Who We Are

ESTABLISHED 1897
Over 120 years later, Champion still shares the same core values we were founded upon. We create solution oriented tools that aim to increase productivity on every job. High service levels are also a top priority, so we make sure our tools are available when and where they are needed. Six family generations later, we are grateful to be a well-respected leader in the cutting tool industry.

CULTURE
Our highly accessible team radiates positive energy and has a passion for delivering personalized service. We are proud of our experienced salesforce who has the problem-solving skills and expert product knowledge to help distributors and cutting tool users meet their business goals. As a service oriented organization, we our constantly evolving to meet the unique needs of the industry.

SPECIAL DISTRIBUTOR NETWORK
Champion tools are available across the USA, Canada, Mexico, Puerto Rico, Central America, and the Caribbean Islands, thanks to our large network of distributor partners.

What We Do

Where We Give
Our Strong Brands

**CHAMPION**

- Quality Cutting Tools You Can Rely On
  - Twist Drills
  - Step Drills
  - Taps
  - Dies
  - Carbide Tipped Hole Cutters
  - Carbide Burs
  - Reamers
  - End Mills
  - Countersinks
  - Sheet Metal Cutters

**BRUTE PLATINUM**

- High Performance Cutting Tools
  - Twist Drills
  - Taps
  - Power Tapper
  - Circular Saw Blades
  - Reamers
  - End Mills
  - Countersinks
  - Cutting Lubricants

**ROTO BRUTE**

- The Ultimate Hole Cutting System
  - Magnetic Drill Presses
  - Carbide Tipped Annular Cutters
  - HSS Annular Cutters

**COLUMBIA**

- Our sister brand Columbia offers an economical alternative to RotoBrute annular cutters.

**PROLINE**

- Concrete, Masonry, Tile, & Wood
  - Hammer Bits
  - Rebar Cutters
  - Hammer Core Drills
  - Hammer Chisels
  - Floor Scrapers
  - Tile Drills
  - Rotary Masonry Drills
  - Spade Bits
  - Auger Bits
## Metal Cutting - Drills

### Twist Drills

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Sizes</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLS Heavy Duty Jobber*</td>
<td>Drill Stainless Steel &amp; Tough Alloys</td>
<td>1/16 to 1/2&quot;, Letters &amp; Numbers</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>XL28 Heavy Duty Mechanics Length*</td>
<td>3 Flattened Reduced Shank - Drill Stainless Steel and Tough Alloys</td>
<td>1/16 to 1/2&quot;</td>
<td>Stainless Steel, Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>705C Cobalt Jobber*</td>
<td>Drill Stainless Steel in Drill Press</td>
<td>1/64 to 1/2&quot;, Letters &amp; Numbers</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>700T Tin Coated Jobber*</td>
<td>For High Production CNC Drilling</td>
<td>1/64 to 1/2&quot;</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>XGO BlackGold® Jobber*</td>
<td>Drill Medium to Hard Alloys</td>
<td>1/64 to 1/2&quot;, Letters &amp; Numbers</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>705SP Split Point Jobber*</td>
<td>Drill Low to Medium Alloys</td>
<td>3/64 to 1/2&quot;, Letters &amp; Numbers</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>705 General Purpose Jobber</td>
<td>Drill Low to Medium Alloys</td>
<td>1/64 to 1/2&quot;, Letters &amp; Numbers</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>405 Bright Finish Jobber</td>
<td>Drill Aluminum &amp; Non-Ferrous Metals</td>
<td>1/64 to 1/2&quot;, Letters &amp; Numbers</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>USHD Split Point Jobber*</td>
<td>Drill Low to Medium Alloys</td>
<td>1/64 to 1/2&quot;, Letters &amp; Numbers</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>US5 General Purpose Jobber</td>
<td>Drill Low to Medium Alloys</td>
<td>1/64 to 1/2&quot;, Letters &amp; Numbers</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
</tbody>
</table>

### Hex Shank Drills

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Sizes</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEX28 Hex Shank Drills*</td>
<td>¼&quot; Hex Shank For Use in Impact Driver</td>
<td>1/16 to 1/2&quot;</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
</tbody>
</table>

### Metric Drills

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Sizes</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>X8 Metric Jobber-Heavy Duty*</td>
<td>Drill Stainless Steel &amp; Tough Alloys</td>
<td>0.8mm to 13.0mm mm</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>708 Metric Jobber-General Purpose</td>
<td>Drill Low To Medium Alloys</td>
<td>0.25mm to 17.5mm</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
</tbody>
</table>

### Silver & Deming 1/2" Shank Drills

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Sizes</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>XL12 Heavy Duty S&amp;D**</td>
<td>Drill Stainless Steel &amp; Tough Alloys</td>
<td>3/32 to 1-1/2&quot;</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>712CO Cobalt S&amp;D**</td>
<td>Drill Stainless Steel in Drill Press</td>
<td>1/16 to 1/2&quot;</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>XG12 BlackGold® S&amp;D**</td>
<td>3 Flattened Shank-Sizes- Drill Medium To Hard Alloys</td>
<td>3/32 to 1-1/2&quot;</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>712 General Purpose S&amp;D</td>
<td>Drill Medium to Hard Alloys</td>
<td>3/32 to 1-1/2&quot;</td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
</tbody>
</table>

### Extra Long Drills

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Sizes</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200 12&quot; Longboy Drills</td>
<td>Sizes - 1/8 to 3/4&quot; 9&quot; Usable Flute Length</td>
<td></td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
</tbody>
</table>

### Screw Extractors

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Sizes</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 Spiral Flute Screw Extractors</td>
<td>Sizes - 1 to 12 (sets available)</td>
<td></td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
<tr>
<td>X2 Straight Flute Screw Extractors</td>
<td>Sizes - 1 to 7 (sets available)</td>
<td></td>
<td>Stainless Steel &amp; Tough Alloys</td>
</tr>
</tbody>
</table>
Step Drills
- MSD-HEX Hex Shank Step Drills*
  - ¼” Hex Shank For Use In Impact Driver
  - 2 Flute - TiN Coated-Split Point
  - 4 Sizes Available
- MSD Step Drills*
  - Straight Shank-2 Flute-Split Point
  - 13 Sizes Available

Quick Change Drivers
- QCD Quick Change Driver
  - For 1/4” and 3/8” hex shank tools
- QCD-EXT Extensions
  - For 1/4” hex shank tools
  - 6, 12 & 24” Lengths

Carbide Drills
- 705CT Carbide Tipped Jobber
  - Sizes - 1/8 to 1/2”
  - Drill Abrasive & Non-Ferrous Materials
- 105 Solid Carbide Drills
  - Sizes - 1/64 to 1/2”
  - Drill Abrasive & Non-Ferrous Materials
- CT505 Glass & Tile Spear Point
  - Sizes - 1/8 to 5/8”
  - Drill Glass & Ceramic Tile
- CT605 Carbide Tipped Die Drill
  - Sizes - 3/16 to 3/4”
  - Precision Drilling: Hardened Steel & Armor Plate
- CT705 Carbide Tipped Locksmith
  - Sizes - 1/8 to 1/2”
  - Non-Precision Drilling: Hardened Steel & Safes

Other Drills & Accessories
- 1805 Double End Sheeter Drills*
  - Sizes - 7/64 to 1/4”
  - #30 Drill Sheet Metal
- 2005 Corrugated Construction Drills*
  - Sizes - 1x1/4 to 1x6
  - Drill Corrugated Metal
- 705-Pilot Drill For Hole Saws
  - ¾” Diameter, 6” OAL, 118º Split Point
  - Triple Slab Shank - Fits Most Hole Saw Arbors
- Gauge Plates
  - Fractional, Metric, Letters & Numbers

Circular Saw Blades
- RZR Circular Saw-Steel Cutting
  - Heavy Duty Cermet Teeth
  - Sizes - 5-3/8 to 14”
- RZR Circular Saw-Stainless Steel Cutting
  - Heavy Duty Cermet Teeth
  - Sizes - 5-3/8 to 14”
- RZR Circular Saw-Alum/Non-Ferrous Cutting
  - Heavy Duty Cermet Teeth
  - Sizes - 6-1/2 to 14”
- RZR Circular Saw-Steel Cutting
  - Heavy Duty Cermet Teeth
  - Sizes - 5-3/8 to 14”

Carbide Tipped Hole Cutters
- CT3 Carbide Tipped Hole Cutters
  - 1/8” Depth Of Cut
  - Sizes - 5/8 to 1-3/8”
  - ¼” Hex Shank - For Use In Impact Driver
- CT5 Carbide Tipped Hole Cutters
  - 3/16” Depth Of Cut
  - Sizes - 9/16 to 5”
  - Ideal For Electrical Work, Construction
- CT7 Carbide Tipped Hole Cutters
  - 1” Depth Of Cut
  - Sizes - 9/16 to 4-1/2”
  - Heavy Duty
  - Ideal For Construction, Steel Fabrication, MRO
- CT9 Carbide Tipped Hole Cutters
  - 2” Depth Of Cut
  - Sizes - 1-1/2 & 2-1/8”
  - Heavy Duty
  - Drill Through Steel Doors

Sheet Metal Cutters
- SMC Sheet Metal Cutters
  - 1/4” Depth Of Cut or 1/2” Depth Of Cut
  - Sizes - 1/4 to 1-1/2” Diameter

Bridge Reamers
- XL86 Heavy Duty Hex Shank Bridge Reamers
  - Sizes - 11/16 to 1-5/8”
- XL86M Heavy Duty Magnetic Hex Shank Bridge Reamers
  - Sizes - 11/16 to 1-5/8”
- 980 Taper Shank Bridge Reamers
  - Sizes - 7/16 to 1-5/16” (Straight Flute)
- 982 Taper Shank Bridge Reamers
  - Sizes - 7/16 to 1-5/8” (Spiral Flute)

Car Reamers
- SA80 Heavy Duty Car Reamers
  - Sizes - 5/16 to 1-1/2”
  - Fluted Straight Shank
- HX82 Hex Shank Car Reamers
  - Sizes - 11/16 to 1-3/16” (Spiral Flute)
- HX82M Hex Shank Magnetic Car Reamers
  - Sizes - 11/16 to 1-3/16” (Spiral Flute)
- HX80 Hex Shank Car Reamers
  - Sizes - 11/16 to 1-3/16” (Straight Flute)

Step Reamers
- XSR Heavy Duty Step Reamers
  - Sizes - 5/16-9/16, 9/16-13/16, 13/16-1-7/16”
  - 5 Drill Sizes Per Reamer

Taper Pin Reamers
- 776/777/778 Straight/Spiral Flute Taper Pin Reamers
  - Sizes - 7/0 to 10
Power Tapper

**XL Tapper**
- High Production, Fast Tapping
- Auto Reverse & Controlled Speeds
- Pivoting Tap Collet Reduces Tap Breakage

Ideal For Use With XL22 Spiral Point Taps & BruteLube Fluid
- For HSS Standard Square Shank Taps
- Aluminum: #10 to 5/8"
- Steel: #10 to 9/16"

High Speed Steel Taps

**XL22 Heavy Duty Spiral Point Taps**
Sizes - 4-40 to 3/4-16

**XL46 Heavy Duty Spiral Flute Taps**
Sizes - 6-32 to 1/2-20

**321 Spiral Point Taps**
Sizes - 0-80 to 3/4-16

**308 Hand Taps**
Sizes - 0-80 to 1-1/2-12

**308B 8 Thread Hand Taps**
Sizes - 1-1/8 to 4

 Titanium Nitride Coated Taps

**XL22T Heavy Duty Spiral Point Taps**
Sizes - 4-40 to 3/4-16

**321T Spiral Point Taps**
Sizes - 6-32 to 3/4-10

 Metric Taps (HSS)

**XL22M Heavy Duty Spiral Point Taps**
Sizes - 2.5x.45 to 16x2

**321M Spiral Point Taps**
Sizes - 1.6x.35 to 24x3

**308M Hand Taps**
Sizes - 1.6x.35 to 36x5.5

 Left Hand Taps (HSS)

**308LH Hand Taps**
Sizes - 10-32 to 1-14

 Carbon Hand Taps

**302 Taps**
Sizes - 4-40 to 1-1/2-12

**302M Metric Hand Taps**
Sizes - 3x6 to 18x2.5

 Nut Taps

**1308 Nut Taps**
Sizes - 1/4-20 to 1/2-13

 Pulley Taps

**3006 Pulley Taps**
Sizes - 1/4-20 to 5/8-11, 6" OAL

Pipe Taps (HSS)

**324/324H Taper Pipe Taps**
Regular / High Hook, NPT
Sizes - 1/16-27 to 2-11-1/2

**324T Taper Pipe Taps**
Interrupted Thread, NPT
Sizes - 1/8 to 2

**325 Straight Pipe Taps**
Sizes - 1/8-27 to 1-11-1/2, NPS

**304 Carbon Steel Taper Pipe Taps**
Sizes - 1/8-27 to 3-8, NPT

Tap Wrenches

**2002/3002 'T' Handle Tap Wrenches**
Ratchet Style Available

**3001 Bar Handle Tap Wrenches**

Drill & Tap Combinations

**DT22HEX Combined Drill & Tap**
Hex Shank - For Use In Impact Driver
Sizes - Fractions & Metric

**DT22/DT22M Combined Drill & Tap**
Square Shank
Sizes - Fractions & Metric

**DT22T Combined Drill & Tap**
Titanium Nitride Coated - Square Shank
Sizes - Fractions & Metric

Hexagon Retreading Dies

**330 Dies**
Sizes - 6-32 to 2-1/2-12, 1/8 to 1 NPT

**3308 8 Thread Special Dies**
8 Thread - Sizes - 1-1/8 to 4

**CS30 Dies**
Sizes - 4-40 to 1-14

Metric Hexagon Retreading Dies

**330M Dies**
Sizes - 3x.5 to 27x3

**CS30M Dies**
Carbon Steel Sizes - 3x.5 to 18x2.5

Left Hand Hexagon Retreading Dies

**330LH**
Sizes - 1/4-20 to 1-14

Screw Adjustable Dies

**328 Round Dies**
Sizes - 6-32 thru 1-14

Die Stocks

**3305 Hex Convertor For Round Dies**
Sizes - 13/16 to 2"

**3291/3292 Round/Hex Die Stocks**
Sizes - 13/16 to 2"
# Metal Cutting - Counterinks, Burs, Tool Bits

## Multi Flute Countersinks

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XL801</td>
<td>Single flute</td>
<td>Countersinks, Stainless Steel &amp; Tough Alloys Use in Portable Drill, Drill Press, or Bridgeport Machine</td>
</tr>
<tr>
<td>800</td>
<td>Four flute</td>
<td>Counterinks/Chamfer Many Steels &amp; Alloys Use in Screw Machines &amp; Turret Lathes</td>
</tr>
<tr>
<td>799</td>
<td>Three flute</td>
<td>Counterinks/Chamfer Many Steels &amp; Alloys Use in Portable Drills &amp; Drill Presses</td>
</tr>
<tr>
<td>799L</td>
<td>Large four flute</td>
<td>Counterinks/Chamfer Many Steels &amp; Alloys Use in Portable Drills &amp; Drill Presses</td>
</tr>
</tbody>
</table>

## Zero Flute ‘Weldon’ Countersinks

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSK</td>
<td>Zero flute</td>
<td>De-Bar Metal, Plastic, Wood, Aluminum Use in Portable Drills &amp; Drill Presses</td>
</tr>
<tr>
<td>CSK-SH</td>
<td>Hex Shank zero flute</td>
<td>De-Bar Metal, 1/4” Hex Shank Use in Impact Drivers</td>
</tr>
<tr>
<td>CSKA/DBK</td>
<td>Zero flute</td>
<td>De-Bar Metal, Plastic, Wood, Aluminum Use in Portable Drills &amp; Drill Presses</td>
</tr>
</tbody>
</table>

## Combined Drill & Countersinks

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>798</td>
<td>Combined drill &amp; countersink</td>
<td>Drill Center Holes In Material Turned On Lathes</td>
</tr>
<tr>
<td>198</td>
<td>Combined drill &amp; countersink</td>
<td>Solid Carbide/Plain Style/60° Included Angle Commonly Called “Center Drills” Drill Center Holes In Material Turned On Lathes</td>
</tr>
</tbody>
</table>

## Carbine Burs - Ferrous Metals

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbide Burs - Double Cut</td>
<td>Titanium Nitride Coated</td>
<td>Shapes - SA to SN / Sizes - 1/8 to 1”</td>
</tr>
<tr>
<td>Carbide Burs - Double Cut</td>
<td>Uncoated, Standard OAL &amp; 6” Length</td>
<td>Shapes - SA to SN / Sizes 1/8 to 3/4”</td>
</tr>
<tr>
<td>Radius Burs - Double Cut</td>
<td>Sizes - 1/2”</td>
<td></td>
</tr>
<tr>
<td>Carbide Burs - Miniature</td>
<td>Double Cut, 1-1/2” OAL</td>
<td>Shapes - SA to SN / Sizes 1/16 to 1/4”</td>
</tr>
</tbody>
</table>

## Carbine Burs - Non Ferrous Metals

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbide Burs - Non Ferrous</td>
<td>Single flute</td>
<td>Sizes - 1/4 to 3/4”</td>
</tr>
</tbody>
</table>

## Fiberglass Routers

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbide Fiberglass Routers</td>
<td>Sizes - FGR-1 to FGR-9</td>
<td></td>
</tr>
</tbody>
</table>

## Tool Bits & Turning Tools

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>515</td>
<td>HSS square tool bits</td>
<td>Sizes - 1/8 to 1-1/4”</td>
</tr>
<tr>
<td>516</td>
<td>Cobalt square tool bits</td>
<td>Sizes - 1/8 to 1-1/4”</td>
</tr>
<tr>
<td>Braided Carbide Turning Tools</td>
<td>Styles - ALAR/BL/BV/CD/E</td>
<td></td>
</tr>
</tbody>
</table>

---

# Metal Cutting - End Mills

## Cobalt & Coated End Mills

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLUC/XLR/ARCR/ACRC coated</td>
<td>Four flute / single end / right hand helix</td>
<td>High Performance, Multi-Purpose</td>
</tr>
<tr>
<td>XLE600</td>
<td>Cobalt TiN coated</td>
<td>2 flute / single end / right hand helix Milling of Tough Alloys Sizes - 1/8 to 1-1/4”</td>
</tr>
<tr>
<td>XLE606</td>
<td>TiN coated cobalt end mills</td>
<td>Multi flute / single end / right hand helix Milling of Tough Alloys Sizes - 1/8 to 1-1/2”</td>
</tr>
<tr>
<td>600T</td>
<td>TiN coated HSS end mills</td>
<td>4 flute / single end / right hand helix Sizes - 1/8 to 2”</td>
</tr>
<tr>
<td>601T</td>
<td>TiN coated HSS end mills</td>
<td>Multi flute / single end / right hand helix Sizes - 1/8 to 2”</td>
</tr>
<tr>
<td>602C0</td>
<td>Cobalt end mills</td>
<td>2 flute / double end / right hand helix Milling of Stainless Steels &amp; Tough Materials Sizes - 1/8 to 1”</td>
</tr>
<tr>
<td>607C0</td>
<td>Cobalt end mills</td>
<td>4 flute / double end / right hand helix Milling of Stainless Steels &amp; Tough Materials Sizes - 1/8 to 1”</td>
</tr>
<tr>
<td>609</td>
<td>Cobalt roughing end mills</td>
<td>Multi flute / single end / right hand helix Sizes - 1/2 to 2”</td>
</tr>
</tbody>
</table>

## Carbide End Mills

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>Solid carbide</td>
<td>2 flute / single end / right hand helix Sizes - 1/32 to 1”</td>
</tr>
<tr>
<td>107</td>
<td>Solid carbide</td>
<td>2 flute / double end / right hand helix Sizes - 1/8 to 1/2”</td>
</tr>
</tbody>
</table>

## Carbide End Mills cont.

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>166</td>
<td>Solid Carbide</td>
<td>4 flute / single end / right hand helix 1/16 to 1”</td>
</tr>
<tr>
<td>167</td>
<td>Solid Carbide</td>
<td>4 flute / double end / right hand helix 1/8 to 1/2”</td>
</tr>
</tbody>
</table>

## High Speed Steel End Mills

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>HSS end mills</td>
<td>2 flute / single end / right hand helix General Purpose Milling Sizes - 1/8 to 2”</td>
</tr>
<tr>
<td>601</td>
<td>HSS end mills</td>
<td>2 flute / single end / right hand helix General Purpose Milling Sizes - 1/8 to 2”</td>
</tr>
<tr>
<td>602</td>
<td>HSS end mills</td>
<td>2 flute / double end / right hand helix General Purpose Milling Sizes - 1/8 to 1”</td>
</tr>
<tr>
<td>603</td>
<td>HSS end mills</td>
<td>4 flute / double end / right hand helix Economic Profiling &amp; Milling Of Slots Sizes - 1/8 to 1”</td>
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<td>Ball end mills</td>
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<td>HSS end mills</td>
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Magnetic Drill Presses & Annular Cutters

**AC35 MiniBrute**
- Powerful & Lightweight
- Cutter Capacity: 1-3/8" Diam x 2" Depth
- Twist Drill Capacity - ¾" x 1-3/4" Depth

**AC50 MightiBrute**
- Powerful & Versatile
- Cutter Capacity: 2-1/8" Diam x 2" Depth
- Twist Drill Capacity – 1”

**SB35 SmartBrute**
- Productive & Reliable
- Automatic Feed
- Cutter Capacity: 1-3/16" Diam x 1-3/4" Depth
- Manual Capacity: 1-3/8" Diam x 2" Depth

**RB32 MiniBrute**
- Lightweight, Reverse Feed Handle
- Cutter Capacity: 1-3/8” Diam x 1-3/16” Depth

**RB32-VSR MiniBrute**
- Reverse Feed, Variable Speed
- Cutter Capacity: 1-3/8” Diam x 1-3/16” Depth
- Can Use With Taps

**RB65E MegaBrute**
- Powerful, Large Capacity
- Cutter Capacity: 4” Diam x 3” Depth
- Twist Drill Capacity – 1-1/4”

**AC35 MiniBrute**
- Powerful & Lightweight
- Cutter Capacity: 1-3/8” Diam x 2” Depth
- Twist Drill Capacity - ¾” x 1-3/4” Depth

**AC50 MightiBrute**
- Powerful & Versatile
- Cutter Capacity: 2-1/8” Diam x 2” Depth
- Twist Drill Capacity – 1”

**SB35 SmartBrute**
- Productive & Reliable
- Automatic Feed
- Cutter Capacity: 1-3/16” Diam x 1-3/4” Depth
- Manual Capacity: 1-3/8” Diam x 2” Depth

**RB32 MiniBrute**
- Lightweight, Reverse Feed Handle
- Cutter Capacity: 1-3/8” Diam x 1-3/16” Depth

**RB32-VSR MiniBrute**
- Reverse Feed, Variable Speed
- Cutter Capacity: 1-3/8” Diam x 1-3/16” Depth
- Can Use With Taps

**RB65E MegaBrute**
- Powerful, Large Capacity
- Cutter Capacity: 4” Diam x 3” Depth
- Twist Drill Capacity – 1-1/4”

**AC35 MiniBrute**
- Powerful & Lightweight
- Cutter Capacity: 1-3/8” Diam x 2” Depth
- Twist Drill Capacity - ¾” x 1-3/4” Depth

**AC50 MightiBrute**
- Powerful & Versatile
- Cutter Capacity: 2-1/8” Diam x 2” Depth
- Twist Drill Capacity – 1”

**SB35 SmartBrute**
- Productive & Reliable
- Automatic Feed
- Cutter Capacity: 1-3/16” Diam x 1-3/4” Depth
- Manual Capacity: 1-3/8” Diam x 2” Depth

**RB32 MiniBrute**
- Lightweight, Reverse Feed Handle
- Cutter Capacity: 1-3/8” Diam x 1-3/16” Depth

**RB32-VSR MiniBrute**
- Reverse Feed, Variable Speed
- Cutter Capacity: 1-3/8” Diam x 1-3/16” Depth
- Can Use With Taps

**RB65E MegaBrute**
- Powerful, Large Capacity
- Cutter Capacity: 4” Diam x 3” Depth
- Twist Drill Capacity – 1-1/4”

**XLUB BruteLube Fluid & Wax**
- Enhance Performance Of All Mag Drills & Cutters

**Carbide Tipped Annular Cutters**

**CT150 Carbide Tipped Cutters**
- Long Tool Life, Drill Tough Alloys
- 1-3/8” Depth Of Cut, Sizes – ½ to 1-9/16”

**CT200 Carbide Tipped Cutters**
- Long Tool Life, Drill Tough Alloys
- 2” Depth Of Cut, Sizes – ⅞ to 4” Diam

**CT300 Carbide Tipped Cutters**
- Long Tool Life, Drill Tough Alloys
- 3” Depth Of Cut, Sizes – ¾ to 4” Diam

**CT400 Carbide Tipped Cutters**
- Long Tool Life, Drill Tough Alloys
- 4” Depth Of Cut, Sizes – ¾ to 2” Diam

**Carbide Tipped Stack Cutters**

**CT150STK Stack Cutters**
- Drill Multiple Plates, Drill Tough Alloys
- 1-3/8” Depth Of Cut, Sizes – 9/16 to 1” Diam

**CT200STK Stack Cutters**
- Drill Multiple Plates, Drill Tough Alloys
- 2” Depth Of Cut, Sizes – 13/16 to 1-1/4” Diam

**High Speed Steel Annular Cutters**

**XL100 HSS Annular Cutters**
- 2X Life Standard HSS Cutters
- 1” Depth Of Cut – Sizes - 7/16 to 4” Diam

**XL200 HSS Annular Cutters**
- 2X Life Standard HSS Cutters
- 2” Depth Of Cut – Sizes - 7/16 to 4” Diam

**XL300 HSS Annular Cutters**
- 2X Life Standard HSS Cutters
- 3” Depth Of Cut – Sizes - ¾ to 4” Diam

**CS100 HSS Annular Cutters**
- Pilot Pin Included
- 1” Depth Of Cut – Sizes - 7/16 to 2” Diam

**CS200 HSS Annular Cutters**
- Pilot Pin Included
- 2” Depth Of Cut – Sizes - 7/16 to 2” Diam

**Magnetic Drill Press Accessories**

**Pilot Pins**

**Pilots CT Annular Cutters**
- For CT150, CT200, CT300, CT400

**Pilots XL Annular Cutters**
- For XL100, XL200, XL300

**Pilots CS Annular Cutters**
- For CS100, CS200

**Corrosion Resistant**

**XLUB BruteLube Fluid & Wax**
- Enhance Performance Of All Mag Drills & Cutters

**Tapping Attachments**
- Available For RB32-VSR

**Additional Arbors**
- Available For RotoBrute

**Saddle for Cutting Pipe**
- Attach Mag Drill To Convex Surfaces, Steel Pipe, & Tubing

**RMX7**
- Magnetic Clean Up Tool
Concrete & Masonry Tools

**SDS Plus Hammer Bits**
- CM95X SDS Plus Hammer Bits
  - Solid Tip Cross Head - Penetrate Rebar
  - Sizes - 5/32x2x4 to 1-1/4x16x18"
- CM95S SDS Plus Hammer Bits
  - Performance Flute, Serrated Tip, Fast Dust Removal
  - Sizes - 5/32x2x4 to 1x16x18"
- CM9 SDS Plus Hammer Bits
  - Sizes - 5/32x2x4 to 1x16x18"
- CM95-STOP SDS Plus Stop Drills
  - Drill Proper Depth For Drop-In Anchors
  - Sizes - 3/8x1-1/16 to 5/8x2-1/16"

**SDS Max Hammer Bits**
- CM96 SDS Max Hammer Bits
  - 4 Cutter Cross-Head, High Performance
  - Sizes - 3/8x8x13 to 2x18x23"

**Spline Shank Hammer Bits**
- CM97 Spline Shank
  - Single Point
  - Sizes - 3/32x5x10 to 2x17x22"
- CM98 Spline Shank
  - Quad Point
  - Sizes - 5/8x5x10 to 2x18x23"

**Rebar Cutters**
- CM795SDS Rebar Cutters
  - SDS Plus Shank
  - Sizes - 3/8 to 1-1/8"
- CM79 Rebar Cutters
  - Straight Shank
  - Sizes - 1/2 to 1-1/2"

**Core Drills**
- CM89HC Hammer Core Bits
  - SDS Max, Spline
  - Sizes - 1-3/4 to 5"
- CM995HC Thin Wall Core Bits
  - SDS Plus Only
  - Sizes - 1-3/16 to 4"
- Hammer Core Bit Shanks
  - SDS Plus, SDS Max, Spline

**Chisels & Floor Scrapers**
- Hammer Chisels
  - Over 50 Styles & Sizes
  - SDS Max, Spline, Breaker, 1/4" Hex, SDS Plus
- Floor Scrapers
  - Complete Kit & Replacements Blades
  - SDS Max, Spline, 3/4" Hex

**Tile Drills & Diamond Cutters**
- PTC3 Mini Diamond Hole Cutters
  - Drill Grade S+ Porcelain Tile, Ceramic & More
  - Sizes – 3/16 to 1-3/8"
- PTC4 Multi Purpose Diamond Hole Saws
  - Use In Rotary Percussion Drill
  - Pilot & Arbor Separate, Sizes – 1/4 to 4"
- PTC Porcelain Tile Spearpoint Drills
  - Drill Tile, Ceramic & More
  - Sizes – 3/16 to 5/16"
- CT505 Glass & Tile Drills
  - Drill Ceramic & Glass
  - Sizes – 1/8 to 5/8"

**Rotary Masonry Drills**
- CM95 Rotary Masonry Drills
  - Use In Rotary Percussion Drill
  - Multiple Lengths, Sizes – 1/8 to 1"
- CSC4 Rotary Masonry Drills
  - Use In Rotary Percussion Drill
  - 4" Short Length, Sizes – 1/8 to 1/2"
- CSC6 Rotary Masonry Drills
  - Use In Rotary Percussion Drill
  - 6" Length, Sizes – 1/4 to 1/2"

**Tapcon Drills**
- CM95T Tapcon® SDS Plus Drills
  - SDS Plus Shank
  - Sizes - 5/32x2x5 to 3/16x4x7
- TCB Tapcon® Masonry Drills
  - Sizes - 5/32x2-1/2 to 3/16x6-1/2"

**Multi Purpose Drills**
- CM-MPB Multi-Purpose Drills
  - Drill Metal, Wood, Tile
  - Sizes – 1/8 to 1/2"

**Wood Cutting Tools**

**Auger Drills**
- 8606 Heavy Duty Auger Drills
  - 6" Length
  - Sizes - 1/2 to 1-1/2"
- 8018 Auger Drills
  - 17" Length
  - Sizes - 3-8 to 1-1/2"
- 8700 / 8800 Auger Extensions
  - 8700 Sizes - 12", 18" & 24" Length
  - 8800 Sizes - 18" & 24" Length

**Wood Boring Drills**
- 8001 Wood Boring Flat Bits
  - 6" Long
  - Sizes - 1/4 to 1-1/2"

**Bellhanger Drills**
- 8048 Bellhanger Drills
  - 12, 18, 24 & 30" Lengths
Sets

Twist Drills
Drill Dispensers
Drill & Tap Indexes
Taps & Dies
Reamers
Step Drills
Carbide Burs
Carbide Tipped Hole Cutters
Countersinks
**CONSTRUCTION**
Commercial, Residential, Infrastructure, Architectural Metal & Glass
Twist Drills, Step Drills, Taps & Dies, XLT Tapper, Reamers, Carbide Tipped Hole Cutters, Circular Saw Blades, Countersinks, Sheet Metal Cutters, Hammer Bits, Rebar Cutters, Hammer Core Drills, Masonry Drills, Chisels & Floor Scrapers, Tile Drills, Magnetic Drill Presses & Annular Cutters, Cutting Fluid & Wax

**INDUSTRIAL**
Manufacturing, CNC Machining, Milling, Aerospace, Automotive, Water Utilities, Energy, Oil & Gas, Mining
Twist Drills, Taps & Dies, XLT Tapper, Reamers, Carbide Tipped Hole Cutters, Circular Saw Blades, Countersinks, End Mills, Carbide Burs, Fiberglass Routers, Turning Tools, Magnetic Drill Presses & Annular Cutters, Cutting Fluid & Wax

**STEEL FABRICATION**
Structural Steel (Beam Fabrication), Truck & Trailer Frame Fabrication, Bridge Fabrication, Railroad Fabrication, Fencing & Railing Fabrication, Sign Fabrication, Steel Window & Door Fabrication, Ship Fabrication
Magnetic Drill Presses & Annular Cutters, Twist Drills, Step Drills, Taps & Dies, XLT Tapper, Reamers, Carbide Tipped Hole Cutters, Circular Saw Blades, Countersinks, Sheet Metal Cutters, Carbide Burs, Cutting Fluid & Wax

**MAINTENANCE, REPAIR & OPERATIONS**
Municipalities, Automotive, Aerospace, Agriculture, Elevator, Power Plants, Food Processing, Hospitality, Entertainment, Technology, Universities, Water Utilities, Energy, Oil & Gas
Twist Drills, Step Drills, Taps & Dies, XLT Tapper, Reamers, Carbide Tipped Hole Cutters, Circular Saw Blades, Countersinks, Sheet Metal Cutters, Hammer Bits, Hammer Core Drills, Rebar Cutters, Masonry Drills, Chisels & Floor Scrapers, Tile Drills, Magnetic Drill Presses & Annular Cutters, Cutting Fluid & Wax

**MECHANICAL, ELECTRICAL & PLUMBING**
HVAC, Electrical Systems, Plumbing
Twist Drills, Step Drills, Taps & Dies, XLT Tapper, Reamers, Carbide Tipped Hole Cutters, Circular Saw Blades, Countersinks, Sheet Metal Cutters, Hammer Bits, Hammer Core Drills, Masonry Drills, Tile Drills, Magnetic Drill Presses & Annular Cutters, Cutting Fluid & Wax
Twist Drill Technical Guide

Anatomy & Nomenclature

Point Geometry

118° Point
- General Purpose Use
- Not Self-Centering
- Ideal For Use In Stationary Drill Press
- For Drilling Softer Materials Such As Wood, Aluminum And Low To Medium Steel Alloys

135° Split Point
- Self-Centering
- Ideal For Use In Handheld Power Drill And Drill Press
- For Drilling Harder Steel Alloys
- Requires Less Operator Force Than 118° Point Drills

BruteLube Cutting Fluid & Wax

BruteLube is highly recommended for most metal drilling applications. By enhancing tool heat resistance, operators will experience smoother cuts, longer tool life, and increased productivity.

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<td>XLUB16 (16oz)</td>
<td>XLUB-WAX-16 (16oz)</td>
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<td>XLUB128 (Gal)</td>
<td>XLUB-STICK-16 (16oz)</td>
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*BruteLube is environmentally safe. MSDS available upon request.
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Understanding Taps

Anatomy & Nomenclature

The **SHANK** fits into the tap holder. The **SQUARE** at the end of the tap, drives and rotates the tap. **FLATS** are the sides of the square at the end of the shank. The **NECK** enables the flow of lubricant and deeper tapping. The **FLUTES** are grooves that provide a path for the removal of chips and the flow of cutting fluid. The **CHAMFER** aligns the tap and provides easy-starting. The **POINT** controls the ejection of chips.

Chamfer Styles

The chamfer is ground on the front of the tap to help it begin threading and assist with alignment. There are three types of chamfer as shown on the hand taps below.

**TAPER**
- 7 TO 10 THREADS OF CHAMFER
- Nickname: “STARTER Taps” - they are easy to align and start threading

**PLUG**
- 3 TO 5 THREADS OF CHAMFER
- Most popular - often used to start and finish threading in a single pass

**BOTTOM**
- 1 TO 1.5 THREADS OF CHAMFER
- Nickname: “FINISHING Taps” - can thread to the bottom of a blind hole (packs the chips at the bottom)

A New Way To Tap

Traditionally, a handheld tap wrench is recommended to properly tap a hole. Unfortunately, this method is time consuming and not cost effective for large projects.

The XLT Tapper solves this problem. Engineered to precisely cut threads quickly and accurately, it eliminates frustrations associated with tapping a large number of holes.

Industries that will benefit from using the XLT Tapper are steel fabrication, commercial construction, elevator maintenance, architectural metal and glass, and more.
### Tap Drill Sizes

<table>
<thead>
<tr>
<th>Tap Size</th>
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<th>Prob % of Thread</th>
<th>Tap Size</th>
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### Pipe Tap Drill Sizes

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### Reading Tap Sizes

**IMPERIAL FRACTIONAL TAPS**

Fractional and machine screw taps are measured in terms of "Threads Per Inch" (TPI)

**METRIC TAPS**

Metric taps sizes are designated by the pitch (distance between threads)

---

**308-1/4-20-P**

- Champion Series Name: 308
- Nominal Size (inch): 1/4
- # Threads Per Inch: 20
- Plug Style: Chamfer

**308M-8x1.25-P**

- Champion Series Name: 308M
- Nominal Size (mm): 8
- Pitch Between Threads: 1.25
- Plug Style: Chamfer

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**Pipe Tap Drill Sizes**

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1971 was an important year in U.S. history. Disney World opened, Apollo 14 landed on the moon, and the Brute Drill was born. 50 years later, the Champion team would like to honor the voice of our past visionary, family member, and friend, Leon Frey.

Leon understood the industrial market and the science behind cutting tools. He pushed to innovate the Brute Drill - a premium high speed steel TWIST DRILL that was as strong as cobalt when drilling tough stainless steel, but at a more accessible price point. As the industry shifted, on-site construction and maintenance workers needed a drill that would not snap in a handheld drilling application. Therefore, the Brute Drill was designed to be flexible.

The Brute Drill is not a “bit” or a “power tool accessory.” In Leon’s words, “Brute Drills are as sophisticated as the machines that run them.” High quality raw materials, unique and specialized web geometry, point geometry, surface treatment, and flute design all play a vital role in optimizing productivity for fast, precise, frustration free drilling. Today the Champion Team still stands by these words. So please...don’t call me a drill bit.