

# Southeast TOOL

High Performance Cutting Tools



## 2017 CATALOG

[WWW.SOUTHEASTTOOL.COM](http://WWW.SOUTHEASTTOOL.COM)

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## Southeast Tool, Inc.

### About the Company:

Southeast Tool, Inc. established a distribution company located in Conover, NC in 1998 for distributors and began selling many tools manufactured by a nearby vendor in the USA. Our vendors manufacture tooling that includes a wide array of woodworking router bits, router bits for plastic, solid carbide spirals, other tooling items and accessories. Over time, the volume of tooling manufactured in the USA has increased.

Since 1998, Southeast Tool has expanded using vendors that have extensive state-of-the-art manufacturing and quality control capabilities. We sell many of our products as Southeast Tool brand name to other local, nationwide and international distributors.

A large amount of our products are made in the USA. These tools have been sold to nationwide home improvement stores, hardware stores and nationwide lumber stores in large volumes for many years. Our cutting tools are used in: industrial applications, plastics industry, furniture manufacturing industries, countertop industry, RV industry, door manufacturers, cabinet manufacturing industries, professional woodworking applications and woodworking by hobbyists to name a few.

### Southeast Tool Mission:

Our mission is to maintain a commitment to provide quality products and dependable service at very affordable prices. Our long-time commitment to high standards in workmanship and service has led to long-term business relationships with our customers.

### We achieve our mission by our resolute commitment to:

- Provide Diverse and Cost Competitive Products
- Offer Personalized Customer Service
- Strive for Continuous Improvement of All That We Do
- Communicate Honestly and With Integrity Which Is To “Say What We Do and Do What We Say”
- Work Together to Enhance Profitably of Our Customers.

Please feel free to inquire about tooling not shown in this catalog. New tooling is continuously being developed to appear in future catalogs. We have the flexibility to provide the cutting tools that meet your needs at attractive prices.

(Be Advised: no portion of this catalog may be reproduced without Southeast Tool, Inc. written approval.)



## **TERMS AND CONDITIONS OF SALES**

**Terms:** All accounts will be given Net 30-day terms if credit is deemed satisfactory by the credit department. A 1-1/2% service charge will be added to all accounts past due. Any account over 60 days will be placed on credit hold until the account is brought current. All invoices correspond with date of shipment, not receipt of goods or invoice. **A \$25.00 service charge will be added for all returned checks. A \$15.00 service charge will be added for all invoices paid by wire transfer.** Southeast Tool, Inc. sells only through a vast network of distributors world wide. Please call or e-mail for the one in your area. Prices subject to change without notice.

**Freight Policy:** F.O.B. Conover NC. Any shortages in transit should be filed with the carrier. Any other shortages should be filed with Southeast Tool, Inc. no more than 10 days after receiving goods. Catalog orders over \$500.00 net will be shipped free ground freight prepaid within the continental USA; this excludes truck shipments.

**Drop Shipments:** All drop shipments are subject to regular terms and minimum order requirements. COD drop shipments will not be accepted.

**Product Guarantee:** All tools are warranted to be free from defects in workmanship. Due to the inherent nature of solid carbide, we cannot guarantee this material. **All warranties are void if tools are altered in any way (including sharpening).**

**Returning Goods:** All returns must be given prior consent by the company. A RGA # will be issued and must be clearly placed on the outside of the package. Southeast Tool, Inc. reserves the right to charge a 20% restocking fee. A copy of the invoice must also accompany the return. This applies to tools ordered in error and returned for exchange. Any tool returned for credit must be a current catalog item and must be returned in original packaging and in resalable condition. The correct tool must have been ordered or an off setting order placed. **No tools will be accepted for return after one year from date of purchase.** Southeast Tool, Inc. assumes no liability for returned goods. It is the shipper's responsibility to package the tools in a manner as to avoid damage in transit. Returned freight must be prepaid.

**Orders:** Orders must be a **minimum of \$50.00 net.** A \$4.00 charge does apply to orders under the minimum. Orders may be placed with Southeast Tool, Inc. by phone, fax, mail, internet, or e-mail. Since orders are processed continually throughout the day, add-ons to orders cannot be guaranteed to ship with other orders that have already been processed.

**Special Tooling:** Because of the vast resources of Southeast Tool, Inc., we can quote on almost any cutting tool that you or your customer may need. Please send a detail sketch or wood sample for a quotation. You may also e-mail drawings or photos to **quotes@southeasttool.com.** To expedite the quote please include the following: cutting diameter, cutting length, shank diameter, overall length, number of flutes, cutting rotation (i.e. RH or LH). We reserve the right to consider an order complete with 20% over or under ordered quantity. **Specials are not subject to return or cancellation.** Custom tooling may require a deposit prior to manufacturing. Although every effort is made to produce specialty tooling to a customer's specific needs. Any defects must be noted in writing to Southeast Tools, Inc. within 120 days of invoice date

**Safety:** Always wear eye and ear protection when working with cutting tools. Do not remove any machine safety guards. The grinding of carbide produces hazardous dust that may be harmful to your health; please use precautions and proper ventilation. Always wash hands before eating or drinking anything after handling carbide products.

## Conversion Chart

| Diameter | Decimal | Diameter | Decimal | Diameter | Decimal | Diameter | Decimal |
|----------|---------|----------|---------|----------|---------|----------|---------|
| 1/64"    | .0156"  | 17/64"   | .2656"  | 13.5mm   | .5315"  | 20.5mm   | .8071"  |
| 1/32"    | .0312"  | 7mm      | .2756"  | 35/64"   | .5469"  | 13/16"   | .8125"  |
| 1mm      | .0394"  | 9/32"    | .2812"  | 14mm     | .5512"  | 21mm     | .8268"  |
| 3/64"    | .0469"  | 7.5mm    | .2953"  | 9/16"    | .5625"  | 53/64"   | .8281"  |
| 1.5mm    | .0591"  | 19/64"   | .2969"  | 14.5mm   | .5709"  | 27/32"   | .8438"  |
| 1/16"    | .0625"  | 5/16"    | .3125"  | 37/64"   | .5781"  | 21.5mm   | .8465"  |
| 5/64"    | .0781"  | 8mm      | .3150"  | 15mm     | .5906"  | 55/64"   | .8594"  |
| 2mm      | .0787"  | 8.2mm    | .3228"  | 19/32"   | .5938"  | 22mm     | .8661"  |
| 3/32"    | .0938"  | 21/64"   | .3281"  | 39/64"   | .6094"  | 7/8"     | .8750"  |
| 2.5mm    | .0984"  | 11/32"   | .3438"  | 15.5mm   | .6102"  | 22.5mm   | .8858"  |
| 7/64"    | .1094"  | 9mm      | .3543"  | 5/8"     | .6250"  | 57/64"   | .8906"  |
| 3mm      | .1181"  | 23/64"   | .3594"  | 16mm     | .6299"  | 23mm     | .9055"  |
| 1/8"     | .1250"  | 9.5mm    | .3740"  | 41/64"   | .6406"  | 29/32"   | .9062"  |
| 3.5mm    | .1378"  | 3/8"     | .3750"  | 16.5mm   | .6496"  | 23.5mm   | .9252"  |
| 28       | .1405"  | 25/64"   | .3906"  | 21/32"   | .6562"  | 15/16"   | .9375"  |
| 9/64"    | .1406"  | 10mm     | .3937"  | 17mm     | .6693"  | 24mm     | .9449"  |
| 5/32"    | .1562"  | 13/32"   | .4062"  | 43/64"   | .6719"  | 61/64"   | .9531"  |
| 4mm      | .1575"  | 10.5mm   | .4134"  | 11/16"   | .6875"  | 24.5mm   | .9646"  |
| 11/64"   | .1719"  | 27/64"   | .4219"  | 17.5mm   | .6890"  | 31/32"   | .9688"  |
| 4.5mm    | .1772"  | 11mm     | .4331"  | 45/64"   | .7031"  | 25mm     | .9843"  |
| 3/16"    | .1875"  | 7/16"    | .4375"  | 18mm     | .7087"  | 63/64"   | .9844"  |
| 5mm      | .1969"  | 11.5mm   | .4528"  | 23/32"   | .7188"  | 1"       | 1.0000" |
| 5.1mm    | .2008"  | 29/64"   | .4531"  | 18.5mm   | .7283"  | 26mm     | 1.0236" |
| 13/64"   | .2031"  | 15/32"   | .4688"  | 47/64"   | .7344"  | 28mm     | 1.1024" |
| 5.5mm    | .2165"  | 12mm     | .4724"  | 19mm     | .7480"  | 30mm     | 1.1811" |
| 7/32"    | .2188"  | 31/64"   | .4844"  | 3/4"     | .7500"  | 32mm     | 1.2598" |
| 15/64"   | .2344"  | 12.5mm   | .4921"  | 49/64"   | .7656"  | 34mm     | 1.3386" |
| 6mm      | .2362"  | 1/2"     | .5000"  | 19.5mm   | .7677"  | 35mm     | 1.3780" |
| 1/4"     | .2500"  | 13mm     | .5118"  | 25/32"   | .7812"  | 36mm     | 1.4173" |
| 6.5mm    | .2559"  | 33/64"   | .5156"  | 20mm     | .7874"  | 38mm     | 1.4961" |
| 6.7mm    | .2638"  | 17/32"   | .5313"  | 51/64"   | .7969"  | 40mm     | 1.5748" |

### Formula for transforming metric to decimal

( mm x .03937 = Decimal )

Example: 8mm x .03937 = .315

### Formula for transforming decimal to metric

( Decimal ÷ .03937 = mm )

Example: .315 ÷ .03937 = 8mm

### Formula for Inches Per Minute(IPM)

RPM x Inches Per Tooth x Number of Flutes

Example: 18000 x .017 x 2 = 612 Inches Per Minute

### Formula for Chipload or Inches Per Tooth (IPT)

IPM ÷ RPM ÷ Number of Flutes

Example: 612 ÷ 18000 ÷ 2 = .017 per tooth



### CHIP LOAD BASED ON 2 FLUTE TOOLS

| FEED RATE | SPINDLE RPM'S IN THOUSANDS |       |       |       |       |       |       |       |       |       |
|-----------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           | 10000                      | 11000 | 12000 | 13000 | 14000 | 15000 | 16000 | 17000 | 18000 | 19000 |
| 50        | 0.003                      | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 |
| 100       | 0.005                      | 0.005 | 0.004 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| 150       | 0.008                      | 0.007 | 0.006 | 0.006 | 0.005 | 0.005 | 0.005 | 0.004 | 0.004 | 0.004 |
| 200       | 0.010                      | 0.009 | 0.008 | 0.008 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 | 0.005 |
| 250       | 0.013                      | 0.011 | 0.010 | 0.010 | 0.009 | 0.008 | 0.008 | 0.007 | 0.007 | 0.007 |
| 300       | 0.015                      | 0.014 | 0.013 | 0.012 | 0.011 | 0.010 | 0.009 | 0.009 | 0.008 | 0.008 |
| 350       | 0.018                      | 0.016 | 0.015 | 0.013 | 0.013 | 0.012 | 0.011 | 0.010 | 0.010 | 0.009 |
| 400       | 0.020                      | 0.018 | 0.017 | 0.015 | 0.014 | 0.013 | 0.013 | 0.012 | 0.011 | 0.011 |
| 450       | 0.023                      | 0.020 | 0.019 | 0.017 | 0.016 | 0.015 | 0.014 | 0.013 | 0.013 | 0.013 |
| 500       | 0.025                      | 0.023 | 0.021 | 0.019 | 0.018 | 0.017 | 0.016 | 0.015 | 0.014 | 0.014 |
| 550       | 0.028                      | 0.025 | 0.023 | 0.021 | 0.020 | 0.018 | 0.017 | 0.016 | 0.015 | 0.015 |
| 600       | 0.030                      | 0.027 | 0.025 | 0.023 | 0.021 | 0.020 | 0.019 | 0.018 | 0.017 | 0.017 |

Inches per min.

CONSERVATIVE VALUES IN THE GRAY

### CHIP LOAD BASED ON 3 FLUTE TOOLS

| FEED RATE | SPINDLE RPM'S IN THOUSANDS |       |       |       |       |       |       |       |       |       |
|-----------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           | 12000                      | 13000 | 14000 | 14500 | 15000 | 16000 | 17000 | 18000 | 18500 | 19000 |
| 100       | 0.003                      | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| 150       | 0.004                      | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| 200       | 0.006                      | 0.005 | 0.005 | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| 250       | 0.007                      | 0.006 | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 | 0.005 | 0.005 | 0.004 |
| 300       | 0.008                      | 0.008 | 0.007 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 |
| 350       | 0.010                      | 0.009 | 0.008 | 0.008 | 0.008 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 |
| 400       | 0.011                      | 0.010 | 0.010 | 0.009 | 0.009 | 0.008 | 0.008 | 0.007 | 0.007 | 0.007 |
| 450       | 0.013                      | 0.012 | 0.011 | 0.010 | 0.010 | 0.009 | 0.009 | 0.008 | 0.008 | 0.008 |
| 500       | 0.014                      | 0.013 | 0.012 | 0.011 | 0.011 | 0.010 | 0.010 | 0.009 | 0.009 | 0.009 |
| 550       | 0.015                      | 0.014 | 0.013 | 0.013 | 0.012 | 0.011 | 0.011 | 0.010 | 0.010 | 0.010 |
| 600       | 0.017                      | 0.015 | 0.014 | 0.014 | 0.013 | 0.013 | 0.012 | 0.011 | 0.011 | 0.011 |
| 650       | 0.018                      | 0.017 | 0.015 | 0.015 | 0.014 | 0.014 | 0.013 | 0.012 | 0.012 | 0.012 |
| 700       | 0.019                      | 0.018 | 0.017 | 0.016 | 0.016 | 0.015 | 0.014 | 0.013 | 0.013 | 0.013 |

Inches per min.

CONSERVATIVE VALUES IN THE GRAY

A RANGE OF .007 TO .012 CHIP LOAD IS IDEAL  
TO LITTLE CHIP LOAD AND YOU BURN UP THE TOOL.  
TO HIGH A CHIP LOAD AND YOU BREAK THE TOOL

**It is important to note that chip loads will vary according to bit selection, bit diameter, depth of cut and material being cut.**

|   |    |  |    |
|---|----|--|----|
| <b>SOLID CARBIDE BITS</b>                                       |    | 3 FLUTE UPCUT SLOW SPIRAL ROUGHERS             | 29 |
| FLUSH TRIM BITS   | 10 | 1+1 COMPRESSION BITS                           | 29 |
| BEVEL TRIM BITS   | 10 | 1+1 COMPRESSION - LEFT-HAND                    | 29 |
| FLUSH AND BEVEL TRIM BIT (DOUBLE ENDED)                         | 10 | 2+2 COMPRESSIONS                               | 30 |
| DADO TRIM BITS  | 10 | 2+2 COMPRESSIONS - MORTISE                     | 30 |
| HOLE AND FLUSH TRIM BITS  | 10 | 2+2 COMPRESSIONS - MD                          | 31 |
| V-GROOVING BITS   | 10 | 2+2 COMPRESSIONS - MD MORTISE                  | 31 |
| FLUSH AND BEVEL TRIM BITS                                       | 11 | 2+2 COMPRESSIONS - HD                          | 31 |
| RIP AND SLOTTING BITS   | 11 | 2+2 COMPRESSIONS - LEFT-HAND                   | 32 |
| ROUND BOTTOM VEINING BITS (1 FLUTE)                             | 11 | 2+2 COMPRESSIONS W/ CHIPBREAKERS               | 32 |
| ROUND BOTTOM VEINING BITS (2 FLUTE)                             | 11 | 3+3 COMPRESSIONS                               | 32 |
| 2 FLUTE UPCUT BALL NOSE   | 11 | 3+3 COMPRESSIONS - MD                          | 33 |
| TAPERED BALL NOSE - UPCUT                                       | 11 | 3+3 COMPRESSIONS - HD                          | 33 |
| COVE NOSE SPIRAL BIT  | 12 | 4 FLUTE DOWNCUT FINISHNG/ROUGHER               | 33 |
| FLAT BOTTOM VEINING BITS (2 FLUTE)                              | 12 | 4 FLUTE UPCUT FINISHING/ROUGHER                | 33 |
| LINER BITS  | 12 | 4+4 COMPRESSIONS                               | 34 |
| ENGRAVING BITS  | 12 | 4+4 FINISHING/ROUGHER COMPRESSIONS             | 34 |
| STRAIGHT BIT - 1 FLUTE<br>(GENERAL PURPOSE APPLICATION)         | 12 | <b>CARBIDE TIPPED STRAIGHT BITS</b>            |    |
| STRAIGHT BIT - 2 FLUTE<br>(GENERAL PURPOSE APPLICATION)         | 13 | 1 FLUTE STRAIGHT                               | 34 |
| SOLID CARBIDE FIBERGLASS BITS                                   | 13 | 2 FLUTE STRAIGHT                               | 35 |
| SOLID CARBIDE WOOD SCREW SLOT BITS                              | 13 | 2 FLUTE STRAIGHT                               | 36 |
| FLUSH TRIM BITS   | 14 | 2 FLUTE LEFT-HAND STRAIGHT                     | 37 |
| 2 FLUTE FLUSH TRIM DOWNCUT BIT                                  | 14 | 2 FLUTE STRAIGHT 3/4 SHANK                     | 37 |
| 2 FLUTE FLUSH TRIM UPCUT BIT                                    | 14 | 2 FLUTE MORTISE STRAIGHT                       | 37 |
| 2 FLUTE FLUSH TRIM COMPRESSION BIT                              | 14 | TEMPLATE STRAIGHT                              | 37 |
| CHAMFER 2+2 COMPRESSION BITS                                    | 14 | TEMPLATE STRAIGHT WITH OVERSIZED BEARING       | 37 |
| <b>NEW SOLID CARBIDE MOAB-COATINGS<br/>(Mother Of All Bits)</b> |    | INSERT TEMPLATE STRAIGHT                       | 38 |
| 2+2 COMPRESSION MD SERIES MOAB-PLUS COATING                     | 15 | STAGGERTOOTH STRAIGHT FLUTE                    | 38 |
| 3+3 COMPRESSION MD SERIES MOAB-PLUS COATING                     | 15 | STAGGERTOOTH STRAIGHT OPPOSITE SHEAR           | 38 |
| 2+2 COMPRESSION HD SERIES MOAB-PLUS COATING                     | 15 | CENTER PILOT STAGGERTOOTH                      | 38 |
| 3+3 COMPRESSION HD SERIES MOAB-PLUS COATING                     | 15 | PLUNGE PANEL PILOT - 1 FLUTE                   | 39 |
| 2 FLUTE SPIRAL DOWNCUT MD SERIES MOAB-PLUS COATING              | 16 | PLUNGE PANEL PILOT - 2 FLUTE                   | 39 |
| 2 FLUTE SPIRAL UPCUT MD SERIES MOAB-PLUS COATING                | 16 | PANEL PILOT - HSS - 1 FLUTE STRAIGHT           | 39 |
| <b>DIAMOND TIPPED BITS</b>                                      |    | PANEL PILOT - HSS SPIRAL - 1 FLUTE             | 39 |
| DIAMOND-TIPPED ROUTER BITS • PCD (1+1 DESIGN)                   | 16 | FLUSH TRIM (2 FLUTE)                           | 39 |
| DIAMOND-TIPPED T-SLOT BITS • PCD (2+1 DESIGN)                   | 16 | FLUSH TRIM (3 FLUTE)                           | 40 |
| DIAMOND-TIPPED T-SLOT BITS • PCD (2+1 DESIGN)                   | 16 | FLUSH TRIM DOUBLE BEARING                      | 40 |
| <b>SOLID CARBIDE PLASTIC BITS</b>                               |    | FLUSH TRIM V-GROOVE                            | 40 |
| O FLUTE STRAIGHT BIT - 1 FLUTE (POLISHED)                       | 17 | OVERHANG                                       | 40 |
| O FLUTE STRAIGHT BIT - 1 FLUTE (POLISHED) - LEFT-HAND           | 17 | GLUE SPACE FLUSH TRIM                          | 40 |
| O FLUTE STRAIGHT BIT - 2 FLUTE (POLISHED)                       | 17 | EASY EDGE (NO FILING)                          | 41 |
| O FLUTE ROUNDING EDGE STRAIGHT FLUTE - 1 FLUTE                  | 18 | DOWNSHEAR FLUSH TRIM                           | 41 |
| O FLUTE ROUNDING EDGE STRAIGHT FLUTE - 2 FLUTE                  | 18 | SCREW-ON MORTISE - INSERT                      | 41 |
| O FLUTE ROUNDING EDGE SPIRAL BIT - 1 FLUTE                      | 18 | SCREW-ON MORTISE - ARBORS                      | 41 |
| O FLUTE UPCUT BIT - 1 FLUTE (GENERAL PURPOSE)                   | 18 | SCREW-ON MORTISE - CARBIDE-TIPPED              | 42 |
| O FLUTE DOWNCUT BIT - 1 FLUTE (GENERAL PURPOSE)                 | 18 | <b>CARBIDE TIPPED FORM BITS</b>                |    |
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| O FLUTE DOWNCUT - 1 FLUTE (POLISHED) - HARD PLASTIC             | 19 | CORE BOX BITS                                  | 43 |
| O FLUTE UPCUT - 1 FLUTE (POLISHED) - SOFT PLASTIC               | 20 | BALL END BITS                                  | 43 |
| O FLUTE DOWNCUT - 1 FLUTE (POLISHED) - SOFT PLASTIC             | 20 | BULL NOSE BITS                                 | 44 |
| O FLUTE LOW HELIX UPCUT SPIRAL, 2 FLUTE                         | 20 | PLUNGE HAND GRIP                               | 44 |
| O FLUTE HIGH HELIX UPCUT SPIRAL, 2 FLUTE                        | 21 | OVAL EDGE (HALF-BULL NOSE)                     | 44 |
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| 2 FLUTE UPCUT LEFT-HAND   | 25 | RABBET BITS                                    | 47 |
| 2 FLUTE DOWNCUT BITS W/ CHIPBEAKERS                             | 25 | RABBET BIT KITS                                | 48 |
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| 3 FLUTE UPCUT BITS  | 26 | ROUNDOVER BITS                                 | 49 |
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| 3 FLUTE DOWNCUT BITS W/ CHIPBEAKERS                             | 27 | BORING POINT ROUNDOVER AND EDGE                | 50 |
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| FURNITURE/BOX MAKER                  | 60 | CARBON STEEL ROUTER BLANKS*                             | 79 |
| TONGUE AND GROOVE ASSEMBLY           | 60 | HIGH SPEED STEEL ROUTER BLANKS FOR FINISHED GROUND      | 80 |
| FINGER JOINT ASSEMBLY                | 60 | HOLLOW MORTISING CHISELS                                | 80 |
| PLUNGE OGEE                          | 61 | HOLLOW MORTISING CHISELS - CENTER DRILL ONLY            | 80 |
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| MDF DOOR BITS                        | 62 | HSS CARVING POD BITS                                    | 81 |
| VERTICAL PANEL                       | 62 | <b>DOOR BITS</b>  |    |
| RAISED PANEL BITS                    | 62 | CARBIDE-TIPPED STRAIGHT DOOR LITE BITS                  | 81 |
| MEDIUM RAISED PANEL                  | 62 | HIGH-SPEED STEEL SPIRAL DOOR BITS                       | 81 |
| STILE AND RAIL                       | 63 | CARBIDE INSERT DRILL BIT                                | 81 |
| DOUBLE STILE AND RAIL                | 63 | CARBIDE TIPPED MULTI-SPUR BITS                          | 82 |
| RECESSED DOOR EDGE                   | 63 | HIGH SPEED STEEL MULTI-SPUR BITS                        | 83 |
| EUROPEAN DOOR EDGE                   | 63 | 2 WING DOOR DRILLS - ECONOMY                            | 83 |
| DRAWER PULL                          | 64 | 3 WING DOOR DRILL BITS                                  | 84 |
| WINDOW SILL EDGE                     | 64 | 3 WING QUICK CHANGE DOOR DRILLS                         | 84 |
| WINDOW SASH BIT                      | 64 | 3 WING DOOR KNOB DRILLS                                 | 85 |
| PICTURE FRAME                        | 65 | DOOR KNOB DRILLS  | 85 |
| PASO ROBLES THROW AWAY               | 65 | LATCH BORE BIT  | 85 |
| POCKET HOLE BITS FOR CASTLE™ MACHINE | 66 | LATCH BORE BIT WITH THREADED SHANK                      | 85 |
| EURO STEP BITS                       | 66 | CARBIDE TIPPED BRAD POINT TWIST DRILLS                  | 85 |
| QUEEN ANNE MOLDING                   | 66 | FACE FRAME BITS   | 86 |
| PLYWOOD KNOCKOUT                     | 66 | <b>BRAD POINT AND THROUGH HOLE BITS</b>                 |    |
| <b>SOLID SURFACE BITS</b>            |    | BRAD POINT - 57MM OAL                                   | 86 |
| FACE INLAY BITS                      | 67 | BRAD POINT - 70MM OAL                                   | 87 |
| NO DRIP COUNTER TOP                  | 67 | BRAD POINT - 77MM OAL                                   | 87 |
| UNDER ROUNDOVER                      | 67 | BRAD POINT - 63.5MM OAL WITH 1/4" SHANK                 | 88 |
| FLUSH TRIM BITS                      | 68 | V-POINT - 58MM OAL                                      | 88 |
| OVERHANG BOWL TRIM                   | 68 | V POINT - 70MM OAL                                      | 89 |
| ROUNDOVER BITS WITH DELRIN BEARING   | 68 | V POINT - 77MM OAL                                      | 89 |
| ROUNDOVER UNDERMOUNT                 | 68 | HINGE BITS - 57MM OAL                                   | 90 |
| DOUBLE COVE BIT                      | 69 | HINGE BITS - 70MM OAL                                   | 90 |
| ROMAN OGEE UNDERMOUNT                | 69 | SOLID CARBIDE CENTER DRILLS WITH DRILL POINT            | 90 |
| BEVEL UNDERMOUNT                     | 69 | SOLID CARBIDE CENTER DRILLS WITH BRAD POINT             | 91 |
| WILSONART® BOWL                      | 69 | Drill Adapters  | 91 |
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| BEVEL BIT                            | 70 | SOLID CARBIDE BORING BITS WITH STEEL SHANK - V-POINT    | 91 |
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| COUNTERTOP SURFACE PLANER            | 70 | CHUCK ADAPTERS WITH THREADED SHANK                      | 92 |
| DRAINBOARD BITS                      | 70 | QUICK CHANGE ADAPTER - BIESSE®                          | 93 |
| FACE COVE BITS                       | 70 | CARBIDE-TIPPED COUNTERSINKS                             | 93 |
| BACKSPLASH COVE                      | 71 | CARBIDE-TIPPED COUNTERSINKS                             | 93 |
| SOLID SURFACE REPAIR BITS            | 71 | CARBIDE-TIPPED COUNTERSINK - ADJUSTABLE 45° ANGLE       | 93 |

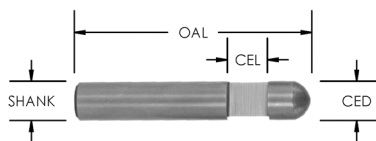
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|---|-----|---|-----|
| CARBIDE-TIPPED COUNTERBORES   | 93  | BRAD-POINT DRILL, STYLE NO 19HSL  | 103 |
| QUICK CHANGE ADAPTER FOR METRIC DRILLS  | 93  | TAPERED BRUSH-BLOCK DRILL,<br>STYLE 19TP                                      | 103 |
| <b>DRILLS</b>   |     |   |     |
| ADJUSTABLE COUNTERBORE, STYLE NO. 5   | 94  | BRAD POINT DRILL, STYLE 20  | 103 |
| ADJUSTABLE COUNTERBORE, STYLE NO. 5A  | 94  | BRAD-POINT DRILL,<br>STYLE 20BHS  | 103 |
| CARBIDE-TIPPED COUNTERBORE, STYLE NO. 5CT                                       | 94  | CARBIDE-TIPPED BRAD-POINT DRILL, STYLE 20BCT                                  | 104 |
| CARBIDE-TIPPED COUNTERSINK, STYLE NO. 5CT                                       | 94  | BRAD-POINT DRILL,<br>STYLE NO. 20CT   | 104 |
| SHORT-LENGTH COUNTERSINKS, STYLE NO. 5C   | 94  | BRAD-POINT DRILL,<br>STYLE 20HS   | 104 |
| ADJUSTABLE COUNTERSINK, STYLE NO. 5C  | 94  | BRAD-POINT DRILL, STYLE 20HS METRIC   | 105 |
| SOLID COUNTERBORE,<br>STYLE NO. 5DHS STEP DRILL • 1 PIECE                       | 94  | BRAD-POINT DRILL,<br>STYLE 20HSLH   | 105 |
| SOLID COUNTERSINK,<br>STYLE NO. 5EHS STEP DRILL • 1 PIECE                       | 94  | CARBIDE-TIPPED BRAD POINT DRILL, STYLE 20-6CT                                 | 105 |
| THREADED-SHANK ADJUSTABLE COUNTERBORE,<br>STYLE NO. 514                         | 95  | BRAD-POINT DRILL<br>STYLE 20-6  | 105 |
| THREADED-SHANK ADJUSTABLE COUNTERSINK,<br>STYLE NO. 514C                        | 95  | BRAD-POINT DRILL,<br>STYLE 20-6HS   | 105 |
| CARBIDE-TIPPED ADJUSTABLE COUNTERBORE,<br>STYLE NO. 514CT                       | 95  | GENERAL PURPOSE DRILL, JOBBER LENGTH,<br>STYLE 29 - 118° POINT                | 106 |
| MORTISING BIT, STYLE NO. 6HS  | 95  | GENERAL PURPOSE DRILL, JOBBER LENGTH,<br>STYLE 29LH - 118° POINT              | 106 |
| 2 Flute • Bi-Directional Cutting  | 95  | GENERAL PURPOSE DRILL, JOBBER LENGTH, METRIC,<br>STYLE 29M                    | 107 |
| VIBRATING MORTISE BIT,<br>STYLE NO. 46HS 2 Flute • Bi-Directional Cutting       | 95  | GENERAL PURPOSE<br>DRILL SETS, JOBBER LENGTH                                  | 107 |
| THREADED-SHANK DRILL-POINT DRILL,<br>STYLE NO. 12HS • 90° Point For Woodworking | 95  | GENERAL PURPOSE DRILL, SHORT LENGTH, STYLE 29S                                | 107 |
| THREADED-SHANK BRAD-POINT DRILL,<br>STYLE 14, 14A, 14ACT                        | 95  | GENERAL PURPOSE DRILL, SHORT LENGTH, STYLE 29SLH                              | 108 |
| THREADED-SHANK BRAD-POINT DRILL, STYLE 14AHS                                    | 95  | GENERAL PURPOSE DRILL, LONG LENGTH, STYLE 29T                                 | 108 |
| THREADED-SHANK BRAD-POINT DRILL, STYLE NO. 14BHS                                | 95  | GENERAL PURPOSE DRILL, LONG LENGTH, FAST SPIRAL,<br>STYLE 29TF                | 109 |
| CARBIDE-TIPPED THREADED-SHANK BRAD-POINT DRILLS,<br>STYLE NO. 14CT              | 95  | TAPER-POINT DRILL, JOBBER LENGTH, STYLE 29JTP                                 | 109 |
| Metric CARBIDE-TIPPED THREADED-SHANK BRAD-POINT<br>DRILLS, STYLE NO. 14CT       | 96  | TAPER-POINT DRILL, TAPER LENGTH, STYLE 29TTP                                  | 110 |
| CARBIDE-TIPPED THREADED-SHANK (EXTENDED)<br>BRAD-POINT DRILLS, STYLE NO. 14ESCT | 96  | DRILL-POINT 1/2" SHANK DRILL,<br>SILVER & DEMING® •                           | 110 |
| THREADED-SHANK (EXTENDED) BRAD-POINT DRILLS,<br>STYLE NO. 14ESHS                | 96  | SOLID-CENTER MACHINE  | 111 |
| THREADED-SHANK (EXTENDED) BRAD-POINT DRILLS,<br>STYLE NO. 14ESHS-L              | 96  | AUGER BITS, STYLE NO. 26A • Carbon tool steel                                 | 111 |
| THREADED-SHANK BRAD-POINT DRILLS, STYLE NO. 14HS                                | 96  | AUGER BITS, STYLE NO. 26F   | 111 |
| THREADED-SHANK BRAD-POINT DRILLS, STYLE NO. 14HSL                               | 96  | POWER POLE AUGER BIT  | 112 |
| THREADED-SHANK BRAD-POINT DRILLS, STYLE NO. 14R                                 | 96  | STYLE 26PP • CARBON TOOL STEEL  | 112 |
| CARBIDE-TIPPED ADJUSTABLE COUNTERSINK, STYLE 4CT                                | 97  | DRILL-POINT DRILL, STYLE 32HS   | 112 |
| TAPER SHELL COUNTERSINK,<br>STYLE 4   | 97  | SELF CENTERING DRILL GUIDES (Vix® Bits)                                       | 112 |
| COUNTERSINK DRILLS, STYLE 5B  | 97  | REPLACEMENT DRILLS<br>(VIX® BITS)   | 112 |
| BRAD-POINT DRILL, STYLE 5BLHS   | 97  | REPLACEMENT SPRINGS<br>(VIX® BITS)  | 112 |
| COUNTERSINK BRAD-POINT DRILL, STYLE 5BPHS                                       | 97  | REPLACEMENT GUIDES<br>(VIX® BITS)   | 113 |
| COUNTERSINK BRAD-POINT DRILL, STYLE 5BPHS-LH                                    | 97  | DEPTH COLLARS & SETS  | 113 |
| COUNTERSINK DRILL-POINT DRILL, STYLE 5HS  | 98  | CHUCK, STYLE 1  | 113 |
| COUNTERSINK DRILL-POINT DRILL, STYLE 5HSLH                                      | 98  | FORSTNER® BITS  | 114 |
| V-POINT COUNTERSINK DRILL, STYLE 5VHS   | 98  | SPADE BITS  | 115 |
| COUNTERSINK BRAD-POINT DRILL, STYLE 5-7BPHS                                     | 98  | <b>INSERT BITS</b>  |     |
| DRILL-POINT DRILL, STYLE 5-7HS  | 98  | 2 FLUTE FLUSH TRIM INSERT BITS  | 116 |
| COUNTERSINK BRAD-POINT DRILL, STYLE 5-8BPHS                                     | 98  | 1 FLUTE INSERT STRAIGHT BITS  | 116 |
| DRILL-POINT DRILL, STYLE 5-8HS  | 98  | 2 FLUTE INSERT STRAIGHT BITS  | 116 |
| BRAD-POINT DRILL, STYLE 8BPHS   | 98  | 2 FLUTE INSERT TEMPLATE BITS  | 116 |
| BRAD-POINT DRILL, STYLE 8BPHSLH   | 99  | 1 FLUTE V-GROOVE BIT  | 116 |
| STRAIGHT SHANK BRAD-POINT DRILL, STYLE 13                                       | 99  | 22 DEGREE BEVEL BITS • 2 FLUTE  | 117 |
| BRAD-POINT DRILL, STYLE 13B   | 99  | 45 DEGREE BEVEL BITS • 2 FLUTE  | 117 |
| CARBIDE-TIPPED COUNTERSINK,<br>STYLE 8CT - 82°                                  | 99  | INSERT COMPRESSION BITS • 2+2   | 117 |
| DRILL-POINT DRILL, STYLE 8HS  | 99  | 45 DEGREE INSERT BIT • 1 FLUTE  | 117 |
| DRILL-POINT DRILL, STYLE 8HSLH  | 100 | INSERT SPOILBOARD SURFACING CUTTERS - STRAIGHT<br>(for MDF and Particleboard) | 117 |
| MULTI-SPUR COUNTERBORE,<br>STYLE 184  | 100 | INSERT SPOILBOARD SURFACING CUTTERS - UP-SHEAR<br>(for Balsa Core Material)   | 118 |
| SPIRAL PLUG CUTTER,<br>STYLE 9B   | 100 | INSERT SPOILBOARD SURFACING CUTTERS - ACCESSORIES                             | 118 |
| BRADPOINT DRILL, STYLE 13L  | 100 | 2 WING COPE (STILE) & STICK (RAIL) BITS - FACE DOWN                           | 118 |
| BRADPOINT DRILL, STYLE 13S  | 101 | 2 WING COPE (STILE) & STICK (RAIL) BITS -<br>FACE DOWN - INSERTS              | 118 |
| CARBIDE-TIPPED BRAD POINT DRILL, STYLE 13CT                                     | 101 | 2 WING COPE (STILE) & STICK (RAIL) BITS - FACE UP                             | 118 |
| BRADPOINT DRILL, STYLE 19   | 101 | 2 WING COPE (STILE) & STICK (RAIL) BITS - FACE UP - INSERTS                   | 119 |
| CARBIDE-TIPPED BRAD POINT DRILL, STYLE 19CT                                     | 102 | 2 WING RAISED PANEL BITS  | 119 |
| CARBIDE-TIPPED BRAD POINT DRILL, STYLE 19CT METRIC                              | 102 | 2 WING RAISED PANEL BITS - INSERTS  | 119 |
| BRAD-POINT DRILL, STYLE NO. 19HS  | 102 | INSERT 3 WING SHAPER - COPE (STILE)   | 119 |
| BRAD POINT DRILL,<br>STYLE 19HS METRIC  | 102 | INSERT 3 WING SHAPER - STICK (RAIL)   | 120 |



|   |     |  |     |
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| INSERT 3 WING RAISED PANEL CUTTERS                                  | 120 | ANDI®/WEEKE®/THERMWOOD® CNC CHUCKS                                 | 141 |
| INSERT 3 WING BACK PANEL CUTTER                                     | 120 | BT30 CHUCKS  | 141 |
| INSERT 3 WING RAISED PANEL TRIM CUTTER                              | 121 | BT35 CHUCKS  | 142 |
| ACCESSORIES FOR 3 WING CUTTER INSERTS                               | 121 | HSK E COLLET TOOLHOLDERS   | 142 |
| <b>SOLID CARBIDE</b>  |     | HSK F COLLET TOOLHOLDERS   | 142 |
| <b>INSERT REPLACEMENTS AND ACCESSORIES</b>                          |     | ER TOOL EXTENDERS  | 144 |
| STANDARD REVERSIBLE INSERT KNIVES - 2 SIDED 1 HOLE                  | 122 | AIRPRO™ NUT  | 144 |
| STANDARD REVERSIBLE INSERT KNIVES - 4 SIDED 1 HOLE                  | 122 | AIRPRO™ NUT SPECIFICATIONS   | 144 |
| STANDARD REVERSIBLE INSERT KNIVES - 2 SIDED 2 HOLES                 | 123 | ER MINI NUTS   | 145 |
| STANDARD REVERSIBLE INSERT KNIVES - 4 SIDED 2 HOLES (14 CTC) PLUNGE | 123 | ER HIGH-SPEED MINI NUTS  | 145 |
| STANDARD REVERSIBLE INSERT KNIVES - 4 SIDED 2 HOLES (26 CTC) PLUNGE | 123 | PULL STUDS (RETENTION KNOBS) FOR CNC ROUTERS                       | 145 |
| STANDARD REVERSIBLE INSERT KNIVES - 4 SIDED 3 HOLES (37 CTC)        | 124 | ISO 30 ARBORS  | 146 |
| INSERT KNIVES - END ANGLE 1 HOLE                                    | 124 | HSK 63F ARBORS   | 146 |
| INSERT KNIVES - END ANGLE 2 HOLES (14 CTC)                          | 124 | TIGHTENING STAND FOR ISO, HSK63 & BT30                             | 147 |
| INSERT KNIVES - END ANGLE 2 HOLES (26 CTC)                          | 124 | <b>CNC ACCESSORIES</b>   |     |
| INSERT KNIVES - DOUBLE ANGLE 2 HOLES                                | 124 | DUST COVERS FOR COLLET NUTS  | 147 |
| INSERT KNIVES - 2 SIDED BACK GROOVE                                 | 124 | SPINDLE TAPER WIPERS   | 147 |
| INSERT KNIVES - 2 SIDED FACE GROOVE                                 | 125 | COLLET BRUSHES   | 148 |
| INSERT KNIVES - 4 SIDED FACE GROOVE                                 | 125 | TORQUE WRENCH  | 148 |
| INSERT KNIVES - 4 SIDED BACK & CROSS GROOVE                         | 125 | TORQUE WRENCH ACCESSORIES  | 148 |
| INSERT KNIVES - Chipbreaker Knives                                  | 125 | RETENTION KNOB SOCKETS   | 149 |
| INSERT KNIVES - Radius Knives                                       | 125 | FIXED HEAD SQUARE DRIVES   | 149 |
| INSERT KNIVES - Radius Knives                                       | 126 | CNC ROUTER TABLE PODS  | 149 |
| INSERT KNIVES - Radius Knives                                       | 126 | MEASURING EQUIPMENT  | 149 |
| INSERT KNIVES - DOUBLE RADIUS KNIVES (3MM HOLE)                     | 126 | <b>KNIVES</b>  |     |
| INSERT KNIVES - RADIUS PROFILE KNIVES                               | 126 | PLANER & JOINTER KNIFE SETS - 1/8" THICKNESS                       | 150 |
| INSERT KNIVES - LEITZ SYSTEMS® FACE GROOVE                          | 126 | PLANER & JOINTER KNIFE SETS - 3/32" THICKNESS                      | 151 |
| INSERT KNIVES - PORTABLE PLANERS BACK GROOVE                        | 127 | PLANER & JOINTER KNIFE SETS - 5/32" THICKNESS                      | 151 |
| INSERT KNIVES - SCRAPER KNIVES 6 DEGREE                             | 127 | REPLACEMENT KNIVES FOR SYSTEM TERMINUS PLANER HEAD - HSS           | 152 |
| INSERT KNIVES - TRIANGLE SPUR KNIVES                                | 127 | REPLACEMENT KNIVES FOR SYSTEM TERMINUS PLANER HEAD - SOLID CARBIDE | 153 |
| INSERT KNIVES - SPUR/GROOVING KNIVES                                | 127 | REPLACEMENT KNIVES FOR SYSTEM TERSA PLANER HEADS                   | 154 |
| INSERT KNIVES - SPUR/GROOVING KNIVES                                | 127 | REPLACEMENT KNIVES FOR SYSTEM TERSA PLANER HEADS - T-1 HSS         | 155 |
| INSERT KNIVES - SPUR/GROOVING KNIVES                                | 128 | REPLACEMENT KNIVES FOR WEINING HEADS                               |     |
| INSERT KNIVES - SPUR KNIVES   | 128 | SYSTEM CENTROLOCK-HSS  | 155 |
| INSERT KNIVES - RADIUS KNIVES                                       | 128 | REPLACEMENT KNIVES FOR SYSTEM CENTROFIX - HSS                      | 155 |
| INSERT KNIVES - V GROOVE KNIVES                                     | 128 | REPLACEMENT KNIVES FOR WEINING HEADS                               |     |
| INSERT KNIVES - LEITZ® SYSTEMS "BG - TEST"                          | 128 | SYSTEM CENTROLOCK - SOLID CARBIDE                                  | 156 |
| INSERT KNIVES - QUADROMAT, IMA, MFA                                 | 129 | REPLACEMENT KNIVES FOR SYSTEM CENTRO-SOLID CARBIDE                 | 156 |
| SPIRAL PLUS MOLDER HEADS  | 129 | Replacement Knives For SuperPac                                    | 157 |
| SPIRAL PLUS PROFILE SHAPER HEADS                                    | 129 | <b>CARBIDE SAW TIPS AND STB STRIPS</b>                             |     |
| SPIRAL PLUS REPLACEMENT PARTS                                       | 130 | STB CARBIDE STRIPS   | 159 |
| COMPONENT PARTS FOR INSERT TOOLING - INSERTS                        | 130 | WBC STYLE - SAW TIPS   | 160 |
| COMPONENT PARTS FOR INSERT TOOLING - INSERTS FOR END                | 130 | WDC STYLE - SAW TIPS   | 160 |
| COMPONENT PARTS FOR INSERT TOOLING - WRENCHES                       | 130 | WEC STYLE - SAW TIPS   | 161 |
| COMPONENT PARTS FOR INSERT TOOLING - SCREWS                         | 130 | WFC STYLE - SAW TIPS   | 162 |
| HSS 60-16 MOLDER BARS - BEVEL BOTTOM - 5/16" THICK                  | 130 | WGC STYLE - SAW TIPS   | 163 |
| HSS 60-16 MOLDER BARS - BEVEL BOTTOM - 1/4" THICK                   | 131 | WHC STYLE - SAW TIPS   | 164 |
| HSS 60-16 MOLDER BARS - FLAT BOTTOM - 5/16" THICK                   | 131 | WQC STYLE - SAW TIPS   | 164 |
| HSS 60-16 MOLDER BARS - FLAT BOTTOM - 1/4" THICK                    | 131 | WXC STYLE - SAW TIPS   | 164 |
| WILLIAM & HUSSEY™   | 131 | WDC RIGHT STYLE - SAW TIPS   | 165 |
| CORRUGATED BACK MOLDER HEADS - 2 KNIFE                              | 132 | WDC LEFT STYLE - SAW TIPS  | 165 |
| CORRUGATED BACK MOLDER HEADS - 4 KNIFE                              | 132 | WGC RIGHT STYLE - SAW TIPS   | 165 |
| CORRUGATED BACK MOLDER HEADS - 6 KNIFE                              | 132 | WGC LEFT STYLE - SAW TIPS  | 165 |
| <b>WORKHOLDING FOR CNC (COLLETS, TOOLHOLDERS AND ACCESSORIES)</b>   |     | WA STYLE - SAW TIPS  | 165 |
| SYOZ 20 FOR WOODWORKING MACHINES (RDO20)                            | 134 | WB STYLE - SAW TIPS  | 166 |
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| ULTRA HIGH-SPEED COATED CLAMPING NUTS                               | 134 | WD STYLE - SAW TIPS  | 166 |
| SPANNER WRENCHES - SYOZ 20 and SYOZ 25                              | 135 | WE STYLE - SAW TIPS  | 167 |
| SHODA® COLLETS (OLD STYLE)  | 135 | WF STYLE - SAW TIPS  | 167 |
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| SHODA® NUTS   | 136 |  |     |
| ER PRECISION COLLETS - STANDARD SIZES                               | 137 |  |     |
| ER PRECISION COLLETS - METRIC SIZES                                 | 138 |  |     |
| ER PRECISION COLLET SETS  | 138 |  |     |
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| EASY COLLET REFERENCE SHEET   | 140 |  |     |
| ER SPANNER WRENCHES   | 140 |  |     |
| TOOL HOLDERS FOR CNC ROUTERS  | 141 |  |     |

## SOLID CARBIDE BITS

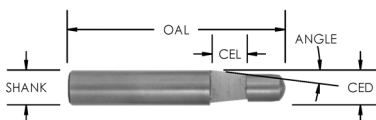
### FLUSH TRIM BITS



| PART #     | CED  | CEL  | SHANK | OAL    |
|------------|------|------|-------|--------|
| SCF200     | 1/4" | 1/4" | 1/4"  | 1-1/2" |
| SCF200-BLK | 1/4" | 1/4" | 1/4"  | 1-1/2" |
| SCF203     | 1/4" | 3/8" | 1/4"  | 1-1/2" |
| SCF205*    | 1/4" | 3/8" | 1/4"  | 2"     |
| SCF205-25* | 1/4" | 3/8" | 1/4"  | 2-1/2" |

\*Does not have a rounded end

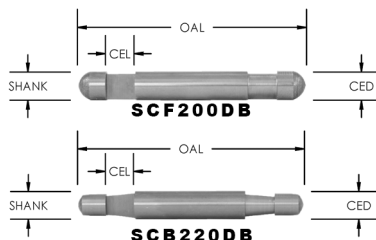
### BEVEL TRIM BITS



| PART #     | CED  | CEL  | SHANK | OAL    | BEVEL |
|------------|------|------|-------|--------|-------|
| SCB220     | 1/4" | 1/4" | 1/4"  | 1-1/2" | 7 DEG |
| SCB220-BLK | 1/4" | 1/4" | 1/4"  | 1-1/2" | 7 DEG |
| SCB220LH*  | 1/4" | 1/4" | 1/4"  | 1-1/2" | 7 DEG |

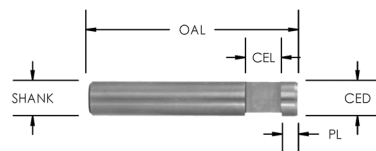
\*Left Hand Rotation

### FLUSH AND BEVEL TRIM BIT (DOUBLE ENDED)



| PART #   | CED  | CEL  | SHANK | OAL | ANGLE |
|----------|------|------|-------|-----|-------|
| SCF200DB | 1/4" | 1/4" | 1/4"  | 2"  | FLUSH |
| SCB220DB | 1/4" | 1/4" | 1/4"  | 2"  | 7 DEG |

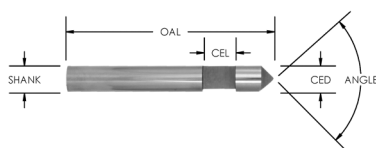
### DADO TRIM BITS



| PART #     | CED  | CEL  | SHANK | OAL    | ANGLE | PL   |
|------------|------|------|-------|--------|-------|------|
| SCD210     | 1/4" | 1/4" | 1/4"  | 1-1/2" | FLUSH | 1/8" |
| SCD210-BLK | 1/4" | 1/4" | 1/4"  | 1-1/2" | FLUSH | 1/8" |
| SCD215     | 1/4" | 1/4" | 1/4"  | 1-1/2" | 7 DEG | 1/8" |

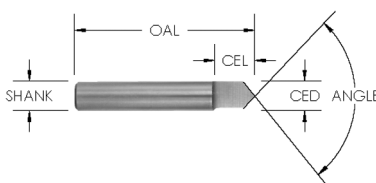
Small Pilot for Shallow Dado

### HOLE AND FLUSH TRIM BITS



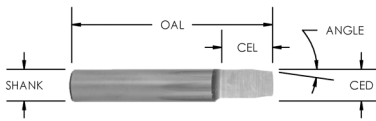
| PART #  | CED  | CEL   | SHANK | OAL    |
|---------|------|-------|-------|--------|
| SCHF240 | 1/4" | 5/16" | 1/4"  | 2"     |
| SCHF242 | 1/4" | 3/8"  | 1/4"  | 1-1/2" |
| SCHF244 | 1/4" | 1/4"  | 1/4"  | 1-1/2" |

### V-GROOVING BITS



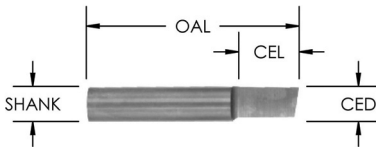
| PART #      | CED  | CEL   | SHANK | OAL    | ANGLE |
|-------------|------|-------|-------|--------|-------|
| SCVG260     | 1/4" | 1/8"  | 1/4"  | 1-1/2" | 90°   |
| SCVG264     | 1/4" | 7/32" | 1/4"  | 1-1/2" | 60°   |
| SCVG264-212 | 1/4" | 7/32" | 1/4"  | 2-1/2" | 60°   |

## FLUSH AND BEVEL TRIM BITS



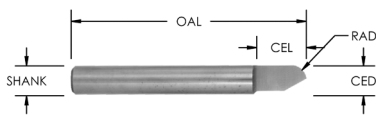
| PART #  | CED  | CEL  | SHANK | OAL    | ANGLE |
|---------|------|------|-------|--------|-------|
| SCFB230 | 1/4" | 3/8" | 1/4"  | 1-1/2" | 7 DEG |

## RIP AND SLOTTING BITS



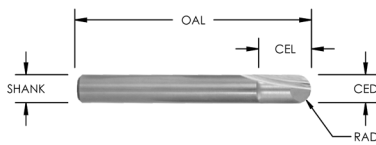
| PART #  | CED  | CEL  | SHANK | OAL    |
|---------|------|------|-------|--------|
| SCRS250 | 1/4" | 3/8" | 1/4"  | 1-1/2" |

## ROUND BOTTOM VEINING BITS (1 FLUTE)



| PART #  | CED  | CEL  | SHANK | OAL    | RAD   |
|---------|------|------|-------|--------|-------|
| SCRV271 | 1/8" | 1/4" | 1/4"  | 1-1/2" | 1/16" |
| SCRV273 | 1/4" | 1/4" | 1/4"  | 2"     | 1/8"  |

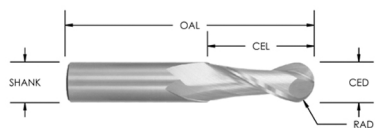
## ROUND BOTTOM VEINING BITS (2 FLUTE)



| PART #  | CED   | CEL   | SHANK | OAL | RAD   |
|---------|-------|-------|-------|-----|-------|
| SCRV275 | 1/8"  | 5/16" | 1/4"  | 2"  | 1/16" |
| SCRV277 | 3/16" | 3/8"  | 1/4"  | 2"  | 3/32" |
| SCRV279 | 1/4"  | 3/8"  | 1/4"  | 2"  | 1/8"  |

## 2 FLUTE UPCUT BALL NOSE

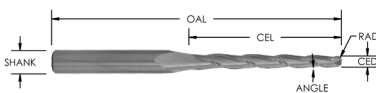
Two flute spiral upcut ball nose. Used for round bottom cuts, carving, fluting and 3D modeling. Used for natural wood, aluminum, wood composites and solid surface.



| PART #  | CED   | CEL    | SHANK | OAL    | RAD   |
|---------|-------|--------|-------|--------|-------|
| SBNU125 | 1/8"  | 1/2"   | 1/4"  | 2"     | 1/16" |
| SBNU316 | 3/16" | 3/4"   | 1/4"  | 2-1/2" | 3/32" |
| SBNU250 | 1/4"  | 3/4"   | 1/4"  | 2-1/2" | 1/8"  |
| SBNU375 | 3/8"  | 1"     | 3/8"  | 3"     | 3/16" |
| SBNU500 | 1/2"  | 1-1/4" | 1/2"  | 3"     | 1/4"  |
| SBNU750 | 3/4"  | 2"     | 3/4"  | 4"     | 3/8"  |

## TAPERED BALL NOSE - UPCUT

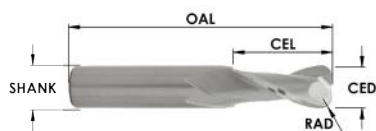
Tapered ball nose upcut spirals. Used for round bottom cuts, carving, fluting and 3D modeling. Used for natural wood, plastic and aluminum.



| PART #      | CED   | CEL    | SHANK | OAL | RAD   | DEG      | FLUTES |
|-------------|-------|--------|-------|-----|-------|----------|--------|
| STBNU116-3  | 1/16" | 3/4"   | 1/4"  | 3"  | 1/32" | 3 deg.   | 2      |
| STBNU116-55 | 1/16" | 3/4"   | 1/4"  | 3"  | 1/32" | 5.5 deg. | 2      |
| STBNU125-1  | 1/8"  | 1-1/2" | 1/4"  | 3"  | 1/16" | 1 deg.   | 3      |
| STBNU125-3  | 1/8"  | 1"     | 1/4"  | 3"  | 1/16" | 3 deg.   | 3      |
| STBNU125-5  | 1/8"  | 3/4"   | 1/4"  | 3"  | 1/16" | 5 deg.   | 3      |
| STBNU125-7  | 1/8"  | 1/2"   | 1/4"  | 3"  | 1/16" | 7 deg.   | 3      |
| STBNU250-3  | 1/4"  | 2"     | 1/2"  | 4"  | 1/8"  | 3 deg.   | 2      |
| STBNU250-5  | 1/4"  | 1-3/8" | 1/2"  | 4"  | 1/8"  | 5 deg.   | 2      |
| STBNU250-7  | 1/4"  | 1"     | 1/2"  | 4"  | 1/8"  | 7 deg.   | 2      |

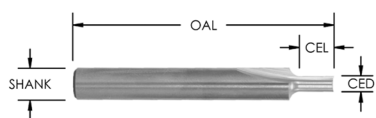
*Great for 2D and 3D Carving*

## COVE NOSE SPIRAL BIT



| PART # | CED  | CEL    | SHANK | OAL | RADIUS |
|--------|------|--------|-------|-----|--------|
| SCN118 | 1/4" | 3/4"   | 1/4"  | 3"  | 1/16"  |
| SCN135 | 3/8" | 1"     | 3/8"  | 3"  | 3/32"  |
| SCN155 | 1/2" | 1-1/4" | 1/2"  | 3"  | 1/8"   |

## FLAT BOTTOM VEINING BITS (2 FLUTE)

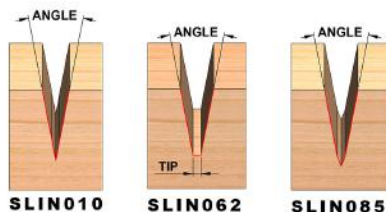


| PART # | CED   | CEL   | SHANK | OAL    |
|--------|-------|-------|-------|--------|
| SST195 | 3/32" | 5/16" | 1/4"  | 1-1/2" |
| SST198 | 1/8"  | 1/4"  | 1/4"  | 2"     |

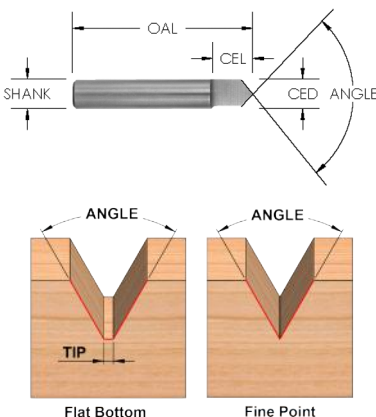
## LINER BITS



| PART #  | INCLUDED ANGLE | TIP FLAT   | SHANK | OAL    | FLUTES |
|---------|----------------|------------|-------|--------|--------|
| SLIN010 | 22             | FINE POINT | 1/4"  | 2"     | 1      |
| SLIN062 | 22             | 1/16       | 1/4"  | 2-1/2" | 1      |
| SLIN085 | 15             | 1/16       | 1/4"  | 2-1/2" | 1      |



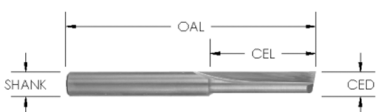
## ENGRAVING BITS



| PART # | INCLUDED ANGLE | TIP FLAT | SHANK | OAL |
|--------|----------------|----------|-------|-----|
| SN305  | 30             | 0.005    | 1/4"  | 2"  |
| SN310  | 30             | 0.010    | 1/4"  | 2"  |
| SN320  | 30             | 0.020    | 1/4"  | 2"  |
| SN330  | 30             | 0.030    | 1/4"  | 2"  |
| SN340  | 30             | 0.040    | 1/4"  | 2"  |
| SN360  | 30             | 0.060    | 1/4"  | 2"  |
| SN390  | 30             | 0.090    | 1/4"  | 2"  |
| SN605  | 60             | 0.005    | 1/4"  | 2"  |
| SN610  | 60             | 0.010    | 1/4"  | 2"  |
| SN620  | 60             | 0.020    | 1/4"  | 2"  |
| SN630  | 60             | 0.030    | 1/4"  | 2"  |
| SN640  | 60             | 0.040    | 1/4"  | 2"  |
| SN660  | 60             | 0.060    | 1/4"  | 2"  |
| SN690  | 60             | 0.090    | 1/4"  | 2"  |

## STRAIGHT BIT - 1 FLUTE (GENERAL PURPOSE APPLICATION)

1 Flute straight bits designed to cut a variety of materials. Usage: natural wood and wood composites.

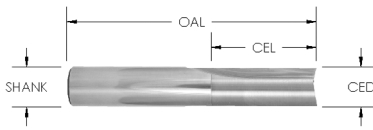


| PART # | CED   | CEL  | SHANK | OAL    |
|--------|-------|------|-------|--------|
| SST100 | 1/16" | 1/4" | 1/4"  | 1-1/2" |
| SST110 | 1/8"  | 3/8" | 1/4"  | 1-1/2" |
| SST120 | 1/4"  | 3/4" | 1/4"  | 2"     |
| SST130 | 1/4"  | 1"   | 1/4"  | 2-1/2" |



## STRAIGHT BIT - 2 FLUTE (GENERAL PURPOSE APPLICATION)

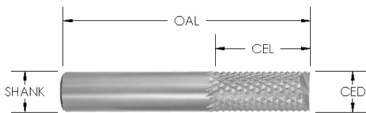
2 flute straight bits designed to cut a variety of materials. Usage: natural wood and wood composites.



| PART #    | CED   | CEL    | SHANK | OAL    |
|-----------|-------|--------|-------|--------|
| SST203-18 | 1/8"  | 1/2"   | 1/8"  | 1-1/2" |
| SST195    | 3/32" | 5/16"  | 1/4"  | 1-1/2" |
| SST198    | 1/8"  | 1/4"   | 1/4"  | 2"     |
| SST200    | 1/8"  | 3/8"   | 1/4"  | 2"     |
| SST203    | 1/8"  | 3/8"   | 1/4"  | 1-1/2" |
| SST205    | 5/32" | 3/8"   | 1/4"  | 2"     |
| SST207    | 5/32" | 3/8"   | 1/4"  | 1-1/2" |
| SST210    | 3/16" | 1/2"   | 1/4"  | 2"     |
| SST213    | 3/16" | 1/2"   | 1/4"  | 1-1/2" |
| SST214    | 3/16" | 5/8"   | 1/4"  | 2"     |
| SST215    | 7/32" | 3/4"   | 1/4"  | 2"     |
| SST220    | 1/4"  | 3/4"   | 1/4"  | 2"     |
| SST223    | 1/4"  | 3/4"   | 1/4"  | 2-1/2" |
| SST225    | 1/4"  | 1"     | 1/4"  | 2-1/2" |
| SST230    | 1/4"  | 1"     | 1/4"  | 3"     |
| SST235    | 5/16" | 1"     | 5/16" | 2-1/2" |
| SST240    | 3/8"  | 1"     | 3/8"  | 2-1/2" |
| SST241    | 3/8"  | 1"     | 3/8"  | 3"     |
| SST245    | 3/8"  | 1-1/4" | 3/8"  | 3"     |
| SST250    | 1/4"  | 3/4"   | 1/2"  | 3"     |
| SST255    | 5/16" | 1"     | 1/2"  | 3"     |
| SST260    | 3/8"  | 1"     | 1/2"  | 3"     |
| SST265    | 1/2"  | 1-1/8" | 1/2"  | 3"     |
| SST270    | 1/2"  | 1-1/4" | 1/2"  | 3"     |
| SST275    | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" |
| SST280    | 1/2"  | 2"     | 1/2"  | 4"     |

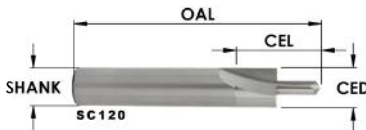
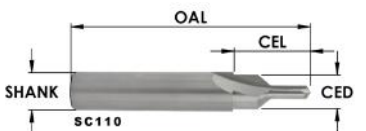
*For Plastics and Wood*

## SOLID CARBIDE FIBERGLASS BITS



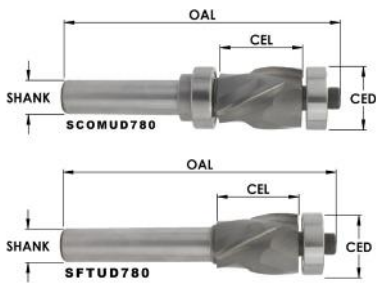
| PART #  | CED  | CEL  | SHANK | OAL    | DESCRIPTION     |
|---------|------|------|-------|--------|-----------------|
| SCFB100 | 1/4" | 3/4" | 1/4"  | 2-1/2" | End Mill End    |
| SCFB110 | 1/4" | 3/4" | 1/4"  | 2-1/2" | Plunge V Pt End |
| SCFB120 | 3/8" | 7/8" | 3/8"  | 2-1/2" | End Mill End    |
| SCFB130 | 3/8" | 7/8" | 3/8"  | 2-1/2" | Plunge V Pt End |
| SCFB140 | 1/2" | 1"   | 1/2"  | 3"     | End Mill End    |
| SCFB150 | 1/2" | 1"   | 1/2"  | 3"     | Plunge V Pt End |

## SOLID CARBIDE WOOD SCREW SLOT BITS



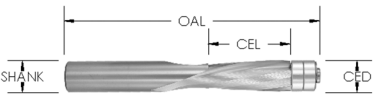
| PART # | CED   | CEL    | SHANK | OAL | USE                             |
|--------|-------|--------|-------|-----|---------------------------------|
| SC110  | 7/16" | 15/16" | 1/2"  | 3"  | #8 Bugle-Head Round Wood Screws |
| SC120  | 1/2"  | 15/16" | 1/2"  | 3"  | #8 Washer Round Wood Screws     |

## FLUSH TRIM BITS



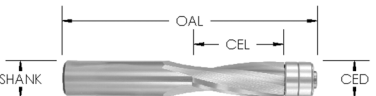
| PART #    | CED  | CEL    | SHANK | OAL      | BEARING        |
|-----------|------|--------|-------|----------|----------------|
| SFTUD780  | 7/8" | 1-1/8" | 1/2"  | 3-15/16" | SBE124         |
| STMUD780  | 7/8" | 1-1/8" | 1/2"  | 3-3/8"   | SBE129         |
| SCOMUD780 | 7/8" | 1-1/8" | 1/2"  | 3-15/16" | SBE124, SBE129 |

## 2 FLUTE FLUSH TRIM DOWNCUT BIT



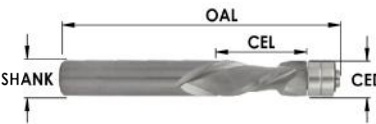
| PART #  | CED  | CEL    | SHANK | OAL    | BEARING | CLIP   |
|---------|------|--------|-------|--------|---------|--------|
| SFTD220 | 1/4" | 1"     | 1/4"  | 3"     | SBE100  | SE-E25 |
| SFTD255 | 1/2" | 1-1/4" | 1/2"  | 3-1/2" | SBE145  | SE-E12 |
| SFTD265 | 1/2" | 2"     | 1/2"  | 4-1/2" | SBE145  | SE-E12 |

## 2 FLUTE FLUSH TRIM UPCUT BIT



| PART #  | CED  | CEL    | SHANK | OAL    | BEARING | CLIP   |
|---------|------|--------|-------|--------|---------|--------|
| SFTU120 | 1/4" | 1"     | 1/4"  | 3"     | SBE100  | SE-E25 |
| SFTU155 | 1/2" | 1-1/4" | 1/2"  | 3-1/2" | SBE145  | SE-E12 |
| SFTU165 | 1/2" | 2"     | 1/2"  | 4-1/2" | SBE145  | SE-E12 |

## 2 FLUTE FLUSH TRIM COMPRESSION BIT



| PART #   | CED  | CEL    | SHANK | OAL | BEARING | CLIP   |
|----------|------|--------|-------|-----|---------|--------|
| SFTUD555 | 1/2" | 1-1/4" | 1/2"  | 4"  | SBE145  | SE-E12 |

## CHAMFER 2+2 COMPRESSION BITS

Chamfer 2+2 compression bits with extra length upcut to enhance chip evacuation while simultaneously chamfering top edge of the material. MD series is extended life and HD series is max life.



| PART #    | CED  | CEL  | SHANK | OAL |
|-----------|------|------|-------|-----|
| CMDUD350  | 3/8" | 1/2" | 1/2"  | 3"  |
| CMDUD375  | 3/8" | 3/4" | 1/2"  | 3"  |
| CHDUD8350 | 3/8" | 1/2" | 1/2"  | 3"  |
| CHDUD8375 | 3/8" | 3/4" | 1/2"  | 3"  |

## Other MOAB-COATINGS Available



| COATING    | COLOR      | AVAILABILITY  | DESCRIPTION     |
|------------|------------|---------------|-----------------|
| MOAB-Z     | WHITE GOLD | SPECIAL ORDER | GENERAL USE     |
| MOAB-BASIC | GOLD       | SPECIAL ORDER | GENERAL USE     |
| MOAB-PRO   | BLACK      | SPECIAL ORDER | GOOD ALL AROUND |
| MOAB-PLUS* | RED/BROWN  | STANDARD      | BEST ALL AROUND |

*SEE MOAB COATING SECTION FOR STANDARD PART WITH MOAB-PLUS COATING*

## NEW SOLID CARBIDE MOAB-COATINGS (Mother Of All Bits)

Coated tooling: coatings further extends tool life by reducing damaging effects of heat and oxidation that occurs during cutting operations. Highly recommended for MDF, chipboard with melamine, laminates, veneered plywood, and many plastics .

### 2+2 COMPRESSION MD SERIES MOAB-PLUS COATING



| PART #     | CED  | CEL    | SHANK | OAL    | UPCUT |
|------------|------|--------|-------|--------|-------|
| HMDUD445   | 1/4" | 7/8"   | 1/4"  | 2-1/2" | 1/4"  |
| HMDUD539   | 3/8" | 7/8"   | 3/8"  | 3"     | 3/16" |
| HMDUD551-1 | 3/8" | 1"     | 3/8"  | 3"     | 3/16" |
| HMDUD551   | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| HMDUD550   | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| HMDUD555   | 1/2" | 1-1/4" | 1/2"  | 3"     | 5/16" |
| HMDUD558   | 1/2" | 1-1/4" | 1/2"  | 3"     | 1/2"  |
| HMDUD565   | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/16" |
| HMDUD566   | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/8"  |

### 3+3 COMPRESSION MD SERIES MOAB-PLUS COATING



| PART #    | CED  | CEL    | SHANK | OAL    | UPCUT |
|-----------|------|--------|-------|--------|-------|
| HMDUD751* | 3/8" | 7/8"   | 3/8"  | 3"     | 3/16" |
| HMDUD751A | 3/8" | 7/8"   | 3/8"  | 3"     | 3/8"  |
| HMDUD756* | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| HMDUD750  | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| HMDUD755  | 1/2" | 1-1/4" | 1/2"  | 3"     | 3/8"  |
| HMDUD795  | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/8"  |

*\*3/16" Upcut for Mortise Cuts*

### 2+2 COMPRESSION HD SERIES MOAB-PLUS COATING



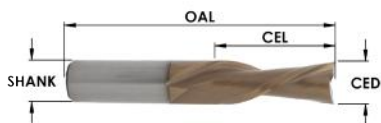
| PART #   | CED  | CEL    | SHANK | OAL    | UPCUT |
|----------|------|--------|-------|--------|-------|
| HHDUD539 | 3/8" | 7/8"   | 3/8"  | 3"     | 3/16" |
| HHDUD545 | 3/8" | 1"     | 3/8"  | 3"     | 3/16" |
| HHDUD551 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| HHDUD550 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| HHDUD555 | 1/2" | 1-1/4" | 1/2"  | 3"     | 5/16" |
| HHDUD558 | 1/2" | 1-1/4" | 1/2"  | 3"     | 1/2"  |
| HHDUD565 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/16" |
| HHDUD566 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/8"  |

### 3+3 COMPRESSION HD SERIES MOAB-PLUS COATING



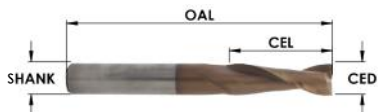
| PART #   | CED  | CEL    | SHANK | OAL    | UPCUT |
|----------|------|--------|-------|--------|-------|
| HHDUD751 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| HHDUD750 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| HHDUD754 | 1/2" | 1-1/4" | 1/2"  | 3"     | 3/16" |
| HHDUD758 | 1/2" | 1-1/4" | 1/2"  | 3"     | 1/2"  |
| HHDUD766 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/8"  |

## 2 FLUTE SPIRAL DOWNCUT MD SERIES MOAB-PLUS COATING



| PART #   | CED  | CEL    | SHANK | OAL    |
|----------|------|--------|-------|--------|
| HRD202MD | 1/8" | 1/2"   | 1/4"  | 2"     |
| HRD218MD | 1/4" | 3/4"   | 1/4"  | 2-1/2" |
| HRD220MD | 1/4" | 1"     | 1/4"  | 2-1/2" |
| HRD237MD | 3/8" | 1-1/4" | 3/8"  | 3"     |
| HRD255MD | 1/2" | 1-1/4" | 1/2"  | 3"     |
| HRD260MD | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |

## 2 FLUTE SPIRAL UPCUT MD SERIES MOAB-PLUS COATING



| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| HURU103MD | 1/8" | 1/2"   | 1/4"  | 2"     |
| HURU114MD | 1/4" | 3/4"   | 1/4"  | 2-1/2" |
| HURU120MD | 1/4" | 1"     | 1/4"  | 2-1/2" |
| HURU137MD | 3/8" | 1-1/4" | 3/8"  | 3"     |
| HURU155MD | 1/2" | 1-1/4" | 1/2"  | 3"     |
| HURU160MD | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |

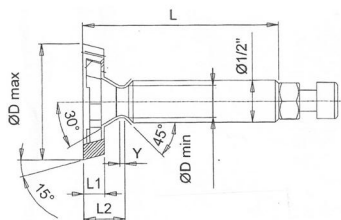
## DIAMOND TIPPED BITS

### DIAMOND-TIPPED ROUTER BITS • PCD (1+1 DESIGN)



| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| SE280003  | 3/8" | 5/8"   | 1/2"  | 3"     |
| SE280004  | 3/8" | 1"     | 1/2"  | 2-3/4" |
| SE280009  | 1/2" | 1"     | 1/2"  | 3"     |
| SE280009A | 1/2" | 1-1/4" | 1/2"  | 3-1/2" |
| SE280010  | 1/2" | 1-3/8" | 1/2"  | 3-1/4" |
| SE280012  | 5/8" | 1"     | 5/8"  | 3-1/2" |
| SE280014  | 5/8" | 1-3/8" | 5/8"  | 4"     |
| SE280018  | 3/4" | 1"     | 3/4"  | 3-3/8" |
| SE280020  | 3/4" | 1-3/8" | 3/4"  | 3-3/4" |
| SE280011  | 3/4" | 1-5/8" | 3/4"  | 4"     |
| SE280024  | 3/4" | 2"     | 3/4"  | 4-1/2" |

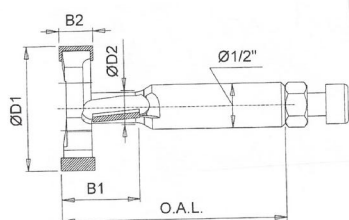
### DIAMOND-TIPPED T-SLOT BITS • PCD (2+1 DESIGN)



| PART #   | MAX CED | LENGTH 1 | LENGTH 2 | SHANK | OAL    | ROTATION |
|----------|---------|----------|----------|-------|--------|----------|
| SE293504 | 1-1/4"  | 1/4"     | 1/2"     | 1/2"  | 2-3/8" | RH       |
| SE293505 | 1-3/8"  | 1/4"     | 1/2"     | 1/2"  | 2-3/8" | RH       |

*Left-Hand Rotation available*

### DIAMOND-TIPPED T-SLOT BITS • PCD (2+1 DESIGN)



| PART #   | D1      | D2   | B1 CEL | B2 CEL | SHANK | OAL    | ROTATION |
|----------|---------|------|--------|--------|-------|--------|----------|
| SE293005 | 1-3/16" | 3/8" | 5/8"   | 1/4"   | 1/2"  | 2-1/2" | RH       |
| SE293205 | 1-1/4"  | 3/8" | 3/4"   | 1/4"   | 1/2"  | 2-1/2" | RH       |
| SE293507 | 1-3/8"  | 3/8" | 3/4"   | 1/4"   | 1/2"  | 2-1/2" | RH       |
| SE293508 | 1-3/8"  | 3/8" | 7/8"   | 3/8"   | 1/2"  | 2-1/2" | RH       |

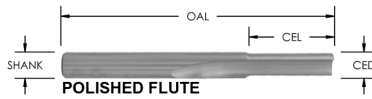
*Left-Hand Rotation available*



## SOLID CARBIDE PLASTIC BITS

### O FLUTE STRAIGHT BIT - 1 FLUTE (POLISHED)

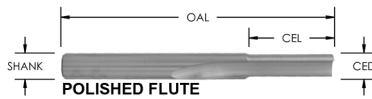
Polished 1 Flute "O" flute straight tools produce curled chips to enhance evacuation and minimize chips welding to the the cutting edge of the tool. Use when upcut or downcut forces are not required. Used for routing hard and soft plastic.



| PART # | CED   | CEL    | SHANK | OAL    |
|--------|-------|--------|-------|--------|
| SPL100 | 1/8"  | 3/8"   | 1/4"  | 2-1/2" |
| SPL102 | 1/8"  | 1/2"   | 1/4"  | 2"     |
| SPL103 | 1/8"  | 5/8"   | 1/4"  | 4"     |
| SPL105 | 5/32" | 1/2"   | 1/4"  | 2-1/2" |
| SPL110 | 3/16" | 1/2"   | 1/4"  | 2-1/2" |
| SPL111 | 3/16" | 5/8"   | 1/4"  | 2"     |
| SPL113 | 3/16" | 1"     | 1/4"  | 4"     |
| SPL115 | 7/32" | 5/8"   | 1/4"  | 2-1/2" |
| SPL120 | 1/4"  | 3/4"   | 1/4"  | 2-1/2" |
| SPL125 | 1/4"  | 1"     | 1/4"  | 3-1/2" |
| SPL128 | 1/4"  | 1-1/4" | 1/4"  | 4"     |
| SPL130 | 3/8"  | 1"     | 3/8"  | 3"     |
| SPL134 | 3/8"  | 1-5/8" | 3/8"  | 6"     |
| SPL140 | 1/2"  | 1"     | 1/2"  | 3"     |
| SPL148 | 1/2"  | 2-1/8" | 1/2"  | 6"     |

### O FLUTE STRAIGHT BIT - 1 FLUTE (POLISHED) - LEFT-HAND

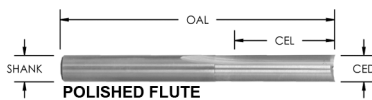
Polished 1 Flute "O" flute straight tools produce curled chips to enhance evacuation and minimize chips welding to the the cutting edge of the tool. Use when upcut or downcut forces are not required. Used for routing hard and soft plastic material.



| PART #   | CED   | CEL  | SHANK | OAL    |
|----------|-------|------|-------|--------|
| SPL100LH | 1/8"  | 3/8" | 1/4"  | 2-1/2" |
| SPL105LH | 5/32" | 1/2" | 1/4"  | 2-1/2" |
| SPL110LH | 3/16" | 1/2" | 1/4"  | 2-1/2" |
| SPL120LH | 1/4"  | 3/4" | 1/4"  | 2-1/2" |

### O FLUTE STRAIGHT BIT - 2 FLUTE (POLISHED)

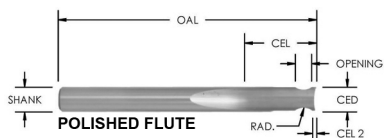
Polished two Flute "O" flute straight tools produce curled chips to enhance chip evacuation and minimize chips welding to the the cutting edge of the tool for a smooth finish. Use when upcut or downcut forces are not required. Used for routing hard and soft plastic.



| PART # | CED   | CEL    | SHANK | OAL    |
|--------|-------|--------|-------|--------|
| SPL210 | 1/8"  | 1/2"   | 1/4"  | 2"     |
| SPL212 | 1/8"  | 5/8"   | 1/4"  | 4"     |
| SPL213 | 5/32" | 1/2"   | 1/4"  | 2-1/2" |
| SPL215 | 3/16" | 3/8"   | 1/4"  | 2"     |
| SPL216 | 3/16" | 5/8"   | 1/4"  | 2"     |
| SPL217 | 3/16" | 1"     | 1/4"  | 4"     |
| SPL220 | 1/4"  | 1"     | 1/4"  | 2-1/2" |
| SPL222 | 1/4"  | 1"     | 1/4"  | 3-1/2" |
| SPL223 | 1/4"  | 1-1/4" | 1/4"  | 4"     |
| SPL225 | 3/8"  | 7/8"   | 3/8"  | 2-1/2" |
| SPL227 | 3/8"  | 1"     | 3/8"  | 4"     |
| SPL230 | 1/2"  | 1"     | 1/2"  | 3"     |
| SPL232 | 1/2"  | 1"     | 1/2"  | 4"     |

## O FLUTE ROUNDING EDGE STRAIGHT FLUTE - 1 FLUTE

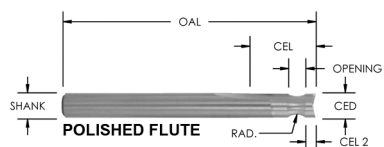
Polished straight 1 Flute edge "O" flute rounding edge design. Recommended for hard plastic, soft plastic and solid surface materials.



| PART # | CED  | CEL  | SHANK | OAL    | RAD   | OPENING | CEL 2 | MATERIAL |
|--------|------|------|-------|--------|-------|---------|-------|----------|
| SPR200 | 1/4" | 3/8" | 1/4"  | 2-1/2" | 1/8"  | 5/32"   | 1/8"  | .195     |
| SPR210 | 1/4" | 3/8" | 1/4"  | 2-1/2" | 3/16" | 7/32"   | 3/16" | .180     |
| SPR220 | 1/4" | 3/8" | 1/4"  | 2-1/2" | 1/4"  | 9/32"   | 1/4"  | .163     |

## O FLUTE ROUNDING EDGE STRAIGHT FLUTE - 2 FLUTE

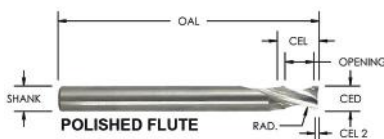
Polished straight two edge "O" flute rounding edge design. The two flute improves edge finish. Recommended for hard plastic, soft plastic and solid surface materials.



| PART # | CED  | CEL  | SHANK | OAL    | RAD   | OPENING | CEL 2 | MATERIAL |
|--------|------|------|-------|--------|-------|---------|-------|----------|
| SPR300 | 1/4" | 3/8" | 1/4"  | 2-1/2" | 1/8"  | 5/32"   | 1/8"  | .195     |
| SPR310 | 1/4" | 3/8" | 1/4"  | 2-1/2" | 3/16" | 7/32"   | 3/16" | .180     |
| SPR320 | 1/4" | 3/8" | 1/4"  | 2-1/2" | 1/4"  | 9/32"   | 1/4"  | .163     |

## O FLUTE ROUNDING EDGE SPIRAL BIT - 1 FLUTE

Polished spiral 1 Flute edge upcut "O" flute rounding edge tools produce curled chips to enhance evacuation. The spiral cut improves edge finish. Recommended for hard plastic, soft plastic and solid surface materials.



| PART # | CED  | CEL  | SHANK | OAL    | RAD   | OPENING | CEL 2 | MATERIAL |
|--------|------|------|-------|--------|-------|---------|-------|----------|
| SPR400 | 1/4" | 3/8" | 1/4"  | 2-1/2" | 1/8"  | 5/32"   | 1/8"  | .195     |
| SPR410 | 1/4" | 3/8" | 1/4"  | 2-1/2" | 3/16" | 7/32"   | 3/16" | .180     |
| SPR420 | 1/4" | 3/8" | 1/4"  | 2-1/2" | 1/4"  | 9/32"   | 1/4"  | .163     |

## O FLUTE UPCUT BIT - 1 FLUTE (GENERAL PURPOSE)



| PART # | CED   | CEL    | SHANK | OAL    |
|--------|-------|--------|-------|--------|
| SOU100 | 1/8"  | 3/8"   | 1/4"  | 2-1/2" |
| SOU110 | 3/16" | 1/2"   | 1/4"  | 2-1/2" |
| SOU120 | 1/4"  | 3/4"   | 1/4"  | 2-1/2" |
| SOU123 | 1/4"  | 1-1/4" | 1/4"  | 3"     |
| SOU135 | 3/8"  | 1"     | 3/8"  | 3"     |
| SOU136 | 3/8"  | 1-5/8" | 3/8"  | 3-1/2" |
| SOU160 | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" |

## O FLUTE DOWNCUT BIT - 1 FLUTE (GENERAL PURPOSE)



| PART # | CED   | CEL    | SHANK | OAL    |
|--------|-------|--------|-------|--------|
| SOD200 | 1/8"  | 3/8"   | 1/4"  | 2-1/2" |
| SOD210 | 3/16" | 1/2"   | 1/4"  | 2-1/2" |
| SOD220 | 1/4"  | 3/4"   | 1/4"  | 2-1/2" |
| SOD223 | 1/4"  | 1-1/4" | 1/4"  | 3"     |
| SOD235 | 3/8"  | 1"     | 3/8"  | 3"     |
| SOD236 | 3/8"  | 1-5/8" | 3/8"  | 3-1/2" |
| SOD260 | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" |

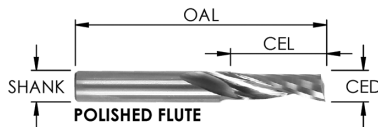
## O FLUTE UPCUT - 1 FLUTE (REPLACED AS "SOU" SERIES)



| PART #  | REPLACEMENT        |
|---------|--------------------|
| SPOU100 | replaced by SOU302 |
| SPOU110 | replaced by SOU313 |
| SPOU120 | replaced by SOU323 |

## O FLUTE UPCUT - 1 FLUTE (POLISHED) - HARD PLASTIC

Polished 1 Flute "O" flute spiral upcut tools produce curled chips to enhance evacuation and minimize chips welding to the cutting edge of the tool while improving surface finish. The end grinds improve bottom cut finishes. Recommended for cutting hard plastic, and solid surface.

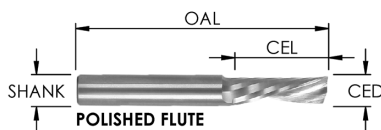


| PART #  | CED   | CEL    | SHANK | OAL    |
|---------|-------|--------|-------|--------|
| SOU300A | 1/8"  | 1/4"   | 1/8"  | 2"     |
| SOU300B | 1/8"  | 1/2"   | 1/8"  | 2"     |
| SOU300  | 1/8"  | 1/4"   | 1/4"  | 2"     |
| SOU302  | 1/8"  | 1/2"   | 1/4"  | 2"     |
| SOU303  | 1/8"  | 3/4"   | 1/4"  | 2-1/2" |
| SOU311  | 3/16" | 3/8"   | 1/4"  | 2"     |
| SOU313  | 3/16" | 5/8"   | 1/4"  | 2"     |
| SOU315  | 7/32" | 3/4"   | 1/4"  | 2-1/2" |
| SOU320  | 1/4"  | 3/8"   | 1/4"  | 2"     |
| SOU323  | 1/4"  | 3/4"   | 1/4"  | 2-1/2" |
| SOU326  | 1/4"  | 1-1/4" | 1/4"  | 3"     |
| SOU323B | 1/4"  | 1-1/2" | 1/4"  | 3"     |
| SOU332  | 3/8"  | 5/8"   | 3/8"  | 2-1/2" |
| SOU338  | 3/8"  | 1-1/8" | 3/8"  | 3"     |
| SOU335  | 3/8"  | 1-5/8" | 3/8"  | 3-1/2" |
| SOU345  | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" |

*\*SOU302 replaces SPOU100, SOU313 replaces SPOU110, SOU323 replaces SPOU120*

## O FLUTE DOWNCUT - 1 FLUTE (POLISHED) - HARD PLASTIC

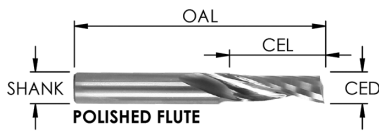
Polished 1 Flute "O" flute spiral downcut tools produce curled chips to enhance evacuation and minimize chips welding to the cutting edge of the tool. The downcut force improves part hold down. The end grinds improve bottom cut finishes. Recommended for cutting hard plastic and solid surface.



| PART # | CED   | CEL    | SHANK | OAL    |
|--------|-------|--------|-------|--------|
| SOD402 | 1/8"  | 1/2"   | 1/4"  | 2"     |
| SOD413 | 3/16" | 5/8"   | 1/4"  | 2"     |
| SOD423 | 1/4"  | 3/4"   | 1/4"  | 2-1/2" |
| SOD426 | 1/4"  | 1-1/4" | 1/4"  | 3"     |
| SOD435 | 3/8"  | 1-1/8" | 3/8"  | 3"     |
| SOD445 | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" |

## O FLUTE UPCUT - 1 FLUTE (POLISHED) - SOFT PLASTIC

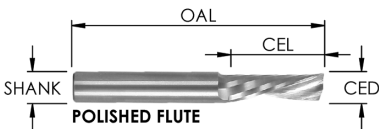
Polished 1 Flute "O" flute spiral upcut tools produce curled chips to enhance evacuation and minimize chips welding to the cutting edge of the tool while improving surface finish. The end grinds improve bottom cut finishes. Recommended for cutting soft plastic, hard plastic, aluminum and solid surface.



| PART #  | CED   | CEL    | SHANK | OAL    |
|---------|-------|--------|-------|--------|
| SOU490  | 1/16" | 1/4"   | 1/4"  | 2"     |
| SOU500A | 1/8"  | 1/4"   | 1/8"  | 2"     |
| SOU500B | 1/8"  | 1/2"   | 1/8"  | 2"     |
| SOU500  | 1/8"  | 1/4"   | 1/4"  | 2"     |
| SOU502  | 1/8"  | 1/2"   | 1/4"  | 2"     |
| SOU503  | 1/8"  | 3/4"   | 1/4"  | 2-1/2" |
| SOU511  | 3/16" | 3/8"   | 1/4"  | 2"     |
| SOU513  | 3/16" | 5/8"   | 1/4"  | 2"     |
| SOU520  | 1/4"  | 3/8"   | 1/4"  | 2"     |
| SOU523  | 1/4"  | 3/4"   | 1/4"  | 2-1/2" |
| SOU524  | 1/4"  | 1"     | 1/4"  | 2-1/2" |
| SOU526  | 1/4"  | 1-1/4" | 1/4"  | 3"     |
| SOU527  | 1/4"  | 1-1/2" | 1/4"  | 3"     |
| SOU532  | 3/8"  | 5/8"   | 3/8"  | 2-1/2" |
| SOU535  | 3/8"  | 1-1/8" | 3/8"  | 3"     |
| SOU538  | 3/8"  | 1-5/8" | 3/8"  | 3-1/2" |
| SOU545  | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" |

## O FLUTE DOWNCUT - 1 FLUTE (POLISHED) - SOFT PLASTIC

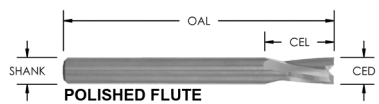
Polished 1 Flute "O" flute spiral downcut tools produce curled chips to enhance evacuation and minimize chips welding to the cutting edge of the tool while improving surface finish. The end grinds improve bottom cut finishes. Recommended for cutting soft plastic, hard plastic, aluminum and solid surface.



| PART # | CED   | CEL    | SHANK | OAL    |
|--------|-------|--------|-------|--------|
| SOD602 | 1/8"  | 1/2"   | 1/4"  | 2"     |
| SOD613 | 3/16" | 5/8"   | 1/4"  | 2"     |
| SOD623 | 1/4"  | 3/4"   | 1/4"  | 2-1/2" |
| SOD626 | 1/4"  | 1-1/4" | 1/4"  | 3"     |
| SOD635 | 3/8"  | 1-1/8" | 3/8"  | 3"     |
| SOD645 | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" |

## O FLUTE LOW HELIX UPCUT SPIRAL, 2 FLUTE

2 flute upcut low helix spiral "O" flute. Upward chip removal. Recommended for hard plastic, soft plastic and solid surface.

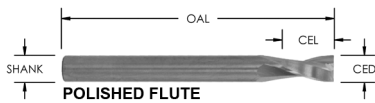


| PART # | CED  | CEL    | SHANK | OAL    |
|--------|------|--------|-------|--------|
| SOU720 | 1/4" | 3/8"   | 1/4"  | 2-1/2" |
| SOU724 | 1/4" | 3/4"   | 1/4"  | 2-1/2" |
| SOU734 | 3/8" | 1"     | 3/8"  | 3"     |
| SOU742 | 1/2" | 1-1/8" | 1/2"  | 3-1/2" |
| SOU745 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |
| SOU748 | 1/2" | 2-1/8" | 1/2"  | 4-1/2" |



## O FLUTE HIGH HELIX UPCUT SPIRAL, 2 FLUTE

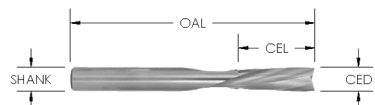
2 flute upcut high helix spiral "O" flute. Evacuates chip upward. Recommended for cutting soft plastic.



| PART # | CED  | CEL    | SHANK | OAL    |
|--------|------|--------|-------|--------|
| SOU920 | 1/4" | 3/8"   | 1/4"  | 2-1/2" |
| SOU926 | 1/4" | 1-1/4" | 1/4"  | 3"     |
| SOU934 | 3/8" | 1"     | 3/8"  | 3"     |
| SOU937 | 3/8" | 1-1/2" | 3/8"  | 4"     |
| SOU943 | 1/2" | 1-1/4" | 1/2"  | 4"     |
| SOU948 | 1/2" | 2-1/8" | 1/2"  | 4"     |

## O FLUTE SLOW SPIRALS

2 flute low helix "O" flute used to achieve smooth finishes in plastic. Recommended for soft plastic, hard plastic and solid surface. General purpose applications.



| PART # | CED  | CEL  | SHANK | OAL    |         |
|--------|------|------|-------|--------|---------|
| SOD823 | 1/4" | 3/4" | 1/4"  | 2-1/2" | DOWNCUT |
| SOU723 | 1/4" | 3/4" | 1/4"  | 2-1/2" | UPCUT   |

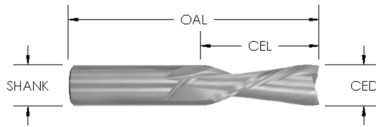
The CARBIDE TIPPED PLASTIC SAW (TRIPLE CHIP GRIND) have been moved to the slotter section of the catalog on page 75.



## SOLID CARBIDE SPIRAL BITS

### 2 FLUTE DOWNCUT BITS

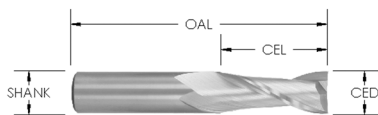
Two flute downcut spiral tools leave a smooth top edge cut. Downcut forces assist holding down material during use. General purpose applications. Recommended for solid surface, wood composites and natural wood.



| PART #    | CED    | CEL    | SHANK | OAL    |
|-----------|--------|--------|-------|--------|
| SRD202    | 3/32"  | 1/2"   | 1/4"  | 2"     |
| SRD203    | 1/8"   | 1/2"   | 1/4"  | 2"     |
| SRD203-34 | 1/8"   | 3/4"   | 1/4"  | 2-1/2" |
| SRD204    | 1/8"   | 7/8"   | 1/4"  | 2-1/2" |
| SRD205    | 5/32"  | 3/4"   | 1/4"  | 2"     |
| SRD210    | 3/16"  | 3/4"   | 1/4"  | 2"     |
| SRD212    | 3/16"  | 7/8"   | 1/4"  | 2-1/2" |
| SRD213    | 5MM    | 3/4"   | 1/4"  | 2"     |
| SRD215    | 7/32"  | 3/4"   | 1/4"  | 2"     |
| SRD216    | 6MM    | 13MM   | 6MM   | 64MM   |
| SRD217    | 6MM    | 7/8"   | 1/4"  | 2-1/2" |
| SRD218    | 1/4"   | 3/4"   | 1/4"  | 2-1/2" |
| SRD220    | 1/4"   | 1"     | 1/4"  | 2-1/2" |
| SRD223    | 1/4"   | 1-1/4" | 1/4"  | 3"     |
| SRD223A   | 1/4"   | 1-1/2" | 1/4"  | 3-1/2" |
| SRD223B   | 7MM    | 1"     | 1/2"  | 3"     |
| SRD224A   | 9/32"  | 1"     | 5/16" | 2-1/2" |
| SRD224B   | 9/32"  | 1"     | 3/8"  | 2-1/2" |
| SRD224    | 9/32"  | 1"     | 1/2"  | 3"     |
| SRD225    | 5/16"  | 1"     | 5/16" | 3"     |
| SRD227    | 5/16"  | 1-1/8" | 5/16" | 3"     |
| SRD230    | 5/16"  | 1"     | 1/2"  | 3"     |
| SRD233    | 8MM    | 25MM   | 8MM   | 65MM   |
| SRD235    | 3/8"   | 1"     | 3/8"  | 3"     |
| SRD237    | 3/8"   | 1-1/4" | 3/8"  | 3"     |
| SRD240    | 3/8"   | 2"     | 3/8"  | 4"     |
| SRD245    | 3/8"   | 1-1/4" | 1/2"  | 3"     |
| SRD247    | 10MM   | 35MM   | 10MM  | 76MM   |
| SRD250A   | 7/16"  | 1"     | 1/2"  | 3"     |
| SRD250    | 7/16"  | 1-1/4" | 1/2"  | 3"     |
| SRD252    | 12MM   | 35MM   | 12MM  | 76MM   |
| SRD253    | 1/2"   | 1"     | 1/2"  | 3"     |
| SRD255    | 1/2"   | 1-1/4" | 1/2"  | 3"     |
| SRD258    | 1/2"   | 1-1/2" | 1/2"  | 3-1/2" |
| SRD260    | 1/2"   | 1-5/8" | 1/2"  | 3-1/2" |
| SRD263    | 1/2"   | 1-3/4" | 1/2"  | 4"     |
| SRD265    | 1/2"   | 2"     | 1/2"  | 4"     |
| SRD267    | 1/2"   | 2-1/8" | 1/2"  | 4"     |
| SRD268    | 1/2"   | 2-1/2" | 1/2"  | 5"     |
| SRD269    | 17/32" | 1-1/4" | 1/2"  | 3-1/2" |
| SRD270    | 9/16"  | 1-1/4" | 1/2"  | 3"     |
| SRD275    | 5/8"   | 1-1/2" | 5/8"  | 3-1/2" |
| SRD280    | 5/8"   | 2"     | 5/8"  | 4"     |
| SRD285    | 3/4"   | 1-1/2" | 3/4"  | 4"     |
| SRD290    | 3/4"   | 2"     | 3/4"  | 4"     |
| SRD291    | 3/4"   | 2-1/8" | 3/4"  | 4"     |
| SRD292    | 3/4"   | 2-1/2" | 3/4"  | 5"     |
| SRD293    | 3/4"   | 3"     | 3/4"  | 6"     |
| SRD295    | 3/4"   | 3-1/4" | 3/4"  | 6"     |
| SRD297    | 3/4"   | 3-1/2" | 3/4"  | 6"     |

## 2 FLUTE UPCUT BITS

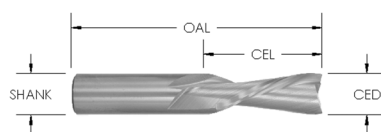
Two flute upcut spiral tools produce a cleaner bottom edge finish and improve chip evacuation. Leaves a smoother bottom edge finish. General purpose applications. Recommended for solid surface, wood composites and natural wood.



| PART # | CED    | CEL    | SHANK | OAL    |
|--------|--------|--------|-------|--------|
| SRU090 | 1/16"  | 1/4"   | 1/8"  | 1-1/2" |
| SRU092 | 1/8"   | 1/2"   | 1/8"  | 1-1/2" |
| SRU102 | 3/32"  | 1/2"   | 1/4"  | 2"     |
| SRU103 | 1/8"   | 1/2"   | 1/4"  | 2"     |
| SRU105 | 5/32"  | 3/4"   | 1/4"  | 2"     |
| SRU110 | 3/16"  | 3/4"   | 1/4"  | 2"     |
| SRU113 | 5MM    | 3/4"   | 1/4"  | 2"     |
| SRU115 | 7/32"  | 3/4"   | 1/4"  | 2"     |
| SRU118 | 1/4"   | 3/4"   | 1/4"  | 2-1/2" |
| SRU119 | 6MM    | 25MM   | 6MM   | 64MM   |
| SRU120 | 1/4"   | 1"     | 1/4"  | 2-1/2" |
| SRU121 | 1/4"   | 1"     | 1/2"  | 3-3/8" |
| SRU123 | 1/4"   | 1-1/4" | 1/4"  | 3"     |
| SRU124 | 9/32"  | 1"     | 1/2"  | 3"     |
| SRU125 | 5/16"  | 1"     | 5/16" | 3"     |
| SRU130 | 5/16"  | 1"     | 1/2"  | 3"     |
| SRU133 | 8MM    | 25MM   | 8MM   | 65MM   |
| SRU135 | 3/8"   | 1"     | 3/8"  | 3"     |
| SRU137 | 3/8"   | 1-1/4" | 3/8"  | 3"     |
| SRU145 | 3/8"   | 1-1/4" | 1/2"  | 3"     |
| SRU147 | 10MM   | 1-1/8" | 1/2"  | 3"     |
| SRU150 | 7/16"  | 1-1/4" | 1/2"  | 3"     |
| SRU152 | 12MM   | 35MM   | 12MM  | 76MM   |
| SRU153 | 1/2"   | 1"     | 1/2"  | 3"     |
| SRU155 | 1/2"   | 1-1/4" | 1/2"  | 3"     |
| SRU158 | 1/2"   | 1-1/2" | 1/2"  | 3-1/2" |
| SRU160 | 1/2"   | 1-5/8" | 1/2"  | 3-1/2" |
| SRU163 | 1/2"   | 1-3/4" | 1/2"  | 4"     |
| SRU165 | 1/2"   | 2"     | 1/2"  | 4"     |
| SRU167 | 1/2"   | 2-1/8" | 1/2"  | 4"     |
| SRU168 | 1/2"   | 2-1/2" | 1/2"  | 5"     |
| SRU169 | 17/32" | 1-1/4" | 1/2"  | 3-1/2" |
| SRU170 | 9/16"  | 1-1/4" | 1/2"  | 3-1/2" |
| SRU175 | 5/8"   | 1-1/2" | 5/8"  | 3-1/2" |
| SRU180 | 5/8"   | 2"     | 5/8"  | 4"     |
| SRU185 | 3/4"   | 1-1/2" | 3/4"  | 4"     |
| SRU190 | 3/4"   | 2"     | 3/4"  | 4"     |
| SRU191 | 3/4"   | 2-1/8" | 3/4"  | 4"     |
| SRU192 | 3/4"   | 2-1/2" | 3/4"  | 5"     |
| SRU193 | 3/4"   | 3"     | 3/4"  | 6"     |
| SRU195 | 3/4"   | 3-1/4" | 3/4"  | 6"     |
| SRU197 | 3/4"   | 3-1/2" | 3/4"  | 6"     |

## 2 FLUTE DOWNCUT BITS - MD

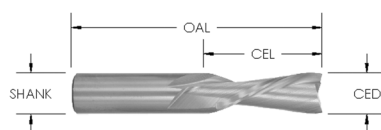
Two flute downcut spiral tools produce a cleaner top edge cut. This MD series is used when "extended tool life" is recommended for cutting adhesive and abrasive materials. Downcut forces assist holding down materials during the cut operation. Recommended cutting MDF, particle board, plywood, melamine and laminates.



| PART #   | CED  | CEL    | SHANK | OAL    |
|----------|------|--------|-------|--------|
| SRD202MD | 1/8" | 1/2"   | 1/4"  | 2"     |
| SRD218MD | 1/4" | 3/4"   | 1/4"  | 2-1/2" |
| SRD220MD | 1/4" | 1"     | 1/4"  | 2-1/2" |
| SRD235MD | 3/8" | 1"     | 3/8"  | 3"     |
| SRD237MD | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRD255MD | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRD260MD | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |
| SRD265MD | 1/2" | 2"     | 1/2"  | 4"     |

## 2 FLUTE DOWNCUT BITS - HD

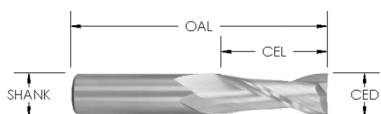
This HD series of tooling extends the max life of tooling at a lower cost than coated tools. Recommended for MDF, chipboard with melamine, laminates and veneered plywood.



| PART #   | CED  | CEL    | SHANK | OAL    |
|----------|------|--------|-------|--------|
| SRD235HD | 3/8" | 1"     | 3/8"  | 3"     |
| SRD237HD | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRD252HD | 1/2" | 1"     | 1/2"  | 3"     |
| SRD255HD | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRD260HD | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |

## 2 FLUTE UPCUT BITS - MD

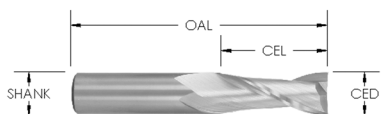
Two flute upcut spiral tools improve chip evacuation and leaves a smoother bottom edge finish. This MD series is used when "extended tool life" is recommended for cutting adhesive and abrasive materials. Recommended cutting MDF, particle board, plywood, melamine and laminates.



| PART #   | CED  | CEL    | SHANK | OAL    |
|----------|------|--------|-------|--------|
| SRU103MD | 1/8" | 1/2"   | 1/4"  | 2"     |
| SRU114MD | 1/4" | 3/4"   | 1/4"  | 2-1/2" |
| SRU120MD | 1/4" | 1"     | 1/4"  | 2-1/2" |
| SRU135MD | 3/8" | 1"     | 3/8"  | 3"     |
| SRU137MD | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRU155MD | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRU160MD | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |
| SRU165MD | 1/2" | 2"     | 1/2"  | 4"     |

## 2 FLUTE UPCUT BITS - HD

This HD series of tooling extends the max life of tooling at a lower cost than coated tools. Recommended for MDF, chipboard with melamine, laminates and veneered plywood.

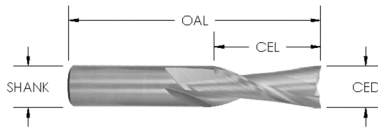


| PART #   | CED  | CEL    | SHANK | OAL    |
|----------|------|--------|-------|--------|
| SRU135HD | 3/8" | 1"     | 3/8"  | 3"     |
| SRU137HD | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRU152HD | 1/2" | 1"     | 1/2"  | 3"     |
| SRU155HD | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRU160HD | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |



## 2 FLUTE DOWNCUT LEFT-HAND

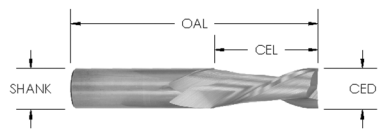
Two flute downcut spiral tools leave a cleaner top edge cut. Downcut forces assist holding down material during use. General purpose applications. Recommended for solid surface, wood composites and natural wood.



| PART # | CED   | CEL    | SHANK | OAL    |
|--------|-------|--------|-------|--------|
| SLD400 | 1/8"  | 1/2"   | 1/4"  | 2"     |
| SLD410 | 3/16" | 3/4"   | 1/4"  | 2"     |
| SLD415 | 7/32" | 3/4"   | 1/4"  | 2"     |
| SLD420 | 1/4"  | 1"     | 1/4"  | 2-1/2" |
| SLD425 | 5/16" | 1"     | 5/16" | 3"     |
| SLD430 | 3/8"  | 1"     | 3/8"  | 3"     |
| SLD435 | 7/16" | 1-1/4" | 1/2"  | 3"     |
| SLD440 | 1/2"  | 1-1/4" | 1/2"  | 3"     |
| SLD445 | 1/2"  | 1-1/2" | 1/2"  | 3-1/2" |
| SLD450 | 1/2"  | 2"     | 1/2"  | 4"     |
| SLD455 | 5/8"  | 1-1/2" | 5/8"  | 3-1/2" |
| SLD460 | 5/8"  | 2"     | 5/8"  | 4"     |
| SLD465 | 3/4"  | 1-1/2" | 3/4"  | 4"     |
| SLD470 | 3/4"  | 2"     | 3/4"  | 4"     |

## 2 FLUTE UPCUT LEFT-HAND

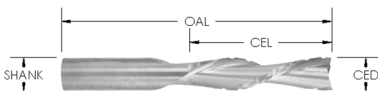
Two flute upcut spiral tools improve bottom edge finish and enhance chip evacuation. Leaves a smooth bottom edge finish. General purpose applications. Recommended for solid surface, wood composites and natural wood.



| PART # | CED   | CEL    | SHANK | OAL    |
|--------|-------|--------|-------|--------|
| SLU300 | 1/8"  | 1/2"   | 1/4"  | 2"     |
| SLU310 | 3/16" | 3/4"   | 1/4"  | 2"     |
| SLU315 | 7/32" | 3/4"   | 1/4"  | 2"     |
| SLU320 | 1/4"  | 1"     | 1/4"  | 2-1/2" |
| SLU325 | 5/16" | 1"     | 5/16" | 3"     |
| SLU330 | 3/8"  | 1"     | 3/8"  | 3"     |
| SLU335 | 7/16" | 1-1/4" | 1/2"  | 3"     |
| SLU340 | 1/2"  | 1-1/4" | 1/2"  | 3"     |
| SLU345 | 1/2"  | 1-1/2" | 1/2"  | 3-1/2" |
| SLU350 | 1/2"  | 2"     | 1/2"  | 4"     |
| SLU355 | 5/8"  | 1-1/2" | 5/8"  | 3-1/2" |
| SLU360 | 5/8"  | 2"     | 5/8"  | 4"     |
| SLU365 | 3/4"  | 1-1/2" | 3/4"  | 4"     |
| SLU370 | 3/4"  | 2"     | 3/4"  | 4"     |

## 2 FLUTE DOWNCUT BITS W/ CHIPBEAKERS

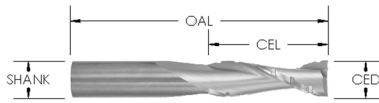
Two flute downcut chipbreakers are designed to reduce chip size for faster feed rates. Downcut forces improve material hold down. These tools are recommended for wood composites and natural wood.



| PART #   | CED  | CEL    | SHANK | OAL    |
|----------|------|--------|-------|--------|
| SRD237CB | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRD255CB | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRD260CB | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |
| SRD265CB | 1/2" | 2"     | 1/2"  | 4"     |
| SRD267CB | 1/2" | 2-1/8" | 1/2"  | 4"     |
| SRD280CB | 5/8" | 2"     | 5/8"  | 4"     |
| SRD290CB | 3/4" | 2"     | 3/4"  | 4"     |
| SRD293CB | 3/4" | 3"     | 3/4"  | 6"     |

## 2 FLUTE UPCUT BITS W/ CHIPBEAKERS

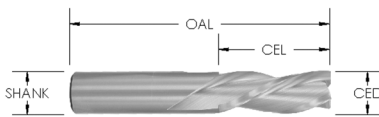
Two flute upcut chipbreakers are designed to reduce chip size for faster feed rates. Upcut forces improve chip evacuation. These tools are recommended for wood composites and natural wood.



| PART #   | CED  | CEL    | SHANK | OAL    |
|----------|------|--------|-------|--------|
| SRU137CB | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRU155CB | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRU160CB | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |
| SRU165CB | 1/2" | 2"     | 1/2"  | 4"     |
| SRU167CB | 1/2" | 2-1/8" | 1/2"  | 4"     |
| SRU180CB | 5/8" | 2"     | 5/8"  | 4"     |
| SRU190CB | 3/4" | 2"     | 3/4"  | 4"     |
| SRU193CB | 3/4" | 3"     | 3/4"  | 6"     |

## 3 FLUTE DOWNCUT BITS

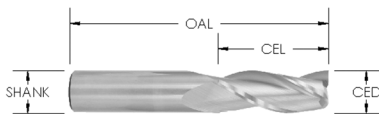
Three flute spiral downcut finishers are designed to improve the finished material upper edges at feed rates similar to two flute spiral spirals. May increase too life compared to two flute tools. Downcut forces improve material hold down. General purpose applications. These tools cut wood composite wood, solid surface and natural wood.



| PART #  | CED  | CEL    | SHANK | OAL    |
|---------|------|--------|-------|--------|
| SRD540T | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRD555T | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRD560T | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |
| SRD565T | 1/2" | 2"     | 1/2"  | 4"     |
| SRD580T | 5/8" | 2"     | 5/8"  | 4"     |
| SRD585T | 3/4" | 1-1/2" | 3/4"  | 4"     |
| SRD590T | 3/4" | 2"     | 3/4"  | 4"     |
| SRD595T | 3/4" | 3"     | 3/4"  | 6"     |
| SRD597T | 3/4" | 3-1/2" | 3/4"  | 6"     |

## 3 FLUTE UPCUT BITS

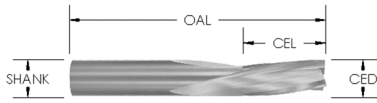
Three flute spiral upcut finishers are designed to improve the finished bottom edges at feed rates similar to two flute spiral spirals. May increase too life compared to two flute tools. Upcut forces improve chip evacuation. General purpose applications. These tools cut wood composites, solid surface and natural wood.



| PART #  | CED  | CEL    | SHANK | OAL    |
|---------|------|--------|-------|--------|
| SRU420T | 1/4" | 1"     | 1/4"  | 3"     |
| SRU440T | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRU455T | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRU460T | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |
| SRU465T | 1/2" | 2"     | 1/2"  | 4"     |
| SRU480T | 5/8" | 2"     | 5/8"  | 4"     |
| SRU485T | 3/4" | 1-1/2" | 3/4"  | 4"     |
| SRU490T | 3/4" | 2"     | 3/4"  | 4"     |
| SRU495T | 3/4" | 3"     | 3/4"  | 6"     |
| SRU497T | 3/4" | 3-1/2" | 3/4"  | 6"     |

### 3 FLUTE DOWNCUT SLOW SPIRAL BITS

Three flute slow spiral downcut finisher sharp edges produce very smooth finishes in hard plastic, solid surface, wood composites and natural wood.

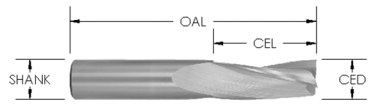


| PART #   | CED  | CEL    | SHANK | OAL    |
|----------|------|--------|-------|--------|
| SRD702SL | 1/4" | 1"     | 1/4"  | 2-1/2" |
| SRD713SL | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRD724SL | 1/2" | 1-1/8" | 1/2"  | 3-1/2" |
| SRD725SL | 1/2" | 1-1/4" | 1/2"  | 3-1/2" |
| SRD726SL | 1/2" | 1-1/2" | 1/2"  | 3-1/2" |
| SRD728SL | 1/2" | 1-5/8" | 1/2"  | 4"     |
| SRD729SL | 1/2" | 1-3/4" | 1/2"  | 4"     |
| SRD745SL | 3/4" | 2"     | 3/4"  | 4"     |

**GREAT FOR APPLICATION PROBLEMS**

### 3 FLUTE UPCUT SLOW SPIRAL BITS

Three flute slow spiral upcut finisher sharp edges produce very smooth finishes in hard plastic, solid surface, wood composites and natural wood.

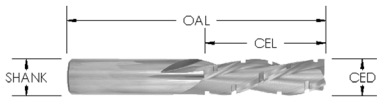


| PART #   | CED  | CEL    | SHANK | OAL    |
|----------|------|--------|-------|--------|
| SRU602SL | 1/4" | 1"     | 1/4"  | 2-1/2" |
| SRU611SL | 3/8" | 3/4"   | 3/8"  | 3"     |
| SRU613SL | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRU621SL | 1/2" | 3/4"   | 1/2"  | 3"     |
| SRU623SL | 1/2" | 1-1/8" | 1/2"  | 3"     |
| SRU625SL | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRU626SL | 1/2" | 1-1/2" | 1/2"  | 3-1/2" |
| SRU627SL | 1/2" | 1-1/2" | 1/2"  | 4"     |
| SRU629SL | 1/2" | 1-3/4" | 1/2"  | 4"     |
| SRU645SL | 3/4" | 2"     | 3/4"  | 4"     |
| SRU648SL | 3/4" | 3"     | 3/4"  | 6"     |

**GREAT FOR APPLICATION PROBLEMS**

### 3 FLUTE DOWNCUT BITS W/ CHIPBEAKERS

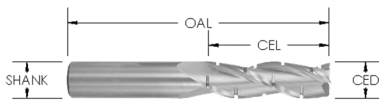
Three flute spiral downcut chipbreakers are designed to reduce chip size for faster feed rates. Better edge finishes and may enhance tool life over two flute tooling. Downcut forces improve material hold down. These tools cut natural wood and wood composites.



| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| SRD540TCB | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRD555TCB | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRD560TCB | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |
| SRD565TCB | 1/2" | 2"     | 1/2"  | 4"     |
| SRD580TCB | 5/8" | 2"     | 5/8"  | 4"     |
| SRD585TCB | 3/4" | 1-1/2" | 3/4"  | 4"     |
| SRD590TCB | 3/4" | 2"     | 3/4"  | 4"     |
| SRD595TCB | 3/4" | 3"     | 3/4"  | 6"     |

### 3 FLUTE UPCUT BITS W/ CHIPBEAKERS

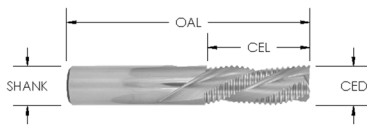
Three flute spiral upcut chipbreakers are designed to reduce chip size for faster feed rates. Better edge finishes and may enhance tool life over two flute tooling. Upcut forces improve chip evacuation. These tools are recommended for natural wood and wood composites.



| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| SRU440TCB | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRU455TCB | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRU460TCB | 1/2" | 1-5/8" | 1/2"  | 3-1/2" |
| SRU465TCB | 1/2" | 2"     | 1/2"  | 4"     |
| SRU480TCB | 5/8" | 2"     | 5/8"  | 4"     |
| SRU485TCB | 3/4" | 1-1/2" | 3/4"  | 4"     |
| SRU490TCB | 3/4" | 2"     | 3/4"  | 4"     |
| SRU495TCB | 3/4" | 3"     | 3/4"  | 6"     |

### 3 FLUTE DOWNCUT ROUGHERS

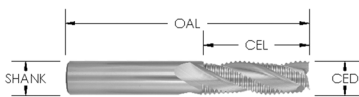
Three flute spiral downcut roughers are designed to increase feed rates when surface finish is not important. Downcut forces improve material hold down. These tools are recommended for natural wood and wood composites.



| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| SRD420RUF | 3/8" | 7/8"   | 3/8"  | 2-1/2" |
| SRD440RUF | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRD446RUF | 3/8" | 1-3/4" | 3/8"  | 4"     |
| SRD450RUF | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRD460RUF | 1/2" | 1-1/2" | 1/2"  | 3-1/2" |
| SRD468RUF | 1/2" | 1-3/4" | 1/2"  | 4"     |
| SRD470RUF | 1/2" | 2"     | 1/2"  | 4"     |
| SRD467RUF | 1/2" | 2-1/4" | 1/2"  | 4"     |
| SRD480RUF | 5/8" | 2"     | 5/8"  | 4"     |
| SRD490RUF | 3/4" | 2"     | 3/4"  | 4"     |
| SRD492RUF | 3/4" | 2-1/2" | 3/4"  | 5"     |
| SRD493RUF | 3/4" | 3"     | 3/4"  | 6"     |
| SRD495RUF | 3/4" | 3-1/4" | 3/4"  | 6"     |
| SRD497RUF | 3/4" | 3-1/2" | 3/4"  | 6"     |

### 3 FLUTE UPCUT ROUGHERS

Three flute spiral upcut roughers are designed to increase feed rates when surface finish is not important. Upcut forces improve chip evacuation. These tools are recommended for natural wood and wood composites.



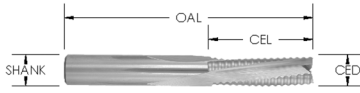
| PART #     | CED  | CEL    | SHANK | OAL    |
|------------|------|--------|-------|--------|
| SRU320RUF* | 3/8" | 7/8"   | 3/8"  | 2-1/2" |
| SRU340RUF  | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRU346RUF  | 3/8" | 1-3/4" | 3/8"  | 4"     |
| SRU350RUF  | 1/2" | 1-1/4" | 1/2"  | 3"     |
| SRU360RUF  | 1/2" | 1-1/2" | 1/2"  | 3-1/2" |
| SRU368RUF  | 1/2" | 1-3/4" | 1/2"  | 4"     |
| SRU370RUF  | 1/2" | 2"     | 1/2"  | 4"     |
| SRU367RUF  | 1/2" | 2-1/4" | 1/2"  | 4"     |
| SRU380RUF  | 5/8" | 2"     | 5/8"  | 4"     |
| SRU390RUF  | 3/4" | 2"     | 3/4"  | 4"     |
| SRU392RUF  | 3/4" | 2-1/2" | 3/4"  | 5"     |
| SRU393RUF  | 3/4" | 3"     | 3/4"  | 6"     |
| SRU395RUF  | 3/4" | 3-1/4" | 3/4"  | 6"     |
| SRU397RUF  | 3/4" | 3-1/2" | 3/4"  | 6"     |

\*For Pocket Cutting Machine



### 3 FLUTE DOWNCUT SLOW SPIRAL ROUGHERS

Three flute slow spiral downcut roughers are designed to increase feed rates when surface finish is not important. Downcut forces improve material hold down. These tools are recommended for plastic, natural wood and wood composites.



| PART #      | CED  | CEL    | SHANK | OAL    |
|-------------|------|--------|-------|--------|
| SRD613SLRUF | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRD614SLRUF | 3/8" | 1-1/4" | 3/8"  | 3-1/2" |
| SRD625SLRUF | 1/2" | 1-1/4" | 1/2"  | 3-1/2" |
| SRD626SLRUF | 1/2" | 1-1/2" | 1/2"  | 4"     |
| SRD627SLRUF | 1/2" | 1-5/8" | 1/2"  | 4"     |
| SRD637SLRUF | 5/8" | 2-1/8" | 5/8"  | 5"     |
| SRD645SLRUF | 3/4" | 2"     | 3/4"  | 5"     |

### 3 FLUTE UPCUT SLOW SPIRAL ROUGHERS

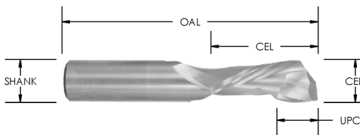
Three flute slow spiral upcut roughers are designed to increase feed rates when surface finish is not important. The lower helix will produce less lifting forces. These tools are recommended for plastic, natural wood and wood composites.



| PART #      | CED  | CEL    | SHANK | OAL    |
|-------------|------|--------|-------|--------|
| SRU513SLRUF | 3/8" | 1-1/4" | 3/8"  | 3"     |
| SRU523SLRUF | 1/2" | 1-1/8" | 1/2"  | 3-1/2" |
| SRU527SLRUF | 1/2" | 1-5/8" | 1/2"  | 4"     |
| SRU528SLRUF | 1/2" | 1-3/4" | 1/2"  | 4"     |
| SRU534SLRUF | 5/8" | 1-5/8" | 5/8"  | 4"     |
| SRU537SLRUF | 5/8" | 2-1/8" | 5/8"  | 5"     |
| SRU542SLRUF | 3/4" | 1-5/8" | 5/8"  | 4"     |
| SRU545SLRUF | 3/4" | 2"     | 3/4"  | 5"     |

### 1+1 COMPRESSION BITS

1 Flute edge compression spiral used to cut double sided laminated material, wood composites and natural wood to improve the finish of upper and lower material edges. Should be used for slower feed rate applications.

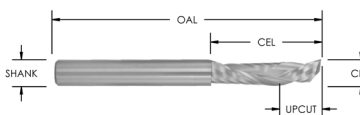


| PART #  | CED  | CEL    | SHANK | OAL    | UPCUT |
|---------|------|--------|-------|--------|-------|
| SUD500  | 1/4" | 1"     | 1/4"  | 2-1/2" | 1/4"  |
| SUD505  | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| SUD506* | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| SUD509  | 1/2" | 1-1/8" | 1/2"  | 3"     | 1/2"  |
| SUD510  | 1/2" | 1-1/4" | 1/2"  | 3"     | 1/2"  |
| SUD512  | 1/2" | 1-3/8" | 1/2"  | 3-1/2" | 1/2"  |
| SUD515  | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 1/2"  |
| SUD531  | 5/8" | 2-1/8" | 5/8"  | 4"     | 5/8"  |

*\*3/16" Upcut For Mortise Cuts*

### 1+1 COMPRESSION - LEFT-HAND

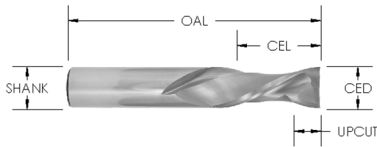
1 Flute edge compression spiral used to cut double sided laminated material, wood composites and natural wood to improve the finish of upper and lower material edges. Should be used for slower feed rate applications.



| PART #  | CED  | CEL    | SHANK | OAL    | UPCUT |
|---------|------|--------|-------|--------|-------|
| SLUD598 | 1/4" | 1"     | 1/4"  | 2-1/2" | 1/4"  |
| SLUD600 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| SLUD605 | 1/2" | 1-1/4" | 1/2"  | 3"     | 1/2"  |

## 2+2 COMPRESSIONS

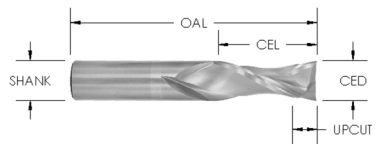
Two flute compression spiral used to cut double sided laminated materials and natural wood to improve the finish of upper and lower material edges.



| PART #  | CED  | CEL    | SHANK | OAL    | UPCUT |
|---------|------|--------|-------|--------|-------|
| SUD550  | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| SUD554  | 1/2" | 1-1/8" | 1/2"  | 3"     | 5/16" |
| SUD555  | 1/2" | 1-1/4" | 1/2"  | 3"     | 5/16" |
| SUD558  | 1/2" | 1-1/4" | 1/2"  | 3"     | 1/2"  |
| SUD560  | 1/2" | 1-3/8" | 1/2"  | 3-1/2" | 5/16" |
| SUD563  | 1/2" | 1-3/8" | 1/2"  | 3-1/2" | 1/2"  |
| SUD565  | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/16" |
| SUD566  | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/8"  |
| SUD570  | 1/2" | 1-5/8" | 1/2"  | 4"     | 5/16" |
| SUD572  | 1/2" | 1-5/8" | 1/2"  | 4"     | 1/2"  |
| SUD573  | 1/2" | 2"     | 1/2"  | 4"     | 5/16" |
| SUD573B | 1/2" | 2"     | 1/2"  | 4"     | 5/8"  |
| SUD580  | 5/8" | 2"     | 5/8"  | 4"     | 5/8"  |
| SUD585  | 3/4" | 1-1/2" | 3/4"  | 4"     | 7/8"  |
| SUD590  | 3/4" | 2"     | 3/4"  | 4"     | 7/8"  |
| SUD592  | 3/4" | 2-1/2" | 3/4"  | 5"     | 7/8"  |
| SUD594  | 3/4" | 3"     | 3/4"  | 6"     | 7/8"  |
| SUD597  | 3/4" | 3-1/2" | 3/4"  | 6"     | 7/8"  |

## 2+2 COMPRESSIONS - MORTISE

Two flute compression spiral used to cut double sided laminated material and natural wood material to improve the finish of upper and lower material edges.

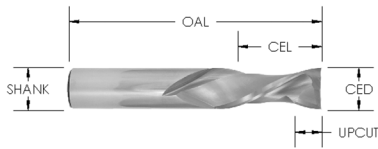


| PART #  | CED   | CEL    | SHANK | OAL    | UPCUT |
|---------|-------|--------|-------|--------|-------|
| SUD448  | 1/4"  | 1"     | 1/4"  | 2-1/2" | 3/16" |
| SUD460  | 5/16" | 1-1/4" | 5/16" | 3"     | 3/16" |
| SUD462  | 5/16" | 1"     | 5/16" | 3"     | 3/16" |
| SUD551  | 3/8"  | 1-1/4" | 3/8"  | 3"     | 3/16" |
| SUD551A | 3/8"  | 1-1/2" | 3/8"  | 3-1/2" | 3/16" |
| SUD553  | 1/2"  | 1"     | 1/2"  | 3"     | 3/16" |
| SUD553A | 1/2"  | 1"     | 1/2"  | 3-1/2" | 3/16" |
| SUD557  | 1/2"  | 1-1/4" | 1/2"  | 3"     | 3/16" |
| SUD567  | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" | 3/16" |
| SUD571  | 1/2"  | 1-3/4" | 1/2"  | 4"     | 3/16" |



## 2+2 COMPRESSIONS - MD

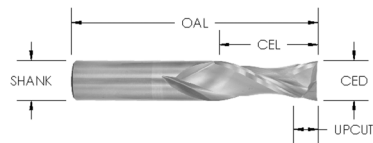
Two flute compression spiral used to improve the finish of upper and lower material edges. This MD series is used when "extended life" is needed for cutting adhesive and abrasive material. Recommended for double sided laminated and veneered material.



| PART #   | CED  | CEL    | SHANK | OAL    | UPCUT |
|----------|------|--------|-------|--------|-------|
| SMDUD445 | 1/4" | 7/8"   | 1/4"  | 2-1/2" | 1/4"  |
| SMDUD540 | 3/8" | 7/8"   | 3/8"  | 3"     | 3/8"  |
| SMDUD550 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| SMDUD554 | 1/2" | 1-1/8" | 1/2"  | 3"     | 5/16" |
| SMDUD555 | 1/2" | 1-1/4" | 1/2"  | 3"     | 5/16" |
| SMDUD558 | 1/2" | 1-1/4" | 1/2"  | 3"     | 1/2"  |
| SMDUD560 | 1/2" | 1-3/8" | 1/2"  | 3-1/2" | 5/16" |
| SMDUD563 | 1/2" | 1-3/8" | 1/2"  | 3-1/2" | 1/2"  |
| SMDUD565 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/16" |
| SMDUD566 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/8"  |
| SMDUD569 | 1/2" | 1-5/8" | 1/2"  | 4"     | 5/8"  |
| SMDUD571 | 1/2" | 1-3/4" | 1/2"  | 3-1/2" | 3/4"  |
| SMDUD573 | 1/2" | 2"     | 1/2"  | 4"     | 5/16" |
| SMDUD575 | 1/2" | 2"     | 1/2"  | 4"     | 5/8"  |

## 2+2 COMPRESSIONS - MD MORTISE

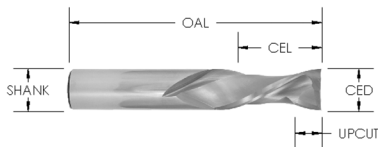
Two flute compression spiral used to improve the finish of upper and lower material edges. This MD series is used when "extended life" is needed for cutting adhesive and abrasive material. Recommended for double sided laminated and veneered material.



| PART #     | CED  | CEL    | SHANK | OAL    | UPCUT |
|------------|------|--------|-------|--------|-------|
| SMDUD539   | 3/8" | 7/8"   | 3/8"  | 3"     | 3/16" |
| SMDUD551-1 | 3/8" | 1"     | 3/8"  | 3"     | 3/16" |
| SMDUD551   | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| SMDUD554A  | 1/2" | 1-1/8" | 1/2"  | 3"     | 3/16" |
| SMDUD557   | 1/2" | 1-1/4" | 1/2"  | 3"     | 3/16" |
| SMDUD567   | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 3/16" |

## 2+2 COMPRESSIONS - HD

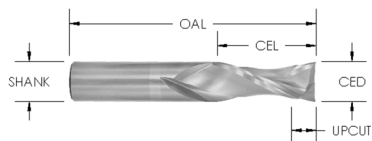
This HD series is used when "maximum tool life" is needed for cutting adhesive and abrasive material at a lower cost than coated tools. Recommended for MDF or chipboard with melamine and laminates. Two flute compression spiral used to improve the finish of upper and lower material edges.



| PART #   | CED  | CEL    | SHANK | OAL    | UPCUT |
|----------|------|--------|-------|--------|-------|
| SHDUD539 | 3/8" | 7/8"   | 3/8"  | 3"     | 3/16" |
| SHDUD545 | 3/8" | 1"     | 3/8"  | 3"     | 3/16" |
| SHDUD551 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| SHDUD550 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| SHDUD555 | 1/2" | 1-1/4" | 1/2"  | 3"     | 5/16" |
| SHDUD558 | 1/2" | 1-1/4" | 1/2"  | 3"     | 1/2"  |
| SHDUD565 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/16" |
| SHDUD566 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/8"  |
| SHDUD575 | 1/2" | 2"     | 1/2"  | 4"     | 5/8"  |

## 2+2 COMPRESSIONS - LEFT-HAND

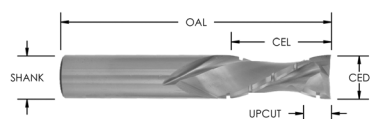
Two flute compression spiral used to cut double sided laminated material and natural wood material to improve the finish of upper and lower material edges.



| PART #  | CED  | CEL    | SHANK | OAL    | UPCUT |
|---------|------|--------|-------|--------|-------|
| SLUD648 | 1/4" | 1"     | 1/4"  | 2-1/2" | 3/16" |
| SLUD650 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| SLUD655 | 1/2" | 1-1/4" | 1/2"  | 3"     | 5/16" |
| SLUD665 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/16" |
| SLUD673 | 1/2" | 2"     | 1/2"  | 4"     | 5/16" |
| SLUD680 | 5/8" | 2"     | 5/8"  | 4"     | 5/8"  |
| SLUD685 | 3/4" | 1-1/2" | 3/4"  | 4"     | 7/8"  |
| SLUD690 | 3/4" | 2"     | 3/4"  | 4"     | 7/8"  |
| SLUD696 | 3/4" | 2-1/2" | 3/4"  | 5"     | 7/8"  |

## 2+2 COMPRESSIONS W/ CHIPBREAKERS

Two flute compression spiral chipbreaker used to cut double sided laminated material and natural wood at increased feed rates.

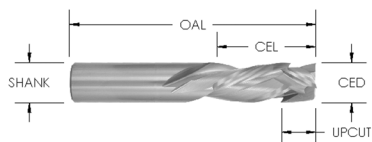


| PART #     | CED   | CEL    | SHANK | OAL    | UPCUT |
|------------|-------|--------|-------|--------|-------|
| SUD448CB*  | 1/4"  | 1"     | 1/4"  | 2-1/2" | 3/16" |
| SUD462CB   | 5/16" | 1"     | 5/16" | 3"     | 3/16" |
| SUD550CB   | 3/8"  | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| SUD551CB*  | 3/8"  | 1-1/4" | 3/8"  | 3"     | 3/16" |
| SUD551ACB* | 3/8"  | 1-1/2" | 3/8"  | 3-1/2" | 3/16" |
| SUD553CB*  | 1/2"  | 1"     | 1/2"  | 3"     | 3/16" |
| SUD553ACB* | 1/2"  | 1"     | 1/2"  | 3-1/2" | 3/16" |
| SUD554CB   | 1/2"  | 1-1/8" | 1/2"  | 3"     | 5/16" |
| SUD555CB   | 1/2"  | 1-1/4" | 1/2"  | 3"     | 5/16" |
| SUD557CB*  | 1/2"  | 1-1/4" | 1/2"  | 3"     | 3/16" |
| SUD560CB   | 1/2"  | 1-3/8" | 1/2"  | 3-1/2" | 5/16" |
| SUD565CB   | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" | 5/16" |
| SUD567CB*  | 1/2"  | 1-5/8" | 1/2"  | 3-1/2" | 3/16" |
| SUD570CB   | 1/2"  | 1-5/8" | 1/2"  | 4"     | 5/16" |
| SUD571CB   | 1/2"  | 1-3/4" | 1/2"  | 4"     | 1/4"  |
| SUD573CB   | 1/2"  | 2"     | 1/2"  | 4"     | 5/16" |
| SUD580CB   | 5/8"  | 2"     | 5/8"  | 4"     | 5/8"  |
| SUD585CB   | 3/4"  | 1-1/2" | 3/4"  | 4"     | 7/8"  |
| SUD590CB   | 3/4"  | 2"     | 3/4"  | 4"     | 7/8"  |
| SUD592CB   | 3/4"  | 2-1/2" | 3/4"  | 4"     | 7/8"  |
| SUD594CB   | 3/4"  | 3"     | 3/4"  | 6"     | 7/8"  |

\*3/16" Upcut For Mortise Cuts

## 3+3 COMPRESSIONS

Three flute compression spiral used to cut double sided laminated, veneered material and natural wood material to improve the finish of upper and lower material edges. Three flute design produces smooth finishes at increased feed rates.



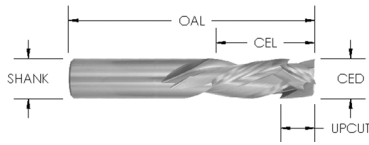
| PART #  | CED  | CEL    | SHANK | OAL    | UPCUT |
|---------|------|--------|-------|--------|-------|
| SUD750  | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| SUD751* | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| SUD754  | 1/2" | 1-1/8" | 1/2"  | 3"     | 7/16" |
| SUD755  | 1/2" | 1-1/4" | 1/2"  | 3"     | 7/16" |
| SUD756* | 1/2" | 1-1/4" | 1/2"  | 3"     | 3/16" |
| SUD765  | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 3/4"  |
| SUD790  | 3/4" | 2"     | 3/4"  | 4"     | 7/8"  |

\*3/16" Upcut for Mortise Cuts



### 3+3 COMPRESSIONS - MD

Three flute compression spiral used to cut double sided laminated materials and natural wood materials to improve the finish of upper and lower material edges. Three flute design produces smooth finishes at increased feed rates. This MD series is used when "extended life" is needed for abrasive materials.

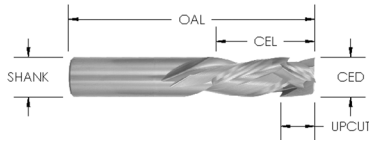


| PART #    | CED  | CEL    | SHANK | OAL    | UPCUT |
|-----------|------|--------|-------|--------|-------|
| SMDUD751* | 3/8" | 7/8"   | 3/8"  | 3"     | 3/16" |
| SMDUD751A | 3/8" | 7/8"   | 3/8"  | 3"     | 3/8"  |
| SMDUD756* | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| SMDUD750  | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| SMDUD790* | 1/2" | 1-1/4" | 1/2"  | 3"     | 3/16" |
| SMDUD755  | 1/2" | 1-1/4" | 1/2"  | 3"     | 3/8"  |
| SMDUD795  | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/8"  |

*\*3/16" Upcut for Mortise Cuts*

### 3+3 COMPRESSIONS - HD

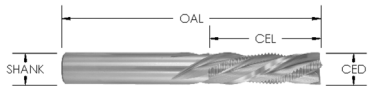
This HD series is used when "maximum tool life" is needed for cutting adhesive and abrasive material at a lower cost than coated tools. Recommended for MDF or chipboard with melamine and laminates. Three flute compression spiral used to improve the finish of upper and lower material edges.



| PART #   | CED  | CEL    | SHANK | OAL    | UPCUT |
|----------|------|--------|-------|--------|-------|
| SHDUD751 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/16" |
| SHDUD750 | 3/8" | 1-1/4" | 3/8"  | 3"     | 3/8"  |
| SHDUD754 | 1/2" | 1-1/4" | 1/2"  | 3"     | 3/16" |
| SHDUD758 | 1/2" | 1-1/4" | 1/2"  | 3"     | 1/2"  |
| SHDUD766 | 1/2" | 1-5/8" | 1/2"  | 3-1/2" | 5/8"  |

### 4 FLUTE DOWNCUT FINISHING/ROUGHER

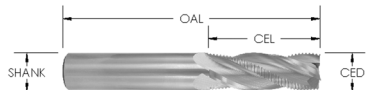
Four flute downcut roughing and finish cut edges in one tool. Downcut improves material hold down. This combination allows for increased feed rates with the simultaneous removals of a roughing tool combined with the smooth finish combined in one tool. Recommended for natural wood and wood composites.



| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| SRD823FIN | 1/2" | 1-1/8" | 1/2"  | 3-1/2" |
| SRD827FIN | 1/2" | 1-5/8" | 1/2"  | 4"     |
| SRD830FIN | 1/2" | 2-1/8" | 1/2"  | 4-1/2" |
| SRD836FIN | 5/8" | 2-1/8" | 5/8"  | 5"     |
| SRD846FIN | 3/4" | 2-1/8" | 3/4"  | 5"     |

### 4 FLUTE UPCUT FINISHING/ROUGHER

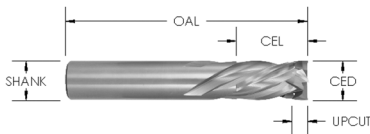
Four flute upcut roughing and finish cut edges in one tool. This combination allows for increased feed rates with the simultaneous removals of a roughing tool combined with the smooth finish combined in one tool. Upcut spiral design improves chip evacuation and improves finish on bottom edges of the material. Recommended for natural wood and wood composites.



| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| SRU723FIN | 1/2" | 1-1/8" | 1/2"  | 3-1/2" |
| SRU727FIN | 1/2" | 1-5/8" | 1/2"  | 4"     |
| SRU730FIN | 1/2" | 2-1/8" | 1/2"  | 4-1/2" |
| SRU746FIN | 3/4" | 2-1/8" | 3/4"  | 5"     |

## 4+4 COMPRESSIONS

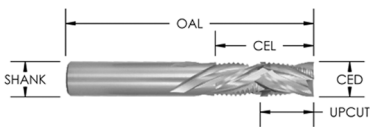
Four flute compression spiral used to cut double sided laminated material, composite and natural wood material to improve the finish of upper and lower material edges. Four flute design produces fine finishes at increased feed rates.



| PART #  | CED  | CEL    | SHANK | OAL    | UPCUT  |
|---------|------|--------|-------|--------|--------|
| SUD840* | 1/2" | 7/8"   | 1/2"  | 3"     | .200"  |
| SUD842  | 1/2" | 1"     | 1/2"  | 3"     | 1/2"   |
| SUD844  | 1/2" | 1-1/8" | 1/2"  | 3"     | 1/2"   |
| SUD860  | 1/2" | 1-3/8" | 1/2"  | 3-1/2" | 3/4"   |
| SUD870  | 1/2" | 1-5/8" | 1/2"  | 4"     | 3/4"   |
| SUD885  | 3/4" | 1-7/8" | 3/4"  | 4"     | 7/8"   |
| SUD888  | 3/4" | 2-1/2" | 3/4"  | 5"     | 1-1/4" |

## 4+4 FINISHING/ROUGHER COMPRESSIONS

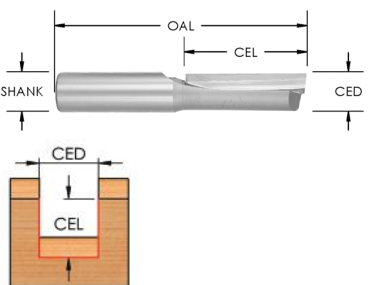
Four flute compression tool with roughing and finish cut edges in one tool. This combination allows for increased feed rates with the simultaneous removals of a roughing tool combined with the fine finishes combined in one tool. Designed to improve the finish of upper and lower material edges. Recommended for natural wood, double sided laminated material, and wood composites.



| PART #    | CED  | CEL    | SHANK | OAL    | UPCUT |
|-----------|------|--------|-------|--------|-------|
| SUD950FIN | 1/2" | 1"     | 1/2"  | 3"     | 1/2"  |
| SUD955FIN | 1/2" | 1-1/8" | 1/2"  | 3"     | 1/2"  |
| SUD960FIN | 1/2" | 1-3/8" | 1/2"  | 3-1/2" | 3/4"  |
| SUD970FIN | 1/2" | 1-5/8" | 1/2"  | 4"     | 3/4"  |
| SUD980FIN | 3/4" | 1-7/8" | 3/4"  | 4"     | 7/8"  |
| SUD990FIN | 3/4" | 2-1/2" | 3/4"  | 5"     | 7/8"  |

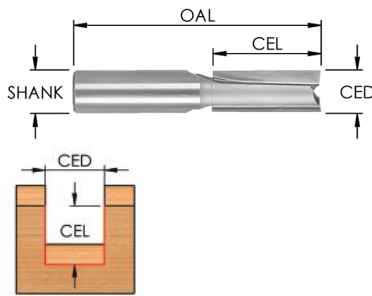
## CARBIDE TIPPED STRAIGHT BITS

### 1 FLUTE STRAIGHT



| PART #  | CED   | CEL    | SHANK | OAL    |
|---------|-------|--------|-------|--------|
| SE1004  | 1/4"  | 3/4"   | 1/4"  | 2-1/4" |
| SE1005  | 1/4"  | 1"     | 1/4"  | 2-1/2" |
| SE1007  | 1/4"  | 1"     | 1/4"  | 3-1/8" |
| SE1033A | 5/16" | 1"     | 5/16" | 2-5/8" |
| SE1035  | 3/8"  | 1"     | 3/8"  | 2-5/8" |
| SE1036  | 3/8"  | 1-1/4" | 3/8"  | 2-3/4" |
| SE1049  | 3/8"  | 1"     | 1/2"  | 2-5/8" |
| SE1050  | 3/8"  | 1-1/4" | 1/2"  | 2-7/8" |
| SE1051  | 1/2"  | 1"     | 1/2"  | 2-5/8" |
| SE1052  | 1/2"  | 1-1/4" | 1/2"  | 3"     |
| SE1054  | 1/2"  | 1-1/2" | 1/2"  | 3-1/4" |
| SE1055  | 1/2"  | 2"     | 1/2"  | 4-1/8" |
| SE1055A | 1/2"  | 2-1/2" | 1/2"  | 4-3/8" |
| SE1055C | 1/2"  | 2-1/2" | 1/2"  | 5-1/8" |

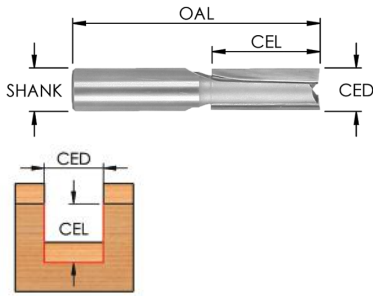
## 2 FLUTE STRAIGHT



| PART #    | CED    | CEL    | SHANK | OAL    |                   |
|-----------|--------|--------|-------|--------|-------------------|
| SE1011    | 3/16"  | 1/2"   | 1/4"  | 2"     |                   |
| SE1012    | 1/4"   | 1/2"   | 1/4"  | 2"     |                   |
| SE1013    | 1/4"   | 3/4"   | 1/4"  | 2-1/8" | Incra®            |
| SE1014    | 1/4"   | 1"     | 1/4"  | 2-1/2" |                   |
| SE1016    | 1/4"   | 1"     | 1/4"  | 3"     |                   |
| SE1016-01 | .245"  | 1"     | 1/4"  | 3-1/4" | *For Air Router   |
| SE1018    | 9/32"  | 1"     | 1/4"  | 2-1/2" |                   |
| SE1018A   | 5/16"  | 3/4"   | 1/4"  | 2-3/4" | Leigh® #140       |
| SE1019    | 5/16"  | 1"     | 1/4"  | 2-1/4" |                   |
| SE1021    | 3/8"   | 3/4"   | 1/4"  | 2-1/4" |                   |
| SE1022    | 3/8"   | 1"     | 1/4"  | 2-1/4" | Incra®            |
| SE1023    | 3/8"   | 1 1/4" | 1/4"  | 2-3/4" |                   |
| SE1023A   | 13/32" | 1"     | 1/4"  | 2-1/2" |                   |
| SE1024    | 7/16"  | 1"     | 1/4"  | 2 1/2" |                   |
| SE1024A   | 31/64" | 3/4"   | 1/4"  | 2 1/4" | Undersize Plywood |
| SE1024B   | 15/32" | 3/4"   | 1/4"  | 2 1/8" |                   |
| SE1025    | 1/2"   | 1/8"   | 1/4"  | 2"     |                   |
| SE1025A   | 1/2"   | 1/4"   | 1/4"  | 2 1/4" |                   |
| SE1025B   | 1/2"   | 1/2"   | 1/4"  | 2 1/4" |                   |
| SE1025C   | 1/2"   | 3/4"   | 1/4"  | 2 3/8" |                   |
| SE1026    | 1/2"   | 1"     | 1/4"  | 2 3/4" | OmniJig® #43318   |
| SE1026A   | 1/2"   | 1-1/4" | 1/4"  | 2-3/4" |                   |
| SE1027    | 9/16"  | 3/4"   | 1/4"  | 2 1/4" |                   |
| SE1027A   | 19/32" | 3/4"   | 1/4"  | 2 1/4" | Undersize Plywood |
| SE1027B   | 5/8"   | 1/4"   | 1/4"  | 2"     |                   |
| SE1027C   | 5/8"   | 1/2"   | 1/4"  | 2-1/4" |                   |
| SE1027D   | 5/8"   | 3/4"   | 1/4"  | 2-1/2" |                   |
| SE1028    | 5/8"   | 1"     | 1/4"  | 2-1/4" |                   |
| SE1029    | 11/16" | 3/4"   | 1/4"  | 2-1/8" |                   |
| SE1029A   | 23/32" | 3/4"   | 1/4"  | 2-1/8" | Undersize Plywood |
| SE1030    | 3/4"   | 3/4"   | 1/4"  | 2-1/8" |                   |
| SE1031    | 3/4"   | 1"     | 1/4"  | 2-1/4" |                   |
| SE1032    | 7/8"   | 3/4"   | 1/4"  | 2-1/8" |                   |
| SE1032A   | 13/16" | 3/4"   | 1/4"  | 2-1/8" |                   |
| SE1033    | 1"     | 3/4"   | 1/4"  | 2-1/8" |                   |
| SE1303    | 1-1/4" | 3/4"   | 1/4"  | 2"     |                   |
| SECTDS38  | 3/8"   | 9/16"  | 3/8"  | 2-1/2" | CASTLE®           |
| SE1039    | 3/8"   | 1"     | 3/8"  | 2-5/8" |                   |
| SE1040    | 3/8"   | 1-1/4" | 3/8"  | 2-7/8" |                   |
| SE1041    | 3/8"   | 1-1/4" | 3/8"  | 3-5/8" |                   |
| SE1043    | 1/2"   | 1"     | 3/8"  | 2-1/2" |                   |

*Continued on next page*

## 2 FLUTE STRAIGHT

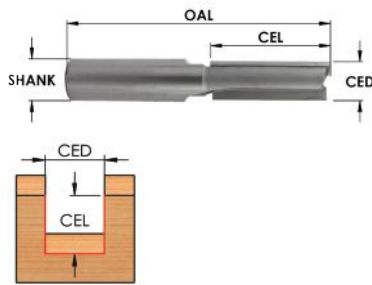


| PART #   | CED     | CEL    | SHANK | OAL    |                   |
|----------|---------|--------|-------|--------|-------------------|
| SE1058*  | 1/4"    | 3/4"   | 1/2"  | 2-5/8" | Incra®            |
| SE1059*  | 9/32"   | 3/4"   | 1/2"  | 2-1/2" |                   |
| SE1060*  | 5/16"   | 1"     | 1/2"  | 2-3/4" |                   |
| SE1061*  | 3/8"    | 3/4"   | 1/2"  | 2-1/2" |                   |
| SE1062*  | 3/8"    | 1"     | 1/2"  | 2-3/4" | Incra®            |
| SE1063*  | 3/8"    | 1-1/4" | 1/2"  | 2-3/4" |                   |
| SE1064*  | 13/32"  | 3/4"   | 1/2"  | 2-1/2" |                   |
| SE1065L* | 7/16"   | 1-1/4" | 1/2"  | 3-1/4" | Leigh® 150        |
| SE1065A  | 31/64"  | 1"     | 1/2"  | 2-5/8" | Undersize Plywood |
| SE1066   | 1/2"    | 1"     | 1/2"  | 2-5/8" |                   |
| SE1067   | 1/2"    | 1-1/4" | 1/2"  | 2-7/8" | Leigh® 160        |
| SE1069   | 1/2"    | 1-1/2" | 1/2"  | 3-1/8" |                   |
| SE1069DS | 1/2"    | 1-1/2" | 1/2"  | 3-1/8" | Downshear         |
| SE1070   | 1/2"    | 1-1/2" | 1/2"  | 4-1/4" |                   |
| SE1071   | 1/2"    | 2"     | 1/2"  | 3-3/4" |                   |
| SE1072   | 1/2"    | 2"     | 1/2"  | 4-1/8" |                   |
| SE1073   | 1/2"    | 2-1/2" | 1/2"  | 4-1/2" |                   |
| SE1073M  | 1/2"    | 2-1/2" | 1/2"  | 5-1/2" |                   |
| SE1074   | 17/32"  | 1-1/4" | 1/2"  | 2-7/8" |                   |
| SE1075   | 9/16"   | 1-1/4" | 1/2"  | 3"     |                   |
| SE1075A  | 19/32"  | 3/4"   | 1/2"  | 2-1/4" | Undersize Plywood |
| SE1076   | 5/8"    | 1"     | 1/2"  | 2-1/2" |                   |
| SE1077   | 5/8"    | 1-1/4" | 1/2"  | 2-3/4" |                   |
| SE1078   | 5/8"    | 1-1/2" | 1/2"  | 3"     |                   |
| SE1079   | 5/8"    | 2"     | 1/2"  | 4"     |                   |
| SE1080   | 21/32"  | 1-1/4" | 1/2"  | 3"     |                   |
| SE1082   | 11/16"  | 1"     | 1/2"  | 2-1/2" |                   |
| SE1083   | 11/16"  | 1-1/4" | 1/2"  | 3"     |                   |
| SE1083A  | 23/32"  | 1"     | 1/2"  | 2-1/2" | Undersize Plywood |
| SE1084   | 3/4"    | 1"     | 1/2"  | 2-3/4" |                   |
| SE1085   | 3/4"    | 1-1/4" | 1/2"  | 2-3/4" |                   |
| SE1086   | 3/4"    | 1-1/2" | 1/2"  | 3"     |                   |
| SE1087   | 3/4"    | 2"     | 1/2"  | 3-3/4" |                   |
| SE1088   | 25/32"  | 1-1/4" | 1/2"  | 3"     |                   |
| SE1090   | 13/16"  | 1-1/4" | 1/2"  | 3"     |                   |
| SE1091   | 7/8"    | 1-1/4" | 1/2"  | 3"     |                   |
| SE1092   | 15/16"  | 1-1/4" | 1/2"  | 3"     |                   |
| SE1093   | 1"      | 1-1/4" | 1/2"  | 2-3/4" |                   |
| SE1094   | 1"      | 1-1/2" | 1/2"  | 3"     |                   |
| SE1095   | 1"      | 2"     | 1/2"  | 3-3/4" |                   |
| SE1095A  | 1-1/16" | 1-1/2" | 1/2"  | 3"     |                   |
| SE1095B  | 1-1/8"  | 1"     | 1/2"  | 3"     |                   |
| SE1096   | 1-1/8"  | 1-1/2" | 1/2"  | 3-1/2" |                   |
| SE1096A  | 1-1/8"  | 2"     | 1/2"  | 4"     |                   |
| SE1304   | 1-1/4"  | 3/4"   | 1/2"  | 2-1/8" |                   |
| SE1097   | 1-1/4"  | 1-1/2" | 1/2"  | 3"     |                   |
| SE1098   | 1-3/8"  | 1-1/4" | 1/2"  | 3"     |                   |
| SE1099   | 1-1/2"  | 1-1/4" | 1/2"  | 3"     |                   |
| SE1100   | 1-3/4"  | 1-1/4" | 1/2"  | 3"     |                   |
| SE1101   | 2"      | 1-1/4" | 1/2"  | 3"     |                   |

The above tools can be supplied with chipbreakers or boring points. Please call for prices. For Chipbreakers add CB to part number. For boring points add (F) for Flat bottom or (V) for V-Point.

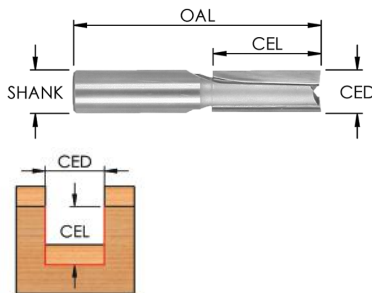
\*No Warranty on Breakage

## 2 FLUTE LEFT-HAND STRAIGHT



| PART #   | CED   | CEL    | SHANK | OAL    |
|----------|-------|--------|-------|--------|
| SE1014LH | 1/4"  | 1"     | 1/4"  | 2-1/2" |
| SE1058LH | 1/4"  | 3/4"   | 1/2"  | 2-5/8" |
| SE1060LH | 5/16" | 1"     | 1/2"  | 2-3/4" |
| SE1062LH | 3/8"  | 1"     | 1/2"  | 2-3/4" |
| SE1066LH | 1/2"  | 1"     | 1/2"  | 2-5/8" |
| SE1069LH | 1/2"  | 1-1/2" | 1/2"  | 3-1/8" |
| SE1072LH | 1/2"  | 2"     | 1/2"  | 4-1/8" |
| SE1085LH | 3/4"  | 1-1/4" | 1/2"  | 2-3/4" |
| SE1087LH | 3/4"  | 2"     | 1/2"  | 3-3/4" |
| SE1091LH | 7/8"  | 1-1/4" | 1/2"  | 3"     |

## 2 FLUTE STRAIGHT 3/4 SHANK



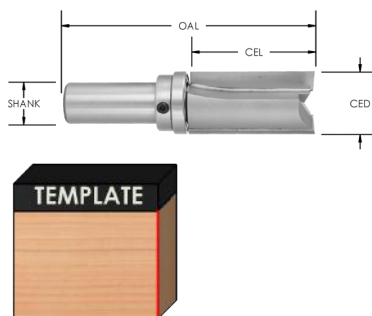
| PART #   | CED  | CEL    | SHANK | OAL    | ROTATION   |
|----------|------|--------|-------|--------|------------|
| SE1105   | 3/4" | 2"     | 3/4"  | 4"     | RIGHT-HAND |
| SE1107   | 3/4" | 2-1/2" | 3/4"  | 4-1/2" | RIGHT-HAND |
| SE1105LH | 3/4" | 2"     | 3/4"  | 5"     | LEFT-HAND  |
| SE1107LH | 3/4" | 2-1/2" | 3/4"  | 5-1/2" | LEFT-HAND  |

## 2 FLUTE MORTISE STRAIGHT



| PART # | CED    | CEL  | SHANK | OAL    |
|--------|--------|------|-------|--------|
| SE1300 | 1/2"   | 5/8" | 1/4"  | 2"     |
| SE1301 | 5/8"   | 3/4" | 1/4"  | 2"     |
| SE1302 | 3/4"   | 3/4" | 1/4"  | 2"     |
| SE1303 | 1-1/4" | 3/4" | 1/4"  | 2"     |
| SE1304 | 1-1/4" | 3/4" | 1/2"  | 2-1/8" |

## TEMPLATE STRAIGHT



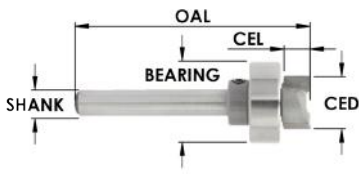
| PART #  | CED    | CEL    | SHANK | OAL    | BEARING |
|---------|--------|--------|-------|--------|---------|
| SE3000A | 1/2"   | 1/8"   | 1/4"  | 2"     | SBE145  |
| SE3000  | 1/2"   | 1/4"   | 1/4"  | 2-1/4" | SBE145  |
| SE3001  | 1/2"   | 1/2"   | 1/4"  | 2-1/4" | SBE145  |
| SE3003  | 1/2"   | 3/4"   | 1/4"  | 2-3/8" | SBE145  |
| SE3004  | 1/2"   | 1"     | 1/4"  | 2-3/4" | SBE145  |
| SE3005  | 1/2"   | 1-1/4" | 1/4"  | 2-3/4" | SBE145  |
| SE3006  | 5/8"   | 1/4"   | 1/4"  | 2"     | SBE130  |
| SE3007  | 5/8"   | 1/2"   | 1/4"  | 2-1/4" | SBE130  |
| SE3007A | 5/8"   | 3/4"   | 1/4"  | 2-1/2" | SBE130  |
| SE3008  | 5/8"   | 1"     | 1/4"  | 2-1/4" | SBE130  |
| SE3014  | 3/4"   | 1"     | 1/4"  | 2-1/4" | SBE120  |
| SE3018  | 1-1/8" | 1-1/2" | 1/2"  | 3-1/2" | SBE150  |
| SE3019  | 1-1/8" | 2"     | 1/2"  | 4"     | SBE150  |
| SE3020  | 3/4"   | 1"     | 1/2"  | 2-3/4" | SBE155  |
| SE3021  | 3/4"   | 1-1/4" | 1/2"  | 2-3/4" | SBE155  |
| SE3022  | 3/4"   | 1-1/2" | 1/2"  | 3"     | SBE155  |
| SE3023  | 3/4"   | 2"     | 1/2"  | 3 3/4" | SBE155  |

1/4" Shank Bits use SELC-14

1/2" Shank Bits use SELC-12

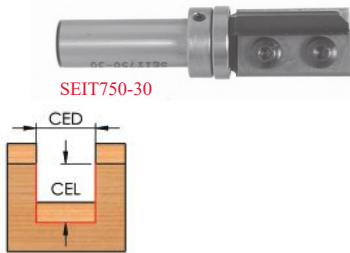


## TEMPLATE STRAIGHT WITH OVERSIZED BEARING



| PART # | CED   | CEL  | SHANK | OAL    | BEARING DIAMETER | BEARING |
|--------|-------|------|-------|--------|------------------|---------|
| SE3025 | 5/16" | 3/4" | 1/4"  | 2-3/4" | 1/2"             | SBE145  |
| SE3028 | 1/2"  | 1/4" | 1/4"  | 2-1/4" | 3/4"             | SBE120  |
| SE3029 | 1/2"  | 1/4" | 1/4"  | 2-1/4" | 5/8"             | SBE130  |
| SE3032 | 9/16" | 3/4" | 1/4"  | 2-1/4" | 5/8"             | SBE130  |

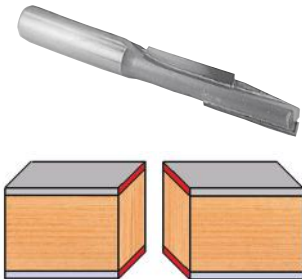
## INSERT TEMPLATE STRAIGHT



| PART #      | CED    | CEL  | SHANK | OAL      | BEARING | INSERTS    |
|-------------|--------|------|-------|----------|---------|------------|
| SEIT750-30  | 3/4"   | 30mm | 1/2"  | 3"       | SBE155  | SI-2951215 |
| SEIT750-40  | 3/4"   | 40mm | 1/2"  | 3-5/16"  | SBE155  | SI-3951215 |
| SEIT750-50  | 3/4"   | 50mm | 1/2"  | 3-11/16" | SBE155  | SI-501217  |
| SEIT1125-30 | 1-1/8" | 30mm | 1/2"  | 3"       | SBE150  | SI-2951215 |
| SEIT1125-40 | 1-1/8" | 40mm | 1/2"  | 3-5/16"  | SBE150  | SI-3951215 |
| SEIT1125-50 | 1-1/8" | 50mm | 1/2"  | 3-11/16" | SBE150  | SI-501217  |

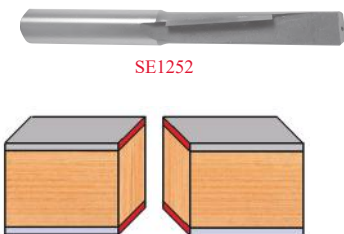
Uses SI-Screw for Insert  
Uses SELC-12, SELC-Screw

## STAGGERTOOTH STRAIGHT FLUTE



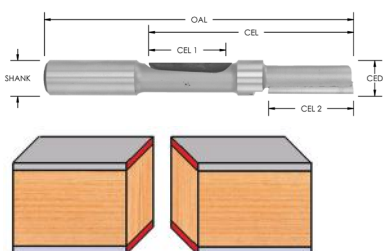
| PART #     | CED  | CEL    | SHANK | OAL    |
|------------|------|--------|-------|--------|
| SE1201     | 3/8" | 1-1/2" | 1/2"  | 3-1/2" |
| SE1202     | 1/2" | 1-1/2" | 1/2"  | 3-1/2" |
| SE1203     | 1/2" | 2"     | 1/2"  | 4-1/4" |
| SE1203-212 | 1/2" | 2-1/2" | 1/2"  | 5-1/2" |

## STAGGERTOOTH STRAIGHT OPPOSITE SHEAR



| PART # | CED  | CEL    | SHANK | OAL    |
|--------|------|--------|-------|--------|
| SE1252 | 1/2" | 2"     | 1/2"  | 4"     |
| SE1256 | 1/2" | 2-5/8" | 1/2"  | 5-1/2" |
| SE1261 | 3/4" | 2"     | 5/8"  | 5"     |
| SE1270 | 3/4" | 2"     | 3/4"  | 4"     |

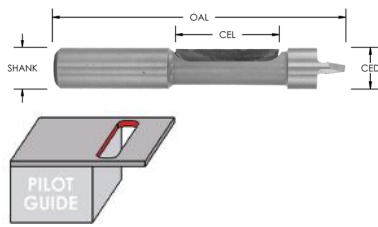
## CENTER PILOT STAGGERTOOTH



| PART # | CED  | CEL    | SHANK | OAL    |
|--------|------|--------|-------|--------|
| SE1725 | 1/2" | 2-3/4" | 1/2"  | 4-1/4" |
| SE1726 | 1/2" | 2-3/4" | 1/2"  | 4-1/4" |

SE1726 is used for CNC and very harsh applications where tool life is needed.

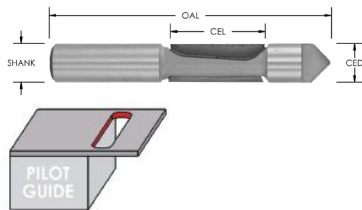
## PLUNGE PANEL PILOT - 1 FLUTE



| PART #      | CED  | CEL     | SHANK | OAL    |
|-------------|------|---------|-------|--------|
| SE1700      | 1/4" | 3/4"    | 1/4"  | 2-1/2" |
| SE1701      | 3/8" | 1"      | 3/8"  | 2-7/8" |
| SE1701-Nail | 3/8" | 1"      | 3/8"  | 2-7/8" |
| SE1702      | 1/2" | 1-3/16" | 1/2"  | 3-1/2" |
| SE1702-Nail | 1/2" | 1-3/16" | 1/2"  | 3-1/2" |
| SE1703      | 1/2" | 2"      | 1/2"  | 4-1/8" |

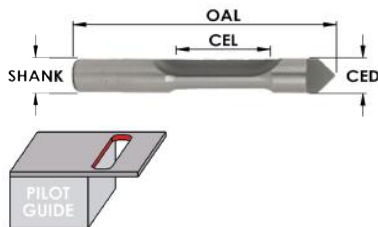
*SE1701-Nail and SE1702-Nail have special carbide designed for nail and staple cutting.*

## PLUNGE PANEL PILOT - 2 FLUTE



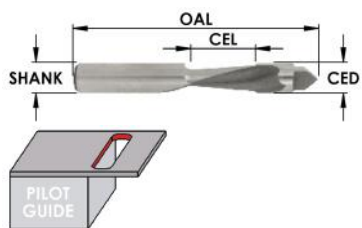
| PART # | CED  | CEL     | SHANK | OAL    |
|--------|------|---------|-------|--------|
| SE1704 | 3/8" | 1"      | 1/4"  | 3-1/4" |
| SE1705 | 3/8" | 1"      | 3/8"  | 3"     |
| SE1706 | 1/2" | 1-3/16" | 1/2"  | 3-1/2" |

## PANEL PILOT - HSS - 1 FLUTE STRAIGHT



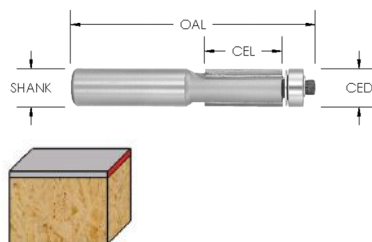
| PART # | CED  | CEL  | SHANK | OAL    |
|--------|------|------|-------|--------|
| SE1740 | 1/4" | 3/4" | 1/4"  | 2-3/4" |
| SE1741 | 3/8" | 3/4" | 3/8"  | 2-3/4" |
| SE1742 | 1/2" | 1"   | 1/2"  | 3-1/2" |

## PANEL PILOT - HSS SPIRAL - 1 FLUTE



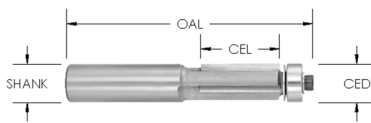
| PART # | CED  | CEL  | SHANK | OAL |
|--------|------|------|-------|-----|
| SE1750 | 1/4" | 3/4" | 1/4"  | 3"  |
| SE1751 | 3/8" | 3/4" | 3/8"  | 3"  |

## FLUSH TRIM (2 FLUTE)



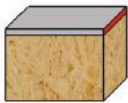
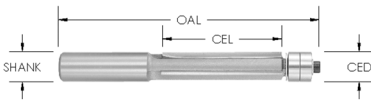
| PART #  | CED  | CEL    | SHANK | OAL    | BEARING | SCREW         |
|---------|------|--------|-------|--------|---------|---------------|
| SE2400A | 1/4" | 3/4"   | 1/4"  | 2-1/2" | SBE100  | SE2400A-Screw |
| SE2400  | 3/8" | 1"     | 1/4"  | 2-3/4" | SBE105  | SE348-38      |
| SE2401  | 3/8" | 1/2"   | 1/4"  | 2-1/4" | SBE105  | SE348-38      |
| SE2402  | 1/2" | 1"     | 1/4"  | 2-3/4" | SBE115  | SE540-38      |
| SE2403  | 1/2" | 1/2"   | 1/4"  | 2-3/8" | SBE115  | SE540-38      |
| SE2404  | 1/2" | 1-1/2" | 1/4"  | 3-1/4" | SBE115  | SE540-38      |
| SE2404A | 3/8" | 1"     | 1/2"  | 3-1/8" | SBE105  | SE2400A-Screw |
| SE2405  | 1/2" | 1"     | 1/2"  | 3-1/8" | SBE115  | SE540-38      |
| SE2406  | 1/2" | 1/2"   | 1/2"  | 2-3/4" | SBE115  | SE540-38      |
| SE2407  | 1/2" | 1-1/2" | 1/2"  | 3-3/4" | SBE115  | SE540-38      |
| SE2408  | 1/2" | 2"     | 1/2"  | 4-1/8" | SBE115  | SE540-38      |
| SE2409  | 3/4" | 1"     | 1/2"  | 3-3/8" | SBE120  | SE1032-38     |
| SE2410  | 3/4" | 1-1/4" | 1/2"  | 3-1/2" | SBE120  | SE1032-38     |
| SE2414  | 3/4" | 2"     | 1/2"  | 4-1/4" | SBE120  | SE1032-38     |

## FLUSH TRIM (3 FLUTE)



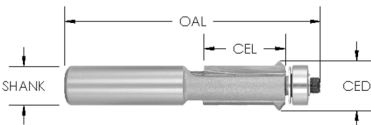
| PART # | CED  | CEL    | SHANK | OAL    | BEARING | SCREW    |
|--------|------|--------|-------|--------|---------|----------|
| SE2500 | 1/2" | 1"     | 1/2"  | 2-3/4" | SBE115  | SE540-38 |
| SE2501 | 1/2" | 1/2"   | 1/2"  | 2-3/8" | SBE115  | SE540-38 |
| SE2502 | 1/2" | 1"     | 1/2"  | 3-1/8" | SBE115  | SE540-38 |
| SE2504 | 1/2" | 1-1/2" | 1/2"  | 3-3/4" | SBE115  | SE540-38 |
| SE2505 | 1/2" | 2"     | 1/2"  | 4-1/4" | SBE115  | SE540-38 |

## FLUSH TRIM DOUBLE BEARING



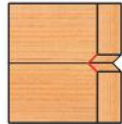
| PART # | CED  | CEL    | SHANK | OAL    | BEARING | FLUTES |
|--------|------|--------|-------|--------|---------|--------|
| SE2457 | 1/2" | 1-1/2" | 1/2"  | 4"     | SBE115  | 2      |
| SE2458 | 1/2" | 2"     | 1/2"  | 4-1/2" | SBE115  | 2      |
| SE2554 | 1/2" | 1-1/2" | 1/2"  | 4"     | SBE115  | 3      |
| SE2555 | 1/2" | 2"     | 1/2"  | 4-1/2" | SBE115  | 3      |

## FLUSH TRIM V-GROOVE

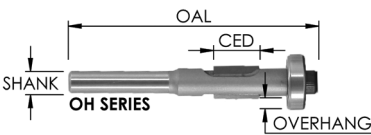


| PART # | CED  | CEL | SHANK | OAL    |
|--------|------|-----|-------|--------|
| SE2425 | 1/2" | 1"  | 1/4"  | 2-3/4" |
| SE2426 | 1/2" | 1"  | 1/2"  | 3-1/8" |

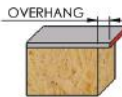
*Use SBE115 Bearing*



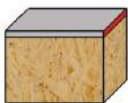
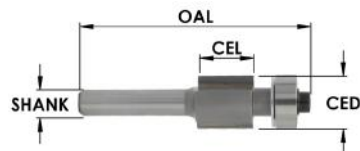
## OVERHANG



| PART # | CED  | CEL  | SHANK | OAL    | OVERHANG | BEARING |
|--------|------|------|-------|--------|----------|---------|
| SE2468 | 3/8" | 1/2" | 1/4"  | 2-5/8" | 1/16"    | SBE145  |
| SE2470 | 3/8" | 1/2" | 1/4"  | 2-5/8" | 1/8"     | SBE130  |



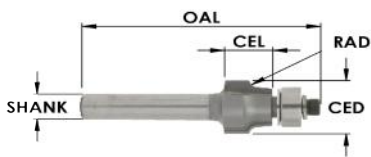
## GLUE SPACE FLUSH TRIM



| PART #  | CED  | CEL  | SHANK |
|---------|------|------|-------|
| SE2416* | 3/8" | 1/2" | 1/4"  |
| SE2417* | 3/8" | 1"   | 1/4"  |
| SE2418  | 1/2" | 1/2" | 1/4"  |
| SE2419  | 1/2" | 1"   | 1/4"  |

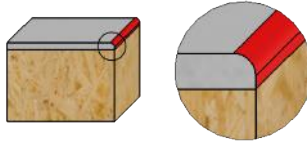
*\*Use SBE105 Bearing  
Use SBE115 Bearing*

## EASY EDGE (NO FILING)

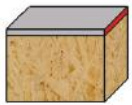
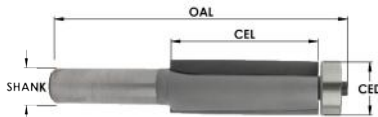


| PART # | CED  | CEL  | SHANK | OAL    | RADIUS |
|--------|------|------|-------|--------|--------|
| SE2420 | 1/2" | 3/8" | 1/4"  | 1-7/8" | 1/16"  |

Use SBE105 Bearing

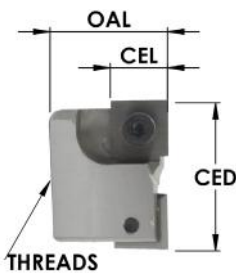


## DOWNSHEAR FLUSH TRIM



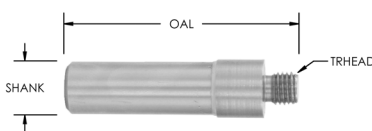
| PART # | CED  | CEL    | SHANK | OAL    |
|--------|------|--------|-------|--------|
| SE2562 | 3/8" | 1"     | 1/4"  | 2-5/8" |
| SE2561 | 1/2" | 5/8"   | 1/4"  | 2-1/4" |
| SE2560 | 3/4" | 5/8"   | 1/4"  | 2-1/4" |
| SE2570 | 3/4" | 1"     | 1/2"  | 3"     |
| SE2575 | 3/4" | 1-1/2" | 1/2"  | 3-1/2" |
| SE2580 | 3/4" | 2"     | 1/2"  | 4"     |

## SCREW-ON MORTISE - INSERT



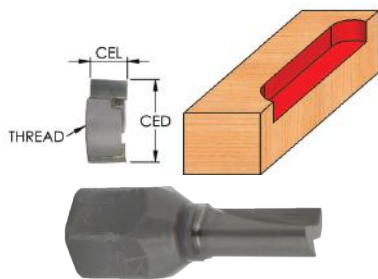
| PART #      | CED    | CEL  | Thread  | Insert Size |
|-------------|--------|------|---------|-------------|
| SEIMHB-1250 | 1-1/4" | 12MM | 1/4"-28 | 12 x 12     |

## SCREW-ON MORTISE - ARBORS



| PART #       | SHANK | OAL    | THREAD   |
|--------------|-------|--------|----------|
| SEHMA-14     | 1/4"  | 1-3/4" | 1/4"-28  |
| SEHMA-38-XL  | 3/8"  | 2-5/8" | 1/4"-28  |
| SEHMA-12     | 1/2"  | 1-3/4" | 1/4"-28  |
| SEHMA-12-XL  | 1/2"  | 2-5/8" | 1/4"-28  |
| SEHMA-12-XXL | 1/2"  | 3-1/4" | 1/4"-28  |
| SEHMA-14-516 | 1/4"  | 1-3/4" | 5/16"-24 |
| SEHMA-12-516 | 1/2"  | 1-3/4" | 5/16"-24 |

## SCREW-ON MORTISE - CARBIDE-TIPPED



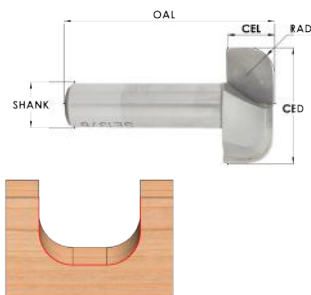
SE13250

| PART #        | CED        | CED   | CEL   | OAL    | THREAD   |
|---------------|------------|-------|-------|--------|----------|
| SEH13125*     | 1/8"       | .125  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13140*     | 9/64"      | .140  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13202*     | 3/16+.015" | .202  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13234*     | 1/4-.015"  | .234  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13250*     | 1/4"       | .250  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13265*     | 1/4+.015"  | .265  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13281      | 9/32"      | .281  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13327      | 5/16+.015" | .327  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13375      | 3/8"       | .375  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13406      | 3/8+.031"  | .406  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13469      | 15/32"     | .469  | 9/16" | 1-3/8" | 1/4"-28  |
| SEH13484      | 31/64"     | .484  | 9/16" | 1-3/8" | 1/4"-28  |
| SE13500       | 1/2"       | .500  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13505       | 1/2+.005   | .505  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13515       | 33/64"     | .515  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13531       | 17/32"     | .531  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13562       | 9/16"      | .562  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13625       | 5/8"       | .625  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13640       | 41/64"     | .640  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13656       | 21/32"     | .656  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13687       | 11/16"     | .687  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13719       | 23/32"     | .719  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13750       | 3/4"       | .750  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13764       | 49/64"     | .765  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13781       | 25/32"     | .781  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13812       | 13/16"     | .812  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13875       | 7/8"       | .875  | 5/8"  | 7/8"   | 1/4"-28  |
| SE13937       | 15/16"     | .937  | 5/8"  | 7/8"   | 1/4"-28  |
| SE131000      | 1"         | 1.000 | 1/2"  | 1/2"   | 1/4"-28  |
| SE131125      | 1-1/8"     | 1.125 | 1/2"  | 1/2"   | 1/4"-28  |
| SE131250      | 1-1/4"     | 1.250 | 5/8"  | 5/8"   | 1/4"-28  |
| SE131375      | 1-3/8"     | 1.375 | 1/2"  | 1/2"   | 1/4"-28  |
| SE131250-516  | 1-1/4"     | 1.250 | 5/8"  | 5/8"   | 5/16"-24 |
| SE131250-516A | 1-1/4"     | 1.250 | 1/2"  | 1/2"   | 5/16"-24 |

\*Solid Carbide Tip

## CARBIDE TIPPED FORM BITS

### BOWL AND TRAY



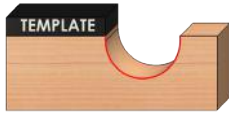
| PART #    | CED    | CEL   | SHANK | OAL    | RADIUS |
|-----------|--------|-------|-------|--------|--------|
| SE1370    | 7/16"  | 5/16" | 1/4"  | 2-1/8" | 1/8"   |
| SE1372    | 3/4"   | 5/8"  | 1/4"  | 2-3/8" | 1/4"   |
| SE1373    | 1"     | 1/2"  | 1/4"  | 2-3/8" | 1/4"   |
| SE1372B*  | 3/4"   | 5/8"  | 1/4"  | 2-3/8" | 1/4"   |
| SE1374    | 3/4"   | 5/8"  | 1/2"  | 2-3/8" | 1/4"   |
| SE1376    | 1-1/4" | 1/2"  | 1/2"  | 2-1/4" | 1/4"   |
| SE1376B** | 1-1/4" | 1/2"  | 1/2"  | 2-3/8" | 1/4"   |

\* Bearing supplied on shank for template routing (SBE120)

\*\*requires SBE152

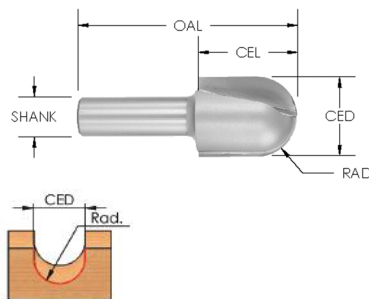


## CORE BOX TEMPLATE



| PART #   | CED  | CEL  | SHANK | OAL    | RADIUS | BEARING |
|----------|------|------|-------|--------|--------|---------|
| SE1404B  | 1/2" | 1/2" | 1/4"  | 1-3/4" | 1/4"   | SBE145  |
| SE1405B  | 5/8" | 3/8" | 1/4"  | 2"     | 5/16"  | SBE130  |
| SE1406BB | 3/4" | 5/8" | 1/4"  | 1-7/8" | 3/8"   | SBE120  |

## CORE BOX BITS



| PART #   | CED    | CEL    | SHANK | OAL    | RADIUS |
|----------|--------|--------|-------|--------|--------|
| SCRV275* | 1/8"   | 5/16"  | 1/4"  | 2"     | 1/16"  |
| SCRV277* | 3/16"  | 3/8"   | 1/4"  | 2"     | 3/32"  |
| SCRV279* | 1/4"   | 3/8"   | 1/4"  | 2"     | 1/8"   |
| SE1402   | 1/4"   | 1/2"   | 1/4"  | 1-7/8" | 1/8"   |
| SE1403   | 3/8"   | 1/2"   | 1/4"  | 1-3/4" | 3/16"  |
| SE1404   | 1/2"   | 1/2"   | 1/4"  | 1-3/4" | 1/4"   |
| SE1405   | 5/8"   | 3/8"   | 1/4"  | 2"     | 5/16"  |
| SE1406   | 3/4"   | 5/8"   | 1/4"  | 1-7/8" | 3/8"   |
| SE1405A  | 5/8"   | 1/2"   | 1/2"  | 2-1/4" | 5/16"  |
| SE1406A  | 3/4"   | 5/8"   | 1/2"  | 2-3/8" | 3/8"   |
| SE1406B  | 7/8"   | 3/4"   | 1/2"  | 2-1/2" | 7/16"  |
| SE1406C  | 1"     | 3/4"   | 1/2"  | 2-1/2" | 1/2"   |
| SE1407   | 3/8"   | 1"     | 1/2"  | 2-5/8" | 3/16"  |
| SE1408   | 1/2"   | 1-1/4" | 1/2"  | 2-7/8" | 1/4"   |
| SE1410   | 5/8"   | 1-1/4" | 1/2"  | 3"     | 5/16"  |
| SE1411   | 3/4"   | 1-1/4" | 1/2"  | 2-3/4" | 3/8"   |
| SE1412   | 7/8"   | 1-1/4" | 1/2"  | 2-7/8" | 7/16"  |
| SE1413   | 1"     | 1-1/4" | 1/2"  | 2-3/4" | 1/2"   |
| SE1414   | 1-1/4" | 1-1/4" | 1/2"  | 3"     | 5/8"   |
| SE1415   | 1-1/2" | 1-1/4" | 1/2"  | 3"     | 3/4"   |
| SE1416   | 1-3/4" | 1-1/4" | 1/2"  | 3"     | 7/8"   |
| SE1417   | 2"     | 1-1/4" | 1/2"  | 3"     | 1"     |
| SE1420   | 2-1/4" | 5/8"   | 1/2"  | 2-1/2" | 1-3/4" |

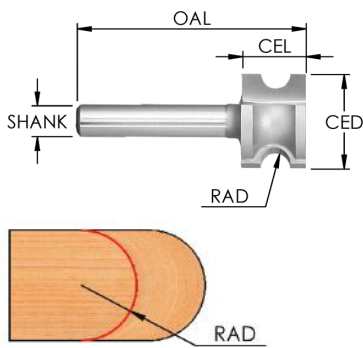
\*Solid Carbide Bits

## BALL END BITS



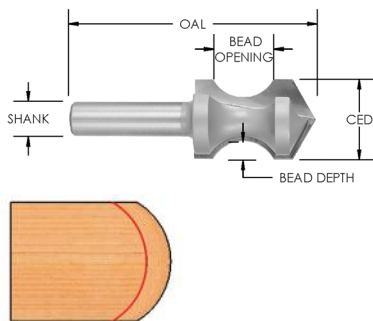
| PART # | CED  | CEL  | SHANK | OAL    | RADIUS |
|--------|------|------|-------|--------|--------|
| SE1450 | 3/8" | 3/8" | 1/4"  | 1-3/4" | 3/16"  |
| SE1452 | 1/2" | 1/2" | 1/4"  | 1-3/4" | 1/4"   |
| SE1460 | 1/2" | 1/2" | 1/2"  | 2-1/4" | 1/4"   |
| SE1462 | 3/4" | 3/4" | 1/2"  | 2-1/2" | 3/8"   |
| SE1464 | 1"   | 1"   | 1/2"  | 2-1/2" | 1/2"   |

## BULL NOSE BITS



| PART #  | CEL    | SHANK | OAL     | OPENING | RADIUS |
|---------|--------|-------|---------|---------|--------|
| SE1425  | 1/2"   | 1/4"  | 1-3/4"  | 3/16"   | 3/32"  |
| SE1426  | 5/8"   | 1/4"  | 1-7/8"  | 1/4"    | 1/8"   |
| SE1427  | 11/16" | 1/4"  | 2"      | 3/8"    | 3/16"  |
| SE1428  | 7/8"   | 1/4"  | 2-1/8"  | 1/2"    | 1/4"   |
| SE1429  | 1/2"   | 1/2"  | 1-7/8"  | 3/16"   | 3/32"  |
| SE1430  | 5/8"   | 1/2"  | 2-1/8"  | 1/4"    | 1/8"   |
| SE1431  | 11/16" | 1/2"  | 2-3/16" | 3/8"    | 3/16"  |
| SE1432  | 7/8"   | 1/2"  | 2-3/8"  | 1/2"    | 1/4"   |
| SE1432A | 1"     | 1/2"  | 2-1/2"  | 5/8"    | 5/16"  |
| SE1433  | 1-1/8" | 1/2"  | 2-5/8"  | 3/4"    | 3/8"   |
| SE1434  | 1-3/8" | 1/2"  | 2-7/8"  | 1"      | 1/2"   |
| SE1434A | 1-1/2" | 1/2"  | 3"      | 1-1/8"  | 9/16"  |
| SE1435  | 1-3/4" | 1/2"  | 3-1/4"  | 1-1/4"  | 5/8"   |
| SE1436  | 1-7/8" | 1/2"  | 3-3/8"  | 1-1/2"  | 3/4"   |

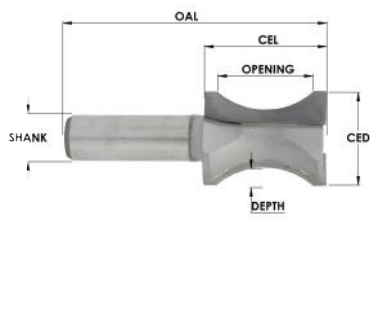
## PLUNGE HAND GRIP



| PART #   | CED    | CEL    | SHANK | OAL    | BEAD DEPTH | OPENING |
|----------|--------|--------|-------|--------|------------|---------|
| SE1440   | 1-1/8" | 1-5/8" | 1/2"  | 3-1/2" | 1/4"       | 7/8"    |
| SE1440B* | 1-1/8" | 1-5/8" | 1/2"  | 3-1/2" | 1/4"       | 7/8"    |

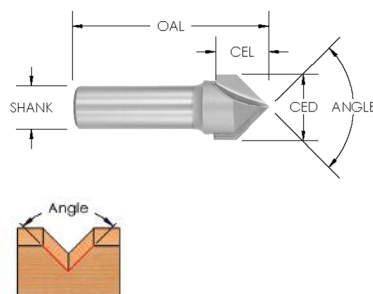
\*Uses SBE150 Bearing w/ collar for template guide routing

## OVAL EDGE (HALF-BULL NOSE)



| PART # | CED    | CEL    | SHANK | OAL    | OPENING | DEPTH |
|--------|--------|--------|-------|--------|---------|-------|
| SE1474 | 3/4"   | 1"     | 1/2"  | 2-1/2" | 1/2"    | 1/8"  |
| SE1476 | 1"     | 1-1/4" | 1/2"  | 2-3/4" | 3/4"    | 3/16" |
| SE1478 | 1"     | 1-1/4" | 1/2"  | 2-3/4" | 1"      | 3/16" |
| SE1480 | 1-1/4" | 1-3/4" | 1/2"  | 3-1/4" | 1-1/2"  | 1/4"  |

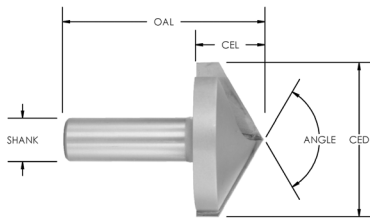
## V-GROOVE - 90°



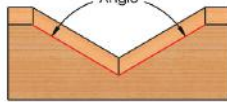
| PART #   | CED    | CEL    | SHANK | OAL    | CUTTING HEIGHT |
|----------|--------|--------|-------|--------|----------------|
| SCVG260* | 1/4"   | 5/16"  | 1/4"  | 1-1/2" | 1/8"           |
| SE1501   | 3/8"   | 1/2"   | 1/4"  | 1-3/4" | 3/16"          |
| SE1502   | 1/2"   | 1/2"   | 1/4"  | 1-3/4" | 7/32"          |
| SE1502A  | 5/8"   | 5/8"   | 1/4"  | 2"     | 5/16"          |
| SE1502B  | 3/4"   | 11/16" | 1/4"  | 2"     | 3/8"           |
| SE1503   | 1/2"   | 1/2"   | 1/2"  | 2-1/4" | 1/4"           |
| SE1504   | 3/4"   | 5/8"   | 1/2"  | 2-1/4" | 3/8"           |
| SE1505   | 1"     | 3/4"   | 1/2"  | 2-3/4" | 7/16"          |
| SE1507   | 1-1/2" | 1"     | 1/2"  | 2-1/2" | 3/4"           |
| SE1508   | 2"     | 1-1/4" | 1/2"  | 2-3/4" | 1"             |

\*Solid Carbide and Single Flute

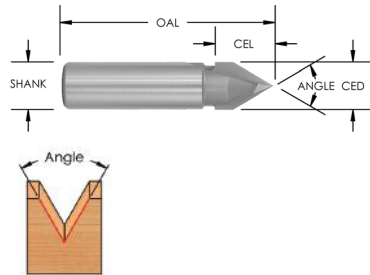
## V-GROOVE - 120°



| PART # | CED    | CEL | SHANK | OAL    | CUTTING HEIGHT |
|--------|--------|-----|-------|--------|----------------|
| SE1526 | 1-3/4" | 1"  | 1/2"  | 2-1/4" | 1/2"           |



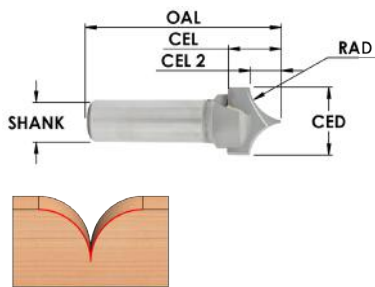
## V-GROOVE - 60°



| PART #   | CED  | CEL   | SHANK | OAL    | FLUTE | CUTTING HEIGHT |
|----------|------|-------|-------|--------|-------|----------------|
| SE1550   | 1/2" | 1/2"  | 1/4"  | 2"     | 2     | 7/16"          |
| SE1560   | 1/2" | 1/2"  | 1/2"  | 2-1/4" | 2     | 13/32"         |
| SCVG264* | 1/4" | 7/32" | 1/4"  | 1-1/2" | 1     | 1/4"           |
| SE1541*  | 1/4" | 7/32" | 1/4"  | 2"     | 3     | 3/16"          |

\*Solid Carbide Bits

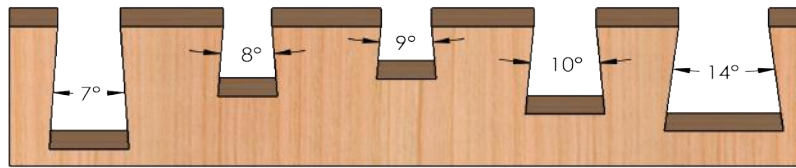
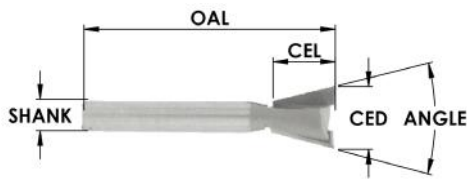
## POINT CUTTING ROUNDOVER



| PART # | CED    | CEL 2 | CEL  | SHANK | OAL    | RADIUS |
|--------|--------|-------|------|-------|--------|--------|
| SE1568 | 5/16"  | 1/8"  | 3/8" | 1/4"  | 1-5/8" | 1/8"   |
| SE1570 | 3/8"   | 3/16" | 3/8" | 1/4"  | 2"     | 3/16"  |
| SE1572 | 1/2"   | 1/4"  | 1/2" | 1/4"  | 2"     | 1/4"   |
| SE1574 | 3/4"   | 3/8"  | 5/8" | 1/4"  | 2"     | 3/8"   |
| SE1580 | 3/4"   | 3/8"  | 5/8" | 1/2"  | 2-1/4" | 3/8"   |
| SE1582 | 3/4"   | 1/2"  | 5/8" | 1/2"  | 2-1/4" | 1/2"   |
| SE1584 | 1-1/2" | 3/4"  | 1"   | 1/2"  | 2-1/2" | 3/4"   |



## DOVETAIL

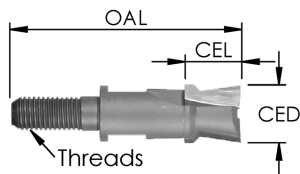


| PART #    | CED    | CEL    | SHANK | OAL    | Use                | ANGLE |
|-----------|--------|--------|-------|--------|--------------------|-------|
| SE1601    | 7/8"   | 5/8"   | 1/2"  | 2-1/2" | Stair Treads       | 3     |
| SE1625    | 5/8"   | 7/8"   | 1/2"  | 2-5/8" | Incra®             | 7     |
| SE1635    | 3/4"   | 7/8"   | 1/2"  | 2-3/4" | Incra®             | 7     |
| SE1635LH  | 3/4"   | 7/8"   | 1/2"  | 2-3/4" | LH Rotation        | 7     |
| SE1645    | 7/8"   | 7/8"   | 1/2"  | 2-3/4" | Stair Treads       | 7     |
| SE1645LH  | 7/8"   | 7/8"   | 1/2"  | 2-3/4" | Stair Treads       | 7     |
| SCDT7525* | 1/4"   | 5/16"  | 1/4"  | 2"     | Incra®/Omni Jig®   | 7-1/2 |
| SE1661    | 5/16"  | 3/8"   | 1/4"  | 2-1/4" | Leigh® #60         | 8     |
| SE1662    | 3/8"   | 1/2"   | 1/4"  | 2-3/8" | Leigh® #70         | 8     |
| SE1663    | 7/16"  | 5/8"   | 1/4"  | 2-3/8" | Leigh® #75         | 8     |
| SE1664    | 1/2"   | 13/16" | 1/4"  | 2-3/4" | Leigh® #80         | 8     |
| SE1666    | 11/16" | 1"     | 1/2"  | 3"     | Leigh® #90         | 8     |
| SE1668    | 13/16" | 1-1/4" | 1/2"  | 3-1/4" | Leigh® #100        | 8     |
| SE1605    | 3/8"   | 3/8"   | 1/4"  | 2-1/4" | Incra®             | 9     |
| SE1613    | 3/8"   | 3/8"   | 3/8"  | 2"     |                    | 9     |
| SE1615    | 3/8"   | 3/8"   | 1/2"  | 2-1/2" |                    | 9     |
| SE1615LH  | 3/8"   | 3/8"   | 1/2"  | 2-1/2" | Incra®             | 9     |
| SE1618    | 0.39   | 3/8"   | 1/2"  | 2"     |                    | 9     |
| SE1618LH  | 0.39   | 3/8"   | 1/2"  | 2"     |                    | 9     |
| SE1672    | 1/2"   | 5/8"   | 1/4"  | 2-1/2" | Incra®/Leigh® #101 | 10    |
| SE1674    | 1/2"   | 5/8"   | 1/2"  | 2-5/8" | Incra®             | 10    |
| SE1611    | 3/8"   | 3/8"   | 1/4"  | 2"     |                    | 14    |
| SE1610    | 1/2"   | 1/2"   | 1/4"  | 2"     | Incra®/Omni Jig®   | 14    |
| SE1622    | 1/2"   | 1/2"   | 1/4"  | 2-3/8" | Leigh® #120        | 14    |
| SE1620    | 1/2"   | 1/2"   | 1/2"  | 2-1/2" | Incra®/Omni Jig®   | 14    |
| SE1620LH  | 1/2"   | 1/2"   | 1/2"  | 2-1/2" |                    | 14    |
| SE1630    | 3/4"   | 3/4"   | 1/2"  | 3"     | Omni Jig®          | 14    |
| SE1640    | 1"     | 7/8"   | 1/2"  | 2-1/2" |                    | 14    |
| SE1680    | 1/2"   | 3/8"   | 1/4"  | 2-1/4" | Leigh® #128        | 18    |

\*Solid Carbide Bits

LH - Left-Hand Rotation

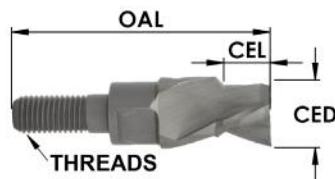
## DOVETAIL BITS FOR DODDS® MACHINE



| PART #  | CED   | SHANK    | OAL | ANGLE | FLUTE |
|---------|-------|----------|-----|-------|-------|
| SE1690R | .550" | 5/16"-24 | 2"  | 9     | 2     |
| SE1690L | .550" | 5/16"-24 | 2"  | 9     | 2     |
| SE1695R | .550" | 3/8"-24  | 2"  | 9     | 2     |
| SE1695L | .550" | 3/8"-24  | 2"  | 9     | 2     |



## SOLID CARBIDE DOVETAIL BITS FOR DODDS® MACHINE

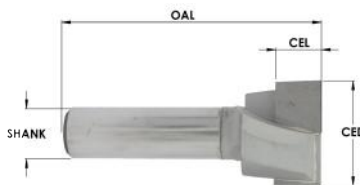


| PART #   | CED   | SHANK    | OAL | ANGLE | FLUTE |
|----------|-------|----------|-----|-------|-------|
| SC1690R* | .550" | 5/16"-24 | 2"  | 9     | 3     |
| SC1690L* | .550" | 5/16"-24 | 2"  | 9     | 3     |

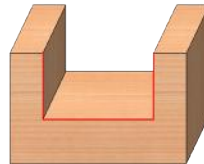


\*Solid Carbide and 3-Flute

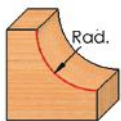
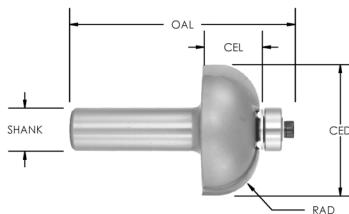
## STAIR TREAD AND BOTTOM CLEANING



| PART # | CED    | CEL  | SHANK | OAL |
|--------|--------|------|-------|-----|
| SE1590 | 3/4"   | 1/2" | 1/4"  | 2"  |
| SE1592 | 3/4"   | 1/2" | 1/2"  | 2"  |
| SE1596 | 1"     | 1/2" | 1/2"  | 2"  |
| SE1598 | 1-1/2" | 1/2" | 1/2"  | 2"  |



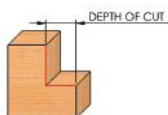
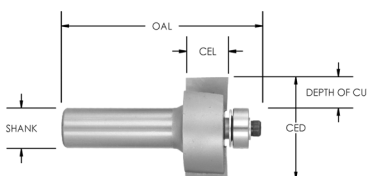
## COVE BITS



| PART #  | CED    | CEL    | SHANK | RADIUS |
|---------|--------|--------|-------|--------|
| SE1800B | 3/4"   | 1/4"   | 1/4"  | 1/8"   |
| SE1800A | 7/8"   | 1/2"   | 1/4"  | 3/16"  |
| SE1800  | 1"     | 1/2"   | 1/4"  | 1/4"   |
| SE1801A | 1-1/8" | 1/2"   | 1/4"  | 5/16"  |
| SE1801  | 1-1/4" | 1/2"   | 1/4"  | 3/8"   |
| SE1802  | 1-1/2" | 5/8"   | 1/4"  | 1/2"   |
| SE1803A | 7/8"   | 1/2"   | 1/2"  | 3/16"  |
| SE1803  | 1"     | 1/2"   | 1/2"  | 1/4"   |
| SE1804A | 1-1/8" | 1/2"   | 1/2"  | 5/16"  |
| SE1804  | 1-1/4" | 1/2"   | 1/2"  | 3/8"   |
| SE1805  | 1-1/2" | 5/8"   | 1/2"  | 1/2"   |
| SE1806  | 1-3/4" | 3/4"   | 1/2"  | 5/8"   |
| SE1807  | 2"     | 1"     | 1/2"  | 3/4"   |
| SE1810  | 2-1/2" | 1-1/4" | 1/2"  | 1"     |

Uses SBE115 Bearing

## RABBET BITS

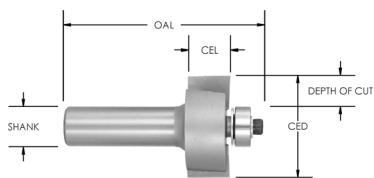


| PART # | CED    | CEL  | SHANK | OAL    | DEPTH | BEARING |
|--------|--------|------|-------|--------|-------|---------|
| SE1900 | 1-1/4" | 1/2" | 1/4"  | 2-1/8" | 3/8"  | SBE115  |
| SE1901 | 1-1/4" | 1/2" | 1/2"  | 2-3/8" | 3/8"  | SBE115  |
| SE1951 | 1-3/8" | 1/2" | 1/4"  | 2-1/8" | 1/2"  | SBE110  |
| SE1954 | 1-3/8" | 1/2" | 1/2"  | 2-3/8" | 1/2"  | SBE110  |
| SE1962 | 2"     | 1"   | 1/2"  | 2-7/8" | 3/4"  | SBE115  |

\*For different depths of cut, see kits next page.

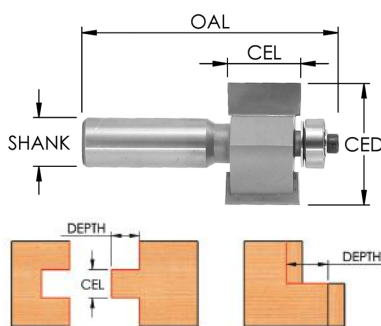


## RABBET BIT KITS



| PART # | CED    | CEL  | SHANK | OAL    | KIT INCLUDES   |
|--------|--------|------|-------|--------|--|
| SE1902 | 1-1/4" | 1/2" | 1/4"  | 2-1/8" | Includes SE1900 and 3 additional bearings for multiple depths of 1/4", 5/16", 3/8", 7/16"                                |
| SE1903 | 1-1/4" | 1/2" | 1/2"  | 2-3/8" | Includes SE1901 and 3 additional bearings for multiple depths of 1/4", 5/16", 3/8", 7/16"                                |
| SE1965 | 2"     | 1"   | 1/2"  | 2-7/8" | Includes SE1962 and 7 additional bearings for multiple depths of 1/2", 9/16", 21/32", 19/32", 5/8", 11/16", 3/4", 13/16" |

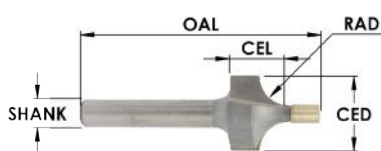
## SLOTTING - 2 FLUTE



| PART #  | CED    | CEL   | SHANK | DEPTH |
|---------|--------|-------|-------|-------|
| SE1904  | 1-1/4" | 1/8"  | 1/4"  | 3/8"  |
| SE1908  | 1-1/2" | 5/32" | 1/4"  | 1/2"  |
| SE1912  | 1-1/4" | 1/4"  | 1/4"  | 3/8"  |
| SE1913  | 1-1/4" | 5/16" | 1/4"  | 3/8"  |
| SE1916  | 1-1/4" | 3/8"  | 1/4"  | 3/8"  |
| SE1920  | 1-1/2" | 1/2"  | 1/4"  | 1/2"  |
| SE1906  | 1-1/4" | 1/8"  | 1/2"  | 3/8"  |
| SE1910  | 1-1/2" | 5/32" | 1/2"  | 1/2"  |
| SE1914  | 1-1/4" | 1/4"  | 1/2"  | 3/8"  |
| SE1917  | 1-1/4" | 5/16" | 1/2"  | 3/8"  |
| SE1918  | 1-1/4" | 3/8"  | 1/2"  | 3/8"  |
| SE1922  | 1-1/2" | 1/2"  | 1/2"  | 1/2"  |
| SE1924  | 1-1/4" | 3/4"  | 1/2"  | 3/8"  |
| SE1980* | 1-1/8" | 3/16" | 5/16" | 3/8"  |

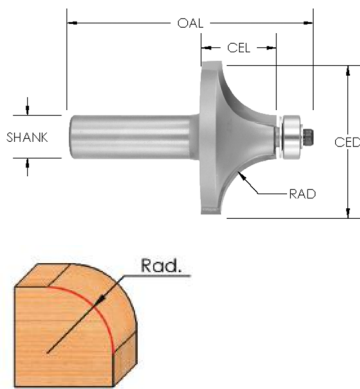
Uses SBE115 Bearing  
\*3 Flute - For Tyler® Machine (No Bearing)

## SMALL PILOT ROUND OVER



| PART # | CED  | CEL   | SHANK | OAL    | RADIUS |
|--------|------|-------|-------|--------|--------|
| SE1978 | 3/8" | 7/16" | 1/4"  | 2"     | 1/16"  |
| SE1981 | 3/8" | 7/16" | 1/4"  | 2"     | 1/8"   |
| SE1982 | 5/8" | 1/2"  | 1/4"  | 2-1/8" | 1/4"   |
| SE1984 | 7/8" | 5/8"  | 1/4"  | 2-1/4" | 3/8"   |

## ROUND OVER BITS

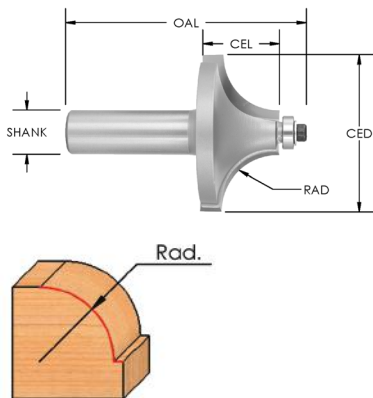


| PART #  | CED    | CEL     | SHANK | RADIUS |
|---------|--------|---------|-------|--------|
| SE2000A | 5/8"   | 1/4"    | 1/4"  | 1/16"  |
| SE2000C | 3/4"   | 1/2"    | 1/4"  | 1/8"   |
| SE2000D | 13/16" | 1/2"    | 1/4"  | 5/32"  |
| SE2000  | 7/8"   | 1/2"    | 1/4"  | 3/16"  |
| SE2001  | 1"     | 1/2"    | 1/4"  | 1/4"   |
| SE2002  | 1-1/8" | 1/2"    | 1/4"  | 5/16"  |
| SE2003  | 1-1/4" | 5/8"    | 1/4"  | 3/8"   |
| SE2003A | 1-3/8" | 11/16"  | 1/4"  | 7/16"  |
| SE2004  | 1-1/2" | 3/4"    | 1/4"  | 1/2"   |
| SE2005A | 3/4"   | 1/2"    | 1/2"  | 1/8"   |
| SE2005  | 7/8"   | 1/2"    | 1/2"  | 3/16"  |
| SE2006  | 1"     | 1/2"    | 1/2"  | 1/4"   |
| SE2007  | 1-1/8" | 1/2"    | 1/2"  | 5/16"  |
| SE2008  | 1-1/4" | 5/8"    | 1/2"  | 3/8"   |
| SE2008A | 1-3/8" | 11/16"  | 1/2"  | 7/16"  |
| SE2009  | 1-1/2" | 3/4"    | 1/2"  | 1/2"   |
| SE2009B | 1-5/8" | 7/8"    | 1/2"  | 9/16"  |
| SE2009A | 1-3/4" | 1"      | 1/2"  | 5/8"   |
| SE2010  | 2"     | 1"      | 1/2"  | 3/4"   |
| SE2011  | 2-1/4" | 1-1/8"  | 1/2"  | 7/8"   |
| SE2012  | 2-1/2" | 1-5/16" | 1/2"  | 1"     |
| SE2013* | 3"     | 1 1/2"  | 1/2"  | 1-1/8" |
| SE2014* | 3-1/4" | 1-3/4"  | 1/2"  | 1-1/4" |
| SE2015* | 3-1/2" | 1-3/4"  | 1/2"  | 1-3/8" |
| SE2016* | 3-3/4" | 1-7/8"  | 1/2"  | 1-1/2" |

Use SBE115 Bearing and SDS115 Dust Shield  
\* Use SBE120 Bearing and SDS120 Dust Shield



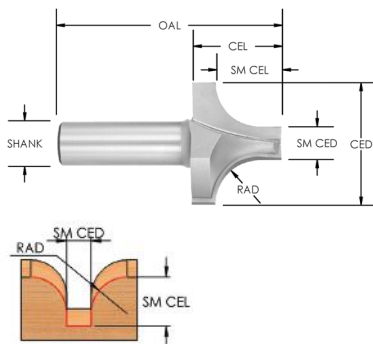
## BEADING BITS



| PART #    | CED    | CEL     | SHANK | RADIUS |
|-----------|--------|---------|-------|--------|
| SEBE2000A | 5/8"   | 1/2"    | 1/4"  | 1/16"  |
| SEBE2000C | 3/4"   | 1/2"    | 1/4"  | 1/8"   |
| SEBE2000D | 13/16" | 1/2"    | 1/4"  | 5/32"  |
| SEBE2000  | 7/8"   | 1/2"    | 1/4"  | 3/16"  |
| SEBE2001  | 1"     | 1/2"    | 1/4"  | 1/4"   |
| SEBE2002  | 1-1/8" | 1/2"    | 1/4"  | 5/16"  |
| SEBE2003  | 1-1/4" | 5/8"    | 1/4"  | 3/8"   |
| SEBE2003A | 1-3/8" | 11/16"  | 1/4"  | 7/16"  |
| SEBE2004  | 1-1/2" | 3/4"    | 1/4"  | 1/2"   |
| SEBE2005A | 3/4"   | 1/2"    | 1/2"  | 1/8"   |
| SEBE2005  | 7/8"   | 1/2"    | 1/2"  | 3/16"  |
| SEBE2006  | 1"     | 1/2"    | 1/2"  | 1/4"   |
| SEBE2007  | 1-1/8" | 1/2"    | 1/2"  | 5/16"  |
| SEBE2008  | 1-1/4" | 5/8"    | 1/2"  | 3/8"   |
| SEBE2008A | 1-3/8" | 11/16"  | 1/2"  | 7/16"  |
| SEBE2009  | 1-1/2" | 3/4"    | 1/2"  | 1/2"   |
| SEBE2009B | 1-5/8" | 7/8"    | 1/2"  | 9/16"  |
| SEBE2009A | 1-3/4" | 1"      | 1/2"  | 5/8"   |
| SEBE2010  | 2"     | 1"      | 1/2"  | 3/4"   |
| SEBE2011  | 2-1/4" | 1-1/8"  | 1/2"  | 7/8"   |
| SEBE2012  | 2-1/2" | 1-5/16" | 1/2"  | 1"     |
| SEBE2013* | 3"     | 1-1/2"  | 1/2"  | 1-1/8" |
| SEBE2014* | 3-1/4" | 1-3/4"  | 1/2"  | 1-1/4" |
| SEBE2015* | 3-1/2" | 1-3/4"  | 1/2"  | 1-3/8" |
| SEBE2016* | 3-1/2" | 1-7/8"  | 1/2"  | 1-1/2" |

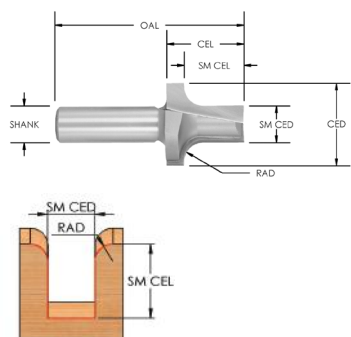
Use SBE110 Bearing  
\* Use SBE130 Bearing

## BORING POINT ROUNDOVER



| PART # | CED    | CEL    | SHANK | RADIUS | SM. CED |
|--------|--------|--------|-------|--------|---------|
| SE2050 | 3/8"   | 1/8"   | 1/4"  | 1/8"   | 1/8"    |
| SE2051 | 5/8"   | 1/8"   | 1/4"  | 3/16"  | 1/4"    |
| SE2052 | 3/4"   | 3/8"   | 1/4"  | 1/4"   | 1/4"    |
| SE2055 | 3/4"   | 1/4"   | 1/2"  | 1/4"   | 1/4"    |
| SE2056 | 3/4"   | 3/8"   | 1/2"  | 1/4"   | 1/4"    |
| SE2057 | 1"     | 5/16"  | 1/2"  | 3/8"   | 1/4"    |
| SE2058 | 1"     | 1/2"   | 1/2"  | 3/8"   | 1/4"    |
| SE2060 | 1-3/8" | 3/4"   | 1/2"  | 1/2"   | 3/8"    |
| SE2062 | 1-5/8" | 1"     | 1/2"  | 9/16"  | 1/2"    |
| SE2066 | 2"     | 1-1/8" | 1/2"  | 3/4"   | 1/2"    |

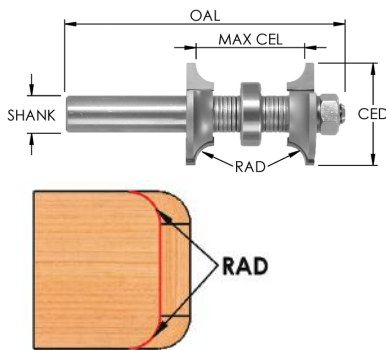
## BORING POINT ROUNDOVER AND EDGE



| PART # | CED    | CEL     | SHANK | RADIUS | SM CED |
|--------|--------|---------|-------|--------|--------|
| SE2068 | 1"     | 13/16"  | 1/2"  | 3/16"  | 1/2"   |
| SE2070 | 1"     | 1-5/16" | 1/2"  | 3/16"  | 1/2"   |
| SE2072 | 1-1/8" | 13/16"  | 1/2"  | 1/4"   | 1/2"   |
| SE2074 | 1-1/8" | 1-5/16" | 1/2"  | 1/4"   | 1/2"   |
| SE2076 | 1-3/8" | 13/16"  | 1/2"  | 3/8"   | 1/2"   |
| SE2078 | 1-3/8" | 1-5/16" | 1/2"  | 3/8"   | 1/2"   |

Cutting length does not include the flat on large diameter

## DOUBLE ROUND OVER

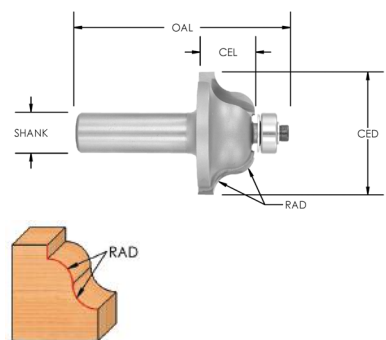


| PART # | CED    | SHANK | OAL    | RADIUS |
|--------|--------|-------|--------|--------|
| SE2160 | 1-1/8" | 1/2"  | 3-3/4" | 1/8"   |
| SE2162 | 1-1/4" | 1/2"  | 3-3/4" | 3/16"  |
| SE2164 | 1-3/8" | 1/2"  | 3-3/4" | 1/4"   |

| PART #     | CED    | RADIUS | Description             |
|------------|--------|--------|-------------------------|
| SE2160RH   | 1-1/8" | 1/8"   | Cutters Only Right-Hand |
| SE2160LH   | 1-1/8" | 1/8"   | Cutters Only Left-Hand  |
| SE2162RH   | 1-1/4" | 3/16"  | Cutters Only Right-Hand |
| SE2162LH   | 1-1/4" | 3/16"  | Cutters Only Left-Hand  |
| SE2164RH   | 1-3/8" | 1/4"   | Cutters Only Right-Hand |
| SE2164LH   | 1-3/8" | 1/4"   | Cutters Only Left-Hand  |
| SBE125     |        |        | Bearing Only            |
| SE21-ARBOR |        |        | Arbor Only              |

Above are the Replacement Parts for the Double Roundover Bits

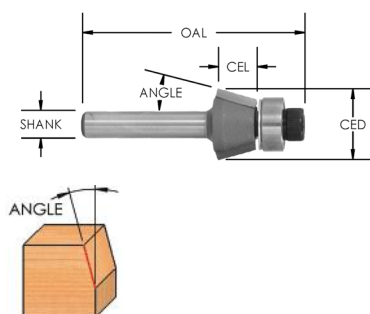
## ROMAN OGEE



| PART # | CED    | CEL    | SHANK | RADIUS |
|--------|--------|--------|-------|--------|
| SE2200 | 1-1/8" | 9/16"  | 1/4"  | 5/32"  |
| SE2201 | 1-1/2" | 11/16" | 1/4"  | 1/4"   |
| SE2202 | 1-1/8" | 9/16"  | 1/2"  | 5/32"  |
| SE2203 | 1-1/2" | 11/16" | 1/2"  | 1/4"   |
| SE2210 | 2"     | 1"     | 1/2"  | 3/8"   |

Uses SBE115 bearing

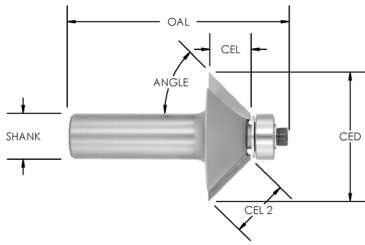
## BEVEL/LAMINATE TRIM



| PART #  | CEL  | CUTTING HEIGHT | SHANK | DEGREE |
|---------|------|----------------|-------|--------|
| SE2298* | 3/8" | 3/8"           | 1/4"  | 7°     |
| SE2300  | 1/2" | 1/2"           | 1/4"  | 15°    |
| SE2300A | 1/4" | 1/4"           | 1/4"  | 15°    |
| SE2300B | 3/8" | 3/8"           | 1/4"  | 22°    |
| SE2301  | 1/2" | 7/16"          | 1/4"  | 25°    |

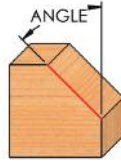
Use SBE115 Bearing  
\*Use SBE110 Bearing

## CHAMFER - 45°

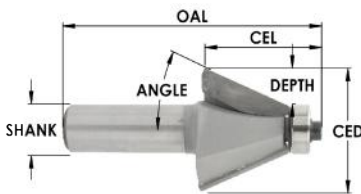


| PART # | CEL    | SHANK | DEPTH   | DEGREE |
|--------|--------|-------|---------|--------|
| SE2302 | 5/8"   | 1/4"  | 7/16"   | 45°    |
| SE2305 | 5/8"   | 1/2"  | 7/16"   | 45°    |
| SE2306 | 1-1/8" | 1/2"  | 13/16"  | 45°    |
| SE2310 | 1-1/2" | 1/2"  | 1-1/16" | 45°    |

Use SBE115 Bearing



## CHAMFER - 22-1/2° & 30°

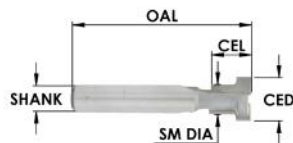


| PART #  | CEL    | SHANK | DEPTH | ANGLE   |
|---------|--------|-------|-------|---------|
| SE2307  | 15/16" | 1/2"  | 7/8"  | 22 1/2° |
| SE2308A | 7/16"  | 1/4"  | 3/8"  | 30°     |
| SE2309  | 1"     | 1/2"  | 7/8"  | 30°     |
| SE2315  | 3/8"   | 1/2"  | 3/8"  | 22 1/2° |

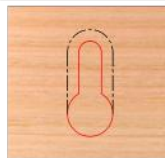
Use SBE115 Bearing



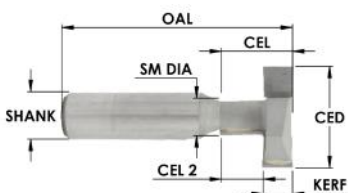
## KEYHOLE - 2 FLUTE



| PART # | CED  | CEL  | SHANK | OAL    | SM DIA |
|--------|------|------|-------|--------|--------|
| SE3050 | 3/8" | 3/8" | 1/4"  | 1-1/2" | 1/4"   |
| SE3052 | 1/2" | 1/2" | 1/4"  | 1-3/4" | 3/8"   |



## T-SLOT - SLAT WALL

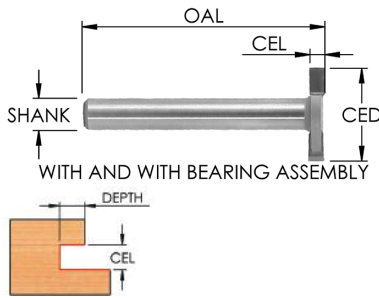


| PART # | CED     | CEL    | SHANK | OAL    | SM DIA | KERF  | CEL 2 |
|--------|---------|--------|-------|--------|--------|-------|-------|
| SE3070 | 1-1/16" | 13/16" | 1/2"  | 2-3/8" | 3/8"   | 5/16" | 1/2"  |
| SE3075 | 1-3/16" | 5/8"   | 1/2"  | 2-3/8" | 3/8"   | 1/4"  | 3/8"  |





## SLOT AND UNDERCUT



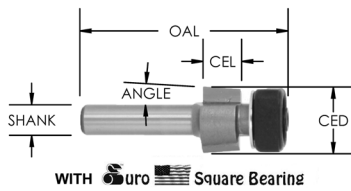
| PART #  | CED    | CEL  | SHANK | OAL    | CUTTING DEPTH | FLUTES |
|---------|--------|------|-------|--------|---------------|--------|
| SE3094  | 3/4"   | 1/8" | 1/4"  | 1-7/8" | 1/4"          | 2      |
| SE3098  | 1"     | 1/4" | 1/4"  | 2"     | 3/8"          | 2      |
| SE3100  | 1-1/4" | 1/4" | 1/4"  | 1-3/4" | 1/2"          | 2      |
| SE3110  | 1-1/2" | 1/4" | 1/4"  | 2"     | 5/8"          | 2      |
| SE3114* | 21mm   | 3mm  | 1/4"  | 1-7/8" | 7.325mm       | 3      |

Add B to Part# for Bearing on Shank

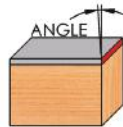
\*For Laminate Flooring

Part # with Bearing use a SBE145 Bearing

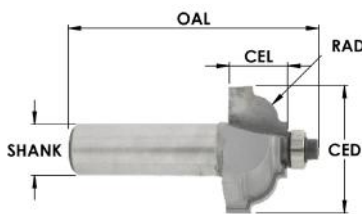
## EURO TRIM BITS



| PART # | CED  | CEL  | SHANK | OAL    | BEARING   |
|--------|------|------|-------|--------|-----------|
| SE2530 | 1/2" | 1/4" | 1/4"  | 1-5/8" | SBE115-ES |
| SE2532 | 3/4" | 5/8" | 1/4"  | 2-1/4" | SBE140-ES |
| SE2538 | 3/4" | 5/8" | 1/2"  | 2-1/4" | SBE140-ES |

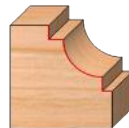


## CLASSICAL COVE

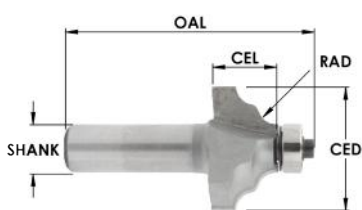


| PART # | CED     | CEL   | SHANK | RAD  |
|--------|---------|-------|-------|------|
| SE3160 | 15/16"  | 1/2"  | 1/4"  | 1/8" |
| SE3162 | 1-3/16" | 9/16" | 1/4"  | 1/4" |
| SE3164 | 15/16"  | 1/2"  | 1/2"  | 1/8" |
| SE3166 | 1-3/16" | 9/16" | 1/2"  | 1/4" |

Use SBE110 Bearing

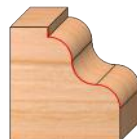


## WAVY EDGE



| PART # | CED    | CEL  | SHANK | RAD   |
|--------|--------|------|-------|-------|
| SE3170 | 1-1/4" | 3/4" | 1/4"  | 5/32" |
| SE3172 | 1-1/4" | 3/4" | 1/2"  | 5/32" |

Use SBE115 Bearing

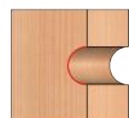


## RADIUS EDGE

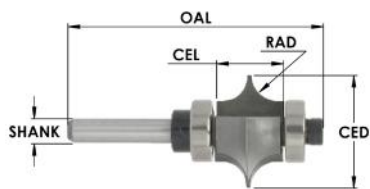


| PART # | CED  | CEL  | SHANK | OAL    | RAD   |
|--------|------|------|-------|--------|-------|
| SE3180 | 7/8" | 1/4" | 1/4"  | 2-5/8" | 1/8"  |
| SE3182 | 1"   | 3/8" | 1/4"  | 2-3/4" | 3/16" |

Use SBE130 Bearing

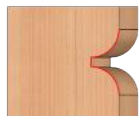


## FULL BEAD

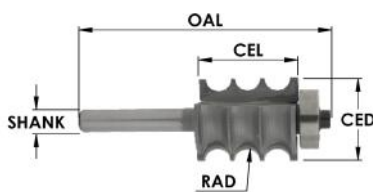


| PART # | CED    | CEL  | SHANK | RAD   |
|--------|--------|------|-------|-------|
| SE3190 | 7/8"   | 3/8" | 1/4"  | 1/8"  |
| SE3192 | 1"     | 1/2" | 1/4"  | 3/16" |
| SE3194 | 1-1/8" | 5/8" | 1/4"  | 1/4"  |
| SE3196 | 1-3/8" | 7/8" | 1/4"  | 3/8"  |

Use SBE130 Bearing



## TRIPLE BEAD

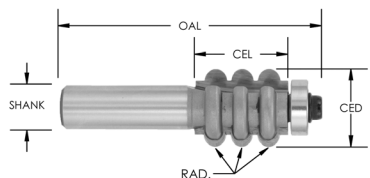


| PART # | CED  | CEL | SHANK | RAD  |
|--------|------|-----|-------|------|
| SE3200 | 7/8" | 1"  | 1/4"  | 1/8" |
| SE3202 | 7/8" | 1"  | 1/2"  | 1/8" |

Use SBE130 Bearing

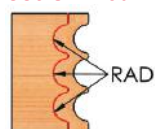


## TRIPLE FLUTE

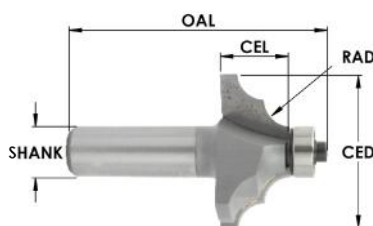


| PART # | CED  | CEL | SHANK | RAD  |
|--------|------|-----|-------|------|
| SE3203 | 7/8" | 1"  | 1/4"  | 1/8" |
| SE3204 | 7/8" | 1"  | 1/2"  | 1/8" |

Use SBE130 Bearing



## DOUBLE ROUND

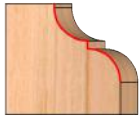
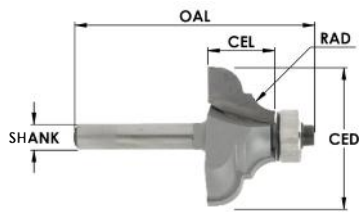


| PART #  | CED    | CEL    | SHANK | RAD   |
|---------|--------|--------|-------|-------|
| SE3205  | 1-1/8" | 1/2"   | 1/4"  | 5/32" |
| SE3206  | 1-1/2" | 11/16" | 1/4"  | 1/4"  |
| SE3207  | 1-1/8" | 1/2"   | 1/2"  | 5/32" |
| SE3207A | 1-3/8" | 11/16" | 1/2"  | 7/32" |
| SE3208  | 1-1/2" | 11/16" | 1/2"  | 1/4"  |

Use SBE115 Bearing



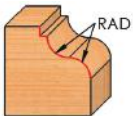
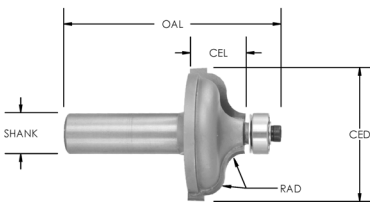
## COVE AND BEAD



| PART # | CED     | CEL     | SHANK | RAD   |
|--------|---------|---------|-------|-------|
| SE3209 | 1-1/8"  | 1/2"    | 1/4"  | 5/32" |
| SE3210 | 1-5/16" | 5/8"    | 1/4"  | 1/4"  |
| SE3211 | 1-1/8"  | 1/2"    | 1/2"  | 5/32" |
| SE3212 | 1-5/16" | 5/8"    | 1/2"  | 1/4"  |
| SE3282 | 2"      | 1-3/16" | 1/2"  | 3/8"  |

Use SBE115 Bearing

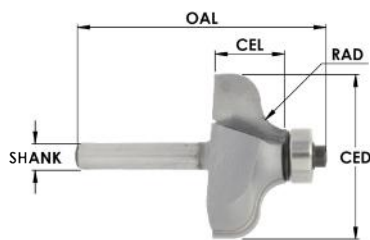
## OGEE FILLET



| PART # | CED    | CEL    | SHANK | RAD   |
|--------|--------|--------|-------|-------|
| SE3214 | 1-3/8" | 9/16"  | 1/4"  | 3/16" |
| SE3215 | 1-5/8" | 11/16" | 1/4"  | 1/4"  |
| SE3216 | 1-3/8" | 9/16"  | 1/2"  | 3/16" |
| SE3218 | 1-5/8" | 11/16" | 1/2"  | 1/4"  |

Use SBE115 Bearing

## OGEE BITS

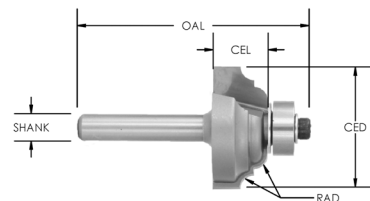


| PART # | CED    | CEL    | SHANK | RAD   |
|--------|--------|--------|-------|-------|
| SE3220 | 1-1/8" | 1/2"   | 1/4"  | 5/32" |
| SE3224 | 1-1/2" | 11/16" | 1/4"  | 1/4"  |
| SE3222 | 1-1/8" | 1/2"   | 1/2"  | 5/32" |
| SE3226 | 1-1/2" | 11/16" | 1/2"  | 1/4"  |

Use SBE115 Bearing

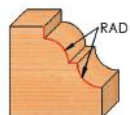


## CLASSICAL PATTERN

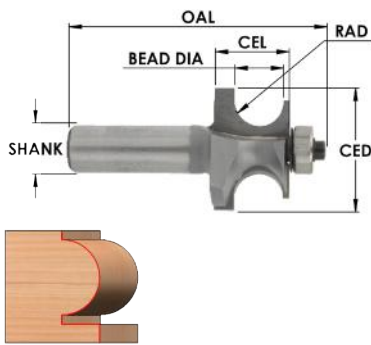


| PART # | CED    | CEL  | SHANK | RAD   |
|--------|--------|------|-------|-------|
| SE3230 | 1"     | 1/2" | 1/4"  | 1/8"  |
| SE3234 | 1-1/4" | 5/8" | 1/4"  | 3/16" |
| SE3232 | 1"     | 1/2" | 1/2"  | 1/8"  |
| SE3236 | 1-1/4" | 5/8" | 1/2"  | 3/16" |

Use SBE110 Bearing



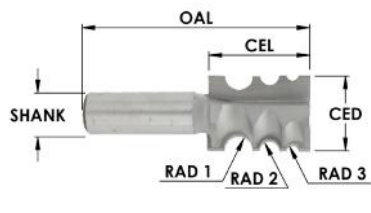
## EDGE BEADING



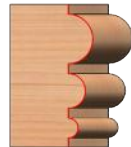
| PART # | CED    | CEL   | SHANK | RADIUS | BEAD DIA |
|--------|--------|-------|-------|--------|----------|
| SE3241 | 13/16" | 1/2"  | 1/4"  | 3/32"  | 3/16"    |
| SE3244 | 7/8"   | 9/16" | 1/4"  | 1/8"   | 1/4"     |
| SE3248 | 15/16" | 5/8"  | 1/4"  | 5/32"  | 5/16"    |
| SE3252 | 1"     | 5/8"  | 1/4"  | 3/16"  | 3/8"     |
| SE3256 | 1-1/4" | 3/4"  | 1/4"  | 1/4"   | 1/2"     |
| SE3243 | 13/16" | 1/2"  | 1/2"  | 3/32"  | 3/16"    |
| SE3246 | 7/8"   | 9/16" | 1/2"  | 1/8"   | 1/4"     |
| SE3250 | 15/16" | 5/8"  | 1/2"  | 5/32"  | 5/16"    |
| SE3254 | 1"     | 5/8"  | 1/2"  | 3/16"  | 3/8"     |
| SE3258 | 1-1/4" | 3/4"  | 1/2"  | 1/4"   | 1/2"     |

*Use SBE115 Bearing*

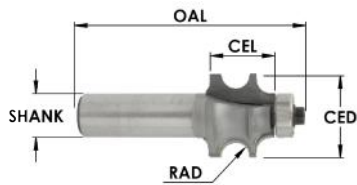
## VARIABLE BEADING



| PART # | CED  | CEL    | SHANK | RAD 1 | RAD 2 | RAD 3 |
|--------|------|--------|-------|-------|-------|-------|
| SE3273 | 7/8" | 1-1/8" | 1/2"  | 5/32" | 7/64" | 1/16" |



## LARGE BEAD

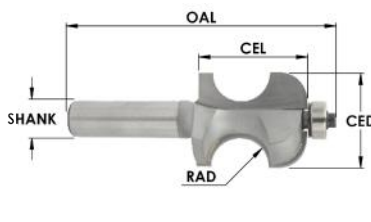


| PART # | CED    | CEL     | SHANK | RADIUS |
|--------|--------|---------|-------|--------|
| SE3274 | 15/16" | 5/8"    | 1/2"  | 5/32"  |
| SE3276 | 1-1/4" | 1-7/16" | 1/2"  | 3/8"   |

*Use SBE115 Bearing*

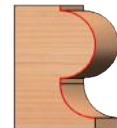


## BEAD AND COVE

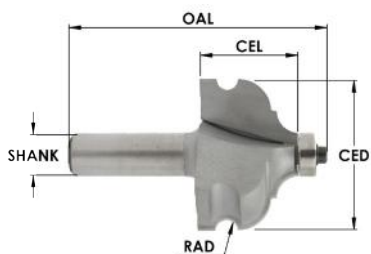


| PART # | CED    | CEL     | SHANK | RADIUS |
|--------|--------|---------|-------|--------|
| SE3278 | 1-1/4" | 1-7/16" | 1/2"  | 3/8"   |

*Use SBE115 Bearing*



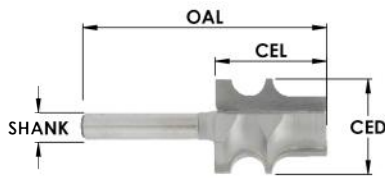
## MOLDING BITS



| PART # | CED    | CEL    | SHANK | BEAD DIAMETER |
|--------|--------|--------|-------|---------------|
| SE3280 | 1-3/4" | 1-1/8" | 1/2"  | 1/4"          |
| SE3281 | 1-1/4" | 15/16" | 1/2"  | 1/4"          |
| SE3284 | 1-1/4" | 13/16" | 1/2"  | 3/16"         |

*Use SBE115 Bearing*

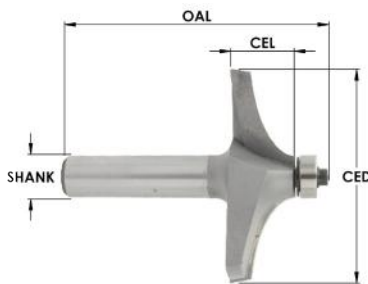
## TAPER REED



| PART # | CED  | CEL | SHANK | RAD   |
|--------|------|-----|-------|-------|
| SE3286 | 7/8" | 1"  | 1/4"  | 5/32" |
| SE3288 | 7/8" | 1"  | 1/2"  | 5/32" |

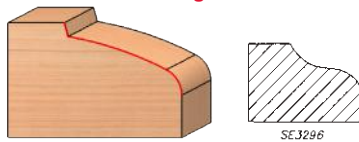


## TABLE EDGE

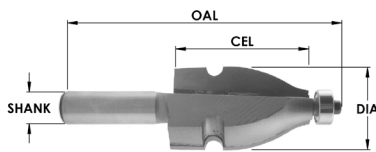


| PART # | CED    | CEL  | SHANK | DEPTH |
|--------|--------|------|-------|-------|
| SE3294 | 2-1/2" | 3/4" | 1/2"  | 1"    |
| SE3296 | 2-1/2" | 3/4" | 1/2"  | 1"    |

Use SBE115 Bearing



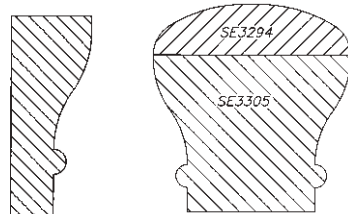
## HANDRAIL BIT



| PART # | CED    | CEL | SHANK | OAL | BEAD DIA |
|--------|--------|-----|-------|-----|----------|
| SE3305 | 1-1/4" | 2"  | 1/2"  | 4"  | 1/4"     |

Use SBE115 Bearing

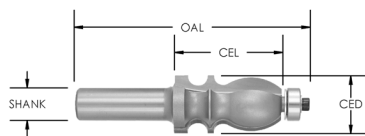
With the combination of SE3294 and SE3305 you can make this style handrail.



SE3305

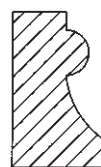
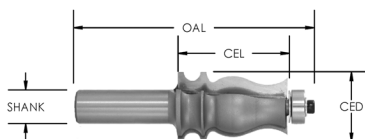
Have a different handrail in mind? Have Southeast Tool quote the router bits or shaper cutters, fax a drawing, or mail a wood sample to Southeast Tool.

## SPECIALTY MOLDING

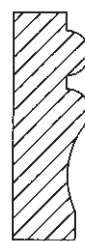


| PART # | CED     | CEL      | SHANK | OAL     | BEAD DIA |
|--------|---------|----------|-------|---------|----------|
| SE3320 | 1"      | 7/8"     | 1/2"  | 2-1/2"  | 5/16"    |
| SE3324 | 15/16"  | 1-3/8"   | 1/2"  | 3"      | 5/16"    |
| SE3326 | 1-1/16" | 1-5/8"   | 1/2"  | 3-1/4"  | 1/4"     |
| SE3330 | 1"      | 1-11/16" | 1/2"  | 3-5/16" | 1/4"     |

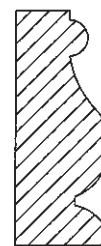
Use SBE115 Bearing



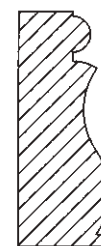
SE3320



SE3324



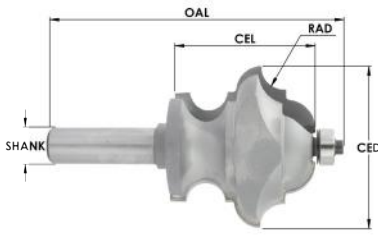
SE3326



SE3330

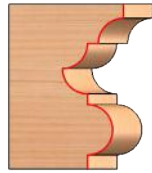


## CLASSICAL MULTIFORM

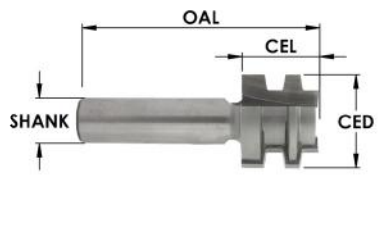


| PART # | CED    | CEL    | SHANK | RADIUS |
|--------|--------|--------|-------|--------|
| SE3342 | 2-1/4" | 1-7/8" | 1/2"  | 7/32"  |

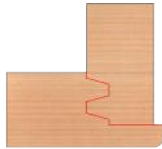
Use SBE115 Bearing



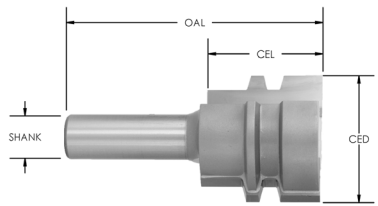
## DRAWER LOCK



| PART # | CED     | CEL  | SHANK | OAL     |
|--------|---------|------|-------|---------|
| SE3350 | 1-1/16" | 3/4" | 1/4"  | 2-5/16" |
| SE3352 | 1-1/16" | 3/4" | 1/2"  | 2-9/16" |



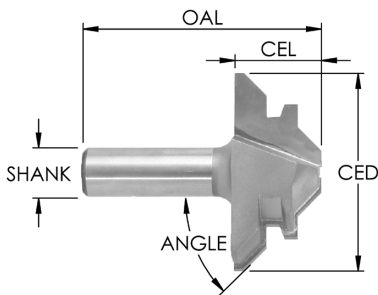
## GLUE JOINT



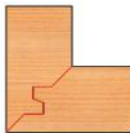
| PART # | CED    | CEL    | SHANK | MATERIAL THICKNESS |
|--------|--------|--------|-------|--------------------|
| SE3354 | 1-1/2" | 1-1/4" | 1/2"  | 1/2" - 1-1/4"      |



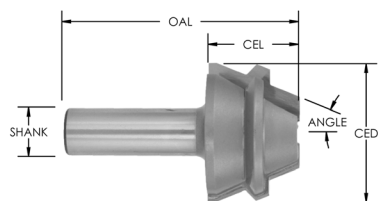
## 45° LOCK MITER



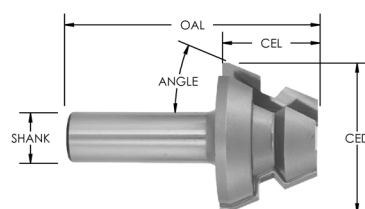
| PART # | CED    | CEL    | SHANK | MAX MATERIAL |
|--------|--------|--------|-------|--------------|
| SE3360 | 1-3/4" | 3/4"   | 1/2"  | 5/8"         |
| SE3362 | 3-1/2" | 1-5/8" | 1/2"  | 1-1/2"       |



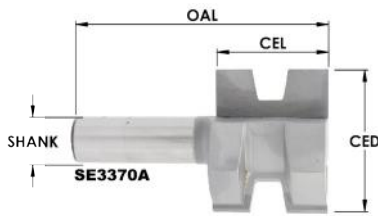
## LOCK MITER SET - 22.5°



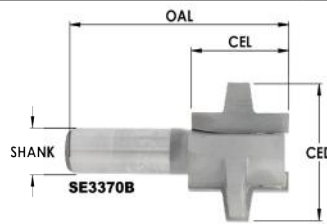
| PART # | CED      | CEL    | SHANK | OAL    | MATERIAL THICKNESS |
|--------|----------|--------|-------|--------|--------------------|
| SE3364 | 1-15/32" | 15/16" | 1/2"  | 2-1/4" | 3/8" - 7/8"        |



## WEDGE TONGUE AND GROOVE



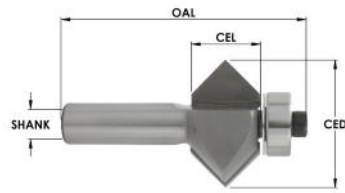
| PART # | CED    | CEL    | SHANK | OAL    | MATERIAL THICKNESS |
|--------|--------|--------|-------|--------|--------------------|
| SE3370 | 1-1/2" | 1-1/8" | 1/2"  | 2-5/8" | 1/2" - 1-1/8"      |



**2-Piece Set**  
  
To order individually:  
SE3370A - Tongue  
SE3370B - Groove



## EDGE BANDING SET



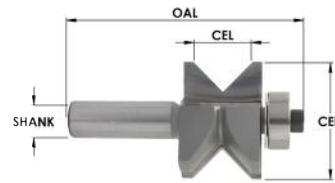
| PART # | CED                            | CEL    | SHANK | OAL     |
|--------|--------------------------------|--------|-------|---------|
| SE3400 | SET INCLUDES SE3401 AND SE3402 |        |       |         |
| SE3401 | 1-1/2"                         | 25/32" | 1/2"  | 2-7/8"  |
| SE3402 | 1-17/32"                       | 25/32" | 1/2"  | 3-1/16" |

Use SBE124 Bearing

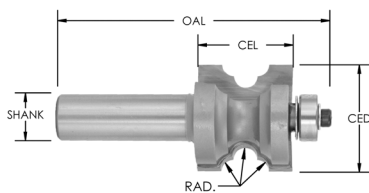


SE3401

SE3402

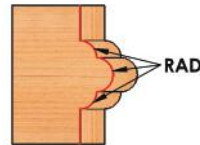


## BEAUTY MOLDING

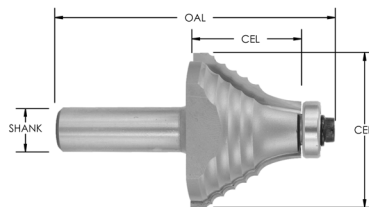


| PART # | CED    | CEL | SHANK | OAL      | RAD  |
|--------|--------|-----|-------|----------|------|
| SE3310 | 1-1/8" | 1"  | 1/2"  | 2-15/16" | 1/8" |

Use SBE115 Bearing



## BEADED PICTURE FRAME MOLDING

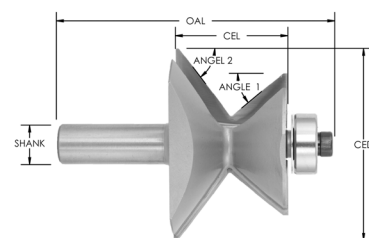


| PART # | CED      | CEL     | SHANK | OAL     |
|--------|----------|---------|-------|---------|
| SE3315 | 1-11/16" | 1-3/16" | 1/2"  | 3-1/16" |

Use SBE130 Bearing

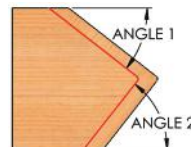


## CROWN MOLDING EDGE TRIM

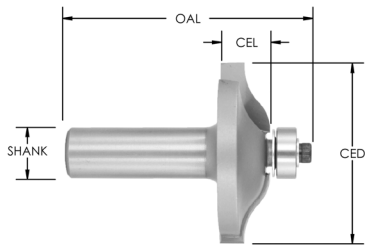


| PART # | CED    | CEL    | SHANK | OAL    | ANGLE 1 | ANGLE 2 |
|--------|--------|--------|-------|--------|---------|---------|
| SE3318 | 2-3/8" | 1-3/8" | 1/2"  | 3-3/8" | 38°     | 52°     |

Use SBE124 Bearing

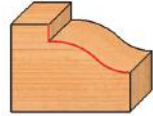


## ELLIPSE OGEE

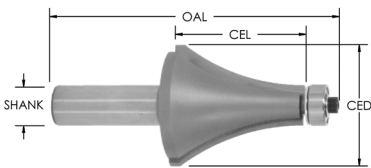


| PART # | CED    | CEL  | SHANK | OAL    |
|--------|--------|------|-------|--------|
| SE3265 | 1-3/4" | 1/2" | 1/4"  | 2-1/8" |
| SE3266 | 1-3/4" | 1/2" | 1/2"  | 2-1/8" |

Use SBE115 Bearing



## FURNITURE/BOX MAKER

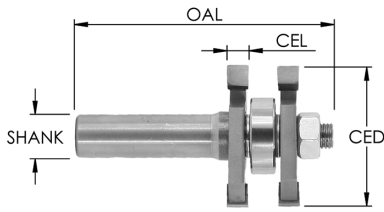


| PART # | CED    | CEL    | SHANK | OAL      |
|--------|--------|--------|-------|----------|
| SE3525 | 1-1/2" | 1-5/8" | 1/2"  | 3-15/16" |

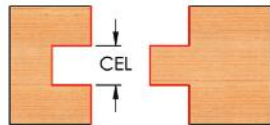
Use SBE115 Bearing



## TONGUE AND GROOVE ASSEMBLY

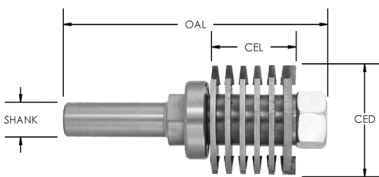


| PART # | CED    | CEL   | SHANK | MATERIAL THICKNESS | BEARING |
|--------|--------|-------|-------|--------------------|---------|
| SE3375 | 1-5/8" | 9/32" | 1/2"  | 1/2" to 13/16"     | SBE125  |

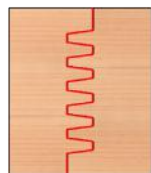


| PART #      | CED    | Description     |
|-------------|--------|-----------------|
| SE3375G     | 1-1/8" | Slotting Cutter |
| SAR500-1716 |        | Arbor           |
| SBE125      |        | Bearing         |
| SESK-012    |        | Shim Kit        |

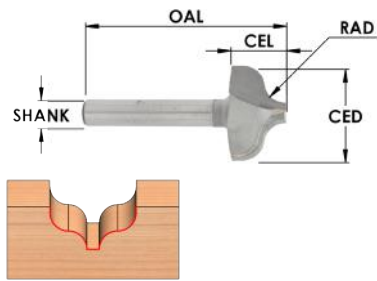
## FINGER JOINT ASSEMBLY



| PART # | CED     | CEL    | SHANK | DEPTH |
|--------|---------|--------|-------|-------|
| SE3385 | 1-9/16" | 1-1/4" | 1/2"  | 7/32" |

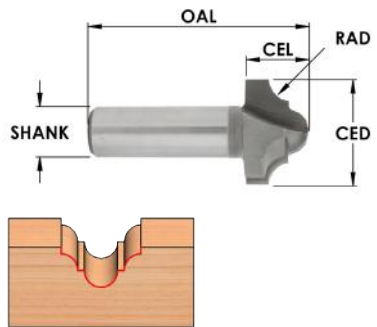


## PLUNGE OGEE



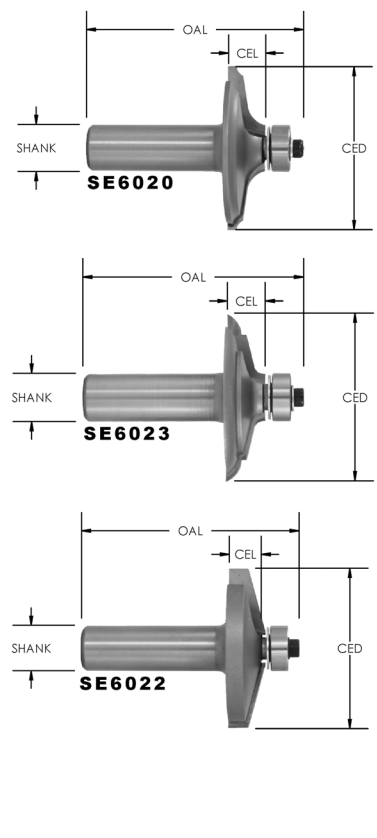
| PART #  | CED    | CEL    | SHANK | RAD   |
|---------|--------|--------|-------|-------|
| SE3601  | 3/8"   | 3/8"   | 1/4"  | 1/16" |
| SE3602  | 1/2"   | 3/8"   | 1/4"  | 3/32" |
| SE3603  | 3/4"   | 7/16"  | 1/4"  | 1/8"  |
| SE3604  | 7/8"   | 1/2"   | 1/4"  | 3/16" |
| SE3605  | 3/8"   | 3/8"   | 1/2"  | 1/16" |
| SE3605A | 1/2"   | 3/8"   | 1/2"  | 3/32" |
| SE3605B | 3/4"   | 7/16"  | 1/2"  | 1/8"  |
| SE3606  | 7/8"   | 5/8"   | 1/2"  | 3/16" |
| SE3608  | 1-1/4" | 11/16" | 1/2"  | 3/16" |

## CLASSICAL ROUND BOTTOM



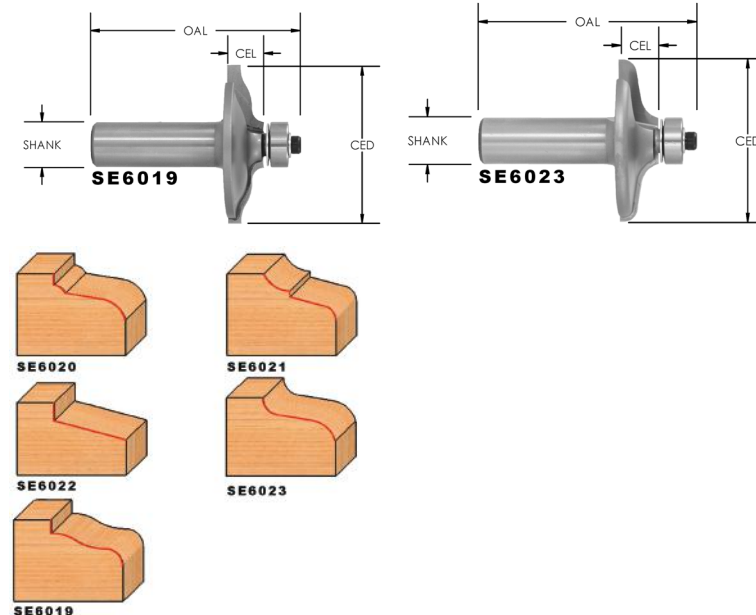
| PART # | CED    | CEL  | SHANK | RAD   |
|--------|--------|------|-------|-------|
| SE3719 | 1/2"   | 3/8" | 1/4"  | 3/32" |
| SE3728 | 3/4"   | 1/2" | 1/4"  | 5/32" |
| SE3733 | 3/4"   | 1/2" | 1/2"  | 5/32" |
| SE3738 | 1"     | 5/8" | 1/2"  | 7/32" |
| SE3752 | 1-1/2" | 3/4" | 1/2"  | 3/8"  |

## DOOR EDGE PROFILE

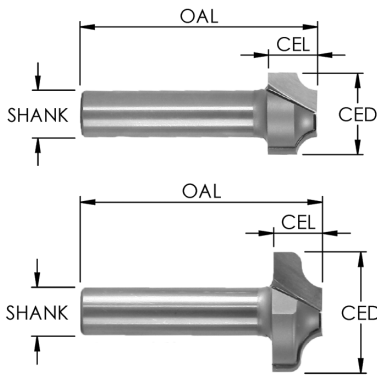


| PART # | CED    | CEL   | SHANK | OAL     |
|--------|--------|-------|-------|---------|
| SE6019 | 1-3/4" | 7/16" | 1/2"  | 2-5/16" |
| SE6020 | 1-3/4" | 7/16" | 1/2"  | 2-5/16" |
| SE6021 | 1-3/4" | 7/16" | 1/2"  | 2-5/16" |
| SE6022 | 1-3/4" | 7/16" | 1/2"  | 2-5/16" |
| SE6023 | 1-3/4" | 7/16" | 1/2"  | 2-5/16" |

Use SBE115 Bearing

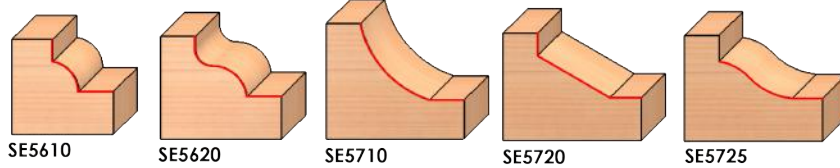


## MDF DOOR BITS

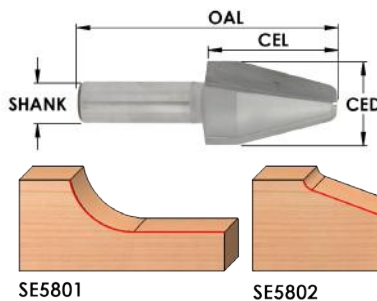


| PART # | CED    | CEL | SHANK | OAL    | STYLE       | DESCRIPTION   |
|--------|--------|-----|-------|--------|-------------|---------------|
| SE5610 | 7/8"   |     | 1/2"  | 2-1/2" | Bead        | Stile Profile |
| SE5620 | 1-1/4" |     | 1/2"  | 2-1/2" | Traditional |               |
| SE5710 | 1-1/2" |     | 1/2"  | 2-1/2" | Cove        | Panel Profile |
| SE5720 | 1-1/2" |     | 1/2"  | 2-1/2" | Straight    |               |
| SE5725 | 1-1/2" |     | 1/2"  | 2-1/2" | Ogee        |               |

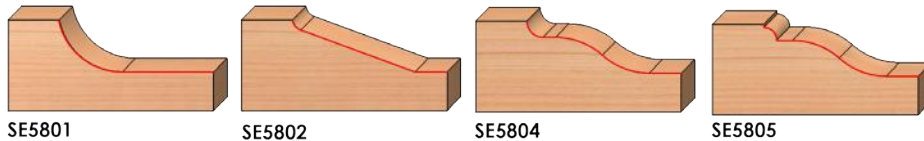
*Tools can be made in Insert and PCD Diamond Tipped - Call for Pricing*



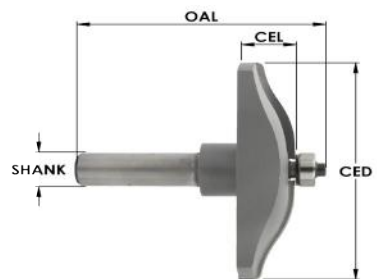
## VERTICAL PANEL



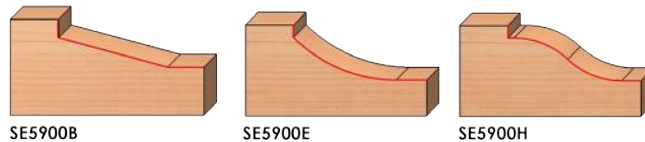
| PART # | CED | CEL    | SHANK | STYLE     |
|--------|-----|--------|-------|-----------|
| SE5801 | 1"  | 1-1/2" | 1/2"  | Cove      |
| SE5802 | 1"  | 1-1/2" | 1/2"  | Straight  |
| SE5804 | 1"  | 1-1/2" | 1/2"  | Ogee      |
| SE5805 | 1"  | 1-1/2" | 1/2"  | Ogee Bead |



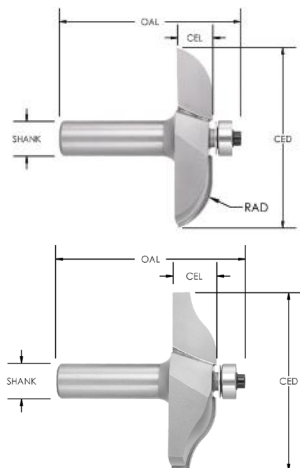
## RAISED PANEL BITS



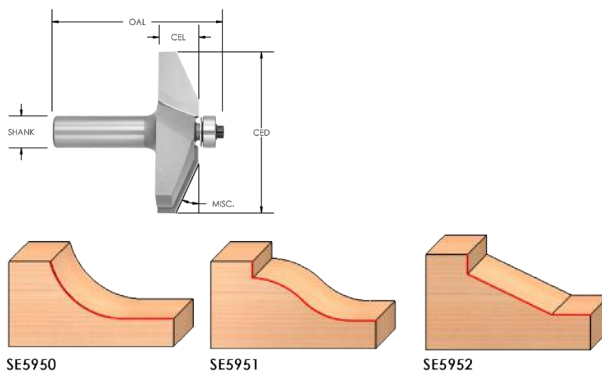
| PART #  | CED    | SHANK | OAL    | BEARING | STYLE        |
|---------|--------|-------|--------|---------|--------------|
| SE5900B | 3-1/4" | 1/2"  | 1-3/8" | SBE115  | Straight 15° |
| SE5900E | 3-1/4" | 1/2"  | 1-3/8" | SBE115  | Cove         |
| SE5900H | 3-1/4" | 1/2"  | 1-3/8" | SBE115  | Ogee         |



## MEDIUM RAISED PANEL



| PART # | CED    | SHANK | OAL | DEPTH | BEARING | STYLE        |
|--------|--------|-------|-----|-------|---------|--------------|
| SE5950 | 2-1/2" | 1/2"  |     | 1"    | SBE115  | Cove         |
| SE5951 | 2-1/2" | 1/2"  |     | 1"    | SBE115  | Ogee         |
| SE5952 | 2-1/2" | 1/2"  |     | 1"    | SBE115  | Straight 25° |



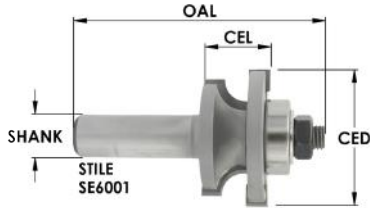


## STILE AND RAIL

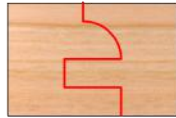


| PART # | CED    | CEL | SHANK | DEPTH | PATTERN |
|--------|--------|-----|-------|-------|---------|
| SE6001 | 1-5/8" | 1"  | 1/2"  | 3/8"  | Round   |
| SE6002 | 1-5/8" | 1"  | 1/2"  | 3/8"  | Ogee    |
| SE6003 | 1-5/8" | 1"  | 1/2"  | 3/8"  | Bead    |

*2-Piece Set*  
*Bearing SBE125*  
*Shim Kit SESK-012*  
*Groover SE6000G*

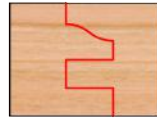


STILE RAIL



SE6001

STILE RAIL



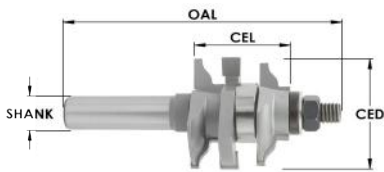
SE6002

STILE RAIL



SE6003

## DOUBLE STILE AND RAIL

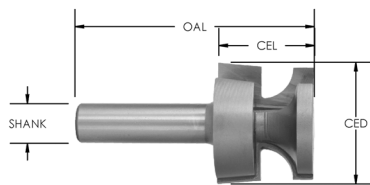


| PART # | CED    | SHANK | DEPTH | PATTERN |
|--------|--------|-------|-------|---------|
| SE6007 | 1-5/8" | 1/2"  | 3/8"  | Ogee    |

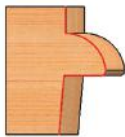
*Bearing SBE125*  
*Shim Kit SESK-012*



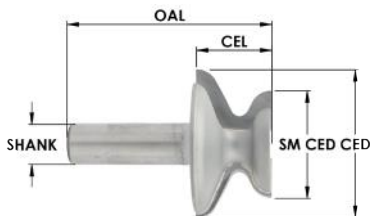
## RECESSED DOOR EDGE



| PART # | CED    | CEL     | SHANK |
|--------|--------|---------|-------|
| SE6010 | 1-1/2" | 1-3/16" | 1/2"  |



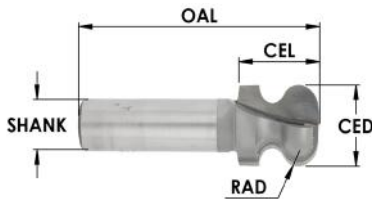
## EUROPEAN DOOR EDGE



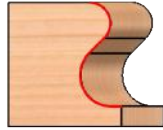
| PART # | CED    | CEL  | SHANK | OAL    | SM DIA |
|--------|--------|------|-------|--------|--------|
| SE6016 | 1-3/4" | 7/8" | 1/2"  | 2-3/8" | 5/8"   |



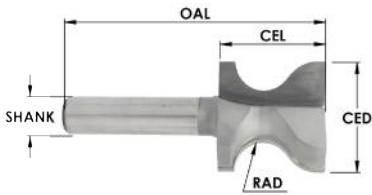
## DRAWER PULL



| PART # | CED    | CEL  | SHANK | RAD   |
|--------|--------|------|-------|-------|
| SE6024 | 3/4"   | 7/8" | 1/2"  | 3/16" |
| SE6026 | 1-1/2" | 7/8" | 1/2"  | 1/4"  |

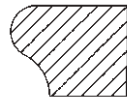


## WINDOW SILL EDGE



| PART # | CED     | CEL    | SHANK | RAD   |
|--------|---------|--------|-------|-------|
| SE6045 | 1-1/4"  | 13/16" | 1/2"  | 7/32" |
| SE6046 | 1-7/16" | 1-1/8" | 1/2"  | 3/8"  |

*These Bits Can Also Be Used For Drawer Pulls*



## WINDOW SASH BIT



| PART # | CED    | CEL         | SHANK | OAL    |
|--------|--------|-------------|-------|--------|
| SE6050 | 1-3/8" | 7/8"-1-5/8" | 1/2"  | 3-5/8" |



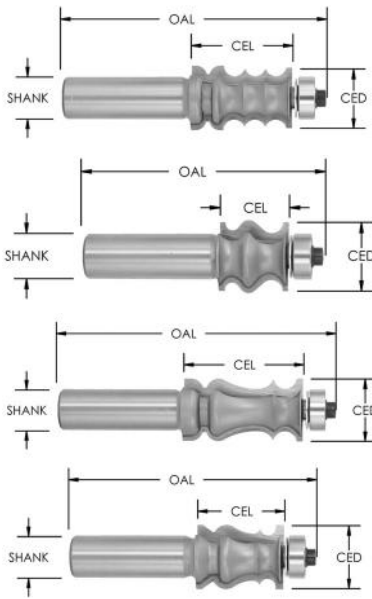
STILE CUT



RAIL CUT

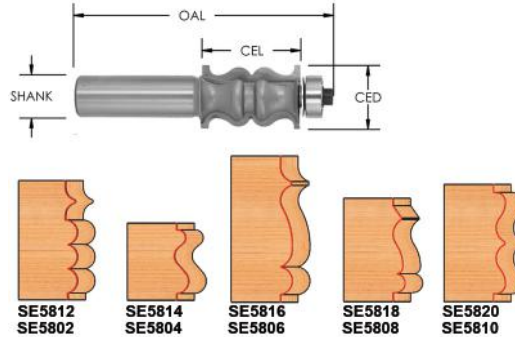
| PART #   | CED    | Description     |
|----------|--------|-----------------|
| SE6050P  | 1-3/8" | Profile Cutter  |
| SAR500WS |        | Arbor           |
| SBE125   |        | Bearing         |
| SESK-012 |        | Shim Kit        |
| SE6050SP |        | Spacer          |
| SE6050C  | 1-3/8" | Straight Cutter |

## PICTURE FRAME



| PART # | CED  | CEL     | SHANK | OAL      |
|--------|------|---------|-------|----------|
| SE5502 | 3/4" | 1-3/16" | 1/4"  | 2-7/8"   |
| SE5504 | 3/4" | 3/4"    | 1/4"  | 2-7/16"  |
| SE5506 | 3/4" | 1-7/16" | 1/4"  | 3-1/8"   |
| SE5508 | 3/4" | 1"      | 1/4"  | 2-11/16" |
| SE5510 | 3/4" | 1-3/16" | 1/4"  | 2-13/16" |
| SE5812 | 3/4" | 1-3/16" | 1/2"  | 3-1/8"   |
| SE5814 | 3/4" | 3/4"    | 1/2"  | 2-11/16" |
| SE5816 | 3/4" | 1-7/16" | 1/2"  | 3-3/8"   |
| SE5818 | 3/4" | 1"      | 1/2"  | 2-15/16" |
| SE5820 | 3/4" | 1-3/16" | 1/2"  | 3-1/16"  |

### SBE115 Bearing



## PASO ROBLES THROW AWAY



SETA-228



SETA-NUT



SETA-170



SETA-152



SETA-150



SETA-162



SETA-151



SETA-157



SETA-176

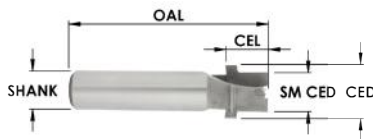
| PART #    | DESCRIPTION                               | CEL           |
|-----------|---|---------------|
| SETA-150  | Straight Flush Trim Assembly 1/4" Shank   | Sold Each     |
| SETA-151  | 100 Bevel Trim Assembly 1/4" Shank        | Sold Each     |
| SETA-152  | Straight Cutter Assembly 1/4" Shank       | Sold Each     |
| SETA-156  | Straight Slip on Cutters Only             | Sold Pkg of 3 |
| SETA-157  | 100 Bevel Cutters Only                    | Sold Pkg of 3 |
| SETA-160  | Arbors for SETA-150, 151 1/4" Shank       | Sold Each     |
| SETA-161  | Arbor for SETA-152 1/4" Shank             | Sold Each     |
| SETA-162  | Arbor for SETA-170 1/4" Shank             | Sold Each     |
| SETA-170  | Template Bit Assembly 1/4" Shank          | Sold Each     |
| SETA-176  | Straight Threaded Cutters Only            | Sold Pkg of 3 |
| SETA-228  | Rabbet Bit Cutter Only                    | Sold Each     |
| SETA-228K | Rabbet Bit Assembly 1/4" Shank            | Sold Each     |
| SETA-Nut  | 5/16 OD nuts for SETA-150, 151, 152, 228K | Sold Each     |

## POCKET HOLE BITS FOR CASTLE™ MACHINE



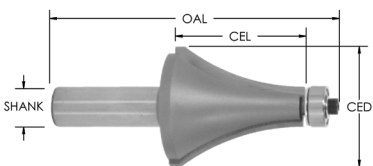
| PART #           | CED   | CEL   | SHANK | OAL    | DESCRIPTION           |
|------------------|-------|-------|-------|--------|-----------------------|
| SE29102-CAST     | 9/64" | 1"    | 1/4"  | 2-1/2" | Drill - Package of 5  |
| SECTDS38         | 3/8"  | 9/16" | 3/8"  | 2-1/2" | Carbide Tipped        |
| SRU320RUF        | 3/8"  | 7/8"  | 3/8"  | 2-1/2" | Solid Carbide         |
| SE29102-CAST-VPT | 9/64" | 1"    | 1/4"  | 2-1/2" | V-Point- Package of 5 |

## EURO STEP BITS



| PART # | CED    | SM CED | SHANK |
|--------|--------|--------|-------|
| SE751  | 1.000" | 0.750" | 1/2"  |
| SE753  | 0.630" | 0.500" | 1/2"  |
| SE755  | 0.650" | 0.492" | 1/2"  |
| SE756  | 0.630" | 0.484" | 1/2"  |
| SE757  | 0.800" | 0.563" | 1/2"  |
| SE758  | 0.795" | 0.480" | 1/2"  |
| SE759  | 0.638" | 0.480" | 1/2"  |

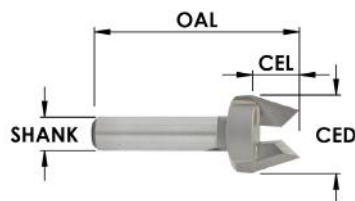
## QUEEN ANNE MOLDING



| PART # | CED    | CEL    | SHANK | RADIUS |
|--------|--------|--------|-------|--------|
| SE3550 | 7/8"   | 15/16" | 1/2"  | 1-3/4" |
| SE3555 | 1-1/2" | 1-5/8" | 1/2"  | 2-1/2" |
| SE3560 | 1-1/8" | 1-3/8" | 1/2"  | 3"     |



## PLYWOOD KNOCKOUT

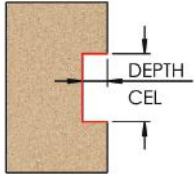
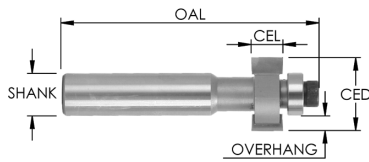


| PART # | CED           | CEL   | SHANK |
|--------|---------------|-------|-------|
| PCO-14 | 5/16" - 9/16" | 5/16" | 1/4"  |

*This bit is used to cut out imperfections in plywood, for resurfacing.  
2-Flute*

## SOLID SURFACE BITS

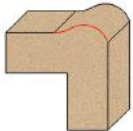
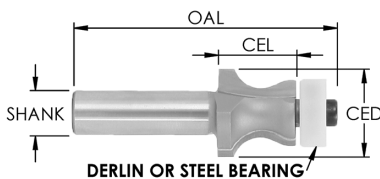
### FACE INLAY BITS



| PART # | CED  | CEL  | SHANK | DEPTH | BEARING |
|--------|------|------|-------|-------|---------|
| SE2906 | 7/8" | 1/8" | 1/2"  | 1/16" | SBE120  |
| SE2907 | 7/8" | 1/8" | 1/2"  | 1/8"  | SBE130  |
| SE2908 | 7/8" | 1/8" | 1/2"  | 3/16" | SBE145  |
| SE2900 | 7/8" | 1/4" | 1/2"  | 1/16" | SBE120  |
| SE2901 | 7/8" | 1/4" | 1/2"  | 1/8"  | SBE130  |
| SE2902 | 7/8" | 1/4" | 1/2"  | 3/16" | SBE145  |
| SE2909 | 7/8" | 3/8" | 1/2"  | 1/16" | SBE120  |
| SE2910 | 7/8" | 3/8" | 1/2"  | 1/8"  | SBE130  |
| SE2911 | 7/8" | 3/8" | 1/2"  | 3/16" | SBE145  |
| SE2903 | 7/8" | 1/2" | 1/2"  | 1/16" | SBE120  |
| SE2904 | 7/8" | 1/2" | 1/2"  | 1/8"  | SBE130  |
| SE2905 | 7/8" | 1/2" | 1/2"  | 3/16" | SBE145  |
| SE2912 | 7/8" | 3/4" | 1/2"  | 1/16" | SBE120  |
| SE2913 | 7/8" | 3/4" | 1/2"  | 1/8"  | SBE130  |
| SE2914 | 7/8" | 3/4" | 1/2"  | 3/16" | SBE145  |

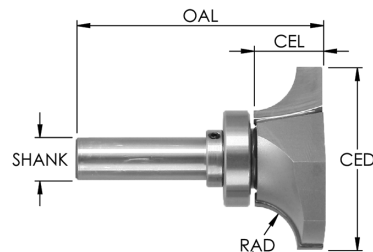
*SBE124 Bearing can be used for flush cutting if needed*

### NO DRIP COUNTER TOP

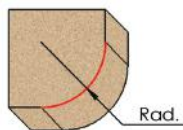


| PART # | CED | SHANK | OAL    | MATERIAL | BEARING |
|--------|-----|-------|--------|----------|---------|
| SE2926 | 1"  | 1/2"  | 3-1/8" | 3/4"     | SBE121  |

### UNDER ROUNDROVER

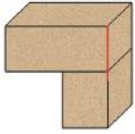
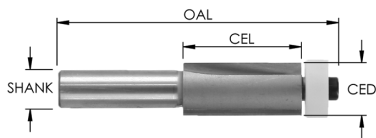


| PART # | CED    | CEL  | SHANK | RAD  | MATERIAL THICKNESS | BEARING |
|--------|--------|------|-------|------|--------------------|---------|
| SE2033 | 1-7/8" | 5/8" | 1/2"  | 3/8" | 3/4"               | SBE150  |
| SE2034 | 2-1/8" | 3/4" | 1/2"  | 1/2" | 1"                 | SBE150  |
| SE2036 | 2-5/8" | 1"   | 1/2"  | 3/4" | 1-1/2"             | SBE150  |



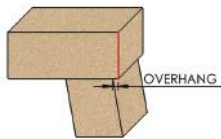
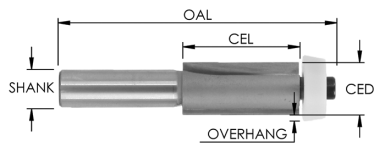


## FLUSH TRIM BITS



| PART #   | CED  | CEL | SHANK | BEARING |
|----------|------|-----|-------|---------|
| SE2410DS | 3/4" | 1"  | 1/2"  | SBE121  |

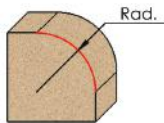
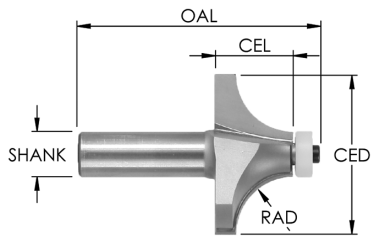
## OVERHANG BOWL TRIM



| PART # | CED  | CEL | SHANK | OAL    | BEARING   | MATERIAL  |
|--------|------|-----|-------|--------|-----------|-----------|
| SE2945 | 3/4" | 1"  | 1/2"  | 3-3/8" | SBESS-New | 1/2"-3/4" |

*Uses Screw SE1032-38SP*

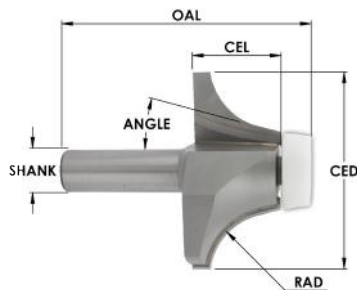
## ROUNDROVER BITS WITH DELRIN BEARING



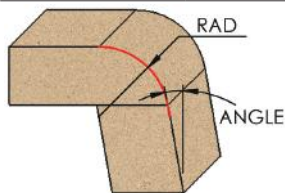
| PART #    | CED    | CEL    | SHANK | RAD   | BEARING |
|-----------|--------|--------|-------|-------|---------|
| SE2005ADS | 3/4"   | 1/2"   | 1/2"  | 1/8"  | SBE117  |
| SE2006DS  | 1"     | 1/2"   | 1/2"  | 1/4"  | SBE117  |
| SE2007DS  | 1-1/8" | 1/2"   | 1/2"  | 5/16" | SBE117  |
| SE2008DS  | 1-1/4" | 5/8"   | 1/2"  | 3/8"  | SBE117  |
| SE2009DS  | 1-1/2" | 3/4"   | 1/2"  | 1/2"  | SBE117  |
| SE2009ADS | 1-3/4" | 1"     | 1/2"  | 5/8"  | SBE117  |
| SE2010DS  | 2"     | 1"     | 1/2"  | 3/4"  | SBE117  |
| SE2011DS  | 2-1/4" | 1-1/8" | 1/2"  | 7/8"  | SBE117  |

*Other sizes available. Select a bit from our Round-Over Section and add DS after the number.*

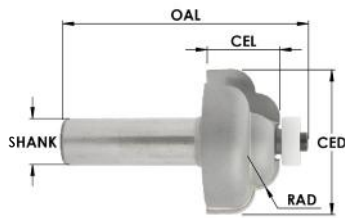
## ROUNDROVER UNDERMOUNT



| PART # | CED    | CEL    | SHANK | OAL    | RAD   | ANGLE | BEARING   |
|--------|--------|--------|-------|--------|-------|-------|-----------|
| SE2930 | 2-1/4" | 1"     | 1/2"  | 3-1/4" | 3/4"  | 15°   | SBESS-New |
| SE2931 | 2-1/8" | 1"     | 1/2"  | 3"     | 1/2"  | 18°   | SBESS-New |
| SE2932 | 2-1/4" | 1-1/4" | 1/2"  | 3-1/4" | 9/16" | 18°   | SBESS-New |
| SE2933 | 2"     | 11/16" | 1/2"  | 2-1/2" | 3/8"  | 17°   | SBESS-New |
| SE2934 | 2-1/4" | 11/16" | 1/2"  | 2-1/2" | 1/2"  | 14°   | SBESS-New |
| SE2935 | 2-1/8" | 1"     | 1/2"  | 2-7/8" | 1/2"  | 17°   | SBESS-New |

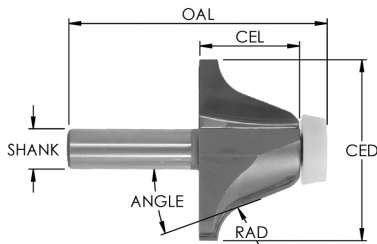


## DOUBLE COVE BIT



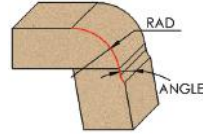
| PART # | CED    | CEL  | SHANK | OAL    | RAD  |
|--------|--------|------|-------|--------|------|
| SE2968 | 1-1/2" | 3/4" | 1/2"  | 2-1/2" | 1/4" |

## ROMAN OGEE UNDERMOUNT

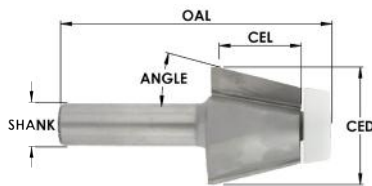


| PART # | CED    | CEL    | SHANK | OAL    | RAD   | ANGLE  | MATERIAL |
|--------|--------|--------|-------|--------|-------|--------|----------|
| SE2927 | 2-1/8" | 1"     | 1/2"  | 2-7/8" | 1/2"  | 15 DEG | 1/2"     |
| SE2928 | 2-3/8" | 1-1/4" | 1/2"  | 3-1/8" | 9/16" | 15 DEG | 3/4"     |

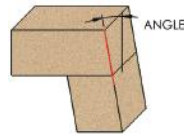
Uses SBESS-New Bearing



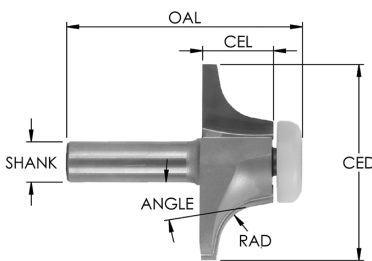
## BEVEL UNDERMOUNT



| PART # | CED     | CEL | SHANK | OAL    | ANGLE | THICK     | BEARING   |
|--------|---------|-----|-------|--------|-------|-----------|-----------|
| SE2940 | 1-1/4"  | 1"  | 1/2"  | 3-1/8" | 10°   | 1/2"-3/4" | SBESS-New |
| SE2942 | 1-1/4"  | 1"  | 1/2"  | 3-1/8" | 12°   | 1/2"-3/4" | SBESS-New |
| SE2944 | 1-7/16" | 1"  | 1/2"  | 3-1/8" | 15°   | 1/2"-3/4" | SBESS-New |

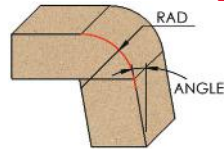


## WILSONART® BOWL



| PART # | CED    | CEL    | SHANK | R1    | R2     | THICK       | DEGREE | DESC      |
|--------|--------|--------|-------|-------|--------|-------------|--------|-----------|
| SE2970 | 1 1/2" | 1-1/4" | 1/2"  | —     | —      | 1/2"-1-1/4" | 12°    | Bevel     |
| SE2972 | 2 3/8" | 7/8"   | 1/2"  | 9/16" | —      | 1/2"-3/4"   | 12°    | Roundover |
| SE2974 | 2 1/4" | 15/16" | 1/2"  | 5/32" | 13/64" | 1/2"-3/4"   | 13°    | Ogee      |

Uses SBE149 Bearing AND SIWB-Screw

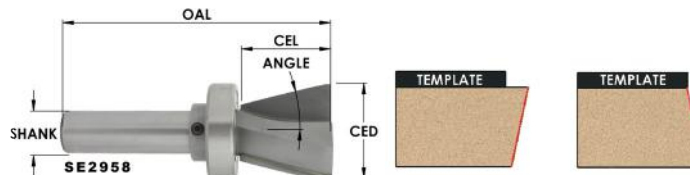


## SOLID SURFACE REPAIR BITS

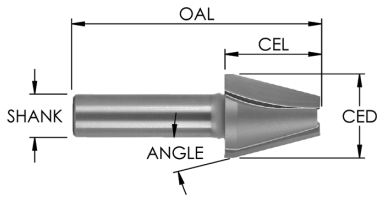


| PART # | CED    | CEL | SHANK | OAL     | ANGLE  | BEARING |
|--------|--------|-----|-------|---------|--------|---------|
| SE2950 | 1-1/8" | 1"  | 1/2"  | 3-5/16" | 14 DEG | SBE150  |
| SE2958 | 1-1/8" | 1"  | 1/2"  | 3-5/16" | 14 DEG | SBE150  |

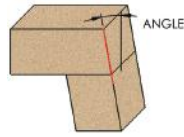
Uses collar SELC-12



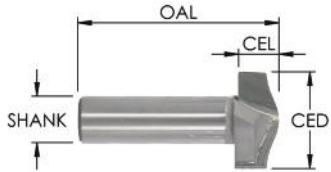
## BEVEL BIT



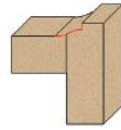
| PART # | CED | CEL    | SHANK | OAL    | ANGLE  |
|--------|-----|--------|-------|--------|--------|
| SE2956 | 1"  | 1-1/8" | 1/2"  | 2-3/4" | 15 DEG |



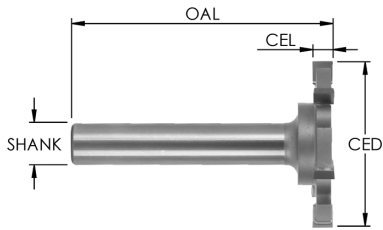
## VERTICAL NO DRIP



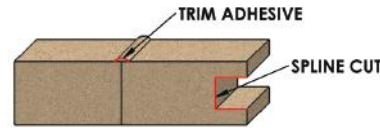
| PART # | CED  | CEL  | SHANK | OAL    |
|--------|------|------|-------|--------|
| SE2952 | 3/4" | 3/8" | 1/4"  | 1-5/8" |
| SE2954 | 1"   | 3/8" | 1/2"  | 2-1/8" |



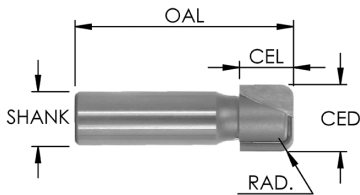
## COUNTERTOP SURFACE PLANER



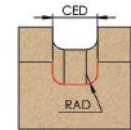
| PART # | CED     | CEL  | SHANK | FLUTES |
|--------|---------|------|-------|--------|
| SE2986 | 2-1/16" | 1/8" | 1/2"  | 6      |
| SE2988 | 2-1/16" | 1/4" | 1/2"  | 6      |
| SE2990 | 2"      | 3/8" | 1/2"  | 6      |



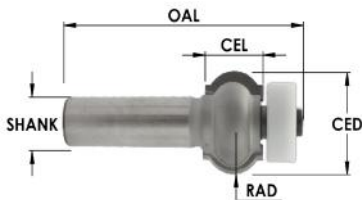
## DRAINBOARD BITS



| PART # | CED  | CEL  | SHANK | OAL | RAD  |
|--------|------|------|-------|-----|------|
| SE2921 | 1/2" | 1/2" | 1/2"  | 2"  | 1/8" |
| SE2922 | 5/8" | 1/2" | 1/2"  | 2"  | 1/8" |
| SE2923 | 3/4" | 1/2" | 1/2"  | 2"  | 1/8" |
| SE2924 | 1"   | 1/2" | 1/2"  | 2"  | 1/8" |

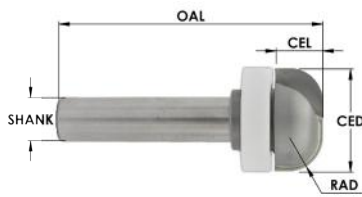


## FACE COVE BITS



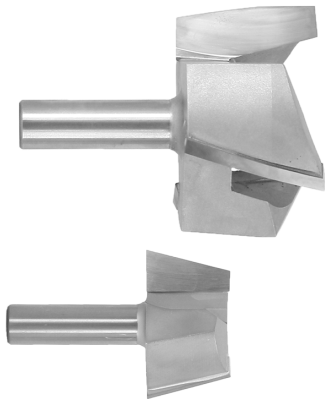
| PART # | CED | CEL  | SHANK | OAL    | RAD   |
|--------|-----|------|-------|--------|-------|
| SE2960 | 1"  | 5/8" | 1/2"  | 2-3/4" | 5/16" |

## BACKSPLASH COVE



| PART # | CED    | CEL  | SHANK | OAL    | RAD  |
|--------|--------|------|-------|--------|------|
| SE2964 | 1-1/8" | 1/2" | 1/2"  | 2-7/8" | 3/8" |

## SOLID SURFACE REPAIR BITS



| PART # | DESCRIPTION          |
|--------|----------------------|
| SE2991 | 2 PIECE SET          |
| SE2992 | 3 FLUTE PLUG CUTTER  |
| SE2994 | 2 FLUTE BEVEL CUTTER |

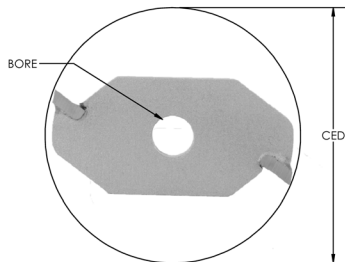
*If you have ever cut a hole in a piece of solid surface in the wrong place, then you need this set. The bevel bit cuts a taper in the hole that was cut wrong and needs to be repaired. The 3 flute plug cutter cuts a taper that will match the taper from the bevel cutter. Once you have finished you will have a virtually undetectable repair of the solid surface. Effective for repairs up to 1-3/4" in diameter.*

*Note: Hot glue fill piece down to avoid movement.*



## SLOT CUTTERS AND SAW BLADES

### 2 WING SLOT CUTTER



| PART #  | CED    | KERF (Decimal) | KERF (Fraction) | BORE  |
|---------|--------|----------------|-----------------|-------|
| SL062-2 | 1-7/8" | .062"          | 1/16"           | 5/16" |
| SL078-2 | 1-7/8" | .078"          | 5/64"           | 5/16" |
| SL093-2 | 1-7/8" | .093"          | 3/32"           | 5/16" |
| SL125-2 | 1-7/8" | .125"          | 1/8"            | 5/16" |
| SL157-2 | 1-7/8" | .156"          | 5/32"           | 5/16" |
| SL187-2 | 1-7/8" | .187"          | 3/16"           | 5/16" |
| SL250-2 | 1-7/8" | .250"          | 1/4"            | 5/16" |

*Special sizes available, call for a quote.*

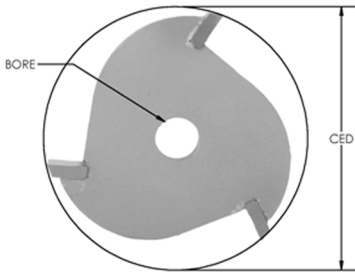
### 2 WING SLOT CUTTER - ASSEMBLY



| PART #<br>1/4" SHANK | PART #<br>1/2" SHANK | CED    | KERF (Decimal) | KERF (Fraction) | BORE  | OAL    |
|----------------------|----------------------|--------|----------------|-----------------|-------|--------|
| SL062-2A2            | SL062-2A5            | 1-7/8" | .062"          | 1/16"           | 5/16" | 2-3/8" |
| SL078-2A2            | SL078-2A5            | 1-7/8" | .078"          | 5/64"           | 5/16" | 2-3/8" |
| SL093-2A2            | SL093-2A5            | 1-7/8" | .093"          | 3/32"           | 5/16" | 2-3/8" |
| SL125-2A2            | SL125-2A5            | 1-7/8" | .125"          | 1/8"            | 5/16" | 2-3/8" |
| SL157-2A2            | SL157-2A5            | 1-7/8" | .156"          | 5/32"           | 5/16" | 2-3/8" |
| SL187-2A2            | SL187-2A5            | 1-7/8" | .187"          | 3/16"           | 5/16" | 2-3/8" |
| SL250-2A2            | SL250-2A5            | 1-7/8" | .250"          | 1/4"            | 5/16" | 2-3/8" |

*Assembly comes complete with arbor & bearing SBE125.*

### 3 WING SLOT CUTTER



| PART #  | CED    | KERF<br>(Decimal) | KERF<br>(Fraction) | BORE  |
|---------|--------|-------------------|--------------------|-------|
| SL050-3 | 1-7/8" | .050"             | n/a                | 5/16" |
| SL055-3 | 1-7/8" | .055"             | n/a                | 5/16" |
| SL062-3 | 1-7/8" | .062"             | 1/16"              | 5/16" |
| SL070-3 | 1-7/8" | .070"             | n/a                | 5/16" |
| SL078-3 | 1-7/8" | .078"             | 5/64"              | 5/16" |
| SL080-3 | 1-7/8" | .080"             | n/a                | 5/16" |
| SL093-3 | 1-7/8" | .093"             | 3/32"              | 5/16" |
| SL100-3 | 1-7/8" | .100"             | n/a                | 5/16" |
| SL106-3 | 1-7/8" | .106"             | n/a                | 5/16" |
| SL110-3 | 1-7/8" | .110"             | 7/64"              | 5/16" |
| SL115-3 | 1-7/8" | .115"             | n/a                | 5/16" |
| SL125-3 | 1-7/8" | .125"             | 1/8"               | 5/16" |
| SL140-3 | 1-7/8" | .140"             | 9/64"              | 5/16" |
| SL157-3 | 1-7/8" | .156"             | 5/32"              | 5/16" |
| SL187-3 | 1-7/8" | .187"             | 3/16"              | 5/16" |
| SL218-3 | 1-7/8" | .218"             | 7/32"              | 5/16" |
| SL250-3 | 1-7/8" | .250"             | 1/4"               | 5/16" |
| SL281-3 | 1-7/8" | .281"             | 9/32"              | 5/16" |

*Special sizes available, call for a quote.*

### 3 WING SLOT CUTTER - ASSEMBLY

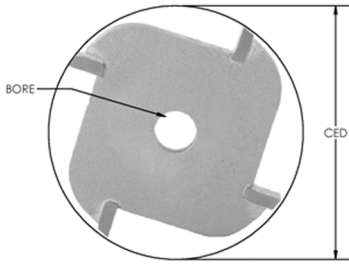


| PART #<br>1/4" SHANK | PART #<br>1/2" SHANK | CED    | KERF<br>(Decimal) | KERF<br>(Fraction) | BORE  | OAL    |
|----------------------|----------------------|--------|-------------------|--------------------|-------|--------|
| SL050-3A2            | SL050-3A5            | 1-7/8" | .050"             | n/a                | 5/16" | 2-3/8" |
| SL055-3A2            | SL055-3A5            | 1-7/8" | .055"             | n/a                | 5/16" | 2-3/8" |
| SL062-3A2            | SL062-3A5            | 1-7/8" | .062"             | 1/16"              | 5/16" | 2-3/8" |
| SL070-3A2            | SL070-3A5            | 1-7/8" | .070"             | n/a                | 5/16" | 2-3/8" |
| SL078-3A2            | SL078-3A5            | 1-7/8" | .078"             | 5/64"              | 5/16" | 2-3/8" |
| SL080-3A2            | SL080-3A5            | 1-7/8" | .080"             | n/a                | 5/16" | 2-3/8" |
| SL093-3A2            | SL093-3A5            | 1-7/8" | .093"             | 3/32"              | 5/16" | 2-3/8" |
| SL100-3A2            | SL100-3A5            | 1-7/8" | .100"             | n/a                | 5/16" | 2-3/8" |
| SL106-3A2            | SL106-3A5            | 1-7/8" | .106"             | n/a                | 5/16" | 2-3/8" |
| SL110-3A2            | SL110-3A5            | 1-7/8" | .110"             | 7/64"              | 5/16" | 2-3/8" |
| SL115-3A2            | SL115-3A5            | 1-7/8" | .115"             | n/a                | 5/16" | 2-3/8" |
| SL125-3A2            | SL125-3A5            | 1-7/8" | .125"             | 1/8"               | 5/16" | 2-3/8" |
| SL140-3A2            | SL140-3A5            | 1-7/8" | .140"             | 9/64"              | 5/16" | 2-3/8" |
| SL157-3A2            | SL157-3A5            | 1-7/8" | .156"             | 5/32"              | 5/16" | 2-3/8" |
| SL187-3A2            | SL187-3A5            | 1-7/8" | .187"             | 3/16"              | 5/16" | 2-3/8" |
| SL218-3A2            | SL218-3A5            | 1-7/8" | .218"             | 7/32"              | 5/16" | 2-3/8" |
| SL250-3A2            | SL250-3A5            | 1-7/8" | .250"             | 1/4"               | 5/16" | 2-3/8" |
| SL281-3A2            | SL281-3A5            | 1-7/8" | .281"             | 9/32"              | 5/16" | 2-3/8" |

*Assembly comes complete with arbor & bearing SBE125.*



## 4 WING SLOT CUTTER



| PART #  | CED    | KERF  | KERF  | BORE  |
|---------|--------|-------|-------|-------|
| SL062-4 | 1-7/8" | .062" | 1/16" | 5/16" |
| SL070-4 | 1-7/8" | .070" | n/a   | 5/16" |
| SL080-4 | 1-7/8" | .080" | n/a   | 5/16" |
| SL093-4 | 1-7/8" | .093" | 3/32" | 5/16" |
| SL125-4 | 1-7/8" | .125" | 1/8"  | 5/16" |
| SL157-4 | 1-7/8" | .156" | 5/32" | 5/16" |
| SL187-4 | 1-7/8" | .187" | 3/16" | 5/16" |
| SL250-4 | 1-7/8" | .250" | 1/4"  | 5/16" |
| SL281-4 | 1-7/8" | .281" | 9/32" | 5/16" |

*Special sizes available, call for a quote.*

## 4 WING SLOT CUTTER - ASSEMBLY



| PART #<br>1/4" SHANK | PART #<br>1/2" SHANK | CED    | KERF<br>(Decimal) | KERF<br>(Fraction) | BORE  | OAL    |
|----------------------|----------------------|--------|-------------------|--------------------|-------|--------|
| SL062-4A2            | SL062-4A5            | 1-7/8" | .062"             | 1/16"              | 5/16" | 2-3/8" |
| SL070-4A2            | SL070-4A5            | 1-7/8" | .070"             | n/a                | 5/16" | 2-3/8" |
| SL080-4A2            | SL080-4A5            | 1-7/8" | .080"             | n/a                | 5/16" | 2-3/8" |
| SL093-4A2            | SL093-4A5            | 1-7/8" | .093"             | 3/32"              | 5/16" | 2-3/8" |
| SL125-4A2            | SL125-4A5            | 1-7/8" | .125"             | 1/8"               | 5/16" | 2-3/8" |
| SL157-4A2            | SL157-4A5            | 1-7/8" | .156"             | 5/32"              | 5/16" | 2-3/8" |
| SL187-4A2            | SL187-4A5            | 1-7/8" | .187"             | 3/16"              | 5/16" | 2-3/8" |
| SL250-4A2            | SL250-4A5            | 1-7/8" | .250"             | 1/4"               | 5/16" | 2-3/8" |
| SL281-4A2            | SL281-4A5            | 1-7/8" | .281"             | 9/32"              | 5/16" | 2-3/8" |

*Assembly comes complete with arbor & bearing SBE125.*

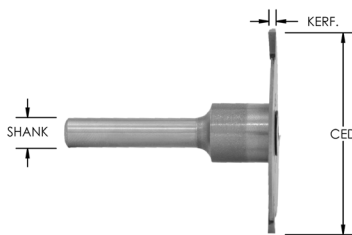
## 3 WING COUNTERSINK SLOT CUTTER\*



| PART #   | CED    | KERF<br>(Decimal) | KERF<br>(Fraction) | BORE  |
|----------|--------|-------------------|--------------------|-------|
| FBL062-3 | 1-7/8" | .062              | 1/16"              | 5/16" |
| FBL093-3 | 1-7/8" | .093              | 3/32"              | 5/16" |
| FBL125-3 | 1-7/8" | .125              | 1/8"               | 5/16" |
| FBL157-3 | 1-7/8" | .157              | 5/32"              | 5/16" |
| FBL187-3 | 1-7/8" | .187              | 3/16"              | 5/16" |
| FBL250-3 | 1-7/8" | .250              | 1/4"               | 5/16" |

*\*Flush Bottom*

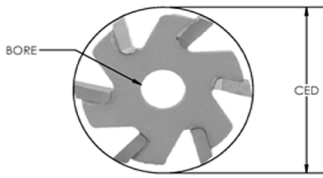
## 3 WING COUNTERSINK SLOT CUTTER - ASSEMBLY\*



| PART #<br>1/4" SHANK | PART #<br>1/2" SHANK | CED    | KERF<br>(Decimal) | KERF<br>(Fraction) | OAL    |
|----------------------|----------------------|--------|-------------------|--------------------|--------|
| FBL062-3A2           | FBL062-3A5           | 1-7/8" | .062              | 1/16"              | 1-1/2" |
| FBL093-3A2           | FBL093-3A5           | 1-7/8" | .093              | 3/32"              | 1-1/2" |
| FBL125-3A2           | FBL125-3A5           | 1-7/8" | .125              | 1/8"               | 1-1/2" |
| FBL157-3A2           | FBL157-3A5           | 1-7/8" | .157              | 5/32"              | 1-1/2" |
| FBL187-3A2           | FBL187-3A5           | 1-7/8" | .187              | 3/16"              | 1-1/2" |
| FBL250-3A2           | FBL250-3A5           | 1-7/8" | .250              | 1/4"               | 1-1/2" |

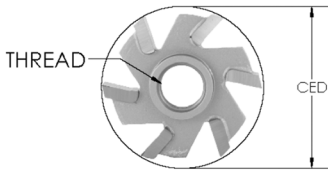
*\*Flush Bottom Assembly  
18,000 MAX RPM*

## DRAWER SLOT CUTTERS



| PART #   | CED    | KERF (Decimal) | KERF (Fraction) | BORE  | WINGS |
|----------|--------|----------------|-----------------|-------|-------|
| SDR187-4 | 1-1/4" | .187"          | 3/16"           | 5/16" | 4     |
| SDR250-4 | 1-1/4" | .250"          | 1/4"            | 5/16" | 4     |
| SDR187-6 | 1-1/4" | .187"          | 3/16"           | 5/16" | 6     |
| SDR250-6 | 1-1/4" | .250"          | 1/4"            | 5/16" | 6     |

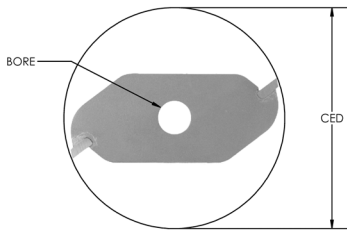
## JEMCO SLOT CUTTERS



| PART #   | CED    | KERF (Decimal) | KERF (Fraction) | BORE  | WINGS | THREAD  |
|----------|--------|----------------|-----------------|-------|-------|---------|
| SJM187-4 | 1-1/4" | .187"          | 3/16"           | 5/16" | 4     | 3/8"-24 |
| SJM250-4 | 1-1/4" | .250"          | 1/4"            | 5/16" | 4     | 3/8"-24 |
| SJM187-6 | 1-1/4" | .187"          | 3/16"           | 5/16" | 6     | 3/8"-24 |
| SJM250-6 | 1-1/4" | .250"          | 1/4"            | 5/16" | 6     | 3/8"-24 |
| SJM281-6 | 1-1/4" | .281"          | 9/32"           | 5/16" | 6     | 3/8"-24 |

*Special sizes available, call for a quote.*

## TOPMASTER SLOT CUTTER - 2 WING

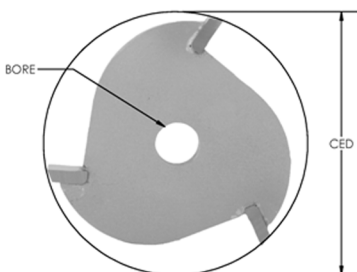


| Part#   | CED    | KERF (Decimal) | KERF (Fraction) | BORE |
|---------|--------|----------------|-----------------|------|
| STOP060 | 2-1/2" | .060"          | n/a             | 3/8" |
| STOP062 | 2-1/2" | .062"          | 1/16"           | 3/8" |
| STOP070 | 2-1/2" | .070"          | n/a             | 3/8" |
| STOP080 | 2-1/2" | .080"          | n/a             | 3/8" |
| STOP085 | 2-1/2" | .085"          | n/a             | 3/8" |
| STOP090 | 2-1/2" | .090"          | n/a             | 3/8" |
| STOP093 | 2-1/2" | .093"          | 3/32"           | 3/8" |
| STOP095 | 2-1/2" | .095"          | n/a             | 3/8" |
| STOP100 | 2-1/2" | .100"          | n/a             | 3/8" |
| STOP105 | 2-1/2" | .105"          | n/a             | 3/8" |
| STOP110 | 2-1/2" | .110"          | 7/64"           | 3/8" |
| STOP115 | 2-1/2" | .115"          | n/a             | 3/8" |
| STOP125 | 2-1/2" | .125"          | 1/8"            | 3/8" |
| STOP130 | 2-1/2" | .130"          | n/a             | 3/8" |
| STOP140 | 2-1/2" | .140"          | 9/64"           | 3/8" |
| STOP150 | 2-1/2" | .150"          | n/a             | 3/8" |
| STOP160 | 2-1/2" | .160"          | n/a             | 3/8" |
| STOP170 | 2-1/2" | .170"          | 11/64"          | 3/8" |
| STOP180 | 2-1/2" | .180"          | n/a             | 3/8" |

*Arbor SAR500-38*

*Arbor for Topmaster Cutters*

## TOPMASTER SLOT CUTTER - 3 WING



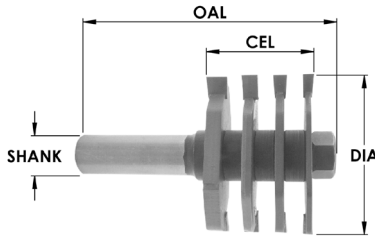
| PART #    | CED    | KERF (Decimal) | KERF (Fraction) | BORE |
|-----------|--------|----------------|-----------------|------|
| STOP093-3 | 2-1/2" | .093"          | 3/32"           | 3/8" |
| STOP115-3 | 2-1/2" | .115"          | n/a             | 3/8" |
| STOP125-3 | 2-1/2" | .125"          | 1/8"            | 3/8" |

*Special sizes available, call for a quote.*

## ADJUSTABLE SLOTTING CUTTER ASSEMBLY

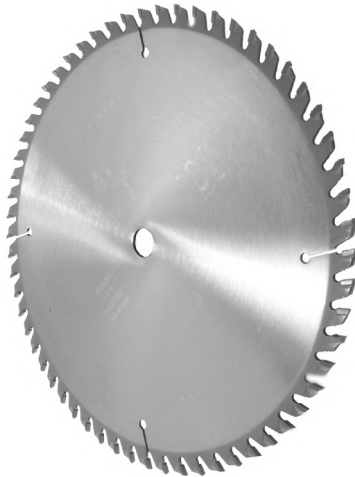
| PART # | CED    | CEL         | SHANK | OAL |
|--------|--------|-------------|-------|-----|
| SLASCA | 1-7/8" | 1/8"-23/32" | 1/2"  |     |

To make various width cuts by combining slotters to achieve desired width.



| Replacement Parts | DESCRIPTION          |
|-------------------|----------------------|
| SL125-2           | 1/8" 2 Wing Slotter  |
| SL157-2           | 5/32" 2 Wing Slotter |
| SL187-2           | 3/16" 2 Wing Slotter |
| SL250-2           | 1/4" 2 Wing Slotter  |
| SAR500-1716       | Arbor                |
| SBE125            | Bearing              |
| SESK-012          | Shim Kit             |

## CARBIDE-TIPPED SAW BLADES



| PART #      | CED    | TEETH | KERF (Fraction) | BORE | GRIND |
|-------------|--------|-------|-----------------|------|-------|
| SE972524    | 7 1/4" | 24    | 0.090           | 5/8" | ATB   |
| SE9840ATB   | 8 1/4" | 40    | 0.087           | 5/8" | ATB   |
| SE9860ATB   | 8 1/4" | 60    | 0.087           | 5/8" | ATB   |
| SE9128ATB   | 10"    | 28    | 0.118           | 5/8" | ATB   |
| SE9140ATB   | 10"    | 40    | 0.118           | 5/8" | ATB   |
| SE9150      | 10"    | 50    | 0.118           | 5/8" | Combo |
| SE9160ATB   | 10"    | 60    | 0.118           | 5/8" | ATB   |
| SE9160TCG   | 10"    | 60    | 0.118           | 5/8" | TCG   |
| SE9180ATB   | 10"    | 80    | 0.118           | 5/8" | ATB   |
| SE9240ATB   | 12"    | 40    | 0.118           | 1"   | ATB   |
| SE9260ATB   | 12"    | 60    | 0.118           | 1"   | ATB   |
| SE9260TCGN* | 12"    | 60    | 0.118           | 1"   | TCG   |
| SE9280ATB   | 12"    | 80    | 0.118           | 1"   | ATB   |
| SE9296ATB   | 12"    | 96    | 0.118           | 1"   | ATB   |

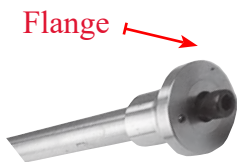
\*Negative Hook

## CARBIDE TIPPED PLASTIC SAW (TRIPLE CHIP GRIND)



| PART #       | CED    | WINGS | HOOK | KERF  | BORE | RPM    | FEED       |
|--------------|--------|-------|------|-------|------|--------|------------|
| SPS2-16-095  | 2"     | 16    | 0°   | 0.095 | 5/8" | 18,000 | 125 to 175 |
| SPS25-16-095 | 2-1/2" | 16    | 0°   | 0.095 | 5/8" | 16,000 | 125 to 175 |
| SPS3-16-095  | 3"     | 16    | 0°   | 0.095 | 5/8" | 14,000 | 125 to 175 |
| SPS35-16-095 | 3-1/2" | 16    | 0°   | 0.095 | 5/8" | 12,000 | 125 to 175 |

## ARBORS FOR PLASTIC SAWS

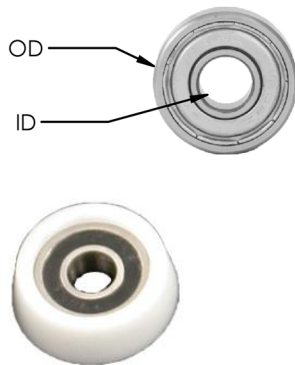


SPSARBOR-12

| PART #          | FLANGE DIAMETER | SHANK | OAL    |
|-----------------|-----------------|-------|--------|
| SPSARBOR-12     | 1-1/4"          | 1/2"  | 3-1/4" |
| SPSARBOR-12-412 | 1-1/4"          | 1/2"  | 4-1/2" |
| SPSARBOR-58     | 1-1/4"          | 5/8"  | 3-1/4" |

## ROUTER BIT ACCESSORIES

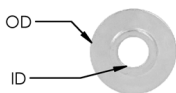
### BEARINGS



| PART #     | O.D.   | I.D.  | DESCRIPTION             |
|------------|--------|-------|-------------------------|
| SBE100     | 1/4"   | 1/8"  |                         |
| SBE105     | 3/8"   | 1/8"  |                         |
| SBE106     | 3/8"   | 1/4"  |                         |
| SBE110     | 3/8"   | 3/16" |                         |
| SBE193     | .490"  | 1/4"  | (For sharpened tools)   |
| SBE107     | 1/2"   | 1/8"  |                         |
| SBE145     | 1/2"   | 1/4"  |                         |
| SBE115     | 1/2"   | 3/16" |                         |
| SBE115-BK  | 1/2"   | 3/16" | Bulk Packaged           |
| SBE117     | 1/2"   | 3/16" | (Delrin Sleeve Bearing) |
| SBE119     | 3/4"   | 6mm   |                         |
| SBE135     | 5/8"   | 3/16" |                         |
| SBE130     | 5/8"   | 1/4"  |                         |
| SBE138     | 11/16" | 3/16" |                         |
| SBE160     | 11/16" | 1/4"  |                         |
| SBE188     | .365"  | 1/8"  | (For sharpened tools)   |
| SBE195     | .740"  | 3/16" | (For sharpened tools)   |
| SBE197     | .740"  | 1/4"  | (For sharpened tools)   |
| SBE140     | 3/4"   | 3/16" |                         |
| SBE120     | 3/4"   | 1/4"  |                         |
| SBE121     | 3/4"   | 1/4"  | (Delrin Sleeve Bearing) |
| SBE155     | 3/4"   | 1/2"  |                         |
| SBE122     | 13/16" | 3/16" |                         |
| SBE123     | 7/8"   | 3/16" |                         |
| SBE124     | 7/8"   | 1/4"  |                         |
| SBE125     | 7/8"   | 5/16" |                         |
| SBE127     | 7/8"   | 3/8"  |                         |
| SBE129     | 7/8"   | 1/2"  |                         |
| SBE128     | 22mm   | 8mm   |                         |
| SBE147     | 1"     | 3/16" |                         |
| SBE149     | 1"     | 1/4"  | DELTRIN BEARING         |
| SBE150     | 1 1/8" | 1/2"  |                         |
| SBE152     | 1 1/4" | 1/2"  |                         |
| SBE153     | 1 3/8" | 1/2"  |                         |
| SBE154     | 1-1/2" | 1/2"  |                         |
| SBESS      | 3/4"   | 1/4"  |                         |
| SBESS-New* | 7/8"   | 1/4"  | 10 DEG DELRIN BEARING   |
| SBE115-ES  | 1/2"   | 3/16" | EUROTRIM BEARING        |
| SBE140-ES  | 3/4"   | 3/16" | EUROTRIM BEARING        |

\*Used on Solid Surface bits requiring angle bearing.

### DUST SHIELDS



| PART # | O.D. | I.D.  | DESCRIPTION | PKG QTY |
|--------|------|-------|-------------|---------|
| SDS105 | 3/8" | 1/8"  | For SBE105  | 10 pcs  |
| SDS115 | 1/2" | 3/16" | For SBE115  | 10 pcs  |
| SDS120 | 3/4" | 1/4"  | For SBE120  | 10 pcs  |

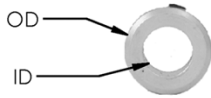
To reduce the effect of dust and glues on bearings.

## RETAINING RINGS



| PART # | DIA  | PKG QTY |
|--------|------|---------|
| SE-E12 | 1/2" | 10 pcs  |
| SE-E25 | 1/4" | 10 pcs  |

## BEARING LOCKING COLLARS



| PART #     | O.D. | I.D.   | DESCRIPTION     |
|------------|------|--------|-----------------|
| SELC-18    | 1/8" | 15/64" |                 |
| SELC-14    | 1/4" | 7/16"  |                 |
| SELC-12    | 1/2" | 11/16" |                 |
| SELC-SCREW |      |        | 10 pcs per pack |
| SEHK-116   |      |        | Hex Key Wrench  |

## BEARING KITS



| PART # | DESCRIPTION        |
|--------|--------------------|
| SBE200 | BEARING KIT • 5pcs |

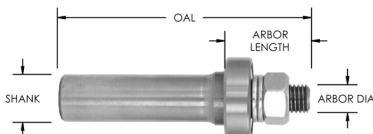
1 pc SBE110  
1 pc SBE115  
1 pc SBE135  
1 pc SBE140  
Hex Key Wrench



| PART # | DESCRIPTION                     |
|--------|---------------------------------|
| SBK022 | SHARPENER'S BEARING KIT (22pcs) |

5 pc SBE115      3 pc SBE110  
1 pc SBE120      1 pc SBE155  
1 pc SBE190      1 pc SBE193  
1 pc SBE195      1 pc SBE197  
1 pc SELC-14      5 pcs SE540-14  
1 pc SELC-12      1 pc SEHK-332

## ARBORS FOR SLOT CUTTERS



THE ABOVE PICTURE IS WITH THE ADDED BEARING. (SAR500A)



| PART #      | SHANK DIAMETER | ARBOR DIAMETER | ARBOR LENGTH | OAL                       |
|-------------|----------------|----------------|--------------|---------------------------|
| SAR250      | 1/4"           | 5/16"          | 7/8"         | 2-3/8"                    |
| SAR375      | 3/8"           | 5/16"          | 7/8"         | 2-5/8"                    |
| SAR500      | 1/2"           | 5/16"          | 7/8"         | 2-3/8"                    |
| SAR500-1716 | 1/2"           | 5/16"          | 1 7/16"      | 3-1/16"<br>(T&G Assembly) |

Add A to the end of the part number for arbor with bearing SBE125 (ex. SAR250A).



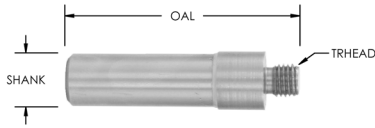
## ARBORS FOR COUNTERSINK SLOT CUTTERS (FLUSH BOTTOM)



| PART #      | SHANK | OAL    |
|-------------|-------|--------|
| SARF250     | 1/4"  | 1-1/2" |
| SARF250-XL3 | 1/4"  | 3"     |
| SARF500     | 1/2"  | 1-1/2" |
| SARF500-XL3 | 1/2"  | 3"     |

*Screws for arbors - SARF1032-516, SARF1032-12, SARF1032-38*

## Arbors For JEMCO® SLOT CUTTERS



| PART #   | SHANK | OAL | THREAD  |
|----------|-------|-----|---------|
| SARJM250 | 1/4"  | 2"  | 3/8"-24 |
| SARJM375 | 3/8"  | 2"  | 3/8"-24 |
| SARJM500 | 1/2"  | 2"  | 3/8"-24 |

## SCREWS



| PART #    | THREAD SIZE | THREAD LENGTH | PKG QTY |
|-----------|-------------|---------------|---------|
| SE348-14  | 3-48        | 1/4"          | 10 PCS  |
| SE348-38  | 3-48        | 3/8"          | 10 PCS  |
| SE540-14  | 5-40        | 1/4"          | 10 PCS  |
| SE540-38  | 5-40        | 3/8"          | 10 PCS  |
| SE1024-38 | 10-24       | 3/8"          | 10 PCS  |
| SE1032-38 | 10-32       | 3/8"          | 10 PCS  |

## SHIM/SPACER KIT (12 PIECE)



| PART #   | DESCRIPTION  |
|----------|--|
| SESK-012 | For any assembly using 5/16" arbor that may need adjustment.<br>(All spacers are 5/16" ID x 5/8" O.D. Kit includes 3 each of the following thicknesses: 6mm, 1mm, .5mm, and .1mm.) |

## HEX KEY WRENCHES



| PART #   | SIZE  | DESCRIPTION                   |
|----------|-------|-------------------------------|
| SEHK-116 | 1/16" | For Bearing Lock Collars      |
| SEHK-564 | 5/64" | 1/8"ID Bearings (3-48) Screw  |
| SEHK-332 | 3/32" | 3/16"ID Bearings (5-40) Screw |
| SEHK-532 | 5/32" | 1/4"ID Bearings (10-32) Screw |

## STEEL ROUTER COLLETS



| PART # | I.D.  | O.D. | OAL    |
|--------|-------|------|--------|
| SE6390 | 1/8"  | 1/2" | 1-1/4" |
| SE6395 | 3/16" | 1/2" | 1-1/4" |
| SE6400 | 1/4"  | 1/2" | 1-1/4" |
| SE6401 | 5/16" | 1/2" | 1-1/4" |
| SE6402 | 3/8"  | 1/2" | 1-1/4" |
| SE6403 | 10mm  | 1/2" | 1-1/4" |

*Other sizes available, call for quote.*

## SOLID BRASS INLAY KIT



SE9500

| PART # | DESCRIPTION                             |
|--------|---|
| SE9500 | Inlay Kit w/ 1/8" Downcut Spiral SRD203 |

*Will work on any router that will accept a 1-3/8" diameter bushing.  
(Porter-Cable® and Black & Decker®)*

## BRASS TEMPLATE GUIDE KIT



| PART #    | I.D.                       | O.D.   | BARREL LENGTH | USAGE             |
|-----------|----------------------------|--------|---------------|-------------------|
| SE9700    | KIT INCLUDES THE FOLLOWING |        |               |                   |
| SE976575  | 21/32"                     | 3/4"   | 3/16"         | Lock Face Routing |
| SE973443  | 11/32"                     | 7/16"  | 3/16"         | Dovetailing 1/2"  |
| SE974050  | 13/32"                     | 1/2"   | 3/16"         | General           |
| SE972837  | 9/32"                      | 3/8"   | 3/16"         | General           |
| SE976279  | 5/8"                       | 51/64" | 3/16"         | Hinge             |
| SE975362  | 17/32"                     | 5/8"   | 3/16"         | Stanley Template  |
| SE972531  | 1/4"                       | 5/16"  | 3/16"         | Dovetailing 1/4"  |
| SE971125N | LOCKING NUT                |        |               |                   |

*Guides and Nut can be ordered separately*

## SQUARE CORNER CHISEL



| PART # | RADIUS |
|--------|--------|
| SE9600 | 1/4"   |

## CARBON STEEL ROUTER BLANKS\*



| PART #     | CED    | CEL    | SHANK | OAL |
|------------|--------|--------|-------|-----|
| SECSRB-34  | 3/4"   | 1-1/2" | 1/2"  | 3"  |
| SECSRB-1   | 1"     | 1-1/2" | 1/2"  | 3"  |
| SECSRB-114 | 1-1/4" | 1-1/2" | 1/2"  | 3"  |
| SECSRB-112 | 1-1/2" | 1-1/2" | 1/2"  | 3"  |
| SECSRB-134 | 1-3/4" | 1-1/2" | 1/2"  | 3"  |
| SECSRB-2   | 2"     | 1-1/2" | 1/2"  | 3"  |
| SECSRB-214 | 2-1/4" | 1-1/2" | 1/2"  | 3"  |
| SECSRB-212 | 2-1/2" | 1-1/2" | 1/2"  | 3"  |

*ALL BLANKS ARE 1/8" UNDERSIZE*

*\*For Carbide Tipping*

## HIGH SPEED STEEL ROUTER BLANKS FOR FINISHED GROUND



| PART #      | CED    | CEL    | SHANK | OAL |
|-------------|--------|--------|-------|-----|
| SEHSSRB-34  | 3/4"   | 1-1/2" | 1/2"  | 3"  |
| SEHSSRB-1   | 1"     | 1-1/2" | 1/2"  | 3"  |
| SEHSSRB-114 | 1-1/4" | 1-1/2" | 1/2"  | 3"  |
| SEHSSRB-112 | 1-1/2" | 1-1/2" | 1/2"  | 3"  |
| SEHSSRB-134 | 1-3/4" | 1-1/2" | 1/2"  | 3"  |
| SEHSSRB-2   | 2"     | 1-1/2" | 1/2"  | 3"  |
| SEHSSRB-214 | 2-1/4" | 1-1/2" | 1/2"  | 3"  |
| SEHSSRB-212 | 2-1/2" | 1-1/2" | 1/2"  | 3"  |
| SEHSSRB-234 | 2-3/4" | 1-1/2" | 1/2"  | 3"  |
| SEHSSRB-3   | 3"     | 1-1/2" | 1/2"  | 3"  |

## HOLLOW MORTISING CHISELS



| PART #    | CED  | SHOULDER DIAMETER | OAL    |
|-----------|------|-------------------|--------|
| SEHMC250  | 1/4" | 3/4"              | 5-1/4" |
| SEHMC375  | 3/8" | 3/4"              | 5-1/2" |
| SEHMC500  | 1/2" | 3/4"              | 5-1/2" |
| SEHMC625  | 5/8" | 3/4"              | 6"     |
| SEHMC750* | 3/4" | 1-1/8"            | 6"     |

*Each Chisel 1/4" thru 5/8" comes with the center drill  
\*Drill sold separately*

## HOLLOW MORTISING CHISELS - CENTER DRILL ONLY



| PART #         | CED  | OAL    |
|----------------|------|--------|
| SEHMC250-DRILL | 1/4" | 8-1/4" |
| SEHMC375-DRILL | 3/8" | 8-1/4" |
| SEHMC500-DRILL | 1/2" | 8-1/4" |
| SEHMC625-DRILL | 5/8" | 9"     |
| SEHMC750-DRILL | 3/4" | 9"     |

*High-Speed Steel*

## HSS CARVING ROUGHER BITS



M2 Steel

| PART #       | CED  | SHANK | ROTATION   |
|--------------|------|-------|------------|
| SECR500RH    | 1/2" | 1/4"  | Right-Hand |
| SECR500LH    | 1/2" | 1/4"  | Left-Hand  |
| SECR625RH    | 5/8" | 1/4"  | Right-Hand |
| SECR625LH    | 5/8" | 1/4"  | Left-Hand  |
| SECR625RH-11 | 5/8" | 11mm  | Right-Hand |
| SECR625LH-11 | 5/8" | 11mm  | Left-Hand  |
| SECR750RH    | 3/4" | 1/4"  | Right-Hand |
| SECR750LH    | 3/4" | 1/4"  | Left-Hand  |
| SECR750RH-11 | 3/4" | 11mm  | Right-Hand |
| SECR750LH-11 | 3/4" | 11mm  | Left-Hand  |
| SECR750RH-12 | 3/4" | 1/2"  | Right-Hand |
| SECR750LH-12 | 3/4" | 1/2"  | Left-Hand  |
| SECR1000RH   | 1"   | 1/4"  | Right-Hand |
| SECR1000LH   | 1"   | 1/4"  | Left-Hand  |

## HSS ROUNDING CARVING BITS



M2 Steel

| PART #    | CED  | SHANK | ROTATION   |
|-----------|------|-------|------------|
| SERC500RH | 1/2" | 1/4"  | Right-Hand |
| SERC500LH | 1/2" | 1/4"  | Left-Hand  |
| SERC750RH | 3/4" | 1/4"  | Right-Hand |
| SERC750LH | 3/4" | 1/4"  | Left-Hand  |

## HSS CARVING POD BITS

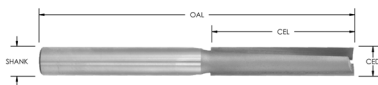


M2 Steel

| PART #    | CED   | CEL  | SHANK | OAL | ROTATION   |
|-----------|-------|------|-------|-----|------------|
| SEPD125LH | 1/8"  | 3/4" | 1/4"  | 3"  | Left-Hand  |
| SEPD125RH | 1/8"  | 3/4" | 1/4"  | 3"  | Right-Hand |
| SEPD187LH | 3/16" | 1"   | 1/4"  | 3"  | Left-Hand  |
| SEPD187RH | 3/16" | 1"   | 1/4"  | 3"  | Right-Hand |
| SEPD250LH | 1/4"  | 1"   | 1/4"  | 3"  | Left-Hand  |
| SEPD250RH | 1/4"  | 1"   | 1/4"  | 3"  | Right-Hand |
| SEPD375LH | 3/8"  | 1"   | 1/4"  | 3"  | Left-Hand  |
| SEPD375RH | 3/8"  | 1"   | 1/4"  | 3"  | Right-Hand |

## DOOR BITS

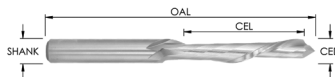
### CARBIDE-TIPPED STRAIGHT DOOR LITE BITS



| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| SEDL12-5  | 1/2" | 2-1/4" | 1/2"  | 5"     |
| SEDL12    | 1/2" | 2-1/4" | 1/2"  | 5-1/2" |
| SEDL12-F* | 1/2" | 2-1/4" | 1/2"  | 5-1/2" |

\*with (1) flat on shank

### HIGH-SPEED STEEL SPIRAL DOOR BITS



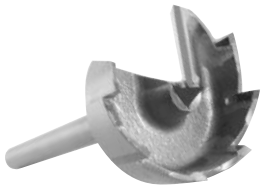
| PART #      | CED  | CEL    | SHANK | OAL    | DESCRIPTION           |
|-------------|------|--------|-------|--------|-----------------------|
| SEDOOR-53   | 1/2" | 2-1/2" | 1/2"  | 5-1/2" | Uncoated              |
| SEDOOR-53M  | 1/2" | 2-1/2" | 1/2"  | 5-1/2" | Ceramic Based Coating |
| SEDOOR-53T  | 1/2" | 2-1/2" | 1/2"  | 5-1/2" | Tin Coated            |
| SEDOOR-57F  | 1/2" | 2-1/2" | 1/2"  | 5-1/2" | With Flat             |
| SEDOOR-57FT | 1/2" | 2-1/2" | 1/2"  | 5-1/2" | Tin Coated w/ Flat    |
| SEDOOR-60   | 1/2" | 2-1/2" | 1/2"  | 5-1/2" | Uncoated              |
| SEDOOR-60T  | 1/2" | 2-1/2" | 1/2"  | 5-1/2" | Tin Coated            |

### CARBIDE INSERT DRILL BIT



| PART #      | CED    | SHANK | OAL    | DESCRIPTION                                |
|-------------|--------|-------|--------|--|
| SEID218     | 2-1/8" | 1/2"  | 5-3/4" |  |
| SI-141420   |        |       |        | 14 x14 x20mm insert (Box of 10) for Spur   |
| SI-251215-2 |        |       |        | 25 x 12 x1.5mm insert (Box of 10) for Plow |
| SEM5-SCREW  |        |       |        | M5 Spur Screw                              |
| SEM35-SCREW |        |       |        | M35 Plow Screw                             |
| SEC-POINT   |        |       |        | 2-51HC Center Drill                        |
| SEC-SCREW   |        |       |        | 6mm x 12mm Set Screw                       |

**CARBIDE TIPPED MULTI-SPUR BITS**



SMS410

**CAUTION: TO BE USED  
IN A DRILL PRESS,  
MILLING MACHINE  
OR BORING MACHINE  
ONLY**

All bits have a 1/2" Shank unless  
noted.  
6" Overall Length  
Made in USA

**Import**

| Part Number | Description               |
|-------------|---------------------------|
| SMS320      | C/T Multi Spur 1" Dia     |
| SMS410      | C/T Multi Spur 2-1/8" Dia |

| PART #     | CED      | SHANK | OAL |
|------------|----------|-------|-----|
| SMS300     | 3/4"     | 1/2"  | 6"  |
| SMS305     | 13/16"   | 1/2"  | 6"  |
| SMS310     | 7/8"     | 1/2"  | 6"  |
| SMS315     | 15/16"   | 1/2"  | 6"  |
| SMS321     | 1"       | 1/2"  | 6"  |
| SMS325     | 1-1/16"  | 1/2"  | 6"  |
| SMS330     | 1-1/8"   | 1/2"  | 6"  |
| SMS335     | 1-3/16"  | 1/2"  | 6"  |
| SMS340     | 1-1/4"   | 1/2"  | 6"  |
| SMS345     | 1-5/16"  | 1/2"  | 6"  |
| SMS350     | 1-3/8"   | 1/2"  | 6"  |
| SMS355     | 1-7/16"  | 1/2"  | 6"  |
| SMS360     | 1 1/2"   | 1/2"  | 6"  |
| SMS365     | 1-9/16"  | 1/2"  | 6"  |
| SMS370     | 1-5/8"   | 1/2"  | 6"  |
| SMS375     | 1-11/16" | 1/2"  | 6"  |
| SMS380     | 1-3/4"   | 1/2"  | 6"  |
| SMS385     | 1-13/16" | 1/2"  | 6"  |
| SMS390     | 1-7/8"   | 1/2"  | 6"  |
| SMS395     | 1-15/16" | 1/2"  | 6"  |
| SMS400     | 2"       | 1/2"  | 6"  |
| SMS411     | 2-1/8"   | 1/2"  | 6"  |
| SMS413     | 2-1/4"   | 1/2"  | 6"  |
| SMS414     | 2-3/8"   | 1/2"  | 6"  |
| SMS415     | 2-1/2"   | 1/2"  | 6"  |
| SMS420     | 2-5/8"   | 1/2"  | 6"  |
| SMS425     | 2-3/4"   | 1/2"  | 6"  |
| SMS430     | 2-7/8"   | 1/2"  | 6"  |
| SMS435     | 3"       | 1/2"  | 6"  |
| SMS440-34* | 3-1/8"   | 3/4"  | 6"  |
| SMS440     | 3-1/8"   | 1/2"  | 6"  |
| SMS445-34* | 3-1/4"   | 3/4"  | 6"  |
| SMS445     | 3-1/4"   | 1/2"  | 6"  |
| SMS450-34* | 3-1/2"   | 3/4"  | 6"  |
| SMS450     | 3-1/2"   | 1/2"  | 6"  |
| SMS455-34* | 3-3/4"   | 3/4"  | 6"  |
| SMS455     | 3-3/4"   | 1/2"  | 6"  |
| SMS460-34* | 4"       | 3/4"  | 6"  |
| SMS460     | 4"       | 1/2"  | 6"  |

\* 3/4 shank



## HIGH SPEED STEEL MULTI-SPUR BITS



SMSHS435

**CAUTION: TO BE USED  
IN A DRILL PRESS,  
MILLING MACHINE  
OR BORING MACHINE  
ONLY**

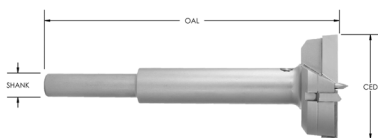


Made in Austria

| PART #       | CED      | SHANK | OAL    |
|--------------|----------|-------|--------|
| SMSHS280     | 3/8"     | 1/2"  | 4-3/4" |
| SMSHS290     | 1/2"     | 1/2"  | 4-3/4" |
| SMSHS295     | 9/16"    | 1/2"  | 4-3/4" |
| SMSHS298     | 5/8"     | 1/2"  | 4-3/4" |
| SMSHS303     | 11/16"   | 1/2"  | 6"     |
| SMSHS300     | 3/4"     | 1/2"  | 5-1/8" |
| SMSHS305     | 13/16"   | 1/2"  | 6"     |
| SMSHS310     | 7/8"     | 1/2"  | 5-1/8" |
| SMSHS315     | 15/16"   | 1/2"  | 5-1/8" |
| SMSHS321     | 1"       | 1/2"  | 6"     |
| SMSHS325     | 1-1/16"  | 1/2"  | 5-1/8" |
| SMSHS330     | 1-1/8"   | 1/2"  | 6"     |
| SMSHS335     | 1-3/16"  | 1/2"  | 6"     |
| SMSHS340     | 1-1/4"   | 1/2"  | 5-1/8" |
| SMSHS345     | 1-5/16"  | 1/2"  | 6"     |
| SMSHS350     | 1-3/8"   | 1/2"  | 6"     |
| SMSHS355     | 1-7/16"  | 1/2"  | 6"     |
| SMSHS360     | 1-1/2"   | 1/2"  | 6"     |
| SMSHS365     | 1-9/16"  | 1/2"  | 6"     |
| SMSHS370     | 1-5/8"   | 1/2"  | 6"     |
| SMSHS375     | 1-11/16" | 1/2"  | 6"     |
| SMSHS380     | 1-3/4"   | 1/2"  | 6"     |
| SMSHS385     | 1-13/16" | 1/2"  | 6"     |
| SMSHS390     | 1-7/8"   | 1/2"  | 6"     |
| SMSHS395     | 1-15/16" | 1/2"  | 6"     |
| SMSHS400     | 2"       | 1/2"  | 6"     |
| SMSHS411     | 2-1/8"   | 1/2"  | 6"     |
| SMSHS413     | 2-1/4"   | 1/2"  | 6"     |
| SMSHS414     | 2-3/8"   | 1/2"  | 6"     |
| SMSHS415     | 2-1/2"   | 1/2"  | 6"     |
| SMSHS420     | 2-5/8"   | 1/2"  | 6"     |
| SMSHS425     | 2-3/4"   | 1/2"  | 6"     |
| SMSHS430     | 2-7/8"   | 1/2"  | 6"     |
| SMSHS435     | 3"       | 1/2"  | 6"     |
| SMSHS440-34* | 3 1/8"   | 3/4"  | 6"     |
| SMSHS440     | 3-1/8"   | 1/2"  | 6"     |
| SMSHS445-34* | 3-1/4"   | 3/4"  | 6"     |
| SMSHS445     | 3-1/4"   | 1/2"  | 6"     |
| SMSHS450-34* | 3-1/2"   | 3/4"  | 6"     |
| SMSHS450     | 3-1/2"   | 1/2"  | 6"     |
| SMSHS455-34* | 3-3/4"   | 3/4"  | 6"     |
| SMSHS455     | 3-3/4"   | 1/2"  | 6"     |
| SMSHS460-34* | 4"       | 3/4"  | 6"     |
| SMSHS460     | 4"       | 1/2"  | 6"     |

\*3/4 shank

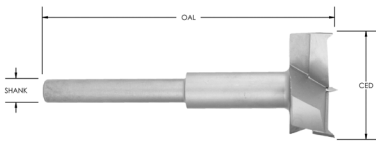
## 2 WING DOOR DRILLS - ECONOMY



| PART #  | CED    | SHANK | OAL | DESCRIPTION  |
|---------|--------|-------|-----|--------------|
| SE6100  | 2-1/8" | 1/2"  | 6"  | Without Flat |
| SE6100F | 2-1/8" | 1/2"  | 6"  | With Flat    |

**CAUTION: TO BE USED IN A DRILL PRESS, MILLING MACHINE OR BORING MACHINE ONLY**

### 3 WING DOOR DRILL BITS



**CAUTION: TO BE USED  
IN A DRILL PRESS,  
MILLING MACHINE  
OR BORING MACHINE  
ONLY**

| PART #    | CED               | SHANK | OAL |
|-----------|-------------------|-------|-----|
| SDR290    | 1/2"              | 1/2"  | 6"  |
| SDR295    | 9/16"             | 1/2"  | 6"  |
| SDR305    | 5/8"              | 1/2"  | 6"  |
| SDR303    | 11/16"            | 1/2"  | 6"  |
| SDR300    | 3/4"              | 1/2"  | 6"  |
| SDR306    | 13/16"            | 1/2"  | 6"  |
| SDR310    | 7/8"              | 1/2"  | 6"  |
| SDR315    | 15/16"            | 1/2"  | 6"  |
| SDR320    | 1"                | 1/2"  | 6"  |
| SDR325    | 1-1/16"           | 1/2"  | 6"  |
| SDR330    | 1-1/8"            | 1/2"  | 6"  |
| SDR340    | 1-1/4"            | 1/2"  | 6"  |
| SDR350    | 1-3/8"            | 1/2"  | 6"  |
| SDR360    | 1-1/2"            | 1/2"  | 6"  |
| SDR370    | 1-5/8"            | 1/2"  | 6"  |
| SDR380    | 1-3/4"            | 1/2"  | 6"  |
| SDR390    | 1-7/8"            | 1/2"  | 6"  |
| SDR400    | 2"                | 1/2"  | 6"  |
| SDR410    | 2-1/8"            | 1/2"  | 6"  |
| SDR413    | 2-1/4"            | 1/2"  | 6"  |
| SDR414    | 2-3/8"            | 1/2"  | 6"  |
| SDR415    | 2-1/2"            | 1/2"  | 6"  |
| SDR424    | 2-15/16"          | 1/2"  | 6"  |
| SDR425    | 3"                | 1/2"  | 6"  |
| SDR430    | 3-1/4"            | 1/2"  | 6"  |
| SDR440    | 3-3/4"            | 1/2"  | 6"  |
| SDR-DRILL | Replacement Drill |       |     |
| SDR-SCREW | Replacement Screw |       |     |

*Full Shanks on Bits up to and including SDR350  
Special sizes available, call for a quote.*

*Add F to end of part number for 1 Flat on Shank*

*Add F3 to end of part number for 3 Flats on Shank*

*These drills can be re-tipped, call for pricing.*

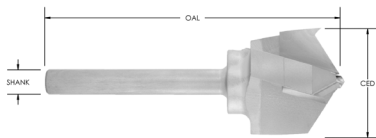
### 3 WING QUICK CHANGE DOOR DRILLS



| PART #     | CED     | SHANK | OAL    |
|------------|---------|-------|--------|
| SDR300-QCF | 3/4"    | 1/2"  | 3-3/4" |
| SDR310-QCF | 7/8"    | 1/2"  | 3-3/4" |
| SDR320-QCF | 1"      | 1/2"  | 3-7/8" |
| SDR325-QCF | 1-1/16" | 1/2"  | 3-7/8" |
| SDR330-QCF | 1-1/8"  | 1/2"  | 3-7/8" |
| SDR340-QCF | 1-1/4"  | 1/2"  | 3-7/8" |
| SDR345-QCF | 1-5/16" | 1/2"  | 3-7/8" |
| SDR350-QCF | 1-3/8"  | 1/2"  | 3-7/8" |
| SDR360-QCF | 1-1/2"  | 1/2"  | 3-7/8" |
| SDR390-QCF | 1-7/8"  | 1/2"  | 3-7/8" |

*Used for fiberglass cutting in the boat or RV industries*

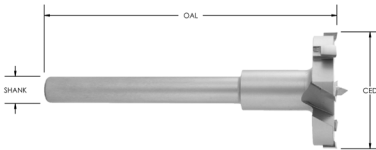
### 3 WING DOOR KNOB DRILLS



| PART #     | CED                      | SHANK | OAL    | DESCRIPTION |
|------------|--------------------------|-------|--------|-------------|
| SDK500     | 2-1/8"                   | 1/2"  | 5-3/4" | No Flat     |
| SDK510     | 2-1/8"                   | 1/2"  | 5-3/4" | With Flat   |
| SDK510-750 | 2-1/8"                   | 3/4"  | 5-3/4" | With Flat   |
| SDK560     | Replacement Center Drill |       |        |             |
| SDK565     | Replacement Screw        |       |        |             |

**CAUTION: TO BE USED IN A DRILL PRESS, MILLING MACHINE OR BORING MACHINE ONLY**

### DOOR KNOB DRILLS

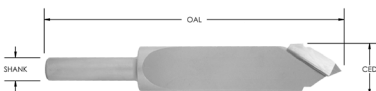


| PART #    | CED                      | SHANK | OAL    | DESCRIPTION  |
|-----------|--------------------------|-------|--------|--------------|
| SLOC600   | 2-1/8"                   | 1/2"  | 5-3/4" | With Flat    |
| SLOC605   | 2-1/8"                   | 1/2"  | 5-3/4" | With 3 Flats |
| SLOC610   | 2-1/8"                   | 1/2"  | 5-3/4" | Without Flat |
| SDR-DRILL | Replacement Center Drill |       |        |              |
| SDR-SCREW | Replacement Screw        |       |        |              |

**FOR AUTOMATED PRE-HUNG DOOR EQUIPMENT**

**CAUTION: TO BE USED IN A DRILL PRESS, MILLING MACHINE OR BORING MACHINE ONLY**

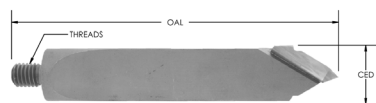
### LATCH BORE BIT



| PART #  | CED     | SHANK | OAL | DESCRIPTION  |
|---------|---------|-------|-----|--------------|
| SLAT670 | 7/8"    | 1/2"  | 6"  | Without Flat |
| SLAT680 | 7/8"    | 1/2"  | 6"  | With Flat    |
| SLAT720 | 15/16"  | 1/2"  | 6"  | Without Flat |
| SLAT730 | 15/16"  | 1/2"  | 6"  | With Flat    |
| SLAT770 | 1"      | 1/2"  | 6"  | Without Flat |
| SLAT780 | 1"      | 1/2"  | 6"  | With Flat    |
| SLAT800 | 1-1/16" | 1/2"  | 6"  | Without Flat |
| SLAT810 | 1-1/16" | 1/2"  | 6"  | With Flat    |

**FOR AUTOMATED PRE-HUNG DOOR EQUIPMENT**

### LATCH BORE BIT WITH THREADED SHANK



| PART #  | CED     | THREAD    | OAL    | DESCRIPTION    |
|---------|---------|-----------|--------|----------------|
| SLAT690 | 7/8"    | 7/16"X 14 | 5-7/8" | Threaded Shank |
| SLAT740 | 15/16"  | 7/16"X 14 | 5-7/8" | Threaded Shank |
| SLAT790 | 1"      | 7/16"X 14 | 5-7/8" | Threaded Shank |
| SLAT820 | 1-1/16" | 7/16"X 14 | 5-7/8" | Threaded Shank |

**FOR AUTOMATED PRE-HUNG DOOR EQUIPMENT**

### CARBIDE TIPPED BRAD POINT TWIST DRILLS



SBPT1

| PART # | CED | CEL | SHANK    | OAL      | DESCRIPTION    |
|--------|-----|-----|----------|----------|----------------|
| SBPT1  | 1"  | 4"  | 1/2"     | 6"       | No Flat        |
| SBPT1F | 1"  | 4"  | 1/2"     | 6"       | With Flat      |
| SBPT1T | 1"  | 4"  | 7/16"-14 | 5 13/16" | Threaded Shank |

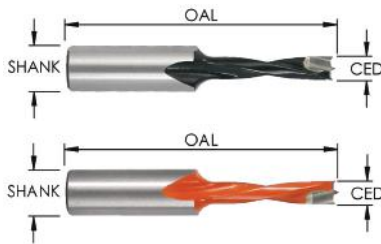
## FACE FRAME BITS



| PART #   | CED  | OAL    | PILOT DRILL           | DESCRIPTION       |
|----------|------|--------|-----------------------|-------------------|
| SFFB700  | 3/8" | 4"     | #29                   | Complete Assembly |
| SFFB800  | 3/8" | 4"     | #29                   | Complete Assembly |
| SFFB900  | 3/8" | 6"     | #29                   | Complete Assembly |
| SFFB1000 | 3/8" | 6-3/4" | #29                   | Complete Assembly |
| SFFB710  |      |        | #29 Pilot Drill Only  |                   |
| SFFB720  |      |        | Replacement Set Screw |                   |

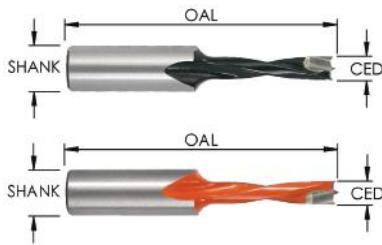
## BRAD POINT AND THROUGH HOLE BITS

### BRAD POINT - 57MM OAL



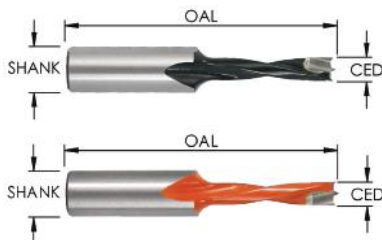
| PART #<br>Right-Hand | PART #<br>Left-Hand | Brad Point<br>CED | Shank | OAL  |
|----------------------|---------------------|-------------------|-------|------|
| SE5703RH             | SE5703LH            | 3mm               | 10mm  | 57mm |
| SE5704RH             | SE5704LH            | 4mm               | 10mm  | 57mm |
| SE57045RH            | SE57045LH           | 4.5mm             | 10mm  | 57mm |
| SE57187RH            | SE57187LH           | 4.76mm (3/16")    | 10mm  | 57mm |
| SE5705RH             | SE5705LH            | 5mm               | 10mm  | 57mm |
| SE57051RH            | SE57051LH           | 5.1mm             | 10mm  | 57mm |
| SE57055RH            | SE57055LH           | 5.5mm (7/32")     | 10mm  | 57mm |
| SE5706RH             | SE5706LH            | 6mm               | 10mm  | 57mm |
| SE57250RH            | SE57250LH           | 6.35mm (1/4")     | 10mm  | 57mm |
| SE57065RH            | SE57065LH           | 6.5mm             | 10mm  | 57mm |
| SE57067RH            | SE57067LH           | 6.7mm             | 10mm  | 57mm |
| SE5707RH             | SE5707LH            | 7mm               | 10mm  | 57mm |
| SE57075RH            | SE57075LH           | 7.5mm             | 10mm  | 57mm |
| SE5708RH             | SE5708LH            | 8mm               | 10mm  | 57mm |
| SE57082RH            | SE57082LH           | 8.2mm             | 10mm  | 57mm |
| SE57085RH            | SE57085LH           | 8.5mm             | 10mm  | 57mm |
| SE5709RH             | SE5709LH            | 9mm               | 10mm  | 57mm |
| SE57375RH            | SE57375LH           | 9.52mm (3/8")     | 10mm  | 57mm |
| SE5710RH             | SE5710LH            | 10mm              | 10mm  | 57mm |
| SE5711RH             | SE5711LH            | 11mm              | 10mm  | 57mm |
| SE57438RH            | SE57438LH           | 11.1mm (7/16")    | 10mm  | 57mm |
| SE5712RH             | SE5712LH            | 12mm              | 10mm  | 57mm |
| SE57500RH            | SE57500LH           | 12.7mm (1/2")     | 10mm  | 57mm |
| SE5713RH             | SE5713LH            | 13mm              | 10mm  | 57mm |
| SE5714RH             | SE5714LH            | 14mm              | 10mm  | 57mm |
| SE5715RH             | SE5715LH            | 15mm              | 10mm  | 57mm |
| SE57625RH            | SE57625LH           | 15.9mm (5/8")     | 10mm  | 57mm |
| SE5716RH             | SE5716LH            | 16mm              | 10mm  | 57mm |
| SE5717RH             | SE5717LH            | 17mm              | 10mm  | 57mm |
| SE5718RH             | SE5718LH            | 18mm              | 10mm  | 57mm |
| SE5719RH             | SE5719LH            | 19mm              | 10mm  | 57mm |
| SE5720RH             | SE5720LH            | 20mm              | 10mm  | 57mm |

## BRAD POINT - 70MM OAL



| PART #<br>Right-Hand | PART #<br>Left-Hand | Brad Point<br>CED  | Shank | OAL  |
|----------------------|---------------------|--------------------|-------|------|
| SE7003RH             | SE7003LH            | 3mm                | 10mm  | 70mm |
| SE7004RH             | SE7004LH            | 4mm                | 10mm  | 70mm |
| SE70045RH            | SE70045LH           | 4.5mm              | 10mm  | 70mm |
| SE70187RH            | SE70187LH           | 4.76mm<br>(3/16")  | 10mm  | 70mm |
| SE7005RH             | SE7005LH            | 5mm                | 10mm  | 70mm |
| SE70051RH            | SE70051LH           | 5.1mm              | 10mm  | 70mm |
| SE70055RH            | SE70055LH           | 5.5mm (7/32")      | 10mm  | 70mm |
| SE7006RH             | SE7006LH            | 6mm                | 10mm  | 70mm |
| SE70250RH            | SE70250LH           | 6.35mm (1/4")      | 10mm  | 70mm |
| SE70065RH            | SE70065LH           | 6.5mm              | 10mm  | 70mm |
| SE70067RH            | SE70067LH           | 6.7mm              | 10mm  | 70mm |
| SE7007RH             | SE7007LH            | 7mm                | 10mm  | 70mm |
| SE70071RH            | SE70071LH           | 7.1mm              | 10mm  | 70mm |
| SE70075RH            | SE70075LH           | 7.5mm              | 10mm  | 70mm |
| SE7008RH             | SE7008LH            | 8mm                | 10mm  | 70mm |
| SE70082RH            | SE70082LH           | 8.2mm              | 10mm  | 70mm |
| SE70085RH            | SE70085LH           | 8.5mm              | 10mm  | 70mm |
| SE7009RH             | SE7009LH            | 9mm                | 10mm  | 70mm |
| SE70375RH            | SE70375LH           | 9.52mm (3/8")      | 10mm  | 70mm |
| SE7010RH             | SE7010LH            | 10mm               | 10mm  | 70mm |
| SE70104RH            | SE70104LH           | 10.4mm             | 10mm  | 70mm |
| SE7011RH             | SE7011LH            | 11mm               | 10mm  | 70mm |
| SE70438RH            | SE70438LH           | 11.1mm (7/16")     | 10mm  | 70mm |
| SE7012RH             | SE7012LH            | 12mm               | 10mm  | 70mm |
| SE70500RH            | SE70500LH           | 12.7mm (1/2")      | 10mm  | 70mm |
| SE7013RH             | SE7013LH            | 13mm               | 10mm  | 70mm |
| SE7014RH             | SE7014LH            | 14mm               | 10mm  | 70mm |
| SE70562RH            | SE70562LH           | 14.27mm<br>(9/16") | 10mm  | 70mm |
| SE7015RH             | SE7015LH            | 15mm               | 10mm  | 70mm |
| SE70625RH            | SE70625LH           | 15.9mm (5/8")      | 10mm  | 70mm |
| SE7016RH             | SE7016LH            | 16mm               | 10mm  | 70mm |
| SE70165RH            | SE70165LH           | 16.5mm             | 10mm  | 70mm |
| SE7017RH             | SE7017LH            | 17mm               | 10mm  | 70mm |
| SE7018RH             | SE7018LH            | 18mm               | 10mm  | 70mm |
| SE7019RH             | SE7019LH            | 19mm               | 10mm  | 70mm |
| SE7020RH             | SE7020LH            | 20mm               | 10mm  | 70mm |
| SE7025RH             | SE7025LH            | 25mm               | 10mm  | 70mm |

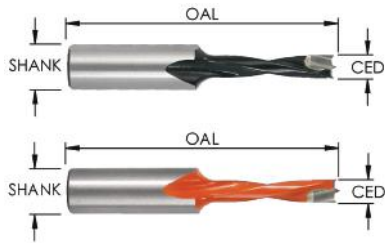
## BRAD POINT - 77MM OAL



| PART #<br>Right-Hand | PART #<br>Left-Hand | Brad Point<br>CED | Shank | OAL  |
|----------------------|---------------------|-------------------|-------|------|
| SE7704RH             | SE7704LH            | 4mm               | 10mm  | 77mm |
| SE7705RH             | SE7705LH            | 5mm               | 10mm  | 77mm |
| SE7706RH             | SE7706LH            | 6mm               | 10mm  | 77mm |
| SE77250RH            | SE77250LH           | 6.35mm (1/4")     | 10mm  | 77mm |
| SE7707RH             | SE7707LH            | 7mm               | 10mm  | 77mm |
| SE7708RH             | SE7708LH            | 8mm               | 10mm  | 77mm |
| SE77375RH            | SE77375LH           | 9.52mm (3/8")     | 10mm  | 77mm |
| SE7710RH             | SE7710LH            | 10mm              | 10mm  | 77mm |
| SE77438RH            | SE77438LH           | 11.1mm (7/16")    | 10mm  | 77mm |
| SE7712RH             | SE7712LH            | 12mm              | 10mm  | 77mm |

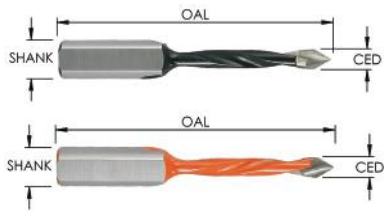


## BRAD POINT - 63.5MM OAL WITH 1/4" SHANK



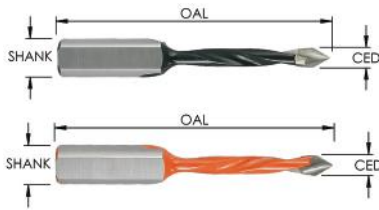
| PART #<br>Right-Hand | PART #<br>Left-Hand | Brad Point<br>CED | Shank | OAL             |
|----------------------|---------------------|-------------------|-------|-----------------|
| SE63505RH            | SE63505LH           | 5mm               | 1/4"  | 63.5mm (2-1/2") |
| SE635250RH           | SE635250LH          | 6.35mm (1/4")     | 1/4"  | 63.5mm (2-1/2") |
| SE63505RH-F          | SE63505LH-F         | 5mm               | 1/4"  | 63.5mm (2-1/2") |
| SE635250RH-F         | SE635250LH-F        | 6.35mm (1/4")     | 1/4"  | 63.5mm (2-1/2") |

## V-POINT - 58MM OAL



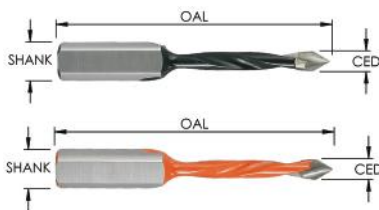
| PART #<br>Right-Hand | PART #<br>Left-Hand | V-Point<br>CED | Shank | OAL  |
|----------------------|---------------------|----------------|-------|------|
| SEV5803RH            | SEV5803LH           | 3mm            | 10mm  | 58mm |
| SEV5804RH            | SEV5804LH           | 4mm            | 10mm  | 58mm |
| SEV58187RH           | SEV58187LH          | 4.76mm (3/16") | 10mm  | 58mm |
| SEV5805RH            | SEV5805LH           | 5mm            | 10mm  | 58mm |
| SEV58055RH           | SEV58055LH          | 5.5mm (7/32")  | 10mm  | 58mm |
| SEV5806RH            | SEV5806LH           | 6mm            | 10mm  | 58mm |
| SEV58250RH           | SEV58250LH          | 6.35mm (1/4")  | 10mm  | 58mm |
| SEV58065RH           | SEV58065LH          | 6.5mm          | 10mm  | 58mm |
| SEV5807RH            | SEV5807LH           | 7mm            | 10mm  | 58mm |
| SEV58079RH           | SEV58079LH          | 7.9mm          | 10mm  | 58mm |
| SEV5808RH            | SEV5808LH           | 8mm            | 10mm  | 58mm |
| SEV5809RH            | SEV5809LH           | 9mm            | 10mm  | 58mm |
| SEV58375RH           | SEV58375LH          | 9.52mm (3/8")  | 10mm  | 58mm |
| SEV5810RH            | SEV5810LH           | 10mm           | 10mm  | 58mm |
| SEV5811RH            | SEV5811LH           | 11mm           | 10mm  | 58mm |
| SEV58111RH           | SEV58111LH          | 11.1mm (7/16") | 10mm  | 58mm |
| SEV5812RH            | SEV5812LH           | 12mm           | 10mm  | 58mm |
| SEV58500RH           | SEV58500LH          | 12.7mm (1/2")  | 10mm  | 58mm |
| SEV5813RH            | SEV5813LH           | 13mm           | 10mm  | 58mm |
| SEV5814RH            | SEV5814LH           | 14mm           | 10mm  | 58mm |
| SEV5815RH            | SEV5815LH           | 15mm           | 10mm  | 58mm |
| SEV5816RH            | SEV5816LH           | 16mm           | 10mm  | 58mm |
| SEV5818RH            | SEV5818LH           | 18mm           | 10mm  | 58mm |

## V POINT - 70MM OAL



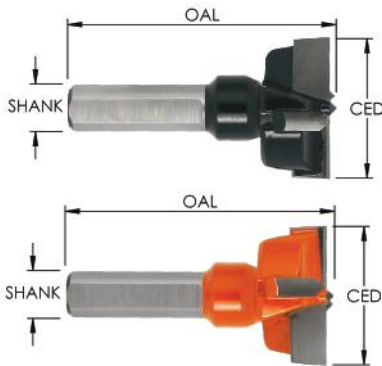
| PART #<br>Right-Hand | PART #<br>Left-Hand | V-Point<br>CED | Shank | OAL  |
|----------------------|---------------------|----------------|-------|------|
| SEV7003RH            | SEV7003LH           | 3mm            | 10mm  | 70mm |
| SEV7004RH            | SEV7004LH           | 4mm            | 10mm  | 70mm |
| SEV70187RH           | SEV70187LH          | 4.76mm (3/16") | 10mm  | 70mm |
| SEV7005RH            | SEV7005LH           | 5mm            | 10mm  | 70mm |
| SEV70055RH           | SEV70055LH          | 5.5mm (7/32")  | 10mm  | 70mm |
| SEV7006RH            | SEV7006LH           | 6mm            | 10mm  | 70mm |
| SEV70250RH           | SEV70250LH          | 6.35mm (1/4")  | 10mm  | 70mm |
| SEV70065RH           | SEV70065LH          | 6.5mm          | 10mm  | 70mm |
| SEV7007RH            | SEV7007LH           | 7mm            | 10mm  | 70mm |
| SEV70071RH           | SEV70071LH          | 7.1mm          | 10mm  | 70mm |
| SEV7008RH            | SEV7008LH           | 8mm            | 10mm  | 70mm |
| SEV70082RH           | SEV70082LH          | 8.2mm          | 10mm  | 70mm |
| SEV7009RH            | SEV7009LH           | 9mm            | 10mm  | 70mm |
| SEV70375RH           | SEV70375LH          | 9.52mm (3/8")  | 10mm  | 70mm |
| SEV7010RH            | SEV7010LH           | 10mm           | 10mm  | 70mm |
| SEV70102RH           | SEV70102LH          | 10.2mm         | 10mm  | 70mm |
| SEV70104RH           | SEV70104LH          | 10.4mm         | 10mm  | 70mm |
| SEV7011RH            | SEV7011LH           | 11mm           | 10mm  | 70mm |
| SEV70111RH           | SEV70111LH          | 11.1mm (7/16") | 10mm  | 70mm |
| SEV7012RH            | SEV7012LH           | 12mm           | 10mm  | 70mm |
| SEV70500RH           | SEV70500LH          | 12.7mm (1/2")  | 10mm  | 70mm |
| SEV7013RH            | SEV7013LH           | 13mm           | 10mm  | 70mm |
| SEV7014RH            | SEV7014LH           | 14mm           | 10mm  | 70mm |
| SEV70142RH           | SEV70142LH          | 14.2mm (9/16") | 10mm  | 70mm |
| SEV7015RH            | SEV7015LH           | 15mm           | 10mm  | 70mm |
| SEV7016RH            | SEV7016LH           | 16mm           | 10mm  | 70mm |
| SEV7017RH            | SEV7017LH           | 17mm           | 10mm  | 70mm |
| SEV7018RH            | SEV7018LH           | 18mm           | 10mm  | 70mm |
| SEV7019RH            | SEV7019LH           | 19mm           | 10mm  | 70mm |

## V POINT - 77MM OAL



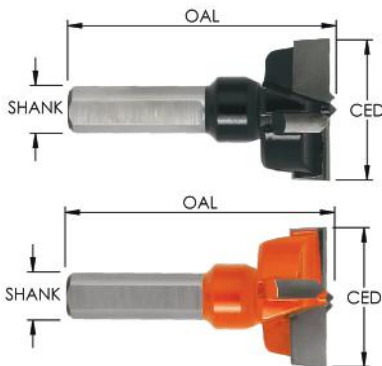
| PART #<br>Right-Hand | PART #<br>Left-Hand | V-Point<br>Diameter | Shank | OAL  |
|----------------------|---------------------|---------------------|-------|------|
| SEV7704RH            | SEV7704LH           | 4mm                 | 10mm  | 77mm |
| SEV7705RH            | SEV7705LH           | 5mm                 | 10mm  | 77mm |
| SEV7706RH            | SEV7706LH           | 6mm                 | 10mm  | 77mm |
| SEV7707RH            | SEV7707LH           | 7mm                 | 10mm  | 77mm |
| SEV7708RH            | SEV7708LH           | 8mm                 | 10mm  | 77mm |
| SEV7710RH            | SEV7710LH           | 10mm                | 10mm  | 77mm |
| SEV77438RH           | SEV77438LH          | 11.1mm (7/16")      | 10mm  | 77mm |
| SEV7712RH            | SEV7712LH           | 12mm                | 10mm  | 77mm |

## HINGE BITS - 57MM OAL



| PART #<br>Right-Hand | PART #<br>Left-Hand | Hinge Bit<br>CED | SHANK | OAL  |
|----------------------|---------------------|------------------|-------|------|
| SEHB5715RH           | SEHB5715LH          | 15mm             | 10mm  | 57mm |
| SEHB5716RH           | SEHB5716LH          | 16mm             | 10mm  | 57mm |
| SEHB5717RH           | SEHB5717LH          | 17mm             | 10mm  | 57mm |
| SEHB5718RH           | SEHB5718LH          | 18mm             | 10mm  | 57mm |
| SEHB5719RH           | SEHB5719LH          | 19mm             | 10mm  | 57mm |
| SEHB5720RH           | SEHB5720LH          | 20mm             | 10mm  | 57mm |
| SEHB5722RH           | SEHB5722LH          | 22mm             | 10mm  | 57mm |
| SEHB5724RH           | SEHB5724LH          | 24mm             | 10mm  | 57mm |
| SEHB5725RH           | SEHB5725LH          | 25mm             | 10mm  | 57mm |
| SEHB5726RH           | SEHB5726LH          | 26mm             | 10mm  | 57mm |
| SEHB5728RH           | SEHB5728LH          | 28mm             | 10mm  | 57mm |
| SEHB5730RH           | SEHB5730LH          | 30mm             | 10mm  | 57mm |
| SEHB5732RH           | SEHB5732LH          | 32mm             | 10mm  | 57mm |
| SEHB5734RH           | SEHB5734LH          | 34mm             | 10mm  | 57mm |
| SEHB5735RH           | SEHB5735LH          | 35mm             | 10mm  | 57mm |
| SEHB5736RH           | SEHB5736LH          | 36mm             | 10mm  | 57mm |
| SEHB5738RH           | SEHB5738LH          | 38mm             | 10mm  | 57mm |
| SEHB5740RH           | SEHB5740LH          | 40mm             | 10mm  | 57mm |

## HINGE BITS - 70MM OAL



| PART #<br>Right-Hand | PART #<br>Left-Hand | Hinge Bit<br>CED | Shank | OAL  |
|----------------------|---------------------|------------------|-------|------|
| SEHB7015RH           | SEHB7015LH          | 15mm             | 10mm  | 70mm |
| SEHB7016RH           | SEHB7016LH          | 16mm             | 10mm  | 70mm |
| SEHB70165RH          | SEHB70165LH         | 16.5mm           | 10mm  | 70mm |
| SEHB7017RH           | SEHB7017LH          | 17mm             | 10mm  | 70mm |
| SEHB7018RH           | SEHB7018LH          | 18mm             | 10mm  | 70mm |
| SEHB7019RH           | SEHB7019LH          | 19mm             | 10mm  | 70mm |
| SEHB7020RH           | SEHB7020LH          | 20mm             | 10mm  | 70mm |
| SEHB7022RH           | SEHB7022LH          | 22mm             | 10mm  | 70mm |
| SEHB7024RH           | SEHB7024LH          | 24mm             | 10mm  | 70mm |
| SEHB7025RH           | SEHB7025LH          | 25mm             | 10mm  | 70mm |
| SEHB7026RH           | SEHB7026LH          | 26mm             | 10mm  | 70mm |
| SEHB7028RH           | SEHB7028LH          | 28mm             | 10mm  | 70mm |
| SEHB7030RH           | SEHB7030LH          | 30mm             | 10mm  | 70mm |
| SEHB7032RH           | SEHB7032LH          | 32mm             | 10mm  | 70mm |
| SEHB7034RH           | SEHB7034LH          | 34mm             | 10mm  | 70mm |
| SEHB7035RH           | SEHB7035LH          | 35mm             | 10mm  | 70mm |
| SEHB7036RH           | SEHB7036LH          | 36mm             | 10mm  | 70mm |
| SEHB7038RH           | SEHB7038LH          | 38mm             | 10mm  | 70mm |
| SEHB7040RH           | SEHB7040LH          | 40mm             | 10mm  | 70mm |

## SOLID CARBIDE CENTER DRILLS WITH DRILL POINT



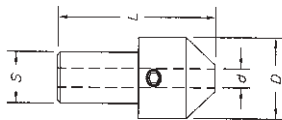
| PART #<br>Right-Hand               | PART #<br>Left-Hand | CED   | SHANK | OAL  |
|------------------------------------|---------------------|-------|-------|------|
| <b>Center Drills * Drill Point</b> |                     |       |       |      |
| CD4502RH                           | CD4502LH            | 2mm   | 2mm   | 45mm |
| CD53025RH                          | CD53025LH           | 2.5mm | 2.5mm | 53mm |
| CD53028RH                          | CD53028LH           | 2.8mm | 2.8mm | 53mm |

## SOLID CARBIDE CENTER DRILLS WITH BRAD POINT



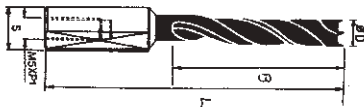
| PART #<br>Right-Hand | PART #<br>Left-Hand | CED   | SHANK | OAL  |
|----------------------|---------------------|-------|-------|------|
| BPD5303RH            | BPD5303LH           | 3mm   | 3mm   | 53mm |
| BPD53032RH           | BPD53032LH          | 3.2mm | 3.2mm | 53mm |
| BPD53035RH           | BPD53035LH          | 3.5mm | 3.5mm | 53mm |
| BPD5304RH            | BPD5304LH           | 4mm   | 4mm   | 53mm |
| BPD53045RH           | BPD53045LH          | 4.5mm | 4.5mm | 53mm |
| BPD5305RH            | BPD5305LH           | 5mm   | 5mm   | 53mm |

## DRILL ADAPTERS



| PART #      | Drill Hole Size | Diameter          | Shank | OAL  |
|-------------|-----------------|-------------------|-------|------|
| DA3502      | 2mm             | 15mm              | 10mm  | 35mm |
| DA35025     | 2.5mm           | 15mm              | 10mm  | 35mm |
| DA35028     | 2.8mm           | 15mm              | 10mm  | 35mm |
| DA3503      | 3mm             | 15mm              | 10mm  | 35mm |
| DA35032     | 3.2mm           | 15mm              | 10mm  | 35mm |
| DA35035     | 3.5mm           | 15mm              | 10mm  | 35mm |
| DA3504      | 4mm             | 15mm              | 10mm  | 35mm |
| DA35045     | 4.5mm           | 15mm              | 10mm  | 35mm |
| DA3505      | 5mm             | 15mm              | 10mm  | 35mm |
| DACSP screw |                 | Replacement Screw |       |      |

## SOLID CARBIDE BORING BITS WITH STEEL SHANK - BRAD POINT



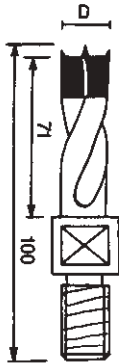
| PART #<br>Right-Hand | PART #<br>Left-Hand | Brad Point<br>CED | Twist<br>Length | Shank | OAL  |
|----------------------|---------------------|-------------------|-----------------|-------|------|
| SCBP5703RH           | SCBP5703LH          | 3mm               | 18mm            | 10mm  | 57mm |
| SCBP5704RH           | SCBP5704LH          | 4mm               | 20mm            | 10mm  | 57mm |
| SCBP5705RH           | SCBP5705LH          | 5mm               | 20mm            | 10mm  | 57mm |
| SCBP5706RH           | SCBP5706LH          | 6mm               | 20mm            | 10mm  | 57mm |
| SCBP5708RH           | SCBP5708LH          | 8mm               | 20mm            | 10mm  | 57mm |
| SCBP7003RH           | SCBP7003LH          | 3mm               | 28mm            | 10mm  | 70mm |
| SCBP7004RH           | SCBP7004LH          | 4mm               | 30mm            | 10mm  | 70mm |
| SCBP7005RH           | SCBP7005LH          | 5mm               | 30mm            | 10mm  | 70mm |
| SCBP7006RH           | SCBP7006LH          | 6mm               | 30mm            | 10mm  | 70mm |
| SCBP7008RH           | SCBP7008LH          | 8mm               | 30mm            | 10mm  | 70mm |
| SCBP7010RH           | SCBP7010LH          | 10mm              | 30mm            | 10mm  | 70mm |

## SOLID CARBIDE BORING BITS WITH STEEL SHANK - V-POINT



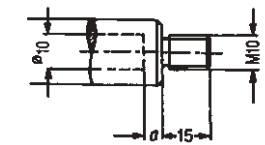
| PART #<br>Right-Hand | PART #<br>Left-Hand | Brad Point<br>CED | Twist<br>Length | Shank | OAL  |
|----------------------|---------------------|-------------------|-----------------|-------|------|
| SCVP5805RH           | SCVP5805LH          | 5mm               | 20mm            | 10mm  | 58mm |
| SCVP5808RH           | SCVP5808LH          | 8mm               | 20mm            | 10mm  | 58mm |
| SCVP7005RH           | SCVP7005LH          | 5mm               | 20mm            | 10mm  | 70mm |
| SCVP7008RH           | SCVP7008LH          | 8mm               | 20mm            | 10mm  | 70mm |

## CARBIDE-TIPPED THREADED SHANK DOWEL DRILLS

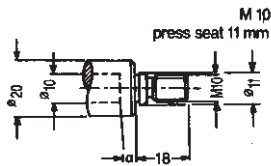


| PART #<br>Right-Hand | PART #<br>Left-Hand | Diameter | Shank<br>Thread | OAL   |
|----------------------|---------------------|----------|-----------------|-------|
| SETSM8005RH          | SETSM8005LH         | 5mm      | M8 x 1.25       | 100mm |
| SETSM8006RH          | SETSM8006LH         | 6mm      | M8 x 1.25       | 100mm |
| SETSM8008RH          | SETSM8008LH         | 8mm      | M8 x 1.25       | 100mm |
| SETSM8010RH          | SETSM8010LH         | 10mm     | M8 x 1.25       | 100mm |
| SETSM8012RH          | SETSM8012LH         | 12mm     | M8 x 1.25       | 100mm |
| SETSM8015RH          | SETSM8015LH         | 15mm     | M8 x 1.25       | 100mm |
| SETSM1005RH          | SETSM1005LH         | 5mm      | M10 x 1.5       | 100mm |
| SETSM1006RH          | SETSM1006LH         | 6mm      | M10 x 1.5       | 100mm |
| SETSM1008RH          | SETSM1008LH         | 8mm      | M10 x 1.5       | 100mm |
| SETSM1010RH          | SETSM1010LH         | 10mm     | M10 x 1.5       | 100mm |
| SETSM1012RH          | SETSM1012LH         | 12mm     | M10 x 1.5       | 100mm |
| SETSM1015RH          | SETSM1015LH         | 15mm     | M10 x 1.5       | 100mm |

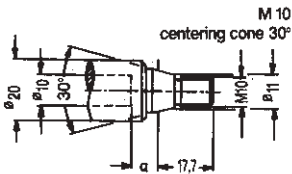
## CHUCK ADAPTERS WITH THREADED SHANK



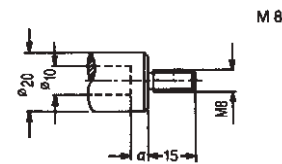
| PART #<br>RIGHT-HAND | PART #<br>LEFT-HAND | SHANK<br>THREADS | MACHINE(S)                  |
|----------------------|---------------------|------------------|-----------------------------|
| QCDA1001RH           | QCDA1002LH          | M10              | Ayen®, Mayer®,<br>Torwegge® |



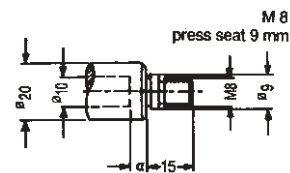
| PART #<br>RIGHT-HAND | PART #<br>LEFT-HAND | SHANK<br>THREADS | MACHINE(S)   |
|----------------------|---------------------|------------------|--|
| QCDA1003RH           | QCDA1004LH          | M10              | Morbidelli®, Weeke®,<br>Holtzer®, SCMI®,<br>Reimall®, Vitap® |



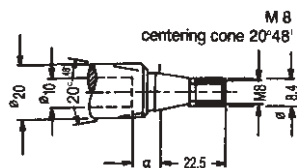
| PART #<br>RIGHT-HAND | PART #<br>LEFT-HAND | SHANK<br>THREADS | MACHINE(S)                             |
|----------------------|---------------------|------------------|--|
| QCDA1005RH           | QCDA1006LH          | M10              | Busselatto®, Ompec®,<br>Bilek®, Weeke® |



| PART #<br>RIGHT-HAND | PART #<br>LEFT-HAND | SHANK<br>THREADS | MACHINE(S) |
|----------------------|---------------------|------------------|------------|
| QCDA8001RH           | QCDA8002LH          | M8               | Nottmeyer® |



| PART #<br>RIGHT-HAND | PART #<br>LEFT-HAND | SHANK<br>THREADS | MACHINE(S)              |
|----------------------|---------------------|------------------|-------------------------|
| QCDA8003RH           | QCDA8004LH          | M8               | Nottmeyer®, Morbidelli® |



| PART #<br>RIGHT-HAND | PART #<br>LEFT-HAND | SHANK<br>THREADS | MACHINE(S) |
|----------------------|---------------------|------------------|------------|
| QCDA8005RH           | QCDA8006LH          | M8               | Bilek®     |



## QUICK CHANGE ADAPTER - BIESSE®



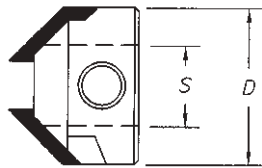
QCDA-Biesse®



QCDA-Morbideli®

| PART #          | DESCRIPTION       |
|-----------------|-------------------|
| RIGHT-HAND      |                   |
| QCDA-Biesse®    | 10 x 20 x 3       |
| QCDA-screw      | screw for adapter |
| QCDA-Morbideli® | FM400             |

## CARBIDE-TIPPED COUNTERSINKS

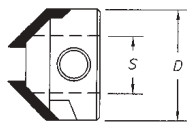


Replacement screw for the countersink above.  
Part # DACSP screw

| PART #     | PART #     | DIAMETER | Shank         |
|------------|------------|----------|---------------|
| RIGHT-HAND | LEFT-HAND  |          |               |
| CSP1604RH  | CSP1604LH  | 16mm     | 4mm           |
| CSP1605RH  | CSP1605LH  | 16mm     | 5mm           |
| CSP1606RH  | CSP1606LH  | 16mm     | 6mm           |
| CSP16250RH | CSP16250LH | 16mm     | 6.35mm (1/4") |
| CSP1607RH  | CSP1607LH  | 16mm     | 7mm           |
| CSP1808RH  | CSP1808LH  | 18mm     | 8mm           |
| CSP1809RH  | CSP1809LH  | 18mm     | 9mm           |
| CSP2010RH  | CSP2010LH  | 20mm     | 10mm          |
| CSP2012RH  | CSP2012LH  | 20mm     | 12mm          |

*These carbide-tipped countersinks are for clamping on the spiral of the Brad Point or V Point Drill. Use replacement screw DACSP screw.*

## CARBIDE-TIPPED COUNTERSINKS



| PART #      | PART #      | FOR SIZES    | SIZE         |
|-------------|-------------|--------------|--------------|
| RIGHT-HAND  | LEFT-HAND   |              |              |
| CSH20510RH  | CSH20510LH  | 5mm to 10mm  | 5mm to 10mm  |
| CSH201112RH | CSH201112LH | 11mm to 12mm | 11mm to 12mm |

*These carbide-tipped countersinks are for clamping on the shank of the Brad Point or V Point Drill*

## CARBIDE-TIPPED COUNTERSINK - ADJUSTABLE 45° ANGLE



SE918

| PART # | DESCRIPTION   | FOR SCREW |
|--------|---------------|-----------|
| SE918  | 3/8" x 1/8"   | # 4       |
| SE921  | 3/8" x 9/64"  | # 6       |
| SE924  | 3/8" x 5/32"  | # 8       |
| SE927  | 3/8" x 11/64" | # 8-9     |
| SE930  | 3/8" x 3/16"  | # 10      |

*Uses SFFB-SCREW*

## CARBIDE-TIPPED COUNTERBORES



| PART #     | PART #    | DESCRIPTION | Shank | OAL    |
|------------|-----------|-------------|-------|--------|
| RIGHT-HAND | LEFT-HAND |             |       |        |
| SE940      | SE942     | 3/8" CD Bit | 10mm  | 2-3/8" |
| SE944      | SE946     | 3/16" Drill | 3/16" | 2-1/4" |

*Counterbore and drill sold separately.*

## QUICK CHANGE ADAPTER FOR METRIC DRILLS

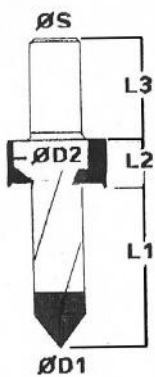


QCHDA250

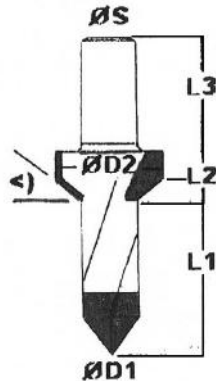
| PART #   | SHANK    | OAL    |
|----------|----------|--------|
| QCHDA250 | 1/4" Hex | 1-3/4" |

**COUNTERBORE & COUNTERSINK • ONE PIECE DESIGN**

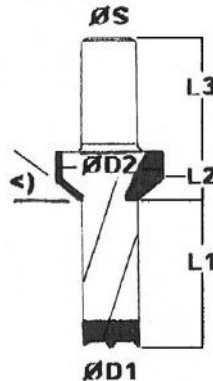
Southeast Tool can help with all of your specialty or custom tooling needs. Just determine your lengths, diameters and angles and we can provide the exact tool you need to do the job right!



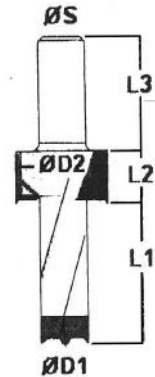
**COUNTERBORE WITH V-POINT**



**COUNTERSINK WITH V-POINT**



**COUNTERSINK WITH BRAD POINT**



**COUNTERBORE WITH BRAD POINT**

**DRILLS**

**ADJUSTABLE COUNTERBORE, STYLE NO. 5**



5 Adjustable Counterbore

Designed for counterboring flat-bottom holes. Overall length is 4-1/2". Shank diameter is 1/2".

**ADJUSTABLE COUNTERBORE, STYLE NO. 5A**



Designed for counterboring flat-bottom holes. Drill is held in place with two opposing set screws.

**CARBIDE-TIPPED COUNTERBORE, STYLE NO. 5CT**



5CT Counterbore

Designed for counterboring flat-bottom holes.

**CARBIDE-TIPPED COUNTERSINK, STYLE NO. 5CT**



5CT Countersink

Designed for countersinking holes for flat-head screws.

**SHORT-LENGTH COUNTERSINKS, STYLE NO. 5C**



5C Short Length Countersink

Designed for countersinking holes for flat-head screws. Shank diameter is 1/2" x 1-1/2" long.

**ADJUSTABLE COUNTERSINK, STYLE NO. 5C**



5C Adjustable Countersink

Designed for countersinking holes for flat-head screws. Overall length is 4-1/2". Shank diameter is 1/2".

**SOLID COUNTERBORE, STYLE NO. 5DHS STEP DRILL • 1 PIECE**



5DHS Solid Counterbore

Overall length is 5-1/2". Shank is 1/2" in diameter x 2" long.

**SOLID COUNTERSINK, STYLE NO. 5EHS STEP DRILL • 1 PIECE**



5EHS Solid Countersink

Overall length is 5-1/2". Shank is 1/2" in diameter x 2" long.

### THREADED-SHANK ADJUSTABLE COUNTERBORE, STYLE NO. 514



Style 514 Counterbore

**Designed for counterboring flat-bottom holes.**

Overall length is 4-1/2". Shank length is 1-1/2". Shank thread is 7/16"-14

### THREADED-SHANK ADJUSTABLE COUNTERSINK, STYLE NO. 514C



Style 514C Countersink

**Designed for countersinking holes for flat-head screws.**

Overall length is 4-1/2". Shank length is 1-1/2". Shank thread is 7/16"-14.

### CARBIDE-TIPPED ADJUSTABLE COUNTERBORE, STYLE NO. 514CT



Style 514CT Counterbore

**Designed for counterboring flat-bottom holes.**

### MORTISING BIT, STYLE NO. 6HS 2 Flute • Bi-Directional Cutting



Style 6HS

**Designed for use on vibrating mortising machines.**

### VIBRATING MORTISE BIT, STYLE NO. 46HS 2 Flute • Bi-Directional Cutting



Style 46HS

**Designed for use on vibrating mortising machines.**

### THREADED-SHANK DRILL-POINT DRILL, STYLE NO. 12HS • 90° Point For Woodworking



Style 12HS

Threaded shank is 7/16"-14.

### THREADED-SHANK BRAD-POINT DRILL, STYLE 14, 14A, 14ACT



Style 14

Threaded shank is 7/16"-14.

Made from carbon tool steel.

### THREADED-SHANK BRAD-POINT DRILL, STYLE 14AHS

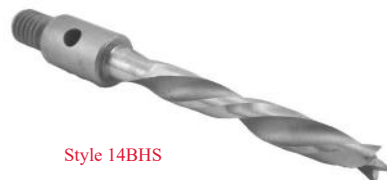


Style 14AHS

Threaded shank is 7/16"-14.

Made from high-speed steel.

### THREADED-SHANK BRAD-POINT DRILL, STYLE NO. 14BHS



Style 14BHS

Threaded shank is 7/16"-14.

Made from high-speed steel.

### CARBIDE-TIPPED THREADED-SHANK BRAD-POINT DRILLS, STYLE NO. 14CT



Style 14CT

Recommended for use in any wood product containing glue, or long production runs in hardwood. Performs well in many plastics, as well as in several composite materials, including fiberglass.  
Threaded shank is 7/16"-14.

**Metric CARBIDE-TIPPED THREADED-SHANK BRAD-POINT DRILLS, STYLE NO. 14CT**



Style 14CT

Recommended for use in any wood product containing glue, or long production runs in hardwood. Performs well in many plastics, as well as in several composite materials, including fiberglass.  
Threaded shank is 7/16"-14.

**CARBIDE-TIPPED THREADED-SHANK (EXTENDED) BRAD-POINT DRILLS, STYLE NO. 14ESCT**



Style 14ESCT

Recommended for use in any wood product containing glue, or long production runs in hardwood. Performs well in many plastics, as well as in several composite materials, including fiberglass.  
Threaded shank is 7/16"-14.

**THREADED-SHANK (EXTENDED) BRAD-POINT DRILLS, STYLE NO. 14ESHS**



Style 14ESHS

Threaded shank is 7/16"-14.  
Made from high-speed steel.

**THREADED-SHANK (EXTENDED) BRAD-POINT DRILLS, STYLE NO. 14ESHS-L**



14ESHS-L

Threaded shank is 7/16"-14.  
Made from high-speed steel.

**THREADED-SHANK BRAD-POINT DRILLS, STYLE NO. 14HS**



Style 14HS

Threaded shank is 7/16"-14.  
Made from high-speed steel.

**THREADED-SHANK BRAD-POINT DRILLS, STYLE NO. 14HSL**



Style 14HSL

Threaded shank is 7/16"-14.  
Made from high-speed steel.

**THREADED-SHANK BRAD-POINT DRILLS, STYLE NO. 14R**



Style 14R

Threaded shank is 7/16"-14.  
Made from high-speed steel.

## CARBIDE-TIPPED ADJUSTABLE COUNTERSINK, STYLE 4CT



4CT Countersink

| PART #   | COUNTERSINK DIA | DRILL DIA | SHANK DIA X LENGTH | OAL    |
|----------|-----------------|-----------|--------------------|--------|
| SE144000 | 3/8"            | 3/16"     | 1/2" x 3/8"        | 1-1/4" |
| SE14400  | 1/2"            | 1/8"      |                    | 1-1/4" |
| SE14401  | 1/2"            | 3/16"     |                    | 1-1/4" |
| SE14402  | 1/2"            | 7/32"     |                    | 1-1/4" |
| SE14403  | 1/2"            | 1/4"      |                    | 1-1/4" |
| SE144030 | 1/2"            | 5/16"     | 5/8 x 3/8"         | 1-1/4" |

*CENTER DRILL ARE NOT INCLUDED*

## TAPER SHELL COUNTERSINK, STYLE 4



| PART #   | CED  | CENTER DRILL DIA | SHANK       | OAL    |
|----------|------|------------------|-------------|--------|
| SE10400  | 3/8" | 1/8"             | 1/2" x 3/8" | 1-1/4" |
| SE10401  | 3/8" | 3/16"            | 1/2" x 3/8" | 1-1/4" |
| SE10402  | 1/2" | 1/8"             |             | 1-1/4" |
| SE10404  | 1/2" | 5/32"            |             | 1-1/4" |
| SE10406  | 1/2" | 3/16"            |             | 1-1/4" |
| SE10408  | 1/2" | 7/32"            |             | 1-1/4" |
| SE10409  | 1/2" | 1/4"             |             | 1-1/4" |
| SE104094 | 1/2" | 5/16"            | 5/8" x 3/8" | 1-1/4" |
| SE10410  | 5/8" | 1/4"             |             | 1-1/4" |
| SE10411  | 5/8" | 5/16"            |             | 1-1/4" |
| SE10412  | 3/4" | 5/16"            |             | 1-1/4" |
| SE10413  | 3/4" | 3/8"             |             | 1-1/4" |

*Center drills are not included in the sale of countersinks.*

## COUNTERSINK DRILLS, STYLE 5B



Made from high-speed steel.

| PART #      | CED   | CEL    | SHANK | SHANK LENGTH | OAL |
|-------------|-------|--------|-------|--------------|-----|
| SE50300BP   | 3/16" | 2-1/4" | 1/8"  | 4"           | 6"  |
| SE503001BP  | 7/32" | 2-1/4" | 3/16" | 3-3/4"       | 6"  |
| SE503010**  | 5/16" | 1-1/2" | 1/4"  | 4-1/2"       | 6"  |
| SE50301BPHS | 5/16" | 1-1/2" | 1/4"  | 4-1/2"       | 6"  |
| SE50302BPHS | 3/8"  | 1-1/2" | 1/4"  | 4-1/2"       | 6"  |
| SE503025**  | 3/8"  | 1-1/2" | 1/4"  | 4-1/2"       | 6"  |
| SE50303BPHS | 7/16" | 1-1/2" | 1/4"  | 4-1/2"       | 6"  |
| SE50305BPHS | 1/2"  | 1-1/2" | 1/4"  | 4-1/2"       | 6"  |

**\*\*TOOLS HAVE DRILL POINT END**

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## BRAD-POINT DRILL, STYLE 5BLHS



5BLHS Brad-Point

Designed for use in bed-lock machines.

Made from high-speed steel.

| PART #  | CED    | CEL | SHANK | OAL |
|---------|--------|-----|-------|-----|
| SE50134 | 19/64" | 4"  | 2"    | 6"  |
| SE50135 | 9/32"  | 4"  | 2"    | 6"  |

## COUNTERSINK BRAD-POINT DRILL, STYLE 5BPHS



5BPHS Countersink Brad-Point

Made from high-speed steel.

| PART #   | CED    | CEL    | SHANK  | OAL |
|----------|--------|--------|--------|-----|
| SE50216  | 1/8"   | 2-1/2" | 1/8"   | 6"  |
| SE50217  | 5/32"  | 2-1/2" | 5/32"  | 6"  |
| SE50218  | 3/16"  | 2-1/2" | 3/16"  | 6"  |
| SE50220  | 7/32"  | 2-1/2" | 7/32"  | 6"  |
| SE50221  | 1/4"   | 2-1/2" | 1/4"   | 6"  |
| SE50223  | 9/32"  | 2-1/2" | 9/32"  | 6"  |
| SE50224  | 5/16"  | 2-1/2" | 5/16"  | 6"  |
| SE502242 | 11/32" | 2-1/2" | 11/32" | 6"  |
| SE50225  | 3/8"   | 2-1/2" | 3/8"   | 6"  |

*Other sizes available.*

## COUNTERSINK BRAD-POINT DRILL, STYLE 5BPHS-LH



5BPHS-LH Countersink Brad-Point

LEFT-HAND ROTATION BITS.

| PART #  | CED   | CEL    | SHANK | OAL |
|---------|-------|--------|-------|-----|
| SE50226 | 3/16" | 2-1/2" | 3/16" | 6"  |
| SE50227 | 7/32" | 2-1/2" | 7/32" | 6"  |
| SE50228 | 1/4"  | 2-1/2" | 1/4"  | 6"  |



## COUNTERSINK DRILL-POINT DRILL, STYLE 5HS



Style 5HS

Made from high-speed steel.

| PART #   | CED    | CEL    | SHANK  | OAL |
|----------|--------|--------|--------|-----|
| SE502001 | 3/32"  | 2-1/2" | 3/32"  | 6"  |
| SE50201  | 1/8"   | 2-1/2" | 1/8"   | 6"  |
| SE50202  | 5/32"  | 2-1/2" | 5/32"  | 6"  |
| SE50204  | 3/16"  | 2-1/2" | 3/16"  | 6"  |
| SE50206  | 7/32"  | 2-1/2" | 7/32"  | 6"  |
| SE50207  | 1/4"   | 2-1/2" | 1/4"   | 6"  |
| SE50209  | 9/32"  | 2-1/2" | 9/32"  | 6"  |
| SE50211  | 5/16"  | 2-1/2" | 5/16"  | 6"  |
| SE502111 | 11/32" | 2-1/2" | 11/32" | 6"  |
| SE50212  | 3/8"   | 2-1/2" | 3/8"   | 6"  |
| SE50219  | 13/64" | 2-1/2" | 13/64" | 6"  |
| SE50222  | 19/64" | 2-1/2" | 19/64" | 6"  |

Other sizes available

## COUNTERSINK DRILL-POINT DRILL, STYLE 5HSLH



Style 5HSLH

Left-Hand rotation

Made from high-speed steel.

| PART #  | CED   | CEL    | SHANK | OAL |
|---------|-------|--------|-------|-----|
| SE50213 | 3/16" | 2-1/2" | 3/16" | 6"  |
| SE50214 | 7/32" | 2-1/2" | 7/32" | 6"  |
| SE50215 | 1/4"  | 2-1/2" | 1/4"  | 6"  |

## V-POINT COUNTERSINK DRILL, STYLE 5VHS



Style 5VHS

| PART #    | CED   | CEL    | SHANK | OAL |
|-----------|-------|--------|-------|-----|
| SE50136HS | 3/16" | 2-1/2" | 3/16" | 6"  |
| SE50137HS | 7/32" | 2-1/2" | 7/32" | 6"  |
| SE50138HS | 1/4"  | 2-1/2" | 1/4"  | 6"  |

Fish-tail point

## COUNTERSINK BRAD-POINT DRILL, STYLE 5-7BPHS



STYLE 5-7BPHS

Made from high-speed steel.

| PART #  | CED   | CEL | SHANK | OAL |
|---------|-------|-----|-------|-----|
| SE50704 | 3/16" | 3"  | 3/16" | 7"  |
| SE50705 | 7/32" | 3"  | 7/32" | 7"  |
| SE50706 | 1/4"  | 3"  | 1/4"  | 7"  |

## DRILL-POINT DRILL, STYLE 5-7HS



Style 7HS

Made from high-speed steel.

| PART #    | CED   | CEL | SHANK | OAL |
|-----------|-------|-----|-------|-----|
| SE50701HS | 3/16" | 3"  | 3/16" | 7"  |
| SE50702HS | 7/32" | 3"  | 7/32" | 7"  |
| SE50703HS | 1/4"  | 3"  | 1/4"  | 7"  |

## COUNTERSINK BRAD-POINT DRILL, STYLE 5-8BPHS



STYLE 5-8BPHS

Made from high-speed steel.

| PART #  | CED   | CEL | SHANK | OAL |
|---------|-------|-----|-------|-----|
| SE50804 | 3/16" | 4"  | 3/16" | 8"  |
| SE50805 | 7/32" | 4"  | 7/32" | 8"  |
| SE50806 | 1/4"  | 4"  | 1/4"  | 8"  |

## DRILL-POINT DRILL, STYLE 5-8HS



Style 5-8HS

| PART #    | CED   | CEL | SHANK | OAL |
|-----------|-------|-----|-------|-----|
| SE50801HS | 3/16" | 4"  | 3/16" | 8"  |
| SE50802HS | 7/32" | 4"  | 7/32" | 8"  |
| SE50803HS | 1/4"  | 4"  | 1/4"  | 8"  |

## BRAD-POINT DRILL, STYLE 8BPHS



STYLE 5-8BPHS

Made from high-speed steel.

| PART #  | CED   | CEL    | SHANK  | OAL    |
|---------|-------|--------|--------|--------|
| SE80210 | 1/8"  | 2-1/4" | 1/8"   | 4-1/2" |
| SE80211 | 5/32" | 2-1/4" | 5/32"  | 4-1/2" |
| SE80212 | 3/16" | 2-1/4" | 3/16"  | 4-1/2" |
| SE80213 | 7/32" | 2-1/4" | 2-1/4" | 4-1/2" |
| SE80214 | 1/4"  | 2-1/4" | 2-1/4" | 4-1/2" |
| SE80217 | 5/16" | 2-1/4" | 2-1/4" | 4-1/2" |
| SE80218 | 3/8"  | 2-1/4" | 2-1/4" | 4-1/2" |

Other sizes available.

## BRAD-POINT DRILL, STYLE 8BPHSLH



STYLE 5-8BPHSLH

Left-Hand rotation

Made from high-speed steel.

| PART #   | CED   | CEL | SHANK | OAL    |
|----------|-------|-----|-------|--------|
| SE80212L | 3/16" | 2"  | 3/16" | 4-1/2" |
| SE80213L | 7/32" | 2"  | 7/32" | 4-1/2" |
| SE80214L | 1/4"  | 2"  | 1/4"  | 4-1/2" |

## STRAIGHT SHANK BRAD-POINT DRILL, STYLE 13



Style 13

Made from high-speed steel.

| PART #   | CED   | CEL      | SHANK | OAL    |
|----------|-------|----------|-------|--------|
| SE13001M | 1/8"  | 1-5/8"   | 1/8"  | 2-3/4" |
| SE13002  | 5/32" | 2"       | 5/32" | 3-1/8" |
| SE13003M | 3/16" | 2-5/16"  | 3/16" | 3-1/2" |
| SE13004  | 7/32" | 2-1/2"   | 7/32" | 3-3/4" |
| SE13005  | 1/4"  | 2-3/4"   | 1/4"  | 4"     |
| SE13006  | 9/32" | 2-15/16" | 9/32" | 4-1/4" |
| SE13007  | 5/16" | 3-3/16"  | 5/16" | 4-1/2" |
| SE13009  | 3/8"  | 3-5/8"   | 3/8"  | 5"     |
| SE13010  | 7/16" | 4-1/16"  | 7/16" | 5-1/2" |

Other sizes available

## BRAD-POINT DRILL, STYLE 13B



Style 13B

Made from high-speed steel.

| PART #  | CED   | CEL    | SHANK | OAL    |
|---------|-------|--------|-------|--------|
| SE13101 | 5/16" | 3-1/2" | 1/4"  | 4-1/2" |
| SE13102 | 3/8"  | 3-1/2" | 1/4"  | 4-1/2" |
| SE13103 | 7/16" | 3-1/2" | 1/4"  | 4-1/2" |
| SE13104 | 1/2"  | 3-1/2" | 1/4"  | 4-1/2" |

Other sizes available

## CARBIDE-TIPPED COUNTERSINK, STYLE 8CT - 82°



Style 8CT

Recommended for use in any wood product containing glue, or long production runs in hardwood. Performs well in many plastics, as well as in several composite materials, including fiberglass.

Center drill is held in place with a set screw.

*Please note that center drills are not included in the sale of counterbores.*

| PART #   | CED   | CENTER DRILL | SHANK | OAL |
|----------|-------|--------------|-------|-----|
| SE18800  | 3/8"  | 3/16"        | 1/2"  | 3"  |
| SE188001 | 7/16" | 3/16"        | 1/2"  | 3"  |
| SE188002 | 7/16" | 7/32"        | 1/2"  | 3"  |
| SE18801  | 1/2"  | 3/16"        | 1/2"  | 3"  |
| SE18802  | 1/2"  | 7/32"        | 1/2"  | 3"  |
| SE18803  | 1/2"  | 1/4"         | 1/2"  | 3"  |

## DRILL-POINT DRILL, STYLE 8HS



Style 8HS

Made from high-speed steel.

| PART #  | CED   | CEL    | SHANK | OAL    |
|---------|-------|--------|-------|--------|
| SE80200 | 3/32" | 2-1/4" | 3/32" | 4-1/2" |
| SE80201 | 1/8"  | 2-1/4" | 1/8"  | 4-1/2" |
| SE80202 | 5/32" | 2-1/4" | 5/32" | 4-1/2" |
| SE80204 | 3/16" | 2-1/4" | 3/16" | 4-1/2" |
| SE80205 | 7/32" | 2-1/4" | 7/32" | 4-1/2" |
| SE80206 | 1/4"  | 2-1/4" | 1/4"  | 4-1/2" |
| SE80207 | 9/32" | 2-1/4" | 9/32" | 4-1/2" |
| SE80208 | 5/16" | 2-1/4" | 5/16" | 4-1/2" |
| SE80209 | 3/8"  | 2-1/4" | 3/8"  | 4-1/2" |

Other sizes available

## DRILL-POINT DRILL, STYLE 8HSLH



Style 8HSLH

Left-Hand rotation Bits.

Made from high-speed steel.

| PART #   | CED   | CEL | SHANK | OAL    |
|----------|-------|-----|-------|--------|
| SE802041 | 3/16" | 2"  | 3/16" | 4-1/2" |
| SE802051 | 7/32" | 2"  | 7/32" | 4-1/2" |
| SE802061 | 1/4"  | 2"  | 1/4"  | 4-1/2" |

## MULTI-SPUR COUNTERBORE, STYLE 184



Style 184

Center drill is held in place with a set screw.

Available with carbide tips, by special order.

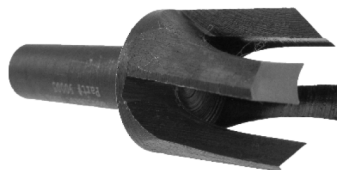
*Please note that center drills are not included in the sale of counterbores.*

| PART #  | CED    | HOLE DIAMETER | OAL     |
|---------|--------|---------------|---------|
| SE18402 | 1-1/8" | 1/2"          | 1-3/16" |
| SE18405 | 1-1/2" | 1/2"          | 1-3/8"  |
| SE18407 | 1-3/4" | 1/2"          | 1-3/8"  |
| SE18408 | 1-7/8" | 1/2"          | 1-1/2"  |
| SE18409 | 2"     | 1/2"          | 1-1/2"  |
| SE18410 | 2-1/8" | 1/2"          | 1-3/4"  |
| SE18412 | 2-1/2" | 1/2"          | 1-3/4"  |

*Other sizes are also available, by request.*

*The above tools are available in carbide-tipped; call for pricing.*

## SPIRAL PLUG CUTTER, STYLE 9B



Designed with a spiral flute to be free cutting, and opened up to allow easy plug removal.

Industrial design for true size plugs, even after several sharpenings.

Made from carbon tool steel.

| PART #      | CED    | CEL      | SHANK | OAL     |
|-------------|--------|----------|-------|---------|
| SE90003*    | 3/8"   | 3-3/16"  | 1/2"  | 5-1/2"  |
| SE90005*    | 1/2"   | 3-3/16"  | 1/2"  | 5-1/2"  |
| SE90007*    | 5/8"   | 3-3/16"  | 1/2"  | 5-1/2"  |
| SE90009*    | 3/4"   | 3-3/16"  | 1/2"  | 5-1/2"  |
| SE90011**   | 7/8"   | 3-3/16"  | 1/2"  | 5-1/2"  |
| SE90013**   | 1"     | 3-3/16"  | 1/2"  | 5-1/2"  |
| SE90015**   | 1-1/4" | 3-3/16"  | 1/2"  | 5-1/2"  |
| SE90016**   | 1-3/8" | 3-15/16" | 1/2"  | 6-5/16" |
| SE90017**   | 1-1/2" | 3-15/16" | 1/2"  | 6-5/16" |
| SE90017A*** | 1-5/8" | 3-15/16" | 1/2"  | 6-5/16" |
| SE90018***  | 1-3/4" | 3-15/16" | 1/2"  | 6-5/16" |
| SE90019***  | 2"     | 3-15/16" | 1/2"  | 6-5/16" |

\* 4-Flute, \*\* 5-Flute, \*\*\* 6-Flute

## BRADPOINT DRILL, STYLE 13L



Style 13L

Made from high-speed steel.

| PART #  | CED    | CEL    | SHANK LENGTH | OAL |
|---------|--------|--------|--------------|-----|
| SE13501 | 1/8"   | 5-1/2" | 2-1/2"       | 8"  |
| SE13502 | 5/32"  | 5-1/2" | 2-1/2"       | 8"  |
| SE13503 | 3/16"  | 5-1/2" | 2-1/2"       | 8"  |
| SE13504 | 7/32"  | 5-1/2" | 2-1/2"       | 8"  |
| SE13505 | 1/4"   | 5-1/2" | 2-1/2"       | 8"  |
| SE13506 | 9/32"  | 5-1/2" | 2-1/2"       | 8"  |
| SE13507 | 5/16"  | 5-1/2" | 2-1/2"       | 8"  |
| SE13508 | 11/32" | 5-1/2" | 2-1/2"       | 8"  |
| SE13509 | 3/8"   | 5-1/2" | 2-1/2"       | 8"  |
| SE13511 | 7/16"  | 5-1/2" | 2-1/2"       | 8"  |
| SE13513 | 1/2"   | 5-1/2" | 2-1/2"       | 8"  |
| SE13601 | 1/8"   | 7-1/2" | 2-1/2"       | 10" |
| SE13603 | 3/16"  | 7-1/2" | 2-1/2"       | 10" |
| SE13605 | 1/4"   | 7-1/2" | 2-1/2"       | 10" |

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|         |       |        |        |     |
|---------|-------|--------|--------|-----|
| SE13607 | 5/16" | 7-1/2" | 2-1/2" | 10" |
| SE13609 | 3/8"  | 7-1/2" | 2-1/2" | 10" |
| SE13611 | 7/16" | 7-1/2" | 2-1/2" | 10" |
| SE13613 | 1/2"  | 7-1/2" | 2-1/2" | 10" |
| SE13701 | 1/8"  | 9"     | 3"     | 12" |
| SE13702 | 5/32" | 9"     | 3"     | 12" |
| SE13703 | 3/16" | 9"     | 3"     | 12" |
| SE13704 | 7/32" | 9"     | 3"     | 12" |
| SE13705 | 1/4"  | 9"     | 3"     | 12" |
| SE13706 | 9/32" | 9"     | 3"     | 12" |
| SE13707 | 5/16" | 9"     | 3"     | 12" |
| SE13709 | 3/8"  | 9"     | 3"     | 12" |
| SE13711 | 7/16" | 9"     | 3"     | 12" |
| SE13713 | 1/2"  | 9"     | 3"     | 12" |
| SE13905 | 1/4"  | 11"    | 4"     | 15" |
| SE13907 | 5/16" | 11"    | 4"     | 15" |
| SE13909 | 3/8"  | 11"    | 4"     | 15" |
| SE13911 | 7/16" | 11"    | 4"     | 15" |
| SE13913 | 1/2"  | 11"    | 4"     | 15" |
| SE13805 | 1/4"  | 14"    | 4"     | 18" |
| SE13807 | 5/16" | 14"    | 4"     | 18" |
| SE13809 | 3/8"  | 14"    | 4"     | 18" |
| SE13811 | 7/16" | 14"    | 4"     | 18" |
| SE13813 | 1/2"  | 14"    | 4"     | 18" |

Other sizes available  
Straight Shanks

## BRADPOINT DRILL, STYLE 13S

Designed for use in Ritter® R-26 and R-38 Boring Heads.



Style 13

Shanks are 1/4" x 1" long and features one flat.

Made from high-speed steel.

| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| SE13201L* | 5mm  | 1-1/2" | 1/4"  | 2-1/2" |
| SE13201R  | 5mm  | 1-1/2" | 1/4"  | 2-1/2" |
| SE13202L* | 1/4" | 1-1/2" | 1/4"  | 2-1/2" |
| SE13202R  | 1/4" | 1-1/2" | 1/4"  | 2-1/2" |

\*LEFT-HAND ROTATION BITS

## CARBIDE-TIPPED BRAD POINT DRILL, STYLE 13CT

Designed for use in Ritter® R-26 and R-38 Boring Heads.

Recommended for use in any wood product containing glue, or long production runs in hardwood. Performs well in many plastics, as well as in several composite materials, including fiberglass.



Style 13CT

Shanks are 1/4" x 1" long and features one flat.

| PART #    | CED  | CEL    | SHANK | OAL    |
|-----------|------|--------|-------|--------|
| SE13301L* | 5mm  | 1-1/2" | 1/4"  | 2-1/2" |
| SE13301R  | 5mm  | 1-1/2" | 1/4"  | 2-1/2" |
| SE13302L* | 1/4" | 1-1/2" | 1/4"  | 2-1/2" |
| SE13302R  | 1/4" | 1-1/2" | 1/4"  | 2-1/2" |

\*LEFT-HAND ROTATION BITS

## BRADPOINT DRILL, STYLE 19



Style 19

Made from carbon steel.

| PART #  | CED    | CEL | SHANK | OAL |
|---------|--------|-----|-------|-----|
| SE19001 | 1/8"   | 3"  | 1/2"  | 5"  |
| SE19002 | 5/32"  | 3"  | 1/2"  | 5"  |
| SE19003 | 3/16"  | 3"  | 1/2"  | 5"  |
| SE19004 | 7/32"  | 3"  | 1/2"  | 5"  |
| SE19005 | 1/4"   | 3"  | 1/2"  | 5"  |
| SE19009 | 5/16"  | 3"  | 1/2"  | 5"  |
| SE19012 | 3/8"   | 3"  | 1/2"  | 5"  |
| SE19015 | 7/16"  | 3"  | 1/2"  | 5"  |
| SE19016 | 29/64" | 3"  | 1/2"  | 5"  |
| SE19018 | 1/2"   | 3"  | 1/2"  | 5"  |
| SE19022 | 5/8"   | 3"  | 1/2"  | 5"  |
| SE19025 | 3/4"   | 3"  | 1/2"  | 5"  |
| SE19027 | 7/8"   | 3"  | 1/2"  | 5"  |
| SE19028 | 1"     | 3"  | 1/2"  | 5"  |
| SE19029 | 1-1/8" | 3"  | 1/2"  | 5"  |
| SE19030 | 1-1/4" | 3"  | 1/2"  | 5"  |

## CARBIDE-TIPPED BRAD POINT DRILL, STYLE 19CT

Recommended for use in any wood product containing glue, or long production runs in hardwood. Performs well in many plastics, as well as in several composite materials, including fiberglass.

Right-hand rotation.



Style 19CT

| PART #    | CED    | CEL | SHANK | OAL |
|-----------|--------|-----|-------|-----|
| SE19201   | 1/4"   | 3"  | 1/2"  | 5"  |
| SE19202   | 9/32"  | 3"  | 1/2"  | 5"  |
| SE19203   | 5/16"  | 3"  | 1/2"  | 5"  |
| SE19204   | 3/8"   | 3"  | 1/2"  | 5"  |
| SE19206   | 7/16"  | 3"  | 1/2"  | 5"  |
| SE19207   | 1/2"   | 3"  | 1/2"  | 5"  |
| SE19208   | 5/8"   | 3"  | 1/2"  | 5"  |
| SE192084  | 11/16" | 3"  | 1/2"  | 5"  |
| SE19209   | 3/4"   | 3"  | 1/2"  | 5"  |
| SE192091  | 7/8"   | 3"  | 1/2"  | 5"  |
| SE1920914 | 15/16" | 3"  | 1/2"  | 5"  |
| SE19210   | 1"     | 3"  | 1/2"  | 5"  |

Other sizes available, call for pricing

## CARBIDE-TIPPED BRAD POINT DRILL, STYLE 19CT METRIC

Recommended for use in any wood product containing glue, or long production runs in hardwood. Performs well in many plastics, as well as in several composite materials, including fiberglass.

Right-hand rotation.



Style 19CT METRIC

| PART #    | CED  | CEL | SHANK | OAL |
|-----------|------|-----|-------|-----|
| SE1920301 | 8mm  | 3"  | 1/2"  | 5"  |
| SE192051  | 10mm | 3"  | 1/2"  | 5"  |
| SE192064  | 12mm | 3"  | 1/2"  | 5"  |
| SE1920713 | 13mm | 3"  | 1/2"  | 5"  |

## BRAD-POINT DRILL, STYLE NO. 19HS



Style 19HS

Made from high-speed steel. Right-Hand Rotation

| PART #    | CED    | CEL | SHANK | OAL |
|-----------|--------|-----|-------|-----|
| SE19100   | 1/8"   | 3"  | 1/2"  | 5"  |
| SE191002  | 5/32"  | 3"  | 1/2"  | 5"  |
| SE19101   | 3/16"  | 3"  | 1/2"  | 5"  |
| SE19102   | 7/32"  | 3"  | 1/2"  | 5"  |
| SE19103   | 1/4"   | 3"  | 1/2"  | 5"  |
| SE19104   | 9/32"  | 3"  | 1/2"  | 5"  |
| SE191041  | 19/64" | 3"  | 1/2"  | 5"  |
| SE19105   | 5/16"  | 3"  | 1/2"  | 5"  |
| SE191051  | 21/64" | 3"  | 1/2"  | 5"  |
| SE19106   | 11/32" | 3"  | 1/2"  | 5"  |
| SE19107   | 3/8"   | 3"  | 1/2"  | 5"  |
| SE19108   | 25/64" | 3"  | 1/2"  | 5"  |
| SE19109   | 13/32" | 3"  | 1/2"  | 5"  |
| SE19110   | 7/16"  | 3"  | 1/2"  | 5"  |
| SE19111   | 15/32" | 3"  | 1/2"  | 5"  |
| SE19112   | 1/2"   | 3"  | 1/2"  | 5"  |
| SE191121  | 33/64" | 3"  | 1/2"  | 5"  |
| SE191122  | 17/32" | 3"  | 1/2"  | 5"  |
| SE19113   | 9/16"  | 3"  | 1/2"  | 5"  |
| SE19114   | 5/8"   | 3"  | 1/2"  | 5"  |
| SE1911441 | 11/16" | 3"  | 1/2"  | 5"  |
| SE19115   | 3/4"   | 3"  | 1/2"  | 5"  |
| SE191154  | 13/16" | 3"  | 1/2"  | 5"  |
| SE191158  | 7/8"   | 3"  | 1/2"  | 5"  |
| SE191159  | 15/16" | 3"  | 1/2"  | 5"  |
| SE19116   | 1"     | 3"  | 1/2"  | 5"  |
| SE191160  | 1-1/8" | 3"  | 1/2"  | 5"  |
| SE191161  | 1-1/4" | 3"  | 1/2"  | 5"  |

Other sizes available, call for pricing

## BRAD POINT DRILL, STYLE 19HS METRIC



Style 19HS

Made from high-speed steel. Right-hand rotation.

| PART #    | CED  | CEL | SHANK | OAL |
|-----------|------|-----|-------|-----|
| SE191010  | 5mm  | 3"  | 1/2"  | 5"  |
| SE191020  | 6mm  | 3"  | 1/2"  | 5"  |
| SE191030  | 7mm  | 3"  | 1/2"  | 5"  |
| SE191050  | 8mm  | 3"  | 1/2"  | 5"  |
| SE191060  | 9mm  | 3"  | 1/2"  | 5"  |
| SE191080  | 10mm | 3"  | 1/2"  | 5"  |
| SE1911101 | 12mm | 3"  | 1/2"  | 5"  |
| SE191130  | 15mm | 3"  | 1/2"  | 5"  |



## BRAD-POINT DRILL, STYLE NO 19HSL



Style 19HS

Made from high-speed steel. Left-hand rotation.

| PART #   | CED   | CEL | SHANK | OAL |
|----------|-------|-----|-------|-----|
| SE19101L | 3/16" | 3"  | 1/2"  | 5"  |
| SE19103L | 1/4"  | 3"  | 1/2"  | 5"  |
| SE19105L | 5/16" | 3"  | 1/2"  | 5"  |
| SE19107L | 3/8"  | 3"  | 1/2"  | 5"  |
| SE19110L | 7/16" | 3"  | 1/2"  | 5"  |
| SE19112L | 1/2"  | 3"  | 1/2"  | 5"  |

## TAPERED BRUSH-BLOCK DRILL, STYLE 19TP

Designed for boring brush-blocks.  
Bores right-hand with a left-hand twist to reduce chatter.



Style 19TP

Shank is 1/2" x 2" long.

Made from high-speed steel.

| PART #  | LG     | SM     | CEL | SHANK | OAL |
|---------|--------|--------|-----|-------|-----|
|         | CED    | CED    |     |       |     |
| SE19995 | 1-1/8" | 11/16" | 3"  | 1/2"  | 5"  |

## BRAD POINT DRILL, STYLE 20



Shank length 1-1/2".

Made from carbon tool steel.

| PART #  | CED    | CEL | SHANK | OAL |
|---------|--------|-----|-------|-----|
| SE20002 | 5/32"  | 4"  | 1/2"  | 6"  |
| SE20003 | 3/16"  | 4"  | 1/2"  | 6"  |
| SE20006 | 1/4"   | 4"  | 1/2"  | 6"  |
| SE20007 | 17/64" | 4"  | 1/2"  | 6"  |
| SE20010 | 5/16"  | 4"  | 1/2"  | 6"  |
| SE20013 | 3/8"   | 4"  | 1/2"  | 6"  |
| SE20016 | 7/16"  | 4"  | 1/2"  | 6"  |
| SE20019 | 1/2"   | 4"  | 1/2"  | 6"  |
| SE20021 | 17/32" | 4"  | 1/2"  | 6"  |

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|         |         |    |      |    |
|---------|---------|----|------|----|
| SE20022 | 9/16"   | 4" | 1/2" | 6" |
| SE20024 | 5/8"    | 4" | 1/2" | 6" |
| SE20025 | 21/32"  | 4" | 1/2" | 6" |
| SE20026 | 11/16"  | 4" | 1/2" | 6" |
| SE20028 | 3/4"    | 4" | 1/2" | 6" |
| SE20032 | 7/8"    | 4" | 1/2" | 6" |
| SE20036 | 1"      | 4" | 1/2" | 6" |
| SE20037 | 1-1/32" | 4" | 1/2" | 6" |
| SE20038 | 1-1/16" | 4" | 1/2" | 6" |
| SE20039 | 1-1/8"  | 4" | 1/2" | 6" |
| SE20041 | 1-1/4"  | 4" | 1/2" | 6" |
| SE20042 | 1-5/16" | 4" | 1/2" | 6" |
| SE20043 | 1-3/8"  | 4" | 1/2" | 6" |
| SE20044 | 1-1/2"  | 4" | 1/2" | 6" |

Other sizes available, call for pricing.

## BRAD-POINT DRILL, STYLE 20BHS



Shank length 1-1/2".

Made from high-speed steel.

| PART #     | CED    | CEL | SHANK | OAL    |
|------------|--------|-----|-------|--------|
| SE20305HS  | 7/32"  | 4"  | 3/8"  | 5-1/2" |
| SE203050HS | 1/4"   | 4"  | 3/8"  | 5-1/2" |
| SE203051HS | 9/32"  | 4"  | 3/8"  | 5-1/2" |
| SE203052HS | 5/16"  | 4"  | 3/8"  | 5-1/2" |
| SE203053HS | 11/32" | 4"  | 3/8"  | 5-1/2" |
| SE20307HS  | 3/8"   | 4"  | 3/8"  | 5-1/2" |
| SE203081HS | 10mm   | 4"  | 3/8"  | 5-1/2" |
| SE20308HS  | 25/64" | 4"  | 3/8"  | 5-1/2" |
| SE20309HS  | 13/32" | 4"  | 3/8"  | 5-1/2" |
| SE20310HS  | 7/16"  | 4"  | 3/8"  | 5-1/2" |
| SE20311HS  | 15/32" | 4"  | 3/8"  | 5-1/2" |
| SE20312HS  | 1/2"   | 4"  | 3/8"  | 5-1/2" |
| SE203122HS | 13mm   | 4"  | 3/8"  | 5-1/2" |
| SE20313HS  | 17/32" | 4"  | 3/8"  | 5-1/2" |
| SE20314HS  | 9/16"  | 4"  | 3/8"  | 5-1/2" |
| SE20315HS  | 5/8"   | 4"  | 3/8"  | 5-1/2" |
| SE20316HS  | 11/16" | 4"  | 3/8"  | 5-1/2" |
| SE20317HS  | 3/4"   | 4"  | 3/8"  | 5-1/2" |
| SE20318HS  | 13/16" | 4"  | 3/8"  | 5-1/2" |
| SE20319HS  | 7/8"   | 4"  | 3/8"  | 5-1/2" |
| SE20320HS  | 15/16" | 4"  | 3/8"  | 5-1/2" |
| SE20321HS  | 1"     | 4"  | 3/8"  | 5-1/2" |

Other sizes available, call for pricing

## CARBIDE-TIPPED BRAD-POINT DRILL, STYLE 20BCT

Recommended for use in any wood product containing glue, or long production runs in hardwood. Performs well in many plastics, as well as in several composite materials, including fiberglass.



Style 19BCT

| PART #    | CED    | CEL | SHANK | OAL    |
|-----------|--------|-----|-------|--------|
| SE20307CT | 3/8"   | 4"  | 3/8"  | 5-1/2" |
| SE20308CT | 25/64" | 4"  | 3/8"  | 5-1/2" |
| SE20310CT | 7/16"  | 4"  | 3/8"  | 5-1/2" |
| SE20312CT | 1/2"   | 4"  | 3/8"  | 5-1/2" |
| SE20314CT | 9/16"  | 4"  | 3/8"  | 5-1/2" |
| SE20315CT | 5/8"   | 4"  | 3/8"  | 5-1/2" |
| SE20317CT | 3/4"   | 4"  | 3/8"  | 5-1/2" |

## BRAD-POINT DRILL, STYLE NO. 20CT



Style 20HS

Made from high-speed steel.

| PART #    | CED    | CEL | SHANK | OAL |
|-----------|--------|-----|-------|-----|
| SE20701   | 1/4"   | 4"  | 1/2"  | 6"  |
| SE20703   | 5/16"  | 4"  | 1/2"  | 6"  |
| SE20704   | 3/8"   | 4"  | 1/2"  | 6"  |
| SE20706   | 7/16"  | 4"  | 1/2"  | 6"  |
| SE20707   | 1/2"   | 4"  | 1/2"  | 6"  |
| SE20708   | 5/8"   | 4"  | 1/2"  | 6"  |
| SE20709   | 3/4"   | 4"  | 1/2"  | 6"  |
| SE207098  | 7/8"   | 4"  | 1/2"  | 6"  |
| SE20710   | 1"     | 4"  | 1/2"  | 6"  |
| SE2070912 | 15/16" | 4"  | 1/2"  | 6"  |

Other sizes available, call for pricing

## BRAD-POINT DRILL, STYLE 20HS



Style 20HS

Made from high-speed steel.

| PART #   | CED     | CEL | SHANK | OAL |
|----------|---------|-----|-------|-----|
| SE20100  | 1/8"    | 4"  | 1/2"  | 6"  |
| SE201002 | 5/32"   | 4"  | 1/2"  | 6"  |
| SE20101  | 3/16"   | 4"  | 1/2"  | 6"  |
| SE201011 | 13/64"  | 4"  | 1/2"  | 6"  |
| SE20102  | 7/32"   | 4"  | 1/2"  | 6"  |
| SE20103  | 1/4"    | 4"  | 1/2"  | 6"  |
| SE201031 | 17/64"  | 4"  | 1/2"  | 6"  |
| SE20104  | 9/32"   | 4"  | 1/2"  | 6"  |
| SE20105  | 5/16"   | 4"  | 1/2"  | 6"  |
| SE201050 | 21/64"  | 4"  | 1/2"  | 6"  |
| SE20106  | 11/32"  | 4"  | 1/2"  | 6"  |
| SE20107  | 3/8"    | 4"  | 1/2"  | 6"  |
| SE20108  | 25/64"  | 4"  | 1/2"  | 6"  |
| SE20109  | 13/32"  | 4"  | 1/2"  | 6"  |
| SE20110  | 7/16"   | 4"  | 1/2"  | 6"  |
| SE201101 | 29/64"  | 4"  | 1/2"  | 6"  |
| SE20111  | 15/32"  | 4"  | 1/2"  | 6"  |
| SE20112  | 1/2"    | 4"  | 1/2"  | 6"  |
| SE201121 | 33/64"  | 4"  | 1/2"  | 6"  |
| SE20113  | 17/32"  | 4"  | 1/2"  | 6"  |
| SE20114  | 9/16"   | 4"  | 1/2"  | 6"  |
| SE201142 | 19/32"  | 4"  | 1/2"  | 6"  |
| SE20115  | 5/8"    | 4"  | 1/2"  | 6"  |
| SE201152 | 21/32"  | 4"  | 1/2"  | 6"  |
| SE20116  | 11/16"  | 4"  | 1/2"  | 6"  |
| SE201162 | 23/32"  | 4"  | 1/2"  | 6"  |
| SE20117  | 3/4"    | 4"  | 1/2"  | 6"  |
| SE201172 | 25/32"  | 4"  | 1/2"  | 6"  |
| SE20118  | 13/16"  | 4"  | 1/2"  | 6"  |
| SE201183 | 27/32"  | 4"  | 1/2"  | 6"  |
| SE20119  | 7/8"    | 4"  | 1/2"  | 6"  |
| SE201192 | 29/32"  | 4"  | 1/2"  | 6"  |
| SE20120  | 15/16"  | 4"  | 1/2"  | 6"  |
| SE201202 | 31/32"  | 4"  | 1/2"  | 6"  |
| SE20121  | 1"      | 4"  | 1/2"  | 6"  |
| SE201221 | 1 1/32" | 4"  | 1/2"  | 6"  |
| SE20122  | 1 1/16" | 4"  | 1/2"  | 6"  |
| SE20123  | 1 1/8"  | 4"  | 1/2"  | 6"  |
| SE20124  | 1 1/4"  | 4"  | 1/2"  | 6"  |
| SE20125  | 1 5/16" | 4"  | 1/2"  | 6"  |
| SE20126  | 1 3/8"  | 4"  | 1/2"  | 6"  |
| SE20128  | 1 1/2"  | 4"  | 1/2"  | 6"  |

## BRAD-POINT DRILL, STYLE 20HS METRIC



Style 20HS

Made from high-speed steel.

| PART #   | CED  | CEL | SHANK | OAL |
|----------|------|-----|-------|-----|
| SE201022 | 6mm  | 4"  | 1/2"  | 6"  |
| SE201051 | 8mm  | 4"  | 1/2"  | 6"  |
| SE201081 | 10mm | 4"  | 1/2"  | 6"  |
| SE201111 | 12mm | 4"  | 1/2"  | 6"  |
| SE201122 | 13mm | 4"  | 1/2"  | 6"  |

## BRAD-POINT DRILL, STYLE 20HSLH



Style 20HSLH

Left-Hand Rotation Bits.

Made from high-speed steel.

| PART #    | CED   | CEL | SHANK | OAL |
|-----------|-------|-----|-------|-----|
| SE20201HS | 3/8"  | 4"  | 1/2"  | 6"  |
| SE20202HS | 7/16" | 4"  | 1/2"  | 6"  |
| SE20203HS | 1/2"  | 4"  | 1/2"  | 6"  |

## CARBIDE-TIPPED BRAD POINT DRILL, STYLE 20-6CT

Recommended for use in any wood product containing glue, or long production runs in hardwood. Performs well in many plastics, as well as in several composite materials, including fiberglass.



Style 20-CT

| PART #    | CED   | CEL | SHANK | OAL |
|-----------|-------|-----|-------|-----|
| SE20601CT | 1/4"  | 6"  | 1/2"  | 8"  |
| SE20602CT | 5/16" | 6"  | 1/2"  | 8"  |
| SE20604CT | 3/8"  | 6"  | 1/2"  | 8"  |
| SE20606CT | 7/16" | 6"  | 1/2"  | 8"  |
| SE20607CT | 1/2"  | 6"  | 1/2"  | 8"  |
| SE20609CT | 5/8"  | 6"  | 1/2"  | 8"  |
| SE20611CT | 3/4"  | 6"  | 1/2"  | 8"  |
| SE20613CT | 7/8"  | 6"  | 1/2"  | 8"  |
| SE20615CT | 1"    | 6"  | 1/2"  | 8"  |

Other sizes available, call for pricing

## BRAD-POINT DRILL STYLE 20-6



Style 20-6

Made from carbon tool steel.

| PART #  | CED     | CEL | SHANK | OAL |
|---------|---------|-----|-------|-----|
| SE20601 | 1/4"    | 6"  | 1/2"  | 8"  |
| SE20602 | 5/16"   | 6"  | 1/2"  | 8"  |
| SE20603 | 11/32"  | 6"  | 1/2"  | 8"  |
| SE20604 | 3/8"    | 6"  | 1/2"  | 8"  |
| SE20605 | 13/32"  | 6"  | 1/2"  | 8"  |
| SE20606 | 7/16"   | 6"  | 1/2"  | 8"  |
| SE20607 | 1/2"    | 6"  | 1/2"  | 8"  |
| SE20608 | 9/16"   | 6"  | 1/2"  | 8"  |
| SE20609 | 5/8"    | 6"  | 1/2"  | 8"  |
| SE20610 | 11/16"  | 6"  | 1/2"  | 8"  |
| SE20611 | 3/4"    | 6"  | 1/2"  | 8"  |
| SE20612 | 13/16"  | 6"  | 1/2"  | 8"  |
| SE20613 | 7/8"    | 6"  | 1/2"  | 8"  |
| SE20614 | 15/16"  | 6"  | 1/2"  | 8"  |
| SE20615 | 1"      | 6"  | 1/2"  | 8"  |
| SE20616 | 1-1/16" | 6"  | 1/2"  | 8"  |
| SE20617 | 1-1/8"  | 6"  | 1/2"  | 8"  |
| SE20618 | 1-1/4"  | 6"  | 1/2"  | 8"  |

Other sizes available, call for pricing

## BRAD-POINT DRILL, STYLE 20-6HS



Style 20-6HS

Made from high-speed steel.

| PART #    | CED     | CEL | SHANK | OAL |
|-----------|---------|-----|-------|-----|
| SE20601HS | 1/4"    | 6"  | 1/2"  | 8"  |
| SE20602HS | 5/16"   | 6"  | 1/2"  | 8"  |
| SE20604HS | 3/8"    | 6"  | 1/2"  | 8"  |
| SE20605HS | 13/32"  | 6"  | 1/2"  | 8"  |
| SE20606HS | 7/16"   | 6"  | 1/2"  | 8"  |
| SE20607HS | 1/2"    | 6"  | 1/2"  | 8"  |
| SE20608HS | 9/16"   | 6"  | 1/2"  | 8"  |
| SE20609HS | 5/8"    | 6"  | 1/2"  | 8"  |
| SE20610HS | 11/16"  | 6"  | 1/2"  | 8"  |
| SE20611HS | 3/4"    | 6"  | 1/2"  | 8"  |
| SE20612HS | 13/16"  | 6"  | 1/2"  | 8"  |
| SE20613HS | 7/8"    | 6"  | 1/2"  | 8"  |
| SE20614HS | 15/16"  | 6"  | 1/2"  | 8"  |
| SE20615HS | 1"      | 6"  | 1/2"  | 8"  |
| SE20616HS | 1-1/16" | 6"  | 1/2"  | 8"  |
| SE20617HS | 1-1/8"  | 6"  | 1/2"  | 8"  |
| SE20618HS | 1-1/4"  | 6"  | 1/2"  | 8"  |

Other sizes available, call for pricing

## GENERAL PURPOSE DRILL, JOBBER LENGTH, STYLE 29 - 118° POINT



Style 29

Made from high-speed steel. Made in USA.

| PART #  | CED    | CEL      | SHANK  | OAL    |
|---------|--------|----------|--------|--------|
| SE29001 | 1/64"  | 3/16"    | 1/64"  | 3/4"   |
| SE29002 | 1/32"  | 1/2"     | 1/32"  | 1-3/8" |
| SE29003 | 3/64"  | 3/4"     | 3/64"  | 1-3/4" |
| SE29004 | 1/16"  | 7/8"     | 1/16"  | 1-7/8" |
| SE29005 | 5/64"  | 1"       | 5/64"  | 2"     |
| SE29006 | 3/32"  | 1-1/4"   | 3/32"  | 2-1/4" |
| SE29007 | 7/64"  | 1-1/2"   | 7/64"  | 2-5/8" |
| SE29008 | 1/8"   | 1-5/8"   | 1/8"   | 2-3/4" |
| SE29009 | 9/64"  | 1-3/4"   | 9/64"  | 2-7/8" |
| SE29010 | 5/32"  | 2"       | 5/32"  | 3-1/8" |
| SE29011 | 11/64" | 2-1/8"   | 11/64" | 3-1/4" |
| SE29012 | 3/16"  | 2-5/16"  | 3/16"  | 3-1/2" |
| SE29013 | 13/64" | 2-7/16"  | 13/64" | 3-5/8" |
| SE29014 | 7/32"  | 2-1/2"   | 7/32"  | 3-3/4" |
| SE29015 | 15/64" | 2-5/8"   | 15/64" | 3-7/8" |
| SE29016 | 1/4"   | 2-3/4"   | 1/4"   | 4"     |
| SE29017 | 17/64" | 2-7/8"   | 17/64" | 4-1/8" |
| SE29018 | 9/32"  | 2-15/16" | 9/32"  | 4-1/4" |
| SE29019 | 19/64" | 3-1/16"  | 19/64" | 4-3/8" |
| SE29020 | 5/16"  | 3-3/16"  | 5/16"  | 4-1/2" |
| SE29021 | 21/64" | 3-5/16"  | 21/64" | 4-5/8" |
| SE29022 | 11/32" | 3-7/16"  | 11/32" | 4-3/4" |
| SE29023 | 23/64" | 3-1/2"   | 23/64" | 4-7/8" |
| SE29024 | 3/8"   | 3-5/8"   | 3/8"   | 5"     |
| SE29025 | 25/64" | 3-3/4"   | 25/64" | 5-1/8" |
| SE29026 | 13/32" | 3-7/8"   | 13/32" | 5-1/4" |
| SE29027 | 27/64" | 3-15/16" | 27/64" | 5-3/8" |
| SE29028 | 7/16"  | 4-1/16"  | 7/16"  | 5-1/2" |
| SE29029 | 29/64" | 4-3/16"  | 29/64" | 5-5/8" |
| SE29030 | 15/32" | 4-5/16"  | 15/32" | 5-3/4" |
| SE29031 | 31/64" | 4-3/8"   | 31/64" | 5-7/8" |
| SE29032 | 1/2"   | 4-1/2"   | 1/2"   | 6"     |

Shank length = OAL minus CEL

## GENERAL PURPOSE DRILL, JOBBER LENGTH, STYLE 29LH - 118° POINT



Style 29LH

Made from high-speed steel. Made in USA.  
Left-Hand Rotation

| PART #   | CED    | CEL      | SHANK  | OAL    |
|----------|--------|----------|--------|--------|
| SE29002L | 1/32"  | 1/2"     | 1/32"  | 1-3/8" |
| SE29003L | 3/64"  | 3/4"     | 3/64"  | 1-3/4" |
| SE29004L | 1/16"  | 7/8"     | 1/16"  | 1-7/8" |
| SE29005L | 5/64"  | 1"       | 5/64"  | 2"     |
| SE29006L | 3/32"  | 1-1/4"   | 3/32"  | 2-1/4" |
| SE29007L | 7/64"  | 1-1/2"   | 7/64"  | 2-5/8" |
| SE29008L | 1/8"   | 1-5/8"   | 1/8"   | 2-3/4" |
| SE29009L | 9/64"  | 1-3/4"   | 9/64"  | 2-7/8" |
| SE29010L | 5/32"  | 2"       | 5/32"  | 3-1/8" |
| SE29011L | 11/64" | 2-1/8"   | 11/64" | 3-1/4" |
| SE29012L | 3/16"  | 2-5/16"  | 3/16"  | 3-1/2" |
| SE29013L | 13/64" | 2-7/16"  | 13/64" | 3-5/8" |
| SE29014L | 7/32"  | 2-1/2"   | 7/32"  | 3-3/4" |
| SE29015L | 15/64" | 2-5/8"   | 15/64" | 3-7/8" |
| SE29016L | 1/4"   | 2-3/4"   | 1/4"   | 4"     |
| SE29017L | 17/64" | 2-7/8"   | 17/64" | 4-1/8" |
| SE29018L | 9/32"  | 2-15/16" | 9/32"  | 4-1/4" |
| SE29019L | 19/64" | 3-1/16"  | 19/64" | 4-3/8" |
| SE29020L | 5/16"  | 3-3/16"  | 5/16"  | 4-1/2" |
| SE29021L | 21/64" | 3-5/16"  | 21/64" | 4-5/8" |
| SE29022L | 11/32" | 3-7/16"  | 11/32" | 4-3/4" |
| SE29023L | 23/64" | 3-1/2"   | 23/64" | 4-7/8" |
| SE29024L | 3/8"   | 3-5/8"   | 3/8"   | 5"     |
| SE29025L | 25/64" | 3-3/4"   | 25/64" | 5-1/8" |
| SE29026L | 13/32" | 3-7/8"   | 13/32" | 5-1/4" |
| SE29027L | 27/64" | 3-15/16" | 27/64" | 5-3/8" |
| SE29028L | 7/16"  | 4-1/16"  | 7/16"  | 5-1/2" |
| SE29029L | 29/64" | 4-3/16"  | 29/64" | 5-5/8" |
| SE29030L | 15/32" | 4-5/16"  | 15/32" | 5-3/4" |
| SE29031L | 31/64" | 4-3/8"   | 31/64" | 5-7/8" |
| SE29032L | 1/2"   | 4-1/2"   | 1/2"   | 6"     |

Shank length = OAL minus CEL



## GENERAL PURPOSE DRILL, JOBBER LENGTH, METRIC, STYLE 29M



Style 29M

Made from high-speed steel. Made in USA.

| PART #   | CED    | CEL   | SHANK  | OAL   |
|----------|--------|-------|--------|-------|
| SE295005 | 0.5mm  | 6mm   | 0.5mm  | 22mm  |
| SE29501  | 1mm    | 12mm  | 1mm    | 34mm  |
| SE295015 | 1.5mm  | 18mm  | 1.5mm  | 40mm  |
| SE29502  | 2mm    | 24mm  | 2mm    | 49mm  |
| SE295026 | 2.5mm  | 30mm  | 2.5mm  | 57mm  |
| SE29503  | 3mm    | 33mm  | 3mm    | 61mm  |
| SE295036 | 3.5mm  | 39mm  | 3.5mm  | 70mm  |
| SE29504  | 4mm    | 43mm  | 4mm    | 75mm  |
| SE295045 | 4.5mm  | 47mm  | 4.5mm  | 80mm  |
| SE29505  | 5mm    | 52mm  | 5mm    | 86mm  |
| SE295055 | 5.5mm  | 57mm  | 5.5mm  | 93mm  |
| SE29506  | 6mm    | 57mm  | 6mm    | 93mm  |
| SE295065 | 6.5mm  | 63mm  | 6.5mm  | 101mm |
| SE29507  | 7mm    | 69mm  | 7mm    | 109mm |
| SE295075 | 7.5mm  | 69mm  | 7.5mm  | 109mm |
| SE29508  | 8mm    | 75mm  | 8mm    | 117mm |
| SE295085 | 8.5mm  | 75mm  | 8.5mm  | 117mm |
| SE29509  | 9mm    | 81mm  | 9mm    | 125mm |
| SE295095 | 9.5mm  | 81mm  | 9.5mm  | 125mm |
| SE29510  | 10mm   | 87mm  | 10mm   | 133mm |
| SE295105 | 10.5mm | 87mm  | 10.5mm | 133mm |
| SE29511  | 11mm   | 94mm  | 11mm   | 142mm |
| SE295115 | 11.5mm | 94mm  | 11.5mm | 142mm |
| SE29512  | 12mm   | 101mm | 12mm   | 151mm |
| SE295125 | 12.5mm | 101mm | 12.5mm | 151mm |
| SE29513  | 13mm   | 101mm | 13mm   | 151mm |

Shank length = OAL minus CEL

## GENERAL PURPOSE DRILL SETS, JOBBER LENGTH

Made from high-speed steel. Made in USA.

| PART #    | DRILLS PER SET | SIZE RANGE    | SIZE INCREMENTS |
|-----------|----------------|---------------|-----------------|
| SEJS13M   | 13             | 1/16" to 1/4" | by 64ths        |
| SEJS15M   | 15             | 1/16" to 1/2" | by 32nds        |
| SEJS21M   | 21             | 1/16" to 3/8" | by 64ths        |
| SEJS29M   | 29             | 1/16" to 1/2" | by 64ths        |
| SEJS25MET | 25             | 1mm - 13mm    | by 0.5mm        |
| SEJS49MET | 41             | 6mm - 10mm    | by 0.1mm        |

## GENERAL PURPOSE DRILL, SHORT LENGTH, STYLE 29S



Style 29S

Made from high-speed steel. Made in USA.

| PART #  | CED    | CEL      | SHANK  | OAL      |
|---------|--------|----------|--------|----------|
| SE29101 | 1/8"   | 7/8"     | 1/8"   | 1-7/8"   |
| SE29102 | 9/64"  | 15/16"   | 9/64"  | 1-15/16" |
| SE29103 | 5/32"  | 1"       | 5/32"  | 2-1/16"  |
| SE29104 | 11/64" | 1-1/16"  | 11/64" | 2-1/8"   |
| SE29105 | 3/16"  | 1-1/8"   | 3/16"  | 2-3/16"  |
| SE29106 | 13/64" | 1-3/16"  | 13/64" | 2-1/4"   |
| SE29107 | 7/32"  | 1-1/4"   | 7/32"  | 2-3/8"   |
| SE29108 | 15/64" | 1-5/16"  | 15/64" | 2-7/16"  |
| SE29109 | 1/4"   | 1-3/8"   | 1/4"   | 2-1/2"   |
| SE29110 | 17/64" | 1-7/16"  | 17/64" | 2-5/8"   |
| SE29111 | 9/32"  | 1-1/2"   | 9/32"  | 2-11/16" |
| SE29112 | 19/64" | 1-9/16"  | 19/64" | 2-3/4"   |
| SE29113 | 5/16"  | 1-5/8"   | 5/16"  | 2-13/16" |
| SE29114 | 21/64" | 1-11/16" | 21/64" | 2-15/16" |
| SE29115 | 11/32" | 1-11/16" | 11/32" | 3"       |
| SE29116 | 23/64" | 1-3/4"   | 23/64" | 3-1/16"  |
| SE29117 | 3/8"   | 1-13/16" | 3/8"   | 3-1/8"   |
| SE29118 | 25/64" | 1-7/8"   | 25/64" | 3-1/4"   |
| SE29119 | 13/32" | 1-15/16" | 13/32" | 3-5/16"  |
| SE29120 | 27/64" | 2"       | 27/64" | 3-3/8"   |
| SE29121 | 7/16"  | 2-1/16"  | 7/16"  | 3-7/16"  |
| SE29122 | 29/64" | 2-1/8"   | 29/64" | 3-9/16"  |
| SE29123 | 15/32" | 2-1/8"   | 15/32" | 3-5/8"   |
| SE29124 | 31/64" | 2-3/16"  | 31/64" | 3-11/16" |
| SE29125 | 1/2"   | 2-1/4"   | 1/2"   | 3-3/4"   |
| SE29133 | 5/8"   | 2-3/4"   | 5/8"   | 4-1/4"   |

Shank length = OAL minus CEL



Straight Shank Drill Set



## GENERAL PURPOSE DRILL, SHORT LENGTH, STYLE 29SLH



Style 29SLH

Made from high-speed steel. Left-hand rotation.

| PART #   | CED    | CEL      | SHANK  | OAL      |
|----------|--------|----------|--------|----------|
| SE29101L | 1/8"   | 7/8"     | 1/8"   | 1-7/8"   |
| SE29102L | 9/64"  | 15/16"   | 9/64"  | 1-15/16" |
| SE29103L | 5/32"  | 1"       | 5/32"  | 2-1/16"  |
| SE29104L | 11/64" | 1-1/16"  | 11/64" | 2-1/8"   |
| SE29105L | 3/16"  | 1-1/8"   | 3/16"  | 2-3/16"  |
| SE29106L | 13/64" | 1-3/16"  | 13/64" | 2-1/4"   |
| SE29107L | 7/32"  | 1-1/4"   | 7/32"  | 2-3/8"   |
| SE29108L | 15/64" | 1-5/16"  | 15/64" | 2-7/16"  |
| SE29109L | 1/4"   | 1-3/8"   | 1/4"   | 2-1/2"   |
| SE29110L | 17/64" | 1-7/16"  | 17/64" | 2-5/8"   |
| SE29111L | 9/32"  | 1-1/2"   | 9/32"  | 2-11/16" |
| SE29112L | 19/64" | 1-9/16"  | 19/64" | 2-3/4"   |
| SE29113L | 5/16"  | 1-5/8"   | 5/16"  | 2-13/16" |
| SE29114L | 21/64" | 1-11/16" | 21/64" | 2-15/16" |
| SE29115L | 11/32" | 1-11/16" | 11/32" | 3"       |
| SE29116L | 23/64" | 1-3/4"   | 23/64" | 3-1/16"  |
| SE29117L | 3/8"   | 1-13/16" | 3/8"   | 3-1/8"   |
| SE29118L | 25/64" | 1-7/8"   | 25/64" | 3-1/4"   |
| SE29119L | 13/32" | 1-15/16" | 13/32" | 3-5/16"  |
| SE29120L | 27/64" | 2"       | 27/64" | 3-3/8"   |
| SE29121L | 7/16"  | 2-1/16"  | 7/16"  | 3-7/16"  |
| SE29122L | 29/64" | 2-1/8"   | 29/64" | 3-9/16"  |
| SE29123L | 15/32" | 2-1/8"   | 15/32" | 3-5/8"   |
| SE29124L | 31/64" | 2-3/16"  | 31/64" | 3-11/16" |
| SE29125L | 1/2"   | 2-1/4"   | 1/2"   | 3-3/4"   |

Shank length = OAL minus CEL

## GENERAL PURPOSE DRILL, LONG LENGTH, STYLE 29T



Style 29T

Made from high-speed steel. Made in U.S.A.

| PART #  | CED    | CEL    | SHANK  | OAL    |
|---------|--------|--------|--------|--------|
| SE29201 | 1/8"   | 2-3/4" | 1/8"   | 5-1/8" |
| SE29202 | 9/64"  | 3"     | 9/64"  | 5-3/8" |
| SE29203 | 5/32"  | 3"     | 5/32"  | 5-3/8" |
| SE29204 | 11/64" | 3-3/8" | 11/64" | 5-3/4" |
| SE29205 | 3/16"  | 3-3/8" | 3/16"  | 5-3/4" |
| SE29206 | 13/64" | 3-5/8" | 13/64" | 6"     |
| SE29207 | 7/32"  | 3-5/8" | 7/32"  | 6"     |
| SE29208 | 15/64" | 3-3/4" | 15/64" | 6-1/8" |
| SE29209 | 1/4"   | 3-3/4" | 1/4"   | 6-1/8" |
| SE29210 | 17/64" | 3-7/8" | 17/64" | 6-1/4" |
| SE29211 | 9/32"  | 3-7/8" | 9/32"  | 6-1/4" |
| SE29212 | 19/64" | 4"     | 19/64" | 6-3/8" |
| SE29213 | 5/16"  | 4"     | 5/16"  | 6-3/8" |
| SE29214 | 21/64" | 4-1/8" | 21/64" | 6-1/2" |
| SE29215 | 11/32" | 4-1/8" | 11/32" | 6-1/2" |
| SE29216 | 23/64" | 4-1/4" | 23/64" | 6-3/4" |
| SE29217 | 3/8"   | 4-1/4" | 3/8"   | 6-3/4" |
| SE29218 | 25/64" | 4-3/8" | 25/64" | 7"     |
| SE29219 | 13/32" | 4-3/8" | 13/32" | 7"     |
| SE29220 | 27/64" | 4-5/8" | 27/64" | 7-1/4" |
| SE29221 | 7/16"  | 4-5/8" | 7/16"  | 7-1/4" |
| SE29222 | 29/64" | 4-3/4" | 29/64" | 7-1/2" |
| SE29223 | 15/32" | 4-3/4" | 15/32" | 7-1/2" |
| SE29224 | 31/64" | 4-3/4" | 31/64" | 7-3/4" |
| SE29225 | 1/2"   | 4-3/4" | 1/2"   | 7-3/4" |

Shank length = OAL minus CEL

## GENERAL PURPOSE DRILL, LONG LENGTH, FAST SPIRAL, STYLE 29TF



Style 29TF

Made from high-speed steel. Made in U.S.A.

| PART #   | CED    | CEL    | SHANK  | OAL    |
|----------|--------|--------|--------|--------|
| SE29201F | 1/8"   | 2-3/4" | 1/8"   | 5-1/8" |
| SE29202F | 9/64"  | 3"     | 9/64"  | 5-3/8" |
| SE29203F | 5/32"  | 3"     | 5/32"  | 5-3/8" |
| SE29204F | 11/64" | 3-3/8" | 11/64" | 5-3/4" |
| SE29205F | 3/16"  | 3-3/8" | 3/16"  | 5-3/4" |
| SE29206F | 13/64" | 3-5/8" | 13/64" | 6"     |
| SE29207F | 7/32"  | 3-5/8" | 7/32"  | 6"     |
| SE29208F | 15/64" | 3-3/4" | 15/64" | 6-1/8" |
| SE29209F | 1/4"   | 3-3/4" | 1/4"   | 6-1/8" |
| SE29210F | 17/64" | 3-7/8" | 17/64" | 6-1/4" |
| SE29211F | 9/32"  | 3-7/8" | 9/32"  | 6-1/4" |
| SE29212F | 19/64" | 4"     | 19/64" | 6-3/8" |
| SE29213F | 5/16"  | 4"     | 5/16"  | 6-3/8" |
| SE29214F | 21/64" | 4-1/8" | 21/64" | 6-1/2" |
| SE29215F | 11/32" | 4-1/8" | 11/32" | 6-1/2" |
| SE29216F | 23/64" | 4-1/4" | 23/64" | 6-3/4" |
| SE29217F | 3/8"   | 4-1/4" | 3/8"   | 6-3/4" |
| SE29218F | 25/64" | 4-3/8" | 25/64" | 7"     |
| SE29219F | 13/32" | 4-3/8" | 13/32" | 7"     |
| SE29220F | 27/64" | 4-5/8" | 27/64" | 7-1/4" |
| SE29221F | 7/16"  | 4-5/8" | 7/16"  | 7-1/4" |
| SE29222F | 29/64" | 4-3/4" | 29/64" | 7-1/2" |
| SE29223F | 15/32" | 4-3/4" | 15/32" | 7-1/2" |
| SE29224F | 31/64" | 4-3/4" | 31/64" | 7-3/4" |
| SE29225F | 1/2"   | 4-3/4" | 1/2"   | 7-3/4" |

Shank length = OAL minus CEL

## TAPER-POINT DRILL, JOBBER LENGTH, STYLE 29JTP



Style 29JTP

Made from high-speed steel. Made in U.S.A.  
Designed for use with wood screws.

| PART #  | CED    | CEL      | SCREW SIZE | OAL    |
|---------|--------|----------|------------|--------|
| SE30078 | 5/64"  | 1"       | 2          | 2"     |
| SE30093 | 3/32"  | 1-1/4"   | 3          | 2-1/4" |
| SE30109 | 7/64"  | 1-1/2"   | 4          | 2-5/8" |
| SE30125 | 1/8"   | 1-5/8"   | 5          | 2-3/4" |
| SE30140 | 9/64"  | 1-3/4"   | 6          | 2-7/8" |
| SE30156 | 5/32"  | 2"       | 7          | 3-1/8" |
| SE30171 | 11/64" | 2"       | 8          | 3-1/4" |
| SE30187 | 3/16"  | 2-5/16"  | 9          | 3-1/2" |
| SE30203 | 13/64" | 2-7/16"  | 10         | 3-5/8" |
| SE30218 | 7/32"  | 2-1/2"   | 12         | 3-3/4" |
| SE30234 | 15/64" | 2-5/8"   | 14         | 3-7/8" |
| SE30250 | 1/4"   | 2-3/4"   | 14         | 4"     |
| SE30265 | 17/64" | 2-7/8"   | 16         | 4-1/8" |
| SE30281 | 9/32"  | 2-15/16" | 16         | 4-1/4" |
| SE30296 | 19/64" | 3-1/16"  | 18         | 4-3/8" |
| SE30312 | 5/16"  | 3-3/16"  | 18-20      | 4-1/2" |
| SE30328 | 21/64" | 3-5/16"  | 20         | 4-5/8" |
| SE30343 | 11/32" | 3-7/16"  | 20         | 4-3/4" |
| SE30359 | 23/64" | 3-1/2"   | 24         | 4-7/8" |
| SE30375 | 3/8"   | 3-5/8"   | 24         | 5"     |

## TAPER-POINT DRILL, TAPER LENGTH, STYLE 29TTP



Style 29TTP

Made from high-speed steel.  
Designed for use with wood screws.

| PART #  | CED    | CEL    | SCREW SIZE | OAL    |
|---------|--------|--------|------------|--------|
| SE31078 | 5/64"  | 2-1/4" | 2          | 3-3/4" |
| SE31093 | 3/32"  | 2-1/4" | 3          | 4-1/4" |
| SE31109 | 7/64"  | 2-1/2" | 4          | 4-5/8" |
| SE31125 | 1/8"   | 2-3/4" | 5          | 5-1/8" |
| SE31140 | 9/64"  | 3"     | 6          | 5-3/8" |
| SE31156 | 5/32"  | 3"     | 7          | 5-3/8" |
| SE31171 | 11/64" | 3-3/8" | 8          | 5-3/4" |
| SE31187 | 3/16"  | 3-3/8" | 9          | 5-3/4" |
| SE31203 | 13/64" | 3-5/8" | 10         | 6"     |
| SE31218 | 7/32"  | 3-5/8" | 12         | 6"     |
| SE31234 | 15/64" | 3-3/4" | 14         | 6-1/8" |
| SE31250 | 1/4"   | 3-3/4" | 14         | 6-1/8" |
| SE31265 | 17/64" | 3-7/8" | 16         | 6-1/4" |
| SE31281 | 9/32"  | 3-7/8" | 16         | 6-1/4" |
| SE31296 | 19/64" | 4"     | 18         | 6-3/8" |
| SE31312 | 5/16"  | 4"     | 18-20      | 6-3/8" |
| SE31328 | 21/64" | 4-1/8" | 20         | 6-1/2" |
| SE31343 | 11/32" | 4-1/8" | 20         | 6-1/2" |
| SE31359 | 23/64" | 4-1/4" | 24         | 6-3/4" |
| SE31375 | 3/8"   | 4-1/4" | 24         | 6-3/4" |

## DRILL-POINT 1/2" SHANK DRILL, SILVER & DEMING® • High-Speed Steel

Designed for general purpose use.



Silver & Deming® Drill

Black-oxide surface treated.  
Features a 118-degree point.

| PART #   | CED    | CEL | SHANK | OAL |
|----------|--------|-----|-------|-----|
| SESD516  | 33/64" | 3"  | 1/2"  | 6"  |
| SESD531  | 17/32" | 3"  | 1/2"  | 6"  |
| SESD547  | 35/64" | 3"  | 1/2"  | 6"  |
| SESD563  | 9/16"  | 3"  | 1/2"  | 6"  |
| SESD578  | 37/64" | 3"  | 1/2"  | 6"  |
| SESD594  | 19/32" | 3"  | 1/2"  | 6"  |
| SESD609  | 39/64" | 3"  | 1/2"  | 6"  |
| SESD625  | 5/8"   | 3"  | 1/2"  | 6"  |
| SESD641  | 41/64" | 3"  | 1/2"  | 6"  |
| SESD656  | 21/32" | 3"  | 1/2"  | 6"  |
| SESD672  | 43/64" | 3"  | 1/2"  | 6"  |
| SESD688  | 11/16" | 3"  | 1/2"  | 6"  |
| SESD703  | 45/64" | 3"  | 1/2"  | 6"  |
| SESD719  | 23/32" | 3"  | 1/2"  | 6"  |
| SESD734  | 47/64" | 3"  | 1/2"  | 6"  |
| SESD750  | 3/4"   | 3"  | 1/2"  | 6"  |
| SESD766  | 49/64" | 3"  | 1/2"  | 6"  |
| SESD781  | 25/32" | 3"  | 1/2"  | 6"  |
| SESD797  | 51/64" | 3"  | 1/2"  | 6"  |
| SESD813  | 13/16" | 3"  | 1/2"  | 6"  |
| SESD828  | 53/64" | 3"  | 1/2"  | 6"  |
| SESD844  | 27/32" | 3"  | 1/2"  | 6"  |
| SESD859  | 55/64" | 3"  | 1/2"  | 6"  |
| SESD875  | 7/8"   | 3"  | 1/2"  | 6"  |
| SESD891  | 57/64" | 3"  | 1/2"  | 6"  |
| SESD906  | 29/32" | 3"  | 1/2"  | 6"  |
| SESD922  | 59/64" | 3"  | 1/2"  | 6"  |
| SESD938  | 15/16" | 3"  | 1/2"  | 6"  |
| SESD953  | 61/64" | 3"  | 1/2"  | 6"  |
| SESD969  | 31/32" | 3"  | 1/2"  | 6"  |
| SESD984  | 63/64" | 3"  | 1/2"  | 6"  |
| SESD1000 | 1"     | 3"  | 1/2"  | 6"  |

## SOLID-CENTER MACHINE AUGER BITS, STYLE NO. 26A • Carbon tool steel

Designed for use in machines and power drills with chucks 1/2" or larger.



Style 26A Auger Bit

Single-flute design with double spurs and double cutters.

| PART #  | CED    | CEL | SHANK | OAL |
|---------|--------|-----|-------|-----|
| SE26115 | 5/16"  | 6"  | 1/2"  | 8"  |
| SE26116 | 3/8"   | 6"  | 1/2"  | 8"  |
| SE26117 | 7/16"  | 6"  | 1/2"  | 8"  |
| SE26118 | 1/2"   | 6"  | 1/2"  | 8"  |
| SE26119 | 9/16"  | 6"  | 1/2"  | 8"  |
| SE26120 | 5/8"   | 6"  | 1/2"  | 8"  |
| SE26121 | 11/16" | 6"  | 1/2"  | 8"  |
| SE26122 | 3/4"   | 6"  | 1/2"  | 8"  |
| SE26123 | 13/16" | 6"  | 1/2"  | 8"  |
| SE26124 | 7/8"   | 6"  | 1/2"  | 8"  |
| SE26126 | 1"     | 6"  | 1/2"  | 8"  |
| SE26149 | 13/16" | 10" | 1/2"  | 12" |
| SE26155 | 3/8"   | 12" | 1/2"  | 14" |
| SE26157 | 1/2"   | 12" | 1/2"  | 14" |
| SE26159 | 5/8"   | 12" | 1/2"  | 14" |
| SE26160 | 11/16" | 12" | 1/2"  | 14" |
| SE26161 | 3/4"   | 12" | 1/2"  | 14" |
| SE26162 | 13/16" | 12" | 1/2"  | 14" |
| SE26163 | 7/8"   | 12" | 1/2"  | 14" |
| SE26165 | 1"     | 12" | 1/2"  | 14" |

## AUGER BITS, STYLE NO. 26F



Centerless ground, featuring a solid center design for added strength and a screw point for fast boring in all types of wood. One flute, with single spur and single cutter.

Dual shank: hex portion may be removed from end when round shank is needed.

Carbon tool steel. Made in France.

| PART #    | CED    | CORRESPONDING CHUCK SIZE | OAL    |
|-----------|--------|--------------------------|--------|
| SEA250175 | 1/4"   | 3/8" or larger           | 7-1/2" |
| SEA250275 | 5/16"  | 3/8" or larger           | 7-1/2" |
| SEA250375 | 3/8"   | 3/8" or larger           | 7-1/2" |
| SEA250475 | 7/16"  | 3/8" or larger           | 7-1/2" |
| SEA250575 | 1/2"   | 3/8" or larger           | 7-1/2" |
| SEA250675 | 9/16"  | 3/8" or larger           | 7-1/2" |
| SEA250875 | 11/16" | 3/8" or larger           | 7-1/2" |
| SEA251075 | 13/16" | 3/8" or larger           | 7-1/2" |
| SEA251175 | 7/8"   | 3/8" or larger           | 7-1/2" |
| SEA251275 | 15/16" | 3/8" or larger           | 7-1/2" |
| SEA251375 | 1"     | 3/8" or larger           | 7-1/2" |
| SEA251475 | 1-1/8" | 1/2" or larger           | 7-1/2" |
| SEA251575 | 1-1/4" | 1/2" or larger           | 7-1/2" |
| SEA251675 | 1-3/8" | 1/2" or larger           | 7-1/2" |
| SEA251775 | 1-1/2" | 1/2" or larger           | 7-1/2" |
| SEA250315 | 3/8"   | 3/8" or larger           | 15"    |
| SEA250415 | 7/16"  | 3/8" or larger           | 15"    |
| SEA250515 | 1/2"   | 3/8" or larger           | 15"    |
| SEA250615 | 9/16"  | 3/8" or larger           | 15"    |
| SEA250715 | 5/8"   | 1/2" or larger           | 15"    |
| SEA250815 | 11/16" | 1/2" or larger           | 15"    |
| SEA250915 | 3/4"   | 1/2" or larger           | 15"    |
| SEA251015 | 13/16" | 1/2" or larger           | 15"    |
| SEA251115 | 7/8"   | 1/2" or larger           | 15"    |
| SEA251215 | 15/16" | 1/2" or larger           | 15"    |
| SEA251315 | 1"     | 1/2" or larger           | 15"    |
| SEA251415 | 1-1/8" | 1/2" or larger           | 15"    |
| SEA251515 | 1-1/4" | 1/2" or larger           | 15"    |
| SEA251615 | 1-3/8" | 1/2" or larger           | 15"    |
| SEA251715 | 1-1/2" | 1/2" or larger           | 15"    |

## POWER POLE AUGER BIT STYLE 26PP • CARBON TOOL STEEL

Designed for boring creosoted poles and construction timbers.



Style 26PP Auger Bit

Hex shank is 7/16" in diameter; fits all 1/2" 3-jaw chucks.

| PART #    | CED     | CEL | SHANK LENGTH | OAL |
|-----------|---------|-----|--------------|-----|
| SE2646809 | 9/16"   | 12" | 5"           | 17" |
| SE2646810 | 5/8"    | 12" | 5"           | 17" |
| SE2646811 | 11/16"  | 12" | 5"           | 17" |
| SE2646812 | 3/4"    | 12" | 5"           | 17" |
| SE2646813 | 13/16"  | 12" | 5"           | 17" |
| SE2646909 | 9/16"   | 18" | 5"           | 23" |
| SE2646910 | 5/8"    | 18" | 5"           | 23" |
| SE2646911 | 11/16"  | 18" | 5"           | 23" |
| SE2646912 | 3/4"    | 18" | 5"           | 23" |
| SE2646913 | 13/16"  | 18" | 5"           | 23" |
| SE2646914 | 7/8"    | 18" | 5"           | 23" |
| SE2646915 | 15/16"  | 18" | 5"           | 23" |
| SE2647009 | 9/16"   | 24" | 5"           | 29" |
| SE2647010 | 5/8"    | 24" | 5"           | 29" |
| SE2647011 | 11/16"  | 24" | 5"           | 29" |
| SE2647012 | 3/4"    | 24" | 5"           | 29" |
| SE2647013 | 13/16"  | 24" | 5"           | 29" |
| SE2647014 | 7/8"    | 24" | 5"           | 29" |
| SE2647015 | 15/16"  | 24" | 5"           | 29" |
| SE2647016 | 1"      | 24" | 5"           | 29" |
| SE2647017 | 1-1/16" | 24" | 5"           | 29" |

## DRILL-POINT DRILL, STYLE 32HS

Great for plastics!



Style 32HS

Made from high-speed steel.

| PART #    | CED    | CEL | SHANK | OAL |
|-----------|--------|-----|-------|-----|
| SE32001HS | 1/8"   | 4"  | 1/2"  | 6"  |
| SE32003HS | 3/16"  | 4"  | 1/2"  | 6"  |
| SE32004HS | 7/32"  | 4"  | 1/2"  | 6"  |
| SE32005HS | 1/4"   | 4"  | 1/2"  | 6"  |
| SE32006HS | 9/32"  | 4"  | 1/2"  | 6"  |
| SE32007HS | 5/16"  | 4"  | 1/2"  | 6"  |
| SE32008HS | 11/32" | 4"  | 1/2"  | 6"  |
| SE32009HS | 3/8"   | 4"  | 1/2"  | 6"  |
| SE32011HS | 7/16"  | 4"  | 1/2"  | 6"  |
| SE32012HS | 1/2"   | 4"  | 1/2"  | 6"  |

## SELF CENTERING DRILL GUIDES (Vix® Bits)

Designed to drill centered screw holes for cabinet and builders hardware.



SNAPPY  
Hex Shaft  
Self-Centering  
Drill Guides



VIX  
Self-Centering  
Drill Guides

| PART #     | CED    | CEL       | SHANK   | OAL    |
|------------|--------|-----------|---------|--------|
| SE56401    | 5/64"  | 3 & 4     | 1/4"    | 3"     |
| SE56401HX  | 5/64"  | 3 & 4     | 1/4"HEX | 4"     |
| SE76401    | 7/64"  | 5 & 6     | 1/4"    | 3-1/4" |
| SE76401HX  | 7/64"  | 5 & 6     | 1/4"HEX | 4"     |
| SE96401    | 9/64"  | 8, 9 & 10 | 1/4"    | 3-1/2" |
| SE96401HX  | 9/64"  | 8, 9 & 10 | 1/4"HEX | 4"     |
| SE116401   | 11/64" | 12        | 3/8"    | 5"     |
| SE116401HX | 11/64" | 12        | 1/4"HEX | 4-1/2" |
| SE136401   | 13/64" | 14        | 3/8"    | 4-1/2" |
| SE136401HX | 13/64" | 14        | 1/4"HEX | 4-1/2" |

## REPLACEMENT DRILLS (VIX® BITS)

| PART #   | CED    | REPLACEMENT FOR STOCK NUMBERS | SHANK  | OAL    |
|----------|--------|-------------------------------|--------|--------|
| SE56402  | 5/64"  | SE56401, SE56401HX            | 5/64"  | 2-1/2" |
| SE76402  | 7/64"  | SE76401, SE76401HX            | 7/64"  | 2-7/8" |
| SE96402  | 9/64"  | SE96401, SE-96401HX           | 9/64"  | 3-1/8" |
| SE116402 | 11/64" | SE116401, SE-116401HX         | 11/64" | 4-1/8" |
| SE136402 | 13/64" | SE136401, SE-136401HX         | 13/64" | 4-1/8" |

## REPLACEMENT SPRINGS (VIX® BITS)

| PART #   | SPRING SIZE | REPLACEMENT FOR STOCK NUMBERS |
|----------|-------------|-------------------------------|
| SE56403  | 5/64"       | SE56401, SE56401HX            |
| SE76403  | 7/64"       | SE76401, SE76401HX            |
| SE96403  | 9/64"       | SE96401, SE96401HX            |
| SE116403 | 11/64"      | SE116401, SE116401HX          |
| SE136403 | 13/64"      | SE136401, SE136401HX          |



## REPLACEMENT GUIDES (VIX® BITS)

| PART #   | GUIDE SIZE | REPLACEMENT FOR STOCK NUMERS |
|----------|------------|------------------------------|
| SE56404  | 5/64"      | SE56401, SE56401HX           |
| SE76404  | 7/64"      | SE76401, SE76401HX           |
| SE96404  | 9/64"      | SE96401, SE96401HX           |
| SE116404 | 11/64"     | SE116401, SE116401HX         |
| SE136404 | 13/64"     | SE136401, SE136401HX         |

## DEPTH COLLARS & SETS

Designed for use with drills and counterbores.



Features collars with set screws which lock into the drill flute or bit surface. Surface finish either zinc-plated, or black oxide to prevent rusting.

**Made in USA.**

| PART #    | HOLE DIA   | OUTSIDE DIA | WIDTH | SET SCREW SIZE |
|-----------|--|-------------|-------|----------------|
| SESC-18   | 1/8"   | 3/8"        | 1/4"  | #6-32          |
| SESC-316  | 3/16"  | 3/8"        | 1/4"  | #10-32         |
| SESC-14   | 1/4"   | 7/16"       | 1/4"  | #10-32         |
| SESC-516  | 5/16"  | 5/8"        | 5/16" | #10-32         |
| SESC-38   | 3/8"   | 3/4"        | 3/8"  | 1/4"-20        |
| SESC-716  | 7/16"  | 7/8"        | 1/2"  | 1/4"-20        |
| SESC-12   | 1/2"   | 1"          | 7/16" | 1/4"-20        |
| SESC-916  | 9/16"  | 1"          | 7/16" | 1/4"-20        |
| SESC-58   | 5/8"   | 1-1/8"      | 1/2"  | 1/4"-20        |
| SESC-34   | 3/4"   | 1-1/4"      | 1/2"  | 5/16"-18       |
| SESC-78   | 7/8"   | 1-3/8"      | 9/16" | 5/16"-18       |
| SESC-1    | 1"   | 1-1/2"      | 9/16" | 5/16"-18       |
| SESC-7Set | Set of 7 Collars<br>1/8", 3/16", 1/4", 5/16", 3/8", 7/16" & 1/2" |             |       |                |
| SESC-4Set | Set of 4 Collars<br>5/8", 3/4", 7/8" & 1"                        |             |       |                |

## CHUCK, STYLE 1

For all types of machines where a 7/16"-14 threaded shank is needed.



Chuck, Style 1

**Threaded shank 7/16"-14**

**Drill is held in place with a set screw.**

| PART #   | HOLE DIA | OUTER DIA | OAL    | ROTATIONAL DIRECTION |
|----------|----------|-----------|--------|----------------------|
| SE11125R | 1/8"     | 5/8"      | 1-1/2" | right                |
| SE11156R | 5/32"    | 5/8"      | 1-1/2" | right                |
| SE11187L | 3/16"    | 5/8"      | 1-1/2" | left                 |
| SE11187R | 3/16"    | 5/8"      | 1-1/2" | right                |
| SE11218L | 7/32"    | 5/8"      | 1-1/2" | left                 |
| SE11218R | 7/32"    | 5/8"      | 1-1/2" | right                |
| SE11250L | 1/4"     | 5/8"      | 1-1/2" | left                 |
| SE11250R | 1/4"     | 5/8"      | 1-1/2" | right                |
| SE11281L | 9/32"    | 5/8"      | 1-1/2" | left                 |
| SE11281R | 9/32"    | 5/8"      | 1-1/2" | right                |
| SE11312L | 5/16"    | 7/8"      | 2-3/8" | left                 |
| SE11312R | 5/16"    | 7/8"      | 2-3/8" | right                |
| SE11375L | 3/8"     | 7/8"      | 2-3/8" | left                 |
| SE11375R | 3/8"     | 7/8"      | 2-3/8" | right                |
| SE11393L | 10mm     | 7/8"      | 2-3/8" | left                 |
| SE11393R | 10mm     | 7/8"      | 2-3/8" | right                |
| SE11437L | 7/16"    | 7/8"      | 2-3/8" | left                 |
| SE11437R | 7/16"    | 7/8"      | 2-3/8" | right                |
| SE11500L | 1/2"     | 7/8"      | 2-3/8" | left                 |
| SE11500R | 1/2"     | 7/8"      | 2-3/8" | right                |

**FORSTNER® BITS**



| PART #  | CED     | SHANK | SHANK LENGTH | OAL    |
|---------|---------|-------|--------------|--------|
| SE55001 | 1/4"    | 5/16" | 4-3/4"       | 5"     |
| SE55002 | 5/16"   | 5/16" | 4-3/4"       | 5"     |
| SE55003 | 3/8"    | 3/8"  | 4-3/4"       | 5"     |
| SE55004 | 7/16"   | 1/2"  | 4-3/4"       | 5"     |
| SE55005 | 1/2"    | 1/2"  | 4-3/4"       | 5"     |
| SE55006 | 9/16"   | 1/2"  | 4-3/4"       | 5"     |
| SE55007 | 5/8"    | 1/2"  | 4-3/4"       | 5"     |
| SE55008 | 11/16"  | 1/2"  | 4-3/4"       | 5"     |
| SE55009 | 3/4"    | 1/2"  | 4-11/16"     | 5"     |
| SE55010 | 13/16"  | 1/2"  | 4-11/16"     | 5"     |
| SE55011 | 7/8"    | 1/2"  | 4-9/16"      | 5"     |
| SE55012 | 15/16"  | 1/2"  | 4-9/16"      | 5"     |
| SE55013 | 1"      | 1/2"  | 4-9/16"      | 5"     |
| SE55014 | 1-1/16" | 1/2"  | 4-9/16"      | 5"     |
| SE55015 | 1-1/8"  | 1/2"  | 4-7/16"      | 5"     |
| SE55016 | 1-3/16" | 1/2"  | 4-7/16"      | 5"     |
| SE55017 | 1-1/4"  | 1/2"  | 4-1/2"       | 5"     |
| SE55018 | 1-5/16" | 1/2"  | 4-1/2"       | 5"     |
| SE55019 | 1-3/8"  | 1/2"  | 4-1/2"       | 5"     |
| SE55020 | 1-7/16" | 1/2"  | 6"           | 6-3/4" |
| SE55021 | 1-1/2"  | 1/2"  | 6"           | 6-3/4" |
| SE55022 | 1-5/8"  | 1/2"  | 6-1/8"       | 6-3/4" |
| SE55023 | 1-3/4"  | 1/2"  | 6-1/8"       | 6-3/4" |
| SE55024 | 1-7/8"  | 1/2"  | 6-1/8"       | 6-3/4" |
| SE55025 | 2"      | 1/2"  | 6-1/8"       | 6-3/4" |
| SE55026 | 2-1/8"  | 1/2"  | 6-1/8"       | 6-3/4" |
| SE55027 | 2-1/4"  | 1/2"  | 5-7/8"       | 6-3/4" |
| SE55028 | 2-3/8"  | 1/2"  | 5-7/8"       | 6-3/4" |
| SE55029 | 2-1/2"  | 1/2"  | 5-7/8"       | 6-3/4" |
| SE55030 | 2-5/8"  | 1/2"  | 5-7/8"       | 6-3/4" |
| SE55031 | 2-3/4"  | 1/2"  | 5-7/8"       | 6-3/4" |
| SE55032 | 2-7/8"  | 1/2"  | 5-7/8"       | 6-3/4" |
| SE55033 | 3"      | 1/2"  | 5-7/8"       | 6-3/4" |

*Carbon steel*

## SPADE BITS



| PART #  | CED    | OAL |
|---------|--------|-----|
| SE94620 | 5/16"  | 6"  |
| SE94624 | 3/8"   | 6"  |
| SE94628 | 7/16"  | 6"  |
| SE94632 | 1/2"   | 6"  |
| SE94636 | 9/16"  | 6"  |
| SE94640 | 5/8"   | 6"  |
| SE94644 | 11/16" | 6"  |
| SE94648 | 3/4"   | 6"  |
| SE94652 | 13/16" | 6"  |
| SE94656 | 7/8"   | 6"  |
| SE94660 | 15/16" | 6"  |
| SE94664 | 1"     | 6"  |
| SE94708 | 1-1/8" | 6"  |
| SE94716 | 1-1/4" | 6"  |
| SE94724 | 1-3/8" | 6"  |
| SE94732 | 1-1/2" | 6"  |

## CUSTOM DRILLS

Special sizes are not subject to return or cancellation, and are considered complete with 20% over or under quantity ordered.

*The following information is needed to quote special drills:*

1. Quantity \_\_\_\_\_
2. Cutting Diameter \_\_\_\_\_
3. Twist or Cutting Length \_\_\_\_\_
4. Shank Diameter & Length \_\_\_\_\_
5. Overall Length \_\_\_\_\_
6. Material (Carbide, High-Speed Steel or Carbon Steel) \_\_\_\_\_
7. Point Style (Brad, V-Point or other) \_\_\_\_\_
8. Rotation \_\_\_\_\_



**FAX: 866-945-9433**

## INSERT BITS

### 2 FLUTE FLUSH TRIM INSERT BITS



Insert Flush Trim Bit

| PART #        | CED  | CEL  | SHANK | OAL      | Inserts   |
|---------------|------|------|-------|----------|-----------|
| SEIFT-71214*  | 3/4" | 12mm | 1/4"  | 2-1/4"   | SI-121215 |
| SEIFT-71212*  | 3/4" | 12mm | 1/2"  | 2-1/2"   | SI-121215 |
| SEIFT-73012** | 3/4" | 30mm | 1/2"  | 3-3/16"  | SI-301215 |
| SEIFT-74012** | 3/4" | 40mm | 1/2"  | 3-5/8"   | SI-401215 |
| SEIFT-75012** | 3/4" | 50mm | 1/2"  | 3-15/16" | SI-501217 |

\*Use SI4-Screw and SBE119 Bearing

\*\*Use SI-Screw and SBE140

### 1 FLUTE INSERT STRAIGHT BITS



Insert 1 Flute Straight Bit

| PART #      | CED  | CEL  | SHANK | OAL    | Inserts    |
|-------------|------|------|-------|--------|------------|
| SEIS1-73012 | 3/4" | 30mm | 1/2"  | 3-3/8" | SI-301215P |
| SEIS1-74012 | 3/4" | 40mm | 1/2"  | 3-3/8" | SI-3951215 |

Use SI35-Screw

### 2 FLUTE INSERT STRAIGHT BITS



| PART #      | CED  | CEL  | SHANK | OAL      | INSERT     |
|-------------|------|------|-------|----------|------------|
| SEINS-34    | 3/4" | 30mm | 3/4"  | 3"       | SI-2951215 |
| SEINS-34-12 | 3/4" | 30mm | 1/2"  | 3"       | SI-301215  |
| SEIS2-740   | 3/4" | 40mm | 1/2"  | 3-5/16"  | SI-401215  |
| SEIS2-750   | 3/4" | 50mm | 1/2"  | 3-11/16" | SI-501217  |
| SEINS-34-58 | 3/4" | 30mm | 5/8"  | 3"       | SI-2951215 |
| SEINS-34-40 | 3/4" | 40mm | 3/4"  | 4"       | SI-3951215 |
| SEINS-34-50 | 3/4" | 50mm | 3/4"  | 4-1/4"   | SI-4951215 |
| SEINS-1-30  | 1"   | 30mm | 1/2"  | 3"       | SI-2951215 |

Use SI-Screw

Four Sided Inserts for End Cutting

### 2 FLUTE INSERT TEMPLATE BITS



SEIT750-30

| PART #        | CED    | CEL  | OAL      | SHANK | Inserts    |
|---------------|--------|------|----------|-------|------------|
| SEIT750-30*   | 3/4"   | 30mm | 3"       | 1/2"  | SI-2951215 |
| SEIT750-40*   | 3/4"   | 40mm | 3-5/16"  | 1/2"  | SI-3951215 |
| SEIT750-50*   | 3/4"   | 50mm | 3-1/16"  | 1/2"  | SI-501217  |
| SEIT1125-30** | 1-1/8" | 30mm | 3"       | 1/2"  | SI-301215P |
| SEIT1125-40** | 1-1/8" | 40mm | 3-5/16"  | 1/2"  | SI-3951215 |
| SEIT1125-50** | 1-1/8" | 50mm | 3-11/16" | 1/2"  | SI-501217  |

Use SI-Screw

Four Sided Inserts for End Cutting

\* Use SBE155

\*\* Use SBE150

### 1 FLUTE V-GROOVE BIT



SEIV91-12

| PART #    | CED  | CEL    | ANGLE | SHANK | OAL     | Inserts   |
|-----------|------|--------|-------|-------|---------|-----------|
| SEIV90-12 | 25mm | 15.5mm | 90°   | 1/2"  | 2-5/8"  | SIV151215 |
| SEIV91-12 | 18mm | 12mm   | 91°   | 1/2"  | 2-5/16" | SI-121215 |

Use SI-Screw

## 22 DEGREE BEVEL BITS • 2 FLUTE



| PART #     | CED  | CEL  | ANGLE | SHANK | OAL    | Inserts   |
|------------|------|------|-------|-------|--------|-----------|
| SEIBT22-14 | 3/4" | 12mm | 22°   | 1/4"  | 2-1/8" | SI-121215 |
| SEIBT22-12 | 3/4" | 12mm | 22°   | 1/2"  | 2-1/4" | SI-121215 |

*Use SI4-Screw*

## 45 DEGREE BEVEL BITS • 2 FLUTE



| PART #     | SMALL |      | ANGLE | SHANK | OAL    | Inserts   |
|------------|-------|------|-------|-------|--------|-----------|
|            | CED   | CEL  |       |       |        |           |
| SEIBT45-14 | 3/4"  | 12mm | 45°   | 1/4"  | 2-1/8" | SI-121215 |
| SEIBT45-12 | 3/4"  | 12mm | 45°   | 1/2"  | 2-1/4" | SI-121215 |

*Use SI4-Screw*

## INSERT COMPRESSION BITS • 2+2



| PART #     | CED    | CEL  | SHANK | OAL    | Inserts                 |
|------------|--------|------|-------|--------|-------------------------|
| SEINS22-40 | 1-1/4" | 40mm | 3/4"  | 3-3/4" | SI-301215,<br>SI-121215 |
| SEINS22-50 | 1-1/4" | 50mm | 3/4"  | 4-1/2" | SI-401215,<br>SI-121215 |

*Use SICS-Screw*

## 45 DEGREE INSERT BIT • 1 FLUTE



| PART #    | CED  | Cut Height | SHANK |
|-----------|------|------------|-------|
| SECS143IR | 50mm | 1"         | 3/4"  |

*Replacement Insert: Part# SECS143IR insert  
Replacement Screw: 10-32x6*

## INSERT SPOILBOARD SURFACING CUTTERS - STRAIGHT (for MDF and Particleboard)

Spoil4-2

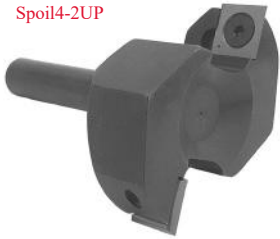


| PART #     | CED    | CEL  | SHANK | # of Wings |
|------------|--------|------|-------|------------|
| SPOIL178-2 | 1-7/8" | 1/2" | 1/2"  | 2          |
| SPOIL25-2  | 2-1/2" | 1/2" | 1/2"  | 2          |
| SPOIL4-2   | 4"     | 1/2" | 3/4"  | 2          |
| SPOIL4-3   | 4"     | 1/2" | 3/4"  | 3          |



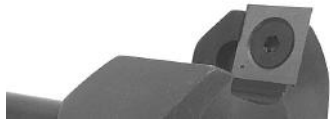
## INSERT SPOILBOARD SURFACING CUTTERS - UP-SHEAR (for Balsa Core Material)

Spoil4-2UP



| PART #      | CED    | CEL  | SHANK | # of Wings |
|-------------|--------|------|-------|------------|
| SPOIL25-2UP | 2-1/2" | 1/2" | 1/2"  | 2          |
| SPOIL4-2UP  | 4"     | 1/2" | 3/4"  | 2          |
| SPOIL4-3UP  | 4"     | 1/2" | 3/4"  | 3          |

## INSERT SPOILBOARD SURFACING CUTTERS - ACCESSORIES



| PART #       | Description   |
|--------------|---|
| SPOIL-Insert | (Replacement insert for spoilboard cutter 10 pc pack 14x14x2) |
| SPOIL-Screw  | (Replacement screw for spoilboard cutter)                     |
| SPOIL-Wrench | (Wrench for spoilboard cutter insert)                         |

## 2 WING COPE (STILE) & STICK (RAIL) BITS - FACE DOWN



Face Down Cope

| PART #   | CED | SHANK | DESCRIPTION  | COMMENTS  |
|----------|-----|-------|--------------|-----------|
| SEIBCSFD | 3"  | 3/4"  | Cope (Stile) | Face Down |
| SEIBSSF  | 3"  | 3/4"  | Stick (Rail) | Face Down |

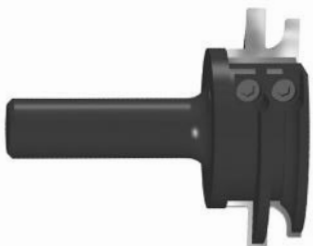
*The same body fits all three styles below.*

## 2 WING COPE(STILE) & STICK(RAIL) BITS - FACE DOWN - INSERTS



| PART #    | DESCRIPTION               | COMMENTS  | PKG QTY    |
|-----------|---------------------------|-----------|------------|
| SE-ICSOFD | Ogee Insert-Cope (Stile)  | Face Down | Sold each. |
| SE-IRSOFD | Ogee Insert-Stick (Rail)  | Face Down | Sold each. |
| SE-ICSBFD | Bead Insert-Cope (Stile)  | Face Down | Sold each. |
| SE-IRSBFD | Bead Insert-Stick (Rail)  | Face Down | Sold each. |
| SE-ICSRFD | Round Insert-Cope (Stile) | Face Down | Sold each. |
| SE-IRSRFD | Round Insert-Stick (Rail) | Face Down | Sold each. |

## 2 WING COPE (STILE) & STICK (RAIL) BITS - FACE UP



| PART # | CED | SHANK | DESCRIPTION  | COMMENTS |
|--------|-----|-------|--------------|----------|
| SEIBCS | 3"  | 3/4"  | Cope (Stile) | Face Up  |
| SEIBSS | 3"  | 3/4"  | Stick (Rail) | Face Up  |

*The same body fits all three styles below.*

## 2 WING COPE (STILE) & STICK (RAIL) BITS - FACE UP - INSERTS



| PART #  | DESCRIPTION               | COMMENTS | PKG QTY    |
|---------|---------------------------|----------|------------|
| SE-ICSO | Ogee Insert-Cope (Stile)  | Face Up  | Sold each. |
| SE-IRSO | Ogee Insert-Stick (Rail)  | Face Up  | Sold each. |
| SE-ICSB | Bead Insert-Cope (Stile)  | Face Up  | Sold each. |
| SE-IRSB | Bead Insert-Stick (Rail)  | Face Up  | Sold each. |
| SE-ICSR | Round Insert-Cope (Stile) | Face Up  | Sold each. |
| SE-IRSR | Round Insert-Stick (Rail) | Face Up  | Sold each. |

## 2 WING RAISED PANEL BITS



| PART #    | DESCRIPTION       | SHANK | COMMENTS |
|-----------|-------------------|-------|----------|
| SEIBRP-34 | Raised Panel Body | 3/4"  | Face Up  |

*3/4" Shank • Face Up*

## 2 WING RAISED PANEL BITS - INSERTS



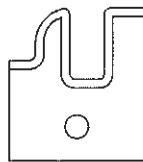
| PART #  | DESCRIPTION (SOLID CARBIDE)  | COMMENTS | PKG QTY    |
|---------|------------------------------|----------|------------|
| SE-IRPC | Round Raised Panel Insert    | Face Up  | Sold each. |
| SE-IRPS | Straight Raised Panel Insert | Face Up  | Sold each. |
| SE-IRPO | Ogee Raised Panel Insert     | Face Up  | Sold each. |

*The same body fits all three styles.*

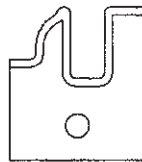
## INSERT 3 WING SHAPER - COPE (STILE)



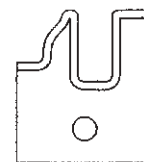
| PART #  | Large Diameter | BORE   | DESCRIPTION                       |
|---------|----------------|--------|-----------------------------------|
| SE-BCS  | 4"             | 1-1/4" | Insert Cope (Stile) Body          |
| SE-ICSR |                |        | Round Cope (Stile) Profile Insert |
| SE-ICSB |                |        | Bead Cope (Stile) Profile Insert  |
| SE-ICSO |                |        | Ogee Cope (Stile) Profile Insert  |



SE-ICSR



SE-ICSB



SE-ICSO

*Right-Hand Rotation - Face Down  
Each body comes with one set of knives*

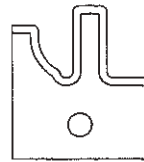
## INSERT 3 WING SHAPER - STICK (RAIL)



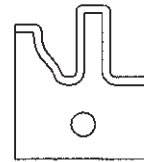
| PART #  | Large Diameter | BORE   | DESCRIPTION               |
|---------|----------------|--------|---------------------------|
| SE-BRS  | 4"             | 1-1/4" | Insert Rail (Stick) Body  |
| SE-IRSR |                |        | Round Rail (Stick) Insert |
| SE-IRSB |                |        | Bead Rail (Stick) Insert  |
| SE-IRSO |                |        | Ogee Rail (Stick) Insert  |



SE-IRSR



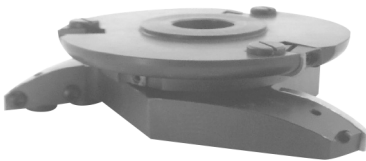
SE-IRSB



SE-IRSO

*Right-Hand Rotation - Face Down  
Each body comes with one set of knives*

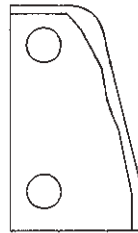
## INSERT 3 WING RAISED PANEL CUTTERS



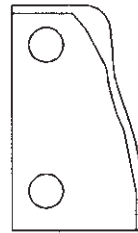
| PART #  | Large Diameter | BORE   | DESCRIPTION                  |
|---------|----------------|--------|------------------------------|
| SE-BRP  | 7-1/2"         | 1-1/4" | Insert Raised Panel Body     |
| SE-IRPC |                |        | Round Raised Panel Insert    |
| SE-IRPS |                |        | Straight Raised Panel Insert |
| SE-IRPO |                |        | Ogee Raised Panel Insert     |



SE-IRPC



SE-IRPS



SE-IRPO

*Face Down - Each body comes with one set of knives  
Use SI-Screw - 10-32X9*

## INSERT 3 WING BACK PANEL CUTTER



| PART #       | Large Diameter | BORE   | DESCRIPTION                 |
|--------------|----------------|--------|-----------------------------|
| SE-BBP       | 5-3/4"         | 1-1/4" | Insert Back Panel Body      |
| SE-IBP       |                |        | Back Panel Insert Old Style |
| SE-IBP-Round |                |        | Round Style-New             |

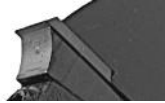


*Each body comes with one set of knives*

## INSERT 3 WING RAISED PANEL TRIM CUTTER



| PART #  | Large Diameter | BORE   | DESCRIPTION                     |
|---------|----------------|--------|---------------------------------|
| SE-BRPT | 4"             | 1-1/4" | Insert Raised Panel Trim Cutter |
| SE-IRPT |                |        | Trim Cutter Insert (7.5 x 12)   |



*Used to trim end panels  
Each body comes with one set of knives*

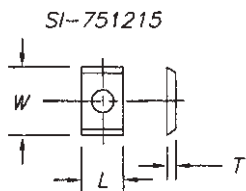
## ACCESSORIES FOR 3 WING CUTTER INSERTS

| PART #    | DESCRIPTION                                |
|-----------|--|
| SE750TBU  | 3/4" T Type Bushing                        |
| SE1000TBU | 1" T Type Bushing                          |
| RB41250   | Rub Bearing 4" OD x 1-1/4" ID x 1/2" Thick |

**Note: Insert tooling requires your machine, spindle and bushings to be in good condition with minimum runout.**

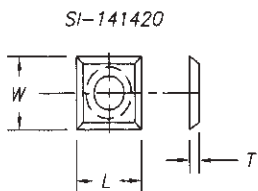
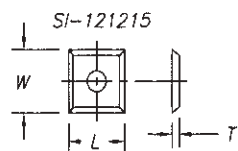
## SOLID CARBIDE INSERT REPLACEMENTS AND ACCESSORIES

### STANDARD REVERSIBLE INSERT KNIVES - 2 SIDED 1 HOLE



| PART #    | DESCRIPTION (L x W x T) |
|-----------|-------------------------|
| SI-751215 | 7.5 x 12 x 1.5          |
| SI-861215 | 8.6 x 12 x 1.5          |
| SI-901215 | 9.0 x 12 x 1.5          |
| SI-961215 | 9.6 x 12 x 1.5          |
| SI-131215 | 13 x 12 x 1.5           |
| SI-151215 | 15 x 12 x 1.5           |
| SI-181215 | 18 x 12 x 1.5           |
| SI-201215 | 20 x 12 x 1.5           |
| SI-251215 | 25 x 12 x 1.5           |

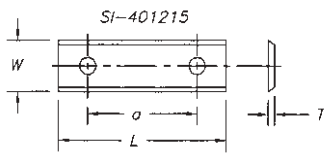
### STANDARD REVERSIBLE INSERT KNIVES - 4 SIDED 1 HOLE



| PART #           | DESCRIPTION (L x W x T)              |
|------------------|--------------------------------------|
| SI-10510515      | 10.5 x 10.5 x 1.5                    |
| SI-10510515CS    | 10.5 x 10.5 x 1.5 C Sink hole        |
| SI-121215        | 12 x 12 x 1.5                        |
| SI-131325        | 13 x 13 x 2.5                        |
| SI-1361362       | 13.6 x 13.6 x 2.0                    |
| SI-141412        | 14 x 14 x 1.2                        |
| SI-141412 Holz   | 14 x 14 x 1.2 Holz-Her Style Insert  |
| SI-141420        | 14 x 14 x 2.0                        |
| SI-141420-T10    | 14 x 14 x 2.0 T10mg                  |
| SI-141420-SP     | 14 x 14 x 2.0 T04F Grade             |
| SI-141420CR      | 14 x 14 x 2.0 w/Corner Radius        |
| SI-14314325      | 14.3 x 14.3 x 2.5                    |
| SI-14614625      | 14.6 x 14.6 x 2.5                    |
| SI-14614625CR    | 14.6 x 14.6 x 2.5 w/Corner Radius    |
| SI-151525        | 15 x 15 x 2.5 w/115mm Radius         |
| SI-151525- 30deg | 15 x 15 x 2.5 w/150mm Radius         |
| SI-151525-R50    | 15 x 15 x 2.5 w/50mm Radius          |
| SI-151525-SQ     | 15 x 15 x 2.5 w/Square Corners       |
| SI-151525-SQ-SP  | 15 x 15 x 2.5 w/Square Corners T08CR |
| SI-151525 Byrd   | 15 x 15 x 2.5 w/100mm Radius         |
| SI-171215        | 17 x 12 x 1.5                        |
| SI-1717203       | 17 x 17 x 2.0 w/3mm Hole             |
| SI-1717204       | 17 x 17 x 2.0 w/4mm Hole             |
| SI-1957015       | 19.5 x 7 x 1.5                       |
| SI-1957515       | 19.5 x 7.5 x 1.5                     |
| SI-1958015       | 19.5 x 8.0 x 1.5                     |
| SI-1959015       | 19.5 x 9.0 x 1.5                     |
| SI-1951015       | 19.5 x 10 x 1.5                      |
| SI-1951115       | 19.5 x 11 x 1.5                      |
| SI-1951215       | 19.5 x 12 x 1.5                      |
| SI-191920        | 19 x 19 x 2.0 w/ 4mm Hole            |
| SI-212155        | 21 x 21 x 5.5 x 40°                  |
| SI-258015        | 25 x 8.0 x 1.5                       |

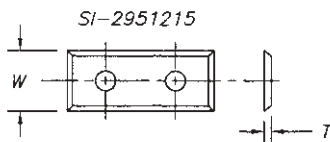


## STANDARD REVERSIBLE INSERT KNIVES - 2 SIDED 2 HOLES



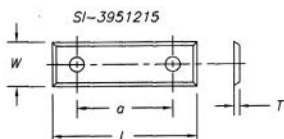
| PART #       | DESCRIPTION (L x W x T)                |
|--------------|--|
| SI-251215-2  | 25 x 12 x 1.5 - 14 CTC                 |
| SI-301215    | 30 x 12 x 1.5 - 14 CTC                 |
| SI-301215CA  | 30 x 12 x 1.5 - 14 CTC 4 Corner Angles |
| SI-301215-16 | 30 x 12 x 1.5 - 16 CTC                 |
| SI-301215SP  | 30 x 12 x 1.5 T03SMG Grade             |
| SI-301225    | 30 x 12 x 2.5 - 14 CTC                 |
| SI-351215    | 35 x 12 x 1.5 - 26 CTC                 |
| SI-401215    | 40 x 12 x 1.5 - 26 CTC                 |
| SI-401215CA  | 40 x 12 x 1.5 - 26 CTC 4 Corner Angles |
| SI-4451515   | 44.5 x 15 x 1.5                        |
| SI-501215    | 50 x 12 x 1.5 - 26 CTC                 |
| SI-501215CA  | 50 x 12 x 1.5 - 26 CTC 4 Corner Angles |
| SI-601215    | 60 x 12 x 1.5 - 26 CTC                 |
| SI-801322    | 80 x 13 x 2.2 - 60 CTC                 |
| SI-1001322   | 100 x 13 x 2.2 - 60 CTC                |
| SI-1201322   | 120 x 13 x 2.2 - 60 CTC                |

## STANDARD REVERSIBLE INSERT KNIVES - 4 SIDED 2 HOLES (14 CTC) PLUNGE



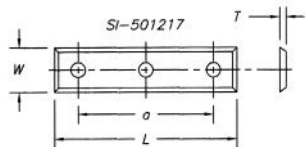
| PART #         | DESCRIPTION (L x W x T)       |
|----------------|-------------------------------|
| SI-287015      | 28 x 7.0 x 1.5                |
| SI-2957015     | 29.5 x 7 x 1.5                |
| SI-2957515     | 29.5 x 7.5 x 1.5              |
| SI-2958015     | 29.5 x 8.0 x 1.5              |
| SI-2959015     | 29.5 x 9.0 x 1.5              |
| SI-2959015SP   | 29.5 x 9.0 x 1.5 T03SMG Grade |
| SI-2951015     | 29.5 x 10 x 1.5               |
| SI-2951115     | 29.5 x 11 x 1.5               |
| SI-2951215SP   | 29.5 x 12 x 1.5 T03SMG Grade  |
| SI-301215P     | 30 x 12 x 1.5                 |
| SI-301215-TL15 | 30 x 12 x 1.5 TL15 Grade      |

## STANDARD REVERSIBLE INSERT KNIVES - 4 SIDED 2 HOLES (26 CTC) PLUNGE



| PART #        | DESCRIPTION (L x W x T)     |
|---------------|-----------------------------|
| SI-3951215    | 39.5 x 12 x 1.5             |
| SI-4958015    | 49.5 x 8 x 1.5              |
| SI-4959015    | 49.5 x 9 x 1.5              |
| SI-4959015-SP | 49.5 x 9 x 1.5 T03SMG Grade |
| SI-4951015    | 49.5 x 10 x 1.5             |
| SI-4951115    | 49.5 x 11 x 1.5             |
| SI-4951215    | 49.5 x 12 x 1.5 T04F Grade  |
| SI-4951215-SP | 49.5 x 12 x 1.5 T03SMG      |
| SI-5951215    | 59.5 x 12 x 1.5             |

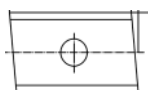
## STANDARD REVERSIBLE INSERT KNIVES - 4 SIDED 3 HOLES (37 CTC)



| PART #    | DESCRIPTION (L x W x T) |
|-----------|-------------------------|
| SI-501017 | 50 x 10 x 1.7           |
| SI-501217 | 50 x 12 x 1.7           |

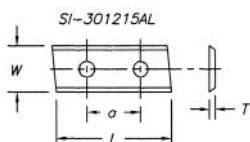
## INSERT KNIVES - END ANGLE 1 HOLE

SI-201215AR



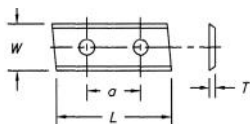
| PART #      | DESCRIPTION (L x W x T)   |
|-------------|---------------------------|
| SI-201215AL | 20 x 12 x 1.5 Angle Left  |
| SI-201215AR | 20 x 12 x 1.5 Angle Right |

## INSERT KNIVES - END ANGLE 2 HOLES (14 CTC)



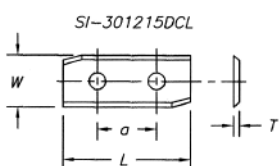
| PART #      | DESCRIPTION (L x W x T)   |
|-------------|---------------------------|
| SI-301215AL | 30 x 12 x 1.5 Angle Left  |
| SI-301215AR | 30 x 12 x 1.5 Angle Right |

## INSERT KNIVES - END ANGLE 2 HOLES (26 CTC)



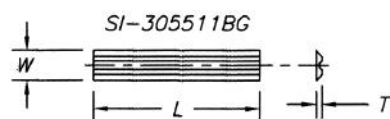
| PART #      | DESCRIPTION (L x W x T)   |
|-------------|---------------------------|
| SI-401215AL | 40 x 12 x 1.5 Angle Left  |
| SI-401215AR | 40 x 12 x 1.5 Angle Right |
| SI-501215AL | 50 x 12 x 1.5 Angle Left  |
| SI-501215AR | 50 x 12 x 1.5 Angle Right |

## INSERT KNIVES - DOUBLE ANGLE 2 HOLES



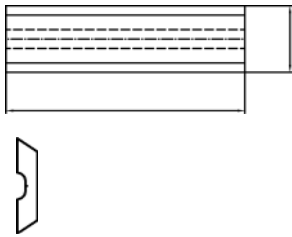
| PART #       | DESCRIPTION (L x W x T)      |
|--------------|------------------------------|
| SI-301215DCL | 30 x 12 x 1.5 RB-TL - 14 CTC |
| SI-301215DCR | 30 x 12 x 1.5 LB-TR - 14 CTC |
| SI-501215DCL | 50 x 12 x 1.5 LB-TR - 26 CTC |
| SI-501215DCR | 50 x 12 x 1.5 RB-TL - 26 CTC |

## INSERT KNIVES - 2 SIDED BACK GROOVE



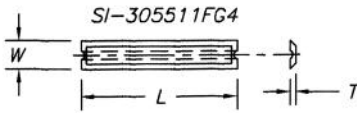
| PART #          | DESCRIPTION (L x W x T)           |
|-----------------|-----------------------------------|
| SI-125511BG     | 12 x 5.5 x 1.1 Back Groove        |
| SI-205511BG     | 20 x 5.5 x 1.1 Back Groove        |
| SI-305511BG     | 30 x 5.5 x 1.1 Back Groove        |
| SI-305511BG- SP | 30 x 5.5 x 1.1 Back Groove T03SMG |
| SI-405511BG     | 40 x 5.5 x 1.1 Back Groove        |
| SI-505511BG     | 50 x 5.5 x 1.1 Back Groove        |
| SI-505511BG-T03 | 50 x 5.5 x 1.1 Back Groove T03SMG |

## INSERT KNIVES - 2 SIDED FACE GROOVE



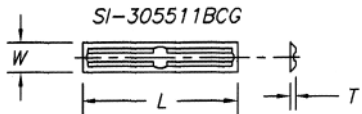
| PART #      | DESCRIPTION (L x W x T)    |
|-------------|----------------------------|
| SI-978152   | 9.7 x 8 x 1.5 Face Groove  |
| SI-117815   | 11.7 x 8 x 1.5 Face Groove |
| SI-1478152  | 14.7 x 8 x 1.5 Face Groove |
| SI-125511FG | 12 x 5.5 x 1.1 Face Groove |
| SI-197815   | 19.7 x 8 x 1.5 Face Groove |
| SI-205511FG | 20 x 5.5 x 1.1 Face Groove |
| SI-305511FG | 30 x 5.5 x 1.1 Face Groove |
| SI-405511FG | 40 x 5.5 x 1.1 Face Groove |
| SI-505511FG | 50 x 5.5 x 1.1 Face Groove |
| SI-508015FG | 50 x 8 x 1.5 Face Groove   |
| SI-608015FG | 60 x 8 x 1.5 Face Groove   |

## INSERT KNIVES - 4 SIDED FACE GROOVE



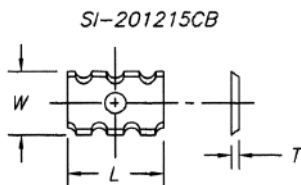
| PART #       | DESCRIPTION (L x W x T)    |
|--------------|----------------------------|
| SI-205511FG4 | 20 x 5.5 x 1.1 Face Groove |
| SI-255511FG4 | 25 x 5.5 x 1.1 Face Groove |
| SI-305511FG4 | 30 x 5.5 x 1.1 Face Groove |
| SI-355511FG4 | 35 x 5.5 x 1.1 Face Groove |
| SI-405511FG4 | 40 x 5.5 x 1.1 Face Groove |
| SI-505511FG4 | 50 x 5.5 x 1.1 Face Groove |

## INSERT KNIVES - 4 SIDED BACK & CROSS GROOVE



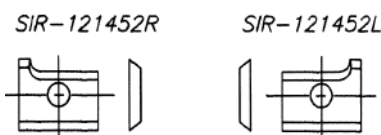
| PART #       | DESCRIPTION (L x W x T) |
|--------------|-------------------------|
| SI-205511BCG | 20 x 5.5 x 1.1          |
| SI-305511BCG | 30 x 5.5 x 1.1          |
| SI-405511BCG | 40 x 5.5 x 1.1          |
| SI-505511BCG | 50 x 5.5 x 1.1          |

## INSERT KNIVES - Chipbreaker Knives



| PART #      | DESCRIPTION (L x W x T) |
|-------------|-------------------------|
| SI-151520CB | 15 x 15 x 2.0 - 4 Sided |
| SI-201215CB | 20 x 12 x 1.5 - 2 Sided |
| SI-301215CB | 30 x 12 x 1.5 - 2 Sided |
| SI-501215CB | 50 x 12 x 1.5 - 2 Sided |

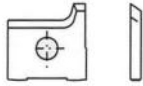
## INSERT KNIVES - Radius Knives



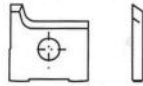
| PART #         | DESCRIPTION (L x W x T)       |
|----------------|-------------------------------|
| SIR-121452L-2  | 12 x 14.5 x 2 LH 2mm Radius   |
| SIR-121452R-2  | 12 x 14.5 x 2 RH 2mm Radius   |
| SIR-121452L-25 | 12 x 14.5 x 2 LH 2.5mm Radius |
| SIR-121452R-25 | 12 x 14.5 x 2 RH 2.5mm Radius |
| SIR-121452L-3  | 12 x 14.5 x 2 LH 3mm Radius   |
| SIR-121452R-3  | 12 x 14.5 x 2 RH 3mm Radius   |

## INSERT KNIVES - Radius Knives

SIR-151452R

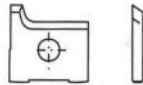
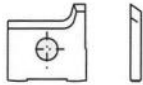


SIR-151452L



| PART #         | DESCRIPTION (L x W x T)       |
|----------------|-------------------------------|
| SIR-151452L-2  | 15 x 14.5 x 2 LH 2mm Radius   |
| SIR-151452R-2  | 15 x 14.5 x 2 RH 2mm Radius   |
| SIR-151452L-25 | 15 x 14.5 x 2 LH 2.5mm Radius |
| SIR-151452R-25 | 15 x 14.5 x 2 RH 2.5mm Radius |
| SIR-151452L-3  | 15 x 14.5 x 2 LH 3mm Radius   |
| SIR-151452R-3  | 15 x 14.5 x 2 RH 3mm Radius   |

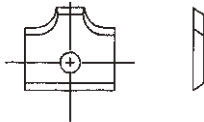
## INSERT KNIVES - Radius Knives



| PART #          | DESCRIPTION (L x W x T)       |
|-----------------|-------------------------------|
| SIR-1961522L-2  | 19.6 x 15.2 x 2 LH 2mm Radius |
| SIR-1961522R-2  | 19.6 x 15.2 x 2 RH 2mm Radius |
| SIR-19615223L-3 | 19.6 x 15.2 x 2 LH 3mm Radius |
| SIR-19615223R-3 | 19.6 x 15.2 x 2 RH 3mm Radius |

## INSERT KNIVES - DOUBLE RADIUS KNIVES (3MM HOLE)

SIDR-161752-4



| PART #        | DESCRIPTION (L x W x T) |
|---------------|-------------------------|
| SIDR-161752-2 | 16 x 17.5 x 2.0 R-2     |
| SIDR-161752-3 | 16 x 17.5 x 2.0 R-3     |
| SIDR-161752-4 | 16 x 17.5 x 2.0 R-4     |
| SIDR-161752-5 | 16 x 17.5 x 2.0 R-5     |

## INSERT KNIVES - RADIUS PROFILE KNIVES

SIRP-12712732-2



| PART #          | DESCRIPTION (L x W x T) |
|-----------------|-------------------------|
| SIRP-12712732-2 | 12.7 x 12.7 x 3.2 R-2   |
| SIRP-12712732-3 | 12.7 x 12.7 x 3.2 R-3   |

## INSERT KNIVES - LEITZ SYSTEMS® FACE GROOVE



| PART #       | DESCRIPTION (L x W x T) |
|--------------|-------------------------|
| SILS-778015  | 7.7 x 8.0 x 1.5         |
| SILS-978015  | 9.7 x 8.0 x 1.5         |
| SILS-1178015 | 11.7 x 8.0 x 1.5        |
| SILS-1478018 | 14.7 x 8.0 x 1.5        |
| SILS-1978015 | 19.7 x 8.0 x 1.5        |
| SILS-2478015 | 24.7 x 8.0 x 1.5        |
| SILS-308015  | 30 x 8.0 x 1.5          |
| SILS-358015  | 35 x 8.0 x 1.5          |
| SILS-408015  | 40 x 8.0 x 1.5          |
| SILS-458015  | 45 x 8.0 x 1.5          |
| SILS-508015  | 50 x 8.0 x 1.5          |
| SILS-608015  | 60 x 8.0 x 1.5          |
| SILS-708015  | 70 x 8.0 x 1.5          |
| SILS-808015  | 80 x 8.0 x 1.5          |
| SILS-1008015 | 100 x 8.0 x 1.5         |
| SILS-1208015 | 120 x 8.0 x 1.5         |

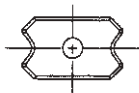
## INSERT KNIVES - PORTABLE PLANERS BACK GROOVE



| PART #       | Description  |
|--------------|--|
| SIPP-565511  | 56 x 5.5 x 1.1 Adler®  |
| SIPP-605511  | 60 x 5.5 x 1.1 Wegoma®   |
| SIPP-755511  | 75.5 x 5.5 x 1.1 AEG®, Bosch®, Festo®, Haffner®, Kress®, Mafell®, Metabo®, Scheer®, Skill®, Holz-Her®  |
| SIPP-7575512 | 75.7 x 5.5 x 1.2 Black & Decker®   |
| SIPP-785511  | 78 x 5.5 x 1.1 Virutex®  |
| SIPP-8055912 | 80.5 x 5.9 x 1.2 ELU®  |
| SIPP-8055511 | 80.5 x 5.5 x 1.1 ELU®  |
| SIPP-825511  | 82 x 5.5 x 1.1 AEG®, Black & Decker®, Bosch®, ALU®, Fein®, Felisatti®, Haffner®, Hitachi®, Holz-Her®, Mafell®, Makita®, Metabo®, Peugeot®, Ryobi®, Skil® |
| SIPP-8275511 | 82.7 x 5.5 x 1.1 Black & Decker®   |
| SIPP-925511  | 92 x 5.5 x 1.1 AEG®, Hitachi®, Ryobi®  |
| SIPP-1025511 | 102 x 5.5 x 1.1 AEG®   |

## INSERT KNIVES - SCRAPER KNIVES 6 DEGREE

SIS-2012202



| PART #      | DESCRIPTION (L x W x T) |
|-------------|-------------------------|
| SIS-2012202 | 20 x 12 x 2.0 R-2       |
| SIS-2012203 | 20 x 12 x 2.0 R-3       |
| SIS-2012204 | 20 x 12 x 2.0 R-4       |
| SIS-2012205 | 20 x 12 x 2.0 R-5       |

## INSERT KNIVES - TRIANGLE SPUR KNIVES

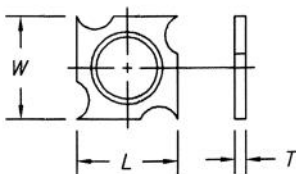
SITS-221920



| PART #      | DESCRIPTION (L x W x T) |
|-------------|-------------------------|
| SITS-221920 | 22 x 19 x 2.0           |

## INSERT KNIVES - SPUR/GROOVING KNIVES

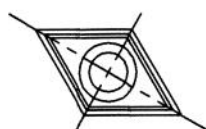
SISG-1818195



| PART #        | DESCRIPTION (L x W x T) |
|---------------|-------------------------|
| SISG-141420-2 | 14 x 14 x 20 2mm Radius |
| SISG-1818195  | 18 x 18 x 1.95          |
| SISG-1818245  | 18 x 18 x 2.45          |
| SISG-1818295  | 18 x 18 x 2.95          |
| SISG-1818370  | 18 x 18 x 3.70          |

## INSERT KNIVES - SPUR/GROOVING KNIVES

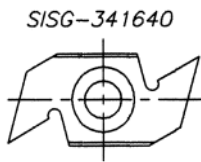
SISG-142820



| PART #      | DESCRIPTION (L x W x T) |
|-------------|-------------------------|
| SISG-142820 | 14 x 28 x 2.0 30 Degree |
| SISG-161630 | 16 x 16 x 3.0 32 Degree |



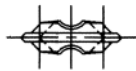
## INSERT KNIVES - SPUR/GROOVING KNIVES



| PART #      | DESCRIPTION (L x W x T) |
|-------------|-------------------------|
| SISG-341640 | 34 x 16 x 4.0           |
| SISG-341650 | 34 x 16 x 5.0           |
| SISG-341660 | 34 x 16 x 6.0           |
| SISG-341670 | 34 x 16 x 7.0           |

## INSERT KNIVES - SPUR KNIVES

SISP-185735



| PART #      | DESCRIPTION (L x W x T) |
|-------------|-------------------------|
| SISP-185735 | 18 x 5.7 x 3.5          |

## INSERT KNIVES - RADIUS KNIVES

SI-301402LH

SI-301402RH



| PART #      | DESCRIPTION (L x W x T)      |
|-------------|------------------------------|
| SI-301402LH | 30 x 14 x 2 LH 3mm Radius LH |
| SI-301402RH | 30 x 14 x 2 RH 3mm Radius RH |

## INSERT KNIVES - V GROOVE KNIVES

SI-3951215V



| PART #      | DESCRIPTION (L x W x T) |
|-------------|-------------------------|
| SI-3951215V | 39.5 x 12 x 1.5 V       |

## INSERT KNIVES - LEITZ® SYSTEMS "BG - TEST"

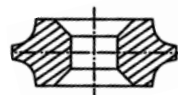


Leitz Systems "BG - TEST"



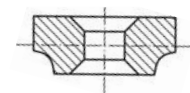
SI-152380-210

| PART #        | DESCRIPTION (L x W x T) |
|---------------|-------------------------|
| SI-152380-210 | 15 x 23 x 8 (21/0-45°)  |



SI-152390-220

| PART #        | DESCRIPTION (L x W x T) |
|---------------|-------------------------|
| SI-152390-220 | 15 x 23 9 (22/0 R3)     |
| SI-152373-223 | 15 x 23 7.3 (22/3 R2)   |
| SI-152370-224 | 15 x 23 7.0 (22/4 R1.5) |
| SI-152390-225 | 15 x 23 9.0 (22/5 R3F)  |



SI-152390-221

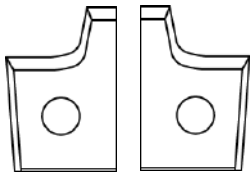
| PART #         | DESCRIPTION (L x W x T)   |
|----------------|---------------------------|
| SI-152390-221  | 15 x 23 x 9.0 (22/1 R3)   |
| SI-1525773-240 | 15 x 25.7 x 7.3 (24/0 R5) |



SI-1525773-241

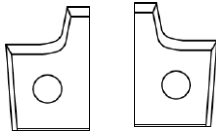
| PART #         | DESCRIPTION (L x W x T)   |
|----------------|---------------------------|
| SI-1525773-241 | 15 x 25.7 x 7.3 (24/1 R5) |

## INSERT KNIVES - QUADROMAT, IMA, MFA



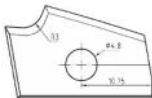
SIR-121802-LH SIR-121802-RH

| PART #         | DESCRIPTION (L x W x T)                  |
|----------------|--|
| SIR-121802-2LH | 12 x 18 x 2 x 2mm Radius LH - Quadromat® |
| SIR-121802-2RH | 12 x 18 x 2 x 2mm Radius RH - Quadromat® |
| SIR-121802-3LH | 12 x 18 x 2 x 3mm Radius LH - Quadromat® |
| SIR-121802-3RH | 12 x 18 x 2 x 3mm Radius RH - Quadromat® |



SIR-121802-RH SIR-121802-LH

| PART #             | DESCRIPTION (L x W x T)           |
|--------------------|-----------------------------------|
| SIR-121802-2LH-MFA | 12 x 18 x 2 x 2mm Radius LH - MFA |
| SIR-121802-2RH-MFA | 12 x 18 x 2 x 2mm Radius RH - MFA |
| SIR-121802-3LH-MFA | 12 x 18 x 2 x 3mm Radius LH - MFA |
| SIR-121802-3RH-MFA | 12 x 18 x 2 x 3mm Radius RH - MFA |

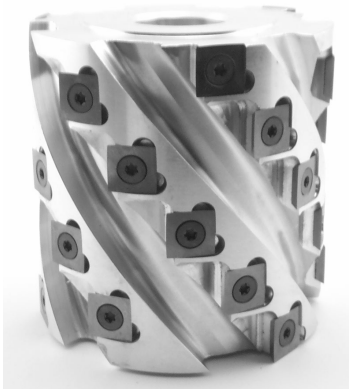


SIR-14223-3RH

| PART #         | DESCRIPTION (L x W x T)     |
|----------------|-----------------------------|
| SIR-14223-3LH* | 14 x 22.3 x 3mm Radius - LH |
| SIR-14223-3RH* | 14 x 22.3 x 3mm Radius - RH |

*\*Sold Individually*

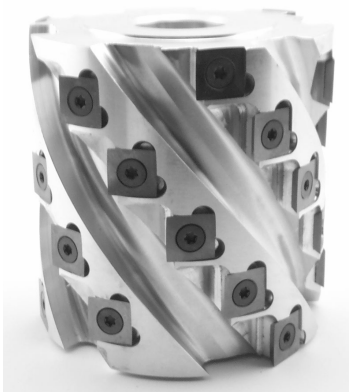
## SPIRAL PLUS MOLDER HEADS



| PART #       | CED | CEL | BORE | WINGS |
|--------------|-----|-----|------|-------|
| SESPM-54-416 | 5"  | 4"  | All  | 4     |
| SESPM-56-420 | 5"  | 6"  | All  | 4     |
| SESPM-59-448 | 5"  | 9"  | All  | 4     |
| SESPM-54-624 | 5"  | 4"  | All  | 6     |
| SESPM-56-630 | 5"  | 6"  | All  | 6     |
| SESPM-59-660 | 5"  | 9"  | All  | 6     |
| SESPM-64-416 | 6"  | 4"  | All  | 4     |
| SESPM-66-420 | 6"  | 6"  | All  | 4     |
| SESPM-69-448 | 6"  | 9"  | All  | 4     |
| SESPM-64-624 | 6"  | 4"  | All  | 6     |
| SESPM-66-630 | 6"  | 6"  | All  | 6     |
| SESPM-69-660 | 6"  | 9"  | All  | 6     |

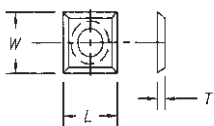
*1-13/16" is the most common bore  
Aircraft Grade Aluminum Body*

## SPIRAL PLUS PROFILE SHAPER HEADS



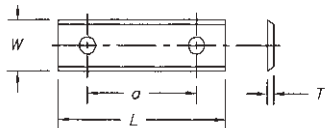
| PART #      | CED                     | CEL | BORE   | WINGS |
|-------------|-------------------------|-----|--------|-------|
| SESP-44-416 | 4"                      | 4"  | 1 1/4" | 4     |
| SESP-45-420 | 4"                      | 5"  | 1 1/4" | 4     |
| SESP-46-424 | 4"                      | 6"  | 1 1/4" | 4     |
| SESP-44-624 | 4"                      | 4"  | 1 1/4" | 6     |
| SESP-45-630 | 4"                      | 5"  | 1 1/4" | 6     |
| SESP-46-636 | 4"                      | 6"  | 1 1/4" | 6     |
| RB41250     | 4" Diameter Rub Bearing |     |        |       |

## SPIRAL PLUS REPLACEMENT PARTS



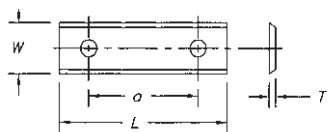
| PART #    | DESCRIPTION                                   |
|-----------|---|
| SI-151525 | Replacement Insert 15 x 15 x 2.5 (pack of 10) |
| SIS-Screw | Replacement Screw                             |

## COMPONENT PARTS FOR INSERT TOOLING - INSERTS



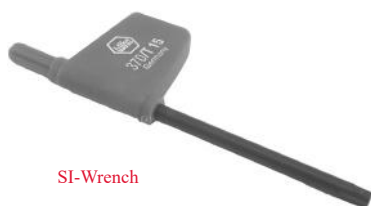
| PART #    | DESCRIPTION   | PACK | SIDES   |
|-----------|---------------|------|---------|
| SI-301215 | 30 x 12 x 1.5 | 10   | 2 sided |
| SI-401215 | 40 x 12 x 1.5 | 10   | 2 sided |
| SI-501215 | 50 x 12 x 1.5 | 10   | 2 sided |

## COMPONENT PARTS FOR INSERT TOOLING - INSERTS FOR END



| PART #     | DESCRIPTION     | PACK | SIDES   |
|------------|-----------------|------|---------|
| SI-121215  | 12 x 12 x 1.5   | 10   | 4 sided |
| SI-2951215 | 29.5 x 12 x 1.5 | 10   | 4 sided |
| SI-3951215 | 39.5 x 12 x 1.5 | 10   | 4 sided |
| SI-4951215 | 49.5 x 12 x 1.5 | 10   | 4 sided |

## COMPONENT PARTS FOR INSERT TOOLING - WRENCHES



SI-Wrench

| PART #         | DESCRIPTION           | PACK |
|----------------|-----------------------|------|
| SE-T8          | T8 x 60 Torx Wrench   | 1    |
| SI-Wrench      | T15 Flag Style        | 1    |
| SI-1580 Wrench | T15 Torx Wrench       | 1    |
| SI-25100Wrench | T25 x 100 Torx Wrench | 1    |

## COMPONENT PARTS FOR INSERT TOOLING - SCREWS



| PART #          | DESCRIPTION                 | PACK |
|-----------------|-----------------------------|------|
| SICS-Screw      | Torx Screw                  | 4    |
| SI4-Screw       | Torx Screw                  | 4    |
| SI35-Screw      | Torx Screw                  | 4    |
| SEI-Screw       | Torx Screw for SEIS1        | EA   |
| SIGSH-Screw     | Torx Screw for Insert Heads |      |
| SICS-Screw      | Torx Screw for Insert Bits  | EA   |
| SI-Screw10-32x6 | Screws for SECS143IR        | EA   |
| SI-Screw10-32x9 | Screws for Bolt in Inserts  | EA   |

## HSS 60-16 MOLDER BARS - BEVEL BOTTOM - 5/16" THICK



with chamfer



| PART #        | DESCRIPTION (W x T x L) |
|---------------|-------------------------|
| SEM2-1250-516 | 1-1/4" x 5/16" x 25"    |
| SEM2-1500-516 | 1-1/2" x 5/16" x 25"    |
| SEM2-1750-516 | 1-3/4" x 5/16" x 25"    |
| SEM2-2000-516 | 2" x 5/16" x 25"        |
| SEM2-2250-516 | 2-1/4" x 5/16" x 25"    |
| SEM2-2500-516 | 2-1/2" x 5/16" x 25"    |
| SEM2-2750-516 | 2-3/4" x 5/16" x 25"    |
| SEM2-3000-516 | 3" x 5/16" x 25"        |

*Corrugated Back  
HSS M2*

## HSS 60-16 MOLDER BARS - BEVEL BOTTOM - 1/4" THICK



| PART #       | DESCRIPTION (W x T x L) |
|--------------|-------------------------|
| SEM2-1250-14 | 1-1/4" x 1/4" x 25"     |
| SEM2-1500-14 | 1-1/2" x 1/4" x 25"     |
| SEM2-1750-14 | 1-3/4" x 1/4" x 25"     |
| SEM2-2000-14 | 2" x 1/4" x 25"         |
| SEM2-2250-14 | 2-1/4" x 1/4" x 25"     |
| SEM2-2500-14 | 2-1/2" x 1/4" x 25"     |

*Corrugated Back*  
*HSS M2*

## HSS 60-16 MOLDER BARS - FLAT BOTTOM - 5/16" THICK



| PART #         | DESCRIPTION (W x T x L) |
|----------------|-------------------------|
| SEM2C-516-1250 | 1-1/4" x 5/16" x 25"    |
| SEM2C-516-1500 | 1-1/2" x 5/16" x 25"    |
| SEM2C-516-1750 | 1-3/4" x 5/16" x 25"    |
| SEM2C-516-2000 | 2" x 5/16" x 25"        |
| SEM2C-516-2250 | 2-1/4" x 5/16" x 25"    |
| SEM2C-516-2500 | 2-1/2" x 5/16" x 25"    |
| SEM2C-516-2750 | 2-3/4" x 5/16" x 25"    |
| SEM2C-516-3000 | 3" x 5/16" x 25"        |

*Corrugated Back*  
*HSS M2*

## HSS 60-16 MOLDER BARS - FLAT BOTTOM - 1/4" THICK



| PART #        | DESCRIPTION (W x T x L) |
|---------------|-------------------------|
| SEM2C-14-1250 | 1-1/4" x 1/4" x 25"     |
| SEM2C-14-1500 | 1-1/2" x 1/4" x 25"     |
| SEM2C-14-1750 | 1-3/4" x 1/4" x 25"     |
| SEM2C-14-2000 | 2" x 1/4" x 25"         |
| SEM2C-14-2250 | 2-1/4" x 1/4" x 25"     |
| SEM2C-14-2500 | 2-1/2" x 1/4" x 25"     |

*HSS M2*

## WILLIAM & HUSSEY™



| PART #         | DESCRIPTION (W x T x L) |                |
|----------------|-------------------------|----------------|
| SEWH-316-2000  | 2" x 3/16" x 25"        | Smooth         |
| SEWH-316-2000C | 2" x 3/16" x 25"        | 60° Corrugated |
| SEWH-14-2000   | 2" x 1/4" x 25"         | Smooth         |
| SEWH-14-2000C  | 2" x 1/4" x 25"         | 60° Corrugated |
| SEWH-14-2250   | 2-1/4" x 1/4" x 25"     | Smooth         |
| SEWH-14-2250C  | 2-1/4" x 1/4" x 25"     | 60° Corrugated |
| SEWH-14-2500   | 2-1/2" x 1/4" x 25"     | Smooth         |
| SEWH-14-2500C  | 2-1/2" x 1/4" x 25"     | 60° Corrugated |

*HSS M2*

## CORRUGATED BACK MOLDER HEADS - 2 KNIFE



Molder Head

| PART #    | CED         | CEL | BORE   |
|-----------|-------------|-----|--------|
| SEMH422ST | 4" or 100mm | 2"  | 1-1/4" |
| SEMH424ST | 4" or 100mm | 4"  | 1-1/4" |
| SEMH426ST | 4" or 100mm | 6"  | 1-1/4" |

*When Ordering*  
Specify Hook - 12° or 20°  
Specify Bore  
Many sizes also available with Hydro Bore  
Self-Centering Sleeves Quoted on Request

## CORRUGATED BACK MOLDER HEADS - 4 KNIFE



Molder Head

| PART #    | CED         | CEL | BORE           |
|-----------|-------------|-----|----------------|
| SEMH442ST | 4" or 100mm | 2"  | 1-1/4"         |
| SEMH444ST | 4" or 100mm | 4"  | 1-1/4"         |
| SEMH446ST | 4" or 100mm | 6"  | 1-1/4"         |
| SEMH542ST | 5" or 137mm | 2"  | 1-1/2" or 44mm |
| SEMH544ST | 5" or 137mm | 4"  | 1-1/2" or 44mm |
| SEMH546ST | 5" or 137mm | 6"  | 1-1/2" or 44mm |
| SEMH549ST | 5" or 137mm | 9"  | 1-1/2" or 44mm |

|           |       |    |                  |
|-----------|-------|----|------------------|
| SEMH642ST | 150mm | 2" | 1-13/16" or 50mm |
| SEMH644ST | 150mm | 4" | 1-13/16" or 50mm |
| SEMH646ST | 150mm | 6" | 1-13/16" or 50mm |
| SEMH649ST | 150mm | 9" | 1-13/16" or 50mm |

*When Ordering*  
Specify Hook - 12° or 20°  
Specify Bore  
Many sizes also available with Hydro Bore  
Self-Centering Sleeves Quoted on Request

## CORRUGATED BACK MOLDER HEADS - 6 KNIFE



Molder Head

| PART #    | CED   | CEL | BORE                     |
|-----------|-------|-----|--------------------------|
| SEMH662ST | 150mm | 2"  | 1-13/16", 2-1/8" or 50mm |
| SEMH664ST | 150mm | 4"  | 1-13/16", 2-1/8" or 50mm |
| SEMH666ST | 150mm | 6"  | 1-13/16", 2-1/8" or 50mm |
| SEMH669ST | 150mm | 9"  | 1-13/16", 2-1/8" or 50mm |

*When Ordering*  
Specify Hook - 12° or 20°  
Specify Bore  
Many sizes also available with Hydro Bore  
Self-Centering Sleeves Quoted on Request



## AGGREGATE HEADS

Below are just some examples of the many possible heads. Due to the complexity of Aggregate heads and the additional information that we must have to get you an accurate quote, please call for pricing or to request more information.



## WORKHOLDING FOR CNC (COLLETS, TOOLHOLDERS AND ACCESSORIES)

### SYOZ 20 FOR WOODWORKING MACHINES (RDO20)



SE03520-12

| PART #       | Description          | Diameter (mm) | Length (mm) | Inside Diameter |
|--------------|----------------------|---------------|-------------|-----------------|
| SE03520-03mm | SYOZ 20 3mm Collet   | 20            | 34          | 3mm             |
| SE03520-18   | SYOZ 20 1/8" Collet  | 20            | 34          | 1/8"            |
| SE03520-316  | SYOZ 20 3/16" Collet | 20            | 34          | 3/16"           |
| SE03520-05mm | SYOZ 20 5mm Collet   | 20            | 34          | 5mm             |
| SE03520-14   | SYOZ 20 1/4" Collet  | 20            | 34          | 1/4"            |
| SE03520-516  | SYOZ 20 5/16" Collet | 20            | 34          | 5/16"           |
| SE03520-38   | SYOZ 20 3/8" Collet  | 20            | 34          | 3/8"            |
| SE03520-10mm | SYOZ 20 10mm Collet  | 20            | 34          | 10mm            |
| SE03520-716  | SYOZ 20 7/16" Collet | 20            | 34          | 7/16"           |
| SE03520-12   | SYOZ 20 1/2" Collet  | 20            | 34          | 1/2"            |

*This collet used on 6.8HP and 7HP dual end Perske® motors  
Other sizes available, call for pricing.*

### SYOZ 25 FOR WOODWORKING MACHINES (RDO35)



SE03868-12

| PART #       | Description          | Diameter (mm) | Length (mm) | Max Torque |
|--------------|----------------------|---------------|-------------|------------|
| SE03868-18   | SYOZ 25 1/8" Collet  | 35            | 52          | 1/8"       |
| SE03868-316  | SYOZ 25 3/16" Collet | 35            | 52          | 3/16"      |
| SE03868-732  | SYOZ 25 7/32" Collet | 35            | 52          | 7/32"      |
| SE03868-14   | SYOZ 25 1/4" Collet  | 35            | 52          | 1/4"       |
| SE03868-516  | SYOZ 25 5/16" Collet | 35            | 52          | 5/16"      |
| SE03868-38   | SYOZ 25 3/8" Collet  | 35            | 52          | 3/8"       |
| SE03868-716  | SYOZ 25 7/16" Collet | 35            | 52          | 7/16"      |
| SE03868-12   | SYOZ 25 1/2" Collet  | 35            | 52          | 1/2"       |
| SE03868-916  | SYOZ 25 9/16" Collet | 35            | 52          | 9/16"      |
| SE03868-58   | SYOZ 25 5/8" Collet  | 35            | 52          | 5/8"       |
| SE03868-34   | SYOZ 25 3/4" Collet  | 35            | 52          | 3/4"       |
| SE03868-78   | SYOZ 25 7/8" Collet  | 35            | 52          | 7/8"       |
| SE03868-1    | SYOZ 25 1" Collet    | 35            | 52          | 1"         |
| SE03868-6mm  | SYOZ 25 6mm Collet   | 35            | 52          | 6mm        |
| SE03868-7mm  | SYOZ 25 7mm Collet   | 35            | 52          | 7mm        |
| SE03868-10mm | SYOZ 25 10mm Collet  | 35            | 52          | 10mm       |
| SE03868-12mm | SYOZ 25 12mm Collet  | 35            | 52          | 12mm       |
| SE03868-16mm | SYOZ 25 16mm Collet  | 35            | 52          | 16mm       |
| SE03868-20mm | SYOZ 25 20mm Collet  | 35            | 52          | 20mm       |
| SE03868-25mm | SYOZ 25 25mm Collet  | 35            | 52          | 25mm       |

*This collet used on 12HP and 15HP Perske® motors and 7.5 Dual End Perske® motors  
Other sizes available, call for pricing*

### ULTRA HIGH-SPEED COATED CLAMPING NUTS



| PART #     | Description    | Diameter (mm) | Length (mm) | Max Torque |
|------------|----------------|---------------|-------------|------------|
| SE03508    | EOC 08         | 30            | 19          |            |
| SE03520    | SYOZ 20/RDO 20 | 35            | 20          | 40ft lbs   |
| SE03868    | SYOZ 25/RDO 35 | 60            | 30          | 90ft lbs   |
| SE03520-L* | SYOZ 20/RDO 20 | 35            | 20          | 40ft lbs   |
| SE03868-L* | SYOZ 25/RDO 35 | 60            | 30          | 90ft lbs   |

*\*Left-Hand  
Compatible with RDO and Ortlieb Nuts Above*

## SPANNER WRENCHES - SYOZ 20 and SYOZ 25

| PART #  | Type           |
|---------|----------------|
| SE22220 | SYOZ 20/RDO 20 |
| SE03691 | SYOZ 25/RDO 35 |

For SYOZ 20 and SYOZ 25 on previous page

## SHODA® COLLETS (OLD STYLE)



| PART #         | Description            | Diameter (A)<br>(mm) | Length (L)<br>(mm) | Inside<br>Diameter (d) |
|----------------|------------------------|----------------------|--------------------|------------------------|
| SESD-20mm-.250 | 20mm (old style) 1/4"  | 20                   | 52                 | .250"                  |
| SESD-20mm-.312 | 20mm (old style) 5/16" | 20                   | 52                 | .312"                  |
| SESD-20mm-.375 | 20mm (old style) 3/8"  | 20                   | 52                 | .375"                  |
| SESD-20mm-10mm | 20mm(old style) 10mm   | 20                   | 52                 | 10mm                   |
| SESD-20mm-.500 | 20mm (old style) 1/2"  | 20                   | 52                 | .500"                  |
| SESD-20mm-.625 | 20mm (old style) 5/8"  | 20                   | 52                 | .625"                  |
| SESD-20mm-Nut  | Old Style Nut          | 41                   | 30                 |                        |

## SHODA® COLLETS (PIGGY BACK)



| PART #         | Description             | Diameter (A)<br>(mm) | Length (L)<br>(mm) | Inside<br>Diameter (d) |
|----------------|-------------------------|----------------------|--------------------|------------------------|
| SESD-C001-.125 | Piggy back 1/8" Collet  | 16                   | 52                 | .125"                  |
| SESD-C001-.187 | Piggy back 3/16" Collet | 16                   | 52                 | .187"                  |
| SESD-C001-.250 | Piggy back 1/4" Collet  | 16                   | 52                 | .250"                  |
| SESD-C001-.312 | Piggy back 5/16" Collet | 16                   | 52                 | .312"                  |
| SESD-C001-.375 | Piggy back 3/8" Collet  | 16                   | 52                 | .375"                  |
| SESD-C001-.500 | Piggy back 1/2" Collet  | 16                   | 52                 | .500"                  |
| SESD-C001-10mm | Piggy back 10mm Collet  | 16                   | 52                 | 10mm                   |
| SESD-C001-Nut  | Nut for Piggy back      | 36                   | 30                 |                        |

## SHODA® COLLETS (NEW STYLE)



| PART #         | Description                  | Diameter<br>(A)<br>(mm) | Length<br>(L)<br>(mm) | Inside<br>Diameter<br>(d) |
|----------------|------------------------------|-------------------------|-----------------------|---------------------------|
| SESD-C015-.125 | Shoda® 24mm (new style) 1/8  | 24                      | 52                    | .125"                     |
| SESD-C015-.250 | Shoda® 24mm (new style) 1/4  | 24                      | 52                    | .250"                     |
| SESD-C015-.312 | Shoda® 24mm (new style) 5/16 | 24                      | 52                    | .312"                     |
| SESD-C015-.375 | Shoda® 24mm (new style) 3/8  | 24                      | 52                    | .375"                     |
| SESD-C015-.500 | Shoda® 24mm (new style) 1/2  | 24                      | 52                    | .500"                     |
| SESD-C015-.625 | Shoda® 24mm (new style) 5/8  | 24                      | 52                    | .625"                     |
| SESD-C015-.750 | Shoda® 24mm (new style) 3/4  | 24                      | 52                    | .750"                     |
| SESD-C015-10mm | Shoda® 24mm (new style) 10mm | 24                      | 52                    | 10mm                      |
| SESD-C015-Nut  | Nut for New Style            | 46                      | 30                    |                           |

## SHODA® COLLETS (SUPER SHODA®)



| PART #          | Description                   | Diameter (A) (mm) | Length (L) (mm) | Inside Diameter (d) |
|-----------------|-------------------------------|-------------------|-----------------|---------------------|
| SESS-22-14      | Super Shoda® 30,000 RPM       | 23                | 40              | .250"               |
| SESS-22-38      | Super Shoda® 30,000 RPM       | 23                | 40              | 3/8"                |
| SESS-22-10mm    | Super Shoda® 30,000 RPM       | 23                | 40              | 10mm                |
| SESS-22-12      | Super Shoda® 30,000 RPM       | 23                | 40              | 1/2"                |
| SESS-22-58      | Super Shoda® 30,000 RPM       | 23                | 40              | 5/8"                |
| SESS-22-Nut     | Nut for Super Shoda®          | 36                | 15              |                     |
| SESS-22-ext-nut | Extended Nut for Super Shoda® | 36                | 30              |                     |

*Other sizes available, call for pricing.*

## SHODA® NUTS



Shoda® New Style Nut

| PART #          | Description          | Diameter (mm) | Length(mm) |
|-----------------|----------------------|---------------|------------|
| SESD-20mm-Nut   | Old Style Nut        | 41            | 30         |
| SESD-C001-Nut   | Piggyback Nut        | 36            | 30         |
| SESD-C015-Nut   | New Style Nut        | 46            | 30         |
| SESS-22-Nut     | Super Shoda® Nut     | 36            | 15         |
| SESS-22-ext-nut | Nut for Super Shoda® | 36            | 30         |



Super Shoda® Nut



Super Shoda® Extended Nut

## ER PRECISION COLLETS - STANDARD SIZES



Collet ER32

| ER11        | ER16         | ER20         | ER25         | ER32         | ER40         | Shank  |
|-------------|--------------|--------------|--------------|--------------|--------------|--------|
| SE04211-116 | SE04216-116  |              |              |              |              | 1/16"  |
| SE04211-332 | SE04216-332  | SE04220-332  | SE04225-332  | SE04232-332  |              | 3/32"  |
| SE04211-18  | SE04216-18   | SE04220-18   | SE04225-18   | SE04232-18   | SE04240-18   | 1/8"   |
| SE04211-532 | SE04216-532  | SE04220-532  | SE04225-532  | SE04232-532  | SE04240-532  | 5/32"  |
| SE04211-316 | SE04216-316  | SE04220-316  | SE04225-316  | SE04232-316  | SE04240-316  | 3/16"  |
| SE04211-732 | SE04216-732  | SE04220-732  | SE04225-732  | SE04232-732  | SE04240-732  | 7/32"  |
| SE04211-14  | SE04216-14   | SE04220-14   | SE04225-14   | SE04232-14   | SE04240-14   | 1/4"   |
|             | SE04216-932  | SE04220-932  | SE04225-932  | SE04232-932  | SE04240-932  | 9/32"  |
|             | SE04216-516  | SE04220-516  | SE04225-516  | SE04232-516  | SE04240-516  | 5/16"  |
|             | SE04216-1132 | SE04220-1132 | SE04225-1132 | SE04232-1132 | SE04240-1132 | 11/32" |
|             | SE04216-38   | SE04220-38   | SE04225-38   | SE04232-38   | SE04240-38   | 3/8"   |
|             | SE04216-1332 | SE04220-1332 | SE04225-1332 | SE04232-1332 | SE04240-1332 | 13/32" |
|             |              | SE04220-716  | SE04225-716  | SE04232-716  | SE04240-716  | 7/16"  |
|             |              | SE04220-1532 | SE04225-1532 | SE04232-1532 | SE04240-1532 | 15/32" |
|             |              | SE04220-12   | SE04225-12   | SE04232-12   | SE04240-12   | 1/2"   |
|             |              |              | SE04225-1732 | SE04232-1732 | SE04240-1732 | 17/32" |
|             |              |              | SE04225-916  | SE04232-916  | SE04240-916  | 9/16"  |
|             |              |              | SE04225-1932 | SE04232-1932 | SE04240-1932 | 19/32" |
|             |              |              | SE04225-58   | SE04232-58   | SE04240-58   | 5/8"   |
|             |              |              |              | SE04232-2132 | SE04240-2132 | 21/32" |
|             |              |              |              | SE04232-1116 | SE04240-1116 | 11/16" |
|             |              |              |              | SE04232-2332 | SE04240-2332 | 23/32" |
|             |              |              | SE04225-34   | SE04232-34   | SE04240-34   | 3/4"   |
|             |              |              |              |              | SE04240-78   | 7/8"   |
|             |              |              |              |              | SE04240-1    | 1"     |

*Inch Sizes - Standard .0004" TIR  
See Chart on Page 140 for dimensions.  
Other sizes available. Call for pricing.*



## ER PRECISION COLLETS - METRIC SIZES



Collet ER32

| ER16         | ER20         | ER25         | ER32         | ER40         | Shank |
|--------------|--------------|--------------|--------------|--------------|-------|
|              |              | SE04225-2mm  |              |              | 2mm   |
|              |              |              | SE04232-5mm  |              | 5mm   |
|              |              |              | SE04232-4mm  |              | 4mm   |
|              |              |              | SE04232-6mm  |              | 6mm   |
| SE04216-7mm  | SE04220-7mm  | SE04225-7mm  | SE04232-7mm  | SE04240-7mm  | 7mm   |
| SE04216-8mm  | SE04220-8mm  | SE04225-8mm  | SE04232-8mm  | SE04240-8mm  | 8mm   |
| SE04216-10mm | SE04220-10mm | SE04225-10mm | SE04232-10mm | SE04240-10mm | 10mm  |
|              | SE04220-12mm | SE04225-12mm | SE04232-12mm | SE04240-12mm | 12mm  |
|              | SE04220-13mm | SE04225-13mm | SE04232-13mm | SE04240-13mm | 13mm  |
|              |              | SE04225-14mm | SE04232-14mm | SE04240-14mm | 14mm  |
|              |              | SE04225-16mm | SE04232-16mm | SE04240-16mm | 16mm  |
|              |              |              | SE04232-18mm | SE04240-18mm | 18mm  |
|              |              |              | SE04232-20mm | SE04240-20mm | 20mm  |
|              |              |              |              | SE04240-22mm | 22mm  |
|              |              |              |              | SE04240-25mm | 25mm  |

*Metric Sizes (note mm is part of the part number)  
See Chart on Page 140 for dimensions.  
Other sizes available. Call for pricing.*

## ER PRECISION COLLET SETS



Collet Set

| PART #  | Description              | Range      | Includes   |
|---------|--------------------------|------------|------------|
| SE04205 | ER32-Metric (18 pc. Set) | 2mm-20mm   | 3-20mm     |
| SE04211 | ER25 (16 pc. Set)        | 1/8"-5/8"  | 5/32"-5/8" |
| SE04212 | ER32 (18 pc. Set)        | 3/16"-3/4" | 7/32"-3/4" |
| SE04213 | ER40 (13 pc. Set)        | 1/8"-1"    | 1/8"-1"    |

*Sets come in wooden tray. Wooden tray also sold separately.*

## TG PRECISION COLLETS



| TG75         | TG100      | TG150      | Shank |
|--------------|------------|------------|-------|
| SE04008-18   | SE04010-18 |            | 1/8"  |
| SE04008-316  |            |            | 3/16" |
| SE04008-14   | SE04010-14 |            | 1/4"  |
| SE04008-38   | SE04010-38 |            | 3/8"  |
| SE04008-10mm |            |            |       |
| SE04008-12   | SE04010-12 | SE04011-12 | 1/2"  |
| SE04008-58   | SE04010-58 | SE04011-58 | 5/8"  |
| SE04008-34   | SE04010-34 | SE04011-34 | 3/4"  |
|              | SE04010-78 | SE04011-78 | 7/8"  |
|              | SE04010-1  | SE04011-1  | 1"    |
| SE04008-nut  |            |            |       |
|              | TG100-nut  |            |       |

*See Chart on page 140 for dimensions.  
Other sizes available. Call for pricing.*

## HEIAN® COLLETS



| PART #            | Description                  |
|-------------------|------------------------------|
| SEHN-24mm-.187    | 3/16" Heian® Collet (24mm)   |
| SEHN-24mm-.375    | 3/8" Heian® Collet (24mm)    |
| SEHN-24mm-.500    | 1/2" Heian® Collet (24mm)    |
| SEHN-24mm-.625    | 5/8" Heian® Collet (24mm)    |
| SEHN-24mm-.750    | 3/4" Heian® Collet (24mm)    |
| SEHN-24mm-10      | 10mm Heian® Collet (24mm)    |
| SEHN-24mm-20      | 20mm Heian® Collet (24mm)    |
| SEHN-29mm-.187    | 3/16" Heian® Collet (29mm)   |
| SEHN-29mm-.500    | 1/2" Heian® Collet (29mm)    |
| SEHN-29mm-.750    | 3/4" Heian® Collet (29mm)    |
| SEHN-Piggyback-14 | 1/4" Heian® Piggyback Collet |
| SEHN-Piggyback-38 | 3/8" Heian® Piggyback Collet |
| SEHN-Piggyback-12 | 1/2" Heian® Piggyback Collet |
| SEHN-Piggyback-58 | 5/8" Heian® Piggyback Collet |

## ER BEARING NUTS



| PART #  | Description      | Diameter | Inside Diameter | Length | Spanner | Max Clamp Torque |
|---------|------------------|----------|-----------------|--------|---------|------------------|
| SE21225 | ER25 Bearing Nut | 42       | 21              | 22.5   | SE04615 | 95 ft. lbs.      |
| SE21232 | ER32 Bearing Nut | 50       | 22              | 25     | SE04616 | 125 ft. lbs.     |
| SE21240 | ER40 Bearing Nut | 63       | 34              | 28     | SE04617 | 140 ft. lbs.     |

## ER HIGH SPEED COATED NUTS



| PART #  | Description         | Dia | Inside Diameter | Length | Spanner | Max Clamp Torque |
|---------|---------------------|-----|-----------------|--------|---------|------------------|
| SE46111 | ER11 High Speed Nut | 19  | 14 x .75        | 11.8   | SE04608 | 20 ft. lbs.      |
| SE46116 | ER16 High Speed Nut | 32  | 22 x 1.5        | 18     | SE04613 | 50 ft. lbs.      |
| SE46120 | ER20 High Speed Nut | 35  | 25 x 1.5        | 19.5   | SE04614 | 75 ft. lbs.      |
| SE46125 | ER25 High Speed Nut | 42  | 32 x 1.5        | 20.5   | SE04615 | 95 ft. lbs.      |
| SE46132 | ER32 High Speed Nut | 50  | 40 x 1.5        | 23     | SE04616 | 125 ft. lbs.     |
| SE46140 | ER40 High Speed Nut | 63  | 50 x 1.5        | 26     | SE04617 | 140 ft. lbs.     |

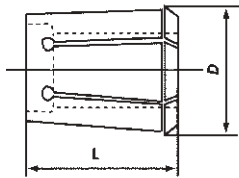
*Coated nuts give up to 100% more clamping pressure over bearing nuts.*

*For use when speeds exceed 15,000 rpm.*

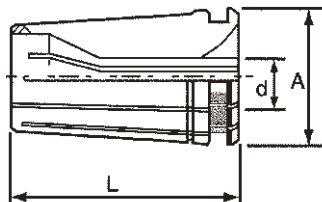
*Recommended torque is 80 to 90% of max value.*

*See page 145 for High Speed ER Mini Nuts.*

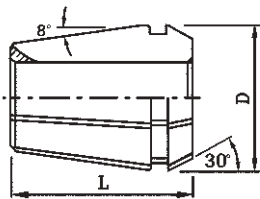
## EASY COLLET REFERENCE SHEET



**ER COLLET**



**TG COLLET**



**SYOZ COLLET**

| COLLET SERIES                    | LENGTH         | DIAMETER          |
|----------------------------------|----------------|-------------------|
| ER 11                            | 18mm (0.708")  | 11.5mm (0.45")    |
| ER 16                            | 27.5mm (1.08") | 17mm (0.67")      |
| ER 20                            | 31.5mm (1.24") | 21mm (0.83")      |
| ER 25                            | 34mm (1.34")   | 26mm (1.02")      |
| ER 32                            | 40mm (1.57")   | 33mm (1.31")      |
| ER 40                            | 46mm (1.81")   | 41mm (1.61")      |
| ER 50                            | 60mm (2.36")   | 52mm (2.05")      |
| EOC 8                            | 26mm (1.026")  | 14.4mm(0.567")    |
| SYOZ 20 • RDO 20 • EOC 12 • 407E | 34mm (1.34")   | 20mm (0.78")      |
| EOC 16 • RDO 25                  | 40mm (1.57")   | 25.5mm (1")       |
| SYOZ 25 • RDO 35 • 462E          | 52mm (2.06")   | 35mm (1.38")      |
| EOC 32                           | 60mm (2.36")   | 43.7mm (1.72")    |
| TG 75                            | 47mm (1.85")   | 27mm (1.06")      |
| TG 100                           | 60mm (2.36")   | 35mm (1.38")      |
| TG 150                           | 76.2mm (3.00") | 50.8mm (2.00")    |
| <b>Shoda® Collets</b>            |                |                   |
| SD-20mm                          | 52mm (2.06")   | 20mm (Back side)  |
| SD-C001                          | 52mm (2.06")   | 16mm (Back side)  |
| SD-C015                          | 52mm (2.06")   | 24mm (Back side)  |
| SS-22                            | 40mm (1.57")   | 22.5mm 0.89" (OD) |
| <b>Heian® Collets</b>            |                |                   |
| HN-24mm                          | 55mm (2.16")   | 24mm (Back side)  |
| HN-29mm                          | 55mm (2.16")   | 29mm (Back side)  |
| HN-Piggyback                     | 36.5mm (1.43") | 22mm (Back side)  |

**ALMOST ALL COLLETS HAVE A DISTINCTIVE LENGTH AND DIAMETER. USE THE REFERENCE SHEET ABOVE TO DETERMINE YOUR COLLET TYPE.**

## ER SPANNER WRENCHES



| PART #  | Description         | Collet Nut | Length | Width | Nut Type |
|---------|---------------------|------------|--------|-------|----------|
| SE04613 | ER16 Wrench         | SE41616    | 160    | 55    | Slotted  |
| SE04614 | ER20 Wrench         | SE41620    | 180    | 60    | Slotted  |
| SE04615 | ER25 Wrench         | SE46125    | 206    | 65    | Slotted  |
| SE04616 | ER32 Wrench         | SE46132    | 253    | 75    | Slotted  |
| SE04617 | ER40 Wrench         | SE46140    | 289    | 90    | Slotted  |
| SE04618 | ER50 Wrench         | SE41950    | 351    | 110   | Slotted  |
| SE04620 | ER8 Wrench          | SE23108    | 75     | 13    | ER Mini  |
| SE04621 | ER11 Wrench         | SE23111    | 95     | 17    | ER Mini  |
| SE04622 | ER16 Wrench         | SE23116    | 117    | 22.5  | ER Mini  |
| SE04623 | ER20 Wrench         | SE23120    | 129    | 28.5  | ER Mini  |
| SE04624 | ER25 Wrench         | SE23125    | 142.5  | 35.5  | ER Mini  |
| SE04018 | TG75 Wrench         | SE27500    | 206    | 39    | Hook     |
| SE03691 | TG100/SYOZ25 Wrench | SE28110    | 260    | 46    | Hook     |
| SE22220 | SYOZ20 Wrench       | SE03520    |        | 34    | Hook     |

**TYPE A, UM, RU, M**

## TOOL HOLDERS FOR CNC ROUTERS



ISO Holder

Collet Nuts are included with holder.

| PART #         | Description                    | D     | A   | F    | N  | Flat | Wrench  |
|----------------|--------------------------------|-------|-----|------|----|------|---------|
| SE06000-2016M  | ISO 20 x ER 16M-52mm           | 30    | 52  | 15.9 | 22 | 17   | SE04622 |
| SE06000-2516   | ISO 20 x ER 16-52mm            | 30    | 52  | 15.9 | 32 | 17   | SE04613 |
| SE06000-2520   | ISO 20 x ER 20-52mm            | 30    | 52  | 15.9 | 35 | 17   | SE04614 |
| SE12407-W      | ISO 30 x ER 11M-100mm          | 50    | 100 | 15.9 | 16 | 14   | SE04621 |
| SE12000-CMS    | ISO 30 x ER 32-CMS             | 46    | 58  | 15.9 | 50 | 36   | SE04616 |
| SE12040        | ISO 30 x ER 40-CMS             | 46    | 66  | 15.9 | 63 | 42   | SE04617 |
| SE12213-W-50   | ISO 30 x ER 32-50mm            | 50    | 50  | 15.9 | 50 | 47   | SE04616 |
| SE12213-W-50-L | ISO 30 x ER 32-50mm Left       | 50    | 50  | 15.9 | 50 | 47   | SE04616 |
| SE12213-W-63   | ISO 30 x ER 32-63mm            | 50    | 63  | 15.9 | 50 | 36   | SE04616 |
| SE12213-W-63-L | ISO 30 x ER 32-63mm Left       | 50    | 63  | 15.9 | 50 | 36   | SE04616 |
| SE12213-W-90   | ISO 30 x ER 32-90mm            | 50    | 90  | 15.9 | 50 | 36   | SE04616 |
| SE12215-W-57   | ISO 30 x ER 40-57mm            | 50    | 57  | 15.9 | 63 | 47   | SE04617 |
| SEPE30DF2056   | ISO 30 x ER 32                 | 46    | 58  | 15.9 | 50 | 36   | SE04616 |
| SEPE30DM20     | ISO 30 x ER 32 W/Locking Teeth |       |     |      |    |      | SE04616 |
| SE12261-W      | ISO 40 x ER40-70mm             | 63.55 | 70  | 15.9 | 63 | 46   | SE04617 |

### ISO AND SK COLLET HOLDERS

Balanced to 25,000 RPM @ G2.5

Collet Nuts are included with holder.

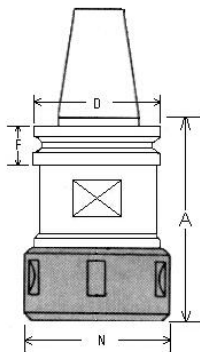
## ANDI®/WEEKE®/THERMWOOD® CNC CHUCKS

| PART #          | Description                  | D  | A    | F    | N  | Flat | Wrench  |
|-----------------|------------------------------|----|------|------|----|------|---------|
| SENT-54300130   | SK-30 x OZ 25 Toolholder     | 50 | 70   | 15.9 | 60 | 38   | SE03691 |
| SENT-54300130-L | SK-30 x OZ 25 LH Toolholder  | 50 | 70   | 15.9 | 60 | 38   | SE03691 |
| SEISO-30-THERM  | Thermwood ISO 30 x ER32-50mm | 57 | 57.5 | 20   | 50 | None | SE04616 |

Collet Nuts are included with holder.

Dimensions in millimeters.

## BT30 CHUCKS

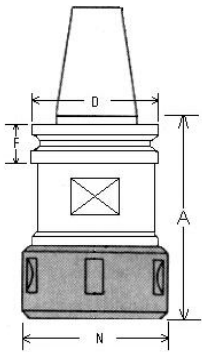


| PART #              | Description                   | D  | A    | F  | N  | Wrench  |
|---------------------|-------------------------------|----|------|----|----|---------|
| SE06106-W           | BT30 x ER 20-70mm w/o Slots   | 46 | 70   | 20 | 34 | SE04614 |
| SE06106-slotnut     | BT30 x ER20-70mm w/ Slots     | 46 | 70   | 20 | 35 | SE04614 |
| SE06107             | BT30 x ER20-135mm w/o Slots   | 46 | 135  | 20 | 35 | SE04614 |
| SE06107-slotnut     | BT30 x ER20-135mm w/ Slots    | 46 | 135  | 20 | 35 | SE04614 |
| SE06108-2.5         | BT30 x ER20-2.5" w/o Slots    | 46 | 63.5 | 20 | 34 | SE04610 |
| SE06108-2.5-slotnut | BT30 x ER20-2.5" w/ Slots     | 46 | 63.5 | 20 | 35 | SE04614 |
| SE06109             | BT30 x ER25-70mm              | 46 | 70   | 20 | 42 | SE04615 |
| SE06110-W-60        | BT30 x ER25-60mm              | 46 | 60   | 20 | 42 | SE04615 |
| SE06111             | BT30 x ER25-135mm             | 46 | 135  | 20 | 42 | SE04615 |
| SE06111-90          | BT30 x ER25-90mm              | 46 | 90   | 20 | 42 | SE04615 |
| SE06112             | BT30 x ER 32-60mm w/ Slots    | 46 | 60   | 20 | 50 | SE04616 |
| SE06113-W-60        | BT30 x ER 32-60mm w/o Slots   | 46 | 60   | 20 | 50 | SE04616 |
| SE06113-W-60-A*     | BT30 x ER32-60mm Komo         | 46 | 60   | 20 | 50 | SE04616 |
| SE06113-W-60L       | BT30 x ER 32-60mm Left Hand   | 46 | 60   | 20 | 50 | SE04616 |
| SE06113             | BT30 x ER 32-70 w/ Slots      | 46 | 70   | 20 | 50 | SE04616 |
| SE06113-W-90        | BT30 x ER 32-90mm w/o Slots   | 46 | 90   | 20 | 50 | SE04616 |
| SE06114             | BT30 x ER 32-100mm            | 46 | 100  | 20 | 50 | SE04616 |
| SE06115             | BT30 x ER40-80mm              | 46 | 80   | 20 | 63 | SE04616 |
| SE06001-W           | BT30 x SYOZ 25-70mm w/o Slots | 46 | 70   | 20 | 60 | SE03691 |
| SE06001             | BT30 x SYOZ 25-70mm           | 46 | 70   | 20 | 60 | SE03691 |

Collet Nuts are included with holder.

\*Pull Stud Included 41mm Flats Komo

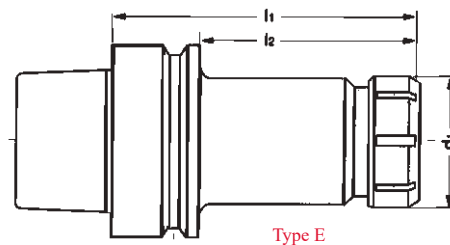
## BT35 CHUCKS



| PART #        | Description         | D  | A  | F  | N  | Wrench  |
|---------------|---------------------|----|----|----|----|---------|
| SE06010       | BT35 x SYOZ 25-76mm | 53 | 76 | 22 | 60 | SE03691 |
| SE061BT353276 | BT35 x ER 32-76mm   | 53 | 76 | 22 | 50 | SE04616 |

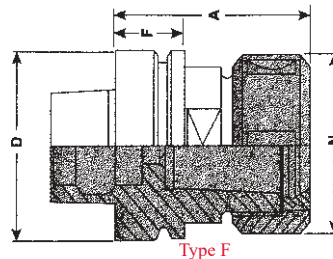
*Collet Nuts are included with holder.  
Dimensions in millimeters.*

## HSK E COLLET TOOLHOLDERS



| PART #     | Description          | D    | d1   | L1    | L2   | Flats | Wrench  |
|------------|----------------------|------|------|-------|------|-------|---------|
| SE31374-60 | HSK 32E x ER25       | 32mm | 42mm | 60mm  | 45mm | 22mm  | SE04615 |
| SE8905001  | HSK 40E x ER16 - 65  | 40mm | 28mm | 65mm  | 45mm | 24mm  | SE04613 |
| SE8905002  | HSK 40E x ER25 - 75  | 40mm | 42mm | 75mm  | 55mm | 27mm  | SE04615 |
| SE8905003  | HSK 40E x ER32 - 100 | 40mm | 50mm | 100mm | 80mm | 35mm  | SE04616 |
| SE8505002  | HSK 50E x ER32 - 85  | 50mm | 50mm | 85mm  | 59mm | 36mm  | SE04616 |
| SE8605002  | HSK 63E x ER32 - 90  | 63mm | 50mm | 90mm  | 64mm | 36mm  | SE04616 |
| SE8605003  | HSK 63E x ER40 - 120 | 63mm | 63mm | 120mm | 94mm | 46mm  | SE04617 |
| SE50001    | HSK 63E x ER40 - 75  | 63mm | 63mm | 75mm  | 49mm | 46mm  | SE04617 |

## HSK F COLLET TOOLHOLDERS



| PART #         | Description              | D    | A     | F    | N    | Flats | Wrench  |
|----------------|--------------------------|------|-------|------|------|-------|---------|
| SE40050        | HSK 50F x ER32 - 80mm    | 50mm | 80mm  | 26mm | 50mm | NONE  | SE04616 |
| SE17105-008001 | HSK 63F x ER16 - 60mm    | 63mm | 60mm  | 26mm | 32mm | 26mm  | SE04613 |
| SE17105-008002 | HSK 63F x ER16 - 100mm   | 63mm | 100mm | 26mm | 32mm | 26mm  | SE04613 |
| SE30000        | HSK 63F x ER32 - 70mm    | 63mm | 70mm  | 26mm | 50mm | 36mm  | SE04616 |
| SE30001        | HSK 63F x ER40 - 76mm    | 63mm | 76mm  | 26mm | 63mm | 46mm  | SE04617 |
| SE30002        | HSK 63F x ER40 - 90mm    | 63mm | 90mm  | 26mm | 63mm | 46mm  | SE04617 |
| SE30005        | HSK 63F x ER40 - 125mm   | 63mm | 125mm | 26mm | 63mm | 46mm  | SE04617 |
| SE41025        | HSK 63F x SYOZ 25 - 80mm | 63mm | 80mm  | 26mm | 60mm | 38mm  | SE03691 |



# Toolholder Measuring Guide – Special Order

USE THIS GUIDE FOR MEASURING YOUR TOOLS TO DETERMINE WHAT YOU NEED TO RE-ORDER, OR FOR SPECIAL ORDER TOOLHOLDERS BUILT TO YOUR SPECIFICATIONS.

Make & model of CNC router \_\_\_\_\_

**Pull Stud dimensions**

P= \_\_\_\_\_

A= \_\_\_\_\_

L= \_\_\_\_\_

R= \_\_\_\_\_

**Toolholder Dimensions**

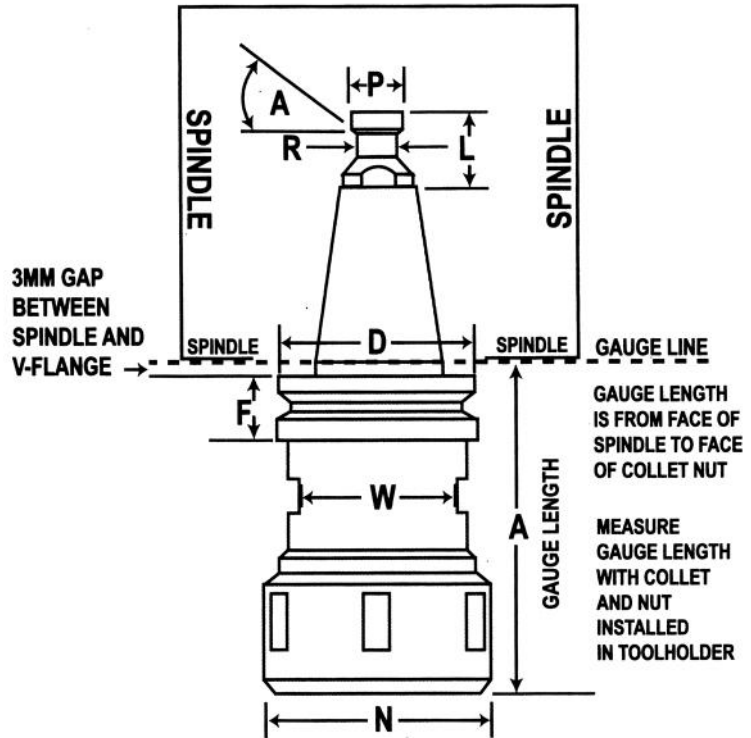
D= \_\_\_\_\_

F= \_\_\_\_\_

W= \_\_\_\_\_

A= \_\_\_\_\_

N= \_\_\_\_\_



Make & model of HSK spindle CNC router \_\_\_\_\_

**Toolholder Dimensions**

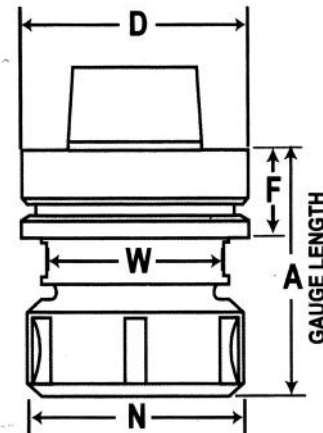
D= \_\_\_\_\_

F= \_\_\_\_\_

W= \_\_\_\_\_

A= \_\_\_\_\_

N= \_\_\_\_\_



## ER TOOL EXTENDERS



| PART #  | Shank | Overall Length | Diameter | Collet | Wrench  | Nut     |
|---------|-------|----------------|----------|--------|---------|---------|
| SE04889 | 3/8"  | 124mm          | 12mm     | ER8    | SE04620 | SE23108 |
| SE04891 | 1/2"  | 166.5mm        | 16mm     | ER11   | SE04621 | SE23111 |
| SE04893 | 5/8"  | 158.5mm        | 16mm     | ER11   | SE04621 | SE23111 |
| SE04895 | 1/2"  | 177mm          | 22mm     | ER16   | SE04622 | SE23116 |
| SE04896 | 3/4"  | 165mm          | 22mm     | ER16   | SE04622 | SE23116 |
| SE04894 | 3/4"  | 180mm          | 28mm     | ER20   | SE04623 | SE23120 |
| SE04897 | 1"    | 168mm          | 28mm     | ER20   | SE04623 | SE23120 |
| SE04888 | 1"    | 190mm          | 35mm     | ER25   | SE04624 | SE23125 |
| SE04898 | 3/4"  | 140mm          | 35mm     | ER25   | SE04624 | SE23125 |

*Extension length should not exceed a 4:1 ratio of length to diameter. For example, a 1/2" shank should not extend more than 2" in front of the holder. This is true only for applications where the extension is rotating. Extenders have threaded thru holes for a backup screw. Includes nut. Collet and wrench sold separately!*

## AIRPRO™ NUT

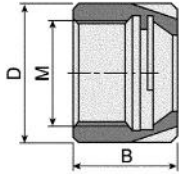


## AIRPRO™ NUT SPECIFICATIONS

| PART #   | Description   | Min RPM | Max RPM | D     | L     | H     | h     | Weight | Adapter  | Torque     |
|----------|---------------|---------|---------|-------|-------|-------|-------|--------|----------|------------|
| SE453200 | ER32 AirPRO   | 18,000  | 24,000  | 1.97" | 3.77" | 1.77" | 1.24" | 1.1lb  | 04604-32 | 100 lb. ft |
| SE454000 | ER40 AirPRO   | 18,000  | 24,000  | 2.48" | 4.06" | 1.81" | 1.13" | 1.4lb  | 04605-40 | 130 lb. ft |
| SE452500 | SYOZ25 AirPRO | 18,000  | 24,000  | 2.36" | 3.92" | 1.97" | 1.13" | 1.3lb  | 03690-25 | 90 lb. ft  |

*Optimal Gap - .070"  
Max Chip Load - .020"  
Wrench - SE200TH*

## ER MINI NUTS



| PART #  | Description    | D    | B      | M          | Wrench  | Maximum Torque |
|---------|----------------|------|--------|------------|---------|----------------|
| SE23108 | ER 8 Mini Nut  | 12mm | 11mm   | M10 x 0.75 | SE04620 | 7 ft/lbs       |
| SE23111 | ER 11 Mini Nut | 16mm | 12mm   | M13 x 0.75 | SE04621 | 14 ft/lbs      |
| SE23116 | ER 16 Mini Nut | 22mm | 18mm   | M19 x 1.0  | SE04622 | 22 ft/lbs      |
| SE23120 | ER 20 Mini Nut | 28mm | 19.5mm | M24 x 1.0  | SE04623 | 25 ft/lbs      |
| SE23125 | ER 25 Mini Nut | 35mm | 21mm   | M30 x 1.0  | SE04624 | 29 ft/lbs      |

## ER HIGH-SPEED MINI NUTS

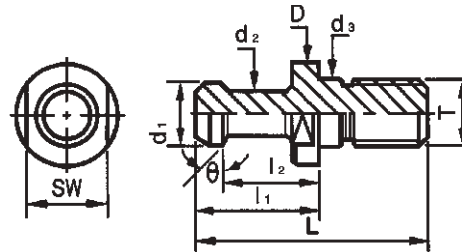


ER High-Speed Nut

| PART #    | Description         | D    | B      | M          | Wrench  | Maximum Torque |
|-----------|---------------------|------|--------|------------|---------|----------------|
| SE33108   | ER 8 HS Mini Nut    | 12mm | 11mm   | M10 x 0.75 | SE04620 | 7 ft/lbs       |
| SE33111   | ER 11 HS Mini Nut   | 16mm | 12mm   | M13 x 0.75 | SE04621 | 14 ft/lbs      |
| SE33116   | ER 16 HS Mini Nut   | 22mm | 18mm   | M19 x 1.0  | SE04622 | 22 ft/lbs      |
| SE33120   | ER 20 HS Mini Nut   | 28mm | 19.5mm | M24 x 1.0  | SE04623 | 25 ft/lbs      |
| SE33125   | ER 25 HS Mini Nut   | 35mm | 21mm   | M30 x 1.0  | SE04624 | 29 ft/lbs      |
| SE33125-L | ER 25 HS L-Hand Nut | 35mm | 21mm   | M30 x 1.0  | SE04624 | 29 ft/lbs      |

*Use ER High-Speed mini nuts for applications where speed exceeds 10,000 RPMs. They are balanced to G2.5 for 20,000 RPMs. These nuts are used on collet holders and multi-spindle heads where center or shoulder distances are important.*

## PULL STUDS (RETENTION KNOBS) FOR CNC ROUTERS



| PART #     | Type            | D    | d1   | d2  | d3   | L  | L1   | L2   | 0      | Threads |
|------------|-----------------|------|------|-----|------|----|------|------|--------|---------|
| SE750-19   | KOMO 30-A12.5   | 17   | 13   | 9   | 12.5 | 44 | 23.4 | 18.2 | 15°    | M12     |
| SE13001    | DAT 30-A        | 17   | 13   | 9   | 13   | 44 | 24   | 19   | 15°    | M12     |
| SE13003    | DAT 40-A        | 23   | 19   | 14  | 17   | 54 | 26   | 20   | 15°    | M16     |
| SE13001-45 | Colombo 30 Ball | 17   | 12.8 | 9   | 13   | 44 | 24   | 19   | 45°    | M12     |
| SE13019    | HSD ISO30       | 17   | 12   | 8   | 13   | 44 | 23.9 | -    | Radius | M12     |
| SE07801    | BT 30-45°       | 16.5 | 11   | 7   | 12.5 | 43 | 23   | -    | 45°    | M12     |
| SE07803    | BT 40-45°       | 23   | 15   | 10  | 17   | 60 | 35   | 28   | -      | M16     |
| SE07805    | BT 50-45°       | 38   | 23   | 17  | 25   | 85 | 45   | 35   | -      | M24     |
| SE07806    | BT 30-60°       | 16.5 | 11   | 7   | 12.5 | 43 | 23   | -    | -      | M12     |
| SE07808    | BT 40-60°       | 23   | 15   | 10  | 17   | 60 | 35   | 28   | 60°    | M16     |
| SE07810    | BT 50-60°       | 38   | 23   | 17  | 25   | 85 | 45   | 35   | -      | M24     |
| SE07812    | BT 30-90°       | 16.5 | 11   | 7   | 12.5 | 43 | 23   | 8    | -      | M12     |
| SE07814    | BT 40-90°       | 23   | 15   | 10  | 17   | 60 | 35   | 28   | -      | M16     |
| SE4403502  | BT 35-Heian     | 20   | 13   | 8.5 | 12.5 | 48 | 28   | 22.5 | 15°    | M12     |

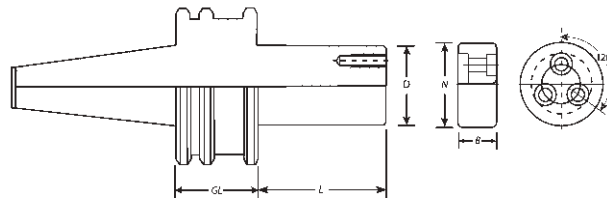
|            |  |
|------------|--|
| SE13001    | Colombo® Spindles                      |
| SE13001-45 | Colombo® Spindles<br>Clamping by Balls |
| SE750-19   | Komo® Router for<br>BT30 Holder        |
| SE13019    | HSD® Spindles                          |

*Please make sure that the pull stud you order is the exact pull stud your machine uses. Improper choice of a pull stud can cause damage to your machine spindle, the tool holder, and can cause a serious safety hazard.*

## ISO 30 ARBORS



ISO 30

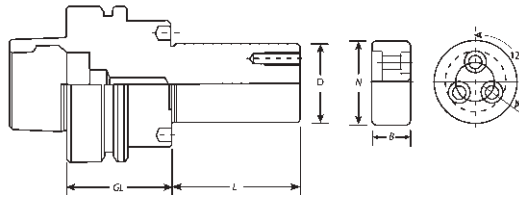


Special 3 screw design for enhanced safety

| PART #      | Description                   | L     | GL   | D      | B    | N    |
|-------------|-------------------------------|-------|------|--------|------|------|
| SE12700-40  | ISO 30 x 1 1/4" x 40mm arbor  | 40mm  | 42mm | 1-1/4" | 20mm | 42mm |
| SE12700-55  | ISO 30 x 1 1/4" x 55mm arbor  | 55mm  | 42mm | 1-1/4" | 20mm | 42mm |
| SE12700-80  | ISO 30 x 1 1/4" x 80mm arbor  | 80mm  | 42mm | 1-1/4" | 20mm | 42mm |
| SE12700-100 | ISO 30 x 1 1/4" x 100mm arbor | 100mm | 42mm | 1-1/4" | 20mm | 42mm |

Special sizes made to your specifications. Contact us for details.

## HSK 63F ARBORS



| PART #     | Description                  | D      | L     | N    | B    | GL   |
|------------|------------------------------|--------|-------|------|------|------|
| SE41060    | HSK 63F 1 1/4" arbor x 55mm  | 1-1/4" | 55mm  | 42mm | 20mm | 45mm |
| SE41080-3H | HSK 63F 1 1/4" arbor x 80mm  | 1-1/4" | 80mm  | 42mm | 20mm | 45mm |
| SE41085    | HSK 63F 1 1/4" arbor x 100mm | 1-1/4" | 100mm | 42mm | 20mm | 45mm |
| SE41087    | HSK 63F 1 1/4" arbor x 112mm | 1-1/4" | 112mm | 42mm | 20mm | 45mm |

## TIGHTENING STAND FOR ISO, HSK63 & BT30

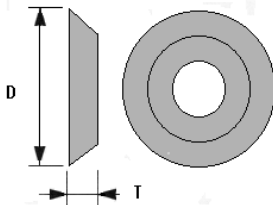


| PART #          | Description              | Toolholder Used For    |
|-----------------|--------------------------|------------------------|
| SENTS-ISO30-36  | ISO 30-36mm Flats        | 12213-W-63, 12213-W-90 |
| SENTS-ISO30-38  | ISO 30-38mm Flats        | NT-5400130             |
| SENTS-ISO30-47  | ISO 30-47mm Flats        | 12213-W-50, 12215-W-57 |
| SENTS-BT30-38   | BT30 Taper 38mm Flats    |                        |
| SENTS-BT30-SLOT | BT30 with Drive Slots    |                        |
| SENTS-BT30-41   | BT 30 - Taper 41mm Flats | 06113-W-60             |
| SENTS-HSK63A    | HSK 63A No Flats         |                        |
| SENTS-HSK63F-36 | HSK 63F - 36mm Flats     | 30000                  |
| SENTS-HSK63F-38 | HSK 63F - 38mm Flats     | 41025                  |
| SENTS-HSK63F-41 | HSK 63F - 41mm Flats     |                        |
| SENTS-HSK63F-46 | HSK 63F - 46mm Flats     | 30001, 30005, 50001    |
| SENTS-BD-15     | Handle                   |                        |
| SE70000-36      | Slide for 36mm flats     |                        |
| SE70000-38      | Slide for 38mm flats     |                        |
| SE70000-41      | Slide for 41mm flats     |                        |
| SE70000-46      | Slide for 46mm flats     |                        |

- New design for easy access to pull studs from bottom
- Constructed of precision machined anodized alloy
- Outstanding strength, speed, and durability
- Securely bolts right on CNC Machine or workbench

## CNC ACCESSORIES

### DUST COVERS FOR COLLET NUTS

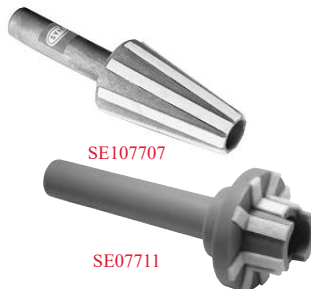


SEDC32

| PART #     | DESCRIPTION                    |
|------------|--------------------------------|
| SEDC32-316 | Dust Cover 3/16" Shank         |
| SEDC32-14  | Dust Cover 1/4" Shank          |
| SEDC32-516 | Dust Cover 5/16" Shank         |
| SEDC32-38  | Dust Cover 3/8" or 10 mm Shank |
| SEDC32-12  | Dust Cover 1/2" Shank          |
| SEDC32-58  | Dust Cover 5/8" Shank          |
| SEDC32-34  | Dust Cover 3/4" Shank          |

- 1 1/2" Diameter x 1/4" thick
- Sold Individual

### SPINDLE TAPER WIPERS



SE107707

SE07711

| PART #  | Taper  | Length | Taper Length | Handle Diameter | Taper Max. Diameter |
|---------|--------|--------|--------------|-----------------|---------------------|
| SE07703 | 30     | 170    | 60           | 24              | 32                  |
| SE07704 | 40     | 188    | 78           | 24              | 45                  |
| SE07705 | 50     | 240    | 120          | 30              | 70                  |
| SE07710 | HSK63A | 165    | 31           | 22              | n/a                 |
| SE07711 | HSK63F | 165    | 31           | 22              | n/a                 |



## COLLET BRUSHES



| PART #    | Description                                     |
|-----------|---|
| SECB250   | 1/4" Brush                                      |
| SECB312   | 5/16" Brush                                     |
| SECB375   | 3/8" Brush                                      |
| SECB500   | 1/2" Brush                                      |
| SECB625   | 5/8" Brush                                      |
| SECB750   | 3/4" Brush                                      |
| SECB1000  | 1" Brush  |
| SECB-4KIT | 1/4", 3/8", 1/2", 3/4" Brushes                  |
| SECB-7KIT | 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1" Brushes |

## TORQUE WRENCH



| PART #  | Description   | Range of Torque | Length | Spigot     |
|---------|---------------|-----------------|--------|------------|
| SE50TH  | Torque Wrench | 5-45 ft/lbs     | 12"    | 16mm Round |
| SE200TH | Torque Wrench | 30-150 ft/lbs   | 16.5"  | 16mm Round |
| SE300TH | Torque Wrench | 45-228 ft/lbs   | 21.5"  | 16mm Round |

## TORQUE WRENCH ACCESSORIES



| PART #        | Collet Nut Size                   | Wrench  | Maximum Torque |
|---------------|-----------------------------------|---------|----------------|
| SESD-20mm-TWA | Fits all Old Style SD Collet Nuts | Hook    |                |
| SESD-C001-TWA | Fits Piggy Back Style Collet Nuts | Hook    |                |
| SESD-C015-TWA | Fits New Style SD Collet Nuts     | Hook    |                |
| SESS22TWA     | Fits all SS-22 Collet Nuts        | Hex     | 50 ft/lbs      |
| SESS22EXTTWA  | Fits all SS-22 Extended Nuts      | Hex     | 50 ft/lbs      |
| SE04580-16    | ER 16                             | Slotted | 50 ft/lbs      |
| SE04601-16    | ER 16 Hex                         | Hex     | 50 ft/lbs      |
| SE04580-20    | ER 20                             | Slotted | 75 ft/lbs      |
| SE04602-20    | ER 20 Hex                         | Hex     | 75 ft/lbs      |
| SE04603-25    | ER 25 Slotted                     | Slotted | 95 ft/lbs      |
| SE04576       | ER 11 Mini                        | Mini    | 14 ft/lbs      |
| SE04577       | ER 16 Mini                        | Mini    | 22 ft/lbs      |
| SE04578       | ER 20 Mini                        | Mini    | 25 ft/lbs      |
| SE04587       | ER 25 M                           | Mini    | 45 ft/lbs      |
| SE04604-32    | ER 32 Slotted                     | Slotted | 125 ft/lbs     |
| SE04605-40    | ER 40 Slotted                     | Slotted | 140 ft/lbs     |
| SE03690-25    | SYOZ 25/TG 100                    | Hook    | 100 ft/lbs     |
| SE04018-TWA   | TG 75 Slotted                     | Hook    | 100 ft/lbs     |
| SE04588-R     | ER 32 Slotted                     | Slotted | 125 ft/lbs     |

*FOR BT, CAT, ISO and HSK TOOL HOLDERS*

## RETENTION KNOB SOCKETS



| PART #      | Taper or Holder         | Wrench Flats | Square Drive | Maximum Torque |
|-------------|-------------------------|--------------|--------------|----------------|
| SEPSS-30BT  | BT 30 Taper Pull Studs  | 0.535"       | 3/8"         | 40 ft/lbs      |
| SEPSS-30ISO | ISO 30 Taper Pull Studs | 0.535"       | 3/8"         | 40 ft/lbs      |
| SEPSS-40    | BT 30 Taper Pull Studs  | 0.750"       | 3/8"         | 85 ft/lbs      |
| SEPSS-50    | BT 50 Taper Pull Studs  | 1.187"       | 1/2"         | 110 ft/lbs     |
| SEPSSC-50   | CAT 50 Taper Pull Studs | 1.250"       | 1/2"         | 110 ft/lbs     |

## FIXED HEAD SQUARE DRIVES



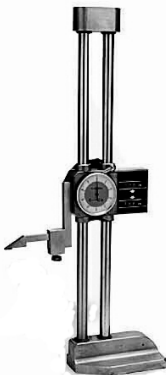
| PART #  | Description       | Square Drive |
|---------|-------------------|--------------|
| SE29828 | 3/8" Square Drive | 3/8" Drive   |
| SE29827 | 1/2" Square Drive | 1/2" Drive   |

## CNC ROUTER TABLE PODS



| PART #   | Description         |
|----------|---------------------|
| SERTP110 | 1 3/4" D x 1" H     |
| SERTP120 | 1 3/4" D x 1 1/2" H |
| SERTP130 | 1 3/4" D x 2" H     |
| SERTP140 | 1 3/4" D x 2 1/2" H |
| SERTP150 | 1 3/4" D x 3" H     |
| SERTP310 | 3" D x 1" H         |
| SERTP320 | 3" D x 1 1/2" H     |
| SERTP330 | 3" D x 2" H         |
| SERTP340 | 3" D x 2 1/2" H     |
| SERTP350 | 3" D x 3" H         |

## MEASURING EQUIPMENT



| PART #       | Description               |
|--------------|---------------------------|
| SE54-212-012 | 12" Height Gauge          |
| SE17906-2    | Analog Axial Preset Gauge |



# KNIVES

## PLANER & JOINTER KNIFE SETS - 1/8" THICKNESS

| T-1 HSS<br>PART # | Carbide-Tipped<br>PART # | Length    | Width   | Knives<br>in set | Fits Planer/Joiner   |
|-------------------|--------------------------|-----------|---------|------------------|--|
| PK7000            | PKC7001                  | 4"        | 5/8"    | 3                | Delta® 4", Atlas®, Boice Crane®, Old Craftsman® & Similar<br>Joiners               |
| PK7002            | PKC7003                  | 6"        | 5/8"    | 3                | Old Delta® 6", TTL, Boice Crane®, Craftsman®, Rockwell®                            |
| PK7004            | N/A                      | 6"        | 5/8"    | 4                | Boice Crane®   |
| PK7006            | PKC7007                  | 6"        | 3/4"    | 3                | Powermatic® 50   |
| PK7008            | PKC7009                  | 6"        | 1"      | 3                | Grizzly®   |
| PK7010            | N/A                      | 6-1/16"   | 5/8"    | 3                | Powermatic®, Jet® JJ-6®  |
| PK7012            | PKC7013                  | 6-1/16"   | 13/16"  | 3                | Delta® DJ-15, 37-154 & Similar 6" Joiners  |
| PK7016            | N/A                      | 6-1/8"    | 5/8"    | 3                | Craftsman®   |
| PK7018            | PKC7019                  | 6-1/8"    | 11/16"  | 3                | Jet®   |
| PK7020            | PKC7021                  | 8"        | 5/8"    | 3                | Old Delta® 8", TTL®, Boice Crane®, Rockwell®,<br>Jet® JJ-8, Powermatic® 60, Pryor® |
| PK7022            | PKC7023                  | 8"        | 3/4"    | 3                |  |
| PK7024            | PKC7025                  | 8"        | 3/4"    | 4                | Bridgewood®  |
| PK7026            | PKC7027                  | 8"        | 7/8"    | 3                | Powermatic® 50   |
| PK7028            | PKC7029                  | 8"        | 1"      | 3                | Grizzly®   |
| PK7032            | N/A                      | 8-1/16"   | 5/8"    | 3                | Delta®   |
| PK7034            | N/A                      | 8-1/16"   | 3/4"    | 3                | Sunhill Machinery®   |
| PK7036            | PKC7037                  | 8-1/16"   | 13/16"  | 3                | Delta® DJ-20 Joiner & Similar  |
| PK7038            | N/A                      | 12"       | 3/4"    | 3                | Grizzly®   |
| PK7040            | PKC7041                  | 12"       | 7/8"    | 3                | Powermatic® & Parks®   |
| PK7042            | PKC7043                  | 12"       | 1"      | 3                | Craftsman®   |
| PK7044            | PKC7045                  | 12"       | 1-1/4"  | 3                | Northfield®  |
| PK7046            | N/A                      | 12-1/4"   | 3/4"    | 3                | Boice Crane®, Reliant®, Wilke®   |
| PK7048            | PKC7049                  | 12-1/4"   | 7/8"    | 3                | Powermatic®  |
| PK7050            | PKC7051                  | 12-1/4"   | 1"      | 3                | Most European Combo Machines   |
| PK7052            | N/A                      | 12-1/2"   | 5/8"    | 3                | Boice Crane®   |
| PK7054            | PKC7055                  | 12-1/2"   | 11/16"  | 3                | RBI® Model 812, Foley-Belsaw®, Jet®  |
| PK7056            | PKC7057                  | 12-1/2"   | 3/4"    | 3                | Jet®, Grizzly®, Wilke®, Reliant®, Most 12" Imports                                 |
| PK7058            | PKC7059                  | 13-1/16"  | 5/8"    | 3                | Jet®   |
| PK7060            | PKC7061                  | 13-1/8"   | 1"      | 3                | Delta® RC-33 & DC-33 13" Planer, Rockwell®   |
| PK7062            | PKC7063                  | 15"       | 1"      | 3                | Delta® DC-380, Grizzly®, Reliant®, Woodtch®, TLL®, Jet®                            |
| PK7064            | N/A                      | 15-1/16"  | 1"      | 3                | Delta® 22-677  |
| PK7066            | PKC7067                  | 15-3/4"   | 1-3/16" | 4                | SCMI®  |
| PK7068            | N/A                      | 16"       | 1"      | 3                | Jet® JWP16   |
| PK7070            | N/A                      | 16"       | 1-1/8"  | 4                | Bridgewood®, Crescent®, Grizzly®   |
| PK7072            | PKC7073                  | 16"       | 1-1/4"  | 3                | NorthField®  |
| PK7076            | PKC7076                  | 16-3/16"  | 1-3/16" | 4                | SCMI®  |
| PK7078            | PKC7079                  | 16-1/2"   | 11/16"  | 4                | RBI® Model 816   |
| PK7086            | PKC7087                  | 18-1/2"   | 11/16"  | 3                | Woodmaster®  |
| PK7088            | PKC7089                  | 20"       | 1"      | 3                | Grizzly®, Northwood®   |
| PK7090            | PKC7091                  | 20"       | 1"      | 4                | Parks®, TLL® 20", Jet® 208, Northstate®  |
| PK7092            | PKC7093                  | 20"       | 1-1/8"  | 4                | Delta® 20 x 9  |
| PK7094            | PKC7095                  | 20"       | 1-3/16" | 4                | Delta® 20" Planer, Many Imports  |
| PK7096            | N/A                      | 20"       | 1-1/4"  | 3                | Woodtek®   |
| PK7098            | PKC7099                  | 20-3/16"  | 1-3/16" | 4                | Delta® DC-580  |
| PK7100            | PKC7101                  | 20-3/16"  | 1-3/8"  | 4                | Delta® RC-51   |
| PK7104            | PKC7105                  | 20-1/2"   | 1-3/16" | 4                | SCMI®  |
| PK7106            | N/A                      | 22-1/8"   | 1"      | 4                | Powermatic® 201  |
| PK7110            | PKC7111                  | 24-1/8"   | 1-3/16" | 4                | Grizzly®   |
| PK7112            | PKC7113                  | 24-1/4"   | 1-1/8"  | 3                | Delta® 22-470  |
| PK7114            | PKC7115                  | 24-1/4"   | 1-1/8"  | 4                | Crescent® (Delta®)   |
| PK7116            | PKC7117                  | 24-3/4"   | 1-1/8"  | 3                | Jet® 24H   |
| PK7118            | PKC7119                  | 24-13/16" | 1-3/8"  | 4                | Delta® RC-63   |
| PK7120            | PKC7121                  | 25"       | 11/16"  | 3                | Woodmaster® 725  |
| PK7122            | PKC7123                  | 25"       | 1-1/4"  | 4                |  |
| PK7124            | N/A                      | 25"       | 1-3/8"  | 4                |  |
| PK7126            | PKC7127                  | 25-3/16"  | 1-3/8"  | 4                | SCMI® F630 & F535  |

## PLANER & JOINTER KNIFE SETS - 3/32" THICKNESS

| T-1 HSS<br>PART # | Caride-Tipped<br>PART # | Length  | Width | Knives<br>in Set | Fits Planer/Jointer     |
|-------------------|-------------------------|---------|-------|------------------|-------------------------|
| PK7014            | N/A                     | 6-1/8"  | 5/8"  | 3                | Delta® 37-190, Jointer® |
| PK7030            | N/A                     | 8-1/16" | 5/8"  | 3                | Delta®                  |

## PLANER & JOINTER KNIFE SETS - 5/32" THICKNESS

| T-1 HSS<br>PART # | Caride-Tipped<br>PART # | Length  | Width  | Knives<br>in Set | Fits Planer/Jointer    |
|-------------------|-------------------------|---------|--------|------------------|------------------------|
| PK7074            | PKC7075                 | 16-1/4" | 1-1/4" | 3                | Powermatic®            |
| PK7080            | PKC7081                 | 18"     | 1-1/4" | 3                | Powermatic®            |
| PK7082            | PKC7083                 | 18-1/8" | 1-1/8" | 3                | Rockwell®, Delta®      |
| PK7084            | PKC7085                 | 18-1/4" | 1-1/4" | 3                | Powermatic             |
| PK7102            | PKC7103                 | 20-1/4" | 1-1/4" | 3                | Powermatic             |
| PK7108            | PKC7109                 | 24"     | 1-1/4" | 4                | Powermatic, Northfield |

## REPLACEMENT KNIVES FOR SYSTEM TERMINUS PLANER HEAD - HSS



System Terminus

T-1 AVAILABLE UPON REQUEST,  
CALL FOR AVAILABILITY

| HSS PART # | L (mm) | W (mm) | T (mm) |
|------------|--------|--------|--------|
| SE100348   | 50     | 14     | 2.55   |
| SE100350   | 60     | 14     | 2.55   |
| SE100349   | 80     | 14     | 2.55   |
| SE100297   | 100    | 14     | 2.55   |
| SE100351   | 110    | 14     | 2.55   |
| SE100352   | 120    | 14     | 2.55   |
| SE055461   | 130    | 14     | 2.55   |
| SE114608   | 136    | 14     | 2.55   |
| SE100353   | 140    | 14     | 2.55   |
| SE100354   | 150    | 14     | 2.55   |
| SE100355   | 160    | 14     | 2.55   |
| SE100356   | 170    | 14     | 2.55   |
| SE100357   | 180    | 14     | 2.55   |
| SE100358   | 190    | 14     | 2.55   |
| SE100359   | 200    | 14     | 2.55   |
| SE100360   | 210    | 14     | 2.55   |
| SE100361   | 220    | 14     | 2.55   |
| SE055462   | 230    | 14     | 2.55   |
| SE100362   | 240    | 14     | 2.55   |
| SE100363   | 250    | 14     | 2.55   |
| SE114621   | 255    | 14     | 2.55   |
| SE100364   | 260    | 14     | 2.55   |
| SE100365   | 270    | 14     | 2.55   |
| SE114624   | 275    | 14     | 2.55   |
| SE100366   | 280    | 14     | 2.55   |
| SE100367   | 300    | 14     | 2.55   |
| SE055468   | 310    | 14     | 2.55   |
| SE114626   | 330    | 14     | 2.55   |
| SE100368   | 350    | 14     | 2.55   |
| SE100369   | 360    | 14     | 2.55   |
| SE100370   | 400    | 14     | 2.55   |
| SE055464   | 410    | 14     | 2.55   |
| SE100371   | 420    | 14     | 2.55   |
| SE100372   | 430    | 14     | 2.55   |
| SE100373   | 450    | 14     | 2.55   |
| SE100463   | 463    | 14     | 2.55   |
| SE100550   | 480    | 14     | 2.55   |
| SE114637   | 500    | 14     | 2.55   |
| SE055465   | 510    | 14     | 2.55   |
| SE100374   | 520    | 14     | 2.55   |
| SE100375   | 530    | 14     | 2.55   |
| SE055466   | 610    | 14     | 2.55   |
| SE100376   | 620    | 14     | 2.55   |
| SE100377   | 630    | 14     | 2.55   |
| SE100378   | 640    | 14     | 2.55   |
| SE055467   | 650    | 14     | 2.55   |
| SE114646   | 710    | 14     | 2.55   |
| SE114647   | 810    | 14     | 2.55   |
| SE114648   | 1050   | 14     | 2.55   |



## REPLACEMENT KNIVES FOR SYSTEM TERMINUS PLANER HEAD - SOLID CARBIDE



System Terminus

| Carbide<br>T10MG<br>PART # | L<br>(mm) | W<br>(mm) | T<br>(mm) |
|----------------------------|-----------|-----------|-----------|
| SE100790                   | 30        | 14        | 2.55      |
| SE100796                   | 50        | 14        | 2.55      |
| SE100803                   | 60        | 14        | 2.55      |
| SE100804                   | 80        | 14        | 2.55      |
| SE100805                   | 100       | 14        | 2.55      |
| SE100806                   | 110       | 14        | 2.55      |
| SE100807                   | 120       | 14        | 2.55      |
| SE055496                   | 130       | 14        | 2.55      |
| SE107532                   | 136       | 14        | 2.55      |
| SE100808                   | 140       | 14        | 2.55      |
| SE100809                   | 150       | 14        | 2.55      |
| SE100811                   | 160       | 14        | 2.55      |
| SE100812                   | 170       | 14        | 2.55      |
| SE100813                   | 180       | 14        | 2.55      |
| SE100814                   | 190       | 14        | 2.55      |
| SE100815                   | 200       | 14        | 2.55      |
| SE100816                   | 210       | 14        | 2.55      |
| SE100817                   | 220       | 14        | 2.55      |
| SE054752                   | 230       | 14        | 2.55      |
| SE100818                   | 240       | 14        | 2.55      |
| SE100819                   | 250       | 14        | 2.55      |
| SE107533                   | 255       | 14        | 2.55      |
| SE100820                   | 260       | 14        | 2.55      |
| SE100821                   | 270       | 14        | 2.55      |
| SE107534                   | 275       | 14        | 2.55      |
| SE100822                   | 280       | 14        | 2.55      |
| SE100823                   | 300       | 14        | 2.55      |
| SE055497                   | 310       | 14        | 2.55      |
| SE107535                   | 330       | 14        | 2.55      |
| SE100824                   | 350       | 14        | 2.55      |
| SE100825                   | 360       | 14        | 2.55      |
| SE100826                   | 400       | 14        | 2.55      |
| SE055498                   | 410       | 14        | 2.55      |
| SE100828                   | 420       | 14        | 2.55      |
| SE100829                   | 430       | 14        | 2.55      |
| SE100830                   | 450       | 14        | 2.55      |
| SE100940                   | 480       | 14        | 2.55      |
| SE104977                   | 500       | 14        | 2.55      |
| SE055499                   | 510       | 14        | 2.55      |
| SE100831                   | 520       | 14        | 2.55      |
| SE100832                   | 530       | 14        | 2.55      |
| SE055500                   | 610       | 14        | 2.55      |
| SE100833                   | 620       | 14        | 2.55      |
| SE100834                   | 630       | 14        | 2.55      |
| SE100835                   | 640       | 14        | 2.55      |
| SE055501                   | 650       | 14        | 2.55      |

**REPLACEMENT KNIVES FOR SYSTEM TERSA PLANER HEADS**



System TERSA

T-1 AVAILABLE UPON REQUEST,  
CALL FOR AVAILABILITY

| HSS M2<br>PART # | HSS M42<br>PART # | Carbide T10MG<br>PART # | Length |
|------------------|-------------------|-------------------------|--------|
| SE100395         | SE114539          | SE100847                | 60     |
| SE107545         | SE114540          | SE104212                | 75     |
| SE100396         | SE114541          | SE100848                | 80     |
| SE107546         | SE114542          | SE104398                | 90     |
| SE107547         | SE114543          | SE104211                | 95     |
| SE100397         | SE114544          | SE055509                | 100    |
| SE100398         | SE114545          | SE100849                | 110    |
| SE100399         | SE114547          | SE100851                | 120    |
| SE107548         | SE114548          | SE104022                | 125    |
| SE100400         | SE114549          | SE055510                | 130    |
| SE103821         | SE114550          | SE103823                | 135    |
| SE104613         | SE114551          | SE104766                | 140    |
| SE107549         | SE114552          | SE104210                | 145    |
| SE100401         | SE114553          | SE100852                | 150    |
| SE102716         | SE114554          | SE103943                | 160    |
| SE100402         | SE114555          | SE100853                | 170    |
| SE100403         | SE114556          | SE100854                | 180    |
| SE102774         | SE114557          | SE105070                | 185    |
| SE104808         | SE114558          | SE104399                | 190    |
| SE104243         | SE114559          | SE105698                | 200    |
| SE100404         | SE114560          | SE100855                | 210    |
| SE104566         | SE114561          | SE104589                | 220    |
| SE100405         | SE114562          | SE055511                | 230    |
| SE101718         | SE114563          | SE103824                | 235    |
| SE101720         | SE114564          | SE104043                | 240    |
| SE100406         | SE114565          | SE100856                | 250    |
| SE100407         | SE114566          | SE100857                | 260    |
| SE104326         | SE114567          | SE104573                | 265    |
| SE102982         | SE114568          | SE101673                | 270    |
| SE100408         | SE114569          | SE100858                | 280    |
| SE100409         | SE114570          | SE100859                | 300    |
| SE100410         | SE114571          | SE055512                | 310    |
| SE104686         | N/A               | N/A                     | 315    |
| SE104687         | SE114572          | SE107550                | 320    |
| SE100411         | SE114573          | SE100861                | 330    |
| SE100412         | SE114574          | SE100862                | 350    |
| SE100413         | SE114575          | SE100863                | 360    |
| SE100414         | SE114576          | SE100864                | 400    |
| SE100415         | SE114577          | SE055513                | 410    |
| SE105267         | SE114578          | SE107551                | 415    |
| SE100416         | SE114579          | SE100865                | 420    |
| SE100417         | SE114580          | SE055514                | 430    |
| SE100418         | SE114581          | SE100866                | 450    |
| SE100419         | SE114582          | SE100867                | 500    |
| SE100420         | SE114583          | SE055515                | 510    |
| SE100421         | SE114584          | SE055516                | 520    |
| SE100422         | SE114585          | SE100868                | 530    |
| SE100423         | SE114586          | SE100869                | 540    |
| SE103994         | SE114587          | SE104720                | 600    |
| SE100424         | SE114588          | SE055517                | 610    |
| N/A              | N/A               | SE055625                | 625    |
| SE100425         | SE114589          | SE055518                | 630    |
| SE100428         | SE114590          | SE102179                | 635    |
| SE100426         | SE114591          | SE100870                | 640    |
| SE100427         | SE114592          | SE055519                | 650    |
| SE114119         | SE114593          | N/A                     | 710    |
| SE113435         | SE114594          | N/A                     | 810    |
| SE114599         | SE114595          | N/A                     | 1050   |

System TERSA knives have a 10.0mm width and thickness of 2.3mm

## REPLACEMENT KNIVES FOR SYSTEM TERSA PLANER HEADS - T-1 HSS



System Tera

| T-1 PART # | Length |
|------------|--------|
| SE114520   | 410    |
| SE114527   | 520    |

*System Tera knives have a 10.0mm width and thickness of 2.3mm*

## REPLACEMENT KNIVES FOR WEINING HEADS SYSTEM CENTROLOCK-HSS



System Centrolock

| HSS PART # | L (mm) | W (mm) | T (mm) |
|------------|--------|--------|--------|
| SE100386   | 20     | 16     | 3      |
| SE100387   | 60     | 16     | 3      |
| SE100388   | 80     | 16     | 3      |
| SE055469   | 100    | 16     | 3      |
| SE055470   | 130    | 16     | 3      |
| SE100389   | 150    | 16     | 3      |
| SE055471   | 170    | 16     | 3      |
| SE100390   | 180    | 16     | 3      |
| SE055472   | 190    | 16     | 3      |
| SE100391   | 210    | 16     | 3      |
| SE100298   | 230    | 16     | 3      |
| SE100392   | 235    | 16     | 3      |
| SE055473   | 240    | 16     | 3      |
| SE100343   | 260    | 16     | 3      |
| SE055474   | 270    | 16     | 3      |
| SE100393   | 310    | 16     | 3      |
| SE055475   | 460    | 16     | 3      |
| SE055476   | 650    | 16     | 3      |

*T-1 Available upon request, call for availability*

## REPLACEMENT KNIVES FOR SYSTEM CENTROFIX - HSS



System Centrofix

| HSS PART # | L (mm) | W (mm) | T (mm) |
|------------|--------|--------|--------|
| SE055490   | 230    | 12     | 2.7    |
| SE055491   | 410    | 12     | 2.7    |
| SE055493   | 520    | 12     | 2.7    |
| SE114786   | 640    | 12     | 2.7    |

*T-1 Available upon request, call for availability*

**REPLACEMENT KNIVES FOR WEINING HEADS  
SYSTEM CENTROLOCK - SOLID CARBIDE**



System Centrollock

| Carbide T10MG<br>PART # | L<br>(mm) | W<br>(mm) | T<br>(mm) |
|-------------------------|-----------|-----------|-----------|
| SE100836                | 20        | 16        | 3         |
| SE100837                | 60        | 16        | 3         |
| SE100838                | 80        | 16        | 3         |
| SE055502                | 100       | 16        | 3         |
| SE055503                | 130       | 16        | 3         |
| SE100839                | 150       | 16        | 3         |
| SE055504                | 170       | 16        | 3         |
| SE100840                | 180       | 16        | 3         |
| SE100841                | 190       | 16        | 3         |
| SE100842                | 210       | 16        | 3         |
| SE054753                | 230       | 16        | 3         |
| SE100844                | 235       | 16        | 3         |
| SE055505                | 240       | 16        | 3         |
| SE100845                | 260       | 16        | 3         |
| SE055506                | 270       | 16        | 3         |
| SE100846                | 310       | 16        | 3         |
| SE055507                | 460       | 16        | 3         |
| SE055508                | 650       | 16        | 3         |

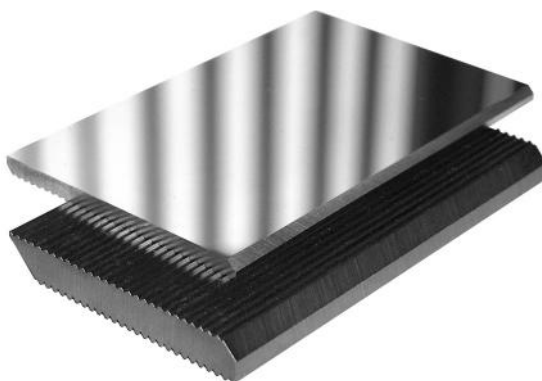
**REPLACEMENT KNIVES FOR SYSTEM CENTROFIX-SOLID CARBIDE**



System Centrofix

| Carbide T10MG<br>PART # | L<br>(mm) | W<br>(mm) | T<br>(mm) |
|-------------------------|-----------|-----------|-----------|
| SE100881                | 120       | 12        | 2.7       |

## REPLACEMENT KNIVES FOR SUPERPAC



| T10MG<br>PART # | T04F<br>PART # | L<br>(mm) | W<br>(mm) | T<br>(mm) | L<br>(mm) | W<br>(mm) | T<br>(mm) | Backing Plate<br>PART # |
|-----------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------|
| SE043933        | SE024082       | 40        | 38        | 3.2       | 40        | 35        | 7.1       | SE024090                |
| SE043934        | SE043924       | 50        | 38        | 3.2       | 50        | 35        | 7.1       | SE043957                |
| SE043935        | SE024115       | 60        | 38        | 3.2       | 60        | 35        | 7.1       | SE024123                |
| SE043936        | SE024148       | 80        | 38        | 3.2       | 80        | 35        | 7.1       | SE024156                |
| SE043937        | SE023949       | 100       | 38        | 3.2       | 100       | 35        | 7.1       | SE023957                |
| SE043938        | SE023982       | 120       | 38        | 3.2       | 120       | 35        | 7.1       | SE023990                |
| SE043939        | SE024016       | 130       | 38        | 3.2       | 130       | 35        | 7.1       | SE024024                |
| SE043940        | SE024049       | 150       | 38        | 3.2       | 150       | 35        | 7.1       | SE024057                |
| SE043962        | SE043961       | 170       | 38        | 3.2       | 170       | 35        | 7.1       | SE045837                |
| SE043941        | SE024093       | 40        | 50        | 3.2       | 40        | 47        | 7.1       | SE024101                |
| SE043942        | SE043927       | 50        | 50        | 3.2       | 50        | 47        | 7.1       | SE043958                |
| SE043943        | SE024126       | 60        | 50        | 3.2       | 60        | 47        | 7.1       | SE024134                |
| SE043944        | SE024159       | 80        | 50        | 3.2       | 80        | 47        | 7.1       | SE024167                |
| SE043945        | SE023960       | 100       | 50        | 3.2       | 100       | 47        | 7.1       | SE023968                |
| SE043946        | SE023993       | 120       | 50        | 3.2       | 120       | 47        | 7.1       | SE024001                |
| SE043947        | SE024027       | 130       | 50        | 3.2       | 130       | 47        | 7.1       | SE024035                |
| SE043948        | SE024060       | 150       | 50        | 3.2       | 150       | 47        | 7.1       | SE024068                |
| SE043966        | SE043965       | 170       | 50        | 3.2       | 170       | 47        | 7.1       | SE045838                |
| SE043949        | SE024104       | 40        | 60        | 3.2       | 40        | 57        | 7.1       | SE024112                |
| SE043950        | SE043931       | 50        | 60        | 3.2       | 50        | 57        | 7.1       | SE043959                |
| SE043951        | SE024137       | 60        | 60        | 3.2       | 60        | 57        | 7.1       | SE024145                |
| SE043952        | SE024170       | 80        | 60        | 3.2       | 80        | 57        | 7.1       | SE024178                |
| SE043953        | SE023971       | 100       | 60        | 3.2       | 100       | 57        | 7.1       | SE023979                |
| SE043954        | SE024004       | 120       | 60        | 3.2       | 120       | 57        | 7.1       | SE024012                |
| SE043955        | SE024038       | 130       | 60        | 3.2       | 130       | 57        | 7.1       | SE024046                |
| SE043956        | SE024071       | 150       | 60        | 3.2       | 150       | 57        | 7.1       | SE024079                |
| SE043970        | SE043969       | 170       | 60        | 3.2       | 170       | 57        | 7.1       | SE045839                |



# CARBIDE SAW TIPS AND STB STRIPS



| Grade<br>Grain Size     | Binder<br>[m %] | -----Hardness-----<br>(SEVNB) |      | Transverse<br>Rupture<br>Strength<br>[MPa] | Fracture<br>Toughness<br>(SEVNB)<br>[MPa*m <sup>1/2</sup> ] |
|-------------------------|-----------------|-------------------------------|------|--|---|
|                         |                 | HV10                          | HRA  |  |   |
| <b>Nano Grades</b>      |                 |                               |      |  |   |
| KCR02+                  | 2.0%            | 2250                          | 95.0 | 2400                                       | 7.5   |
| <b>Ultrafine Grain</b>  |                 |                               |      |  |   |
| KCR05+                  | 3.0%            | 2160                          | 94.5 | 2900                                       | 7.8   |
| <b>Submicron Grades</b> |                 |                               |      |  |   |
| KCR06                   | 3.0%            | 1950                          | 93.6 | 2300                                       | 8.5   |
| KCR10                   | 4.0%            | 1780                          | 92.8 | 2800                                       | 10.1  |
| KCR18+                  | 9.5%            | 1590                          | 91.7 | 3750                                       | 10.8  |
| CTOPP10                 | 10.0%           | 1570                          | 91.6 | 3000                                       | 10  |
| <b>Coarse Grain</b>     |                 |                               |      |  |   |
| KCR32                   | 10.0%           | 1140                          | 87.7 | 2600                                       | 16.5  |
| GC32                    | 10.0%           | 1130                          | 87.6 | 2600                                       | 18  |

## Tool Life vs Performance based on Wood Types

| GRADE   | WINTER<br>PRIMARY<br>WOOD | SUMMER<br>PRIMARY<br>WOOD | SOFTWOOD | HARDWOOD | CHIPBOARD | MDF  | HDF  |
|---------|---------------------------|---------------------------|----------|----------|-----------|------|------|
| KCR02+  |                           |                           |          |          | ••        | •••• | •••• |
| KCR05+  |                           |                           |          | •••      | ••••      | •••  | •••  |
| KCR06   |                           |                           |          | ••••     | •••       | ••   | ••   |
| KCR10   | •                         | •••                       | ••••     | •••      |           |      |      |
| KCR18+  | ••                        | ••••                      | •••      | ••       |           |      |      |
| KCR32   | ••••                      | ••                        |          |          |           |      |      |
| GC32    | ••••                      | ••                        |          |          |           |      |      |
| CTOPP10 |                           | ••                        | •••      | •        |           |      |      |

\*KCR32: better corrosion resistance

\*GC32: better toughness

Tool life/Performance: optimum: •••• very good: ••• good: •• suitable: • not good:

## STB CARBIDE STRIPS



| PART # | THICKNESS      | WIDTH           | LENGTH |
|--------|----------------|-----------------|--------|
| STB310 | 3/32" (0.093") | 5/16" (0.312")  | 6"     |
| STB312 | 3/32" (0.093") | 3/8" (0.375")   | 6"     |
| STB316 | 3/32" (0.093") | 1/2" (0.500")   | 6"     |
| STB320 | 3/32" (0.093") | 5/8" (0.625")   | 6"     |
| STB324 | 3/32" (0.093") | 3/4" (0.750")   | 6"     |
| STB328 | 3/32" (0.093") | 7/8" (0.875")   | 6"     |
| STB332 | 3/32" (0.093") | 1" (1.000")     | 6"     |
| STB336 | 3/32" (0.093") | 1-1/8" (1.125") | 6"     |
| STB340 | 3/32" (0.093") | 1-1/4" (1.250") | 6"     |
| STB344 | 3/32" (0.093") | 1-3/8" (1.375") | 6"     |
| STB348 | 3/32" (0.093") | 1-1/2" (1.500") | 6"     |
| STB410 | 1/8" (0.125")  | 5/16" (0.312")  | 6"     |
| STB412 | 1/8" (0.125")  | 3/8" (0.375")   | 6"     |
| STB416 | 1/8" (0.125")  | 1/2" (0.500")   | 6"     |
| STB420 | 1/8" (0.125")  | 5/8" (0.625")   | 6"     |
| STB424 | 1/8" (0.125")  | 3/4" (0.750")   | 6"     |
| STB428 | 1/8" (0.125")  | 7/8" (0.875")   | 6"     |
| STB432 | 1/8" (0.125")  | 1" (1.000")     | 6"     |
| STB436 | 1/8" (0.125")  | 1-1/8" (1.125") | 6"     |
| STB440 | 1/8" (0.125")  | 1-1/4" (1.250") | 6"     |
| STB444 | 1/8" (0.125")  | 1-3/8" (1.375") | 6"     |
| STB448 | 1/8" (0.125")  | 1-1/2" (1.500") | 6"     |
| STB510 | 5/32" (0.156") | 5/16" (0.312")  | 6"     |
| STB512 | 5/32" (0.156") | 3/8" (0.375")   | 6"     |
| STB516 | 5/32" (0.156") | 1/2" (0.500")   | 6"     |
| STB520 | 5/32" (0.156") | 5/8" (0.625")   | 6"     |
| STB524 | 5/32" (0.156") | 3/4" (0.750")   | 6"     |
| STB528 | 5/32" (0.156") | 7/8" (0.875")   | 6"     |
| STB532 | 5/32" (0.156") | 1" (1.000")     | 6"     |
| STB536 | 5/32" (0.156") | 1-1/8" (1.125") | 6"     |
| STB540 | 5/32" (0.156") | 1-1/4" (1.250") | 6"     |
| STB544 | 5/32" (0.156") | 1-3/8" (1.375") | 6"     |
| STB548 | 5/32" (0.156") | 1-1/2" (1.500") | 6"     |
| STB610 | 3/16" (0.187") | 5/16" (0.312")  | 6"     |
| STB612 | 3/16" (0.187") | 3/8" (0.375")   | 6"     |
| STB616 | 3/16" (0.187") | 1/2" (0.500")   | 6"     |
| STB620 | 3/16" (0.187") | 5/8" (0.625")   | 6"     |
| STB624 | 3/16" (0.187") | 3/4" (0.750")   | 6"     |
| STB628 | 3/16" (0.187") | 7/8" (0.875")   | 6"     |
| STB632 | 3/16" (0.187") | 1" (1.000")     | 6"     |
| STB636 | 3/16" (0.187") | 1-1/8" (1.125") | 6"     |
| STB640 | 3/16" (0.187") | 1-1/4" (1.250") | 6"     |
| STB644 | 3/16" (0.187") | 1-3/8" (1.375") | 6"     |
| STB648 | 3/16" (0.187") | 1-1/2" (1.500") | 6"     |

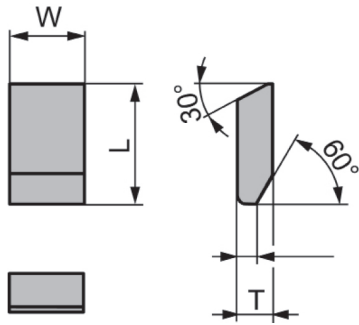
Specify Grade - HC25 = C2, MG18 = C3

Tolerances - Length +/- 0.080, Width +/- 0.020, Thickness +/- 0.004

**To Order saw tips:**  
Choose a style, then specify pretinned (PT) or untinned (TS90),  
then Grade of carbide (see chart page 158).

EXAMPLE: WDC 7100 PT KCR06

## WBC STYLE - SAW TIPS

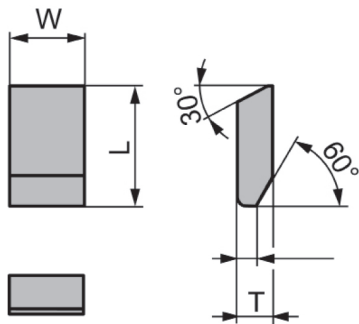


| STYLE    | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|----------|--------|-------|-----------|----|---|----|
| WBC 7085 | 0.281  | 0.085 | 0.078     | 30 | 0 | 60 |
| WBC 7100 | 0.281  | 0.100 | 0.078     | 30 | 0 | 60 |
| WBC 7120 | 0.281  | 0.120 | 0.078     | 30 | 0 | 60 |
| WBC 7135 | 0.281  | 0.135 | 0.078     | 30 | 0 | 60 |
| WBC 7150 | 0.281  | 0.150 | 0.078     | 30 | 0 | 60 |
| WBC 7165 | 0.281  | 0.165 | 0.078     | 30 | 0 | 60 |
| WBC 7180 | 0.281  | 0.180 | 0.078     | 30 | 0 | 60 |
| WBC 7195 | 0.281  | 0.195 | 0.078     | 30 | 0 | 60 |

Sold in Packs of 100 Pieces

Tips in-stock can be pretinned within one week.  
All tips braze ready.

## WDC STYLE - SAW TIPS

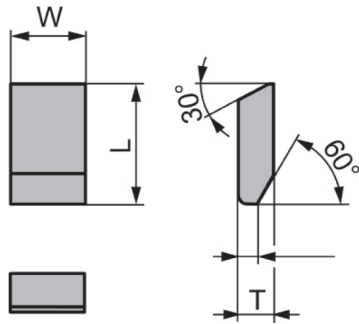


| STYLE    | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|----------|--------|-------|-----------|----|---|----|
| WDC 7100 | 0.312  | 0.100 | 0.093     | 30 | 0 | 60 |
| WDC 7105 | 0.312  | 0.105 | 0.093     | 30 | 0 | 60 |
| WDC 7110 | 0.312  | 0.110 | 0.093     | 30 | 0 | 60 |
| WDC 7115 | 0.312  | 0.115 | 0.093     | 30 | 0 | 60 |
| WDC 7120 | 0.312  | 0.120 | 0.093     | 30 | 0 | 60 |
| WDC 7125 | 0.312  | 0.125 | 0.093     | 30 | 0 | 60 |
| WDC 7130 | 0.312  | 0.130 | 0.093     | 30 | 0 | 60 |
| WDC 7135 | 0.312  | 0.135 | 0.093     | 30 | 0 | 60 |
| WDC 7140 | 0.312  | 0.140 | 0.093     | 30 | 0 | 60 |
| WDC 7150 | 0.312  | 0.150 | 0.093     | 30 | 0 | 60 |
| WDC 7155 | 0.312  | 0.155 | 0.093     | 30 | 0 | 60 |
| WDC 7160 | 0.312  | 0.160 | 0.093     | 30 | 0 | 60 |
| WDC 7165 | 0.312  | 0.165 | 0.093     | 30 | 0 | 60 |
| WDC 7170 | 0.312  | 0.170 | 0.093     | 30 | 0 | 60 |
| WDC 7175 | 0.312  | 0.175 | 0.093     | 30 | 0 | 60 |
| WDC 7180 | 0.312  | 0.180 | 0.093     | 30 | 0 | 60 |
| WDC 7185 | 0.312  | 0.185 | 0.093     | 30 | 0 | 60 |
| WDC 7190 | 0.312  | 0.190 | 0.093     | 30 | 0 | 60 |
| WDC 7200 | 0.312  | 0.200 | 0.093     | 30 | 0 | 60 |
| WDC 7210 | 0.312  | 0.210 | 0.093     | 30 | 0 | 60 |
| WDC 7215 | 0.312  | 0.215 | 0.093     | 30 | 0 | 60 |
| WDC 7220 | 0.312  | 0.220 | 0.093     | 30 | 0 | 60 |
| WDC 7230 | 0.312  | 0.230 | 0.093     | 30 | 0 | 60 |
| WDC 7250 | 0.312  | 0.250 | 0.093     | 30 | 0 | 60 |
| WDC 7280 | 0.312  | 0.280 | 0.093     | 30 | 0 | 60 |
| WDC 7281 | 0.312  | 0.281 | 0.093     | 30 | 0 | 60 |
| WDC 7312 | 0.312  | 0.312 | 0.093     | 30 | 0 | 60 |

Sold in Packs of 100 Pieces

Tips in-stock can be pretinned within one week.  
All tips braze ready.

## WEC STYLE - SAW TIPS

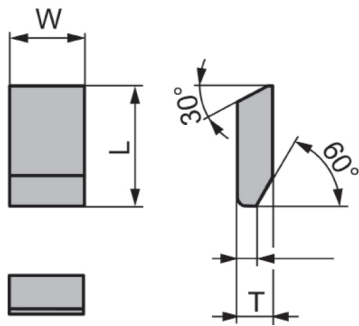


Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE    | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|----------|--------|-------|-----------|----|---|----|
| WEC 7110 | 0.375  | 0.110 | 0.093     | 30 | 0 | 60 |
| WEC 7120 | 0.375  | 0.120 | 0.093     | 30 | 0 | 60 |
| WEC 7130 | 0.375  | 0.130 | 0.093     | 30 | 0 | 60 |
| WEC 7135 | 0.375  | 0.135 | 0.093     | 30 | 0 | 60 |
| WEC 7140 | 0.375  | 0.140 | 0.093     | 30 | 0 | 60 |
| WEC 7150 | 0.375  | 0.150 | 0.093     | 30 | 0 | 60 |
| WEC 7165 | 0.375  | 0.165 | 0.093     | 30 | 0 | 60 |
| WEC 7170 | 0.375  | 0.170 | 0.093     | 30 | 0 | 60 |
| WEC 7175 | 0.372  | 0.175 | 0.093     | 30 | 0 | 60 |
| WEC 7180 | 0.372  | 0.180 | 0.093     | 30 | 0 | 60 |
| WEC 7185 | 0.375  | 0.185 | 0.093     | 30 | 0 | 60 |
| WEC 7190 | 0.375  | 0.190 | 0.093     | 30 | 0 | 60 |
| WEC 7200 | 0.375  | 0.200 | 0.093     | 30 | 0 | 60 |
| WEC 7205 | 0.375  | 0.205 | 0.093     | 30 | 0 | 60 |
| WEC 7210 | 0.375  | 0.210 | 0.093     | 30 | 0 | 60 |
| WEC 7215 | 0.375  | 0.215 | 0.093     | 30 | 0 | 60 |
| WEC 7220 | 0.375  | 0.220 | 0.093     | 30 | 0 | 60 |
| WEC 7225 | 0.375  | 0.225 | 0.093     | 30 | 0 | 60 |
| WEC 7230 | 0.375  | 0.230 | 0.093     | 30 | 0 | 60 |
| WEC 7240 | 0.375  | 0.240 | 0.093     | 30 | 0 | 60 |
| WEC 7250 | 0.375  | 0.250 | 0.093     | 30 | 0 | 60 |
| WEC 7260 | 0.375  | 0.260 | 0.093     | 30 | 0 | 60 |
| WEC 7265 | 0.375  | 0.265 | 0.093     | 30 | 0 | 60 |
| WEC 7280 | 0.375  | 0.280 | 0.093     | 30 | 0 | 60 |
| WEC 7281 | 0.375  | 0.281 | 0.093     | 30 | 0 | 60 |
| WEC 7300 | 0.375  | 0.300 | 0.093     | 30 | 0 | 60 |
| WEC 7312 | 0.375  | 0.312 | 0.093     | 30 | 0 | 60 |
| WEC 7375 | 0.375  | 0.375 | 0.093     | 30 | 0 | 60 |
| WEC 7400 | 0.375  | 0.400 | 0.093     | 30 | 0 | 60 |

*Sold in Packs of 100 Pieces*

## WFC STYLE - SAW TIPS



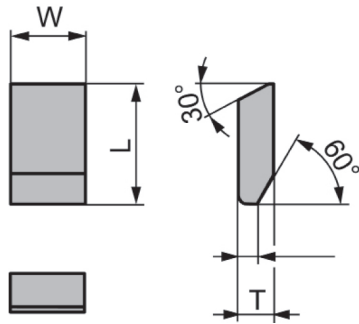
Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE    | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|----------|--------|-------|-----------|----|---|----|
| WFC 7110 | 0.500  | 0.110 | 0.125     | 35 | 0 | 70 |
| WFC 7115 | 0.500  | 0.115 | 0.125     | 35 | 0 | 70 |
| WFC 7120 | 0.500  | 0.120 | 0.125     | 35 | 0 | 70 |
| WFC 7125 | 0.500  | 0.125 | 0.125     | 35 | 0 | 70 |
| WFC 7130 | 0.500  | 0.130 | 0.125     | 35 | 0 | 70 |
| WFC 7135 | 0.500  | 0.135 | 0.125     | 35 | 0 | 70 |
| WFC 7140 | 0.500  | 0.140 | 0.125     | 35 | 0 | 70 |
| WFC 7145 | 0.500  | 0.145 | 0.125     | 35 | 0 | 70 |
| WFC 7150 | 0.500  | 0.150 | 0.125     | 35 | 0 | 70 |
| WFC 7155 | 0.500  | 0.155 | 0.125     | 35 | 0 | 70 |
| WFC 7160 | 0.500  | 0.160 | 0.125     | 35 | 0 | 70 |
| WFC 7165 | 0.500  | 0.165 | 0.125     | 35 | 0 | 70 |
| WFC 7170 | 0.500  | 0.170 | 0.125     | 35 | 0 | 70 |
| WFC 7175 | 0.500  | 0.175 | 0.125     | 35 | 0 | 70 |
| WFC 7180 | 0.500  | 0.180 | 0.125     | 35 | 0 | 70 |
| WFC 7185 | 0.500  | 0.185 | 0.125     | 35 | 0 | 70 |
| WFC 7190 | 0.500  | 0.190 | 0.125     | 35 | 0 | 70 |
| WFC 7195 | 0.500  | 0.195 | 0.125     | 35 | 0 | 70 |
| WFC 7200 | 0.500  | 0.200 | 0.125     | 35 | 0 | 70 |
| WFC 7205 | 0.500  | 0.205 | 0.125     | 35 | 0 | 70 |
| WFC 7210 | 0.500  | 0.210 | 0.125     | 35 | 0 | 70 |
| WFC 7215 | 0.500  | 0.215 | 0.125     | 35 | 0 | 70 |
| WFC 7220 | 0.500  | 0.220 | 0.125     | 35 | 0 | 70 |
| WFC 7230 | 0.500  | 0.230 | 0.125     | 35 | 0 | 70 |
| WFC 7235 | 0.500  | 0.235 | 0.125     | 35 | 0 | 70 |
| WFC 7240 | 0.500  | 0.240 | 0.125     | 35 | 0 | 70 |
| WFC 7250 | 0.500  | 0.250 | 0.125     | 35 | 0 | 70 |
| WFC 7256 | 0.500  | 0.256 | 0.125     | 35 | 0 | 70 |
| WFC 7260 | 0.500  | 0.260 | 0.125     | 35 | 0 | 70 |
| WFC 7265 | 0.500  | 0.265 | 0.125     | 35 | 0 | 70 |
| WFC 7270 | 0.500  | 0.270 | 0.125     | 35 | 0 | 70 |
| WFC 7275 | 0.500  | 0.275 | 0.125     | 35 | 0 | 70 |
| WFC 7280 | 0.500  | 0.280 | 0.125     | 35 | 0 | 70 |
| WFC 7285 | 0.500  | 0.285 | 0.125     | 35 | 0 | 70 |
| WFC 7290 | 0.500  | 0.290 | 0.125     | 35 | 0 | 70 |
| WFC 7300 | 0.500  | 0.30  | 0.125     | 35 | 0 | 70 |
| WFC 7310 | 0.500  | 0.310 | 0.125     | 35 | 0 | 70 |
| WFC 7312 | 0.500  | 0.312 | 0.125     | 35 | 0 | 70 |
| WFC 7330 | 0.500  | 0.330 | 0.125     | 35 | 0 | 70 |
| WFC 7335 | 0.500  | 0.335 | 0.125     | 35 | 0 | 70 |
| WFC 7340 | 0.500  | 0.340 | 0.125     | 35 | 0 | 70 |
| WFC 7350 | 0.500  | 0.350 | 0.125     | 35 | 0 | 70 |
| WFC 7375 | 0.500  | 0.375 | 0.125     | 35 | 0 | 70 |
| WFC 7400 | 0.500  | 0.400 | 0.125     | 35 | 0 | 70 |
| WFC 7430 | 0.500  | 0.430 | 0.125     | 35 | 0 | 70 |
| WFC 7437 | 0.500  | 0.437 | 0.125     | 35 | 0 | 70 |
| WFC 7500 | 0.500  | 0.500 | 0.125     | 35 | 0 | 70 |
| WFC 7562 | 0.500  | 0.562 | 0.125     | 35 | 0 | 70 |
| WFC 7625 | 0.500  | 0.625 | 0.125     | 35 | 0 | 70 |
| WFC 7687 | 0.500  | 0.687 | 0.125     | 35 | 0 | 70 |
| WFC 7750 | 0.500  | 0.750 | 0.125     | 35 | 0 | 70 |

*Sold in Packs of 100 Pieces*



## WGC STYLE - SAW TIPS

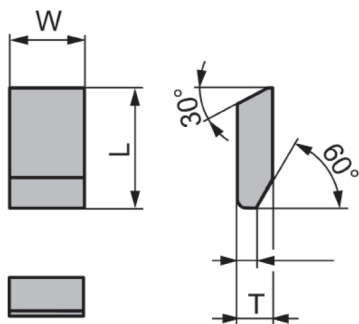


Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE    | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|----------|--------|-------|-----------|----|---|----|
| WGC 7090 | 0.375  | 0.090 | 0.125     | 30 | 0 | 60 |
| WGC 7100 | 0.375  | 0.100 | 0.125     | 30 | 0 | 60 |
| WGC 7105 | 0.375  | 0.105 | 0.125     | 30 | 0 | 60 |
| WGC 7110 | 0.375  | 0.110 | 0.125     | 30 | 0 | 60 |
| WGC 7115 | 0.375  | 0.115 | 0.125     | 30 | 0 | 60 |
| WGC 7120 | 0.375  | 0.120 | 0.125     | 30 | 0 | 60 |
| WGC 7125 | 0.375  | 0.125 | 0.125     | 30 | 0 | 60 |
| WGC 7130 | 0.375  | 0.130 | 0.125     | 30 | 0 | 60 |
| WGC 7135 | 0.375  | 0.135 | 0.125     | 30 | 0 | 60 |
| WGC 7140 | 0.375  | 0.140 | 0.125     | 30 | 0 | 60 |
| WGC 7145 | 0.375  | 0.145 | 0.125     | 30 | 0 | 60 |
| WGC 7150 | 0.375  | 0.150 | 0.125     | 30 | 0 | 60 |
| WGC 7155 | 0.375  | 0.155 | 0.125     | 30 | 0 | 60 |
| WGC 7160 | 0.375  | 0.160 | 0.125     | 30 | 0 | 60 |
| WGC 7165 | 0.375  | 0.165 | 0.125     | 30 | 0 | 60 |
| WGC 7170 | 0.375  | 0.170 | 0.125     | 30 | 0 | 60 |
| WGC 7175 | 0.375  | 0.175 | 0.125     | 30 | 0 | 60 |
| WGC 7180 | 0.375  | 0.180 | 0.125     | 30 | 0 | 60 |
| WGC 7185 | 0.375  | 0.185 | 0.125     | 30 | 0 | 60 |
| WGC 7190 | 0.375  | 0.190 | 0.125     | 30 | 0 | 60 |
| WGC 7195 | 0.375  | 0.195 | 0.125     | 30 | 0 | 60 |
| WGC 7200 | 0.375  | 0.200 | 0.125     | 30 | 0 | 60 |
| WGC 7210 | 0.375  | 0.210 | 0.125     | 30 | 0 | 60 |
| WGC 7215 | 0.375  | 0.215 | 0.125     | 30 | 0 | 60 |
| WGC 7220 | 0.375  | 0.220 | 0.125     | 30 | 0 | 60 |
| WGC 7225 | 0.375  | 0.225 | 0.125     | 30 | 0 | 60 |
| WGC 7228 | 0.375  | 0.228 | 0.125     | 30 | 0 | 60 |
| WGC 7230 | 0.375  | 0.230 | 0.125     | 30 | 0 | 60 |
| WGC 7240 | 0.375  | 0.240 | 0.125     | 30 | 0 | 60 |
| WGC 7250 | 0.375  | 0.250 | 0.125     | 30 | 0 | 60 |
| WGC 7256 | 0.375  | 0.256 | 0.125     | 30 | 0 | 60 |
| WGC 7260 | 0.375  | 0.260 | 0.125     | 30 | 0 | 60 |
| WGC 7265 | 0.375  | 0.265 | 0.125     | 30 | 0 | 60 |
| WGC 7270 | 0.375  | 0.270 | 0.125     | 30 | 0 | 60 |
| WGC 7275 | 0.375  | 0.275 | 0.125     | 30 | 0 | 60 |
| WGC 7280 | 0.375  | 0.280 | 0.125     | 30 | 0 | 60 |
| WGC 7300 | 0.375  | 0.300 | 0.125     | 30 | 0 | 60 |
| WGC 7310 | 0.375  | 0.310 | 0.125     | 30 | 0 | 60 |
| WGC 7312 | 0.375  | 0.375 | 0.125     | 30 | 0 | 60 |
| WGC 7320 | 0.375  | 0.320 | 0.125     | 30 | 0 | 60 |
| WGC 7335 | 0.375  | 0.335 | 0.125     | 30 | 0 | 60 |
| WGC 7350 | 0.375  | 0.350 | 0.125     | 30 | 0 | 60 |
| WGC 7400 | 0.375  | 0.400 | 0.125     | 30 | 0 | 60 |
| WGC 7500 | 0.375  | 0.500 | 0.125     | 30 | 0 | 60 |
| WGC 7550 | 0.375  | 0.550 | 0.125     | 30 | 0 | 60 |

*Sold in Packs of 100 Pieces*

## WHC STYLE - SAW TIPS

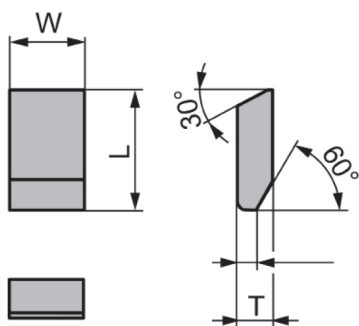


Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE    | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|----------|--------|-------|-----------|----|---|----|
| WHC 7120 | 0.344  | 0.120 | 0.125     | 30 | 0 | 60 |
| WHC 7135 | 0.344  | 0.135 | 0.125     | 30 | 0 | 60 |
| WHC 7150 | 0.344  | 0.150 | 0.125     | 30 | 0 | 60 |
| WHC 7165 | 0.344  | 0.165 | 0.125     | 30 | 0 | 60 |
| WHC 7200 | 0.344  | 0.200 | 0.125     | 30 | 0 | 60 |
| WHC 7215 | 0.344  | 0.215 | 0.125     | 30 | 0 | 60 |
| WHC 7230 | 0.344  | 0.230 | 0.125     | 30 | 0 | 60 |
| WHC 7250 | 0.344  | 0.250 | 0.125     | 30 | 0 | 60 |
| WHC 7265 | 0.344  | 0.265 | 0.125     | 30 | 0 | 60 |
| WHC 7280 | 0.344  | 0.280 | 0.125     | 30 | 0 | 60 |

*Sold in Packs of 100 Pieces*

## WQC STYLE - SAW TIPS

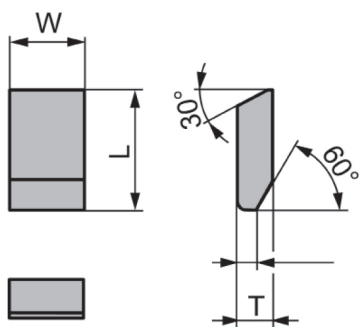


Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE    | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|----------|--------|-------|-----------|----|---|----|
| WQC 7230 | 0.375  | 0.230 | 0.156     | 30 | 0 | 60 |
| WQC 7250 | 0.375  | 0.250 | 0.156     | 30 | 0 | 60 |
| WQC 7300 | 0.375  | 0.300 | 0.156     | 30 | 0 | 60 |
| WQC 7400 | 0.375  | 0.400 | 0.156     | 30 | 0 | 60 |
| WQC 7530 | 0.375  | 0.530 | 0.156     | 30 | 0 | 60 |
| WQC 7625 | 0.375  | 0.625 | 0.156     | 30 | 0 | 60 |

*Sold in Packs of 100 Pieces*

## WXC STYLE - SAW TIPS



Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE    | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|----------|--------|-------|-----------|----|---|----|
| WXC 7095 | 0.437  | 0.095 | 0.125     | 30 | 0 | 70 |
| WXC 7100 | 0.437  | 0.100 | 0.125     | 30 | 0 | 70 |
| WXC 7105 | 0.437  | 0.105 | 0.125     | 30 | 0 | 70 |
| WXC 7110 | 0.437  | 0.110 | 0.125     | 30 | 0 | 70 |
| WXC 7115 | 0.437  | 0.115 | 0.125     | 30 | 0 | 70 |
| WXC 7120 | 0.437  | 0.120 | 0.125     | 30 | 0 | 70 |
| WXC 7125 | 0.437  | 0.125 | 0.125     | 30 | 0 | 70 |
| WXC 7130 | 0.437  | 0.130 | 0.125     | 30 | 0 | 70 |
| WXC 7135 | 0.437  | 0.135 | 0.125     | 30 | 0 | 70 |
| WXC 7140 | 0.437  | 0.140 | 0.125     | 30 | 0 | 70 |
| WXC 7150 | 0.437  | 0.150 | 0.125     | 30 | 0 | 70 |
| WXC 7155 | 0.437  | 0.155 | 0.125     | 30 | 0 | 70 |
| WXC 7160 | 0.437  | 0.160 | 0.125     | 30 | 0 | 70 |
| WXC 7165 | 0.437  | 0.165 | 0.125     | 30 | 0 | 70 |
| WXC 7170 | 0.437  | 0.170 | 0.125     | 30 | 0 | 70 |
| WXC 7175 | 0.437  | 0.175 | 0.125     | 30 | 0 | 70 |
| WXC 7180 | 0.437  | 0.180 | 0.125     | 30 | 0 | 70 |
| WXC 7190 | 0.437  | 0.190 | 0.125     | 30 | 0 | 70 |
| WXC 7195 | 0.437  | 0.195 | 0.125     | 30 | 0 | 70 |

*Sold in Packs of 100 Pieces*

## WDC RIGHT STYLE - SAW TIPS



CW Right Style

| STYLE     | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|-----------|--------|-------|-----------|----|---|----|
| WDCR 7165 | 0.312  | 0.165 | 0.093     | 30 | 0 | 60 |
| WDCR 7185 | 0.312  | 0.185 | 0.093     | 30 | 0 | 60 |
| WDCR 7200 | 0.312  | 0.200 | 0.093     | 30 | 0 | 60 |
| WDCR 7215 | 0.312  | 0.215 | 0.093     | 30 | 0 | 60 |
| WDCR 7250 | 0.312  | 0.250 | 0.093     | 30 | 0 | 60 |

*Sold in Packs of 100 Pieces*

## WDC LEFT STYLE - SAW TIPS



CW Left Style

| STYLE     | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|-----------|--------|-------|-----------|----|---|----|
| WDCL 7165 | 0.312  | 0.165 | 0.093     | 30 | 0 | 60 |
| WDCL 7185 | 0.312  | 0.185 | 0.093     | 30 | 0 | 60 |
| WDCL 7200 | 0.312  | 0.200 | 0.093     | 30 | 0 | 60 |
| WDCL 7215 | 0.312  | 0.215 | 0.093     | 30 | 0 | 60 |
| WDCL 7250 | 0.312  | 0.250 | 0.093     | 30 | 0 | 60 |

*Sold in Packs of 100 Pieces*

## WGC RIGHT STYLE - SAW TIPS



CW Right Style

| STYLE     | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|-----------|--------|-------|-----------|----|---|----|
| WGCR 7230 | 0.375  | 0.230 | 0.125     | 30 | 0 | 60 |
| WGCR 7250 | 0.375  | 0.250 | 0.125     | 30 | 0 | 60 |
| WGCR 7265 | 0.375  | 0.265 | 0.125     | 30 | 0 | 60 |
| WGCR 7270 | 0.375  | 0.270 | 0.125     | 30 | 0 | 60 |

*Sold in Packs of 100 Pieces*

## WGC LEFT STYLE - SAW TIPS

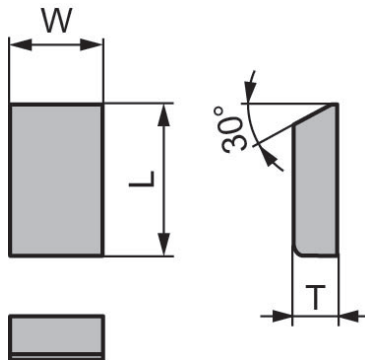


CW Left Style

| STYLE     | LENGTH | WIDTH | THICKNESS | a  | B | Y  |
|-----------|--------|-------|-----------|----|---|----|
| WGCL 7230 | 0.375  | 0.230 | 0.125     | 30 | 0 | 60 |
| WGCL 7250 | 0.375  | 0.250 | 0.125     | 30 | 0 | 60 |
| WGCL 7265 | 0.375  | 0.265 | 0.125     | 30 | 0 | 60 |
| WGCL 7270 | 0.375  | 0.270 | 0.125     | 30 | 0 | 60 |

*Sold in Packs of 100 Pieces*

## WA STYLE - SAW TIPS

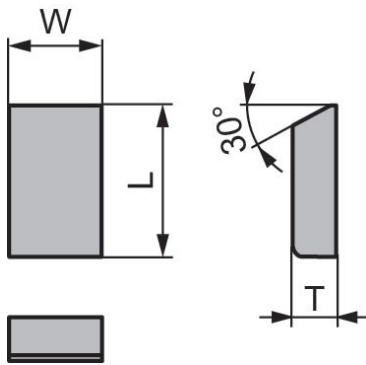


| STYLE   | LENGTH | WIDTH | THICKNESS | a  | B | Y |
|---------|--------|-------|-----------|----|---|---|
| WA 7085 | 0.250  | 0.085 | 0.062     | 30 | 0 | 0 |
| WA 7091 | 0.250  | 0.091 | 0.062     | 30 | 0 | 0 |
| WA 7105 | 0.250  | 0.105 | 0.062     | 30 | 0 | 0 |
| WA 7110 | 0.250  | 0.110 | 0.062     | 30 | 0 | 0 |
| WA 7115 | 0.250  | 0.115 | 0.062     | 30 | 0 | 0 |
| WA 7130 | 0.250  | 0.130 | 0.062     | 30 | 0 | 0 |
| WA 7150 | 0.250  | 0.150 | 0.062     | 30 | 0 | 0 |
| WA 7160 | 0.250  | 0.160 | 0.062     | 30 | 0 | 0 |
| WA 7180 | 0.250  | 0.180 | 0.062     | 30 | 0 | 0 |
| WA 7200 | 0.250  | 0.200 | 0.062     | 30 | 0 | 0 |
| WA 7215 | 0.250  | 0.215 | 0.062     | 30 | 0 | 0 |

*Sold in Packs of 100 Pieces*

Tips in-stock can be pretinned within one week.  
All tips braze ready.

## WB STYLE - SAW TIPS

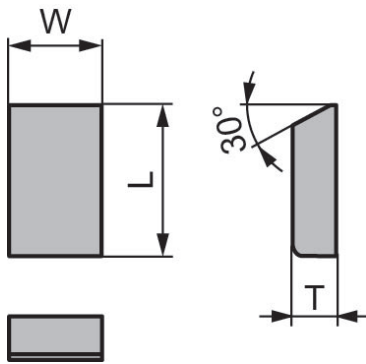


| STYLE   | LENGTH | WIDTH | THICKNESS | a  | B | Y |
|---------|--------|-------|-----------|----|---|---|
| WB 7100 | 0.281  | 0.100 | 0.078     | 30 | 0 | 0 |
| WB 7119 | 0.281  | 0.119 | 0.078     | 30 | 0 | 0 |
| WB 7120 | 0.281  | 0.120 | 0.078     | 30 | 0 | 0 |
| WB 7135 | 0.281  | 0.135 | 0.078     | 30 | 0 | 0 |
| WB 7150 | 0.281  | 0.150 | 0.078     | 30 | 0 | 0 |
| WB 7165 | 0.281  | 0.165 | 0.078     | 30 | 0 | 0 |
| WB 7180 | 0.281  | 0.180 | 0.078     | 30 | 0 | 0 |
| WB 7195 | 0.281  | 0.195 | 0.078     | 30 | 0 | 0 |
| WB 7215 | 0.281  | 0.215 | 0.078     | 30 | 0 | 0 |

*Sold in Packs of 100 Pieces*

Tips in-stock can be pretinned within one week.  
All tips braze ready.

## WC STYLE - SAW TIPS

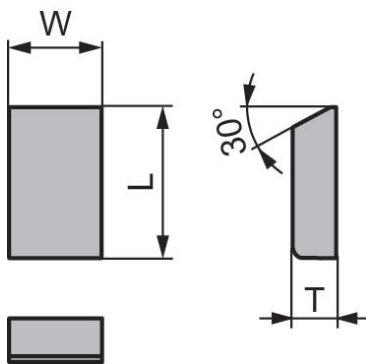


| STYLE   | LENGTH | WIDTH | THICKNESS | a  | B | Y |
|---------|--------|-------|-----------|----|---|---|
| WC 7100 | 0.281  | 0.100 | 0.093     | 30 | 0 | 0 |
| WC 7135 | 0.281  | 0.135 | 0.093     | 30 | 0 | 0 |
| WC 7150 | 0.281  | 0.150 | 0.093     | 30 | 0 | 0 |
| WC 7165 | 0.281  | 0.165 | 0.093     | 30 | 0 | 0 |
| WC 7185 | 0.281  | 0.185 | 0.093     | 30 | 0 | 0 |

*Sold in Packs of 100 Pieces*

Tips in-stock can be pretinned within one week.  
All tips braze ready.

## WD STYLE - SAW TIPS

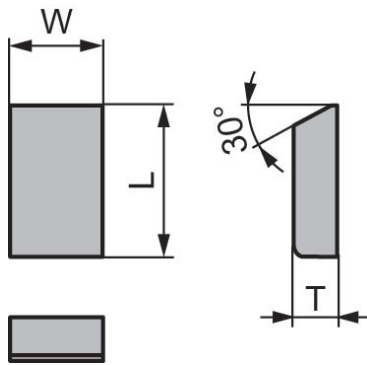


| STYLE   | LENGTH | WIDTH | THICKNESS | a  | B | Y |
|---------|--------|-------|-----------|----|---|---|
| WD 7115 | 0.312  | 0.115 | 0.093     | 30 | 0 | 0 |
| WD 7120 | 0.312  | 0.120 | 0.093     | 30 | 0 | 0 |
| WD 7135 | 0.312  | 0.135 | 0.093     | 30 | 0 | 0 |
| WD 7140 | 0.312  | 0.140 | 0.093     | 30 | 0 | 0 |
| WD 7150 | 0.312  | 0.150 | 0.093     | 30 | 0 | 0 |
| WD 7165 | 0.312  | 0.165 | 0.093     | 30 | 0 | 0 |
| WD 7170 | 0.312  | 0.170 | 0.093     | 30 | 0 | 0 |
| WD 7175 | 0.312  | 0.175 | 0.093     | 30 | 0 | 0 |
| WD 7180 | 0.312  | 0.180 | 0.093     | 30 | 0 | 0 |
| WD 7185 | 0.312  | 0.185 | 0.093     | 30 | 0 | 0 |
| WD 7200 | 0.312  | 0.200 | 0.093     | 30 | 0 | 0 |
| WD 7215 | 0.312  | 0.215 | 0.093     | 30 | 0 | 0 |
| WD 7230 | 0.312  | 0.230 | 0.093     | 30 | 0 | 0 |
| WD 7240 | 0.312  | 0.240 | 0.093     | 30 | 0 | 0 |
| WD 7250 | 0.312  | 0.250 | 0.093     | 30 | 0 | 0 |
| WD 7281 | 0.312  | 0.281 | 0.093     | 30 | 0 | 0 |
| WD 7312 | 0.312  | 0.312 | 0.093     | 30 | 0 | 0 |
| WD 7375 | 0.312  | 0.375 | 0.093     | 30 | 0 | 0 |

*Sold in Packs of 100 Pieces*

Tips in-stock can be pretinned within one week.  
All tips braze ready.

## WE STYLE - SAW TIPS

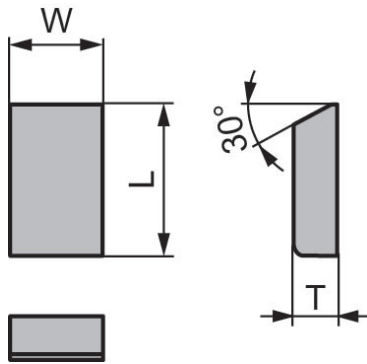


Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE   | LENGTH | WIDTH | THICKNESS | a  | B | Y |
|---------|--------|-------|-----------|----|---|---|
| WE 7085 | 0.375  | 0.085 | 0.093     | 30 | 0 | 0 |
| WE 7135 | 0.375  | 0.135 | 0.093     | 30 | 0 | 0 |
| WE 7150 | 0.375  | 0.150 | 0.093     | 30 | 0 | 0 |
| WE 7165 | 0.375  | 0.165 | 0.093     | 30 | 0 | 0 |
| WE 7185 | 0.375  | 0.185 | 0.093     | 30 | 0 | 0 |
| WE 7200 | 0.375  | 0.200 | 0.093     | 30 | 0 | 0 |
| WE 7215 | 0.375  | 0.215 | 0.093     | 30 | 0 | 0 |
| WE 7225 | 0.375  | 0.225 | 0.093     | 30 | 0 | 0 |
| WE 7235 | 0.375  | 0.235 | 0.093     | 30 | 0 | 0 |
| WE 7250 | 0.375  | 0.250 | 0.093     | 30 | 0 | 0 |
| WE 7265 | 0.375  | 0.265 | 0.093     | 30 | 0 | 0 |
| WE 7281 | 0.375  | 0.281 | 0.093     | 30 | 0 | 0 |
| WE 7312 | 0.375  | 0.312 | 0.093     | 30 | 0 | 0 |
| WE 7350 | 0.375  | 0.350 | 0.093     | 30 | 0 | 0 |
| WE 7375 | 0.375  | 0.375 | 0.093     | 30 | 0 | 0 |
| WE 7400 | 0.375  | 0.400 | 0.093     | 30 | 0 | 0 |

*Sold in Packs of 100 Pieces*

## WF STYLE - SAW TIPS



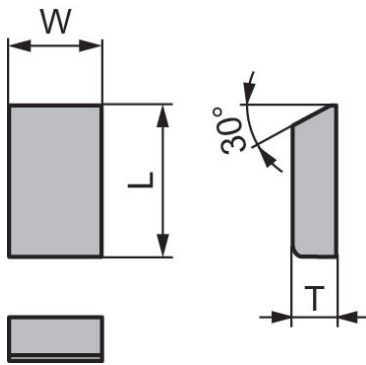
Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE   | LENGTH | WIDTH | THICKNESS | a  | B | Y |
|---------|--------|-------|-----------|----|---|---|
| WF 7120 | 0.500  | 0.120 | 0.125     | 35 | 0 | 0 |
| WF 7150 | 0.500  | 0.150 | 0.125     | 35 | 0 | 0 |
| WF 7160 | 0.500  | 0.160 | 0.125     | 35 | 0 | 0 |
| WF 7165 | 0.500  | 0.165 | 0.125     | 35 | 0 | 0 |
| WF 7170 | 0.500  | 0.170 | 0.125     | 35 | 0 | 0 |
| WF 7180 | 0.500  | 0.180 | 0.125     | 35 | 0 | 0 |
| WF 7190 | 0.500  | 0.190 | 0.125     | 35 | 0 | 0 |
| WF 7200 | 0.500  | 0.200 | 0.125     | 35 | 0 | 0 |
| WF 7210 | 0.500  | 0.210 | 0.125     | 35 | 0 | 0 |
| WF 7215 | 0.500  | 0.215 | 0.125     | 35 | 0 | 0 |
| WF 7220 | 0.500  | 0.220 | 0.125     | 35 | 0 | 0 |
| WF 7230 | 0.500  | 0.230 | 0.125     | 35 | 0 | 0 |
| WF 7240 | 0.500  | 0.240 | 0.125     | 35 | 0 | 0 |
| WF 7250 | 0.500  | 0.250 | 0.125     | 35 | 0 | 0 |
| WF 7260 | 0.500  | 0.260 | 0.125     | 35 | 0 | 0 |
| WF 7265 | 0.500  | 0.265 | 0.125     | 35 | 0 | 0 |
| WF 7270 | 0.500  | 0.270 | 0.125     | 35 | 0 | 0 |
| WF 7275 | 0.500  | 0.275 | 0.125     | 35 | 0 | 0 |
| WF 7280 | 0.500  | 0.280 | 0.125     | 35 | 0 | 0 |
| WF 7285 | 0.500  | 0.285 | 0.125     | 35 | 0 | 0 |
| WF 7290 | 0.500  | 0.290 | 0.125     | 35 | 0 | 0 |
| WF 7300 | 0.500  | 0.300 | 0.125     | 35 | 0 | 0 |
| WF 7310 | 0.500  | 0.310 | 0.125     | 35 | 0 | 0 |
| WF 7312 | 0.500  | 0.312 | 0.125     | 35 | 0 | 0 |
| WF 7320 | 0.500  | 0.320 | 0.125     | 35 | 0 | 0 |
| WF 7330 | 0.500  | 0.330 | 0.125     | 35 | 0 | 0 |
| WF 7350 | 0.500  | 0.350 | 0.125     | 35 | 0 | 0 |
| WF 7375 | 0.500  | 0.375 | 0.125     | 35 | 0 | 0 |
| WF 7400 | 0.500  | 0.400 | 0.125     | 35 | 0 | 0 |
| WF 7437 | 0.500  | 0.437 | 0.125     | 35 | 0 | 0 |
| WF 7500 | 0.500  | 0.500 | 0.125     | 35 | 0 | 0 |
| WF 7530 | 0.500  | 0.530 | 0.125     | 35 | 0 | 0 |
| WF 7562 | 0.500  | 0.562 | 0.125     | 35 | 0 | 0 |
| WF 7625 | 0.500  | 0.625 | 0.125     | 35 | 0 | 0 |
| WF 7750 | 0.500  | 0.750 | 0.125     | 35 | 0 | 0 |

*Sold in Packs of 100 Pieces*



## WG STYLE - SAW TIPS

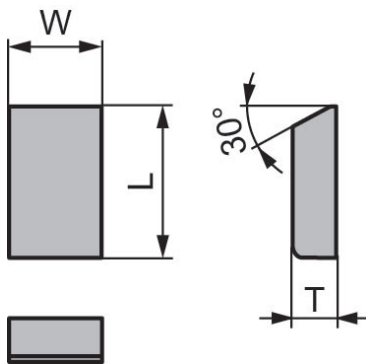


Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE   | LENGTH | WIDTH | THICKNESS | a  | B | Y |
|---------|--------|-------|-----------|----|---|---|
| WG 7150 | 0.375  | 0.150 | 0.125     | 30 | 0 | 0 |
| WG 7165 | 0.375  | 0.165 | 0.125     | 30 | 0 | 0 |
| WG 7180 | 0.375  | 0.180 | 0.125     | 30 | 0 | 0 |
| WG 7190 | 0.375  | 0.190 | 0.125     | 30 | 0 | 0 |
| WG 7197 | 0.375  | 0.197 | 0.125     | 30 | 0 | 0 |
| WG 7200 | 0.375  | 0.200 | 0.125     | 30 | 0 | 0 |
| WG 7215 | 0.375  | 0.215 | 0.125     | 30 | 0 | 0 |
| WG 7220 | 0.375  | 0.220 | 0.125     | 30 | 0 | 0 |
| WG 7230 | 0.375  | 0.230 | 0.125     | 30 | 0 | 0 |
| WG 7240 | 0.375  | 0.240 | 0.125     | 30 | 0 | 0 |
| WG 7250 | 0.375  | 0.250 | 0.125     | 30 | 0 | 0 |
| WG 7265 | 0.375  | 0.265 | 0.125     | 30 | 0 | 0 |
| WG 7275 | 0.375  | 0.275 | 0.125     | 30 | 0 | 0 |
| WG 7280 | 0.375  | 0.280 | 0.125     | 30 | 0 | 0 |
| WG 7300 | 0.375  | 0.300 | 0.125     | 30 | 0 | 0 |
| WG 7312 | 0.375  | 0.312 | 0.125     | 30 | 0 | 0 |
| WG 7335 | 0.375  | 0.335 | 0.125     | 30 | 0 | 0 |
| WG 7350 | 0.375  | 0.350 | 0.125     | 30 | 0 | 0 |
| WG 7375 | 0.375  | 0.375 | 0.125     | 30 | 0 | 0 |
| WG 7400 | 0.375  | 0.400 | 0.125     | 30 | 0 | 0 |
| WG 7437 | 0.375  | 0.437 | 0.125     | 30 | 0 | 0 |
| WG 7460 | 0.375  | 0.460 | 0.125     | 30 | 0 | 0 |
| WG 7500 | 0.375  | 0.500 | 0.125     | 30 | 0 | 0 |
| WG 7530 | 0.375  | 0.530 | 0.125     | 30 | 0 | 0 |
| WG 7560 | 0.375  | 0.560 | 0.125     | 30 | 0 | 0 |
| WG 7625 | 0.375  | 0.625 | 0.125     | 30 | 0 | 0 |
| WG 7687 | 0.375  | 0.687 | 0.125     | 30 | 0 | 0 |

*Sold in Packs of 100 Pieces*

## WQ STYLE - SAW TIPS

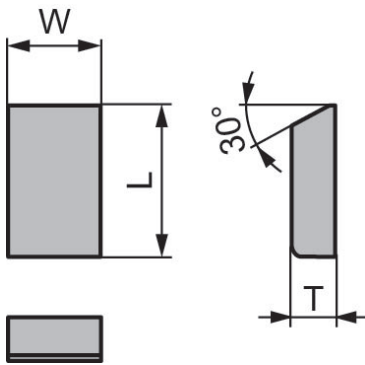


Tips in-stock can be pretinned within one week.  
All tips braze ready.

| STYLE   | LENGTH | WIDTH | THICKNESS | a  | B | Y |
|---------|--------|-------|-----------|----|---|---|
| WQ 7200 | 0.375  | 0.200 | 0.156     | 30 | 0 | 0 |
| WQ 7265 | 0.375  | 0.265 | 0.156     | 30 | 0 | 0 |
| WQ 7300 | 0.375  | 0.300 | 0.156     | 30 | 0 | 0 |
| WQ 7335 | 0.375  | 0.335 | 0.156     | 30 | 0 | 0 |
| WQ 7375 | 0.375  | 0.375 | 0.156     | 30 | 0 | 0 |
| WQ 7400 | 0.375  | 0.400 | 0.156     | 30 | 0 | 0 |
| WQ 7460 | 0.375  | 0.460 | 0.156     | 30 | 0 | 0 |
| WQ 7500 | 0.375  | 0.500 | 0.156     | 30 | 0 | 0 |

*Sold in Packs of 100 Pieces*

## WH STYLE - SAW TIPS



| STYLE   | LENGTH | WIDTH | THICKNESS | a  | B | Y |
|---------|--------|-------|-----------|----|---|---|
| WH 7197 | 0.344  | 0.197 | 0.125     | 30 | 0 | 0 |
| WH 7215 | 0.344  | 0.215 | 0.125     | 30 | 0 | 0 |
| WH 7230 | 0.344  | 0.230 | 0.125     | 30 | 0 | 0 |
| WH 7236 | 0.344  | 0.236 | 0.125     | 30 | 0 | 0 |
| WH 7250 | 0.344  | 0.250 | 0.125     | 30 | 0 | 0 |

*Sold in Packs of 100 Pieces*

Tips in-stock can be pretinned within one week.  
All tips braze ready.

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| BPD5304LH                   | 91 | CSP1607LH   | 93 | FBL157-3   | 73 | HMDUD750  | 15  |
| BPD5304RH                   | 91 | CSP1607RH   | 93 | FBL157-3A2 | 73 | HMDUD751* | 15  |
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| PK7078  | 150 | QCDA1002LH      | 92  | SBESS-New* | 76 | SCVG260     | 10 |
| PK7080  | 151 | QCDA1003RH      | 92  | SBK022     | 77 | SCVG260*    | 44 |
| PK7082  | 151 | QCDA1004LH      | 92  | SBNU125    | 11 | SCVG264     | 10 |
| PK7084  | 151 | QCDA1005RH      | 92  | SBNU250    | 11 | SCVG264*    | 45 |
| PK7086  | 150 | QCDA1006LH      | 92  | SBNU316    | 11 | SCVG264-212 | 10 |
| PK7088  | 150 | QCDA8001RH      | 92  | SBNU375    | 11 | SCVP5805LH  | 91 |
| PK7090  | 150 | QCDA8002LH      | 92  | SBNU500    | 11 | SCVP5805RH  | 91 |
| PK7092  | 150 | QCDA8003RH      | 92  | SBNU750    | 11 | SCVP5808LH  | 91 |
| PK7094  | 150 | QCDA8004LH      | 92  | SBPT1      | 85 | SCVP5808RH  | 91 |
| PK7096  | 150 | QCDA8005RH      | 92  | SBPT1F     | 85 | SCVP7005LH  | 91 |
| PK7098  | 150 | QCDA8006LH      | 92  | SBPT1T     | 85 | SCVP7005RH  | 91 |
| PK7100  | 150 | QCDA-Biesse®    | 93  | SC110      | 13 | SCVP7008LH  | 91 |
| PK7102  | 151 | QCDA-Morbidell® | 93  | SC120      | 13 | SCVP7008RH  | 91 |
| PK7104  | 150 | QCDA-screw      | 93  | SC1690L*   | 47 | SDK500      | 85 |
| PK7106  | 150 | QCHDA250        | 93  | SC1690R*   | 47 | SDK510      | 85 |
| PK7108  | 151 | RB41250         | 121 | SCB220     | 10 | SDK510-750  | 85 |
| PK7110  | 150 | RB41250         | 129 | SCB220-BLK | 10 | SDK560      | 85 |
| PK7112  | 150 | SAR250          | 77  | SCB220DB   | 10 | SDK565      | 85 |
| PK7114  | 150 | SAR375          | 77  | SCB220LH*  | 10 | SDR187-4    | 74 |
| PK7116  | 150 | SAR500          | 77  | SCBP5703LH | 91 | SDR187-6    | 74 |
| PK7118  | 150 | SAR500-1716     | 60  | SCBP5703RH | 91 | SDR250-4    | 74 |
| PK7120  | 150 | SAR500-1716     | 75  | SCBP5704LH | 91 | SDR250-6    | 74 |
| PK7122  | 150 | SAR500-1716     | 77  | SCBP5704RH | 91 | SDR290      | 84 |
| PK7124  | 150 | SAR500WS        | 64  | SCBP5705LH | 91 | SDR295      | 84 |
| PK7126  | 150 | SARF250         | 78  | SCBP5705RH | 91 | SDR300      | 84 |
| PKC7001 | 150 | SARF250-XL3     | 78  | SCBP5706LH | 91 | SDR300-QCF  | 84 |
| PKC7003 | 150 | SARF500         | 78  | SCBP5706RH | 91 | SDR303      | 84 |
| PKC7007 | 150 | SARF500-XL3     | 78  | SCBP5708LH | 91 | SDR305      | 84 |
| PKC7009 | 150 | SARJM250        | 78  | SCBP5708RH | 91 | SDR306      | 84 |
| PKC7013 | 150 | SARJM375        | 78  | SCBP7003LH | 91 | SDR310      | 84 |
| PKC7019 | 150 | SARJM500        | 78  | SCBP7003RH | 91 | SDR310-QCF  | 84 |
| PKC7021 | 150 | SBE100          | 76  | SCBP7004LH | 91 | SDR315      | 84 |
| PKC7023 | 150 | SBE105          | 76  | SCBP7004RH | 91 | SDR320      | 84 |
| PKC7025 | 150 | SBE106          | 76  | SCBP7005LH | 91 | SDR320-QCF  | 84 |
| PKC7027 | 150 | SBE107          | 76  | SCBP7005RH | 91 | SDR325      | 84 |
| PKC7029 | 150 | SBE110          | 76  | SCBP7006LH | 91 | SDR325-QCF  | 84 |
| PKC7037 | 150 | SBE115          | 76  | SCBP7006RH | 91 | SDR330      | 84 |
| PKC7041 | 150 | SBE115-BK       | 76  | SCBP7008LH | 91 | SDR330-QCF  | 84 |

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| SDR340-QCF    | 84  | SE1085     | 36 | SE1024-38 | 78 | SE1428   | 44 |
| SDR345-QCF    | 84  | SE1085LH   | 37 | SE1024A   | 35 | SE1429   | 44 |
| SDR350        | 84  | SE1086     | 36 | SE1024B   | 35 | SE1430   | 44 |
| SDR350-QCF    | 84  | SE1087     | 36 | SE1025    | 35 | SE1431   | 44 |
| SDR360        | 84  | SE1087LH   | 37 | SE1025A   | 35 | SE1432   | 44 |
| SDR360-QCF    | 84  | SE1088     | 36 | SE1025B   | 35 | SE1432A  | 44 |
| SDR370        | 84  | SE1090     | 36 | SE1025C   | 35 | SE1433   | 44 |
| SDR380        | 84  | SE1091     | 36 | SE1026    | 35 | SE1434   | 44 |
| SDR390        | 84  | SE1091LH   | 37 | SE1026A   | 35 | SE1434A  | 44 |
| SDR390-QCF    | 84  | SE1092     | 36 | SE1027    | 35 | SE1435   | 44 |
| SDR400        | 84  | SE1093     | 36 | SE1027A   | 35 | SE1436   | 44 |
| SDR410        | 84  | SE1094     | 36 | SE1027B   | 35 | SE1440   | 44 |
| SDR413        | 84  | SE1095     | 36 | SE1027C   | 35 | SE1440B* | 44 |
| SDR414        | 84  | SE1095A    | 36 | SE1027D   | 35 | SE1450   | 43 |
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| SDR424        | 84  | SE1096     | 36 | SE1029    | 35 | SE1460   | 43 |
| SDR425        | 84  | SE1096A    | 36 | SE1029A   | 35 | SE1462   | 43 |
| SDR430        | 84  | SE1097     | 36 | SE1030    | 35 | SE1464   | 43 |
| SDR440        | 84  | SE1098     | 36 | SE1031    | 35 | SE1474   | 44 |
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| SDR-SCREW     | 85  | SE1105     | 37 | SE1033    | 35 | SE1501   | 44 |
| SDS105        | 76  | SE1105LH   | 37 | SE1033A   | 34 | SE1502   | 44 |
| SDS115        | 76  | SE1107     | 37 | SE1035    | 34 | SE1502A  | 44 |
| SDS120        | 76  | SE1107LH   | 37 | SE1036    | 34 | SE1502B  | 44 |
| SE21-ARBOR    | 51  | SE1201     | 38 | SE1039    | 35 | SE1503   | 44 |
| SE50TH        | 148 | SE1202     | 38 | SE1040    | 35 | SE1504   | 44 |
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| SE750-19      | 145 | SE1302     | 37 | SE1055A   | 34 | SE1570   | 45 |
| SE750-19      | 145 | SE1303     | 35 | SE1055C   | 34 | SE1572   | 45 |
| SE750TBU      | 121 | SE1303     | 37 | SE1058*   | 36 | SE1574   | 45 |
| SE751         | 66  | SE1304     | 36 | SE1058LH  | 37 | SE1580   | 45 |
| SE753         | 66  | SE1304     | 37 | SE1059*   | 36 | SE1582   | 45 |
| SE755         | 66  | SE1370     | 42 | SE1060*   | 36 | SE1584   | 45 |
| SE756         | 66  | SE1372     | 42 | SE1060LH  | 37 | SE1590   | 47 |
| SE757         | 66  | SE1372B*   | 42 | SE1061*   | 36 | SE1592   | 47 |
| SE758         | 66  | SE1373     | 42 | SE1062*   | 36 | SE1596   | 47 |
| SE759         | 66  | SE1374     | 42 | SE1062LH  | 37 | SE1598   | 47 |
| SE918         | 93  | SE1376     | 42 | SE1063*   | 36 | SE1601   | 46 |
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| SE924         | 93  | SE1402     | 43 | SE1065A   | 36 | SE1610   | 46 |
| SE927         | 93  | SE1403     | 43 | SE1065L*  | 36 | SE1611   | 46 |
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| SE940         | 93  | SE1404B    | 43 | SE1066LH  | 37 | SE1615   | 46 |
| SE942         | 93  | SE1405     | 43 | SE1067    | 36 | SE1615LH | 46 |
| SE944         | 93  | SE1405A    | 43 | SE1069    | 36 | SE1618   | 46 |
| SE946         | 93  | SE1405B    | 43 | SE1069DS  | 36 | SE1618LH | 46 |
| SE1000TBU     | 121 | SE1406     | 43 | SE1069LH  | 37 | SE1620   | 46 |
| SE1004        | 34  | SE1406A    | 43 | SE1070    | 36 | SE1620LH | 46 |
| SE1005        | 34  | SE1406B    | 43 | SE1071    | 36 | SE1622   | 46 |
| SE1007        | 34  | SE1406BB   | 43 | SE1072    | 36 | SE1625   | 46 |
| SE1011        | 35  | SE1406C    | 43 | SE1072LH  | 37 | SE1630   | 46 |
| SE1012        | 35  | SE1407     | 43 | SE1073    | 36 | SE1635   | 46 |
| SE1013        | 35  | SE1408     | 43 | SE1073M   | 36 | SE1635LH | 46 |
| SE1014        | 35  | SE1410     | 43 | SE1074    | 36 | SE1640   | 46 |
| SE1014LH      | 37  | SE1411     | 43 | SE1075    | 36 | SE1645   | 46 |
| SE1016        | 35  | SE1412     | 43 | SE1075A   | 36 | SE1645LH | 46 |
| SE1016-01     | 35  | SE1413     | 43 | SE1076    | 36 | SE1661   | 46 |
| SE1018        | 35  | SE1414     | 43 | SE1077    | 36 | SE1662   | 46 |
| SE1018A       | 35  | SE1415     | 43 | SE1078    | 36 | SE1663   | 46 |
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| SE1021        | 35  | SE1417     | 43 | SE1080    | 36 | SE1666   | 46 |
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| SE1023        | 35  | SE1425     | 44 | SE1083    | 36 | SE1672   | 46 |
| SE1023A       | 35  | SE1426     | 44 | SE1083A   | 36 | SE1674   | 46 |

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| SE1690L     | 46 | SE2007    | 49 | SE2407   | 39 | SE2972  | 69 |
| SE1690R     | 46 | SE2007DS  | 68 | SE2408   | 39 | SE2974  | 69 |
| SE1695L     | 46 | SE2008    | 49 | SE2409   | 39 | SE2986  | 70 |
| SE1695R     | 46 | SE2008A   | 49 | SE2410   | 39 | SE2988  | 70 |
| SE1700      | 39 | SE2008DS  | 68 | SE2410DS | 68 | SE2990  | 70 |
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| SE1703      | 39 | SE2009DS  | 68 | SE2419   | 40 | SE3000A | 37 |
| SE1704      | 39 | SE2010    | 49 | SE2420   | 41 | SE3001  | 37 |
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| SE1750      | 39 | SE2016*   | 49 | SE2501   | 40 | SE3014  | 37 |
| SE1751      | 39 | SE2033    | 67 | SE2502   | 40 | SE3018  | 37 |
| SE1800      | 47 | SE2034    | 67 | SE2504   | 40 | SE3019  | 37 |
| SE1800A     | 47 | SE2036    | 67 | SE2505   | 40 | SE3020  | 37 |
| SE1800B     | 47 | SE2050    | 50 | SE2530   | 53 | SE3021  | 37 |
| SE1801      | 47 | SE2051    | 50 | SE2532   | 53 | SE3022  | 37 |
| SE1801A     | 47 | SE2052    | 50 | SE2538   | 53 | SE3023  | 37 |
| SE1802      | 47 | SE2055    | 50 | SE2554   | 40 | SE3025  | 38 |
| SE1803      | 47 | SE2056    | 50 | SE2555   | 40 | SE3028  | 38 |
| SE1803A     | 47 | SE2057    | 50 | SE2560   | 41 | SE3029  | 38 |
| SE1804      | 47 | SE2058    | 50 | SE2561   | 41 | SE3032  | 38 |
| SE1804A     | 47 | SE2060    | 50 | SE2562   | 41 | SE3050  | 52 |
| SE1805      | 47 | SE2062    | 50 | SE2570   | 41 | SE3052  | 52 |
| SE1806      | 47 | SE2066    | 50 | SE2575   | 41 | SE3070  | 52 |
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| SE1810      | 47 | SE2070    | 50 | SE2900   | 67 | SE3094  | 53 |
| SE1900      | 47 | SE2072    | 50 | SE2901   | 67 | SE3098  | 53 |
| SE1901      | 47 | SE2074    | 50 | SE2902   | 67 | SE3100  | 53 |
| SE1902      | 48 | SE2076    | 50 | SE2903   | 67 | SE3110  | 53 |
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| SE1906      | 48 | SE2160LH  | 51 | SE2906   | 67 | SE3162  | 53 |
| SE1908      | 48 | SE2160RH  | 51 | SE2907   | 67 | SE3164  | 53 |
| SE1910      | 48 | SE2162    | 51 | SE2908   | 67 | SE3166  | 53 |
| SE1912      | 48 | SE2162LH  | 51 | SE2909   | 67 | SE3170  | 53 |
| SE1913      | 48 | SE2162RH  | 51 | SE2910   | 67 | SE3172  | 53 |
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| SE1917      | 48 | SE2164RH  | 51 | SE2913   | 67 | SE3190  | 54 |
| SE1918      | 48 | SE2200    | 51 | SE2914   | 67 | SE3192  | 54 |
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| SE2000      | 49 | SE2307    | 52 | SE2935   | 68 | SE3210  | 55 |
| SE2000A     | 49 | SE2308A   | 52 | SE2940   | 69 | SE3211  | 55 |
| SE2000C     | 49 | SE2309    | 52 | SE2942   | 69 | SE3212  | 55 |
| SE2000D     | 49 | SE2310    | 52 | SE2944   | 69 | SE3214  | 55 |
| SE2001      | 49 | SE2315    | 52 | SE2945   | 68 | SE3215  | 55 |
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| SE2003      | 49 | SE2400A   | 39 | SE2952   | 70 | SE3218  | 55 |
| SE2003A     | 49 | SE2401    | 39 | SE2954   | 70 | SE3220  | 55 |
| SE2004      | 49 | SE2402    | 39 | SE2956   | 70 | SE3222  | 55 |
| SE2005      | 49 | SE2403    | 39 | SE2958   | 69 | SE3224  | 55 |
| SE2005A     | 49 | SE2404    | 39 | SE2960   | 70 | SE3226  | 55 |
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| SE3241       | 56  | SE03691      | 140 | SE04216-316  | 137 | SE04232-516  | 137 |
| SE3243       | 56  | SE03691      | 141 | SE04216-332  | 137 | SE04232-532  | 137 |
| SE3244       | 56  | SE03691      | 141 | SE04216-516  | 137 | SE04232-716  | 137 |
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| SE3248       | 56  | SE03691      | 142 | SE04216-732  | 137 | SE04232-916  | 137 |
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| SE3254       | 56  | SE3733       | 61  | SE04216-1332 | 137 | SE04232-1132 | 137 |
| SE3256       | 56  | SE3738       | 61  | SE04220-7mm  | 138 | SE04232-1332 | 137 |
| SE3258       | 56  | SE3752       | 61  | SE04220-8mm  | 138 | SE04232-1532 | 137 |
| SE3265       | 60  | SE03868      | 134 | SE04220-10mm | 138 | SE04232-1732 | 137 |
| SE3266       | 60  | SE03868-1    | 134 | SE04220-12   | 137 | SE04232-1932 | 137 |
| SE3273       | 56  | SE03868-6mm  | 134 | SE04220-12mm | 138 | SE04232-2132 | 137 |
| SE3274       | 56  | SE03868-7mm  | 134 | SE04220-13mm | 138 | SE04232-2332 | 137 |
| SE3276       | 56  | SE03868-10mm | 134 | SE04220-14   | 137 | SE04240-1    | 137 |
| SE3278       | 56  | SE03868-12   | 134 | SE04220-18   | 137 | SE04240-7mm  | 138 |
| SE3280       | 56  | SE03868-12mm | 134 | SE04220-38   | 137 | SE04240-8mm  | 138 |
| SE3281       | 56  | SE03868-14   | 134 | SE04220-316  | 137 | SE04240-10mm | 138 |
| SE3282       | 55  | SE03868-16mm | 134 | SE04220-332  | 137 | SE04240-12   | 137 |
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| SE3286       | 57  | SE03868-20mm | 134 | SE04220-532  | 137 | SE04240-13mm | 138 |
| SE3288       | 57  | SE03868-25mm | 134 | SE04220-716  | 137 | SE04240-14   | 137 |
| SE3294       | 57  | SE03868-34   | 134 | SE04220-732  | 137 | SE04240-14mm | 138 |
| SE3296       | 57  | SE03868-38   | 134 | SE04220-932  | 137 | SE04240-16mm | 138 |
| SE3305       | 57  | SE03868-58   | 134 | SE04220-1132 | 137 | SE04240-18   | 137 |
| SE3310       | 59  | SE03868-78   | 134 | SE04220-1332 | 137 | SE04240-18mm | 138 |
| SE3315       | 59  | SE03868-316  | 134 | SE04220-1532 | 137 | SE04240-20mm | 138 |
| SE3318       | 59  | SE03868-516  | 134 | SE04225-2mm  | 138 | SE04240-22mm | 138 |
| SE3320       | 57  | SE03868-716  | 134 | SE04225-7mm  | 138 | SE04240-25mm | 138 |
| SE3324       | 57  | SE03868-732  | 134 | SE04225-8mm  | 138 | SE04240-34   | 137 |
| SE3326       | 57  | SE03868-916  | 134 | SE04225-10mm | 138 | SE04240-38   | 137 |
| SE3330       | 57  | SE03868-L*   | 134 | SE04225-12   | 137 | SE04240-58   | 137 |
| SE3342       | 58  | SE04008-10mm | 138 | SE04225-12mm | 138 | SE04240-78   | 137 |
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| SE3370       | 59  | SE04008-316  | 138 | SE04225-38   | 137 | SE04240-932  | 137 |
| SE3375       | 60  | SE04008-nut  | 138 | SE04225-58   | 137 | SE04240-1116 | 137 |
| SE3375G      | 60  | SE04010-1    | 138 | SE04225-316  | 137 | SE04240-1132 | 137 |
| SE3385       | 60  | SE04010-12   | 138 | SE04225-332  | 137 | SE04240-1332 | 137 |
| SE3400       | 59  | SE04010-14   | 138 | SE04225-516  | 137 | SE04240-1532 | 137 |
| SE3401       | 59  | SE04010-18   | 138 | SE04225-532  | 137 | SE04240-1732 | 137 |
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| SE04615  | 140 | SE5708RH        | 86  | SE06108-2.5         | 141 | SE07711        | 147 |
| SE04615  | 141 | SE5709LH        | 86  | SE06108-2.5-slotnut | 141 | SE7712LH       | 87  |
| SE04615  | 141 | SE5709RH        | 86  | SE06109             | 141 | SE7712RH       | 87  |
| SE04615  | 141 | SE5710          | 62  | SE06110-W-60        | 141 | SE07801        | 145 |
| SE04615  | 141 | SE5710LH        | 86  | SE06111             | 141 | SE07803        | 145 |
| SE04615  | 142 | SE5710RH        | 86  | SE06111-90          | 141 | SE07805        | 145 |
| SE04615  | 142 | SE5711LH        | 86  | SE06112             | 141 | SE07806        | 145 |
| SE04616  | 140 | SE5711RH        | 86  | SE06113             | 141 | SE07808        | 145 |
| SE04616  | 141 | SE5712LH        | 86  | SE06113-W-60        | 141 | SE07810        | 145 |
| SE04616  | 141 | SE5712RH        | 86  | SE06113-W-60-A*     | 141 | SE07812        | 145 |
| SE04616  | 141 | SE5713LH        | 86  | SE06113-W-60L       | 141 | SE07814        | 145 |
| SE04616  | 141 | SE5713RH        | 86  | SE06113-W-90        | 141 | SE9128ATB      | 75  |
| SE04616  | 141 | SE5714LH        | 86  | SE06114             | 141 | SE9140ATB      | 75  |
| SE04616  | 141 | SE5714RH        | 86  | SE06115             | 141 | SE9150         | 75  |
| SE04616  | 141 | SE5715LH        | 86  | SE6390              | 78  | SE9160ATB      | 75  |
| SE04616  | 141 | SE5715RH        | 86  | SE6395              | 78  | SE9160TCG      | 75  |
| SE04616  | 141 | SE5716LH        | 86  | SE6400              | 78  | SE9180ATB      | 75  |
| SE04616  | 141 | SE5716RH        | 86  | SE6401              | 78  | SE9240ATB      | 75  |
| SE04616  | 141 | SE5717LH        | 86  | SE6402              | 78  | SE9260ATB      | 75  |
| SE04616  | 141 | SE5717RH        | 86  | SE6403              | 78  | SE9260TCGN*    | 75  |
| SE04616  | 141 | SE5718LH        | 86  | SE7003LH            | 87  | SE9280ATB      | 75  |
| SE04616  | 141 | SE5718RH        | 86  | SE7003RH            | 87  | SE9296ATB      | 75  |
| SE04616  | 141 | SE5719LH        | 86  | SE7004LH            | 87  | SE9500         | 79  |
| SE04616  | 141 | SE5719RH        | 86  | SE7004RH            | 87  | SE9600         | 79  |
| SE04616  | 142 | SE5720          | 62  | SE7005LH            | 87  | SE9700         | 79  |
| SE04616  | 142 | SE5720LH        | 86  | SE7005RH            | 87  | SE9840ATB      | 75  |
| SE04616  | 142 | SE5720RH        | 86  | SE7006LH            | 87  | SE9860ATB      | 75  |
| SE04616  | 142 | SE5725          | 62  | SE7006RH            | 87  | SE10400        | 97  |
| SE04616  | 142 | SE5801          | 62  | SE7007LH            | 87  | SE10401        | 97  |
| SE04616  | 142 | SE5802          | 62  | SE7007RH            | 87  | SE10402        | 97  |
| SE04617  | 140 | SE5804          | 62  | SE7008LH            | 87  | SE10404        | 97  |
| SE04617  | 141 | SE5805          | 62  | SE7008RH            | 87  | SE10406        | 97  |
| SE04617  | 141 | SE5812          | 65  | SE7009LH            | 87  | SE10408        | 97  |
| SE04617  | 141 | SE5814          | 65  | SE7009RH            | 87  | SE10409        | 97  |
| SE04617  | 142 | SE5816          | 65  | SE7010LH            | 87  | SE10410        | 97  |
| SE04617  | 142 | SE5818          | 65  | SE7010RH            | 87  | SE10411        | 97  |
| SE04617  | 142 | SE5820          | 65  | SE7011LH            | 87  | SE10412        | 97  |
| SE04617  | 142 | SE5900B         | 62  | SE7011RH            | 87  | SE10413        | 97  |
| SE04617  | 142 | SE5900E         | 62  | SE7012LH            | 87  | SE11125R       | 113 |
| SE04618  | 140 | SE5900H         | 62  | SE7012RH            | 87  | SE11156R       | 113 |
| SE04620  | 140 | SE5950          | 62  | SE7013LH            | 87  | SE11187L       | 113 |
| SE04621  | 140 | SE5951          | 62  | SE7013RH            | 87  | SE11187R       | 113 |
| SE04621  | 141 | SE5952          | 62  | SE7014LH            | 87  | SE11218L       | 113 |
| SE04622  | 140 | SE06000-2016M   | 141 | SE7014RH            | 87  | SE11218R       | 113 |
| SE04622  | 141 | SE06000-2516    | 141 | SE7015LH            | 87  | SE11250L       | 113 |
| SE04623  | 140 | SE06000-2520    | 141 | SE7015RH            | 87  | SE11250R       | 113 |
| SE04624  | 140 | SE6001          | 63  | SE7016LH            | 87  | SE11281L       | 113 |
| SE04888  | 144 | SE06001         | 141 | SE7016RH            | 87  | SE11281R       | 113 |
| SE04889  | 144 | SE06001-W       | 141 | SE7017LH            | 87  | SE11312L       | 113 |
| SE04891  | 144 | SE6002          | 63  | SE7017RH            | 87  | SE11312R       | 113 |
| SE04893  | 144 | SE6003          | 63  | SE7018LH            | 87  | SE11375L       | 113 |
| SE04894  | 144 | SE6007          | 63  | SE7018RH            | 87  | SE11375R       | 113 |
| SE04895  | 144 | SE6010          | 63  | SE7019LH            | 87  | SE11393L       | 113 |
| SE04896  | 144 | SE06010         | 142 | SE7019RH            | 87  | SE11393R       | 113 |
| SE04897  | 144 | SE6016          | 63  | SE7020LH            | 87  | SE11437L       | 113 |
| SE04898  | 144 | SE6019          | 61  | SE7020RH            | 87  | SE11437R       | 113 |
| SE5502   | 65  | SE6020          | 61  | SE7025LH            | 87  | SE11500L       | 113 |
| SE5504   | 65  | SE6021          | 61  | SE7025RH            | 87  | SE11500R       | 113 |
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| SE5510   | 65  | SE6024          | 64  | SE7704LH            | 87  | SE12213-W-50   | 141 |
| SE5610   | 62  | SE6026          | 64  | SE7704RH            | 87  | SE12213-W-50-L | 141 |
| SE5620   | 62  | SE6045          | 64  | SE07705             | 147 | SE12213-W-63   | 141 |
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| SE5703RH | 86  | SE6050          | 64  | SE7705RH            | 87  | SE12213-W-90   | 141 |
| SE5704LH | 86  | SE6050C         | 64  | SE7706LH            | 87  | SE12215-W-57   | 141 |
| SE5704RH | 86  | SE6050P         | 64  | SE7706RH            | 87  | SE12261-W      | 141 |
| SE5705LH | 86  | SE6050SP        | 64  | SE7707LH            | 87  | SE12407-W      | 141 |
| SE5705RH | 86  | SE6100          | 83  | SE7707RH            | 87  | SE12700-40     | 146 |
| SE5706LH | 86  | SE6100F         | 83  | SE7708LH            | 87  | SE12700-55     | 146 |
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| SE13001M   | 99  | SE13909        | 101 | SE20007   | 103 | SE20601   | 105 |
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| SE13003    | 145 | SE13913        | 101 | SE20013   | 103 | SE20601HS | 105 |
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| SE13006    | 99  | SE14402        | 97  | SE20022   | 103 | SE20603   | 105 |
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| SE13102    | 99  | SE18407        | 100 | SE20037   | 103 | SE20606CT | 105 |
| SE13103    | 99  | SE18408        | 100 | SE20038   | 103 | SE20606HS | 105 |
| SE13104    | 99  | SE18409        | 100 | SE20039   | 103 | SE20607   | 105 |
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| SE13201R   | 101 | SE18412        | 100 | SE20042   | 103 | SE20607HS | 105 |
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| SE13202R   | 101 | SE18801        | 99  | SE20044   | 103 | SE20608HS | 105 |
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| SE13301R   | 101 | SE18803        | 99  | SE20101   | 104 | SE20609CT | 105 |
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| SE13302R   | 101 | SE19002        | 101 | SE20103   | 104 | SE20610   | 105 |
| SE13500    | 42  | SE19003        | 101 | SE20104   | 104 | SE20610HS | 105 |
| SE13501    | 100 | SE19004        | 101 | SE20105   | 104 | SE20611   | 105 |
| SE13502    | 100 | SE19005        | 101 | SE20106   | 104 | SE20611CT | 105 |
| SE13503    | 100 | SE19009        | 101 | SE20107   | 104 | SE20611HS | 105 |
| SE13504    | 100 | SE19012        | 101 | SE20108   | 104 | SE20612   | 105 |
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| SE13505    | 100 | SE19016        | 101 | SE20110   | 104 | SE20613   | 105 |
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| SE13507    | 100 | SE19022        | 101 | SE20112   | 104 | SE20613HS | 105 |
| SE13508    | 100 | SE19025        | 101 | SE20113   | 104 | SE20614   | 105 |
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| SE13511    | 100 | SE19028        | 101 | SE20115   | 104 | SE20615   | 105 |
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| SE13515    | 42  | SE19030        | 101 | SE20117   | 104 | SE20615HS | 105 |
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| SE13601    | 100 | SE19101L       | 103 | SE20120   | 104 | SE20617   | 105 |
| SE13603    | 100 | SE19102        | 102 | SE20121   | 104 | SE20617HS | 105 |
| SE13605    | 100 | SE19103        | 102 | SE20122   | 104 | SE20618   | 105 |
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| SE13704    | 101 | SE19111        | 102 | SE20308CT | 104 | SE21240   | 139 |
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| SE26115  | 111 | SE29028L         | 106 | SE29207  | 108 | SE30343    | 109 |
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| SE29008  | 106 | SE29112          | 107 | SE29223F | 109 | SE32012HS  | 112 |
| SE29008L | 106 | SE29112L         | 108 | SE29224  | 108 | SE33108    | 145 |
| SE29009  | 106 | SE29113          | 107 | SE29224F | 109 | SE33111    | 145 |
| SE29009L | 106 | SE29113L         | 108 | SE29225  | 108 | SE33116    | 145 |
| SE29010  | 106 | SE29114          | 107 | SE29225F | 109 | SE33120    | 145 |
| SE29010L | 106 | SE29114L         | 108 | SE29501  | 107 | SE33125    | 145 |
| SE29011  | 106 | SE29115          | 107 | SE29502  | 107 | SE33125-L  | 145 |
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| SE41060    | 146 | SE50224     | 97  | SE055493    | 155 | SE70065RH   | 87  |
| SE41080-3H | 146 | SE50225     | 97  | SE055496    | 153 | SE70067LH   | 87  |
| SE41085    | 146 | SE50226     | 97  | SE055497    | 153 | SE70067RH   | 87  |
| SE41087    | 146 | SE50227     | 97  | SE055498    | 153 | SE70071LH   | 87  |
| SE043924   | 157 | SE50228     | 97  | SE055499    | 153 | SE70071RH   | 87  |
| SE043927   | 157 | SE50300BP   | 97  | SE055500    | 153 | SE70075LH   | 87  |
| SE043931   | 157 | SE50301BPHS | 97  | SE055501    | 153 | SE70075RH   | 87  |
| SE043933   | 157 | SE50302BPHS | 97  | SE055502    | 156 | SE70082LH   | 87  |
| SE043934   | 157 | SE50303BPHS | 97  | SE055503    | 156 | SE70082RH   | 87  |
| SE043935   | 157 | SE50305BPHS | 97  | SE055504    | 156 | SE70085LH   | 87  |
| SE043936   | 157 | SE50701HS   | 98  | SE055505    | 156 | SE70085RH   | 87  |
| SE043937   | 157 | SE50702HS   | 98  | SE055506    | 156 | SE70104LH   | 87  |
| SE043938   | 157 | SE50703HS   | 98  | SE055507    | 156 | SE70104RH   | 87  |
| SE043939   | 157 | SE50704     | 98  | SE055508    | 156 | SE70165LH   | 87  |
| SE043940   | 157 | SE50705     | 98  | SE055509    | 154 | SE70165RH   | 87  |
| SE043941   | 157 | SE50706     | 98  | SE055510    | 154 | SE70187LH   | 87  |
| SE043942   | 157 | SE50801HS   | 98  | SE055511    | 154 | SE70187RH   | 87  |
| SE043943   | 157 | SE50802HS   | 98  | SE055512    | 154 | SE70250LH   | 87  |
| SE043944   | 157 | SE50803HS   | 98  | SE055513    | 154 | SE70250RH   | 87  |
| SE043945   | 157 | SE50804     | 98  | SE055514    | 154 | SE70375LH   | 87  |
| SE043946   | 157 | SE50805     | 98  | SE055515    | 154 | SE70375RH   | 87  |
| SE043947   | 157 | SE50806     | 98  | SE055516    | 154 | SE70438LH   | 87  |
| SE043948   | 157 | SE054752    | 153 | SE055517    | 154 | SE70438RH   | 87  |
| SE043949   | 157 | SE054753    | 156 | SE055518    | 154 | SE70500LH   | 87  |
| SE043950   | 157 | SE55001     | 114 | SE055519    | 154 | SE70500RH   | 87  |
| SE043951   | 157 | SE55002     | 114 | SE055625    | 154 | SE70562LH   | 87  |
| SE043952   | 157 | SE55003     | 114 | SE56401     | 112 | SE70562RH   | 87  |
| SE043953   | 157 | SE55004     | 114 | SE56401HX   | 112 | SE70625LH   | 87  |
| SE043954   | 157 | SE55005     | 114 | SE56402     | 112 | SE70625RH   | 87  |
| SE043955   | 157 | SE55006     | 114 | SE56403     | 112 | SE76401     | 112 |
| SE043956   | 157 | SE55007     | 114 | SE56404     | 113 | SE76401HX   | 112 |
| SE043957   | 157 | SE55008     | 114 | SE57045LH   | 86  | SE76402     | 112 |
| SE043958   | 157 | SE55009     | 114 | SE57045RH   | 86  | SE76403     | 112 |
| SE043959   | 157 | SE55010     | 114 | SE57051LH   | 86  | SE76404     | 113 |
| SE043961   | 157 | SE55011     | 114 | SE57051RH   | 86  | SE77250LH   | 87  |
| SE043962   | 157 | SE55012     | 114 | SE57055LH   | 86  | SE77250RH   | 87  |
| SE043965   | 157 | SE55013     | 114 | SE57055RH   | 86  | SE77375LH   | 87  |
| SE043966   | 157 | SE55014     | 114 | SE57065LH   | 86  | SE77375RH   | 87  |
| SE043969   | 157 | SE55015     | 114 | SE57065RH   | 86  | SE77438LH   | 87  |
| SE043970   | 157 | SE55016     | 114 | SE57067LH   | 86  | SE77438RH   | 87  |
| SE045837   | 157 | SE55017     | 114 | SE57067RH   | 86  | SE80200     | 99  |
| SE045838   | 157 | SE55018     | 114 | SE57075LH   | 86  | SE80201     | 99  |
| SE045839   | 157 | SE55019     | 114 | SE57075RH   | 86  | SE80202     | 99  |
| SE46111    | 139 | SE55020     | 114 | SE57082LH   | 86  | SE80204     | 99  |
| SE46116    | 139 | SE55021     | 114 | SE57082RH   | 86  | SE80205     | 99  |
| SE46120    | 139 | SE55022     | 114 | SE57085LH   | 86  | SE80206     | 99  |
| SE46125    | 139 | SE55023     | 114 | SE57085RH   | 86  | SE80207     | 99  |
| SE46132    | 139 | SE55024     | 114 | SE57187LH   | 86  | SE80208     | 99  |
| SE46140    | 139 | SE55025     | 114 | SE57187RH   | 86  | SE80209     | 99  |
| SE50001    | 142 | SE55026     | 114 | SE57250LH   | 86  | SE80210     | 98  |
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| SE50135    | 97  | SE55028     | 114 | SE57375LH   | 86  | SE80212     | 98  |
| SE50136HS  | 98  | SE55029     | 114 | SE57375RH   | 86  | SE80212L    | 99  |
| SE50137HS  | 98  | SE55030     | 114 | SE57438LH   | 86  | SE80213     | 98  |
| SE50138HS  | 98  | SE55031     | 114 | SE57438RH   | 86  | SE80213L    | 99  |
| SE50201    | 98  | SE55032     | 114 | SE57500LH   | 86  | SE80214     | 98  |
| SE50202    | 98  | SE55033     | 114 | SE57500RH   | 86  | SE80214L    | 99  |
| SE50204    | 98  | SE055461    | 152 | SE57625LH   | 86  | SE80217     | 98  |
| SE50206    | 98  | SE055462    | 152 | SE57625RH   | 86  | SE80218     | 98  |
| SE50207    | 98  | SE055464    | 152 | SE63505LH   | 88  | SE90003*    | 100 |
| SE50209    | 98  | SE055465    | 152 | SE63505LH-F | 88  | SE90005*    | 100 |
| SE50211    | 98  | SE055466    | 152 | SE63505RH   | 88  | SE90007*    | 100 |
| SE50212    | 98  | SE055467    | 152 | SE63505RH-F | 88  | SE90009*    | 100 |
| SE50213    | 98  | SE055468    | 152 | SE70000-36  | 147 | SE90011**   | 100 |
| SE50214    | 98  | SE055469    | 155 | SE70000-38  | 147 | SE90013**   | 100 |
| SE50215    | 98  | SE055470    | 155 | SE70000-41  | 147 | SE90015**   | 100 |
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| SE50217    | 97  | SE055472    | 155 | SE70045LH   | 87  | SE90017**   | 100 |
| SE50218    | 97  | SE055473    | 155 | SE70045RH   | 87  | SE90017A*** | 100 |
| SE50219    | 98  | SE055474    | 155 | SE70051LH   | 87  | SE90018***  | 100 |
| SE50220    | 97  | SE055475    | 155 | SE70051RH   | 87  | SE90019***  | 100 |
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| SE100297  | 152 | SE100427 | 154 | SE102179 | 154 | SE114567      | 154 |
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| SEHB5736LH     | 90  | SEHN-29mm-.500    | 139 | SEIT750-30*     | 116 | SENTS-BT30-38   | 147 |
| SEHB5736RH     | 90  | SEHN-29mm-.750    | 139 | SEIT750-40      | 38  | SENTS-BT30-41   | 147 |
| SEHB5738LH     | 90  | SEHN-Piggyback-12 | 139 | SEIT750-40*     | 116 | SENTS-BT30-SLOT | 147 |
| SEHB5738RH     | 90  | SEHN-Piggyback-14 | 139 | SEIT750-50      | 38  | SENTS-HSK63A    | 147 |
| SEHB5740LH     | 90  | SEHN-Piggyback-38 | 139 | SEIT750-50*     | 116 | SENTS-HSK63F-36 | 147 |
| SEHB5740RH     | 90  | SEHN-Piggyback-58 | 139 | SEIT1125-30     | 38  | SENTS-HSK63F-38 | 147 |
| SEHB7015LH     | 90  | SEHSSRB-1         | 80  | SEIT1125-30**   | 116 | SENTS-HSK63F-41 | 147 |
| SEHB7015RH     | 90  | SEHSSRB-2         | 80  | SEIT1125-40     | 38  | SENTS-HSK63F-46 | 147 |
| SEHB7016LH     | 90  | SEHSSRB-3         | 80  | SEIT1125-40**   | 116 | SENTS-ISO30-36  | 147 |
| SEHB7016RH     | 90  | SEHSSRB-34        | 80  | SEIT1125-50     | 38  | SENTS-ISO30-38  | 147 |
| SEHB7017LH     | 90  | SEHSSRB-112       | 80  | SEIT1125-50**   | 116 | SENTS-ISO30-47  | 147 |
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| SEHB7018LH     | 90  | SEHSSRB-134       | 80  | SEIV91-12       | 116 | SEPD125RH       | 81  |
| SEHB7018RH     | 90  | SEHSSRB-212       | 80  | SEJS13M         | 107 | SEPD187LH       | 81  |
| SEHB7019LH     | 90  | SEHSSRB-214       | 80  | SEJS15M         | 107 | SEPD187RH       | 81  |
| SEHB7019RH     | 90  | SEHSSRB-234       | 80  | SEJS21M         | 107 | SEPD250LH       | 81  |
| SEHB7020LH     | 90  | SEIBCS            | 118 | SEJS25MET       | 107 | SEPD250RH       | 81  |
| SEHB7020RH     | 90  | SEIBCSFD          | 118 | SEJS29M         | 107 | SEPD375LH       | 81  |
| SEHB7022LH     | 90  | SE-IBP            | 120 | SEJS49MET       | 107 | SEPD375RH       | 81  |
| SEHB7022RH     | 90  | SE-IBP-Round      | 120 | SELC-12         | 77  | SEPE30DF2056    | 141 |
| SEHB7024LH     | 90  | SEIBRP-34         | 119 | SELC-14         | 77  | SEPE30DM20      | 141 |
| SEHB7024RH     | 90  | SEIBSS            | 118 | SELC-18         | 77  | SEPSS-30BT      | 149 |
| SEHB7025LH     | 90  | SEIBSSFD          | 118 | SELC-SCREW      | 77  | SEPSS-30ISO     | 149 |
| SEHB7025RH     | 90  | SEIBT22-12        | 117 | SEM2-1250-14    | 131 | SEPSS-40        | 149 |
| SEHB7026LH     | 90  | SEIBT22-14        | 117 | SEM2-1250-516   | 130 | SEPSS-50        | 149 |
| SEHB7026RH     | 90  | SEIBT45-12        | 117 | SEM2-1500-14    | 131 | SEPSSC-50       | 149 |
| SEHB7028LH     | 90  | SEIBT45-14        | 117 | SEM2-1500-516   | 130 | SERC500LH       | 81  |
| SEHB7028RH     | 90  | SE-ICSB           | 119 | SEM2-1750-14    | 131 | SERC500RH       | 81  |
| SEHB7030LH     | 90  | SE-ICSB           | 119 | SEM2-1750-516   | 130 | SERC750LH       | 81  |
| SEHB7030RH     | 90  | SE-ICSBFD         | 118 | SEM2-2000-14    | 131 | SERC750RH       | 81  |
| SEHB7032LH     | 90  | SE-ICSO           | 119 | SEM2-2000-516   | 130 | SERTP110        | 149 |
| SEHB7032RH     | 90  | SE-ICSO           | 119 | SEM2-2250-14    | 131 | SERTP120        | 149 |
| SEHB7034LH     | 90  | SE-ICSOFD         | 118 | SEM2-2250-516   | 130 | SERTP130        | 149 |
| SEHB7034RH     | 90  | SE-ICSR           | 119 | SEM2-2500-14    | 131 | SERTP140        | 149 |
| SEHB7035LH     | 90  | SE-ICSR           | 119 | SEM2-2500-516   | 130 | SERTP150        | 149 |
| SEHB7035RH     | 90  | SE-ICSRFD         | 118 | SEM2-2750-516   | 130 | SERTP310        | 149 |
| SEHB7036LH     | 90  | SEID218           | 81  | SEM2-3000-516   | 130 | SERTP320        | 149 |
| SEHB7036RH     | 90  | SEIFT-71212*      | 116 | SEM2C-14-1250   | 131 | SERTP330        | 149 |
| SEHB7038LH     | 90  | SEIFT-71214*      | 116 | SEM2C-14-1500   | 131 | SERTP340        | 149 |
| SEHB7038RH     | 90  | SEIFT-73012**     | 116 | SEM2C-14-1750   | 131 | SERTP350        | 149 |
| SEHB7040LH     | 90  | SEIFT-74012**     | 116 | SEM2C-14-2000   | 131 | SESC-1          | 113 |
| SEHB7040RH     | 90  | SEIFT-75012**     | 116 | SEM2C-14-2250   | 131 | SESC-4Set       | 113 |
| SEHB70165LH    | 90  | SEIMHB-1250       | 41  | SEM2C-14-2500   | 131 | SESC-7Set       | 113 |
| SEHB70165RH    | 90  | SEINS-1-30        | 116 | SEM2C-516-1250  | 131 | SESC-12         | 113 |
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| SEHK-116       | 78  | SEINS22-50        | 117 | SEM2C-516-1750  | 131 | SESC-18         | 113 |
| SEHK-332       | 78  | SEINS-34          | 116 | SEM2C-516-2000  | 131 | SESC-34         | 113 |
| SEHK-532       | 78  | SEINS-34-12       | 116 | SEM2C-516-2250  | 131 | SESC-38         | 113 |
| SEHK-564       | 78  | SEINS-34-40       | 116 | SEM2C-516-2500  | 131 | SESC-58         | 113 |
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| SEHMA-12-516   | 41  | SEINS-34-58       | 116 | SEM2C-516-3000  | 131 | SESC-316        | 113 |
| SEHMA-12-XL    | 41  | SE-IRPC           | 119 | SEM5-SCREW      | 81  | SESC-516        | 113 |
| SEHMA-12-XXL   | 41  | SE-IRPC           | 120 | SEM35-SCREW     | 81  | SESC-716        | 113 |
| SEHMA-14       | 41  | SE-IRPO           | 119 | SEMH422ST       | 132 | SESC-916        | 113 |
| SEHMA-14-516   | 41  | SE-IRPO           | 120 | SEMH424ST       | 132 | SESD-20mm-10mm  | 135 |
| SEHMA-38-XL    | 41  | SE-IRPS           | 119 | SEMH426ST       | 132 | SESD-20mm-.250  | 135 |
| SEHMC250       | 80  | SE-IRPS           | 120 | SEMH442ST       | 132 | SESD-20mm-.312  | 135 |
| SEHMC250-DRILL | 80  | SE-IRPT           | 121 | SEMH444ST       | 132 | SESD-20mm-.375  | 135 |
| SEHMC375       | 80  | SE-IRSB           | 119 | SEMH446ST       | 132 | SESD-20mm-.500  | 135 |
| SEHMC375-DRILL | 80  | SE-IRSB           | 120 | SEMH542ST       | 132 | SESD-20mm-.625  | 135 |
| SEHMC500       | 80  | SE-IRSBFD         | 118 | SEMH544ST       | 132 | SESD-20mm-Nut   | 135 |
| SEHMC500-DRILL | 80  | SE-IRSO           | 119 | SEMH546ST       | 132 | SESD-20mm-Nut   | 136 |
| SEHMC625       | 80  | SE-IRSO           | 120 | SEMH549ST       | 132 | SESD-20mm-TWA   | 148 |
| SEHMC625-DRILL | 80  | SE-IRSOFD         | 118 | SEMH642ST       | 132 | SESD516         | 110 |
| SEHMC750*      | 80  | SE-IRSR           | 119 | SEMH644ST       | 132 | SESD531         | 110 |
| SEHMC750-DRILL | 80  | SE-IRSR           | 120 | SEMH646ST       | 132 | SESD547         | 110 |
| SEHN-24mm-10   | 139 | SE-IRSRFD         | 118 | SEMH649ST       | 132 | SESD563         | 110 |
| SEHN-24mm-20   | 139 | SEIS1-73012       | 116 | SEMH662ST       | 132 | SESD578         | 110 |
| SEHN-24mm-.187 | 139 | SEIS1-74012       | 116 | SEMH664ST       | 132 | SESD594         | 110 |
| SEHN-24mm-.375 | 139 | SEIS2-740         | 116 | SEMH666ST       | 132 | SESD609         | 110 |
| SEHN-24mm-.500 | 139 | SEIS2-750         | 116 | SEMH669ST       | 132 | SESD625         | 110 |
| SEHN-24mm-.625 | 139 | SEI-Screw         | 130 | SENT-54300130   | 141 | SESD641         | 110 |
| SEHN-24mm-.750 | 139 | SEISO-30-THERM    | 141 | SENT-54300130-L | 141 | SESD656         | 110 |

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| SESD688         | 110 | SESS22TWA   | 148 | SEV7005RH  | 89 | SEV70142RH       | 89  |
| SESD703         | 110 | SE-T8       | 130 | SEV7006LH  | 89 | SEV70187LH       | 89  |
| SESD719         | 110 | SETA-150    | 65  | SEV7006RH  | 89 | SEV70187RH       | 89  |
| SESD734         | 110 | SETA-151    | 65  | SEV7007LH  | 89 | SEV70250LH       | 89  |
| SESD750         | 110 | SETA-152    | 65  | SEV7007RH  | 89 | SEV70250RH       | 89  |
| SESD766         | 110 | SETA-156    | 65  | SEV7008LH  | 89 | SEV70375LH       | 89  |
| SESD781         | 110 | SETA-157    | 65  | SEV7008RH  | 89 | SEV70375RH       | 89  |
| SESD797         | 110 | SETA-160    | 65  | SEV7009LH  | 89 | SEV70500LH       | 89  |
| SESD813         | 110 | SETA-161    | 65  | SEV7009RH  | 89 | SEV70500RH       | 89  |
| SESD828         | 110 | SETA-162    | 65  | SEV7010LH  | 89 | SEV77438LH       | 89  |
| SESD844         | 110 | SETA-170    | 65  | SEV7010RH  | 89 | SEV77438RH       | 89  |
| SESD859         | 110 | SETA-176    | 65  | SEV7011LH  | 89 | SEWH-14-2000     | 131 |
| SESD875         | 110 | SETA-228    | 65  | SEV7011RH  | 89 | SEWH-14-2000C    | 131 |
| SESD891         | 110 | SETA-228K   | 65  | SEV7012LH  | 89 | SEWH-14-2250     | 131 |
| SESD906         | 110 | SETA-Nut    | 65  | SEV7012RH  | 89 | SEWH-14-2250C    | 131 |
| SESD922         | 110 | SETSM1005LH | 92  | SEV7013LH  | 89 | SEWH-14-2500     | 131 |
| SESD938         | 110 | SETSM1005RH | 92  | SEV7013RH  | 89 | SEWH-14-2500C    | 131 |
| SESD953         | 110 | SETSM1006LH | 92  | SEV7014LH  | 89 | SEWH-316-2000    | 131 |
| SESD969         | 110 | SETSM1006RH | 92  | SEV7014RH  | 89 | SEWH-316-2000C   | 131 |
| SESD984         | 110 | SETSM1008LH | 92  | SEV7015LH  | 89 | SFFB700          | 86  |
| SESD1000        | 110 | SETSM1008RH | 92  | SEV7015RH  | 89 | SFFB710          | 86  |
| SESD-C001-10mm  | 135 | SETSM1010LH | 92  | SEV7016LH  | 89 | SFFB720          | 86  |
| SESD-C001-.125  | 135 | SETSM1010RH | 92  | SEV7016RH  | 89 | SFFB800          | 86  |
| SESD-C001-.187  | 135 | SETSM1012LH | 92  | SEV7017LH  | 89 | SFFB900          | 86  |
| SESD-C001-.250  | 135 | SETSM1012RH | 92  | SEV7017RH  | 89 | SFFB1000         | 86  |
| SESD-C001-.312  | 135 | SETSM1015LH | 92  | SEV7018LH  | 89 | SFTD220          | 14  |
| SESD-C001-.375  | 135 | SETSM1015RH | 92  | SEV7018RH  | 89 | SFTD255          | 14  |
| SESD-C001-.500  | 135 | SETSM8005LH | 92  | SEV7019LH  | 89 | SFTD265          | 14  |
| SESD-C001-Nut   | 135 | SETSM8005RH | 92  | SEV7019RH  | 89 | SFTU120          | 14  |
| SESD-C001-Nut   | 136 | SETSM8006LH | 92  | SEV7704LH  | 89 | SFTU155          | 14  |
| SESD-C001-TWA   | 148 | SETSM8006RH | 92  | SEV7704RH  | 89 | SFTU165          | 14  |
| SESD-C015-10mm  | 135 | SETSM8008LH | 92  | SEV7705LH  | 89 | SFTUD555         | 14  |
| SESD-C015-.125  | 135 | SETSM8008RH | 92  | SEV7705RH  | 89 | SFTUD780         | 14  |
| SESD-C015-.250  | 135 | SETSM8010LH | 92  | SEV7706LH  | 89 | SHDUD539         | 31  |
| SESD-C015-.312  | 135 | SETSM8010RH | 92  | SEV7706RH  | 89 | SHDUD545         | 31  |
| SESD-C015-.375  | 135 | SETSM8012LH | 92  | SEV7707LH  | 89 | SHDUD550         | 31  |
| SESD-C015-.500  | 135 | SETSM8012RH | 92  | SEV7707RH  | 89 | SHDUD551         | 31  |
| SESD-C015-.625  | 135 | SETSM8015LH | 92  | SEV7708LH  | 89 | SHDUD555         | 31  |
| SESD-C015-.750  | 135 | SETSM8015RH | 92  | SEV7708RH  | 89 | SHDUD558         | 31  |
| SESD-C015-Nut   | 135 | SEV5803LH   | 88  | SEV7710LH  | 89 | SHDUD565         | 31  |
| SESD-C015-Nut   | 136 | SEV5803RH   | 88  | SEV7710RH  | 89 | SHDUD566         | 31  |
| SESD-C015-TWA   | 148 | SEV5804LH   | 88  | SEV7712LH  | 89 | SHDUD575         | 31  |
| SESK-012        | 60  | SEV5804RH   | 88  | SEV7712RH  | 89 | SHDUD750         | 33  |
| SESK-012        | 64  | SEV5805LH   | 88  | SEV58055LH | 88 | SHDUD751         | 33  |
| SESK-012        | 75  | SEV5805RH   | 88  | SEV58055RH | 88 | SHDUD754         | 33  |
| SESK-012        | 78  | SEV5806LH   | 88  | SEV58065LH | 88 | SHDUD758         | 33  |
| SESP-44-416     | 129 | SEV5806RH   | 88  | SEV58065RH | 88 | SHDUD766         | 33  |
| SESP-44-624     | 129 | SEV5807LH   | 88  | SEV58079LH | 88 | SI4-Screw        | 130 |
| SESP-45-420     | 129 | SEV5807RH   | 88  | SEV58079RH | 88 | SI35-Screw       | 130 |
| SESP-45-630     | 129 | SEV5808LH   | 88  | SEV58111LH | 88 | SI-1580 Wrench   | 130 |
| SESP-46-424     | 129 | SEV5808RH   | 88  | SEV58111RH | 88 | SI-25100Wrench   | 130 |
| SESP-46-636     | 129 | SEV5809LH   | 88  | SEV58187LH | 88 | SI-117815        | 125 |
| SESPM-54-416    | 129 | SEV5809RH   | 88  | SEV58187RH | 88 | SI-121215        | 122 |
| SESPM-54-624    | 129 | SEV5810LH   | 88  | SEV58250LH | 88 | SI-121215        | 130 |
| SESPM-56-420    | 129 | SEV5810RH   | 88  | SEV58250RH | 88 | SI-125511BG      | 124 |
| SESPM-56-630    | 129 | SEV5811LH   | 88  | SEV58375LH | 88 | SI-125511FG      | 125 |
| SESPM-59-448    | 129 | SEV5811RH   | 88  | SEV58375RH | 88 | SI-131215        | 122 |
| SESPM-59-660    | 129 | SEV5812LH   | 88  | SEV58500LH | 88 | SI-131325        | 122 |
| SESPM-64-416    | 129 | SEV5812RH   | 88  | SEV58500RH | 88 | SI-141412        | 122 |
| SESPM-64-624    | 129 | SEV5813LH   | 88  | SEV70055LH | 89 | SI-141412 Holz   | 122 |
| SESPM-66-420    | 129 | SEV5813RH   | 88  | SEV70055RH | 89 | SI-141420        | 81  |
| SESPM-66-630    | 129 | SEV5814LH   | 88  | SEV70065LH | 89 | SI-141420        | 122 |
| SESPM-69-448    | 129 | SEV5814RH   | 88  | SEV70065RH | 89 | SI-141420OCR     | 122 |
| SESPM-69-660    | 129 | SEV5815LH   | 88  | SEV70071LH | 89 | SI-141420-SP     | 122 |
| SESS-22-10mm    | 136 | SEV5815RH   | 88  | SEV70071RH | 89 | SI-141420-T10    | 122 |
| SESS-22-12      | 136 | SEV5816LH   | 88  | SEV70082LH | 89 | SI-151215        | 122 |
| SESS-22-14      | 136 | SEV5816RH   | 88  | SEV70082RH | 89 | SI-151520CB      | 125 |
| SESS-22-38      | 136 | SEV5818LH   | 88  | SEV70102LH | 89 | SI-151525        | 122 |
| SESS-22-58      | 136 | SEV5818RH   | 88  | SEV70102RH | 89 | SI-151525        | 130 |
| SESS-22-ext-nut | 136 | SEV7003LH   | 89  | SEV70104LH | 89 | SI-151525- 30deg | 122 |
| SESS-22-ext-nut | 136 | SEV7003RH   | 89  | SEV70104RH | 89 | SI-151525 Byrd   | 122 |
| SESS22EXTTWA    | 148 | SEV7004LH   | 89  | SEV70111LH | 89 | SI-151525-R50    | 122 |
| SESS-22-Nut     | 136 | SEV7004RH   | 89  | SEV70111RH | 89 | SI-151525-SQ     | 122 |



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| SI-152370-224   | 128 | SI-751215      | 122 | SIPP-825511        | 127 | SL062-4   | 73 |
| SI-152373-223   | 128 | SI-801322      | 123 | SIPP-925511        | 127 | SL062-4A2 | 73 |
| SI-152380-210   | 128 | SI-861215      | 122 | SIPP-1025511       | 127 | SL062-4A5 | 73 |
| SI-152390-220   | 128 | SI-901215      | 122 | SIPP-7555511       | 127 | SL070-3   | 72 |
| SI-152390-221   | 128 | SI-961215      | 122 | SIPP-7575512       | 127 | SL070-3A2 | 72 |
| SI-152390-225   | 128 | SI-978152      | 125 | SIPP-8055511       | 127 | SL070-3A5 | 72 |
| SI-171215       | 122 | SI-1001322     | 123 | SIPP-8055912       | 127 | SL070-4   | 73 |
| SI-181215       | 122 | SI-1201322     | 123 | SIPP-8275511       | 127 | SL070-4A2 | 73 |
| SI-191920       | 122 | SI-1361362     | 122 | SIR-14223-3LH*     | 129 | SL070-4A5 | 73 |
| SI-197815       | 125 | SI-1478152     | 125 | SIR-14223-3RH*     | 129 | SL078-2   | 71 |
| SI-201215       | 122 | SI-1525773-240 | 128 | SIR-121452L-2      | 125 | SL078-2A2 | 71 |
| SI-201215AL     | 124 | SI-1525773-241 | 128 | SIR-121452L-3      | 125 | SL078-2A5 | 71 |
| SI-201215AR     | 124 | SI-1717203     | 122 | SIR-121452L-25     | 125 | SL078-3   | 72 |
| SI-201215CB     | 125 | SI-1717204     | 122 | SIR-121452R-2      | 125 | SL078-3A2 | 72 |
| SI-205511BCG    | 125 | SI-1951015     | 122 | SIR-121452R-3      | 125 | SL078-3A5 | 72 |
| SI-205511BG     | 124 | SI-1951115     | 122 | SIR-121452R-25     | 125 | SL080-3   | 72 |
| SI-205511FG     | 125 | SI-1951215     | 122 | SIR-121802-2LH     | 129 | SL080-3A2 | 72 |
| SI-205511FG4    | 125 | SI-1957015     | 122 | SIR-121802-2LH-MFA | 129 | SL080-3A5 | 72 |
| SI-212155       | 122 | SI-1957515     | 122 | SIR-121802-2RH     | 129 | SL080-4   | 73 |
| SI-251215       | 122 | SI-1958015     | 122 | SIR-121802-2RH-MFA | 129 | SL080-4A2 | 73 |
| SI-251215-2     | 81  | SI-1959015     | 122 | SIR-121802-3LH     | 129 | SL080-4A5 | 73 |
| SI-251215-2     | 123 | SI-2951015     | 123 | SIR-121802-3LH-MFA | 129 | SL093-2   | 71 |
| SI-255511FG4    | 125 | SI-2951115     | 123 | SIR-121802-3RH     | 129 | SL093-2A2 | 71 |
| SI-258015       | 122 | SI-2951215     | 130 | SIR-121802-3RH-MFA | 129 | SL093-2A5 | 71 |
| SI-287015       | 123 | SI-2951215SP   | 123 | SIR-151452L-2      | 126 | SL093-3   | 72 |
| SI-301215       | 123 | SI-2957015     | 123 | SIR-151452L-3      | 126 | SL093-3A2 | 72 |
| SI-301215       | 130 | SI-2957515     | 123 | SIR-151452L-25     | 126 | SL093-3A5 | 72 |
| SI-301215-16    | 123 | SI-2958015     | 123 | SIR-151452R-2      | 126 | SL093-4   | 73 |
| SI-301215AL     | 124 | SI-2959015     | 123 | SIR-151452R-3      | 126 | SL093-4A2 | 73 |
| SI-301215AR     | 124 | SI-2959015SP   | 123 | SIR-151452R-25     | 126 | SL093-4A5 | 73 |
| SI-301215CA     | 123 | SI-3951215     | 123 | SIR-1961522L-2     | 126 | SL100-3   | 72 |
| SI-301215CB     | 125 | SI-3951215     | 130 | SIR-1961522R-2     | 126 | SL100-3A2 | 72 |
| SI-301215DCL    | 124 | SI-3951215V    | 128 | SIR-19615223L-3    | 126 | SL100-3A5 | 72 |
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| SI-301215SP     | 123 | SI-4951115     | 123 | SIRP-12712732-3    | 126 | SL106-3A5 | 72 |
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| SI-301225       | 123 | SI-4951215     | 130 | SIS-2012203        | 127 | SL110-3A2 | 72 |
| SI-301402LH     | 128 | SI-4951215-SP  | 123 | SIS-2012204        | 127 | SL110-3A5 | 72 |
| SI-301402RH     | 128 | SI-4958015     | 123 | SIS-2012205        | 127 | SL115-3   | 72 |
| SI-305511BCG    | 125 | SI-4959015     | 123 | SI-Screw10-32x6    | 130 | SL115-3A2 | 72 |
| SI-305511BG     | 124 | SI-4959015-SP  | 123 | SI-Screw10-32x9    | 130 | SL115-3A5 | 72 |
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| SI-305511FG     | 125 | SI-10510515    | 122 | SISG-142820        | 127 | SL125-2   | 75 |
| SI-305511FG4    | 125 | SI-10510515CS  | 122 | SISG-161630        | 127 | SL125-2A2 | 71 |
| SI-351215       | 123 | SI-14314325    | 122 | SISG-341640        | 128 | SL125-2A5 | 71 |
| SI-355511FG4    | 125 | SI-14614625    | 122 | SISG-341650        | 128 | SL125-3   | 72 |
| SI-401215       | 123 | SI-14614625CR  | 122 | SISG-341660        | 128 | SL125-3A2 | 72 |
| SI-401215       | 130 | SICS-Screw     | 130 | SISG-341670        | 128 | SL125-3A5 | 72 |
| SI-401215AL     | 124 | SICS-Screw     | 130 | SISG-1818195       | 127 | SL125-4   | 73 |
| SI-401215AR     | 124 | SIDR-161752-2  | 126 | SISG-1818245       | 127 | SL125-4A2 | 73 |
| SI-401215CA     | 123 | SIDR-161752-3  | 126 | SISG-1818295       | 127 | SL125-4A5 | 73 |
| SI-405511BCG    | 125 | SIDR-161752-4  | 126 | SISG-1818370       | 127 | SL140-3   | 72 |
| SI-405511BG     | 124 | SIDR-161752-5  | 126 | SISP-185735        | 128 | SL140-3A2 | 72 |
| SI-405511FG     | 125 | SIGSH-Screw    | 130 | SIS-Screw          | 130 | SL140-3A5 | 72 |
| SI-405511FG4    | 125 | SILS-308015    | 126 | SITS-221920        | 127 | SL157-2   | 71 |
| SI-501017       | 124 | SILS-358015    | 126 | SI-Wrench          | 130 | SL157-2   | 75 |
| SI-501215       | 123 | SILS-408015    | 126 | SJM187-4           | 74  | SL157-2A2 | 71 |
| SI-501215       | 130 | SILS-458015    | 126 | SJM187-6           | 74  | SL157-2A5 | 71 |
| SI-501215AL     | 124 | SILS-508015    | 126 | SJM250-4           | 74  | SL157-3   | 72 |
| SI-501215AR     | 124 | SILS-608015    | 126 | SJM250-6           | 74  | SL157-3A2 | 72 |
| SI-501215CA     | 123 | SILS-708015    | 126 | SJM281-6           | 74  | SL157-3A5 | 72 |
| SI-501215CB     | 125 | SILS-778015    | 126 | SL050-3            | 72  | SL157-4   | 73 |
| SI-501215DCL    | 124 | SILS-808015    | 126 | SL050-3A2          | 72  | SL157-4A2 | 73 |
| SI-501215DCR    | 124 | SILS-978015    | 126 | SL050-3A5          | 72  | SL157-4A5 | 73 |
| SI-501217       | 124 | SILS-1008015   | 126 | SL055-3            | 72  | SL187-2   | 71 |
| SI-505511BCG    | 125 | SILS-1178015   | 126 | SL055-3A2          | 72  | SL187-2   | 75 |
| SI-505511BG     | 124 | SILS-1208015   | 126 | SL055-3A5          | 72  | SL187-2A2 | 71 |
| SI-505511BG-T03 | 124 | SILS-1478018   | 126 | SL062-2            | 71  | SL187-2A5 | 71 |
| SI-505511FG     | 125 | SILS-1978015   | 126 | SL062-2A2          | 71  | SL187-3   | 72 |
| SI-505511FG4    | 125 | SILS-2478015   | 126 | SL062-2A5          | 71  | SL187-3A2 | 72 |
| SI-508015FG     | 125 | SIPP-565511    | 127 | SL062-3            | 72  | SL187-3A5 | 72 |
| SI-601215       | 123 | SIPP-605511    | 127 | SL062-3A2          | 72  | SL187-4   | 73 |



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| SL187-4A2 | 73 | SLUD650    | 32 | SMSHS280     | 83 | SOD626   | 20 |
| SL187-4A5 | 73 | SLUD655    | 32 | SMSHS290     | 83 | SOD635   | 20 |
| SL218-3   | 72 | SLUD665    | 32 | SMSHS295     | 83 | SOD645   | 20 |
| SL218-3A2 | 72 | SLUD673    | 32 | SMSHS298     | 83 | SOD823   | 21 |
| SL218-3A5 | 72 | SLUD680    | 32 | SMSHS300     | 83 | SOU100   | 18 |
| SL250-2   | 71 | SLUD685    | 32 | SMSHS303     | 83 | SOU110   | 18 |
| SL250-2   | 75 | SLUD690    | 32 | SMSHS305     | 83 | SOU120   | 18 |
| SL250-2A2 | 71 | SLUD696    | 32 | SMSHS310     | 83 | SOU123   | 18 |
| SL250-2A5 | 71 | SMDUD445   | 31 | SMSHS315     | 83 | SOU135   | 18 |
| SL250-3   | 72 | SMDUD539   | 31 | SMSHS321     | 83 | SOU136   | 18 |
| SL250-3A2 | 72 | SMDUD540   | 31 | SMSHS325     | 83 | SOU160   | 18 |
| SL250-3A5 | 72 | SMDUD550   | 31 | SMSHS330     | 83 | SOU300   | 19 |
| SL250-4   | 73 | SMDUD551   | 31 | SMSHS335     | 83 | SOU300A  | 19 |
| SL250-4A2 | 73 | SMDUD551-1 | 31 | SMSHS340     | 83 | SOU300B  | 19 |
| SL250-4A5 | 73 | SMDUD554   | 31 | SMSHS345     | 83 | SOU302   | 19 |
| SL281-3   | 72 | SMDUD554A  | 31 | SMSHS350     | 83 | SOU303   | 19 |
| SL281-3A2 | 72 | SMDUD555   | 31 | SMSHS355     | 83 | SOU311   | 19 |
| SL281-3A5 | 72 | SMDUD557   | 31 | SMSHS360     | 83 | SOU313   | 19 |
| SL281-4   | 73 | SMDUD558   | 31 | SMSHS365     | 83 | SOU315   | 19 |
| SL281-4A2 | 73 | SMDUD560   | 31 | SMSHS370     | 83 | SOU320   | 19 |
| SL281-4A5 | 73 | SMDUD563   | 31 | SMSHS375     | 83 | SOU323   | 19 |
| SLASCA    | 75 | SMDUD565   | 31 | SMSHS380     | 83 | SOU323B  | 19 |
| SLAT670   | 85 | SMDUD566   | 31 | SMSHS385     | 83 | SOU326   | 19 |
| SLAT680   | 85 | SMDUD567   | 31 | SMSHS390     | 83 | SOU332   | 19 |
| SLAT690   | 85 | SMDUD569   | 31 | SMSHS395     | 83 | SOU335   | 19 |
| SLAT720   | 85 | SMDUD571   | 31 | SMSHS400     | 83 | SOU338   | 19 |
| SLAT730   | 85 | SMDUD573   | 31 | SMSHS411     | 83 | SOU345   | 19 |
| SLAT740   | 85 | SMDUD575   | 31 | SMSHS413     | 83 | SOU490   | 20 |
| SLAT770   | 85 | SMDUD750   | 33 | SMSHS414     | 83 | SOU500   | 20 |
| SLAT780   | 85 | SMDUD751*  | 33 | SMSHS415     | 83 | SOU500A  | 20 |
| SLAT790   | 85 | SMDUD751A  | 33 | SMSHS420     | 83 | SOU500B  | 20 |
| SLAT800   | 85 | SMDUD755   | 33 | SMSHS425     | 83 | SOU502   | 20 |
| SLAT810   | 85 | SMDUD756*  | 33 | SMSHS430     | 83 | SOU503   | 20 |
| SLAT820   | 85 | SMDUD790*  | 33 | SMSHS435     | 83 | SOU511   | 20 |
| SLD400    | 25 | SMDUD795   | 33 | SMSHS440     | 83 | SOU513   | 20 |
| SLD410    | 25 | SMS300     | 82 | SMSHS440-34* | 83 | SOU520   | 20 |
| SLD415    | 25 | SMS305     | 82 | SMSHS445     | 83 | SOU523   | 20 |
| SLD420    | 25 | SMS310     | 82 | SMSHS445-34* | 83 | SOU524   | 20 |
| SLD425    | 25 | SMS315     | 82 | SMSHS450     | 83 | SOU526   | 20 |
| SLD430    | 25 | SMS321     | 82 | SMSHS450-34* | 83 | SOU527   | 20 |
| SLD435    | 25 | SMS325     | 82 | SMSHS455     | 83 | SOU532   | 20 |
| SLD440    | 25 | SMS330     | 82 | SMSHS455-34* | 83 | SOU535   | 20 |
| SLD445    | 25 | SMS335     | 82 | SMSHS460     | 83 | SOU538   | 20 |
| SLD450    | 25 | SMS340     | 82 | SMSHS460-34* | 83 | SOU545   | 20 |
| SLD455    | 25 | SMS345     | 82 | SN305        | 12 | SOU720   | 20 |
| SLD460    | 25 | SMS350     | 82 | SN310        | 12 | SOU723   | 21 |
| SLD465    | 25 | SMS355     | 82 | SN320        | 12 | SOU724   | 20 |
| SLD470    | 25 | SMS360     | 82 | SN330        | 12 | SOU734   | 20 |
| SLIN010   | 12 | SMS365     | 82 | SN340        | 12 | SOU742   | 20 |
| SLIN062   | 12 | SMS370     | 82 | SN360        | 12 | SOU745   | 20 |
| SLIN085   | 12 | SMS375     | 82 | SN390        | 12 | SOU748   | 20 |
| SLOC600   | 85 | SMS380     | 82 | SN605        | 12 | SOU920   | 21 |
| SLOC605   | 85 | SMS385     | 82 | SN610        | 12 | SOU926   | 21 |
| SLOC610   | 85 | SMS390     | 82 | SN620        | 12 | SOU934   | 21 |
| SLU300    | 25 | SMS395     | 82 | SN630        | 12 | SOU937   | 21 |
| SLU310    | 25 | SMS400     | 82 | SN640        | 12 | SOU943   | 21 |
| SLU315    | 25 | SMS411     | 82 | SN660        | 12 | SOU948   | 21 |
| SLU320    | 25 | SMS413     | 82 | SN690        | 12 | SPL100   | 17 |
| SLU325    | 25 | SMS414     | 82 | SOD200       | 18 | SPL100LH | 17 |
| SLU330    | 25 | SMS415     | 82 | SOD210       | 18 | SPL102   | 17 |
| SLU335    | 25 | SMS420     | 82 | SOD220       | 18 | SPL103   | 17 |
| SLU340    | 25 | SMS425     | 82 | SOD223       | 18 | SPL105   | 17 |
| SLU345    | 25 | SMS430     | 82 | SOD235       | 18 | SPL105LH | 17 |
| SLU350    | 25 | SMS435     | 82 | SOD236       | 18 | SPL110   | 17 |
| SLU355    | 25 | SMS440     | 82 | SOD260       | 18 | SPL110LH | 17 |
| SLU360    | 25 | SMS440-34* | 82 | SOD402       | 19 | SPL111   | 17 |
| SLU365    | 25 | SMS445     | 82 | SOD413       | 19 | SPL113   | 17 |
| SLU370    | 25 | SMS445-34* | 82 | SOD423       | 19 | SPL115   | 17 |
| SLUD598   | 29 | SMS450     | 82 | SOD426       | 19 | SPL120   | 17 |
| SLUD600   | 29 | SMS450-34* | 82 | SOD435       | 19 | SPL120LH | 17 |
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| SLUD610   | 29 | SMS455-34* | 82 | SOD602       | 20 | SPL128   | 17 |
| SLUD615   | 29 | SMS460     | 82 | SOD613       | 20 | SPL130   | 17 |
| SLUD648   | 32 | SMS460-34* | 82 | SOD623       | 20 | SPL134   | 17 |

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| SPL140          | 17  | SRD237CB    | 25 | SRD625SLRUF | 29 | SRU190CB    | 26 |
| SPL148          | 17  | SRD237HD    | 24 | SRD626SLRUF | 29 | SRU191      | 23 |
| SPL210          | 17  | SRD237MD    | 24 | SRD627SLRUF | 29 | SRU192      | 23 |
| SPL212          | 17  | SRD240      | 22 | SRD637SLRUF | 29 | SRU193      | 23 |
| SPL213          | 17  | SRD245      | 22 | SRD645SLRUF | 29 | SRU193CB    | 26 |
| SPL215          | 17  | SRD247      | 22 | SRD702SL    | 27 | SRU195      | 23 |
| SPL216          | 17  | SRD250      | 22 | SRD713SL    | 27 | SRU197      | 23 |
| SPL217          | 17  | SRD250A     | 22 | SRD724SL    | 27 | SRU320RUF   | 66 |
| SPL220          | 17  | SRD252      | 22 | SRD725SL    | 27 | SRU320RUF*  | 28 |
| SPL222          | 17  | SRD252HD    | 24 | SRD726SL    | 27 | SRU340RUF   | 28 |
| SPL223          | 17  | SRD253      | 22 | SRD728SL    | 27 | SRU346RUF   | 28 |
| SPL225          | 17  | SRD255      | 22 | SRD729SL    | 27 | SRU350RUF   | 28 |
| SPL227          | 17  | SRD255CB    | 25 | SRD745SL    | 27 | SRU360RUF   | 28 |
| SPL230          | 17  | SRD255HD    | 24 | SRD823FIN   | 33 | SRU367RUF   | 28 |
| SPL232          | 17  | SRD255MD    | 24 | SRD827FIN   | 33 | SRU368RUF   | 28 |
| SPOIL4-2        | 117 | SRD258      | 22 | SRD830FIN   | 33 | SRU370RUF   | 28 |
| SPOIL4-2UP      | 118 | SRD260      | 22 | SRD836FIN   | 33 | SRU380RUF   | 28 |
| SPOIL4-3        | 117 | SRD260CB    | 25 | SRD846FIN   | 33 | SRU390RUF   | 28 |
| SPOIL4-3UP      | 118 | SRD260HD    | 24 | SRU090      | 23 | SRU392RUF   | 28 |
| SPOIL25-2       | 117 | SRD260MD    | 24 | SRU092      | 23 | SRU393RUF   | 28 |
| SPOIL25-2UP     | 118 | SRD263      | 22 | SRU102      | 23 | SRU395RUF   | 28 |
| SPOIL178-2      | 117 | SRD265      | 22 | SRU103      | 23 | SRU397RUF   | 28 |
| SPOIL-Insert    | 118 | SRD265CB    | 25 | SRU103MD    | 24 | SRU420T     | 26 |
| SPOIL-Screw     | 118 | SRD265MD    | 24 | SRU105      | 23 | SRU440T     | 26 |
| SPOIL-Wrench    | 118 | SRD267      | 22 | SRU110      | 23 | SRU440TCB   | 28 |
| SPOU100         | 19  | SRD267CB    | 25 | SRU113      | 23 | SRU455T     | 26 |
| SPOU110         | 19  | SRD268      | 22 | SRU114MD    | 24 | SRU455TCB   | 28 |
| SPOU120         | 19  | SRD269      | 22 | SRU115      | 23 | SRU460T     | 26 |
| SPR200          | 18  | SRD270      | 22 | SRU118      | 23 | SRU460TCB   | 28 |
| SPR210          | 18  | SRD275      | 22 | SRU119      | 23 | SRU465T     | 26 |
| SPR220          | 18  | SRD280      | 22 | SRU120      | 23 | SRU465TCB   | 28 |
| SPR300          | 18  | SRD280CB    | 25 | SRU120MD    | 24 | SRU480T     | 26 |
| SPR310          | 18  | SRD285      | 22 | SRU121      | 23 | SRU480TCB   | 28 |
| SPR320          | 18  | SRD290      | 22 | SRU123      | 23 | SRU485T     | 26 |
| SPR400          | 18  | SRD290CB    | 25 | SRU124      | 23 | SRU485TCB   | 28 |
| SPR410          | 18  | SRD291      | 22 | SRU125      | 23 | SRU490T     | 26 |
| SPR420          | 18  | SRD292      | 22 | SRU130      | 23 | SRU490TCB   | 28 |
| SPS2-16-095     | 75  | SRD293      | 22 | SRU133      | 23 | SRU495T     | 26 |
| SPS3-16-095     | 75  | SRD293CB    | 25 | SRU135      | 23 | SRU495TCB   | 28 |
| SPS25-16-095    | 75  | SRD295      | 22 | SRU135HD    | 24 | SRU497T     | 26 |
| SPS35-16-095    | 75  | SRD297      | 22 | SRU135MD    | 24 | SRU513SLRUF | 29 |
| SPSARBOR-12     | 75  | SRD420RUF   | 28 | SRU137      | 23 | SRU523SLRUF | 29 |
| SPSARBOR-12-412 | 75  | SRD440RUF   | 28 | SRU137CB    | 26 | SRU527SLRUF | 29 |
| SPSARBOR-58     | 75  | SRD446RUF   | 28 | SRU137HD    | 24 | SRU528SLRUF | 29 |
| SRD202          | 22  | SRD450RUF   | 28 | SRU137MD    | 24 | SRU534SLRUF | 29 |
| SRD202MD        | 24  | SRD460RUF   | 28 | SRU145      | 23 | SRU537SLRUF | 29 |
| SRD203          | 22  | SRD467RUF   | 28 | SRU147      | 23 | SRU542SLRUF | 29 |
| SRD203-34       | 22  | SRD468RUF   | 28 | SRU150      | 23 | SRU545SLRUF | 29 |
| SRD204          | 22  | SRD470RUF   | 28 | SRU152      | 23 | SRU602SL    | 27 |
| SRD205          | 22  | SRD480RUF   | 28 | SRU152HD    | 24 | SRU611SL    | 27 |
| SRD210          | 22  | SRD490RUF   | 28 | SRU153      | 23 | SRU613SL    | 27 |
| SRD212          | 22  | SRD492RUF   | 28 | SRU155      | 23 | SRU621SL    | 27 |
| SRD213          | 22  | SRD493RUF   | 28 | SRU155CB    | 26 | SRU623SL    | 27 |
| SRD215          | 22  | SRD495RUF   | 28 | SRU155HD    | 24 | SRU625SL    | 27 |
| SRD216          | 22  | SRD497RUF   | 28 | SRU155MD    | 24 | SRU626SL    | 27 |
| SRD217          | 22  | SRD540T     | 26 | SRU158      | 23 | SRU627SL    | 27 |
| SRD218          | 22  | SRD540TCB   | 27 | SRU160      | 23 | SRU629SL    | 27 |
| SRD218MD        | 24  | SRD555T     | 26 | SRU160CB    | 26 | SRU645SL    | 27 |
| SRD220          | 22  | SRD555TCB   | 27 | SRU160HD    | 24 | SRU648SL    | 27 |
| SRD220MD        | 24  | SRD560T     | 26 | SRU160MD    | 24 | SRU723FIN   | 33 |
| SRD223          | 22  | SRD560TCB   | 27 | SRU163      | 23 | SRU727FIN   | 33 |
| SRD223A         | 22  | SRD565T     | 26 | SRU165      | 23 | SRU730FIN   | 33 |
| SRD223B         | 22  | SRD565TCB   | 27 | SRU165CB    | 26 | SRU746FIN   | 33 |
| SRD224          | 22  | SRD580T     | 26 | SRU165MD    | 24 | SST100      | 12 |
| SRD224A         | 22  | SRD580TCB   | 27 | SRU167      | 23 | SST110      | 12 |
| SRD224B         | 22  | SRD585T     | 26 | SRU167CB    | 26 | SST120      | 12 |
| SRD225          | 22  | SRD585TCB   | 27 | SRU168      | 23 | SST130      | 12 |
| SRD227          | 22  | SRD590T     | 26 | SRU169      | 23 | SST195      | 12 |
| SRD230          | 22  | SRD590TCB   | 27 | SRU170      | 23 | SST195      | 13 |
| SRD233          | 22  | SRD595T     | 26 | SRU175      | 23 | SST198      | 12 |
| SRD235          | 22  | SRD595TCB   | 27 | SRU180      | 23 | SST198      | 13 |
| SRD235HD        | 24  | SRD597T     | 26 | SRU180CB    | 26 | SST200      | 13 |
| SRD235MD        | 24  | SRD613SLRUF | 29 | SRU185      | 23 | SST203      | 13 |
| SRD237          | 22  | SRD614SLRUF | 29 | SRU190      | 23 | SST203-18   | 13 |

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| SST207      | 13  | STOP060    | 74 | SUD592    | 30  | WD 7281   | 166 |
| SST210      | 13  | STOP062    | 74 | SUD592CB  | 32  | WD 7312   | 166 |
| SST213      | 13  | STOP070    | 74 | SUD594    | 30  | WD 7375   | 166 |
| SST214      | 13  | STOP080    | 74 | SUD594CB  | 32  | WDC 7100  | 160 |
| SST215      | 13  | STOP085    | 74 | SUD597    | 30  | WDC 7105  | 160 |
| SST220      | 13  | STOP090    | 74 | SUD750    | 32  | WDC 7110  | 160 |
| SST223      | 13  | STOP093    | 74 | SUD751*   | 32  | WDC 7115  | 160 |
| SST225      | 13  | STOP093-3  | 74 | SUD754    | 32  | WDC 7120  | 160 |
| SST230      | 13  | STOP095    | 74 | SUD755    | 32  | WDC 7125  | 160 |
| SST235      | 13  | STOP100    | 74 | SUD756*   | 32  | WDC 7130  | 160 |
| SST240      | 13  | STOP105    | 74 | SUD765    | 32  | WDC 7135  | 160 |
| SST241      | 13  | STOP110    | 74 | SUD790    | 32  | WDC 7140  | 160 |
| SST245      | 13  | STOP115    | 74 | SUD840*   | 34  | WDC 7150  | 160 |
| SST250      | 13  | STOP115-3  | 74 | SUD842    | 34  | WDC 7155  | 160 |
| SST255      | 13  | STOP125    | 74 | SUD844    | 34  | WDC 7160  | 160 |
| SST260      | 13  | STOP125-3  | 74 | SUD860    | 34  | WDC 7165  | 160 |
| SST265      | 13  | STOP130    | 74 | SUD870    | 34  | WDC 7170  | 160 |
| SST270      | 13  | STOP140    | 74 | SUD885    | 34  | WDC 7175  | 160 |
| SST275      | 13  | STOP150    | 74 | SUD888    | 34  | WDC 7180  | 160 |
| SST280      | 13  | STOP160    | 74 | SUD950FIN | 34  | WDC 7185  | 160 |
| STB310      | 159 | STOP170    | 74 | SUD955FIN | 34  | WDC 7190  | 160 |
| STB312      | 159 | STOP180    | 74 | SUD960FIN | 34  | WDC 7200  | 160 |
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| STB324      | 159 | SUD460     | 30 | SUD990FIN | 34  | WDC 7220  | 160 |
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| STB336      | 159 | SUD500     | 29 | WA 7091   | 165 | WDC 7280  | 160 |
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| STB424      | 159 | SUD550     | 30 | WA 7200   | 165 | WDCR 7165 | 165 |
| STB428      | 159 | SUD550CB   | 32 | WA 7215   | 165 | WDCR 7185 | 165 |
| STB432      | 159 | SUD551     | 30 | WB 7100   | 166 | WDCR 7200 | 165 |
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| STB448      | 159 | SUD553     | 30 | WB 7150   | 166 | WE 7135   | 167 |
| STB510      | 159 | SUD553A    | 30 | WB 7165   | 166 | WE 7150   | 167 |
| STB512      | 159 | SUD553ACB* | 32 | WB 7180   | 166 | WE 7165   | 167 |
| STB516      | 159 | SUD553CB*  | 32 | WB 7195   | 166 | WE 7185   | 167 |
| STB520      | 159 | SUD554     | 30 | WB 7215   | 166 | WE 7200   | 167 |
| STB524      | 159 | SUD554CB   | 32 | WBC 7085  | 160 | WE 7215   | 167 |
| STB528      | 159 | SUD555     | 30 | WBC 7100  | 160 | WE 7225   | 167 |
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| STB536      | 159 | SUD557     | 30 | WBC 7135  | 160 | WE 7250   | 167 |
| STB540      | 159 | SUD557CB*  | 32 | WBC 7150  | 160 | WE 7265   | 167 |
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| STB610      | 159 | SUD560CB   | 32 | WBC 7195  | 160 | WE 7350   | 167 |
| STB612      | 159 | SUD563     | 30 | WC 7100   | 166 | WE 7375   | 167 |
| STB616      | 159 | SUD565     | 30 | WC 7135   | 166 | WE 7400   | 167 |
| STB620      | 159 | SUD565CB   | 32 | WC 7150   | 166 | WEC 7110  | 161 |
| STB624      | 159 | SUD566     | 30 | WC 7165   | 166 | WEC 7120  | 161 |
| STB628      | 159 | SUD567     | 30 | WC 7185   | 166 | WEC 7130  | 161 |
| STB632      | 159 | SUD567CB*  | 32 | WD 7115   | 166 | WEC 7135  | 161 |
| STB636      | 159 | SUD570     | 30 | WD 7120   | 166 | WEC 7140  | 161 |
| STB640      | 159 | SUD570CB   | 32 | WD 7135   | 166 | WEC 7150  | 161 |
| STB644      | 159 | SUD571     | 30 | WD 7140   | 166 | WEC 7165  | 161 |
| STB648      | 159 | SUD571CB   | 32 | WD 7150   | 166 | WEC 7170  | 161 |
| STBNU116-3  | 11  | SUD572     | 30 | WD 7165   | 166 | WEC 7175  | 161 |
| STBNU116-55 | 11  | SUD573     | 30 | WD 7170   | 166 | WEC 7180  | 161 |
| STBNU125-1  | 11  | SUD573B    | 30 | WD 7175   | 166 | WEC 7185  | 161 |
| STBNU125-3  | 11  | SUD573CB   | 32 | WD 7180   | 166 | WEC 7190  | 161 |
| STBNU125-5  | 11  | SUD580     | 30 | WD 7185   | 166 | WEC 7200  | 161 |
| STBNU125-7  | 11  | SUD580CB   | 32 | WD 7200   | 166 | WEC 7205  | 161 |
| STBNU250-3  | 11  | SUD585     | 30 | WD 7215   | 166 | WEC 7210  | 161 |
| STBNU250-5  | 11  | SUD585CB   | 32 | WD 7230   | 166 | WEC 7215  | 161 |
| STBNU250-7  | 11  | SUD590     | 30 | WD 7240   | 166 | WEC 7220  | 161 |

|          |     |          |     |           |     |          |     |
|----------|-----|----------|-----|-----------|-----|----------|-----|
| WEC 7225 | 161 | WFC 7256 | 162 | WGC 7215  | 163 | WXC 7175 | 164 |
| WEC 7230 | 161 | WFC 7260 | 162 | WGC 7220  | 163 | WXC 7180 | 164 |
| WEC 7240 | 161 | WFC 7265 | 162 | WGC 7225  | 163 | WXC 7190 | 164 |
| WEC 7250 | 161 | WFC 7270 | 162 | WGC 7228  | 163 | WXC 7195 | 164 |
| WEC 7260 | 161 | WFC 7275 | 162 | WGC 7230  | 163 |          |     |
| WEC 7265 | 161 | WFC 7280 | 162 | WGC 7240  | 163 |          |     |
| WEC 7280 | 161 | WFC 7285 | 162 | WGC 7250  | 163 |          |     |
| WEC 7281 | 161 | WFC 7290 | 162 | WGC 7256  | 163 |          |     |
| WEC 7300 | 161 | WFC 7300 | 162 | WGC 7260  | 163 |          |     |
| WEC 7312 | 161 | WFC 7310 | 162 | WGC 7265  | 163 |          |     |
| WEC 7375 | 161 | WFC 7312 | 162 | WGC 7270  | 163 |          |     |
| WEC 7400 | 161 | WFC 7330 | 162 | WGC 7275  | 163 |          |     |
| WF 7120  | 167 | WFC 7335 | 162 | WGC 7280  | 163 |          |     |
| WF 7150  | 167 | WFC 7340 | 162 | WGC 7300  | 163 |          |     |
| WF 7160  | 167 | WFC 7350 | 162 | WGC 7310  | 163 |          |     |
| WF 7165  | 167 | WFC 7375 | 162 | WGC 7312  | 163 |          |     |
| WF 7170  | 167 | WFC 7400 | 162 | WGC 7320  | 163 |          |     |
| WF 7180  | 167 | WFC 7430 | 162 | WGC 7335  | 163 |          |     |
| WF 7190  | 167 | WFC 7437 | 162 | WGC 7350  | 163 |          |     |
| WF 7200  | 167 | WFC 7500 | 162 | WGC 7400  | 163 |          |     |
| WF 7210  | 167 | WFC 7562 | 162 | WGC 7500  | 163 |          |     |
| WF 7215  | 167 | WFC 7625 | 162 | WGC 7550  | 163 |          |     |
| WF 7220  | 167 | WFC 7687 | 162 | WGCL 7230 | 165 |          |     |
| WF 7230  | 167 | WFC 7750 | 162 | WGCL 7250 | 165 |          |     |
| WF 7240  | 167 | WG 7150  | 168 | WGCL 7265 | 165 |          |     |
| WF 7250  | 167 | WG 7165  | 168 | WGCL 7270 | 165 |          |     |
| WF 7260  | 167 | WG 7180  | 168 | WGCR 7230 | 165 |          |     |
| WF 7265  | 167 | WG 7190  | 168 | WGCR 7250 | 165 |          |     |
| WF 7270  | 167 | WG 7197  | 168 | WGCR 7265 | 165 |          |     |
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| WF 7280  | 167 | WG 7215  | 168 | WH 7197   | 169 |          |     |
| WF 7285  | 167 | WG 7220  | 168 | WH 7215   | 169 |          |     |
| WF 7290  | 167 | WG 7230  | 168 | WH 7230   | 169 |          |     |
| WF 7300  | 167 | WG 7240  | 168 | WH 7236   | 169 |          |     |
| WF 7310  | 167 | WG 7250  | 168 | WH 7250   | 169 |          |     |
| WF 7312  | 167 | WG 7265  | 168 | WHC 7120  | 164 |          |     |
| WF 7320  | 167 | WG 7275  | 168 | WHC 7135  | 164 |          |     |
| WF 7330  | 167 | WG 7280  | 168 | WHC 7150  | 164 |          |     |
| WF 7350  | 167 | WG 7300  | 168 | WHC 7165  | 164 |          |     |
| WF 7375  | 167 | WG 7312  | 168 | WHC 7200  | 164 |          |     |
| WF 7400  | 167 | WG 7335  | 168 | WHC 7215  | 164 |          |     |
| WF 7437  | 167 | WG 7350  | 168 | WHC 7230  | 164 |          |     |
| WF 7500  | 167 | WG 7375  | 168 | WHC 7250  | 164 |          |     |
| WF 7530  | 167 | WG 7400  | 168 | WHC 7265  | 164 |          |     |
| WF 7562  | 167 | WG 7437  | 168 | WHC 7280  | 164 |          |     |
| WF 7625  | 167 | WG 7460  | 168 | WQ 7200   | 168 |          |     |
| WF 7750  | 167 | WG 7500  | 168 | WQ 7265   | 168 |          |     |
| WFC 7110 | 162 | WG 7530  | 168 | WQ 7300   | 168 |          |     |
| WFC 7115 | 162 | WG 7560  | 168 | WQ 7335   | 168 |          |     |
| WFC 7120 | 162 | WG 7625  | 168 | WQ 7375   | 168 |          |     |
| WFC 7125 | 162 | WG 7687  | 168 | WQ 7400   | 168 |          |     |
| WFC 7130 | 162 | WGC 7090 | 163 | WQ 7460   | 168 |          |     |
| WFC 7135 | 162 | WGC 7100 | 163 | WQ 7500   | 168 |          |     |
| WFC 7140 | 162 | WGC 7105 | 163 | WQC 7230  | 164 |          |     |
| WFC 7145 | 162 | WGC 7110 | 163 | WQC 7250  | 164 |          |     |
| WFC 7150 | 162 | WGC 7115 | 163 | WQC 7300  | 164 |          |     |
| WFC 7155 | 162 | WGC 7120 | 163 | WQC 7400  | 164 |          |     |
| WFC 7160 | 162 | WGC 7125 | 163 | WQC 7530  | 164 |          |     |
| WFC 7165 | 162 | WGC 7130 | 163 | WQC 7625  | 164 |          |     |
| WFC 7170 | 162 | WGC 7135 | 163 | WXC 7095  | 164 |          |     |
| WFC 7175 | 162 | WGC 7140 | 163 | WXC 7100  | 164 |          |     |
| WFC 7180 | 162 | WGC 7145 | 163 | WXC 7105  | 164 |          |     |
| WFC 7185 | 162 | WGC 7150 | 163 | WXC 7110  | 164 |          |     |
| WFC 7190 | 162 | WGC 7155 | 163 | WXC 7115  | 164 |          |     |
| WFC 7195 | 162 | WGC 7160 | 163 | WXC 7120  | 164 |          |     |
| WFC 7200 | 162 | WGC 7165 | 163 | WXC 7125  | 164 |          |     |
| WFC 7205 | 162 | WGC 7170 | 163 | WXC 7130  | 164 |          |     |
| WFC 7210 | 162 | WGC 7175 | 163 | WXC 7135  | 164 |          |     |
| WFC 7215 | 162 | WGC 7180 | 163 | WXC 7140  | 164 |          |     |
| WFC 7220 | 162 | WGC 7185 | 163 | WXC 7150  | 164 |          |     |
| WFC 7230 | 162 | WGC 7190 | 163 | WXC 7155  | 164 |          |     |
| WFC 7235 | 162 | WGC 7195 | 163 | WXC 7160  | 164 |          |     |
| WFC 7240 | 162 | WGC 7200 | 163 | WXC 7165  | 164 |          |     |
| WFC 7250 | 162 | WGC 7210 | 163 | WXC 7170  | 164 |          |     |



# Router Bit Sets



**Door Set**

**SE5900E**  
Round Raised Panel Bit

**SE6001**  
Stile and Rail Bit



**Basic Set-12**

**SE1067**  
1/2" Straight Bit

**SE1504**  
3/4" V-Groove Bit

**SE1803**  
1/4" Radius Cove

**SE1901**  
1-1/4" Rabbet Bit

**SE2006**  
1/4" Radius Roundover

**SE2009**  
1/2" Radius Roundover

**SE2202**  
5/32" Radius Roman  
Ogee

**SE2305**  
45 Degree Chamfer Bit

**SE2405**  
1/2" Trim Bit



**CNC Set**

**SRU120**  
1/4" S/C Spiral Upcut

**SRD220**  
1/4" S/C Spiral Downcut

**SRU165**  
1/2" S/C Spiral Upcut

**SRD265**  
1/2" S/C Spiral Downcut

**SUD555**  
S/C 1/2" Dia x 1-1/4" CL  
Compression

**SUD573**  
S/C 1/2" Dia x 2" CL  
Compression

**SE1507**  
C/T 1-1/2" Dia V Groove Bit

**SE5610**  
C/T MDF Bit-Bead

**SE5710**  
C/T MDF Bit-Cove



**P Set**

**SRU120**  
1/4" S/C Spiral Upcut

**SPL100**  
1/8" S/C Straight O Flute

**SPL110**  
3/16" S/C Straight O Flute

**SPL120**  
1/4" S/C Straight O Flute

**SPL220**  
1/4" S/C Straight O Flute  
2 Flute

**SOU100**  
1/8" S/C Spiral O Flute

**SOU120**  
1/4" S/C Spiral O Flute

**SOU323**  
1/4" S/C Multi Grind  
Polished O Flute

**SPR200**  
1/8" Radius O Flute  
1/8" Material

**SPR220**  
1/4" Radius O Flute  
1/4" Material



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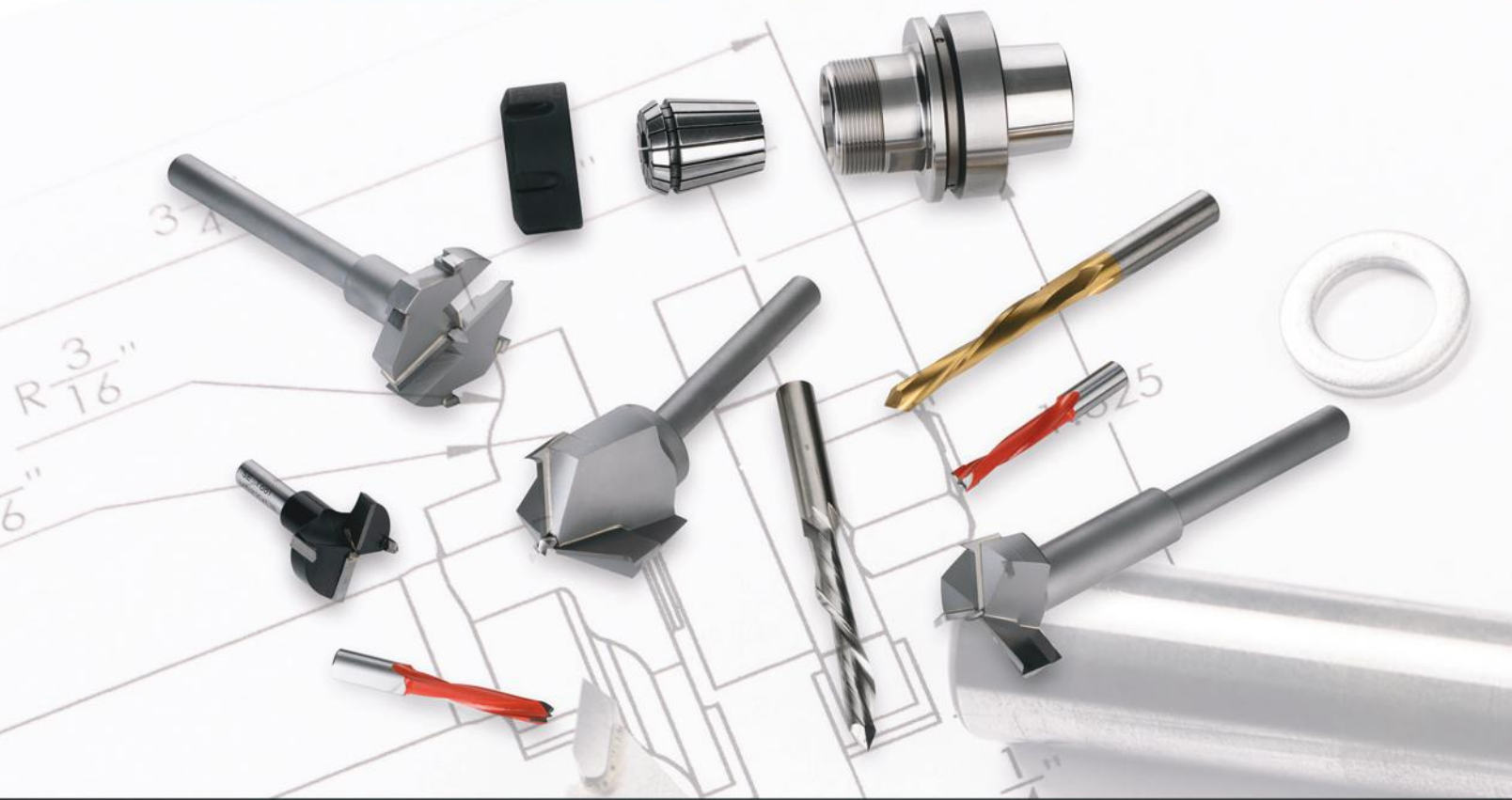


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