# MITGI®

MANUFACTURER OF CUSTOM AND STANDARD CARBIDE CUTTING TOOLS

## CUSTOMER FOCUSED, EMPLOYEE DRIVEN®

EDITION 7

## CONTACT US

**PHONE:** (320) 455-0535
**FAX:** (320) 455-0805
**EMAIL:** info@mitgi.us
**WEB:** www.mitgi.us

**ADDRESS**
P.O. Box 549
45 West Highland Park Drive
Hutchinson, MN 55350

**OFFICE HOURS**
Monday - Friday
8AM - 4PM Central

## ORDERING INFO

Each manufacturing facility operates a little bit differently and we trust our customers to know the way that works best for them to purchase. That's why MITGI offers flexibility in purchasing. Customers can buy online, direct, or through the distributors they trust to deliver additional service and support. Contact us for more information.

Visit www.mitgi.us to place an order, send a quote request, or contact us for purchasing options.

**Prices subject to change.**

## MIDWEST INDUSTRIAL TOOL GRINDING, INC.

Midwest Industrial Tool Grinding, Inc. (MITGI) manufactures and markets standard and custom micro cutting tools. Headquartered in Hutchinson, Minnesota, MITGI combines innovation with quality and repeatability. MITGI tools are the product of choice for many R&D departments and manufacturers that serve medical device manufacturing, automotive, aerospace, and rapid prototyping industries. Founded in 1993 as a re-grinding company and custom cutting tool manufacturer, MITGI has grown and expanded, but the focus has remained the same: quality, precision, and personalized customer service.

Many customers first came to MITGI to find a source for tools that other manufacturers could not make or when available lead times were too long. MITGI is good at solving problems like these and we like knowing that the tools we make help to empower innovation and performance in manufacturing facilities across the U.S. and throughout the world.

## CUSTOMER FOCUSED, EMPLOYEE DRIVEN®

Building a business is possible only when everyone shares the same goal: meeting the needs of our customers. For more than 25 years, MITGI employees have worked to achieve this goal every day. With an eye for innovation, customer-centric service, and attention to detail, MITGI employees ensure that we meet or exceed the expectations of our customers each day.

We look forward to continuing to work with our customers to manufacture and utilize quality custom and standard tooling.

Rev. 06/2019

# QUICK TURN SPECIALS

## MANUFACTURED BY MITGI: QUICK TURN SPECIALS and Modified Standards

We strive to provide fast service on every order we manufacture. Most specials can be manufactured in two weeks or less. Some custom tools can be made even faster, often within a three day turnaround.

In general, tools that are similar to our standard tool lines are more likely to qualify for a condensed timeline. Common modifications and tool features include:

- Reach
- Length of cut
- Cutter diameter
- Overall length
- Shank diameter
- Number of flutes
- Number of teeth
- End finish
- Draft or taper angle
- Shoulder angle

## QUICK TURN TOOL CATEGORIES

QUICK TURN SPECIALS

Tool categories that may qualify for QUICK TURN timelines are marked throughout the catalog with the QUICK TURN icon. Depending on the tool design, others may qualify as well (see p. 206-207 for more details about form tools, larger diameter tools, and complex tools).

**MICRO TOOLS (1/8" shank)**

- Micro End Mills
- Micro Drills
- Micro Reamers
- Mold Tools
- Step Drills

## GETTING STARTED

1. Send us the specs for your custom tool. Options that provide useful tool information include: existing tool print, a completed Quote Form, sketch, or photo.

2. Ask for a QUICK TURN REVIEW. We will review the tool info, the current schedule, and determine how quickly the tool can be made.

3. If the tool qualifies, your tool will be marked for QUICK TURN. Within a few hours, you will receive a tool print for review and the order acknowledgement. Return the tool print quickly to maintain estimated ship date.

QUICK TURN schedule availability may vary and capacity is limited.

**Ready to get started?**
**Contact us:**
**Phone: (320) 455-0535**
**Email: info@mitgi.us,**
**Web: www.mitgi.us**

## TABLE OF CONTENTS


| MICRO END MILLS (2, 3, 4 Flutes) | PAGES |
|---|---|
| Square Micro End Mills | 6-12 |
| Extended Reach Square Micro End Mills | 14-19 |
| Corner Radius Micro End Mills | 20-29 |
| Extended Reach Corner Radius Micro End Mills | 30-41 |
| Ball Micro End Mills | 42-46 |
| Extended Reach Ball Micro End Mills | 48-53 |

| MICRO END MILLS (5 Flutes) | |
|---|---|
| Square Micro End Mills | 54-58 |
| Extended Reach Square Micro End Mills | 60-65 |
| Corner Radius Micro End Mills | 66-73 |
| Extended Reach Corner Radius Micro End Mills | 74-79 |

| METRIC MICRO END MILLS | |
|---|---|
| Metric Square Micro End Mills | 80-81 |
| Metric Ball Micro End Mills | 82-83 |
| Metric Square Micro End Mills (Metric Shank) | 84-85 |
| Metric Ball Micro End Mills (Metric Shank) | 86-87 |

| VARIABLE HELIX MICRO END MILLS | |
|---|---|
| Square Micro Variable Helix End Mills | 88-89 |
| Corner Radius Micro Variable Helix End Mills | 90-92 |
| Ball Micro Variable Helix End Mills | 94-95 |

| MICRO DRILLS | |
|---|---|
| Micro Drills 5x, 8x, 12x, 15x Flute Length | 96-103 |
| Metric Micro Drills 5x, 8x, 12x, 15x Flute Length | 104-107 |

| COOLANT THRU MICRO DRILLS | |
|---|---|
| 140° Coolant Thru Micro Drills 8x and 12x Flute Length | 108 |
| 140° Metric Coolant Thru Micro Drills 8x and 12x Flute Length | 109 |

| REAMERS | |
|---|---|
| Reamers / +0.0002 Tolerance / 8x Flute Length | 110 |
| Reamers / +0.0002 Tolerance / 8x Flute Length / 12x Reach | 111 |
| Metric Reamers / +0.005mm Tolerance / 8x Flute Length | 112 |
| Metric Reamers / +0.005mm Tolerance / 8x Flute Length / 12x Reach | 113 |

| DRAFTED MOLD TOOLS | PAGES |
|---|---|
| 2° Square Drafted Mold Tools | 114 |
| 3° Square Drafted Mold Tools | 115 |
| 5° Square Drafted Mold Tools | 116 |
| 2° Corner Radius Drafted Mold Tools | 118-119 |
| 3° Corner Radius Drafted Mold Tools | 120-121 |
| 5° Corner Radius Drafted Mold Tools | 122-123 |
| 2° Ball Drafted Mold Tools | 124 |
| 3° Ball Drafted Mold Tools | 124 |
| 5° Ball Drafted Mold Tools | 125 |

| CLEARANCE CUTTER MOLD TOOLS | |
|---|---|
| 2° Square Clearance Cutters | 126 |
| 2° Ball Clearance Cutters | 127 |
| 2° Corner Radius Clearance Cutters | 128-129 |

| TAPERED RIB CUTTER MOLD TOOLS | |
|---|---|
| 0.5° Square Tapered Rib Cutters | 130 |
| 1° Square Tapered Rib Cutters | 131 |
| 1.5° Square Tapered Rib Cutters | 132 |
| 2° Square Tapered Rib Cutters | 133 |
| 3° Square Tapered Rib Cutters | 134 |
| 5° Square Tapered Rib Cutters | 135 |
| 0.5° Corner Radius Tapered Rib Cutters | 136-137 |
| 1° Corner Radius Tapered Rib Cutters | 138-139 |
| 1.5° Corner Radius Tapered Rib Cutters | 140-141 |
| 2° Corner Radius Tapered Rib Cutters | 142-143 |
| 3° Corner Radius Tapered Rib Cutters | 144-145 |
| 5° Corner Radius Tapered Rib Cutters | 146-147 |
| 0.5° Ball Tapered Rib Cutters | 148 |
| 1° Ball Tapered Rib Cutters | 148 |
| 1.5° Ball Tapered Rib Cutters | 149 |
| 2° Ball Tapered Rib Cutters | 149 |
| 3° Ball Tapered Rib Cutters | 150 |
| 5° Ball Tapered Rib Cutters | 150 |

| THREAD MILLS | PAGES |
|---|---|
| Single Point Thread Mills | 152-153 |
| UN Full Form Helical Thread Mills | 154-156 |
| UN Full Form Straight Flute Thread Mills | 158-160 |
| NPTF Full Form Helical Thread Mills | 162 |

## THREAD MILLS (con't)

| | PAGES |
|---|---|
| NPTF Full Form Straight Flute Thread Mills | 162 |
| NPT Full Form Helical Thread Mills | 163 |
| NPT Full Form Straight Flute Thread Mills | 163 |
| Metric Full Form Helical Thread Mills | 164 |
| Metric Full Form Straight Flute Thread Mills | 165 |

## COOLANT THRU THREAD MILLS

| | |
|---|---|
| Coolant Thru UN Full Form Helical Thread Mills | 166-168 |
| Coolant Thru NPTF Full Form Helical Thread Mills | 170 |
| Coolant Thru NPT Full Form Helical Thread Mills | 170 |
| Metric Coolant Thru Full Form Helical Thread Mills | 171 |

## END MILLS

| | |
|---|---|
| 30° Helix Square End Mills | 172 |
| 30° Helix Ball End Mills | 172 |
| 30° Helix Square End Mills | 173 |
| 30° Helix Square End Mills | 173 |
| Square Variable Helix End Mills | 174 |
| Square Variable Helix End Mills | 174 |
| Square Aluminum Cutting End Mills | 175 |
| Single End Corner Rounding End Mills | 175 |
| 270° Undercutting End Mills/Cherry Ball Tools | 176-177 |

## SPOT DRILLS AND DRILL MILLS

| | |
|---|---|
| 90° Carbide NC Spot Drills | 178 |
| 118° Carbide NC Spot Drills | 179 |
| 140° Carbide NC Spot Drills | 180 |
| 60°, 90°, 120° Carbide Drill Mills | 181 |

## KEYSEAT CUTTERS

| | |
|---|---|
| Square Keyseat Cutters | 182 |
| Corner Radius Keyseat Cutters | 184-185 |
| Full Radius Keyseat Cutters | 186 |
| 45° Chamfer Keyseat Cutters | 187 |

## CUTTERS

| | |
|---|---|
| 60° Dovetail Cutters and Extended Reach | 188 |
| 90° Dovetail Cutters and Extended Reach | 189 |
| 30° and 45° Chamfer Cutters | 190 |
| 30°, 60°, 90° Engraving Cutters | 192-193 |

## DEBURRING KNIVES

| | |
|---|---|
| 7° Deburring Knives, HSS and Carbide | 191 |
| 10° Deburring Knives, HSS and Carbide | 191 |

## PLASTIC CUTTERS

| | |
|---|---|
| Square Upcut 3x LOC Plastic Cutters | 194 |
| Square Upcut 4x LOC Plastic Cutters | 195 |
| Square Upcut 5x LOC Plastic Cutters | 196 |
| Square Upcut 3x LOC Plastic Cutters | 197 |
| Square Upcut 5x LOC Plastic Cutters | 198 |
| Square Upcut 8x LOC Plastic Cutters | 199 |
| Square Straight Flute Plastic Cutters | 200 |

## BRAZED SAWS

| | |
|---|---|
| 3/8" Brazed Saws | 202 |
| 1/2" Brazed Saws | 203 |
| 3/4" Brazed Saws | 204 |
| 1" Brazed Saws | 205 |

## SERVICES, RESOURCES, AND REFERENCE INFO

| | |
|---|---|
| Company Overview | 2 |
| Quick Turn Specials | 3 |
| Table of Contents | 4-5 |
| Tools for Swiss Machining | 13 |
| Tool Types and Regrinds | 47 |
| Quality | 59 |
| Reliable Service and Support | 93 |
| Stocking and Shipping Options | 117 |
| Standards vs. Specials | 151 |
| On-site Manufacturing | 157 |
| Custom Tool Quote Forms | 161 |
| Measurement Reference Chart | 169 |
| Short Lead Times | 201 |
| Custom Tools and Modified Standards | 206-207 |
| Coating | 208-209 |
| Product Line Reference Chart (S-REF) | 210-211 |

# S10

## Square Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.003 | 0.0045 | 0.125 | 1.50 | S10-003-2-SST | N/A | N/A | $38.75 | $40.85 |
| 0.004 | 0.006 | 0.125 | 1.50 | S10-004-2-SST | N/A | N/A | $32.94 | $35.04 |
| 0.005 | 0.0075 | 0.125 | 1.50 | S10-005-2-SST | N/A | N/A | $30.36 | $32.46 |
| 0.006 | 0.009 | 0.125 | 1.50 | S10-006-2-SST | N/A | N/A | $30.36 | $32.46 |
| 0.007 | 0.0105 | 0.125 | 1.50 | S10-007-2-SST | N/A | N/A | $29.38 | $31.48 |
| 0.008 | 0.012 | 0.125 | 1.50 | S10-008-2-SST | S10-008-3-SST | S10-008-4-SST | $29.38 | $31.48 |
| 0.009 | 0.0135 | 0.125 | 1.50 | S10-009-2-SST | S10-009-3-SST | S10-009-4-SST | $29.38 | $31.48 |
| 0.010 | 0.015 | 0.125 | 1.50 | S10-010-2-SST | S10-010-3-SST | S10-010-4-SST | $24.21 | $26.31 |
| 0.011 | 0.0165 | 0.125 | 1.50 | S10-011-2-SST | S10-011-3-SST | S10-011-4-SST | $24.21 | $26.31 |
| 0.012 | 0.018 | 0.125 | 1.50 | S10-012-2-SST | S10-012-3-SST | S10-012-4-SST | $24.21 | $26.31 |
| 0.013 | 0.0195 | 0.125 | 1.50 | S10-013-2-SST | S10-013-3-SST | S10-013-4-SST | $24.21 | $26.31 |
| 0.014 | 0.021 | 0.125 | 1.50 | S10-014-2-SST | S10-014-3-SST | S10-014-4-SST | $24.21 | $26.31 |
| 0.015 (1/64) | 0.0225 | 0.125 | 1.50 | S10-015-2-SST | S10-015-3-SST | S10-015-4-SST | $21.32 | $23.42 |
| 0.016 | 0.024 | 0.125 | 1.50 | S10-016-2-SST | S10-016-3-SST | S10-016-4-SST | $21.32 | $23.42 |
| 0.017 | 0.0255 | 0.125 | 1.50 | S10-017-2-SST | S10-017-3-SST | S10-017-4-SST | $21.32 | $23.42 |
| 0.018 | 0.027 | 0.125 | 1.50 | S10-018-2-SST | S10-018-3-SST | S10-018-4-SST | $21.32 | $23.42 |
| 0.019 | 0.0285 | 0.125 | 1.50 | S10-019-2-SST | S10-019-3-SST | S10-019-4-SST | $21.32 | $23.42 |
| 0.020 | 0.030 | 0.125 | 1.50 | S10-020-2-SST | S10-020-3-SST | S10-020-4-SST | $20.34 | $22.44 |
| 0.021 | 0.0315 | 0.125 | 1.50 | S10-021-2-SST | S10-021-3-SST | S10-021-4-SST | $20.34 | $22.44 |
| 0.022 | 0.033 | 0.125 | 1.50 | S10-022-2-SST | S10-022-3-SST | S10-022-4-SST | $20.34 | $22.44 |
| 0.023 | 0.0345 | 0.125 | 1.50 | S10-023-2-SST | S10-023-3-SST | S10-023-4-SST | $20.34 | $22.44 |
| 0.024 | 0.036 | 0.125 | 1.50 | S10-024-2-SST | S10-024-3-SST | S10-024-4-SST | $20.34 | $22.44 |
| 0.025 | 0.0375 | 0.125 | 1.50 | S10-025-2-SST | S10-025-3-SST | S10-025-4-SST | $18.41 | $20.51 |
| 0.026 | 0.039 | 0.125 | 1.50 | S10-026-2-SST | S10-026-3-SST | S10-026-4-SST | $18.41 | $20.51 |
| 0.027 | 0.0405 | 0.125 | 1.50 | S10-027-2-SST | S10-027-3-SST | S10-027-4-SST | $18.41 | $20.51 |
| 0.028 | 0.042 | 0.125 | 1.50 | S10-028-2-SST | S10-028-3-SST | S10-028-4-SST | $18.41 | $20.51 |
| 0.029 | 0.0435 | 0.125 | 1.50 | S10-029-2-SST | S10-029-3-SST | S10-029-4-SST | $18.41 | $20.51 |
| 0.030 | 0.045 | 0.125 | 1.50 | S10-030-2-SST | S10-030-3-SST | S10-030-4-SST | $18.41 | $20.51 |
| 0.031 (1/32) | 0.0465 | 0.125 | 1.50 | S10-031-2-SST | S10-031-3-SST | S10-031-4-SST | $18.41 | $20.51 |
| 0.035 | 0.0525 | 0.125 | 1.50 | S10-035-2-SST | S10-035-3-SST | S10-035-4-SST | $15.82 | $17.92 |
| 0.039 (1mm) | 0.059 | 0.125 | 1.50 | S10-039-2-SST | S10-039-3-SST | S10-039-4-SST | $15.82 | $17.92 |
| 0.040 | 0.060 | 0.125 | 1.50 | S10-040-2-SST | S10-040-3-SST | S10-040-4-SST | $15.82 | $17.92 |
| 0.045 | 0.0675 | 0.125 | 1.50 | S10-045-2-SST | S10-045-3-SST | S10-045-4-SST | $15.82 | $17.92 |
| 0.047 (3/64) | 0.0705 | 0.125 | 1.50 | S10-047-2-SST | S10-047-3-SST | S10-047-4-SST | $15.82 | $17.92 |
| 0.050 | 0.075 | 0.125 | 1.50 | S10-050-2-SST | S10-050-3-SST | S10-050-4-SST | $15.82 | $17.92 |
| 0.055 | 0.0825 | 0.125 | 1.50 | S10-055-2-SST | S10-055-3-SST | S10-055-4-SST | $15.82 | $17.92 |
| 0.060 | 0.090 | 0.125 | 1.50 | S10-060-2-SST | S10-060-3-SST | S10-060-4-SST | $13.88 | $15.98 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | S10-062-2-SST | S10-062-3-SST | S10-062-4-SST | $13.88 | $15.98 |
| 0.065 | 0.0975 | 0.125 | 1.50 | S10-065-2-SST | S10-065-3-SST | S10-065-4-SST | $13.88 | $15.98 |
| 0.070 | 0.105 | 0.125 | 1.50 | S10-070-2-SST | S10-070-3-SST | S10-070-4-SST | $13.88 | $15.98 |
| 0.075 | 0.1125 | 0.125 | 1.50 | S10-075-2-SST | S10-075-3-SST | S10-075-4-SST | $13.88 | $15.98 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | S10-078-2-SST | S10-078-3-SST | S10-078-4-SST | $13.88 | $15.98 |
| 0.080 | 0.120 | 0.125 | 1.50 | S10-080-2-SST | S10-080-3-SST | S10-080-4-SST | $13.88 | $15.98 |

## Square Micro End Mills



| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.085 | 0.1275 | 0.125 | 1.50 | S10-085-2-SST | S10-085-3-SST | S10-085-4-SST | $13.88 | $15.98 |
| 0.090 | 0.135 | 0.125 | 1.50 | S10-090-2-SST | S10-090-3-SST | S10-090-4-SST | $13.88 | $15.98 |
| 0.093 (3/32) | 0.1395 | 0.125 | 1.50 | S10-093-2-SST | S10-093-3-SST | S10-093-4-SST | $13.88 | $15.98 |
| 0.095 | 0.1425 | 0.125 | 1.50 | S10-095-2-SST | S10-095-3-SST | S10-095-4-SST | $13.88 | $15.98 |
| 0.100 | 0.150 | 0.125 | 1.50 | S10-100-2-SST | S10-100-3-SST | S10-100-4-SST | $13.88 | $15.98 |
| 0.105 | 0.1575 | 0.125 | 1.50 | S10-105-2-SST | S10-105-3-SST | S10-105-4-SST | $13.88 | $15.98 |
| 0.110 | 0.165 | 0.125 | 1.50 | S10-110-2-SST | S10-110-3-SST | S10-110-4-SST | $13.88 | $15.98 |
| 0.115 | 0.1725 | 0.125 | 1.50 | S10-115-2-SST | S10-115-3-SST | S10-115-4-SST | $13.88 | $15.98 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | S10-118-2-SST | S10-118-3-SST | S10-118-4-SST | $13.88 | $15.98 |
| 0.120 | 0.180 | 0.125 | 1.50 | S10-120-2-SST | S10-120-3-SST | S10-120-4-SST | $13.88 | $15.98 |
| 0.125 (1/8) | 0.1875 | 0.125 | 1.50 | S10-125-2-SST | S10-125-3-SST | S10-125-4-SST | $13.88 | $15.98 |

FLUTES 2,3,4

1.5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 54 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## CUSTOM SPECIALS / End Mills

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter: 3mm – 1.250 in
- Tolerances and number of flutes vary by design
- End finishes: square, ball, corner radius
- Extended reach and extended length of cut options available
- Coated or uncoated
- Specials usually available in two weeks or less

**Quote forms available on our website and upon request.**
**Contact us for an estimate today.**

# S08 Square Micro End Mills

FLUTES 2,3,4

3X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.003 | 0.009 | 0.125 | 1.50 | S08-003-2-SEM | N/A | N/A | $38.75 | $40.85 |
| 0.004 | 0.012 | 0.125 | 1.50 | S08-004-2-SEM | N/A | N/A | $32.94 | $35.04 |
| 0.005 | 0.015 | 0.125 | 1.50 | S08-005-2-SEM | N/A | N/A | $30.36 | $32.46 |
| 0.006 | 0.018 | 0.125 | 1.50 | S08-006-2-SEM | N/A | N/A | $30.36 | $32.46 |
| 0.007 | 0.021 | 0.125 | 1.50 | S08-007-2-SEM | N/A | N/A | $29.38 | $31.48 |
| 0.008 | 0.024 | 0.125 | 1.50 | S08-008-2-SEM | N/A | N/A | $29.38 | $31.48 |
| 0.009 | 0.027 | 0.125 | 1.50 | S08-009-2-SEM | N/A | N/A | $29.38 | $31.48 |
| 0.010 | 0.030 | 0.125 | 1.50 | S08-010-2-SEM | S08-010-3-SEM | S08-010-4-SEM | $24.21 | $26.31 |
| 0.011 | 0.033 | 0.125 | 1.50 | S08-011-2-SEM | S08-011-3-SEM | S08-011-4-SEM | $24.21 | $26.31 |
| 0.012 | 0.036 | 0.125 | 1.50 | S08-012-2-SEM | S08-012-3-SEM | S08-012-4-SEM | $24.21 | $26.31 |
| 0.013 | 0.039 | 0.125 | 1.50 | S08-013-2-SEM | S08-013-3-SEM | S08-013-4-SEM | $24.21 | $26.31 |
| 0.014 | 0.042 | 0.125 | 1.50 | S08-014-2-SEM | S08-014-3-SEM | S08-014-4-SEM | $24.21 | $26.31 |
| 0.015 (1/64) | 0.045 | 0.125 | 1.50 | S08-015-2-SEM | S08-015-3-SEM | S08-015-4-SEM | $21.32 | $23.42 |
| 0.016 | 0.048 | 0.125 | 1.50 | S08-016-2-SEM | S08-016-3-SEM | S08-016-4-SEM | $21.32 | $23.42 |
| 0.017 | 0.051 | 0.125 | 1.50 | S08-017-2-SEM | S08-017-3-SEM | S08-017-4-SEM | $21.32 | $23.42 |
| 0.018 | 0.054 | 0.125 | 1.50 | S08-018-2-SEM | S08-018-3-SEM | S08-018-4-SEM | $21.32 | $23.42 |
| 0.019 | 0.057 | 0.125 | 1.50 | S08-019-2-SEM | S08-019-3-SEM | S08-019-4-SEM | $21.32 | $23.42 |
| 0.020 | 0.060 | 0.125 | 1.50 | S08-020-2-SEM | S08-020-3-SEM | S08-020-4-SEM | $20.34 | $22.44 |
| 0.021 | 0.063 | 0.125 | 1.50 | S08-021-2-SEM | S08-021-3-SEM | S08-021-4-SEM | $20.34 | $22.44 |
| 0.022 | 0.066 | 0.125 | 1.50 | S08-022-2-SEM | S08-022-3-SEM | S08-022-4-SEM | $20.34 | $22.44 |
| 0.023 | 0.069 | 0.125 | 1.50 | S08-023-2-SEM | S08-023-3-SEM | S08-023-4-SEM | $20.34 | $22.44 |
| 0.024 | 0.072 | 0.125 | 1.50 | S08-024-2-SEM | S08-024-3-SEM | S08-024-4-SEM | $20.34 | $22.44 |
| 0.025 | 0.075 | 0.125 | 1.50 | S08-025-2-SEM | S08-025-3-SEM | S08-025-4-SEM | $18.41 | $20.51 |
| 0.026 | 0.078 | 0.125 | 1.50 | S08-026-2-SEM | S08-026-3-SEM | S08-026-4-SEM | $18.41 | $20.51 |
| 0.027 | 0.081 | 0.125 | 1.50 | S08-027-2-SEM | S08-027-3-SEM | S08-027-4-SEM | $18.41 | $20.51 |
| 0.028 | 0.084 | 0.125 | 1.50 | S08-028-2-SEM | S08-028-3-SEM | S08-028-4-SEM | $18.41 | $20.51 |
| 0.029 | 0.087 | 0.125 | 1.50 | S08-029-2-SEM | S08-029-3-SEM | S08-029-4-SEM | $18.41 | $20.51 |
| 0.030 | 0.090 | 0.125 | 1.50 | S08-030-2-SEM | S08-030-3-SEM | S08-030-4-SEM | $18.41 | $20.51 |
| 0.031 (1/32) | 0.093 | 0.125 | 1.50 | S08-031-2-SEM | S08-031-3-SEM | S08-031-4-SEM | $18.41 | $20.51 |
| 0.035 | 0.105 | 0.125 | 1.50 | S08-035-2-SEM | S08-035-3-SEM | S08-035-4-SEM | $15.82 | $17.92 |
| 0.039 (1mm) | 0.117 | 0.125 | 1.50 | S08-039-2-SEM | S08-039-3-SEM | S08-039-4-SEM | $15.82 | $17.92 |
| 0.040 | 0.120 | 0.125 | 1.50 | S08-040-2-SEM | S08-040-3-SEM | S08-040-4-SEM | $15.82 | $17.92 |
| 0.042 | 0.126 | 0.125 | 1.50 | S08-042-2-SEM | S08-042-3-SEM | S08-042-4-SEM | $15.82 | $17.92 |
| 0.045 | 0.135 | 0.125 | 1.50 | S08-045-2-SEM | S08-045-3-SEM | S08-045-4-SEM | $15.82 | $17.92 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | S08-047-2-SEM | S08-047-3-SEM | S08-047-4-SEM | $15.82 | $17.92 |
| 0.050 | 0.150 | 0.125 | 1.50 | S08-050-2-SEM | S08-050-3-SEM | S08-050-4-SEM | $15.82 | $17.92 |
| 0.055 | 0.165 | 0.125 | 1.50 | S08-055-2-SEM | S08-055-3-SEM | S08-055-4-SEM | $15.82 | $17.92 |
| 0.060 | 0.180 | 0.125 | 1.50 | S08-060-2-SEM | S08-060-3-SEM | S08-060-4-SEM | $13.88 | $15.98 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | S08-062-2-SEM | S08-062-3-SEM | S08-062-4-SEM | $13.88 | $15.98 |
| 0.063 | 0.189 | 0.125 | 1.50 | S08-063-2-SEM | S08-063-3-SEM | S08-063-4-SEM | $13.88 | $15.98 |
| 0.065 | 0.195 | 0.125 | 1.50 | S08-065-2-SEM | S08-065-3-SEM | S08-065-4-SEM | $13.88 | $15.98 |
| 0.070 | 0.210 | 0.125 | 1.50 | S08-070-2-SEM | S08-070-3-SEM | S08-070-4-SEM | $13.88 | $15.98 |
| 0.075 | 0.225 | 0.125 | 1.50 | S08-075-2-SEM | S08-075-3-SEM | S08-075-4-SEM | $13.88 | $15.98 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | S08-078-2-SEM | S08-078-3-SEM | S08-078-4-SEM | $13.88 | $15.98 |
| 0.080 | 0.240 | 0.125 | 1.50 | S08-080-2-SEM | S08-080-3-SEM | S08-080-4-SEM | $13.88 | $15.98 |

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.085 | 0.255 | 0.125 | 1.50 | S08-085-2-SEM | S08-085-3-SEM | S08-085-4-SEM | $13.88 | $15.98 |
| 0.090 | 0.270 | 0.125 | 1.50 | S08-090-2-SEM | S08-090-3-SEM | S08-090-4-SEM | $13.88 | $15.98 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | S08-093-2-SEM | S08-093-3-SEM | S08-093-4-SEM | $13.88 | $15.98 |
| 0.095 | 0.285 | 0.125 | 1.50 | S08-095-2-SEM | S08-095-3-SEM | S08-095-4-SEM | $13.88 | $15.98 |
| 0.100 | 0.300 | 0.125 | 1.50 | S08-100-2-SEM | S08-100-3-SEM | S08-100-4-SEM | $13.88 | $15.98 |
| 0.105 | 0.315 | 0.125 | 1.50 | S08-105-2-SEM | S08-105-3-SEM | S08-105-4-SEM | $13.88 | $15.98 |
| 0.110 | 0.330 | 0.125 | 1.50 | S08-110-2-SEM | S08-110-3-SEM | S08-110-4-SEM | $13.88 | $15.98 |
| 0.115 | 0.345 | 0.125 | 1.50 | S08-115-2-SEM | S08-115-3-SEM | S08-115-4-SEM | $13.88 | $15.98 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | S08-118-2-SEM | S08-118-3-SEM | S08-118-4-SEM | $13.88 | $15.98 |
| 0.120 | 0.360 | 0.125 | 1.50 | S08-120-2-SEM | S08-120-3-SEM | S08-120-4-SEM | $13.88 | $15.98 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | S08-125-2-SEM | S08-125-3-SEM | S08-125-4-SEM | $13.88 | $15.98 |

FLUTES 2,3,4

3X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 55 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MANUFACTURED BY MITGI: Approval Based Sample Program

**No one makes better tools than MITGI. We're so confident that we encourage you to give them a try on approval.**

In most cases, the Approval Based Sample Program allows you to order a standard tool and give it a try before placing the full order. This lets you see the catalog tool in action, allows you to compare it to the tools of our competitors, and helps determine whether it matches the specifications required for your project.

*Troy , Training Supervisor*

**Ready to get started? See page 2 for contact information.**

# S62 Square Micro End Mills

FLUTES 2,3,4

5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.010 | 0.050 | 0.125 | 2.50 | S62-010-2-SQ5X | N/A | N/A | $29.72 | $31.82 |
| 0.015 (1/64) | 0.075 | 0.125 | 2.50 | S62-015-2-SQ5X | S62-015-3-SQ5X | S62-015-4-SQ5X | $27.72 | $29.82 |
| 0.020 | 0.100 | 0.125 | 2.50 | S62-020-2-SQ5X | S62-020-3-SQ5X | S62-020-4-SQ5X | $23.94 | $26.04 |
| 0.025 | 0.125 | 0.125 | 2.50 | S62-025-2-SQ5X | S62-025-3-SQ5X | S62-025-4-SQ5X | $22.89 | $24.99 |
| 0.030 | 0.150 | 0.125 | 2.50 | S62-030-2-SQ5X | S62-030-3-SQ5X | S62-030-4-SQ5X | $22.89 | $24.99 |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | S62-031-2-SQ5X | S62-031-3-SQ5X | S62-031-4-SQ5X | $22.05 | $24.15 |
| 0.035 | 0.175 | 0.125 | 2.50 | S62-035-2-SQ5X | S62-035-3-SQ5X | S62-035-4-SQ5X | $22.05 | $24.15 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | S62-039-2-SQ5X | S62-039-3-SQ5X | S62-039-4-SQ5X | $22.05 | $24.15 |
| 0.040 | 0.200 | 0.125 | 2.50 | S62-040-2-SQ5X | S62-040-3-SQ5X | S62-040-4-SQ5X | $22.05 | $24.15 |
| 0.045 | 0.225 | 0.125 | 2.50 | S62-045-2-SQ5X | S62-045-3-SQ5X | S62-045-4-SQ5X | $21.53 | $23.63 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | S62-047-2-SQ5X | S62-047-3-SQ5X | S62-047-4-SQ5X | $21.53 | $23.63 |
| 0.050 | 0.250 | 0.125 | 2.50 | S62-050-2-SQ5X | S62-050-3-SQ5X | S62-050-4-SQ5X | $21.53 | $23.63 |
| 0.055 | 0.275 | 0.125 | 2.50 | S62-055-2-SQ5X | S62-055-3-SQ5X | S62-055-4-SQ5X | $19.85 | $21.95 |
| 0.060 | 0.300 | 0.125 | 2.50 | S62-060-2-SQ5X | S62-060-3-SQ5X | S62-060-4-SQ5X | $19.85 | $21.95 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | S62-062-2-SQ5X | S62-062-3-SQ5X | S62-062-4-SQ5X | $19.85 | $21.95 |
| 0.065 | 0.325 | 0.125 | 2.50 | S62-065-2-SQ5X | S62-065-3-SQ5X | S62-065-4-SQ5X | $19.85 | $21.95 |
| 0.070 | 0.350 | 0.125 | 2.50 | S62-070-2-SQ5X | S62-070-3-SQ5X | S62-070-4-SQ5X | $19.85 | $21.95 |
| 0.075 | 0.375 | 0.125 | 2.50 | S62-075-2-SQ5X | S62-075-3-SQ5X | S62-075-4-SQ5X | $19.85 | $21.95 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | S62-078-2-SQ5X | S62-078-3-SQ5X | S62-078-4-SQ5X | $19.85 | $21.95 |
| 0.080 | 0.400 | 0.125 | 2.50 | S62-080-2-SQ5X | S62-080-3-SQ5X | S62-080-4-SQ5X | $19.85 | $21.95 |
| 0.085 | 0.425 | 0.125 | 2.50 | S62-085-2-SQ5X | S62-085-3-SQ5X | S62-085-4-SQ5X | $19.85 | $21.95 |
| 0.090 | 0.450 | 0.125 | 2.50 | S62-090-2-SQ5X | S62-090-3-SQ5X | S62-090-4-SQ5X | $19.85 | $21.95 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | S62-093-2-SQ5X | S62-093-3-SQ5X | S62-093-4-SQ5X | $19.85 | $21.95 |
| 0.095 | 0.475 | 0.125 | 2.50 | S62-095-2-SQ5X | S62-095-3-SQ5X | S62-095-4-SQ5X | $19.85 | $21.95 |
| 0.100 | 0.500 | 0.125 | 2.50 | S62-100-2-SQ5X | S62-100-3-SQ5X | S62-100-4-SQ5X | $19.64 | $21.74 |
| 0.105 | 0.525 | 0.125 | 2.50 | S62-105-2-SQ5X | S62-105-3-SQ5X | S62-105-4-SQ5X | $19.64 | $21.74 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | S62-118-2-SQ5X | S62-118-3-SQ5X | S62-118-4-SQ5X | $19.64 | $21.74 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | S62-125-2-SQ5X | S62-125-3-SQ5X | S62-125-4-SQ5X | $19.64 | $21.74 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 56 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

FLUTES 2,3,4

8X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.010 | 0.080 | 0.125 | 2.50 | S63-010-2-SQ8X | N/A | N/A | $53.76 | $55.86 |
| 0.015 (1/64) | 0.120 | 0.125 | 2.50 | S63-015-2-SQ8X | S63-015-3-SQ8X | S63-015-4-SQ8X | $49.77 | $51.87 |
| 0.020 | 0.160 | 0.125 | 2.50 | S63-020-2-SQ8X | S63-020-3-SQ8X | S63-020-4-SQ8X | $45.83 | $47.93 |
| 0.025 | 0.200 | 0.125 | 2.50 | S63-025-2-SQ8X | S63-025-3-SQ8X | S63-025-4-SQ8X | $45.83 | $47.93 |
| 0.030 | 0.240 | 0.125 | 2.50 | S63-030-2-SQ8X | S63-030-3-SQ8X | S63-030-4-SQ8X | $45.83 | $47.93 |
| 0.031 (1/32) | 0.248 | 0.125 | 2.50 | S63-031-2-SQ8X | S63-031-3-SQ8X | S63-031-4-SQ8X | $45.83 | $47.93 |
| 0.035 | 0.280 | 0.125 | 2.50 | S63-035-2-SQ8X | S63-035-3-SQ8X | S63-035-4-SQ8X | $45.83 | $47.93 |
| 0.039 (1mm) | 0.312 | 0.125 | 2.50 | S63-039-2-SQ8X | S63-039-3-SQ8X | S63-039-4-SQ8X | $45.83 | $47.93 |
| 0.040 | 0.320 | 0.125 | 2.50 | S63-040-2-SQ8X | S63-040-3-SQ8X | S63-040-4-SQ8X | $45.83 | $47.93 |
| 0.045 | 0.360 | 0.125 | 2.50 | S63-045-2-SQ8X | S63-045-3-SQ8X | S63-045-4-SQ8X | $45.83 | $47.93 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.50 | S63-047-2-SQ8X | S63-047-3-SQ8X | S63-047-4-SQ8X | $45.83 | $47.93 |
| 0.050 | 0.400 | 0.125 | 2.50 | S63-050-2-SQ8X | S63-050-3-SQ8X | S63-050-4-SQ8X | $32.87 | $34.97 |
| 0.055 | 0.440 | 0.125 | 2.50 | S63-055-2-SQ8X | S63-055-3-SQ8X | S63-055-4-SQ8X | $32.87 | $34.97 |
| 0.060 | 0.480 | 0.125 | 2.50 | S63-060-2-SQ8X | S63-060-3-SQ8X | S63-060-4-SQ8X | $32.87 | $34.97 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | S63-062-2-SQ8X | S63-062-3-SQ8X | S63-062-4-SQ8X | $32.87 | $34.97 |
| 0.065 | 0.520 | 0.125 | 2.50 | S63-065-2-SQ8X | S63-065-3-SQ8X | S63-065-4-SQ8X | $29.19 | $31.29 |
| 0.070 | 0.560 | 0.125 | 2.50 | S63-070-2-SQ8X | S63-070-3-SQ8X | S63-070-4-SQ8X | $29.19 | $31.29 |
| 0.075 | 0.600 | 0.125 | 2.50 | S63-075-2-SQ8X | S63-075-3-SQ8X | S63-075-4-SQ8X | $25.62 | $27.72 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | S63-078-2-SQ8X | S63-078-3-SQ8X | S63-078-4-SQ8X | $25.62 | $27.72 |
| 0.080 | 0.640 | 0.125 | 2.50 | S63-080-2-SQ8X | S63-080-3-SQ8X | S63-080-4-SQ8X | $25.62 | $27.72 |
| 0.085 | 0.680 | 0.125 | 2.50 | S63-085-2-SQ8X | S63-085-3-SQ8X | S63-085-4-SQ8X | $23.36 | $25.46 |
| 0.090 | 0.720 | 0.125 | 2.50 | S63-090-2-SQ8X | S63-090-3-SQ8X | S63-090-4-SQ8X | $23.36 | $25.46 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | S63-093-2-SQ8X | S63-093-3-SQ8X | S63-093-4-SQ8X | $23.36 | $25.46 |
| 0.095 | 0.760 | 0.125 | 2.50 | S63-095-2-SQ8X | S63-095-3-SQ8X | S63-095-4-SQ8X | $23.36 | $25.46 |
| 0.100 | 0.800 | 0.125 | 2.50 | S63-100-2-SQ8X | S63-100-3-SQ8X | S63-100-4-SQ8X | $23.36 | $25.46 |
| 0.109 (7/64) | 0.872 | 0.125 | 2.50 | S63-109-2-SQ8X | S63-109-3-SQ8X | S63-109-4-SQ8X | $23.36 | $25.46 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | S63-118-2-SQ8X | S63-118-3-SQ8X | S63-118-4-SQ8X | $23.10 | $25.20 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | S63-125-2-SQ8X | S63-125-3-SQ8X | S63-125-4-SQ8X | $23.10 | $25.20 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 57 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## CONTACT US

P. 2

MITGI is open from 8 AM - 4 PM Central Time. We can be reached any time by email, web, and social media. See page 2 for more information about ordering and ways to contact us.

# S64 Square Micro End Mills

FLUTES 2,3,4

12X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.015 (1/64) | 0.180 | 0.125 | 2.50 | S64-015-2-SQ12X | S64-015-3-SQ12X | S64-015-4-SQ12X | $63.84 | $65.94 |
| 0.020 | 0.240 | 0.125 | 2.50 | S64-020-2-SQ12X | S64-020-3-SQ12X | S64-020-4-SQ12X | $61.01 | $63.11 |
| 0.025 | 0.300 | 0.125 | 2.50 | S64-025-2-SQ12X | S64-025-3-SQ12X | S64-025-4-SQ12X | $54.08 | $56.18 |
| 0.030 | 0.360 | 0.125 | 2.50 | S64-030-2-SQ12X | S64-030-3-SQ12X | S64-030-4-SQ12X | $51.66 | $53.76 |
| 0.031 (1/32) | 0.372 | 0.125 | 2.50 | S64-031-2-SQ12X | S64-031-3-SQ12X | S64-031-4-SQ12X | $51.66 | $53.76 |
| 0.035 | 0.420 | 0.125 | 2.50 | S64-035-2-SQ12X | S64-035-3-SQ12X | S64-035-4-SQ12X | $51.66 | $53.76 |
| 0.039 (1mm) | 0.468 | 0.125 | 2.50 | S64-039-2-SQ12X | S64-039-3-SQ12X | S64-039-4-SQ12X | $51.66 | $53.76 |
| 0.040 | 0.480 | 0.125 | 2.50 | S64-040-2-SQ12X | S64-040-3-SQ12X | S64-040-4-SQ12X | $51.66 | $53.76 |
| 0.045 | 0.540 | 0.125 | 2.50 | S64-045-2-SQ12X | S64-045-3-SQ12X | S64-045-4-SQ12X | $51.66 | $53.76 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.50 | S64-047-2-SQ12X | S64-047-3-SQ12X | S64-047-4-SQ12X | $51.45 | $53.55 |
| 0.050 | 0.600 | 0.125 | 2.50 | S64-050-2-SQ12X | S64-050-3-SQ12X | S64-050-4-SQ12X | $51.45 | $53.55 |
| 0.055 | 0.660 | 0.125 | 2.50 | S64-055-2-SQ12X | S64-055-3-SQ12X | S64-055-4-SQ12X | $47.36 | $49.46 |
| 0.060 | 0.720 | 0.125 | 2.50 | S64-060-2-SQ12X | S64-060-3-SQ12X | S64-060-4-SQ12X | $47.36 | $49.46 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | S64-062-2-SQ12X | S64-062-3-SQ12X | S64-062-4-SQ12X | $41.58 | $43.68 |
| 0.065 | 0.780 | 0.125 | 2.50 | S64-065-2-SQ12X | S64-065-3-SQ12X | S64-065-4-SQ12X | $41.58 | $43.68 |
| 0.070 | 0.840 | 0.125 | 2.50 | S64-070-2-SQ12X | S64-070-3-SQ12X | S64-070-4-SQ12X | $41.58 | $43.68 |
| 0.075 | 0.900 | 0.125 | 2.50 | S64-075-2-SQ12X | S64-075-3-SQ12X | S64-075-4-SQ12X | $41.58 | $43.68 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | S64-078-2-SQ12X | S64-078-3-SQ12X | S64-078-4-SQ12X | $41.00 | $43.10 |
| 0.080 | 0.960 | 0.125 | 2.50 | S64-080-2-SQ12X | S64-080-3-SQ12X | S64-080-4-SQ12X | $41.00 | $43.10 |
| 0.085 | 1.020 | 0.125 | 2.50 | S64-085-2-SQ12X | S64-085-3-SQ12X | S64-085-4-SQ12X | $41.00 | $43.10 |
| 0.090 | 1.080 | 0.125 | 2.50 | S64-090-2-SQ12X | S64-090-3-SQ12X | S64-090-4-SQ12X | $41.00 | $43.10 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | S64-093-2-SQ12X | S64-093-3-SQ12X | S64-093-4-SQ12X | $40.32 | $42.42 |
| 0.095 | 1.140 | 0.125 | 2.50 | S64-095-2-SQ12X | S64-095-3-SQ12X | S64-095-4-SQ12X | $40.32 | $42.42 |
| 0.100 | 1.200 | 0.125 | 2.50 | S64-100-2-SQ12X | S64-100-3-SQ12X | S64-100-4-SQ12X | $40.32 | $42.42 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | S64-118-2-SQ12X | S64-118-3-SQ12X | S64-118-4-SQ12X | $40.32 | $42.42 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | S64-125-2-SQ12X | S64-125-3-SQ12X | S64-125-4-SQ12X | $40.32 | $42.42 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 58 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# TOOLS FOR SWISS MACHINING

## MANUFACTURED BY MITGI: Overall Lengths for Swiss-type Tooling

On-site manufacturing provides MITGI with many advantages, one of which includes the ability to quickly change the overall length of standard tools. For shops utilizing Swiss-type machines, a shorter overall length than offered as part of our standard tool line may be required.

Many tools found in our standard micro lines are now available in a shorter overall length upon request. Prices remain the same as noted in product tables.

## QUALIFYING CATEGORIES

Tool categories that may qualify for Swiss-type overall length options are marked throughout the catalog with an icon. Qualifying categories are noted below.

### MICRO TOOLS

- Micro End Mills
- High Performance Micro End Mills
- Metric Micro End Mills
- Micro Drills
- Micro Reamers

SWISS-TYPE OAL

## GETTING STARTED

To place an order for standard tools with a Swiss-type OAL, simply contact Customer Service or your MITGI Account Manager. Use the standard tool part number noted in the catalog and designate your preference for a shorter overall length optimized for Swiss machining.

*Top: Standard catalog tool*
*Bottom: Standard tool with Swiss-type OAL*

**Ready to place an order?**
**Contact us:**
**Phone: (320) 455-0535**
**Email: info@mitgi.us,**
**Web: www.mitgi.us**

# S71 Square Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.015 | 0.050 | 0.125 | 2.50 | S71-010-2-SSQ5XR | N/A | N/A | $35.91 | $38.01 |
| 0.015 (1/64) | 0.023 | 0.075 | 0.125 | 2.50 | S71-015-2-SSQ5XR | S71-015-3-SSQ5XR | S71-015-4-SSQ5XR | $32.03 | $34.13 |
| 0.020 | 0.030 | 0.100 | 0.125 | 2.50 | S71-020-2-SSQ5XR | S71-020-3-SSQ5XR | S71-020-4-SSQ5XR | $29.72 | $31.82 |
| 0.025 | 0.038 | 0.125 | 0.125 | 2.50 | S71-025-2-SSQ5XR | S71-025-3-SSQ5XR | S71-025-4-SSQ5XR | $29.72 | $31.82 |
| 0.030 | 0.045 | 0.150 | 0.125 | 2.50 | S71-030-2-SSQ5XR | S71-030-3-SSQ5XR | S71-030-4-SSQ5XR | $29.72 | $31.82 |
| 0.031 (1/32) | 0.047 | 0.155 | 0.125 | 2.50 | S71-031-2-SSQ5XR | S71-031-3-SSQ5XR | S71-031-4-SSQ5XR | $29.72 | $31.82 |
| 0.035 | 0.053 | 0.175 | 0.125 | 2.50 | S71-035-2-SSQ5XR | S71-035-3-SSQ5XR | S71-035-4-SSQ5XR | $28.46 | $30.56 |
| 0.039 (1mm) | 0.059 | 0.195 | 0.125 | 2.50 | S71-039-2-SSQ5XR | S71-039-3-SSQ5XR | S71-039-4-SSQ5XR | $28.46 | $30.56 |
| 0.040 | 0.060 | 0.200 | 0.125 | 2.50 | S71-040-2-SSQ5XR | S71-040-3-SSQ5XR | S71-040-4-SSQ5XR | $28.46 | $30.56 |
| 0.045 | 0.068 | 0.225 | 0.125 | 2.50 | S71-045-2-SSQ5XR | S71-045-3-SSQ5XR | S71-045-4-SSQ5XR | $28.46 | $30.56 |
| 0.047 (3/64) | 0.071 | 0.235 | 0.125 | 2.50 | S71-047-2-SSQ5XR | S71-047-3-SSQ5XR | S71-047-4-SSQ5XR | $28.46 | $30.56 |
| 0.050 | 0.075 | 0.250 | 0.125 | 2.50 | S71-050-2-SSQ5XR | S71-050-3-SSQ5XR | S71-050-4-SSQ5XR | $28.46 | $30.56 |
| 0.055 | 0.083 | 0.275 | 0.125 | 2.50 | S71-055-2-SSQ5XR | S71-055-3-SSQ5XR | S71-055-4-SSQ5XR | $28.46 | $30.56 |
| 0.060 | 0.090 | 0.300 | 0.125 | 2.50 | S71-060-2-SSQ5XR | S71-060-3-SSQ5XR | S71-060-4-SSQ5XR | $28.46 | $30.56 |
| 0.062 (1/16) | 0.093 | 0.310 | 0.125 | 2.50 | S71-062-2-SSQ5XR | S71-062-3-SSQ5XR | S71-062-4-SSQ5XR | $28.46 | $30.56 |
| 0.065 | 0.098 | 0.325 | 0.125 | 2.50 | S71-065-2-SSQ5XR | S71-065-3-SSQ5XR | S71-065-4-SSQ5XR | $28.46 | $30.56 |
| 0.070 | 0.105 | 0.350 | 0.125 | 2.50 | S71-070-2-SSQ5XR | S71-070-3-SSQ5XR | S71-070-4-SSQ5XR | $27.20 | $29.30 |
| 0.075 | 0.113 | 0.375 | 0.125 | 2.50 | S71-075-2-SSQ5XR | S71-075-3-SSQ5XR | S71-075-4-SSQ5XR | $27.20 | $29.30 |
| 0.078 (5/64) | 0.117 | 0.390 | 0.125 | 2.50 | S71-078-2-SSQ5XR | S71-078-3-SSQ5XR | S71-078-4-SSQ5XR | $27.20 | $29.30 |
| 0.080 | 0.120 | 0.400 | 0.125 | 2.50 | S71-080-2-SSQ5XR | S71-080-3-SSQ5XR | S71-080-4-SSQ5XR | $27.20 | $29.30 |
| 0.085 | 0.128 | 0.425 | 0.125 | 2.50 | S71-085-2-SSQ5XR | S71-085-3-SSQ5XR | S71-085-4-SSQ5XR | $27.20 | $29.30 |
| 0.090 | 0.135 | 0.450 | 0.125 | 2.50 | S71-090-2-SSQ5XR | S71-090-3-SSQ5XR | S71-090-4-SSQ5XR | $27.20 | $29.30 |
| 0.093 (3/32) | 0.140 | 0.465 | 0.125 | 2.50 | S71-093-2-SSQ5XR | S71-093-3-SSQ5XR | S71-093-4-SSQ5XR | $27.20 | $29.30 |
| 0.095 | 0.143 | 0.475 | 0.125 | 2.50 | S71-095-2-SSQ5XR | S71-095-3-SSQ5XR | S71-095-4-SSQ5XR | $27.20 | $29.30 |
| 0.100 | 0.150 | 0.500 | 0.125 | 2.50 | S71-100-2-SSQ5XR | S71-100-3-SSQ5XR | S71-100-4-SSQ5XR | $27.20 | $29.30 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | S71-118-2-SSQ5XR | S71-118-3-SSQ5XR | S71-118-4-SSQ5XR | $27.20 | $29.30 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | S71-125-2-SSQ5XR | S71-125-3-SSQ5XR | S71-125-4-SSQ5XR | $27.20 | $29.30 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 60 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.030 | 0.050 | 0.125 | 2.50 | S68-010-2-SQ5XR | N/A | N/A | $35.91 | $38.01 |
| 0.015 (1/64) | 0.045 | 0.075 | 0.125 | 2.50 | S68-015-2-SQ5XR | S68-015-3-SQ5XR | S68-015-4-SQ5XR | $32.03 | $34.13 |
| 0.020 | 0.060 | 0.100 | 0.125 | 2.50 | S68-020-2-SQ5XR | S68-020-3-SQ5XR | S68-020-4-SQ5XR | $29.72 | $31.82 |
| 0.025 | 0.075 | 0.125 | 0.125 | 2.50 | S68-025-2-SQ5XR | S68-025-3-SQ5XR | S68-025-4-SQ5XR | $29.72 | $31.82 |
| 0.030 | 0.090 | 0.150 | 0.125 | 2.50 | S68-030-2-SQ5XR | S68-030-3-SQ5XR | S68-030-4-SQ5XR | $29.72 | $31.82 |
| 0.031 (1/32) | 0.093 | 0.155 | 0.125 | 2.50 | S68-031-2-SQ5XR | S68-031-3-SQ5XR | S68-031-4-SQ5XR | $29.72 | $31.82 |
| 0.035 | 0.105 | 0.175 | 0.125 | 2.50 | S68-035-2-SQ5XR | S68-035-3-SQ5XR | S68-035-4-SQ5XR | $28.46 | $30.56 |
| 0.039 (1mm) | 0.117 | 0.195 | 0.125 | 2.50 | S68-039-2-SQ5XR | S68-039-3-SQ5XR | S68-039-4-SQ5XR | $28.46 | $30.56 |
| 0.040 | 0.120 | 0.200 | 0.125 | 2.50 | S68-040-2-SQ5XR | S68-040-3-SQ5XR | S68-040-4-SQ5XR | $28.46 | $30.56 |
| 0.045 | 0.135 | 0.225 | 0.125 | 2.50 | S68-045-2-SQ5XR | S68-045-3-SQ5XR | S68-045-4-SQ5XR | $28.46 | $30.56 |
| 0.047 (3/64) | 0.141 | 0.235 | 0.125 | 2.50 | S68-047-2-SQ5XR | S68-047-3-SQ5XR | S68-047-4-SQ5XR | $28.46 | $30.56 |
| 0.050 | 0.150 | 0.250 | 0.125 | 2.50 | S68-050-2-SQ5XR | S68-050-3-SQ5XR | S68-050-4-SQ5XR | $28.46 | $30.56 |
| 0.055 | 0.165 | 0.275 | 0.125 | 2.50 | S68-055-2-SQ5XR | S68-055-3-SQ5XR | S68-055-4-SQ5XR | $28.46 | $30.56 |
| 0.060 | 0.180 | 0.300 | 0.125 | 2.50 | S68-060-2-SQ5XR | S68-060-3-SQ5XR | S68-060-4-SQ5XR | $28.46 | $30.56 |
| 0.062 (1/16) | 0.186 | 0.310 | 0.125 | 2.50 | S68-062-2-SQ5XR | S68-062-3-SQ5XR | S68-062-4-SQ5XR | $28.46 | $30.56 |
| 0.065 | 0.195 | 0.325 | 0.125 | 2.50 | S68-065-2-SQ5XR | S68-065-3-SQ5XR | S68-065-4-SQ5XR | $28.46 | $30.56 |
| 0.070 | 0.210 | 0.350 | 0.125 | 2.50 | S68-070-2-SQ5XR | S68-070-3-SQ5XR | S68-070-4-SQ5XR | $27.20 | $29.30 |
| 0.075 | 0.225 | 0.375 | 0.125 | 2.50 | S68-075-2-SQ5XR | S68-075-3-SQ5XR | S68-075-4-SQ5XR | $27.20 | $29.30 |
| 0.078 (5/64) | 0.234 | 0.390 | 0.125 | 2.50 | S68-078-2-SQ5XR | S68-078-3-SQ5XR | S68-078-4-SQ5XR | $27.20 | $29.30 |
| 0.080 | 0.240 | 0.400 | 0.125 | 2.50 | S68-080-2-SQ5XR | S68-080-3-SQ5XR | S68-080-4-SQ5XR | $27.20 | $29.30 |
| 0.085 | 0.255 | 0.425 | 0.125 | 2.50 | S68-085-2-SQ5XR | S68-085-3-SQ5XR | S68-085-4-SQ5XR | $27.20 | $29.30 |
| 0.090 | 0.270 | 0.450 | 0.125 | 2.50 | S68-090-2-SQ5XR | S68-090-3-SQ5XR | S68-090-4-SQ5XR | $27.20 | $29.30 |
| 0.093 (3/32) | 0.279 | 0.465 | 0.125 | 2.50 | S68-093-2-SQ5XR | S68-093-3-SQ5XR | S68-093-4-SQ5XR | $27.20 | $29.30 |
| 0.095 | 0.285 | 0.475 | 0.125 | 2.50 | S68-095-2-SQ5XR | S68-095-3-SQ5XR | S68-095-4-SQ5XR | $27.20 | $29.30 |
| 0.100 | 0.300 | 0.500 | 0.125 | 2.50 | S68-100-2-SQ5XR | S68-100-3-SQ5XR | S68-100-4-SQ5XR | $27.20 | $29.30 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | S68-118-2-SQ5XR | S68-118-3-SQ5XR | S68-118-4-SQ5XR | $27.20 | $29.30 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | S68-125-2-SQ5XR | S68-125-3-SQ5XR | S68-125-4-SQ5XR | $27.20 | $29.30 |

FLUTES 2,3,4

3X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 61 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

# S72 Square Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.015 | 0.080 | 0.125 | 2.50 | S72-010-2-SSQ8XR | N/A | N/A | $38.01 | $40.11 |
| 0.015 (1/64) | 0.023 | 0.120 | 0.125 | 2.50 | S72-015-2-SSQ8XR | S72-015-3-SSQ8XR | S72-015-4-SSQ8XR | $32.03 | $34.13 |
| 0.020 | 0.030 | 0.160 | 0.125 | 2.50 | S72-020-2-SSQ8XR | S72-020-3-SSQ8XR | S72-020-4-SSQ8XR | $29.87 | $31.97 |
| 0.025 | 0.038 | 0.200 | 0.125 | 2.50 | S72-025-2-SSQ8XR | S72-025-3-SSQ8XR | S72-025-4-SSQ8XR | $29.87 | $31.97 |
| 0.030 | 0.045 | 0.240 | 0.125 | 2.50 | S72-030-2-SSQ8XR | S72-030-3-SSQ8XR | S72-030-4-SSQ8XR | $29.87 | $31.97 |
| 0.031 (1/32) | 0.047 | 0.248 | 0.125 | 2.50 | S72-031-2-SSQ8XR | S72-031-3-SSQ8XR | S72-031-4-SSQ8XR | $29.87 | $31.97 |
| 0.035 | 0.053 | 0.280 | 0.125 | 2.50 | S72-035-2-SSQ8XR | S72-035-3-SSQ8XR | S72-035-4-SSQ8XR | $28.46 | $30.56 |
| 0.039 (1mm) | 0.059 | 0.312 | 0.125 | 2.50 | S72-039-2-SSQ8XR | S72-039-3-SSQ8XR | S72-039-4-SSQ8XR | $28.46 | $30.56 |
| 0.040 | 0.060 | 0.320 | 0.125 | 2.50 | S72-040-2-SSQ8XR | S72-040-3-SSQ8XR | S72-040-4-SSQ8XR | $28.46 | $30.56 |
| 0.045 | 0.068 | 0.360 | 0.125 | 2.50 | S72-045-2-SSQ8XR | S72-045-3-SSQ8XR | S72-045-4-SSQ8XR | $28.46 | $30.56 |
| 0.047 (3/64) | 0.071 | 0.376 | 0.125 | 2.50 | S72-047-2-SSQ8XR | S72-047-3-SSQ8XR | S72-047-4-SSQ8XR | $28.46 | $30.56 |
| 0.050 | 0.075 | 0.400 | 0.125 | 2.50 | S72-050-2-SSQ8XR | S72-050-3-SSQ8XR | S72-050-4-SSQ8XR | $28.46 | $30.56 |
| 0.055 | 0.083 | 0.440 | 0.125 | 2.50 | S72-055-2-SSQ8XR | S72-055-3-SSQ8XR | S72-055-4-SSQ8XR | $28.46 | $30.56 |
| 0.060 | 0.090 | 0.480 | 0.125 | 2.50 | S72-060-2-SSQ8XR | S72-060-3-SSQ8XR | S72-060-4-SSQ8XR | $28.46 | $30.56 |
| 0.062 (1/16) | 0.093 | 0.496 | 0.125 | 2.50 | S72-062-2-SSQ8XR | S72-062-3-SSQ8XR | S72-062-4-SSQ8XR | $28.46 | $30.56 |
| 0.065 | 0.098 | 0.520 | 0.125 | 2.50 | S72-065-2-SSQ8XR | S72-065-3-SSQ8XR | S72-065-4-SSQ8XR | $28.46 | $30.56 |
| 0.070 | 0.105 | 0.560 | 0.125 | 2.50 | S72-070-2-SSQ8XR | S72-070-3-SSQ8XR | S72-070-4-SSQ8XR | $27.20 | $29.30 |
| 0.075 | 0.113 | 0.600 | 0.125 | 2.50 | S72-075-2-SSQ8XR | S72-075-3-SSQ8XR | S72-075-4-SSQ8XR | $27.20 | $29.30 |
| 0.078 (5/64) | 0.117 | 0.624 | 0.125 | 2.50 | S72-078-2-SSQ8XR | S72-078-3-SSQ8XR | S72-078-4-SSQ8XR | $27.20 | $29.30 |
| 0.080 | 0.120 | 0.640 | 0.125 | 2.50 | S72-080-2-SSQ8XR | S72-080-3-SSQ8XR | S72-080-4-SSQ8XR | $27.20 | $29.30 |
| 0.085 | 0.128 | 0.680 | 0.125 | 2.50 | S72-085-2-SSQ8XR | S72-085-3-SSQ8XR | S72-085-4-SSQ8XR | $27.20 | $29.30 |
| 0.090 | 0.135 | 0.720 | 0.125 | 2.50 | S72-090-2-SSQ8XR | S72-090-3-SSQ8XR | S72-090-4-SSQ8XR | $27.20 | $29.30 |
| 0.093 (3/32) | 0.140 | 0.744 | 0.125 | 2.50 | S72-093-2-SSQ8XR | S72-093-3-SSQ8XR | S72-093-4-SSQ8XR | $27.20 | $29.30 |
| 0.095 | 0.143 | 0.760 | 0.125 | 2.50 | S72-095-2-SSQ8XR | S72-095-3-SSQ8XR | S72-095-4-SSQ8XR | $27.20 | $29.30 |
| 0.100 | 0.150 | 0.800 | 0.125 | 2.50 | S72-100-2-SSQ8XR | S72-100-3-SSQ8XR | S72-100-4-SSQ8XR | $27.20 | $29.30 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | S72-118-2-SSQ8XR | S72-118-3-SSQ8XR | S72-118-4-SSQ8XR | $27.20 | $29.30 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | S72-125-2-SSQ8XR | S72-125-3-SSQ8XR | S72-125-4-SSQ8XR | $27.20 | $29.30 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 62 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.030 | 0.080 | 0.125 | 2.50 | S69-010-2-SQ8XR | N/A | N/A | $38.01 | $40.11 |
| 0.015 (1/64) | 0.045 | 0.120 | 0.125 | 2.50 | S69-015-2-SQ8XR | S69-015-3-SQ8XR | S69-015-4-SQ8XR | $32.03 | $34.13 |
| 0.020 | 0.060 | 0.160 | 0.125 | 2.50 | S69-020-2-SQ8XR | S69-020-3-SQ8XR | S69-020-4-SQ8XR | $29.87 | $31.97 |
| 0.025 | 0.075 | 0.200 | 0.125 | 2.50 | S69-025-2-SQ8XR | S69-025-3-SQ8XR | S69-025-4-SQ8XR | $29.87 | $31.97 |
| 0.030 | 0.090 | 0.240 | 0.125 | 2.50 | S69-030-2-SQ8XR | S69-030-3-SQ8XR | S69-030-4-SQ8XR | $29.87 | $31.97 |
| 0.031 (1/32) | 0.093 | 0.248 | 0.125 | 2.50 | S69-031-2-SQ8XR | S69-031-3-SQ8XR | S69-031-4-SQ8XR | $29.87 | $31.97 |
| 0.035 | 0.105 | 0.280 | 0.125 | 2.50 | S69-035-2-SQ8XR | S69-035-3-SQ8XR | S69-035-4-SQ8XR | $28.46 | $30.56 |
| 0.039 (1mm) | 0.117 | 0.312 | 0.125 | 2.50 | S69-039-2-SQ8XR | S69-039-3-SQ8XR | S69-039-4-SQ8XR | $28.46 | $30.56 |
| 0.040 | 0.120 | 0.320 | 0.125 | 2.50 | S69-040-2-SQ8XR | S69-040-3-SQ8XR | S69-040-4-SQ8XR | $28.46 | $30.56 |
| 0.045 | 0.135 | 0.360 | 0.125 | 2.50 | S69-045-2-SQ8XR | S69-045-3-SQ8XR | S69-045-4-SQ8XR | $28.46 | $30.56 |
| 0.047 (3/64) | 0.141 | 0.376 | 0.125 | 2.50 | S69-047-2-SQ8XR | S69-047-3-SQ8XR | S69-047-4-SQ8XR | $28.46 | $30.56 |
| 0.050 | 0.150 | 0.400 | 0.125 | 2.50 | S69-050-2-SQ8XR | S69-050-3-SQ8XR | S69-050-4-SQ8XR | $28.46 | $30.56 |
| 0.055 | 0.165 | 0.440 | 0.125 | 2.50 | S69-055-2-SQ8XR | S69-055-3-SQ8XR | S69-055-4-SQ8XR | $28.46 | $30.56 |
| 0.060 | 0.180 | 0.480 | 0.125 | 2.50 | S69-060-2-SQ8XR | S69-060-3-SQ8XR | S69-060-4-SQ8XR | $28.46 | $30.56 |
| 0.062 (1/16) | 0.186 | 0.496 | 0.125 | 2.50 | S69-062-2-SQ8XR | S69-062-3-SQ8XR | S69-062-4-SQ8XR | $28.46 | $30.56 |
| 0.065 | 0.195 | 0.520 | 0.125 | 2.50 | S69-065-2-SQ8XR | S69-065-3-SQ8XR | S69-065-4-SQ8XR | $28.46 | $30.56 |
| 0.070 | 0.210 | 0.560 | 0.125 | 2.50 | S69-070-2-SQ8XR | S69-070-3-SQ8XR | S69-070-4-SQ8XR | $27.20 | $29.30 |
| 0.075 | 0.225 | 0.600 | 0.125 | 2.50 | S69-075-2-SQ8XR | S69-075-3-SQ8XR | S69-075-4-SQ8XR | $27.20 | $29.30 |
| 0.078 (5/64) | 0.234 | 0.624 | 0.125 | 2.50 | S69-078-2-SQ8XR | S69-078-3-SQ8XR | S69-078-4-SQ8XR | $27.20 | $29.30 |
| 0.080 | 0.240 | 0.640 | 0.125 | 2.50 | S69-080-2-SQ8XR | S69-080-3-SQ8XR | S69-080-4-SQ8XR | $27.20 | $29.30 |
| 0.085 | 0.255 | 0.680 | 0.125 | 2.50 | S69-085-2-SQ8XR | S69-085-3-SQ8XR | S69-085-4-SQ8XR | $27.20 | $29.30 |
| 0.090 | 0.270 | 0.720 | 0.125 | 2.50 | S69-090-2-SQ8XR | S69-090-3-SQ8XR | S69-090-4-SQ8XR | $27.20 | $29.30 |
| 0.093 (3/32) | 0.279 | 0.744 | 0.125 | 2.50 | S69-093-2-SQ8XR | S69-093-3-SQ8XR | S69-093-4-SQ8XR | $27.20 | $29.30 |
| 0.095 | 0.285 | 0.760 | 0.125 | 2.50 | S69-095-2-SQ8XR | S69-095-3-SQ8XR | S69-095-4-SQ8XR | $27.20 | $29.30 |
| 0.100 | 0.300 | 0.800 | 0.125 | 2.50 | S69-100-2-SQ8XR | S69-100-3-SQ8XR | S69-100-4-SQ8XR | $27.20 | $29.30 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | S69-118-2-SQ8XR | S69-118-3-SQ8XR | S69-118-4-SQ8XR | $27.20 | $29.30 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | S69-125-2-SQ8XR | S69-125-3-SQ8XR | S69-125-4-SQ8XR | $27.20 | $29.30 |

FLUTES 2,3,4

3X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 63 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## Tips on Selecting the Right Tool for the Job

| Number of Flutes | Primary Uses | Ideal Cutting Materials |
|---|---|---|
| 2-3 | Tools with fewer flutes allow optimal space for chip removal when milling or slotting softer materials. Also used for roughing. | Soft materials, such as aluminum and plastics. |
| 3-4 | Adding flutes provides greater strength. Recommended for use with roughing, milling, and slotting a variety of materials. Can also be used for finishing softer materials. | Hard materials, such as stainless steel, steel, and titanium. |
| 5 + | Ideal for use in finishing work, when using faster feed rates, and with reduced chip load. | Harder materials, such as steel, or for finishing a variety of materials. |

# S73 Square Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.015 | 0.120 | 0.125 | 2.50 | S73-010-2-SSQ12XR | N/A | N/A | $39.48 | $41.58 |
| 0.015 (1/64) | 0.023 | 0.180 | 0.125 | 2.50 | S73-015-2-SSQ12XR | S73-015-3-SSQ12XR | S73-015-4-SSQ12XR | $33.13 | $35.23 |
| 0.020 | 0.030 | 0.240 | 0.125 | 2.50 | S73-020-2-SSQ12XR | S73-020-3-SSQ12XR | S73-020-4-SSQ12XR | $31.50 | $33.60 |
| 0.025 | 0.038 | 0.300 | 0.125 | 2.50 | S73-025-2-SSQ12XR | S73-025-3-SSQ12XR | S73-025-4-SSQ12XR | $31.50 | $33.60 |
| 0.030 | 0.045 | 0.360 | 0.125 | 2.50 | S73-030-2-SSQ12XR | S73-030-3-SSQ12XR | S73-030-4-SSQ12XR | $29.61 | $31.71 |
| 0.031 (1/32) | 0.047 | 0.372 | 0.125 | 2.50 | S73-031-2-SSQ12XR | S73-031-3-SSQ12XR | S73-031-4-SSQ12XR | $29.61 | $31.71 |
| 0.035 | 0.053 | 0.420 | 0.125 | 2.50 | S73-035-2-SSQ12XR | S73-035-3-SSQ12XR | S73-035-4-SSQ12XR | $29.61 | $31.71 |
| 0.039 (1mm) | 0.059 | 0.468 | 0.125 | 2.50 | S73-039-2-SSQ12XR | S73-039-3-SSQ12XR | S73-039-4-SSQ12XR | $29.61 | $31.71 |
| 0.040 | 0.060 | 0.480 | 0.125 | 2.50 | S73-040-2-SSQ12XR | S73-040-3-SSQ12XR | S73-040-4-SSQ12XR | $29.61 | $31.71 |
| 0.045 | 0.068 | 0.540 | 0.125 | 2.50 | S73-045-2-SSQ12XR | S73-045-3-SSQ12XR | S73-045-4-SSQ12XR | $29.61 | $31.71 |
| 0.047 (3/64) | 0.071 | 0.564 | 0.125 | 2.50 | S73-047-2-SSQ12XR | S73-047-3-SSQ12XR | S73-047-4-SSQ12XR | $29.61 | $31.71 |
| 0.050 | 0.075 | 0.600 | 0.125 | 2.50 | S73-050-2-SSQ12XR | S73-050-3-SSQ12XR | S73-050-4-SSQ12XR | $29.61 | $31.71 |
| 0.055 | 0.083 | 0.660 | 0.125 | 2.50 | S73-055-2-SSQ12XR | S73-055-3-SSQ12XR | S73-055-4-SSQ12XR | $29.61 | $31.71 |
| 0.060 | 0.090 | 0.720 | 0.125 | 2.50 | S73-060-2-SSQ12XR | S73-060-3-SSQ12XR | S73-060-4-SSQ12XR | $29.61 | $31.71 |
| 0.062 (1/16) | 0.093 | 0.744 | 0.125 | 2.50 | S73-062-2-SSQ12XR | S73-062-3-SSQ12XR | S73-062-4-SSQ12XR | $29.61 | $31.71 |
| 0.065 | 0.098 | 0.780 | 0.125 | 2.50 | S73-065-2-SSQ12XR | S73-065-3-SSQ12XR | S73-065-4-SSQ12XR | $29.61 | $31.71 |
| 0.070 | 0.105 | 0.840 | 0.125 | 2.50 | S73-070-2-SSQ12XR | S73-070-3-SSQ12XR | S73-070-4-SSQ12XR | $27.93 | $30.03 |
| 0.075 | 0.113 | 0.900 | 0.125 | 2.50 | S73-075-2-SSQ12XR | S73-075-3-SSQ12XR | S73-075-4-SSQ12XR | $27.93 | $30.03 |
| 0.078 (5/64) | 0.117 | 0.936 | 0.125 | 2.50 | S73-078-2-SSQ12XR | S73-078-3-SSQ12XR | S73-078-4-SSQ12XR | $27.93 | $30.03 |
| 0.080 | 0.120 | 0.960 | 0.125 | 2.50 | S73-080-2-SSQ12XR | S73-080-3-SSQ12XR | S73-080-4-SSQ12XR | $27.93 | $30.03 |
| 0.085 | 0.128 | 1.020 | 0.125 | 2.50 | S73-085-2-SSQ12XR | S73-085-3-SSQ12XR | S73-085-4-SSQ12XR | $27.93 | $30.03 |
| 0.090 | 0.135 | 1.080 | 0.125 | 2.50 | S73-090-2-SSQ12XR | S73-090-3-SSQ12XR | S73-090-4-SSQ12XR | $27.93 | $30.03 |
| 0.093 (3/32) | 0.140 | 1.116 | 0.125 | 2.50 | S73-093-2-SSQ12XR | S73-093-3-SSQ12XR | S73-093-4-SSQ12XR | $27.93 | $30.03 |
| 0.095 | 0.143 | 1.140 | 0.125 | 2.50 | S73-095-2-SSQ12XR | S73-095-3-SSQ12XR | S73-095-4-SSQ12XR | $27.93 | $30.03 |
| 0.100 | 0.150 | 1.200 | 0.125 | 2.50 | S73-100-2-SSQ12XR | S73-100-3-SSQ12XR | S73-100-4-SSQ12XR | $27.93 | $30.03 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | S73-118-2-SSQ12XR | S73-118-3-SSQ12XR | S73-118-4-SSQ12XR | $27.93 | $30.03 |
| 0.125 (1/8) | 0.187 | 1.500 | 0.125 | 2.50 | S73-125-2-SSQ12XR | S73-125-3-SSQ12XR | S73-125-4-SSQ12XR | $27.93 | $30.03 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 64 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Square Micro End Mills



| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.030 | 0.120 | 0.125 | 2.50 | S70-010-2-SQ12XR | N/A | N/A | $39.48 | $41.58 |
| 0.015 (1/64) | 0.045 | 0.180 | 0.125 | 2.50 | S70-015-2-SQ12XR | S70-015-3-SQ12XR | S70-015-4-SQ12XR | $33.13 | $35.23 |
| 0.020 | 0.060 | 0.240 | 0.125 | 2.50 | S70-020-2-SQ12XR | S70-020-3-SQ12XR | S70-020-4-SQ12XR | $31.50 | $33.60 |
| 0.025 | 0.075 | 0.300 | 0.125 | 2.50 | S70-025-2-SQ12XR | S70-025-3-SQ12XR | S70-025-4-SQ12XR | $31.50 | $33.60 |
| 0.030 | 0.090 | 0.360 | 0.125 | 2.50 | S70-030-2-SQ12XR | S70-030-3-SQ12XR | S70-030-4-SQ12XR | $31.50 | $33.60 |
| 0.031 (1/32) | 0.093 | 0.372 | 0.125 | 2.50 | S70-031-2-SQ12XR | S70-031-3-SQ12XR | S70-031-4-SQ12XR | $29.61 | $31.71 |
| 0.035 | 0.105 | 0.420 | 0.125 | 2.50 | S70-035-2-SQ12XR | S70-035-3-SQ12XR | S70-035-4-SQ12XR | $29.61 | $31.71 |
| 0.039 (1mm) | 0.117 | 0.468 | 0.125 | 2.50 | S70-039-2-SQ12XR | S70-039-3-SQ12XR | S70-039-4-SQ12XR | $29.61 | $31.71 |
| 0.040 | 0.120 | 0.480 | 0.125 | 2.50 | S70-040-2-SQ12XR | S70-040-3-SQ12XR | S70-040-4-SQ12XR | $29.61 | $31.71 |
| 0.045 | 0.135 | 0.540 | 0.125 | 2.50 | S70-045-2-SQ12XR | S70-045-3-SQ12XR | S70-045-4-SQ12XR | $29.61 | $31.71 |
| 0.047 (3/64) | 0.141 | 0.564 | 0.125 | 2.50 | S70-047-2-SQ12XR | S70-047-3-SQ12XR | S70-047-4-SQ12XR | $29.61 | $31.71 |
| 0.050 | 0.150 | 0.600 | 0.125 | 2.50 | S70-050-2-SQ12XR | S70-050-3-SQ12XR | S70-050-4-SQ12XR | $29.61 | $31.71 |
| 0.055 | 0.165 | 0.660 | 0.125 | 2.50 | S70-055-2-SQ12XR | S70-055-3-SQ12XR | S70-055-4-SQ12XR | $29.61 | $31.71 |
| 0.060 | 0.180 | 0.720 | 0.125 | 2.50 | S70-060-2-SQ12XR | S70-060-3-SQ12XR | S70-060-4-SQ12XR | $29.61 | $31.71 |
| 0.062 (1/16) | 0.186 | 0.744 | 0.125 | 2.50 | S70-062-2-SQ12XR | S70-062-3-SQ12XR | S70-062-4-SQ12XR | $29.61 | $31.71 |
| 0.065 | 0.195 | 0.780 | 0.125 | 2.50 | S70-065-2-SQ12XR | S70-065-3-SQ12XR | S70-065-4-SQ12XR | $29.61 | $31.71 |
| 0.070 | 0.210 | 0.840 | 0.125 | 2.50 | S70-070-2-SQ12XR | S70-070-3-SQ12XR | S70-070-4-SQ12XR | $27.93 | $30.03 |
| 0.075 | 0.225 | 0.900 | 0.125 | 2.50 | S70-075-2-SQ12XR | S70-075-3-SQ12XR | S70-075-4-SQ12XR | $27.93 | $30.03 |
| 0.078 (5/64) | 0.234 | 0.936 | 0.125 | 2.50 | S70-078-2-SQ12XR | S70-078-3-SQ12XR | S70-078-4-SQ12XR | $27.93 | $30.03 |
| 0.080 | 0.240 | 0.960 | 0.125 | 2.50 | S70-080-2-SQ12XR | S70-080-3-SQ12XR | S70-080-4-SQ12XR | $27.93 | $30.03 |
| 0.085 | 0.255 | 1.020 | 0.125 | 2.50 | S70-085-2-SQ12XR | S70-085-3-SQ12XR | S70-085-4-SQ12XR | $27.93 | $30.03 |
| 0.090 | 0.270 | 1.080 | 0.125 | 2.50 | S70-090-2-SQ12XR | S70-090-3-SQ12XR | S70-090-4-SQ12XR | $27.93 | $30.03 |
| 0.093 (3/32) | 0.279 | 1.116 | 0.125 | 2.50 | S70-093-2-SQ12XR | S70-093-3-SQ12XR | S70-093-4-SQ12XR | $27.93 | $30.03 |
| 0.095 | 0.285 | 1.140 | 0.125 | 2.50 | S70-095-2-SQ12XR | S70-095-3-SQ12XR | S70-095-4-SQ12XR | $27.93 | $30.03 |
| 0.100 | 0.300 | 1.200 | 0.125 | 2.50 | S70-100-2-SQ12XR | S70-100-3-SQ12XR | S70-100-4-SQ12XR | $27.93 | $30.03 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | S70-118-2-SQ12XR | S70-118-3-SQ12XR | S70-118-4-SQ12XR | $27.93 | $30.03 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | S70-125-2-SQ12XR | S70-125-3-SQ12XR | S70-125-4-SQ12XR | $27.93 | $30.03 |

FLUTES 2,3,4

3X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 65 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

# S83 Corner Radius Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.015 (1/64) | 0.023 | 0.125 | 1.50 | 0.003 | S83-015-2-.003R | S83-015-3-.003R | S83-015-4-.003R | $38.85 | $40.95 |
| 0.020 | 0.030 | 0.125 | 1.50 | 0.005 | S83-020-2-.005R | S83-020-3-.005R | S83-020-4-.005R | $37.01 | $39.11 |
| 0.025 | 0.038 | 0.125 | 1.50 | 0.005 | S83-025-2-.005R | S83-025-3-.005R | S83-025-4-.005R | $32.76 | $34.86 |
| 0.030 | 0.045 | 0.125 | 1.50 | 0.005 | S83-030-2-.005R | S83-030-3-.005R | S83-030-4-.005R | $31.08 | $33.18 |
| 0.030 | 0.045 | 0.125 | 1.50 | 0.010 | S83-030-2-.010R | S83-030-3-.010R | S83-030-4-.010R | $31.08 | $33.18 |
| 0.031 (1/32) | 0.047 | 0.125 | 1.50 | 0.005 | S83-031-2-.005R | S83-031-3-.005R | S83-031-4-.005R | $31.08 | $33.18 |
| 0.031 (1/32) | 0.047 | 0.125 | 1.50 | 0.010 | S83-031-2-.010R | S83-031-3-.010R | S83-031-4-.010R | $31.08 | $33.18 |
| 0.035 | 0.053 | 0.125 | 1.50 | 0.005 | S83-035-2-.005R | S83-035-3-.005R | S83-035-4-.005R | $22.10 | $24.20 |
| 0.035 | 0.053 | 0.125 | 1.50 | 0.010 | S83-035-2-.010R | S83-035-3-.010R | S83-035-4-.010R | $22.10 | $24.20 |
| 0.039 (1mm) | 0.059 | 0.125 | 1.50 | 0.005 | S83-039-2-.005R | S83-039-3-.005R | S83-039-4-.005R | $22.10 | $24.20 |
| 0.039 (1mm) | 0.059 | 0.125 | 1.50 | 0.010 | S83-039-2-.010R | S83-039-3-.010R | S83-039-4-.010R | $22.10 | $24.20 |
| 0.040 | 0.060 | 0.125 | 1.50 | 0.005 | S83-040-2-.005R | S83-040-3-.005R | S83-040-4-.005R | $22.10 | $24.20 |
| 0.040 | 0.060 | 0.125 | 1.50 | 0.010 | S83-040-2-.010R | S83-040-3-.010R | S83-040-4-.010R | $22.10 | $24.20 |
| 0.045 | 0.068 | 0.125 | 1.50 | 0.005 | S83-045-2-.005R | S83-045-3-.005R | S83-045-4-.005R | $22.10 | $24.20 |
| 0.045 | 0.068 | 0.125 | 1.50 | 0.010 | S83-045-2-.010R | S83-045-3-.010R | S83-045-4-.010R | $22.10 | $24.20 |
| 0.045 | 0.068 | 0.125 | 1.50 | 0.015 | S83-045-2-.015R | S83-045-3-.015R | S83-045-4-.015R | $22.10 | $24.20 |
| 0.047 (3/64) | 0.071 | 0.125 | 1.50 | 0.005 | S83-047-2-.005R | S83-047-3-.005R | S83-047-4-.005R | $22.10 | $24.20 |
| 0.047 (3/64) | 0.071 | 0.125 | 1.50 | 0.010 | S83-047-2-.010R | S83-047-3-.010R | S83-047-4-.010R | $22.10 | $24.20 |
| 0.047 (3/64) | 0.071 | 0.125 | 1.50 | 0.015 | S83-047-2-.015R | S83-047-3-.015R | S83-047-4-.015R | $22.10 | $24.20 |
| 0.050 | 0.075 | 0.125 | 1.50 | 0.005 | S83-050-2-.005R | S83-050-3-.005R | S83-050-4-.005R | $22.10 | $24.20 |
| 0.050 | 0.075 | 0.125 | 1.50 | 0.010 | S83-050-2-.010R | S83-050-3-.010R | S83-050-4-.010R | $22.10 | $24.20 |
| 0.050 | 0.075 | 0.125 | 1.50 | 0.015 | S83-050-2-.015R | S83-050-3-.015R | S83-050-4-.015R | $22.10 | $24.20 |
| 0.055 | 0.083 | 0.125 | 1.50 | 0.005 | S83-055-2-.005R | S83-055-3-.005R | S83-055-4-.005R | $20.79 | $22.89 |
| 0.055 | 0.083 | 0.125 | 1.50 | 0.010 | S83-055-2-.010R | S83-055-3-.010R | S83-055-4-.010R | $20.79 | $22.89 |
| 0.055 | 0.083 | 0.125 | 1.50 | 0.015 | S83-055-2-.015R | S83-055-3-.015R | S83-055-4-.015R | $20.79 | $22.89 |
| 0.060 | 0.090 | 0.125 | 1.50 | 0.005 | S83-060-2-.005R | S83-060-3-.005R | S83-060-4-.005R | $20.79 | $22.89 |
| 0.060 | 0.090 | 0.125 | 1.50 | 0.010 | S83-060-2-.010R | S83-060-3-.010R | S83-060-4-.010R | $20.79 | $22.89 |
| 0.060 | 0.090 | 0.125 | 1.50 | 0.015 | S83-060-2-.015R | S83-060-3-.015R | S83-060-4-.015R | $20.79 | $22.89 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | 0.005 | S83-062-2-.005R | S83-062-3-.005R | S83-062-4-.005R | $20.79 | $22.89 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | 0.010 | S83-062-2-.010R | S83-062-3-.010R | S83-062-4-.010R | $20.79 | $22.89 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | 0.015 | S83-062-2-.015R | S83-062-3-.015R | S83-062-4-.015R | $20.79 | $22.89 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | 0.020 | S83-062-2-.020R | S83-062-3-.020R | S83-062-4-.020R | $20.79 | $22.89 |
| 0.065 | 0.098 | 0.125 | 1.50 | 0.005 | S83-065-2-.005R | S83-065-3-.005R | S83-065-4-.005R | $20.79 | $22.89 |
| 0.065 | 0.098 | 0.125 | 1.50 | 0.010 | S83-065-2-.010R | S83-065-3-.010R | S83-065-4-.010R | $20.79 | $22.89 |
| 0.065 | 0.098 | 0.125 | 1.50 | 0.015 | S83-065-2-.015R | S83-065-3-.015R | S83-065-4-.015R | $20.79 | $22.89 |
| 0.070 | 0.105 | 0.125 | 1.50 | 0.005 | S83-070-2-.005R | S83-070-3-.005R | S83-070-4-.005R | $20.79 | $22.89 |
| 0.070 | 0.105 | 0.125 | 1.50 | 0.010 | S83-070-2-.010R | S83-070-3-.010R | S83-070-4-.010R | $20.79 | $22.89 |
| 0.070 | 0.105 | 0.125 | 1.50 | 0.015 | S83-070-2-.015R | S83-070-3-.015R | S83-070-4-.015R | $20.79 | $22.89 |
| 0.075 | 0.113 | 0.125 | 1.50 | 0.005 | S83-075-2-.005R | S83-075-3-.005R | S83-075-4-.005R | $20.79 | $22.89 |
| 0.075 | 0.113 | 0.125 | 1.50 | 0.010 | S83-075-2-.010R | S83-075-3-.010R | S83-075-4-.010R | $20.79 | $22.89 |
| 0.075 | 0.113 | 0.125 | 1.50 | 0.015 | S83-075-2-.015R | S83-075-3-.015R | S83-075-4-.015R | $20.79 | $22.89 |

## Corner Radius Micro End Mills



FLUTES 2,3,4

1.5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | 0.005 | S83-078-2-.005R | S83-078-3-.005R | S83-078-4-.005R | $20.79 | $22.89 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | 0.010 | S83-078-2-.010R | S83-078-3-.010R | S83-078-4-.010R | $20.79 | $22.89 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | 0.015 | S83-078-2-.015R | S83-078-3-.015R | S83-078-4-.015R | $20.79 | $22.89 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | 0.020 | S83-078-2-.020R | S83-078-3-.020R | S83-078-4-.020R | $20.79 | $22.89 |
| 0.080 | 0.120 | 0.125 | 1.50 | 0.005 | S83-080-2-.005R | S83-080-3-.005R | S83-080-4-.005R | $20.79 | $22.89 |
| 0.080 | 0.120 | 0.125 | 1.50 | 0.010 | S83-080-2-.010R | S83-080-3-.010R | S83-080-4-.010R | $20.79 | $22.89 |
| 0.080 | 0.120 | 0.125 | 1.50 | 0.015 | S83-080-2-.015R | S83-080-3-.015R | S83-080-4-.015R | $20.79 | $22.89 |
| 0.085 | 0.128 | 0.125 | 1.50 | 0.005 | S83-085-2-.005R | S83-085-3-.005R | S83-085-4-.005R | $20.79 | $22.89 |
| 0.085 | 0.128 | 0.125 | 1.50 | 0.010 | S83-085-2-.010R | S83-085-3-.010R | S83-085-4-.010R | $20.79 | $22.89 |
| 0.085 | 0.128 | 0.125 | 1.50 | 0.015 | S83-085-2-.015R | S83-085-3-.015R | S83-085-4-.015R | $20.79 | $22.89 |
| 0.090 | 0.135 | 0.125 | 1.50 | 0.005 | S83-090-2-.005R | S83-090-3-.005R | S83-090-4-.005R | $20.79 | $22.89 |
| 0.090 | 0.135 | 0.125 | 1.50 | 0.010 | S83-090-2-.010R | S83-090-3-.010R | S83-090-4-.010R | $20.79 | $22.89 |
| 0.090 | 0.135 | 0.125 | 1.50 | 0.015 | S83-090-2-.015R | S83-090-3-.015R | S83-090-4-.015R | $20.79 | $22.89 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | 0.005 | S83-093-2-.005R | S83-093-3-.005R | S83-093-4-.005R | $20.79 | $22.89 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | 0.010 | S83-093-2-.010R | S83-093-3-.010R | S83-093-4-.010R | $20.79 | $22.89 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | 0.015 | S83-093-2-.015R | S83-093-3-.015R | S83-093-4-.015R | $20.79 | $22.89 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | 0.020 | S83-093-2-.020R | S83-093-3-.020R | S83-093-4-.020R | $20.79 | $22.89 |
| 0.095 | 0.143 | 0.125 | 1.50 | 0.005 | S83-095-2-.005R | S83-095-3-.005R | S83-095-4-.005R | $20.79 | $22.89 |
| 0.095 | 0.143 | 0.125 | 1.50 | 0.010 | S83-095-2-.010R | S83-095-3-.010R | S83-095-4-.010R | $20.79 | $22.89 |
| 0.095 | 0.143 | 0.125 | 1.50 | 0.015 | S83-095-2-.015R | S83-095-3-.015R | S83-095-4-.015R | $20.79 | $22.89 |
| 0.100 | 0.150 | 0.125 | 1.50 | 0.005 | S83-100-2-.005R | S83-100-3-.005R | S83-100-4-.005R | $20.53 | $22.63 |
| 0.100 | 0.150 | 0.125 | 1.50 | 0.010 | S83-100-2-.010R | S83-100-3-.010R | S83-100-4-.010R | $20.53 | $22.63 |
| 0.100 | 0.150 | 0.125 | 1.50 | 0.015 | S83-100-2-.015R | S83-100-3-.015R | S83-100-4-.015R | $20.53 | $22.63 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.005 | S83-118-2-.005R | S83-118-3-.005R | S83-118-4-.005R | $20.53 | $22.63 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.010 | S83-118-2-.010R | S83-118-3-.010R | S83-118-4-.010R | $20.53 | $22.63 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.015 | S83-118-2-.015R | S83-118-3-.015R | S83-118-4-.015R | $20.53 | $22.63 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.020 | S83-118-2-.020R | S83-118-3-.020R | S83-118-4-.020R | $20.53 | $22.63 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.005 | S83-125-2-.005R | S83-125-3-.005R | S83-125-4-.005R | $20.53 | $22.63 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.010 | S83-125-2-.010R | S83-125-3-.010R | S83-125-4-.010R | $20.53 | $22.63 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.015 | S83-125-2-.015R | S83-125-3-.015R | S83-125-4-.015R | $20.53 | $22.63 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.020 | S83-125-2-.020R | S83-125-3-.020R | S83-125-4-.020R | $20.53 | $22.63 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 66 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

# S58 Corner Radius Micro End Mills

FLUTES 2,3,4

3X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.015 (1/64) | 0.045 | 0.125 | 1.50 | 0.003 | S58-015-2-.003R | S58-015-3-.003R | S58-015-4-.003R | $38.85 | $40.95 |
| 0.020 | 0.060 | 0.125 | 1.50 | 0.005 | S58-020-2-.005R | S58-020-3-.005R | S58-020-4-.005R | $37.01 | $39.11 |
| 0.025 | 0.075 | 0.125 | 1.50 | 0.005 | S58-025-2-.005R | S58-025-3-.005R | S58-025-4-.005R | $32.76 | $34.86 |
| 0.030 | 0.090 | 0.125 | 1.50 | 0.005 | S58-030-2-.005R | S58-030-3-.005R | S58-030-4-.005R | $31.08 | $33.18 |
| 0.030 | 0.090 | 0.125 | 1.50 | 0.010 | S58-030-2-.010R | S58-030-3-.010R | S58-030-4-.010R | $31.08 | $33.18 |
| 0.031 (1/32) | 0.093 | 0.125 | 1.50 | 0.005 | S58-031-2-.005R | S58-031-3-.005R | S58-031-4-.005R | $31.08 | $33.18 |
| 0.031 (1/32) | 0.093 | 0.125 | 1.50 | 0.010 | S58-031-2-.010R | S58-031-3-.010R | S58-031-4-.010R | $31.08 | $33.18 |
| 0.035 | 0.105 | 0.125 | 1.50 | 0.005 | S58-035-2-.005R | S58-035-3-.005R | S58-035-4-.005R | $22.10 | $24.20 |
| 0.035 | 0.105 | 0.125 | 1.50 | 0.010 | S58-035-2-.010R | S58-035-3-.010R | S58-035-4-.010R | $22.10 | $24.20 |
| 0.039 (1mm) | 0.117 | 0.125 | 1.50 | 0.005 | S58-039-2-.005R | S58-039-3-.005R | S58-039-4-.005R | $22.10 | $24.20 |
| 0.039 (1mm) | 0.117 | 0.125 | 1.50 | 0.010 | S58-039-2-.010R | S58-039-3-.010R | S58-039-4-.010R | $22.10 | $24.20 |
| 0.040 | 0.120 | 0.125 | 1.50 | 0.005 | S58-040-2-.005R | S58-040-3-.005R | S58-040-4-.005R | $22.10 | $24.20 |
| 0.040 | 0.120 | 0.125 | 1.50 | 0.010 | S58-040-2-.010R | S58-040-3-.010R | S58-040-4-.010R | $22.10 | $24.20 |
| 0.045 | 0.135 | 0.125 | 1.50 | 0.005 | S58-045-2-.005R | S58-045-3-.005R | S58-045-4-.005R | $22.10 | $24.20 |
| 0.045 | 0.135 | 0.125 | 1.50 | 0.010 | S58-045-2-.010R | S58-045-3-.010R | S58-045-4-.010R | $22.10 | $24.20 |
| 0.045 | 0.135 | 0.125 | 1.50 | 0.015 | S58-045-2-.015R | S58-045-3-.015R | S58-045-4-.015R | $22.10 | $24.20 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | 0.005 | S58-047-2-.005R | S58-047-3-.005R | S58-047-4-.005R | $22.10 | $24.20 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | 0.010 | S58-047-2-.010R | S58-047-3-.010R | S58-047-4-.010R | $22.10 | $24.20 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | 0.015 | S58-047-2-.015R | S58-047-3-.015R | S58-047-4-.015R | $22.10 | $24.20 |
| 0.050 | 0.150 | 0.125 | 1.50 | 0.005 | S58-050-2-.005R | S58-050-3-.005R | S58-050-4-.005R | $22.10 | $24.20 |
| 0.050 | 0.150 | 0.125 | 1.50 | 0.010 | S58-050-2-.010R | S58-050-3-.010R | S58-050-4-.010R | $22.10 | $24.20 |
| 0.050 | 0.150 | 0.125 | 1.50 | 0.015 | S58-050-2-.015R | S58-050-3-.015R | S58-050-4-.015R | $22.10 | $24.20 |
| 0.055 | 0.165 | 0.125 | 1.50 | 0.005 | S58-055-2-.005R | S58-055-3-.005R | S58-055-4-.005R | $20.79 | $22.89 |
| 0.055 | 0.165 | 0.125 | 1.50 | 0.010 | S58-055-2-.010R | S58-055-3-.010R | S58-055-4-.010R | $20.79 | $22.89 |
| 0.055 | 0.165 | 0.125 | 1.50 | 0.015 | S58-055-2-.015R | S58-055-3-.015R | S58-055-4-.015R | $20.79 | $22.89 |
| 0.060 | 0.180 | 0.125 | 1.50 | 0.005 | S58-060-2-.005R | S58-060-3-.005R | S58-060-4-.005R | $20.79 | $22.89 |
| 0.060 | 0.180 | 0.125 | 1.50 | 0.010 | S58-060-2-.010R | S58-060-3-.010R | S58-060-4-.010R | $20.79 | $22.89 |
| 0.060 | 0.180 | 0.125 | 1.50 | 0.015 | S58-060-2-.015R | S58-060-3-.015R | S58-060-4-.015R | $20.79 | $22.89 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | 0.005 | S58-062-2-.005R | S58-062-3-.005R | S58-062-4-.005R | $20.79 | $22.89 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | 0.010 | S58-062-2-.010R | S58-062-3-.010R | S58-062-4-.010R | $20.79 | $22.89 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | 0.015 | S58-062-2-.015R | S58-062-3-.015R | S58-062-4-.015R | $20.79 | $22.89 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | 0.020 | S58-062-2-.020R | S58-062-3-.020R | S58-062-4-.020R | $20.79 | $22.89 |
| 0.065 | 0.195 | 0.125 | 1.50 | 0.005 | S58-065-2-.005R | S58-065-3-.005R | S58-065-4-.005R | $20.79 | $22.89 |
| 0.065 | 0.195 | 0.125 | 1.50 | 0.010 | S58-065-2-.010R | S58-065-3-.010R | S58-065-4-.010R | $20.79 | $22.89 |
| 0.065 | 0.195 | 0.125 | 1.50 | 0.015 | S58-065-2-.015R | S58-065-3-.015R | S58-065-4-.015R | $20.79 | $22.89 |
| 0.070 | 0.210 | 0.125 | 1.50 | 0.005 | S58-070-2-.005R | S58-070-3-.005R | S58-070-4-.005R | $20.79 | $22.89 |
| 0.070 | 0.210 | 0.125 | 1.50 | 0.010 | S58-070-2-.010R | S58-070-3-.010R | S58-070-4-.010R | $20.79 | $22.89 |
| 0.070 | 0.210 | 0.125 | 1.50 | 0.015 | S58-070-2-.015R | S58-070-3-.015R | S58-070-4-.015R | $20.79 | $22.89 |
| 0.075 | 0.225 | 0.125 | 1.50 | 0.005 | S58-075-2-.005R | S58-075-3-.005R | S58-075-4-.005R | $20.79 | $22.89 |
| 0.075 | 0.225 | 0.125 | 1.50 | 0.010 | S58-075-2-.010R | S58-075-3-.010R | S58-075-4-.010R | $20.79 | $22.89 |
| 0.075 | 0.225 | 0.125 | 1.50 | 0.015 | S58-075-2-.015R | S58-075-3-.015R | S58-075-4-.015R | $20.79 | $22.89 |

## Corner Radius Micro End Mills



| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | 0.005 | S58-078-2-.005R | S58-078-3-.005R | S58-078-4-.005R | $20.79 | $22.89 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | 0.010 | S58-078-2-.010R | S58-078-3-.010R | S58-078-4-.010R | $20.79 | $22.89 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | 0.015 | S58-078-2-.015R | S58-078-3-.015R | S58-078-4-.015R | $20.79 | $22.89 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | 0.020 | S58-078-2-.020R | S58-078-3-.020R | S58-078-4-.020R | $20.79 | $22.89 |
| 0.080 | 0.240 | 0.125 | 1.50 | 0.005 | S58-080-2-.005R | S58-080-3-.005R | S58-080-4-.005R | $20.79 | $22.89 |
| 0.080 | 0.240 | 0.125 | 1.50 | 0.010 | S58-080-2-.010R | S58-080-3-.010R | S58-080-4-.010R | $20.79 | $22.89 |
| 0.080 | 0.240 | 0.125 | 1.50 | 0.015 | S58-080-2-.015R | S58-080-3-.015R | S58-080-4-.015R | $20.79 | $22.89 |
| 0.085 | 0.255 | 0.125 | 1.50 | 0.005 | S58-085-2-.005R | S58-085-3-.005R | S58-085-4-.005R | $20.79 | $22.89 |
| 0.085 | 0.255 | 0.125 | 1.50 | 0.010 | S58-085-2-.010R | S58-085-3-.010R | S58-085-4-.010R | $20.79 | $22.89 |
| 0.085 | 0.255 | 0.125 | 1.50 | 0.015 | S58-085-2-.015R | S58-085-3-.015R | S58-085-4-.015R | $20.79 | $22.89 |
| 0.090 | 0.270 | 0.125 | 1.50 | 0.005 | S58-090-2-.005R | S58-090-3-.005R | S58-090-4-.005R | $20.79 | $22.89 |
| 0.090 | 0.270 | 0.125 | 1.50 | 0.010 | S58-090-2-.010R | S58-090-3-.010R | S58-090-4-.010R | $20.79 | $22.89 |
| 0.090 | 0.270 | 0.125 | 1.50 | 0.015 | S58-090-2-.015R | S58-090-3-.015R | S58-090-4-.015R | $20.79 | $22.89 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | 0.005 | S58-093-2-.005R | S58-093-3-.005R | S58-093-4-.005R | $20.79 | $22.89 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | 0.010 | S58-093-2-.010R | S58-093-3-.010R | S58-093-4-.010R | $20.79 | $22.89 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | 0.015 | S58-093-2-.015R | S58-093-3-.015R | S58-093-4-.015R | $20.79 | $22.89 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | 0.020 | S58-093-2-.020R | S58-093-3-.020R | S58-093-4-.020R | $20.79 | $22.89 |
| 0.095 | 0.285 | 0.125 | 1.50 | 0.005 | S58-095-2-.005R | S58-095-3-.005R | S58-095-4-.005R | $20.79 | $22.89 |
| 0.095 | 0.285 | 0.125 | 1.50 | 0.010 | S58-095-2-.010R | S58-095-3-.010R | S58-095-4-.010R | $20.79 | $22.89 |
| 0.095 | 0.285 | 0.125 | 1.50 | 0.015 | S58-095-2-.015R | S58-095-3-.015R | S58-095-4-.015R | $20.79 | $22.89 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.005 | S58-100-2-.005R | S58-100-3-.005R | S58-100-4-.005R | $20.53 | $22.63 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.010 | S58-100-2-.010R | S58-100-3-.010R | S58-100-4-.010R | $20.53 | $22.63 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.015 | S58-100-2-.015R | S58-100-3-.015R | S58-100-4-.015R | $20.53 | $22.63 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.030 | S58-100-2-.030R | S58-100-3-.030R | S58-100-4-.030R | $20.53 | $22.63 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.005 | S58-118-2-.005R | S58-118-3-.005R | S58-118-4-.005R | $20.53 | $22.63 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.010 | S58-118-2-.010R | S58-118-3-.010R | S58-118-4-.010R | $20.53 | $22.63 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.015 | S58-118-2-.015R | S58-118-3-.015R | S58-118-4-.015R | $20.53 | $22.63 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.020 | S58-118-2-.020R | S58-118-3-.020R | S58-118-4-.020R | $20.53 | $22.63 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.005 | S58-125-2-.005R | S58-125-3-.005R | S58-125-4-.005R | $20.53 | $22.63 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.010 | S58-125-2-.010R | S58-125-3-.010R | S58-125-4-.010R | $20.53 | $22.63 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.015 | S58-125-2-.015R | S58-125-3-.015R | S58-125-4-.015R | $20.53 | $22.63 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.020 | S58-125-2-.020R | S58-125-3-.020R | S58-125-4-.020R | $20.53 | $22.63 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.030 | S58-125-2-.030R | S58-125-3-.030R | S58-125-4-.030R | $20.53 | $22.63 |

FLUTES 2,3,4

3X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 67 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

# S107 Corner Radius Micro End Mills

FLUTES 2,3,4

5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.015 (1/64) | 0.075 | 0.125 | 2.50 | 0.003 | S107-015-2-.003R | S107-015-3-.003R | S107-015-4-.003R | $35.39 | $37.49 |
| 0.020 | 0.100 | 0.125 | 2.50 | 0.005 | S107-020-2-.005R | S107-020-3-.005R | S107-020-4-.005R | $29.51 | $31.61 |
| 0.025 | 0.125 | 0.125 | 2.50 | 0.005 | S107-025-2-.005R | S107-025-3-.005R | S107-025-4-.005R | $29.51 | $31.61 |
| 0.030 | 0.150 | 0.125 | 2.50 | 0.005 | S107-030-2-.005R | S107-030-3-.005R | S107-030-4-.005R | $27.62 | $29.72 |
| 0.030 | 0.150 | 0.125 | 2.50 | 0.010 | S107-030-2-.010R | S107-030-3-.010R | S107-030-4-.010R | $27.62 | $29.72 |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | 0.005 | S107-031-2-.005R | S107-031-3-.005R | S107-031-4-.005R | $27.62 | $29.72 |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | 0.010 | S107-031-2-.010R | S107-031-3-.010R | S107-031-4-.010R | $27.62 | $29.72 |
| 0.035 | 0.175 | 0.125 | 2.50 | 0.005 | S107-035-2-.005R | S107-035-3-.005R | S107-035-4-.005R | $27.62 | $29.72 |
| 0.035 | 0.175 | 0.125 | 2.50 | 0.010 | S107-035-2-.010R | S107-035-3-.010R | S107-035-4-.010R | $27.62 | $29.72 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | 0.005 | S107-039-2-.005R | S107-039-3-.005R | S107-039-4-.005R | $27.62 | $29.72 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | 0.010 | S107-039-2-.010R | S107-039-3-.010R | S107-039-4-.010R | $27.62 | $29.72 |
| 0.040 | 0.200 | 0.125 | 2.50 | 0.005 | S107-040-2-.005R | S107-040-3-.005R | S107-040-4-.005R | $27.62 | $29.72 |
| 0.040 | 0.200 | 0.125 | 2.50 | 0.010 | S107-040-2-.010R | S107-040-3-.010R | S107-040-4-.010R | $27.62 | $29.72 |
| 0.045 | 0.225 | 0.125 | 2.50 | 0.005 | S107-045-2-.005R | S107-045-3-.005R | S107-045-4-.005R | $27.62 | $29.72 |
| 0.045 | 0.225 | 0.125 | 2.50 | 0.010 | S107-045-2-.010R | S107-045-3-.010R | S107-045-4-.010R | $27.62 | $29.72 |
| 0.045 | 0.225 | 0.125 | 2.50 | 0.015 | S107-045-2-.015R | S107-045-3-.015R | S107-045-4-.015R | $27.62 | $29.72 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | 0.005 | S107-047-2-.005R | S107-047-3-.005R | S107-047-4-.005R | $27.62 | $29.72 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | 0.010 | S107-047-2-.010R | S107-047-3-.010R | S107-047-4-.010R | $27.62 | $29.72 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | 0.015 | S107-047-2-.015R | S107-047-3-.015R | S107-047-4-.015R | $27.62 | $29.72 |
| 0.050 | 0.250 | 0.125 | 2.50 | 0.005 | S107-050-2-.005R | S107-050-3-.005R | S107-050-4-.005R | $27.62 | $29.72 |
| 0.050 | 0.250 | 0.125 | 2.50 | 0.010 | S107-050-2-.010R | S107-050-3-.010R | S107-050-4-.010R | $27.62 | $29.72 |
| 0.050 | 0.250 | 0.125 | 2.50 | 0.015 | S107-050-2-.015R | S107-050-3-.015R | S107-050-4-.015R | $27.62 | $29.72 |
| 0.055 | 0.275 | 0.125 | 2.50 | 0.005 | S107-055-2-.005R | S107-055-3-.005R | S107-055-4-.005R | $24.36 | $26.46 |
| 0.055 | 0.275 | 0.125 | 2.50 | 0.010 | S107-055-2-.010R | S107-055-3-.010R | S107-055-4-.010R | $24.36 | $26.46 |
| 0.055 | 0.275 | 0.125 | 2.50 | 0.015 | S107-055-2-.015R | S107-055-3-.015R | S107-055-4-.015R | $24.36 | $26.46 |
| 0.060 | 0.300 | 0.125 | 2.50 | 0.005 | S107-060-2-.005R | S107-060-3-.005R | S107-060-4-.005R | $24.36 | $26.46 |
| 0.060 | 0.300 | 0.125 | 2.50 | 0.010 | S107-060-2-.010R | S107-060-3-.010R | S107-060-4-.010R | $24.36 | $26.46 |
| 0.060 | 0.300 | 0.125 | 2.50 | 0.015 | S107-060-2-.015R | S107-060-3-.015R | S107-060-4-.015R | $24.36 | $26.46 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | 0.005 | S107-062-2-.005R | S107-062-3-.005R | S107-062-4-.005R | $24.36 | $26.46 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | 0.010 | S107-062-2-.010R | S107-062-3-.010R | S107-062-4-.010R | $24.36 | $26.46 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | 0.015 | S107-062-2-.015R | S107-062-3-.015R | S107-062-4-.015R | $24.36 | $26.46 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | 0.020 | S107-062-2-.020R | S107-062-3-.020R | S107-062-4-.020R | $24.36 | $26.46 |
| 0.065 | 0.325 | 0.125 | 2.50 | 0.005 | S107-065-2-.005R | S107-065-3-.005R | S107-065-4-.005R | $24.36 | $26.46 |
| 0.065 | 0.325 | 0.125 | 2.50 | 0.010 | S107-065-2-.010R | S107-065-3-.010R | S107-065-4-.010R | $24.36 | $26.46 |
| 0.065 | 0.325 | 0.125 | 2.50 | 0.015 | S107-065-2-.015R | S107-065-3-.015R | S107-065-4-.015R | $24.36 | $26.46 |
| 0.070 | 0.350 | 0.125 | 2.50 | 0.005 | S107-070-2-.005R | S107-070-3-.005R | S107-070-4-.005R | $24.36 | $26.46 |
| 0.070 | 0.350 | 0.125 | 2.50 | 0.010 | S107-070-2-.010R | S107-070-3-.010R | S107-070-4-.010R | $24.36 | $26.46 |
| 0.070 | 0.350 | 0.125 | 2.50 | 0.015 | S107-070-2-.015R | S107-070-3-.015R | S107-070-4-.015R | $24.36 | $26.46 |
| 0.075 | 0.375 | 0.125 | 2.50 | 0.005 | S107-075-2-.005R | S107-075-3-.005R | S107-075-4-.005R | $24.36 | $26.46 |
| 0.075 | 0.375 | 0.125 | 2.50 | 0.010 | S107-075-2-.010R | S107-075-3-.010R | S107-075-4-.010R | $24.36 | $26.46 |
| 0.075 | 0.375 | 0.125 | 2.50 | 0.015 | S107-075-2-.015R | S107-075-3-.015R | S107-075-4-.015R | $24.36 | $26.46 |

FLUTES 2,3,4

5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.005 | S107-078-2-.005R | S107-078-3-.005R | S107-078-4-.005R | $24.36 | $26.46 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.010 | S107-078-2-.010R | S107-078-3-.010R | S107-078-4-.010R | $24.36 | $26.46 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.015 | S107-078-2-.015R | S107-078-3-.015R | S107-078-4-.015R | $24.36 | $26.46 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.020 | S107-078-2-.020R | S107-078-3-.020R | S107-078-4-.020R | $24.36 | $26.46 |
| 0.080 | 0.400 | 0.125 | 2.50 | 0.005 | S107-080-2-.005R | S107-080-3-.005R | S107-080-4-.005R | $24.36 | $26.46 |
| 0.080 | 0.400 | 0.125 | 2.50 | 0.010 | S107-080-2-.010R | S107-080-3-.010R | S107-080-4-.010R | $24.36 | $26.46 |
| 0.080 | 0.400 | 0.125 | 2.50 | 0.015 | S107-080-2-.015R | S107-080-3-.015R | S107-080-4-.015R | $24.36 | $26.46 |
| 0.085 | 0.425 | 0.125 | 2.50 | 0.005 | S107-085-2-.005R | S107-085-3-.005R | S107-085-4-.005R | $22.47 | $24.57 |
| 0.085 | 0.425 | 0.125 | 2.50 | 0.010 | S107-085-2-.010R | S107-085-3-.010R | S107-085-4-.010R | $22.47 | $24.57 |
| 0.085 | 0.425 | 0.125 | 2.50 | 0.015 | S107-085-2-.015R | S107-085-3-.015R | S107-085-4-.015R | $22.47 | $24.57 |
| 0.090 | 0.450 | 0.125 | 2.50 | 0.005 | S107-090-2-.005R | S107-090-3-.005R | S107-090-4-.005R | $22.47 | $24.57 |
| 0.090 | 0.450 | 0.125 | 2.50 | 0.010 | S107-090-2-.010R | S107-090-3-.010R | S107-090-4-.010R | $22.47 | $24.57 |
| 0.090 | 0.450 | 0.125 | 2.50 | 0.015 | S107-090-2-.015R | S107-090-3-.015R | S107-090-4-.015R | $22.47 | $24.57 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.005 | S107-093-2-.005R | S107-093-3-.005R | S107-093-4-.005R | $22.47 | $24.57 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.010 | S107-093-2-.010R | S107-093-3-.010R | S107-093-4-.010R | $22.47 | $24.57 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.015 | S107-093-2-.015R | S107-093-3-.015R | S107-093-4-.015R | $22.47 | $24.57 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.020 | S107-093-2-.020R | S107-093-3-.020R | S107-093-4-.020R | $22.47 | $24.57 |
| 0.095 | 0.475 | 0.125 | 2.50 | 0.005 | S107-095-2-.005R | S107-095-3-.005R | S107-095-4-.005R | $22.47 | $24.57 |
| 0.095 | 0.475 | 0.125 | 2.50 | 0.010 | S107-095-2-.010R | S107-095-3-.010R | S107-095-4-.010R | $22.47 | $24.57 |
| 0.095 | 0.475 | 0.125 | 2.50 | 0.015 | S107-095-2-.015R | S107-095-3-.015R | S107-095-4-.015R | $22.47 | $24.57 |
| 0.100 | 0.500 | 0.125 | 2.50 | 0.005 | S107-100-2-.005R | S107-100-3-.005R | S107-100-4-.005R | $22.47 | $24.57 |
| 0.100 | 0.500 | 0.125 | 2.50 | 0.010 | S107-100-2-.010R | S107-100-3-.010R | S107-100-4-.010R | $22.47 | $24.57 |
| 0.100 | 0.500 | 0.125 | 2.50 | 0.015 | S107-100-2-.015R | S107-100-3-.015R | S107-100-4-.015R | $22.47 | $24.57 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.005 | S107-118-2-.005R | S107-118-3-.005R | S107-118-4-.005R | $22.47 | $24.57 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.010 | S107-118-2-.010R | S107-118-3-.010R | S107-118-4-.010R | $22.47 | $24.57 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.015 | S107-118-2-.015R | S107-118-3-.015R | S107-118-4-.015R | $22.47 | $24.57 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.020 | S107-118-2-.020R | S107-118-3-.020R | S107-118-4-.020R | $22.47 | $24.57 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.005 | S107-125-2-.005R | S107-125-3-.005R | S107-125-4-.005R | $22.47 | $24.57 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.010 | S107-125-2-.010R | S107-125-3-.010R | S107-125-4-.010R | $22.47 | $24.57 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.015 | S107-125-2-.015R | S107-125-3-.015R | S107-125-4-.015R | $22.47 | $24.57 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.020 | S107-125-2-.020R | S107-125-3-.020R | S107-125-4-.020R | $22.47 | $24.57 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 68 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## SPECIALS

**P.206**

MITGI specializes in custom micro tools that are needed quickly or are difficult to find. See pages 206-207 for more info regarding custom tool capabilities, estimated production times, and information on how to place an order.

# S108 Corner Radius Micro End Mills

FLUTES 2,3,4

8X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.015 (1/64) | 0.120 | 0.125 | 2.50 | 0.003 | S108-015-2-.003R | S108-015-3-.003R | S108-015-4-.003R | $60.06 | $62.16 |
| 0.020 | 0.160 | 0.125 | 2.50 | 0.005 | S108-020-2-.005R | S108-020-3-.005R | S108-020-4-.005R | $60.06 | $62.16 |
| 0.025 | 0.200 | 0.125 | 2.50 | 0.005 | S108-025-2-.005R | S108-025-3-.005R | S108-025-4-.005R | $53.66 | $55.76 |
| 0.030 | 0.240 | 0.125 | 2.50 | 0.005 | S108-030-2-.005R | S108-030-3-.005R | S108-030-4-.005R | $53.66 | $55.76 |
| 0.030 | 0.240 | 0.125 | 2.50 | 0.010 | S108-030-2-.010R | S108-030-3-.010R | S108-030-4-.010R | $53.66 | $55.76 |
| 0.031 (1/32) | 0.248 | 0.125 | 2.50 | 0.005 | S108-031-2-.005R | S108-031-3-.005R | S108-031-4-.005R | $53.66 | $55.76 |
| 0.031 (1/32) | 0.248 | 0.125 | 2.50 | 0.010 | S108-031-2-.010R | S108-031-3-.010R | S108-031-4-.010R | $53.66 | $55.76 |
| 0.035 | 0.280 | 0.125 | 2.50 | 0.005 | S108-035-2-.005R | S108-035-3-.005R | S108-035-4-.005R | $53.66 | $55.76 |
| 0.035 | 0.280 | 0.125 | 2.50 | 0.010 | S108-035-2-.010R | S108-035-3-.010R | S108-035-4-.010R | $53.66 | $55.76 |
| 0.039 (1mm) | 0.312 | 0.125 | 2.50 | 0.005 | S108-039-2-.005R | S108-039-3-.005R | S108-039-4-.005R | $52.29 | $54.39 |
| 0.039 (1mm) | 0.312 | 0.125 | 2.50 | 0.010 | S108-039-2-.010R | S108-039-3-.010R | S108-039-4-.010R | $52.29 | $54.39 |
| 0.040 | 0.320 | 0.125 | 2.50 | 0.005 | S108-040-2-.005R | S108-040-3-.005R | S108-040-4-.005R | $52.29 | $54.39 |
| 0.040 | 0.320 | 0.125 | 2.50 | 0.010 | S108-040-2-.010R | S108-040-3-.010R | S108-040-4-.010R | $52.29 | $54.39 |
| 0.045 | 0.360 | 0.125 | 2.50 | 0.005 | S108-045-2-.005R | S108-045-3-.005R | S108-045-4-.005R | $49.77 | $51.87 |
| 0.045 | 0.360 | 0.125 | 2.50 | 0.010 | S108-045-2-.010R | S108-045-3-.010R | S108-045-4-.010R | $49.77 | $51.87 |
| 0.045 | 0.360 | 0.125 | 2.50 | 0.015 | S108-045-2-.015R | S108-045-3-.015R | S108-045-4-.015R | $49.77 | $51.87 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.50 | 0.005 | S108-047-2-.005R | S108-047-3-.005R | S108-047-4-.005R | $49.77 | $51.87 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.50 | 0.010 | S108-047-2-.010R | S108-047-3-.010R | S108-047-4-.010R | $49.77 | $51.87 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.50 | 0.015 | S108-047-2-.015R | S108-047-3-.015R | S108-047-4-.015R | $49.77 | $51.87 |
| 0.050 | 0.400 | 0.125 | 2.50 | 0.005 | S108-050-2-.005R | S108-050-3-.005R | S108-050-4-.005R | $49.77 | $51.87 |
| 0.050 | 0.400 | 0.125 | 2.50 | 0.010 | S108-050-2-.010R | S108-050-3-.010R | S108-050-4-.010R | $49.77 | $51.87 |
| 0.050 | 0.400 | 0.125 | 2.50 | 0.015 | S108-050-2-.015R | S108-050-3-.015R | S108-050-4-.015R | $49.77 | $51.87 |
| 0.055 | 0.440 | 0.125 | 2.50 | 0.005 | S108-055-2-.005R | S108-055-3-.005R | S108-055-4-.005R | $32.66 | $34.76 |
| 0.055 | 0.440 | 0.125 | 2.50 | 0.010 | S108-055-2-.010R | S108-055-3-.010R | S108-055-4-.010R | $32.66 | $34.76 |
| 0.055 | 0.440 | 0.125 | 2.50 | 0.015 | S108-055-2-.015R | S108-055-3-.015R | S108-055-4-.015R | $32.66 | $34.76 |
| 0.060 | 0.480 | 0.125 | 2.50 | 0.005 | S108-060-2-.005R | S108-060-3-.005R | S108-060-4-.005R | $32.66 | $34.76 |
| 0.060 | 0.480 | 0.125 | 2.50 | 0.010 | S108-060-2-.010R | S108-060-3-.010R | S108-060-4-.010R | $32.66 | $34.76 |
| 0.060 | 0.480 | 0.125 | 2.50 | 0.015 | S108-060-2-.015R | S108-060-3-.015R | S108-060-4-.015R | $32.66 | $34.76 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | 0.005 | S108-062-2-.005R | S108-062-3-.005R | S108-062-4-.005R | $32.66 | $34.76 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | 0.010 | S108-062-2-.010R | S108-062-3-.010R | S108-062-4-.010R | $32.66 | $34.76 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | 0.015 | S108-062-2-.015R | S108-062-3-.015R | S108-062-4-.015R | $32.66 | $34.76 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | 0.020 | S108-062-2-.020R | S108-062-3-.020R | S108-062-4-.020R | $32.66 | $34.76 |
| 0.065 | 0.520 | 0.125 | 2.50 | 0.005 | S108-065-2-.005R | S108-065-3-.005R | S108-065-4-.005R | $26.51 | $28.61 |
| 0.065 | 0.520 | 0.125 | 2.50 | 0.010 | S108-065-2-.010R | S108-065-3-.010R | S108-065-4-.010R | $26.51 | $28.61 |
| 0.065 | 0.520 | 0.125 | 2.50 | 0.015 | S108-065-2-.015R | S108-065-3-.015R | S108-065-4-.015R | $26.51 | $28.61 |
| 0.070 | 0.560 | 0.125 | 2.50 | 0.005 | S108-070-2-.005R | S108-070-3-.005R | S108-070-4-.005R | $26.51 | $28.61 |
| 0.070 | 0.560 | 0.125 | 2.50 | 0.010 | S108-070-2-.010R | S108-070-3-.010R | S108-070-4-.010R | $26.51 | $28.61 |
| 0.070 | 0.560 | 0.125 | 2.50 | 0.015 | S108-070-2-.015R | S108-070-3-.015R | S108-070-4-.015R | $26.51 | $28.61 |
| 0.075 | 0.600 | 0.125 | 2.50 | 0.005 | S108-075-2-.005R | S108-075-3-.005R | S108-075-4-.005R | $26.51 | $28.61 |
| 0.075 | 0.600 | 0.125 | 2.50 | 0.010 | S108-075-2-.010R | S108-075-3-.010R | S108-075-4-.010R | $26.51 | $28.61 |
| 0.075 | 0.600 | 0.125 | 2.50 | 0.015 | S108-075-2-.015R | S108-075-3-.015R | S108-075-4-.015R | $26.51 | $28.61 |

## Corner Radius Micro End Mills



FLUTES 2,3,4

8X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | 0.005 | S108-078-2-.005R | S108-078-3-.005R | S108-078-4-.005R | $26.51 | $28.61 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | 0.010 | S108-078-2-.010R | S108-078-3-.010R | S108-078-4-.010R | $26.51 | $28.61 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | 0.015 | S108-078-2-.015R | S108-078-3-.015R | S108-078-4-.015R | $26.51 | $28.61 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | 0.020 | S108-078-2-.020R | S108-078-3-.020R | S108-078-4-.020R | $26.51 | $28.61 |
| 0.080 | 0.640 | 0.125 | 2.50 | 0.005 | S108-080-2-.005R | S108-080-3-.005R | S108-080-4-.005R | $26.51 | $28.61 |
| 0.080 | 0.640 | 0.125 | 2.50 | 0.010 | S108-080-2-.010R | S108-080-3-.010R | S108-080-4-.010R | $26.51 | $28.61 |
| 0.080 | 0.640 | 0.125 | 2.50 | 0.015 | S108-080-2-.015R | S108-080-3-.015R | S108-080-4-.015R | $26.51 | $28.61 |
| 0.085 | 0.680 | 0.125 | 2.50 | 0.005 | S108-085-2-.005R | S108-085-3-.005R | S108-085-4-.005R | $26.51 | $28.61 |
| 0.085 | 0.680 | 0.125 | 2.50 | 0.010 | S108-085-2-.010R | S108-085-3-.010R | S108-085-4-.010R | $26.51 | $28.61 |
| 0.085 | 0.680 | 0.125 | 2.50 | 0.015 | S108-085-2-.015R | S108-085-3-.015R | S108-085-4-.015R | $26.51 | $28.61 |
| 0.090 | 0.720 | 0.125 | 2.50 | 0.005 | S108-090-2-.005R | S108-090-3-.005R | S108-090-4-.005R | $25.67 | $27.77 |
| 0.090 | 0.720 | 0.125 | 2.50 | 0.010 | S108-090-2-.010R | S108-090-3-.010R | S108-090-4-.010R | $25.67 | $27.77 |
| 0.090 | 0.720 | 0.125 | 2.50 | 0.015 | S108-090-2-.015R | S108-090-3-.015R | S108-090-4-.015R | $25.67 | $27.77 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | 0.005 | S108-093-2-.005R | S108-093-3-.005R | S108-093-4-.005R | $25.67 | $27.77 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | 0.010 | S108-093-2-.010R | S108-093-3-.010R | S108-093-4-.010R | $25.67 | $27.77 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | 0.015 | S108-093-2-.015R | S108-093-3-.015R | S108-093-4-.015R | $25.67 | $27.77 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | 0.020 | S108-093-2-.020R | S108-093-3-.020R | S108-093-4-.020R | $25.67 | $27.77 |
| 0.095 | 0.760 | 0.125 | 2.50 | 0.005 | S108-095-2-.005R | S108-095-3-.005R | S108-095-4-.005R | $25.67 | $27.77 |
| 0.095 | 0.760 | 0.125 | 2.50 | 0.010 | S108-095-2-.010R | S108-095-3-.010R | S108-095-4-.010R | $25.67 | $27.77 |
| 0.095 | 0.760 | 0.125 | 2.50 | 0.015 | S108-095-2-.015R | S108-095-3-.015R | S108-095-4-.015R | $25.67 | $27.77 |
| 0.100 | 0.800 | 0.125 | 2.50 | 0.005 | S108-100-2-.005R | S108-100-3-.005R | S108-100-4-.005R | $25.67 | $27.77 |
| 0.100 | 0.800 | 0.125 | 2.50 | 0.010 | S108-100-2-.010R | S108-100-3-.010R | S108-100-4-.010R | $25.67 | $27.77 |
| 0.100 | 0.800 | 0.125 | 2.50 | 0.015 | S108-100-2-.015R | S108-100-3-.015R | S108-100-4-.015R | $25.67 | $27.77 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | 0.005 | S108-118-2-.005R | S108-118-3-.005R | S108-118-4-.005R | $25.67 | $27.77 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | 0.010 | S108-118-2-.010R | S108-118-3-.010R | S108-118-4-.010R | $25.67 | $27.77 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | 0.015 | S108-118-2-.015R | S108-118-3-.015R | S108-118-4-.015R | $25.67 | $27.77 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | 0.020 | S108-118-2-.020R | S108-118-3-.020R | S108-118-4-.020R | $25.67 | $27.77 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | 0.005 | S108-125-2-.005R | S108-125-3-.005R | S108-125-4-.005R | $25.67 | $27.77 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | 0.010 | S108-125-2-.010R | S108-125-3-.010R | S108-125-4-.010R | $25.67 | $27.77 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | 0.015 | S108-125-2-.015R | S108-125-3-.015R | S108-125-4-.015R | $25.67 | $27.77 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | 0.020 | S108-125-2-.020R | S108-125-3-.020R | S108-125-4-.020R | $25.67 | $27.77 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 70 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

# S109 Corner Radius Micro End Mills

FLUTES 2,3,4

12X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.015 (1/64) | 0.180 | 0.125 | 2.50 | 0.003 | S109-015-2-.003R | S109-015-3-.003R | S109-015-4-.003R | $72.56 | $74.66 |
| 0.020 | 0.240 | 0.125 | 2.50 | 0.005 | S109-020-2-.005R | S109-020-3-.005R | S109-020-4-.005R | $69.30 | $71.40 |
| 0.025 | 0.300 | 0.125 | 2.50 | 0.005 | S109-025-2-.005R | S109-025-3-.005R | S109-025-4-.005R | $66.20 | $68.30 |
| 0.030 | 0.360 | 0.125 | 2.50 | 0.005 | S109-030-2-.005R | S109-030-3-.005R | S109-030-4-.005R | $60.80 | $62.90 |
| 0.030 | 0.360 | 0.125 | 2.50 | 0.010 | S109-030-2-.010R | S109-030-3-.010R | S109-030-4-.010R | $60.80 | $62.90 |
| 0.031 (1/32) | 0.372 | 0.125 | 2.50 | 0.005 | S109-031-2-.005R | S109-031-3-.005R | S109-031-4-.005R | $60.80 | $62.90 |
| 0.031 (1/32) | 0.372 | 0.125 | 2.50 | 0.010 | S109-031-2-.010R | S109-031-3-.010R | S109-031-4-.010R | $60.80 | $62.90 |
| 0.035 | 0.420 | 0.125 | 2.50 | 0.005 | S109-035-2-.005R | S109-035-3-.005R | S109-035-4-.005R | $60.80 | $62.90 |
| 0.035 | 0.420 | 0.125 | 2.50 | 0.010 | S109-035-2-.010R | S109-035-3-.010R | S109-035-4-.010R | $60.80 | $62.90 |
| 0.039 (1mm) | 0.468 | 0.125 | 2.50 | 0.005 | S109-039-2-.005R | S109-039-3-.005R | S109-039-4-.005R | $60.80 | $62.90 |
| 0.039 (1mm) | 0.468 | 0.125 | 2.50 | 0.010 | S109-039-2-.010R | S109-039-3-.010R | S109-039-4-.010R | $60.80 | $62.90 |
| 0.040 | 0.480 | 0.125 | 2.50 | 0.005 | S109-040-2-.005R | S109-040-3-.005R | S109-040-4-.005R | $60.80 | $62.90 |
| 0.040 | 0.480 | 0.125 | 2.50 | 0.010 | S109-040-2-.010R | S109-040-3-.010R | S109-040-4-.010R | $60.80 | $62.90 |
| 0.045 | 0.540 | 0.125 | 2.50 | 0.005 | S109-045-2-.005R | S109-045-3-.005R | S109-045-4-.005R | $60.80 | $62.90 |
| 0.045 | 0.540 | 0.125 | 2.50 | 0.010 | S109-045-2-.010R | S109-045-3-.010R | S109-045-4-.010R | $60.80 | $62.90 |
| 0.045 | 0.540 | 0.125 | 2.50 | 0.015 | S109-045-2-.015R | S109-045-3-.015R | S109-045-4-.015R | $60.80 | $62.90 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.50 | 0.005 | S109-047-2-.005R | S109-047-3-.005R | S109-047-4-.005R | $60.80 | $62.90 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.50 | 0.010 | S109-047-2-.010R | S109-047-3-.010R | S109-047-4-.010R | $60.80 | $62.90 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.50 | 0.015 | S109-047-2-.015R | S109-047-3-.015R | S109-047-4-.015R | $60.80 | $62.90 |
| 0.050 | 0.600 | 0.125 | 2.50 | 0.005 | S109-050-2-.005R | S109-050-3-.005R | S109-050-4-.005R | $53.97 | $56.07 |
| 0.050 | 0.600 | 0.125 | 2.50 | 0.010 | S109-050-2-.010R | S109-050-3-.010R | S109-050-4-.010R | $53.97 | $56.07 |
| 0.050 | 0.600 | 0.125 | 2.50 | 0.015 | S109-050-2-.015R | S109-050-3-.015R | S109-050-4-.015R | $53.97 | $56.07 |
| 0.055 | 0.660 | 0.125 | 2.50 | 0.005 | S109-055-2-.005R | S109-055-3-.005R | S109-055-4-.005R | $53.97 | $56.07 |
| 0.055 | 0.660 | 0.125 | 2.50 | 0.010 | S109-055-2-.010R | S109-055-3-.010R | S109-055-4-.010R | $53.97 | $56.07 |
| 0.055 | 0.660 | 0.125 | 2.50 | 0.015 | S109-055-2-.015R | S109-055-3-.015R | S109-055-4-.015R | $53.97 | $56.07 |
| 0.060 | 0.720 | 0.125 | 2.50 | 0.005 | S109-060-2-.005R | S109-060-3-.005R | S109-060-4-.005R | $48.41 | $50.51 |
| 0.060 | 0.720 | 0.125 | 2.50 | 0.010 | S109-060-2-.010R | S109-060-3-.010R | S109-060-4-.010R | $48.41 | $50.51 |
| 0.060 | 0.720 | 0.125 | 2.50 | 0.015 | S109-060-2-.015R | S109-060-3-.015R | S109-060-4-.015R | $48.41 | $50.51 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | 0.005 | S109-062-2-.005R | S109-062-3-.005R | S109-062-4-.005R | $48.41 | $50.51 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | 0.010 | S109-062-2-.010R | S109-062-3-.010R | S109-062-4-.010R | $48.41 | $50.51 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | 0.015 | S109-062-2-.015R | S109-062-3-.015R | S109-062-4-.015R | $48.41 | $50.51 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | 0.020 | S109-062-2-.020R | S109-062-3-.020R | S109-062-4-.020R | $48.41 | $50.51 |
| 0.065 | 0.780 | 0.125 | 2.50 | 0.005 | S109-065-2-.005R | S109-065-3-.005R | S109-065-4-.005R | $48.41 | $50.51 |
| 0.065 | 0.780 | 0.125 | 2.50 | 0.010 | S109-065-2-.010R | S109-065-3-.010R | S109-065-4-.010R | $48.41 | $50.51 |
| 0.065 | 0.780 | 0.125 | 2.50 | 0.015 | S109-065-2-.015R | S109-065-3-.015R | S109-065-4-.015R | $48.41 | $50.51 |
| 0.070 | 0.840 | 0.125 | 2.50 | 0.005 | S109-070-2-.005R | S109-070-3-.005R | S109-070-4-.005R | $47.88 | $49.98 |
| 0.070 | 0.840 | 0.125 | 2.50 | 0.010 | S109-070-2-.010R | S109-070-3-.010R | S109-070-4-.010R | $47.88 | $49.98 |
| 0.070 | 0.840 | 0.125 | 2.50 | 0.015 | S109-070-2-.015R | S109-070-3-.015R | S109-070-4-.015R | $47.88 | $49.98 |
| 0.075 | 0.900 | 0.125 | 2.50 | 0.005 | S109-075-2-.005R | S109-075-3-.005R | S109-075-4-.005R | $47.88 | $49.98 |
| 0.075 | 0.900 | 0.125 | 2.50 | 0.010 | S109-075-2-.010R | S109-075-3-.010R | S109-075-4-.010R | $47.88 | $49.98 |
| 0.075 | 0.900 | 0.125 | 2.50 | 0.015 | S109-075-2-.015R | S109-075-3-.015R | S109-075-4-.015R | $47.88 | $49.98 |

## Corner Radius Micro End Mills



FLUTES 2,3,4

12X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | | |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | 0.005 | S109-078-2-.005R | S109-078-3-.005R | S109-078-4-.005R | $47.88 | $49.98 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | 0.010 | S109-078-2-.010R | S109-078-3-.010R | S109-078-4-.010R | $47.88 | $49.98 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | 0.015 | S109-078-2-.015R | S109-078-3-.015R | S109-078-4-.015R | $47.88 | $49.98 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | 0.020 | S109-078-2-.020R | S109-078-3-.020R | S109-078-4-.020R | $47.88 | $49.98 |
| 0.080 | 0.960 | 0.125 | 2.50 | 0.005 | S109-080-2-.005R | S109-080-3-.005R | S109-080-4-.005R | $47.88 | $49.98 |
| 0.080 | 0.960 | 0.125 | 2.50 | 0.010 | S109-080-2-.010R | S109-080-3-.010R | S109-080-4-.010R | $47.88 | $49.98 |
| 0.080 | 0.960 | 0.125 | 2.50 | 0.015 | S109-080-2-.015R | S109-080-3-.015R | S109-080-4-.015R | $47.88 | $49.98 |
| 0.085 | 1.020 | 0.125 | 2.50 | 0.005 | S109-085-2-.005R | S109-085-3-.005R | S109-085-4-.005R | $47.88 | $49.98 |
| 0.085 | 1.020 | 0.125 | 2.50 | 0.010 | S109-085-2-.010R | S109-085-3-.010R | S109-085-4-.010R | $47.88 | $49.98 |
| 0.085 | 1.020 | 0.125 | 2.50 | 0.015 | S109-085-2-.015R | S109-085-3-.015R | S109-085-4-.015R | $47.88 | $49.98 |
| 0.090 | 1.080 | 0.125 | 2.50 | 0.005 | S109-090-2-.005R | S109-090-3-.005R | S109-090-4-.005R | $46.99 | $49.09 |
| 0.090 | 1.080 | 0.125 | 2.50 | 0.010 | S109-090-2-.010R | S109-090-3-.010R | S109-090-4-.010R | $46.99 | $49.09 |
| 0.090 | 1.080 | 0.125 | 2.50 | 0.015 | S109-090-2-.015R | S109-090-3-.015R | S109-090-4-.015R | $46.99 | $49.09 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | 0.005 | S109-093-2-.005R | S109-093-3-.005R | S109-093-4-.005R | $46.99 | $49.09 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | 0.010 | S109-093-2-.010R | S109-093-3-.010R | S109-093-4-.010R | $46.99 | $49.09 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | 0.015 | S109-093-2-.015R | S109-093-3-.015R | S109-093-4-.015R | $46.99 | $49.09 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | 0.020 | S109-093-2-.020R | S109-093-3-.020R | S109-093-4-.020R | $46.99 | $49.09 |
| 0.095 | 1.140 | 0.125 | 2.50 | 0.005 | S109-095-2-.005R | S109-095-3-.005R | S109-095-4-.005R | $46.99 | $49.09 |
| 0.095 | 1.140 | 0.125 | 2.50 | 0.010 | S109-095-2-.010R | S109-095-3-.010R | S109-095-4-.010R | $46.99 | $49.09 |
| 0.095 | 1.140 | 0.125 | 2.50 | 0.015 | S109-095-2-.015R | S109-095-3-.015R | S109-095-4-.015R | $46.99 | $49.09 |
| 0.100 | 1.200 | 0.125 | 2.50 | 0.005 | S109-100-2-.005R | S109-100-3-.005R | S109-100-4-.005R | $46.99 | $49.09 |
| 0.100 | 1.200 | 0.125 | 2.50 | 0.010 | S109-100-2-.010R | S109-100-3-.010R | S109-100-4-.010R | $46.99 | $49.09 |
| 0.100 | 1.200 | 0.125 | 2.50 | 0.015 | S109-100-2-.015R | S109-100-3-.015R | S109-100-4-.015R | $46.99 | $49.09 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | 0.005 | S109-118-2-.005R | S109-118-3-.005R | S109-118-4-.005R | $46.99 | $49.09 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | 0.010 | S109-118-2-.010R | S109-118-3-.010R | S109-118-4-.010R | $46.99 | $49.09 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | 0.015 | S109-118-2-.015R | S109-118-3-.015R | S109-118-4-.015R | $46.99 | $49.09 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | 0.020 | S109-118-2-.020R | S109-118-3-.020R | S109-118-4-.020R | $46.99 | $49.09 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | 0.005 | S109-125-2-.005R | S109-125-3-.005R | S109-125-4-.005R | $46.99 | $49.09 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | 0.010 | S109-125-2-.010R | S109-125-3-.010R | S109-125-4-.010R | $46.99 | $49.09 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | 0.015 | S109-125-2-.015R | S109-125-3-.015R | S109-125-4-.015R | $46.99 | $49.09 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | 0.020 | S109-125-2-.020R | S109-125-3-.020R | S109-125-4-.020R | $46.99 | $49.09 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 72 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

# S87

## Corner Radius Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.015 (1/64) | 0.023 | 0.075 | 0.125 | 2.50 | 0.003 | S87-015-2-.003R5XR | S87-015-3-.003R5XR | S87-015-4-.003R5XR | $42.68 | $44.78 |
| 0.020 | 0.030 | 0.100 | 0.125 | 2.50 | 0.005 | S87-020-2-.005R5XR | S87-020-3-.005R5XR | S87-020-4-.005R5XR | $40.26 | $42.36 |
| 0.025 | 0.038 | 0.125 | 0.125 | 2.50 | 0.005 | S87-025-2-.005R5XR | S87-025-3-.005R5XR | S87-025-4-.005R5XR | $39.90 | $42.00 |
| 0.030 | 0.045 | 0.150 | 0.125 | 2.50 | 0.005 | S87-030-2-.005R5XR | S87-030-3-.005R5XR | S87-030-4-.005R5XR | $35.81 | $37.91 |
| 0.030 | 0.045 | 0.150 | 0.125 | 2.50 | 0.010 | S87-030-2-.010R5XR | S87-030-3-.010R5XR | S87-030-4-.010R5XR | $35.81 | $37.91 |
| 0.031 (1/32) | 0.047 | 0.155 | 0.125 | 2.50 | 0.005 | S87-031-2-.005R5XR | S87-031-3-.005R5XR | S87-031-4-.005R5XR | $35.81 | $37.91 |
| 0.031 (1/32) | 0.047 | 0.155 | 0.125 | 2.50 | 0.010 | S87-031-2-.010R5XR | S87-031-3-.010R5XR | S87-031-4-.010R5XR | $35.81 | $37.91 |
| 0.035 | 0.053 | 0.175 | 0.125 | 2.50 | 0.005 | S87-035-2-.005R5XR | S87-035-3-.005R5XR | S87-035-4-.005R5XR | $34.49 | $36.59 |
| 0.035 | 0.053 | 0.175 | 0.125 | 2.50 | 0.010 | S87-035-2-.010R5XR | S87-035-3-.010R5XR | S87-035-4-.010R5XR | $34.49 | $36.59 |
| 0.039 (1mm) | 0.059 | 0.195 | 0.125 | 2.50 | 0.005 | S87-039-2-.005R5XR | S87-039-3-.005R5XR | S87-039-4-.005R5XR | $34.49 | $36.59 |
| 0.039 (1mm) | 0.059 | 0.195 | 0.125 | 2.50 | 0.010 | S87-039-2-.010R5XR | S87-039-3-.010R5XR | S87-039-4-.010R5XR | $34.49 | $36.59 |
| 0.040 | 0.060 | 0.200 | 0.125 | 2.50 | 0.005 | S87-040-2-.005R5XR | S87-040-3-.005R5XR | S87-040-4-.005R5XR | $34.49 | $36.59 |
| 0.040 | 0.060 | 0.200 | 0.125 | 2.50 | 0.010 | S87-040-2-.010R5XR | S87-040-3-.010R5XR | S87-040-4-.010R5XR | $34.49 | $36.59 |
| 0.045 | 0.068 | 0.225 | 0.125 | 2.50 | 0.005 | S87-045-2-.005R5XR | S87-045-3-.005R5XR | S87-045-4-.005R5XR | $34.49 | $36.59 |
| 0.045 | 0.068 | 0.225 | 0.125 | 2.50 | 0.010 | S87-045-2-.010R5XR | S87-045-3-.010R5XR | S87-045-4-.010R5XR | $34.49 | $36.59 |
| 0.045 | 0.068 | 0.225 | 0.125 | 2.50 | 0.015 | S87-045-2-.015R5XR | S87-045-3-.015R5XR | S87-045-4-.015R5XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.071 | 0.235 | 0.125 | 2.50 | 0.005 | S87-047-2-.005R5XR | S87-047-3-.005R5XR | S87-047-4-.005R5XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.071 | 0.235 | 0.125 | 2.50 | 0.010 | S87-047-2-.010R5XR | S87-047-3-.010R5XR | S87-047-4-.010R5XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.071 | 0.235 | 0.125 | 2.50 | 0.015 | S87-047-2-.015R5XR | S87-047-3-.015R5XR | S87-047-4-.015R5XR | $34.49 | $36.59 |
| 0.050 | 0.075 | 0.250 | 0.125 | 2.50 | 0.005 | S87-050-2-.005R5XR | S87-050-3-.005R5XR | S87-050-4-.005R5XR | $34.49 | $36.59 |
| 0.050 | 0.075 | 0.250 | 0.125 | 2.50 | 0.010 | S87-050-2-.010R5XR | S87-050-3-.010R5XR | S87-050-4-.010R5XR | $34.49 | $36.59 |
| 0.050 | 0.075 | 0.250 | 0.125 | 2.50 | 0.015 | S87-050-2-.015R5XR | S87-050-3-.015R5XR | S87-050-4-.015R5XR | $34.49 | $36.59 |
| 0.055 | 0.083 | 0.275 | 0.125 | 2.50 | 0.005 | S87-055-2-.005R5XR | S87-055-3-.005R5XR | S87-055-4-.005R5XR | $34.49 | $36.59 |
| 0.055 | 0.083 | 0.275 | 0.125 | 2.50 | 0.010 | S87-055-2-.010R5XR | S87-055-3-.010R5XR | S87-055-4-.010R5XR | $34.49 | $36.59 |
| 0.055 | 0.083 | 0.275 | 0.125 | 2.50 | 0.015 | S87-055-2-.015R5XR | S87-055-3-.015R5XR | S87-055-4-.015R5XR | $34.49 | $36.59 |
| 0.060 | 0.090 | 0.300 | 0.125 | 2.50 | 0.005 | S87-060-2-.005R5XR | S87-060-3-.005R5XR | S87-060-4-.005R5XR | $34.49 | $36.59 |
| 0.060 | 0.090 | 0.300 | 0.125 | 2.50 | 0.010 | S87-060-2-.010R5XR | S87-060-3-.010R5XR | S87-060-4-.010R5XR | $34.49 | $36.59 |
| 0.060 | 0.090 | 0.300 | 0.125 | 2.50 | 0.015 | S87-060-2-.015R5XR | S87-060-3-.015R5XR | S87-060-4-.015R5XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.093 | 0.310 | 0.125 | 2.50 | 0.005 | S87-062-2-.005R5XR | S87-062-3-.005R5XR | S87-062-4-.005R5XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.093 | 0.310 | 0.125 | 2.50 | 0.010 | S87-062-2-.010R5XR | S87-062-3-.010R5XR | S87-062-4-.010R5XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.093 | 0.310 | 0.125 | 2.50 | 0.015 | S87-062-2-.015R5XR | S87-062-3-.015R5XR | S87-062-4-.015R5XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.093 | 0.310 | 0.125 | 2.50 | 0.020 | S87-062-2-.020R5XR | S87-062-3-.020R5XR | S87-062-4-.020R5XR | $34.49 | $36.59 |
| 0.065 | 0.098 | 0.325 | 0.125 | 2.50 | 0.005 | S87-065-2-.005R5XR | S87-065-3-.005R5XR | S87-065-4-.005R5XR | $34.49 | $36.59 |
| 0.065 | 0.098 | 0.325 | 0.125 | 2.50 | 0.010 | S87-065-2-.010R5XR | S87-065-3-.010R5XR | S87-065-4-.010R5XR | $34.49 | $36.59 |
| 0.065 | 0.098 | 0.325 | 0.125 | 2.50 | 0.015 | S87-065-2-.015R5XR | S87-065-3-.015R5XR | S87-065-4-.015R5XR | $34.49 | $36.59 |
| 0.070 | 0.105 | 0.350 | 0.125 | 2.50 | 0.005 | S87-070-2-.005R5XR | S87-070-3-.005R5XR | S87-070-4-.005R5XR | $33.76 | $35.86 |
| 0.070 | 0.105 | 0.350 | 0.125 | 2.50 | 0.010 | S87-070-2-.010R5XR | S87-070-3-.010R5XR | S87-070-4-.010R5XR | $33.76 | $35.86 |
| 0.070 | 0.105 | 0.350 | 0.125 | 2.50 | 0.015 | S87-070-2-.015R5XR | S87-070-3-.015R5XR | S87-070-4-.015R5XR | $33.76 | $35.86 |
| 0.075 | 0.113 | 0.375 | 0.125 | 2.50 | 0.005 | S87-075-2-.005R5XR | S87-075-3-.005R5XR | S87-075-4-.005R5XR | $33.76 | $35.86 |
| 0.075 | 0.113 | 0.375 | 0.125 | 2.50 | 0.010 | S87-075-2-.010R5XR | S87-075-3-.010R5XR | S87-075-4-.010R5XR | $33.76 | $35.86 |
| 0.075 | 0.113 | 0.375 | 0.125 | 2.50 | 0.015 | S87-075-2-.015R5XR | S87-075-3-.015R5XR | S87-075-4-.015R5XR | $33.76 | $35.86 |

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.078 (5/64) | 0.117 | 0.390 | 0.125 | 2.50 | 0.005 | S87-078-2-.005R5XR | S87-078-3-.005R5XR | S87-078-4-.005R5XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.117 | 0.390 | 0.125 | 2.50 | 0.010 | S87-078-2-.010R5XR | S87-078-3-.010R5XR | S87-078-4-.010R5XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.117 | 0.390 | 0.125 | 2.50 | 0.015 | S87-078-2-.015R5XR | S87-078-3-.015R5XR | S87-078-4-.015R5XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.117 | 0.390 | 0.125 | 2.50 | 0.020 | S87-078-2-.020R5XR | S87-078-3-.020R5XR | S87-078-4-.020R5XR | $33.76 | $35.86 |
| 0.080 | 0.120 | 0.400 | 0.125 | 2.50 | 0.005 | S87-080-2-.005R5XR | S87-080-3-.005R5XR | S87-080-4-.005R5XR | $33.76 | $35.86 |
| 0.080 | 0.120 | 0.400 | 0.125 | 2.50 | 0.010 | S87-080-2-.010R5XR | S87-080-3-.010R5XR | S87-080-4-.010R5XR | $33.76 | $35.86 |
| 0.080 | 0.120 | 0.400 | 0.125 | 2.50 | 0.015 | S87-080-2-.015R5XR | S87-080-3-.015R5XR | S87-080-4-.015R5XR | $33.76 | $35.86 |
| 0.085 | 0.128 | 0.425 | 0.125 | 2.50 | 0.005 | S87-085-2-.005R5XR | S87-085-3-.005R5XR | S87-085-4-.005R5XR | $33.76 | $35.86 |
| 0.085 | 0.128 | 0.425 | 0.125 | 2.50 | 0.010 | S87-085-2-.010R5XR | S87-085-3-.010R5XR | S87-085-4-.010R5XR | $33.76 | $35.86 |
| 0.085 | 0.128 | 0.425 | 0.125 | 2.50 | 0.015 | S87-085-2-.015R5XR | S87-085-3-.015R5XR | S87-085-4-.015R5XR | $33.76 | $35.86 |
| 0.090 | 0.135 | 0.450 | 0.125 | 2.50 | 0.005 | S87-090-2-.005R5XR | S87-090-3-.005R5XR | S87-090-4-.005R5XR | $33.76 | $35.86 |
| 0.090 | 0.135 | 0.450 | 0.125 | 2.50 | 0.010 | S87-090-2-.010R5XR | S87-090-3-.010R5XR | S87-090-4-.010R5XR | $33.76 | $35.86 |
| 0.090 | 0.135 | 0.450 | 0.125 | 2.50 | 0.015 | S87-090-2-.015R5XR | S87-090-3-.015R5XR | S87-090-4-.015R5XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.140 | 0.465 | 0.125 | 2.50 | 0.005 | S87-093-2-.005R5XR | S87-093-3-.005R5XR | S87-093-4-.005R5XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.140 | 0.465 | 0.125 | 2.50 | 0.010 | S87-093-2-.010R5XR | S87-093-3-.010R5XR | S87-093-4-.010R5XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.140 | 0.465 | 0.125 | 2.50 | 0.015 | S87-093-2-.015R5XR | S87-093-3-.015R5XR | S87-093-4-.015R5XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.140 | 0.465 | 0.125 | 2.50 | 0.020 | S87-093-2-.020R5XR | S87-093-3-.020R5XR | S87-093-4-.020R5XR | $33.76 | $35.86 |
| 0.095 | 0.143 | 0.475 | 0.125 | 2.50 | 0.005 | S87-095-2-.005R5XR | S87-095-3-.005R5XR | S87-095-4-.005R5XR | $33.76 | $35.86 |
| 0.095 | 0.143 | 0.475 | 0.125 | 2.50 | 0.010 | S87-095-2-.010R5XR | S87-095-3-.010R5XR | S87-095-4-.010R5XR | $33.76 | $35.86 |
| 0.095 | 0.143 | 0.475 | 0.125 | 2.50 | 0.015 | S87-095-2-.015R5XR | S87-095-3-.015R5XR | S87-095-4-.015R5XR | $33.76 | $35.86 |
| 0.100 | 0.150 | 0.500 | 0.125 | 2.50 | 0.005 | S87-100-2-.005R5XR | S87-100-3-.005R5XR | S87-100-4-.005R5XR | $33.50 | $35.60 |
| 0.100 | 0.150 | 0.500 | 0.125 | 2.50 | 0.010 | S87-100-2-.010R5XR | S87-100-3-.010R5XR | S87-100-4-.010R5XR | $33.50 | $35.60 |
| 0.100 | 0.150 | 0.500 | 0.125 | 2.50 | 0.015 | S87-100-2-.015R5XR | S87-100-3-.015R5XR | S87-100-4-.015R5XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | 0.005 | S87-118-2-.005R5XR | S87-118-3-.005R5XR | S87-118-4-.005R5XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | 0.010 | S87-118-2-.010R5XR | S87-118-3-.010R5XR | S87-118-4-.010R5XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | 0.015 | S87-118-2-.015R5XR | S87-118-3-.015R5XR | S87-118-4-.015R5XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | 0.020 | S87-118-2-.020R5XR | S87-118-3-.020R5XR | S87-118-4-.020R5XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | 0.005 | S87-125-2-.005R5XR | S87-125-3-.005R5XR | S87-125-4-.005R5XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | 0.010 | S87-125-2-.010R5XR | S87-125-3-.010R5XR | S87-125-4-.010R5XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | 0.015 | S87-125-2-.015R5XR | S87-125-3-.015R5XR | S87-125-4-.015R5XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | 0.020 | S87-125-2-.020R5XR | S87-125-3-.020R5XR | S87-125-4-.020R5XR | $33.50 | $35.60 |

FLUTES 2,3,4

1.5X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 74 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


**IN STOCK, ON DEMAND**

**P.117**

All standard tools can be manufactured and shipped within 3 days of receiving the purchase order. See page 117 for more information regarding turnaround times, stocking programs, and delivery options for both standard and custom tools.

# S84 Corner Radius Micro End Mills

FLUTES 2,3,4

3X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.015 (1/64) | 0.045 | 0.075 | 0.125 | 2.50 | 0.003 | S84-015-2-.003R5XR | S84-015-3-.003R5XR | S84-015-4-.003R5XR | $42.68 | $44.78 |
| 0.020 | 0.060 | 0.100 | 0.125 | 2.50 | 0.005 | S84-020-2-.005R5XR | S84-020-3-.005R5XR | S84-020-4-.005R5XR | $40.26 | $42.36 |
| 0.025 | 0.075 | 0.125 | 0.125 | 2.50 | 0.005 | S84-025-2-.005R5XR | S84-025-3-.005R5XR | S84-025-4-.005R5XR | $39.90 | $42.00 |
| 0.030 | 0.090 | 0.150 | 0.125 | 2.50 | 0.005 | S84-030-2-.005R5XR | S84-030-3-.005R5XR | S84-030-4-.005R5XR | $35.81 | $37.91 |
| 0.030 | 0.090 | 0.150 | 0.125 | 2.50 | 0.010 | S84-030-2-.010R5XR | S84-030-3-.010R5XR | S84-030-4-.010R5XR | $35.81 | $37.91 |
| 0.031 (1/32) | 0.093 | 0.155 | 0.125 | 2.50 | 0.005 | S84-031-2-.005R5XR | S84-031-3-.005R5XR | S84-031-4-.005R5XR | $35.81 | $37.91 |
| 0.031 (1/32) | 0.093 | 0.155 | 0.125 | 2.50 | 0.010 | S84-031-2-.010R5XR | S84-031-3-.010R5XR | S84-031-4-.010R5XR | $35.81 | $37.91 |
| 0.035 | 0.105 | 0.175 | 0.125 | 2.50 | 0.005 | S84-035-2-.005R5XR | S84-035-3-.005R5XR | S84-035-4-.005R5XR | $34.49 | $36.59 |
| 0.035 | 0.105 | 0.175 | 0.125 | 2.50 | 0.010 | S84-035-2-.010R5XR | S84-035-3-.010R5XR | S84-035-4-.010R5XR | $34.49 | $36.59 |
| 0.039 (1mm) | 0.117 | 0.195 | 0.125 | 2.50 | 0.005 | S84-039-2-.005R5XR | S84-039-3-.005R5XR | S84-039-4-.005R5XR | $34.49 | $36.59 |
| 0.039 (1mm) | 0.117 | 0.195 | 0.125 | 2.50 | 0.010 | S84-039-2-.010R5XR | S84-039-3-.010R5XR | S84-039-4-.010R5XR | $34.49 | $36.59 |
| 0.040 | 0.120 | 0.200 | 0.125 | 2.50 | 0.005 | S84-040-2-.005R5XR | S84-040-3-.005R5XR | S84-040-4-.005R5XR | $34.49 | $36.59 |
| 0.040 | 0.120 | 0.200 | 0.125 | 2.50 | 0.010 | S84-040-2-.010R5XR | S84-040-3-.010R5XR | S84-040-4-.010R5XR | $34.49 | $36.59 |
| 0.045 | 0.135 | 0.225 | 0.125 | 2.50 | 0.005 | S84-045-2-.005R5XR | S84-045-3-.005R5XR | S84-045-4-.005R5XR | $34.49 | $36.59 |
| 0.045 | 0.135 | 0.225 | 0.125 | 2.50 | 0.010 | S84-045-2-.010R5XR | S84-045-3-.010R5XR | S84-045-4-.010R5XR | $34.49 | $36.59 |
| 0.045 | 0.135 | 0.225 | 0.125 | 2.50 | 0.015 | S84-045-2-.015R5XR | S84-045-3-.015R5XR | S84-045-4-.015R5XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.141 | 0.235 | 0.125 | 2.50 | 0.005 | S84-047-2-.005R5XR | S84-047-3-.005R5XR | S84-047-4-.005R5XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.141 | 0.235 | 0.125 | 2.50 | 0.010 | S84-047-2-.010R5XR | S84-047-3-.010R5XR | S84-047-4-.010R5XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.141 | 0.235 | 0.125 | 2.50 | 0.015 | S84-047-2-.015R5XR | S84-047-3-.015R5XR | S84-047-4-.015R5XR | $34.49 | $36.59 |
| 0.050 | 0.150 | 0.250 | 0.125 | 2.50 | 0.005 | S84-050-2-.005R5XR | S84-050-3-.005R5XR | S84-050-4-.005R5XR | $34.49 | $36.59 |
| 0.050 | 0.150 | 0.250 | 0.125 | 2.50 | 0.010 | S84-050-2-.010R5XR | S84-050-3-.010R5XR | S84-050-4-.010R5XR | $34.49 | $36.59 |
| 0.050 | 0.150 | 0.250 | 0.125 | 2.50 | 0.015 | S84-050-2-.015R5XR | S84-050-3-.015R5XR | S84-050-4-.015R5XR | $34.49 | $36.59 |
| 0.055 | 0.165 | 0.275 | 0.125 | 2.50 | 0.005 | S84-055-2-.005R5XR | S84-055-3-.005R5XR | S84-055-4-.005R5XR | $34.49 | $36.59 |
| 0.055 | 0.165 | 0.275 | 0.125 | 2.50 | 0.010 | S84-055-2-.010R5XR | S84-055-3-.010R5XR | S84-055-4-.010R5XR | $34.49 | $36.59 |
| 0.055 | 0.165 | 0.275 | 0.125 | 2.50 | 0.015 | S84-055-2-.015R5XR | S84-055-3-.015R5XR | S84-055-4-.015R5XR | $34.49 | $36.59 |
| 0.060 | 0.180 | 0.300 | 0.125 | 2.50 | 0.005 | S84-060-2-.005R5XR | S84-060-3-.005R5XR | S84-060-4-.005R5XR | $34.49 | $36.59 |
| 0.060 | 0.180 | 0.300 | 0.125 | 2.50 | 0.010 | S84-060-2-.010R5XR | S84-060-3-.010R5XR | S84-060-4-.010R5XR | $34.49 | $36.59 |
| 0.060 | 0.180 | 0.300 | 0.125 | 2.50 | 0.015 | S84-060-2-.015R5XR | S84-060-3-.015R5XR | S84-060-4-.015R5XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.186 | 0.310 | 0.125 | 2.50 | 0.005 | S84-062-2-.005R5XR | S84-062-3-.005R5XR | S84-062-4-.005R5XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.186 | 0.310 | 0.125 | 2.50 | 0.010 | S84-062-2-.010R5XR | S84-062-3-.010R5XR | S84-062-4-.010R5XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.186 | 0.310 | 0.125 | 2.50 | 0.015 | S84-062-2-.015R5XR | S84-062-3-.015R5XR | S84-062-4-.015R5XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.186 | 0.310 | 0.125 | 2.50 | 0.020 | S84-062-2-.020R5XR | S84-062-3-.020R5XR | S84-062-4-.020R5XR | $34.49 | $36.59 |
| 0.065 | 0.195 | 0.325 | 0.125 | 2.50 | 0.005 | S84-065-2-.005R5XR | S84-065-3-.005R5XR | S84-065-4-.005R5XR | $34.49 | $36.59 |
| 0.065 | 0.195 | 0.325 | 0.125 | 2.50 | 0.010 | S84-065-2-.010R5XR | S84-065-3-.010R5XR | S84-065-4-.010R5XR | $34.49 | $36.59 |
| 0.065 | 0.195 | 0.325 | 0.125 | 2.50 | 0.015 | S84-065-2-.015R5XR | S84-065-3-.015R5XR | S84-065-4-.015R5XR | $34.49 | $36.59 |
| 0.070 | 0.210 | 0.350 | 0.125 | 2.50 | 0.005 | S84-070-2-.005R5XR | S84-070-3-.005R5XR | S84-070-4-.005R5XR | $33.76 | $35.86 |
| 0.070 | 0.210 | 0.350 | 0.125 | 2.50 | 0.010 | S84-070-2-.010R5XR | S84-070-3-.010R5XR | S84-070-4-.010R5XR | $33.76 | $35.86 |
| 0.070 | 0.210 | 0.350 | 0.125 | 2.50 | 0.015 | S84-070-2-.015R5XR | S84-070-3-.015R5XR | S84-070-4-.015R5XR | $33.76 | $35.86 |
| 0.075 | 0.225 | 0.375 | 0.125 | 2.50 | 0.005 | S84-075-2-.005R5XR | S84-075-3-.005R5XR | S84-075-4-.005R5XR | $33.76 | $35.86 |
| 0.075 | 0.225 | 0.375 | 0.125 | 2.50 | 0.010 | S84-075-2-.010R5XR | S84-075-3-.010R5XR | S84-075-4-.010R5XR | $33.76 | $35.86 |
| 0.075 | 0.225 | 0.375 | 0.125 | 2.50 | 0.015 | S84-075-2-.015R5XR | S84-075-3-.015R5XR | S84-075-4-.015R5XR | $33.76 | $35.86 |

## Corner Radius Micro End Mills



FLUTES 2,3,4

3X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.078 (5/64) | 0.234 | 0.390 | 0.125 | 2.50 | 0.005 | S84-078-2-.005R5XR | S84-078-3-.005R5XR | S84-078-4-.005R5XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.234 | 0.390 | 0.125 | 2.50 | 0.010 | S84-078-2-.010R5XR | S84-078-3-.010R5XR | S84-078-4-.010R5XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.234 | 0.390 | 0.125 | 2.50 | 0.015 | S84-078-2-.015R5XR | S84-078-3-.015R5XR | S84-078-4-.015R5XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.234 | 0.390 | 0.125 | 2.50 | 0.020 | S84-078-2-.020R5XR | S84-078-3-.020R5XR | S84-078-4-.020R5XR | $33.76 | $35.86 |
| 0.080 | 0.240 | 0.400 | 0.125 | 2.50 | 0.005 | S84-080-2-.005R5XR | S84-080-3-.005R5XR | S84-080-4-.005R5XR | $33.76 | $35.86 |
| 0.080 | 0.240 | 0.400 | 0.125 | 2.50 | 0.010 | S84-080-2-.010R5XR | S84-080-3-.010R5XR | S84-080-4-.010R5XR | $33.76 | $35.86 |
| 0.080 | 0.240 | 0.400 | 0.125 | 2.50 | 0.015 | S84-080-2-.015R5XR | S84-080-3-.015R5XR | S84-080-4-.015R5XR | $33.76 | $35.86 |
| 0.085 | 0.255 | 0.425 | 0.125 | 2.50 | 0.005 | S84-085-2-.005R5XR | S84-085-3-.005R5XR | S84-085-4-.005R5XR | $33.76 | $35.86 |
| 0.085 | 0.255 | 0.425 | 0.125 | 2.50 | 0.010 | S84-085-2-.010R5XR | S84-085-3-.010R5XR | S84-085-4-.010R5XR | $33.76 | $35.86 |
| 0.085 | 0.255 | 0.425 | 0.125 | 2.50 | 0.015 | S84-085-2-.015R5XR | S84-085-3-.015R5XR | S84-085-4-.015R5XR | $33.76 | $35.86 |
| 0.090 | 0.270 | 0.450 | 0.125 | 2.50 | 0.005 | S84-090-2-.005R5XR | S84-090-3-.005R5XR | S84-090-4-.005R5XR | $33.76 | $35.86 |
| 0.090 | 0.270 | 0.450 | 0.125 | 2.50 | 0.010 | S84-090-2-.010R5XR | S84-090-3-.010R5XR | S84-090-4-.010R5XR | $33.76 | $35.86 |
| 0.090 | 0.270 | 0.450 | 0.125 | 2.50 | 0.015 | S84-090-2-.015R5XR | S84-090-3-.015R5XR | S84-090-4-.015R5XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.279 | 0.465 | 0.125 | 2.50 | 0.005 | S84-093-2-.005R5XR | S84-093-3-.005R5XR | S84-093-4-.005R5XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.279 | 0.465 | 0.125 | 2.50 | 0.010 | S84-093-2-.010R5XR | S84-093-3-.010R5XR | S84-093-4-.010R5XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.279 | 0.465 | 0.125 | 2.50 | 0.015 | S84-093-2-.015R5XR | S84-093-3-.015R5XR | S84-093-4-.015R5XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.279 | 0.465 | 0.125 | 2.50 | 0.020 | S84-093-2-.020R5XR | S84-093-3-.020R5XR | S84-093-4-.020R5XR | $33.76 | $35.86 |
| 0.095 | 0.285 | 0.475 | 0.125 | 2.50 | 0.005 | S84-095-2-.005R5XR | S84-095-3-.005R5XR | S84-095-4-.005R5XR | $33.76 | $35.86 |
| 0.095 | 0.285 | 0.475 | 0.125 | 2.50 | 0.010 | S84-095-2-.010R5XR | S84-095-3-.010R5XR | S84-095-4-.010R5XR | $33.76 | $35.86 |
| 0.095 | 0.285 | 0.475 | 0.125 | 2.50 | 0.015 | S84-095-2-.015R5XR | S84-095-3-.015R5XR | S84-095-4-.015R5XR | $33.76 | $35.86 |
| 0.100 | 0.300 | 0.500 | 0.125 | 2.50 | 0.005 | S84-100-2-.005R5XR | S84-100-3-.005R5XR | S84-100-4-.005R5XR | $33.50 | $35.60 |
| 0.100 | 0.300 | 0.500 | 0.125 | 2.50 | 0.010 | S84-100-2-.010R5XR | S84-100-3-.010R5XR | S84-100-4-.010R5XR | $33.50 | $35.60 |
| 0.100 | 0.300 | 0.500 | 0.125 | 2.50 | 0.015 | S84-100-2-.015R5XR | S84-100-3-.015R5XR | S84-100-4-.015R5XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | 0.005 | S84-118-2-.005R5XR | S84-118-3-.005R5XR | S84-118-4-.005R5XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | 0.010 | S84-118-2-.010R5XR | S84-118-3-.010R5XR | S84-118-4-.010R5XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | 0.015 | S84-118-2-.015R5XR | S84-118-3-.015R5XR | S84-118-4-.015R5XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | 0.020 | S84-118-2-.020R5XR | S84-118-3-.020R5XR | S84-118-4-.020R5XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | 0.005 | S84-125-2-.005R5XR | S84-125-3-.005R5XR | S84-125-4-.005R5XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | 0.010 | S84-125-2-.010R5XR | S84-125-3-.010R5XR | S84-125-4-.010R5XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | 0.015 | S84-125-2-.015R5XR | S84-125-3-.015R5XR | S84-125-4-.015R5XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | 0.020 | S84-125-2-.020R5XR | S84-125-3-.020R5XR | S84-125-4-.020R5XR | $33.50 | $35.60 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 75 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

# S88

## Corner Radius Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.015 (1/64) | 0.023 | 0.120 | 0.125 | 2.50 | 0.003 | S88-015-2-.003R8XR | S88-015-3-.003R8XR | S88-015-4-.003R8XR | $42.68 | $44.78 |
| 0.020 | 0.030 | 0.160 | 0.125 | 2.50 | 0.005 | S88-020-2-.005R8XR | S88-020-3-.005R8XR | S88-020-4-.005R8XR | $40.26 | $42.36 |
| 0.025 | 0.038 | 0.200 | 0.125 | 2.50 | 0.005 | S88-025-2-.005R8XR | S88-025-3-.005R8XR | S88-025-4-.005R8XR | $39.90 | $42.00 |
| 0.030 | 0.045 | 0.240 | 0.125 | 2.50 | 0.005 | S88-030-2-.005R8XR | S88-030-3-.005R8XR | S88-030-4-.005R8XR | $35.81 | $37.91 |
| 0.030 | 0.045 | 0.240 | 0.125 | 2.50 | 0.010 | S88-030-2-.010R8XR | S88-030-3-.010R8XR | S88-030-4-.010R8XR | $35.81 | $37.91 |
| 0.031 (1/32) | 0.047 | 0.248 | 0.125 | 2.50 | 0.005 | S88-031-2-.005R8XR | S88-031-3-.005R8XR | S88-031-4-.005R8XR | $35.81 | $37.91 |
| 0.031 (1/32) | 0.047 | 0.248 | 0.125 | 2.50 | 0.010 | S88-031-2-.010R8XR | S88-031-3-.010R8XR | S88-031-4-.010R8XR | $35.81 | $37.91 |
| 0.035 | 0.053 | 0.280 | 0.125 | 2.50 | 0.005 | S88-035-2-.005R8XR | S88-035-3-.005R8XR | S88-035-4-.005R8XR | $34.49 | $36.59 |
| 0.035 | 0.053 | 0.280 | 0.125 | 2.50 | 0.010 | S88-035-2-.010R8XR | S88-035-3-.010R8XR | S88-035-4-.010R8XR | $34.49 | $36.59 |
| 0.039 (1mm) | 0.059 | 0.312 | 0.125 | 2.50 | 0.005 | S88-039-2-.005R8XR | S88-039-3-.005R8XR | S88-039-4-.005R8XR | $34.49 | $36.59 |
| 0.039 (1mm) | 0.059 | 0.312 | 0.125 | 2.50 | 0.010 | S88-039-2-.010R8XR | S88-039-3-.010R8XR | S88-039-4-.010R8XR | $34.49 | $36.59 |
| 0.040 | 0.060 | 0.320 | 0.125 | 2.50 | 0.005 | S88-040-2-.005R8XR | S88-040-3-.005R8XR | S88-040-4-.005R8XR | $34.49 | $36.59 |
| 0.040 | 0.060 | 0.320 | 0.125 | 2.50 | 0.010 | S88-040-2-.010R8XR | S88-040-3-.010R8XR | S88-040-4-.010R8XR | $34.49 | $36.59 |
| 0.045 | 0.068 | 0.360 | 0.125 | 2.50 | 0.005 | S88-045-2-.005R8XR | S88-045-3-.005R8XR | S88-045-4-.005R8XR | $34.49 | $36.59 |
| 0.045 | 0.068 | 0.360 | 0.125 | 2.50 | 0.010 | S88-045-2-.010R8XR | S88-045-3-.010R8XR | S88-045-4-.010R8XR | $34.49 | $36.59 |
| 0.045 | 0.068 | 0.360 | 0.125 | 2.50 | 0.015 | S88-045-2-.015R8XR | S88-045-3-.015R8XR | S88-045-4-.015R8XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.071 | 0.376 | 0.125 | 2.50 | 0.005 | S88-047-2-.005R8XR | S88-047-3-.005R8XR | S88-047-4-.005R8XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.071 | 0.376 | 0.125 | 2.50 | 0.010 | S88-047-2-.010R8XR | S88-047-3-.010R8XR | S88-047-4-.010R8XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.071 | 0.376 | 0.125 | 2.50 | 0.015 | S88-047-2-.015R8XR | S88-047-3-.015R8XR | S88-047-4-.015R8XR | $34.49 | $36.59 |
| 0.050 | 0.075 | 0.400 | 0.125 | 2.50 | 0.005 | S88-050-2-.005R8XR | S88-050-3-.005R8XR | S88-050-4-.005R8XR | $34.49 | $36.59 |
| 0.050 | 0.075 | 0.400 | 0.125 | 2.50 | 0.010 | S88-050-2-.010R8XR | S88-050-3-.010R8XR | S88-050-4-.010R8XR | $34.49 | $36.59 |
| 0.050 | 0.075 | 0.400 | 0.125 | 2.50 | 0.015 | S88-050-2-.015R8XR | S88-050-3-.015R8XR | S88-050-4-.015R8XR | $34.49 | $36.59 |
| 0.055 | 0.083 | 0.440 | 0.125 | 2.50 | 0.005 | S88-055-2-.005R8XR | S88-055-3-.005R8XR | S88-055-4-.005R8XR | $34.49 | $36.59 |
| 0.055 | 0.083 | 0.440 | 0.125 | 2.50 | 0.010 | S88-055-2-.010R8XR | S88-055-3-.010R8XR | S88-055-4-.010R8XR | $34.49 | $36.59 |
| 0.055 | 0.083 | 0.440 | 0.125 | 2.50 | 0.015 | S88-055-2-.015R8XR | S88-055-3-.015R8XR | S88-055-4-.015R8XR | $34.49 | $36.59 |
| 0.060 | 0.090 | 0.480 | 0.125 | 2.50 | 0.005 | S88-060-2-.005R8XR | S88-060-3-.005R8XR | S88-060-4-.005R8XR | $34.49 | $36.59 |
| 0.060 | 0.090 | 0.480 | 0.125 | 2.50 | 0.010 | S88-060-2-.010R8XR | S88-060-3-.010R8XR | S88-060-4-.010R8XR | $34.49 | $36.59 |
| 0.060 | 0.090 | 0.480 | 0.125 | 2.50 | 0.015 | S88-060-2-.015R8XR | S88-060-3-.015R8XR | S88-060-4-.015R8XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.093 | 0.496 | 0.125 | 2.50 | 0.005 | S88-062-2-.005R8XR | S88-062-3-.005R8XR | S88-062-4-.005R8XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.093 | 0.496 | 0.125 | 2.50 | 0.010 | S88-062-2-.010R8XR | S88-062-3-.010R8XR | S88-062-4-.010R8XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.093 | 0.496 | 0.125 | 2.50 | 0.015 | S88-062-2-.015R8XR | S88-062-3-.015R8XR | S88-062-4-.015R8XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.093 | 0.496 | 0.125 | 2.50 | 0.020 | S88-062-2-.020R8XR | S88-062-3-.020R8XR | S88-062-4-.020R8XR | $34.49 | $36.59 |
| 0.065 | 0.098 | 0.520 | 0.125 | 2.50 | 0.005 | S88-065-2-.005R8XR | S88-065-3-.005R8XR | S88-065-4-.005R8XR | $34.49 | $36.59 |
| 0.065 | 0.098 | 0.520 | 0.125 | 2.50 | 0.010 | S88-065-2-.010R8XR | S88-065-3-.010R8XR | S88-065-4-.010R8XR | $34.49 | $36.59 |
| 0.065 | 0.098 | 0.520 | 0.125 | 2.50 | 0.015 | S88-065-2-.015R8XR | S88-065-3-.015R8XR | S88-065-4-.015R8XR | $34.49 | $36.59 |
| 0.070 | 0.105 | 0.560 | 0.125 | 2.50 | 0.005 | S88-070-2-.005R8XR | S88-070-3-.005R8XR | S88-070-4-.005R8XR | $33.76 | $35.86 |
| 0.070 | 0.105 | 0.560 | 0.125 | 2.50 | 0.010 | S88-070-2-.010R8XR | S88-070-3-.010R8XR | S88-070-4-.010R8XR | $33.76 | $35.86 |
| 0.070 | 0.105 | 0.560 | 0.125 | 2.50 | 0.015 | S88-070-2-.015R8XR | S88-070-3-.015R8XR | S88-070-4-.015R8XR | $33.76 | $35.86 |
| 0.075 | 0.113 | 0.600 | 0.125 | 2.50 | 0.005 | S88-075-2-.005R8XR | S88-075-3-.005R8XR | S88-075-4-.005R8XR | $33.76 | $35.86 |
| 0.075 | 0.113 | 0.600 | 0.125 | 2.50 | 0.010 | S88-075-2-.010R8XR | S88-075-3-.010R8XR | S88-075-4-.010R8XR | $33.76 | $35.86 |
| 0.075 | 0.113 | 0.600 | 0.125 | 2.50 | 0.015 | S88-075-2-.015R8XR | S88-075-3-.015R8XR | S88-075-4-.015R8XR | $33.76 | $35.86 |

## Corner Radius Micro End Mills



| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.078 (5/64) | 0.117 | 0.624 | 0.125 | 2.50 | 0.005 | S88-078-2-.005R8XR | S88-078-3-.005R8XR | S88-078-4-.005R8XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.117 | 0.624 | 0.125 | 2.50 | 0.010 | S88-078-2-.010R8XR | S88-078-3-.010R8XR | S88-078-4-.010R8XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.117 | 0.624 | 0.125 | 2.50 | 0.015 | S88-078-2-.015R8XR | S88-078-3-.015R8XR | S88-078-4-.015R8XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.117 | 0.624 | 0.125 | 2.50 | 0.020 | S88-078-2-.020R8XR | S88-078-3-.020R8XR | S88-078-4-.020R8XR | $33.76 | $35.86 |
| 0.080 | 0.120 | 0.640 | 0.125 | 2.50 | 0.005 | S88-080-2-.005R8XR | S88-080-3-.005R8XR | S88-080-4-.005R8XR | $33.76 | $35.86 |
| 0.080 | 0.120 | 0.640 | 0.125 | 2.50 | 0.010 | S88-080-2-.010R8XR | S88-080-3-.010R8XR | S88-080-4-.010R8XR | $33.76 | $35.86 |
| 0.080 | 0.120 | 0.640 | 0.125 | 2.50 | 0.015 | S88-080-2-.015R8XR | S88-080-3-.015R8XR | S88-080-4-.015R8XR | $33.76 | $35.86 |
| 0.085 | 0.128 | 0.680 | 0.125 | 2.50 | 0.005 | S88-085-2-.005R8XR | S88-085-3-.005R8XR | S88-085-4-.005R8XR | $33.76 | $35.86 |
| 0.085 | 0.128 | 0.680 | 0.125 | 2.50 | 0.010 | S88-085-2-.010R8XR | S88-085-3-.010R8XR | S88-085-4-.010R8XR | $33.76 | $35.86 |
| 0.085 | 0.128 | 0.680 | 0.125 | 2.50 | 0.015 | S88-085-2-.015R8XR | S88-085-3-.015R8XR | S88-085-4-.015R8XR | $33.76 | $35.86 |
| 0.090 | 0.135 | 0.720 | 0.125 | 2.50 | 0.005 | S88-090-2-.005R8XR | S88-090-3-.005R8XR | S88-090-4-.005R8XR | $33.76 | $35.86 |
| 0.090 | 0.135 | 0.720 | 0.125 | 2.50 | 0.010 | S88-090-2-.010R8XR | S88-090-3-.010R8XR | S88-090-4-.010R8XR | $33.76 | $35.86 |
| 0.090 | 0.135 | 0.720 | 0.125 | 2.50 | 0.015 | S88-090-2-.015R8XR | S88-090-3-.015R8XR | S88-090-4-.015R8XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.140 | 0.744 | 0.125 | 2.50 | 0.005 | S88-093-2-.005R8XR | S88-093-3-.005R8XR | S88-093-4-.005R8XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.140 | 0.744 | 0.125 | 2.50 | 0.010 | S88-093-2-.010R8XR | S88-093-3-.010R8XR | S88-093-4-.010R8XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.140 | 0.744 | 0.125 | 2.50 | 0.015 | S88-093-2-.015R8XR | S88-093-3-.015R8XR | S88-093-4-.015R8XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.140 | 0.744 | 0.125 | 2.50 | 0.020 | S88-093-2-.020R8XR | S88-093-3-.020R8XR | S88-093-4-.020R8XR | $33.76 | $35.86 |
| 0.095 | 0.143 | 0.760 | 0.125 | 2.50 | 0.005 | S88-095-2-.005R8XR | S88-095-3-.005R8XR | S88-095-4-.005R8XR | $33.76 | $35.86 |
| 0.095 | 0.143 | 0.760 | 0.125 | 2.50 | 0.010 | S88-095-2-.010R8XR | S88-095-3-.010R8XR | S88-095-4-.010R8XR | $33.76 | $35.86 |
| 0.095 | 0.143 | 0.760 | 0.125 | 2.50 | 0.015 | S88-095-2-.015R8XR | S88-095-3-.015R8XR | S88-095-4-.015R8XR | $33.76 | $35.86 |
| 0.100 | 0.150 | 0.800 | 0.125 | 2.50 | 0.005 | S88-100-2-.005R8XR | S88-100-3-.005R8XR | S88-100-4-.005R8XR | $33.50 | $35.60 |
| 0.100 | 0.150 | 0.800 | 0.125 | 2.50 | 0.010 | S88-100-2-.010R8XR | S88-100-3-.010R8XR | S88-100-4-.010R8XR | $33.50 | $35.60 |
| 0.100 | 0.150 | 0.800 | 0.125 | 2.50 | 0.015 | S88-100-2-.015R8XR | S88-100-3-.015R8XR | S88-100-4-.015R8XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | 0.005 | S88-118-2-.005R8XR | S88-118-3-.005R8XR | S88-118-4-.005R8XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | 0.010 | S88-118-2-.010R8XR | S88-118-3-.010R8XR | S88-118-4-.010R8XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | 0.015 | S88-118-2-.015R8XR | S88-118-3-.015R8XR | S88-118-4-.015R8XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | 0.020 | S88-118-2-.020R8XR | S88-118-3-.020R8XR | S88-118-4-.020R8XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | 0.005 | S88-125-2-.005R8XR | S88-125-3-.005R8XR | S88-125-4-.005R8XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | 0.010 | S88-125-2-.010R8XR | S88-125-3-.010R8XR | S88-125-4-.010R8XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | 0.015 | S88-125-2-.015R8XR | S88-125-3-.015R8XR | S88-125-4-.015R8XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | 0.020 | S88-125-2-.020R8XR | S88-125-3-.020R8XR | S88-125-4-.020R8XR | $33.50 | $35.60 |

FLUTES 2,3,4

1.5X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 76 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

# S85

## Corner Radius Micro End Mills

FLUTES 2,3,4

3X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.015 (1/64) | 0.045 | 0.120 | 0.125 | 2.50 | 0.003 | S85-015-2-.003R8XR | S85-015-3-.003R8XR | S85-015-4-.003R8XR | $42.68 | $44.78 |
| 0.020 | 0.060 | 0.160 | 0.125 | 2.50 | 0.005 | S85-020-2-.005R8XR | S85-020-3-.005R8XR | S85-020-4-.005R8XR | $40.26 | $42.36 |
| 0.025 | 0.075 | 0.200 | 0.125 | 2.50 | 0.005 | S85-025-2-.005R8XR | S85-025-3-.005R8XR | S85-025-4-.005R8XR | $39.90 | $42.00 |
| 0.030 | 0.090 | 0.240 | 0.125 | 2.50 | 0.005 | S85-030-2-.005R8XR | S85-030-3-.005R8XR | S85-030-4-.005R8XR | $35.81 | $37.91 |
| 0.030 | 0.090 | 0.240 | 0.125 | 2.50 | 0.010 | S85-030-2-.010R8XR | S85-030-3-.010R8XR | S85-030-4-.010R8XR | $35.81 | $37.91 |
| 0.031 (1/32) | 0.093 | 0.248 | 0.125 | 2.50 | 0.005 | S85-031-2-.005R8XR | S85-031-3-.005R8XR | S85-031-4-.005R8XR | $35.81 | $37.91 |
| 0.031 (1/32) | 0.093 | 0.248 | 0.125 | 2.50 | 0.010 | S85-031-2-.010R8XR | S85-031-3-.010R8XR | S85-031-4-.010R8XR | $35.81 | $37.91 |
| 0.035 | 0.105 | 0.280 | 0.125 | 2.50 | 0.005 | S85-035-2-.005R8XR | S85-035-3-.005R8XR | S85-035-4-.005R8XR | $34.49 | $36.59 |
| 0.035 | 0.105 | 0.280 | 0.125 | 2.50 | 0.010 | S85-035-2-.010R8XR | S85-035-3-.010R8XR | S85-035-4-.010R8XR | $34.49 | $36.59 |
| 0.039 (1mm) | 0.117 | 0.312 | 0.125 | 2.50 | 0.005 | S85-039-2-.005R8XR | S85-039-3-.005R8XR | S85-039-4-.005R8XR | $34.49 | $36.59 |
| 0.039 (1mm) | 0.117 | 0.312 | 0.125 | 2.50 | 0.010 | S85-039-2-.010R8XR | S85-039-3-.010R8XR | S85-039-4-.010R8XR | $34.49 | $36.59 |
| 0.040 | 0.120 | 0.320 | 0.125 | 2.50 | 0.005 | S85-040-2-.005R8XR | S85-040-3-.005R8XR | S85-040-4-.005R8XR | $34.49 | $36.59 |
| 0.040 | 0.120 | 0.320 | 0.125 | 2.50 | 0.010 | S85-040-2-.010R8XR | S85-040-3-.010R8XR | S85-040-4-.010R8XR | $34.49 | $36.59 |
| 0.045 | 0.135 | 0.360 | 0.125 | 2.50 | 0.005 | S85-045-2-.005R8XR | S85-045-3-.005R8XR | S85-045-4-.005R8XR | $34.49 | $36.59 |
| 0.045 | 0.135 | 0.360 | 0.125 | 2.50 | 0.010 | S85-045-2-.010R8XR | S85-045-3-.010R8XR | S85-045-4-.010R8XR | $34.49 | $36.59 |
| 0.045 | 0.135 | 0.360 | 0.125 | 2.50 | 0.015 | S85-045-2-.015R8XR | S85-045-3-.015R8XR | S85-045-4-.015R8XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.141 | 0.376 | 0.125 | 2.50 | 0.005 | S85-047-2-.005R8XR | S85-047-3-.005R8XR | S85-047-4-.005R8XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.141 | 0.376 | 0.125 | 2.50 | 0.010 | S85-047-2-.010R8XR | S85-047-3-.010R8XR | S85-047-4-.010R8XR | $34.49 | $36.59 |
| 0.047 (3/64) | 0.141 | 0.376 | 0.125 | 2.50 | 0.015 | S85-047-2-.015R8XR | S85-047-3-.015R8XR | S85-047-4-.015R8XR | $34.49 | $36.59 |
| 0.050 | 0.150 | 0.400 | 0.125 | 2.50 | 0.005 | S85-050-2-.005R8XR | S85-050-3-.005R8XR | S85-050-4-.005R8XR | $34.49 | $36.59 |
| 0.050 | 0.150 | 0.400 | 0.125 | 2.50 | 0.010 | S85-050-2-.010R8XR | S85-050-3-.010R8XR | S85-050-4-.010R8XR | $34.49 | $36.59 |
| 0.050 | 0.150 | 0.400 | 0.125 | 2.50 | 0.015 | S85-050-2-.015R8XR | S85-050-3-.015R8XR | S85-050-4-.015R8XR | $34.49 | $36.59 |
| 0.055 | 0.165 | 0.440 | 0.125 | 2.50 | 0.005 | S85-055-2-.005R8XR | S85-055-3-.005R8XR | S85-055-4-.005R8XR | $34.49 | $36.59 |
| 0.055 | 0.165 | 0.440 | 0.125 | 2.50 | 0.010 | S85-055-2-.010R8XR | S85-055-3-.010R8XR | S85-055-4-.010R8XR | $34.49 | $36.59 |
| 0.055 | 0.165 | 0.440 | 0.125 | 2.50 | 0.015 | S85-055-2-.015R8XR | S85-055-3-.015R8XR | S85-055-4-.015R8XR | $34.49 | $36.59 |
| 0.060 | 0.180 | 0.480 | 0.125 | 2.50 | 0.005 | S85-060-2-.005R8XR | S85-060-3-.005R8XR | S85-060-4-.005R8XR | $34.49 | $36.59 |
| 0.060 | 0.180 | 0.480 | 0.125 | 2.50 | 0.010 | S85-060-2-.010R8XR | S85-060-3-.010R8XR | S85-060-4-.010R8XR | $34.49 | $36.59 |
| 0.060 | 0.180 | 0.480 | 0.125 | 2.50 | 0.015 | S85-060-2-.015R8XR | S85-060-3-.015R8XR | S85-060-4-.015R8XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.186 | 0.496 | 0.125 | 2.50 | 0.005 | S85-062-2-.005R8XR | S85-062-3-.005R8XR | S85-062-4-.005R8XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.186 | 0.496 | 0.125 | 2.50 | 0.010 | S85-062-2-.010R8XR | S85-062-3-.010R8XR | S85-062-4-.010R8XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.186 | 0.496 | 0.125 | 2.50 | 0.015 | S85-062-2-.015R8XR | S85-062-3-.015R8XR | S85-062-4-.015R8XR | $34.49 | $36.59 |
| 0.062 (1/16) | 0.186 | 0.496 | 0.125 | 2.50 | 0.020 | S85-062-2-.020R8XR | S85-062-3-.020R8XR | S85-062-4-.020R8XR | $34.49 | $36.59 |
| 0.065 | 0.195 | 0.520 | 0.125 | 2.50 | 0.005 | S85-065-2-.005R8XR | S85-065-3-.005R8XR | S85-065-4-.005R8XR | $34.49 | $36.59 |
| 0.065 | 0.195 | 0.520 | 0.125 | 2.50 | 0.010 | S85-065-2-.010R8XR | S85-065-3-.010R8XR | S85-065-4-.010R8XR | $34.49 | $36.59 |
| 0.065 | 0.195 | 0.520 | 0.125 | 2.50 | 0.015 | S85-065-2-.015R8XR | S85-065-3-.015R8XR | S85-065-4-.015R8XR | $34.49 | $36.59 |
| 0.070 | 0.210 | 0.560 | 0.125 | 2.50 | 0.005 | S85-070-2-.005R8XR | S85-070-3-.005R8XR | S85-070-4-.005R8XR | $33.76 | $35.86 |
| 0.070 | 0.210 | 0.560 | 0.125 | 2.50 | 0.010 | S85-070-2-.010R8XR | S85-070-3-.010R8XR | S85-070-4-.010R8XR | $33.76 | $35.86 |
| 0.070 | 0.210 | 0.560 | 0.125 | 2.50 | 0.015 | S85-070-2-.015R8XR | S85-070-3-.015R8XR | S85-070-4-.015R8XR | $33.76 | $35.86 |
| 0.075 | 0.225 | 0.600 | 0.125 | 2.50 | 0.005 | S85-075-2-.005R8XR | S85-075-3-.005R8XR | S85-075-4-.005R8XR | $33.76 | $35.86 |
| 0.075 | 0.225 | 0.600 | 0.125 | 2.50 | 0.010 | S85-075-2-.010R8XR | S85-075-3-.010R8XR | S85-075-4-.010R8XR | $33.76 | $35.86 |
| 0.075 | 0.225 | 0.600 | 0.125 | 2.50 | 0.015 | S85-075-2-.015R8XR | S85-075-3-.015R8XR | S85-075-4-.015R8XR | $33.76 | $35.86 |

## Corner Radius Micro End Mills



| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.078 (5/64) | 0.234 | 0.624 | 0.125 | 2.50 | 0.005 | S85-078-2-.005R8XR | S85-078-3-.005R8XR | S85-078-4-.005R8XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.234 | 0.624 | 0.125 | 2.50 | 0.010 | S85-078-2-.010R8XR | S85-078-3-.010R8XR | S85-078-4-.010R8XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.234 | 0.624 | 0.125 | 2.50 | 0.015 | S85-078-2-.015R8XR | S85-078-3-.015R8XR | S85-078-4-.015R8XR | $33.76 | $35.86 |
| 0.078 (5/64) | 0.234 | 0.624 | 0.125 | 2.50 | 0.020 | S85-078-2-.020R8XR | S85-078-3-.020R8XR | S85-078-4-.020R8XR | $33.76 | $35.86 |
| 0.080 | 0.240 | 0.640 | 0.125 | 2.50 | 0.005 | S85-080-2-.005R8XR | S85-080-3-.005R8XR | S85-080-4-.005R8XR | $33.76 | $35.86 |
| 0.080 | 0.240 | 0.640 | 0.125 | 2.50 | 0.010 | S85-080-2-.010R8XR | S85-080-3-.010R8XR | S85-080-4-.010R8XR | $33.76 | $35.86 |
| 0.080 | 0.240 | 0.640 | 0.125 | 2.50 | 0.015 | S85-080-2-.015R8XR | S85-080-3-.015R8XR | S85-080-4-.015R8XR | $33.76 | $35.86 |
| 0.085 | 0.255 | 0.680 | 0.125 | 2.50 | 0.005 | S85-085-2-.005R8XR | S85-085-3-.005R8XR | S85-085-4-.005R8XR | $33.76 | $35.86 |
| 0.085 | 0.255 | 0.680 | 0.125 | 2.50 | 0.010 | S85-085-2-.010R8XR | S85-085-3-.010R8XR | S85-085-4-.010R8XR | $33.76 | $35.86 |
| 0.085 | 0.255 | 0.680 | 0.125 | 2.50 | 0.015 | S85-085-2-.015R8XR | S85-085-3-.015R8XR | S85-085-4-.015R8XR | $33.76 | $35.86 |
| 0.090 | 0.270 | 0.720 | 0.125 | 2.50 | 0.005 | S85-090-2-.005R8XR | S85-090-3-.005R8XR | S85-090-4-.005R8XR | $33.76 | $35.86 |
| 0.090 | 0.270 | 0.720 | 0.125 | 2.50 | 0.010 | S85-090-2-.010R8XR | S85-090-3-.010R8XR | S85-090-4-.010R8XR | $33.76 | $35.86 |
| 0.090 | 0.270 | 0.720 | 0.125 | 2.50 | 0.015 | S85-090-2-.015R8XR | S85-090-3-.015R8XR | S85-090-4-.015R8XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.279 | 0.744 | 0.125 | 2.50 | 0.005 | S85-093-2-.005R8XR | S85-093-3-.005R8XR | S85-093-4-.005R8XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.279 | 0.744 | 0.125 | 2.50 | 0.010 | S85-093-2-.010R8XR | S85-093-3-.010R8XR | S85-093-4-.010R8XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.279 | 0.744 | 0.125 | 2.50 | 0.015 | S85-093-2-.015R8XR | S85-093-3-.015R8XR | S85-093-4-.015R8XR | $33.76 | $35.86 |
| 0.093 (3/32) | 0.279 | 0.744 | 0.125 | 2.50 | 0.020 | S85-093-2-.020R8XR | S85-093-3-.020R8XR | S85-093-4-.020R8XR | $33.76 | $35.86 |
| 0.095 | 0.285 | 0.760 | 0.125 | 2.50 | 0.005 | S85-095-2-.005R8XR | S85-095-3-.005R8XR | S85-095-4-.005R8XR | $33.76 | $35.86 |
| 0.095 | 0.285 | 0.760 | 0.125 | 2.50 | 0.010 | S85-095-2-.010R8XR | S85-095-3-.010R8XR | S85-095-4-.010R8XR | $33.76 | $35.86 |
| 0.095 | 0.285 | 0.760 | 0.125 | 2.50 | 0.015 | S85-095-2-.015R8XR | S85-095-3-.015R8XR | S85-095-4-.015R8XR | $33.76 | $35.86 |
| 0.100 | 0.300 | 0.800 | 0.125 | 2.50 | 0.005 | S85-100-2-.005R8XR | S85-100-3-.005R8XR | S85-100-4-.005R8XR | $33.50 | $35.60 |
| 0.100 | 0.300 | 0.800 | 0.125 | 2.50 | 0.010 | S85-100-2-.010R8XR | S85-100-3-.010R8XR | S85-100-4-.010R8XR | $33.50 | $35.60 |
| 0.100 | 0.300 | 0.800 | 0.125 | 2.50 | 0.015 | S85-100-2-.015R8XR | S85-100-3-.015R8XR | S85-100-4-.015R8XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | 0.005 | S85-118-2-.005R8XR | S85-118-3-.005R8XR | S85-118-4-.005R8XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | 0.010 | S85-118-2-.010R8XR | S85-118-3-.010R8XR | S85-118-4-.010R8XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | 0.015 | S85-118-2-.015R8XR | S85-118-3-.015R8XR | S85-118-4-.015R8XR | $33.50 | $35.60 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | 0.020 | S85-118-2-.020R8XR | S85-118-3-.020R8XR | S85-118-4-.020R8XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | 0.005 | S85-125-2-.005R8XR | S85-125-3-.005R8XR | S85-125-4-.005R8XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | 0.010 | S85-125-2-.010R8XR | S85-125-3-.010R8XR | S85-125-4-.010R8XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | 0.015 | S85-125-2-.015R8XR | S85-125-3-.015R8XR | S85-125-4-.015R8XR | $33.50 | $35.60 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | 0.020 | S85-125-2-.020R8XR | S85-125-3-.020R8XR | S85-125-4-.020R8XR | $33.50 | $35.60 |

FLUTES 2,3,4

3X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 77 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


### COATING

P.208

In-house coating allows MITGI to deliver high-quality coating applied consistently from tool-to-tool and batch-to-batch, with short turnaround times. See page 208-209 for more information regarding coating options, pricing, and timelines.

# S89 Corner Radius Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.015 (1/64) | 0.023 | 0.180 | 0.125 | 2.50 | 0.003 | S89-015-2-.003R12XR | S89-015-3-.003R12XR | S89-015-4-.003R12XR | $44.78 | $46.88 |
| 0.020 | 0.030 | 0.240 | 0.125 | 2.50 | 0.005 | S89-020-2-.005R12XR | S89-020-3-.005R12XR | S89-020-4-.005R12XR | $42.47 | $44.57 |
| 0.025 | 0.038 | 0.300 | 0.125 | 2.50 | 0.005 | S89-025-2-.005R12XR | S89-025-3-.005R12XR | S89-025-4-.005R12XR | $42.00 | $44.10 |
| 0.030 | 0.045 | 0.360 | 0.125 | 2.50 | 0.005 | S89-030-2-.005R12XR | S89-030-3-.005R12XR | S89-030-4-.005R12XR | $37.91 | $40.01 |
| 0.030 | 0.045 | 0.360 | 0.125 | 2.50 | 0.010 | S89-030-2-.010R12XR | S89-030-3-.010R12XR | S89-030-4-.010R12XR | $37.91 | $40.01 |
| 0.031 (1/32) | 0.047 | 0.372 | 0.125 | 2.50 | 0.005 | S89-031-2-.005R12XR | S89-031-3-.005R12XR | S89-031-4-.005R12XR | $37.91 | $40.01 |
| 0.031 (1/32) | 0.047 | 0.372 | 0.125 | 2.50 | 0.010 | S89-031-2-.010R12XR | S89-031-3-.010R12XR | S89-031-4-.010R12XR | $37.91 | $40.01 |
| 0.035 | 0.053 | 0.420 | 0.125 | 2.50 | 0.005 | S89-035-2-.005R12XR | S89-035-3-.005R12XR | S89-035-4-.005R12XR | $37.01 | $39.11 |
| 0.035 | 0.053 | 0.420 | 0.125 | 2.50 | 0.010 | S89-035-2-.010R12XR | S89-035-3-.010R12XR | S89-035-4-.010R12XR | $37.01 | $39.11 |
| 0.039 (1mm) | 0.059 | 0.468 | 0.125 | 2.50 | 0.005 | S89-039-2-.005R12XR | S89-039-3-.005R12XR | S89-039-4-.005R12XR | $37.01 | $39.11 |
| 0.039 (1mm) | 0.059 | 0.468 | 0.125 | 2.50 | 0.010 | S89-039-2-.010R12XR | S89-039-3-.010R12XR | S89-039-4-.010R12XR | $37.01 | $39.11 |
| 0.040 | 0.060 | 0.480 | 0.125 | 2.50 | 0.005 | S89-040-2-.005R12XR | S89-040-3-.005R12XR | S89-040-4-.005R12XR | $36.59 | $38.69 |
| 0.040 | 0.060 | 0.480 | 0.125 | 2.50 | 0.010 | S89-040-2-.010R12XR | S89-040-3-.010R12XR | S89-040-4-.010R12XR | $36.59 | $38.69 |
| 0.045 | 0.068 | 0.540 | 0.125 | 2.50 | 0.005 | S89-045-2-.005R12XR | S89-045-3-.005R12XR | S89-045-4-.005R12XR | $36.59 | $38.69 |
| 0.045 | 0.068 | 0.540 | 0.125 | 2.50 | 0.010 | S89-045-2-.010R12XR | S89-045-3-.010R12XR | S89-045-4-.010R12XR | $36.59 | $38.69 |
| 0.045 | 0.068 | 0.540 | 0.125 | 2.50 | 0.015 | S89-045-2-.015R12XR | S89-045-3-.015R12XR | S89-045-4-.015R12XR | $36.59 | $38.69 |
| 0.047 (3/64) | 0.071 | 0.564 | 0.125 | 2.50 | 0.005 | S89-047-2-.005R12XR | S89-047-3-.005R12XR | S89-047-4-.005R12XR | $36.59 | $38.69 |
| 0.047 (3/64) | 0.071 | 0.564 | 0.125 | 2.50 | 0.010 | S89-047-2-.010R12XR | S89-047-3-.010R12XR | S89-047-4-.010R12XR | $36.59 | $38.69 |
| 0.047 (3/64) | 0.071 | 0.564 | 0.125 | 2.50 | 0.015 | S89-047-2-.015R12XR | S89-047-3-.015R12XR | S89-047-4-.015R12XR | $36.59 | $38.69 |
| 0.050 | 0.075 | 0.600 | 0.125 | 2.50 | 0.005 | S89-050-2-.005R12XR | S89-050-3-.005R12XR | S89-050-4-.005R12XR | $36.59 | $38.69 |
| 0.050 | 0.075 | 0.600 | 0.125 | 2.50 | 0.010 | S89-050-2-.010R12XR | S89-050-3-.010R12XR | S89-050-4-.010R12XR | $36.59 | $38.69 |
| 0.050 | 0.075 | 0.600 | 0.125 | 2.50 | 0.015 | S89-050-2-.015R12XR | S89-050-3-.015R12XR | S89-050-4-.015R12XR | $36.59 | $38.69 |
| 0.055 | 0.083 | 0.660 | 0.125 | 2.50 | 0.005 | S89-055-2-.005R12XR | S89-055-3-.005R12XR | S89-055-4-.005R12XR | $36.59 | $38.69 |
| 0.055 | 0.083 | 0.660 | 0.125 | 2.50 | 0.010 | S89-055-2-.010R12XR | S89-055-3-.010R12XR | S89-055-4-.010R12XR | $36.59 | $38.69 |
| 0.055 | 0.083 | 0.660 | 0.125 | 2.50 | 0.015 | S89-055-2-.015R12XR | S89-055-3-.015R12XR | S89-055-4-.015R12XR | $36.59 | $38.69 |
| 0.060 | 0.090 | 0.720 | 0.125 | 2.50 | 0.005 | S89-060-2-.005R12XR | S89-060-3-.005R12XR | S89-060-4-.005R12XR | $36.59 | $38.69 |
| 0.060 | 0.090 | 0.720 | 0.125 | 2.50 | 0.010 | S89-060-2-.010R12XR | S89-060-3-.010R12XR | S89-060-4-.010R12XR | $36.59 | $38.69 |
| 0.060 | 0.090 | 0.720 | 0.125 | 2.50 | 0.015 | S89-060-2-.015R12XR | S89-060-3-.015R12XR | S89-060-4-.015R12XR | $36.59 | $38.69 |
| 0.062 (1/16) | 0.093 | 0.744 | 0.125 | 2.50 | 0.005 | S89-062-2-.005R12XR | S89-062-3-.005R12XR | S89-062-4-.005R12XR | $36.59 | $38.69 |
| 0.062 (1/16) | 0.093 | 0.744 | 0.125 | 2.50 | 0.010 | S89-062-2-.010R12XR | S89-062-3-.010R12XR | S89-062-4-.010R12XR | $36.59 | $38.69 |
| 0.062 (1/16) | 0.093 | 0.744 | 0.125 | 2.50 | 0.015 | S89-062-2-.015R12XR | S89-062-3-.015R12XR | S89-062-4-.015R12XR | $36.59 | $38.69 |
| 0.062 (1/16) | 0.093 | 0.744 | 0.125 | 2.50 | 0.020 | S89-062-2-.020R12XR | S89-062-3-.020R12XR | S89-062-4-.020R12XR | $36.59 | $38.69 |
| 0.065 | 0.098 | 0.780 | 0.125 | 2.50 | 0.005 | S89-065-2-.005R12XR | S89-065-3-.005R12XR | S89-065-4-.005R12XR | $36.59 | $38.69 |
| 0.065 | 0.098 | 0.780 | 0.125 | 2.50 | 0.010 | S89-065-2-.010R12XR | S89-065-3-.010R12XR | S89-065-4-.010R12XR | $36.59 | $38.69 |
| 0.065 | 0.098 | 0.780 | 0.125 | 2.50 | 0.015 | S89-065-2-.015R12XR | S89-065-3-.015R12XR | S89-065-4-.015R12XR | $36.59 | $38.69 |
| 0.070 | 0.105 | 0.840 | 0.125 | 2.50 | 0.005 | S89-070-2-.005R12XR | S89-070-3-.005R12XR | S89-070-4-.005R12XR | $35.86 | $37.96 |
| 0.070 | 0.105 | 0.840 | 0.125 | 2.50 | 0.010 | S89-070-2-.010R12XR | S89-070-3-.010R12XR | S89-070-4-.010R12XR | $35.86 | $37.96 |
| 0.070 | 0.105 | 0.840 | 0.125 | 2.50 | 0.015 | S89-070-2-.015R12XR | S89-070-3-.015R12XR | S89-070-4-.015R12XR | $35.86 | $37.96 |
| 0.075 | 0.113 | 0.900 | 0.125 | 2.50 | 0.005 | S89-075-2-.005R12XR | S89-075-3-.005R12XR | S89-075-4-.005R12XR | $35.86 | $37.96 |
| 0.075 | 0.113 | 0.900 | 0.125 | 2.50 | 0.010 | S89-075-2-.010R12XR | S89-075-3-.010R12XR | S89-075-4-.010R12XR | $35.86 | $37.96 |
| 0.075 | 0.113 | 0.900 | 0.125 | 2.50 | 0.015 | S89-075-2-.015R12XR | S89-075-3-.015R12XR | S89-075-4-.015R12XR | $35.86 | $37.96 |

## Corner Radius Micro End Mills



FLUTES 2,3,4

1.5X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.078 (5/64) | 0.117 | 0.936 | 0.125 | 2.50 | 0.005 | S89-078-2-.005R12XR | S89-078-3-.005R12XR | S89-078-4-.005R12XR | $35.86 | $37.96 |
| 0.078 (5/64) | 0.117 | 0.936 | 0.125 | 2.50 | 0.010 | S89-078-2-.010R12XR | S89-078-3-.010R12XR | S89-078-4-.010R12XR | $35.86 | $37.96 |
| 0.078 (5/64) | 0.117 | 0.936 | 0.125 | 2.50 | 0.015 | S89-078-2-.015R12XR | S89-078-3-.015R12XR | S89-078-4-.015R12XR | $35.86 | $37.96 |
| 0.078 (5/64) | 0.117 | 0.936 | 0.125 | 2.50 | 0.020 | S89-078-2-.020R12XR | S89-078-3-.020R12XR | S89-078-4-.020R12XR | $35.86 | $37.96 |
| 0.080 | 0.120 | 0.960 | 0.125 | 2.50 | 0.005 | S89-080-2-.005R12XR | S89-080-3-.005R12XR | S89-080-4-.005R12XR | $35.86 | $37.96 |
| 0.080 | 0.120 | 0.960 | 0.125 | 2.50 | 0.010 | S89-080-2-.010R12XR | S89-080-3-.010R12XR | S89-080-4-.010R12XR | $35.86 | $37.96 |
| 0.080 | 0.120 | 0.960 | 0.125 | 2.50 | 0.015 | S89-080-2-.015R12XR | S89-080-3-.015R12XR | S89-080-4-.015R12XR | $35.86 | $37.96 |
| 0.085 | 0.128 | 1.020 | 0.125 | 2.50 | 0.005 | S89-085-2-.005R12XR | S89-085-3-.005R12XR | S89-085-4-.005R12XR | $35.86 | $37.96 |
| 0.085 | 0.128 | 1.020 | 0.125 | 2.50 | 0.010 | S89-085-2-.010R12XR | S89-085-3-.010R12XR | S89-085-4-.010R12XR | $35.86 | $37.96 |
| 0.085 | 0.128 | 1.020 | 0.125 | 2.50 | 0.015 | S89-085-2-.015R12XR | S89-085-3-.015R12XR | S89-085-4-.015R12XR | $35.86 | $37.96 |
| 0.090 | 0.135 | 1.080 | 0.125 | 2.50 | 0.005 | S89-090-2-.005R12XR | S89-090-3-.005R12XR | S89-090-4-.005R12XR | $35.86 | $37.96 |
| 0.090 | 0.135 | 1.080 | 0.125 | 2.50 | 0.010 | S89-090-2-.010R12XR | S89-090-3-.010R12XR | S89-090-4-.010R12XR | $35.86 | $37.96 |
| 0.090 | 0.135 | 1.080 | 0.125 | 2.50 | 0.015 | S89-090-2-.015R12XR | S89-090-3-.015R12XR | S89-090-4-.015R12XR | $35.86 | $37.96 |
| 0.093 (3/32) | 0.140 | 1.116 | 0.125 | 2.50 | 0.005 | S89-093-2-.005R12XR | S89-093-3-.005R12XR | S89-093-4-.005R12XR | $35.86 | $37.96 |
| 0.093 (3/32) | 0.140 | 1.116 | 0.125 | 2.50 | 0.010 | S89-093-2-.010R12XR | S89-093-3-.010R12XR | S89-093-4-.010R12XR | $35.86 | $37.96 |
| 0.093 (3/32) | 0.140 | 1.116 | 0.125 | 2.50 | 0.015 | S89-093-2-.015R12XR | S89-093-3-.015R12XR | S89-093-4-.015R12XR | $35.86 | $37.96 |
| 0.093 (3/32) | 0.140 | 1.116 | 0.125 | 2.50 | 0.020 | S89-093-2-.020R12XR | S89-093-3-.020R12XR | S89-093-4-.020R12XR | $35.86 | $37.96 |
| 0.095 | 0.143 | 1.140 | 0.125 | 2.50 | 0.005 | S89-095-2-.005R12XR | S89-095-3-.005R12XR | S89-095-4-.005R12XR | $35.86 | $37.96 |
| 0.095 | 0.143 | 1.140 | 0.125 | 2.50 | 0.010 | S89-095-2-.010R12XR | S89-095-3-.010R12XR | S89-095-4-.010R12XR | $35.86 | $37.96 |
| 0.095 | 0.143 | 1.140 | 0.125 | 2.50 | 0.015 | S89-095-2-.015R12XR | S89-095-3-.015R12XR | S89-095-4-.015R12XR | $35.86 | $37.96 |
| 0.100 | 0.150 | 1.200 | 0.125 | 2.50 | 0.005 | S89-100-2-.005R12XR | S89-100-3-.005R12XR | S89-100-4-.005R12XR | $35.60 | $37.70 |
| 0.100 | 0.150 | 1.200 | 0.125 | 2.50 | 0.010 | S89-100-2-.010R12XR | S89-100-3-.010R12XR | S89-100-4-.010R12XR | $35.60 | $37.70 |
| 0.100 | 0.150 | 1.200 | 0.125 | 2.50 | 0.015 | S89-100-2-.015R12XR | S89-100-3-.015R12XR | S89-100-4-.015R12XR | $35.60 | $37.70 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | 0.005 | S89-118-2-.005R12XR | S89-118-3-.005R12XR | S89-118-4-.005R12XR | $35.60 | $37.70 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | 0.010 | S89-118-2-.010R12XR | S89-118-3-.010R12XR | S89-118-4-.010R12XR | $35.60 | $37.70 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | 0.015 | S89-118-2-.015R12XR | S89-118-3-.015R12XR | S89-118-4-.015R12XR | $35.60 | $37.70 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | 0.020 | S89-118-2-.020R12XR | S89-118-3-.020R12XR | S89-118-4-.020R12XR | $35.60 | $37.70 |
| 0.125 (1/8) | 0.188 | 1.500 | 0.125 | 2.50 | 0.005 | S89-125-2-.005R12XR | S89-125-3-.005R12XR | S89-125-4-.005R12XR | $35.60 | $37.70 |
| 0.125 (1/8) | 0.188 | 1.500 | 0.125 | 2.50 | 0.010 | S89-125-2-.010R12XR | S89-125-3-.010R12XR | S89-125-4-.010R12XR | $35.60 | $37.70 |
| 0.125 (1/8) | 0.188 | 1.500 | 0.125 | 2.50 | 0.015 | S89-125-2-.015R12XR | S89-125-3-.015R12XR | S89-125-4-.015R12XR | $35.60 | $37.70 |
| 0.125 (1/8) | 0.188 | 1.500 | 0.125 | 2.50 | 0.020 | S89-125-2-.020R12XR | S89-125-3-.020R12XR | S89-125-4-.020R12XR | $35.60 | $37.70 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 78 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

# S86

## Corner Radius Micro End Mills

FLUTES 2,3,4

3X LENGTH OF CUT

12X REACH

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.015 (1/64) | 0.045 | 0.180 | 0.125 | 2.50 | 0.003 | S86-015-2-.003R12XR | S86-015-3-.003R12XR | S86-015-4-.003R12XR | $44.78 | $46.88 |
| 0.020 | 0.060 | 0.240 | 0.125 | 2.50 | 0.005 | S86-020-2-.005R12XR | S86-020-3-.005R12XR | S86-020-4-.005R12XR | $42.47 | $44.57 |
| 0.025 | 0.075 | 0.300 | 0.125 | 2.50 | 0.005 | S86-025-2-.005R12XR | S86-025-3-.005R12XR | S86-025-4-.005R12XR | $42.00 | $44.10 |
| 0.030 | 0.090 | 0.360 | 0.125 | 2.50 | 0.005 | S86-030-2-.005R12XR | S86-030-3-.005R12XR | S86-030-4-.005R12XR | $37.91 | $40.01 |
| 0.030 | 0.090 | 0.360 | 0.125 | 2.50 | 0.010 | S86-030-2-.010R12XR | S86-030-3-.010R12XR | S86-030-4-.010R12XR | $37.91 | $40.01 |
| 0.031 (1/32) | 0.093 | 0.372 | 0.125 | 2.50 | 0.005 | S86-031-2-.005R12XR | S86-031-3-.005R12XR | S86-031-4-.005R12XR | $37.91 | $40.01 |
| 0.031 (1/32) | 0.093 | 0.372 | 0.125 | 2.50 | 0.010 | S86-031-2-.010R12XR | S86-031-3-.010R12XR | S86-031-4-.010R12XR | $37.91 | $40.01 |
| 0.035 | 0.105 | 0.420 | 0.125 | 2.50 | 0.005 | S86-035-2-.005R12XR | S86-035-3-.005R12XR | S86-035-4-.005R12XR | $37.01 | $39.11 |
| 0.035 | 0.105 | 0.420 | 0.125 | 2.50 | 0.010 | S86-035-2-.010R12XR | S86-035-3-.010R12XR | S86-035-4-.010R12XR | $37.01 | $39.11 |
| 0.039 (1mm) | 0.117 | 0.468 | 0.125 | 2.50 | 0.005 | S86-039-2-.005R12XR | S86-039-3-.005R12XR | S86-039-4-.005R12XR | $37.01 | $39.11 |
| 0.039 (1mm) | 0.117 | 0.468 | 0.125 | 2.50 | 0.010 | S86-039-2-.010R12XR | S86-039-3-.010R12XR | S86-039-4-.010R12XR | $37.01 | $39.11 |
| 0.040 | 0.120 | 0.480 | 0.125 | 2.50 | 0.005 | S86-040-2-.005R12XR | S86-040-3-.005R12XR | S86-040-4-.005R12XR | $36.59 | $38.69 |
| 0.040 | 0.120 | 0.480 | 0.125 | 2.50 | 0.010 | S86-040-2-.010R12XR | S86-040-3-.010R12XR | S86-040-4-.010R12XR | $36.59 | $38.69 |
| 0.045 | 0.135 | 0.540 | 0.125 | 2.50 | 0.005 | S86-045-2-.005R12XR | S86-045-3-.005R12XR | S86-045-4-.005R12XR | $36.59 | $38.69 |
| 0.045 | 0.135 | 0.540 | 0.125 | 2.50 | 0.010 | S86-045-2-.010R12XR | S86-045-3-.010R12XR | S86-045-4-.010R12XR | $36.59 | $38.69 |
| 0.045 | 0.135 | 0.540 | 0.125 | 2.50 | 0.015 | S86-045-2-.015R12XR | S86-045-3-.015R12XR | S86-045-4-.015R12XR | $36.59 | $38.69 |
| 0.047 (3/64) | 0.141 | 0.564 | 0.125 | 2.50 | 0.005 | S86-047-2-.005R12XR | S86-047-3-.005R12XR | S86-047-4-.005R12XR | $36.59 | $38.69 |
| 0.047 (3/64) | 0.141 | 0.564 | 0.125 | 2.50 | 0.010 | S86-047-2-.010R12XR | S86-047-3-.010R12XR | S86-047-4-.010R12XR | $36.59 | $38.69 |
| 0.047 (3/64) | 0.141 | 0.564 | 0.125 | 2.50 | 0.015 | S86-047-2-.015R12XR | S86-047-3-.015R12XR | S86-047-4-.015R12XR | $36.59 | $38.69 |
| 0.050 | 0.150 | 0.600 | 0.125 | 2.50 | 0.005 | S86-050-2-.005R12XR | S86-050-3-.005R12XR | S86-050-4-.005R12XR | $36.59 | $38.69 |
| 0.050 | 0.150 | 0.600 | 0.125 | 2.50 | 0.010 | S86-050-2-.010R12XR | S86-050-3-.010R12XR | S86-050-4-.010R12XR | $36.59 | $38.69 |
| 0.050 | 0.150 | 0.600 | 0.125 | 2.50 | 0.015 | S86-050-2-.015R12XR | S86-050-3-.015R12XR | S86-050-4-.015R12XR | $36.59 | $38.69 |
| 0.055 | 0.165 | 0.660 | 0.125 | 2.50 | 0.005 | S86-055-2-.005R12XR | S86-055-3-.005R12XR | S86-055-4-.005R12XR | $36.59 | $38.69 |
| 0.055 | 0.165 | 0.660 | 0.125 | 2.50 | 0.010 | S86-055-2-.010R12XR | S86-055-3-.010R12XR | S86-055-4-.010R12XR | $36.59 | $38.69 |
| 0.055 | 0.165 | 0.660 | 0.125 | 2.50 | 0.015 | S86-055-2-.015R12XR | S86-055-3-.015R12XR | S86-055-4-.015R12XR | $36.59 | $38.69 |
| 0.060 | 0.180 | 0.720 | 0.125 | 2.50 | 0.005 | S86-060-2-.005R12XR | S86-060-3-.005R12XR | S86-060-4-.005R12XR | $36.59 | $38.69 |
| 0.060 | 0.180 | 0.720 | 0.125 | 2.50 | 0.010 | S86-060-2-.010R12XR | S86-060-3-.010R12XR | S86-060-4-.010R12XR | $36.59 | $38.69 |
| 0.060 | 0.180 | 0.720 | 0.125 | 2.50 | 0.015 | S86-060-2-.015R12XR | S86-060-3-.015R12XR | S86-060-4-.015R12XR | $36.59 | $38.69 |
| 0.062 (1/16) | 0.186 | 0.744 | 0.125 | 2.50 | 0.005 | S86-062-2-.005R12XR | S86-062-3-.005R12XR | S86-062-4-.005R12XR | $36.59 | $38.69 |
| 0.062 (1/16) | 0.186 | 0.744 | 0.125 | 2.50 | 0.010 | S86-062-2-.010R12XR | S86-062-3-.010R12XR | S86-062-4-.010R12XR | $36.59 | $38.69 |
| 0.062 (1/16) | 0.186 | 0.744 | 0.125 | 2.50 | 0.015 | S86-062-2-.015R12XR | S86-062-3-.015R12XR | S86-062-4-.015R12XR | $36.59 | $38.69 |
| 0.062 (1/16) | 0.186 | 0.744 | 0.125 | 2.50 | 0.020 | S86-062-2-.020R12XR | S86-062-3-.020R12XR | S86-062-4-.020R12XR | $36.59 | $38.69 |
| 0.065 | 0.195 | 0.780 | 0.125 | 2.50 | 0.005 | S86-065-2-.005R12XR | S86-065-3-.005R12XR | S86-065-4-.005R12XR | $36.59 | $38.69 |
| 0.065 | 0.195 | 0.780 | 0.125 | 2.50 | 0.010 | S86-065-2-.010R12XR | S86-065-3-.010R12XR | S86-065-4-.010R12XR | $36.59 | $38.69 |
| 0.065 | 0.195 | 0.780 | 0.125 | 2.50 | 0.015 | S86-065-2-.015R12XR | S86-065-3-.015R12XR | S86-065-4-.015R12XR | $36.59 | $38.69 |
| 0.070 | 0.210 | 0.840 | 0.125 | 2.50 | 0.005 | S86-070-2-.005R12XR | S86-070-3-.005R12XR | S86-070-4-.005R12XR | $35.86 | $37.96 |
| 0.070 | 0.210 | 0.840 | 0.125 | 2.50 | 0.010 | S86-070-2-.010R12XR | S86-070-3-.010R12XR | S86-070-4-.010R12XR | $35.86 | $37.96 |
| 0.070 | 0.210 | 0.840 | 0.125 | 2.50 | 0.015 | S86-070-2-.015R12XR | S86-070-3-.015R12XR | S86-070-4-.015R12XR | $35.86 | $37.96 |
| 0.075 | 0.225 | 0.900 | 0.125 | 2.50 | 0.005 | S86-075-2-.005R12XR | S86-075-3-.005R12XR | S86-075-4-.005R12XR | $35.86 | $37.96 |
| 0.075 | 0.225 | 0.900 | 0.125 | 2.50 | 0.010 | S86-075-2-.010R12XR | S86-075-3-.010R12XR | S86-075-4-.010R12XR | $35.86 | $37.96 |
| 0.075 | 0.225 | 0.900 | 0.125 | 2.50 | 0.015 | S86-075-2-.015R12XR | S86-075-3-.015R12XR | S86-075-4-.015R12XR | $35.86 | $37.96 |

## Corner Radius Micro End Mills



FLUTES 2,3,4

3X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | | |
| 0.078 (5/64) | 0.234 | 0.936 | 0.125 | 2.50 | 0.005 | S86-078-2-.005R12XR | S86-078-3-.005R12XR | S86-078-4-.005R12XR | $35.86 | $37.96 |
| 0.078 (5/64) | 0.234 | 0.936 | 0.125 | 2.50 | 0.010 | S86-078-2-.010R12XR | S86-078-3-.010R12XR | S86-078-4-.010R12XR | $35.86 | $37.96 |
| 0.078 (5/64) | 0.234 | 0.936 | 0.125 | 2.50 | 0.015 | S86-078-2-.015R12XR | S86-078-3-.015R12XR | S86-078-4-.015R12XR | $35.86 | $37.96 |
| 0.078 (5/64) | 0.234 | 0.936 | 0.125 | 2.50 | 0.020 | S86-078-2-.020R12XR | S86-078-3-.020R12XR | S86-078-4-.020R12XR | $35.86 | $37.96 |
| 0.080 | 0.240 | 0.960 | 0.125 | 2.50 | 0.005 | S86-080-2-.005R12XR | S86-080-3-.005R12XR | S86-080-4-.005R12XR | $35.86 | $37.96 |
| 0.080 | 0.240 | 0.960 | 0.125 | 2.50 | 0.010 | S86-080-2-.010R12XR | S86-080-3-.010R12XR | S86-080-4-.010R12XR | $35.86 | $37.96 |
| 0.080 | 0.240 | 0.960 | 0.125 | 2.50 | 0.015 | S86-080-2-.015R12XR | S86-080-3-.015R12XR | S86-080-4-.015R12XR | $35.86 | $37.96 |
| 0.085 | 0.255 | 1.020 | 0.125 | 2.50 | 0.005 | S86-085-2-.005R12XR | S86-085-3-.005R12XR | S86-085-4-.005R12XR | $35.86 | $37.96 |
| 0.085 | 0.255 | 1.020 | 0.125 | 2.50 | 0.010 | S86-085-2-.010R12XR | S86-085-3-.010R12XR | S86-085-4-.010R12XR | $35.86 | $37.96 |
| 0.085 | 0.255 | 1.020 | 0.125 | 2.50 | 0.015 | S86-085-2-.015R12XR | S86-085-3-.015R12XR | S86-085-4-.015R12XR | $35.86 | $37.96 |
| 0.090 | 0.270 | 1.080 | 0.125 | 2.50 | 0.005 | S86-090-2-.005R12XR | S86-090-3-.005R12XR | S86-090-4-.005R12XR | $35.86 | $37.96 |
| 0.090 | 0.270 | 1.080 | 0.125 | 2.50 | 0.010 | S86-090-2-.010R12XR | S86-090-3-.010R12XR | S86-090-4-.010R12XR | $35.86 | $37.96 |
| 0.090 | 0.270 | 1.080 | 0.125 | 2.50 | 0.015 | S86-090-2-.015R12XR | S86-090-3-.015R12XR | S86-090-4-.015R12XR | $35.86 | $37.96 |
| 0.093 (3/32) | 0.279 | 1.116 | 0.125 | 2.50 | 0.005 | S86-093-2-.005R12XR | S86-093-3-.005R12XR | S86-093-4-.005R12XR | $35.86 | $37.96 |
| 0.093 (3/32) | 0.279 | 1.116 | 0.125 | 2.50 | 0.010 | S86-093-2-.010R12XR | S86-093-3-.010R12XR | S86-093-4-.010R12XR | $35.86 | $37.96 |
| 0.093 (3/32) | 0.279 | 1.116 | 0.125 | 2.50 | 0.015 | S86-093-2-.015R12XR | S86-093-3-.015R12XR | S86-093-4-.015R12XR | $35.86 | $37.96 |
| 0.093 (3/32) | 0.279 | 1.116 | 0.125 | 2.50 | 0.020 | S86-093-2-.020R12XR | S86-093-3-.020R12XR | S86-093-4-.020R12XR | $35.86 | $37.96 |
| 0.095 | 0.285 | 1.140 | 0.125 | 2.50 | 0.005 | S86-095-2-.005R12XR | S86-095-3-.005R12XR | S86-095-4-.005R12XR | $35.86 | $37.96 |
| 0.095 | 0.285 | 1.140 | 0.125 | 2.50 | 0.010 | S86-095-2-.010R12XR | S86-095-3-.010R12XR | S86-095-4-.010R12XR | $35.86 | $37.96 |
| 0.095 | 0.285 | 1.140 | 0.125 | 2.50 | 0.015 | S86-095-2-.015R12XR | S86-095-3-.015R12XR | S86-095-4-.015R12XR | $35.86 | $37.96 |
| 0.100 | 0.300 | 1.200 | 0.125 | 2.50 | 0.005 | S86-100-2-.005R12XR | S86-100-3-.005R12XR | S86-100-4-.005R12XR | $35.60 | $37.70 |
| 0.100 | 0.300 | 1.200 | 0.125 | 2.50 | 0.010 | S86-100-2-.010R12XR | S86-100-3-.010R12XR | S86-100-4-.010R12XR | $35.60 | $37.70 |
| 0.100 | 0.300 | 1.200 | 0.125 | 2.50 | 0.015 | S86-100-2-.015R12XR | S86-100-3-.015R12XR | S86-100-4-.015R12XR | $35.60 | $37.70 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | 0.005 | S86-118-2-.005R12XR | S86-118-3-.005R12XR | S86-118-4-.005R12XR | $35.60 | $37.70 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | 0.010 | S86-118-2-.010R12XR | S86-118-3-.010R12XR | S86-118-4-.010R12XR | $35.60 | $37.70 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | 0.015 | S86-118-2-.015R12XR | S86-118-3-.015R12XR | S86-118-4-.015R12XR | $35.60 | $37.70 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | 0.020 | S86-118-2-.020R12XR | S86-118-3-.020R12XR | S86-118-4-.020R12XR | $35.60 | $37.70 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | 0.005 | S86-125-2-.005R12XR | S86-125-3-.005R12XR | S86-125-4-.005R12XR | $35.60 | $37.70 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | 0.010 | S86-125-2-.010R12XR | S86-125-3-.010R12XR | S86-125-4-.010R12XR | $35.60 | $37.70 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | 0.015 | S86-125-2-.015R12XR | S86-125-3-.015R12XR | S86-125-4-.015R12XR | $35.60 | $37.70 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | 0.020 | S86-125-2-.020R12XR | S86-125-3-.020R12XR | S86-125-4-.020R12XR | $35.60 | $37.70 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 79 | 5 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

# S11 Ball Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.004 | 0.006 | 0.125 | 1.50 | S11-004-2-BST | N/A | N/A | $49.67 | $51.77 |
| 0.005 | 0.008 | 0.125 | 1.50 | S11-005-2-BST | N/A | N/A | $45.33 | $47.43 |
| 0.006 | 0.009 | 0.125 | 1.50 | S11-006-2-BST | N/A | N/A | $45.33 | $47.43 |
| 0.008 | 0.012 | 0.125 | 1.50 | S11-008-2-BST | N/A | N/A | $41.20 | $43.30 |
| 0.010 | 0.015 | 0.125 | 1.50 | S11-010-2-BST | S11-010-3-BST | S11-010-4-BST | $37.07 | $39.17 |
| 0.015 (1/64) | 0.023 | 0.125 | 1.50 | S11-015-2-BST | S11-015-3-BST | S11-015-4-BST | $29.38 | $31.48 |
| 0.020 | 0.030 | 0.125 | 1.50 | S11-020-2-BST | S11-020-3-BST | S11-020-4-BST | $28.22 | $30.33 |
| 0.025 | 0.038 | 0.125 | 1.50 | S11-025-2-BST | S11-025-3-BST | S11-025-4-BST | $25.70 | $27.81 |
| 0.030 | 0.045 | 0.125 | 1.50 | S11-030-2-BST | S11-030-3-BST | S11-030-4-BST | $23.00 | $25.10 |
| 0.031 (1/32) | 0.047 | 0.125 | 1.50 | S11-031-2-BST | S11-031-3-BST | S11-031-4-BST | $23.00 | $25.10 |
| 0.032 | 0.048 | 0.125 | 1.50 | S11-032-2-BST | S11-032-3-BST | S11-032-4-BST | $22.99 | $25.09 |
| 0.035 | 0.053 | 0.125 | 1.50 | S11-035-2-BST | S11-035-3-BST | S11-035-4-BST | $21.77 | $23.87 |
| 0.039 (1mm) | 0.059 | 0.125 | 1.50 | S11-039-2-BST | S11-039-3-BST | S11-039-4-BST | $21.77 | $23.87 |
| 0.040 | 0.060 | 0.125 | 1.50 | S11-040-2-BST | S11-040-3-BST | S11-040-4-BST | $21.77 | $23.87 |
| 0.045 | 0.068 | 0.125 | 1.50 | S11-045-2-BST | S11-045-3-BST | S11-045-4-BST | $21.77 | $23.87 |
| 0.047 (3/64) | 0.071 | 0.125 | 1.50 | S11-047-2-BST | S11-047-3-BST | S11-047-4-BST | $21.77 | $23.87 |
| 0.050 | 0.075 | 0.125 | 1.50 | S11-050-2-BST | S11-050-3-BST | S11-050-4-BST | $21.77 | $23.87 |
| 0.055 | 0.083 | 0.125 | 1.50 | S11-055-2-BST | S11-055-3-BST | S11-055-4-BST | $21.77 | $23.87 |
| 0.060 | 0.090 | 0.125 | 1.50 | S11-060-2-BST | S11-060-3-BST | S11-060-4-BST | $20.99 | $23.09 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | S11-062-2-BST | S11-062-3-BST | S11-062-4-BST | $20.99 | $23.09 |
| 0.065 | 0.098 | 0.125 | 1.50 | S11-065-2-BST | S11-065-3-BST | S11-065-4-BST | $20.99 | $23.09 |
| 0.070 | 0.105 | 0.125 | 1.50 | S11-070-2-BST | S11-070-3-BST | S11-070-4-BST | $20.99 | $23.09 |
| 0.075 | 0.113 | 0.125 | 1.50 | S11-075-2-BST | S11-075-3-BST | S11-075-4-BST | $20.99 | $23.09 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | S11-078-2-BST | S11-078-3-BST | S11-078-4-BST | $20.99 | $23.09 |
| 0.080 | 0.120 | 0.125 | 1.50 | S11-080-2-BST | S11-080-3-BST | S11-080-4-BST | $20.99 | $23.09 |
| 0.085 | 0.128 | 0.125 | 1.50 | S11-085-2-BST | S11-085-3-BST | S11-085-4-BST | $20.99 | $23.09 |
| 0.090 | 0.135 | 0.125 | 1.50 | S11-090-2-BST | S11-090-3-BST | S11-090-4-BST | $20.99 | $23.09 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | S11-093-2-BST | S11-093-3-BST | S11-093-4-BST | $20.99 | $23.09 |
| 0.095 | 0.143 | 0.125 | 1.50 | S11-095-2-BST | S11-095-3-BST | S11-095-4-BST | $20.99 | $23.09 |
| 0.100 | 0.150 | 0.125 | 1.50 | S11-100-2-BST | S11-100-3-BST | S11-100-4-BST | $20.99 | $23.09 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | S11-118-2-BST | S11-118-3-BST | S11-118-4-BST | $20.99 | $23.09 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | S11-125-2-BST | S11-125-3-BST | S11-125-4-BST | $20.99 | $23.09 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 192 | Coating |

## CONTACT US

P. 2

MITGI is open from 8 AM - 4 PM Central Time, and can be reached any time by email, web, and social media. See page 2 for more information about ordering and ways to reach us.

FLUTES 2,3,4

3X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.004 | 0.012 | 0.125 | 1.50 | S07-004-2-BEM | N/A | N/A | $49.67 | $51.77 |
| 0.005 | 0.015 | 0.125 | 1.50 | S07-005-2-BEM | N/A | N/A | $45.33 | $47.43 |
| 0.006 | 0.018 | 0.125 | 1.50 | S07-006-2-BEM | N/A | N/A | $45.33 | $47.43 |
| 0.008 | 0.024 | 0.125 | 1.50 | S07-008-2-BEM | N/A | N/A | $41.20 | $43.30 |
| 0.010 | 0.030 | 0.125 | 1.50 | S07-010-2-BEM | S07-010-3-BEM | S07-010-4-BEM | $37.07 | $39.17 |
| 0.015 (1/64) | 0.045 | 0.125 | 1.50 | S07-015-2-BEM | S07-015-3-BEM | S07-015-4-BEM | $29.38 | $31.48 |
| 0.020 | 0.060 | 0.125 | 1.50 | S07-020-2-BEM | S07-020-3-BEM | S07-020-4-BEM | $28.22 | $30.33 |
| 0.025 | 0.075 | 0.125 | 1.50 | S07-025-2-BEM | S07-025-3-BEM | S07-025-4-BEM | $25.70 | $27.81 |
| 0.030 | 0.090 | 0.125 | 1.50 | S07-030-2-BEM | S07-030-3-BEM | S07-030-4-BEM | $23.00 | $25.10 |
| 0.031 (1/32) | 0.093 | 0.125 | 1.50 | S07-031-2-BEM | S07-031-3-BEM | S07-031-4-BEM | $23.00 | $25.10 |
| 0.032 | 0.096 | 0.125 | 1.50 | S07-032-2-BEM | S07-032-3-BEM | S07-032-4-BEM | $22.99 | $25.09 |
| 0.035 | 0.105 | 0.125 | 1.50 | S07-035-2-BEM | S07-035-3-BEM | S07-035-4-BEM | $21.77 | $23.87 |
| 0.039 (1mm) | 0.117 | 0.125 | 1.50 | S07-039-2-BEM | S07-039-3-BEM | S07-039-4-BEM | $21.77 | $23.87 |
| 0.040 | 0.120 | 0.125 | 1.50 | S07-040-2-BEM | S07-040-3-BEM | S07-040-4-BEM | $21.77 | $23.87 |
| 0.045 | 0.135 | 0.125 | 1.50 | S07-045-2-BEM | S07-045-3-BEM | S07-045-4-BEM | $21.77 | $23.87 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | S07-047-2-BEM | S07-047-3-BEM | S07-047-4-BEM | $21.77 | $23.87 |
| 0.050 | 0.150 | 0.125 | 1.50 | S07-050-2-BEM | S07-050-3-BEM | S07-050-4-BEM | $21.77 | $23.87 |
| 0.055 | 0.165 | 0.125 | 1.50 | S07-055-2-BEM | S07-055-3-BEM | S07-055-4-BEM | $21.77 | $23.87 |
| 0.060 | 0.180 | 0.125 | 1.50 | S07-060-2-BEM | S07-060-3-BEM | S07-060-4-BEM | $20.99 | $23.09 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | S07-062-2-BEM | S07-062-3-BEM | S07-062-4-BEM | $20.99 | $23.09 |
| 0.065 | 0.195 | 0.125 | 1.50 | S07-065-2-BEM | S07-065-3-BEM | S07-065-4-BEM | $20.99 | $23.09 |
| 0.070 | 0.210 | 0.125 | 1.50 | S07-070-2-BEM | S07-070-3-BEM | S07-070-4-BEM | $20.99 | $23.09 |
| 0.075 | 0.225 | 0.125 | 1.50 | S07-075-2-BEM | S07-075-3-BEM | S07-075-4-BEM | $20.99 | $23.09 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | S07-078-2-BEM | S07-078-3-BEM | S07-078-4-BEM | $20.99 | $23.09 |
| 0.080 | 0.240 | 0.125 | 1.50 | S07-080-2-BEM | S07-080-3-BEM | S07-080-4-BEM | $20.99 | $23.09 |
| 0.085 | 0.255 | 0.125 | 1.50 | S07-085-2-BEM | S07-085-3-BEM | S07-085-4-BEM | $20.99 | $23.09 |
| 0.090 | 0.270 | 0.125 | 1.50 | S07-090-2-BEM | S07-090-3-BEM | S07-090-4-BEM | $20.99 | $23.09 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | S07-093-2-BEM | S07-093-3-BEM | S07-093-4-BEM | $20.99 | $23.09 |
| 0.095 | 0.285 | 0.125 | 1.50 | S07-095-2-BEM | S07-095-3-BEM | S07-095-4-BEM | $20.99 | $23.09 |
| 0.100 | 0.300 | 0.125 | 1.50 | S07-100-2-BEM | S07-100-3-BEM | S07-100-4-BEM | $20.99 | $23.09 |
| 0.115 | 0.345 | 0.125 | 1.50 | S07-115-2-BEM | S07-115-3-BEM | S07-115-4-BEM | $20.99 | $23.09 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | S07-118-2-BEM | S07-118-3-BEM | S07-118-4-BEM | $20.99 | $23.09 |
| 0.122 | 0.366 | 0.125 | 1.50 | S07-122-2-BEM | S07-122-3-BEM | S07-122-4-BEM | $20.99 | $23.09 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | S07-125-2-BEM | S07-125-3-BEM | S07-125-4-BEM | $20.99 | $23.09 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S74 Ball Micro End Mills

FLUTES 2,3,4

5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.010 | 0.050 | 0.125 | 2.50 | S74-010-2-BN5X | N/A | N/A | $37.70 | $39.80 |
| 0.015 (1/64) | 0.075 | 0.125 | 2.50 | S74-015-2-BN5X | S74-015-3-BN5X | S74-015-4-BN5X | $35.39 | $37.49 |
| 0.020 | 0.100 | 0.125 | 2.50 | S74-020-2-BN5X | S74-020-3-BN5X | S74-020-4-BN5X | $29.51 | $31.61 |
| 0.025 | 0.125 | 0.125 | 2.50 | S74-025-2-BN5X | S74-025-3-BN5X | S74-025-4-BN5X | $29.51 | $31.61 |
| 0.030 | 0.150 | 0.125 | 2.50 | S74-030-2-BN5X | S74-030-3-BN5X | S74-030-4-BN5X | $27.62 | $29.72 |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | S74-031-2-BN5X | S74-031-3-BN5X | S74-031-4-BN5X | $27.62 | $29.72 |
| 0.035 | 0.175 | 0.125 | 2.50 | S74-035-2-BN5X | S74-035-3-BN5X | S74-035-4-BN5X | $27.62 | $29.72 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | S74-039-2-BN5X | S74-039-3-BN5X | S74-039-4-BN5X | $27.62 | $29.72 |
| 0.040 | 0.200 | 0.125 | 2.50 | S74-040-2-BN5X | S74-040-3-BN5X | S74-040-4-BN5X | $27.62 | $29.72 |
| 0.045 | 0.225 | 0.125 | 2.50 | S74-045-2-BN5X | S74-045-3-BN5X | S74-045-4-BN5X | $27.62 | $29.72 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | S74-047-2-BN5X | S74-047-3-BN5X | S74-047-4-BN5X | $27.62 | $29.72 |
| 0.050 | 0.250 | 0.125 | 2.50 | S74-050-2-BN5X | S74-050-3-BN5X | S74-050-4-BN5X | $27.62 | $29.72 |
| 0.055 | 0.275 | 0.125 | 2.50 | S74-055-2-BN5X | S74-055-3-BN5X | S74-055-4-BN5X | $24.36 | $26.46 |
| 0.060 | 0.300 | 0.125 | 2.50 | S74-060-2-BN5X | S74-060-3-BN5X | S74-060-4-BN5X | $24.36 | $26.46 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | S74-062-2-BN5X | S74-062-3-BN5X | S74-062-4-BN5X | $24.36 | $26.46 |
| 0.065 | 0.325 | 0.125 | 2.50 | S74-065-2-BN5X | S74-065-3-BN5X | S74-065-4-BN5X | $24.36 | $26.46 |
| 0.070 | 0.350 | 0.125 | 2.50 | S74-070-2-BN5X | S74-070-3-BN5X | S74-070-4-BN5X | $24.36 | $26.46 |
| 0.075 | 0.375 | 0.125 | 2.50 | S74-075-2-BN5X | S74-075-3-BN5X | S74-075-4-BN5X | $24.36 | $26.46 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | S74-078-2-BN5X | S74-078-3-BN5X | S74-078-4-BN5X | $24.36 | $26.46 |
| 0.080 | 0.400 | 0.125 | 2.50 | S74-080-2-BN5X | S74-080-3-BN5X | S74-080-4-BN5X | $24.36 | $26.46 |
| 0.085 | 0.425 | 0.125 | 2.50 | S74-085-2-BN5X | S74-085-3-BN5X | S74-085-4-BN5X | $22.47 | $24.57 |
| 0.090 | 0.450 | 0.125 | 2.50 | S74-090-2-BN5X | S74-090-3-BN5X | S74-090-4-BN5X | $22.47 | $24.57 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | S74-093-2-BN5X | S74-093-3-BN5X | S74-093-4-BN5X | $22.47 | $24.57 |
| 0.095 | 0.475 | 0.125 | 2.50 | S74-095-2-BN5X | S74-095-3-BN5X | S74-095-4-BN5X | $22.47 | $24.57 |
| 0.100 | 0.500 | 0.125 | 2.50 | S74-100-2-BN5X | S74-100-3-BN5X | S74-100-4-BN5X | $22.47 | $24.57 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | S74-118-2-BN5X | S74-118-3-BN5X | S74-118-4-BN5X | $22.47 | $24.57 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | S74-125-2-BN5X | S74-125-3-BN5X | S74-125-4-BN5X | $22.47 | $24.57 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Selecting the Right Tool

### Unsure how many flutes to select to deliver optimum results?

The ideal number of flutes for each tool is based on the job at hand and the material being cut.

**See page 17: Selecting the right tool for the job**

## Ball Micro End Mills



FLUTES 2,3,4

8X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.010 | 0.080 | 0.125 | 2.50 | S75-010-2-BN8X | N/A | N/A | $64.05 | $66.15 |
| 0.015 (1/64) | 0.120 | 0.125 | 2.50 | S75-015-2-BN8X | S75-015-3-BN8X | S75-015-4-BN8X | $60.06 | $62.16 |
| 0.020 | 0.160 | 0.125 | 2.50 | S75-020-2-BN8X | S75-020-3-BN8X | S75-020-4-BN8X | $60.06 | $62.16 |
| 0.025 | 0.200 | 0.125 | 2.50 | S75-025-2-BN8X | S75-025-3-BN8X | S75-025-4-BN8X | $53.66 | $55.76 |
| 0.030 | 0.240 | 0.125 | 2.50 | S75-030-2-BN8X | S75-030-3-BN8X | S75-030-4-BN8X | $53.66 | $55.76 |
| 0.031 (1/32) | 0.248 | 0.125 | 2.50 | S75-031-2-BN8X | S75-031-3-BN8X | S75-031-4-BN8X | $53.66 | $55.76 |
| 0.035 | 0.280 | 0.125 | 2.50 | S75-035-2-BN8X | S75-035-3-BN8X | S75-035-4-BN8X | $53.66 | $55.76 |
| 0.039 (1mm) | 0.312 | 0.125 | 2.50 | S75-039-2-BN8X | S75-039-3-BN8X | S75-039-4-BN8X | $52.29 | $54.39 |
| 0.040 | 0.320 | 0.125 | 2.50 | S75-040-2-BN8X | S75-040-3-BN8X | S75-040-4-BN8X | $52.29 | $54.39 |
| 0.045 | 0.360 | 0.125 | 2.50 | S75-045-2-BN8X | S75-045-3-BN8X | S75-045-4-BN8X | $49.77 | $51.87 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.50 | S75-047-2-BN8X | S75-047-3-BN8X | S75-047-4-BN8X | $49.77 | $51.87 |
| 0.050 | 0.400 | 0.125 | 2.50 | S75-050-2-BN8X | S75-050-3-BN8X | S75-050-4-BN8X | $49.77 | $51.87 |
| 0.055 | 0.440 | 0.125 | 2.50 | S75-055-2-BN8X | S75-055-3-BN8X | S75-055-4-BN8X | $32.66 | $34.76 |
| 0.060 | 0.480 | 0.125 | 2.50 | S75-060-2-BN8X | S75-060-3-BN8X | S75-060-4-BN8X | $32.66 | $34.76 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | S75-062-2-BN8X | S75-062-3-BN8X | S75-062-4-BN8X | $32.66 | $34.76 |
| 0.065 | 0.520 | 0.125 | 2.50 | S75-065-2-BN8X | S75-065-3-BN8X | S75-065-4-BN8X | $26.51 | $28.61 |
| 0.070 | 0.560 | 0.125 | 2.50 | S75-070-2-BN8X | S75-070-3-BN8X | S75-070-4-BN8X | $26.51 | $28.61 |
| 0.075 | 0.600 | 0.125 | 2.50 | S75-075-2-BN8X | S75-075-3-BN8X | S75-075-4-BN8X | $26.51 | $28.61 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | S75-078-2-BN8X | S75-078-3-BN8X | S75-078-4-BN8X | $26.51 | $28.61 |
| 0.080 | 0.640 | 0.125 | 2.50 | S75-080-2-BN8X | S75-080-3-BN8X | S75-080-4-BN8X | $26.51 | $28.61 |
| 0.085 | 0.680 | 0.125 | 2.50 | S75-085-2-BN8X | S75-085-3-BN8X | S75-085-4-BN8X | $26.51 | $28.61 |
| 0.090 | 0.720 | 0.125 | 2.50 | S75-090-2-BN8X | S75-090-3-BN8X | S75-090-4-BN8X | $25.67 | $27.77 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | S75-093-2-BN8X | S75-093-3-BN8X | S75-093-4-BN8X | $25.67 | $27.77 |
| 0.095 | 0.760 | 0.125 | 2.50 | S75-095-2-BN8X | S75-095-3-BN8X | S75-095-4-BN8X | $25.67 | $27.77 |
| 0.100 | 0.800 | 0.125 | 2.50 | S75-100-2-BN8X | S75-100-3-BN8X | S75-100-4-BN8X | $25.67 | $27.77 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | S75-118-2-BN8X | S75-118-3-BN8X | S75-118-4-BN8X | $25.67 | $27.77 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | S75-125-2-BN8X | S75-125-3-BN8X | S75-125-4-BN8X | $25.67 | $27.77 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S76 Ball Micro End Mills

FLUTES 2,3,4

12X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.015 (1/64) | 0.180 | 0.125 | 2.50 | S76-015-2-BN12X | S76-015-3-BN12X | S76-015-4-BN12X | $72.56 | $74.66 |
| 0.020 | 0.240 | 0.125 | 2.50 | S76-020-2-BN12X | S76-020-3-BN12X | S76-020-4-BN12X | $69.30 | $71.40 |
| 0.025 | 0.300 | 0.125 | 2.50 | S76-025-2-BN12X | S76-025-3-BN12X | S76-025-4-BN12X | $66.20 | $68.30 |
| 0.030 | 0.360 | 0.125 | 2.50 | S76-030-2-BN12X | S76-030-3-BN12X | S76-030-4-BN12X | $60.80 | $62.90 |
| 0.031 (1/32) | 0.372 | 0.125 | 2.50 | S76-031-2-BN12X | S76-031-3-BN12X | S76-031-4-BN12X | $60.80 | $62.90 |
| 0.035 | 0.420 | 0.125 | 2.50 | S76-035-2-BN12X | S76-035-3-BN12X | S76-035-4-BN12X | $60.80 | $62.90 |
| 0.039 (1mm) | 0.468 | 0.125 | 2.50 | S76-039-2-BN12X | S76-039-3-BN12X | S76-039-4-BN12X | $60.80 | $62.90 |
| 0.040 | 0.480 | 0.125 | 2.50 | S76-040-2-BN12X | S76-040-3-BN12X | S76-040-4-BN12X | $60.80 | $62.90 |
| 0.045 | 0.540 | 0.125 | 2.50 | S76-045-2-BN12X | S76-045-3-BN12X | S76-045-4-BN12X | $60.80 | $62.90 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.50 | S76-047-2-BN12X | S76-047-3-BN12X | S76-047-4-BN12X | $60.80 | $62.90 |
| 0.050 | 0.600 | 0.125 | 2.50 | S76-050-2-BN12X | S76-050-3-BN12X | S76-050-4-BN12X | $53.97 | $56.07 |
| 0.055 | 0.660 | 0.125 | 2.50 | S76-055-2-BN12X | S76-055-3-BN12X | S76-055-4-BN12X | $53.97 | $56.07 |
| 0.060 | 0.720 | 0.125 | 2.50 | S76-060-2-BN12X | S76-060-3-BN12X | S76-060-4-BN12X | $48.41 | $50.51 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | S76-062-2-BN12X | S76-062-3-BN12X | S76-062-4-BN12X | $48.41 | $50.51 |
| 0.065 | 0.780 | 0.125 | 2.50 | S76-065-2-BN12X | S76-065-3-BN12X | S76-065-4-BN12X | $48.41 | $50.51 |
| 0.070 | 0.840 | 0.125 | 2.50 | S76-070-2-BN12X | S76-070-3-BN12X | S76-070-4-BN12X | $47.88 | $49.98 |
| 0.075 | 0.900 | 0.125 | 2.50 | S76-075-2-BN12X | S76-075-3-BN12X | S76-075-4-BN12X | $47.88 | $49.98 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | S76-078-2-BN12X | S76-078-3-BN12X | S76-078-4-BN12X | $47.88 | $49.98 |
| 0.080 | 0.960 | 0.125 | 2.50 | S76-080-2-BN12X | S76-080-3-BN12X | S76-080-4-BN12X | $47.88 | $49.98 |
| 0.085 | 1.020 | 0.125 | 2.50 | S76-085-2-BN12X | S76-085-3-BN12X | S76-085-4-BN12X | $47.88 | $49.98 |
| 0.090 | 1.080 | 0.125 | 2.50 | S76-090-2-BN12X | S76-090-3-BN12X | S76-090-4-BN12X | $46.99 | $49.09 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | S76-093-2-BN12X | S76-093-3-BN12X | S76-093-4-BN12X | $46.99 | $49.09 |
| 0.095 | 1.140 | 0.125 | 2.50 | S76-095-2-BN12X | S76-095-3-BN12X | S76-095-4-BN12X | $46.99 | $49.09 |
| 0.100 | 1.200 | 0.125 | 2.50 | S76-100-2-BN12X | S76-100-3-BN12X | S76-100-4-BN12X | $46.99 | $49.09 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | S76-118-2-BN12X | S76-118-3-BN12X | S76-118-4-BN12X | $46.99 | $49.09 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | S76-125-2-BN12X | S76-125-3-BN12X | S76-125-4-BN12X | $46.99 | $49.09 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Turnaround and Stocking Options

### Facing a tight production schedule, or suddenly out of a tool you need?

MITGI standards can ship in 3 days or less, and usually within 2 weeks for specials. After standard tools have been ordered, they are stocked and available for same day shipment.

**See page 117: Scheduling and stocking options**

# TOOL TYPES AND REGRINDS

## SPECIALS

All standard tool types are available with a variety of options as specials or modified standards. Each section of the catalog includes more information about specials in that category.

In addition to standard tool categories, MITGI also manufactures the following custom tool types:

- **Drills, Drill Mills, Spot Drills, G-Style Drills, Double Margin Drills, Spade Drills, Gun Drills**
- **Multi-Diameter Step Tooling, Step Drills, Step Reamers**
- **Countersinks, Counterbores**
- Form Tools
- Intersecting Form Tools
- Specialty Mold Tooling
- Chamfer Cutters, Corner Rounders
- Keyseat Cutters, Woodruff Cutters
- Dovetails
- Combination Tools
- Slitting Saws (mounted and arbor)
- Broaches, Pins, Go/No-Go Gauges
- **Corner Rounding End Mills**
- Boring Bars
- **Rebar Tools, Thread Bars**
- Specialty Tool Manufacturing to Customer Print or Design

More information on specials and quote forms can be found on pages 206-207.

Renewing services available on tools larger than 1/8" in designated tool categories (marked in **BOLD**).

## STANDARDS

All standard tool lines are available in 3 days or less (except saws, see pages 202-205 for more details). All stocked tools are available for same or next day shipment.

- Micro End Mills (standard, stub, extended reach, extended length of cut)
- Micro Drills
- **Reamers**
- Drafted Mold Tools
- Clearance Cutter Mold Tools
- Tapered Rib Cutter Mold Tools
- **Single Point and Full Form Thread Mills**
- **End Mills**
- Undercutting End Mills/Cherry Ball Tools
- **Spot Drills, Drill Mills**
- Deburring Knives
- Keyseat Cutters
- Chamfer Cutters
- Engraving Cutters
- Coolant Thru Thread Mills and Micro Drills
- Brazed Saws

# S80 Ball Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.015 | 0.050 | 0.125 | 2.50 | S80-010-2-SBN5XR | N/A | N/A | $52.08 | $54.18 |
| 0.015 (1/64) | 0.023 | 0.075 | 0.125 | 2.50 | S80-015-2-SBN5XR | S80-015-3-SBN5XR | S80-015-4-SBN5XR | $44.21 | $46.31 |
| 0.020 | 0.030 | 0.100 | 0.125 | 2.50 | S80-020-2-SBN5XR | S80-020-3-SBN5XR | S80-020-4-SBN5XR | $36.96 | $39.06 |
| 0.025 | 0.038 | 0.125 | 0.125 | 2.50 | S80-025-2-SBN5XR | S80-025-3-SBN5XR | S80-025-4-SBN5XR | $36.07 | $38.17 |
| 0.030 | 0.045 | 0.150 | 0.125 | 2.50 | S80-030-2-SBN5XR | S80-030-3-SBN5XR | S80-030-4-SBN5XR | $36.07 | $38.17 |
| 0.031 (1/32) | 0.047 | 0.155 | 0.125 | 2.50 | S80-031-2-SBN5XR | S80-031-3-SBN5XR | S80-031-4-SBN5XR | $36.07 | $38.17 |
| 0.035 | 0.053 | 0.175 | 0.125 | 2.50 | S80-035-2-SBN5XR | S80-035-3-SBN5XR | S80-035-4-SBN5XR | $36.07 | $38.17 |
| 0.039 (1mm) | 0.059 | 0.195 | 0.125 | 2.50 | S80-039-2-SBN5XR | S80-039-3-SBN5XR | S80-039-4-SBN5XR | $36.07 | $38.17 |
| 0.040 | 0.060 | 0.200 | 0.125 | 2.50 | S80-040-2-SBN5XR | S80-040-3-SBN5XR | S80-040-4-SBN5XR | $36.07 | $38.17 |
| 0.045 | 0.068 | 0.225 | 0.125 | 2.50 | S80-045-2-SBN5XR | S80-045-3-SBN5XR | S80-045-4-SBN5XR | $36.07 | $38.17 |
| 0.047 (3/64) | 0.071 | 0.235 | 0.125 | 2.50 | S80-047-2-SBN5XR | S80-047-3-SBN5XR | S80-047-4-SBN5XR | $36.07 | $38.17 |
| 0.050 | 0.075 | 0.250 | 0.125 | 2.50 | S80-050-2-SBN5XR | S80-050-3-SBN5XR | S80-050-4-SBN5XR | $36.07 | $38.17 |
| 0.055 | 0.083 | 0.275 | 0.125 | 2.50 | S80-055-2-SBN5XR | S80-055-3-SBN5XR | S80-055-4-SBN5XR | $34.97 | $37.07 |
| 0.060 | 0.090 | 0.300 | 0.125 | 2.50 | S80-060-2-SBN5XR | S80-060-3-SBN5XR | S80-060-4-SBN5XR | $34.97 | $37.07 |
| 0.062 (1/16) | 0.093 | 0.310 | 0.125 | 2.50 | S80-062-2-SBN5XR | S80-062-3-SBN5XR | S80-062-4-SBN5XR | $34.97 | $37.07 |
| 0.065 | 0.098 | 0.325 | 0.125 | 2.50 | S80-065-2-SBN5XR | S80-065-3-SBN5XR | S80-065-4-SBN5XR | $34.97 | $37.07 |
| 0.070 | 0.105 | 0.350 | 0.125 | 2.50 | S80-070-2-SBN5XR | S80-070-3-SBN5XR | S80-070-4-SBN5XR | $34.97 | $37.07 |
| 0.075 | 0.113 | 0.375 | 0.125 | 2.50 | S80-075-2-SBN5XR | S80-075-3-SBN5XR | S80-075-4-SBN5XR | $34.97 | $37.07 |
| 0.078 (5/64) | 0.117 | 0.390 | 0.125 | 2.50 | S80-078-2-SBN5XR | S80-078-3-SBN5XR | S80-078-4-SBN5XR | $34.97 | $37.07 |
| 0.080 | 0.120 | 0.400 | 0.125 | 2.50 | S80-080-2-SBN5XR | S80-080-3-SBN5XR | S80-080-4-SBN5XR | $34.97 | $37.07 |
| 0.085 | 0.128 | 0.425 | 0.125 | 2.50 | S80-085-2-SBN5XR | S80-085-3-SBN5XR | S80-085-4-SBN5XR | $34.97 | $37.07 |
| 0.090 | 0.135 | 0.450 | 0.125 | 2.50 | S80-090-2-SBN5XR | S80-090-3-SBN5XR | S80-090-4-SBN5XR | $34.97 | $37.07 |
| 0.093 (3/32) | 0.140 | 0.465 | 0.125 | 2.50 | S80-093-2-SBN5XR | S80-093-3-SBN5XR | S80-093-4-SBN5XR | $34.97 | $37.07 |
| 0.095 | 0.143 | 0.475 | 0.125 | 2.50 | S80-095-2-SBN5XR | S80-095-3-SBN5XR | S80-095-4-SBN5XR | $34.97 | $37.07 |
| 0.100 | 0.150 | 0.500 | 0.125 | 2.50 | S80-100-2-SBN5XR | S80-100-3-SBN5XR | S80-100-4-SBN5XR | $34.97 | $37.07 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | S80-118-2-SBN5XR | S80-118-3-SBN5XR | S80-118-4-SBN5XR | $34.97 | $37.07 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | S80-125-2-SBN5XR | S80-125-3-SBN5XR | S80-125-4-SBN5XR | $34.97 | $37.07 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Ball Micro End Mills



| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.030 | 0.050 | 0.125 | 2.50 | S77-010-2-BN5XR | N/A | N/A | $52.08 | $54.18 |
| 0.015 (1/64) | 0.045 | 0.075 | 0.125 | 2.50 | S77-015-2-BN5XR | S77-015-3-BN5XR | S77-015-4-BN5XR | $44.21 | $46.31 |
| 0.020 | 0.060 | 0.100 | 0.125 | 2.50 | S77-020-2-BN5XR | S77-020-3-BN5XR | S77-020-4-BN5XR | $36.96 | $39.06 |
| 0.025 | 0.075 | 0.125 | 0.125 | 2.50 | S77-025-2-BN5XR | S77-025-3-BN5XR | S77-025-4-BN5XR | $36.07 | $38.17 |
| 0.030 | 0.090 | 0.150 | 0.125 | 2.50 | S77-030-2-BN5XR | S77-030-3-BN5XR | S77-030-4-BN5XR | $36.07 | $38.17 |
| 0.031 (1/32) | 0.093 | 0.155 | 0.125 | 2.50 | S77-031-2-BN5XR | S77-031-3-BN5XR | S77-031-4-BN5XR | $36.07 | $38.17 |
| 0.035 | 0.105 | 0.175 | 0.125 | 2.50 | S77-035-2-BN5XR | S77-035-3-BN5XR | S77-035-4-BN5XR | $36.07 | $38.17 |
| 0.039 (1mm) | 0.117 | 0.195 | 0.125 | 2.50 | S77-039-2-BN5XR | S77-039-3-BN5XR | S77-039-4-BN5XR | $36.07 | $38.17 |
| 0.040 | 0.120 | 0.200 | 0.125 | 2.50 | S77-040-2-BN5XR | S77-040-3-BN5XR | S77-040-4-BN5XR | $36.07 | $38.17 |
| 0.045 | 0.135 | 0.225 | 0.125 | 2.50 | S77-045-2-BN5XR | S77-045-3-BN5XR | S77-045-4-BN5XR | $36.07 | $38.17 |
| 0.047 (3/64) | 0.141 | 0.235 | 0.125 | 2.50 | S77-047-2-BN5XR | S77-047-3-BN5XR | S77-047-4-BN5XR | $36.07 | $38.17 |
| 0.050 | 0.150 | 0.250 | 0.125 | 2.50 | S77-050-2-BN5XR | S77-050-3-BN5XR | S77-050-4-BN5XR | $36.07 | $38.17 |
| 0.055 | 0.165 | 0.275 | 0.125 | 2.50 | S77-055-2-BN5XR | S77-055-3-BN5XR | S77-055-4-BN5XR | $34.97 | $37.07 |
| 0.060 | 0.180 | 0.300 | 0.125 | 2.50 | S77-060-2-BN5XR | S77-060-3-BN5XR | S77-060-4-BN5XR | $34.97 | $37.07 |
| 0.062 (1/16) | 0.186 | 0.310 | 0.125 | 2.50 | S77-062-2-BN5XR | S77-062-3-BN5XR | S77-062-4-BN5XR | $34.97 | $37.07 |
| 0.065 | 0.195 | 0.325 | 0.125 | 2.50 | S77-065-2-BN5XR | S77-065-3-BN5XR | S77-065-4-BN5XR | $34.97 | $37.07 |
| 0.070 | 0.210 | 0.350 | 0.125 | 2.50 | S77-070-2-BN5XR | S77-070-3-BN5XR | S77-070-4-BN5XR | $34.97 | $37.07 |
| 0.075 | 0.225 | 0.375 | 0.125 | 2.50 | S77-075-2-BN5XR | S77-075-3-BN5XR | S77-075-4-BN5XR | $34.97 | $37.07 |
| 0.078 (5/64) | 0.234 | 0.390 | 0.125 | 2.50 | S77-078-2-BN5XR | S77-078-3-BN5XR | S77-078-4-BN5XR | $34.97 | $37.07 |
| 0.080 | 0.240 | 0.400 | 0.125 | 2.50 | S77-080-2-BN5XR | S77-080-3-BN5XR | S77-080-4-BN5XR | $34.97 | $37.07 |
| 0.085 | 0.255 | 0.425 | 0.125 | 2.50 | S77-085-2-BN5XR | S77-085-3-BN5XR | S77-085-4-BN5XR | $34.97 | $37.07 |
| 0.090 | 0.270 | 0.450 | 0.125 | 2.50 | S77-090-2-BN5XR | S77-090-3-BN5XR | S77-090-4-BN5XR | $34.97 | $37.07 |
| 0.093 (3/32) | 0.279 | 0.465 | 0.125 | 2.50 | S77-093-2-BN5XR | S77-093-3-BN5XR | S77-093-4-BN5XR | $34.97 | $37.07 |
| 0.095 | 0.285 | 0.475 | 0.125 | 2.50 | S77-095-2-BN5XR | S77-095-3-BN5XR | S77-095-4-BN5XR | $34.97 | $37.07 |
| 0.100 | 0.300 | 0.500 | 0.125 | 2.50 | S77-100-2-BN5XR | S77-100-3-BN5XR | S77-100-4-BN5XR | $34.97 | $37.07 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | S77-118-2-BN5XR | S77-118-3-BN5XR | S77-118-4-BN5XR | $34.97 | $37.07 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | S77-125-2-BN5XR | S77-125-3-BN5XR | S77-125-4-BN5XR | $34.97 | $37.07 |

FLUTES 2,3,4

3X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

# S81 Ball Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.015 | 0.080 | 0.125 | 2.50 | S81-010-2-SBN8XR | N/A | N/A | $52.29 | $54.39 |
| 0.015 (1/64) | 0.023 | 0.120 | 0.125 | 2.50 | S81-015-2-SBN8XR | S81-015-3-SBN8XR | S81-015-4-SBN8XR | $44.21 | $46.31 |
| 0.020 | 0.030 | 0.160 | 0.125 | 2.50 | S81-020-2-SBN8XR | S81-020-3-SBN8XR | S81-020-4-SBN8XR | $37.49 | $39.59 |
| 0.025 | 0.038 | 0.200 | 0.125 | 2.50 | S81-025-2-SBN8XR | S81-025-3-SBN8XR | S81-025-4-SBN8XR | $36.54 | $38.64 |
| 0.030 | 0.045 | 0.240 | 0.125 | 2.50 | S81-030-2-SBN8XR | S81-030-3-SBN8XR | S81-030-4-SBN8XR | $36.54 | $38.64 |
| 0.031 (1/32) | 0.047 | 0.248 | 0.125 | 2.50 | S81-031-2-SBN8XR | S81-031-3-SBN8XR | S81-031-4-SBN8XR | $36.54 | $38.64 |
| 0.035 | 0.053 | 0.280 | 0.125 | 2.50 | S81-035-2-SBN8XR | S81-035-3-SBN8XR | S81-035-4-SBN8XR | $36.54 | $38.64 |
| 0.039 (1mm) | 0.059 | 0.312 | 0.125 | 2.50 | S81-039-2-SBN8XR | S81-039-3-SBN8XR | S81-039-4-SBN8XR | $36.54 | $38.64 |
| 0.040 | 0.060 | 0.320 | 0.125 | 2.50 | S81-040-2-SBN8XR | S81-040-3-SBN8XR | S81-040-4-SBN8XR | $36.54 | $38.64 |
| 0.045 | 0.068 | 0.360 | 0.125 | 2.50 | S81-045-2-SBN8XR | S81-045-3-SBN8XR | S81-045-4-SBN8XR | $36.54 | $38.64 |
| 0.047 (3/64) | 0.071 | 0.376 | 0.125 | 2.50 | S81-047-2-SBN8XR | S81-047-3-SBN8XR | S81-047-4-SBN8XR | $36.54 | $38.64 |
| 0.050 | 0.075 | 0.400 | 0.125 | 2.50 | S81-050-2-SBN8XR | S81-050-3-SBN8XR | S81-050-4-SBN8XR | $36.54 | $38.64 |
| 0.055 | 0.083 | 0.440 | 0.125 | 2.50 | S81-055-2-SBN8XR | S81-055-3-SBN8XR | S81-055-4-SBN8XR | $35.39 | $37.49 |
| 0.060 | 0.090 | 0.480 | 0.125 | 2.50 | S81-060-2-SBN8XR | S81-060-3-SBN8XR | S81-060-4-SBN8XR | $35.39 | $37.49 |
| 0.062 (1/16) | 0.093 | 0.496 | 0.125 | 2.50 | S81-062-2-SBN8XR | S81-062-3-SBN8XR | S81-062-4-SBN8XR | $35.39 | $37.49 |
| 0.065 | 0.098 | 0.520 | 0.125 | 2.50 | S81-065-2-SBN8XR | S81-065-3-SBN8XR | S81-065-4-SBN8XR | $35.39 | $37.49 |
| 0.070 | 0.105 | 0.560 | 0.125 | 2.50 | S81-070-2-SBN8XR | S81-070-3-SBN8XR | S81-070-4-SBN8XR | $35.39 | $37.49 |
| 0.075 | 0.113 | 0.600 | 0.125 | 2.50 | S81-075-2-SBN8XR | S81-075-3-SBN8XR | S81-075-4-SBN8XR | $35.39 | $37.49 |
| 0.078 (5/64) | 0.117 | 0.624 | 0.125 | 2.50 | S81-078-2-SBN8XR | S81-078-3-SBN8XR | S81-078-4-SBN8XR | $35.39 | $37.49 |
| 0.080 | 0.120 | 0.640 | 0.125 | 2.50 | S81-080-2-SBN8XR | S81-080-3-SBN8XR | S81-080-4-SBN8XR | $35.39 | $37.49 |
| 0.085 | 0.128 | 0.680 | 0.125 | 2.50 | S81-085-2-SBN8XR | S81-085-3-SBN8XR | S81-085-4-SBN8XR | $35.39 | $37.49 |
| 0.090 | 0.135 | 0.720 | 0.125 | 2.50 | S81-090-2-SBN8XR | S81-090-3-SBN8XR | S81-090-4-SBN8XR | $35.39 | $37.49 |
| 0.093 (3/32) | 0.140 | 0.744 | 0.125 | 2.50 | S81-093-2-SBN8XR | S81-093-3-SBN8XR | S81-093-4-SBN8XR | $35.39 | $37.49 |
| 0.095 | 0.143 | 0.760 | 0.125 | 2.50 | S81-095-2-SBN8XR | S81-095-3-SBN8XR | S81-095-4-SBN8XR | $35.39 | $37.49 |
| 0.100 | 0.150 | 0.800 | 0.125 | 2.50 | S81-100-2-SBN8XR | S81-100-3-SBN8XR | S81-100-4-SBN8XR | $35.39 | $37.49 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | S81-118-2-SBN8XR | S81-118-3-SBN8XR | S81-118-4-SBN8XR | $35.39 | $37.49 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | S81-125-2-SBN8XR | S81-125-3-SBN8XR | S81-125-4-SBN8XR | $35.39 | $37.49 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

FLUTES 2,3,4

3X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.030 | 0.080 | 0.125 | 2.50 | S78-010-2-BN8XR | N/A | N/A | $52.29 | $54.39 |
| 0.015 (1/64) | 0.045 | 0.120 | 0.125 | 2.50 | S78-015-2-BN8XR | S78-015-3-BN8XR | S78-015-4-BN8XR | $44.21 | $46.31 |
| 0.020 | 0.060 | 0.160 | 0.125 | 2.50 | S78-020-2-BN8XR | S78-020-3-BN8XR | S78-020-4-BN8XR | $37.49 | $39.59 |
| 0.025 | 0.075 | 0.200 | 0.125 | 2.50 | S78-025-2-BN8XR | S78-025-3-BN8XR | S78-025-4-BN8XR | $36.54 | $38.64 |
| 0.030 | 0.090 | 0.240 | 0.125 | 2.50 | S78-030-2-BN8XR | S78-030-3-BN8XR | S78-030-4-BN8XR | $36.54 | $38.64 |
| 0.031 (1/32) | 0.093 | 0.248 | 0.125 | 2.50 | S78-031-2-BN8XR | S78-031-3-BN8XR | S78-031-4-BN8XR | $36.54 | $38.64 |
| 0.035 | 0.105 | 0.280 | 0.125 | 2.50 | S78-035-2-BN8XR | S78-035-3-BN8XR | S78-035-4-BN8XR | $36.54 | $38.64 |
| 0.039 (1mm) | 0.117 | 0.312 | 0.125 | 2.50 | S78-039-2-BN8XR | S78-039-3-BN8XR | S78-039-4-BN8XR | $36.54 | $38.64 |
| 0.040 | 0.120 | 0.320 | 0.125 | 2.50 | S78-040-2-BN8XR | S78-040-3-BN8XR | S78-040-4-BN8XR | $36.54 | $38.64 |
| 0.045 | 0.135 | 0.360 | 0.125 | 2.50 | S78-045-2-BN8XR | S78-045-3-BN8XR | S78-045-4-BN8XR | $36.54 | $38.64 |
| 0.047 (3/64) | 0.141 | 0.376 | 0.125 | 2.50 | S78-047-2-BN8XR | S78-047-3-BN8XR | S78-047-4-BN8XR | $36.54 | $38.64 |
| 0.050 | 0.150 | 0.400 | 0.125 | 2.50 | S78-050-2-BN8XR | S78-050-3-BN8XR | S78-050-4-BN8XR | $36.54 | $38.64 |
| 0.055 | 0.165 | 0.440 | 0.125 | 2.50 | S78-055-2-BN8XR | S78-055-3-BN8XR | S78-055-4-BN8XR | $35.39 | $37.49 |
| 0.060 | 0.180 | 0.480 | 0.125 | 2.50 | S78-060-2-BN8XR | S78-060-3-BN8XR | S78-060-4-BN8XR | $35.39 | $37.49 |
| 0.062 (1/16) | 0.186 | 0.496 | 0.125 | 2.50 | S78-062-2-BN8XR | S78-062-3-BN8XR | S78-062-4-BN8XR | $35.39 | $37.49 |
| 0.065 | 0.195 | 0.520 | 0.125 | 2.50 | S78-065-2-BN8XR | S78-065-3-BN8XR | S78-065-4-BN8XR | $35.39 | $37.49 |
| 0.070 | 0.210 | 0.560 | 0.125 | 2.50 | S78-070-2-BN8XR | S78-070-3-BN8XR | S78-070-4-BN8XR | $35.39 | $37.49 |
| 0.075 | 0.225 | 0.600 | 0.125 | 2.50 | S78-075-2-BN8XR | S78-075-3-BN8XR | S78-075-4-BN8XR | $35.39 | $37.49 |
| 0.078 (5/64) | 0.234 | 0.624 | 0.125 | 2.50 | S78-078-2-BN8XR | S78-078-3-BN8XR | S78-078-4-BN8XR | $35.39 | $37.49 |
| 0.080 | 0.240 | 0.640 | 0.125 | 2.50 | S78-080-2-BN8XR | S78-080-3-BN8XR | S78-080-4-BN8XR | $35.39 | $37.49 |
| 0.085 | 0.255 | 0.680 | 0.125 | 2.50 | S78-085-2-BN8XR | S78-085-3-BN8XR | S78-085-4-BN8XR | $35.39 | $37.49 |
| 0.090 | 0.270 | 0.720 | 0.125 | 2.50 | S78-090-2-BN8XR | S78-090-3-BN8XR | S78-090-4-BN8XR | $35.39 | $37.49 |
| 0.093 (3/32) | 0.279 | 0.744 | 0.125 | 2.50 | S78-093-2-BN8XR | S78-093-3-BN8XR | S78-093-4-BN8XR | $35.39 | $37.49 |
| 0.095 | 0.285 | 0.760 | 0.125 | 2.50 | S78-095-2-BN8XR | S78-095-3-BN8XR | S78-095-4-BN8XR | $35.39 | $37.49 |
| 0.100 | 0.300 | 0.800 | 0.125 | 2.50 | S78-100-2-BN8XR | S78-100-3-BN8XR | S78-100-4-BN8XR | $35.39 | $37.49 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | S78-118-2-BN8XR | S78-118-3-BN8XR | S78-118-4-BN8XR | $35.39 | $37.49 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | S78-125-2-BN8XR | S78-125-3-BN8XR | S78-125-4-BN8XR | $35.39 | $37.49 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## COATING

**P.208**

In-house coating allows MITGI to deliver high-quality coating applied consistently from tool-to-tool and batch-to-batch, with short turnaround times. See pages 208-209 for more information regarding coating options, pricing, and timelines.

# S82 Ball Micro End Mills

FLUTES 2,3,4

1.5X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.015 | 0.120 | 0.125 | 2.50 | S82-010-2-SBN12XR | N/A | N/A | $53.34 | $55.44 |
| 0.015 (1/64) | 0.023 | 0.180 | 0.125 | 2.50 | S82-015-2-SBN12XR | S82-015-3-SBN12XR | S82-015-4-SBN12XR | $45.26 | $47.36 |
| 0.020 | 0.030 | 0.240 | 0.125 | 2.50 | S82-020-2-SBN12XR | S82-020-3-SBN12XR | S82-020-4-SBN12XR | $44.73 | $46.83 |
| 0.025 | 0.038 | 0.300 | 0.125 | 2.50 | S82-025-2-SBN12XR | S82-025-3-SBN12XR | S82-025-4-SBN12XR | $38.54 | $40.64 |
| 0.030 | 0.045 | 0.360 | 0.125 | 2.50 | S82-030-2-SBN12XR | S82-030-3-SBN12XR | S82-030-4-SBN12XR | $37.33 | $39.43 |
| 0.031 (1/32) | 0.047 | 0.372 | 0.125 | 2.50 | S82-031-2-SBN12XR | S82-031-3-SBN12XR | S82-031-4-SBN12XR | $37.33 | $39.43 |
| 0.035 | 0.053 | 0.420 | 0.125 | 2.50 | S82-035-2-SBN12XR | S82-035-3-SBN12XR | S82-035-4-SBN12XR | $37.33 | $39.43 |
| 0.039 (1mm) | 0.059 | 0.468 | 0.125 | 2.50 | S82-039-2-SBN12XR | S82-039-3-SBN12XR | S82-039-4-SBN12XR | $37.33 | $39.43 |
| 0.040 | 0.060 | 0.480 | 0.125 | 2.50 | S82-040-2-SBN12XR | S82-040-3-SBN12XR | S82-040-4-SBN12XR | $37.33 | $39.43 |
| 0.045 | 0.068 | 0.540 | 0.125 | 2.50 | S82-045-2-SBN12XR | S82-045-3-SBN12XR | S82-045-4-SBN12XR | $37.33 | $39.43 |
| 0.047 (3/64) | 0.071 | 0.564 | 0.125 | 2.50 | S82-047-2-SBN12XR | S82-047-3-SBN12XR | S82-047-4-SBN12XR | $37.33 | $39.43 |
| 0.050 | 0.075 | 0.600 | 0.125 | 2.50 | S82-050-2-SBN12XR | S82-050-3-SBN12XR | S82-050-4-SBN12XR | $37.33 | $39.43 |
| 0.055 | 0.083 | 0.660 | 0.125 | 2.50 | S82-055-2-SBN12XR | S82-055-3-SBN12XR | S82-055-4-SBN12XR | $36.12 | $38.22 |
| 0.060 | 0.090 | 0.720 | 0.125 | 2.50 | S82-060-2-SBN12XR | S82-060-3-SBN12XR | S82-060-4-SBN12XR | $36.12 | $38.22 |
| 0.062 (1/16) | 0.093 | 0.744 | 0.125 | 2.50 | S82-062-2-SBN12XR | S82-062-3-SBN12XR | S82-062-4-SBN12XR | $36.12 | $38.22 |
| 0.065 | 0.098 | 0.780 | 0.125 | 2.50 | S82-065-2-SBN12XR | S82-065-3-SBN12XR | S82-065-4-SBN12XR | $36.12 | $38.22 |
| 0.070 | 0.105 | 0.840 | 0.125 | 2.50 | S82-070-2-SBN12XR | S82-070-3-SBN12XR | S82-070-4-SBN12XR | $36.12 | $38.22 |
| 0.075 | 0.113 | 0.900 | 0.125 | 2.50 | S82-075-2-SBN12XR | S82-075-3-SBN12XR | S82-075-4-SBN12XR | $36.12 | $38.22 |
| 0.078 (5/64) | 0.117 | 0.936 | 0.125 | 2.50 | S82-078-2-SBN12XR | S82-078-3-SBN12XR | S82-078-4-SBN12XR | $36.12 | $38.22 |
| 0.080 | 0.120 | 0.960 | 0.125 | 2.50 | S82-080-2-SBN12XR | S82-080-3-SBN12XR | S82-080-4-SBN12XR | $36.12 | $38.22 |
| 0.085 | 0.128 | 1.020 | 0.125 | 2.50 | S82-085-2-SBN12XR | S82-085-3-SBN12XR | S82-085-4-SBN12XR | $36.12 | $38.22 |
| 0.090 | 0.135 | 1.080 | 0.125 | 2.50 | S82-090-2-SBN12XR | S82-090-3-SBN12XR | S82-090-4-SBN12XR | $36.12 | $38.22 |
| 0.093 (3/32) | 0.140 | 1.116 | 0.125 | 2.50 | S82-093-2-SBN12XR | S82-093-3-SBN12XR | S82-093-4-SBN12XR | $36.12 | $38.22 |
| 0.095 | 0.143 | 1.140 | 0.125 | 2.50 | S82-095-2-SBN12XR | S82-095-3-SBN12XR | S82-095-4-SBN12XR | $36.12 | $38.22 |
| 0.100 | 0.150 | 1.200 | 0.125 | 2.50 | S82-100-2-SBN12XR | S82-100-3-SBN12XR | S82-100-4-SBN12XR | $36.12 | $38.22 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | S82-118-2-SBN12XR | S82-118-3-SBN12XR | S82-118-4-SBN12XR | $36.12 | $38.22 |
| 0.125 (1/8) | 0.187 | 1.500 | 0.125 | 2.50 | S82-125-2-SBN12XR | S82-125-3-SBN12XR | S82-125-4-SBN12XR | $36.12 | $38.22 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Ball Micro End Mills



| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.010 | 0.030 | 0.120 | 0.125 | 2.50 | S79-010-2-BN12XR | N/A | N/A | $53.34 | $55.44 |
| 0.015 (1/64) | 0.045 | 0.180 | 0.125 | 2.50 | S79-015-2-BN12XR | S79-015-3-BN12XR | S79-015-4-BN12XR | $45.26 | $47.36 |
| 0.020 | 0.060 | 0.240 | 0.125 | 2.50 | S79-020-2-BN12XR | S79-020-3-BN12XR | S79-020-4-BN12XR | $44.73 | $46.83 |
| 0.025 | 0.075 | 0.300 | 0.125 | 2.50 | S79-025-2-BN12XR | S79-025-3-BN12XR | S79-025-4-BN12XR | $38.54 | $40.64 |
| 0.030 | 0.090 | 0.360 | 0.125 | 2.50 | S79-030-2-BN12XR | S79-030-3-BN12XR | S79-030-4-BN12XR | $37.33 | $39.43 |
| 0.031 (1/32) | 0.093 | 0.372 | 0.125 | 2.50 | S79-031-2-BN12XR | S79-031-3-BN12XR | S79-031-4-BN12XR | $37.33 | $39.43 |
| 0.035 | 0.105 | 0.420 | 0.125 | 2.50 | S79-035-2-BN12XR | S79-035-3-BN12XR | S79-035-4-BN12XR | $37.33 | $39.43 |
| 0.039 (1mm) | 0.117 | 0.468 | 0.125 | 2.50 | S79-039-2-BN12XR | S79-039-3-BN12XR | S79-039-4-BN12XR | $37.33 | $39.43 |
| 0.040 | 0.120 | 0.480 | 0.125 | 2.50 | S79-040-2-BN12XR | S79-040-3-BN12XR | S79-040-4-BN12XR | $37.33 | $39.43 |
| 0.045 | 0.135 | 0.540 | 0.125 | 2.50 | S79-045-2-BN12XR | S79-045-3-BN12XR | S79-045-4-BN12XR | $37.33 | $39.43 |
| 0.047 (3/64) | 0.141 | 0.564 | 0.125 | 2.50 | S79-047-2-BN12XR | S79-047-3-BN12XR | S79-047-4-BN12XR | $37.33 | $39.43 |
| 0.050 | 0.150 | 0.600 | 0.125 | 2.50 | S79-050-2-BN12XR | S79-050-3-BN12XR | S79-050-4-BN12XR | $37.33 | $39.43 |
| 0.055 | 0.165 | 0.660 | 0.125 | 2.50 | S79-055-2-BN12XR | S79-055-3-BN12XR | S79-055-4-BN12XR | $36.12 | $38.22 |
| 0.060 | 0.180 | 0.720 | 0.125 | 2.50 | S79-060-2-BN12XR | S79-060-3-BN12XR | S79-060-4-BN12XR | $36.12 | $38.22 |
| 0.062 (1/16) | 0.186 | 0.744 | 0.125 | 2.50 | S79-062-2-BN12XR | S79-062-3-BN12XR | S79-062-4-BN12XR | $36.12 | $38.22 |
| 0.065 | 0.195 | 0.780 | 0.125 | 2.50 | S79-065-2-BN12XR | S79-065-3-BN12XR | S79-065-4-BN12XR | $36.12 | $38.22 |
| 0.070 | 0.210 | 0.840 | 0.125 | 2.50 | S79-070-2-BN12XR | S79-070-3-BN12XR | S79-070-4-BN12XR | $36.12 | $38.22 |
| 0.075 | 0.225 | 0.900 | 0.125 | 2.50 | S79-075-2-BN12XR | S79-075-3-BN12XR | S79-075-4-BN12XR | $36.12 | $38.22 |
| 0.078 (5/64) | 0.234 | 0.936 | 0.125 | 2.50 | S79-078-2-BN12XR | S79-078-3-BN12XR | S79-078-4-BN12XR | $36.12 | $38.22 |
| 0.080 | 0.240 | 0.960 | 0.125 | 2.50 | S79-080-2-BN12XR | S79-080-3-BN12XR | S79-080-4-BN12XR | $36.12 | $38.22 |
| 0.085 | 0.255 | 1.020 | 0.125 | 2.50 | S79-085-2-BN12XR | S79-085-3-BN12XR | S79-085-4-BN12XR | $36.12 | $38.22 |
| 0.090 | 0.270 | 1.080 | 0.125 | 2.50 | S79-090-2-BN12XR | S79-090-3-BN12XR | S79-090-4-BN12XR | $36.12 | $38.22 |
| 0.093 (3/32) | 0.279 | 1.116 | 0.125 | 2.50 | S79-093-2-BN12XR | S79-093-3-BN12XR | S79-093-4-BN12XR | $36.12 | $38.22 |
| 0.095 | 0.285 | 1.140 | 0.125 | 2.50 | S79-095-2-BN12XR | S79-095-3-BN12XR | S79-095-4-BN12XR | $36.12 | $38.22 |
| 0.100 | 0.300 | 1.200 | 0.125 | 2.50 | S79-100-2-BN12XR | S79-100-3-BN12XR | S79-100-4-BN12XR | $36.12 | $38.22 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | S79-118-2-BN12XR | S79-118-3-BN12XR | S79-118-4-BN12XR | $36.12 | $38.22 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | S79-125-2-BN12XR | S79-125-3-BN12XR | S79-125-4-BN12XR | $36.12 | $38.22 |

FLUTES 2,3,4

3X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

# S10 Square Micro End Mills

FLUTES 5

1.5X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.031 (1/32) | 0.0465 | 0.125 | 1.50 | S10-031-5-SST | $24.71 | $26.81 |
| 0.035 | 0.0525 | 0.125 | 1.50 | S10-035-5-SST | $22.12 | $24.22 |
| 0.039 (1mm) | 0.059 | 0.125 | 1.50 | S10-039-5-SST | $22.12 | $24.22 |
| 0.040 | 0.060 | 0.125 | 1.50 | S10-040-5-SST | $22.12 | $24.22 |
| 0.045 | 0.0675 | 0.125 | 1.50 | S10-045-5-SST | $22.12 | $24.22 |
| 0.047 (3/64) | 0.0705 | 0.125 | 1.50 | S10-047-5-SST | $22.12 | $24.22 |
| 0.050 | 0.075 | 0.125 | 1.50 | S10-050-5-SST | $22.12 | $24.22 |
| 0.055 | 0.0825 | 0.125 | 1.50 | S10-055-5-SST | $22.12 | $24.22 |
| 0.060 | 0.090 | 0.125 | 1.50 | S10-060-5-SST | $20.18 | $22.28 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | S10-062-5-SST | $20.18 | $22.28 |
| 0.065 | 0.0975 | 0.125 | 1.50 | S10-065-5-SST | $20.18 | $22.28 |
| 0.070 | 0.105 | 0.125 | 1.50 | S10-070-5-SST | $20.18 | $22.28 |
| 0.075 | 0.1125 | 0.125 | 1.50 | S10-075-5-SST | $20.18 | $22.28 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | S10-078-5-SST | $20.18 | $22.28 |
| 0.080 | 0.120 | 0.125 | 1.50 | S10-080-5-SST | $20.18 | $22.28 |
| 0.085 | 0.1275 | 0.125 | 1.50 | S10-085-5-SST | $20.18 | $22.28 |
| 0.090 | 0.135 | 0.125 | 1.50 | S10-090-5-SST | $20.18 | $22.28 |
| 0.093 (3/32) | 0.1395 | 0.125 | 1.50 | S10-093-5-SST | $20.18 | $22.28 |
| 0.095 | 0.1425 | 0.125 | 1.50 | S10-095-5-SST | $20.18 | $22.28 |
| 0.100 | 0.150 | 0.125 | 1.50 | S10-100-5-SST | $20.18 | $22.28 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | S10-118-5-SST | $20.18 | $22.28 |
| 0.125 (1/8) | 0.1875 | 0.125 | 1.50 | S10-125-5-SST | $20.18 | $22.28 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 6 | 2, 3, 4 Flute Tools |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

FLUTES 5

3X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.031 (1/32) | 0.093 | 0.125 | 1.50 | S08-031-5-SEM | $24.71 | $26.81 |
| 0.035 | 0.105 | 0.125 | 1.50 | S08-035-5-SEM | $22.12 | $24.22 |
| 0.039 (1mm) | 0.117 | 0.125 | 1.50 | S08-039-5-SEM | $22.12 | $24.22 |
| 0.040 | 0.120 | 0.125 | 1.50 | S08-040-5-SEM | $22.12 | $24.22 |
| 0.045 | 0.135 | 0.125 | 1.50 | S08-045-5-SEM | $22.12 | $24.22 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | S08-047-5-SEM | $22.12 | $24.22 |
| 0.050 | 0.150 | 0.125 | 1.50 | S08-050-5-SEM | $22.12 | $24.22 |
| 0.055 | 0.165 | 0.125 | 1.50 | S08-055-5-SEM | $22.12 | $24.22 |
| 0.060 | 0.180 | 0.125 | 1.50 | S08-060-5-SEM | $20.18 | $22.28 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | S08-062-5-SEM | $20.18 | $22.28 |
| 0.065 | 0.195 | 0.125 | 1.50 | S08-065-5-SEM | $20.18 | $22.28 |
| 0.070 | 0.210 | 0.125 | 1.50 | S08-070-5-SEM | $20.18 | $22.28 |
| 0.075 | 0.225 | 0.125 | 1.50 | S08-075-5-SEM | $20.18 | $22.28 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | S08-078-5-SEM | $20.18 | $22.28 |
| 0.080 | 0.240 | 0.125 | 1.50 | S08-080-5-SEM | $20.18 | $22.28 |
| 0.085 | 0.255 | 0.125 | 1.50 | S08-085-5-SEM | $20.18 | $22.28 |
| 0.090 | 0.270 | 0.125 | 1.50 | S08-090-5-SEM | $20.18 | $22.28 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | S08-093-5-SEM | $20.18 | $22.28 |
| 0.095 | 0.285 | 0.125 | 1.50 | S08-095-5-SEM | $20.18 | $22.28 |
| 0.100 | 0.300 | 0.125 | 1.50 | S08-100-5-SEM | $20.18 | $22.28 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | S08-118-5-SEM | $20.18 | $22.28 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | S08-125-5-SEM | $20.18 | $22.28 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 8 | 2, 3, 4 Flute Tools |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## Tips on Selecting the Right Tool for the Job

| Number of Flutes | Primary Uses | Ideal Cutting Materials |
|---|---|---|
| 2-3 | Tools with fewer flutes allow optimal space for chip removal when milling or slotting softer materials. Also used for roughing. | Soft materials, such as aluminum and plastics |
| 3-4 | Adding flutes provides greater strength. Recommended for use with roughing, milling, and slotting a variety of materials. Can also be used for finishing softer materials. | Hard materials, such as stainless steel, steel, and titanium. |
| 5 + | Ideal for use in finishing work, when using faster feed rates, and with reduced chip load. | Harder materials, such as steel, or for finishing a variety of materials. |

# S62 Square Micro End Mills

FLUTES 5

5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | S62-031-5-SQ5X | $28.35 | $30.45 |
| 0.035 | 0.175 | 0.125 | 2.50 | S62-035-5-SQ5X | $28.35 | $30.45 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | S62-039-5-SQ5X | $28.35 | $30.45 |
| 0.040 | 0.200 | 0.125 | 2.50 | S62-040-5-SQ5X | $28.35 | $30.45 |
| 0.045 | 0.225 | 0.125 | 2.50 | S62-045-5-SQ5X | $27.83 | $29.93 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | S62-047-5-SQ5X | $27.83 | $29.93 |
| 0.050 | 0.250 | 0.125 | 2.50 | S62-050-5-SQ5X | $27.83 | $29.93 |
| 0.055 | 0.275 | 0.125 | 2.50 | S62-055-5-SQ5X | $26.15 | $28.25 |
| 0.060 | 0.300 | 0.125 | 2.50 | S62-060-5-SQ5X | $26.15 | $28.25 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | S62-062-5-SQ5X | $26.15 | $28.25 |
| 0.065 | 0.325 | 0.125 | 2.50 | S62-065-5-SQ5X | $26.15 | $28.25 |
| 0.070 | 0.350 | 0.125 | 2.50 | S62-070-5-SQ5X | $26.15 | $28.25 |
| 0.075 | 0.375 | 0.125 | 2.50 | S62-075-5-SQ5X | $26.15 | $28.25 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | S62-078-5-SQ5X | $26.15 | $28.25 |
| 0.080 | 0.400 | 0.125 | 2.50 | S62-080-5-SQ5X | $26.15 | $28.25 |
| 0.085 | 0.425 | 0.125 | 2.50 | S62-085-5-SQ5X | $26.15 | $28.25 |
| 0.090 | 0.450 | 0.125 | 2.50 | S62-090-5-SQ5X | $26.15 | $28.25 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | S62-093-5-SQ5X | $26.15 | $28.25 |
| 0.095 | 0.475 | 0.125 | 2.50 | S62-095-5-SQ5X | $26.15 | $28.25 |
| 0.100 | 0.500 | 0.125 | 2.50 | S62-100-5-SQ5X | $25.94 | $28.04 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | S62-118-5-SQ5X | $25.94 | $28.04 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | S62-125-5-SQ5X | $25.94 | $28.04 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 10 | 2, 3, 4 Flute Tools |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Stocking Program Advantages

**Price or time: which is more important? They both are, and you don't need to prioritize one over the other. Consider MITGI stocking options to help you complete your job on time and within budget.**

When the tool is right but price is an objection, consider ordering a higher quantity to take advantage of price breaks. MITGI offers stocking programs that can be delivered in regular intervals or on-demand. After the initial order, tools are stocked and available to ship the day the PO is received.

Once a tool is put into your production environment, there are more options to consider. Using your forecast and production data, minimum and maximum inventory numbers can be set; this allows MITGI to gain production efficiencies by producing your tool in larger quantities. The benefits are twofold: lower pricing for higher quantities, and tools that are in-stock and available for same day shipping.

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.031 (1/32) | 0.248 | 0.125 | 2.50 | S63-031-5-SQ8X | $54.23 | $56.33 |
| 0.035 | 0.280 | 0.125 | 2.50 | S63-035-5-SQ8X | $54.23 | $56.33 |
| 0.039 (1mm) | 0.312 | 0.125 | 2.50 | S63-039-5-SQ8X | $54.23 | $56.33 |
| 0.040 | 0.320 | 0.125 | 2.50 | S63-040-5-SQ8X | $54.23 | $56.33 |
| 0.045 | 0.360 | 0.125 | 2.50 | S63-045-5-SQ8X | $54.23 | $56.33 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.50 | S63-047-5-SQ8X | $54.23 | $56.33 |
| 0.050 | 0.400 | 0.125 | 2.50 | S63-050-5-SQ8X | $41.27 | $43.37 |
| 0.055 | 0.440 | 0.125 | 2.50 | S63-055-5-SQ8X | $41.27 | $43.37 |
| 0.060 | 0.480 | 0.125 | 2.50 | S63-060-5-SQ8X | $41.27 | $43.37 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | S63-062-5-SQ8X | $41.27 | $43.37 |
| 0.065 | 0.520 | 0.125 | 2.50 | S63-065-5-SQ8X | $37.59 | $39.69 |
| 0.070 | 0.560 | 0.125 | 2.50 | S63-070-5-SQ8X | $37.59 | $39.69 |
| 0.075 | 0.600 | 0.125 | 2.50 | S63-075-5-SQ8X | $34.02 | $36.12 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | S63-078-5-SQ8X | $34.02 | $36.12 |
| 0.080 | 0.640 | 0.125 | 2.50 | S63-080-5-SQ8X | $34.02 | $36.12 |
| 0.085 | 0.680 | 0.125 | 2.50 | S63-085-5-SQ8X | $31.76 | $33.86 |
| 0.090 | 0.720 | 0.125 | 2.50 | S63-090-5-SQ8X | $31.76 | $33.86 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | S63-093-5-SQ8X | $31.76 | $33.86 |
| 0.095 | 0.760 | 0.125 | 2.50 | S63-095-5-SQ8X | $31.76 | $33.86 |
| 0.100 | 0.800 | 0.125 | 2.50 | S63-100-5-SQ8X | $31.76 | $33.86 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | S63-118-5-SQ8X | $31.50 | $33.60 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | S63-125-5-SQ8X | $31.50 | $33.60 |

FLUTES 5

8X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 11 | 2, 3, 4 Flute Tools |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MITGI RESULTS: Tool Life Is Doubled

"My customer loves the end mills we had them test - they were able to increase the tool life from 85 to 165 pieces, and the finish was a lot better with minimal burrs. They are setting up on four machines tomorrow, and they would like more tools. Once I have the forecast, we would like to setup a blanket order to make sure we have enough to keep them stocked."

*- Brennan*

*Karissa, Marketing Analyst*

# S64 Square Micro End Mills

FLUTES 5

12X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.031 (1/32) | 0.372 | 0.125 | 2.50 | S64-031-5-SQ12X | $62.16 | $64.26 |
| 0.035 | 0.420 | 0.125 | 2.50 | S64-035-5-SQ12X | $62.16 | $64.26 |
| 0.039 (1mm) | 0.468 | 0.125 | 2.50 | S64-039-5-SQ12X | $62.16 | $64.26 |
| 0.040 | 0.480 | 0.125 | 2.50 | S64-040-5-SQ12X | $62.16 | $64.26 |
| 0.045 | 0.540 | 0.125 | 2.50 | S64-045-5-SQ12X | $62.16 | $64.26 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.50 | S64-047-5-SQ12X | $61.95 | $64.05 |
| 0.050 | 0.600 | 0.125 | 2.50 | S64-050-5-SQ12X | $61.95 | $64.05 |
| 0.055 | 0.660 | 0.125 | 2.50 | S64-055-5-SQ12X | $57.86 | $59.96 |
| 0.060 | 0.720 | 0.125 | 2.50 | S64-060-5-SQ12X | $57.86 | $59.96 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | S64-062-5-SQ12X | $52.08 | $54.18 |
| 0.065 | 0.780 | 0.125 | 2.50 | S64-065-5-SQ12X | $52.08 | $54.18 |
| 0.070 | 0.840 | 0.125 | 2.50 | S64-070-5-SQ12X | $52.08 | $54.18 |
| 0.075 | 0.900 | 0.125 | 2.50 | S64-075-5-SQ12X | $52.08 | $54.18 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | S64-078-5-SQ12X | $51.50 | $53.60 |
| 0.080 | 0.960 | 0.125 | 2.50 | S64-080-5-SQ12X | $51.50 | $53.60 |
| 0.085 | 1.020 | 0.125 | 2.50 | S64-085-5-SQ12X | $51.50 | $53.60 |
| 0.090 | 1.080 | 0.125 | 2.50 | S64-090-5-SQ12X | $51.50 | $53.60 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | S64-093-5-SQ12X | $50.82 | $52.92 |
| 0.095 | 1.140 | 0.125 | 2.50 | S64-095-5-SQ12X | $50.82 | $52.92 |
| 0.100 | 1.200 | 0.125 | 2.50 | S64-100-5-SQ12X | $50.82 | $52.92 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | S64-118-5-SQ12X | $50.82 | $52.92 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | S64-125-5-SQ12X | $50.82 | $52.92 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 12 | 2, 3, 4 Flute Tools |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Tool Selection

### Unsure how many flutes to select to deliver optimum results?

The ideal number of flutes for each tool is based on the job at hand and the material being cut.

**See page 71: Selecting the right tool for the job**

# QUALITY & REPEATABILITY

## MANUFACTURED BY MITGI: QUALITY

At MITGI, quality isn't just the end goal, it's embedded throughout the entire manufacturing process. From securing tool print accuracy, mid-job inspections, and pre-shipping approvals, we ensure that each tool meets our quality standards before it leaves our door. It is our goal that every customer receives tools that meet specs and exceed expectations with every order.

In order for this to happen, the design needs to be right the first time you use it and well-executed every time it is ordered.

The MITGI quality process begins using tool prints provided by customers or those designed in-house. Each tool print is reviewed for accuracy, tool performance optimization, and to establish the tightest tolerances that can be held in manufacturing. Every tool manufactured is inspected by the machine operator as it moves through production, reviewed by a quality technician, and checked by the department supervisor. This multi-step inspection process ensures that every tool produced will match customer expectations.

*Jessica, Coating*

## REPEATABILITY

After the initial order, specifications are kept in our tool record system to ensure that we're ready to manufacture the same tool each time it is reordered. Detailed program notes, in-house tool prints, routers, and inspection sheets give us the ability to track each job completely and to the source. Closely tracking each customer order means we're ready to manufacture the tool to the exact same specifications when you're ready to reorder.

**Ready to get started?**
**Contact us:**
**Phone: (320) 455-0535**
**Email: info@mitgi.us,**
**Web: www.mitgi.us**

# S71 Square Micro End Mills

FLUTES 5

1.5X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.047 | 0.155 | 0.125 | 2.50 | S71-031-5-SSQ5XR | $34.97 | $37.07 |
| 0.035 | 0.053 | 0.175 | 0.125 | 2.50 | S71-035-5-SSQ5XR | $33.71 | $35.81 |
| 0.039 (1mm) | 0.059 | 0.195 | 0.125 | 2.50 | S71-039-5-SSQ5XR | $33.71 | $35.81 |
| 0.040 | 0.060 | 0.200 | 0.125 | 2.50 | S71-040-5-SSQ5XR | $33.71 | $35.81 |
| 0.045 | 0.068 | 0.225 | 0.125 | 2.50 | S71-045-5-SSQ5XR | $33.71 | $35.81 |
| 0.047 (3/64) | 0.071 | 0.235 | 0.125 | 2.50 | S71-047-5-SSQ5XR | $33.71 | $35.81 |
| 0.050 | 0.075 | 0.250 | 0.125 | 2.50 | S71-050-5-SSQ5XR | $33.71 | $35.81 |
| 0.055 | 0.083 | 0.275 | 0.125 | 2.50 | S71-055-5-SSQ5XR | $33.71 | $35.81 |
| 0.060 | 0.090 | 0.300 | 0.125 | 2.50 | S71-060-5-SSQ5XR | $33.71 | $35.81 |
| 0.062 (1/16) | 0.093 | 0.310 | 0.125 | 2.50 | S71-062-5-SSQ5XR | $33.71 | $35.81 |
| 0.065 | 0.098 | 0.325 | 0.125 | 2.50 | S71-065-5-SSQ5XR | $33.71 | $35.81 |
| 0.070 | 0.105 | 0.350 | 0.125 | 2.50 | S71-070-5-SSQ5XR | $32.45 | $34.55 |
| 0.075 | 0.113 | 0.375 | 0.125 | 2.50 | S71-075-5-SSQ5XR | $32.45 | $34.55 |
| 0.078 (5/64) | 0.117 | 0.390 | 0.125 | 2.50 | S71-078-5-SSQ5XR | $32.45 | $34.55 |
| 0.080 | 0.120 | 0.400 | 0.125 | 2.50 | S71-080-5-SSQ5XR | $32.45 | $34.55 |
| 0.085 | 0.128 | 0.425 | 0.125 | 2.50 | S71-085-5-SSQ5XR | $32.45 | $34.55 |
| 0.090 | 0.135 | 0.450 | 0.125 | 2.50 | S71-090-5-SSQ5XR | $32.45 | $34.55 |
| 0.093 (3/32) | 0.140 | 0.465 | 0.125 | 2.50 | S71-093-5-SSQ5XR | $32.45 | $34.55 |
| 0.095 | 0.143 | 0.475 | 0.125 | 2.50 | S71-095-5-SSQ5XR | $32.45 | $34.55 |
| 0.100 | 0.150 | 0.500 | 0.125 | 2.50 | S71-100-5-SSQ5XR | $32.45 | $34.55 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | S71-118-5-SSQ5XR | $32.45 | $34.55 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | S71-125-5-SSQ5XR | $32.45 | $34.55 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 14 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Renewing Services

### Have your carbide tools become less effective over time? Extend tooling investment by utilizing MITGI renewing services.

In production, tools can become dull through normal wear and tear. In some cases, tools may become chipped through production or mishandling. In many cases, tools can be resharpened to bring new life to old tools. Many carbide tools made by MITGI or manufactured by other vendors may qualify for resharpening.

A complete list of qualifying tool types can be found on page 47. Contact MITGI for more renewing service information and pricing estimates.

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.093 | 0.155 | 0.125 | 2.50 | S68-031-5-SQ5XR | $34.97 | $37.07 |
| 0.035 | 0.105 | 0.175 | 0.125 | 2.50 | S68-035-5-SQ5XR | $33.71 | $35.81 |
| 0.039 (1mm) | 0.117 | 0.195 | 0.125 | 2.50 | S68-039-5-SQ5XR | $33.71 | $35.81 |
| 0.040 | 0.120 | 0.200 | 0.125 | 2.50 | S68-040-5-SQ5XR | $33.71 | $35.81 |
| 0.045 | 0.135 | 0.225 | 0.125 | 2.50 | S68-045-5-SQ5XR | $33.71 | $35.81 |
| 0.047 (3/64) | 0.141 | 0.235 | 0.125 | 2.50 | S68-047-5-SQ5XR | $33.71 | $35.81 |
| 0.050 | 0.150 | 0.250 | 0.125 | 2.50 | S68-050-5-SQ5XR | $33.71 | $35.81 |
| 0.055 | 0.165 | 0.275 | 0.125 | 2.50 | S68-055-5-SQ5XR | $33.71 | $35.81 |
| 0.060 | 0.180 | 0.300 | 0.125 | 2.50 | S68-060-5-SQ5XR | $33.71 | $35.81 |
| 0.062 (1/16) | 0.186 | 0.310 | 0.125 | 2.50 | S68-062-5-SQ5XR | $33.71 | $35.81 |
| 0.065 | 0.195 | 0.325 | 0.125 | 2.50 | S68-065-5-SQ5XR | $33.71 | $35.81 |
| 0.070 | 0.210 | 0.350 | 0.125 | 2.50 | S68-070-5-SQ5XR | $32.45 | $34.55 |
| 0.075 | 0.225 | 0.375 | 0.125 | 2.50 | S68-075-5-SQ5XR | $32.45 | $34.55 |
| 0.078 (5/64) | 0.234 | 0.390 | 0.125 | 2.50 | S68-078-5-SQ5XR | $32.45 | $34.55 |
| 0.080 | 0.240 | 0.400 | 0.125 | 2.50 | S68-080-5-SQ5XR | $32.45 | $34.55 |
| 0.085 | 0.255 | 0.425 | 0.125 | 2.50 | S68-085-5-SQ5XR | $32.45 | $34.55 |
| 0.090 | 0.270 | 0.450 | 0.125 | 2.50 | S68-090-5-SQ5XR | $32.45 | $34.55 |
| 0.093 (3/32) | 0.279 | 0.465 | 0.125 | 2.50 | S68-093-5-SQ5XR | $32.45 | $34.55 |
| 0.095 | 0.285 | 0.475 | 0.125 | 2.50 | S68-095-5-SQ5XR | $32.45 | $34.55 |
| 0.100 | 0.300 | 0.500 | 0.125 | 2.50 | S68-100-5-SQ5XR | $32.45 | $34.55 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | S68-118-5-SQ5XR | $32.45 | $34.55 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | S68-125-5-SQ5XR | $32.45 | $34.55 |

FLUTES 5

3X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 15 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MITGI RESULTS: Service is a Team Sport

"Thank you for becoming one of our most trusted partners. Your account manager and engineer have solved an issue that has been plaguing us for months. Your team always responds quickly and brings value to our business.

Thanks for adding our part number to your system and label. This is huge for us as all of our tools are dispensed using our internal part number.

Your quality and consistency are spot on!" - *Sam*

*Amy, Administrative Assistant*

# S72 Square Micro End Mills

FLUTES 5

1.5X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.047 | 0.248 | 0.125 | 2.50 | S72-031-5-SSQ8XR | $35.12 | $37.22 |
| 0.035 | 0.053 | 0.280 | 0.125 | 2.50 | S72-035-5-SSQ8XR | $33.71 | $35.81 |
| 0.039 (1mm) | 0.059 | 0.312 | 0.125 | 2.50 | S72-039-5-SSQ8XR | $33.71 | $35.81 |
| 0.040 | 0.060 | 0.320 | 0.125 | 2.50 | S72-040-5-SSQ8XR | $33.71 | $35.81 |
| 0.045 | 0.068 | 0.360 | 0.125 | 2.50 | S72-045-5-SSQ8XR | $33.71 | $35.81 |
| 0.047 (3/64) | 0.071 | 0.376 | 0.125 | 2.50 | S72-047-5-SSQ8XR | $33.71 | $35.81 |
| 0.050 | 0.075 | 0.400 | 0.125 | 2.50 | S72-050-5-SSQ8XR | $33.71 | $35.81 |
| 0.055 | 0.083 | 0.440 | 0.125 | 2.50 | S72-055-5-SSQ8XR | $33.71 | $35.81 |
| 0.060 | 0.090 | 0.480 | 0.125 | 2.50 | S72-060-5-SSQ8XR | $33.71 | $35.81 |
| 0.062 (1/16) | 0.093 | 0.496 | 0.125 | 2.50 | S72-062-5-SSQ8XR | $33.71 | $35.81 |
| 0.065 | 0.098 | 0.520 | 0.125 | 2.50 | S72-065-5-SSQ8XR | $33.71 | $35.81 |
| 0.070 | 0.105 | 0.560 | 0.125 | 2.50 | S72-070-5-SSQ8XR | $32.45 | $34.55 |
| 0.075 | 0.113 | 0.600 | 0.125 | 2.50 | S72-075-5-SSQ8XR | $32.45 | $34.55 |
| 0.078 (5/64) | 0.117 | 0.624 | 0.125 | 2.50 | S72-078-5-SSQ8XR | $32.45 | $34.55 |
| 0.080 | 0.120 | 0.640 | 0.125 | 2.50 | S72-080-5-SSQ8XR | $32.45 | $34.55 |
| 0.085 | 0.128 | 0.680 | 0.125 | 2.50 | S72-085-5-SSQ8XR | $32.45 | $34.55 |
| 0.090 | 0.135 | 0.720 | 0.125 | 2.50 | S72-090-5-SSQ8XR | $32.45 | $34.55 |
| 0.093 (3/32) | 0.140 | 0.744 | 0.125 | 2.50 | S72-093-5-SSQ8XR | $32.45 | $34.55 |
| 0.095 | 0.143 | 0.760 | 0.125 | 2.50 | S72-095-5-SSQ8XR | $32.45 | $34.55 |
| 0.100 | 0.150 | 0.800 | 0.125 | 2.50 | S72-100-5-SSQ8XR | $32.45 | $34.55 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | S72-118-5-SSQ8XR | $32.45 | $34.55 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | S72-125-5-SSQ8XR | $32.45 | $34.55 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 16 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Innovation and Design

### Complex manufacturing jobs require tooling that is up to the task. Our in-house design and manufacturing teams are up to the challenge.

When customers can't find exactly what they are looking for or when they are facing a particularly difficult job, we rely on talented designers and operators to find innovative solutions to meet their needs.

Our in-house design teams are able to review tools, identify enhancements that may provide superior production capabilities, or create a new tool to match customer specifications. Using a wide range of experiences in machining, tooling, and production, our teams collaborate to design and manufacture tools that can accomplish even the most complex manufacturing tasks.

Contact us to start working with our design and manufacturing teams today.

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.093 | 0.248 | 0.125 | 2.50 | S69-031-5-SQ8XR | $35.12 | $37.22 |
| 0.035 | 0.105 | 0.280 | 0.125 | 2.50 | S69-035-5-SQ8XR | $33.71 | $35.81 |
| 0.039 (1mm) | 0.117 | 0.312 | 0.125 | 2.50 | S69-039-5-SQ8XR | $33.71 | $35.81 |
| 0.040 | 0.120 | 0.320 | 0.125 | 2.50 | S69-040-5-SQ8XR | $33.71 | $35.81 |
| 0.045 | 0.135 | 0.360 | 0.125 | 2.50 | S69-045-5-SQ8XR | $33.71 | $35.81 |
| 0.047 (3/64) | 0.141 | 0.376 | 0.125 | 2.50 | S69-047-5-SQ8XR | $33.71 | $35.81 |
| 0.050 | 0.150 | 0.400 | 0.125 | 2.50 | S69-050-5-SQ8XR | $33.71 | $35.81 |
| 0.055 | 0.165 | 0.440 | 0.125 | 2.50 | S69-055-5-SQ8XR | $33.71 | $35.81 |
| 0.060 | 0.180 | 0.480 | 0.125 | 2.50 | S69-060-5-SQ8XR | $33.71 | $35.81 |
| 0.062 (1/16) | 0.186 | 0.496 | 0.125 | 2.50 | S69-062-5-SQ8XR | $33.71 | $35.81 |
| 0.065 | 0.195 | 0.520 | 0.125 | 2.50 | S69-065-5-SQ8XR | $33.71 | $35.81 |
| 0.070 | 0.210 | 0.560 | 0.125 | 2.50 | S69-070-5-SQ8XR | $32.45 | $34.55 |
| 0.075 | 0.225 | 0.600 | 0.125 | 2.50 | S69-075-5-SQ8XR | $32.45 | $34.55 |
| 0.078 (5/64) | 0.234 | 0.624 | 0.125 | 2.50 | S69-078-5-SQ8XR | $32.45 | $34.55 |
| 0.080 | 0.240 | 0.640 | 0.125 | 2.50 | S69-080-5-SQ8XR | $32.45 | $34.55 |
| 0.085 | 0.255 | 0.680 | 0.125 | 2.50 | S69-085-5-SQ8XR | $32.45 | $34.55 |
| 0.090 | 0.270 | 0.720 | 0.125 | 2.50 | S69-090-5-SQ8XR | $32.45 | $34.55 |
| 0.093 (3/32) | 0.279 | 0.744 | 0.125 | 2.50 | S69-093-5-SQ8XR | $32.45 | $34.55 |
| 0.095 | 0.285 | 0.760 | 0.125 | 2.50 | S69-095-5-SQ8XR | $32.45 | $34.55 |
| 0.100 | 0.300 | 0.800 | 0.125 | 2.50 | S69-100-5-SQ8XR | $32.45 | $34.55 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | S69-118-5-SQ8XR | $32.45 | $34.55 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | S69-125-5-SQ8XR | $32.45 | $34.55 |

FLUTES 5

3X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 17 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MITGI RESULTS: Great Expectations

"The tools we used without the honed edges worked perfectly. We didn't even need to test the honed edge samples you provided. We've been very happy with all of the cutting tools we have received from you.

They have all performed as expected; your customer service and lead times have been great.

I look forward to future projects with you and your company."
- *Guy*

*Corey, Drafter / Production Support*

# S73 Square Micro End Mills

FLUTES 5

1.5X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.047 | 0.372 | 0.125 | 2.50 | S73-031-5-SSQ12XR | $36.33 | $38.43 |
| 0.035 | 0.053 | 0.420 | 0.125 | 2.50 | S73-035-5-SSQ12XR | $34.86 | $36.96 |
| 0.039 (1mm) | 0.059 | 0.468 | 0.125 | 2.50 | S73-039-5-SSQ12XR | $34.86 | $36.96 |
| 0.040 | 0.060 | 0.480 | 0.125 | 2.50 | S73-040-5-SSQ12XR | $34.86 | $36.96 |
| 0.045 | 0.068 | 0.540 | 0.125 | 2.50 | S73-045-5-SSQ12XR | $34.65 | $36.75 |
| 0.047 (3/64) | 0.071 | 0.564 | 0.125 | 2.50 | S73-047-5-SSQ12XR | $34.65 | $36.75 |
| 0.050 | 0.075 | 0.600 | 0.125 | 2.50 | S73-050-5-SSQ12XR | $34.65 | $36.75 |
| 0.055 | 0.083 | 0.660 | 0.125 | 2.50 | S73-055-5-SSQ12XR | $34.65 | $36.75 |
| 0.060 | 0.090 | 0.720 | 0.125 | 2.50 | S73-060-5-SSQ12XR | $34.65 | $36.75 |
| 0.062 (1/16) | 0.093 | 0.744 | 0.125 | 2.50 | S73-062-5-SSQ12XR | $34.65 | $36.75 |
| 0.065 | 0.098 | 0.780 | 0.125 | 2.50 | S73-065-5-SSQ12XR | $34.65 | $36.75 |
| 0.070 | 0.105 | 0.840 | 0.125 | 2.50 | S73-070-5-SSQ12XR | $33.18 | $35.28 |
| 0.075 | 0.113 | 0.900 | 0.125 | 2.50 | S73-075-5-SSQ12XR | $33.18 | $35.28 |
| 0.078 (5/64) | 0.117 | 0.936 | 0.125 | 2.50 | S73-078-5-SSQ12XR | $33.18 | $35.28 |
| 0.080 | 0.120 | 0.960 | 0.125 | 2.50 | S73-080-5-SSQ12XR | $33.18 | $35.28 |
| 0.085 | 0.128 | 1.020 | 0.125 | 2.50 | S73-085-5-SSQ12XR | $33.18 | $35.28 |
| 0.090 | 0.135 | 1.080 | 0.125 | 2.50 | S73-090-5-SSQ12XR | $33.18 | $35.28 |
| 0.093 (3/32) | 0.140 | 1.116 | 0.125 | 2.50 | S73-093-5-SSQ12XR | $33.18 | $35.28 |
| 0.095 | 0.143 | 1.140 | 0.125 | 2.50 | S73-095-5-SSQ12XR | $33.18 | $35.28 |
| 0.100 | 0.150 | 1.200 | 0.125 | 2.50 | S73-100-5-SSQ12XR | $33.18 | $35.28 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | S73-118-5-SSQ12XR | $33.18 | $35.28 |
| 0.125 (1/8) | 0.187 | 1.500 | 0.125 | 2.50 | S73-125-5-SSQ12XR | $33.18 | $35.28 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 18 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Fast Turnaround Time

**Finding the right tool for the job is important. Don't let an out-of-inventory situation keep you from completing the job on time.**

Long lead times or out-of-stock situations can be disruptive to your manufacturing schedule. Through flexible scheduling and in-house capabilities, we are able to manufacture standard tools in three days or less, custom within two weeks. By utilizing on-site design and manufacturing, we're able to quickly deliver the tools you need.

Contact us to start working with our design and manufacturing teams today.

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.093 | 0.372 | 0.125 | 2.50 | S70-031-5-SQ12XR | $36.33 | $38.43 |
| 0.035 | 0.105 | 0.420 | 0.125 | 2.50 | S70-035-5-SQ12XR | $34.86 | $36.96 |
| 0.039 (1mm) | 0.117 | 0.468 | 0.125 | 2.50 | S70-039-5-SQ12XR | $34.86 | $36.96 |
| 0.040 | 0.120 | 0.480 | 0.125 | 2.50 | S70-040-5-SQ12XR | $34.86 | $36.96 |
| 0.045 | 0.135 | 0.540 | 0.125 | 2.50 | S70-045-5-SQ12XR | $34.65 | $36.75 |
| 0.047 (3/64) | 0.141 | 0.564 | 0.125 | 2.50 | S70-047-5-SQ12XR | $34.65 | $36.75 |
| 0.050 | 0.150 | 0.600 | 0.125 | 2.50 | S70-050-5-SQ12XR | $34.65 | $36.75 |
| 0.055 | 0.165 | 0.660 | 0.125 | 2.50 | S70-055-5-SQ12XR | $34.65 | $36.75 |
| 0.060 | 0.180 | 0.720 | 0.125 | 2.50 | S70-060-5-SQ12XR | $34.65 | $36.75 |
| 0.062 (1/16) | 0.186 | 0.744 | 0.125 | 2.50 | S70-062-5-SQ12XR | $34.65 | $36.75 |
| 0.065 | 0.195 | 0.780 | 0.125 | 2.50 | S70-065-5-SQ12XR | $34.65 | $36.75 |
| 0.070 | 0.210 | 0.840 | 0.125 | 2.50 | S70-070-5-SQ12XR | $33.18 | $35.28 |
| 0.075 | 0.225 | 0.900 | 0.125 | 2.50 | S70-075-5-SQ12XR | $33.18 | $35.28 |
| 0.078 (5/64) | 0.234 | 0.936 | 0.125 | 2.50 | S70-078-5-SQ12XR | $33.18 | $35.28 |
| 0.080 | 0.240 | 0.960 | 0.125 | 2.50 | S70-080-5-SQ12XR | $33.18 | $35.28 |
| 0.085 | 0.255 | 1.020 | 0.125 | 2.50 | S70-085-5-SQ12XR | $33.18 | $35.28 |
| 0.090 | 0.270 | 1.080 | 0.125 | 2.50 | S70-090-5-SQ12XR | $33.18 | $35.28 |
| 0.093 (3/32) | 0.279 | 1.116 | 0.125 | 2.50 | S70-093-5-SQ12XR | $33.18 | $35.28 |
| 0.095 | 0.285 | 1.140 | 0.125 | 2.50 | S70-095-5-SQ12XR | $33.18 | $35.28 |
| 0.100 | 0.300 | 1.200 | 0.125 | 2.50 | S70-100-5-SQ12XR | $33.18 | $35.28 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | S70-118-5-SQ12XR | $33.18 | $35.28 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | S70-125-5-SQ12XR | $33.18 | $35.28 |

FLUTES 5

3X LENGTH OF CUT

12X REACH

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 19 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MITGI RESULTS: Delivery, Fast and On-Time

"We appreciate all of the work you're doing for us. When the owner asked for your tools, I wanted to get the quote in your hands quickly. I think he's impressed with the quality and delivery that MITGI provides!

I'm impressed with your customer service team. THANK YOU!"
*- Teresa*

*Thomas, Account Manager*

# S83 Corner Radius Micro End Mills

FLUTES 5

1.5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.031 (1/32) | 0.047 | 0.125 | 1.50 | 0.005 | S83-031-5-.005R | $35.28 | $37.38 |
| 0.035 | 0.053 | 0.125 | 1.50 | 0.005 | S83-035-5-.005R | $26.30 | $28.40 |
| 0.039 (1mm) | 0.059 | 0.125 | 1.50 | 0.005 | S83-039-5-.005R | $26.30 | $28.40 |
| 0.040 | 0.060 | 0.125 | 1.50 | 0.005 | S83-040-5-.005R | $26.30 | $28.40 |
| 0.045 | 0.068 | 0.125 | 1.50 | 0.005 | S83-045-5-.005R | $26.30 | $28.40 |
| 0.047 (3/64) | 0.071 | 0.125 | 1.50 | 0.005 | S83-047-5-.005R | $26.30 | $28.40 |
| 0.050 | 0.075 | 0.125 | 1.50 | 0.005 | S83-050-5-.005R | $26.30 | $28.40 |
| 0.055 | 0.083 | 0.125 | 1.50 | 0.005 | S83-055-5-.005R | $24.99 | $27.09 |
| 0.060 | 0.090 | 0.125 | 1.50 | 0.005 | S83-060-5-.005R | $24.99 | $27.09 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | 0.005 | S83-062-5-.005R | $24.99 | $27.09 |
| 0.065 | 0.098 | 0.125 | 1.50 | 0.005 | S83-065-5-.005R | $24.99 | $27.09 |
| 0.070 | 0.105 | 0.125 | 1.50 | 0.005 | S83-070-5-.005R | $24.99 | $27.09 |
| 0.070 | 0.105 | 0.125 | 1.50 | 0.010 | S83-070-5-.010R | $24.99 | $27.09 |
| 0.075 | 0.113 | 0.125 | 1.50 | 0.005 | S83-075-5-.005R | $24.99 | $27.09 |
| 0.075 | 0.113 | 0.125 | 1.50 | 0.010 | S83-075-5-.010R | $24.99 | $27.09 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | 0.005 | S83-078-5-.005R | $24.99 | $27.09 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | 0.010 | S83-078-5-.010R | $24.99 | $27.09 |
| 0.080 | 0.120 | 0.125 | 1.50 | 0.005 | S83-080-5-.005R | $24.99 | $27.09 |
| 0.080 | 0.120 | 0.125 | 1.50 | 0.010 | S83-080-5-.010R | $24.99 | $27.09 |
| 0.085 | 0.128 | 0.125 | 1.50 | 0.005 | S83-085-5-.005R | $24.99 | $27.09 |
| 0.085 | 0.128 | 0.125 | 1.50 | 0.010 | S83-085-5-.010R | $24.99 | $27.09 |
| 0.090 | 0.135 | 0.125 | 1.50 | 0.005 | S83-090-5-.005R | $24.99 | $27.09 |
| 0.090 | 0.135 | 0.125 | 1.50 | 0.010 | S83-090-5-.010R | $24.99 | $27.09 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | 0.005 | S83-093-5-.005R | $24.99 | $27.09 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | 0.010 | S83-093-5-.010R | $24.99 | $27.09 |
| 0.095 | 0.143 | 0.125 | 1.50 | 0.005 | S83-095-5-.005R | $24.99 | $27.09 |
| 0.095 | 0.143 | 0.125 | 1.50 | 0.010 | S83-095-5-.010R | $24.99 | $27.09 |
| 0.100 | 0.150 | 0.125 | 1.50 | 0.005 | S83-100-5-.005R | $24.73 | $26.83 |
| 0.100 | 0.150 | 0.125 | 1.50 | 0.010 | S83-100-5-.010R | $24.73 | $26.83 |
| 0.100 | 0.150 | 0.125 | 1.50 | 0.015 | S83-100-5-.015R | $24.73 | $26.83 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.005 | S83-118-5-.005R | $24.73 | $26.83 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.010 | S83-118-5-.010R | $24.73 | $26.83 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.015 | S83-118-5-.015R | $24.73 | $26.83 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.005 | S83-125-5-.005R | $24.73 | $26.83 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.010 | S83-125-5-.010R | $24.73 | $26.83 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.015 | S83-125-5-.015R | $24.73 | $26.83 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.020 | S83-125-5-.020R | $24.73 | $26.83 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 20 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Corner Radius Micro End Mills



FLUTES 5

3X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.031 (1/32) | 0.093 | 0.125 | 1.50 | 0.005 | S58-031-5-.005R | $35.28 | $37.38 |
| 0.035 | 0.105 | 0.125 | 1.50 | 0.005 | S58-035-5-.005R | $26.30 | $28.40 |
| 0.039 (1mm) | 0.117 | 0.125 | 1.50 | 0.005 | S58-039-5-.005R | $26.30 | $28.40 |
| 0.040 | 0.120 | 0.125 | 1.50 | 0.005 | S58-040-5-.005R | $26.30 | $28.40 |
| 0.045 | 0.135 | 0.125 | 1.50 | 0.005 | S58-045-5-.005R | $26.30 | $28.40 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | 0.005 | S58-047-5-.005R | $26.30 | $28.40 |
| 0.050 | 0.150 | 0.125 | 1.50 | 0.005 | S58-050-5-.005R | $26.30 | $28.40 |
| 0.055 | 0.165 | 0.125 | 1.50 | 0.005 | S58-055-5-.005R | $24.99 | $27.09 |
| 0.060 | 0.180 | 0.125 | 1.50 | 0.005 | S58-060-5-.005R | $24.99 | $27.09 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | 0.005 | S58-062-5-.005R | $24.99 | $27.09 |
| 0.065 | 0.195 | 0.125 | 1.50 | 0.005 | S58-065-5-.005R | $24.99 | $27.09 |
| 0.070 | 0.210 | 0.125 | 1.50 | 0.005 | S58-070-5-.005R | $24.99 | $27.09 |
| 0.070 | 0.210 | 0.125 | 1.50 | 0.010 | S58-070-5-.010R | $24.99 | $27.09 |
| 0.075 | 0.225 | 0.125 | 1.50 | 0.005 | S58-075-5-.005R | $24.99 | $27.09 |
| 0.075 | 0.225 | 0.125 | 1.50 | 0.010 | S58-075-5-.010R | $24.99 | $27.09 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | 0.005 | S58-078-5-.005R | $24.99 | $27.09 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | 0.010 | S58-078-5-.010R | $24.99 | $27.09 |
| 0.080 | 0.240 | 0.125 | 1.50 | 0.005 | S58-080-5-.005R | $24.99 | $27.09 |
| 0.080 | 0.240 | 0.125 | 1.50 | 0.010 | S58-080-5-.010R | $24.99 | $27.09 |
| 0.085 | 0.255 | 0.125 | 1.50 | 0.005 | S58-085-5-.005R | $24.99 | $27.09 |
| 0.085 | 0.255 | 0.125 | 1.50 | 0.010 | S58-085-5-.010R | $24.99 | $27.09 |
| 0.090 | 0.270 | 0.125 | 1.50 | 0.005 | S58-090-5-.005R | $24.99 | $27.09 |
| 0.090 | 0.270 | 0.125 | 1.50 | 0.010 | S58-090-5-.010R | $24.99 | $27.09 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | 0.005 | S58-093-5-.005R | $24.99 | $27.09 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | 0.010 | S58-093-5-.010R | $24.99 | $27.09 |
| 0.095 | 0.285 | 0.125 | 1.50 | 0.005 | S58-095-5-.005R | $24.99 | $27.09 |
| 0.095 | 0.285 | 0.125 | 1.50 | 0.010 | S58-095-5-.010R | $24.99 | $27.09 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.005 | S58-100-5-.005R | $24.73 | $26.83 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.010 | S58-100-5-.010R | $24.73 | $26.83 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.015 | S58-100-5-.015R | $24.73 | $26.83 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.005 | S58-118-5-.005R | $24.73 | $26.83 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.010 | S58-118-5-.010R | $24.73 | $26.83 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.015 | S58-118-5-.015R | $24.73 | $26.83 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.005 | S58-125-5-.005R | $24.73 | $26.83 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.010 | S58-125-5-.010R | $24.73 | $26.83 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.015 | S58-125-5-.015R | $24.73 | $26.83 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 22 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S107 Corner Radius Micro End Mills

FLUTES 5

5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | 0.005 | S107-031-5-.005R | $27.62 | $29.72 |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | 0.010 | S107-031-5-.010R | $27.62 | $29.72 |
| 0.035 | 0.175 | 0.125 | 2.50 | 0.005 | S107-035-5-.005R | $27.62 | $29.72 |
| 0.035 | 0.175 | 0.125 | 2.50 | 0.010 | S107-035-5-.010R | $27.62 | $29.72 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | 0.005 | S107-039-5-.005R | $27.62 | $29.72 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | 0.010 | S107-039-5-.010R | $27.62 | $29.72 |
| 0.040 | 0.200 | 0.125 | 2.50 | 0.005 | S107-040-5-.005R | $27.62 | $29.72 |
| 0.040 | 0.200 | 0.125 | 2.50 | 0.010 | S107-040-5-.010R | $27.62 | $29.72 |
| 0.045 | 0.225 | 0.125 | 2.50 | 0.005 | S107-045-5-.005R | $27.62 | $29.72 |
| 0.045 | 0.225 | 0.125 | 2.50 | 0.010 | S107-045-5-.010R | $27.62 | $29.72 |
| 0.045 | 0.225 | 0.125 | 2.50 | 0.015 | S107-045-5-.015R | $27.62 | $29.72 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | 0.005 | S107-047-5-.005R | $27.62 | $29.72 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | 0.010 | S107-047-5-.010R | $27.62 | $29.72 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | 0.015 | S107-047-5-.015R | $27.62 | $29.72 |
| 0.050 | 0.250 | 0.125 | 2.50 | 0.005 | S107-050-5-.005R | $27.62 | $29.72 |
| 0.050 | 0.250 | 0.125 | 2.50 | 0.010 | S107-050-5-.010R | $27.62 | $29.72 |
| 0.050 | 0.250 | 0.125 | 2.50 | 0.015 | S107-050-5-.015R | $27.62 | $29.72 |
| 0.055 | 0.275 | 0.125 | 2.50 | 0.005 | S107-055-5-.005R | $24.36 | $26.46 |
| 0.055 | 0.275 | 0.125 | 2.50 | 0.010 | S107-055-5-.010R | $24.36 | $26.46 |
| 0.055 | 0.275 | 0.125 | 2.50 | 0.015 | S107-055-5-.015R | $24.36 | $26.46 |
| 0.060 | 0.300 | 0.125 | 2.50 | 0.005 | S107-060-5-.005R | $24.36 | $26.46 |
| 0.060 | 0.300 | 0.125 | 2.50 | 0.010 | S107-060-5-.010R | $24.36 | $26.46 |
| 0.060 | 0.300 | 0.125 | 2.50 | 0.015 | S107-060-5-.015R | $24.36 | $26.46 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | 0.005 | S107-062-5-.005R | $24.36 | $26.46 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | 0.010 | S107-062-5-.010R | $24.36 | $26.46 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | 0.015 | S107-062-5-.015R | $24.36 | $26.46 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | 0.020 | S107-062-5-.020R | $24.36 | $26.46 |
| 0.065 | 0.325 | 0.125 | 2.50 | 0.005 | S107-065-5-.005R | $24.36 | $26.46 |
| 0.065 | 0.325 | 0.125 | 2.50 | 0.010 | S107-065-5-.010R | $24.36 | $26.46 |
| 0.065 | 0.325 | 0.125 | 2.50 | 0.015 | S107-065-5-.015R | $24.36 | $26.46 |
| 0.070 | 0.350 | 0.125 | 2.50 | 0.005 | S107-070-5-.005R | $24.36 | $26.46 |
| 0.070 | 0.350 | 0.125 | 2.50 | 0.010 | S107-070-5-.010R | $24.36 | $26.46 |
| 0.070 | 0.350 | 0.125 | 2.50 | 0.015 | S107-070-5-.015R | $24.36 | $26.46 |
| 0.075 | 0.375 | 0.125 | 2.50 | 0.005 | S107-075-5-.005R | $24.36 | $26.46 |
| 0.075 | 0.375 | 0.125 | 2.50 | 0.010 | S107-075-5-.010R | $24.36 | $26.46 |
| 0.075 | 0.375 | 0.125 | 2.50 | 0.015 | S107-075-5-.015R | $24.36 | $26.46 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.005 | S107-078-5-.005R | $24.36 | $26.46 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.010 | S107-078-5-.010R | $24.36 | $26.46 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.015 | S107-078-5-.015R | $24.36 | $26.46 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.020 | S107-078-5-.020R | $24.36 | $26.46 |
| 0.080 | 0.400 | 0.125 | 2.50 | 0.005 | S107-080-5-.005R | $24.36 | $26.46 |
| 0.080 | 0.400 | 0.125 | 2.50 | 0.010 | S107-080-5-.010R | $24.36 | $26.46 |
| 0.080 | 0.400 | 0.125 | 2.50 | 0.015 | S107-080-5-.015R | $24.36 | $26.46 |

FLUTES 5

5X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.085 | 0.425 | 0.125 | 2.50 | 0.005 | S107-085-5-.005R | $22.47 | $24.57 |
| 0.085 | 0.425 | 0.125 | 2.50 | 0.010 | S107-085-5-.010R | $22.47 | $24.57 |
| 0.085 | 0.425 | 0.125 | 2.50 | 0.015 | S107-085-5-.015R | $22.47 | $24.57 |
| 0.090 | 0.450 | 0.125 | 2.50 | 0.005 | S107-090-5-.005R | $22.47 | $24.57 |
| 0.090 | 0.450 | 0.125 | 2.50 | 0.010 | S107-090-5-.010R | $22.47 | $24.57 |
| 0.090 | 0.450 | 0.125 | 2.50 | 0.015 | S107-090-5-.015R | $22.47 | $24.57 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.005 | S107-093-5-.005R | $22.47 | $24.57 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.010 | S107-093-5-.010R | $22.47 | $24.57 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.015 | S107-093-5-.015R | $22.47 | $24.57 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.020 | S107-093-5-.020R | $22.47 | $24.57 |
| 0.095 | 0.475 | 0.125 | 2.50 | 0.005 | S107-095-5-.005R | $22.47 | $24.57 |
| 0.095 | 0.475 | 0.125 | 2.50 | 0.010 | S107-095-5-.010R | $22.47 | $24.57 |
| 0.095 | 0.475 | 0.125 | 2.50 | 0.015 | S107-095-5-.015R | $22.47 | $24.57 |
| 0.100 | 0.500 | 0.125 | 2.50 | 0.005 | S107-100-5-.005R | $22.47 | $24.57 |
| 0.100 | 0.500 | 0.125 | 2.50 | 0.010 | S107-100-5-.010R | $22.47 | $24.57 |
| 0.100 | 0.500 | 0.125 | 2.50 | 0.015 | S107-100-5-.015R | $22.47 | $24.57 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.005 | S107-118-5-.005R | $22.47 | $24.57 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.010 | S107-118-5-.010R | $22.47 | $24.57 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.015 | S107-118-5-.015R | $22.47 | $24.57 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.020 | S107-118-5-.020R | $22.47 | $24.57 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.005 | S107-125-5-.005R | $22.47 | $24.57 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.010 | S107-125-5-.010R | $22.47 | $24.57 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.015 | S107-125-5-.015R | $22.47 | $24.57 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.020 | S107-125-5-.020R | $22.47 | $24.57 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 24 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Custom Tools

### Can't find a standard tool to meet your exact specifications?

Specials or modified standards may be the answer. Learn more about working with MITGI to create tools from customer prints, part prints, or to discuss combination tools.

**See page 206-207: Custom tools**

# S108 Corner Radius Micro End Mills

FLUTES 5

8X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.031 (1/32) | 0.248 | 0.125 | 2.50 | 0.005 | S108-031-5-.005R | $53.66 | $55.76 |
| 0.031 (1/32) | 0.248 | 0.125 | 2.50 | 0.010 | S108-031-5-.010R | $53.66 | $55.76 |
| 0.035 | 0.280 | 0.125 | 2.50 | 0.005 | S108-035-5-.005R | $53.66 | $55.76 |
| 0.035 | 0.280 | 0.125 | 2.50 | 0.010 | S108-035-5-.010R | $53.66 | $55.76 |
| 0.039 (1mm) | 0.312 | 0.125 | 2.50 | 0.005 | S108-039-5-.005R | $52.29 | $54.39 |
| 0.039 (1mm) | 0.312 | 0.125 | 2.50 | 0.010 | S108-039-5-.010R | $52.29 | $54.39 |
| 0.040 | 0.320 | 0.125 | 2.50 | 0.005 | S108-040-5-.005R | $52.29 | $54.39 |
| 0.040 | 0.320 | 0.125 | 2.50 | 0.010 | S108-040-5-.010R | $52.29 | $54.39 |
| 0.045 | 0.360 | 0.125 | 2.50 | 0.005 | S108-045-5-.005R | $49.77 | $51.87 |
| 0.045 | 0.360 | 0.125 | 2.50 | 0.010 | S108-045-5-.010R | $49.77 | $51.87 |
| 0.045 | 0.360 | 0.125 | 2.50 | 0.015 | S108-045-5-.015R | $49.77 | $51.87 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.50 | 0.005 | S108-047-5-.005R | $49.77 | $51.87 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.50 | 0.010 | S108-047-5-.010R | $49.77 | $51.87 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.50 | 0.015 | S108-047-5-.015R | $49.77 | $51.87 |
| 0.050 | 0.400 | 0.125 | 2.50 | 0.005 | S108-050-5-.005R | $49.77 | $51.87 |
| 0.050 | 0.400 | 0.125 | 2.50 | 0.010 | S108-050-5-.010R | $49.77 | $51.87 |
| 0.050 | 0.400 | 0.125 | 2.50 | 0.015 | S108-050-5-.015R | $49.77 | $51.87 |
| 0.055 | 0.440 | 0.125 | 2.50 | 0.005 | S108-055-5-.005R | $32.66 | $34.76 |
| 0.055 | 0.440 | 0.125 | 2.50 | 0.010 | S108-055-5-.010R | $32.66 | $34.76 |
| 0.055 | 0.440 | 0.125 | 2.50 | 0.015 | S108-055-5-.015R | $32.66 | $34.76 |
| 0.060 | 0.480 | 0.125 | 2.50 | 0.005 | S108-060-5-.005R | $32.66 | $34.76 |
| 0.060 | 0.480 | 0.125 | 2.50 | 0.010 | S108-060-5-.010R | $32.66 | $34.76 |
| 0.060 | 0.480 | 0.125 | 2.50 | 0.015 | S108-060-5-.015R | $32.66 | $34.76 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | 0.005 | S108-062-5-.005R | $32.66 | $34.76 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | 0.010 | S108-062-5-.010R | $32.66 | $34.76 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | 0.015 | S108-062-5-.015R | $32.66 | $34.76 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.50 | 0.020 | S108-062-5-.020R | $32.66 | $34.76 |
| 0.065 | 0.520 | 0.125 | 2.50 | 0.005 | S108-065-5-.005R | $26.51 | $28.61 |
| 0.065 | 0.520 | 0.125 | 2.50 | 0.010 | S108-065-5-.010R | $26.51 | $28.61 |
| 0.065 | 0.520 | 0.125 | 2.50 | 0.015 | S108-065-5-.015R | $26.51 | $28.61 |
| 0.070 | 0.560 | 0.125 | 2.50 | 0.005 | S108-070-5-.005R | $26.51 | $28.61 |
| 0.070 | 0.560 | 0.125 | 2.50 | 0.010 | S108-070-5-.010R | $26.51 | $28.61 |
| 0.070 | 0.560 | 0.125 | 2.50 | 0.015 | S108-070-5-.015R | $26.51 | $28.61 |
| 0.075 | 0.600 | 0.125 | 2.50 | 0.005 | S108-075-5-.005R | $26.51 | $28.61 |
| 0.075 | 0.600 | 0.125 | 2.50 | 0.010 | S108-075-5-.010R | $26.51 | $28.61 |
| 0.075 | 0.600 | 0.125 | 2.50 | 0.015 | S108-075-5-.015R | $26.51 | $28.61 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | 0.005 | S108-078-5-.005R | $26.51 | $28.61 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | 0.010 | S108-078-5-.010R | $26.51 | $28.61 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | 0.015 | S108-078-5-.015R | $26.51 | $28.61 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.50 | 0.020 | S108-078-5-.020R | $26.51 | $28.61 |
| 0.080 | 0.640 | 0.125 | 2.50 | 0.005 | S108-080-5-.005R | $26.51 | $28.61 |
| 0.080 | 0.640 | 0.125 | 2.50 | 0.010 | S108-080-5-.010R | $26.51 | $28.61 |
| 0.080 | 0.640 | 0.125 | 2.50 | 0.015 | S108-080-5-.015R | $26.51 | $28.61 |

## Corner Radius Micro End Mills



FLUTES 5

8X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.085 | 0.680 | 0.125 | 2.50 | 0.005 | S108-085-5-.005R | $26.51 | $28.61 |
| 0.085 | 0.680 | 0.125 | 2.50 | 0.010 | S108-085-5-.010R | $26.51 | $28.61 |
| 0.085 | 0.680 | 0.125 | 2.50 | 0.015 | S108-085-5-.015R | $26.51 | $28.61 |
| 0.090 | 0.720 | 0.125 | 2.50 | 0.005 | S108-090-5-.005R | $25.67 | $27.77 |
| 0.090 | 0.720 | 0.125 | 2.50 | 0.010 | S108-090-5-.010R | $25.67 | $27.77 |
| 0.090 | 0.720 | 0.125 | 2.50 | 0.015 | S108-090-5-.015R | $25.67 | $27.77 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | 0.005 | S108-093-5-.005R | $25.67 | $27.77 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | 0.010 | S108-093-5-.010R | $25.67 | $27.77 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | 0.015 | S108-093-5-.015R | $25.67 | $27.77 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.50 | 0.020 | S108-093-5-.020R | $25.67 | $27.77 |
| 0.095 | 0.760 | 0.125 | 2.50 | 0.005 | S108-095-5-.005R | $25.67 | $27.77 |
| 0.095 | 0.760 | 0.125 | 2.50 | 0.010 | S108-095-5-.010R | $25.67 | $27.77 |
| 0.095 | 0.760 | 0.125 | 2.50 | 0.015 | S108-095-5-.015R | $25.67 | $27.77 |
| 0.100 | 0.800 | 0.125 | 2.50 | 0.005 | S108-100-5-.005R | $25.67 | $27.77 |
| 0.100 | 0.800 | 0.125 | 2.50 | 0.010 | S108-100-5-.010R | $25.67 | $27.77 |
| 0.100 | 0.800 | 0.125 | 2.50 | 0.015 | S108-100-5-.015R | $25.67 | $27.77 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | 0.005 | S108-118-5-.005R | $25.67 | $27.77 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | 0.010 | S108-118-5-.010R | $25.67 | $27.77 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | 0.015 | S108-118-5-.015R | $25.67 | $27.77 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | 0.020 | S108-118-5-.020R | $25.67 | $27.77 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | 0.005 | S108-125-5-.005R | $25.67 | $27.77 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | 0.010 | S108-125-5-.010R | $25.67 | $27.77 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | 0.015 | S108-125-5-.015R | $25.67 | $27.77 |
| 0.125 (1/8) | 1.000 | 0.125 | 2.50 | 0.020 | S108-125-5-.020R | $25.67 | $27.77 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 26 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## Tips on Selecting the Right Tool for the Job

| Number of Flutes | Primary Uses | Ideal Cutting Materials |
|---|---|---|
| 2-3 | Tools with fewer flutes allow optimal space for chip removal when milling or slotting softer materials. Also used for roughing. | Soft materials, such as aluminum and plastics. |
| 3-4 | Adding flutes provides greater strength. Recommended for use with roughing, milling, and slotting a variety of materials. Can also be used for finishing softer materials. | Hard materials, such as stainless steel, steel, and titanium. |
| 5 + | Ideal for use in finishing work, when using faster feed rates, and with reduced chip load. | Harder materials, such as steel, or for finishing a variety of materials. |

# S109

## Corner Radius Micro End Mills

FLUTES 5

12X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.031 (1/32) | 0.372 | 0.125 | 2.50 | 0.005 | S109-031-5-.005R | $60.80 | $62.90 |
| 0.031 (1/32) | 0.372 | 0.125 | 2.50 | 0.010 | S109-031-5-.010R | $60.80 | $62.90 |
| 0.035 | 0.420 | 0.125 | 2.50 | 0.005 | S109-035-5-.005R | $60.80 | $62.90 |
| 0.035 | 0.420 | 0.125 | 2.50 | 0.010 | S109-035-5-.010R | $60.80 | $62.90 |
| 0.039 (1mm) | 0.468 | 0.125 | 2.50 | 0.005 | S109-039-5-.005R | $60.80 | $62.90 |
| 0.039 (1mm) | 0.468 | 0.125 | 2.50 | 0.010 | S109-039-5-.010R | $60.80 | $62.90 |
| 0.040 | 0.480 | 0.125 | 2.50 | 0.005 | S109-040-5-.005R | $60.80 | $62.90 |
| 0.040 | 0.480 | 0.125 | 2.50 | 0.010 | S109-040-5-.010R | $60.80 | $62.90 |
| 0.045 | 0.540 | 0.125 | 2.50 | 0.005 | S109-045-5-.005R | $60.80 | $62.90 |
| 0.045 | 0.540 | 0.125 | 2.50 | 0.010 | S109-045-5-.010R | $60.80 | $62.90 |
| 0.045 | 0.540 | 0.125 | 2.50 | 0.015 | S109-045-5-.015R | $60.80 | $62.90 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.50 | 0.005 | S109-047-5-.005R | $60.80 | $62.90 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.50 | 0.010 | S109-047-5-.010R | $60.80 | $62.90 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.50 | 0.015 | S109-047-5-.015R | $60.80 | $62.90 |
| 0.050 | 0.600 | 0.125 | 2.50 | 0.005 | S109-050-5-.005R | $53.97 | $56.07 |
| 0.050 | 0.600 | 0.125 | 2.50 | 0.010 | S109-050-5-.010R | $53.97 | $56.07 |
| 0.050 | 0.600 | 0.125 | 2.50 | 0.015 | S109-050-5-.015R | $53.97 | $56.07 |
| 0.055 | 0.660 | 0.125 | 2.50 | 0.005 | S109-055-5-.005R | $53.97 | $56.07 |
| 0.055 | 0.660 | 0.125 | 2.50 | 0.010 | S109-055-5-.010R | $53.97 | $56.07 |
| 0.055 | 0.660 | 0.125 | 2.50 | 0.015 | S109-055-5-.015R | $53.97 | $56.07 |
| 0.060 | 0.720 | 0.125 | 2.50 | 0.005 | S109-060-5-.005R | $48.41 | $50.51 |
| 0.060 | 0.720 | 0.125 | 2.50 | 0.010 | S109-060-5-.010R | $48.41 | $50.51 |
| 0.060 | 0.720 | 0.125 | 2.50 | 0.015 | S109-060-5-.015R | $48.41 | $50.51 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | 0.005 | S109-062-5-.005R | $48.41 | $50.51 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | 0.010 | S109-062-5-.010R | $48.41 | $50.51 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | 0.015 | S109-062-5-.015R | $48.41 | $50.51 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.50 | 0.020 | S109-062-5-.020R | $48.41 | $50.51 |
| 0.065 | 0.780 | 0.125 | 2.50 | 0.005 | S109-065-5-.005R | $48.41 | $50.51 |
| 0.065 | 0.780 | 0.125 | 2.50 | 0.010 | S109-065-5-.010R | $48.41 | $50.51 |
| 0.065 | 0.780 | 0.125 | 2.50 | 0.015 | S109-065-5-.015R | $48.41 | $50.51 |
| 0.070 | 0.840 | 0.125 | 2.50 | 0.005 | S109-070-5-.005R | $47.88 | $49.98 |
| 0.070 | 0.840 | 0.125 | 2.50 | 0.010 | S109-070-5-.010R | $47.88 | $49.98 |
| 0.070 | 0.840 | 0.125 | 2.50 | 0.015 | S109-070-5-.015R | $47.88 | $49.98 |
| 0.075 | 0.900 | 0.125 | 2.50 | 0.005 | S109-075-5-.005R | $47.88 | $49.98 |
| 0.075 | 0.900 | 0.125 | 2.50 | 0.010 | S109-075-5-.010R | $47.88 | $49.98 |
| 0.075 | 0.900 | 0.125 | 2.50 | 0.015 | S109-075-5-.015R | $47.88 | $49.98 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | 0.005 | S109-078-5-.005R | $47.88 | $49.98 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | 0.010 | S109-078-5-.010R | $47.88 | $49.98 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | 0.015 | S109-078-5-.015R | $47.88 | $49.98 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | 0.020 | S109-078-5-.020R | $47.88 | $49.98 |
| 0.080 | 0.960 | 0.125 | 2.50 | 0.005 | S109-080-5-.005R | $47.88 | $49.98 |
| 0.080 | 0.960 | 0.125 | 2.50 | 0.010 | S109-080-5-.010R | $47.88 | $49.98 |
| 0.080 | 0.960 | 0.125 | 2.50 | 0.015 | S109-080-5-.015R | $47.88 | $49.98 |

## Corner Radius Micro End Mills



FLUTES 5

12X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.085 | 1.020 | 0.125 | 2.50 | 0.005 | S109-085-5-.005R | $47.88 | $49.98 |
| 0.085 | 1.020 | 0.125 | 2.50 | 0.010 | S109-085-5-.010R | $47.88 | $49.98 |
| 0.085 | 1.020 | 0.125 | 2.50 | 0.015 | S109-085-5-.015R | $47.88 | $49.98 |
| 0.090 | 1.080 | 0.125 | 2.50 | 0.005 | S109-090-5-.005R | $46.99 | $49.09 |
| 0.090 | 1.080 | 0.125 | 2.50 | 0.010 | S109-090-5-.010R | $46.99 | $49.09 |
| 0.090 | 1.080 | 0.125 | 2.50 | 0.015 | S109-090-5-.015R | $46.99 | $49.09 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | 0.005 | S109-093-5-.005R | $46.99 | $49.09 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | 0.010 | S109-093-5-.010R | $46.99 | $49.09 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | 0.015 | S109-093-5-.015R | $46.99 | $49.09 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | 0.020 | S109-093-5-.020R | $46.99 | $49.09 |
| 0.095 | 1.140 | 0.125 | 2.50 | 0.005 | S109-095-5-.005R | $46.99 | $49.09 |
| 0.095 | 1.140 | 0.125 | 2.50 | 0.010 | S109-095-5-.010R | $46.99 | $49.09 |
| 0.095 | 1.140 | 0.125 | 2.50 | 0.015 | S109-095-5-.015R | $46.99 | $49.09 |
| 0.100 | 1.200 | 0.125 | 2.50 | 0.005 | S109-100-5-.005R | $46.99 | $49.09 |
| 0.100 | 1.200 | 0.125 | 2.50 | 0.010 | S109-100-5-.010R | $46.99 | $49.09 |
| 0.100 | 1.200 | 0.125 | 2.50 | 0.015 | S109-100-5-.015R | $46.99 | $49.09 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | 0.005 | S109-118-5-.005R | $46.99 | $49.09 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | 0.010 | S109-118-5-.010R | $46.99 | $49.09 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | 0.015 | S109-118-5-.015R | $46.99 | $49.09 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | 0.020 | S109-118-5-.020R | $46.99 | $49.09 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | 0.005 | S109-125-5-.005R | $46.99 | $49.09 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | 0.010 | S109-125-5-.010R | $46.99 | $49.09 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | 0.015 | S109-125-5-.015R | $46.99 | $49.09 |
| 0.125 (1/8) | 1.500 | 0.125 | 2.50 | 0.020 | S109-125-5-.020R | $46.99 | $49.09 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 28 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |


### ONLINE ORDERING

P. 2

All standard tools are available via online ordering. To place your order, visit **www.mitgi.us** and browse through the available selection. Or, use the SEARCH box to quickly find the tool using the tool numbers listed in the catalog. See page 2 for more info.

# S87 Corner Radius Micro End Mills

FLUTES 5

1.5X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| 0.031 (1/32) | 0.047 | 0.155 | 0.125 | 2.50 | 0.005 | S87-031-5-.005R5XR | $41.06 | $43.16 |
| 0.035 | 0.053 | 0.175 | 0.125 | 2.50 | 0.005 | S87-035-5-.005R5XR | $39.74 | $41.84 |
| 0.039 (1mm) | 0.059 | 0.195 | 0.125 | 2.50 | 0.005 | S87-039-5-.005R5XR | $39.74 | $41.84 |
| 0.040 | 0.060 | 0.200 | 0.125 | 2.50 | 0.005 | S87-040-5-.005R5XR | $39.74 | $41.84 |
| 0.045 | 0.068 | 0.225 | 0.125 | 2.50 | 0.005 | S87-045-5-.005R5XR | $39.74 | $41.84 |
| 0.047 (3/64) | 0.071 | 0.235 | 0.125 | 2.50 | 0.005 | S87-047-5-.005R5XR | $39.74 | $41.84 |
| 0.050 | 0.075 | 0.250 | 0.125 | 2.50 | 0.005 | S87-050-5-.005R5XR | $39.74 | $41.84 |
| 0.055 | 0.083 | 0.275 | 0.125 | 2.50 | 0.005 | S87-055-5-.005R5XR | $39.74 | $41.84 |
| 0.060 | 0.090 | 0.300 | 0.125 | 2.50 | 0.005 | S87-060-5-.005R5XR | $39.74 | $41.84 |
| 0.062 (1/16) | 0.093 | 0.310 | 0.125 | 2.50 | 0.005 | S87-062-5-.005R5XR | $39.74 | $41.84 |
| 0.065 | 0.098 | 0.325 | 0.125 | 2.50 | 0.005 | S87-065-5-.005R5XR | $39.74 | $41.84 |
| 0.070 | 0.105 | 0.350 | 0.125 | 2.50 | 0.005 | S87-070-5-.005R5XR | $39.01 | $41.11 |
| 0.070 | 0.105 | 0.350 | 0.125 | 2.50 | 0.010 | S87-070-5-.010R5XR | $39.01 | $41.11 |
| 0.075 | 0.113 | 0.375 | 0.125 | 2.50 | 0.005 | S87-075-5-.005R5XR | $39.01 | $41.11 |
| 0.075 | 0.113 | 0.375 | 0.125 | 2.50 | 0.010 | S87-075-5-.010R5XR | $39.01 | $41.11 |
| 0.078 (5/64) | 0.117 | 0.390 | 0.125 | 2.50 | 0.005 | S87-078-5-.005R5XR | $39.01 | $41.11 |
| 0.078 (5/64) | 0.117 | 0.390 | 0.125 | 2.50 | 0.010 | S87-078-5-.010R5XR | $39.01 | $41.11 |
| 0.080 | 0.120 | 0.400 | 0.125 | 2.50 | 0.005 | S87-080-5-.005R5XR | $39.01 | $41.11 |
| 0.080 | 0.120 | 0.400 | 0.125 | 2.50 | 0.010 | S87-080-5-.010R5XR | $39.01 | $41.11 |
| 0.085 | 0.128 | 0.425 | 0.125 | 2.50 | 0.005 | S87-085-5-.005R5XR | $39.01 | $41.11 |
| 0.085 | 0.128 | 0.425 | 0.125 | 2.50 | 0.010 | S87-085-5-.010R5XR | $39.01 | $41.11 |
| 0.090 | 0.135 | 0.450 | 0.125 | 2.50 | 0.005 | S87-090-5-.005R5XR | $39.01 | $41.11 |
| 0.090 | 0.135 | 0.450 | 0.125 | 2.50 | 0.010 | S87-090-5-.010R5XR | $39.01 | $41.11 |
| 0.090 | 0.135 | 0.450 | 0.125 | 2.50 | 0.015 | S87-090-5-.015R5XR | $39.01 | $41.11 |
| 0.093 (3/32) | 0.140 | 0.465 | 0.125 | 2.50 | 0.005 | S87-093-5-.005R5XR | $39.01 | $41.11 |
| 0.093 (3/32) | 0.140 | 0.465 | 0.125 | 2.50 | 0.010 | S87-093-5-.010R5XR | $39.01 | $41.11 |
| 0.095 | 0.143 | 0.475 | 0.125 | 2.50 | 0.005 | S87-095-5-.005R5XR | $39.01 | $41.11 |
| 0.095 | 0.143 | 0.475 | 0.125 | 2.50 | 0.010 | S87-095-5-.010R5XR | $39.01 | $41.11 |
| 0.100 | 0.150 | 0.500 | 0.125 | 2.50 | 0.005 | S87-100-5-.005R5XR | $38.75 | $40.85 |
| 0.100 | 0.150 | 0.500 | 0.125 | 2.50 | 0.010 | S87-100-5-.010R5XR | $38.75 | $40.85 |
| 0.100 | 0.150 | 0.500 | 0.125 | 2.50 | 0.015 | S87-100-5-.015R5XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | 0.005 | S87-118-5-.005R5XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | 0.010 | S87-118-5-.010R5XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.177 | 0.590 | 0.125 | 2.50 | 0.015 | S87-118-5-.015R5XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | 0.005 | S87-125-5-.005R5XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | 0.010 | S87-125-5-.010R5XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.188 | 0.625 | 0.125 | 2.50 | 0.015 | S87-125-5-.015R5XR | $38.75 | $40.85 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 30 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Corner Radius Micro End Mills



FLUTES 5

3X LENGTH OF CUT

5X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| 0.031 (1/32) | 0.093 | 0.155 | 0.125 | 2.50 | 0.005 | S84-031-5-.005R5XR | $41.06 | $43.16 |
| 0.035 | 0.105 | 0.175 | 0.125 | 2.50 | 0.005 | S84-035-5-.005R5XR | $39.74 | $41.84 |
| 0.039 (1mm) | 0.117 | 0.195 | 0.125 | 2.50 | 0.005 | S84-039-5-.005R5XR | $39.74 | $41.84 |
| 0.040 | 0.120 | 0.200 | 0.125 | 2.50 | 0.005 | S84-040-5-.005R5XR | $39.74 | $41.84 |
| 0.045 | 0.135 | 0.225 | 0.125 | 2.50 | 0.005 | S84-045-5-.005R5XR | $39.74 | $41.84 |
| 0.047 (3/64) | 0.141 | 0.235 | 0.125 | 2.50 | 0.005 | S84-047-5-.005R5XR | $39.74 | $41.84 |
| 0.050 | 0.150 | 0.250 | 0.125 | 2.50 | 0.005 | S84-050-5-.005R5XR | $39.74 | $41.84 |
| 0.055 | 0.165 | 0.275 | 0.125 | 2.50 | 0.005 | S84-055-5-.005R5XR | $39.74 | $41.84 |
| 0.060 | 0.180 | 0.300 | 0.125 | 2.50 | 0.005 | S84-060-5-.005R5XR | $39.74 | $41.84 |
| 0.062 (1/16) | 0.186 | 0.310 | 0.125 | 2.50 | 0.005 | S84-062-5-.005R5XR | $39.74 | $41.84 |
| 0.065 | 0.195 | 0.325 | 0.125 | 2.50 | 0.005 | S84-065-5-.005R5XR | $39.74 | $41.84 |
| 0.070 | 0.210 | 0.350 | 0.125 | 2.50 | 0.005 | S84-070-5-.005R5XR | $39.01 | $41.11 |
| 0.070 | 0.210 | 0.350 | 0.125 | 2.50 | 0.010 | S84-070-5-.010R5XR | $39.01 | $41.11 |
| 0.075 | 0.225 | 0.375 | 0.125 | 2.50 | 0.005 | S84-075-5-.005R5XR | $39.01 | $41.11 |
| 0.075 | 0.225 | 0.375 | 0.125 | 2.50 | 0.010 | S84-075-5-.010R5XR | $39.01 | $41.11 |
| 0.078 (5/64) | 0.234 | 0.390 | 0.125 | 2.50 | 0.005 | S84-078-5-.005R5XR | $39.01 | $41.11 |
| 0.078 (5/64) | 0.234 | 0.390 | 0.125 | 2.50 | 0.010 | S84-078-5-.010R5XR | $39.01 | $41.11 |
| 0.080 | 0.240 | 0.400 | 0.125 | 2.50 | 0.005 | S84-080-5-.005R5XR | $39.01 | $41.11 |
| 0.080 | 0.240 | 0.400 | 0.125 | 2.50 | 0.010 | S84-080-5-.010R5XR | $39.01 | $41.11 |
| 0.085 | 0.255 | 0.425 | 0.125 | 2.50 | 0.005 | S84-085-5-.005R5XR | $39.01 | $41.11 |
| 0.085 | 0.255 | 0.425 | 0.125 | 2.50 | 0.010 | S84-085-5-.010R5XR | $39.01 | $41.11 |
| 0.090 | 0.270 | 0.450 | 0.125 | 2.50 | 0.005 | S84-090-5-.005R5XR | $39.01 | $41.11 |
| 0.090 | 0.270 | 0.450 | 0.125 | 2.50 | 0.010 | S84-090-5-.010R5XR | $39.01 | $41.11 |
| 0.093 (3/32) | 0.279 | 0.465 | 0.125 | 2.50 | 0.005 | S84-093-5-.005R5XR | $39.01 | $41.11 |
| 0.093 (3/32) | 0.279 | 0.465 | 0.125 | 2.50 | 0.010 | S84-093-5-.010R5XR | $39.01 | $41.11 |
| 0.095 | 0.285 | 0.475 | 0.125 | 2.50 | 0.005 | S84-095-5-.005R5XR | $39.01 | $41.11 |
| 0.095 | 0.285 | 0.475 | 0.125 | 2.50 | 0.010 | S84-095-5-.010R5XR | $39.01 | $41.11 |
| 0.100 | 0.300 | 0.500 | 0.125 | 2.50 | 0.005 | S84-100-5-.005R5XR | $38.75 | $40.85 |
| 0.100 | 0.300 | 0.500 | 0.125 | 2.50 | 0.010 | S84-100-5-.010R5XR | $38.75 | $40.85 |
| 0.100 | 0.300 | 0.500 | 0.125 | 2.50 | 0.015 | S84-100-5-.015R5XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | 0.005 | S84-118-5-.005R5XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | 0.010 | S84-118-5-.010R5XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.354 | 0.590 | 0.125 | 2.50 | 0.015 | S84-118-5-.015R5XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | 0.005 | S84-125-5-.005R5XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | 0.010 | S84-125-5-.010R5XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.375 | 0.625 | 0.125 | 2.50 | 0.015 | S84-125-5-.015R5XR | $38.75 | $40.85 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 32 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S88 Corner Radius Micro End Mills

FLUTES 5

1.5X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| A | B | C | D | E | F | | | |
| 0.031 (1/32) | 0.047 | 0.248 | 0.125 | 2.50 | 0.005 | S88-031-5-.005R8XR | $41.06 | $43.16 |
| 0.035 | 0.053 | 0.280 | 0.125 | 2.50 | 0.005 | S88-035-5-.005R8XR | $39.74 | $41.84 |
| 0.039 (1mm) | 0.059 | 0.312 | 0.125 | 2.50 | 0.005 | S88-039-5-.005R8XR | $39.74 | $41.84 |
| 0.040 | 0.060 | 0.320 | 0.125 | 2.50 | 0.005 | S88-040-5-.005R8XR | $39.74 | $41.84 |
| 0.045 | 0.068 | 0.360 | 0.125 | 2.50 | 0.005 | S88-045-5-.005R8XR | $39.74 | $41.84 |
| 0.047 (3/64) | 0.071 | 0.376 | 0.125 | 2.50 | 0.005 | S88-047-5-.005R8XR | $39.74 | $41.84 |
| 0.050 | 0.075 | 0.400 | 0.125 | 2.50 | 0.005 | S88-050-5-.005R8XR | $39.74 | $41.84 |
| 0.055 | 0.083 | 0.440 | 0.125 | 2.50 | 0.005 | S88-055-5-.005R8XR | $39.74 | $41.84 |
| 0.060 | 0.090 | 0.480 | 0.125 | 2.50 | 0.005 | S88-060-5-.005R8XR | $39.74 | $41.84 |
| 0.062 (1/16) | 0.093 | 0.496 | 0.125 | 2.50 | 0.005 | S88-062-5-.005R8XR | $39.74 | $41.84 |
| 0.065 | 0.098 | 0.520 | 0.125 | 2.50 | 0.005 | S88-065-5-.005R8XR | $39.74 | $41.84 |
| 0.070 | 0.105 | 0.560 | 0.125 | 2.50 | 0.005 | S88-070-5-.005R8XR | $39.01 | $41.11 |
| 0.070 | 0.105 | 0.560 | 0.125 | 2.50 | 0.010 | S88-070-5-.010R8XR | $39.01 | $41.11 |
| 0.075 | 0.113 | 0.600 | 0.125 | 2.50 | 0.005 | S88-075-5-.005R8XR | $39.01 | $41.11 |
| 0.075 | 0.113 | 0.600 | 0.125 | 2.50 | 0.010 | S88-075-5-.010R8XR | $39.01 | $41.11 |
| 0.078 (5/64) | 0.117 | 0.624 | 0.125 | 2.50 | 0.005 | S88-078-5-.005R8XR | $39.01 | $41.11 |
| 0.078 (5/64) | 0.117 | 0.624 | 0.125 | 2.50 | 0.010 | S88-078-5-.010R8XR | $39.01 | $41.11 |
| 0.080 | 0.120 | 0.640 | 0.125 | 2.50 | 0.005 | S88-080-5-.005R8XR | $39.01 | $41.11 |
| 0.080 | 0.120 | 0.640 | 0.125 | 2.50 | 0.010 | S88-080-5-.010R8XR | $39.01 | $41.11 |
| 0.085 | 0.128 | 0.680 | 0.125 | 2.50 | 0.005 | S88-085-5-.005R8XR | $39.01 | $41.11 |
| 0.085 | 0.128 | 0.680 | 0.125 | 2.50 | 0.010 | S88-085-5-.010R8XR | $39.01 | $41.11 |
| 0.090 | 0.135 | 0.720 | 0.125 | 2.50 | 0.005 | S88-090-5-.005R8XR | $39.01 | $41.11 |
| 0.090 | 0.135 | 0.720 | 0.125 | 2.50 | 0.010 | S88-090-5-.010R8XR | $39.01 | $41.11 |
| 0.093 (3/32) | 0.140 | 0.744 | 0.125 | 2.50 | 0.005 | S88-093-5-.005R8XR | $39.01 | $41.11 |
| 0.093 (3/32) | 0.140 | 0.744 | 0.125 | 2.50 | 0.010 | S88-093-5-.010R8XR | $39.01 | $41.11 |
| 0.095 | 0.143 | 0.760 | 0.125 | 2.50 | 0.005 | S88-095-5-.005R8XR | $39.01 | $41.11 |
| 0.095 | 0.143 | 0.760 | 0.125 | 2.50 | 0.010 | S88-095-5-.010R8XR | $39.01 | $41.11 |
| 0.100 | 0.150 | 0.800 | 0.125 | 2.50 | 0.005 | S88-100-5-.005R8XR | $38.75 | $40.85 |
| 0.100 | 0.150 | 0.800 | 0.125 | 2.50 | 0.010 | S88-100-5-.010R8XR | $38.75 | $40.85 |
| 0.100 | 0.150 | 0.800 | 0.125 | 2.50 | 0.015 | S88-100-5-.015R8XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | 0.005 | S88-118-5-.005R8XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | 0.010 | S88-118-5-.010R8XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.177 | 0.944 | 0.125 | 2.50 | 0.015 | S88-118-5-.015R8XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | 0.005 | S88-125-5-.005R8XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | 0.010 | S88-125-5-.010R8XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.188 | 1.000 | 0.125 | 2.50 | 0.015 | S88-125-5-.015R8XR | $38.75 | $40.85 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 34 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Corner Radius Micro End Mills



FLUTES 5

3X LENGTH OF CUT

8X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| 0.031 (1/32) | 0.093 | 0.248 | 0.125 | 2.50 | 0.005 | S85-031-5-.005R8XR | $41.06 | $43.16 |
| 0.035 | 0.105 | 0.280 | 0.125 | 2.50 | 0.005 | S85-035-5-.005R8XR | $39.74 | $41.84 |
| 0.039 (1mm) | 0.117 | 0.312 | 0.125 | 2.50 | 0.005 | S85-039-5-.005R8XR | $39.74 | $41.84 |
| 0.040 | 0.120 | 0.320 | 0.125 | 2.50 | 0.005 | S85-040-5-.005R8XR | $39.74 | $41.84 |
| 0.045 | 0.135 | 0.360 | 0.125 | 2.50 | 0.005 | S85-045-5-.005R8XR | $39.74 | $41.84 |
| 0.047 (3/64) | 0.141 | 0.376 | 0.125 | 2.50 | 0.005 | S85-047-5-.005R8XR | $39.74 | $41.84 |
| 0.050 | 0.150 | 0.400 | 0.125 | 2.50 | 0.005 | S85-050-5-.005R8XR | $39.74 | $41.84 |
| 0.055 | 0.165 | 0.440 | 0.125 | 2.50 | 0.005 | S85-055-5-.005R8XR | $39.74 | $41.84 |
| 0.060 | 0.180 | 0.480 | 0.125 | 2.50 | 0.005 | S85-060-5-.005R8XR | $39.74 | $41.84 |
| 0.062 (1/16) | 0.186 | 0.496 | 0.125 | 2.50 | 0.005 | S85-062-5-.005R8XR | $39.74 | $41.84 |
| 0.065 | 0.195 | 0.520 | 0.125 | 2.50 | 0.005 | S85-065-5-.005R8XR | $39.74 | $41.84 |
| 0.070 | 0.210 | 0.560 | 0.125 | 2.50 | 0.005 | S85-070-5-.005R8XR | $39.01 | $41.11 |
| 0.070 | 0.210 | 0.560 | 0.125 | 2.50 | 0.010 | S85-070-5-.010R8XR | $39.01 | $41.11 |
| 0.075 | 0.225 | 0.600 | 0.125 | 2.50 | 0.005 | S85-075-5-.005R8XR | $39.01 | $41.11 |
| 0.075 | 0.225 | 0.600 | 0.125 | 2.50 | 0.010 | S85-075-5-.010R8XR | $39.01 | $41.11 |
| 0.078 (5/64) | 0.234 | 0.624 | 0.125 | 2.50 | 0.005 | S85-078-5-.005R8XR | $39.01 | $41.11 |
| 0.078 (5/64) | 0.234 | 0.624 | 0.125 | 2.50 | 0.010 | S85-078-5-.010R8XR | $39.01 | $41.11 |
| 0.080 | 0.240 | 0.640 | 0.125 | 2.50 | 0.005 | S85-080-5-.005R8XR | $39.01 | $41.11 |
| 0.080 | 0.240 | 0.640 | 0.125 | 2.50 | 0.010 | S85-080-5-.010R8XR | $39.01 | $41.11 |
| 0.085 | 0.255 | 0.680 | 0.125 | 2.50 | 0.005 | S85-085-5-.005R8XR | $39.01 | $41.11 |
| 0.085 | 0.255 | 0.680 | 0.125 | 2.50 | 0.010 | S85-085-5-.010R8XR | $39.01 | $41.11 |
| 0.090 | 0.270 | 0.720 | 0.125 | 2.50 | 0.005 | S85-090-5-.005R8XR | $39.01 | $41.11 |
| 0.090 | 0.270 | 0.720 | 0.125 | 2.50 | 0.010 | S85-090-5-.010R8XR | $39.01 | $41.11 |
| 0.093 (3/32) | 0.279 | 0.744 | 0.125 | 2.50 | 0.005 | S85-093-5-.005R8XR | $39.01 | $41.11 |
| 0.093 (3/32) | 0.279 | 0.744 | 0.125 | 2.50 | 0.010 | S85-093-5-.010R8XR | $39.01 | $41.11 |
| 0.095 | 0.285 | 0.760 | 0.125 | 2.50 | 0.005 | S85-095-5-.005R8XR | $39.01 | $41.11 |
| 0.095 | 0.285 | 0.760 | 0.125 | 2.50 | 0.010 | S85-095-5-.010R8XR | $39.01 | $41.11 |
| 0.100 | 0.300 | 0.800 | 0.125 | 2.50 | 0.005 | S85-100-5-.005R8XR | $38.75 | $40.85 |
| 0.100 | 0.300 | 0.800 | 0.125 | 2.50 | 0.010 | S85-100-5-.010R8XR | $38.75 | $40.85 |
| 0.100 | 0.300 | 0.800 | 0.125 | 2.50 | 0.015 | S85-100-5-.015R8XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | 0.005 | S85-118-5-.005R8XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | 0.010 | S85-118-5-.010R8XR | $38.75 | $40.85 |
| 0.118 (3mm) | 0.354 | 0.944 | 0.125 | 2.50 | 0.015 | S85-118-5-.015R8XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | 0.005 | S85-125-5-.005R8XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | 0.010 | S85-125-5-.010R8XR | $38.75 | $40.85 |
| 0.125 (1/8) | 0.375 | 1.000 | 0.125 | 2.50 | 0.015 | S85-125-5-.015R8XR | $38.75 | $40.85 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 36 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S89 Corner Radius Micro End Mills

FLUTES 5

1.5X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| 0.031 (1/32) | 0.047 | 0.372 | 0.125 | 2.50 | 0.005 | S89-031-5-.005R12XR | $43.16 | $45.26 |
| 0.035 | 0.053 | 0.420 | 0.125 | 2.50 | 0.005 | S89-035-5-.005R12XR | $42.26 | $44.36 |
| 0.039 (1mm) | 0.059 | 0.468 | 0.125 | 2.50 | 0.005 | S89-039-5-.005R12XR | $42.26 | $44.36 |
| 0.040 | 0.060 | 0.480 | 0.125 | 2.50 | 0.005 | S89-040-5-.005R12XR | $41.84 | $43.94 |
| 0.045 | 0.068 | 0.540 | 0.125 | 2.50 | 0.005 | S89-045-5-.005R12XR | $41.84 | $43.94 |
| 0.047 (3/64) | 0.071 | 0.564 | 0.125 | 2.50 | 0.005 | S89-047-5-.005R12XR | $41.84 | $43.94 |
| 0.050 | 0.075 | 0.600 | 0.125 | 2.50 | 0.005 | S89-050-5-.005R12XR | $41.84 | $43.94 |
| 0.055 | 0.083 | 0.660 | 0.125 | 2.50 | 0.005 | S89-055-5-.005R12XR | $41.84 | $43.94 |
| 0.060 | 0.090 | 0.720 | 0.125 | 2.50 | 0.005 | S89-060-5-.005R12XR | $41.84 | $43.94 |
| 0.062 (1/16) | 0.093 | 0.744 | 0.125 | 2.50 | 0.005 | S89-062-5-.005R12XR | $41.84 | $43.94 |
| 0.065 | 0.098 | 0.780 | 0.125 | 2.50 | 0.005 | S89-065-5-.005R12XR | $41.84 | $43.94 |
| 0.070 | 0.105 | 0.840 | 0.125 | 2.50 | 0.005 | S89-070-5-.005R12XR | $41.11 | $43.21 |
| 0.070 | 0.105 | 0.840 | 0.125 | 2.50 | 0.010 | S89-070-5-.010R12XR | $41.11 | $43.21 |
| 0.075 | 0.113 | 0.900 | 0.125 | 2.50 | 0.005 | S89-075-5-.005R12XR | $41.11 | $43.21 |
| 0.075 | 0.113 | 0.900 | 0.125 | 2.50 | 0.010 | S89-075-5-.010R12XR | $41.11 | $43.21 |
| 0.078 (5/64) | 0.117 | 0.936 | 0.125 | 2.50 | 0.005 | S89-078-5-.005R12XR | $41.11 | $43.21 |
| 0.078 (5/64) | 0.117 | 0.936 | 0.125 | 2.50 | 0.010 | S89-078-5-.010R12XR | $41.11 | $43.21 |
| 0.080 | 0.120 | 0.960 | 0.125 | 2.50 | 0.005 | S89-080-5-.005R12XR | $41.11 | $43.21 |
| 0.080 | 0.120 | 0.960 | 0.125 | 2.50 | 0.010 | S89-080-5-.010R12XR | $41.11 | $43.21 |
| 0.085 | 0.128 | 1.020 | 0.125 | 2.50 | 0.005 | S89-085-5-.005R12XR | $41.11 | $43.21 |
| 0.085 | 0.128 | 1.020 | 0.125 | 2.50 | 0.010 | S89-085-5-.010R12XR | $41.11 | $43.21 |
| 0.090 | 0.135 | 1.080 | 0.125 | 2.50 | 0.005 | S89-090-5-.005R12XR | $41.11 | $43.21 |
| 0.090 | 0.135 | 1.080 | 0.125 | 2.50 | 0.010 | S89-090-5-.010R12XR | $41.11 | $43.21 |
| 0.093 (3/32) | 0.140 | 1.116 | 0.125 | 2.50 | 0.005 | S89-093-5-.005R12XR | $41.11 | $43.21 |
| 0.093 (3/32) | 0.140 | 1.116 | 0.125 | 2.50 | 0.010 | S89-093-5-.010R12XR | $41.11 | $43.21 |
| 0.095 | 0.143 | 1.140 | 0.125 | 2.50 | 0.005 | S89-095-5-.005R12XR | $41.11 | $43.21 |
| 0.095 | 0.143 | 1.140 | 0.125 | 2.50 | 0.010 | S89-095-5-.010R12XR | $41.11 | $43.21 |
| 0.100 | 0.150 | 1.200 | 0.125 | 2.50 | 0.005 | S89-100-5-.005R12XR | $40.85 | $42.95 |
| 0.100 | 0.150 | 1.200 | 0.125 | 2.50 | 0.010 | S89-100-5-.010R12XR | $40.85 | $42.95 |
| 0.100 | 0.150 | 1.200 | 0.125 | 2.50 | 0.015 | S89-100-5-.015R12XR | $40.85 | $42.95 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | 0.005 | S89-118-5-.005R12XR | $40.85 | $42.95 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | 0.010 | S89-118-5-.010R12XR | $40.85 | $42.95 |
| 0.118 (3mm) | 0.177 | 1.416 | 0.125 | 2.50 | 0.015 | S89-118-5-.015R12XR | $40.85 | $42.95 |
| 0.125 (1/8) | 0.188 | 1.500 | 0.125 | 2.50 | 0.005 | S89-125-5-.005R12XR | $40.85 | $42.95 |
| 0.125 (1/8) | 0.188 | 1.500 | 0.125 | 2.50 | 0.010 | S89-125-5-.010R12XR | $40.85 | $42.95 |
| 0.125 (1/8) | 0.188 | 1.500 | 0.125 | 2.50 | 0.015 | S89-125-5-.015R12XR | $40.85 | $42.95 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 38 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Corner Radius Micro End Mills



FLUTES 5

3X LENGTH OF CUT

12X REACH

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| 0.031 (1/32) | 0.093 | 0.372 | 0.125 | 2.50 | 0.005 | S86-031-5-.005R12XR | $43.16 | $45.26 |
| 0.035 | 0.105 | 0.420 | 0.125 | 2.50 | 0.005 | S86-035-5-.005R12XR | $42.26 | $44.36 |
| 0.039 (1mm) | 0.117 | 0.468 | 0.125 | 2.50 | 0.005 | S86-039-5-.005R12XR | $42.26 | $44.36 |
| 0.040 | 0.120 | 0.480 | 0.125 | 2.50 | 0.005 | S86-040-5-.005R12XR | $41.84 | $43.94 |
| 0.045 | 0.135 | 0.540 | 0.125 | 2.50 | 0.005 | S86-045-5-.005R12XR | $41.84 | $43.94 |
| 0.047 (3/64) | 0.141 | 0.564 | 0.125 | 2.50 | 0.005 | S86-047-5-.005R12XR | $41.84 | $43.94 |
| 0.050 | 0.150 | 0.600 | 0.125 | 2.50 | 0.005 | S86-050-5-.005R12XR | $41.84 | $43.94 |
| 0.055 | 0.165 | 0.660 | 0.125 | 2.50 | 0.005 | S86-055-5-.005R12XR | $41.84 | $43.94 |
| 0.060 | 0.180 | 0.720 | 0.125 | 2.50 | 0.005 | S86-060-5-.005R12XR | $41.84 | $43.94 |
| 0.062 (1/16) | 0.186 | 0.744 | 0.125 | 2.50 | 0.005 | S86-062-5-.005R12XR | $41.84 | $43.94 |
| 0.065 | 0.195 | 0.780 | 0.125 | 2.50 | 0.005 | S86-065-5-.005R12XR | $41.84 | $43.94 |
| 0.070 | 0.210 | 0.840 | 0.125 | 2.50 | 0.005 | S86-070-5-.005R12XR | $41.11 | $43.21 |
| 0.070 | 0.210 | 0.840 | 0.125 | 2.50 | 0.010 | S86-070-5-.010R12XR | $41.11 | $43.21 |
| 0.075 | 0.225 | 0.900 | 0.125 | 2.50 | 0.005 | S86-075-5-.005R12XR | $41.11 | $43.21 |
| 0.075 | 0.225 | 0.900 | 0.125 | 2.50 | 0.010 | S86-075-5-.010R12XR | $41.11 | $43.21 |
| 0.078 (5/64) | 0.234 | 0.936 | 0.125 | 2.50 | 0.005 | S86-078-5-.005R12XR | $41.11 | $43.21 |
| 0.078 (5/64) | 0.234 | 0.936 | 0.125 | 2.50 | 0.010 | S86-078-5-.010R12XR | $41.11 | $43.21 |
| 0.080 | 0.240 | 0.960 | 0.125 | 2.50 | 0.005 | S86-080-5-.005R12XR | $41.11 | $43.21 |
| 0.080 | 0.240 | 0.960 | 0.125 | 2.50 | 0.010 | S86-080-5-.010R12XR | $41.11 | $43.21 |
| 0.085 | 0.255 | 1.020 | 0.125 | 2.50 | 0.005 | S86-085-5-.005R12XR | $41.11 | $43.21 |
| 0.085 | 0.255 | 1.020 | 0.125 | 2.50 | 0.010 | S86-085-5-.010R12XR | $41.11 | $43.21 |
| 0.090 | 0.270 | 1.080 | 0.125 | 2.50 | 0.005 | S86-090-5-.005R12XR | $41.11 | $43.21 |
| 0.090 | 0.270 | 1.080 | 0.125 | 2.50 | 0.010 | S86-090-5-.010R12XR | $41.11 | $43.21 |
| 0.093 (3/32) | 0.279 | 1.116 | 0.125 | 2.50 | 0.005 | S86-093-5-.005R12XR | $41.11 | $43.21 |
| 0.093 (3/32) | 0.279 | 1.116 | 0.125 | 2.50 | 0.010 | S86-093-5-.010R12XR | $41.11 | $43.21 |
| 0.095 | 0.285 | 1.140 | 0.125 | 2.50 | 0.005 | S86-095-5-.005R12XR | $41.11 | $43.21 |
| 0.095 | 0.285 | 1.140 | 0.125 | 2.50 | 0.010 | S86-095-5-.010R12XR | $41.11 | $43.21 |
| 0.100 | 0.300 | 1.200 | 0.125 | 2.50 | 0.005 | S86-100-5-.005R12XR | $40.85 | $42.95 |
| 0.100 | 0.300 | 1.200 | 0.125 | 2.50 | 0.010 | S86-100-5-.010R12XR | $40.85 | $42.95 |
| 0.100 | 0.300 | 1.200 | 0.125 | 2.50 | 0.015 | S86-100-5-.015R12XR | $40.85 | $42.95 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | 0.005 | S86-118-5-.005R12XR | $40.85 | $42.95 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | 0.010 | S86-118-5-.010R12XR | $40.85 | $42.95 |
| 0.118 (3mm) | 0.354 | 1.416 | 0.125 | 2.50 | 0.015 | S86-118-5-.015R12XR | $40.85 | $42.95 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | 0.005 | S86-125-5-.005R12XR | $40.85 | $42.95 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | 0.010 | S86-125-5-.010R12XR | $40.85 | $42.95 |
| 0.125 (1/8) | 0.375 | 1.500 | 0.125 | 2.50 | 0.015 | S86-125-5-.015R12XR | $40.85 | $42.95 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 40 | 2, 3, 4 Flute Tools |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S35 Metric Square Micro End Mills

FLUTES 2,4

1.5X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter (mm) | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.20 | 0.0119 | 0.125 | 1.50 | S35-.20mm-2-SST | S35-.20mm-4-SST | $29.38 | $31.48 |
| 0.25 | 0.0147 | 0.125 | 1.50 | S35-.25mm-2-SST | S35-.25mm-4-SST | $24.21 | $26.31 |
| 0.30 | 0.0177 | 0.125 | 1.50 | S35-.30mm-2-SST | S35-.30mm-4-SST | $24.21 | $26.31 |
| 0.35 | 0.0207 | 0.125 | 1.50 | S35-.35mm-2-SST | S35-.35mm-4-SST | $24.21 | $26.31 |
| 0.40 | 0.0236 | 0.125 | 1.50 | S35-.40mm-2-SST | S35-.40mm-4-SST | $21.32 | $23.42 |
| 0.45 | 0.0266 | 0.125 | 1.50 | S35-.45mm-2-SST | S35-.45mm-4-SST | $21.32 | $23.42 |
| 0.50 | 0.0296 | 0.125 | 1.50 | S35-.50mm-2-SST | S35-.50mm-4-SST | $20.34 | $22.44 |
| 0.55 | 0.0326 | 0.125 | 1.50 | S35-.55mm-2-SST | S35-.55mm-4-SST | $20.34 | $22.44 |
| 0.60 | 0.0354 | 0.125 | 1.50 | S35-.60mm-2-SST | S35-.60mm-4-SST | $20.34 | $22.44 |
| 0.65 | 0.0384 | 0.125 | 1.50 | S35-.65mm-2-SST | S35-.65mm-4-SST | $18.41 | $20.51 |
| 0.70 | 0.0414 | 0.125 | 1.50 | S35-.70mm-2-SST | S35-.70mm-4-SST | $18.41 | $20.51 |
| 0.75 | 0.0443 | 0.125 | 1.50 | S35-.75mm-2-SST | S35-.75mm-4-SST | $18.41 | $20.51 |
| 0.80 | 0.0473 | 0.125 | 1.50 | S35-.80mm-2-SST | S35-.80mm-4-SST | $18.41 | $20.51 |
| 0.85 | 0.0503 | 0.125 | 1.50 | S35-.85mm-2-SST | S35-.85mm-4-SST | $15.82 | $17.92 |
| 0.90 | 0.0531 | 0.125 | 1.50 | S35-.90mm-2-SST | S35-.90mm-4-SST | $15.82 | $17.92 |
| 0.95 | 0.0561 | 0.125 | 1.50 | S35-.95mm-2-SST | S35-.95mm-4-SST | $15.82 | $17.92 |
| 1.00 | 0.0591 | 0.125 | 1.50 | S35-1.00mm-2-SST | S35-1.00mm-4-SST | $15.82 | $17.92 |
| 1.25 | 0.0738 | 0.125 | 1.50 | S35-1.25mm-2-SST | S35-1.25mm-4-SST | $15.82 | $17.92 |
| 1.50 | 0.0887 | 0.125 | 1.50 | S35-1.50mm-2-SST | S35-1.50mm-4-SST | $13.88 | $15.98 |
| 1.75 | 0.1034 | 0.125 | 1.50 | S35-1.75mm-2-SST | S35-1.75mm-4-SST | $13.88 | $15.98 |
| 2.00 | 0.1181 | 0.125 | 1.50 | S35-2.00mm-2-SST | S35-2.00mm-4-SST | $13.88 | $15.98 |
| 2.25 | 0.1329 | 0.125 | 1.50 | S35-2.25mm-2-SST | S35-2.25mm-4-SST | $13.88 | $15.98 |
| 2.50 | 0.1476 | 0.125 | 1.50 | S35-2.50mm-2-SST | S35-2.50mm-4-SST | $13.88 | $15.98 |
| 2.75 | 0.1625 | 0.125 | 1.50 | S35-2.75mm-2-SST | S35-2.75mm-4-SST | $13.88 | $15.98 |
| 3.00 | 0.1772 | 0.125 | 1.50 | S35-3.00mm-2-SST | S35-3.00mm-4-SST | $13.88 | $15.98 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Optimized Quality Control

### At MITGI, quality isn't just the end goal, it's embedded throughout the entire manufacturing process.

From securing tool print accuracy, to mid-job inspections, through pre-shipping approvals, we ensure that each tool meets our quality standards before it leaves our door. Since all MITGI tools are manufactured on-location, we can ensure that all tools meet our standards of manufacturing and are in spec before they leave the building.

For micro tooling, quality control and manufacturing to tight tolerances are closely linked. The smaller the tool, the more important it is that every detail is checked. Our quality process requires skilled operators, equipment kept in perfect condition, carefully dressed wheels, and meticulous setup.

## Metric Square Micro End Mills



| Cutter Diameter (mm) | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.20 | 0.0237 | 0.125 | 1.50 | S34-.20mm-2-SEM | S34-.20mm-4-SEM | $29.38 | $31.48 |
| 0.25 | 0.0294 | 0.125 | 1.50 | S34-.25mm-2-SEM | S34-.25mm-4-SEM | $24.21 | $26.31 |
| 0.30 | 0.0354 | 0.125 | 1.50 | S34-.30mm-2-SEM | S34-.30mm-4-SEM | $24.21 | $26.31 |
| 0.35 | 0.0414 | 0.125 | 1.50 | S34-.35mm-2-SEM | S34-.35mm-4-SEM | $24.21 | $26.31 |
| 0.40 | 0.0471 | 0.125 | 1.50 | S34-.40mm-2-SEM | S34-.40mm-4-SEM | $21.32 | $23.42 |
| 0.45 | 0.0531 | 0.125 | 1.50 | S34-.45mm-2-SEM | S34-.45mm-4-SEM | $21.32 | $23.42 |
| 0.50 | 0.0591 | 0.125 | 1.50 | S34-.50mm-2-SEM | S34-.50mm-4-SEM | $20.34 | $22.44 |
| 0.55 | 0.0651 | 0.125 | 1.50 | S34-.55mm-2-SEM | S34-.55mm-4-SEM | $20.34 | $22.44 |
| 0.60 | 0.0708 | 0.125 | 1.50 | S34-.60mm-2-SEM | S34-.60mm-4-SEM | $20.34 | $22.44 |
| 0.65 | 0.0768 | 0.125 | 1.50 | S34-.65mm-2-SEM | S34-.65mm-4-SEM | $18.41 | $20.51 |
| 0.70 | 0.0828 | 0.125 | 1.50 | S34-.70mm-2-SEM | S34-.70mm-4-SEM | $18.41 | $20.51 |
| 0.75 | 0.0885 | 0.125 | 1.50 | S34-.75mm-2-SEM | S34-.75mm-4-SEM | $18.41 | $20.51 |
| 0.80 | 0.0945 | 0.125 | 1.50 | S34-.80mm-2-SEM | S34-.80mm-4-SEM | $18.41 | $20.51 |
| 0.85 | 0.1005 | 0.125 | 1.50 | S34-.85mm-2-SEM | S34-.85mm-4-SEM | $15.82 | $17.92 |
| 0.90 | 0.1062 | 0.125 | 1.50 | S34-.90mm-2-SEM | S34-.90mm-4-SEM | $15.82 | $17.92 |
| 0.95 | 0.1122 | 0.125 | 1.50 | S34-.95mm-2-SEM | S34-.95mm-4-SEM | $15.82 | $17.92 |
| 1.00 | 0.1181 | 0.125 | 1.50 | S34-1.00mm-2-SEM | S34-1.00mm-4-SEM | $15.82 | $17.92 |
| 1.25 | 0.1476 | 0.125 | 1.50 | S34-1.25mm-2-SEM | S34-1.25mm-4-SEM | $15.82 | $17.92 |
| 1.50 | 0.1773 | 0.125 | 1.50 | S34-1.50mm-2-SEM | S34-1.50mm-4-SEM | $13.88 | $15.98 |
| 1.75 | 0.2067 | 0.125 | 1.50 | S34-1.75mm-2-SEM | S34-1.75mm-4-SEM | $13.88 | $15.98 |
| 2.00 | 0.2361 | 0.125 | 1.50 | S34-2.00mm-2-SEM | S34-2.00mm-4-SEM | $13.88 | $15.98 |
| 2.25 | 0.2658 | 0.125 | 1.50 | S34-2.25mm-2-SEM | S34-2.25mm-4-SEM | $13.88 | $15.98 |
| 2.50 | 0.2952 | 0.125 | 1.50 | S34-2.50mm-2-SEM | S34-2.50mm-4-SEM | $13.88 | $15.98 |
| 2.75 | 0.3249 | 0.125 | 1.50 | S34-2.75mm-2-SEM | S34-2.75mm-4-SEM | $13.88 | $15.98 |
| 3.00 | 0.3543 | 0.125 | 1.50 | S34-3.00mm-2-SEM | S34-3.00mm-4-SEM | $13.88 | $15.98 |

FLUTES 2,4

3X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MITGI RESULTS: High Performance Products and Service

"Thank you so much for the 'Above and Beyond' approach you had with our job. We truly appreciate it.

Your company is a joy to work with, not only for the fast and friendly service, but also the technical advice that you provide. Many thanks!"
*- Donna*

*Sue, Quality Support Technician*

# S37 Metric Ball Micro End Mills

FLUTES 2,4

1.5X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter (mm) | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.20 | 0.0119 | 0.125 | 1.50 | S37-.20mm-2-BST | S37-.20mm-4-BST | $37.07 | $39.17 |
| 0.25 | 0.0147 | 0.125 | 1.50 | S37-.25mm-2-BST | S37-.25mm-4-BST | $37.07 | $39.17 |
| 0.30 | 0.0177 | 0.125 | 1.50 | S37-.30mm-2-BST | S37-.30mm-4-BST | $37.07 | $39.17 |
| 0.35 | 0.0207 | 0.125 | 1.50 | S37-.35mm-2-BST | S37-.35mm-4-BST | $29.38 | $31.48 |
| 0.40 | 0.0236 | 0.125 | 1.50 | S37-.40mm-2-BST | S37-.40mm-4-BST | $29.38 | $31.48 |
| 0.45 | 0.0266 | 0.125 | 1.50 | S37-.45mm-2-BST | S37-.45mm-4-BST | $28.22 | $30.33 |
| 0.50 | 0.0296 | 0.125 | 1.50 | S37-.50mm-2-BST | S37-.50mm-4-BST | $28.22 | $30.33 |
| 0.55 | 0.0326 | 0.125 | 1.50 | S37-.55mm-2-BST | S37-.55mm-4-BST | $28.22 | $30.33 |
| 0.60 | 0.0354 | 0.125 | 1.50 | S37-.60mm-2-BST | S37-.60mm-4-BST | $25.70 | $27.81 |
| 0.65 | 0.0384 | 0.125 | 1.50 | S37-.65mm-2-BST | S37-.65mm-4-BST | $25.70 | $27.81 |
| 0.70 | 0.0414 | 0.125 | 1.50 | S37-.70mm-2-BST | S37-.70mm-4-BST | $25.70 | $27.81 |
| 0.75 | 0.0443 | 0.125 | 1.50 | S37-.75mm-2-BST | S37-.75mm-4-BST | $23.00 | $25.10 |
| 0.80 | 0.0473 | 0.125 | 1.50 | S37-.80mm-2-BST | S37-.80mm-4-BST | $23.00 | $25.10 |
| 0.85 | 0.0503 | 0.125 | 1.50 | S37-.85mm-2-BST | S37-.85mm-4-BST | $23.00 | $25.10 |
| 0.90 | 0.0531 | 0.125 | 1.50 | S37-.90mm-2-BST | S37-.90mm-4-BST | $21.77 | $23.87 |
| 0.95 | 0.0561 | 0.125 | 1.50 | S37-.95mm-2-BST | S37-.95mm-4-BST | $21.77 | $23.87 |
| 1.00 | 0.0591 | 0.125 | 1.50 | S37-1.00mm-2-BST | S37-1.00mm-4-BST | $21.77 | $23.87 |
| 1.25 | 0.0738 | 0.125 | 1.50 | S37-1.25mm-2-BST | S37-1.25mm-4-BST | $21.77 | $23.87 |
| 1.50 | 0.0887 | 0.125 | 1.50 | S37-1.50mm-2-BST | S37-1.50mm-4-BST | $20.99 | $23.09 |
| 1.75 | 0.1034 | 0.125 | 1.50 | S37-1.75mm-2-BST | S37-1.75mm-4-BST | $20.99 | $23.09 |
| 2.00 | 0.1181 | 0.125 | 1.50 | S37-2.00mm-2-BST | S37-2.00mm-4-BST | $20.99 | $23.09 |
| 2.25 | 0.1329 | 0.125 | 1.50 | S37-2.25mm-2-BST | S37-2.25mm-4-BST | $20.99 | $23.09 |
| 2.50 | 0.1476 | 0.125 | 1.50 | S37-2.50mm-2-BST | S37-2.50mm-4-BST | $20.99 | $23.09 |
| 2.75 | 0.1625 | 0.125 | 1.50 | S37-2.75mm-2-BST | S37-2.75mm-4-BST | $20.99 | $23.09 |
| 3.00 | 0.1772 | 0.125 | 1.50 | S37-3.00mm-2-BST | S37-3.00mm-4-BST | $20.99 | $23.09 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: In-House Coating

**Coating can enhance tool life and overall performance, but it can also add to the length of the production schedule of the tool. In-house coating at MITGI helps to shorten lead times, while ensuring consistent results.**

Adding a coating to the tool surface can extend the life of the tool, help create a smoother finish in manufacturing, and can reduce heat. In-house coating gives us the ability to coat tools in batches of like sizes, allowing us to ensure evenly applied and consistent coating each time you place an order.

MITGI Level I coating runs through a weekly production schedule rotation. Level II coatings are available upon request and can usually run within 1-2 weeks. Contact us for more information about coated tools and coating services.

| Cutter Diameter (mm) | Length of Cut | Shank Diameter | Overall Length | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.20 | 0.0237 | 0.125 | 1.50 | S36-.20mm-2-BEM | S36-.20mm-4-BEM | $37.07 | $39.17 |
| 0.25 | 0.0294 | 0.125 | 1.50 | S36-.25mm-2-BEM | S36-.25mm-4-BEM | $37.07 | $39.17 |
| 0.30 | 0.0354 | 0.125 | 1.50 | S36-.30mm-2-BEM | S36-.30mm-4-BEM | $37.07 | $39.17 |
| 0.35 | 0.0414 | 0.125 | 1.50 | S36-.35mm-2-BEM | S36-.35mm-4-BEM | $29.38 | $31.48 |
| 0.40 | 0.0471 | 0.125 | 1.50 | S36-.40mm-2-BEM | S36-.40mm-4-BEM | $29.38 | $31.48 |
| 0.45 | 0.0531 | 0.125 | 1.50 | S36-.45mm-2-BEM | S36-.45mm-4-BEM | $28.22 | $30.33 |
| 0.50 | 0.0591 | 0.125 | 1.50 | S36-.50mm-2-BEM | S36-.50mm-4-BEM | $28.22 | $30.33 |
| 0.55 | 0.0651 | 0.125 | 1.50 | S36-.55mm-2-BEM | S36-.55mm-4-BEM | $28.22 | $30.33 |
| 0.60 | 0.0708 | 0.125 | 1.50 | S36-.60mm-2-BEM | S36-.60mm-4-BEM | $25.70 | $27.81 |
| 0.65 | 0.0768 | 0.125 | 1.50 | S36-.65mm-2-BEM | S36-.65mm-4-BEM | $25.70 | $27.81 |
| 0.70 | 0.0828 | 0.125 | 1.50 | S36-.70mm-2-BEM | S36-.70mm-4-BEM | $25.70 | $27.81 |
| 0.75 | 0.0885 | 0.125 | 1.50 | S36-.75mm-2-BEM | S36-.75mm-4-BEM | $23.00 | $25.10 |
| 0.80 | 0.0945 | 0.125 | 1.50 | S36-.80mm-2-BEM | S36-.80mm-4-BEM | $23.00 | $25.10 |
| 0.85 | 0.1005 | 0.125 | 1.50 | S36-.85mm-2-BEM | S36-.85mm-4-BEM | $23.00 | $25.10 |
| 0.90 | 0.1062 | 0.125 | 1.50 | S36-.90mm-2-BEM | S36-.90mm-4-BEM | $21.77 | $23.87 |
| 0.95 | 0.1122 | 0.125 | 1.50 | S36-.95mm-2-BEM | S36-.95mm-4-BEM | $21.77 | $23.87 |
| 1.00 | 0.1181 | 0.125 | 1.50 | S36-1.00mm-2-BEM | S36-1.00mm-4-BEM | $21.77 | $23.87 |
| 1.25 | 0.1476 | 0.125 | 1.50 | S36-1.25mm-2-BEM | S36-1.25mm-4-BEM | $21.77 | $23.87 |
| 1.50 | 0.1773 | 0.125 | 1.50 | S36-1.50mm-2-BEM | S36-1.50mm-4-BEM | $20.99 | $23.09 |
| 1.75 | 0.2067 | 0.125 | 1.50 | S36-1.75mm-2-BEM | S36-1.75mm-4-BEM | $20.99 | $23.09 |
| 2.00 | 0.2361 | 0.125 | 1.50 | S36-2.00mm-2-BEM | S36-2.00mm-4-BEM | $20.99 | $23.09 |
| 2.25 | 0.2658 | 0.125 | 1.50 | S36-2.25mm-2-BEM | S36-2.25mm-4-BEM | $20.99 | $23.09 |
| 2.50 | 0.2952 | 0.125 | 1.50 | S36-2.50mm-2-BEM | S36-2.50mm-4-BEM | $20.99 | $23.09 |
| 2.75 | 0.3249 | 0.125 | 1.50 | S36-2.75mm-2-BEM | S36-2.75mm-4-BEM | $20.99 | $23.09 |
| 3.00 | 0.3543 | 0.125 | 1.50 | S36-3.00mm-2-BEM | S36-3.00mm-4-BEM | $20.99 | $23.09 |

FLUTES 2,4

3X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MITGI RESULTS: Speedy Service with In-House Coating

"The standard coated tool we ordered worked better than other tools we've tried to create this hex drive configuration. We were cutting Cobalt Chrome, so it was a struggle for us. The turnaround for coating from other places was a killer for us, and we were far behind schedule. Your coating was quick, and results look good.

Thanks for all you guys do!"
*- Justin*

*Whitney, Coating Lead*

# S309

## Metric Square Micro End Mills (Metric Shank)

FLUTES 2,4

1.5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter (mm) | Length of Cut (mm) | Shank Diameter (mm) | Overall Length (in.) | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.20 | 0.30 | 3.00 | 1.50 | S309-.20mm-2-SQEM | S309-.20mm-4-SQEM | $29.38 | $31.48 |
| 0.25 | 0.38 | 3.00 | 1.50 | S309-.25mm-2-SQEM | S309-.25mm-4-SQEM | $24.21 | $26.31 |
| 0.30 | 0.45 | 3.00 | 1.50 | S309-.30mm-2-SQEM | S309-.30mm-4-SQEM | $24.21 | $26.31 |
| 0.35 | 0.53 | 3.00 | 1.50 | S309-.35mm-2-SQEM | S309-.35mm-4-SQEM | $24.21 | $26.31 |
| 0.40 | 0.60 | 3.00 | 1.50 | S309-.40mm-2-SQEM | S309-.40mm-4-SQEM | $21.32 | $23.42 |
| 0.45 | 0.68 | 3.00 | 1.50 | S309-.45mm-2-SQEM | S309-.45mm-4-SQEM | $21.32 | $23.42 |
| 0.50 | 0.75 | 3.00 | 1.50 | S309-.50mm-2-SQEM | S309-.50mm-4-SQEM | $20.34 | $22.44 |
| 0.55 | 0.83 | 3.00 | 1.50 | S309-.55mm-2-SQEM | S309-.55mm-4-SQEM | $20.34 | $22.44 |
| 0.60 | 0.90 | 3.00 | 1.50 | S309-.60mm-2-SQEM | S309-.60mm-4-SQEM | $20.34 | $22.44 |
| 0.65 | 0.98 | 3.00 | 1.50 | S309-.65mm-2-SQEM | S309-.65mm-4-SQEM | $18.41 | $20.51 |
| 0.70 | 1.05 | 3.00 | 1.50 | S309-.70mm-2-SQEM | S309-.70mm-4-SQEM | $18.41 | $20.51 |
| 0.75 | 1.13 | 3.00 | 1.50 | S309-.75mm-2-SQEM | S309-.75mm-4-SQEM | $18.41 | $20.51 |
| 0.80 | 1.20 | 3.00 | 1.50 | S309-.80mm-2-SQEM | S309-.80mm-4-SQEM | $18.41 | $20.51 |
| 0.85 | 1.28 | 3.00 | 1.50 | S309-.85mm-2-SQEM | S309-.85mm-4-SQEM | $15.82 | $17.92 |
| 0.90 | 1.35 | 3.00 | 1.50 | S309-.90mm-2-SQEM | S309-.90mm-4-SQEM | $15.82 | $17.92 |
| 0.95 | 1.43 | 3.00 | 1.50 | S309-.95mm-2-SQEM | S309-.95mm-4-SQEM | $15.82 | $17.92 |
| 1.00 | 1.50 | 3.00 | 1.50 | S309-1.00mm-2-SQEM | S309-1.00mm-4-SQEM | $15.82 | $17.92 |
| 1.25 | 1.88 | 3.00 | 1.50 | S309-1.25mm-2-SQEM | S309-1.25mm-4-SQEM | $15.82 | $17.92 |
| 1.50 | 2.25 | 3.00 | 1.50 | S309-1.50mm-2-SQEM | S309-1.50mm-4-SQEM | $13.88 | $15.98 |
| 1.75 | 2.63 | 3.00 | 1.50 | S309-1.75mm-2-SQEM | S309-1.75mm-4-SQEM | $13.88 | $15.98 |
| 2.00 | 3.00 | 3.00 | 1.50 | S309-2.00mm-2-SQEM | S309-2.00mm-4-SQEM | $13.88 | $15.98 |
| 2.25 | 3.38 | 3.00 | 1.50 | S309-2.25mm-2-SQEM | S309-2.25mm-4-SQEM | $13.88 | $15.98 |
| 2.50 | 3.75 | 3.00 | 1.50 | S309-2.50mm-2-SQEM | S309-2.50mm-4-SQEM | $13.88 | $15.98 |
| 2.75 | 4.13 | 3.00 | 1.50 | S309-2.75mm-2-SQEM | S309-2.75mm-4-SQEM | $13.88 | $15.98 |
| 3.00 | 4.50 | 3.00 | 1.50 | S309-3.00mm-2-SQEM | S309-3.00mm-4-SQEM | $13.88 | $15.98 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Metric Square Micro End Mills (Metric Shank)



FLUTES 2,4

3X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter (mm) | Length of Cut (mm) | Shank Diameter (mm) | Overall Length (in.) | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.20 | 0.60 | 3.00 | 1.50 | S310-.20mm-2-SQEM | S310-.20mm-4-SQEM | $29.38 | $31.48 |
| 0.25 | 0.75 | 3.00 | 1.50 | S310-.25mm-2-SQEM | S310-.25mm-4-SQEM | $24.21 | $26.31 |
| 0.30 | 0.90 | 3.00 | 1.50 | S310-.30mm-2-SQEM | S310-.30mm-4-SQEM | $24.21 | $26.31 |
| 0.35 | 1.05 | 3.00 | 1.50 | S310-.35mm-2-SQEM | S310-.35mm-4-SQEM | $24.21 | $26.31 |
| 0.40 | 1.20 | 3.00 | 1.50 | S310-.40mm-2-SQEM | S310-.40mm-4-SQEM | $21.32 | $23.42 |
| 0.45 | 1.35 | 3.00 | 1.50 | S310-.45mm-2-SQEM | S310-.45mm-4-SQEM | $21.32 | $23.42 |
| 0.50 | 1.50 | 3.00 | 1.50 | S310-.50mm-2-SQEM | S310-.50mm-4-SQEM | $20.34 | $22.44 |
| 0.55 | 1.65 | 3.00 | 1.50 | S310-.55mm-2-SQEM | S310-.55mm-4-SQEM | $20.34 | $22.44 |
| 0.60 | 1.80 | 3.00 | 1.50 | S310-.60mm-2-SQEM | S310-.60mm-4-SQEM | $20.34 | $22.44 |
| 0.65 | 1.95 | 3.00 | 1.50 | S310-.65mm-2-SQEM | S310-.65mm-4-SQEM | $18.41 | $20.51 |
| 0.70 | 2.10 | 3.00 | 1.50 | S310-.70mm-2-SQEM | S310-.70mm-4-SQEM | $18.41 | $20.51 |
| 0.75 | 2.25 | 3.00 | 1.50 | S310-.75mm-2-SQEM | S310-.75mm-4-SQEM | $18.41 | $20.51 |
| 0.80 | 2.40 | 3.00 | 1.50 | S310-.80mm-2-SQEM | S310-.80mm-4-SQEM | $18.41 | $20.51 |
| 0.85 | 2.55 | 3.00 | 1.50 | S310-.85mm-2-SQEM | S310-.85mm-4-SQEM | $15.82 | $17.92 |
| 0.90 | 2.70 | 3.00 | 1.50 | S310-.90mm-2-SQEM | S310-.90mm-4-SQEM | $15.82 | $17.92 |
| 0.95 | 2.85 | 3.00 | 1.50 | S310-.95mm-2-SQEM | S310-.95mm-4-SQEM | $15.82 | $17.92 |
| 1.00 | 3.00 | 3.00 | 1.50 | S310-1.00mm-2-SQEM | S310-1.00mm-4-SQEM | $15.82 | $17.92 |
| 1.25 | 3.75 | 3.00 | 1.50 | S310-1.25mm-2-SQEM | S310-1.25mm-4-SQEM | $15.82 | $17.92 |
| 1.50 | 4.50 | 3.00 | 1.50 | S310-1.50mm-2-SQEM | S310-1.50mm-4-SQEM | $13.88 | $15.98 |
| 1.75 | 5.25 | 3.00 | 1.50 | S310-1.75mm-2-SQEM | S310-1.75mm-4-SQEM | $13.88 | $15.98 |
| 2.00 | 6.00 | 3.00 | 1.50 | S310-2.00mm-2-SQEM | S310-2.00mm-4-SQEM | $13.88 | $15.98 |
| 2.25 | 6.75 | 3.00 | 1.50 | S310-2.25mm-2-SQEM | S310-2.25mm-4-SQEM | $13.88 | $15.98 |
| 2.50 | 7.50 | 3.00 | 1.50 | S310-2.50mm-2-SQEM | S310-2.50mm-4-SQEM | $13.88 | $15.98 |
| 2.75 | 8.25 | 3.00 | 1.50 | S310-2.75mm-2-SQEM | S310-2.75mm-4-SQEM | $13.88 | $15.98 |
| 3.00 | 9.00 | 3.00 | 1.50 | S310-3.00mm-2-SQEM | S310-3.00mm-4-SQEM | $13.88 | $15.98 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S311 Metric Ball Micro End Mills (Metric Shank)

FLUTES 2,4

1.5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter (mm) | Length of Cut (mm) | Shank Diameter (mm) | Overall Length (in.) | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.20 | 0.30 | 3.00 | 1.50 | S311-.20mm-2-BLEM | S311-.20mm-4-BLEM | $37.07 | $39.17 |
| 0.25 | 0.38 | 3.00 | 1.50 | S311-.25mm-2-BLEM | S311-.25mm-4-BLEM | $37.07 | $39.17 |
| 0.30 | 0.45 | 3.00 | 1.50 | S311-.30mm-2-BLEM | S311-.30mm-4-BLEM | $37.07 | $39.17 |
| 0.35 | 0.53 | 3.00 | 1.50 | S311-.35mm-2-BLEM | S311-.35mm-4-BLEM | $29.38 | $31.48 |
| 0.40 | 0.60 | 3.00 | 1.50 | S311-.40mm-2-BLEM | S311-.40mm-4-BLEM | $29.38 | $31.48 |
| 0.45 | 0.68 | 3.00 | 1.50 | S311-.45mm-2-BLEM | S311-.45mm-4-BLEM | $28.22 | $30.33 |
| 0.50 | 0.75 | 3.00 | 1.50 | S311-.50mm-2-BLEM | S311-.50mm-4-BLEM | $28.22 | $30.33 |
| 0.55 | 0.83 | 3.00 | 1.50 | S311-.55mm-2-BLEM | S311-.55mm-4-BLEM | $28.22 | $30.33 |
| 0.60 | 0.90 | 3.00 | 1.50 | S311-.60mm-2-BLEM | S311-.60mm-4-BLEM | $25.70 | $27.81 |
| 0.65 | 0.98 | 3.00 | 1.50 | S311-.65mm-2-BLEM | S311-.65mm-4-BLEM | $25.70 | $27.81 |
| 0.70 | 1.05 | 3.00 | 1.50 | S311-.70mm-2-BLEM | S311-.70mm-4-BLEM | $25.70 | $27.81 |
| 0.75 | 1.13 | 3.00 | 1.50 | S311-.75mm-2-BLEM | S311-.75mm-4-BLEM | $23.00 | $25.10 |
| 0.80 | 1.20 | 3.00 | 1.50 | S311-.80mm-2-BLEM | S311-.80mm-4-BLEM | $23.00 | $25.10 |
| 0.85 | 1.28 | 3.00 | 1.50 | S311-.85mm-2-BLEM | S311-.85mm-4-BLEM | $23.00 | $25.10 |
| 0.90 | 1.35 | 3.00 | 1.50 | S311-.90mm-2-BLEM | S311-.90mm-4-BLEM | $21.77 | $23.87 |
| 0.95 | 1.43 | 3.00 | 1.50 | S311-.95mm-2-BLEM | S311-.95mm-4-BLEM | $21.77 | $23.87 |
| 1.00 | 1.50 | 3.00 | 1.50 | S311-1.00mm-2-BLEM | S311-1.00mm-4-BLEM | $21.77 | $23.87 |
| 1.25 | 1.88 | 3.00 | 1.50 | S311-1.25mm-2-BLEM | S311-1.25mm-4-BLEM | $21.77 | $23.87 |
| 1.50 | 2.25 | 3.00 | 1.50 | S311-1.50mm-2-BLEM | S311-1.50mm-4-BLEM | $20.99 | $23.09 |
| 1.75 | 2.63 | 3.00 | 1.50 | S311-1.75mm-2-BLEM | S311-1.75mm-4-BLEM | $20.99 | $23.09 |
| 2.00 | 3.00 | 3.00 | 1.50 | S311-2.00mm-2-BLEM | S311-2.00mm-4-BLEM | $20.99 | $23.09 |
| 2.25 | 3.38 | 3.00 | 1.50 | S311-2.25mm-2-BLEM | S311-2.25mm-4-BLEM | $20.99 | $23.09 |
| 2.50 | 3.75 | 3.00 | 1.50 | S311-2.50mm-2-BLEM | S311-2.50mm-4-BLEM | $20.99 | $23.09 |
| 2.75 | 4.13 | 3.00 | 1.50 | S311-2.75mm-2-BLEM | S311-2.75mm-4-BLEM | $20.99 | $23.09 |
| 3.00 | 4.50 | 3.00 | 1.50 | S311-3.00mm-2-BLEM | S311-3.00mm-4-BLEM | $20.99 | $23.09 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## MANUFACTURED BY MITGI: Customer Focus

**At MITGI, your deadline and specifications are ours too. Our customer service, design, and manufacturing teams work together to ensure that your needs are represented every step along the way.**

Short turnaround times and tight tolerances are the nature of our business. Our teams are responsive and ready to help get your order started and out the door on time. Through personal and professional customer service, we make sure that our tools and delivery times meet specs and exceed expectations every time an order is placed.

Contact us to start working with MITGI today.

## Metric Ball Micro End Mills (Metric Shank)



FLUTES 2,4

3X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter (mm) | Length of Cut (mm) | Shank Diameter (mm) | Overall Length (in.) | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.20 | 0.60 | 3.00 | 1.50 | S312-.20mm-2-BLEM | S312-.20mm-4-BLEM | $37.07 | $39.17 |
| 0.25 | 0.75 | 3.00 | 1.50 | S312-.25mm-2-BLEM | S312-.25mm-4-BLEM | $37.07 | $39.17 |
| 0.30 | 0.90 | 3.00 | 1.50 | S312-.30mm-2-BLEM | S312-.30mm-4-BLEM | $37.07 | $39.17 |
| 0.35 | 1.05 | 3.00 | 1.50 | S312-.35mm-2-BLEM | S312-.35mm-4-BLEM | $29.38 | $31.48 |
| 0.40 | 1.20 | 3.00 | 1.50 | S312-.40mm-2-BLEM | S312-.40mm-4-BLEM | $29.38 | $31.48 |
| 0.45 | 1.35 | 3.00 | 1.50 | S312-.45mm-2-BLEM | S312-.45mm-4-BLEM | $28.22 | $30.33 |
| 0.50 | 1.50 | 3.00 | 1.50 | S312-.50mm-2-BLEM | S312-.50mm-4-BLEM | $28.22 | $30.33 |
| 0.55 | 1.65 | 3.00 | 1.50 | S312-.55mm-2-BLEM | S312-.55mm-4-BLEM | $28.22 | $30.33 |
| 0.60 | 1.80 | 3.00 | 1.50 | S312-.60mm-2-BLEM | S312-.60mm-4-BLEM | $25.70 | $27.81 |
| 0.65 | 1.95 | 3.00 | 1.50 | S312-.65mm-2-BLEM | S312-.65mm-4-BLEM | $25.70 | $27.81 |
| 0.70 | 2.10 | 3.00 | 1.50 | S312-.70mm-2-BLEM | S312-.70mm-4-BLEM | $25.70 | $27.81 |
| 0.75 | 2.25 | 3.00 | 1.50 | S312-.75mm-2-BLEM | S312-.75mm-4-BLEM | $23.00 | $25.10 |
| 0.80 | 2.40 | 3.00 | 1.50 | S312-.80mm-2-BLEM | S312-.80mm-4-BLEM | $23.00 | $25.10 |
| 0.85 | 2.55 | 3.00 | 1.50 | S312-.85mm-2-BLEM | S312-.85mm-4-BLEM | $23.00 | $25.10 |
| 0.90 | 2.70 | 3.00 | 1.50 | S312-.90mm-2-BLEM | S312-.90mm-4-BLEM | $21.77 | $23.87 |
| 0.95 | 2.85 | 3.00 | 1.50 | S312-.95mm-2-BLEM | S312-.95mm-4-BLEM | $21.77 | $23.87 |
| 1.00 | 3.00 | 3.00 | 1.50 | S312-1.00mm-2-BLEM | S312-1.00mm-4-BLEM | $21.77 | $23.87 |
| 1.25 | 3.75 | 3.00 | 1.50 | S312-1.25mm-2-BLEM | S312-1.25mm-4-BLEM | $21.77 | $23.87 |
| 1.50 | 4.50 | 3.00 | 1.50 | S312-1.50mm-2-BLEM | S312-1.50mm-4-BLEM | $20.99 | $23.09 |
| 1.75 | 5.25 | 3.00 | 1.50 | S312-1.75mm-2-BLEM | S312-1.75mm-4-BLEM | $20.99 | $23.09 |
| 2.00 | 6.00 | 3.00 | 1.50 | S312-2.00mm-2-BLEM | S312-2.00mm-4-BLEM | $20.99 | $23.09 |
| 2.25 | 6.75 | 3.00 | 1.50 | S312-2.25mm-2-BLEM | S312-2.25mm-4-BLEM | $20.99 | $23.09 |
| 2.50 | 7.50 | 3.00 | 1.50 | S312-2.50mm-2-BLEM | S312-2.50mm-4-BLEM | $20.99 | $23.09 |
| 2.75 | 8.25 | 3.00 | 1.50 | S312-2.75mm-2-BLEM | S312-2.75mm-4-BLEM | $20.99 | $23.09 |
| 3.00 | 9.00 | 3.00 | 1.50 | S312-3.00mm-2-BLEM | S312-3.00mm-4-BLEM | $20.99 | $23.09 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MITGI RESULTS: Service and Performance

"As always, your tools, delivery, service, and tool performance, were absolutely wonderful. I can't tell you enough what a pleasure it is to do business with MITGI.

We currently utilize a number of different suppliers, but your service is unparalleled. I love your new tools; they blow the doors off of everyone else."

*- Chad*

*Amy, Customer Service Representative*

## S277 Square Variable Helix Micro End Mills

FLUTES 3,4

1.5X LENGTH OF CUT

VARIABLE HELIX

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.031 (1/32) | 0.047 | 0.125 | 1.50 | S277-031-3-VHSM | S277-031-4-VHSM | $23.45 | $25.45 |
| 0.035 | 0.053 | 0.125 | 1.50 | S277-035-3-VHSM | S277-035-4-VHSM | $23.45 | $25.45 |
| 0.039 (1mm) | 0.059 | 0.125 | 1.50 | S277-039-3-VHSM | S277-039-4-VHSM | $23.45 | $25.45 |
| 0.040 | 0.060 | 0.125 | 1.50 | S277-040-3-VHSM | S277-040-4-VHSM | $23.45 | $25.45 |
| 0.045 | 0.068 | 0.125 | 1.50 | S277-045-3-VHSM | S277-045-4-VHSM | $23.45 | $25.45 |
| 0.047 (3/64) | 0.071 | 0.125 | 1.50 | S277-047-3-VHSM | S277-047-4-VHSM | $23.45 | $25.45 |
| 0.050 | 0.075 | 0.125 | 1.50 | S277-050-3-VHSM | S277-050-4-VHSM | $23.45 | $25.45 |
| 0.055 | 0.083 | 0.125 | 1.50 | S277-055-3-VHSM | S277-055-4-VHSM | $23.45 | $25.45 |
| 0.060 | 0.090 | 0.125 | 1.50 | S277-060-3-VHSM | S277-060-4-VHSM | $23.45 | $25.45 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | S277-062-3-VHSM | S277-062-4-VHSM | $21.80 | $23.80 |
| 0.065 | 0.098 | 0.125 | 1.50 | S277-065-3-VHSM | S277-065-4-VHSM | $21.80 | $23.80 |
| 0.070 | 0.105 | 0.125 | 1.50 | S277-070-3-VHSM | S277-070-4-VHSM | $21.80 | $23.80 |
| 0.075 | 0.113 | 0.125 | 1.50 | S277-075-3-VHSM | S277-075-4-VHSM | $21.80 | $23.80 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | S277-078-3-VHSM | S277-078-4-VHSM | $21.80 | $23.80 |
| 0.080 | 0.120 | 0.125 | 1.50 | S277-080-3-VHSM | S277-080-4-VHSM | $21.80 | $23.80 |
| 0.085 | 0.128 | 0.125 | 1.50 | S277-085-3-VHSM | S277-085-4-VHSM | $21.80 | $23.80 |
| 0.090 | 0.135 | 0.125 | 1.50 | S277-090-3-VHSM | S277-090-4-VHSM | $21.80 | $23.80 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | S277-093-3-VHSM | S277-093-4-VHSM | $21.80 | $23.80 |
| 0.095 | 0.143 | 0.125 | 1.50 | S277-095-3-VHSM | S277-095-4-VHSM | $21.80 | $23.80 |
| 0.100 | 0.150 | 0.125 | 1.50 | S277-100-3-VHSM | S277-100-4-VHSM | $21.80 | $23.80 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | S277-118-3-VHSM | S277-118-4-VHSM | $21.80 | $23.80 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | S277-125-3-VHSM | S277-125-4-VHSM | $21.80 | $23.80 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## S278 Square Variable Helix Micro End Mills

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.031 (1/32) | 0.093 | 0.125 | 1.50 | S278-031-3-VHSM | S278-031-4-VHSM | $23.45 | $25.45 |
| 0.035 | 0.105 | 0.125 | 1.50 | S278-035-3-VHSM | S278-035-4-VHSM | $23.45 | $25.45 |
| 0.039 (1mm) | 0.117 | 0.125 | 1.50 | S278-039-3-VHSM | S278-039-4-VHSM | $23.45 | $25.45 |
| 0.040 | 0.120 | 0.125 | 1.50 | S278-040-3-VHSM | S278-040-4-VHSM | $23.45 | $25.45 |
| 0.045 | 0.135 | 0.125 | 1.50 | S278-045-3-VHSM | S278-045-4-VHSM | $23.45 | $25.45 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | S278-047-3-VHSM | S278-047-4-VHSM | $23.45 | $25.45 |
| 0.050 | 0.150 | 0.125 | 1.50 | S278-050-3-VHSM | S278-050-4-VHSM | $23.45 | $25.45 |
| 0.055 | 0.165 | 0.125 | 1.50 | S278-055-3-VHSM | S278-055-4-VHSM | $23.45 | $25.45 |

## Square Variable Helix Micro End Mills (con't)

**S278**

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.060 | 0.180 | 0.125 | 1.50 | S278-060-3-VHSM | S278-060-4-VHSM | $23.45 | $25.45 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | S278-062-3-VHSM | S278-062-4-VHSM | $21.80 | $23.80 |
| 0.065 | 0.195 | 0.125 | 1.50 | S278-065-3-VHSM | S278-065-4-VHSM | $21.80 | $23.80 |
| 0.070 | 0.210 | 0.125 | 1.50 | S278-070-3-VHSM | S278-070-4-VHSM | $21.80 | $23.80 |
| 0.075 | 0.225 | 0.125 | 1.50 | S278-075-3-VHSM | S278-075-4-VHSM | $21.80 | $23.80 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | S278-078-3-VHSM | S278-078-4-VHSM | $21.80 | $23.80 |
| 0.080 | 0.240 | 0.125 | 1.50 | S278-080-3-VHSM | S278-080-4-VHSM | $21.80 | $23.80 |
| 0.085 | 0.255 | 0.125 | 1.50 | S278-085-3-VHSM | S278-085-4-VHSM | $21.80 | $23.80 |
| 0.090 | 0.270 | 0.125 | 1.50 | S278-090-3-VHSM | S278-090-4-VHSM | $21.80 | $23.80 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | S278-093-3-VHSM | S278-093-4-VHSM | $21.80 | $23.80 |
| 0.095 | 0.285 | 0.125 | 1.50 | S278-095-3-VHSM | S278-095-4-VHSM | $21.80 | $23.80 |
| 0.100 | 0.300 | 0.125 | 1.50 | S278-100-3-VHSM | S278-100-4-VHSM | $21.80 | $23.80 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | S278-118-3-VHSM | S278-118-4-VHSM | $21.80 | $23.80 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | S278-125-3-VHSM | S278-125-4-VHSM | $21.80 | $23.80 |

FLUTES 3,4
3X LENGTH OF CUT
VARIABLE HELIX
SWISS-TYPE OAL
QUICK TURN SPECIALS

## Square Variable Helix Micro End Mills

**S279**

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | S279-031-3-VHSM | S279-031-4-VHSM | $31.66 | $33.76 |
| 0.035 | 0.175 | 0.125 | 2.50 | S279-035-3-VHSM | S279-035-4-VHSM | $31.66 | $33.76 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | S279-039-3-VHSM | S279-039-4-VHSM | $31.66 | $33.76 |
| 0.040 | 0.200 | 0.125 | 2.50 | S279-040-3-VHSM | S279-040-4-VHSM | $31.66 | $33.76 |
| 0.045 | 0.225 | 0.125 | 2.50 | S279-045-3-VHSM | S279-045-4-VHSM | $31.66 | $33.76 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | S279-047-3-VHSM | S279-047-4-VHSM | $31.66 | $33.76 |
| 0.050 | 0.250 | 0.125 | 2.50 | S279-050-3-VHSM | S279-050-4-VHSM | $31.66 | $33.76 |
| 0.055 | 0.275 | 0.125 | 2.50 | S279-055-3-VHSM | S279-055-4-VHSM | $31.66 | $33.76 |
| 0.060 | 0.300 | 0.125 | 2.50 | S279-060-3-VHSM | S279-060-4-VHSM | $31.66 | $33.76 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | S279-062-3-VHSM | S279-062-4-VHSM | $30.50 | $32.60 |
| 0.065 | 0.325 | 0.125 | 2.50 | S279-065-3-VHSM | S279-065-4-VHSM | $30.50 | $32.60 |
| 0.070 | 0.350 | 0.125 | 2.50 | S279-070-3-VHSM | S279-070-4-VHSM | $30.50 | $32.60 |
| 0.075 | 0.375 | 0.125 | 2.50 | S279-075-3-VHSM | S279-075-4-VHSM | $30.50 | $32.60 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | S279-078-3-VHSM | S279-078-4-VHSM | $30.50 | $32.60 |
| 0.080 | 0.400 | 0.125 | 2.50 | S279-080-3-VHSM | S279-080-4-VHSM | $30.50 | $32.60 |
| 0.085 | 0.425 | 0.125 | 2.50 | S279-085-3-VHSM | S279-085-4-VHSM | $30.50 | $32.60 |
| 0.090 | 0.450 | 0.125 | 2.50 | S279-090-3-VHSM | S279-090-4-VHSM | $30.50 | $32.60 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | S279-093-3-VHSM | S279-093-4-VHSM | $30.50 | $32.60 |
| 0.095 | 0.475 | 0.125 | 2.50 | S279-095-3-VHSM | S279-095-4-VHSM | $30.50 | $32.60 |
| 0.100 | 0.500 | 0.125 | 2.50 | S279-100-3-VHSM | S279-100-4-VHSM | $30.50 | $32.60 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | S279-118-3-VHSM | S279-118-4-VHSM | $30.50 | $32.60 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | S279-125-3-VHSM | S279-125-4-VHSM | $30.50 | $32.60 |

FLUTES 3,4
5X LENGTH OF CUT
VARIABLE HELIX
SWISS-TYPE OAL
QUICK TURN SPECIALS

# S286 Corner Radius Variable Helix Micro End Mills

FLUTES 3,4

1.5X LENGTH OF CUT

VARIABLE HELIX

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | |
| 0.031 (1/32) | 0.047 | 0.125 | 1.50 | 0.005 | S286-031-3-.005R-VHCM | S286-031-4-.005R-VHCM | $30.00 | $32.00 |
| 0.035 | 0.053 | 0.125 | 1.50 | 0.005 | S286-035-3-.005R-VHCM | S286-035-4-.005R-VHCM | $26.10 | $28.10 |
| 0.039 (1mm) | 0.059 | 0.125 | 1.50 | 0.005 | S286-039-3-.005R-VHCM | S286-039-4-.005R-VHCM | $26.10 | $28.10 |
| 0.040 | 0.060 | 0.125 | 1.50 | 0.005 | S286-040-3-.005R-VHCM | S286-040-4-.005R-VHCM | $26.10 | $28.10 |
| 0.045 | 0.068 | 0.125 | 1.50 | 0.005 | S286-045-3-.005R-VHCM | S286-045-4-.005R-VHCM | $26.10 | $28.10 |
| 0.047 (3/64) | 0.071 | 0.125 | 1.50 | 0.005 | S286-047-3-.005R-VHCM | S286-047-4-.005R-VHCM | $26.10 | $28.10 |
| 0.050 | 0.075 | 0.125 | 1.50 | 0.005 | S286-050-3-.005R-VHCM | S286-050-4-.005R-VHCM | $26.10 | $28.10 |
| 0.055 | 0.083 | 0.125 | 1.50 | 0.005 | S286-055-3-.005R-VHCM | S286-055-4-.005R-VHCM | $26.10 | $28.10 |
| 0.060 | 0.090 | 0.125 | 1.50 | 0.005 | S286-060-3-.005R-VHCM | S286-060-4-.005R-VHCM | $26.10 | $28.10 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | 0.005 | S286-062-3-.005R-VHCM | S286-062-4-.005R-VHCM | $24.55 | $26.55 |
| 0.065 | 0.098 | 0.125 | 1.50 | 0.005 | S286-065-3-.005R-VHCM | S286-065-4-.005R-VHCM | $24.55 | $26.55 |
| 0.070 | 0.105 | 0.125 | 1.50 | 0.005 | S286-070-3-.005R-VHCM | S286-070-4-.005R-VHCM | $24.55 | $26.55 |
| 0.070 | 0.105 | 0.125 | 1.50 | 0.010 | S286-070-3-.010R-VHCM | S286-070-4-.010R-VHCM | $24.55 | $26.55 |
| 0.075 | 0.113 | 0.125 | 1.50 | 0.005 | S286-075-3-.005R-VHCM | S286-075-4-.005R-VHCM | $24.55 | $26.55 |
| 0.075 | 0.113 | 0.125 | 1.50 | 0.010 | S286-075-3-.010R-VHCM | S286-075-4-.010R-VHCM | $24.55 | $26.55 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | 0.005 | S286-078-3-.005R-VHCM | S286-078-4-.005R-VHCM | $24.55 | $26.55 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | 0.010 | S286-078-3-.010R-VHCM | S286-078-4-.010R-VHCM | $24.55 | $26.55 |
| 0.080 | 0.120 | 0.125 | 1.50 | 0.005 | S286-080-3-.005R-VHCM | S286-080-4-.005R-VHCM | $24.55 | $26.55 |
| 0.080 | 0.120 | 0.125 | 1.50 | 0.010 | S286-080-3-.010R-VHCM | S286-080-4-.010R-VHCM | $24.55 | $26.55 |
| 0.085 | 0.128 | 0.125 | 1.50 | 0.005 | S286-085-3-.005R-VHCM | S286-085-4-.005R-VHCM | $24.55 | $26.55 |
| 0.085 | 0.128 | 0.125 | 1.50 | 0.010 | S286-085-3-.010R-VHCM | S286-085-4-.010R-VHCM | $24.55 | $26.55 |
| 0.090 | 0.135 | 0.125 | 1.50 | 0.005 | S286-090-3-.005R-VHCM | S286-090-4-.005R-VHCM | $24.55 | $26.55 |
| 0.090 | 0.135 | 0.125 | 1.50 | 0.010 | S286-090-3-.010R-VHCM | S286-090-4-.010R-VHCM | $24.55 | $26.55 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | 0.005 | S286-093-3-.005R-VHCM | S286-093-4-.005R-VHCM | $24.55 | $26.55 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | 0.010 | S286-093-3-.010R-VHCM | S286-093-4-.010R-VHCM | $24.55 | $26.55 |
| 0.095 | 0.143 | 0.125 | 1.50 | 0.005 | S286-095-3-.005R-VHCM | S286-095-4-.005R-VHCM | $24.55 | $26.55 |
| 0.095 | 0.143 | 0.125 | 1.50 | 0.010 | S286-095-3-.010R-VHCM | S286-095-4-.010R-VHCM | $24.55 | $26.55 |
| 0.100 | 0.150 | 0.125 | 1.50 | 0.005 | S286-100-3-.005R-VHCM | S286-100-4-.005R-VHCM | $24.55 | $26.55 |
| 0.100 | 0.150 | 0.125 | 1.50 | 0.010 | S286-100-3-.010R-VHCM | S286-100-4-.010R-VHCM | $24.55 | $26.55 |
| 0.100 | 0.150 | 0.125 | 1.50 | 0.015 | S286-100-3-.015R-VHCM | S286-100-4-.015R-VHCM | $24.55 | $26.55 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.005 | S286-118-3-.005R-VHCM | S286-118-4-.005R-VHCM | $24.55 | $26.55 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.010 | S286-118-3-.010R-VHCM | S286-118-4-.010R-VHCM | $24.55 | $26.55 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | 0.015 | S286-118-3-.015R-VHCM | S286-118-4-.015R-VHCM | $24.55 | $26.55 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.005 | S286-125-3-.005R-VHCM | S286-125-4-.005R-VHCM | $24.55 | $26.55 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.010 | S286-125-3-.010R-VHCM | S286-125-4-.010R-VHCM | $24.55 | $26.55 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.015 | S286-125-3-.015R-VHCM | S286-125-4-.015R-VHCM | $24.55 | $26.55 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.020 | S286-125-3-.020R-VHCM | S286-125-4-.020R-VHCM | $24.55 | $26.55 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Corner Radius Variable Helix Micro End Mills



| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | |
| 0.031 (1/32) | 0.093 | 0.125 | 1.50 | 0.005 | S287-031-3-.005R-VHCM | S287-031-4-.005R-VHCM | $30.00 | $32.00 |
| 0.035 | 0.105 | 0.125 | 1.50 | 0.005 | S287-035-3-.005R-VHCM | S287-035-4-.005R-VHCM | $26.10 | $28.10 |
| 0.039 (1mm) | 0.117 | 0.125 | 1.50 | 0.005 | S287-039-3-.005R-VHCM | S287-039-4-.005R-VHCM | $26.10 | $28.10 |
| 0.040 | 0.120 | 0.125 | 1.50 | 0.005 | S287-040-3-.005R-VHCM | S287-040-4-.005R-VHCM | $26.10 | $28.10 |
| 0.045 | 0.135 | 0.125 | 1.50 | 0.005 | S287-045-3-.005R-VHCM | S287-045-4-.005R-VHCM | $26.10 | $28.10 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | 0.005 | S287-047-3-.005R-VHCM | S287-047-4-.005R-VHCM | $26.10 | $28.10 |
| 0.050 | 0.150 | 0.125 | 1.50 | 0.005 | S287-050-3-.005R-VHCM | S287-050-4-.005R-VHCM | $26.10 | $28.10 |
| 0.055 | 0.165 | 0.125 | 1.50 | 0.005 | S287-055-3-.005R-VHCM | S287-055-4-.005R-VHCM | $26.10 | $28.10 |
| 0.060 | 0.180 | 0.125 | 1.50 | 0.005 | S287-060-3-.005R-VHCM | S287-060-4-.005R-VHCM | $26.10 | $28.10 |
| 0.062 (1/16) | 0.187 | 0.125 | 1.50 | 0.005 | S287-062-3-.005R-VHCM | S287-062-4-.005R-VHCM | $24.55 | $26.55 |
| 0.065 | 0.195 | 0.125 | 1.50 | 0.005 | S287-065-3-.005R-VHCM | S287-065-4-.005R-VHCM | $24.55 | $26.55 |
| 0.070 | 0.210 | 0.125 | 1.50 | 0.005 | S287-070-3-.005R-VHCM | S287-070-4-.005R-VHCM | $24.55 | $26.55 |
| 0.070 | 0.210 | 0.125 | 1.50 | 0.010 | S287-070-3-.010R-VHCM | S287-070-4-.010R-VHCM | $24.55 | $26.55 |
| 0.075 | 0.225 | 0.125 | 1.50 | 0.005 | S287-075-3-.005R-VHCM | S287-075-4-.005R-VHCM | $24.55 | $26.55 |
| 0.075 | 0.225 | 0.125 | 1.50 | 0.010 | S287-075-3-.010R-VHCM | S287-075-4-.010R-VHCM | $24.55 | $26.55 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | 0.005 | S287-078-3-.005R-VHCM | S287-078-4-.005R-VHCM | $24.55 | $26.55 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | 0.010 | S287-078-3-.010R-VHCM | S287-078-4-.010R-VHCM | $24.55 | $26.55 |
| 0.080 | 0.240 | 0.125 | 1.50 | 0.005 | S287-080-3-.005R-VHCM | S287-080-4-.005R-VHCM | $24.55 | $26.55 |
| 0.080 | 0.240 | 0.125 | 1.50 | 0.010 | S287-080-3-.010R-VHCM | S287-080-4-.010R-VHCM | $24.55 | $26.55 |
| 0.085 | 0.255 | 0.125 | 1.50 | 0.005 | S287-085-3-.005R-VHCM | S287-085-4-.005R-VHCM | $24.55 | $26.55 |
| 0.085 | 0.255 | 0.125 | 1.50 | 0.010 | S287-085-3-.010R-VHCM | S287-085-4-.010R-VHCM | $24.55 | $26.55 |
| 0.090 | 0.270 | 0.125 | 1.50 | 0.005 | S287-090-3-.005R-VHCM | S287-090-4-.005R-VHCM | $24.55 | $26.55 |
| 0.090 | 0.270 | 0.125 | 1.50 | 0.010 | S287-090-3-.010R-VHCM | S287-090-4-.010R-VHCM | $24.55 | $26.55 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | 0.005 | S287-093-3-.005R-VHCM | S287-093-4-.005R-VHCM | $24.55 | $26.55 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | 0.010 | S287-093-3-.010R-VHCM | S287-093-4-.010R-VHCM | $24.55 | $26.55 |
| 0.095 | 0.285 | 0.125 | 1.50 | 0.005 | S287-095-3-.005R-VHCM | S287-095-4-.005R-VHCM | $24.55 | $26.55 |
| 0.095 | 0.285 | 0.125 | 1.50 | 0.010 | S287-095-3-.010R-VHCM | S287-095-4-.010R-VHCM | $24.55 | $26.55 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.005 | S287-100-3-.005R-VHCM | S287-100-4-.005R-VHCM | $24.55 | $26.55 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.010 | S287-100-3-.010R-VHCM | S287-100-4-.010R-VHCM | $24.55 | $26.55 |
| 0.100 | 0.300 | 0.125 | 1.50 | 0.015 | S287-100-3-.015R-VHCM | S287-100-4-.015R-VHCM | $24.55 | $26.55 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.005 | S287-118-3-.005R-VHCM | S287-118-4-.005R-VHCM | $24.55 | $26.55 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.010 | S287-118-3-.010R-VHCM | S287-118-4-.010R-VHCM | $24.55 | $26.55 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | 0.015 | S287-118-3-.015R-VHCM | S287-118-4-.015R-VHCM | $24.55 | $26.55 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.005 | S287-125-3-.005R-VHCM | S287-125-4-.005R-VHCM | $24.55 | $26.55 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.010 | S287-125-3-.010R-VHCM | S287-125-4-.010R-VHCM | $24.55 | $26.55 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.015 | S287-125-3-.015R-VHCM | S287-125-4-.015R-VHCM | $24.55 | $26.55 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.020 | S287-125-3-.020R-VHCM | S287-125-4-.020R-VHCM | $24.55 | $26.55 |

FLUTES 3,4

3X LENGTH OF CUT

VARIABLE HELIX

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S288 Corner Radius Variable Helix Micro End Mills

FLUTES 3,4

5X LENGTH OF CUT

VARIABLE HELIX

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | 0.005 | S288-031-3-.005R-VHCM | S288-031-4-.005R-VHCM | $32.76 | $34.86 |
| 0.035 | 0.175 | 0.125 | 2.50 | 0.005 | S288-035-3-.005R-VHCM | S288-035-4-.005R-VHCM | $32.76 | $34.86 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | 0.005 | S288-039-3-.005R-VHCM | S288-039-4-.005R-VHCM | $32.76 | $34.86 |
| 0.040 | 0.200 | 0.125 | 2.50 | 0.005 | S288-040-3-.005R-VHCM | S288-040-4-.005R-VHCM | $32.76 | $34.86 |
| 0.045 | 0.225 | 0.125 | 2.50 | 0.005 | S288-045-3-.005R-VHCM | S288-045-4-.005R-VHCM | $32.76 | $34.86 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | 0.005 | S288-047-3-.005R-VHCM | S288-047-4-.005R-VHCM | $32.76 | $34.86 |
| 0.050 | 0.250 | 0.125 | 2.50 | 0.005 | S288-050-3-.005R-VHCM | S288-050-4-.005R-VHCM | $32.76 | $34.86 |
| 0.055 | 0.275 | 0.125 | 2.50 | 0.005 | S288-055-3-.005R-VHCM | S288-055-4-.005R-VHCM | $32.76 | $34.86 |
| 0.060 | 0.300 | 0.125 | 2.50 | 0.005 | S288-060-3-.005R-VHCM | S288-060-4-.005R-VHCM | $32.76 | $34.86 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | 0.005 | S288-062-3-.005R-VHCM | S288-062-4-.005R-VHCM | $31.40 | $33.50 |
| 0.065 | 0.325 | 0.125 | 2.50 | 0.005 | S288-065-3-.005R-VHCM | S288-065-4-.005R-VHCM | $31.40 | $33.50 |
| 0.070 | 0.350 | 0.125 | 2.50 | 0.005 | S288-070-3-.005R-VHCM | S288-070-4-.005R-VHCM | $31.40 | $33.50 |
| 0.070 | 0.350 | 0.125 | 2.50 | 0.015 | S288-070-3-.015R-VHCM | S288-070-4-.015R-VHCM | $31.40 | $33.50 |
| 0.075 | 0.375 | 0.125 | 2.50 | 0.005 | S288-075-3-.005R-VHCM | S288-075-4-.005R-VHCM | $31.40 | $33.50 |
| 0.075 | 0.375 | 0.125 | 2.50 | 0.010 | S288-075-3-.010R-VHCM | S288-075-4-.010R-VHCM | $31.40 | $33.50 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.005 | S288-078-3-.005R-VHCM | S288-078-4-.005R-VHCM | $31.40 | $33.50 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | 0.010 | S288-078-3-.010R-VHCM | S288-078-4-.010R-VHCM | $31.40 | $33.50 |
| 0.080 | 0.400 | 0.125 | 2.50 | 0.005 | S288-080-3-.005R-VHCM | S288-080-4-.005R-VHCM | $31.40 | $33.50 |
| 0.080 | 0.400 | 0.125 | 2.50 | 0.010 | S288-080-3-.010R-VHCM | S288-080-4-.010R-VHCM | $31.40 | $33.50 |
| 0.085 | 0.425 | 0.125 | 2.50 | 0.005 | S288-085-3-.005R-VHCM | S288-085-4-.005R-VHCM | $31.40 | $33.50 |
| 0.085 | 0.425 | 0.125 | 2.50 | 0.010 | S288-085-3-.010R-VHCM | S288-085-4-.010R-VHCM | $31.40 | $33.50 |
| 0.090 | 0.450 | 0.125 | 2.50 | 0.005 | S288-090-3-.005R-VHCM | S288-090-4-.005R-VHCM | $31.40 | $33.50 |
| 0.090 | 0.450 | 0.125 | 2.50 | 0.010 | S288-090-3-.010R-VHCM | S288-090-4-.010R-VHCM | $31.40 | $33.50 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.005 | S288-093-3-.005R-VHCM | S288-093-4-.005R-VHCM | $31.40 | $33.50 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | 0.010 | S288-093-3-.010R-VHCM | S288-093-4-.010R-VHCM | $31.40 | $33.50 |
| 0.095 | 0.475 | 0.125 | 2.50 | 0.005 | S288-095-3-.005R-VHCM | S288-095-4-.005R-VHCM | $31.40 | $33.50 |
| 0.095 | 0.475 | 0.125 | 2.50 | 0.010 | S288-095-3-.010R-VHCM | S288-095-4-.010R-VHCM | $31.40 | $33.50 |
| 0.100 | 0.500 | 0.125 | 2.50 | 0.005 | S288-100-3-.005R-VHCM | S288-100-4-.005R-VHCM | $31.40 | $33.50 |
| 0.100 | 0.500 | 0.125 | 2.50 | 0.010 | S288-100-3-.010R-VHCM | S288-100-4-.010R-VHCM | $31.40 | $33.50 |
| 0.100 | 0.500 | 0.125 | 2.50 | 0.015 | S288-100-3-.015R-VHCM | S288-100-4-.015R-VHCM | $31.40 | $33.50 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.005 | S288-118-3-.005R-VHCM | S288-118-4-.005R-VHCM | $31.40 | $33.50 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.010 | S288-118-3-.010R-VHCM | S288-118-4-.010R-VHCM | $31.40 | $33.50 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | 0.015 | S288-118-3-.015R-VHCM | S288-118-4-.015R-VHCM | $31.40 | $33.50 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.005 | S288-125-3-.005R-VHCM | S288-125-4-.005R-VHCM | $31.40 | $33.50 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.010 | S288-125-3-.010R-VHCM | S288-125-4-.010R-VHCM | $31.40 | $33.50 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.015 | S288-125-3-.015R-VHCM | S288-125-4-.015R-VHCM | $31.40 | $33.50 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | 0.020 | S288-125-3-.020R-VHCM | S288-125-4-.020R-VHCM | $31.40 | $33.50 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# RELIABLE SERVICE & SUPPORT

## DEPENDABILITY

Manufacturers face increasingly tight production schedules and cannot afford downtime. MITGI understands that short lead times and the ability to deliver tools on time are essential to keep lines running and efficient. Our teams keep both your lead times and tool specs in mind when quoting, manufacturing, and delivering your tools. MITGI delivers performance and timelines you can depend on.

## ON-SITE MANUFACTURING

Companies that specialize in medical device manufacturing, aerospace, rapid prototyping, and all forms of precision manufacturing require tools with tight tolerances that are often hard to make. On-site manufacturing gives MITGI the ability to assess complex applications with our technical team and gives us flexibility in scheduling to meet customer demand. Our shop is well-equipped with an array of machines, inspection equipment, and experienced staff. This means that MITGI is capable and ready to make the tools you need, when you need them, and are well-positioned to support your growth.

*Katie, Executive Assistant to President*

## PERFORMANCE DRIVEN INNOVATION

Many of our customers first came to us to make tools that other manufacturers could not provide or when available lead times were too long. We're skilled at solving problems like these and we like knowing that the tools we manufacture help to empower innovation and performance in manufacturing facilities across the U.S. and throughout the world.

## TECHNICAL SUPPORT

Precision manufacturing requires tools that ensure repeatable performance, can handle complex manufacturing tasks, and help to boost productivity. MITGI employs service and support teams who can help solve tool problems that are difficult to assess or manufacture. Our teams are adept at helping to solve technical issues remotely or on-site, depending on location.

Contact your MITGI Account Manager for more information.

## S300 Ball Variable Helix Micro End Mills

FLUTES 3,4

1.5X LENGTH OF CUT

VARIABLE HELIX

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.031 (1/32) | 0.047 | 0.125 | 1.50 | S300-031-3-VHBM | S300-031-4-VHBM | $29.87 | $31.97 |
| 0.035 | 0.053 | 0.125 | 1.50 | S300-035-3-VHBM | S300-035-4-VHBM | $29.87 | $31.97 |
| 0.039 (1mm) | 0.059 | 0.125 | 1.50 | S300-039-3-VHBM | S300-039-4-VHBM | $29.87 | $31.97 |
| 0.040 | 0.060 | 0.125 | 1.50 | S300-040-3-VHBM | S300-040-4-VHBM | $29.87 | $31.97 |
| 0.045 | 0.068 | 0.125 | 1.50 | S300-045-3-VHBM | S300-045-4-VHBM | $29.87 | $31.97 |
| 0.047 (3/64) | 0.071 | 0.125 | 1.50 | S300-047-3-VHBM | S300-047-4-VHBM | $29.87 | $31.97 |
| 0.050 | 0.075 | 0.125 | 1.50 | S300-050-3-VHBM | S300-050-4-VHBM | $29.87 | $31.97 |
| 0.055 | 0.083 | 0.125 | 1.50 | S300-055-3-VHBM | S300-055-4-VHBM | $29.87 | $31.97 |
| 0.060 | 0.090 | 0.125 | 1.50 | S300-060-3-VHBM | S300-060-4-VHBM | $29.87 | $31.97 |
| 0.062 (1/16) | 0.093 | 0.125 | 1.50 | S300-062-3-VHBM | S300-062-4-VHBM | $27.83 | $29.93 |
| 0.065 | 0.098 | 0.125 | 1.50 | S300-065-3-VHBM | S300-065-4-VHBM | $27.83 | $29.93 |
| 0.070 | 0.105 | 0.125 | 1.50 | S300-070-3-VHBM | S300-070-4-VHBM | $27.83 | $29.93 |
| 0.075 | 0.113 | 0.125 | 1.50 | S300-075-3-VHBM | S300-075-4-VHBM | $27.83 | $29.93 |
| 0.078 (5/64) | 0.117 | 0.125 | 1.50 | S300-078-3-VHBM | S300-078-4-VHBM | $27.83 | $29.93 |
| 0.080 | 0.120 | 0.125 | 1.50 | S300-080-3-VHBM | S300-080-4-VHBM | $27.83 | $29.93 |
| 0.085 | 0.128 | 0.125 | 1.50 | S300-085-3-VHBM | S300-085-4-VHBM | $27.83 | $29.93 |
| 0.090 | 0.135 | 0.125 | 1.50 | S300-090-3-VHBM | S300-090-4-VHBM | $27.83 | $29.93 |
| 0.093 (3/32) | 0.140 | 0.125 | 1.50 | S300-093-3-VHBM | S300-093-4-VHBM | $27.83 | $29.93 |
| 0.095 | 0.143 | 0.125 | 1.50 | S300-095-3-VHBM | S300-095-4-VHBM | $27.83 | $29.93 |
| 0.100 | 0.150 | 0.125 | 1.50 | S300-100-3-VHBM | S300-100-4-VHBM | $27.83 | $29.93 |
| 0.118 (3mm) | 0.177 | 0.125 | 1.50 | S300-118-3-VHBM | S300-118-4-VHBM | $27.83 | $29.93 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | S300-125-3-VHBM | S300-125-4-VHBM | $27.83 | $29.93 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## S301 Ball Variable Helix Micro End Mills

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.031 (1/32) | 0.093 | 0.125 | 1.50 | S301-031-3-VHBM | S301-031-4-VHBM | $29.87 | $31.97 |
| 0.035 | 0.105 | 0.125 | 1.50 | S301-035-3-VHBM | S301-035-4-VHBM | $29.87 | $31.97 |
| 0.039 (1mm) | 0.117 | 0.125 | 1.50 | S301-039-3-VHBM | S301-039-4-VHBM | $29.87 | $31.97 |
| 0.040 | 0.120 | 0.125 | 1.50 | S301-040-3-VHBM | S301-040-4-VHBM | $29.87 | $31.97 |
| 0.045 | 0.135 | 0.125 | 1.50 | S301-045-3-VHBM | S301-045-4-VHBM | $29.87 | $31.97 |
| 0.047 (3/64) | 0.141 | 0.125 | 1.50 | S301-047-3-VHBM | S301-047-4-VHBM | $29.87 | $31.97 |
| 0.050 | 0.150 | 0.125 | 1.50 | S301-050-3-VHBM | S301-050-4-VHBM | $29.87 | $31.97 |
| 0.055 | 0.165 | 0.125 | 1.50 | S301-055-3-VHBM | S301-055-4-VHBM | $29.87 | $31.97 |

## Ball Variable Helix Micro End Mills (con't)

**S301**

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.065 | 0.195 | 0.125 | 1.50 | S301-065-3-VHBM | S301-065-4-VHBM | $27.83 | $29.93 |
| 0.070 | 0.210 | 0.125 | 1.50 | S301-070-3-VHBM | S301-070-4-VHBM | $27.83 | $29.93 |
| 0.075 | 0.225 | 0.125 | 1.50 | S301-075-3-VHBM | S301-075-4-VHBM | $27.83 | $29.93 |
| 0.078 (5/64) | 0.234 | 0.125 | 1.50 | S301-078-3-VHBM | S301-078-4-VHBM | $27.83 | $29.93 |
| 0.080 | 0.240 | 0.125 | 1.50 | S301-080-3-VHBM | S301-080-4-VHBM | $27.83 | $29.93 |
| 0.085 | 0.255 | 0.125 | 1.50 | S301-085-3-VHBM | S301-085-4-VHBM | $27.83 | $29.93 |
| 0.090 | 0.270 | 0.125 | 1.50 | S301-090-3-VHBM | S301-090-4-VHBM | $27.83 | $29.93 |
| 0.093 (3/32) | 0.279 | 0.125 | 1.50 | S301-093-3-VHBM | S301-093-4-VHBM | $27.83 | $29.93 |
| 0.095 | 0.285 | 0.125 | 1.50 | S301-095-3-VHBM | S301-095-4-VHBM | $27.83 | $29.93 |
| 0.100 | 0.300 | 0.125 | 1.50 | S301-100-3-VHBM | S301-100-4-VHBM | $27.83 | $29.93 |
| 0.118 (3mm) | 0.354 | 0.125 | 1.50 | S301-118-3-VHBM | S301-118-4-VHBM | $27.83 | $29.93 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | S301-125-3-VHBM | S301-125-4-VHBM | $27.83 | $29.93 |

FLUTES 3,4
3X LENGTH OF CUT
VARIABLE HELIX
SWISS-TYPE OAL
QUICK TURN SPECIALS

## Ball Variable Helix Micro End Mills

**S302**

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.031 (1/32) | 0.155 | 0.125 | 2.50 | S302-031-3-VHBM | S302-031-4-VHBM | $37.38 | $39.48 |
| 0.035 | 0.175 | 0.125 | 2.50 | S302-035-3-VHBM | S302-035-4-VHBM | $37.38 | $39.48 |
| 0.039 (1mm) | 0.195 | 0.125 | 2.50 | S302-039-3-VHBM | S302-039-4-VHBM | $37.38 | $39.48 |
| 0.040 | 0.200 | 0.125 | 2.50 | S302-040-3-VHBM | S302-040-4-VHBM | $37.38 | $39.48 |
| 0.045 | 0.225 | 0.125 | 2.50 | S302-045-3-VHBM | S302-045-4-VHBM | $37.38 | $39.48 |
| 0.047 (3/64) | 0.235 | 0.125 | 2.50 | S302-047-3-VHBM | S302-047-4-VHBM | $37.38 | $39.48 |
| 0.050 | 0.250 | 0.125 | 2.50 | S302-050-3-VHBM | S302-050-4-VHBM | $37.38 | $39.48 |
| 0.055 | 0.275 | 0.125 | 2.50 | S302-055-3-VHBM | S302-055-4-VHBM | $37.38 | $39.48 |
| 0.060 | 0.300 | 0.125 | 2.50 | S302-060-3-VHBM | S302-060-4-VHBM | $37.38 | $39.48 |
| 0.062 (1/16) | 0.310 | 0.125 | 2.50 | S302-062-3-VHBM | S302-062-4-VHBM | $35.49 | $37.59 |
| 0.065 | 0.325 | 0.125 | 2.50 | S302-065-3-VHBM | S302-065-4-VHBM | $35.49 | $37.59 |
| 0.070 | 0.350 | 0.125 | 2.50 | S302-070-3-VHBM | S302-070-4-VHBM | $35.49 | $37.59 |
| 0.075 | 0.375 | 0.125 | 2.50 | S302-075-3-VHBM | S302-075-4-VHBM | $35.49 | $37.59 |
| 0.078 (5/64) | 0.390 | 0.125 | 2.50 | S302-078-3-VHBM | S302-078-4-VHBM | $35.49 | $37.59 |
| 0.080 | 0.400 | 0.125 | 2.50 | S302-080-3-VHBM | S302-080-4-VHBM | $35.49 | $37.59 |
| 0.085 | 0.425 | 0.125 | 2.50 | S302-085-3-VHBM | S302-085-4-VHBM | $35.49 | $37.59 |
| 0.090 | 0.450 | 0.125 | 2.50 | S302-090-3-VHBM | S302-090-4-VHBM | $35.49 | $37.59 |
| 0.093 (3/32) | 0.465 | 0.125 | 2.50 | S302-093-3-VHBM | S302-093-4-VHBM | $35.49 | $37.59 |
| 0.095 | 0.475 | 0.125 | 2.50 | S302-095-3-VHBM | S302-095-4-VHBM | $35.49 | $37.59 |
| 0.100 | 0.500 | 0.125 | 2.50 | S302-100-3-VHBM | S302-100-4-VHBM | $35.49 | $37.59 |
| 0.118 (3mm) | 0.590 | 0.125 | 2.50 | S302-118-3-VHBM | S302-118-4-VHBM | $35.49 | $37.59 |
| 0.125 (1/8) | 0.625 | 0.125 | 2.50 | S302-125-3-VHBM | S302-125-4-VHBM | $35.49 | $37.59 |

FLUTES 3,4
5X LENGTH OF CUT
VARIABLE HELIX
SWISS-TYPE OAL
QUICK TURN SPECIALS

# S131 Micro Drills

FLUTES 2

5X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.0040 | 0.020 | 0.125 | 1.50 | 2 | S131-004-118-5X | S131-004-140-5X | $33.50 | $35.60 |
| 0.0050 | 0.025 | 0.125 | 1.50 | 2 | S131-005-118-5X | S131-005-140-5X | $33.50 | $35.60 |
| 0.0060 | 0.030 | 0.125 | 1.50 | 2 | S131-006-118-5X | S131-006-140-5X | $33.50 | $35.60 |
| 0.0070 | 0.035 | 0.125 | 1.50 | 2 | S131-007-118-5X | S131-007-140-5X | $33.50 | $35.60 |
| 0.0080 | 0.040 | 0.125 | 1.50 | 2 | S131-008-118-5X | S131-008-140-5X | $26.04 | $28.14 |
| 0.0090 | 0.045 | 0.125 | 1.50 | 2 | S131-009-118-5X | S131-009-140-5X | $26.04 | $28.14 |
| 0.0100 | 0.050 | 0.125 | 1.50 | 2 | S131-010-118-5X | S131-010-140-5X | $26.04 | $28.14 |
| 0.0110 | 0.055 | 0.125 | 1.50 | 2 | S131-011-118-5X | S131-011-140-5X | $26.04 | $28.14 |
| 0.0120 | 0.060 | 0.125 | 1.50 | 2 | S131-012-118-5X | S131-012-140-5X | $26.04 | $28.14 |
| 0.0130 | 0.065 | 0.125 | 1.50 | 2 | S131-013-118-5X | S131-013-140-5X | $26.04 | $28.14 |
| 0.0140 | 0.070 | 0.125 | 1.50 | 2 | S131-014-118-5X | S131-014-140-5X | $22.21 | $24.31 |
| 0.0156 (1/64) | 0.078 | 0.125 | 1.50 | 2 | S131-015-118-5X | S131-015-140-5X | $22.21 | $24.31 |
| 0.0160 | 0.080 | 0.125 | 1.50 | 2 | S131-016-118-5X | S131-016-140-5X | $22.21 | $24.31 |
| 0.0170 | 0.085 | 0.125 | 1.50 | 2 | S131-017-118-5X | S131-017-140-5X | $22.21 | $24.31 |
| 0.0180 | 0.090 | 0.125 | 1.50 | 2 | S131-018-118-5X | S131-018-140-5X | $20.37 | $22.47 |
| 0.0190 | 0.095 | 0.125 | 1.50 | 2 | S131-019-118-5X | S131-019-140-5X | $20.37 | $22.47 |
| 0.0200 | 0.100 | 0.125 | 1.50 | 2 | S131-020-118-5X | S131-020-140-5X | $20.37 | $22.47 |
| 0.0210 | 0.105 | 0.125 | 1.50 | 2 | S131-021-118-5X | S131-021-140-5X | $20.37 | $22.47 |
| 0.0220 | 0.110 | 0.125 | 1.50 | 2 | S131-022-118-5X | S131-022-140-5X | $20.37 | $22.47 |
| 0.0230 | 0.115 | 0.125 | 1.50 | 2 | S131-023-118-5X | S131-023-140-5X | $20.37 | $22.47 |
| 0.0240 | 0.120 | 0.125 | 1.50 | 2 | S131-024-118-5X | S131-024-140-5X | $20.37 | $22.47 |
| 0.0250 | 0.125 | 0.125 | 1.50 | 2 | S131-025-118-5X | S131-025-140-5X | $20.37 | $22.47 |
| 0.0260 | 0.130 | 0.125 | 1.50 | 2 | S131-026-118-5X | S131-026-140-5X | $20.37 | $22.47 |
| 0.0270 | 0.135 | 0.125 | 1.50 | 2 | S131-027-118-5X | S131-027-140-5X | $20.37 | $22.47 |
| 0.0280 | 0.140 | 0.125 | 1.50 | 2 | S131-028-118-5X | S131-028-140-5X | $20.37 | $22.47 |
| 0.0290 | 0.145 | 0.125 | 1.50 | 2 | S131-029-118-5X | S131-029-140-5X | $20.37 | $22.47 |
| 0.0300 | 0.150 | 0.125 | 1.50 | 2 | S131-030-118-5X | S131-030-140-5X | $20.37 | $22.47 |
| 0.0313 (1/32) | 0.156 | 0.125 | 1.50 | 2 | S131-031-118-5X | S131-031-140-5X | $19.48 | $21.58 |
| 0.0350 | 0.175 | 0.125 | 1.50 | 2 | S131-035-118-5X | S131-035-140-5X | $19.48 | $21.58 |
| 0.0400 | 0.200 | 0.125 | 1.50 | 2 | S131-040-118-5X | S131-040-140-5X | $19.48 | $21.58 |
| 0.0450 | 0.225 | 0.125 | 1.50 | 2 | S131-045-118-5X | S131-045-140-5X | $19.48 | $21.58 |
| 0.0469 (3/64) | 0.235 | 0.125 | 1.50 | 2 | S131-047-118-5X | S131-047-140-5X | $19.48 | $21.58 |
| 0.0500 | 0.250 | 0.125 | 1.50 | 2 | S131-050-118-5X | S131-050-140-5X | $19.48 | $21.58 |
| 0.0550 | 0.275 | 0.125 | 1.50 | 2 | S131-055-118-5X | S131-055-140-5X | $19.48 | $21.58 |
| 0.0600 | 0.300 | 0.125 | 1.50 | 2 | S131-060-118-5X | S131-060-140-5X | $19.48 | $21.58 |
| 0.0625 (1/16) | 0.313 | 0.125 | 2.00 | 2 | S131-062-118-5X | S131-062-140-5X | $19.48 | $21.58 |
| 0.0650 | 0.325 | 0.125 | 2.00 | 2 | S131-065-118-5X | S131-065-140-5X | $19.48 | $21.58 |
| 0.0700 | 0.350 | 0.125 | 2.00 | 2 | S131-070-118-5X | S131-070-140-5X | $19.48 | $21.58 |
| 0.0750 | 0.375 | 0.125 | 2.00 | 2 | S131-075-118-5X | S131-075-140-5X | $19.48 | $21.58 |
| 0.0781 (5/64) | 0.391 | 0.125 | 2.00 | 2 | S131-078-118-5X | S131-078-140-5X | $19.48 | $21.58 |
| 0.0800 | 0.400 | 0.125 | 2.00 | 2 | S131-080-118-5X | S131-080-140-5X | $19.48 | $21.58 |
| 0.0850 | 0.425 | 0.125 | 2.00 | 2 | S131-085-118-5X | S131-085-140-5X | $19.48 | $21.58 |

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.0900 | 0.450 | 0.125 | 2.00 | 2 | S131-090-118-5X | S131-090-140-5X | $19.48 | $21.58 |
| 0.0938 (3/32) | 0.469 | 0.125 | 2.00 | 2 | S131-093-118-5X | S131-093-140-5X | $19.48 | $21.58 |
| 0.0950 | 0.475 | 0.125 | 2.00 | 2 | S131-095-118-5X | S131-095-140-5X | $19.48 | $21.58 |
| 0.1000 | 0.500 | 0.125 | 2.00 | 2 | S131-100-118-5X | S131-100-140-5X | $19.48 | $21.58 |
| 0.1050 | 0.525 | 0.125 | 2.00 | 2 | S131-105-118-5X | S131-105-140-5X | $19.48 | $21.58 |
| 0.1094 (7/64) | 0.547 | 0.125 | 2.00 | 2 | S131-109-118-5X | S131-109-140-5X | $19.48 | $21.58 |
| 0.1100 | 0.550 | 0.125 | 2.00 | 2 | S131-110-118-5X | S131-110-140-5X | $19.48 | $21.58 |
| 0.1150 | 0.575 | 0.125 | 2.00 | 2 | S131-115-118-5X | S131-115-140-5X | $19.48 | $21.58 |
| 0.1200 | 0.600 | 0.125 | 2.00 | 2 | S131-120-118-5X | S131-120-140-5X | $19.48 | $21.58 |
| 0.1250 (1/8) | 0.625 | 0.1875 | 2.00 | 2 | S131-125-118-5X | S131-125-140-5X | $21.58 | $26.20 |
| 0.1200 | 0.600 | 0.125 | 2.00 | 2 | S131-120-118-5X | S131-120-140-5X | $19.48 | $21.58 |
| 0.1250 (1/8) | 0.625 | 0.1875 | 2.00 | 2 | S131-125-118-5X | S131-125-140-5X | $21.58 | $26.20 |

FLUTES 2

5X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


# CUSTOM SPECIALS / Drills

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

## MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and flute types vary by design
- Custom drill types: Drills, Spot Drills, G-Style Drills, Double Margin Drills, Spade Drills
- Specs include shoulder angle, flute length, included point angle, and drill diameter
- Extended reach and extended flute length options
- Specials usually available in two weeks or less

**Quote forms available on our website and upon request. Contact us for an estimate today.**

MITGI

QUOTE SHEET / Drill, Drill Mill, Spot Drill
G-Style Drill, Double Margin Drill

Company Information

Tool Information

Quoting

Tool Material

GSS

Schedule and Production

Coating

End Finish

# S132 Micro Drills

FLUTES 2

8X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.0040 | 0.032 | 0.125 | 1.50 | 2 | S132-004-118-8X | S132-004-140-8X | $33.50 | $35.60 |
| 0.0050 | 0.040 | 0.125 | 1.50 | 2 | S132-005-118-8X | S132-005-140-8X | $33.50 | $35.60 |
| 0.0060 | 0.048 | 0.125 | 1.50 | 2 | S132-006-118-8X | S132-006-140-8X | $33.50 | $35.60 |
| 0.0070 | 0.056 | 0.125 | 1.50 | 2 | S132-007-118-8X | S132-007-140-8X | $33.50 | $35.60 |
| 0.0080 | 0.064 | 0.125 | 1.50 | 2 | S132-008-118-8X | S132-008-140-8X | $26.04 | $28.14 |
| 0.0090 | 0.072 | 0.125 | 1.50 | 2 | S132-009-118-8X | S132-009-140-8X | $26.04 | $28.14 |
| 0.0100 | 0.080 | 0.125 | 1.50 | 2 | S132-010-118-8X | S132-010-140-8X | $26.04 | $28.14 |
| 0.0110 | 0.088 | 0.125 | 1.50 | 2 | S132-011-118-8X | S132-011-140-8X | $26.04 | $28.14 |
| 0.0120 | 0.096 | 0.125 | 1.50 | 2 | S132-012-118-8X | S132-012-140-8X | $26.04 | $28.14 |
| 0.0130 | 0.104 | 0.125 | 1.50 | 2 | S132-013-118-8X | S132-013-140-8X | $26.04 | $28.14 |
| 0.0140 | 0.112 | 0.125 | 1.50 | 2 | S132-014-118-8X | S132-014-140-8X | $22.21 | $24.31 |
| 0.0156 (1/64) | 0.125 | 0.125 | 1.50 | 2 | S132-015-118-8X | S132-015-140-8X | $22.21 | $24.31 |
| 0.0160 | 0.128 | 0.125 | 1.50 | 2 | S132-016-118-8X | S132-016-140-8X | $22.21 | $24.31 |
| 0.0170 | 0.136 | 0.125 | 1.50 | 2 | S132-017-118-8X | S132-017-140-8X | $22.21 | $24.31 |
| 0.0180 | 0.144 | 0.125 | 1.50 | 2 | S132-018-118-8X | S132-018-140-8X | $20.37 | $22.47 |
| 0.0190 | 0.152 | 0.125 | 1.50 | 2 | S132-019-118-8X | S132-019-140-8X | $20.37 | $22.47 |
| 0.0200 | 0.160 | 0.125 | 1.50 | 2 | S132-020-118-8X | S132-020-140-8X | $20.37 | $22.47 |
| 0.0210 | 0.168 | 0.125 | 1.50 | 2 | S132-021-118-8X | S132-021-140-8X | $20.37 | $22.47 |
| 0.0220 | 0.176 | 0.125 | 1.50 | 2 | S132-022-118-8X | S132-022-140-8X | $20.37 | $22.47 |
| 0.0230 | 0.184 | 0.125 | 1.50 | 2 | S132-023-118-8X | S132-023-140-8X | $20.37 | $22.47 |
| 0.0240 | 0.192 | 0.125 | 1.50 | 2 | S132-024-118-8X | S132-024-140-8X | $20.37 | $22.47 |
| 0.0250 | 0.200 | 0.125 | 1.50 | 2 | S132-025-118-8X | S132-025-140-8X | $20.37 | $22.47 |
| 0.0260 | 0.208 | 0.125 | 1.50 | 2 | S132-026-118-8X | S132-026-140-8X | $20.37 | $22.47 |
| 0.0270 | 0.216 | 0.125 | 1.50 | 2 | S132-027-118-8X | S132-027-140-8X | $20.37 | $22.47 |
| 0.0280 | 0.224 | 0.125 | 1.50 | 2 | S132-028-118-8X | S132-028-140-8X | $20.37 | $22.47 |
| 0.0290 | 0.232 | 0.125 | 1.50 | 2 | S132-029-118-8X | S132-029-140-8X | $20.37 | $22.47 |
| 0.0300 | 0.240 | 0.125 | 1.50 | 2 | S132-030-118-8X | S132-030-140-8X | $20.37 | $22.47 |
| 0.0313 (1/32) | 0.250 | 0.125 | 1.50 | 2 | S132-031-118-8X | S132-031-140-8X | $19.48 | $21.58 |
| 0.0350 | 0.280 | 0.125 | 1.50 | 2 | S132-035-118-8X | S132-035-140-8X | $19.48 | $21.58 |
| 0.0400 | 0.320 | 0.125 | 1.50 | 2 | S132-040-118-8X | S132-040-140-8X | $19.48 | $21.58 |
| 0.0450 | 0.360 | 0.125 | 1.50 | 2 | S132-045-118-8X | S132-045-140-8X | $19.48 | $21.58 |
| 0.0469 (3/64) | 0.375 | 0.125 | 1.50 | 2 | S132-047-118-8X | S132-047-140-8X | $19.48 | $21.58 |
| 0.0500 | 0.400 | 0.125 | 1.50 | 2 | S132-050-118-8X | S132-050-140-8X | $19.48 | $21.58 |
| 0.0550 | 0.440 | 0.125 | 1.50 | 2 | S132-055-118-8X | S132-055-140-8X | $19.48 | $21.58 |
| 0.0600 | 0.480 | 0.125 | 1.50 | 2 | S132-060-118-8X | S132-060-140-8X | $19.48 | $21.58 |
| 0.0625 (1/16) | 0.500 | 0.125 | 2.00 | 2 | S132-062-118-8X | S132-062-140-8X | $19.48 | $21.58 |
| 0.0650 | 0.520 | 0.125 | 2.00 | 2 | S132-065-118-8X | S132-065-140-8X | $19.48 | $21.58 |
| 0.0700 | 0.560 | 0.125 | 2.00 | 2 | S132-070-118-8X | S132-070-140-8X | $19.48 | $21.58 |
| 0.0750 | 0.600 | 0.125 | 2.00 | 2 | S132-075-118-8X | S132-075-140-8X | $19.48 | $21.58 |
| 0.0781 (5/64) | 0.625 | 0.125 | 2.00 | 2 | S132-078-118-8X | S132-078-140-8X | $19.48 | $21.58 |
| 0.0800 | 0.640 | 0.125 | 2.00 | 2 | S132-080-118-8X | S132-080-140-8X | $19.48 | $21.58 |
| 0.0850 | 0.680 | 0.125 | 2.00 | 2 | S132-085-118-8X | S132-085-140-8X | $19.48 | $21.58 |

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.0900 | 0.720 | 0.125 | 2.00 | 2 | S132-090-118-8X | S132-090-140-8X | $19.48 | $21.58 |
| 0.0938 (3/32) | 0.750 | 0.125 | 2.00 | 2 | S132-093-118-8X | S132-093-140-8X | $19.48 | $21.58 |
| 0.0950 | 0.760 | 0.125 | 2.00 | 2 | S132-095-118-8X | S132-095-140-8X | $19.48 | $21.58 |
| 0.1000 | 0.800 | 0.125 | 2.00 | 2 | S132-100-118-8X | S132-100-140-8X | $19.48 | $21.58 |
| 0.1050 | 0.840 | 0.125 | 2.00 | 2 | S132-105-118-8X | S132-105-140-8X | $19.48 | $21.58 |
| 0.1094 (7/64) | 0.875 | 0.125 | 2.00 | 2 | S132-109-118-8X | S132-109-140-8X | $19.48 | $21.58 |
| 0.1100 | 0.880 | 0.125 | 2.00 | 2 | S132-110-118-8X | S132-110-140-8X | $19.48 | $21.58 |
| 0.1150 | 0.920 | 0.125 | 2.00 | 2 | S132-115-118-8X | S132-115-140-8X | $19.48 | $21.58 |
| 0.1200 | 0.960 | 0.125 | 2.00 | 2 | S132-120-118-8X | S132-120-140-8X | $19.48 | $21.58 |
| 0.1250 (1/8) | 1.000 | 0.1875 | 2.00 | 2 | S132-125-118-8X | S132-125-140-8X | $21.58 | $26.20 |

FLUTES 2

8X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MANUFACTURED BY MITGI: Stocking Options and Blanket Purchase Orders

**Avoid long lead times or back order situations by ensuring that the tools you need are always in stock and ready to ship.**

Once an order has been placed, those tools can be stocked and available for reorder. By establishing minimum inventory levels, custom tools can be stocked and ready for same day shipment.

Blanket POs allow you to schedule tools for regular delivery while taking advantage of the lower price point available when ordering in larger quantities.

**Ready to get started? See page 2 for contact information.**

*Jesse, Manufacturing Manager*

# S133 Micro Drills

FLUTES 2

12X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.0040 | 0.048 | 0.125 | 1.50 | 2 | S133-004-118-12X | S133-004-140-12X | $35.60 | $37.70 |
| 0.0050 | 0.060 | 0.125 | 1.50 | 2 | S133-005-118-12X | S133-005-140-12X | $35.60 | $37.70 |
| 0.0060 | 0.072 | 0.125 | 1.50 | 2 | S133-006-118-12X | S133-006-140-12X | $35.60 | $37.70 |
| 0.0070 | 0.084 | 0.125 | 1.50 | 2 | S133-007-118-12X | S133-007-140-12X | $35.60 | $37.70 |
| 0.0080 | 0.096 | 0.125 | 1.50 | 2 | S133-008-118-12X | S133-008-140-12X | $28.14 | $30.24 |
| 0.0090 | 0.108 | 0.125 | 1.50 | 2 | S133-009-118-12X | S133-009-140-12X | $28.14 | $30.24 |
| 0.0100 | 0.120 | 0.125 | 1.50 | 2 | S133-010-118-12X | S133-010-140-12X | $28.14 | $30.24 |
| 0.0110 | 0.132 | 0.125 | 1.50 | 2 | S133-011-118-12X | S133-011-140-12X | $28.14 | $30.24 |
| 0.0120 | 0.144 | 0.125 | 1.50 | 2 | S133-012-118-12X | S133-012-140-12X | $28.14 | $30.24 |
| 0.0130 | 0.156 | 0.125 | 1.50 | 2 | S133-013-118-12X | S133-013-140-12X | $28.14 | $30.24 |
| 0.0140 | 0.168 | 0.125 | 1.50 | 2 | S133-014-118-12X | S133-014-140-12X | $24.31 | $26.41 |
| 0.0156 (1/64) | 0.187 | 0.125 | 1.50 | 2 | S133-015-118-12X | S133-015-140-12X | $24.31 | $26.41 |
| 0.0160 | 0.192 | 0.125 | 1.50 | 2 | S133-016-118-12X | S133-016-140-12X | $24.31 | $26.41 |
| 0.0170 | 0.204 | 0.125 | 1.50 | 2 | S133-017-118-12X | S133-017-140-12X | $24.31 | $26.41 |
| 0.0180 | 0.216 | 0.125 | 1.50 | 2 | S133-018-118-12X | S133-018-140-12X | $22.47 | $24.57 |
| 0.0190 | 0.228 | 0.125 | 1.50 | 2 | S133-019-118-12X | S133-019-140-12X | $22.47 | $24.57 |
| 0.0200 | 0.240 | 0.125 | 1.50 | 2 | S133-020-118-12X | S133-020-140-12X | $22.47 | $24.57 |
| 0.0210 | 0.252 | 0.125 | 1.50 | 2 | S133-021-118-12X | S133-021-140-12X | $22.47 | $24.57 |
| 0.0220 | 0.264 | 0.125 | 1.50 | 2 | S133-022-118-12X | S133-022-140-12X | $22.47 | $24.57 |
| 0.0230 | 0.276 | 0.125 | 1.50 | 2 | S133-023-118-12X | S133-023-140-12X | $22.47 | $24.57 |
| 0.0240 | 0.288 | 0.125 | 1.50 | 2 | S133-024-118-12X | S133-024-140-12X | $22.47 | $24.57 |
| 0.0250 | 0.300 | 0.125 | 1.50 | 2 | S133-025-118-12X | S133-025-140-12X | $22.47 | $24.57 |
| 0.0260 | 0.312 | 0.125 | 1.50 | 2 | S133-026-118-12X | S133-026-140-12X | $22.47 | $24.57 |
| 0.0270 | 0.324 | 0.125 | 1.50 | 2 | S133-027-118-12X | S133-027-140-12X | $22.47 | $24.57 |
| 0.0280 | 0.336 | 0.125 | 1.50 | 2 | S133-028-118-12X | S133-028-140-12X | $22.47 | $24.57 |
| 0.0290 | 0.348 | 0.125 | 1.50 | 2 | S133-029-118-12X | S133-029-140-12X | $22.47 | $24.57 |
| 0.0300 | 0.360 | 0.125 | 1.50 | 2 | S133-030-118-12X | S133-030-140-12X | $22.47 | $24.57 |
| 0.0313 (1/32) | 0.376 | 0.125 | 1.50 | 2 | S133-031-118-12X | S133-031-140-12X | $21.58 | $23.68 |
| 0.0350 | 0.420 | 0.125 | 1.50 | 2 | S133-035-118-12X | S133-035-140-12X | $21.58 | $23.68 |
| 0.0400 | 0.480 | 0.125 | 1.50 | 2 | S133-040-118-12X | S133-040-140-12X | $21.58 | $23.68 |
| 0.0450 | 0.540 | 0.125 | 2.00 | 2 | S133-045-118-12X | S133-045-140-12X | $21.58 | $23.68 |
| 0.0469 (3/64) | 0.563 | 0.125 | 2.00 | 2 | S133-047-118-12X | S133-047-140-12X | $21.58 | $23.68 |
| 0.0500 | 0.600 | 0.125 | 2.00 | 2 | S133-050-118-12X | S133-050-140-12X | $21.58 | $23.68 |
| 0.0550 | 0.660 | 0.125 | 2.00 | 2 | S133-055-118-12X | S133-055-140-12X | $21.58 | $23.68 |
| 0.0600 | 0.720 | 0.125 | 2.00 | 2 | S133-060-118-12X | S133-060-140-12X | $21.58 | $23.68 |
| 0.0625 (1/16) | 0.750 | 0.125 | 2.00 | 2 | S133-062-118-12X | S133-062-140-12X | $21.58 | $23.68 |
| 0.0650 | 0.780 | 0.125 | 2.00 | 2 | S133-065-118-12X | S133-065-140-12X | $21.58 | $23.68 |
| 0.0700 | 0.840 | 0.125 | 2.00 | 2 | S133-070-118-12X | S133-070-140-12X | $21.58 | $23.68 |
| 0.0750 | 0.900 | 0.125 | 2.00 | 2 | S133-075-118-12X | S133-075-140-12X | $21.58 | $23.68 |
| 0.0781 (5/64) | 0.937 | 0.125 | 2.00 | 2 | S133-078-118-12X | S133-078-140-12X | $21.58 | $23.68 |
| 0.0800 | 0.960 | 0.125 | 2.00 | 2 | S133-080-118-12X | S133-080-140-12X | $21.58 | $23.68 |
| 0.0850 | 1.020 | 0.125 | 2.50 | 2 | S133-085-118-12X | S133-085-140-12X | $22.10 | $24.20 |

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.0900 | 1.080 | 0.125 | 2.50 | 2 | S133-090-118-12X | S133-090-140-12X | $22.10 | $24.20 |
| 0.0938 (3/32) | 1.126 | 0.125 | 2.50 | 2 | S133-093-118-12X | S133-093-140-12X | $22.10 | $24.20 |
| 0.0950 | 1.140 | 0.125 | 2.50 | 2 | S133-095-118-12X | S133-095-140-12X | $22.10 | $24.20 |
| 0.1000 | 1.200 | 0.125 | 2.50 | 2 | S133-100-118-12X | S133-100-140-12X | $22.10 | $24.20 |
| 0.1050 | 1.260 | 0.125 | 2.50 | 2 | S133-105-118-12X | S133-105-140-12X | $22.10 | $24.20 |
| 0.1094 (7/64) | 1.313 | 0.125 | 2.50 | 2 | S133-109-118-12X | S133-109-140-12X | $22.10 | $24.20 |
| 0.1100 | 1.320 | 0.125 | 2.50 | 2 | S133-110-118-12X | S133-110-140-12X | $22.10 | $24.20 |
| 0.1150 | 1.380 | 0.125 | 2.50 | 2 | S133-115-118-12X | S133-115-140-12X | $22.10 | $24.20 |
| 0.1200 | 1.440 | 0.125 | 2.50 | 2 | S133-120-118-12X | S133-120-140-12X | $22.10 | $24.20 |
| 0.1250 (1/8) | 1.500 | 0.1875 | 2.50 | 2 | S133-125-118-12X | S133-125-140-12X | $24.20 | $28.82 |

FLUTES 2

12X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MANUFACTURED BY MITGI: Selecting the Right Tool for the Job

**On-site manufacturing means that MITGI can be your one-stop shop for both standards and specials. How do you know which is better for the job at hand?**

To determine which option is the best for each job, consider the following:

- Is there a MITGI standard tool that meets all of the job requirements?
- How complex is the part?
- What's the scale of the project?
- Would making changes to a standard tool increase tool life or save production time?

**Ready to get started? See page 2 for contact information.**

*Ted, Senior CNC Programmer/Operator*

# S134 Micro Drills

FLUTES 2

15X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.0040 | 0.060 | 0.125 | 1.50 | 2 | S134-004-118-15X | S134-004-140-15X | $37.70 | $39.80 |
| 0.0050 | 0.075 | 0.125 | 1.50 | 2 | S134-005-118-15X | S134-005-140-15X | $37.70 | $39.80 |
| 0.0060 | 0.090 | 0.125 | 1.50 | 2 | S134-006-118-15X | S134-006-140-15X | $37.70 | $39.80 |
| 0.0070 | 0.105 | 0.125 | 1.50 | 2 | S134-007-118-15X | S134-007-140-15X | $37.70 | $39.80 |
| 0.0080 | 0.120 | 0.125 | 1.50 | 2 | S134-008-118-15X | S134-008-140-15X | $30.24 | $32.34 |
| 0.0090 | 0.135 | 0.125 | 1.50 | 2 | S134-009-118-15X | S134-009-140-15X | $30.24 | $32.34 |
| 0.0100 | 0.150 | 0.125 | 1.50 | 2 | S134-010-118-15X | S134-010-140-15X | $30.24 | $32.34 |
| 0.0110 | 0.165 | 0.125 | 1.50 | 2 | S134-011-118-15X | S134-011-140-15X | $30.24 | $32.34 |
| 0.0120 | 0.180 | 0.125 | 1.50 | 2 | S134-012-118-15X | S134-012-140-15X | $30.24 | $32.34 |
| 0.0130 | 0.195 | 0.125 | 1.50 | 2 | S134-013-118-15X | S134-013-140-15X | $30.24 | $32.34 |
| 0.0140 | 0.210 | 0.125 | 1.50 | 2 | S134-014-118-15X | S134-014-140-15X | $26.41 | $28.51 |
| 0.0156 (1/64) | 0.234 | 0.125 | 1.50 | 2 | S134-015-118-15X | S134-015-140-15X | $26.41 | $28.51 |
| 0.0160 | 0.240 | 0.125 | 1.50 | 2 | S134-016-118-15X | S134-016-140-15X | $26.41 | $28.51 |
| 0.0170 | 0.255 | 0.125 | 1.50 | 2 | S134-017-118-15X | S134-017-140-15X | $26.41 | $28.51 |
| 0.0180 | 0.270 | 0.125 | 1.50 | 2 | S134-018-118-15X | S134-018-140-15X | $24.57 | $26.67 |
| 0.0190 | 0.285 | 0.125 | 1.50 | 2 | S134-019-118-15X | S134-019-140-15X | $24.57 | $26.67 |
| 0.0200 | 0.300 | 0.125 | 1.50 | 2 | S134-020-118-15X | S134-020-140-15X | $24.57 | $26.67 |
| 0.0210 | 0.315 | 0.125 | 1.50 | 2 | S134-021-118-15X | S134-021-140-15X | $24.57 | $26.67 |
| 0.0220 | 0.330 | 0.125 | 1.50 | 2 | S134-022-118-15X | S134-022-140-15X | $24.57 | $26.67 |
| 0.0230 | 0.345 | 0.125 | 1.50 | 2 | S134-023-118-15X | S134-023-140-15X | $24.57 | $26.67 |
| 0.0240 | 0.360 | 0.125 | 1.50 | 2 | S134-024-118-15X | S134-024-140-15X | $24.57 | $26.67 |
| 0.0250 | 0.375 | 0.125 | 1.50 | 2 | S134-025-118-15X | S134-025-140-15X | $24.57 | $26.67 |
| 0.0260 | 0.390 | 0.125 | 1.50 | 2 | S134-026-118-15X | S134-026-140-15X | $24.57 | $26.67 |
| 0.0270 | 0.405 | 0.125 | 1.50 | 2 | S134-027-118-15X | S134-027-140-15X | $24.57 | $26.67 |
| 0.0280 | 0.420 | 0.125 | 1.50 | 2 | S134-028-118-15X | S134-028-140-15X | $24.57 | $26.67 |
| 0.0290 | 0.435 | 0.125 | 1.50 | 2 | S134-029-118-15X | S134-029-140-15X | $24.57 | $26.67 |
| 0.0300 | 0.450 | 0.125 | 1.50 | 2 | S134-030-118-15X | S134-030-140-15X | $24.57 | $26.67 |
| 0.0313 (1/32) | 0.470 | 0.125 | 1.50 | 2 | S134-031-118-15X | S134-031-140-15X | $23.68 | $25.78 |
| 0.0350 | 0.525 | 0.125 | 2.00 | 2 | S134-035-118-15X | S134-035-140-15X | $23.68 | $25.78 |
| 0.0400 | 0.600 | 0.125 | 2.00 | 2 | S134-040-118-15X | S134-040-140-15X | $23.68 | $25.78 |
| 0.0450 | 0.675 | 0.125 | 2.00 | 2 | S134-045-118-15X | S134-045-140-15X | $23.68 | $25.78 |
| 0.0469 (3/64) | 0.704 | 0.125 | 2.00 | 2 | S134-047-118-15X | S134-047-140-15X | $23.68 | $25.78 |
| 0.0500 | 0.750 | 0.125 | 2.00 | 2 | S134-050-118-15X | S134-050-140-15X | $23.68 | $25.78 |
| 0.0550 | 0.825 | 0.125 | 2.00 | 2 | S134-055-118-15X | S134-055-140-15X | $23.68 | $25.78 |
| 0.0600 | 0.900 | 0.125 | 2.00 | 2 | S134-060-118-15X | S134-060-140-15X | $23.68 | $25.78 |
| 0.0625 (1/16) | 0.938 | 0.125 | 2.00 | 2 | S134-062-118-15X | S134-062-140-15X | $23.68 | $25.78 |
| 0.0650 | 0.975 | 0.125 | 2.00 | 2 | S134-065-118-15X | S134-065-140-15X | $23.68 | $25.78 |
| 0.0700 | 1.050 | 0.125 | 2.50 | 2 | S134-070-118-15X | S134-070-140-15X | $23.68 | $25.78 |
| 0.0750 | 1.125 | 0.125 | 2.50 | 2 | S134-075-118-15X | S134-075-140-15X | $23.68 | $25.78 |
| 0.0781 (5/64) | 1.172 | 0.125 | 2.50 | 2 | S134-078-118-15X | S134-078-140-15X | $23.68 | $25.78 |
| 0.0800 | 1.200 | 0.125 | 2.50 | 2 | S134-080-118-15X | S134-080-140-15X | $23.68 | $25.78 |
| 0.0850 | 1.275 | 0.125 | 2.50 | 2 | S134-085-118-15X | S134-085-140-15X | $23.68 | $25.78 |

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.0900 | 1.350 | 0.125 | 2.50 | 2 | S134-090-118-15X | S134-090-140-15X | $23.68 | $25.78 |
| 0.0938 (3/32) | 1.407 | 0.125 | 2.50 | 2 | S134-093-118-15X | S134-093-140-15X | $23.68 | $25.78 |
| 0.0950 | 1.425 | 0.125 | 2.50 | 2 | S134-095-118-15X | S134-095-140-15X | $23.68 | $25.78 |
| 0.1000 | 1.500 | 0.125 | 2.50 | 2 | S134-100-118-15X | S134-100-140-15X | $23.68 | $25.78 |
| 0.1050 | 1.575 | 0.125 | 3.00 | 2 | S134-105-118-15X | S134-105-140-15X | $23.68 | $25.78 |
| 0.1094 (7/64) | 1.641 | 0.125 | 3.00 | 2 | S134-109-118-15X | S134-109-140-15X | $23.68 | $25.78 |
| 0.1100 | 1.650 | 0.125 | 3.00 | 2 | S134-110-118-15X | S134-110-140-15X | $23.68 | $25.78 |
| 0.1150 | 1.725 | 0.125 | 3.00 | 2 | S134-115-118-15X | S134-115-140-15X | $23.68 | $25.78 |
| 0.1200 | 1.800 | 0.125 | 3.00 | 2 | S134-120-118-15X | S134-120-140-15X | $23.68 | $25.78 |
| 0.1250 (1/8) | 1.875 | 0.1875 | 3.00 | 2 | S134-125-118-15X | S134-125-140-15X | $25.78 | $30.40 |

FLUTES 2

15X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MANUFACTURED BY MITGI: Tool Performance Review

### A manufacturing process may work, but could a tooling change drive improvement?

There are many options to consider when reviewing the performance of tools with any given job. The production and design teams at MITGI work together to evaluate variables such as material being machined, existing speeds and feeds, coating, tool geometry, and application. With this information, they can help determine whether changes can be made to help increase parts per tool, improve surface finish, reduce burrs, or improve work with hard to machine materials.

**Have a project you'd like to review with our team?**
**See page 2 for contact information.**

*Andrea, General Manager*

# S131 Metric Micro Drills

FLUTES 2

5X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter (mm) | Flute Length (mm) | Shank Diameter (mm) | Overall Length (in.) | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.15 | 0.75 | 3.00 | 1.50 | 2 | S131-0.15mm-118-5X | S131-0.15mm-140-5X | $33.50 | $35.60 |
| 0.20 | 1.00 | 3.00 | 1.50 | 2 | S131-0.20mm-118-5X | S131-0.20mm-140-5X | $26.04 | $28.14 |
| 0.25 | 1.25 | 3.00 | 1.50 | 2 | S131-0.25mm-118-5X | S131-0.25mm-140-5X | $26.04 | $28.14 |
| 0.30 | 1.50 | 3.00 | 1.50 | 2 | S131-0.30mm-118-5X | S131-0.30mm-140-5X | $26.04 | $28.14 |
| 0.35 | 1.75 | 3.00 | 1.50 | 2 | S131-0.35mm-118-5X | S131-0.35mm-140-5X | $22.21 | $24.31 |
| 0.40 | 2.00 | 3.00 | 1.50 | 2 | S131-0.40mm-118-5X | S131-0.40mm-140-5X | $22.21 | $24.31 |
| 0.45 | 2.25 | 3.00 | 1.50 | 2 | S131-0.45mm-118-5X | S131-0.45mm-140-5X | $22.21 | $24.31 |
| 0.50 | 2.50 | 3.00 | 1.50 | 2 | S131-0.50mm-118-5X | S131-0.50mm-140-5X | $20.37 | $22.47 |
| 0.55 | 2.75 | 3.00 | 1.50 | 2 | S131-0.55mm-118-5X | S131-0.55mm-140-5X | $20.37 | $22.47 |
| 0.60 | 3.00 | 3.00 | 1.50 | 2 | S131-0.60mm-118-5X | S131-0.60mm-140-5X | $20.37 | $22.47 |
| 0.65 | 3.25 | 3.00 | 1.50 | 2 | S131-0.65mm-118-5X | S131-0.65mm-140-5X | $20.37 | $22.47 |
| 0.70 | 3.50 | 3.00 | 1.50 | 2 | S131-0.70mm-118-5X | S131-0.70mm-140-5X | $20.37 | $22.47 |
| 0.75 | 3.75 | 3.00 | 1.50 | 2 | S131-0.75mm-118-5X | S131-0.75mm-140-5X | $20.37 | $22.47 |
| 0.80 | 4.00 | 3.00 | 1.50 | 2 | S131-0.80mm-118-5X | S131-0.80mm-140-5X | $19.48 | $21.58 |
| 0.85 | 4.25 | 3.00 | 1.50 | 2 | S131-0.85mm-118-5X | S131-0.85mm-140-5X | $19.48 | $21.58 |
| 0.90 | 4.50 | 3.00 | 1.50 | 2 | S131-0.90mm-118-5X | S131-0.90mm-140-5X | $19.48 | $21.58 |
| 0.95 | 4.75 | 3.00 | 1.50 | 2 | S131-0.95mm-118-5X | S131-0.95mm-140-5X | $19.48 | $21.58 |
| 1.00 | 5.00 | 3.00 | 1.50 | 2 | S131-1.00mm-118-5X | S131-1.00mm-140-5X | $19.48 | $21.58 |
| 1.25 | 6.25 | 3.00 | 1.50 | 2 | S131-1.25mm-118-5X | S131-1.25mm-140-5X | $19.48 | $21.58 |
| 1.50 | 7.50 | 3.00 | 1.50 | 2 | S131-1.50mm-118-5X | S131-1.50mm-140-5X | $19.48 | $21.58 |
| 1.75 | 8.75 | 3.00 | 1.50 | 2 | S131-1.75mm-118-5X | S131-1.75mm-140-5X | $19.48 | $21.58 |
| 2.00 | 10.00 | 3.00 | 1.50 | 2 | S131-2.00mm-118-5X | S131-2.00mm-140-5X | $19.48 | $21.58 |
| 2.25 | 11.25 | 3.00 | 1.50 | 2 | S131-2.25mm-118-5X | S131-2.25mm-140-5X | $19.48 | $21.58 |
| 2.50 | 12.50 | 3.00 | 1.50 | 2 | S131-2.50mm-118-5X | S131-2.50mm-140-5X | $19.48 | $21.58 |
| 2.75 | 13.75 | 3.00 | 2.00 | 2 | S131-2.75mm-118-5X | S131-2.75mm-140-5X | $19.48 | $21.58 |
| 3.00 | 15.00 | 4.00 | 2.00 | 2 | S131-3.00mm-118-5X | S131-3.00mm-140-5X | $21.58 | $26.20 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Metric Micro Drills



| Cutter Diameter (mm) | Flute Length (mm) | Shank Diameter (mm) | Overall Length (in.) | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.15 | 1.20 | 3.00 | 1.50 | 2 | S132-0.15mm-118-8X | S132-0.15mm-140-8X | $33.50 | $35.60 |
| 0.20 | 1.60 | 3.00 | 1.50 | 2 | S132-0.20mm-118-8X | S132-0.20mm-140-8X | $26.04 | $28.14 |
| 0.25 | 2.00 | 3.00 | 1.50 | 2 | S132-0.25mm-118-8X | S132-0.25mm-140-8X | $26.04 | $28.14 |
| 0.30 | 2.40 | 3.00 | 1.50 | 2 | S132-0.30mm-118-8X | S132-0.30mm-140-8X | $26.04 | $28.14 |
| 0.35 | 2.80 | 3.00 | 1.50 | 2 | S132-0.35mm-118-8X | S132-0.35mm-140-8X | $22.21 | $24.31 |
| 0.40 | 3.20 | 3.00 | 1.50 | 2 | S132-0.40mm-118-8X | S132-0.40mm-140-8X | $22.21 | $24.31 |
| 0.45 | 3.60 | 3.00 | 1.50 | 2 | S132-0.45mm-118-8X | S132-0.45mm-140-8X | $22.21 | $24.31 |
| 0.50 | 4.00 | 3.00 | 1.50 | 2 | S132-0.50mm-118-8X | S132-0.50mm-140-8X | $20.37 | $22.47 |
| 0.55 | 4.40 | 3.00 | 1.50 | 2 | S132-0.55mm-118-8X | S132-0.55mm-140-8X | $20.37 | $22.47 |
| 0.60 | 4.80 | 3.00 | 1.50 | 2 | S132-0.60mm-118-8X | S132-0.60mm-140-8X | $20.37 | $22.47 |
| 0.65 | 5.20 | 3.00 | 1.50 | 2 | S132-0.65mm-118-8X | S132-0.65mm-140-8X | $20.37 | $22.47 |
| 0.70 | 5.60 | 3.00 | 1.50 | 2 | S132-0.70mm-118-8X | S132-0.70mm-140-8X | $20.37 | $22.47 |
| 0.75 | 6.00 | 3.00 | 1.50 | 2 | S132-0.75mm-118-8X | S132-0.75mm-140-8X | $20.37 | $22.47 |
| 0.80 | 6.40 | 3.00 | 1.50 | 2 | S132-0.80mm-118-8X | S132-0.80mm-140-8X | $19.48 | $21.58 |
| 0.85 | 6.80 | 3.00 | 1.50 | 2 | S132-0.85mm-118-8X | S132-0.85mm-140-8X | $19.48 | $21.58 |
| 0.90 | 7.20 | 3.00 | 1.50 | 2 | S132-0.90mm-118-8X | S132-0.90mm-140-8X | $19.48 | $21.58 |
| 0.95 | 7.60 | 3.00 | 1.50 | 2 | S132-0.95mm-118-8X | S132-0.95mm-140-8X | $19.48 | $21.58 |
| 1.00 | 8.00 | 3.00 | 1.50 | 2 | S132-1.00mm-118-8X | S132-1.00mm-140-8X | $19.48 | $21.58 |
| 1.25 | 10.00 | 3.00 | 1.50 | 2 | S132-1.25mm-118-8X | S132-1.25mm-140-8X | $19.48 | $21.58 |
| 1.50 | 12.00 | 3.00 | 1.50 | 2 | S132-1.50mm-118-8X | S132-1.50mm-140-8X | $19.48 | $21.58 |
| 1.75 | 14.00 | 3.00 | 2.00 | 2 | S132-1.75mm-118-8X | S132-1.75mm-140-8X | $19.48 | $21.58 |
| 2.00 | 16.00 | 3.00 | 2.00 | 2 | S132-2.00mm-118-8X | S132-2.00mm-140-8X | $19.48 | $21.58 |
| 2.25 | 18.00 | 3.00 | 2.00 | 2 | S132-2.25mm-118-8X | S132-2.25mm-140-8X | $19.48 | $21.58 |
| 2.50 | 20.00 | 3.00 | 2.00 | 2 | S132-2.50mm-118-8X | S132-2.50mm-140-8X | $19.48 | $21.58 |
| 2.75 | 22.00 | 3.00 | 2.00 | 2 | S132-2.75mm-118-8X | S132-2.75mm-140-8X | $19.48 | $21.58 |
| 3.00 | 24.00 | 4.00 | 2.00 | 2 | S132-3.00mm-118-8X | S132-3.00mm-140-8X | $21.58 | $26.20 |

FLUTES 2

8X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

# S133 Metric Micro Drills

FLUTES 2

12X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter (mm) | Flute Length (mm) | Shank Diameter (mm) | Overall Length (in.) | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.15 | 1.80 | 3.00 | 1.50 | 2 | S133-0.15mm-118-12X | S133-0.15mm-140-12X | $35.60 | $37.70 |
| 0.20 | 2.40 | 3.00 | 1.50 | 2 | S133-0.20mm-118-12X | S133-0.20mm-140-12X | $28.14 | $30.24 |
| 0.25 | 3.00 | 3.00 | 1.50 | 2 | S133-0.25mm-118-12X | S133-0.25mm-140-12X | $28.14 | $30.24 |
| 0.30 | 3.60 | 3.00 | 1.50 | 2 | S133-0.30mm-118-12X | S133-0.30mm-140-12X | $28.14 | $30.24 |
| 0.35 | 4.20 | 3.00 | 1.50 | 2 | S133-0.35mm-118-12X | S133-0.35mm-140-12X | $24.31 | $26.41 |
| 0.40 | 4.80 | 3.00 | 1.50 | 2 | S133-0.40mm-118-12X | S133-0.40mm-140-12X | $24.31 | $26.41 |
| 0.45 | 5.40 | 3.00 | 1.50 | 2 | S133-0.45mm-118-12X | S133-0.45mm-140-12X | $24.31 | $26.41 |
| 0.50 | 6.00 | 3.00 | 1.50 | 2 | S133-0.50mm-118-12X | S133-0.50mm-140-12X | $22.47 | $24.57 |
| 0.55 | 6.60 | 3.00 | 1.50 | 2 | S133-0.55mm-118-12X | S133-0.55mm-140-12X | $22.47 | $24.57 |
| 0.60 | 7.20 | 3.00 | 1.50 | 2 | S133-0.60mm-118-12X | S133-0.60mm-140-12X | $22.47 | $24.57 |
| 0.65 | 7.80 | 3.00 | 1.50 | 2 | S133-0.65mm-118-12X | S133-0.65mm-140-12X | $22.47 | $24.57 |
| 0.70 | 8.40 | 3.00 | 1.50 | 2 | S133-0.70mm-118-12X | S133-0.70mm-140-12X | $22.47 | $24.57 |
| 0.75 | 9.00 | 3.00 | 1.50 | 2 | S133-0.75mm-118-12X | S133-0.75mm-140-12X | $22.47 | $24.57 |
| 0.80 | 9.60 | 3.00 | 1.50 | 2 | S133-0.80mm-118-12X | S133-0.80mm-140-12X | $21.58 | $23.68 |
| 0.85 | 10.20 | 3.00 | 1.50 | 2 | S133-0.85mm-118-12X | S133-0.85mm-140-12X | $21.58 | $23.68 |
| 0.90 | 10.80 | 3.00 | 1.50 | 2 | S133-0.90mm-118-12X | S133-0.90mm-140-12X | $21.58 | $23.68 |
| 0.95 | 11.40 | 3.00 | 1.50 | 2 | S133-0.95mm-118-12X | S133-0.95mm-140-12X | $21.58 | $23.68 |
| 1.00 | 12.00 | 3.00 | 1.50 | 2 | S133-1.00mm-118-12X | S133-1.00mm-140-12X | $21.58 | $23.68 |
| 1.25 | 15.00 | 3.00 | 2.00 | 2 | S133-1.25mm-118-12X | S133-1.25mm-140-12X | $21.58 | $23.68 |
| 1.50 | 18.00 | 3.00 | 2.00 | 2 | S133-1.50mm-118-12X | S133-1.50mm-140-12X | $21.58 | $23.68 |
| 1.75 | 21.00 | 3.00 | 2.00 | 2 | S133-1.75mm-118-12X | S133-1.75mm-140-12X | $21.58 | $23.68 |
| 2.00 | 24.00 | 3.00 | 2.00 | 2 | S133-2.00mm-118-12X | S133-2.00mm-140-12X | $21.58 | $23.68 |
| 2.25 | 27.00 | 3.00 | 2.50 | 2 | S133-2.25mm-118-12X | S133-2.25mm-140-12X | $22.10 | $24.20 |
| 2.50 | 30.00 | 3.00 | 2.50 | 2 | S133-2.50mm-118-12X | S133-2.50mm-140-12X | $22.10 | $24.20 |
| 2.75 | 33.00 | 3.00 | 2.50 | 2 | S133-2.75mm-118-12X | S133-2.75mm-140-12X | $22.10 | $24.20 |
| 3.00 | 36.00 | 4.00 | 2.50 | 2 | S133-3.00mm-118-12X | S133-3.00mm-140-12X | $24.20 | $28.82 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

| Cutter Diameter (mm) | Flute Length (mm) | Shank Diameter (mm) | Overall Length (in.) | # of Flutes | 118° Drill Point Tool # | 140° Drill Point Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.15 | 2.25 | 3.00 | 1.50 | 2 | S134-0.15mm-118-15X | S134-0.15mm-140-15X | $37.70 | $39.80 |
| 0.20 | 3.00 | 3.00 | 1.50 | 2 | S134-0.20mm-118-15X | S134-0.20mm-140-15X | $30.24 | $32.34 |
| 0.25 | 3.75 | 3.00 | 1.50 | 2 | S134-0.25mm-118-15X | S134-0.25mm-140-15X | $30.24 | $32.34 |
| 0.30 | 4.50 | 3.00 | 1.50 | 2 | S134-0.30mm-118-15X | S134-0.30mm-140-15X | $30.24 | $32.34 |
| 0.35 | 5.25 | 3.00 | 1.50 | 2 | S134-0.35mm-118-15X | S134-0.35mm-140-15X | $26.41 | $28.51 |
| 0.40 | 6.00 | 3.00 | 1.50 | 2 | S134-0.40mm-118-15X | S134-0.40mm-140-15X | $26.41 | $28.51 |
| 0.45 | 6.75 | 3.00 | 1.50 | 2 | S134-0.45mm-118-15X | S134-0.45mm-140-15X | $26.41 | $28.51 |
| 0.50 | 7.50 | 3.00 | 1.50 | 2 | S134-0.50mm-118-15X | S134-0.50mm-140-15X | $24.57 | $26.67 |
| 0.55 | 8.25 | 3.00 | 1.50 | 2 | S134-0.55mm-118-15X | S134-0.55mm-140-15X | $24.57 | $26.67 |
| 0.60 | 9.00 | 3.00 | 1.50 | 2 | S134-0.60mm-118-15X | S134-0.60mm-140-15X | $24.57 | $26.67 |
| 0.65 | 9.75 | 3.00 | 1.50 | 2 | S134-0.65mm-118-15X | S134-0.65mm-140-15X | $24.57 | $26.67 |
| 0.70 | 10.50 | 3.00 | 1.50 | 2 | S134-0.70mm-118-15X | S134-0.70mm-140-15X | $24.57 | $26.67 |
| 0.75 | 11.25 | 3.00 | 1.50 | 2 | S134-0.75mm-118-15X | S134-0.75mm-140-15X | $24.57 | $26.67 |
| 0.80 | 12.00 | 3.00 | 1.50 | 2 | S134-0.80mm-118-15X | S134-0.80mm-140-15X | $23.68 | $25.78 |
| 0.85 | 12.75 | 3.00 | 2.00 | 2 | S134-0.85mm-118-15X | S134-0.85mm-140-15X | $23.68 | $25.78 |
| 0.90 | 13.50 | 3.00 | 2.00 | 2 | S134-0.90mm-118-15X | S134-0.90mm-140-15X | $23.68 | $25.78 |
| 0.95 | 14.25 | 3.00 | 2.00 | 2 | S134-0.95mm-118-15X | S134-0.95mm-140-15X | $23.68 | $25.78 |
| 1.00 | 15.00 | 3.00 | 2.00 | 2 | S134-1.00mm-118-15X | S134-1.00mm-140-15X | $23.68 | $25.78 |
| 1.25 | 18.75 | 3.00 | 2.00 | 2 | S134-1.25mm-118-15X | S134-1.25mm-140-15X | $23.68 | $25.78 |
| 1.50 | 22.50 | 3.00 | 2.00 | 2 | S134-1.50mm-118-15X | S134-1.50mm-140-15X | $23.68 | $25.78 |
| 1.75 | 26.25 | 3.00 | 2.50 | 2 | S134-1.75mm-118-15X | S134-1.75mm-140-15X | $23.68 | $25.78 |
| 2.00 | 30.00 | 3.00 | 2.50 | 2 | S134-2.00mm-118-15X | S134-2.00mm-140-15X | $23.68 | $25.78 |
| 2.25 | 33.75 | 3.00 | 2.50 | 2 | S134-2.25mm-118-15X | S134-2.25mm-140-15X | $23.68 | $25.78 |
| 2.50 | 37.50 | 3.00 | 2.50 | 2 | S134-2.50mm-118-15X | S134-2.50mm-140-15X | $23.68 | $25.78 |
| 2.75 | 41.25 | 3.00 | 3.00 | 2 | S134-2.75mm-118-15X | S134-2.75mm-140-15X | $24.20 | $26.30 |
| 3.00 | 45.00 | 4.00 | 3.00 | 2 | S134-3.00mm-118-15X | S134-3.00mm-140-15X | $25.78 | $30.40 |

FLUTES 2

15X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

## S61 140° Coolant Thru Micro Drills

FLUTES 2

8X FLUTE LENGTH

COOLANT THRU

CIRCULAR

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | 140° Drill Point Tool # | AlTiN Coated Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.031 (1/32) | 0.248 | 0.125 | 2.00 | S61-031-8X | $137.13 |
| 0.039 (1mm) | 0.312 | 0.125 | 2.00 | S61-039-8X | $137.13 |
| 0.047 (3/64) | 0.376 | 0.125 | 2.00 | S61-047-8X | $137.13 |
| 0.062 (1/16) | 0.496 | 0.125 | 2.00 | S61-062-8X | $137.13 |
| 0.078 (5/64) | 0.624 | 0.125 | 2.00 | S61-078-8X | $146.63 |
| 0.093 (3/32) | 0.744 | 0.125 | 2.00 | S61-093-8X | $146.63 |
| 0.109 (7/64) | 0.872 | 0.125 | 2.50 | S61-109-8X | $152.67 |
| 0.118 (3mm) | 0.944 | 0.125 | 2.50 | S61-118-8X | $152.67 |
| 0.125 (1/8) | 1.000 | 0.1875 | 2.50 | S61-125-8X | $159.92 |

**SEE ALSO:**


p. 206 Custom Tools

p. 208 Coating


## S111 140° Coolant Thru Micro Drills

FLUTES 2

12X FLUTE LENGTH

COOLANT THRU

CIRCULAR

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | 140° Drill Point Tool # | AlTiN Coated Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.031 (1/32) | 0.372 | 0.125 | 2.00 | S111-031-12X | $148.16 |
| 0.039 (1mm) | 0.468 | 0.125 | 2.00 | S111-039-12X | $148.16 |
| 0.047 (3/64) | 0.564 | 0.125 | 2.00 | S111-047-12X | $148.16 |
| 0.062 (1/16) | 0.744 | 0.125 | 2.00 | S111-062-12X | $148.16 |
| 0.078 (5/64) | 0.936 | 0.125 | 2.50 | S111-078-12X | $161.23 |
| 0.093 (3/32) | 1.116 | 0.125 | 2.50 | S111-093-12X | $161.23 |
| 0.109 (7/64) | 1.308 | 0.125 | 2.50 | S111-109-12X | $161.23 |
| 0.118 (3mm) | 1.416 | 0.125 | 2.50 | S111-118-12X | $161.23 |
| 0.125 (1/8) | 1.500 | 0.1875 | 2.50 | S111-125-12X | $168.47 |

**SEE ALSO:**


p. 206 Custom Tools

p. 208 Coating


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

## 140° Metric Coolant Thru Micro Drills

**S112**

| Cutter Diameter (mm) | Flute Length (mm) | Shank Diameter (mm) | Overall Length (in.) | 140° Drill Point Tool # | AlTiN Coated Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.80 | 6.40 | 3.00 | 2.00 | S112-0.80mm-8X | $137.13 |
| 0.90 | 7.20 | 3.00 | 2.00 | S112-0.90mm-8X | $137.13 |
| 1.00 | 8.00 | 3.00 | 2.00 | S112-1.00mm-8X | $137.13 |
| 1.25 | 10.00 | 3.00 | 2.00 | S112-1.25mm-8X | $137.13 |
| 1.50 | 12.00 | 3.00 | 2.00 | S112-1.50mm-8X | $146.63 |
| 1.75 | 14.00 | 3.00 | 2.00 | S112-1.75mm-8X | $146.63 |
| 2.00 | 16.00 | 3.00 | 2.50 | S112-2.00mm-8X | $152.67 |
| 2.50 | 20.00 | 3.00 | 2.50 | S112-2.50mm-8X | $152.67 |
| 3.00 | 24.00 | 4.00 | 2.50 | S112-3.00mm-8X | $159.92 |

FLUTES 2

8X FLUTE LENGTH

COOLANT THRU

CIRCULAR

**SEE ALSO:**

p. 206 Custom Tools
p. 208 Coating

## 140° Metric Coolant Thru Micro Drills

**S113**

| Cutter Diameter (mm) | Flute Length (mm) | Shank Diameter (mm) | Overall Length (in.) | 140° Drill Point Tool # | AlTiN Coated Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.80 | 9.60 | 3.00 | 2.00 | S113-0.80mm-12X | $148.16 |
| 0.90 | 10.80 | 3.00 | 2.00 | S113-0.90mm-12X | $148.16 |
| 1.00 | 12.00 | 3.00 | 2.00 | S113-1.00mm-12X | $148.16 |
| 1.25 | 15.00 | 3.00 | 2.00 | S113-1.25mm-12X | $148.16 |
| 1.50 | 18.00 | 3.00 | 2.50 | S113-1.50mm-12X | $161.23 |
| 1.75 | 21.00 | 3.00 | 2.50 | S113-1.75mm-12X | $161.23 |
| 2.00 | 24.00 | 3.00 | 2.50 | S113-2.00mm-12X | $161.23 |
| 2.50 | 30.00 | 3.00 | 2.50 | S113-2.50mm-12X | $161.23 |
| 3.00 | 36.00 | 4.00 | 2.50 | S113-3.00mm-12X | $168.47 |

FLUTES 2

12X FLUTE LENGTH

COOLANT THRU

CIRCULAR

**SEE ALSO:**

p. 206 Custom Tools
p. 208 Coating

# S135

## Reamers / +0.0002 Tolerance

FLUTES 2,3,4

8X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Flute Length | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.0050 | 0.040 | 0.125 | 2.00 | S135-005-2-REAM8X | N/A | N/A | $70.20 | $72.30 |
| 0.0100 | 0.080 | 0.125 | 2.00 | S135-010-2-REAM8X | S135-010-3-REAM8X | S135-010-4-REAM8X | $60.80 | $62.90 |
| 0.0150 | 0.120 | 0.125 | 2.00 | S135-015-2-REAM8X | S135-015-3-REAM8X | S135-015-4-REAM8X | $60.80 | $62.90 |
| 0.0156 (1/64) | 0.125 | 0.125 | 2.00 | S135-016-2-REAM8X | S135-016-3-REAM8X | S135-016-4-REAM8X | $60.80 | $62.90 |
| 0.0200 | 0.160 | 0.125 | 2.00 | S135-020-2-REAM8X | S135-020-3-REAM8X | S135-020-4-REAM8X | $54.70 | $56.80 |
| 0.0250 | 0.200 | 0.125 | 2.00 | S135-025-2-REAM8X | S135-025-3-REAM8X | S135-025-4-REAM8X | $54.70 | $56.80 |
| 0.0300 | 0.240 | 0.125 | 2.00 | S135-030-2-REAM8X | S135-030-3-REAM8X | S135-030-4-REAM8X | $54.70 | $56.80 |
| 0.0313 (1/32) | 0.250 | 0.125 | 2.00 | S135-031-2-REAM8X | S135-031-3-REAM8X | S135-031-4-REAM8X | $54.70 | $56.80 |
| 0.0350 | 0.280 | 0.125 | 2.00 | S135-035-2-REAM8X | S135-035-3-REAM8X | S135-035-4-REAM8X | $54.70 | $56.80 |
| 0.0400 | 0.320 | 0.125 | 2.00 | S135-040-2-REAM8X | S135-040-3-REAM8X | S135-040-4-REAM8X | $54.70 | $56.80 |
| 0.0450 | 0.360 | 0.125 | 2.00 | S135-045-2-REAM8X | S135-045-3-REAM8X | S135-045-4-REAM8X | $54.70 | $56.80 |
| 0.0469 (3/64) | 0.375 | 0.125 | 2.00 | S135-047-2-REAM8X | S135-047-3-REAM8X | S135-047-4-REAM8X | $54.70 | $56.80 |
| 0.0500 | 0.400 | 0.125 | 2.00 | S135-050-2-REAM8X | S135-050-3-REAM8X | S135-050-4-REAM8X | $49.60 | $51.70 |
| 0.0550 | 0.440 | 0.125 | 2.00 | S135-055-2-REAM8X | S135-055-3-REAM8X | S135-055-4-REAM8X | $49.60 | $51.70 |
| 0.0600 | 0.480 | 0.125 | 2.00 | S135-060-2-REAM8X | S135-060-3-REAM8X | S135-060-4-REAM8X | $49.60 | $51.70 |
| 0.0625 (1/16) | 0.500 | 0.125 | 2.00 | S135-062-2-REAM8X | S135-062-3-REAM8X | S135-062-4-REAM8X | $49.60 | $51.70 |
| 0.0650 | 0.520 | 0.125 | 2.00 | S135-065-2-REAM8X | S135-065-3-REAM8X | S135-065-4-REAM8X | $49.60 | $51.70 |
| 0.0700 | 0.560 | 0.125 | 2.00 | S135-070-2-REAM8X | S135-070-3-REAM8X | S135-070-4-REAM8X | $49.60 | $51.70 |
| 0.0750 | 0.600 | 0.125 | 2.00 | S135-075-2-REAM8X | S135-075-3-REAM8X | S135-075-4-REAM8X | $49.60 | $51.70 |
| 0.0781 (5/64) | 0.625 | 0.125 | 2.00 | S135-078-2-REAM8X | S135-078-3-REAM8X | S135-078-4-REAM8X | $49.60 | $51.70 |
| 0.0800 | 0.640 | 0.125 | 2.50 | S135-080-2-REAM8X | S135-080-3-REAM8X | S135-080-4-REAM8X | $49.60 | $51.70 |
| 0.0850 | 0.680 | 0.125 | 2.50 | S135-085-2-REAM8X | S135-085-3-REAM8X | S135-085-4-REAM8X | $49.60 | $51.70 |
| 0.0900 | 0.720 | 0.125 | 2.50 | S135-090-2-REAM8X | S135-090-3-REAM8X | S135-090-4-REAM8X | $49.60 | $51.70 |
| 0.0938 (3/32) | 0.750 | 0.125 | 2.50 | S135-093-2-REAM8X | S135-093-3-REAM8X | S135-093-4-REAM8X | $49.60 | $51.70 |
| 0.0950 | 0.760 | 0.125 | 2.50 | S135-095-2-REAM8X | S135-095-3-REAM8X | S135-095-4-REAM8X | $49.60 | $51.70 |
| 0.1000 | 0.800 | 0.125 | 2.50 | S135-100-2-REAM8X | S135-100-3-REAM8X | S135-100-4-REAM8X | $49.60 | $51.70 |
| 0.1050 | 0.840 | 0.125 | 2.50 | S135-105-2-REAM8X | S135-105-3-REAM8X | S135-105-4-REAM8X | $49.60 | $51.70 |
| 0.1094 (7/64) | 0.875 | 0.125 | 2.50 | S135-109-2-REAM8X | S135-109-3-REAM8X | S135-109-4-REAM8X | $49.60 | $51.70 |
| 0.1100 | 0.880 | 0.125 | 2.50 | S135-110-2-REAM8X | S135-110-3-REAM8X | S135-110-4-REAM8X | $49.60 | $51.70 |
| 0.1150 | 0.920 | 0.125 | 2.50 | S135-115-2-REAM8X | S135-115-3-REAM8X | S135-115-4-REAM8X | $49.60 | $51.70 |
| 0.1200 | 0.960 | 0.125 | 2.50 | S135-120-2-REAM8X | S135-120-3-REAM8X | S135-120-4-REAM8X | $49.60 | $51.70 |
| 0.1250 (1/8) | 1.000 | 0.1875 | 2.50 | S135-125-2-REAM8X | S135-125-3-REAM8X | S135-125-4-REAM8X | $51.60 | $56.22 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Reamers / +0.0002 Tolerance



| Cutter Diameter | Flute Length | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.0100 | 0.080 | 0.120 | 0.125 | 2.00 | S136-010-2-REAM12XR | S136-010-3-REAM12XR | S136-010-4-REAM12XR | $68.80 | $70.90 |
| 0.0150 | 0.120 | 0.180 | 0.125 | 2.00 | S136-015-2-REAM12XR | S136-015-3-REAM12XR | S136-015-4-REAM12XR | $68.80 | $70.90 |
| 0.0156 (1/64) | 0.125 | 0.187 | 0.125 | 2.00 | S136-016-2-REAM12XR | S136-016-3-REAM12XR | S136-016-4-REAM12XR | $68.80 | $70.90 |
| 0.0200 | 0.160 | 0.240 | 0.125 | 2.00 | S136-020-2-REAM12XR | S136-020-3-REAM12XR | S136-020-4-REAM12XR | $62.70 | $64.80 |
| 0.0250 | 0.200 | 0.300 | 0.125 | 2.00 | S136-025-2-REAM12XR | S136-025-3-REAM12XR | S136-025-4-REAM12XR | $62.70 | $64.80 |
| 0.0300 | 0.240 | 0.360 | 0.125 | 2.00 | S136-030-2-REAM12XR | S136-030-3-REAM12XR | S136-030-4-REAM12XR | $62.70 | $64.80 |
| 0.0313 (1/32) | 0.250 | 0.376 | 0.125 | 2.00 | S136-031-2-REAM12XR | S136-031-3-REAM12XR | S136-031-4-REAM12XR | $62.70 | $64.80 |
| 0.0350 | 0.280 | 0.420 | 0.125 | 2.00 | S136-035-2-REAM12XR | S136-035-3-REAM12XR | S136-035-4-REAM12XR | $62.70 | $64.80 |
| 0.0400 | 0.320 | 0.480 | 0.125 | 2.00 | S136-040-2-REAM12XR | S136-040-3-REAM12XR | S136-040-4-REAM12XR | $62.70 | $64.80 |
| 0.0450 | 0.360 | 0.540 | 0.125 | 2.00 | S136-045-2-REAM12XR | S136-045-3-REAM12XR | S136-045-4-REAM12XR | $62.70 | $64.80 |
| 0.0469 (3/64) | 0.375 | 0.563 | 0.125 | 2.00 | S136-047-2-REAM12XR | S136-047-3-REAM12XR | S136-047-4-REAM12XR | $62.70 | $64.80 |
| 0.0500 | 0.400 | 0.600 | 0.125 | 2.00 | S136-050-2-REAM12XR | S136-050-3-REAM12XR | S136-050-4-REAM12XR | $57.60 | $59.70 |
| 0.0550 | 0.440 | 0.660 | 0.125 | 2.00 | S136-055-2-REAM12XR | S136-055-3-REAM12XR | S136-055-4-REAM12XR | $57.60 | $59.70 |
| 0.0600 | 0.480 | 0.720 | 0.125 | 2.00 | S136-060-2-REAM12XR | S136-060-3-REAM12XR | S136-060-4-REAM12XR | $57.60 | $59.70 |
| 0.0625 (1/16) | 0.500 | 0.750 | 0.125 | 2.00 | S136-062-2-REAM12XR | S136-062-3-REAM12XR | S136-062-4-REAM12XR | $57.60 | $59.70 |
| 0.0650 | 0.520 | 0.780 | 0.125 | 2.00 | S136-065-2-REAM12XR | S136-065-3-REAM12XR | S136-065-4-REAM12XR | $57.60 | $59.70 |
| 0.0700 | 0.560 | 0.840 | 0.125 | 2.00 | S136-070-2-REAM12XR | S136-070-3-REAM12XR | S136-070-4-REAM12XR | $57.60 | $59.70 |
| 0.0750 | 0.600 | 0.900 | 0.125 | 2.00 | S136-075-2-REAM12XR | S136-075-3-REAM12XR | S136-075-4-REAM12XR | $57.60 | $59.70 |
| 0.0781 (5/64) | 0.625 | 0.937 | 0.125 | 2.00 | S136-078-2-REAM12XR | S136-078-3-REAM12XR | S136-078-4-REAM12XR | $57.60 | $59.70 |
| 0.0800 | 0.640 | 0.960 | 0.125 | 2.50 | S136-080-2-REAM12XR | S136-080-3-REAM12XR | S136-080-4-REAM12XR | $57.60 | $59.70 |
| 0.0850 | 0.680 | 1.020 | 0.125 | 2.50 | S136-085-2-REAM12XR | S136-085-3-REAM12XR | S136-085-4-REAM12XR | $57.60 | $59.70 |
| 0.0900 | 0.720 | 1.080 | 0.125 | 2.50 | S136-090-2-REAM12XR | S136-090-3-REAM12XR | S136-090-4-REAM12XR | $57.60 | $59.70 |
| 0.0938 (3/32) | 0.750 | 1.126 | 0.125 | 2.50 | S136-093-2-REAM12XR | S136-093-3-REAM12XR | S136-093-4-REAM12XR | $57.60 | $59.70 |
| 0.0950 | 0.760 | 1.140 | 0.125 | 2.50 | S136-095-2-REAM12XR | S136-095-3-REAM12XR | S136-095-4-REAM12XR | $57.60 | $59.70 |
| 0.1000 | 0.800 | 1.200 | 0.125 | 2.50 | S136-100-2-REAM12XR | S136-100-3-REAM12XR | S136-100-4-REAM12XR | $57.60 | $59.70 |
| 0.1050 | 0.840 | 1.260 | 0.125 | 2.50 | S136-105-2-REAM12XR | S136-105-3-REAM12XR | S136-105-4-REAM12XR | $57.60 | $59.70 |
| 0.1094 (7/64) | 0.875 | 1.313 | 0.125 | 2.50 | S136-109-2-REAM12XR | S136-109-3-REAM12XR | S136-109-4-REAM12XR | $57.60 | $59.70 |
| 0.1100 | 0.880 | 1.320 | 0.125 | 2.50 | S136-110-2-REAM12XR | S136-110-3-REAM12XR | S136-110-4-REAM12XR | $57.60 | $59.70 |
| 0.1150 | 0.920 | 1.380 | 0.125 | 2.50 | S136-115-2-REAM12XR | S136-115-3-REAM12XR | S136-115-4-REAM12XR | $57.60 | $59.70 |
| 0.1200 | 0.960 | 1.440 | 0.125 | 2.50 | S136-120-2-REAM12XR | S136-120-3-REAM12XR | S136-120-4-REAM12XR | $57.60 | $59.70 |
| 0.1250 (1/8) | 1.000 | 1.500 | 0.1875 | 2.50 | S136-125-2-REAM12XR | S136-125-3-REAM12XR | S136-125-4-REAM12XR | $59.60 | $64.22 |

FLUTES 2,3,4

8X FLUTE LENGTH

12X REACH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

# S135

## Metric Reamers / +0.005mm Tolerance

FLUTES 2,3,4

8X FLUTE LENGTH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter (mm) | Flute Length (mm) | Shank Diameter (mm) | OAL (in.) | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.20 | 1.60 | 3.00 | 2.00 | S135-0.20mm-2-REAM8X | N/A | N/A | $70.20 | $72.30 |
| 0.25 | 2.00 | 3.00 | 2.00 | S135-0.25mm-2-REAM8X | N/A | N/A | $70.20 | $72.30 |
| 0.30 | 2.40 | 3.00 | 2.00 | S135-0.30mm-2-REAM8X | S135-0.30mm-3-REAM8X | S135-0.30mm-4-REAM8X | $60.80 | $62.90 |
| 0.35 | 2.80 | 3.00 | 2.00 | S135-0.35mm-2-REAM8X | S135-0.35mm-3-REAM8X | S135-0.35mm-4-REAM8X | $60.80 | $62.90 |
| 0.40 | 3.20 | 3.00 | 2.00 | S135-0.40mm-2-REAM8X | S135-0.40mm-3-REAM8X | S135-0.40mm-4-REAM8X | $60.80 | $62.90 |
| 0.45 | 3.60 | 3.00 | 2.00 | S135-0.45mm-2-REAM8X | S135-0.45mm-3-REAM8X | S135-0.45mm-4-REAM8X | $60.80 | $62.90 |
| 0.50 | 4.00 | 3.00 | 2.00 | S135-0.50mm-2-REAM8X | S135-0.50mm-3-REAM8X | S135-0.50mm-4-REAM8X | $60.80 | $62.90 |
| 0.55 | 4.40 | 3.00 | 2.00 | S135-0.55mm-2-REAM8X | S135-0.55mm-3-REAM8X | S135-0.55mm-4-REAM8X | $54.70 | $56.80 |
| 0.60 | 4.80 | 3.00 | 2.00 | S135-0.60mm-2-REAM8X | S135-0.60mm-3-REAM8X | S135-0.60mm-4-REAM8X | $54.70 | $56.80 |
| 0.65 | 5.20 | 3.00 | 2.00 | S135-0.65mm-2-REAM8X | S135-0.65mm-3-REAM8X | S135-0.65mm-4-REAM8X | $54.70 | $56.80 |
| 0.70 | 5.60 | 3.00 | 2.00 | S135-0.70mm-2-REAM8X | S135-0.70mm-3-REAM8X | S135-0.70mm-4-REAM8X | $54.70 | $56.80 |
| 0.75 | 6.00 | 3.00 | 2.00 | S135-0.75mm-2-REAM8X | S135-0.75mm-3-REAM8X | S135-0.75mm-4-REAM8X | $54.70 | $56.80 |
| 0.80 | 6.40 | 3.00 | 2.00 | S135-0.80mm-2-REAM8X | S135-0.80mm-3-REAM8X | S135-0.80mm-4-REAM8X | $54.70 | $56.80 |
| 0.85 | 6.80 | 3.00 | 2.00 | S135-0.85mm-2-REAM8X | S135-0.85mm-3-REAM8X | S135-0.85mm-4-REAM8X | $54.70 | $56.80 |
| 0.90 | 7.20 | 3.00 | 2.00 | S135-0.90mm-2-REAM8X | S135-0.90mm-3-REAM8X | S135-0.90mm-4-REAM8X | $54.70 | $56.80 |
| 0.95 | 7.60 | 3.00 | 2.00 | S135-0.95mm-2-REAM8X | S135-0.95mm-3-REAM8X | S135-0.95mm-4-REAM8X | $54.70 | $56.80 |
| 1.00 | 8.00 | 3.00 | 2.00 | S135-1.00mm-2-REAM8X | S135-1.00mm-3-REAM8X | S135-1.00mm-4-REAM8X | $54.70 | $56.80 |
| 1.25 | 10.00 | 3.00 | 2.00 | S135-1.25mm-2-REAM8X | S135-1.25mm-3-REAM8X | S135-1.25mm-4-REAM8X | $54.70 | $56.80 |
| 1.50 | 12.00 | 3.00 | 2.00 | S135-1.50mm-2-REAM8X | S135-1.50mm-3-REAM8X | S135-1.50mm-4-REAM8X | $49.60 | $51.70 |
| 1.75 | 14.00 | 3.00 | 2.00 | S135-1.75mm-2-REAM8X | S135-1.75mm-3-REAM8X | S135-1.75mm-4-REAM8X | $49.60 | $51.70 |
| 2.00 | 16.00 | 3.00 | 2.00 | S135-2.00mm-2-REAM8X | S135-2.00mm-3-REAM8X | S135-2.00mm-4-REAM8X | $49.60 | $51.70 |
| 2.25 | 18.00 | 3.00 | 2.50 | S135-2.25mm-2-REAM8X | S135-2.25mm-3-REAM8X | S135-2.25mm-4-REAM8X | $49.60 | $51.70 |
| 2.50 | 20.00 | 3.00 | 2.50 | S135-2.50mm-2-REAM8X | S135-2.50mm-3-REAM8X | S135-2.50mm-4-REAM8X | $49.60 | $51.70 |
| 2.75 | 22.00 | 3.00 | 2.50 | S135-2.75mm-2-REAM8X | S135-2.75mm-3-REAM8X | S135-2.75mm-4-REAM8X | $49.60 | $51.70 |
| 3.00 | 24.00 | 4.00 | 2.50 | S135-3.00mm-2-REAM8X | S135-3.00mm-3-REAM8X | S135-3.00mm-4-REAM8X | $51.60 | $56.22 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Metric Reamers / +0.005mm Tolerance

**S136**

| Cutter Diameter (mm) | Flute Length (mm) | Overall Reach (mm) | Shank Diameter (mm) | OAL (in.) | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.25 | 2.00 | 3.00 | 3.00 | 2.00 | S136-0.25mm-2-REAM12XR | N/A | N/A | $78.20 | $80.30 |
| 0.30 | 2.40 | 3.60 | 3.00 | 2.00 | S136-0.30mm-2-REAM12XR | S136-0.30mm-3-REAM12XR | S136-0.30mm-4-REAM12XR | $68.80 | $70.90 |
| 0.35 | 2.80 | 4.20 | 3.00 | 2.00 | S136-0.35mm-2-REAM12XR | S136-0.35mm-3-REAM12XR | S136-0.35mm-4-REAM12XR | $68.80 | $70.90 |
| 0.40 | 3.20 | 4.80 | 3.00 | 2.00 | S136-0.40mm-2-REAM12XR | S136-0.40mm-3-REAM12XR | S136-0.40mm-4-REAM12XR | $68.80 | $70.90 |
| 0.45 | 3.60 | 5.40 | 3.00 | 2.00 | S136-0.45mm-2-REAM12XR | S136-0.45mm-3-REAM12XR | S136-0.45mm-4-REAM12XR | $68.80 | $70.90 |
| 0.50 | 4.00 | 6.00 | 3.00 | 2.00 | S136-0.50mm-2-REAM12XR | S136-0.50mm-3-REAM12XR | S136-0.50mm-4-REAM12XR | $68.80 | $70.90 |
| 0.55 | 4.40 | 6.60 | 3.00 | 2.00 | S136-0.55mm-2-REAM12XR | S136-0.55mm-3-REAM12XR | S136-0.55mm-4-REAM12XR | $62.70 | $64.80 |
| 0.60 | 4.80 | 7.20 | 3.00 | 2.00 | S136-0.60mm-2-REAM12XR | S136-0.60mm-3-REAM12XR | S136-0.60mm-4-REAM12XR | $62.70 | $64.80 |
| 0.65 | 5.20 | 7.80 | 3.00 | 2.00 | S136-0.65mm-2-REAM12XR | S136-0.65mm-3-REAM12XR | S136-0.65mm-4-REAM12XR | $62.70 | $64.80 |
| 0.70 | 5.60 | 8.40 | 3.00 | 2.00 | S136-0.70mm-2-REAM12XR | S136-0.70mm-3-REAM12XR | S136-0.70mm-4-REAM12XR | $62.70 | $64.80 |
| 0.75 | 6.00 | 9.00 | 3.00 | 2.00 | S136-0.75mm-2-REAM12XR | S136-0.75mm-3-REAM12XR | S136-0.75mm-4-REAM12XR | $62.70 | $64.80 |
| 0.80 | 6.40 | 9.60 | 3.00 | 2.00 | S136-0.80mm-2-REAM12XR | S136-0.80mm-3-REAM12XR | S136-0.80mm-4-REAM12XR | $62.70 | $64.80 |
| 0.85 | 6.80 | 10.20 | 3.00 | 2.00 | S136-0.85mm-2-REAM12XR | S136-0.85mm-3-REAM12XR | S136-0.85mm-4-REAM12XR | $62.70 | $64.80 |
| 0.90 | 7.20 | 10.80 | 3.00 | 2.00 | S136-0.90mm-2-REAM12XR | S136-0.90mm-3-REAM12XR | S136-0.90mm-4-REAM12XR | $62.70 | $64.80 |
| 0.95 | 7.60 | 11.40 | 3.00 | 2.00 | S136-0.95mm-2-REAM12XR | S136-0.95mm-3-REAM12XR | S136-0.95mm-4-REAM12XR | $62.70 | $64.80 |
| 1.00 | 8.00 | 12.00 | 3.00 | 2.00 | S136-1.00mm-2-REAM12XR | S136-1.00mm-3-REAM12XR | S136-1.00mm-4-REAM12XR | $62.70 | $64.80 |
| 1.25 | 10.00 | 15.00 | 3.00 | 2.00 | S136-1.25mm-2-REAM12XR | S136-1.25mm-3-REAM12XR | S136-1.25mm-4-REAM12XR | $62.70 | $64.80 |
| 1.50 | 12.00 | 18.00 | 3.00 | 2.00 | S136-1.50mm-2-REAM12XR | S136-1.50mm-3-REAM12XR | S136-1.50mm-4-REAM12XR | $57.60 | $59.70 |
| 1.75 | 14.00 | 21.00 | 3.00 | 2.00 | S136-1.75mm-2-REAM12XR | S136-1.75mm-3-REAM12XR | S136-1.75mm-4-REAM12XR | $57.60 | $59.70 |
| 2.00 | 16.00 | 24.00 | 3.00 | 2.00 | S136-2.00mm-2-REAM12XR | S136-2.00mm-3-REAM12XR | S136-2.00mm-4-REAM12XR | $57.60 | $59.70 |
| 2.25 | 18.00 | 27.00 | 3.00 | 2.50 | S136-2.25mm-2-REAM12XR | S136-2.25mm-3-REAM12XR | S136-2.25mm-4-REAM12XR | $57.60 | $59.70 |
| 2.50 | 20.00 | 30.00 | 3.00 | 2.50 | S136-2.50mm-2-REAM12XR | S136-2.50mm-3-REAM12XR | S136-2.50mm-4-REAM12XR | $57.60 | $59.70 |
| 2.75 | 22.00 | 33.00 | 3.00 | 2.50 | S136-2.75mm-2-REAM12XR | S136-2.75mm-3-REAM12XR | S136-2.75mm-4-REAM12XR | $57.60 | $59.70 |
| 3.00 | 24.00 | 36.00 | 4.00 | 2.50 | S136-3.00mm-2-REAM12XR | S136-3.00mm-3-REAM12XR | S136-3.00mm-4-REAM12XR | $59.60 | $64.22 |

FLUTES 2,3,4

8X FLUTE LENGTH

12X REACH

CIRCULAR

SWISS-TYPE OAL

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## CUSTOM SPECIALS / Reamers

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and flute types vary by design
- End finishes: chamfer, ball, and corner radius
- Extended reach available
- Multi-diameter, multi-step reamers available
- Specials usually available in two weeks or less

**Quote forms available on our website and upon request.**
**Contact us for an estimate today.**

# S137

## 2° Square Drafted Mold Tools

FLUTES 2,3,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.015 (1/64) | 0.023 | 2.537 | 0.1875 | 4.00 | S137-015-2-DVSM | S137-015-3-DVSM | S137-015-4-DVSM | $62.79 | $67.41 |
| 0.031 (1/32) | 0.047 | 2.356 | 0.1875 | 4.00 | S137-031-2-DVSM | S137-031-3-DVSM | S137-031-4-DVSM | $62.79 | $67.41 |
| 0.047 (3/64) | 0.071 | 2.175 | 0.1875 | 4.00 | S137-047-2-DVSM | S137-047-3-DVSM | S137-047-4-DVSM | $62.79 | $67.41 |
| 0.062 (1/16) | 0.093 | 2.004 | 0.1875 | 4.00 | S137-062-2-DVSM | S137-062-3-DVSM | S137-062-4-DVSM | $76.55 | $81.17 |
| 0.078 (5/64) | 0.117 | 1.823 | 0.1875 | 4.00 | S137-078-2-DVSM | S137-078-3-DVSM | S137-078-4-DVSM | $76.55 | $81.17 |
| 0.093 (3/32) | 0.140 | 1.654 | 0.1875 | 4.00 | S137-093-2-DVSM | S137-093-3-DVSM | S137-093-4-DVSM | $76.55 | $81.17 |
| 0.109 (7/64) | 0.164 | 1.473 | 0.1875 | 4.00 | S137-109-2-DVSM | S137-109-3-DVSM | S137-109-4-DVSM | $76.55 | $81.17 |
| 0.125 (1/8) | 0.188 | 2.180 | 0.250 | 4.00 | S137-125-2-DVSM | S137-125-3-DVSM | S137-125-4-DVSM | $79.96 | $84.58 |
| 0.156 (5/32)* | 0.234 | 1.828 | 0.250 | 4.00 | S137-156-2-DVSM | S137-156-3-DVSM | S137-156-4-DVSM | $79.96 | $84.58 |
| 0.187 (3/16)* | 0.281 | 1.492 | 0.250 | 4.00 | S137-188-2-DVSM | S137-188-3-DVSM | S137-188-4-DVSM | $79.96 | $84.58 |
| 0.219 (7/32)* | 0.329 | 2.905 | 0.375 | 4.00 | S137-219-2-DVSM | S137-219-3-DVSM | S137-219-4-DVSM | $119.54 | $125.53 |
| 0.250 (1/4)* | 0.375 | 2.554 | 0.375 | 4.00 | S137-250-2-DVSM | S137-250-3-DVSM | S137-250-4-DVSM | $119.54 | $125.53 |

## 2° Square Drafted Mold Tools

FLUTES 5

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.047 | 2.356 | 0.1875 | 4.00 | S137-031-5-DVSM | $71.19 | $75.81 |
| 0.047 (3/64) | 0.071 | 2.175 | 0.1875 | 4.00 | S137-047-5-DVSM | $71.19 | $75.81 |
| 0.062 (1/16) | 0.093 | 2.004 | 0.1875 | 4.00 | S137-062-5-DVSM | $84.95 | $89.57 |
| 0.078 (5/64) | 0.117 | 1.823 | 0.1875 | 4.00 | S137-078-5-DVSM | $84.95 | $89.57 |
| 0.093 (3/32) | 0.140 | 1.654 | 0.1875 | 4.00 | S137-093-5-DVSM | $84.95 | $89.57 |
| 0.109 (7/64) | 0.164 | 1.473 | 0.1875 | 4.00 | S137-109-5-DVSM | $84.95 | $89.57 |
| 0.125 (1/8) | 0.188 | 2.180 | 0.250 | 4.00 | S137-125-5-DVSM | $88.36 | $92.98 |
| 0.156 (5/32)* | 0.234 | 1.828 | 0.250 | 4.00 | S137-156-5-DVSM | $88.36 | $92.98 |
| 0.187 (3/16)* | 0.281 | 1.492 | 0.250 | 4.00 | S137-188-5-DVSM | $88.36 | $92.98 |
| 0.219 (7/32)* | 0.329 | 2.905 | 0.375 | 4.00 | S137-219-5-DVSM | $127.94 | $133.93 |
| 0.250 (1/4)* | 0.375 | 2.554 | 0.375 | 4.00 | S137-250-5-DVSM | $127.94 | $133.93 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 3° Square Drafted Mold Tools



| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.015 (1/64) | 0.023 | 1.706 | 0.1875 | 3.00 | S138-015-2-DVSM | S138-015-3-DVSM | S138-015-4-DVSM | $62.79 | $67.41 |
| 0.031 (1/32) | 0.047 | 1.601 | 0.1875 | 3.00 | S138-031-2-DVSM | S138-031-3-DVSM | S138-031-4-DVSM | $62.79 | $67.41 |
| 0.047 (3/64) | 0.071 | 1.496 | 0.1875 | 3.00 | S138-047-2-DVSM | S138-047-3-DVSM | S138-047-4-DVSM | $62.79 | $67.41 |
| 0.062 (1/16) | 0.093 | 1.398 | 0.1875 | 3.00 | S138-062-2-DVSM | S138-062-3-DVSM | S138-062-4-DVSM | $76.55 | $81.17 |
| 0.078 (5/64) | 0.117 | 1.293 | 0.1875 | 3.00 | S138-078-2-DVSM | S138-078-3-DVSM | S138-078-4-DVSM | $76.55 | $81.17 |
| 0.093 (3/32) | 0.140 | 1.195 | 0.1875 | 3.00 | S138-093-2-DVSM | S138-093-3-DVSM | S138-093-4-DVSM | $76.55 | $81.17 |
| 0.109 (7/64) | 0.164 | 1.091 | 0.1875 | 3.00 | S138-109-2-DVSM | S138-109-3-DVSM | S138-109-4-DVSM | $76.55 | $81.17 |
| 0.125 (1/8) | 0.188 | 1.578 | 0.250 | 3.00 | S138-125-2-DVSM | S138-125-3-DVSM | S138-125-4-DVSM | $79.96 | $84.58 |
| 0.156 (5/32)* | 0.234 | 1.374 | 0.250 | 3.00 | S138-156-2-DVSM | S138-156-3-DVSM | S138-156-4-DVSM | $79.96 | $84.58 |
| 0.187 (3/16)* | 0.281 | 1.182 | 0.250 | 3.00 | S138-188-2-DVSM | S138-188-3-DVSM | S138-188-4-DVSM | $79.96 | $84.58 |
| 0.219 (7/32)* | 0.329 | 2.155 | 0.375 | 4.00 | S138-219-2-DVSM | S138-219-3-DVSM | S138-219-4-DVSM | $119.54 | $125.53 |
| 0.250 (1/4)* | 0.375 | 1.952 | 0.375 | 4.00 | S138-250-2-DVSM | S138-250-3-DVSM | S138-250-4-DVSM | $119.54 | $125.53 |

FLUTES 2,3,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

## 3° Square Drafted Mold Tools

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.047 | 1.601 | 0.1875 | 3.00 | S138-031-5-DVSM | $71.19 | $75.81 |
| 0.047 (3/64) | 0.071 | 1.496 | 0.1875 | 3.00 | S138-047-5-DVSM | $71.19 | $75.81 |
| 0.062 (1/16) | 0.093 | 1.398 | 0.1875 | 3.00 | S138-062-5-DVSM | $84.95 | $89.57 |
| 0.078 (5/64) | 0.117 | 1.293 | 0.1875 | 3.00 | S138-078-5-DVSM | $84.95 | $89.57 |
| 0.093 (3/32) | 0.140 | 1.195 | 0.1875 | 3.00 | S138-093-5-DVSM | $84.95 | $89.57 |
| 0.109 (7/64) | 0.164 | 1.091 | 0.1875 | 3.00 | S138-109-5-DVSM | $84.95 | $89.57 |
| 0.125 (1/8) | 0.188 | 1.578 | 0.250 | 3.00 | S138-125-5-DVSM | $88.36 | $92.98 |
| 0.156 (5/32)* | 0.234 | 1.374 | 0.250 | 3.00 | S138-156-5-DVSM | $88.36 | $92.98 |
| 0.187 (3/16)* | 0.281 | 1.182 | 0.250 | 3.00 | S138-188-5-DVSM | $88.36 | $92.98 |
| 0.219 (7/32)* | 0.329 | 2.155 | 0.375 | 4.00 | S138-219-5-DVSM | $127.94 | $133.93 |
| 0.250 (1/4)* | 0.375 | 1.952 | 0.375 | 4.00 | S138-250-5-DVSM | $127.94 | $133.93 |

FLUTES 5

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S139

## 5° Square Drafted Mold Tools

FLUTES 2,3,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.015 (1/64) | 0.023 | 1.040 | 0.1875 | 3.00 | S139-015-2-DVSM | S139-015-3-DVSM | S139-015-4-DVSM | $62.79 | $67.41 |
| 0.031 (1/32) | 0.047 | 0.997 | 0.1875 | 3.00 | S139-031-2-DVSM | S139-031-3-DVSM | S139-031-4-DVSM | $62.79 | $67.41 |
| 0.047 (3/64) | 0.071 | 0.953 | 0.1875 | 3.00 | S139-047-2-DVSM | S139-047-3-DVSM | S139-047-4-DVSM | $62.79 | $67.41 |
| 0.062 (1/16) | 0.093 | 0.912 | 0.1875 | 3.00 | S139-062-2-DVSM | S139-062-3-DVSM | S139-062-4-DVSM | $76.55 | $81.17 |
| 0.078 (5/64) | 0.117 | 0.868 | 0.1875 | 3.00 | S139-078-2-DVSM | S139-078-3-DVSM | S139-078-4-DVSM | $76.55 | $81.17 |
| 0.093 (3/32) | 0.140 | 0.828 | 0.1875 | 3.00 | S139-093-2-DVSM | S139-093-3-DVSM | S139-093-4-DVSM | $76.55 | $81.17 |
| 0.109 (7/64) | 0.164 | 0.785 | 0.1875 | 3.00 | S139-109-2-DVSM | S139-109-3-DVSM | S139-109-4-DVSM | $76.55 | $81.17 |
| 0.125 (1/8) | 0.188 | 1.096 | 0.250 | 3.00 | S139-125-2-DVSM | S139-125-3-DVSM | S139-125-4-DVSM | $79.96 | $84.58 |
| 0.156 (5/32)* | 0.234 | 1.011 | 0.250 | 3.00 | S139-156-2-DVSM | S139-156-3-DVSM | S139-156-4-DVSM | $79.96 | $84.58 |
| 0.187 (3/16)* | 0.281 | 0.933 | 0.250 | 3.00 | S139-188-2-DVSM | S139-188-3-DVSM | S139-188-4-DVSM | $79.96 | $84.58 |
| 0.219 (7/32)* | 0.329 | 1.555 | 0.375 | 4.00 | S139-219-2-DVSM | S139-219-3-DVSM | S139-219-4-DVSM | $119.54 | $125.53 |
| 0.250 (1/4)* | 0.375 | 1.470 | 0.375 | 4.00 | S139-250-2-DVSM | S139-250-3-DVSM | S139-250-4-DVSM | $119.54 | $125.53 |

## 5° Square Drafted Mold Tools

FLUTES 5

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.047 | 0.997 | 0.1875 | 3.00 | S139-031-5-DVSM | $71.19 | $75.81 |
| 0.047 (3/64) | 0.071 | 0.953 | 0.1875 | 3.00 | S139-047-5-DVSM | $71.19 | $75.81 |
| 0.062 (1/16) | 0.093 | 0.912 | 0.1875 | 3.00 | S139-062-5-DVSM | $84.95 | $89.57 |
| 0.078 (5/64) | 0.117 | 0.868 | 0.1875 | 3.00 | S139-078-5-DVSM | $84.95 | $89.57 |
| 0.093 (3/32) | 0.140 | 0.828 | 0.1875 | 3.00 | S139-093-5-DVSM | $84.95 | $89.57 |
| 0.109 (7/64) | 0.164 | 0.785 | 0.1875 | 3.00 | S139-109-5-DVSM | $84.95 | $89.57 |
| 0.125 (1/8) | 0.188 | 1.096 | 0.250 | 3.00 | S139-125-5-DVSM | $88.36 | $92.98 |
| 0.156 (5/32)* | 0.234 | 1.011 | 0.250 | 3.00 | S139-156-5-DVSM | $88.36 | $92.98 |
| 0.187 (3/16)* | 0.281 | 0.933 | 0.250 | 3.00 | S139-188-5-DVSM | $88.36 | $92.98 |
| 0.219 (7/32)* | 0.329 | 1.555 | 0.375 | 4.00 | S139-219-5-DVSM | $127.94 | $133.93 |
| 0.250 (1/4)* | 0.375 | 1.470 | 0.375 | 4.00 | S139-250-5-DVSM | $127.94 | $133.93 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# STOCKING & SHIPPING OPTIONS

## STOCKING OPTIONS & BLANKET ORDERS

Once an order has been placed (standard or custom), those tools can be stocked and available for same day shipment on reorders. Blanket POs allow you to schedule tools for regular delivery while taking advantage of lower price points available when ordering in larger quantities. Ask your Account Manager for more information regarding stocking options and blanket POs.

## APPROVAL BASED SAMPLES

No one makes better tools than MITGI. We're so confident that we encourage you to give them a try on approval.

In most cases, the Approval Based Sample Program allows you to order a standard tool and give it a try before placing the full order. This lets you see the catalog tool in action, allows you to compare it to the tools of our competitors, and helps determine whether it matches the specifications required for your project.

Contact your Account Manager to request a standard tool sample.

*Kyrstin, Executive Assistant - Sales & Production*

## SHIPPING & LOCAL DELIVERY

Orders ship via UPS or FedEx; expedited delivery options are available. For customers within 90 miles of Hutchinson, MN, same day courier or pick up options may be available for standard or custom stocked tools. Ask your Account Manager for more information.

## EXPEDITED ORDERS

Our manufacturing facility is set up for flexibility and can produce standard or custom orders quickly and efficiently. Contact us for quick turn and expedited order options.

Expedited delivery is available on a case-by-case basis.

## PRODUCTION TIME LINES

| | |
|---|---|
| **Standard Tools:** | **3 days or less** |
| **Quick Turn Specials:** | **3 days or less** |
| **Custom Tools:** | **2 weeks or less** |
| **Coating:** | **1 week or less** |

# S140

## 2° Corner Radius Drafted Mold Tools

FLUTES 2,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | |
| 0.015 (1/64) | 0.023 | 2.537 | 0.1875 | 4.00 | 0.003 | S140-015-2-.003DVCM | N/A | $68.99 | $73.61 |
| 0.031 (1/32) | 0.047 | 2.356 | 0.1875 | 4.00 | 0.005 | S140-031-2-.005DVCM | S140-031-4-.005DVCM | $68.99 | $73.61 |
| 0.047 (3/64) | 0.071 | 2.175 | 0.1875 | 4.00 | 0.005 | S140-047-2-.005DVCM | S140-047-4-.005DVCM | $68.99 | $73.61 |
| 0.047 (3/64) | 0.071 | 2.175 | 0.1875 | 4.00 | 0.010 | S140-047-2-.010DVCM | S140-047-4-.010DVCM | $68.99 | $73.61 |
| 0.062 (1/16) | 0.093 | 2.004 | 0.1875 | 4.00 | 0.010 | S140-062-2-.010DVCM | S140-062-4-.010DVCM | $83.11 | $87.73 |
| 0.062 (1/16) | 0.093 | 2.004 | 0.1875 | 4.00 | 0.015 | S140-062-2-.015DVCM | S140-062-4-.015DVCM | $83.11 | $87.73 |
| 0.078 (5/64) | 0.117 | 1.823 | 0.1875 | 4.00 | 0.010 | S140-078-2-.010DVCM | S140-078-4-.010DVCM | $83.11 | $87.73 |
| 0.078 (5/64) | 0.117 | 1.823 | 0.1875 | 4.00 | 0.015 | S140-078-2-.015DVCM | S140-078-4-.015DVCM | $83.11 | $87.73 |
| 0.093 (3/32) | 0.140 | 1.654 | 0.1875 | 4.00 | 0.010 | S140-093-2-.010DVCM | S140-093-4-.010DVCM | $83.11 | $87.73 |
| 0.093 (3/32) | 0.140 | 1.654 | 0.1875 | 4.00 | 0.015 | S140-093-2-.015DVCM | S140-093-4-.015DVCM | $83.11 | $87.73 |
| 0.109 (7/64) | 0.164 | 1.473 | 0.1875 | 4.00 | 0.015 | S140-109-2-.015DVCM | S140-109-4-.015DVCM | $83.11 | $87.73 |
| 0.109 (7/64) | 0.164 | 1.473 | 0.1875 | 4.00 | 0.020 | S140-109-2-.020DVCM | S140-109-4-.020DVCM | $83.11 | $87.73 |
| 0.125 (1/8) | 0.188 | 2.180 | 0.250 | 4.00 | 0.015 | S140-125-2-.015DVCM | S140-125-4-.015DVCM | $87.36 | $91.98 |
| 0.125 (1/8) | 0.188 | 2.180 | 0.250 | 4.00 | 0.020 | S140-125-2-.020DVCM | S140-125-4-.020DVCM | $87.36 | $91.98 |
| 0.156 (5/32)* | 0.234 | 1.828 | 0.250 | 4.00 | 0.015 | S140-156-2-.015DVCM | S140-156-4-.015DVCM | $87.36 | $91.98 |
| 0.156 (5/32)* | 0.234 | 1.828 | 0.250 | 4.00 | 0.020 | S140-156-2-.020DVCM | S140-156-4-.020DVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 1.492 | 0.250 | 4.00 | 0.015 | S140-188-2-.015DVCM | S140-188-4-.015DVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 1.492 | 0.250 | 4.00 | 0.020 | S140-188-2-.020DVCM | S140-188-4-.020DVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 1.492 | 0.250 | 4.00 | 0.031 | S140-188-2-.031DVCM | S140-188-4-.031DVCM | $87.36 | $91.98 |
| 0.219 (7/32)* | 0.329 | 2.905 | 0.375 | 4.00 | 0.015 | S140-219-2-.015DVCM | S140-219-4-.015DVCM | $131.41 | $137.39 |
| 0.219 (7/32)* | 0.329 | 2.905 | 0.375 | 4.00 | 0.020 | S140-219-2-.020DVCM | S140-219-4-.020DVCM | $131.41 | $137.39 |
| 0.219 (7/32)* | 0.329 | 2.905 | 0.375 | 4.00 | 0.031 | S140-219-2-.031DVCM | S140-219-4-.031DVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 2.554 | 0.375 | 4.00 | 0.015 | S140-250-2-.015DVCM | S140-250-4-.015DVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 2.554 | 0.375 | 4.00 | 0.020 | S140-250-2-.020DVCM | S140-250-4-.020DVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 2.554 | 0.375 | 4.00 | 0.031 | S140-250-2-.031DVCM | S140-250-4-.031DVCM | $131.41 | $137.39 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 2° Corner Radius Drafted Mold Tools



FLUTES 5

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| 0.047 (3/64) | 0.071 | 2.175 | 0.1875 | 4.00 | 0.005 | S140-047-5-.005DVCM | $77.39 | $82.01 |
| 0.047 (3/64) | 0.071 | 2.175 | 0.1875 | 4.00 | 0.010 | S140-047-5-.010DVCM | $77.39 | $82.01 |
| 0.062 (1/16) | 0.093 | 2.004 | 0.1875 | 4.00 | 0.010 | S140-062-5-.010DVCM | $91.51 | $96.13 |
| 0.062 (1/16) | 0.093 | 2.004 | 0.1875 | 4.00 | 0.015 | S140-062-5-.015DVCM | $91.51 | $96.13 |
| 0.078 (5/64) | 0.117 | 1.823 | 0.1875 | 4.00 | 0.010 | S140-078-5-.010DVCM | $91.51 | $96.13 |
| 0.078 (5/64) | 0.117 | 1.823 | 0.1875 | 4.00 | 0.015 | S140-078-5-.015DVCM | $91.51 | $96.13 |
| 0.093 (3/32) | 0.140 | 1.654 | 0.1875 | 4.00 | 0.010 | S140-093-5-.010DVCM | $91.51 | $96.13 |
| 0.093 (3/32) | 0.140 | 1.654 | 0.1875 | 4.00 | 0.015 | S140-093-5-.015DVCM | $91.51 | $96.13 |
| 0.109 (7/64) | 0.164 | 1.473 | 0.1875 | 4.00 | 0.015 | S140-109-5-.015DVCM | $91.51 | $96.13 |
| 0.109 (7/64) | 0.164 | 1.473 | 0.1875 | 4.00 | 0.020 | S140-109-5-.020DVCM | $91.51 | $96.13 |
| 0.125 (1/8) | 0.188 | 2.180 | 0.250 | 4.00 | 0.015 | S140-125-5-.015DVCM | $95.76 | $100.38 |
| 0.125 (1/8) | 0.188 | 2.180 | 0.250 | 4.00 | 0.020 | S140-125-5-.020DVCM | $95.76 | $100.38 |
| 0.156 (5/32)* | 0.234 | 1.828 | 0.250 | 4.00 | 0.015 | S140-156-5-.015DVCM | $95.76 | $100.38 |
| 0.156 (5/32)* | 0.234 | 1.828 | 0.250 | 4.00 | 0.020 | S140-156-5-.020DVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 1.492 | 0.250 | 4.00 | 0.015 | S140-188-5-.015DVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 1.492 | 0.250 | 4.00 | 0.020 | S140-188-5-.020DVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 1.492 | 0.250 | 4.00 | 0.031 | S140-188-5-.031DVCM | $95.76 | $100.38 |
| 0.219 (7/32)* | 0.329 | 2.905 | 0.375 | 4.00 | 0.015 | S140-219-5-.015DVCM | $139.81 | $145.79 |
| 0.219 (7/32)* | 0.329 | 2.905 | 0.375 | 4.00 | 0.020 | S140-219-5-.020DVCM | $139.81 | $145.79 |
| 0.219 (7/32)* | 0.329 | 2.905 | 0.375 | 4.00 | 0.031 | S140-219-5-.031DVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 2.554 | 0.375 | 4.00 | 0.015 | S140-250-5-.015DVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 2.554 | 0.375 | 4.00 | 0.020 | S140-250-5-.020DVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 2.554 | 0.375 | 4.00 | 0.031 | S140-250-5-.031DVCM | $139.81 | $145.79 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

# S141

## 3° Corner Radius Drafted Mold Tools

FLUTES 2,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | |
| 0.015 (1/64) | 0.023 | 1.706 | 0.1875 | 3.00 | 0.003 | S141-015-2-.003DVCM | N/A | $68.99 | $73.61 |
| 0.031 (1/32) | 0.047 | 1.601 | 0.1875 | 3.00 | 0.005 | S141-031-2-.005DVCM | S141-031-4-.005DVCM | $68.99 | $73.61 |
| 0.047 (3/64) | 0.071 | 1.496 | 0.1875 | 3.00 | 0.005 | S141-047-2-.005DVCM | S141-047-4-.005DVCM | $68.99 | $73.61 |
| 0.047 (3/64) | 0.071 | 1.496 | 0.1875 | 3.00 | 0.010 | S141-047-2-.010DVCM | S141-047-4-.010DVCM | $68.99 | $73.61 |
| 0.062 (1/16) | 0.093 | 1.398 | 0.1875 | 3.00 | 0.010 | S141-062-2-.010DVCM | S141-062-4-.010DVCM | $83.11 | $87.73 |
| 0.062 (1/16) | 0.093 | 1.398 | 0.1875 | 3.00 | 0.015 | S141-062-2-.015DVCM | S141-062-4-.015DVCM | $83.11 | $87.73 |
| 0.078 (5/64) | 0.117 | 1.293 | 0.1875 | 3.00 | 0.010 | S141-078-2-.010DVCM | S141-078-4-.010DVCM | $83.11 | $87.73 |
| 0.078 (5/64) | 0.117 | 1.293 | 0.1875 | 3.00 | 0.015 | S141-078-2-.015DVCM | S141-078-4-.015DVCM | $83.11 | $87.73 |
| 0.093 (3/32) | 0.140 | 1.195 | 0.1875 | 3.00 | 0.010 | S141-093-2-.010DVCM | S141-093-4-.010DVCM | $83.11 | $87.73 |
| 0.093 (3/32) | 0.140 | 1.195 | 0.1875 | 3.00 | 0.015 | S141-093-2-.015DVCM | S141-093-4-.015DVCM | $83.11 | $87.73 |
| 0.109 (7/64) | 0.164 | 1.091 | 0.1875 | 3.00 | 0.015 | S141-109-2-.015DVCM | S141-109-4-.015DVCM | $83.11 | $87.73 |
| 0.109 (7/64) | 0.164 | 1.091 | 0.1875 | 3.00 | 0.020 | S141-109-2-.020DVCM | S141-109-4-.020DVCM | $83.11 | $87.73 |
| 0.125 (1/8) | 0.188 | 1.578 | 0.250 | 3.00 | 0.015 | S141-125-2-.015DVCM | S141-125-4-.015DVCM | $87.36 | $91.98 |
| 0.125 (1/8) | 0.188 | 1.578 | 0.250 | 3.00 | 0.020 | S141-125-2-.020DVCM | S141-125-4-.020DVCM | $87.36 | $91.98 |
| 0.156 (5/32)* | 0.234 | 1.374 | 0.250 | 3.00 | 0.015 | S141-156-2-.015DVCM | S141-156-4-.015DVCM | $87.36 | $91.98 |
| 0.156 (5/32)* | 0.234 | 1.374 | 0.250 | 3.00 | 0.020 | S141-156-2-.020DVCM | S141-156-4-.020DVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 1.182 | 0.250 | 3.00 | 0.015 | S141-188-2-.015DVCM | S141-188-4-.015DVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 1.182 | 0.250 | 3.00 | 0.020 | S141-188-2-.020DVCM | S141-188-4-.020DVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 1.182 | 0.250 | 3.00 | 0.031 | S141-188-2-.031DVCM | S141-188-4-.031DVCM | $87.36 | $91.98 |
| 0.219 (7/32)* | 0.329 | 2.155 | 0.375 | 4.00 | 0.015 | S141-219-2-.015DVCM | S141-219-4-.015DVCM | $131.41 | $137.39 |
| 0.219 (7/32)* | 0.329 | 2.155 | 0.375 | 4.00 | 0.020 | S141-219-2-.020DVCM | S141-219-4-.020DVCM | $131.41 | $137.39 |
| 0.219 (7/32)* | 0.329 | 2.155 | 0.375 | 4.00 | 0.031 | S141-219-2-.031DVCM | S141-219-4-.031DVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 1.952 | 0.375 | 4.00 | 0.015 | S141-250-2-.015DVCM | S141-250-4-.015DVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 1.952 | 0.375 | 4.00 | 0.020 | S141-250-2-.020DVCM | S141-250-4-.020DVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 1.952 | 0.375 | 4.00 | 0.031 | S141-250-2-.031DVCM | S141-250-4-.031DVCM | $131.41 | $137.39 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 3° Corner Radius Drafted Mold Tools



FLUTES 5

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| 0.047 (3/64) | 0.071 | 1.496 | 0.1875 | 3.00 | 0.005 | S141-047-5-.005DVCM | $77.39 | $82.01 |
| 0.047 (3/64) | 0.071 | 1.496 | 0.1875 | 3.00 | 0.010 | S141-047-5-.010DVCM | $77.39 | $82.01 |
| 0.062 (1/16) | 0.093 | 1.398 | 0.1875 | 3.00 | 0.010 | S141-062-5-.010DVCM | $91.51 | $96.13 |
| 0.062 (1/16) | 0.093 | 1.398 | 0.1875 | 3.00 | 0.015 | S141-062-5-.015DVCM | $91.51 | $96.13 |
| 0.078 (5/64) | 0.117 | 1.293 | 0.1875 | 3.00 | 0.010 | S141-078-5-.010DVCM | $91.51 | $96.13 |
| 0.078 (5/64) | 0.117 | 1.293 | 0.1875 | 3.00 | 0.015 | S141-078-5-.015DVCM | $91.51 | $96.13 |
| 0.093 (3/32) | 0.140 | 1.195 | 0.1875 | 3.00 | 0.010 | S141-093-5-.010DVCM | $91.51 | $96.13 |
| 0.093 (3/32) | 0.140 | 1.195 | 0.1875 | 3.00 | 0.015 | S141-093-5-.015DVCM | $91.51 | $96.13 |
| 0.109 (7/64) | 0.164 | 1.091 | 0.1875 | 3.00 | 0.015 | S141-109-5-.015DVCM | $91.51 | $96.13 |
| 0.109 (7/64) | 0.164 | 1.091 | 0.1875 | 3.00 | 0.020 | S141-109-5-.020DVCM | $91.51 | $96.13 |
| 0.125 (1/8) | 0.188 | 1.578 | 0.250 | 3.00 | 0.015 | S141-125-5-.015DVCM | $95.76 | $100.38 |
| 0.125 (1/8) | 0.188 | 1.578 | 0.250 | 3.00 | 0.020 | S141-125-5-.020DVCM | $95.76 | $100.38 |
| 0.156 (5/32)* | 0.234 | 1.374 | 0.250 | 3.00 | 0.015 | S141-156-5-.015DVCM | $95.76 | $100.38 |
| 0.156 (5/32)* | 0.234 | 1.374 | 0.250 | 3.00 | 0.020 | S141-156-5-.020DVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 1.182 | 0.250 | 3.00 | 0.015 | S141-188-5-.015DVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 1.182 | 0.250 | 3.00 | 0.020 | S141-188-5-.020DVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 1.182 | 0.250 | 3.00 | 0.031 | S141-188-5-.031DVCM | $95.76 | $100.38 |
| 0.219 (7/32)* | 0.329 | 2.155 | 0.375 | 4.00 | 0.015 | S141-219-5-.015DVCM | $139.81 | $145.79 |
| 0.219 (7/32)* | 0.329 | 2.155 | 0.375 | 4.00 | 0.020 | S141-219-5-.020DVCM | $139.81 | $145.79 |
| 0.219 (7/32)* | 0.329 | 2.155 | 0.375 | 4.00 | 0.031 | S141-219-5-.031DVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 1.952 | 0.375 | 4.00 | 0.015 | S141-250-5-.015DVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 1.952 | 0.375 | 4.00 | 0.020 | S141-250-5-.020DVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 1.952 | 0.375 | 4.00 | 0.031 | S141-250-5-.031DVCM | $139.81 | $145.79 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


### CONTACT US

P. 2

MITGI is open from 8 AM - 4 PM Central Time, and can be reached any time by email, web, and social media. See page 2 for more information about ordering and ways to reach us.

# S142

## 5° Corner Radius Drafted Mold Tools

FLUTES 2,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | |
| 0.015 (1/64) | 0.023 | 1.040 | 0.1875 | 3.00 | 0.003 | S142-015-2-.003DVCM | N/A | $68.99 | $73.61 |
| 0.031 (1/32) | 0.047 | 0.997 | 0.1875 | 3.00 | 0.005 | S142-031-2-.005DVCM | S142-031-4-.005DVCM | $68.99 | $73.61 |
| 0.047 (3/64) | 0.071 | 0.953 | 0.1875 | 3.00 | 0.005 | S142-047-2-.005DVCM | S142-047-4-.005DVCM | $68.99 | $73.61 |
| 0.047 (3/64) | 0.071 | 0.953 | 0.1875 | 3.00 | 0.010 | S142-047-2-.010DVCM | S142-047-4-.010DVCM | $68.99 | $73.61 |
| 0.062 (1/16) | 0.093 | 0.912 | 0.1875 | 3.00 | 0.010 | S142-062-2-.010DVCM | S142-062-4-.010DVCM | $83.11 | $87.73 |
| 0.062 (1/16) | 0.093 | 0.912 | 0.1875 | 3.00 | 0.015 | S142-062-2-.015DVCM | S142-062-4-.015DVCM | $83.11 | $87.73 |
| 0.078 (5/64) | 0.117 | 0.868 | 0.1875 | 3.00 | 0.010 | S142-078-2-.010DVCM | S142-078-4-.010DVCM | $83.11 | $87.73 |
| 0.078 (5/64) | 0.117 | 0.868 | 0.1875 | 3.00 | 0.015 | S142-078-2-.015DVCM | S142-078-4-.015DVCM | $83.11 | $87.73 |
| 0.093 (3/32) | 0.140 | 0.828 | 0.1875 | 3.00 | 0.010 | S142-093-2-.010DVCM | S142-093-4-.010DVCM | $83.11 | $87.73 |
| 0.093 (3/32) | 0.140 | 0.828 | 0.1875 | 3.00 | 0.015 | S142-093-2-.015DVCM | S142-093-4-.015DVCM | $83.11 | $87.73 |
| 0.109 (7/64) | 0.164 | 0.785 | 0.1875 | 3.00 | 0.015 | S142-109-2-.015DVCM | S142-109-4-.015DVCM | $83.11 | $87.73 |
| 0.109 (7/64) | 0.164 | 0.785 | 0.1875 | 3.00 | 0.020 | S142-109-2-.020DVCM | S142-109-4-.020DVCM | $83.11 | $87.73 |
| 0.125 (1/8) | 0.188 | 1.096 | 0.250 | 3.00 | 0.015 | S142-125-2-.015DVCM | S142-125-4-.015DVCM | $87.36 | $91.98 |
| 0.125 (1/8) | 0.188 | 1.096 | 0.250 | 3.00 | 0.020 | S142-125-2-.020DVCM | S142-125-4-.020DVCM | $87.36 | $91.98 |
| 0.156 (5/32)* | 0.234 | 1.011 | 0.250 | 3.00 | 0.015 | S142-156-2-.015DVCM | S142-156-4-.015DVCM | $87.36 | $91.98 |
| 0.156 (5/32)* | 0.234 | 1.011 | 0.250 | 3.00 | 0.020 | S142-156-2-.020DVCM | S142-156-4-.020DVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 0.933 | 0.250 | 3.00 | 0.015 | S142-188-2-.015DVCM | S142-188-4-.015DVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 0.933 | 0.250 | 3.00 | 0.020 | S142-188-2-.020DVCM | S142-188-4-.020DVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 0.933 | 0.250 | 3.00 | 0.031 | S142-188-2-.031DVCM | S142-188-4-.031DVCM | $87.36 | $91.98 |
| 0.219 (7/32)* | 0.329 | 1.555 | 0.375 | 4.00 | 0.015 | S142-219-2-.015DVCM | S142-219-4-.015DVCM | $131.41 | $137.39 |
| 0.219 (7/32)* | 0.329 | 1.555 | 0.375 | 4.00 | 0.020 | S142-219-2-.020DVCM | S142-219-4-.020DVCM | $131.41 | $137.39 |
| 0.219 (7/32)* | 0.329 | 1.555 | 0.375 | 4.00 | 0.031 | S142-219-2-.031DVCM | S142-219-4-.031DVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 1.470 | 0.375 | 4.00 | 0.015 | S142-250-2-.015DVCM | S142-250-4-.015DVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 1.470 | 0.375 | 4.00 | 0.020 | S142-250-2-.020DVCM | S142-250-4-.020DVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 1.470 | 0.375 | 4.00 | 0.031 | S142-250-2-.031DVCM | S142-250-4-.031DVCM | $131.41 | $137.39 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 5° Corner Radius Drafted Mold Tools



FLUTES 5

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| 0.047 (3/64) | 0.071 | 0.953 | 0.1875 | 3.00 | 0.005 | S142-047-5-.005DVCM | $77.39 | $82.01 |
| 0.047 (3/64) | 0.071 | 0.953 | 0.1875 | 3.00 | 0.010 | S142-047-5-.010DVCM | $77.39 | $82.01 |
| 0.062 (1/16) | 0.093 | 0.912 | 0.1875 | 3.00 | 0.010 | S142-062-5-.010DVCM | $91.51 | $96.13 |
| 0.062 (1/16) | 0.093 | 0.912 | 0.1875 | 3.00 | 0.015 | S142-062-5-.015DVCM | $91.51 | $96.13 |
| 0.078 (5/64) | 0.117 | 0.868 | 0.1875 | 3.00 | 0.010 | S142-078-5-.010DVCM | $91.51 | $96.13 |
| 0.078 (5/64) | 0.117 | 0.868 | 0.1875 | 3.00 | 0.015 | S142-078-5-.015DVCM | $91.51 | $96.13 |
| 0.093 (3/32) | 0.140 | 0.828 | 0.1875 | 3.00 | 0.010 | S142-093-5-.010DVCM | $91.51 | $96.13 |
| 0.093 (3/32) | 0.140 | 0.828 | 0.1875 | 3.00 | 0.015 | S142-093-5-.015DVCM | $91.51 | $96.13 |
| 0.109 (7/64) | 0.164 | 0.785 | 0.1875 | 3.00 | 0.015 | S142-109-5-.015DVCM | $91.51 | $96.13 |
| 0.109 (7/64) | 0.164 | 0.785 | 0.1875 | 3.00 | 0.020 | S142-109-5-.020DVCM | $91.51 | $96.13 |
| 0.125 (1/8) | 0.188 | 1.096 | 0.250 | 3.00 | 0.015 | S142-125-5-.015DVCM | $95.76 | $100.38 |
| 0.125 (1/8) | 0.188 | 1.096 | 0.250 | 3.00 | 0.020 | S142-125-5-.020DVCM | $95.76 | $100.38 |
| 0.156 (5/32)* | 0.234 | 1.011 | 0.250 | 3.00 | 0.015 | S142-156-5-.015DVCM | $95.76 | $100.38 |
| 0.156 (5/32)* | 0.234 | 1.011 | 0.250 | 3.00 | 0.020 | S142-156-5-.020DVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 0.933 | 0.250 | 3.00 | 0.015 | S142-188-5-.015DVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 0.933 | 0.250 | 3.00 | 0.020 | S142-188-5-.020DVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 0.933 | 0.250 | 3.00 | 0.031 | S142-188-5-.031DVCM | $95.76 | $100.38 |
| 0.219 (7/32)* | 0.329 | 1.555 | 0.375 | 4.00 | 0.015 | S142-219-5-.015DVCM | $139.81 | $145.79 |
| 0.219 (7/32)* | 0.329 | 1.555 | 0.375 | 4.00 | 0.020 | S142-219-5-.020DVCM | $139.81 | $145.79 |
| 0.219 (7/32)* | 0.329 | 1.555 | 0.375 | 4.00 | 0.031 | S142-219-5-.031DVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 1.470 | 0.375 | 4.00 | 0.015 | S142-250-5-.015DVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 1.470 | 0.375 | 4.00 | 0.020 | S142-250-5-.020DVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 1.470 | 0.375 | 4.00 | 0.031 | S142-250-5-.031DVCM | $139.81 | $145.79 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

## S143 2° Ball Drafted Mold Tools

FLUTES 2,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | |
| 0.015 (1/64) | 0.023 | 2.537 | 0.1875 | 4.00 | S143-015-2-DVBM | N/A | $66.94 | $71.56 |
| 0.031 (1/32) | 0.047 | 2.356 | 0.1875 | 4.00 | S143-031-2-DVBM | S143-031-4-DVBM | $66.94 | $71.56 |
| 0.047 (3/64) | 0.071 | 2.175 | 0.1875 | 4.00 | S143-047-2-DVBM | S143-047-4-DVBM | $66.94 | $71.56 |
| 0.062 (1/16) | 0.093 | 2.004 | 0.1875 | 4.00 | S143-062-2-DVBM | S143-062-4-DVBM | $80.90 | $85.52 |
| 0.078 (5/64) | 0.117 | 1.823 | 0.1875 | 4.00 | S143-078-2-DVBM | S143-078-4-DVBM | $80.90 | $85.52 |
| 0.093 (3/32) | 0.140 | 1.654 | 0.1875 | 4.00 | S143-093-2-DVBM | S143-093-4-DVBM | $80.90 | $85.52 |
| 0.109 (7/64) | 0.164 | 1.473 | 0.1875 | 4.00 | S143-109-2-DVBM | S143-109-4-DVBM | $80.90 | $85.52 |
| 0.125 (1/8) | 0.188 | 2.180 | 0.250 | 4.00 | S143-125-2-DVBM | S143-125-4-DVBM | $84.11 | $88.73 |
| 0.156 (5/32)* | 0.234 | 1.828 | 0.250 | 4.00 | S143-156-2-DVBM | S143-156-4-DVBM | $84.11 | $88.73 |
| 0.187 (3/16)* | 0.281 | 1.492 | 0.250 | 4.00 | S143-188-2-DVBM | S143-188-4-DVBM | $84.11 | $88.73 |
| 0.219 (7/32)* | 0.329 | 2.905 | 0.375 | 4.00 | S143-219-2-DVBM | S143-219-4-DVBM | $124.95 | $130.94 |
| 0.250 (1/4)* | 0.375 | 2.554 | 0.375 | 4.00 | S143-250-2-DVBM | S143-250-4-DVBM | $124.95 | $130.94 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## S144 3° Ball Drafted Mold Tools

FLUTES 2,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | |
| 0.015 (1/64) | 0.023 | 1.706 | 0.1875 | 3.00 | S144-015-2-DVBM | N/A | $66.94 | $71.56 |
| 0.031 (1/32) | 0.047 | 1.601 | 0.1875 | 3.00 | S144-031-2-DVBM | S144-031-4-DVBM | $66.94 | $71.56 |
| 0.047 (3/64) | 0.071 | 1.496 | 0.1875 | 3.00 | S144-047-2-DVBM | S144-047-4-DVBM | $66.94 | $71.56 |
| 0.062 (1/16) | 0.093 | 1.398 | 0.1875 | 3.00 | S144-062-2-DVBM | S144-062-4-DVBM | $80.90 | $85.52 |
| 0.078 (5/64) | 0.117 | 1.293 | 0.1875 | 3.00 | S144-078-2-DVBM | S144-078-4-DVBM | $80.90 | $85.52 |
| 0.093 (3/32) | 0.140 | 1.195 | 0.1875 | 3.00 | S144-093-2-DVBM | S144-093-4-DVBM | $80.90 | $85.52 |
| 0.109 (7/64) | 0.164 | 1.091 | 0.1875 | 3.00 | S144-109-2-DVBM | S144-109-4-DVBM | $80.90 | $85.52 |
| 0.125 (1/8) | 0.188 | 1.578 | 0.250 | 3.00 | S144-125-2-DVBM | S144-125-4-DVBM | $84.11 | $88.73 |
| 0.156 (5/32)* | 0.234 | 1.374 | 0.250 | 3.00 | S144-156-2-DVBM | S144-156-4-DVBM | $84.11 | $88.73 |
| 0.187 (3/16)* | 0.281 | 1.182 | 0.250 | 3.00 | S144-188-2-DVBM | S144-188-4-DVBM | $84.11 | $88.73 |
| 0.219 (7/32)* | 0.329 | 2.155 | 0.375 | 4.00 | S144-219-2-DVBM | S144-219-4-DVBM | $124.95 | $130.94 |
| 0.250 (1/4)* | 0.375 | 1.952 | 0.375 | 4.00 | S144-250-2-DVBM | S144-250-4-DVBM | $124.95 | $130.94 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 5° Ball Drafted Mold Tools



| Cutter Diameter | Length of Cut | Approx. Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | |
| 0.015 (1/64) | 0.023 | 1.040 | 0.1875 | 3.00 | S145-015-2-DVBM | N/A | $66.94 | $71.56 |
| 0.031 (1/32) | 0.047 | 0.997 | 0.1875 | 3.00 | S145-031-2-DVBM | S145-031-4-DVBM | $66.94 | $71.56 |
| 0.047 (3/64) | 0.071 | 0.953 | 0.1875 | 3.00 | S145-047-2-DVBM | S145-047-4-DVBM | $66.94 | $71.56 |
| 0.062 (1/16) | 0.093 | 0.912 | 0.1875 | 3.00 | S145-062-2-DVBM | S145-062-4-DVBM | $80.90 | $85.52 |
| 0.078 (5/64) | 0.117 | 0.868 | 0.1875 | 3.00 | S145-078-2-DVBM | S145-078-4-DVBM | $80.90 | $85.52 |
| 0.093 (3/32) | 0.140 | 0.828 | 0.1875 | 3.00 | S145-093-2-DVBM | S145-093-4-DVBM | $80.90 | $85.52 |
| 0.109 (7/64) | 0.164 | 0.785 | 0.1875 | 3.00 | S145-109-2-DVBM | S145-109-4-DVBM | $80.90 | $85.52 |
| 0.125 (1/8) | 0.188 | 1.096 | 0.250 | 3.00 | S145-125-2-DVBM | S145-125-4-DVBM | $84.11 | $88.73 |
| 0.156 (5/32)* | 0.234 | 1.011 | 0.250 | 3.00 | S145-156-2-DVBM | S145-156-4-DVBM | $84.11 | $88.73 |
| 0.187 (3/16)* | 0.281 | 0.933 | 0.250 | 3.00 | S145-188-2-DVBM | S145-188-4-DVBM | $84.11 | $88.73 |
| 0.219 (7/32)* | 0.329 | 1.555 | 0.375 | 4.00 | S145-219-2-DVBM | S145-219-4-DVBM | $124.95 | $130.94 |
| 0.250 (1/4)* | 0.375 | 1.470 | 0.375 | 4.00 | S145-250-2-DVBM | S145-250-4-DVBM | $124.95 | $130.94 |

FLUTES 2,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## MANUFACTURED BY MITGI: The Standard Advantage

### On-site manufacturing means MITGI can ensure the quality and quick turn availability of every tool in our standard lines. But how do they compare?

For many years, MITGI has been a reliable source for high quality, hard to find specials. Manufactured with the same attention to detail, MITGI standard tools deliver the same great quality and performance that customers have come to expect from our specials.

**Customers tell us that MITGI standards consistently outperform other standard tools in the marketplace. Ready to try for yourself? See page 2 for contact information.**

*Ross, Mechanical Engineer*

# S146

## 2° Square Clearance Cutter Mold Tools

FLUTES 2,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | | |
| 0.015 (1/64) | 0.023 | 1.50 | 0.1875 | 3.00 | S146-015-2-CVSM | S146-015-3-CVSM | S146-015-4-CVSM | $62.79 | $67.41 |
| 0.031 (1/32) | 0.047 | 1.50 | 0.1875 | 3.00 | S146-031-2-CVSM | S146-031-3-CVSM | S146-031-4-CVSM | $62.79 | $67.41 |
| 0.047 (3/64) | 0.071 | 1.50 | 0.1875 | 3.00 | S146-047-2-CVSM | S146-047-3-CVSM | S146-047-4-CVSM | $62.79 | $67.41 |
| 0.062 (1/16) | 0.093 | 1.50 | 0.1875 | 3.00 | S146-062-2-CVSM | S146-062-3-CVSM | S146-062-4-CVSM | $76.55 | $81.17 |
| 0.078 (5/64) | 0.117 | 1.50 | 0.1875 | 3.00 | S146-078-2-CVSM | S146-078-3-CVSM | S146-078-4-CVSM | $76.55 | $81.17 |
| 0.093 (3/32) | 0.140 | 1.50 | 0.1875 | 3.00 | S146-093-2-CVSM | S146-093-3-CVSM | S146-093-4-CVSM | $76.55 | $81.17 |
| 0.109 (7/64) | 0.164 | 1.50 | 0.1875 | 3.00 | S146-109-2-CVSM | S146-109-3-CVSM | S146-109-4-CVSM | $76.55 | $81.17 |
| 0.125 (1/8) | 0.188 | 1.50 | 0.250 | 3.00 | S146-125-2-CVSM | S146-125-3-CVSM | S146-125-4-CVSM | $79.96 | $84.58 |
| 0.156 (5/32)* | 0.234 | 1.50 | 0.250 | 3.00 | S146-156-2-CVSM | S146-156-3-CVSM | S146-156-4-CVSM | $79.96 | $84.58 |
| 0.187 (3/16)* | 0.281 | 1.50 | 0.250 | 3.00 | S146-188-2-CVSM | S146-188-3-CVSM | S146-188-4-CVSM | $79.96 | $84.58 |
| 0.219 (7/32)* | 0.329 | 1.50 | 0.375 | 4.00 | S146-219-2-CVSM | S146-219-3-CVSM | S146-219-4-CVSM | $119.54 | $125.53 |
| 0.250 (1/4)* | 0.375 | 1.50 | 0.375 | 4.00 | S146-250-2-CVSM | S146-250-3-CVSM | S146-250-4-CVSM | $119.54 | $125.53 |

## 2° Square Clearance Cutter Mold Tools

FLUTES 5

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.031 (1/32) | 0.047 | 1.50 | 0.1875 | 3.00 | S146-031-5-CVSM | $71.19 | $75.81 |
| 0.047 (3/64) | 0.071 | 1.50 | 0.1875 | 3.00 | S146-047-5-CVSM | $71.19 | $75.81 |
| 0.062 (1/16) | 0.093 | 1.50 | 0.1875 | 3.00 | S146-062-5-CVSM | $84.95 | $89.57 |
| 0.078 (5/64) | 0.117 | 1.50 | 0.1875 | 3.00 | S146-078-5-CVSM | $84.95 | $89.57 |
| 0.093 (3/32) | 0.140 | 1.50 | 0.1875 | 3.00 | S146-093-5-CVSM | $84.95 | $89.57 |
| 0.109 (7/64) | 0.164 | 1.50 | 0.1875 | 3.00 | S146-109-5-CVSM | $84.95 | $89.57 |
| 0.125 (1/8) | 0.188 | 1.50 | 0.250 | 3.00 | S146-125-5-CVSM | $88.36 | $92.98 |
| 0.156 (5/32)* | 0.234 | 1.50 | 0.250 | 3.00 | S146-156-5-CVSM | $88.36 | $92.98 |
| 0.187 (3/16)* | 0.281 | 1.50 | 0.250 | 3.00 | S146-188-5-CVSM | $88.36 | $92.98 |
| 0.219 (7/32)* | 0.329 | 1.50 | 0.375 | 4.00 | S146-219-5-CVSM | $127.94 | $133.93 |
| 0.250 (1/4)* | 0.375 | 1.50 | 0.375 | 4.00 | S146-250-5-CVSM | $127.94 | $133.93 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 2° Ball Clearance Cutter Mold Tools



| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | |
| 0.015 (1/64) | 0.023 | 1.50 | 0.1875 | 3.00 | S148-015-2-CVBM | N/A | $66.94 | $71.56 |
| 0.031 (1/32) | 0.047 | 1.50 | 0.1875 | 3.00 | S148-031-2-CVBM | S148-031-4-CVBM | $66.94 | $71.56 |
| 0.047 (3/64) | 0.071 | 1.50 | 0.1875 | 3.00 | S148-047-2-CVBM | S148-047-4-CVBM | $66.94 | $71.56 |
| 0.062 (1/16) | 0.093 | 1.50 | 0.1875 | 3.00 | S148-062-2-CVBM | S148-062-4-CVBM | $80.90 | $85.52 |
| 0.078 (5/64) | 0.117 | 1.50 | 0.1875 | 3.00 | S148-078-2-CVBM | S148-078-4-CVBM | $80.90 | $85.52 |
| 0.093 (3/32) | 0.140 | 1.50 | 0.1875 | 3.00 | S148-093-2-CVBM | S148-093-4-CVBM | $80.90 | $85.52 |
| 0.109 (7/64) | 0.164 | 1.50 | 0.1875 | 3.00 | S148-109-2-CVBM | S148-109-4-CVBM | $80.90 | $85.52 |
| 0.125 (1/8) | 0.188 | 1.50 | 0.250 | 3.00 | S148-125-2-CVBM | S148-125-4-CVBM | $84.11 | $88.73 |
| 0.156 (5/32)* | 0.234 | 1.50 | 0.250 | 3.00 | S148-156-2-CVBM | S148-156-4-CVBM | $84.11 | $88.73 |
| 0.187 (3/16)* | 0.281 | 1.50 | 0.250 | 3.00 | S148-188-2-CVBM | S148-188-4-CVBM | $84.11 | $88.73 |
| 0.219 (7/32)* | 0.329 | 1.50 | 0.375 | 4.00 | S148-219-2-CVBM | S148-219-4-CVBM | $124.95 | $130.94 |
| 0.250 (1/4)* | 0.375 | 1.50 | 0.375 | 4.00 | S148-250-2-CVBM | S148-250-4-CVBM | $124.95 | $130.94 |

FLUTES 2,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## CUSTOM SPECIALS / Clearance Cutter Mold Tools

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and number of flutes vary by design
- Specs include shoulder angle, taper angle per side, overall reach, length of cut, and cutter diameter
- Coated and uncoated
- Specials usually available in two weeks or less

**Quote forms available on our website and upon request.**
**Contact us for an estimate today.**

# S147

## 2° Corner Radius Clearance Cutter Mold Tools

FLUTES 2,4

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | | |
| 0.015 (1/64) | 0.023 | 1.50 | 0.1875 | 3.00 | 0.003 | S147-015-2-.003CVCM | N/A | $68.99 | $73.61 |
| 0.031 (1/32) | 0.047 | 1.50 | 0.1875 | 3.00 | 0.005 | S147-031-2-.005CVCM | S147-031-4-.005CVCM | $68.99 | $73.61 |
| 0.047 (3/64) | 0.071 | 1.50 | 0.1875 | 3.00 | 0.005 | S147-047-2-.005CVCM | S147-047-4-.005CVCM | $68.99 | $73.61 |
| 0.047 (3/64) | 0.071 | 1.50 | 0.1875 | 3.00 | 0.010 | S147-047-2-.010CVCM | S147-047-4-.010CVCM | $68.99 | $73.61 |
| 0.062 (1/16) | 0.093 | 1.50 | 0.1875 | 3.00 | 0.010 | S147-062-2-.010CVCM | S147-062-4-.010CVCM | $83.11 | $87.73 |
| 0.062 (1/16) | 0.093 | 1.50 | 0.1875 | 3.00 | 0.015 | S147-062-2-.015CVCM | S147-062-4-.015CVCM | $83.11 | $87.73 |
| 0.078 (5/64) | 0.117 | 1.50 | 0.1875 | 3.00 | 0.010 | S147-078-2-.010CVCM | S147-078-4-.010CVCM | $83.11 | $87.73 |
| 0.078 (5/64) | 0.117 | 1.50 | 0.1875 | 3.00 | 0.015 | S147-078-2-.015CVCM | S147-078-4-.015CVCM | $83.11 | $87.73 |
| 0.093 (3/32) | 0.140 | 1.50 | 0.1875 | 3.00 | 0.010 | S147-093-2-.010CVCM | S147-093-4-.010CVCM | $83.11 | $87.73 |
| 0.093 (3/32) | 0.140 | 1.50 | 0.1875 | 3.00 | 0.015 | S147-093-2-.015CVCM | S147-093-4-.015CVCM | $83.11 | $87.73 |
| 0.109 (7/64) | 0.164 | 1.50 | 0.1875 | 3.00 | 0.015 | S147-109-2-.015CVCM | S147-109-4-.015CVCM | $83.11 | $87.73 |
| 0.109 (7/64) | 0.164 | 1.50 | 0.1875 | 3.00 | 0.020 | S147-109-2-.020CVCM | S147-109-4-.020CVCM | $83.11 | $87.73 |
| 0.125 (1/8) | 0.188 | 1.50 | 0.250 | 3.00 | 0.015 | S147-125-2-.015CVCM | S147-125-4-.015CVCM | $87.36 | $91.98 |
| 0.125 (1/8) | 0.188 | 1.50 | 0.250 | 3.00 | 0.020 | S147-125-2-.020CVCM | S147-125-4-.020CVCM | $87.36 | $91.98 |
| 0.156 (5/32)* | 0.234 | 1.50 | 0.250 | 3.00 | 0.015 | S147-156-2-.015CVCM | S147-156-4-.015CVCM | $87.36 | $91.98 |
| 0.156 (5/32)* | 0.234 | 1.50 | 0.250 | 3.00 | 0.020 | S147-156-2-.020CVCM | S147-156-4-.020CVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 1.50 | 0.250 | 3.00 | 0.015 | S147-188-2-.015CVCM | S147-188-4-.015CVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 1.50 | 0.250 | 3.00 | 0.020 | S147-188-2-.020CVCM | S147-188-4-.020CVCM | $87.36 | $91.98 |
| 0.187 (3/16)* | 0.281 | 1.50 | 0.250 | 3.00 | 0.031 | S147-188-2-.031CVCM | S147-188-4-.031CVCM | $87.36 | $91.98 |
| 0.219 (7/32)* | 0.329 | 1.50 | 0.375 | 4.00 | 0.015 | S147-219-2-.015CVCM | S147-219-4-.015CVCM | $131.41 | $137.39 |
| 0.219 (7/32)* | 0.329 | 1.50 | 0.375 | 4.00 | 0.020 | S147-219-2-.020CVCM | S147-219-4-.020CVCM | $131.41 | $137.39 |
| 0.219 (7/32)* | 0.329 | 1.50 | 0.375 | 4.00 | 0.031 | S147-219-2-.031CVCM | S147-219-4-.031CVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 1.50 | 0.375 | 4.00 | 0.015 | S147-250-2-.015CVCM | S147-250-4-.015CVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 1.50 | 0.375 | 4.00 | 0.020 | S147-250-2-.020CVCM | S147-250-4-.020CVCM | $131.41 | $137.39 |
| 0.250 (1/4)* | 0.375 | 1.50 | 0.375 | 4.00 | 0.031 | S147-250-2-.031CVCM | S147-250-4-.031CVCM | $131.41 | $137.39 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 2° Corner Radius Clearance Cutter Mold Tools



FLUTES 5

1.5X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | | | |
| 0.047 (3/64) | 0.071 | 1.50 | 0.1875 | 3.00 | 0.005 | S147-047-5-.005CVCM | $77.39 | $82.01 |
| 0.047 (3/64) | 0.071 | 1.50 | 0.1875 | 3.00 | 0.010 | S147-047-5-.010CVCM | $77.39 | $82.01 |
| 0.062 (1/16) | 0.093 | 1.50 | 0.1875 | 3.00 | 0.010 | S147-062-5-.010CVCM | $91.51 | $96.13 |
| 0.062 (1/16) | 0.093 | 1.50 | 0.1875 | 3.00 | 0.015 | S147-062-5-.015CVCM | $91.51 | $96.13 |
| 0.078 (5/64) | 0.117 | 1.50 | 0.1875 | 3.00 | 0.010 | S147-078-5-.010CVCM | $91.51 | $96.13 |
| 0.078 (5/64) | 0.117 | 1.50 | 0.1875 | 3.00 | 0.015 | S147-078-5-.015CVCM | $91.51 | $96.13 |
| 0.093 (3/32) | 0.140 | 1.50 | 0.1875 | 3.00 | 0.010 | S147-093-5-.010CVCM | $91.51 | $96.13 |
| 0.093 (3/32) | 0.140 | 1.50 | 0.1875 | 3.00 | 0.015 | S147-093-5-.015CVCM | $91.51 | $96.13 |
| 0.109 (7/64) | 0.164 | 1.50 | 0.1875 | 3.00 | 0.015 | S147-109-5-.015CVCM | $91.51 | $96.13 |
| 0.109 (7/64) | 0.164 | 1.50 | 0.1875 | 3.00 | 0.020 | S147-109-5-.020CVCM | $91.51 | $96.13 |
| 0.125 (1/8) | 0.188 | 1.50 | 0.250 | 3.00 | 0.015 | S147-125-5-.015CVCM | $95.76 | $100.38 |
| 0.125 (1/8) | 0.188 | 1.50 | 0.250 | 3.00 | 0.020 | S147-125-5-.020CVCM | $95.76 | $100.38 |
| 0.156 (5/32)* | 0.234 | 1.50 | 0.250 | 3.00 | 0.015 | S147-156-5-.015CVCM | $95.76 | $100.38 |
| 0.156 (5/32)* | 0.234 | 1.50 | 0.250 | 3.00 | 0.020 | S147-156-5-.020CVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 1.50 | 0.250 | 3.00 | 0.015 | S147-188-5-.015CVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 1.50 | 0.250 | 3.00 | 0.020 | S147-188-5-.020CVCM | $95.76 | $100.38 |
| 0.187 (3/16)* | 0.281 | 1.50 | 0.250 | 3.00 | 0.031 | S147-188-5-.031CVCM | $95.76 | $100.38 |
| 0.219 (7/32)* | 0.329 | 1.50 | 0.375 | 4.00 | 0.015 | S147-219-5-.015CVCM | $139.81 | $145.79 |
| 0.219 (7/32)* | 0.329 | 1.50 | 0.375 | 4.00 | 0.020 | S147-219-5-.020CVCM | $139.81 | $145.79 |
| 0.219 (7/32)* | 0.329 | 1.50 | 0.375 | 4.00 | 0.031 | S147-219-5-.031CVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 1.50 | 0.375 | 4.00 | 0.015 | S147-250-5-.015CVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 1.50 | 0.375 | 4.00 | 0.020 | S147-250-5-.020CVCM | $139.81 | $145.79 |
| 0.250 (1/4)* | 0.375 | 1.50 | 0.375 | 4.00 | 0.031 | S147-250-5-.031CVCM | $139.81 | $145.79 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


**IN STOCK, ON DEMAND**

**P.117**

All standard tools can be manufactured and shipped within 3 days of receiving the purchase order. See page 117 for more information regarding turnaround times, stocking programs, and delivery times for both standard and custom tools.

# S149

## 0.5° Square Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S149-015-3-TASM8X | N/A | $55.07 | $59.69 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S149-015-3-TASM12X | N/A | $55.07 | $59.69 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S149-031-3-TASM8X | S149-031-4-TASM8X | $65.42 | $70.04 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S149-031-3-TASM12X | S149-031-4-TASM12X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S149-047-3-TASM8X | S149-047-4-TASM8X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S149-047-3-TASM12X | S149-047-4-TASM12X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S149-062-3-TASM8X | S149-062-4-TASM8X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S149-062-3-TASM12X | S149-062-4-TASM12X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S149-078-3-TASM8X | S149-078-4-TASM8X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S149-078-3-TASM12X | S149-078-4-TASM12X | $77.81 | $82.43 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S149-093-3-TASM8X | S149-093-4-TASM8X | $77.81 | $82.43 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S149-093-3-TASM12X | S149-093-4-TASM12X | $77.81 | $82.43 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S149-109-3-TASM8X | S149-109-4-TASM8X | $77.81 | $82.43 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | S149-125-3-TASM8X | S149-125-4-TASM8X | $77.81 | $82.43 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S149-156-3-TASM8X | S149-156-4-TASM8X | $77.81 | $82.43 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | S149-188-3-TASM8X | S149-188-4-TASM8X | $77.81 | $82.43 |

## 0.5° Square Tapered Rib Cutter Mold Tools

FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S149-047-5-TASM8X | $73.82 | $78.44 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S149-047-5-TASM12X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S149-062-5-TASM8X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S149-062-5-TASM12X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S149-078-5-TASM8X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S149-078-5-TASM12X | $86.21 | $90.83 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S149-093-5-TASM8X | $86.21 | $90.83 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S149-093-5-TASM12X | $86.21 | $90.83 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S149-109-5-TASM8X | $86.21 | $90.83 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | S149-125-5-TASM8X | $86.21 | $90.83 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S149-156-5-TASM8X | $86.21 | $90.83 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | S149-188-5-TASM8X | $86.21 | $90.83 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 1° Square Tapered Rib Cutter Mold Tools



| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S150-015-3-TASM8X | N/A | $55.07 | $59.69 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S150-015-3-TASM12X | N/A | $55.07 | $59.69 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S150-031-3-TASM8X | S150-031-4-TASM8X | $65.42 | $70.04 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S150-031-3-TASM12X | S150-031-4-TASM12X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S150-047-3-TASM8X | S150-047-4-TASM8X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S150-047-3-TASM12X | S150-047-4-TASM12X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S150-062-3-TASM8X | S150-062-4-TASM8X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S150-062-3-TASM12X | S150-062-4-TASM12X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S150-078-3-TASM8X | S150-078-4-TASM8X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S150-078-3-TASM12X | S150-078-4-TASM12X | $77.81 | $82.43 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S150-093-3-TASM8X | S150-093-4-TASM8X | $77.81 | $82.43 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S150-093-3-TASM12X | S150-093-4-TASM12X | $77.81 | $82.43 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S150-109-3-TASM8X | S150-109-4-TASM8X | $77.81 | $82.43 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | S150-125-3-TASM8X | S150-125-4-TASM8X | $77.81 | $82.43 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S150-156-3-TASM8X | S150-156-4-TASM8X | $77.81 | $82.43 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | S150-188-3-TASM8X | S150-188-4-TASM8X | $77.81 | $82.43 |

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

## 1° Square Tapered Rib Cutter Mold Tools

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S150-047-5-TASM8X | $73.82 | $78.44 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S150-047-5-TASM12X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S150-062-5-TASM8X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S150-062-5-TASM12X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S150-078-5-TASM8X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S150-078-5-TASM12X | $86.21 | $90.83 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S150-093-5-TASM8X | $86.21 | $90.83 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S150-093-5-TASM12X | $86.21 | $90.83 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S150-109-5-TASM8X | $86.21 | $90.83 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | S150-125-5-TASM8X | $86.21 | $90.83 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S150-156-5-TASM8X | $86.21 | $90.83 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | S150-188-5-TASM8X | $86.21 | $90.83 |

FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S151

## 1.5° Square Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S151-015-3-TASM8X | N/A | $55.07 | $59.69 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S151-015-3-TASM12X | N/A | $55.07 | $59.69 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S151-031-3-TASM8X | S151-031-4-TASM8X | $65.42 | $70.04 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S151-031-3-TASM12X | S151-031-4-TASM12X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S151-047-3-TASM8X | S151-047-4-TASM8X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S151-047-3-TASM12X | S151-047-4-TASM12X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S151-062-3-TASM8X | S151-062-4-TASM8X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S151-062-3-TASM12X | S151-062-4-TASM12X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S151-078-3-TASM8X | S151-078-4-TASM8X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S151-078-3-TASM12X | S151-078-4-TASM12X | $77.81 | $82.43 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S151-093-3-TASM8X | S151-093-4-TASM8X | $77.81 | $82.43 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S151-093-3-TASM12X | S151-093-4-TASM12X | $77.81 | $82.43 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S151-109-3-TASM8X | S151-109-4-TASM8X | $77.81 | $82.43 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | S151-125-3-TASM8X | S151-125-4-TASM8X | $77.81 | $82.43 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S151-156-3-TASM8X | S151-156-4-TASM8X | $77.81 | $82.43 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | S151-188-3-TASM8X | S151-188-4-TASM8X | $87.26 | $93.24 |

## 1.5° Square Tapered Rib Cutter Mold Tools

FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S151-047-5-TASM8X | $73.82 | $78.44 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S151-047-5-TASM12X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S151-062-5-TASM8X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S151-062-5-TASM12X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S151-078-5-TASM8X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S151-078-5-TASM12X | $86.21 | $90.83 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S151-093-5-TASM8X | $86.21 | $90.83 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S151-093-5-TASM12X | $86.21 | $90.83 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S151-109-5-TASM8X | $86.21 | $90.83 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | S151-125-5-TASM8X | $86.21 | $90.83 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S151-156-5-TASM8X | $86.21 | $90.83 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | S151-188-5-TASM8X | $95.66 | $101.64 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 2° Square Tapered Rib Cutter Mold Tools



| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S152-015-3-TASM8X | N/A | $55.07 | $59.69 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S152-015-3-TASM12X | N/A | $55.07 | $59.69 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S152-031-3-TASM8X | S152-031-4-TASM8X | $65.42 | $70.04 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S152-031-3-TASM12X | S152-031-4-TASM12X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S152-047-3-TASM8X | S152-047-4-TASM8X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S152-047-3-TASM12X | S152-047-4-TASM12X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S152-062-3-TASM8X | S152-062-4-TASM8X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S152-062-3-TASM12X | S152-062-4-TASM12X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S152-078-3-TASM8X | S152-078-4-TASM8X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S152-078-3-TASM12X | S152-078-4-TASM12X | $77.81 | $82.43 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S152-093-3-TASM8X | S152-093-4-TASM8X | $77.81 | $82.43 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S152-093-3-TASM12X | S152-093-4-TASM12X | $77.81 | $82.43 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S152-109-3-TASM8X | S152-109-4-TASM8X | $77.81 | $82.43 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | S152-125-3-TASM8X | S152-125-4-TASM8X | $77.81 | $82.43 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S152-156-3-TASM8X | S152-156-4-TASM8X | $77.81 | $82.43 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | S152-188-3-TASM8X | S152-188-4-TASM8X | $87.26 | $93.24 |

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

## 2° Square Tapered Rib Cutter Mold Tools

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S152-047-5-TASM8X | $73.82 | $78.44 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S152-047-5-TASM12X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S152-062-5-TASM8X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S152-062-5-TASM12X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S152-078-5-TASM8X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S152-078-5-TASM12X | $86.21 | $90.83 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S152-093-5-TASM8X | $86.21 | $90.83 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S152-093-5-TASM12X | $86.21 | $90.83 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S152-109-5-TASM8X | $86.21 | $90.83 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | S152-125-5-TASM8X | $86.21 | $90.83 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S152-156-5-TASM8X | $86.21 | $90.83 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | S152-188-5-TASM8X | $95.66 | $101.64 |

FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S153

## 3° Square Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S153-015-3-TASM8X | N/A | $55.07 | $59.69 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S153-015-3-TASM12X | N/A | $55.07 | $59.69 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S153-031-3-TASM8X | S153-031-4-TASM8X | $65.42 | $70.04 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S153-031-3-TASM12X | S153-031-4-TASM12X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S153-047-3-TASM8X | S153-047-4-TASM8X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S153-047-3-TASM12X | S153-047-4-TASM12X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S153-062-3-TASM8X | S153-062-4-TASM8X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S153-062-3-TASM12X | S153-062-4-TASM12X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S153-078-3-TASM8X | S153-078-4-TASM8X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S153-078-3-TASM12X | S153-078-4-TASM12X | $77.81 | $82.43 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S153-093-3-TASM8X | S153-093-4-TASM8X | $77.81 | $82.43 |
| 0.093 (3/32) | 1.116 | 0.250 | 3.00 | S153-093-3-TASM12X | S153-093-4-TASM12X | $77.81 | $82.43 |
| 0.109 (7/64) | 0.872 | 0.250 | 3.00 | S153-109-3-TASM8X | S153-109-4-TASM8X | $77.81 | $82.43 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | S153-125-3-TASM8X | S153-125-4-TASM8X | $77.81 | $82.43 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | S153-156-3-TASM8X | S153-156-4-TASM8X | $87.26 | $93.24 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | S153-188-3-TASM8X | S153-188-4-TASM8X | $87.26 | $93.24 |

## 3° Square Tapered Rib Cutter Mold Tools

FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S153-047-5-TASM8X | $73.82 | $78.44 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S153-047-5-TASM12X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S153-062-5-TASM8X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S153-062-5-TASM12X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S153-078-5-TASM8X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S153-078-5-TASM12X | $86.21 | $90.83 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S153-093-5-TASM8X | $86.21 | $90.83 |
| 0.093 (3/32) | 1.116 | 0.250 | 3.00 | S153-093-5-TASM12X | $86.21 | $90.83 |
| 0.109 (7/64) | 0.872 | 0.250 | 3.00 | S153-109-5-TASM8X | $86.21 | $90.83 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | S153-125-5-TASM8X | $86.21 | $90.83 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | S153-156-5-TASM8X | $95.66 | $101.64 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | S153-188-5-TASM8X | $95.66 | $101.64 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 5° Square Tapered Rib Cutter Mold Tools



FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S154-015-3-TASM8X | N/A | $55.07 | $59.69 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S154-015-3-TASM12X | N/A | $55.07 | $59.69 |
| 0.020 | 0.160 | 0.1875 | 3.00 | S154-020-3-TASM8X | N/A | $55.07 | $59.69 |
| 0.020 | 0.240 | 0.1875 | 3.00 | S154-020-3-TASM12X | N/A | $55.07 | $59.69 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S154-031-3-TASM8X | S154-031-4-TASM8X | $65.42 | $70.04 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S154-031-3-TASM12X | S154-031-4-TASM12X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S154-047-3-TASM8X | S154-047-4-TASM8X | $65.42 | $70.04 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S154-047-3-TASM12X | S154-047-4-TASM12X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.496 | 0.250 | 3.00 | S154-062-3-TASM8X | S154-062-4-TASM8X | $65.42 | $70.04 |
| 0.062 (1/16) | 0.744 | 0.250 | 3.00 | S154-062-3-TASM12X | S154-062-4-TASM12X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.624 | 0.250 | 3.00 | S154-078-3-TASM8X | S154-078-4-TASM8X | $77.81 | $82.43 |
| 0.078 (5/64) | 0.936 | 0.250 | 3.00 | S154-078-3-TASM12X | S154-078-4-TASM12X | $77.81 | $82.43 |
| 0.093 (3/32) | 0.744 | 0.3125 | 3.00 | S154-093-3-TASM8X | S154-093-4-TASM8X | $86.21 | $92.19 |
| 0.093 (3/32) | 1.116 | 0.3125 | 3.00 | S154-093-3-TASM12X | S154-093-4-TASM12X | $86.21 | $92.19 |
| 0.109 (7/64) | 0.872 | 0.3125 | 3.00 | S154-109-3-TASM8X | S154-109-4-TASM8X | $86.21 | $92.19 |
| 0.125 (1/8) | 1.000 | 0.3125 | 3.00 | S154-125-3-TASM8X | S154-125-4-TASM8X | $86.21 | $92.19 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | S154-156-3-TASM8X | S154-156-4-TASM8X | $88.31 | $94.29 |
| 0.187 (3/16)* | 1.496 | 0.500 | 4.00 | S154-188-3-TASM8X | S154-188-4-TASM8X | $109.31 | $117.60 |

## 5° Square Tapered Rib Cutter Mold Tools

FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S154-047-5-TASM8X | $73.82 | $78.44 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S154-047-5-TASM12X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.496 | 0.250 | 3.00 | S154-062-5-TASM8X | $73.82 | $78.44 |
| 0.062 (1/16) | 0.744 | 0.250 | 3.00 | S154-062-5-TASM12X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.624 | 0.250 | 3.00 | S154-078-5-TASM8X | $86.21 | $90.83 |
| 0.078 (5/64) | 0.936 | 0.250 | 3.00 | S154-078-5-TASM12X | $86.21 | $90.83 |
| 0.093 (3/32) | 0.744 | 0.3125 | 3.00 | S154-093-5-TASM8X | $94.61 | $100.59 |
| 0.093 (3/32) | 1.116 | 0.3125 | 3.00 | S154-093-5-TASM12X | $94.61 | $100.59 |
| 0.109 (7/64) | 0.872 | 0.3125 | 3.00 | S154-109-5-TASM8X | $94.61 | $100.59 |
| 0.125 (1/8) | 1.000 | 0.3125 | 3.00 | S154-125-5-TASM8X | $94.61 | $100.59 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | S154-156-5-TASM8X | $96.71 | $102.69 |
| 0.187 (3/16)* | 1.496 | 0.500 | 4.00 | S154-188-5-TASM8X | $117.71 | $126.00 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S155

## 0.5° Corner Radius Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.003 | S155-015-3-.003TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.003 | S155-015-3-.003TACM12X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.005 | S155-015-3-.005TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.005 | S155-015-3-.005TACM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.003 | S155-031-3-.003TACM8X | S155-031-4-.003TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.003 | S155-031-3-.003TACM12X | S155-031-4-.003TACM12X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.005 | S155-031-3-.005TACM8X | S155-031-4-.005TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.005 | S155-031-3-.005TACM12X | S155-031-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S155-047-3-.005TACM8X | S155-047-4-.005TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S155-047-3-.005TACM12X | S155-047-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S155-047-3-.010TACM8X | S155-047-4-.010TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S155-047-3-.010TACM12X | S155-047-4-.010TACM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S155-062-3-.005TACM8X | S155-062-4-.005TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S155-062-3-.005TACM12X | S155-062-4-.005TACM12X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S155-062-3-.015TACM8X | S155-062-4-.015TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S155-062-3-.015TACM12X | S155-062-4-.015TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S155-078-3-.005TACM8X | S155-078-4-.005TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S155-078-3-.005TACM12X | S155-078-4-.005TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S155-078-3-.015TACM8X | S155-078-4-.015TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S155-078-3-.015TACM12X | S155-078-4-.015TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.005 | S155-093-3-.005TACM8X | S155-093-4-.005TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.005 | S155-093-3-.005TACM12X | S155-093-4-.005TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.015 | S155-093-3-.015TACM8X | S155-093-4-.015TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.015 | S155-093-3-.015TACM12X | S155-093-4-.015TACM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.005 | S155-109-3-.005TACM8X | S155-109-4-.005TACM8X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.015 | S155-109-3-.015TACM8X | S155-109-4-.015TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.005 | S155-125-3-.005TACM8X | S155-125-4-.005TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.015 | S155-125-3-.015TACM8X | S155-125-4-.015TACM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.005 | S155-156-3-.005TACM8X | S155-156-4-.005TACM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.015 | S155-156-3-.015TACM8X | S155-156-4-.015TACM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.005 | S155-188-3-.005TACM8X | S155-188-4-.005TACM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.015 | S155-188-3-.015TACM8X | S155-188-4-.015TACM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.031 | S155-188-3-.031TACM8X | S155-188-4-.031TACM8X | $85.16 | $89.78 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 0.5° Corner Radius Tapered Rib Cutter Mold Tools



FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S155-047-5-.005TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S155-047-5-.005TACM12X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S155-047-5-.010TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S155-047-5-.010TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S155-062-5-.005TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S155-062-5-.005TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S155-062-5-.015TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S155-062-5-.015TACM12X | $81.17 | $85.79 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S155-078-5-.005TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S155-078-5-.005TACM12X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S155-078-5-.015TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S155-078-5-.015TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.005 | S155-093-5-.005TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.005 | S155-093-5-.005TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.015 | S155-093-5-.015TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.015 | S155-093-5-.015TACM12X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.005 | S155-109-5-.005TACM8X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.015 | S155-109-5-.015TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.005 | S155-125-5-.005TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.015 | S155-125-5-.015TACM8X | $93.56 | $98.18 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.005 | S155-156-5-.005TACM8X | $93.56 | $98.18 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.015 | S155-156-5-.015TACM8X | $93.56 | $98.18 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.005 | S155-188-5-.005TACM8X | $93.56 | $98.18 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.015 | S155-188-5-.015TACM8X | $93.56 | $98.18 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.031 | S155-188-5-.031TACM8X | $93.56 | $98.18 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## CUSTOM SPECIALS / Tapered Rib Cutter

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and number of flutes vary by design
- End finishes: square, corner radius, ball, chamfer
- Options: taper angle, cutter diameter, overall reach
- Specials usually available in two weeks or less

**Quote forms available on our website and upon request. Contact us for an estimate today.**

# S156 1° Corner Radius Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.003 | S156-015-3-.003TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.003 | S156-015-3-.003TACM12X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.005 | S156-015-3-.005TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.005 | S156-015-3-.005TACM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.003 | S156-031-3-.003TACM8X | S156-031-4-.003TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.003 | S156-031-3-.003TACM12X | S156-031-4-.003TACM12X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.005 | S156-031-3-.005TACM8X | S156-031-4-.005TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.005 | S156-031-3-.005TACM12X | S156-031-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S156-047-3-.005TACM8X | S156-047-4-.005TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S156-047-3-.005TACM12X | S156-047-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S156-047-3-.010TACM8X | S156-047-4-.010TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S156-047-3-.010TACM12X | S156-047-4-.010TACM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S156-062-3-.005TACM8X | S156-062-4-.005TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S156-062-3-.005TACM12X | S156-062-4-.005TACM12X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S156-062-3-.015TACM8X | S156-062-4-.015TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S156-062-3-.015TACM12X | S156-062-4-.015TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S156-078-3-.005TACM8X | S156-078-4-.005TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S156-078-3-.005TACM12X | S156-078-4-.005TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S156-078-3-.015TACM8X | S156-078-4-.015TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S156-078-3-.015TACM12X | S156-078-4-.015TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.005 | S156-093-3-.005TACM8X | S156-093-4-.005TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.005 | S156-093-3-.005TACM12X | S156-093-4-.005TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.015 | S156-093-3-.015TACM8X | S156-093-4-.015TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.015 | S156-093-3-.015TACM12X | S156-093-4-.015TACM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.005 | S156-109-3-.005TACM8X | S156-109-4-.005TACM8X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.015 | S156-109-3-.015TACM8X | S156-109-4-.015TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.005 | S156-125-3-.005TACM8X | S156-125-4-.005TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.015 | S156-125-3-.015TACM8X | S156-125-4-.015TACM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.005 | S156-156-3-.005TACM8X | S156-156-4-.005TACM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.015 | S156-156-3-.015TACM8X | S156-156-4-.015TACM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.005 | S156-188-3-.005TACM8X | S156-188-4-.005TACM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.015 | S156-188-3-.015TACM8X | S156-188-4-.015TACM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.031 | S156-188-3-.031TACM8X | S156-188-4-.031TACM8X | $85.16 | $89.78 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 1° Corner Radius Tapered Rib Cutter Mold Tools



FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S156-047-5-.005TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S156-047-5-.005TACM12X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S156-047-5-.010TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S156-047-5-.010TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S156-062-5-.005TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S156-062-5-.005TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S156-062-5-.015TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S156-062-5-.015TACM12X | $81.17 | $85.79 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S156-078-5-.005TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S156-078-5-.005TACM12X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S156-078-5-.015TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S156-078-5-.015TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.005 | S156-093-5-.005TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.005 | S156-093-5-.005TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.015 | S156-093-5-.015TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.015 | S156-093-5-.015TACM12X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.005 | S156-109-5-.005TACM8X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.015 | S156-109-5-.015TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.005 | S156-125-5-.005TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.015 | S156-125-5-.015TACM8X | $93.56 | $98.18 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.005 | S156-156-5-.005TACM8X | $93.56 | $98.18 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.015 | S156-156-5-.015TACM8X | $93.56 | $98.18 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.005 | S156-188-5-.005TACM8X | $93.56 | $98.18 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.015 | S156-188-5-.015TACM8X | $93.56 | $98.18 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | 0.031 | S156-188-5-.031TACM8X | $93.56 | $98.18 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## Tips on Selecting the Right Tool for the Job

| Number of Flutes | Primary Uses | Ideal Cutting Materials |
|---|---|---|
| 2-3 | Tools with fewer flutes allow optimal space for chip removal when milling or slotting softer materials. Also used for roughing. | Soft materials, such as aluminum and plastics. |
| 3-4 | Adding flutes provides greater strength. Recommended for use with roughing, milling, and slotting a variety of materials. Can also be used for finishing softer materials. | Hard materials, such as stainless steel, steel, and titanium. |
| 5 + | Ideal for use in finishing work, when using faster feed rates, and with reduced chip load. | Harder materials, such as steel, or for finishing a variety of materials. |

# S157

## 1.5° Corner Radius Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.003 | S157-015-3-.003TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.003 | S157-015-3-.003TACM12X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.005 | S157-015-3-.005TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.005 | S157-015-3-.005TACM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.003 | S157-031-3-.003TACM8X | S157-031-4-.003TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.003 | S157-031-3-.003TACM12X | S157-031-4-.003TACM12X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.005 | S157-031-3-.005TACM8X | S157-031-4-.005TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.005 | S157-031-3-.005TACM12X | S157-031-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S157-047-3-.005TACM8X | S157-047-4-.005TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S157-047-3-.005TACM12X | S157-047-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S157-047-3-.010TACM8X | S157-047-4-.010TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S157-047-3-.010TACM12X | S157-047-4-.010TACM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S157-062-3-.005TACM8X | S157-062-4-.005TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S157-062-3-.005TACM12X | S157-062-4-.005TACM12X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S157-062-3-.015TACM8X | S157-062-4-.015TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S157-062-3-.015TACM12X | S157-062-4-.015TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S157-078-3-.005TACM8X | S157-078-4-.005TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S157-078-3-.005TACM12X | S157-078-4-.005TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S157-078-3-.015TACM8X | S157-078-4-.015TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S157-078-3-.015TACM12X | S157-078-4-.015TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.005 | S157-093-3-.005TACM8X | S157-093-4-.005TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.005 | S157-093-3-.005TACM12X | S157-093-4-.005TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.015 | S157-093-3-.015TACM8X | S157-093-4-.015TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.015 | S157-093-3-.015TACM12X | S157-093-4-.015TACM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.005 | S157-109-3-.005TACM8X | S157-109-4-.005TACM8X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.015 | S157-109-3-.015TACM8X | S157-109-4-.015TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.005 | S157-125-3-.005TACM8X | S157-125-4-.005TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.015 | S157-125-3-.015TACM8X | S157-125-4-.015TACM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.005 | S157-156-3-.005TACM8X | S157-156-4-.005TACM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.015 | S157-156-3-.015TACM8X | S157-156-4-.015TACM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.005 | S157-188-3-.005TACM8X | S157-188-4-.005TACM8X | $94.61 | $100.59 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.015 | S157-188-3-.015TACM8X | S157-188-4-.015TACM8X | $94.61 | $100.59 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.031 | S157-188-3-.031TACM8X | S157-188-4-.031TACM8X | $94.61 | $100.59 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# 1.5° Corner Radius Tapered Rib Cutter Mold Tools



FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S157-047-5-.005TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S157-047-5-.005TACM12X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S157-047-5-.010TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S157-047-5-.010TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S157-062-5-.005TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S157-062-5-.005TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S157-062-5-.015TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S157-062-5-.015TACM12X | $81.17 | $85.79 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S157-078-5-.005TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S157-078-5-.005TACM12X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S157-078-5-.015TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S157-078-5-.015TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.005 | S157-093-5-.005TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.005 | S157-093-5-.005TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.015 | S157-093-5-.015TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.015 | S157-093-5-.015TACM12X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.005 | S157-109-5-.005TACM8X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.015 | S157-109-5-.015TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.005 | S157-125-5-.005TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.015 | S157-125-5-.015TACM8X | $93.56 | $98.18 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.005 | S157-156-5-.005TACM8X | $93.56 | $98.18 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.015 | S157-156-5-.015TACM8X | $93.56 | $98.18 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.005 | S157-188-5-.005TACM8X | $103.01 | $108.99 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.015 | S157-188-5-.015TACM8X | $103.01 | $108.99 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.031 | S157-188-5-.031TACM8X | $103.01 | $108.99 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

# S158 2° Corner Radius Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.003 | S158-015-3-.003TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.003 | S158-015-3-.003TACM12X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.005 | S158-015-3-.005TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.005 | S158-015-3-.005TACM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.003 | S158-031-3-.003TACM8X | S158-031-4-.003TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.003 | S158-031-3-.003TACM12X | S158-031-4-.003TACM12X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.005 | S158-031-3-.005TACM8X | S158-031-4-.005TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.005 | S158-031-3-.005TACM12X | S158-031-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S158-047-3-.005TACM8X | S158-047-4-.005TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S158-047-3-.005TACM12X | S158-047-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S158-047-3-.010TACM8X | S158-047-4-.010TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S158-047-3-.010TACM12X | S158-047-4-.010TACM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S158-062-3-.005TACM8X | S158-062-4-.005TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S158-062-3-.005TACM12X | S158-062-4-.005TACM12X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S158-062-3-.015TACM8X | S158-062-4-.015TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S158-062-3-.015TACM12X | S158-062-4-.015TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S158-078-3-.005TACM8X | S158-078-4-.005TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S158-078-3-.005TACM12X | S158-078-4-.005TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S158-078-3-.015TACM8X | S158-078-4-.015TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S158-078-3-.015TACM12X | S158-078-4-.015TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.005 | S158-093-3-.005TACM8X | S158-093-4-.005TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.005 | S158-093-3-.005TACM12X | S158-093-4-.005TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.015 | S158-093-3-.015TACM8X | S158-093-4-.015TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.015 | S158-093-3-.015TACM12X | S158-093-4-.015TACM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.005 | S158-109-3-.005TACM8X | S158-109-4-.005TACM8X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.015 | S158-109-3-.015TACM8X | S158-109-4-.015TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.005 | S158-125-3-.005TACM8X | S158-125-4-.005TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.015 | S158-125-3-.015TACM8X | S158-125-4-.015TACM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.005 | S158-156-3-.005TACM8X | S158-156-4-.005TACM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.015 | S158-156-3-.015TACM8X | S158-156-4-.015TACM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.005 | S158-188-3-.005TACM8X | S158-188-4-.005TACM8X | $94.61 | $100.59 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.015 | S158-188-3-.015TACM8X | S158-188-4-.015TACM8X | $94.61 | $100.59 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.031 | S158-188-3-.031TACM8X | S158-188-4-.031TACM8X | $94.61 | $100.59 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 2° Corner Radius Tapered Rib Cutter Mold Tools



FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S158-047-5-.005TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S158-047-5-.005TACM12X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S158-047-5-.010TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S158-047-5-.010TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S158-062-5-.005TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S158-062-5-.005TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S158-062-5-.015TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S158-062-5-.015TACM12X | $81.17 | $85.79 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S158-078-5-.005TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S158-078-5-.005TACM12X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S158-078-5-.015TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S158-078-5-.015TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.005 | S158-093-5-.005TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.005 | S158-093-5-.005TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | 0.015 | S158-093-5-.015TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | 0.015 | S158-093-5-.015TACM12X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.005 | S158-109-5-.005TACM8X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | 0.015 | S158-109-5-.015TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.005 | S158-125-5-.005TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | 0.015 | S158-125-5-.015TACM8X | $93.56 | $98.18 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.005 | S158-156-5-.005TACM8X | $93.56 | $98.18 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | 0.015 | S158-156-5-.015TACM8X | $93.56 | $98.18 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.005 | S158-188-5-.005TACM8X | $103.01 | $108.99 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.015 | S158-188-5-.015TACM8X | $103.01 | $108.99 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.031 | S158-188-5-.031TACM8X | $103.01 | $108.99 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


### ONLINE ORDERING

P. 2

All standard tools are available via online ordering. To place your order, visit www.mitgi.us and browse through the available selection. Or, use the SEARCH box to quickly find the tool using the tool numbers listed in the catalog. See page 2 for more info.

# S159

## 3° Corner Radius Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.003 | S159-015-3-.003TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.003 | S159-015-3-.003TACM12X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.005 | S159-015-3-.005TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.005 | S159-015-3-.005TACM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.003 | S159-031-3-.003TACM8X | S159-031-4-.003TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.003 | S159-031-3-.003TACM12X | S159-031-4-.003TACM12X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.005 | S159-031-3-.005TACM8X | S159-031-4-.005TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.005 | S159-031-3-.005TACM12X | S159-031-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S159-047-3-.005TACM8X | S159-047-4-.005TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S159-047-3-.005TACM12X | S159-047-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S159-047-3-.010TACM8X | S159-047-4-.010TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S159-047-3-.010TACM12X | S159-047-4-.010TACM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S159-062-3-.005TACM8X | S159-062-4-.005TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S159-062-3-.005TACM12X | S159-062-4-.005TACM12X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S159-062-3-.015TACM8X | S159-062-4-.015TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S159-062-3-.015TACM12X | S159-062-4-.015TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S159-078-3-.005TACM8X | S159-078-4-.005TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S159-078-3-.005TACM12X | S159-078-4-.005TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S159-078-3-.015TACM8X | S159-078-4-.015TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S159-078-3-.015TACM12X | S159-078-4-.015TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.250 | 3.00 | 0.005 | S159-093-3-.005TACM8X | S159-093-4-.005TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.250 | 3.00 | 0.005 | S159-093-3-.005TACM12X | S159-093-4-.005TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.250 | 3.00 | 0.015 | S159-093-3-.015TACM8X | S159-093-4-.015TACM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.250 | 3.00 | 0.015 | S159-093-3-.015TACM12X | S159-093-4-.015TACM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.250 | 3.00 | 0.005 | S159-109-3-.005TACM8X | S159-109-4-.005TACM8X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.250 | 3.00 | 0.015 | S159-109-3-.015TACM8X | S159-109-4-.015TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | 0.005 | S159-125-3-.005TACM8X | S159-125-4-.005TACM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | 0.015 | S159-125-3-.015TACM8X | S159-125-4-.015TACM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | 0.005 | S159-156-3-.005TACM8X | S159-156-4-.005TACM8X | $94.61 | $100.59 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | 0.015 | S159-156-3-.015TACM8X | S159-156-4-.015TACM8X | $94.61 | $100.59 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.005 | S159-188-3-.005TACM8X | S159-188-4-.005TACM8X | $94.61 | $100.59 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.015 | S159-188-3-.015TACM8X | S159-188-4-.015TACM8X | $94.61 | $100.59 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.031 | S159-188-3-.031TACM8X | S159-188-4-.031TACM8X | $94.61 | $100.59 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 3° Corner Radius Tapered Rib Cutter Mold Tools



FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S159-047-5-.005TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S159-047-5-.005TACM12X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S159-047-5-.010TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S159-047-5-.010TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.005 | S159-062-5-.005TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.005 | S159-062-5-.005TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | 0.015 | S159-062-5-.015TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | 0.015 | S159-062-5-.015TACM12X | $81.17 | $85.79 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.005 | S159-078-5-.005TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.005 | S159-078-5-.005TACM12X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | 0.015 | S159-078-5-.015TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | 0.015 | S159-078-5-.015TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.250 | 3.00 | 0.005 | S159-093-5-.005TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.250 | 3.00 | 0.005 | S159-093-5-.005TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.250 | 3.00 | 0.015 | S159-093-5-.015TACM8X | $93.56 | $98.18 |
| 0.093 (3/32) | 1.116 | 0.250 | 3.00 | 0.015 | S159-093-5-.015TACM12X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.250 | 3.00 | 0.005 | S159-109-5-.005TACM8X | $93.56 | $98.18 |
| 0.109 (7/64) | 0.872 | 0.250 | 3.00 | 0.015 | S159-109-5-.015TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | 0.005 | S159-125-5-.005TACM8X | $93.56 | $98.18 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | 0.015 | S159-125-5-.015TACM8X | $93.56 | $98.18 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | 0.005 | S159-156-5-.005TACM8X | $103.01 | $108.99 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | 0.015 | S159-156-5-.015TACM8X | $103.01 | $108.99 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.005 | S159-188-5-.005TACM8X | $103.01 | $108.99 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.015 | S159-188-5-.015TACM8X | $103.01 | $108.99 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | 0.031 | S159-188-5-.031TACM8X | $103.01 | $108.99 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


### SPECIALS

P.206

MITGI specializes in custom micro tools that are needed quickly or are difficult to find. See pages 206-207 for more info regarding custom tool capabilities, estimated production times, and information about how to place an order.

# S160

## 5° Corner Radius Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.003 | S160-015-3-.003TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.003 | S160-015-3-.003TACM12X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | 0.005 | S160-015-3-.005TACM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | 0.005 | S160-015-3-.005TACM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.003 | S160-031-3-.003TACM8X | S160-031-4-.003TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.003 | S160-031-3-.003TACM12X | S160-031-4-.003TACM12X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | 0.005 | S160-031-3-.005TACM8X | S160-031-4-.005TACM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | 0.005 | S160-031-3-.005TACM12X | S160-031-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S160-047-3-.005TACM8X | S160-047-4-.005TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S160-047-3-.005TACM12X | S160-047-4-.005TACM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S160-047-3-.010TACM8X | S160-047-4-.010TACM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S160-047-3-.010TACM12X | S160-047-4-.010TACM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.250 | 3.00 | 0.005 | S160-062-3-.005TACM8X | S160-062-4-.005TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.250 | 3.00 | 0.005 | S160-062-3-.005TACM12X | S160-062-4-.005TACM12X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.496 | 0.250 | 3.00 | 0.015 | S160-062-3-.015TACM8X | S160-062-4-.015TACM8X | $85.16 | $89.78 |
| 0.062 (1/16) | 0.744 | 0.250 | 3.00 | 0.015 | S160-062-3-.015TACM12X | S160-062-4-.015TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.250 | 3.00 | 0.005 | S160-078-3-.005TACM8X | S160-078-4-.005TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.250 | 3.00 | 0.005 | S160-078-3-.005TACM12X | S160-078-4-.005TACM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.250 | 3.00 | 0.015 | S160-078-3-.015TACM8X | S160-078-4-.015TACM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.250 | 3.00 | 0.015 | S160-078-3-.015TACM12X | S160-078-4-.015TACM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.3125 | 3.00 | 0.005 | S160-093-3-.005TACM8X | S160-093-4-.005TACM8X | $93.56 | $99.54 |
| 0.093 (3/32) | 1.116 | 0.3125 | 3.00 | 0.005 | S160-093-3-.005TACM12X | S160-093-4-.005TACM12X | $93.56 | $99.54 |
| 0.093 (3/32) | 0.744 | 0.3125 | 3.00 | 0.015 | S160-093-3-.015TACM8X | S160-093-4-.015TACM8X | $93.56 | $99.54 |
| 0.093 (3/32) | 1.116 | 0.3125 | 3.00 | 0.015 | S160-093-3-.015TACM12X | S160-093-4-.015TACM12X | $93.56 | $99.54 |
| 0.109 (7/64) | 0.872 | 0.3125 | 3.00 | 0.005 | S160-109-3-.005TACM8X | S160-109-4-.005TACM8X | $93.56 | $99.54 |
| 0.109 (7/64) | 0.872 | 0.3125 | 3.00 | 0.015 | S160-109-3-.015TACM8X | S160-109-4-.015TACM8X | $93.56 | $99.54 |
| 0.125 (1/8) | 1.000 | 0.3125 | 3.00 | 0.005 | S160-125-3-.005TACM8X | S160-125-4-.005TACM8X | $93.56 | $99.54 |
| 0.125 (1/8) | 1.000 | 0.3125 | 3.00 | 0.015 | S160-125-3-.015TACM8X | S160-125-4-.015TACM8X | $93.56 | $99.54 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | 0.005 | S160-156-3-.005TACM8X | S160-156-4-.005TACM8X | $95.66 | $101.64 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | 0.015 | S160-156-3-.015TACM8X | S160-156-4-.015TACM8X | $95.66 | $101.64 |
| 0.187 (3/16)* | 1.496 | 0.500 | 4.00 | 0.005 | S160-188-3-.005TACM8X | S160-188-4-.005TACM8X | $116.66 | $124.95 |
| 0.187 (3/16)* | 1.496 | 0.500 | 4.00 | 0.015 | S160-188-3-.015TACM8X | S160-188-4-.015TACM8X | $116.66 | $124.95 |
| 0.187 (3/16)* | 1.496 | 0.500 | 4.00 | 0.031 | S160-188-3-.031TACM8X | S160-188-4-.031TACM8X | $116.66 | $124.95 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 5° Corner Radius Tapered Rib Cutter Mold Tools



FLUTES 5

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Corner Radius | 5 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | F | | | |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.005 | S160-047-5-.005TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.005 | S160-047-5-.005TACM12X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | 0.010 | S160-047-5-.010TACM8X | $81.17 | $85.79 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | 0.010 | S160-047-5-.010TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.250 | 3.00 | 0.005 | S160-062-5-.005TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.250 | 3.00 | 0.005 | S160-062-5-.005TACM12X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.496 | 0.250 | 3.00 | 0.015 | S160-062-5-.015TACM8X | $81.17 | $85.79 |
| 0.062 (1/16) | 0.744 | 0.250 | 3.00 | 0.015 | S160-062-5-.015TACM12X | $81.17 | $85.79 |
| 0.078 (5/64) | 0.624 | 0.250 | 3.00 | 0.005 | S160-078-5-.005TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.250 | 3.00 | 0.005 | S160-078-5-.005TACM12X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.624 | 0.250 | 3.00 | 0.015 | S160-078-5-.015TACM8X | $93.56 | $98.18 |
| 0.078 (5/64) | 0.936 | 0.250 | 3.00 | 0.015 | S160-078-5-.015TACM12X | $93.56 | $98.18 |
| 0.093 (3/32) | 0.744 | 0.3125 | 3.00 | 0.005 | S160-093-5-.005TACM8X | $101.96 | $107.94 |
| 0.093 (3/32) | 1.116 | 0.3125 | 3.00 | 0.005 | S160-093-5-.005TACM12X | $101.96 | $107.94 |
| 0.093 (3/32) | 0.744 | 0.3125 | 3.00 | 0.015 | S160-093-5-.015TACM8X | $101.96 | $107.94 |
| 0.093 (3/32) | 1.116 | 0.3125 | 3.00 | 0.015 | S160-093-5-.015TACM12X | $101.96 | $107.94 |
| 0.109 (7/64) | 0.872 | 0.3125 | 3.00 | 0.005 | S160-109-5-.005TACM8X | $101.96 | $107.94 |
| 0.109 (7/64) | 0.872 | 0.3125 | 3.00 | 0.015 | S160-109-5-.015TACM8X | $101.96 | $107.94 |
| 0.125 (1/8) | 1.000 | 0.3125 | 3.00 | 0.005 | S160-125-5-.005TACM8X | $101.96 | $107.94 |
| 0.125 (1/8) | 1.000 | 0.3125 | 3.00 | 0.015 | S160-125-5-.015TACM8X | $101.96 | $107.94 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | 0.005 | S160-156-5-.005TACM8X | $104.06 | $110.04 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | 0.015 | S160-156-5-.015TACM8X | $104.06 | $110.04 |
| 0.187 (3/16)* | 1.496 | 0.500 | 4.00 | 0.005 | S160-188-5-.005TACM8X | $125.06 | $133.35 |
| 0.187 (3/16)* | 1.496 | 0.500 | 4.00 | 0.015 | S160-188-5-.015TACM8X | $125.06 | $133.35 |
| 0.187 (3/16)* | 1.496 | 0.500 | 4.00 | 0.031 | S160-188-5-.031TACM8X | $125.06 | $133.35 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

## S161 0.5° Ball Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S161-015-3-TABM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S161-015-3-TABM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S161-031-3-TABM8X | S161-031-4-TABM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S161-031-3-TABM12X | S161-031-4-TABM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S161-047-3-TABM8X | S161-047-4-TABM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S161-047-3-TABM12X | S161-047-4-TABM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S161-062-3-TABM8X | S161-062-4-TABM8X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S161-062-3-TABM12X | S161-062-4-TABM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S161-078-3-TABM8X | S161-078-4-TABM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S161-078-3-TABM12X | S161-078-4-TABM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S161-093-3-TABM8X | S161-093-4-TABM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S161-093-3-TABM12X | S161-093-4-TABM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S161-109-3-TABM8X | S161-109-4-TABM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | S161-125-3-TABM8X | S161-125-4-TABM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S161-156-3-TABM8X | S161-156-4-TABM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | S161-188-3-TABM8X | S161-188-4-TABM8X | $85.16 | $89.78 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## S162 1° Ball Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S162-015-3-TABM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S162-015-3-TABM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S162-031-3-TABM8X | S162-031-4-TABM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S162-031-3-TABM12X | S162-031-4-TABM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S162-047-3-TABM8X | S162-047-4-TABM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S162-047-3-TABM12X | S162-047-4-TABM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S162-062-3-TABM8X | S162-062-4-TABM8X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S162-062-3-TABM12X | S162-062-4-TABM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S162-078-3-TABM8X | S162-078-4-TABM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S162-078-3-TABM12X | S162-078-4-TABM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S162-093-3-TABM8X | S162-093-4-TABM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S162-093-3-TABM12X | S162-093-4-TABM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S162-109-3-TABM8X | S162-109-4-TABM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | S162-125-3-TABM8X | S162-125-4-TABM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S162-156-3-TABM8X | S162-156-4-TABM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.250 | 4.00 | S162-188-3-TABM8X | S162-188-4-TABM8X | $85.16 | $89.78 |

## 1.5° Ball Tapered Rib Cutter Mold Tools

**S163**

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S163-015-3-TABM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S163-015-3-TABM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S163-031-3-TABM8X | S163-031-4-TABM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S163-031-3-TABM12X | S163-031-4-TABM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S163-047-3-TABM8X | S163-047-4-TABM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S163-047-3-TABM12X | S163-047-4-TABM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S163-062-3-TABM8X | S163-062-4-TABM8X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S163-062-3-TABM12X | S163-062-4-TABM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S163-078-3-TABM8X | S163-078-4-TABM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S163-078-3-TABM12X | S163-078-4-TABM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S163-093-3-TABM8X | S163-093-4-TABM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S163-093-3-TABM12X | S163-093-4-TABM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S163-109-3-TABM8X | S163-109-4-TABM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.1875 | 3.00 | S163-125-3-TABM8X | S163-125-4-TABM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S163-156-3-TABM8X | S163-156-4-TABM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | S163-188-3-TABM8X | S163-188-4-TABM8X | $94.61 | $100.59 |

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## 2° Ball Tapered Rib Cutter Mold Tools

**S164**

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S164-015-3-TABM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S164-015-3-TABM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S164-031-3-TABM8X | S164-031-4-TABM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S164-031-3-TABM12X | S164-031-4-TABM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S164-047-3-TABM8X | S164-047-4-TABM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S164-047-3-TABM12X | S164-047-4-TABM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S164-062-3-TABM8X | S164-062-4-TABM8X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S164-062-3-TABM12X | S164-062-4-TABM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S164-078-3-TABM8X | S164-078-4-TABM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S164-078-3-TABM12X | S164-078-4-TABM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S164-093-3-TABM8X | S164-093-4-TABM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.1875 | 3.00 | S164-093-3-TABM12X | S164-093-4-TABM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.1875 | 3.00 | S164-109-3-TABM8X | S164-109-4-TABM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | S164-125-3-TABM8X | S164-125-4-TABM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.250 | 3.00 | S164-156-3-TABM8X | S164-156-4-TABM8X | $85.16 | $89.78 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | S164-188-3-TABM8X | S164-188-4-TABM8X | $94.61 | $100.59 |

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

## S165 3° Ball Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S165-015-3-TABM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S165-015-3-TABM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S165-031-3-TABM8X | S165-031-4-TABM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S165-031-3-TABM12X | S165-031-4-TABM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S165-047-3-TABM8X | S165-047-4-TABM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S165-047-3-TABM12X | S165-047-4-TABM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.1875 | 3.00 | S165-062-3-TABM8X | S165-062-4-TABM8X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.744 | 0.1875 | 3.00 | S165-062-3-TABM12X | S165-062-4-TABM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.1875 | 3.00 | S165-078-3-TABM8X | S165-078-4-TABM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.1875 | 3.00 | S165-078-3-TABM12X | S165-078-4-TABM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.1875 | 3.00 | S165-093-3-TABM8X | S165-093-4-TABM8X | $85.16 | $89.78 |
| 0.093 (3/32) | 1.116 | 0.250 | 3.00 | S165-093-3-TABM12X | S165-093-4-TABM12X | $85.16 | $89.78 |
| 0.109 (7/64) | 0.872 | 0.250 | 3.00 | S165-109-3-TABM8X | S165-109-4-TABM8X | $85.16 | $89.78 |
| 0.125 (1/8) | 1.000 | 0.250 | 3.00 | S165-125-3-TABM8X | S165-125-4-TABM8X | $85.16 | $89.78 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | S165-156-3-TABM8X | S165-156-4-TABM8X | $94.61 | $100.59 |
| 0.187 (3/16)* | 1.496 | 0.375 | 4.00 | S165-188-3-TABM8X | S165-188-4-TABM8X | $94.61 | $100.59 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## S166 5° Ball Tapered Rib Cutter Mold Tools

FLUTES 3,4

8X LENGTH OF CUT

12X LENGTH OF CUT

VARIABLE HELIX

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | |
| 0.015 (1/64) | 0.120 | 0.1875 | 3.00 | S166-015-3-TABM8X | N/A | $62.42 | $67.04 |
| 0.015 (1/64) | 0.180 | 0.1875 | 3.00 | S166-015-3-TABM12X | N/A | $62.42 | $67.04 |
| 0.031 (1/32) | 0.248 | 0.1875 | 3.00 | S166-031-3-TABM8X | S166-031-4-TABM8X | $72.77 | $77.39 |
| 0.031 (1/32) | 0.372 | 0.1875 | 3.00 | S166-031-3-TABM12X | S166-031-4-TABM12X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.376 | 0.1875 | 3.00 | S166-047-3-TABM8X | S166-047-4-TABM8X | $72.77 | $77.39 |
| 0.047 (3/64) | 0.564 | 0.1875 | 3.00 | S166-047-3-TABM12X | S166-047-4-TABM12X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.496 | 0.250 | 3.00 | S166-062-3-TABM8X | S166-062-4-TABM8X | $72.77 | $77.39 |
| 0.062 (1/16) | 0.744 | 0.250 | 3.00 | S166-062-3-TABM12X | S166-062-4-TABM12X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.624 | 0.250 | 3.00 | S166-078-3-TABM8X | S166-078-4-TABM8X | $85.16 | $89.78 |
| 0.078 (5/64) | 0.936 | 0.250 | 3.00 | S166-078-3-TABM12X | S166-078-4-TABM12X | $85.16 | $89.78 |
| 0.093 (3/32) | 0.744 | 0.3125 | 3.00 | S166-093-3-TABM8X | S166-093-4-TABM8X | $93.56 | $99.54 |
| 0.093 (3/32) | 1.116 | 0.3125 | 3.00 | S166-093-3-TABM12X | S166-093-4-TABM12X | $93.56 | $99.54 |
| 0.109 (7/64) | 0.872 | 0.3125 | 3.00 | S166-109-3-TABM8X | S166-109-4-TABM8X | $93.56 | $99.54 |
| 0.125 (1/8) | 1.000 | 0.3125 | 3.00 | S166-125-3-TABM8X | S166-125-4-TABM8X | $93.56 | $99.54 |
| 0.156 (5/32)* | 1.248 | 0.375 | 3.00 | S166-156-3-TABM8X | S166-156-4-TABM8X | $94.61 | $100.59 |
| 0.187 (3/16)* | 1.496 | 0.500 | 4.00 | S166-188-3-TABM8X | S166-188-4-TABM8X | $116.66 | $124.95 |

# STANDARDS VS. SPECIALS

## MITGI STANDARDS

For many jobs, standard tools are the preferred option, especially when time is the top priority. Standard tools provide an immediate manufacturing solution that can be utilized in many situations.

Key Benefits
- Readily available in a wide array of sizes, depths, geometries, and radii
- Short turn around time
- Economical choice

MITGI standards are available in 3 days or less. See product charts for available standard options.

## MITGI SPECIALS

When a standard tool won't accomplish the task, turning to a custom tool is often the answer. Complex tool requirements, the need to consolidate tools in a tool station, or slight modifications to a standard tool, are all indications that moving to specials may be advantageous.

Key Benefits
- Efficiencies gained in saving machine time
- Tool geometry designed for specific material
- Reduction in labor to implement tool changes
- Greater design freedom for part design and manufacturing optimization

Simply submit a drawing or set of specifications, and we can provide a quote to match. MITGI specializes in custom work with tight tolerances, elaborate form tools, and complex combination tools. MITGI specials are usually available in 2 weeks or less. See pages 206-207 for more information.

Some tools may qualify as QUICK TURN SPECIALS and can be manufactured in three days or less. Simply request a QUICK TURN REVIEW when submitting a quote.

# S17

## Single Point Thread Mills

FLUTES 4

| Thread Size | Cutter Diameter | Max Depth of Thread | Shank Diameter | Overall Length | Neck Diameter | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | C | D | E | G | | | |
| 0 | 0.044 | 0.094 | 0.125 | 1.50 | 0.024 | S17-0-TM | $75.60 | $77.70 |
| 0 | 0.044 | 0.125 | 0.125 | 1.50 | 0.024 | S17-0-TML-.125 | $76.65 | $78.75 |
| 0 | 0.044 | 0.156 | 0.125 | 1.50 | 0.024 | S17-0-TML-.156 | $77.70 | $79.80 |
| 0 | 0.044 | 0.250 | 0.125 | 1.50 | 0.024 | S17-0-TML-.250 | $78.75 | $80.85 |
| 1 | 0.054 | 0.125 | 0.125 | 1.50 | 0.032 | S17-1-TM | $72.71 | $74.81 |
| 1 | 0.054 | 0.188 | 0.125 | 1.50 | 0.032 | S17-1-TML-.188 | $73.76 | $75.86 |
| 1 | 0.054 | 0.250 | 0.125 | 1.50 | 0.032 | S17-1-TML-.250 | $74.81 | $76.91 |
| 1 | 0.054 | 0.313 | 0.125 | 1.50 | 0.032 | S17-1-TML-.313 | $75.86 | $77.96 |
| 2 | 0.064 | 0.156 | 0.125 | 1.50 | 0.038 | S17-2-TM | $72.71 | $74.81 |
| 2 | 0.064 | 0.219 | 0.125 | 1.50 | 0.038 | S17-2-TML-.219 | $73.76 | $75.86 |
| 2 | 0.064 | 0.313 | 0.125 | 1.50 | 0.038 | S17-2-TML-.313 | $74.81 | $76.91 |
| 2 | 0.064 | 0.438 | 0.125 | 1.50 | 0.038 | S17-2-TML-.438 | $75.86 | $77.96 |
| 3 | 0.072 | 0.156 | 0.125 | 1.50 | 0.040 | S17-3-TM | $72.71 | $74.81 |
| 3 | 0.072 | 0.250 | 0.125 | 1.50 | 0.040 | S17-3-TML-.250 | $73.76 | $75.86 |
| 3 | 0.072 | 0.375 | 0.125 | 1.50 | 0.040 | S17-3-TML-.375 | $74.81 | $76.91 |
| 3 | 0.072 | 0.500 | 0.125 | 1.50 | 0.040 | S17-3-TML-.500 | $75.86 | $77.96 |
| 4 | 0.080 | 0.125 | 0.125 | 1.50 | 0.035 | S17-4-TM | $69.87 | $71.97 |
| 4 | 0.080 | 0.250 | 0.125 | 1.50 | 0.035 | S17-4-TML | $69.87 | $71.97 |
| 4 | 0.080 | 0.375 | 0.125 | 1.50 | 0.035 | S17-4-TML-.375 | $71.97 | $74.07 |
| 4 | 0.080 | 0.500 | 0.125 | 1.50 | 0.035 | S17-4-TML-.500 | $73.02 | $75.12 |
| 5 | 0.093 | 0.188 | 0.125 | 1.50 | 0.050 | S17-5-TM | $69.87 | $71.97 |
| 5 | 0.093 | 0.250 | 0.125 | 1.50 | 0.050 | S17-5-TML-.250 | $70.92 | $73.02 |
| 5 | 0.093 | 0.375 | 0.125 | 1.50 | 0.050 | S17-5-TML-.375 | $71.97 | $74.07 |
| 5 | 0.093 | 0.500 | 0.125 | 1.50 | 0.050 | S17-5-TML-.500 | $73.02 | $75.12 |
| 6 | 0.098 | 0.250 | 0.188 | 2.00 | 0.042 | S17-6-TM | $69.87 | $74.49 |
| 6 | 0.098 | 0.375 | 0.188 | 2.00 | 0.042 | S17-6-TML | $69.87 | $74.49 |
| 6 | 0.098 | 0.500 | 0.188 | 2.00 | 0.042 | S17-6-TML-.500 | $71.97 | $76.59 |
| 6 | 0.098 | 0.625 | 0.188 | 2.00 | 0.042 | S17-6-TML-.625 | $73.02 | $77.64 |
| 8 | 0.120 | 0.313 | 0.250 | 2.50 | 0.056 | S17-8-TM | $69.87 | $74.49 |
| 8 | 0.120 | 0.500 | 0.250 | 2.50 | 0.056 | S17-8-TML | $69.87 | $74.49 |
| 8 | 0.120 | 0.625 | 0.250 | 2.50 | 0.056 | S17-8-TML-.625 | $72.49 | $77.11 |
| 8 | 0.120 | 0.750 | 0.250 | 2.50 | 0.056 | S17-8-TML-.750 | $73.54 | $78.16 |
| 10 | 0.135 | 0.313 | 0.250 | 2.50 | 0.061 | S17-10-TM | $69.87 | $74.49 |
| 10 | 0.135 | 0.500 | 0.250 | 2.50 | 0.061 | S17-10-TML | $69.87 | $74.49 |
| 10 | 0.135 | 0.625 | 0.250 | 2.50 | 0.061 | S17-10-TML-.625 | $72.49 | $77.11 |
| 10 | 0.135 | 0.875 | 0.250 | 2.50 | 0.061 | S17-10-TML-.875 | $73.54 | $78.16 |
| 12 | 0.160 | 0.313 | 0.250 | 2.50 | 0.085 | S17-12-TM | $69.87 | $74.49 |
| 12 | 0.160 | 0.375 | 0.250 | 2.50 | 0.085 | S17-12-TML-.375 | $71.44 | $76.06 |
| 12 | 0.160 | 0.625 | 0.250 | 2.50 | 0.085 | S17-12-TML-.625 | $72.49 | $77.11 |
| 12 | 0.160 | 0.875 | 0.250 | 2.50 | 0.085 | S17-12-TML-.875 | $73.54 | $78.16 |
| 1/4 | 0.180 | 0.500 | 0.250 | 2.50 | 0.091 | S17-250-TM | $72.71 | $77.33 |
| 1/4 | 0.180 | 0.750 | 0.250 | 2.50 | 0.091 | S17-250-TML | $72.71 | $77.33 |
| 1/4 | 0.180 | 1.000 | 0.250 | 2.50 | 0.091 | S17-250-TML-1.00 | $75.86 | $80.48 |
| 1/4 | 0.180 | 1.250 | 0.250 | 2.50 | 0.091 | S17-250-TML-1.25 | $76.91 | $81.53 |

FLUTES 4

| Thread Size | Cutter Diameter | Max Depth of Thread | Shank Diameter | Overall Length | Neck Diameter | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | C | D | E | G | | | |
| 5/16 | 0.240 | 0.500 | 0.250 | 2.50 | 0.142 | S17-3125-TM | $73.68 | $78.30 |
| 5/16 | 0.240 | 0.750 | 0.250 | 2.50 | 0.142 | S17-3125-TML | $73.68 | $78.30 |
| 5/16 | 0.240 | 1.000 | 0.250 | 2.50 | 0.142 | S17-3125-TML-1.00 | $76.83 | $81.45 |
| 5/16 | 0.240 | 1.250 | 0.250 | 2.50 | 0.142 | S17-3125-TML-1.25 | $77.88 | $82.50 |
| 3/8 | 0.300 | 0.750 | 0.375 | 2.50 | 0.190 | S17-375-TM | $94.54 | $100.53 |
| 3/8 | 0.300 | 1.000 | 0.375 | 2.50 | 0.190 | S17-375-TML | $94.54 | $100.53 |
| 3/8 | 0.300 | 1.250 | 0.375 | 2.50 | 0.190 | S17-375-TML-1.25 | $97.69 | $103.68 |
| 3/8 | 0.300 | 1.500 | 0.375 | 2.50 | 0.190 | S17-375-TML-1.50 | $98.74 | $104.73 |
| 1/2 | 0.388 | 0.750 | 0.500 | 3.00 | 0.230 | S17-500-TM | $106.81 | $115.10 |
| 1/2 | 0.388 | 1.250 | 0.500 | 3.00 | 0.230 | S17-500-TML | $106.81 | $115.10 |
| 1/2 | 0.388 | 1.750 | 0.500 | 3.00 | 0.230 | S17-500-TML-1.75 | $111.01 | $119.30 |
| 1/2 | 0.388 | 2.250 | 0.500 | 3.00 | 0.230 | S17-500-TML-2.25 | $112.06 | $120.35 |
| 3/4 | 0.495 | 1.000 | 0.500 | 3.00 | 0.325 | S17-750-TM | $106.81 | $115.10 |
| 3/4 | 0.495 | 1.375 | 0.500 | 3.00 | 0.325 | S17-750-TML | $106.81 | $115.10 |
| 3/4 | 0.495 | 1.750 | 0.500 | 3.00 | 0.325 | S17-750-TML-1.75 | $111.01 | $119.30 |
| 3/4 | 0.495 | 2.250 | 0.500 | 3.00 | 0.325 | S17-750-TML-2.25 | $112.06 | $120.35 |

## SEE ALSO:

p. 206 Custom Tools
p. 208 Coating

## NOTES:

1. Any pitch (standard or metric) , RH and LH threads, and fine or coarse threads
2. All S17 thread mills have an included 60° thread angle

## MANUFACTURED BY MITGI: Coolant Thru Materials

### MITGI coolant thru materials will do more than just help you keep your cool.

Coolant thru materials can help improve many common manufacturing issues. Use MITGI coolant thru materials to:

- Help improve chip removal
- Reduce heat
- Reduce temperature fluctuations at the cutting edge
- Aid deep pocket or hole manufacturing operations
- Decrease cycle times
- Improve finishes by alleviating double cutting and chip smearing

*Zach, Project Manager*

**Ready to get started? See page 2 for contact information.**

# S39 UN Full Form Helical Thread Mills

FLUTES 3,4

| Min. Thread Size and Pitch | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | B | D | E | | | | |
| 2-56 | 0.065 | 0.125 | 0.125 | 2.00 | 3 | S39-011 | $59.54 | $61.64 |
| 2-64 | 0.065 | 0.125 | 0.125 | 2.00 | 3 | S39-087 | $59.54 | $61.64 |
| 3-48 | 0.075 | 0.167 | 0.125 | 2.00 | 3 | S39-024 | $61.60 | $63.70 |
| 3-56 | 0.075 | 0.167 | 0.125 | 2.00 | 3 | S39-088 | $61.60 | $63.70 |
| 4-40 | 0.085 | 0.175 | 0.125 | 2.00 | 3 | S39-012 | $61.60 | $63.70 |
| 4-48 | 0.085 | 0.175 | 0.125 | 2.00 | 3 | S39-089 | $61.60 | $63.70 |
| 5-40 | 0.095 | 0.228 | 0.125 | 2.00 | 3 | S39-090 | $65.23 | $67.33 |
| 5-44 | 0.095 | 0.228 | 0.125 | 2.00 | 3 | S39-025 | $65.23 | $67.33 |
| 6-32 | 0.100 | 0.218 | 0.125 | 2.00 | 3 | S39-013 | $65.23 | $67.33 |
| 6-40 | 0.100 | 0.218 | 0.125 | 2.00 | 3 | S39-091 | $65.23 | $67.33 |
| 8-32 | 0.124 | 0.250 | 0.125 | 2.00 | 4 | S39-014 | $69.16 | $71.26 |
| 8-36 | 0.124 | 0.250 | 0.125 | 2.00 | 4 | S39-092 | $69.16 | $71.26 |
| 10-24 | 0.124 | 0.312 | 0.125 | 2.00 | 3 | S39-015 | $72.51 | $74.61 |
| 10-32 | 0.124 | 0.312 | 0.125 | 2.00 | 4 | S39-016 | $72.51 | $74.61 |
| 12-24 | 0.134 | 0.312 | 0.1875 | 2.00 | 4 | S39-026 | $86.47 | $91.09 |
| 12-28 | 0.134 | 0.312 | 0.1875 | 2.00 | 4 | S39-027 | $86.47 | $91.09 |
| 1/4-20 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S39-001 | $86.47 | $91.09 |
| 1/4-24 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S39-028 | $86.47 | $91.09 |
| 1/4-28 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S39-017 | $86.47 | $91.09 |
| 1/4-32 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S39-029 | $86.47 | $91.09 |
| 1/4-36 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S39-030 | $86.47 | $91.09 |
| 1/4-40 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S39-031 | $86.47 | $91.09 |
| 1/4-48 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S39-032 | $86.47 | $91.09 |
| 1/4-56 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S39-033 | $86.47 | $91.09 |
| 5/16-18 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S39-003 | $104.88 | $109.50 |
| 5/16-20 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S39-035 | $104.88 | $109.50 |
| 5/16-24 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S39-018 | $104.88 | $109.50 |
| 5/16-28 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S39-036 | $104.88 | $109.50 |
| 5/16-32 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S39-037 | $104.88 | $109.50 |
| 5/16-36 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S39-038 | $104.88 | $109.50 |
| 5/16-40 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S39-039 | $104.88 | $109.50 |
| 5/16-48 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S39-040 | $104.88 | $109.50 |

## SEE ALSO:


p. 206 Custom Tools

p. 208 Coating

## UN Full Form Helical Thread Mills



FLUTES 3,4

| Min. Thread Size and Pitch | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | B | D | E | | | | |
| 3/8-16 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S39-019 | $127.35 | $133.33 |
| 3/8-18 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S39-041 | $127.35 | $133.33 |
| 3/8-20 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S39-042 | $127.35 | $133.33 |
| 3/8-24 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S39-010 | $127.35 | $133.33 |
| 3/8-28 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S39-043 | $127.35 | $133.33 |
| 3/8-32 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S39-044 | $127.35 | $133.33 |
| 3/8-36 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S39-045 | $127.35 | $133.33 |
| 3/8-40 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S39-046 | $127.35 | $133.33 |
| 7/16-14 | 0.340 | 0.750 | 0.375 | 3.00 | 4 | S39-020 | $141.29 | $147.27 |
| 7/16-16 | 0.340 | 0.750 | 0.375 | 3.00 | 4 | S39-047 | $141.29 | $147.27 |
| 7/16-18 | 0.340 | 0.750 | 0.375 | 3.00 | 4 | S39-048 | $141.29 | $147.27 |
| 7/16-20 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S39-002 | $141.29 | $147.27 |
| 7/16-24 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S39-049 | $141.29 | $147.27 |
| 7/16-28 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S39-050 | $141.29 | $147.27 |
| 7/16-32 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S39-051 | $141.29 | $147.27 |
| 1/2-12 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-052 | $141.29 | $147.27 |
| 1/2-13 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-007 | $141.29 | $147.27 |
| 1/2-14 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-053 | $141.29 | $147.27 |
| 1/2-16 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-054 | $141.29 | $147.27 |
| 1/2-18 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-055 | $141.29 | $147.27 |
| 1/2-20 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-056 | $141.29 | $147.27 |
| 1/2-24 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-057 | $141.29 | $147.27 |
| 1/2-28 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-058 | $141.29 | $147.27 |
| 1/2-32 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-059 | $141.29 | $147.27 |
| 9/16-12 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-008 | $141.29 | $147.27 |
| 9/16-14 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-060 | $141.29 | $147.27 |
| 9/16-16 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-061 | $141.29 | $147.27 |
| 9/16-18 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-004 | $141.29 | $147.27 |
| 9/16-20 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-062 | $141.29 | $147.27 |
| 9/16-24 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-063 | $141.29 | $147.27 |
| 9/16-28 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-064 | $141.29 | $147.27 |
| 9/16-32 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S39-065 | $141.29 | $147.27 |

**SEE ALSO:**


| | |
|---|---|
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S39 UN Full Form Helical Thread Mills

FLUTES 3,4

| Min. Thread Size and Pitch | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | B | D | E | | | | |
| 5/8-11 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-021 | $186.75 | $195.05 |
| 5/8-12 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-066 | $186.75 | $195.05 |
| 5/8-14 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-067 | $186.75 | $195.05 |
| 5/8-16 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-068 | $186.75 | $195.05 |
| 5/8-18 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-069 | $186.75 | $195.05 |
| 5/8-20 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-070 | $186.75 | $195.05 |
| 5/8-24 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-071 | $186.75 | $195.05 |
| 5/8-28 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-072 | $186.75 | $195.05 |
| 5/8-32 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-073 | $186.75 | $195.05 |
| 3/4-10 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-022 | $186.75 | $195.05 |
| 3/4-12 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-009 | $186.75 | $195.05 |
| 3/4-14 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-074 | $186.75 | $195.05 |
| 3/4-16 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-005 | $186.75 | $195.05 |
| 3/4-18 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-075 | $186.75 | $195.05 |
| 3/4-20 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-076 | $186.75 | $195.05 |
| 3/4-24 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-077 | $186.75 | $195.05 |
| 3/4-28 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-078 | $186.75 | $195.05 |
| 3/4-32 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-079 | $186.75 | $195.05 |
| 7/8-9 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-080 | $186.75 | $195.05 |
| 7/8-12 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-081 | $186.75 | $195.05 |
| 7/8-14 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-006 | $186.75 | $195.05 |
| 7/8-16 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-082 | $186.75 | $195.05 |
| 7/8-18 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-083 | $186.75 | $195.05 |
| 7/8-20 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-093 | $186.75 | $195.05 |
| 7/8-24 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-084 | $186.75 | $195.05 |
| 7/8-28 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-085 | $186.75 | $195.05 |
| 7/8-32 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S39-086 | $186.75 | $195.05 |

## SEE ALSO:


p. 206 Custom Tools

p. 208 Coating

# ON-SITE MANUFACTURING

## QUALITY. PRECISION. MITGI.

For more than 25 years, MITGI has delivered on our reputation for manufacturing hard-to-find or difficult-to-make custom cutting tools. We apply that same attention to detail, repeatability, and precision to the manufacturing of standard tools.

Our state-of-the-art facility has a diverse group of CNC cutter grinders that allow us to build both custom and standard cutting tools with a high degree of accuracy and repeatability. Our goal is to provide high quality tools that meet the specific needs of each customer.

Regardless of the equipment you're using today, we can offer a solution that will meet your current specifications through our standard product lines and custom tools.

## ON-SITE MANUFACTURING

All tools sold by MITGI are manufactured on-site, which makes it easy for MITGI to stand behind the quality of the products and services provided. Customers tell us that whether using standards or specials, MITGI carbide cutting tools consistently outperform the competition.

Working with MITGI to design and manufacture tools provides several advantages:

- A Minnesota-based team that provides on-site manufacturing, inspections, drafting, customer service, shipping, and technical support
- A reliable source for standards and specials, both available with tight timelines – specials can usually be manufactured within two weeks, standards and QUICK TURN SPECIALS are available in three days or less
- In-house coating allows consistent quality control and a reduction in lead times for coated tools

## MANUFACTURED BY MITGI

Ordering from MITGI means that you can always be certain that the tool you receive from us today will meet the same requirements the next time it's ordered.

On-site manufacturing ensures:

- Same quality carbide used across all tool categories
- Repeatable quality
- Consistent inspection methods
- Diligent inspection tracking
- Internal quality processes throughout all stages of production
- On-site logistics to reduce project management hassles

**Ready to get started?**
**Contact us:**
**Phone: (320) 455-0535**
**Email: info@mitgi.us,**
**Web: www.mitgi.us**

# S105 UN Full Form Straight Flute Thread Mills

FLUTES 3,4

| Min. Thread Size and Pitch | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | B | D | E | | | | |
| 2-56 | 0.065 | 0.125 | 0.125 | 2.00 | 3 | S105-001 | $59.54 | $61.64 |
| 2-64 | 0.065 | 0.125 | 0.125 | 2.00 | 3 | S105-086 | $59.54 | $61.64 |
| 3-48 | 0.075 | 0.167 | 0.125 | 2.00 | 3 | S105-002 | $61.60 | $63.70 |
| 3-56 | 0.075 | 0.167 | 0.125 | 2.00 | 3 | S105-087 | $61.60 | $63.70 |
| 4-40 | 0.085 | 0.175 | 0.125 | 2.00 | 3 | S105-003 | $61.60 | $63.70 |
| 4-48 | 0.085 | 0.175 | 0.125 | 2.00 | 3 | S105-088 | $61.60 | $63.70 |
| 5-40 | 0.095 | 0.228 | 0.125 | 2.00 | 3 | S105-089 | $65.23 | $67.33 |
| 5-44 | 0.095 | 0.228 | 0.125 | 2.00 | 3 | S105-004 | $65.23 | $67.33 |
| 6-32 | 0.100 | 0.218 | 0.125 | 2.00 | 3 | S105-005 | $65.23 | $67.33 |
| 6-40 | 0.100 | 0.218 | 0.125 | 2.00 | 3 | S105-090 | $65.23 | $67.33 |
| 8-32 | 0.124 | 0.250 | 0.125 | 2.00 | 4 | S105-006 | $69.16 | $71.26 |
| 8-36 | 0.124 | 0.250 | 0.125 | 2.00 | 4 | S105-091 | $69.16 | $71.26 |
| 10-24 | 0.124 | 0.312 | 0.125 | 2.00 | 3 | S105-007 | $72.51 | $74.61 |
| 10-32 | 0.124 | 0.312 | 0.125 | 2.00 | 4 | S105-008 | $72.51 | $74.61 |
| 12-24 | 0.134 | 0.312 | 0.1875 | 2.00 | 4 | S105-009 | $86.47 | $91.09 |
| 12-28 | 0.134 | 0.312 | 0.1875 | 2.00 | 4 | S105-010 | $86.47 | $91.09 |
| 1/4-20 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S105-011 | $86.47 | $91.09 |
| 1/4-24 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S105-012 | $86.47 | $91.09 |
| 1/4-28 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S105-013 | $86.47 | $91.09 |
| 1/4-32 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S105-014 | $86.47 | $91.09 |
| 1/4-36 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S105-015 | $86.47 | $91.09 |
| 1/4-40 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S105-016 | $86.47 | $91.09 |
| 1/4-48 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S105-017 | $86.47 | $91.09 |
| 1/4-56 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S105-018 | $86.47 | $91.09 |
| 5/16-18 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S105-020 | $104.88 | $109.50 |
| 5/16-20 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S105-021 | $104.88 | $109.50 |
| 5/16-24 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S105-022 | $104.88 | $109.50 |
| 5/16-28 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S105-023 | $104.88 | $109.50 |
| 5/16-32 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S105-024 | $104.88 | $109.50 |
| 5/16-36 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S105-025 | $104.88 | $109.50 |
| 5/16-40 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S105-026 | $104.88 | $109.50 |
| 5/16-48 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S105-027 | $104.88 | $109.50 |

## SEE ALSO:


p. 206 Custom Tools

p. 208 Coating

## UN Full Form Straight Flute Thread Mills



FLUTES 3,4

| Min. Thread Size and Pitch | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | B | D | E | | | | |
| 3/8-16 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S105-028 | $127.35 | $133.33 |
| 3/8-18 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S105-029 | $127.35 | $133.33 |
| 3/8-20 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S105-030 | $127.35 | $133.33 |
| 3/8-24 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S105-031 | $127.35 | $133.33 |
| 3/8-28 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S105-032 | $127.35 | $133.33 |
| 3/8-32 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S105-033 | $127.35 | $133.33 |
| 3/8-36 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S105-034 | $127.35 | $133.33 |
| 3/8-40 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S105-035 | $127.35 | $133.33 |
| 7/16-14 | 0.340 | 0.750 | 0.375 | 3.00 | 4 | S105-036 | $141.29 | $147.27 |
| 7/16-16 | 0.340 | 0.750 | 0.375 | 3.00 | 4 | S105-037 | $141.29 | $147.27 |
| 7/16-18 | 0.340 | 0.750 | 0.375 | 3.00 | 4 | S105-038 | $141.29 | $147.27 |
| 7/16-20 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S105-039 | $141.29 | $147.27 |
| 7/16-24 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S105-040 | $141.29 | $147.27 |
| 7/16-28 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S105-041 | $141.29 | $147.27 |
| 7/16-32 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S105-042 | $141.29 | $147.27 |
| 1/2-12 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-043 | $141.29 | $147.27 |
| 1/2-13 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-044 | $141.29 | $147.27 |
| 1/2-14 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-045 | $141.29 | $147.27 |
| 1/2-16 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-046 | $141.29 | $147.27 |
| 1/2-18 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-047 | $141.29 | $147.27 |
| 1/2-20 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-048 | $141.29 | $147.27 |
| 1/2-24 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-049 | $141.29 | $147.27 |
| 1/2-28 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-050 | $141.29 | $147.27 |
| 1/2-32 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-051 | $141.29 | $147.27 |
| 9/16-12 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-052 | $141.29 | $147.27 |
| 9/16-14 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-053 | $141.29 | $147.27 |
| 9/16-16 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-054 | $141.29 | $147.27 |
| 9/16-18 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-055 | $141.29 | $147.27 |
| 9/16-20 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-056 | $141.29 | $147.27 |
| 9/16-24 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-057 | $141.29 | $147.27 |
| 9/16-28 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-058 | $141.29 | $147.27 |
| 9/16-32 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S105-059 | $141.29 | $147.27 |

**SEE ALSO:**

p. 206 Custom Tools
p. 208 Coating

# S105

## UN Full Form Straight Flute Thread Mills

FLUTES 3,4

| Min. Thread Size and Pitch | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | B | D | E | | | | |
| 5/8-11 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-060 | $186.75 | $195.05 |
| 5/8-12 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-061 | $186.75 | $195.05 |
| 5/8-14 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-062 | $186.75 | $195.05 |
| 5/8-16 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-063 | $186.75 | $195.05 |
| 5/8-18 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-064 | $186.75 | $195.05 |
| 5/8-20 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-065 | $186.75 | $195.05 |
| 5/8-24 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-066 | $186.75 | $195.05 |
| 5/8-28 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-067 | $186.75 | $195.05 |
| 5/8-32 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-068 | $186.75 | $195.05 |
| 3/4-10 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-069 | $186.75 | $195.05 |
| 3/4-12 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-070 | $186.75 | $195.05 |
| 3/4-14 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-071 | $186.75 | $195.05 |
| 3/4-16 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-072 | $186.75 | $195.05 |
| 3/4-18 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-073 | $186.75 | $195.05 |
| 3/4-20 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-074 | $186.75 | $195.05 |
| 3/4-24 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-075 | $186.75 | $195.05 |
| 3/4-28 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-076 | $186.75 | $195.05 |
| 3/4-32 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-077 | $186.75 | $195.05 |
| 7/8-9 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-078 | $186.75 | $195.05 |
| 7/8-12 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-079 | $186.75 | $195.05 |
| 7/8-14 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-080 | $186.75 | $195.05 |
| 7/8-16 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-081 | $186.75 | $195.05 |
| 7/8-18 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-082 | $186.75 | $195.05 |
| 7/8-20 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-092 | $186.75 | $195.05 |
| 7/8-24 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-083 | $186.75 | $195.05 |
| 7/8-28 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-084 | $186.75 | $195.05 |
| 7/8-32 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S105-085 | $186.75 | $195.05 |

### SEE ALSO:


p. 206 Custom Tools

p. 208 Coating

MITGI
MIDWEST INDUSTRIAL TOOL GRINDING, INC.

**QUOTE SHEET / Keyseat Cutter**
**Woodruff Cutter**

OAL
SHOULDER ANGLE
CUTTER WIDTH
E
H
SHANK DIAMETER
D
G
A
CUTTER DIAMETER
C
OVERALL REACH
NECK DIAMETER

TOLERANCES

| | |
|---|---|
| .XX | ± .010 |
| .XXX | ± .001 |
| .XXXX | ± .0005 |
| Angular | ± 1.0° |

NOTES:
1. Tolerances are quoted with block tolerance unless noted (excluding OAL).
2. Shoulder angle is x° unless specified.
3. All dimensions are inches unless noted.
4. Diagram letters correspond with standard tool columns featured in MITGI product catalog.
5. Use highlighter to designate cutting area.

**Company Information**
ORGANIZATION
PRIMARY CONTACT - NAME, EMAIL, PHONE
SECONDARY CONTACT - NAME, EMAIL, PHONE
ADDRESS
CITY, STATE, ZIP

**Schedule and Production**
DATE SUBMITTED
TARGET DELIVERY DATE
PREFERRED SHIPPING METHOD
LASER MARKING (Y / N)
SPECIAL NOTES OR INSTRUCTIONS

**Tool Information**
ITEM NUMBER
QUANTITY (QUANTITIES) TO QUOTE
MATERIAL MACHINING
NUMBER OF TEETH
HELIX ANGLE (0° = STRAIGHT)

**Tool Material** (CIRCLE ONE)

| | | |
|---|---|---|
| CARBIDE | HSS | COOLANT THRU |
| PRE-FORM | SUPPLIED MAT'L | |

**Coating** (CIRCLE ONE)

| | | |
|---|---|---|
| UNCOATED | ALTIN | TIN |
| TICN | NACO® | NACRO® |
| DLC | DIAMOND | ZRN |

**End Finish** (CIRCLE ONE, ADD NOTES)

| | | |
|---|---|---|
| SQUARE | CORNER RADIUS (R) | FULL RADIUS |
| CHAMFER (DEGREE) | CHAMFER (FLAT) | |

**Quoting** (MITGI USE ONLY)
MATERIAL STOCK OR SPECIAL ORDER
PRICING (BY QTY)
ESTIMATED SHIP DATE
MITGI CUSTOMER NUMBER
MITGI ACCOUNT MANAGER

**GSS** (MITGI USE ONLY)

| | |
|---|---|
| PART DESCRIPTION CODE: | CUTTER DIAMETER/6 |
| | # FLUTES/2 |
| | TOOL TYPE CODE/4 KEYS |
| | LOC/5 |
| | SHANK DIAMETER/5 |
| | OAL/3 |
| | PRODUCT CODE: CA, CF |

©2016 Midwest Industrial Tool Grinding, Inc. www.mitgi.us (320) 455-0535 MITGIFORM_06 Rev 10/05/2016
nACo® and nACRo® are registered trademarks of PLATO, Inc.

# CUSTOM TOOL QUOTE FORMS

## ORDERING CUSTOM TOOLS

The process to get exactly the right tool you need does not have to be complicated. Working with our design and manufacturing teams, your specifications can turn into a working tool within two weeks of print approval.

There are a number of ways to get started:

1. Send a tool print for an existing tool
2. Email tool specs
3. Provide a sketch of the tool concept
4. Complete a QUOTE SHEET (available at www.mitgi.us)

After we receive the tool information, we'll prepare an estimate and timeline. After receipt of the purchase order, we'll complete a MITGI tool print for your review. With your approval, the tool will move into production.

Contact us to get started today.

## S41 NPTF Full Form Helical Thread Mills

FLUTES 4

| Min. Thread Size | Pitch | Large End Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B | D | E | | | | |
| 1/16 & 1/8 | 27 | 0.245 | 0.437 | 0.250 | 2.50 | 4 | S41-001 | $94.41 | $99.03 |
| 1/4 & 3/8 | 18 | 0.305 | 0.625 | 0.3125 | 3.00 | 4 | S41-002 | $129.41 | $135.39 |
| 1/2 & 3/4 | 14 | 0.495 | 0.825 | 0.500 | 4.00 | 4 | S41-003 | $153.30 | $161.60 |
| 1 & 2 | 11.5 | 0.620 | 1.125 | 0.625 | 4.00 | 4 | S41-005 | $229.44 | $237.73 |

**SEE ALSO:**


p. 206 Custom Tools
p. 208 Coating

## S104 NPTF Full Form Straight Flute Thread Mills

FLUTES 4

| Min. Thread Size | Pitch | Large End Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B | D | E | | | | |
| 1/16 & 1/8 | 27 | 0.245 | 0.437 | 0.250 | 2.50 | 4 | S104-001 | $94.41 | $99.03 |
| 1/4 & 3/8 | 18 | 0.305 | 0.625 | 0.3125 | 3.00 | 4 | S104-002 | $129.41 | $135.40 |
| 1/2 & 3/4 | 14 | 0.495 | 0.825 | 0.500 | 4.00 | 4 | S104-003 | $153.30 | $161.60 |
| 1 & 2 | 11.5 | 0.620 | 1.125 | 0.625 | 4.00 | 4 | S104-004 | $229.44 | $237.73 |

**SEE ALSO:**


p. 206 Custom Tools
p. 208 Coating

## NPT Full Form Helical Thread Mills

**S51**

**FLUTES 4**

| Min. Thread Size | Pitch | Large End Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B | D | E | | | | |
| 1/16 & 1/8 | 27 | 0.245 | 0.437 | 0.250 | 2.50 | 4 | S51-001 | $94.41 | $99.03 |
| 1/4 & 3/8 | 18 | 0.305 | 0.625 | 0.3125 | 3.00 | 4 | S51-002 | $129.41 | $135.39 |
| 1/2 & 3/4 | 14 | 0.495 | 0.825 | 0.500 | 4.00 | 4 | S51-003 | $153.30 | $161.60 |
| 1 & 2 | 11.5 | 0.620 | 1.125 | 0.625 | 4.00 | 4 | S51-005 | $229.44 | $237.73 |

**SEE ALSO:**


p. 206 Custom Tools
p. 208 Coating


## NPT Full Form Straight Flute Thread Mills

**S103**

**FLUTES 4**

| Min. Thread Size | Pitch | Large End Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B | D | E | | | | |
| 1/16 & 1/8 | 27 | 0.245 | 0.437 | 0.250 | 2.50 | 4 | S103-001 | $94.41 | $99.03 |
| 1/4 & 3/8 | 18 | 0.305 | 0.625 | 0.3125 | 3.00 | 4 | S103-002 | $129.41 | $135.40 |
| 1/2 & 3/4 | 14 | 0.495 | 0.825 | 0.500 | 4.00 | 4 | S103-003 | $153.30 | $161.60 |
| 1 & 2 | 11.5 | 0.620 | 1.125 | 0.625 | 4.00 | 4 | S103-004 | $229.44 | $237.73 |

**SEE ALSO:**


p. 206 Custom Tools
p. 208 Coating


JUST IN TIME

*Need your coated tool quickly? All standard tools are available AlTiN coated in 3 days or less. See page 117 for more details.*

# S40 Metric Full Form Helical Thread Mills

FLUTES 4

| Min. Thread Size | Pitch (mm) | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B | D | E | | | | |
| M3 | 0.50 | 0.085 | 0.178 | 0.125 | 2.00 | 4 | S40-010 | $79.69 | $81.79 |
| M3.5 | 0.60 | 0.095 | 0.235 | 0.125 | 2.00 | 4 | S40-011 | $79.69 | $81.79 |
| M4 | 0.70 | 0.115 | 0.276 | 0.125 | 2.00 | 4 | S40-012 | $79.69 | $81.79 |
| M4.5 | 0.75 | 0.120 | 0.313 | 0.125 | 2.00 | 4 | S40-013 | $79.69 | $81.79 |
| M5 | 0.80 | 0.120 | 0.312 | 0.125 | 2.00 | 4 | S40-005 | $79.69 | $81.79 |
| M6 | 1.00 | 0.170 | 0.500 | 0.1875 | 2.50 | 4 | S40-006 | $94.54 | $99.16 |
| M8 | 1.25 | 0.235 | 0.625 | 0.250 | 3.00 | 4 | S40-001 | $100.48 | $105.10 |
| M10 | 1.50 | 0.300 | 0.750 | 0.3125 | 3.00 | 4 | S40-007 | $135.03 | $141.02 |
| M12 | 1.75 | 0.360 | 0.875 | 0.375 | 3.00 | 4 | S40-003 | $150.08 | $156.06 |
| M14 | 1.50 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S40-002 | $150.08 | $156.06 |
| M16 | 2.00 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S40-004 | $184.23 | $192.53 |
| M18 | 1.50 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S40-008 | $184.23 | $192.53 |
| M20 | 2.50 | 0.495 | 1.250 | 0.500 | 4.00 | 4 | S40-009 | $184.23 | $192.53 |
| M22 | 2.50 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S40-014 | $198.03 | $206.33 |
| M24 | 3.00 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S40-015 | $198.03 | $206.33 |
| M30 | 3.50 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S40-016 | $198.03 | $206.33 |
| M36 | 4.00 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S40-017 | $198.03 | $206.33 |

## SEE ALSO:


p. 206 Custom Tools

p. 208 Coating

## Metric Full Form Straight Flute Thread Mills

**S106**

**FLUTES 4**

| Min. Thread Size | Pitch (mm) | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B | D | E | | | | |
| M3 | 0.50 | 0.085 | 0.178 | 0.125 | 2.00 | 4 | S106-001 | $79.69 | $81.79 |
| M3.5 | 0.60 | 0.095 | 0.235 | 0.125 | 2.00 | 4 | S106-002 | $79.69 | $81.79 |
| M4 | 0.70 | 0.115 | 0.276 | 0.125 | 2.00 | 4 | S106-003 | $79.69 | $81.79 |
| M4.5 | 0.75 | 0.120 | 0.313 | 0.125 | 2.00 | 4 | S106-004 | $79.69 | $81.79 |
| M5 | 0.80 | 0.120 | 0.312 | 0.125 | 2.00 | 4 | S106-005 | $79.69 | $81.79 |
| M6 | 1.00 | 0.170 | 0.500 | 0.1875 | 2.50 | 4 | S106-006 | $94.54 | $99.16 |
| M8 | 1.25 | 0.235 | 0.625 | 0.250 | 3.00 | 4 | S106-007 | $100.48 | $105.10 |
| M10 | 1.50 | 0.300 | 0.750 | 0.3125 | 3.00 | 4 | S106-008 | $135.03 | $141.02 |
| M12 | 1.75 | 0.360 | 0.875 | 0.375 | 3.00 | 4 | S106-009 | $150.08 | $156.06 |
| M14 | 1.50 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S106-010 | $150.08 | $156.06 |
| M16 | 2.00 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S106-011 | $184.23 | $192.53 |
| M18 | 1.50 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S106-012 | $184.23 | $192.53 |
| M20 | 2.50 | 0.495 | 1.250 | 0.500 | 4.00 | 4 | S106-013 | $184.23 | $192.53 |
| M22 | 2.50 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S106-014 | $198.03 | $206.33 |
| M24 | 3.00 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S106-015 | $198.03 | $206.33 |
| M30 | 3.50 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S106-016 | $198.03 | $206.33 |
| M36 | 4.00 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S106-017 | $198.03 | $206.33 |

**SEE ALSO:**


p. 206 Custom Tools

p. 208 Coating


## CUSTOM

### SPECIALS / Thread Mills

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and number of flutes vary by design
- Custom thread mill types: single point, full form, and coolant thru
- Specs: shoulder angle, depth of thread, pitch, cutter diameter, length of cut, neck diameter, straight or helical flutes, reach
- Coated or uncoated
- Specials usually available in two weeks or less

MITGI
QUOTE SHEET / Thread Mill
Company Information
Tool Information
Quoting
Tool Material
Schedule and Production
Coating
GSS
TRCM

**Quote forms available on our website and upon request.**
**Contact us for an estimate today.**

# S172

## Coolant Thru UN Full Form Helical Thread Mills

FLUTES 3,4

COOLANT THRU

| Min. Thread Size and Pitch | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | B | D | E | | | | |
| 2-56 | 0.065 | 0.125 | 0.125 | 2.00 | 3 | S172-001 | $67.94 | $70.04 |
| 2-64 | 0.065 | 0.125 | 0.125 | 2.00 | 3 | S172-084 | $67.94 | $70.04 |
| 3-48 | 0.075 | 0.167 | 0.125 | 2.00 | 3 | S172-002 | $70.00 | $72.10 |
| 3-56 | 0.075 | 0.167 | 0.125 | 2.00 | 3 | S172-085 | $70.00 | $72.10 |
| 4-40 | 0.085 | 0.175 | 0.125 | 2.00 | 3 | S172-003 | $70.00 | $72.10 |
| 4-48 | 0.085 | 0.175 | 0.125 | 2.00 | 3 | S172-086 | $70.00 | $72.10 |
| 5-40 | 0.095 | 0.228 | 0.125 | 2.00 | 3 | S172-087 | $73.63 | $75.73 |
| 5-44 | 0.095 | 0.228 | 0.125 | 2.00 | 3 | S172-004 | $73.63 | $75.73 |
| 6-32 | 0.100 | 0.218 | 0.125 | 2.00 | 3 | S172-005 | $73.63 | $75.73 |
| 6-40 | 0.100 | 0.218 | 0.125 | 2.00 | 3 | S172-088 | $73.63 | $75.73 |
| 8-32 | 0.124 | 0.250 | 0.125 | 2.00 | 4 | S172-006 | $77.56 | $79.66 |
| 8-36 | 0.124 | 0.250 | 0.125 | 2.00 | 4 | S172-089 | $77.56 | $79.66 |
| 10-24 | 0.124 | 0.312 | 0.125 | 2.00 | 3 | S172-007 | $80.91 | $83.01 |
| 10-32 | 0.124 | 0.312 | 0.125 | 2.00 | 4 | S172-008 | $80.91 | $83.01 |
| 12-24 | 0.134 | 0.312 | 0.1875 | 2.00 | 4 | S172-091 | $99.07 | $103.69 |
| 12-28 | 0.134 | 0.312 | 0.1875 | 2.00 | 4 | S172-092 | $99.07 | $103.69 |
| 1/4-20 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S172-009 | $99.07 | $103.69 |
| 1/4-24 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S172-010 | $99.07 | $103.69 |
| 1/4-28 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S172-011 | $99.07 | $103.69 |
| 1/4-32 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S172-012 | $99.07 | $103.69 |
| 1/4-36 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S172-013 | $99.07 | $103.69 |
| 1/4-40 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S172-014 | $99.07 | $103.69 |
| 1/4-48 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S172-015 | $99.07 | $103.69 |
| 1/4-56 | 0.180 | 0.500 | 0.1875 | 2.50 | 4 | S172-016 | $99.07 | $103.69 |
| 5/16-18 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S172-018 | $117.48 | $122.10 |
| 5/16-20 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S172-019 | $117.48 | $122.10 |
| 5/16-24 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S172-020 | $117.48 | $122.10 |
| 5/16-28 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S172-021 | $117.48 | $122.10 |
| 5/16-32 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S172-022 | $117.48 | $122.10 |
| 5/16-36 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S172-023 | $117.48 | $122.10 |
| 5/16-40 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S172-024 | $117.48 | $122.10 |
| 5/16-48 | 0.240 | 0.625 | 0.250 | 2.50 | 4 | S172-025 | $117.48 | $122.10 |

### SEE ALSO:


p. 206 Custom Tools

p. 208 Coating

## Coolant Thru UN Full Form Helical Thread Mills



FLUTES 3,4

COOLANT THRU

| Min. Thread Size and Pitch | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | B | D | E | | | | |
| 3/8-16 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S172-026 | $144.15 | $150.13 |
| 3/8-18 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S172-027 | $144.15 | $150.13 |
| 3/8-20 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S172-028 | $144.15 | $150.13 |
| 3/8-24 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S172-029 | $144.15 | $150.13 |
| 3/8-28 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S172-030 | $144.15 | $150.13 |
| 3/8-32 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S172-031 | $144.15 | $150.13 |
| 3/8-36 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S172-032 | $144.15 | $150.13 |
| 3/8-40 | 0.290 | 0.750 | 0.3125 | 3.00 | 4 | S172-033 | $144.15 | $150.13 |
| 7/16-14 | 0.340 | 0.750 | 0.375 | 3.00 | 4 | S172-034 | $158.09 | $164.07 |
| 7/16-16 | 0.340 | 0.750 | 0.375 | 3.00 | 4 | S172-035 | $158.09 | $164.07 |
| 7/16-18 | 0.340 | 0.750 | 0.375 | 3.00 | 4 | S172-036 | $158.09 | $164.07 |
| 7/16-20 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S172-037 | $158.09 | $164.07 |
| 7/16-24 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S172-038 | $158.09 | $164.07 |
| 7/16-28 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S172-039 | $158.09 | $164.07 |
| 7/16-32 | 0.340 | 0.875 | 0.375 | 3.00 | 4 | S172-040 | $158.09 | $164.07 |
| 1/2-12 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-041 | $158.09 | $164.07 |
| 1/2-13 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-042 | $158.09 | $164.07 |
| 1/2-14 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-043 | $158.09 | $164.07 |
| 1/2-16 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-044 | $158.09 | $164.07 |
| 1/2-18 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-045 | $158.09 | $164.07 |
| 1/2-20 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-046 | $158.09 | $164.07 |
| 1/2-24 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-047 | $158.09 | $164.07 |
| 1/2-28 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-048 | $158.09 | $164.07 |
| 1/2-32 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-049 | $158.09 | $164.07 |
| 9/16-12 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-050 | $158.09 | $164.07 |
| 9/16-14 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-051 | $158.09 | $164.07 |
| 9/16-16 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-052 | $158.09 | $164.07 |
| 9/16-18 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-053 | $158.09 | $164.07 |
| 9/16-20 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-054 | $158.09 | $164.07 |
| 9/16-24 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-055 | $158.09 | $164.07 |
| 9/16-28 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-056 | $158.09 | $164.07 |
| 9/16-32 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S172-057 | $158.09 | $164.07 |

**SEE ALSO:**


| | |
|---|---|
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S172 Coolant Thru UN Full Form Helical Thread Mills

FLUTES 3,4

COOLANT THRU

| Min. Thread Size and Pitch | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | A | B | D | E | | | | |
| 5/8-11 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-058 | $220.35 | $228.65 |
| 5/8-12 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-059 | $220.35 | $228.65 |
| 5/8-14 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-060 | $220.35 | $228.65 |
| 5/8-16 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-061 | $220.35 | $228.65 |
| 5/8-18 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-062 | $220.35 | $228.65 |
| 5/8-20 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-063 | $220.35 | $228.65 |
| 5/8-24 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-064 | $220.35 | $228.65 |
| 5/8-28 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-065 | $220.35 | $228.65 |
| 5/8-32 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-066 | $220.35 | $228.65 |
| 3/4-10 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-067 | $220.35 | $228.65 |
| 3/4-12 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-068 | $220.35 | $228.65 |
| 3/4-14 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-069 | $220.35 | $228.65 |
| 3/4-16 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-070 | $220.35 | $228.65 |
| 3/4-18 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-071 | $220.35 | $228.65 |
| 3/4-20 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-072 | $220.35 | $228.65 |
| 3/4-24 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-073 | $220.35 | $228.65 |
| 3/4-28 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-074 | $220.35 | $228.65 |
| 3/4-32 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-075 | $220.35 | $228.65 |
| 7/8-9 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-076 | $220.35 | $228.65 |
| 7/8-12 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-077 | $220.35 | $228.65 |
| 7/8-14 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-078 | $220.35 | $228.65 |
| 7/8-16 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-079 | $220.35 | $228.65 |
| 7/8-18 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-080 | $220.35 | $228.65 |
| 7/8-20 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-090 | $220.35 | $228.65 |
| 7/8-24 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-081 | $220.35 | $228.65 |
| 7/8-28 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-082 | $220.35 | $228.65 |
| 7/8-32 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S172-083 | $220.35 | $228.65 |

## SEE ALSO:


p. 206 Custom Tools

p. 208 Coating

# MEASUREMENT CHART

| | | | Inches | MM |
|---|---|---|---|---|
| | | 1/64 | .015625 | .39688 |
| | 1/32 | | .03125 | .79375 |
| | | 3/64 | .046875 | 1.19063 |
| 1/16 | | | .0625 | 1.58750 |
| | | 5/64 | .078125 | 1.98438 |
| | 3/32 | | .09375 | 2.38125 |
| | | 7/64 | .109375 | 2.77813 |
| 1/8 | | | .125 | 3.17500 |
| | | 9/64 | .140625 | 3.57188 |
| | 5/32 | | .15625 | 3.96875 |
| | | 11/64 | .171875 | 4.36563 |
| 3/16 | | | .1875 | 4.76250 |
| | | 13/64 | .203125 | 5.15938 |
| | 7/32 | | .21875 | 5.55625 |
| | | 15/64 | .234375 | 5.95313 |
| 1/4 | | | .250 | 6.35000 |
| | | 17/64 | .265625 | 6.74688 |
| | 9/32 | | .28125 | 7.14375 |
| | | 19/64 | .296875 | 7.54063 |
| 5/16 | | | .3125 | 7.93750 |
| | | 21/64 | .328125 | 8.33438 |
| | 11/32 | | .34375 | 8.73125 |
| | | 23/64 | .359375 | 9.12813 |
| 3/8 | | | .375 | 9.52500 |
| | | 25/64 | .390625 | 9.92188 |
| | 13/32 | | .40625 | 10.31875 |
| | | 27/64 | .421875 | 10.71563 |
| 7/16 | | | .4375 | 11.11250 |
| | | 29/64 | .453125 | 11.50938 |
| | 15/32 | | .46875 | 11.90625 |
| | | 31/64 | .484375 | 12.30313 |
| 1/2 | | | .500 | 12.70000 |

| | | | Inches | MM |
|---|---|---|---|---|
| | | 33/64 | .515625 | 13.09688 |
| | 17/32 | | .53125 | 13.49375 |
| | | 35/64 | .546875 | 13.89063 |
| 9/16 | | | .5625 | 14.28750 |
| | | 37/64 | .578125 | 14.68438 |
| | 19/32 | | .59375 | 15.08125 |
| | | 39/64 | .609375 | 15.47813 |
| 5/8 | | | .625 | 15.87500 |
| | | 41/64 | .640625 | 16.27188 |
| | 21/32 | | .65625 | 16.66875 |
| | | 43/64 | .671875 | 17.06563 |
| 11/16 | | | .6875 | 17.46250 |
| | | 45/64 | .703125 | 17.85938 |
| | 23/32 | | .71875 | 18.25625 |
| | | 47/64 | .734375 | 18.65313 |
| 3/4 | | | .750 | 19.05000 |
| | | 49/64 | .765625 | 19.44688 |
| | 25/32 | | .78125 | 19.84375 |
| | | 51/64 | .796875 | 20.24063 |
| 13/16 | | | .8125 | 20.63750 |
| | | 53/64 | .828125 | 21.03438 |
| | 27/32 | | .84375 | 21.43125 |
| | | 55/64 | .859375 | 21.82813 |
| 7/8 | | | .875 | 22.22500 |
| | | 57/64 | .890625 | 22.62188 |
| | 29/32 | | .90625 | 23.01875 |
| | | 59/64 | .921875 | 23.41563 |
| 15/16 | | | .9375 | 23.81250 |
| | | 61/64 | .953125 | 24.20938 |
| | 31/32 | | .96875 | 24.60625 |
| | | 63/64 | .984375 | 25.00313 |
| 1 | | | 1.00 | 25.40000 |

## S170 Coolant Thru NPTF Full Form Helical Thread Mills

FLUTES 4

COOLANT THRU

| Min. Thread Size | Pitch | Large End Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B | D | E | | | | |
| 1/16 & 1/8 | 27 | 0.245 | 0.437 | 0.250 | 2.50 | 4 | S170-001 | $107.01 | $111.63 |
| 1/4 & 3/8 | 18 | 0.305 | 0.625 | 0.3125 | 3.00 | 4 | S170-002 | $152.20 | $158.18 |
| 1/2 & 3/4 | 14 | 0.495 | 0.825 | 0.500 | 4.00 | 4 | S170-003 | $195.20 | $203.49 |
| 1 & 2 | 11.5 | 0.620 | 1.125 | 0.625 | 4.00 | 4 | S170-004 | $291.28 | $299.58 |

**SEE ALSO:**

p. 206 Custom Tools
p. 208 Coating

## S171 Coolant Thru NPT Full Form Helical Thread Mills

FLUTES 4

COOLANT THRU

| Min. Thread Size | Pitch | Large End Cut-ter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B | D | E | | | | |
| 1/16 & 1/8 | 27 | 0.245 | 0.437 | 0.250 | 2.50 | 4 | S171-001 | $107.01 | $111.63 |
| 1/4 & 3/8 | 18 | 0.305 | 0.625 | 0.3125 | 3.00 | 4 | S171-002 | $152.20 | $158.18 |
| 1/2 & 3/4 | 14 | 0.495 | 0.825 | 0.500 | 4.00 | 4 | S171-003 | $195.20 | $203.49 |
| 1 & 2 | 11.5 | 0.620 | 1.125 | 0.625 | 4.00 | 4 | S171-004 | $291.28 | $299.58 |

**SEE ALSO:**

p. 206 Custom Tools
p. 208 Coating

**ONLINE ORDERING**

P. 2

All standard tools are available via online ordering. To place your order, visit www.mitgi.us and browse through the available selection. Or, use the SEARCH box to quickly find the tool using the tool numbers listed in the catalog. See page 2 for more info.

## Metric Coolant Thru Full Form Helical Thread Mills



FLUTES 4

COOLANT THRU

| Min. Thread Size | Pitch (mm) | Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| | | A | B | D | E | | | | |
| M3 | 0.50 | 0.085 | 0.178 | 0.125 | 2.00 | 4 | S173-001 | $88.09 | $90.19 |
| M3.5 | 0.60 | 0.095 | 0.235 | 0.125 | 2.00 | 4 | S173-002 | $88.09 | $90.19 |
| M4 | 0.70 | 0.115 | 0.276 | 0.125 | 2.00 | 4 | S173-003 | $88.09 | $90.19 |
| M4.5 | 0.75 | 0.120 | 0.313 | 0.125 | 2.00 | 4 | S173-004 | $88.09 | $90.19 |
| M5 | 0.80 | 0.120 | 0.312 | 0.125 | 2.00 | 4 | S173-005 | $88.09 | $90.19 |
| M6 | 1.00 | 0.170 | 0.500 | 0.1875 | 2.50 | 4 | S173-006 | $107.14 | $111.76 |
| M8 | 1.25 | 0.235 | 0.625 | 0.250 | 3.00 | 4 | S173-007 | $113.08 | $117.70 |
| M10 | 1.50 | 0.300 | 0.750 | 0.3125 | 3.00 | 4 | S173-008 | $151.83 | $157.82 |
| M12 | 1.75 | 0.360 | 0.875 | 0.375 | 3.00 | 4 | S173-009 | $166.88 | $172.86 |
| M14 | 1.50 | 0.370 | 0.875 | 0.375 | 3.00 | 4 | S173-010 | $166.88 | $172.86 |
| M16 | 2.00 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S173-011 | $217.83 | $226.13 |
| M18 | 1.50 | 0.490 | 1.250 | 0.500 | 4.00 | 4 | S173-012 | $217.83 | $226.13 |
| M20 | 2.50 | 0.495 | 1.250 | 0.500 | 4.00 | 4 | S173-013 | $217.83 | $226.13 |
| M22 | 2.50 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S173-014 | $281.30 | $289.59 |
| M24 | 3.00 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S173-015 | $281.30 | $289.59 |
| M30 | 3.50 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S173-016 | $281.30 | $289.59 |
| M36 | 4.00 | 0.620 | 1.250 | 0.625 | 4.00 | 4 | S173-017 | $281.30 | $289.59 |

### SEE ALSO:


p. 206 Custom Tools

p. 208 Coating


## CUSTOM

### SPECIALS / Coolant Thru Tools

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances vary by design
- Tool types: end mills, drills, reamers, thread mills, broaches
- Custom options: diameter, flute length, overall length of cut, reach
- Standard coolant thru material stocked and on-hand
- Specialty coolant thru materials available by special order
- Coated and uncoated
- Specials usually available in two weeks or less

**Quote forms available on the web and upon request.**
**Contact us for an estimate today.**

MITGI
QUOTE SHEET / Thread Mill
Company Information
Tool Information
Quoting
Tool Material
Schedule and Production
Coating
GSS
TRCM

## S42 30° Helix Square End Mills

FLUTES 4

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | S42-001 | $18.80 | $23.42 |
| 0.250 (1/4) | 0.625 | 0.250 | 2.50 | S42-002 | $25.12 | $29.74 |
| 0.375 (3/8) | 0.750 | 0.375 | 2.50 | S42-003 | $40.10 | $46.09 |
| 0.500 (1/2) | 1.00 | 0.500 | 3.00 | S42-004 | $75.11 | $83.40 |
| 0.750 (3/4) | 1.50 | 0.750 | 4.00 | S42-005 | $186.82 | $203.09 |
| 1.00 | 1.50 | 1.00 | 4.00 | S42-007 | $256.75 | $288.25 |
| 1.00 | 1.50 | 0.750 | 4.00 | S42-006* | $283.35 | $314.85 |

### SEE ALSO:

p. 206 Custom Tools
p. 208 Coating

### NOTE:

* 3/4" Reduced Shank

## S47 30° Helix Ball End Mills

FLUTES 4

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | S47-001 | $27.25 | $31.87 |
| 0.250 (1/4) | 0.625 | 0.250 | 2.50 | S47-002 | $34.09 | $38.71 |
| 0.375 (3/8) | 0.750 | 0.375 | 2.50 | S47-003 | $46.69 | $52.68 |
| 0.500 (1/2) | 1.00 | 0.500 | 3.00 | S47-004 | $89.50 | $97.80 |
| 0.750 (3/4) | 1.50 | 0.750 | 4.00 | S47-005 | $243.83 | $260.11 |
| 1.00 | 1.50 | 1.00 | 4.00 | S47-006 | $310.41 | $341.91 |
| 1.00 | 1.50 | 0.750 | 4.00 | S47-007* | $343.67 | $375.17 |

### SEE ALSO:

p. 206 Custom Tools
p. 208 Coating

### NOTE:

* 3/4" Reduced Shank

JUST IN TIME

*Need your tool quickly? All standard tools are available to ship within 3 days or less. See page 117 for more details.*

## 30° Helix Square End Mills

**S20**

FLUTES 5

1.5X LENGTH OF CUT

| Mill Diameter | Length of Cut | Shank Diameter | Overall Length | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.125 (1/8) | 0.1875 | 0.125 | 2.00 | S20-001 | $20.02 | $22.12 |
| 0.1875 (3/16) | 0.2810 | 0.1875 | 2.00 | S20-002 | $22.02 | $26.66 |
| 0.250 (1/4) | 0.3750 | 0.250 | 2.00 | S20-003 | $23.37 | $27.99 |
| 0.3125 (5/16) | 0.4690 | 0.3125 | 2.00 | S20-004 | $30.87 | $36.86 |
| 0.375 (3/8) | 0.5620 | 0.375 | 2.50 | S20-005 | $37.19 | $43.18 |
| 0.500 (1/2) | 0.7500 | 0.500 | 3.00 | S20-006 | $58.63 | $66.93 |

**SEE ALSO:**

p. 206 Custom Tools
p. 208 Coating

## 30° Helix Square End Mills

**S26**

FLUTES 5

3X LENGTH OF CUT

| Mill Diameter | Length of Cut | Shank Diameter | Overall Length | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.125 (1/8) | 0.3750 | 0.125 | 2.00 | S26-001 | $23.12 | $25.22 |
| 0.1875 (3/16) | 0.5625 | 0.1875 | 2.00 | S26-002 | $24.60 | $29.22 |
| 0.250 (1/4) | 0.7500 | 0.250 | 2.00 | S26-003 | $26.03 | $30.64 |
| 0.3125 (5/16) | 0.9375 | 0.3125 | 2.00 | S26-004 | $35.13 | $41.12 |
| 0.375 (3/8) | 1.1250 | 0.375 | 2.50 | S26-005 | $42.11 | $48.09 |
| 0.500 (1/2) | 1.5000 | 0.500 | 3.00 | S26-006 | $64.12 | $72.42 |

**SEE ALSO:**

p. 206 Custom Tools
p. 208 Coating

## S21 Square Variable Helix End Mills

FLUTES 5

1.5X LENGTH OF CUT

VARIABLE HELIX

| Mill Diameter | Length of Cut | Shank Diameter | Overall Length | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.125 (1/8) | 0.1875 | 0.125 | 1.50 | S21-001 | $42.95 | $45.05 |
| 0.1875 (3/16) | 0.2810 | 0.1875 | 2.00 | S21-005 | $53.76 | $58.38 |
| 0.250 (1/4) | 0.3750 | 0.250 | 2.00 | S21-002 | $63.89 | $68.51 |
| 0.375 (3/8) | 0.5630 | 0.375 | 2.50 | S21-003 | $75.02 | $81.01 |
| 0.500 (1/2) | 0.7500 | 0.500 | 3.00 | S21-004 | $107.78 | $116.08 |

**SEE ALSO:**


p. 206 Custom Tools
p. 208 Coating


## S14 Square Variable Helix End Mills

FLUTES 5

3X LENGTH OF CUT

VARIABLE HELIX

| Mill Diameter | Length of Cut | Shank Diameter | Overall Length | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| A | B | D | E | | | |
| 0.125 (1/8) | 0.3750 | 0.125 | 1.50 | S14-001 | $45.47 | $47.57 |
| 0.1875 (3/16) | 0.5625 | 0.1875 | 2.00 | S14-002 | $56.81 | $61.43 |
| 0.250 (1/4) | 0.7500 | 0.250 | 2.00 | S14-003 | $66.99 | $71.61 |
| 0.375 (3/8) | 1.1250 | 0.375 | 3.00 | S14-004 | $82.53 | $88.52 |
| 0.500 (1/2) | 1.5000 | 0.500 | 3.00 | S14-005 | $116.97 | $125.27 |

**SEE ALSO:**


p. 206 Custom Tools
p. 208 Coating


**ONLINE ORDERING**

P. 2

All standard tools are available via online ordering. To place your order, visit www.mitgi.us and browse through the available selection. Or, use the SEARCH box to quickly find the tool using the tool numbers listed in the catalog. See page 2 for more info.

## Square Aluminum Cutting End Mills

**S43**

FLUTES 3

CIRCULAR

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | Tool # | Price | TiCN Coated Price |
|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | |
| 0.125 (1/8) | 0.250 | N/A | 0.125 | 1.50 | S43-001 | $19.25 | $21.35 |
| 0.125 (1/8) | 0.250 | 0.500 | 0.125 | 1.50 | S43-002 | $25.25 | $27.35 |
| 0.125 (1/8) | 0.250 | 1.375 | 0.125 | 3.00 | S43-003 | $29.44 | $31.54 |
| 0.1875 (3/16) | 0.3125 | N/A | 0.1875 | 2.00 | S43-004 | $22.02 | $26.64 |
| 0.1875 (3/16) | 0.3125 | 0.500 | 0.1875 | 2.00 | S43-005 | $27.32 | $31.94 |
| 0.1875 (3/16) | 0.3125 | 1.375 | 0.1875 | 3.00 | S43-006 | $31.39 | $36.01 |
| 0.250 (1/4) | 0.375 | N/A | 0.250 | 2.50 | S43-007 | $26.67 | $31.29 |
| 0.250 (1/4) | 0.375 | 1.125 | 0.250 | 2.50 | S43-008 | $30.61 | $35.23 |
| 0.250 (1/4) | 0.375 | 2.125 | 0.250 | 4.00 | S43-009 | $35.45 | $40.07 |
| 0.375 (3/8) | 0.500 | N/A | 0.375 | 2.50 | S43-010 | $36.04 | $41.02 |
| 0.375 (3/8) | 0.500 | 1.125 | 0.375 | 2.50 | S43-011 | $40.88 | $45.86 |
| 0.375 (3/8) | 0.500 | 2.125 | 0.375 | 4.00 | S43-012 | $49.20 | $54.19 |
| 0.500 (1/2) | 0.625 | N/A | 0.500 | 3.00 | S43-013 | $60.44 | $66.80 |
| 0.500 (1/2) | 0.625 | 1.375 | 0.500 | 3.00 | S43-014 | $68.71 | $75.07 |
| 0.500 (1/2) | 0.625 | 2.375 | 0.500 | 4.00 | S43-015 | $76.07 | $82.43 |

**SEE ALSO:**

p. 206 Custom Tools
p. 208 Coating

## Single End Corner Rounding End Mills

**S22**

FLUTES 4

| Radius | Minor Diameter | Shank Diameter | Overall Length | # of Flutes | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| F | A | D | E | | | | |
| 0.010 | 0.105 | 0.125 | 1.50 | 4 | S22-001 | $27.25 | $29.35 |
| 0.015 | 0.095 | 0.125 | 1.50 | 4 | S22-002 | $27.25 | $29.35 |
| 0.020 | 0.085 | 0.125 | 1.50 | 4 | S22-003 | $27.25 | $29.35 |
| 0.025 | 0.075 | 0.125 | 1.50 | 4 | S22-004 | $27.25 | $29.35 |
| 0.031 | 0.063 | 0.125 | 1.50 | 4 | S22-005 | $27.25 | $29.35 |
| 0.035 | 0.055 | 0.125 | 1.50 | 4 | S22-006 | $27.25 | $29.35 |
| 0.040 | 0.045 | 0.125 | 1.50 | 4 | S22-007 | $27.25 | $29.35 |
| 0.047 | 0.094 | 0.1875 | 2.00 | 4 | S22-008 | $35.91 | $40.52 |
| 0.050 | 0.087 | 0.1875 | 2.00 | 4 | S22-009 | $35.91 | $40.52 |
| 0.055 | 0.077 | 0.1875 | 2.00 | 4 | S22-010 | $35.91 | $40.52 |
| 0.062 | 0.063 | 0.1875 | 2.00 | 4 | S22-011 | $35.91 | $40.52 |

**SEE ALSO:**

p. 206 Custom Tools
p. 208 Coating

# S100

## 270° Undercutting End Mills / Cherry Ball Tools

FLUTES 2,4

| Cutter Diameter | Overall Reach | Shank Diameter | Overall Length | Neck Diameter | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | C | D | E | G | | | | |
| 0.0156 (1/64) | 0.016 | 0.125 | 1.50 | 0.0094 | S100-001-270 | N/A | $77.91 | $80.01 |
| 0.0156 (1/64) | 0.031 | 0.125 | 1.50 | 0.0094 | S100-002-270 | N/A | $79.49 | $81.59 |
| 0.0156 (1/64) | 0.063 | 0.125 | 1.50 | 0.0094 | S100-003-270 | N/A | $81.06 | $83.16 |
| 0.50mm | 0.016 | 3mm | 1.50 | 0.0118 | S100-004-270 | N/A | $64.73 | $66.83 |
| 0.50mm | 0.031 | 3mm | 1.50 | 0.0118 | S100-005-270 | N/A | $66.31 | $68.41 |
| 0.50mm | 0.063 | 3mm | 1.50 | 0.0118 | S100-006-270 | N/A | $67.88 | $69.98 |
| 0.03125 (1/32) | 0.031 | 0.125 | 1.50 | 0.0188 | S100-007-270 | S100-008-270 | $47.67 | $49.77 |
| 0.03125 (1/32) | 0.063 | 0.125 | 1.50 | 0.0188 | S100-009-270 | S100-010-270 | $49.25 | $51.35 |
| 0.03125 (1/32) | 0.125 | 0.125 | 1.50 | 0.0188 | S100-011-270 | S100-012-270 | $50.82 | $52.92 |
| 1.00mm | 0.031 | 3mm | 1.50 | 0.0236 | S100-013-270 | S100-014-270 | $47.67 | $49.77 |
| 1.00mm | 0.063 | 3mm | 1.50 | 0.0236 | S100-015-270 | S100-016-270 | $49.25 | $51.35 |
| 1.00mm | 0.125 | 3mm | 1.50 | 0.0236 | S100-017-270 | S100-018-270 | $50.82 | $52.92 |
| 1.50mm | 0.031 | 3mm | 1.50 | 0.0354 | S100-019-270 | S100-020-270 | $42.21 | $44.31 |
| 1.50mm | 0.063 | 3mm | 1.50 | 0.0354 | S100-021-270 | S100-022-270 | $43.79 | $45.89 |
| 1.50mm | 0.125 | 3mm | 1.50 | 0.0354 | S100-023-270 | S100-024-270 | $45.36 | $47.46 |
| 0.0625 (1/16) | 0.063 | 0.125 | 1.50 | 0.0375 | S100-025-270 | S100-026-270 | $32.97 | $35.07 |
| 0.0625 (1/16) | 0.125 | 0.125 | 1.50 | 0.0375 | S100-027-270 | S100-028-270 | $34.55 | $36.65 |
| 0.0625 (1/16) | 0.250 | 0.125 | 1.50 | 0.0375 | S100-029-270 | S100-030-270 | $36.12 | $38.22 |
| 2.00mm | 0.063 | 3mm | 1.50 | 0.0472 | S100-031-270 | S100-032-270 | $31.29 | $33.39 |
| 2.00mm | 0.125 | 3mm | 1.50 | 0.0472 | S100-033-270 | S100-034-270 | $32.87 | $34.97 |
| 2.00mm | 0.250 | 3mm | 1.50 | 0.0472 | S100-035-270 | S100-036-270 | $34.44 | $36.54 |
| 2.50mm | 0.063 | 3mm | 1.50 | 0.0591 | S100-037-270 | S100-038-270 | $29.24 | $31.34 |
| 2.50mm | 0.125 | 3mm | 1.50 | 0.0591 | S100-039-270 | S100-040-270 | $30.82 | $32.92 |
| 2.50mm | 0.250 | 3mm | 1.50 | 0.0591 | S100-041-270 | S100-042-270 | $32.39 | $34.49 |
| 3.00mm | 0.125 | 3mm | 1.50 | 0.0709 | S100-043-270 | S100-044-270 | $27.72 | $29.82 |
| 3.00mm | 0.250 | 3mm | 1.50 | 0.0709 | S100-045-270 | S100-046-270 | $29.30 | $31.40 |
| 3.00mm | 0.500 | 3mm | 1.50 | 0.0709 | S100-047-270 | S100-048-270 | $30.87 | $32.97 |
| 0.125 (1/8) | 0.125 | 0.125 | 1.50 | 0.0750 | S100-049-270 | S100-050-270 | $27.72 | $29.82 |
| 0.125 (1/8) | 0.250 | 0.125 | 1.50 | 0.0750 | S100-051-270 | S100-052-270 | $29.30 | $31.40 |
| 0.125 (1/8) | 0.500 | 0.125 | 1.50 | 0.0750 | S100-053-270 | S100-054-270 | $30.87 | $32.97 |
| 3.50mm | 0.125 | 4mm | 2.50 | 0.0827 | S100-055-270 | S100-056-270 | $30.66 | $35.28 |
| 3.50mm | 0.250 | 4mm | 2.50 | 0.0827 | S100-057-270 | S100-058-270 | $32.76 | $37.38 |
| 3.50mm | 0.500 | 4mm | 2.50 | 0.0827 | S100-059-270 | S100-060-270 | $34.34 | $38.96 |
| 4.00mm | 0.125 | 4mm | 2.50 | 0.1024 | S100-061-270 | S100-062-270 | $30.66 | $35.28 |
| 4.00mm | 0.250 | 4mm | 2.50 | 0.1024 | S100-063-270 | S100-064-270 | $32.76 | $37.38 |
| 4.00mm | 0.500 | 4mm | 2.50 | 0.1024 | S100-065-270 | S100-066-270 | $34.34 | $38.96 |
| 0.1875 (3/16) | 0.250 | 0.1875 | 2.50 | 0.1219 | S100-067-270 | S100-068-270 | $32.34 | $36.96 |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.50 | 0.1219 | S100-069-270 | S100-070-270 | $34.44 | $39.06 |
| 0.1875 (3/16) | 0.750 | 0.1875 | 2.50 | 0.1219 | S100-071-270 | S100-072-270 | $36.02 | $40.64 |
| 5.50mm | 0.250 | 6mm | 2.50 | 0.1407 | S100-073-270 | S100-074-270 | $35.12 | $39.74 |
| 5.50mm | 0.500 | 6mm | 2.50 | 0.1407 | S100-075-270 | S100-076-270 | $37.22 | $41.84 |
| 5.50mm | 0.750 | 6mm | 2.50 | 0.1407 | S100-077-270 | S100-078-270 | $38.80 | $43.42 |
| 6.00mm | 0.250 | 6mm | 2.50 | 0.1535 | S100-079-270 | S100-080-270 | $42.21 | $46.83 |
| 6.00mm | 0.500 | 6mm | 2.50 | 0.1535 | S100-081-270 | S100-082-270 | $44.31 | $48.93 |
| 6.00mm | 0.750 | 6mm | 2.50 | 0.1535 | S100-083-270 | S100-084-270 | $45.89 | $50.51 |

## 270° Undercutting End Mills / Cherry Ball Tools

**S100**

**FLUTES 2,4**

| Cutter Diameter | Overall Reach | Shank Diameter | Overall Length | Neck Diameter | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | C | D | E | G | | | | |
| 0.250 (1/4) | 0.250 | 0.250 | 2.50 | 0.1625 | S100-085-270 | S100-086-270 | $44.36 | $48.98 |
| 0.250 (1/4) | 0.500 | 0.250 | 2.50 | 0.1625 | S100-087-270 | S100-088-270 | $46.46 | $51.08 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 0.1625 | S100-089-270 | S100-090-270 | $48.04 | $52.66 |
| 0.3125 (5/16) | 0.250 | 0.3125 | 2.50 | 0.2031 | S100-091-270 | S100-092-270 | $51.66 | $57.65 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 2.50 | 0.2031 | S100-093-270 | S100-094-270 | $53.76 | $59.75 |
| 0.3125 (5/16) | 0.750 | 0.3125 | 2.50 | 0.2031 | S100-095-270 | S100-096-270 | $55.34 | $61.32 |
| 0.375 (3/8) | 0.250 | 0.375 | 2.50 | 0.2438 | S100-097-270 | S100-098-270 | $60.59 | $66.57 |
| 0.375 (3/8) | 0.500 | 0.375 | 2.50 | 0.2438 | S100-099-270 | S100-100-270 | $63.21 | $69.20 |
| 0.375 (3/8) | 0.750 | 0.375 | 2.50 | 0.2438 | S100-101-270 | S100-102-270 | $64.79 | $70.77 |

**SEE ALSO:**


p. 206 Custom Tools
p. 208 Coating


## CUSTOM

## SPECIALS / Undercutting End Mills, Cherry Ball End Mills, Lollipop Tools

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and number of flutes vary by design
- Cutter diameter sizes = 0.0156 (1/64) to 0.375 (3/8)
- Any spherical ball size, multiple neck lengths, cutter diameter, reach
- Coated or uncoated
- Specials usually available in two weeks or less

MITGI
QUOTE SHEET / Undercutting End Mill
Cherry Ball Tool

Company Information
Tool Information
Quoting
Schedule and Production
Tool Material
Coating
GSS

**Quote forms available on our website and upon request.**
**Contact us for an estimate today.**

# S16 90° Carbide NC Spot Drills

| Cutter Diameter | Shank Diameter | Overall Length | Flute Length | Facet Point | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | D | E | B | | | | |
| 0.0313 (1/32) | 0.125 (1/8) | 1.50 | 0.093 | N/A | S16-017 | $18.95 | $21.05 |
| 0.0313 (1/32) | 0.125 (1/8) | 1.50 | 0.093 | 4 Facet Point | S16-018 | $18.95 | $21.05 |
| 0.0625 (1/16) | 0.125 (1/8) | 1.50 | 0.188 | N/A | S16-019 | $18.95 | $21.05 |
| 0.0625 (1/16) | 0.125 (1/8) | 1.50 | 0.188 | 4 Facet Point | S16-020 | $18.95 | $21.05 |
| 0.125 (1/8) | 0.125 (1/8) | 2.00 | 0.375 | N/A | S16-001 | $16.40 | $18.50 |
| 0.125 (1/8) | 0.125 (1/8) | 2.00 | 0.375 | 4 Facet Point | S16-002 | $16.40 | $18.50 |
| 0.1875 (3/16) | 0.1875 (3/16) | 2.00 | 0.625 | N/A | S16-003 | $17.57 | $22.19 |
| 0.1875 (3/16) | 0.1875 (3/16) | 2.00 | 0.625 | 4 Facet Point | S16-004 | $17.57 | $22.19 |
| 0.250 (1/4) | 0.250 (1/4) | 2.00 | 0.625 | N/A | S16-005 | $26.86 | $31.48 |
| 0.250 (1/4) | 0.250 (1/4) | 2.00 | 0.625 | 4 Facet Point | S16-006 | $26.86 | $31.48 |
| 0.3125 (5/16) | 0.3125 (5/16) | 2.00 | 0.750 | N/A | S16-007 | $35.65 | $41.63 |
| 0.3125 (5/16) | 0.3125 (5/16) | 2.00 | 0.750 | 4 Facet Point | S16-008 | $35.65 | $41.63 |
| 0.375 (3/8) | 0.375 (3/8) | 2.50 | 0.750 | N/A | S16-009 | $45.78 | $51.77 |
| 0.375 (3/8) | 0.375 (3/8) | 2.50 | 0.750 | 4 Facet Point | S16-010 | $45.78 | $51.77 |
| 0.500 (1/2) | 0.500 (1/2) | 3.00 | 1.000 | N/A | S16-011 | $65.93 | $74.23 |
| 0.500 (1/2) | 0.500 (1/2) | 3.00 | 1.000 | 4 Facet Point | S16-012 | $65.93 | $74.23 |
| 0.625 (5/8) | 0.625 (5/8) | 3.50 | 1.125 | N/A | S16-013 | $130.05 | $138.35 |
| 0.625 (5/8) | 0.625 (5/8) | 3.50 | 1.125 | 4 Facet Point | S16-014 | $130.05 | $138.35 |
| 0.750 (3/4) | 0.750 (3/4) | 4.00 | 1.250 | N/A | S16-015 | $197.73 | $214.00 |
| 0.750 (3/4) | 0.750 (3/4) | 4.00 | 1.250 | 4 Facet Point | S16-016 | $197.73 | $214.00 |

**SEE ALSO:**


p. 206 Custom Tools
p. 208 Coating

# CUSTOM SPECIALS / Spot Drills

## Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.

## MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and flute types vary by design
- Specs include: shoulder angle, flute length, included point angle, and drill diameter
- Extended reach and extended length of cut options
- Carbide or HSS
- Coated and uncoated
- Specials usually available in two weeks or less

MITGI
QUOTE SHEET / Drill, Drill Mill, Spot Drill
G-Style Drill, Double Margin Drill

Company Information
Tool Information
Quoting
Tool Material
GSS
Schedule and Production
Coating
End Finish

**Quote forms available on our website and upon request.**
**Contact us for an estimate today.**

## 118° Carbide NC Spot Drills



| Cutter Diameter | Shank Diameter | Overall Length | Flute Length | Facet Point | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | D | E | B | | | | |
| 0.0313 (1/32) | 0.125 (1/8) | 1.50 | 0.093 | N/A | S213-017 | $18.95 | $21.05 |
| 0.0313 (1/32) | 0.125 (1/8) | 1.50 | 0.093 | 4 Facet Point | S213-018 | $18.95 | $21.05 |
| 0.0625 (1/16) | 0.125 (1/8) | 1.50 | 0.188 | N/A | S213-019 | $18.95 | $21.05 |
| 0.0625 (1/16) | 0.125 (1/8) | 1.50 | 0.188 | 4 Facet Point | S213-020 | $18.95 | $21.05 |
| 0.125 (1/8) | 0.125 (1/8) | 2.00 | 0.375 | N/A | S213-001 | $16.40 | $18.50 |
| 0.125 (1/8) | 0.125 (1/8) | 2.00 | 0.375 | 4 Facet Point | S213-002 | $16.40 | $18.50 |
| 0.1875 (3/16) | 0.1875 (3/16) | 2.00 | 0.625 | N/A | S213-003 | $17.57 | $22.19 |
| 0.1875 (3/16) | 0.1875 (3/16) | 2.00 | 0.625 | 4 Facet Point | S213-004 | $17.57 | $22.19 |
| 0.250 (1/4) | 0.250 (1/4) | 2.00 | 0.625 | N/A | S213-005 | $26.86 | $31.48 |
| 0.250 (1/4) | 0.250 (1/4) | 2.00 | 0.625 | 4 Facet Point | S213-006 | $26.86 | $31.48 |
| 0.3125 (5/16) | 0.3125 (5/16) | 2.00 | 0.750 | N/A | S213-007 | $35.65 | $41.63 |
| 0.3125 (5/16) | 0.3125 (5/16) | 2.00 | 0.750 | 4 Facet Point | S213-008 | $35.65 | $41.63 |
| 0.375 (3/8) | 0.375 (3/8) | 2.50 | 0.750 | N/A | S213-009 | $45.78 | $51.77 |
| 0.375 (3/8) | 0.375 (3/8) | 2.50 | 0.750 | 4 Facet Point | S213-010 | $45.78 | $51.77 |
| 0.500 (1/2) | 0.500 (1/2) | 3.00 | 1.000 | N/A | S213-011 | $65.93 | $74.23 |
| 0.500 (1/2) | 0.500 (1/2) | 3.00 | 1.000 | 4 Facet Point | S213-012 | $65.93 | $74.23 |
| 0.625 (5/8) | 0.625 (5/8) | 3.50 | 1.125 | N/A | S213-013 | $130.05 | $138.35 |
| 0.625 (5/8) | 0.625 (5/8) | 3.50 | 1.125 | 4 Facet Point | S213-014 | $130.05 | $138.35 |
| 0.750 (3/4) | 0.750 (3/4) | 4.00 | 1.250 | N/A | S213-015 | $197.73 | $214.00 |
| 0.750 (3/4) | 0.750 (3/4) | 4.00 | 1.250 | 4 Facet Point | S213-016 | $197.73 | $214.00 |

### SEE ALSO:


p. 206 Custom Tools
p. 208 Coating

# S110 140° Carbide NC Spot Drills

| Cutter Diameter | Shank Diameter | Overall Length | Flute Length | Facet Point | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|
| A | D | E | B | | | | |
| 0.0313 (1/32) | 0.125 (1/8) | 1.50 | 0.093 | N/A | S110-017 | $18.95 | $21.05 |
| 0.0313 (1/32) | 0.125 (1/8) | 1.50 | 0.093 | 4 Facet Point | S110-018 | $18.95 | $21.05 |
| 0.0625 (1/16) | 0.125 (1/8) | 1.50 | 0.188 | N/A | S110-019 | $18.95 | $21.05 |
| 0.0625 (1/16) | 0.125 (1/8) | 1.50 | 0.188 | 4 Facet Point | S110-020 | $18.95 | $21.05 |
| 0.125 (1/8) | 0.125 (1/8) | 2.00 | 0.375 | N/A | S110-001 | $16.40 | $18.50 |
| 0.125 (1/8) | 0.125 (1/8) | 2.00 | 0.375 | 4 Facet Point | S110-002 | $16.40 | $18.50 |
| 0.1875 (3/16) | 0.1875 (3/16) | 2.00 | 0.625 | N/A | S110-003 | $17.57 | $22.19 |
| 0.1875 (3/16) | 0.1875 (3/16) | 2.00 | 0.625 | 4 Facet Point | S110-004 | $17.57 | $22.19 |
| 0.250 (1/4) | 0.250 (1/4) | 2.00 | 0.625 | N/A | S110-005 | $26.86 | $31.48 |
| 0.250 (1/4) | 0.250 (1/4) | 2.00 | 0.625 | 4 Facet Point | S110-006 | $26.86 | $31.48 |
| 0.3125 (5/16) | 0.3125 (5/16) | 2.00 | 0.750 | N/A | S110-007 | $35.65 | $41.63 |
| 0.3125 (5/16) | 0.3125 (5/16) | 2.00 | 0.750 | 4 Facet Point | S110-008 | $35.65 | $41.63 |
| 0.375 (3/8) | 0.375 (3/8) | 2.50 | 0.750 | N/A | S110-009 | $45.78 | $51.77 |
| 0.375 (3/8) | 0.375 (3/8) | 2.50 | 0.750 | 4 Facet Point | S110-010 | $45.78 | $51.77 |
| 0.500 (1/2) | 0.500 (1/2) | 3.00 | 1.000 | N/A | S110-011 | $65.93 | $74.23 |
| 0.500 (1/2) | 0.500 (1/2) | 3.00 | 1.000 | 4 Facet Point | S110-012 | $65.93 | $74.23 |
| 0.625 (5/8) | 0.625 (5/8) | 3.50 | 1.125 | N/A | S110-013 | $130.05 | $138.35 |
| 0.625 (5/8) | 0.625 (5/8) | 3.50 | 1.125 | 4 Facet Point | S110-014 | $130.05 | $138.35 |
| 0.750 (3/4) | 0.750 (3/4) | 4.00 | 1.250 | N/A | S110-015 | $197.73 | $214.00 |
| 0.750 (3/4) | 0.750 (3/4) | 4.00 | 1.250 | 4 Facet Point | S110-016 | $197.73 | $214.00 |

## SEE ALSO:


| | |
|---|---|
| p. 206 | Custom Tools |
| p. 208 | Coating |

## 60° Drill Mills, Carbide

**S33**

**FLUTES 2,4**

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Drill Point | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.125 (1/8) | 0.500 | 0.125 | 1.50 | 60° | S33-003 | S33-004 | $31.84 | $33.94 |
| 0.1875 (3/16) | 0.625 | 0.1875 | 2.00 | 60° | S33-005 | S33-006 | $33.00 | $37.62 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 60° | S33-007 | S33-008 | $44.94 | $49.56 |

## 90° Drill Mills, Carbide

**S28**

**FLUTES 2,4**

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Drill Point | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.125 (1/8) | 0.500 | 0.125 | 1.50 | 90° | S28-001 | S28-002 | $31.84 | $33.94 |
| 0.1875 (3/16) | 0.625 | 0.1875 | 2.00 | 90° | S28-003 | S28-004 | $33.00 | $37.62 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 90° | S28-005 | S28-006 | $44.94 | $49.56 |

## 120° Drill Mills, Carbide

**S29**

**FLUTES 2,4**

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Drill Point | 2 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | D | E | | | | | |
| 0.125 (1/8) | 0.500 | 0.125 | 1.50 | 120° | S29-001 | S29-002 | $31.84 | $33.94 |
| 0.1875 (3/16) | 0.625 | 0.1875 | 2.00 | 120° | S29-003 | S29-004 | $33.00 | $37.62 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 120° | S29-005 | S29-006 | $44.94 | $49.56 |

**SEE ALSO:**


| | |
|---|---|
| p. 206 | Custom Tools |
| p. 208 | Coating |


## CUSTOM SPECIALS / Drill Mills

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and number of flutes vary by design
- Specs: shoulder angle, length of cut, included point angle, and cutter diameter
- Coated and uncoated
- Specials usually available in two weeks or less

**Quote forms available on our website and upon request. Contact us for an estimate today.**

# S97 Square Keyseat Cutters

TEETH 6,8

QUICK TURN SPECIALS

KEYSEAT CUTTER TOOL DIAGRAMS FOUND ON PAGE 183

| Cutter Diameter | Overall Reach | Shank Diameter | Overall Length | Neck Diameter | Cutter Width | # of Teeth | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | C | D | E | G | H | | | | |
| 0.0625 (1/16) | 0.094 | 0.125 | 1.50 | 0.031 | 0.016 | 6 | S97-001-SQ | $45.68 | $47.78 |
| 0.0625 (1/16) | 0.188 | 0.125 | 1.50 | 0.031 | 0.016 | 6 | S97-002-SQ | $47.72 | $49.82 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.063 | 0.031 | 6 | S97-003-SQ | $38.22 | $40.32 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.063 | 0.031 | 6 | S97-004-SQ | $44.68 | $46.78 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.063 | 0.063 | 6 | S97-005-SQ | $38.22 | $40.32 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.063 | 0.063 | 6 | S97-006-SQ | $44.68 | $46.78 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.063 | 0.125 | 6 | S97-007-SQ | $38.22 | $40.32 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.063 | 0.125 | 6 | S97-008-SQ | $44.68 | $46.78 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.094 | 0.063 | 6 | S97-009-SQ | $39.17 | $43.79 |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | 0.094 | 0.063 | 6 | S97-010-SQ | $49.35 | $53.97 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.094 | 0.125 | 6 | S97-011-SQ | $39.17 | $43.79 |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | 0.094 | 0.125 | 6 | S97-012-SQ | $49.35 | $53.97 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.094 | 0.188 | 6 | S97-013-SQ | $39.17 | $43.79 |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | 0.094 | 0.188 | 6 | S97-014-SQ | $49.35 | $53.97 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.125 | 0.063 | 6 | S97-015-SQ | $44.84 | $49.46 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 0.125 | 0.063 | 6 | S97-016-SQ | $54.86 | $59.48 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.125 | 0.125 | 6 | S97-017-SQ | $44.84 | $49.46 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 0.125 | 0.125 | 6 | S97-018-SQ | $54.86 | $59.48 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.125 | 0.188 | 6 | S97-019-SQ | $44.84 | $49.46 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 0.125 | 0.188 | 6 | S97-020-SQ | $54.86 | $59.48 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.063 | 6 | S97-021-SQ | $66.31 | $72.29 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.063 | 6 | S97-022-SQ | $78.75 | $84.74 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.094 | 6 | S97-041-SQ | $66.31 | $72.29 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.094 | 6 | S97-042-SQ | $78.75 | $84.74 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.125 | 6 | S97-023-SQ | $66.31 | $72.29 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.125 | 6 | S97-024-SQ | $78.75 | $84.74 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.188 | 6 | S97-025-SQ | $66.31 | $72.29 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.188 | 6 | S97-026-SQ | $78.75 | $84.74 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.063 | 8 | S97-027-SQ | $74.76 | $80.75 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.063 | 8 | S97-028-SQ | $88.10 | $94.08 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.094 | 8 | S97-043-SQ | $74.76 | $80.75 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.094 | 8 | S97-044-SQ | $88.10 | $94.08 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.125 | 8 | S97-029-SQ | $74.76 | $80.75 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.125 | 8 | S97-030-SQ | $88.10 | $94.08 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.250 | 8 | S97-031-SQ | $74.76 | $80.75 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.250 | 8 | S97-032-SQ | $88.10 | $94.08 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.094 | 8 | S97-033-SQ | $84.68 | $92.98 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.094 | 8 | S97-034-SQ | $95.71 | $104.00 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.125 | 8 | S97-035-SQ | $84.68 | $92.98 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.125 | 8 | S97-036-SQ | $95.71 | $104.00 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.250 | 8 | S97-037-SQ | $84.68 | $92.98 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.250 | 8 | S97-038-SQ | $95.71 | $104.00 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.375 | 8 | S97-039-SQ | $84.68 | $92.98 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.375 | 8 | S97-040-SQ | $95.71 | $104.00 |

## Standard Keyseat Cutters are available in a variety of end finishes: square, corner radius, full radius, and 45° chamfer.

Each of our standard keyseat cutter lines include a variety of tools, all available in 3 days or less. See pages 182-187 for the list of tools offered in each standard line.

Don't see exactly what you need? Slight modifications to the specs on our standard keyseats may qualify for Quick Turn timelines. More complex keyseats are usually available in 2 weeks or less. Contact us with your modified standard or custom keyseat requests for timelines and production schedule availability.

### SQUARE KEYSEAT CUTTERS, p. 182

### CORNER RADIUS KEYSEAT CUTTERS, p. 184-185

### FULL RADIUS KEYSEAT CUTTERS, p. 186

### 45° CHAMFER KEYSEAT CUTTERS, p. 187

# S219 Corner Radius Keyseat Cutters

TEETH 6,8

QUICK TURN SPECIALS

KEYSEAT CUTTER TOOL DIAGRAMS FOUND ON PAGE 183

| Cutter Diameter | Overall Reach | Shank Diameter | Overall Length | Corner Radius | Neck Diameter | Cutter Width | # of Teeth | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | C | D | E | F | G | H | | | | |
| 0.0625 (1/16) | 0.094 | 0.125 | 1.50 | 0.005 | 0.031 | 0.016 | 6 | S219-001-.005R | $61.27 | $63.37 |
| 0.0625 (1/16) | 0.094 | 0.125 | 1.50 | 0.010 | 0.031 | 0.016 | 6 | S219-002-.010R | $61.27 | $63.37 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.005 | 0.063 | 0.031 | 6 | S219-003-.005R | $51.98 | $54.08 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.010 | 0.063 | 0.031 | 6 | S219-004-.010R | $51.98 | $54.08 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.005 | 0.063 | 0.063 | 6 | S219-005-.005R | $51.98 | $54.08 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.010 | 0.063 | 0.063 | 6 | S219-006-.010R | $51.98 | $54.08 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.005 | 0.063 | 0.125 | 6 | S219-007-.005R | $51.98 | $54.08 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.010 | 0.063 | 0.125 | 6 | S219-008-.010R | $51.98 | $54.08 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.005 | 0.094 | 0.063 | 6 | S219-009-.005R | $59.43 | $64.05 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.010 | 0.094 | 0.063 | 6 | S219-010-.010R | $59.43 | $64.05 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.015 | 0.094 | 0.063 | 6 | S219-011-.015R | $59.43 | $64.05 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.005 | 0.094 | 0.125 | 6 | S219-012-.005R | $59.43 | $64.05 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.010 | 0.094 | 0.125 | 6 | S219-013-.010R | $59.43 | $64.05 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.015 | 0.094 | 0.125 | 6 | S219-014-.015R | $59.43 | $64.05 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.005 | 0.094 | 0.188 | 6 | S219-015-.005R | $59.43 | $64.05 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.010 | 0.094 | 0.188 | 6 | S219-016-.010R | $59.43 | $64.05 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.015 | 0.094 | 0.188 | 6 | S219-017-.015R | $59.43 | $64.05 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.005 | 0.125 | 0.063 | 6 | S219-018-.005R | $71.98 | $76.60 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.010 | 0.125 | 0.063 | 6 | S219-019-.010R | $71.98 | $76.60 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.015 | 0.125 | 0.063 | 6 | S219-020-.015R | $71.98 | $76.60 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.005 | 0.125 | 0.125 | 6 | S219-021-.005R | $71.98 | $76.60 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.010 | 0.125 | 0.125 | 6 | S219-022-.010R | $71.98 | $76.60 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.015 | 0.125 | 0.125 | 6 | S219-023-.015R | $71.98 | $76.60 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.005 | 0.125 | 0.188 | 6 | S219-024-.005R | $71.98 | $76.60 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.010 | 0.125 | 0.188 | 6 | S219-025-.010R | $71.98 | $76.60 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.015 | 0.125 | 0.188 | 6 | S219-026-.015R | $71.98 | $76.60 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.005 | 0.156 | 0.063 | 6 | S219-027-.005R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.010 | 0.156 | 0.063 | 6 | S219-028-.010R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.015 | 0.156 | 0.063 | 6 | S219-029-.015R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.005 | 0.156 | 0.094 | 6 | S219-030-.005R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.010 | 0.156 | 0.094 | 6 | S219-031-.010R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.015 | 0.156 | 0.094 | 6 | S219-032-.015R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.005 | 0.156 | 0.125 | 6 | S219-033-.005R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.010 | 0.156 | 0.125 | 6 | S219-034-.010R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.015 | 0.156 | 0.125 | 6 | S219-035-.015R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.005 | 0.156 | 0.188 | 6 | S219-036-.005R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.010 | 0.156 | 0.188 | 6 | S219-037-.010R | $76.13 | $82.11 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.015 | 0.156 | 0.188 | 6 | S219-038-.015R | $76.13 | $82.11 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.005 | 0.188 | 0.063 | 8 | S219-039-.005R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.010 | 0.188 | 0.063 | 8 | S219-040-.010R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.015 | 0.188 | 0.063 | 8 | S219-041-.015R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.005 | 0.188 | 0.094 | 8 | S219-042-.005R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.010 | 0.188 | 0.094 | 8 | S219-043-.010R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.015 | 0.188 | 0.094 | 8 | S219-044-.015R | $80.43 | $86.42 |

## Corner Radius Keyseat Cutters

**S219**

TEETH 6,8

QUICK TURN SPECIALS

| Cutter Diameter | Overall Reach | Shank Diameter | Overall Length | Corner Radius | Neck Diameter | Cutter Width | # of Teeth | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|---|
| A | C | D | E | F | G | H | | | | |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.005 | 0.188 | 0.125 | 8 | S219-045-.005R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.010 | 0.188 | 0.125 | 8 | S219-046-.010R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.015 | 0.188 | 0.125 | 8 | S219-047-.015R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.005 | 0.188 | 0.250 | 8 | S219-048-.005R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.010 | 0.188 | 0.250 | 8 | S219-049-.010R | $80.43 | $86.42 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.015 | 0.188 | 0.250 | 8 | S219-050-.015R | $80.43 | $86.42 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.005 | 0.250 | 0.094 | 8 | S219-051-.005R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.010 | 0.250 | 0.094 | 8 | S219-052-.010R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.015 | 0.250 | 0.094 | 8 | S219-053-.015R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.005 | 0.250 | 0.125 | 8 | S219-054-.005R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.010 | 0.250 | 0.125 | 8 | S219-055-.010R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.015 | 0.250 | 0.125 | 8 | S219-056-.015R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.005 | 0.250 | 0.250 | 8 | S219-057-.005R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.010 | 0.250 | 0.250 | 8 | S219-058-.010R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.015 | 0.250 | 0.250 | 8 | S219-059-.015R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.005 | 0.250 | 0.375 | 8 | S219-060-.005R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.010 | 0.250 | 0.375 | 8 | S219-061-.010R | $84.74 | $93.03 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.015 | 0.250 | 0.375 | 8 | S219-062-.015R | $84.74 | $93.03 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 183 | End finish options for Standard Keyseats |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## CUSTOM SPECIALS / Keyseats

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances vary by design
- Specs include: overall length, shoulder angle, cutter width, cutter diameter, neck diameter, number of teeth
- End finish: square, corner radius, chamfer, full radius, stagger tooth
- Extended reach options
- Coated and uncoated
- Specials usually available in two weeks or less
- Tool specs may qualify for Quick Turn time lines

**Quote forms available on our website and upon request. Contact us for an estimate today.**

MITGI

QUOTE SHEET / Keyseat Cutter
Woodruff Cutter

Company Information
Tool Information
Quoting
Tool Material
GSS
Schedule and Production
Coating
End Finish

# S218 Full Radius Keyseat Cutters

TEETH 6,8

QUICK TURN SPECIALS

| Cutter Diameter | Overall Reach | Shank Diameter | Overall Length | Neck Diameter | Cutter Width | # of Teeth | Full Radius Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | C | D | E | G | H | | | | |
| 0.0625 (1/16) | 0.094 | 0.125 | 1.50 | 0.031 | 0.016 | 6 | S218-001-FR | $61.27 | $63.37 |
| 0.0625 (1/16) | 0.188 | 0.125 | 1.50 | 0.031 | 0.016 | 6 | S218-002-FR | $63.89 | $65.99 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.063 | 0.031 | 6 | S218-003-FR | $51.98 | $54.08 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.063 | 0.031 | 6 | S218-004-FR | $60.06 | $62.16 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.094 | 0.063 | 6 | S218-009-FR | $59.43 | $64.05 |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | 0.094 | 0.063 | 6 | S218-010-FR | $72.14 | $76.76 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.125 | 0.063 | 6 | S218-015-FR | $71.98 | $76.60 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 0.125 | 0.063 | 6 | S218-016-FR | $83.69 | $88.31 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.063 | 6 | S218-021-FR | $76.13 | $82.11 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.063 | 6 | S218-022-FR | $87.94 | $93.92 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.094 | 6 | S218-023-FR | $76.13 | $82.11 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.094 | 6 | S218-024-FR | $87.94 | $93.92 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.125 | 6 | S218-025-FR | $76.13 | $82.11 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.125 | 6 | S218-026-FR | $87.94 | $93.92 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.063 | 8 | S218-029-FR | $80.43 | $86.42 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.063 | 8 | S218-030-FR | $92.19 | $98.18 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.094 | 8 | S218-031-FR | $80.43 | $86.42 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.094 | 8 | S218-032-FR | $92.19 | $98.18 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.125 | 8 | S218-033-FR | $80.43 | $86.42 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.125 | 8 | S218-034-FR | $92.19 | $98.18 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.094 | 8 | S218-037-FR | $84.74 | $93.03 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.094 | 8 | S218-038-FR | $96.44 | $104.74 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.125 | 8 | S218-039-FR | $84.74 | $93.03 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.125 | 8 | S218-040-FR | $96.44 | $104.74 |

KEYSEAT CUTTER TOOL DIAGRAMS FOUND ON PAGE 183

## SEE ALSO:


p. 206 Custom Tools

p. 208 Coating

## 45° Chamfer Keyseat Cutters



TEETH 6,8

QUICK TURN SPECIALS

| Cutter Diameter | Overall Reach | Shank Diameter | Overall Length | Neck Diameter | Cutter Width | # of Teeth | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|---|
| A | C | D | E | G | H | | | | |
| 0.0625 (1/16) | 0.094 | 0.125 | 1.50 | 0.031 | 0.016 | 6 | S97-001-45 | $45.68 | $47.78 |
| 0.0625 (1/16) | 0.188 | 0.125 | 1.50 | 0.031 | 0.016 | 6 | S97-002-45 | $47.72 | $49.82 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.063 | 0.031 | 6 | S97-003-45 | $38.22 | $40.32 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.063 | 0.031 | 6 | S97-004-45 | $44.68 | $46.78 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.063 | 0.063 | 6 | S97-005-45 | $38.22 | $40.32 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.063 | 0.063 | 6 | S97-006-45 | $44.68 | $46.78 |
| 0.125 (1/8) | 0.188 | 0.125 | 1.50 | 0.063 | 0.125 | 6 | S97-007-45 | $38.22 | $40.32 |
| 0.125 (1/8) | 0.375 | 0.125 | 1.50 | 0.063 | 0.125 | 6 | S97-008-45 | $44.68 | $46.78 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.094 | 0.063 | 6 | S97-009-45 | $39.17 | $43.79 |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | 0.094 | 0.063 | 6 | S97-010-45 | $49.35 | $53.97 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.094 | 0.125 | 6 | S97-011-45 | $39.17 | $43.79 |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | 0.094 | 0.125 | 6 | S97-012-45 | $49.35 | $53.97 |
| 0.1875 (3/16) | 0.375 | 0.1875 | 2.00 | 0.094 | 0.188 | 6 | S97-013-45 | $39.17 | $43.79 |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | 0.094 | 0.188 | 6 | S97-014-45 | $49.35 | $53.97 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.125 | 0.063 | 6 | S97-015-45 | $44.84 | $49.46 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 0.125 | 0.063 | 6 | S97-016-45 | $54.86 | $59.48 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.125 | 0.125 | 6 | S97-017-45 | $44.84 | $49.46 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 0.125 | 0.125 | 6 | S97-018-45 | $54.86 | $59.48 |
| 0.250 (1/4) | 0.375 | 0.250 | 2.50 | 0.125 | 0.188 | 6 | S97-019-45 | $44.84 | $49.46 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | 0.125 | 0.188 | 6 | S97-020-45 | $54.86 | $59.48 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.063 | 6 | S97-021-45 | $66.31 | $72.29 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.063 | 6 | S97-022-45 | $78.75 | $84.74 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.094 | 6 | S97-041-45 | $66.31 | $72.29 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.094 | 6 | S97-042-45 | $78.75 | $84.74 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.125 | 6 | S97-023-45 | $66.31 | $72.29 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.125 | 6 | S97-024-45 | $78.75 | $84.74 |
| 0.3125 (5/16) | 0.500 | 0.3125 | 3.00 | 0.156 | 0.188 | 6 | S97-025-45 | $66.31 | $72.29 |
| 0.3125 (5/16) | 1.000 | 0.3125 | 3.00 | 0.156 | 0.188 | 6 | S97-026-45 | $78.75 | $84.74 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.063 | 8 | S97-027-45 | $74.76 | $80.75 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.063 | 8 | S97-028-45 | $88.10 | $94.08 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.094 | 8 | S97-043-45 | $74.76 | $80.75 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.094 | 8 | S97-044-45 | $88.10 | $94.08 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.125 | 8 | S97-029-45 | $74.76 | $80.75 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.125 | 8 | S97-030-45 | $88.10 | $94.08 |
| 0.375 (3/8) | 0.563 | 0.375 | 3.00 | 0.188 | 0.250 | 8 | S97-031-45 | $74.76 | $80.75 |
| 0.375 (3/8) | 1.125 | 0.375 | 3.00 | 0.188 | 0.250 | 8 | S97-032-45 | $88.10 | $94.08 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.094 | 8 | S97-033-45 | $84.68 | $92.98 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.094 | 8 | S97-034-45 | $95.71 | $104.00 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.125 | 8 | S97-035-45 | $84.68 | $92.98 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.125 | 8 | S97-036-45 | $95.71 | $104.00 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.250 | 8 | S97-037-45 | $84.68 | $92.98 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.250 | 8 | S97-038-45 | $95.71 | $104.00 |
| 0.500 (1/2) | 0.750 | 0.500 | 4.00 | 0.250 | 0.375 | 8 | S97-039-45 | $84.68 | $92.98 |
| 0.500 (1/2) | 1.500 | 0.500 | 4.00 | 0.250 | 0.375 | 8 | S97-040-45 | $95.71 | $104.00 |

KEYSEAT CUTTER TOOL DIAGRAMS FOUND ON PAGE 183

## S214 60° Dovetail Cutters

FLUTES 4

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | # of Flutes | 60° Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | |
| 0.0625 (1/16) | 0.028 | 0.094 | 0.125 | 1.50 | 4 | S214-0625-DOVE | $62.63 | $64.73 |
| 0.125 (1/8) | 0.055 | 0.188 | 0.125 | 1.50 | 4 | S214-125-DOVE | $59.64 | $61.74 |
| 0.1875 (3/16) | 0.083 | 0.281 | 0.1875 | 2.00 | 4 | S214-1875-DOVE | $62.63 | $67.25 |
| 0.250 (1/4) | 0.110 | 0.375 | 0.250 | 2.00 | 4 | S214-250-DOVE | $77.60 | $82.22 |
| 0.3125 (5/16) | 0.137 | 0.469 | 0.3125 | 2.50 | 4 | S214-3125-DOVE | $84.11 | $90.09 |
| 0.375 (3/8) | 0.164 | 0.563 | 0.375 | 2.50 | 4 | S214-375-DOVE | $87.36 | $93.35 |
| 0.500 (1/2) | 0.219 | 0.750 | 0.500 | 3.00 | 4 | S214-500-DOVE | $121.12 | $129.41 |

### SEE ALSO:


p. 3 Quick Turn Specials
p. 206 Custom Tools
p. 208 Coating

## S215 60° Dovetail Cutters

FLUTES 4

3X REACH

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | # of Flutes | 60° Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | |
| 0.0625 (1/16) | 0.028 | 0.188 | 0.125 | 1.50 | 4 | S215-0625-DOVE3XR | $67.88 | $69.98 |
| 0.125 (1/8) | 0.055 | 0.375 | 0.125 | 1.50 | 4 | S215-125-DOVE3XR | $64.89 | $66.99 |
| 0.1875 (3/16) | 0.083 | 0.563 | 0.1875 | 2.00 | 4 | S215-1875-DOVE3XR | $68.93 | $73.55 |
| 0.250 (1/4) | 0.110 | 0.750 | 0.250 | 2.00 | 4 | S215-250-DOVE3XR | $83.90 | $88.52 |
| 0.3125 (5/16) | 0.137 | 0.938 | 0.3125 | 2.50 | 4 | S215-3125-DOVE3XR | $92.51 | $98.49 |
| 0.375 (3/8) | 0.164 | 1.125 | 0.375 | 2.50 | 4 | S215-375-DOVE3XR | $95.76 | $101.75 |
| 0.500 (1/2) | 0.219 | 1.500 | 0.500 | 3.00 | 4 | S215-500-DOVE3XR | $131.62 | $139.91 |

### SEE ALSO:


p. 3 Quick Turn Specials
p. 206 Custom Tools
p. 208 Coating

## 90° Dovetail Cutters

## S216

FLUTES 4

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | # of Flutes | 90° Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | |
| 0.0625 (1/16) | 0.017 | 0.094 | 0.125 | 1.50 | 4 | S216-0625-DOVE | $62.63 | $64.73 |
| 0.125 (1/8) | 0.032 | 0.188 | 0.125 | 1.50 | 4 | S216-125-DOVE | $59.64 | $61.74 |
| 0.1875 (3/16) | 0.049 | 0.281 | 0.1875 | 2.00 | 4 | S216-1875-DOVE | $62.63 | $67.25 |
| 0.250 (1/4) | 0.065 | 0.375 | 0.250 | 2.00 | 4 | S216-250-DOVE | $77.60 | $82.22 |
| 0.3125 (5/16) | 0.080 | 0.469 | 0.3125 | 2.50 | 4 | S216-3125-DOVE | $84.11 | $90.09 |
| 0.375 (3/8) | 0.096 | 0.563 | 0.375 | 2.50 | 4 | S216-375-DOVE | $87.36 | $93.35 |
| 0.500 (1/2) | 0.127 | 0.750 | 0.500 | 3.00 | 4 | S216-500-DOVE | $121.12 | $129.41 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## 90° Dovetail Cutters

## S217

FLUTES 4

3X REACH

| Cutter Diameter | Length of Cut | Overall Reach | Shank Diameter | Overall Length | # of Flutes | 90° Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | | | | |
| 0.0625 (1/16) | 0.017 | 0.188 | 0.125 | 1.50 | 4 | S217-0625-DOVE3XR | $67.88 | $69.98 |
| 0.125 (1/8) | 0.032 | 0.375 | 0.125 | 1.50 | 4 | S217-125-DOVE3XR | $64.89 | $66.99 |
| 0.1875 (3/16) | 0.049 | 0.563 | 0.1875 | 2.00 | 4 | S217-1875-DOVE3XR | $68.93 | $73.55 |
| 0.250 (1/4) | 0.065 | 0.750 | 0.250 | 2.00 | 4 | S217-250-DOVE3XR | $83.90 | $88.52 |
| 0.3125 (5/16) | 0.080 | 0.938 | 0.3125 | 2.50 | 4 | S217-3125-DOVE3XR | $92.51 | $98.49 |
| 0.375 (3/8) | 0.096 | 1.125 | 0.375 | 2.50 | 4 | S217-375-DOVE3XR | $95.76 | $101.75 |
| 0.500 (1/2) | 0.127 | 1.500 | 0.500 | 3.00 | 4 | S217-500-DOVE3XR | $131.62 | $139.91 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S102

## 30° Chamfer Cutters

FLUTES 2,3,4

QUICK TURN SPECIALS

| Cutter Diameter | Shank Diameter | Overall Length | Tip Diameter | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | D | E | J | | | | | |
| 0.125 (1/8) | 0.125 | 1.50 | 0.010 | S102-001-60 | S102-002-60 | S102-003-60 | $19.01 | $21.11 |
| 0.125 (1/8) | 0.125 | 1.50 | 0.040 | S102-004-60 | S102-005-60 | S102-006-60 | $19.01 | $21.11 |
| 0.1875 (3/16) | 0.1875 | 2.00 | 0.010 | S102-007-60 | S102-008-60 | S102-009-60 | $24.73 | $29.35 |
| 0.1875 (3/16) | 0.1875 | 2.00 | 0.050 | S102-010-60 | S102-011-60 | S102-012-60 | $24.73 | $29.35 |
| 0.250 (1/4) | 0.250 | 2.50 | 0.010 | S102-013-60 | S102-014-60 | S102-015-60 | $29.82 | $34.44 |
| 0.250 (1/4) | 0.250 | 2.50 | 0.060 | S102-016-60 | S102-017-60 | S102-018-60 | $29.82 | $34.44 |
| 0.3125 (5/16) | 0.3125 | 2.50 | 0.010 | S102-019-60 | S102-020-60 | S102-021-60 | $34.91 | $40.90 |
| 0.3125 (5/16) | 0.3125 | 2.50 | 0.060 | S102-022-60 | S102-023-60 | S102-024-60 | $34.91 | $40.90 |
| 0.375 (3/8) | 0.375 | 2.50 | 0.010 | S102-025-60 | S102-026-60 | S102-027-60 | $42.21 | $48.20 |
| 0.375 (3/8) | 0.375 | 2.50 | 0.060 | S102-028-60 | S102-029-60 | S102-030-60 | $42.21 | $48.20 |

## 45° Chamfer Cutters

| Cutter Diameter | Shank Diameter | Overall Length | Tip Diameter | 2 Flute Tool # | 3 Flute Tool # | 4 Flute Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|---|---|
| | D | E | J | | | | | |
| 0.125 (1/8) | 0.125 | 1.50 | 0.010 | S102-001-45 | S102-002-45 | S102-003-45 | $19.01 | $21.11 |
| 0.125 (1/8) | 0.125 | 1.50 | 0.040 | S102-004-45 | S102-005-45 | S102-006-45 | $19.01 | $21.11 |
| 0.1875 (3/16) | 0.1875 | 2.00 | 0.010 | S102-007-45 | S102-008-45 | S102-009-45 | $24.73 | $29.35 |
| 0.1875 (3/16) | 0.1875 | 2.00 | 0.050 | S102-010-45 | S102-011-45 | S102-012-45 | $24.73 | $29.35 |
| 0.250 (1/4) | 0.250 | 2.50 | 0.010 | S102-013-45 | S102-014-45 | S102-015-45 | $29.82 | $34.44 |
| 0.250 (1/4) | 0.250 | 2.50 | 0.060 | S102-016-45 | S102-017-45 | S102-018-45 | $29.82 | $34.44 |
| 0.3125 (5/16) | 0.3125 | 2.50 | 0.010 | S102-019-45 | S102-020-45 | S102-021-45 | $34.91 | $40.90 |
| 0.3125 (5/16) | 0.3125 | 2.50 | 0.060 | S102-022-45 | S102-023-45 | S102-024-45 | $34.91 | $40.90 |
| 0.375 (3/8) | 0.375 | 2.50 | 0.010 | S102-025-45 | S102-026-45 | S102-027-45 | $42.21 | $48.20 |
| 0.375 (3/8) | 0.375 | 2.50 | 0.060 | S102-028-45 | S102-029-45 | S102-030-45 | $42.21 | $48.20 |

**SEE ALSO:**


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# CUSTOM

## SPECIALS / Chamfer Cutters, Corner Rounders

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and number of flutes vary by design
- End finishes: chamfer cutter, corner rounder
- Coated and uncoated
- Specials usually available in two weeks or less

**Quote forms available on our website and upon request.**
**Contact us for an estimate today.**

## 7° Deburring Knives, HSS



| Size | Tool # | Qty: 1- 49 | Qty: 50-599 | Qty: 600+ | Box / Qty: 50 |
|---|---|---|---|---|---|
| | | | | | |
| 1mm x 1-1/4 | S04-003 | $6.46 | $5.43 | $5.17 | $271.50 |
| 1/16 x 1-1/4 | S04-007 | $6.20 | $5.17 | $4.90 | $258.50 |
| 3/32 x 1-1/4 | S04-011 | $6.20 | $5.17 | $4.90 | $258.50 |
| 1/8 x 1-1/4 | S04-005 | $6.20 | $5.17 | $4.90 | $258.50 |

## 7° Deburring Knives, Carbide

| Size | Tool # | Qty: 1- 49 | Qty: 50-599 | Qty: 600+ | Box / Qty: 50 |
|---|---|---|---|---|---|
| | | | | | |
| 1mm x 1-1/2 | S04-020 | $7.61 | $6.09 | $5.78 | $304.50 |
| 1/16 x 1-1/2 | S04-013 | $7.11 | $5.68 | $5.43 | $284.00 |
| 3/32 x 1-1/2 | S04-015 | $7.11 | $5.68 | $5.43 | $284.00 |
| 1/8 x 1-1/2 | S04-017 | $7.11 | $5.68 | $5.43 | $284.00 |

## 10° Deburring Knives, HSS

| Size | Tool # | Qty: 1-49 | Qty: 50-599 | Qty: 600+ | Box / Qty: 50 |
|---|---|---|---|---|---|
| | | | | | |
| 1mm x 1-1/4 | S04-002 | $6.46 | $5.43 | $5.17 | $271.50 |
| 1/16 x 1-1/4 | S04-006 | $6.20 | $5.17 | $4.90 | $258.50 |
| 3/32 x 1-1/4 | S04-012 | $6.20 | $5.17 | $4.90 | $258.50 |
| 1/8 x 1-1/4 | S04-004 | $6.20 | $5.17 | $4.90 | $258.50 |

## 10° Deburring Knives, Carbide

| Size | Tool # | Qty: 1-49 | Qty: 50-599 | Qty: 600+ | Box / Qty: 50 |
|---|---|---|---|---|---|
| | | | | | |
| 1mm x 1-1/2 | S04-019 | $7.61 | $6.09 | $5.78 | $304.50 |
| 1/16 x 1-1/2 | S04-014 | $7.11 | $5.68 | $5.43 | $284.00 |
| 3/32 x 1-1/2 | S04-016 | $7.11 | $5.68 | $5.43 | $284.00 |
| 1/8 x 1-1/2 | S04-018 | $7.11 | $5.68 | $5.43 | $284.00 |

**SEE ALSO:**

p. 206 | Custom Tools

**SPECIALS**

**P.206**

MITGI specializes in custom micro tools that are needed quickly or are difficult to find. See pages 206-207 for more info regarding custom tool capabilities, estimated production times, and information about how to place an order.

# S101

## 30° Engraving Cutters

| Shank Diameter | Overall Length | Tip | Split Length | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| D | E | | K | | | |
| 0.125 (1/8) | 1.50 | Point | 0.375 | S101-001-30 | $13.13 | $15.23 |
| 0.125 (1/8) | 1.50 | Radius - 0.005 | 0.375 | S101-002-30 | $19.01 | $21.11 |
| 0.125 (1/8) | 1.50 | Radius - 0.010 | 0.375 | S101-003-30 | $19.01 | $21.11 |
| 0.125 (1/8) | 1.50 | Flat - 0.005 | 0.375 | S101-004-30 | $14.70 | $16.80 |
| 0.125 (1/8) | 1.50 | Flat - 0.010 | 0.375 | S101-005-30 | $14.70 | $16.80 |
| 0.1875 (3/16) | 2.00 | Point | 0.375 | S101-006-30 | $15.75 | $20.37 |
| 0.1875 (3/16) | 2.00 | Radius - 0.005 | 0.375 | S101-007-30 | $22.73 | $27.35 |
| 0.1875 (3/16) | 2.00 | Radius - 0.010 | 0.375 | S101-008-30 | $22.73 | $27.35 |
| 0.1875 (3/16) | 2.00 | Flat - 0.005 | 0.375 | S101-009-30 | $18.95 | $23.57 |
| 0.1875 (3/16) | 2.00 | Flat - 0.010 | 0.375 | S101-010-30 | $18.95 | $23.57 |
| 0.250 (1/4) | 2.50 | Point | 0.500 | S101-011-30 | $20.06 | $24.68 |
| 0.250 (1/4) | 2.50 | Radius - 0.005 | 0.500 | S101-012-30 | $25.10 | $29.72 |
| 0.250 (1/4) | 2.50 | Radius - 0.010 | 0.500 | S101-013-30 | $25.10 | $29.72 |
| 0.250 (1/4) | 2.50 | Flat - 0.005 | 0.500 | S101-014-30 | $21.21 | $25.83 |
| 0.250 (1/4) | 2.50 | Flat - 0.010 | 0.500 | S101-015-30 | $21.21 | $25.83 |

## 60° Engraving Cutters

| Shank Diameter | Overall Length | Tip | Split Length | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| D | E | | K | | | |
| 0.125 (1/8) | 1.50 | Point | 0.375 | S101-001-60 | $13.13 | $15.23 |
| 0.125 (1/8) | 1.50 | Radius - 0.005 | 0.375 | S101-002-60 | $19.01 | $21.11 |
| 0.125 (1/8) | 1.50 | Radius - 0.010 | 0.375 | S101-003-60 | $19.01 | $21.11 |
| 0.125 (1/8) | 1.50 | Flat - 0.005 | 0.375 | S101-004-60 | $14.70 | $16.80 |
| 0.125 (1/8) | 1.50 | Flat - 0.010 | 0.375 | S101-005-60 | $14.70 | $16.80 |
| 0.1875 (3/16) | 2.00 | Point | 0.375 | S101-006-60 | $15.75 | $20.37 |
| 0.1875 (3/16) | 2.00 | Radius - 0.005 | 0.375 | S101-007-60 | $22.73 | $27.35 |
| 0.1875 (3/16) | 2.00 | Radius - 0.010 | 0.375 | S101-008-60 | $22.73 | $27.35 |
| 0.1875 (3/16) | 2.00 | Flat - 0.005 | 0.375 | S101-009-60 | $18.95 | $23.57 |
| 0.1875 (3/16) | 2.00 | Flat - 0.010 | 0.375 | S101-010-60 | $18.95 | $23.57 |
| 0.250 (1/4) | 2.50 | Point | 0.500 | S101-011-60 | $20.06 | $24.68 |
| 0.250 (1/4) | 2.50 | Radius - 0.005 | 0.500 | S101-012-60 | $25.10 | $29.72 |
| 0.250 (1/4) | 2.50 | Radius - 0.010 | 0.500 | S101-013-60 | $25.10 | $29.72 |
| 0.250 (1/4) | 2.50 | Flat - 0.005 | 0.500 | S101-014-60 | $21.21 | $25.83 |
| 0.250 (1/4) | 2.50 | Flat - 0.010 | 0.500 | S101-015-60 | $21.21 | $25.83 |

**CONTACT US**

**P. 2**

MITGI is open from 8 AM - 4 PM Central Time, and can be reached any time by email, web, and social media. See page 2 for more information about ordering and ways to reach us.

| Shank Diameter | Overall Length | Tip | Split Length | Tool # | Price | AlTiN Coated Price |
|---|---|---|---|---|---|---|
| D | E | | K | | | |
| 0.125 (1/8) | 1.50 | Point | 0.375 | S101-001-90 | $13.13 | $15.23 |
| 0.125 (1/8) | 1.50 | Radius - 0.005 | 0.375 | S101-002-90 | $19.01 | $21.11 |
| 0.125 (1/8) | 1.50 | Radius - 0.010 | 0.375 | S101-003-90 | $19.01 | $21.11 |
| 0.125 (1/8) | 1.50 | Flat - 0.005 | 0.375 | S101-004-90 | $14.70 | $16.80 |
| 0.125 (1/8) | 1.50 | Flat - 0.010 | 0.375 | S101-005-90 | $14.70 | $16.80 |
| 0.1875 (3/16) | 2.00 | Point | 0.375 | S101-006-90 | $15.75 | $20.37 |
| 0.1875 (3/16) | 2.00 | Radius - 0.005 | 0.375 | S101-007-90 | $22.73 | $27.35 |
| 0.1875 (3/16) | 2.00 | Radius - 0.010 | 0.375 | S101-008-90 | $22.73 | $27.35 |
| 0.1875 (3/16) | 2.00 | Flat - 0.005 | 0.375 | S101-009-90 | $18.95 | $23.57 |
| 0.1875 (3/16) | 2.00 | Flat - 0.010 | 0.375 | S101-010-90 | $18.95 | $23.57 |
| 0.250 (1/4) | 2.50 | Point | 0.500 | S101-011-90 | $20.06 | $24.68 |
| 0.250 (1/4) | 2.50 | Radius - 0.005 | 0.500 | S101-012-90 | $25.10 | $29.72 |
| 0.250 (1/4) | 2.50 | Radius - 0.010 | 0.500 | S101-013-90 | $25.10 | $29.72 |
| 0.250 (1/4) | 2.50 | Flat - 0.005 | 0.500 | S101-014-90 | $21.21 | $25.83 |
| 0.250 (1/4) | 2.50 | Flat - 0.010 | 0.500 | S101-015-90 | $21.21 | $25.83 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 206 | Custom Tools |
| p. 208 | Coating |


## CUSTOM SPECIALS / Engraving Tools

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances vary by design
- End finishes: flat, pointed, radius
- Specs: shoulder angle/radius, split length, included point angle
- Specials usually available in two weeks or less

**Quote forms available on our website and upon request. Contact us for an estimate today.**

# S235 Square Upcut Plastic Cutters

FLUTE 1

3X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Upcut 1 Flute Tool # | Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.031(1/32) | 0.093 | 0.125 | 1.50 | S235-031-1-SQUP3X | $33.81 |
| 0.035 | 0.105 | 0.125 | 1.50 | S235-035-1-SQUP3X | $33.81 |
| 0.039(1mm) | 0.117 | 0.125 | 1.50 | S235-039-1-SQUP3X | $33.81 |
| 0.040 | 0.120 | 0.125 | 1.50 | S235-040-1-SQUP3X | $33.81 |
| 0.045 | 0.135 | 0.125 | 1.50 | S235-045-1-SQUP3X | $33.81 |
| 0.047(3/64) | 0.141 | 0.125 | 1.50 | S235-047-1-SQUP3X | $28.88 |
| 0.050 | 0.150 | 0.125 | 1.50 | S235-050-1-SQUP3X | $28.88 |
| 0.055 | 0.165 | 0.125 | 1.50 | S235-055-1-SQUP3X | $28.88 |
| 0.060 | 0.180 | 0.125 | 1.50 | S235-060-1-SQUP3X | $28.88 |
| 0.062(1/16) | 0.187 | 0.125 | 1.50 | S235-062-1-SQUP3X | $27.09 |
| 0.065 | 0.195 | 0.125 | 1.50 | S235-065-1-SQUP3X | $27.09 |
| 0.070 | 0.210 | 0.125 | 1.50 | S235-070-1-SQUP3X | $27.09 |
| 0.075 | 0.225 | 0.125 | 1.50 | S235-075-1-SQUP3X | $27.09 |
| 0.078(5/64) | 0.234 | 0.125 | 1.50 | S235-078-1-SQUP3X | $27.09 |
| 0.080 | 0.240 | 0.125 | 1.50 | S235-080-1-SQUP3X | $27.09 |
| 0.085 | 0.255 | 0.125 | 1.50 | S235-085-1-SQUP3X | $27.09 |
| 0.090 | 0.270 | 0.125 | 1.50 | S235-090-1-SQUP3X | $27.09 |
| 0.093(3/32) | 0.279 | 0.125 | 1.50 | S235-093-1-SQUP3X | $27.09 |
| 0.095 | 0.285 | 0.125 | 1.50 | S235-095-1-SQUP3X | $27.09 |
| 0.100 | 0.300 | 0.125 | 1.50 | S235-100-1-SQUP3X | $27.09 |
| 0.118(3mm) | 0.354 | 0.125 | 1.50 | S235-118-1-SQUP3X | $27.09 |
| 0.125 (1/8)* | 0.375 | 0.125 | 1.50 | S235-125-1-SQUP3X | $27.09 |
| 0.1875 (3/16)* | 0.563 | 0.1875 | 3.00 | S235-188-1-SQUP3X | $33.81 |
| 0.250 (1/4)* | 0.750 | 0.250 | 3.00 | S235-250-1-SQUP3X | $38.96 |
| 0.3125 (5/16)* | 0.938 | 0.3125 | 3.00 | S235-313-1-SQUP3X | $46.41 |
| 0.375 (3/8)* | 1.125 | 0.375 | 4.00 | S235-375-1-SQUP3X | $76.28 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Square Upcut Plastic Cutters

**S295**

FLUTE 1

4X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Upcut 1 Flute Tool # | Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.031(1/32) | 0.124 | 0.125 | 2.00 | S295-031-1-SQUP4X | $35.39 |
| 0.035 | 0.140 | 0.125 | 2.00 | S295-035-1-SQUP4X | $35.39 |
| 0.039(1mm) | 0.156 | 0.125 | 2.00 | S295-039-1-SQUP4X | $35.39 |
| 0.040 | 0.160 | 0.125 | 2.00 | S295-040-1-SQUP4X | $35.39 |
| 0.045 | 0.180 | 0.125 | 2.00 | S295-045-1-SQUP4X | $35.39 |
| 0.047(3/64) | 0.188 | 0.125 | 2.00 | S295-047-1-SQUP4X | $30.46 |
| 0.050 | 0.200 | 0.125 | 2.00 | S295-050-1-SQUP4X | $30.46 |
| 0.055 | 0.220 | 0.125 | 2.00 | S295-055-1-SQUP4X | $30.46 |
| 0.060 | 0.240 | 0.125 | 2.00 | S295-060-1-SQUP4X | $30.46 |
| 0.062(1/16) | 0.248 | 0.125 | 2.00 | S295-062-1-SQUP4X | $28.67 |
| 0.065 | 0.260 | 0.125 | 2.00 | S295-065-1-SQUP4X | $28.67 |
| 0.070 | 0.280 | 0.125 | 2.00 | S295-070-1-SQUP4X | $28.67 |
| 0.075 | 0.300 | 0.125 | 2.00 | S295-075-1-SQUP4X | $28.67 |
| 0.078(5/64) | 0.312 | 0.125 | 2.00 | S295-078-1-SQUP4X | $28.67 |
| 0.080 | 0.320 | 0.125 | 2.00 | S295-080-1-SQUP4X | $28.67 |
| 0.085 | 0.340 | 0.125 | 2.00 | S295-085-1-SQUP4X | $28.67 |
| 0.090 | 0.360 | 0.125 | 2.00 | S295-090-1-SQUP4X | $28.67 |
| 0.093(3/32) | 0.372 | 0.125 | 2.00 | S295-093-1-SQUP4X | $28.67 |
| 0.095 | 0.380 | 0.125 | 2.00 | S295-095-1-SQUP4X | $28.67 |
| 0.100 | 0.400 | 0.125 | 2.00 | S295-100-1-SQUP4X | $28.67 |
| 0.118(3mm) | 0.472 | 0.125 | 2.00 | S295-118-1-SQUP4X | $28.67 |
| 0.125 (1/8)* | 0.500 | 0.125 | 2.00 | S295-125-1-SQUP4X | $28.67 |
| 0.1875 (3/16)* | 0.750 | 0.1875 | 3.00 | S295-188-1-SQUP4X | $36.91 |
| 0.250 (1/4)* | 1.000 | 0.250 | 3.00 | S295-250-1-SQUP4X | $41.64 |
| 0.3125 (5/16)* | 1.250 | 0.3125 | 4.00 | S295-313-1-SQUP4X | $47.65 |
| 0.375 (3/8)* | 1.500 | 0.375 | 4.00 | S295-375-1-SQUP4X | $78.91 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S236 Square Upcut Plastic Cutters

FLUTE 1

5X LENGTH OF CUT

+ SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Upcut 1 Flute Tool # | Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.031(1/32) | 0.155 | 0.125 | 2.50 | S236-031-1-SQUP5X | $36.96 |
| 0.035 | 0.175 | 0.125 | 2.50 | S236-035-1-SQUP5X | $36.96 |
| 0.039(1mm) | 0.195 | 0.125 | 2.50 | S236-039-1-SQUP5X | $36.96 |
| 0.040 | 0.200 | 0.125 | 2.50 | S236-040-1-SQUP5X | $36.96 |
| 0.045 | 0.225 | 0.125 | 2.50 | S236-045-1-SQUP5X | $36.96 |
| 0.047(3/64) | 0.235 | 0.125 | 2.50 | S236-047-1-SQUP5X | $32.03 |
| 0.050 | 0.250 | 0.125 | 2.50 | S236-050-1-SQUP5X | $32.03 |
| 0.055 | 0.275 | 0.125 | 2.50 | S236-055-1-SQUP5X | $32.03 |
| 0.060 | 0.300 | 0.125 | 2.50 | S236-060-1-SQUP5X | $32.03 |
| 0.062(1/16) | 0.310 | 0.125 | 2.50 | S236-062-1-SQUP5X | $30.24 |
| 0.065 | 0.325 | 0.125 | 2.50 | S236-065-1-SQUP5X | $30.24 |
| 0.070 | 0.350 | 0.125 | 2.50 | S236-070-1-SQUP5X | $30.24 |
| 0.075 | 0.375 | 0.125 | 2.50 | S236-075-1-SQUP5X | $30.24 |
| 0.078(5/64) | 0.390 | 0.125 | 2.50 | S236-078-1-SQUP5X | $30.24 |
| 0.080 | 0.400 | 0.125 | 2.50 | S236-080-1-SQUP5X | $30.24 |
| 0.085 | 0.425 | 0.125 | 2.50 | S236-085-1-SQUP5X | $30.24 |
| 0.090 | 0.450 | 0.125 | 2.50 | S236-090-1-SQUP5X | $30.24 |
| 0.093(3/32) | 0.465 | 0.125 | 2.50 | S236-093-1-SQUP5X | $30.24 |
| 0.095 | 0.475 | 0.125 | 2.50 | S236-095-1-SQUP5X | $30.24 |
| 0.100 | 0.500 | 0.125 | 2.50 | S236-100-1-SQUP5X | $30.24 |
| 0.118(3mm) | 0.590 | 0.125 | 2.50 | S236-118-1-SQUP5X | $30.24 |
| 0.125 (1/8)* | 0.625 | 0.125 | 2.50 | S236-125-1-SQUP5X | $30.24 |
| 0.1875 (3/16)* | 0.938 | 0.1875 | 3.00 | S236-188-1-SQUP5X | $40.01 |
| 0.250 (1/4)* | 1.250 | 0.250 | 4.00 | S236-250-1-SQUP5X | $44.31 |
| 0.3125 (5/16)* | 1.563 | 0.3125 | 4.00 | S236-313-1-SQUP5X | $48.88 |
| 0.375 (3/8)* | 1.875 | 0.375 | 4.00 | S236-375-1-SQUP5X | $81.53 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Square Upcut Plastic Cutters

**S259**

FLUTES 2

3X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Upcut 2 Flute Tool # | Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.031(1/32) | 0.093 | 0.125 | 1.50 | S259-031-2-SQUP3X | $31.50 |
| 0.035 | 0.105 | 0.125 | 1.50 | S259-035-2-SQUP3X | $31.50 |
| 0.039(1mm) | 0.117 | 0.125 | 1.50 | S259-039-2-SQUP3X | $31.50 |
| 0.040 | 0.120 | 0.125 | 1.50 | S259-040-2-SQUP3X | $31.50 |
| 0.045 | 0.135 | 0.125 | 1.50 | S259-045-2-SQUP3X | $31.50 |
| 0.047(3/64) | 0.141 | 0.125 | 1.50 | S259-047-2-SQUP3X | $26.72 |
| 0.050 | 0.150 | 0.125 | 1.50 | S259-050-2-SQUP3X | $26.72 |
| 0.055 | 0.165 | 0.125 | 1.50 | S259-055-2-SQUP3X | $26.72 |
| 0.060 | 0.180 | 0.125 | 1.50 | S259-060-2-SQUP3X | $26.72 |
| 0.062(1/16) | 0.187 | 0.125 | 1.50 | S259-062-2-SQUP3X | $24.94 |
| 0.065 | 0.195 | 0.125 | 1.50 | S259-065-2-SQUP3X | $24.94 |
| 0.070 | 0.210 | 0.125 | 1.50 | S259-070-2-SQUP3X | $24.94 |
| 0.075 | 0.225 | 0.125 | 1.50 | S259-075-2-SQUP3X | $24.94 |
| 0.078(5/64) | 0.234 | 0.125 | 1.50 | S259-078-2-SQUP3X | $24.94 |
| 0.080 | 0.240 | 0.125 | 1.50 | S259-080-2-SQUP3X | $24.94 |
| 0.085 | 0.255 | 0.125 | 1.50 | S259-085-2-SQUP3X | $24.94 |
| 0.090 | 0.270 | 0.125 | 1.50 | S259-090-2-SQUP3X | $24.94 |
| 0.093(3/32) | 0.279 | 0.125 | 1.50 | S259-093-2-SQUP3X | $24.94 |
| 0.095 | 0.285 | 0.125 | 1.50 | S259-095-2-SQUP3X | $24.94 |
| 0.100 | 0.300 | 0.125 | 1.50 | S259-100-2-SQUP3X | $24.94 |
| 0.118(3mm) | 0.354 | 0.125 | 1.50 | S259-118-2-SQUP3X | $24.94 |
| 0.125 (1/8)* | 0.375 | 0.125 | 1.50 | S259-125-2-SQUP3X | $24.94 |
| 0.1875 (3/16)* | 0.563 | 0.1875 | 3.00 | S259-188-2-SQUP3X | $31.76 |
| 0.250 (1/4)* | 0.750 | 0.250 | 3.00 | S259-250-2-SQUP3X | $36.80 |
| 0.3125 (5/16)* | 0.938 | 0.3125 | 3.00 | S259-313-2-SQUP3X | $44.21 |
| 0.375 (3/8)* | 1.125 | 0.375 | 4.00 | S259-375-2-SQUP3X | $74.03 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S260

## Square Upcut Plastic Cutters

FLUTES 2

5X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Upcut 2 Flute Tool # | Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.031(1/32) | 0.155 | 0.125 | 2.50 | S260-031-2-SQUP5X | $35.86 |
| 0.035 | 0.175 | 0.125 | 2.50 | S260-035-2-SQUP5X | $35.86 |
| 0.039(1mm) | 0.195 | 0.125 | 2.50 | S260-039-2-SQUP5X | $35.86 |
| 0.040 | 0.200 | 0.125 | 2.50 | S260-040-2-SQUP5X | $35.86 |
| 0.045 | 0.225 | 0.125 | 2.50 | S260-045-2-SQUP5X | $35.86 |
| 0.047(3/64) | 0.235 | 0.125 | 2.50 | S260-047-2-SQUP5X | $31.03 |
| 0.050 | 0.250 | 0.125 | 2.50 | S260-050-2-SQUP5X | $31.03 |
| 0.055 | 0.275 | 0.125 | 2.50 | S260-055-2-SQUP5X | $31.03 |
| 0.060 | 0.300 | 0.125 | 2.50 | S260-060-2-SQUP5X | $31.03 |
| 0.062(1/16) | 0.310 | 0.125 | 2.50 | S260-062-2-SQUP5X | $29.19 |
| 0.065 | 0.325 | 0.125 | 2.50 | S260-065-2-SQUP5X | $29.19 |
| 0.070 | 0.350 | 0.125 | 2.50 | S260-070-2-SQUP5X | $29.19 |
| 0.075 | 0.375 | 0.125 | 2.50 | S260-075-2-SQUP5X | $29.19 |
| 0.078(5/64) | 0.390 | 0.125 | 2.50 | S260-078-2-SQUP5X | $29.19 |
| 0.080 | 0.400 | 0.125 | 2.50 | S260-080-2-SQUP5X | $29.19 |
| 0.085 | 0.425 | 0.125 | 2.50 | S260-085-2-SQUP5X | $29.19 |
| 0.090 | 0.450 | 0.125 | 2.50 | S260-090-2-SQUP5X | $29.19 |
| 0.093(3/32) | 0.465 | 0.125 | 2.50 | S260-093-2-SQUP5X | $29.19 |
| 0.095 | 0.475 | 0.125 | 2.50 | S260-095-2-SQUP5X | $29.19 |
| 0.100 | 0.500 | 0.125 | 2.50 | S260-100-2-SQUP5X | $29.19 |
| 0.118(3mm) | 0.590 | 0.125 | 2.50 | S260-118-2-SQUP5X | $29.19 |
| 0.125 (1/8)* | 0.625 | 0.125 | 2.50 | S260-125-2-SQUP5X | $29.19 |
| 0.1875 (3/16)* | 0.938 | 0.1875 | 3.00 | S260-188-2-SQUP5X | $36.28 |
| 0.250 (1/4)* | 1.250 | 0.250 | 3.00 | S260-250-2-SQUP5X | $41.11 |
| 0.3125 (5/16)* | 1.563 | 0.3125 | 4.00 | S260-313-2-SQUP5X | $48.83 |
| 0.375 (3/8)* | 1.875 | 0.375 | 4.00 | S260-375-2-SQUP5X | $78.12 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

## Square Upcut Plastic Cutters

# S261

FLUTES 2

8X LENGTH OF CUT

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | Upcut 2 Flute Tool # | Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.031(1/32) | 0.248 | 0.125 | 2.50 | S261-031-2-SQUP8X | $46.52 |
| 0.035 | 0.280 | 0.125 | 2.50 | S261-035-2-SQUP8X | $46.52 |
| 0.039(1mm) | 0.312 | 0.125 | 2.50 | S261-039-2-SQUP8X | $46.52 |
| 0.040 | 0.320 | 0.125 | 2.50 | S261-040-2-SQUP8X | $46.52 |
| 0.045 | 0.360 | 0.125 | 2.50 | S261-045-2-SQUP8X | $46.52 |
| 0.047(3/64) | 0.376 | 0.125 | 2.50 | S261-047-2-SQUP8X | $40.11 |
| 0.050 | 0.400 | 0.125 | 2.50 | S261-050-2-SQUP8X | $40.11 |
| 0.055 | 0.440 | 0.125 | 2.50 | S261-055-2-SQUP8X | $40.11 |
| 0.060 | 0.480 | 0.125 | 2.50 | S261-060-2-SQUP8X | $40.11 |
| 0.062(1/16) | 0.496 | 0.125 | 2.50 | S261-062-2-SQUP8X | $37.85 |
| 0.065 | 0.520 | 0.125 | 2.50 | S261-065-2-SQUP8X | $37.85 |
| 0.070 | 0.560 | 0.125 | 2.50 | S261-070-2-SQUP8X | $37.85 |
| 0.075 | 0.600 | 0.125 | 2.50 | S261-075-2-SQUP8X | $37.85 |
| 0.078(5/64) | 0.624 | 0.125 | 2.50 | S261-078-2-SQUP8X | $37.85 |
| 0.080 | 0.640 | 0.125 | 2.50 | S261-080-2-SQUP8X | $37.85 |
| 0.085 | 0.680 | 0.125 | 2.50 | S261-085-2-SQUP8X | $37.85 |
| 0.090 | 0.720 | 0.125 | 2.50 | S261-090-2-SQUP8X | $37.85 |
| 0.093(3/32) | 0.744 | 0.125 | 2.50 | S261-093-2-SQUP8X | $37.85 |
| 0.095 | 0.760 | 0.125 | 2.50 | S261-095-2-SQUP8X | $37.85 |
| 0.100 | 0.800 | 0.125 | 2.50 | S261-100-2-SQUP8X | $37.85 |
| 0.118(3mm) | 0.944 | 0.125 | 2.50 | S261-118-2-SQUP8X | $37.85 |
| 0.125 (1/8)* | 1.000 | 0.125 | 2.50 | S261-125-2-SQUP8X | $37.85 |
| 0.1875 (3/16)* | 1.500 | 0.1875 | 3.00 | S261-188-2-SQUP8X | $44.89 |
| 0.250 (1/4)* | 2.000 | 0.250 | 4.00 | S261-250-2-SQUP8X | $59.69 |
| 0.3125 (5/16)* | 2.500 | 0.3125 | 4.00 | S261-313-2-SQUP8X | $75.76 |
| 0.375 (3/8)* | 3.000 | 0.375 | 5.00 | S261-375-2-SQUP8X | $93.35 |

### SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# S276 Square Straight Flute Plastic Cutters

FLUTE 1

SWISS-TYPE OAL

QUICK TURN SPECIALS

| Cutter Diameter | Length of Cut | Shank Diameter | Overall Length | 1 Flute Tool # | Price |
|---|---|---|---|---|---|
| A | B | D | E | | |
| 0.125 (1/8) | 0.375 | 0.125 | 2.00 | S276-001-1-ROUT | $29.14 |
| 0.125 (1/8) | 0.375 | 0.250 | 2.00 | S276-002-1-ROUT | $32.34 |
| 0.125 (1/8) | 0.500 | 0.125 | 2.00 | S276-003-1-ROUT | $29.14 |
| 0.125 (1/8) | 0.500 | 0.250 | 2.00 | S276-004-1-ROUT | $32.34 |
| 0.125 (1/8) | 0.750 | 0.125 | 2.50 | S276-005-1-ROUT | $31.66 |
| 0.125 (1/8) | 0.750 | 0.250 | 2.50 | S276-006-1-ROUT | $37.17 |
| 0.1875 (3/16) | 0.500 | 0.1875 | 2.00 | S276-007-1-ROUT | $33.39 |
| 0.1875 (3/16) | 0.500 | 0.250 | 2.00 | S276-008-1-ROUT | $34.51 |
| 0.1875 (3/16) | 0.750 | 0.1875 | 2.50 | S276-009-1-ROUT | $34.02 |
| 0.1875 (3/16) | 0.750 | 0.250 | 2.50 | S276-010-1-ROUT | $36.20 |
| 0.1875 (3/16) | 1.000 | 0.1875 | 3.00 | S276-011-1-ROUT | $36.33 |
| 0.1875 (3/16) | 1.000 | 0.250 | 3.00 | S276-012-1-ROUT | $38.69 |
| 0.1875 (3/16) | 1.250 | 0.1875 | 4.00 | S276-013-1-ROUT | $42.84 |
| 0.1875 (3/16) | 1.250 | 0.250 | 4.00 | S276-014-1-ROUT | $48.04 |
| 0.250 (1/4) | 0.500 | 0.250 | 2.50 | S276-015-1-ROUT | $35.75 |
| 0.250 (1/4) | 0.750 | 0.250 | 2.50 | S276-016-1-ROUT | $37.70 |
| 0.250 (1/4) | 1.000 | 0.250 | 3.00 | S276-017-1-ROUT | $42.63 |
| 0.250 (1/4) | 1.250 | 0.250 | 4.00 | S276-018-1-ROUT | $48.88 |
| 0.375 (3/8) | 0.750 | 0.375 | 2.50 | S276-019-1-ROUT | $65.80 |
| 0.375 (3/8) | 1.000 | 0.375 | 3.00 | S276-020-1-ROUT | $69.25 |
| 0.375 (3/8) | 1.250 | 0.375 | 4.00 | S276-021-1-ROUT | $73.80 |

## SEE ALSO:


| | |
|---|---|
| p. 3 | Quick Turn Specials |
| p. 13 | Swiss-Type Tooling |
| p. 206 | Custom Tools |
| p. 208 | Coating |

# SHORT LEAD TIMES

## QUALITY TOOLS, FAST

Manufacturers face increasingly tight production schedules and cannot afford downtime. MITGI understands that short lead times and the ability to deliver tools on time are essential to keep lines running and efficient. Our teams keep both your lead times and tool specs in mind when quoting, manufacturing, and ensuring tools arrive when expected. MITGI delivers performance and timelines you can depend on.

## BLANKET ORDERS

Blanket POs allow you to ensure that any tool can be available for same day shipment. With a blanket PO in place, tools are manufactured then stocked and ready to go when needed. Shipments for blanket orders can be scheduled for specific release dates or shipped upon request. We recommend utilizing blankets on tools used in long-running jobs and those with a stable estimated forecast. Blanket POs are also very useful for tools that have longer lead times due to complexity or special order material.

Contact your MITGI Account Manager for more information regarding stocking options and blanket orders.

*Sue, Quality Support Technician*

## CUSTOM TOOLS

Most custom tools are available in two weeks or less, and some as quickly as three days. Contact your MITGI Account Manager to receive an estimate based on current production schedule.

## STOCK TOOLS

Most standard tools are available in three days or less. Once standard tools have been ordered they are stocked and available for same day shipment on reorders.

## EXPEDITED ORDERS

Our manufacturing facility is setup for flexibility and can produce standard or custom orders quickly and efficiently. Contact us for Quick Turn and expedited order options.

Expedited delivery is available on a case-by-case basis.

# S114 3/8" Brazed Saws

| Cutter Diameter | Shank Diameter | Overall Length | Neck Diameter | Neck Length | Cutter Width | 10 Teeth | 14 Teeth | 18 Teeth | Price |
|---|---|---|---|---|---|---|---|---|---|
| A | D | E | G | C | H | | | | |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.030 | S114-001-10 | S114-001-14 | S114-001-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.030 | S114-002-10 | S114-002-14 | S114-002-18 | $148.37 |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.035 | S114-003-10 | S114-003-14 | S114-003-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.035 | S114-004-10 | S114-004-14 | S114-004-18 | $148.37 |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.040 | S114-005-10 | S114-005-14 | S114-005-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.040 | S114-006-10 | S114-006-14 | S114-006-18 | $148.37 |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.045 | S114-007-10 | S114-007-14 | S114-007-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.045 | S114-008-10 | S114-008-14 | S114-008-18 | $148.37 |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.050 | S114-009-10 | S114-009-14 | S114-009-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.050 | S114-010-10 | S114-010-14 | S114-010-18 | $148.37 |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.055 | S114-011-10 | S114-011-14 | S114-011-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.055 | S114-012-10 | S114-012-14 | S114-012-18 | $148.37 |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.060 | S114-013-10 | S114-013-14 | S114-013-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.060 | S114-014-10 | S114-014-14 | S114-014-18 | $148.37 |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.065 | S114-015-10 | S114-015-14 | S114-015-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.065 | S114-016-10 | S114-016-14 | S114-016-18 | $148.37 |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.070 | S114-017-10 | S114-017-14 | S114-017-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.070 | S114-018-10 | S114-018-14 | S114-018-18 | $148.37 |
| 0.375 (3/8) | 0.250 | 3.00 | N/A | N/A | 0.075 | S114-019-10 | S114-019-14 | S114-019-18 | $142.59 |
| 0.375 (3/8) | 0.250 | 3.00 | 0.125 | 0.50 | 0.075 | S114-020-10 | S114-020-14 | S114-020-18 | $148.37 |

**SEE ALSO:**

p. 206 | Custom Tools

**ALL SAWS ARE AVAILABLE IN 3 WEEKS OR LESS (4 WEEKS COATED)**

JUST IN TIME

*All MITGI Brazed Saws are available in 3 weeks or less (4 weeks coated). Contact us to order standards or request a custom saw quote.*

## 1/2" Brazed Saws



| Cutter Diameter | Shank Diameter | Overall Length | Neck Diameter | Neck Length | Cutter Width | 10 Teeth | 16 Teeth | 20 Teeth | Price |
|---|---|---|---|---|---|---|---|---|---|
| A | D | E | G | C | H | | | | |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.030 | S115-001-10 | S115-001-16 | S115-001-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.030 | S115-002-10 | S115-002-16 | S115-002-20 | $160.86 |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.035 | S115-003-10 | S115-003-16 | S115-003-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.035 | S115-004-10 | S115-004-16 | S115-004-20 | $160.86 |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.040 | S115-005-10 | S115-005-16 | S115-005-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.040 | S115-006-10 | S115-006-16 | S115-006-20 | $160.86 |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.045 | S115-007-10 | S115-007-16 | S115-007-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.045 | S115-008-10 | S115-008-16 | S115-008-20 | $160.86 |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.050 | S115-009-10 | S115-009-16 | S115-009-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.050 | S115-010-10 | S115-010-16 | S115-010-20 | $160.86 |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.055 | S115-011-10 | S115-011-16 | S115-011-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.055 | S115-012-10 | S115-012-16 | S115-012-20 | $160.86 |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.060 | S115-013-10 | S115-013-16 | S115-013-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.060 | S115-014-10 | S115-014-16 | S115-014-20 | $160.86 |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.065 | S115-015-10 | S115-015-16 | S115-015-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.065 | S115-016-10 | S115-016-16 | S115-016-20 | $160.86 |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.070 | S115-017-10 | S115-017-16 | S115-017-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.070 | S115-018-10 | S115-018-16 | S115-018-20 | $160.86 |
| 0.500 (1/2) | 0.250 | 3.00 | N/A | N/A | 0.075 | S115-019-10 | S115-019-16 | S115-019-20 | $154.04 |
| 0.500 (1/2) | 0.250 | 3.00 | 0.125 | 0.50 | 0.075 | S115-020-10 | S115-020-16 | S115-020-20 | $160.86 |

**SEE ALSO:**

p. 206 | Custom Tools

**ALL SAWS ARE AVAILABLE IN 3 WEEKS OR LESS (4 WEEKS COATED)**

## S116 3/4" Brazed Saws

| Cutter Diameter | Shank Diameter | Overall Length | Neck Diameter | Neck Length | Cutter Width | 10 Teeth | 16 Teeth | 22 Teeth | Price |
|---|---|---|---|---|---|---|---|---|---|
| A | D | E | G | C | H | | | | |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.030 | S116-001-10 | S116-001-16 | S116-001-22 | $161.33 |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.035 | S116-002-10 | S116-002-16 | S116-002-22 | $161.33 |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.040 | S116-003-10 | S116-003-16 | S116-003-22 | $161.33 |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.045 | S116-004-10 | S116-004-16 | S116-004-22 | $161.33 |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.050 | S116-005-10 | S116-005-16 | S116-005-22 | $161.33 |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.055 | S116-006-10 | S116-006-16 | S116-006-22 | $161.33 |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.060 | S116-007-10 | S116-007-16 | S116-007-22 | $161.33 |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.065 | S116-008-10 | S116-008-16 | S116-008-22 | $161.33 |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.070 | S116-009-10 | S116-009-16 | S116-009-22 | $161.33 |
| 0.750 (3/4) | 0.250 | 3.00 | N/A | N/A | 0.075 | S116-010-10 | S116-010-16 | S116-010-22 | $161.33 |

## S117 3/4" Brazed Saws

| Cutter Diameter | Shank Diameter | Overall Length | Neck Diameter | Neck Length | Cutter Width | 10 Teeth | 16 Teeth | 22 Teeth | Price |
|---|---|---|---|---|---|---|---|---|---|
| A | D | E | G | C | H | | | | |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.030 | S117-001-10 | S117-001-16 | S117-001-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.030 | S117-002-10 | S117-002-16 | S117-002-22 | $170.94 |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.035 | S117-003-10 | S117-003-16 | S117-003-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.035 | S117-004-10 | S117-004-16 | S117-004-22 | $170.94 |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.040 | S117-005-10 | S117-005-16 | S117-005-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.040 | S117-006-10 | S117-006-16 | S117-006-22 | $170.94 |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.045 | S117-007-10 | S117-007-16 | S117-007-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.045 | S117-008-10 | S117-008-16 | S117-008-22 | $170.94 |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.050 | S117-009-10 | S117-009-16 | S117-009-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.050 | S117-010-10 | S117-010-16 | S117-010-22 | $170.94 |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.055 | S117-011-10 | S117-011-16 | S117-011-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.055 | S117-012-10 | S117-012-16 | S117-012-22 | $170.94 |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.060 | S117-013-10 | S117-013-16 | S117-013-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.060 | S117-014-10 | S117-014-16 | S117-014-22 | $170.94 |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.065 | S117-015-10 | S117-015-16 | S117-015-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.065 | S117-016-10 | S117-016-16 | S117-016-22 | $170.94 |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.070 | S117-017-10 | S117-017-16 | S117-017-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.070 | S117-018-10 | S117-018-16 | S117-018-22 | $170.94 |
| 0.750 (3/4) | 0.375 | 3.00 | N/A | N/A | 0.075 | S117-019-10 | S117-019-16 | S117-019-22 | $163.07 |
| 0.750 (3/4) | 0.375 | 3.00 | 0.25 | 0.50 | 0.075 | S117-020-10 | S117-020-16 | S117-020-22 | $170.94 |

**SEE ALSO:**

p. 206 | Custom Tools

JUST IN TIME

*All MITGI Brazed Saws are available in 3 weeks or less (4 weeks coated). Contact us to order standards or request a custom saw quote.*

## 1" Brazed Saws

# S118

| Cutter Diameter | Shank Diameter | Overall Length | Neck Diameter | Neck Length | Cutter Width | 12 Teeth | 18 Teeth | 24 Teeth | Price |
|---|---|---|---|---|---|---|---|---|---|
| A | D | E | G | C | H | | | | |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.030 | S118-001-12 | S118-001-18 | S118-001-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.030 | S118-002-12 | S118-002-18 | S118-002-24 | $176.66 |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.035 | S118-003-12 | S118-003-18 | S118-003-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.035 | S118-004-12 | S118-004-18 | S118-004-24 | $176.66 |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.040 | S118-005-12 | S118-005-18 | S118-005-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.040 | S118-006-12 | S118-006-18 | S118-006-24 | $176.66 |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.045 | S118-007-12 | S118-007-18 | S118-007-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.045 | S118-008-12 | S118-008-18 | S118-008-24 | $176.66 |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.050 | S118-009-12 | S118-009-18 | S118-009-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.050 | S118-010-12 | S118-010-18 | S118-010-24 | $176.66 |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.055 | S118-011-12 | S118-011-18 | S118-011-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.055 | S118-012-12 | S118-012-18 | S118-012-24 | $176.66 |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.060 | S118-013-12 | S118-013-18 | S118-013-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.060 | S118-014-12 | S118-014-18 | S118-014-24 | $176.66 |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.065 | S118-015-12 | S118-015-18 | S118-015-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.065 | S118-016-12 | S118-016-18 | S118-016-24 | $176.66 |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.070 | S118-017-12 | S118-017-18 | S118-017-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.070 | S118-018-12 | S118-018-18 | S118-018-24 | $176.66 |
| 1.00 | 0.375 | 3.00 | N/A | N/A | 0.075 | S118-019-12 | S118-019-18 | S118-019-24 | $168.79 |
| 1.00 | 0.375 | 3.00 | 0.25 | 0.50 | 0.075 | S118-020-12 | S118-020-18 | S118-020-24 | $176.66 |

**ALL SAWS ARE AVAILABLE IN 3 WEEKS OR LESS (4 WEEKS COATED)**

**SEE ALSO:**

p. 206 | Custom Tools

## CUSTOM

### SPECIALS / Brazed or Arbor Mounted Saws

**Can't find a tool to meet your exact specifications? Specials or modified standards may be the answer.**

### MANUFACTURED BY MITGI

- Shank diameter = 3mm – 1.250 in
- Tolerances and number of teeth vary by design
- Saws dished front to back for free cutting
- Options: modified or combined features, neck length, staggered form, end finishes, saw diameter
- Specials usually available in 3-4 weeks or less

**Quote forms available on our website and upon request.**
**Contact us for an estimate today.**

## CUSTOM TOOLS

There are some situations in which a standard tool just doesn't fit the job. When a complicated application or other limitations exist, a custom tool can provide the unique capabilities required.

Custom tools can be manufactured from an existing design or created using our in-house design service. Within two weeks of print approval and receipt of a purchase order, we can have the custom tool in your hands and ready for use. To make re-ordering easier, we'll keep detailed records on each custom order so that we're always ready to manufacture the tool to the exact same specifications.

**TIMELINE: TWO WEEKS OR LESS**

## MODIFIED STANDARDS

Standard tools provide an immediate manufacturing solution. In some cases, the tool needed may be similar to a stocked tool, but requires some changes to improve efficiencies. For more information about each tool type, refer to QUOTE SHEETS on our website, or on the following pages:

- End Mills, pages 6-95 and 172-177
- Variable Helix Micro End Mills, pages 88-95
- Drills, pages 96-109
- Coolant Thru Tools, pages 108-109 and 166-171
- Reamers, pages 110-113
- Drafted Mold Tools, pages 114-125
- Clearance Cutter Mold Tools, pages 126-129
- Tapered Rib Cutters, pages 130-150
- Thread Mills, pages 152-165
- Corner Rounders, page 175
- Undercutting End Mills/Cherry Ball Tools, pages 176-177
- Spot Drills, pages 178-180
- Drill Mills, page 181
- Keyseat Cutters, pages 182-187
- Dovetail Cutters, pages 188-189
- Chamfer Cutters, page 190
- Engraving Tools, page 192-193
- Plastics Cutters, pages 194-200
- Brazed or Arbor Mounted Saws, pages 202-205

Some modified standards may be able to be manufactured as quickly as three days. To determine the fastest production timeline, request a QUICK TURN REVIEW when submitting your quote request. QUICK TURN schedule availability may vary and capacity is limited.

**TIMELINE: TWO WEEKS OR LESS**
**QUICK TURN TIMELINE: THREE DAYS OR LESS**

# CUSTOM TOOLS AND MODIFIED STANDARDS

## CUSTOM TOOL TYPES

- Micro End Mills (standard, stub, extended reach, extended length of cut) including Ball, Square, and Corner Radius
- High Performance Micro End Mills
- Micro Drills
- Drills, Drill Mills, Spot Drills, G-Style Drills, Double Margin Drills, Spade Drills, Gun Drills
- Reamers
- Single Point and Full Form Thread Mills
- End Mills
- Hard Milling End Mills
- Undercutting End Mills/Cherry Ball Tools
- Deburring Knives
- Chamfer Cutters
- Engraving Cutters
- Drafted Mold Tools
- Clearance Cutter Mold Tools
- Tapered Rib Cutter Mold Tools
- Specialty Mold Tooling
- Chamfer Cutters, Corner Rounders
- Keyseat Cutters, Woodruff Cutters, Staggered Tooth Keyseat Cutters
- Dovetails
- Multi-Diameter Step Tooling, Step Drills, Step Reamers
- Countersinks, Counterbores
- Broaches, Pins, Go/No-Go Gauges
- Corner Rounding End Mills
- Boring Bars
- Rebar Tools, Thread Bars
- Insert Modifications
- Port Tools
- Coolant Thru Thread Mills and Micro Drills
- Slitting Saws (mounted and arbor)
- Brazed Saws
- Form Tools
- Intersecting Form Tools
- Combination Tools
- Specialty Tool Manufacturing to Customer Print or Design

**Ready to get started?**
**Contact us:**
**Phone: (320) 455-0535**
**Email: info@mitgi.us,**
**Web: www.mitgi.us**

## IN-HOUSE COATING

With the introduction of in-house coating, we're able to deliver coating that has the same great quality as the tools you've come to expect from MITGI. Tools are coated in small batches of like sizes to ensure consistent coating is applied at the optimum temperature. MITGI offers coating for micro tools with a round shank, that are made of carbide or high speed steel, in shank sizes ranging from 1/8"-1" in diameter, and with cutter dimensions commonly as low as 0.010" (smaller on a case-by-case basis).

*Whitney, Coating Lead*

## LEVEL I: AlTiN (Aluminum Titanium Nitride)

**Ideal Cutting Material:** Hardened Steel, Alloy Steel, Low Carbon Steel, Carbon Steel, Stainless Steel, PH Stainless Steel, Titanium
**Primary Features:** Longer tool life, especially in high speed applications

## LEVEL II: TiN (Titanium Nitride)

**Ideal Cutting Material:** Iron, Steel, Alloy Steel, Low Carbon Steel, Carbon Steel
**Primary Features:** Reduction in overall tool wear

## LEVEL II: TiCN (Titanium Carbon Nitride)

**Ideal Cutting Material:** Aluminum, Steel
**Primary Features:** Optimum coating for tools with sharp edges and corners

## LEVEL II: nACo®

**Ideal Cutting Material:** Steel, Hardened Steel, Alloyed Steel, Superalloys
**Primary Features:** Drilling, Hard Milling

Contact us to discuss which coating will deliver optimum results.

# COATING OPTIONS

## LEVEL III COATING OPTIONS

Level III coating formulas may be run in-house or outsourced to approved vendors. Lead times vary based on tool type and quantity.

- ZrN
- nACRo®
- Diamond
- DLC (diamond-like coating)
- Other formulations as requested

**Ready to get started?**
**Contact us:**
**Phone: (320) 455-0535**
**Email: info@mitgi.us,**
**Web: www.mitgi.us**

## PRODUCTION NOTES

- In-house coating generally adds 1-5 days to overall production schedule
- Level I coating runs every 1-2 days, depending on tool size
- Level II and Level III coatings are available upon request, with an average 1-2 week turnaround
- When estimating Level I pricing, add 25% per inch for overall lengths greater than 3"
- No double ended tools or brazed tools with MITGI in-house coating
- Batch charge minimum or total of tool charge (whichever is greater)

## COATING AS A SERVICE

All MITGI in-house coatings are available for purchase as a batch. For more information, contact your MITGI Account Manager for pricing and scheduling options.

*Jessica, Coating*

nACo® and nACRo® are registered trademarks of PLATIT, Inc.

## Index by Product Line


| S-REF | Catalog Table Title | Page |
|---|---|---|
| S04 | 7° Deburring Knives, HSS | 191 |
| S04 | 7° Deburring Knives, Carbide | 191 |
| S04 | 10° Deburring Knives, HSS | 191 |
| S04 | 10° Deburring Knives, Carbide | 191 |
| S07 | Ball Micro End Mills / 3x LOC | 43 |
| S08 | Square Micro End Mills / 3x LOC / 2, 3, 4 Flutes | 8-9 |
| S08 | Square Micro End Mills / 3x LOC / 5 Flutes | 55 |
| S10 | Square Micro End Mills / 1.5x LOC / 2, 3, 4 Flutes | 6-7 |
| S10 | Square Micro End Mills / 1.5x LOC / 5 Flutes | 54 |
| S11 | Ball Micro End Mills / 1.5x LOC / 2, 3, 4 Flutes | 42 |
| S14 | Square Variable Helix End Mills / 3x LOC / 5 Flutes | 174 |
| S16 | 90° Carbide NC Spot Drills | 178 |
| S17 | Single Point Thread Mills | 152-153 |
| S20 | 30° Helix Square End Mills / 1.5x LOC / 5 Flutes | 173 |
| S21 | Square Variable Helix End Mills / 1.5x LOC / 5 Flutes | 174 |
| S22 | Single End Corner Rounding End Mills | 175 |
| S26 | 30° Helix Square End Mills / 3x LOC / 5 Flutes | 173 |
| S28 | 90° Drill Mills, Carbide | 181 |
| S29 | 120° Drill Mills, Carbide | 181 |
| S33 | 60° Drill Mills, Carbide | 181 |
| S34 | Metric Square Micro End Mills / 3x LOC / 2, 4 Flutes | 81 |
| S35 | Metric Square Micro End Mills / 1.5x LOC / 2, 4 Flutes | 80 |
| S36 | Metric Ball Micro End Mills / 3x LOC / 2, 4 Flutes | 83 |
| S37 | Metric Ball Micro End Mills / 1.5x LOC / 2, 4 Flutes | 82 |
| S39 | UN Full Form Helical Thread Mills | 154-156 |
| S40 | Metric Full Form Helical Thread Mills | 164 |
| S41 | NPTF Full Form Helical Thread Mills | 162 |
| S42 | 30° Helix Square End Mills / 4 Flutes | 172 |
| S43 | Square Aluminum Cutting End Mills / 3 Flutes | 175 |
| S47 | 30° Helix Ball End Mills / 4 Flutes | 172 |
| S51 | NPT Full Form Helical Thread Mills | 163 |
| S58 | Corner Radius Micro End Mills / 3x LOC / 2, 3, 4 Flutes | 22-23 |
| S58 | Corner Radius Micro End Mills / 3x LOC / 5 Flutes | 67 |
| S61 | 140° Coolant Thru Micro Drills / 8x Flute Length | 108 |

| S-REF | Catalog Table Title | Page |
|---|---|---|
| S62 | Square Micro End Mills / 5x LOC / 2, 3, 4 Flutes | 10 |
| S62 | Square Micro End Mills / 5x LOC / 5 Flutes | 56 |
| S63 | Square Micro End Mills / 8x LOC / 2, 3, 4 Flutes | 11 |
| S63 | Square Micro End Mills / 8x LOC / 5 Flutes | 57 |
| S64 | Square Micro End Mills / 12x LOC / 2, 3, 4 Flutes | 12 |
| S64 | Square Micro End Mills / 12x LOC / 5 Flutes | 58 |
| S68 | Square Micro End Mills / 3x LOC / 5x Reach / 2, 3, 4 Flutes | 15 |
| S68 | Square Micro End Mills / 3x LOC / 5x Reach / 5 Flutes | 61 |
| S69 | Square Micro End Mills / 3x LOC / 8x Reach / 2, 3, 4 Flutes | 17 |
| S69 | Square Micro End Mills / 3x LOC / 8x Reach / 5 Flutes | 63 |
| S70 | Square Micro End Mills / 3x LOC / 12x Reach / 2, 3, 4 Flutes | 19 |
| S70 | Square Micro End Mills / 3x LOC / 12x Reach / 5 Flutes | 65 |
| S71 | Square Micro End Mills / 1.5x LOC / 5x Reach / 2, 3, 4 Flutes | 14 |
| S71 | Square Micro End Mills / 1.5x LOC / 5x Reach / 5 Flutes | 60 |
| S72 | Square Micro End Mills / 1.5x LOC / 8x Reach / 2, 3, 4 Flutes | 16 |
| S72 | Square Micro End Mills / 1.5x LOC / 8x Reach / 5 Flutes | 62 |
| S73 | Square Micro End Mills / 1.5x LOC / 12x Reach / 2, 3, 4 Flutes | 18 |
| S73 | Square Micro End Mills / 1.5x LOC / 12x Reach / 5 Flutes | 64 |
| S74 | Ball Micro End Mills / 5x LOC / 2, 3, 4 Flutes | 44 |
| S75 | Ball Micro End Mills / 8x LOC / 2, 3, 4 Flutes | 45 |
| S76 | Ball Micro End Mills / 12x LOC / 2, 3, 4 Flutes | 46 |
| S77 | Ball Micro End Mills / 3x LOC / 5x Reach / 2, 3, 4 Flutes | 49 |
| S78 | Ball Micro End Mills / 3x LOC / 8x Reach / 2, 3, 4 Flutes | 51 |
| S79 | Ball Micro End Mills / 3x LOC / 12x Reach / 2, 3, 4 Flutes | 53 |
| S80 | Ball Micro End Mills / 1.5x LOC / 5x Reach / 2, 3, 4 Flutes | 48 |
| S81 | Ball Micro End Mills / 1.5x LOC / 8x Reach / 2, 3, 4 Flutes | 50 |
| S82 | Ball Micro End Mills / 1.5x LOC / 12x Reach / 2, 3, 4 Flutes | 52 |
| S83 | Corner Radius Micro End Mills / 1.5x LOC / 2, 3, 4 Flutes | 20-21 |
| S83 | Corner Radius Micro End Mills / 1.5x LOC / 5 Flutes | 66 |

| S-REF | Catalog Table Title | Page |
|---|---|---|
| S84 | Corner Radius Micro End Mills / 3x LOC / 5x Reach / 2, 3, 4 Flutes | 32-33 |
| S84 | Corner Radius Micro End Mills / 3x LOC / 5x Reach / 5 Flutes | 75 |
| S85 | Corner Radius Micro End Mills / 3x LOC / 8x Reach / 2, 3, 4 Flutes | 36-37 |
| S85 | Corner Radius Micro End Mills / 3x LOC / 8x Reach / 5 Flutes | 77 |
| S86 | Corner Radius Micro End Mills / 3x LOC / 12x Reach / 2, 3, 4 Flutes | 40-41 |
| S86 | Corner Radius Micro End Mills / 3x LOC / 12x Reach / 5 Flutes | 79 |
| S87 | Corner Radius Micro End Mills / 1.5 LOC / 5x Reach / 2, 3, 4 Flutes | 30-31 |
| S87 | Corner Radius Micro End Mills / 1.5 LOC / 5x Reach / 5 Flutes | 74 |
| S88 | Corner Radius Micro End Mills / 1.5x LOC / 8x Reach / 2, 3, 4 Flutes | 34-35 |
| S88 | Corner Radius Micro End Mills / 1.5x LOC / 8x Reach / 5 Flutes | 76 |
| S89 | Corner Radius Micro End Mills / 1.5x LOC / 12x Reach / 2, 3, 4 Flutes | 38-39 |
| S89 | Corner Radius Micro End Mills / 1.5x LOC / 12x Reach / 5 Flutes | 78 |
| S97 | Square Keyseat Cutters | 182 |
| S97 | 45° Chamfer Keyseat Cutters | 187 |
| S100 | 270° Undercutting End Mills / Cherry Ball Tools | 176-177 |
| S101 | 30° Engraving Cutters | 192 |
| S101 | 60° Engraving Cutters | 192 |
| S101 | 90° Engraving Cutters | 193 |
| S102 | 30° Chamfer Cutters | 190 |
| S102 | 45° Chamfer Cutters | 190 |
| S103 | NPT Full Form Straight Flute Thread Mills | 163 |
| S104 | NPTF Full Form Straight Flute Thread Mills | 162 |
| S105 | UN Full Form Straight Flute Thread Mills | 158-160 |
| S106 | Metric Full Form Straight Flute Thread Mills | 165 |
| S107 | Corner Radius Micro End Mills / 5x LOC / 2, 3, 4 Flutes | 24-25 |
| S107 | Corner Radius Micro End Mills / 5x LOC / 5 Flutes | 68-69 |
| S108 | Corner Radius Micro End Mills / 8x LOC / 2, 3, 4 Flutes | 26-27 |
| S108 | Corner Radius Micro End Mills / 8x LOC / 5 Flutes | 70-71 |
| S109 | Corner Radius Micro End Mills / 12x LOC / 2, 3, 4 Flutes | 28-29 |
| S109 | Corner Radius Micro End Mills /12x LOC / 5 Flutes | 72-73 |
| S110 | 140° Carbide NC Spot Drills | 180 |
| S111 | 140° Coolant Thru Micro Drills / 12x Flute Length | 108 |

## Index by Product Line


| S-REF | Catalog Table Title | Page |
|---|---|---|
| S112 | 140° Metric Coolant Thru Micro Drills / 8x Flute Length | 109 |
| S113 | 140° Metric Coolant Thru Micro Drills / 12x Flute Length | 109 |
| S114 | 3/8" Brazed Saws | 202 |
| S115 | 1/2" Brazed Saws | 203 |
| S116 | 3/4" Brazed Saws | 204 |
| S117 | 3/4" Brazed Saws | 204 |
| S118 | 1" Brazed Saws | 205 |
| S131 | Micro Drills / 5x Flute Length | 96-97 |
| S131 | Metric Micro Drills / 5x Flute Length | 104 |
| S132 | Micro Drills / 8x Flute Length | 98-99 |
| S132 | Metric Micro Drills / 8x Flute Length | 105 |
| S133 | Micro Drills / 12x Flute Length | 100-101 |
| S133 | Metric Micro Drills / 12x Flute Length | 106 |
| S134 | Micro Drills / 15x Flute Length | 102-103 |
| S134 | Metric Micro Drills / 15x Flute Length | 107 |
| S135 | +0.0002 Tolerance Reamers / 8x Flute Length | 110 |
| S135 | +0.005mm Tolerance Metric Reamers / 8x Flute Length | 112 |
| S136 | +0.0002 Tolerance Reamers / 8x Flute Length / 12x Reach | 111 |
| S136 | +0.005mm Tolerance Metric Reamers / 8x Flute Length / 12x Reach | 113 |
| S137 | 2° Square Drafted Mold Tools / 1.5x LOC / 2, 3, 4, 5 Flutes | 114 |
| S138 | 3° Square Drafted Mold Tools / 1.5x LOC / 2, 3, 4, 5 Flutes | 115 |
| S139 | 5° Square Drafted Mold Tools / 1.5x LOC / 2, 3, 4, 5 Flutes | 116 |
| S140 | 2° Corner Radius Drafted Mold Tools / 1.5x LOC / 2, 4, 5 Flutes | 118-119 |
| S141 | 3° Corner Radius Drafted Mold Tools / 1.5x LOC / 2, 4, 5 Flutes | 120-121 |
| S142 | 5° Corner Radius Drafted Mold Tools / 1.5x LOC / 2, 4, 5 Flutes | 122-123 |
| S143 | 2° Ball Drafted Mold Tools / 1.5x LOC / 2, 4 Flutes | 124 |
| S144 | 3° Ball Drafted Mold Tools / 1.5x LOC / 2, 4 Flutes | 124 |
| S145 | 5° Ball Drafted Mold Tools / 1.5x LOC / 2, 4 Flutes | 125 |
| S146 | 2° Square Clearance Cutters / 1.5x LOC / 2, 4, 5 Flutes | 126 |
| S147 | 2° Corner Radius Clearance Cutters / 1.5x LOC / 2, 4, 5 Flutes | 128-129 |
| S148 | 2° Ball Clearance Cutters / 1.5x LOC / 2, 4 Flutes | 127 |
| S149 | 0.5° Square Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 130 |
| S150 | 1° Square Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 131 |
| S151 | 1.5° Square Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 132 |
| S152 | 2° Square Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 133 |
| S153 | 3° Square Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 134 |
| S154 | 5° Square Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 135 |
| S155 | 0.5° Corner Radius Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 136-137 |
| S156 | 1° Corner Radius Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 138-139 |
| S157 | 1.5° Corner Radius Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 140-141 |
| S158 | 2° Corner Radius Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 142-143 |
| S159 | 3° Corner Radius Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 144-145 |
| S160 | 5° Corner Radius Tapered Rib Cutters / 8x or 12x LOC / 3, 4, 5 Flutes | 146-147 |
| S161 | 0.5° Ball Tapered Rib Cutters / 8x or 12x LOC / 3, 4 Flutes | 148 |
| S162 | 1° Ball Tapered Rib Cutters / 8x or 12x LOC / 3, 4 Flutes | 148 |
| S163 | 1.5° Ball Tapered Rib Cutters / 8x or 12x LOC / 3, 4 Flutes | 149 |
| S164 | 2° Ball Tapered Rib Cutters / 8x or 12x LOC / 3, 4 Flutes | 149 |
| S165 | 3° Ball Tapered Rib Cutters / 8x or 12x LOC / 3, 4 Flutes | 150 |
| S166 | 5° Ball Tapered Rib Cutters / 8x or 12x LOC / 3, 4 Flutes | 150 |
| S170 | Coolant Thru NPTF Full Form Helical Thread Mills | 170 |
| S171 | Coolant Thru NPT Full Form Helical Thread Mills | 170 |
| S172 | Coolant Thru UN Full Form Helical Thread Mills | 166-168 |
| S173 | Metric Coolant Thru Full Form Helical Thread Mills | 171 |
| S213 | 118° Carbide NC Spot Drills | 179 |
| S214 | 60° Dovetail Cutters | 188 |
| S215 | 60° Dovetail Cutters / 3x Reach | 188 |
| S216 | 90° Dovetail Cutters | 189 |
| S217 | 90° Dovetail Cutters / 3x Reach | 189 |
| S218 | Full Radius Keyseat Cutters | 186 |
| S219 | Corner Radius Keyseat Cutters | 184-185 |
| S235 | Square Upcut Plastic Cutters / 3x LOC / 1 Flute | 194 |
| S236 | Square Upcut Plastic Cutters / 5x LOC / 1 Flute | 196 |
| S259 | Square Upcut Plastic Cutters / 3x LOC / 2 Flutes | 197 |
| S260 | Square Upcut Plastic Cutters / 5x LOC / 2 Flutes | 198 |
| S261 | Square Upcut Plastic Cutters / 8x LOC / 2 Flutes | 199 |
| S276 | Square Straight Plastic Cutters / 1 Flute | 200 |
| S277 | Square Variable Helix Micro End Mills / 1.5x LOC | 88 |
| S278 | Square Variable Helix Micro End Mills / 3x LOC | 88-89 |
| S279 | Square Variable Helix Micro End Mills / 5x LOC | 89 |
| S286 | Corner Radius Variable Helix Micro End Mills / 1.5x LOC | 90 |
| S287 | Corner Radius Variable Helix Micro End Mills / 3x LOC | 91 |
| S288 | Corner Radius Variable Helix Micro End Mills / 5x LOC | 92 |
| S295 | Square Helical Upcut Plastics Cutters / 4x LOC / 1 Flute | 195 |
| S300 | Ball Variable Helix Micro End Mills / 1.5x LOC / 3, 4 Flutes | 94 |
| S301 | Ball Variable Helix Micro End Mills / 3x LOC / 3, 4 Flutes | 94-95 |
| S302 | Ball Variable Helix Micro End Mills / 5x LOC / 3, 4 Flutes | 95 |
| S309 | Metric Square Micro End Mills (Metric Shank) / 1.5x LOC / 2, 4 Flutes | 84 |
| S310 | Metric Square Micro End Mills (Metric Shank) / 3x LOC / 2, 4 Flutes | 85 |
| S311 | Metric Ball Micro End Mills (Metric Shank) / 1.5x LOC / 2, 4 Flutes | 86 |
| S312 | Metric Ball Micro End Mills (Metric Shank) / 3x LOC / 2, 4 Flutes | 87 |

MITGI®

MANUFACTURER OF CUSTOM AND STANDARD CARBIDE CUTTING TOOLS

## MANUFACTURED BY MITGI

For more than 25 years, MITGI has proven that finding the right product with time lines that match your schedule does not have to be complicated. Through our standard and custom product lines, we can design and manufacture tools that will meet your specifications and exceed your expectations.

## CONTACT INFORMATION

**PO Box 549**
**45 West Highland Park Drive**
**Hutchinson, MN 55350**

**Phone: (320) 455-0535**
**Fax: (320) 455-0805**
**Email: info@mitgi.us**
**Web: www.mitgi.us**

©2019 Midwest Industrial Tool Grinding, Inc.

REV 07/2019