



**ABABA BOLT**  
*Commercial Hardware*  
AN INDUSTRIAL THREADED PRODUCTS INC. COMPANY



**CUTTING TOOLS**

# Metal Cutting - Drills

\* 135° Self-Centering Split Point  
\*\* 118° Self-Centering Split Point



## Twist Drills

- \* **BRUTE PLATINUM** **XL5 Heavy Duty Jobber\***  
Sizes - 1/16 to 1/2", Letters & Numbers  
Drill Stainless Steel & Tough Alloys 
- \* **BRUTE PLATINUM** **XL28 Heavy Duty Mechanics Length\***  
3 Flatted Reduced Shank - Sizes - 1/16 to 1/2"  
Drill Stainless Steel and Tough Alloys 
- \* **CHAMPION** **705C Cobalt Jobber\***  
Sizes - 1/64 to 1/2", Letters & Numbers  
Drill Stainless Steel In Drill Press 
- CHAMPION** **700T TIN Coated Jobber\***  
Sizes - 1/16 to 1/2", Numbers  
For High Production CNC Drilling 
- CHAMPION** **XG0 BlackGold® Jobber\***  
Sizes - 1/16 to 1/2", Letters & Numbers  
Drill Medium to Hard Alloys 
- CHAMPION** **705SP Split Point Jobber\***  
Sizes - 3/64 to 1/2", Letters & Numbers  
Drill Low to Medium Alloys 
- \* **CHAMPION** **705 General Purpose Jobber**  
Sizes - 1/64 to 1/16", Letters & Numbers  
Drill Low to Medium Alloys 
- CHAMPION** **405 Bright Finish Jobber**  
Sizes - 1/64 to 1/2", Letters & Numbers  
Drill Aluminum & Non-Ferrous Metals 
- CHAMPION** **USHD Split Point Jobber\***  
Sizes - 1/16 to 1/2", Letters & Numbers  
Drill Low to Medium Alloys 
- CHAMPION** **US5 General Purpose Jobber**  
Sizes - 1/16 to 1/2", Letters & Numbers  
Drill Low to Medium Alloys 

## Hex Shank Drills

- \* **CHAMPION** **HEX28 Hex Shank Drills\***  
Sizes - 1/16 to 1/2", Drill Low to Medium Alloys  
1/4" Hex Shank For Use In Impact Driver 


## Metric Drills

- \* **BRUTE PLATINUM** **XL8 Metric Jobber-Heavy Duty\***  
Sizes - 1.0mm to 13.00mm  
Drill Stainless Steel & Tough Alloys 
- \* **CHAMPION** **708 Metric Jobber-General Purpose**  
Sizes - 0.25mm to 17.50mm  
Drill Low to Medium Alloys 





## Silver & Deming 1/2" Shank Drills

- \* **BRUTE PLATINUM** **XL12 Heavy Duty S&D\*\***  
3 Flatted Shank- Sizes - 33/64 to 1-1/2"  
Drill Stainless Steel & Tough Alloys 
- CHAMPION** **712G0 Cobalt S&D\*\***  
Sizes - 17/32 to 1-1/2"  
Drill Stainless Steel in Drill Press 
- CHAMPION** **XG12 BlackGold® S&D\*\***  
3 Flatted Shank-Sizes- 33/64 to 1-1/2"  
Drill Medium to Hard Alloys 
- CHAMPION** **712 General Purpose S&D**  
Sizes - 33/64 to 1-1/2"  
Drill Low to Medium Alloys 
- CHAMPION** **US12 General Purpose S&D**  
Sizes - 33/64 to 1-1/2"  
Drill Low to Medium Alloys 

## Extra Long Drills

- CHAMPION** **1800 18" Longboy Drills**  
Sizes - 3/16 to 1"  
13" Usable Flute Length 
- \* **CHAMPION** **1200 12" Longboy Drills**  
Sizes - 1/8 to 3/4"  
9" Usable Flute Length 

## Extra Long Drills cont.

- CHAMPION** **1212 12" Longboy 1/2" Shank**  
Sizes - 17/32 to 1"  
9" Usable Flute Length 
- CHAMPION** **7012 12" Aircraft Extension\***  
Sizes - 3/64 to 1/2", Numbers  
For Precision Drilling 
- CHAMPION** **7006 6" Aircraft Extension\***  
Sizes - 3/64 to 3/8", Numbers & Letters  
For Precision Drilling 
- \* **CHAMPION** **CS12X 12" Aircraft Extension\***  
Sizes - 1/8 to 1/2", Numbers  
For Construction & Maintenance Drilling 
- CHAMPION** **CS6X 6" Aircraft Extension\***  
Sizes - 1/16 to 1/2", Numbers  
For Construction & Maintenance Drilling 




## Screw Machine "Stub" Drills

- CHAMPION** **1705C Cobalt Screw Machine\***  
Sizes - 1/8 to 1/2", Numbers & Letters  
Drill Stainless Steel & Tough Alloys 
- \* **CHAMPION** **1705 Screw Machine\***  
Sizes - 3/64 to 1/2", Numbers & Letters  
Drill Low to Medium Alloys 

## Reduced Shank Drills

- BRUTE PLATINUM** **XM28 Heavy Duty Mechanics Length\***  
3 Flatted Shank - Sizes - 25/64 to 1/2"  
Drill Stainless Steel & Tough Alloys 
- BRUTE PLATINUM** **XL38 Heavy Duty 3/8" Shank\***  
Sizes - 25/64 to 1/2"  
Drill Medium To Hard Alloys 
- CHAMPION** **XG38 BlackGold® 3/8" Shank\***  
Sizes - 25/64 to 1/2"  
Drill Medium To Hard Alloys 
- CHAMPION** **738 3/8" Shank**  
Sizes - 25/64 to 11/16"  
Drill Low to Medium Alloys 
- CHAMPION** **CS14 1/4" Shank**  
Sizes - 9/32 to 1/2"  
Drill Sheet Metal, Mild Steel, Aluminum 



## Taper Shank / Taper Length Drills

- CHAMPION** **702 Taper Shank Drills**  
Sizes - 13/64 to 3-1/4" 
- CHAMPION** **704 Taper Length Drills**  
Sizes - 3/64 to 1-3/4" 
- CHAMPION** **S1, S2 Taper Sleeves, Sockets and D1 Drift Keys** 

## Left Hand Twist Drills

- BRUTE PLATINUM** **XL5LH Heavy Duty Left Hand Drills\***  
Sizes - 5/64, 7/64, 5/32, 1/4 & 19/64" 
- \* **CHAMPION** **705LH Left Hand Drills**  
Sizes - 1/32 to 1/2" 

## Screw Extractors

- CHAMPION** **X1 Spiral Flute Screw Extractors**  
Sizes - 1 to 12 (sets available) 
- \* **CHAMPION** **X2 Straight Flute Screw Extractors**  
Sizes - 1 to 7 (sets available) 

\* Stocked at ABABA BOLT

# Metal Cutting - Drills, Saws, Cutters & Reamers

## Step Drills

\* **CHAMPION** **MSD-HEX Hex Shank Step Drills\***  
 1/4" Hex Shank For Use In Impact Driver  
 2 Flute - TIN Coated-Split Point  
 4 Sizes Available



\* **CHAMPION** **MSD Step Drills\***  
 Straight Shank-2 Flute-Split Point  
 13 Sizes Available



## Quick Change Drivers

**CHAMPION** **QCD Quick Change Driver**  
 For 1/4" and 3/8" hex shank tools



**CHAMPION** **QCD-EXT Extensions**  
 For 1/4" hex shank tools  
 6, 12 & 24" Lengths



## Carbide Drills

**CHAMPION** **705CT Carbide Tipped Jobber**  
 Sizes - 1/8 to 1/2"  
 Drill Abrasive & Non-Ferrous Materials



**CHAMPION** **105 Solid Carbide Drills**  
 Sizes - 1/64 to 1/2"  
 Drill Abrasive & Non-Ferrous Materials



**CHAMPION** **CT505 Glass & Tile Spear Point**  
 Sizes - 1/8 to 5/8"  
 Drill Glass & Ceramic Tile



**CHAMPION** **CT605 Carbide Tipped Die Drill**  
 Sizes - 3/16 to 3/4"  
 Precision Drilling: Hardened Steel & Armor Plate



**CHAMPION** **CT705 Carbide Tipped Locksmith**  
 Sizes - 1/8 to 1/2"  
 Non-Precision Drilling: Hardened Steel & Safes



## Other Drills & Accessories

\* **CHAMPION** **1805 Double End Sheeter Drills\***  
 Sizes - 7/64 to 1/4", #30  
 Drill Sheet Metal



**CHAMPION** **2005 Corrugated Construction Drills\***  
 Sizes - 1x2-1/4 to 1x6  
 Drill Corrugated Metal



**CHAMPION** **705-Pilot Drill For Hole Saws**  
 1/4" Diameter, 4" OAL, 118° Split Point  
 Triple Slab Shank- Fits Most Hole Saw Arbors



**CHAMPION** **Gauge Plates**  
 Fractional, Metric, Letters & Numbers



## Circular Saw Blades

\* **BAUTE PLATINUM** **RZR Circular Saw-Steel Cutting**  
 Heavy Duty Cermet Teeth  
 Sizes - 5-3/8 to 14"



\* **BAUTE PLATINUM** **RZR Circular Saw-Stainless Steel Cutting**  
 Heavy Duty Cermet Teeth  
 Sizes - 5-3/8 to 14"



\* **BAUTE PLATINUM** **RZR Circular Saw-Alum/Non-Ferrous Cutting**  
 Heavy Duty Carbide Teeth  
 Sizes - 6-1/2 to 14"



## Carbide Tipped Hole Cutters


**CHAMPION** **CT3 Carbide Tipped Hole Cutters**  
 1/8" Depth Of Cut  
 Sizes - 5/8 to 1-3/8"  
 1/4" Hex Shank- For Use In Impact Driver



**CHAMPION** **CT5 Carbide Tipped Hole Cutters**  
 3/16" Depth Of Cut  
 Sizes - 9/16 to 5"  
 Ideal For Electrical Work, Construction



**CHAMPION** **CT7 Carbide Tipped Hole Cutters**  
 1" Depth Of Cut  
 Sizes - 9/16 to 4-1/2" - Heavy Duty  
 Ideal For Construction, Steel Fabrication, MRO



**CHAMPION** **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

**CHAMPION** **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

**BAUTE PLATINUM** **XL86 Heavy Duty Hex Shank Bridge Reamers**  
 Sizes - 11/16 to 1-5/8"



**BAUTE PLATINUM** **XL86M Heavy Duty Magnetic Hex Shank Bridge Reamers**  
 Sizes - 11/16 to 1-3/16"



**CHAMPION** **980 Taper Shank Bridge Reamers**  
 Sizes - 7/16 to 1-5/16" (Straight Flute)



**CHAMPION** **982 Taper Shank Bridge Reamers**  
 Sizes - 7/16 to 1-5/8" (Spiral Flute)



## Car Reamers

**BAUTE PLATINUM** **SA80 Heavy Duty Car Reamers**  
 Sizes - 5/16 to 1-1/2"  
 Flatted Straight Shank



**CHAMPION** **HX82 Hex Shank Car Reamers**  
 Sizes - 11/16 to 1-3/16" (Spiral Flute)



**CHAMPION** **HX82M Hex Shank Magnetic Car Reamers**  
 Sizes - 11/16 to 1-3/16" (Spiral Flute)



**CHAMPION** **HX80 Hex Shank Car Reamers**  
 Sizes - 11/16 to 1-3/16" (Straight Flute)



## Step Reamers

**BAUTE PLATINUM** **XSR Heavy Duty Step Reamers**  
 Sizes - 5/16-9/16, 9/16-13/16, 13/16-1-1/16"  
 5 Drill Sizes Per Reamer



## Taper Pin Reamers

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



\* Stocked at ABABA BOLT

# Metal Cutting - Threading

\* Specify Taper, Plug, Bottom, or Set  
\*\* Specify Plug or Bottom

## Power Tapper



### XLT 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"



## Pipe Taps (HSS)



### 324/324H Taper Pipe Taps

Regular / High Hook, NPT  
Sizes - 1/16-27 to 2-11-1/2



### 324I 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



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## High Speed Steel Taps

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### XL22 Heavy Duty Spiral Point Taps

Sizes - 4-40 to 3/4-16



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### 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



### 3088 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 56x5.5



## 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 - 3x.6 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



## 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



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### DT22/DT22M Combined Drill & Tap

Square Shank  
Sizes - Fractions & Metric



### DT22T Combined Drill & Tap

Titanium Nitride Coated - Square Shank  
Sizes - Fractions & Metric



## Hexagon Rethreading Dies



### 330 Dies

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



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### 3308 8 Thread Special Dies

8 Thread - Sizes - 1-1/8 to 4



### CS30 Dies

Sizes - 4-40 to 1-14



## Metric Hexagon Rethreading Dies



### 330M Dies

Sizes - 3x.5 to 27x3



### CS30M Dies

Carbon Steel Sizes - 3x.5 to 18x2.5



## Left Hand Hexagon Rethreading 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 Converter For Round Dies

Sizes - 13/16 to 2"







### 3291/3292 Round/Hex Die Stocks

Sizes - 13/16 to 2"



# Metal Cutting - Countersinks, Burs, Tool Bits

## Multi Flute Countersinks

- \* **BRUTE PLATINUM** **XL801 Single Flute Countersinks**  
 Sizes - 1/4 to 2" - 60 / 82 / 90 / 100 & 120°  
 Countersink Stainless Steel & Tough Alloys  
 Use In Portable Drill, Drill Press, or Bridgeport Machine 
- CHAMPION** **800 Four Flute Countersinks**  
 Sizes - 1/2 to 1" - 60 / 82 & 90°  
 Countersink/Chamfer Many Steels & Alloys  
 Use In Screw Machines & Turret Lathes 
- \* **CHAMPION** **799 Three Flute Countersinks**  
 Sizes - 1/4 to 1" - 60 / 82 / 90 / 100 & 120°  
 Countersink/Chamfer Many Steels & Alloys  
 Use In Portable Drills & Drill Presses 
- CHAMPION** **799L Large Four Flute Countersinks**  
 Sizes - 1-1/4 to 2" - 60 / 82 & 90°  
 Countersink/Chamfer Many Steels & Alloys  
 Use In Portable Drills & Drill Presses 

## Zero Flute 'Weldon' Countersinks

- \* **CHAMPION** **CSK Zero Flute Countersinks**  
 82° Piloted or Pilotless  
 De-Bur Metal, Plastic, Wood, Aluminum  
 Use In Portable Drills & Drill Presses 
- CHAMPION** **CSK-SH Hex Shank Zero Flute Countersinks**  
 82° Pilotless, 1/4" Hex Shank  
 De-Bur Metal, Plastic, Wood, Aluminum  
 Use In Impact Drivers 
- CHAMPION** **CSKA/DBK Zero Flute Countersinks**  
 100°/90°  
 De-Bur Metal, Plastic, Wood, Aluminum  
 Use In Portable Drills & Drill Presses 

## Combined Drill & Countersinks

- CHAMPION** **798 Combined Drill & Countersinks**  
 HSS / Plain Style / 60° Included Angle  
 Commonly Called "Center Drills"  
 Drill Center Holes In Material Turned On Lathes 
- CHAMPION** **198 Combined Drill & Countersinks**  
 Solid Carbide/Plain Style/60° Included Angle  
 Commonly Called "Center Drills"  
 Drill Center Holes In Material Turned On Lathes 

\* Stocked at ABABA BOLT

## Carbide Burs - Ferrous Metals

- CHAMPION** **Carbide Burs - Double Cut**  
 Titanium Nitride Coated  
 Shapes - SA to SN / Sizes - 1/8 to 1" 
- CHAMPION** **Carbide Burs - Double Cut**  
 Uncoated, Standard OAL & 6" Length  
 Shapes - SA to SN / Sizes 1/8 to 3/4" 
- CHAMPION** **Radius Burs - Double Cut**  
 SB5RA / SC5RA / SF5RA  
 Sizes - 1/2" 
- CHAMPION** **Carbide Burs - Miniature**  
 Double Cut, 1-1/2" OAL  
 Shapes - SA to SN / Sizes 1/16 to 1/4" 

## Carbide Burs - Non Ferrous Metals

- CHAMPION** **Carbide Burs - Non Ferrous**  
 Single Flute  
 Shapes - SA to SL / Sizes - 1/4 to 3/4" 

## Fiberglass Routers

- CHAMPION** **Carbide Fiberglass Routers**  
 Sizes - FGR-1 to FGR-9 

## Tool Bits & Turning Tools

- CHAMPION** **515 HSS Square Tool Bits**  
 Sizes - 1/8 to 1-1/4" 
- CHAMPION** **516 Cobalt Square Tool Bits**  
 Sizes - 1/8 to 1-1/4" 
- CHAMPION** **Brazed Carbide Turning Tools**  
 Styles - AL/AR/BL/BR/C/D/E 

# Metal Cutting - End Mills

\* Aluminum Chromium Nitride  
 \*\* Titanium Nitride

## Cobalt & Coated End Mills

- BRUTE PLATINUM** **XLVC/XLVR AlCrN Coated End Mills\***  
 Four Flute / Single End / Right Hand Helix  
 High Performance, Multi-Purpose  
 Sizes - 1/4 to 1" 
- BRUTE PLATINUM** **XL600 Cobalt TiN Coated End Mills\*\***  
 2 Flute / Single End / Right Hand Helix  
 Milling Of Tough Alloys  
 Sizes - 1/8 to 1-1/4" 
- BRUTE PLATINUM** **XL606 TiN Coated Cobalt End Mills\*\***  
 Multi Flute / Single End / Right Hand Helix  
 Milling Of Tough Alloys  
 Sizes - 1/8 to 1-1/2" 
- CHAMPION** **600T TiN Coated HSS End Mills\*\***  
 2 Flute / Single End / Right Hand Helix  
 Sizes - 1/8 to 2" 
- CHAMPION** **601T TiN Coated HSS End Mills\*\***  
 Multi Flute / Single End / Right Hand Helix  
 Sizes - 1/8 to 2" 
- CHAMPION** **602CO Cobalt End Mills**  
 2 Flute / Double End / Right Hand Helix  
 Milling Stainless Steels & Tough Materials  
 Sizes - 1/8 to 1" 
- CHAMPION** **607CO Cobalt End Mills**  
 4 Flute / Double End / Right Hand Helix  
 Milling Stainless Steels & Tough Materials  
 Sizes - 1/8 to 1" 
- CHAMPION** **609 Cobalt Roughing End Mills**  
 Multi Flute / Single End / Right Hand Helix  
 Sizes - 1/2 to 2" 








## Carbide End Mills

- CHAMPION** **106 Solid Carbide End Mills**  
 2 Flute / Single End / Right Hand Helix  
 Sizes - 1/32 to 1" 
- CHAMPION** **107 Solid Carbide End Mills**  
 2 Flute / Double End / Right Hand Helix  
 Sizes - 1/8 to 1/2" 

## Carbide End Mills cont.

- CHAMPION** **166 Solid Carbide End Mills**  
 4 Flute / Single End / Right Hand Helix  
 1/16 to 1" 
- CHAMPION** **167 Solid Carbide End Mills**  
 4 Flute / Double End / Right Hand Helix  
 1/8 to 1/2" 

## High Speed Steel End Mills

- CHAMPION** **600 HSS End Mills**  
 2 Flute / Single End / Right Hand Helix  
 General Purpose Milling  
 Sizes - 1/8 to 2" 
- CHAMPION** **601 HSS End Mills**  
 Multi Flute / Single End / Right Hand Helix  
 General Purpose Milling  
 Sizes - 1/8 to 2" 
- CHAMPION** **602 HSS End Mills**  
 2 Flute / Double End / Right Hand Helix  
 General Purpose Milling  
 Sizes - 1/8 to 1" 
- CHAMPION** **603 HSS End Mills**  
 4 Flute / Double End / Right Hand Helix  
 Economic Profiling & Milling Of Slots  
 Sizes - 1/8 to 1" 
- CHAMPION** **604 HSS Ball End Mills**  
 2 Flute / Single End / Right Hand Helix  
 General Purpose Radius Milling  
 Sizes - 1/8 to 1-1/2" 
- CHAMPION** **606 HSS End Mills**  
 4 Flute / Single End / Right Hand Helix  
 Plunge Cutting & Fine Finish Required  
 Sizes - 1/8 to 1-1/2" 
- CHAMPION** **607 HSS End Mills**  
 4 Flute / Double End / Right Hand Helix  
 Plunge Cutting & Fine Finish Required  
 Sizes - 1/8 to 1" 

\* Stocked at ABABA BOLT

# Magnetic Drill Presses & Annular Cutters

## Magnetic Drill Presses & Cutting Lubricants

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



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



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



**RB30 LittleBrute**  
**Low Profile & Lightweight**  
 Cutter Capacity:  
 1-3/8" Diam x 1-3/16" 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 - 1/2 to 1-9/16"



\* **CT200 Carbide Tipped Cutters**  
 Long Tool Life, Drill Tough Alloys  
 2" Depth Of Cut, Sizes - 1/2 to 4" Diam



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



**CT400 Carbide Tipped Cutters**  
 Long Tool Life, Drill Tough Alloys  
 4" Depth Of Cut, Sizes - 3/4 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



## 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



## 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 - 3/4 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

**Additional Arbors Available**  
 For RotoBrute  
 Magnetic Drill Presses



**Tapping Attachments**  
 Available For RB32-VSR



**Additional Drill Chucks**  
 For RotoBrute  
 Magnetic Drill Presses



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



**RMX7**  
 Magnetic Clean Up Tool



\* Stocked at ABABA BOLT

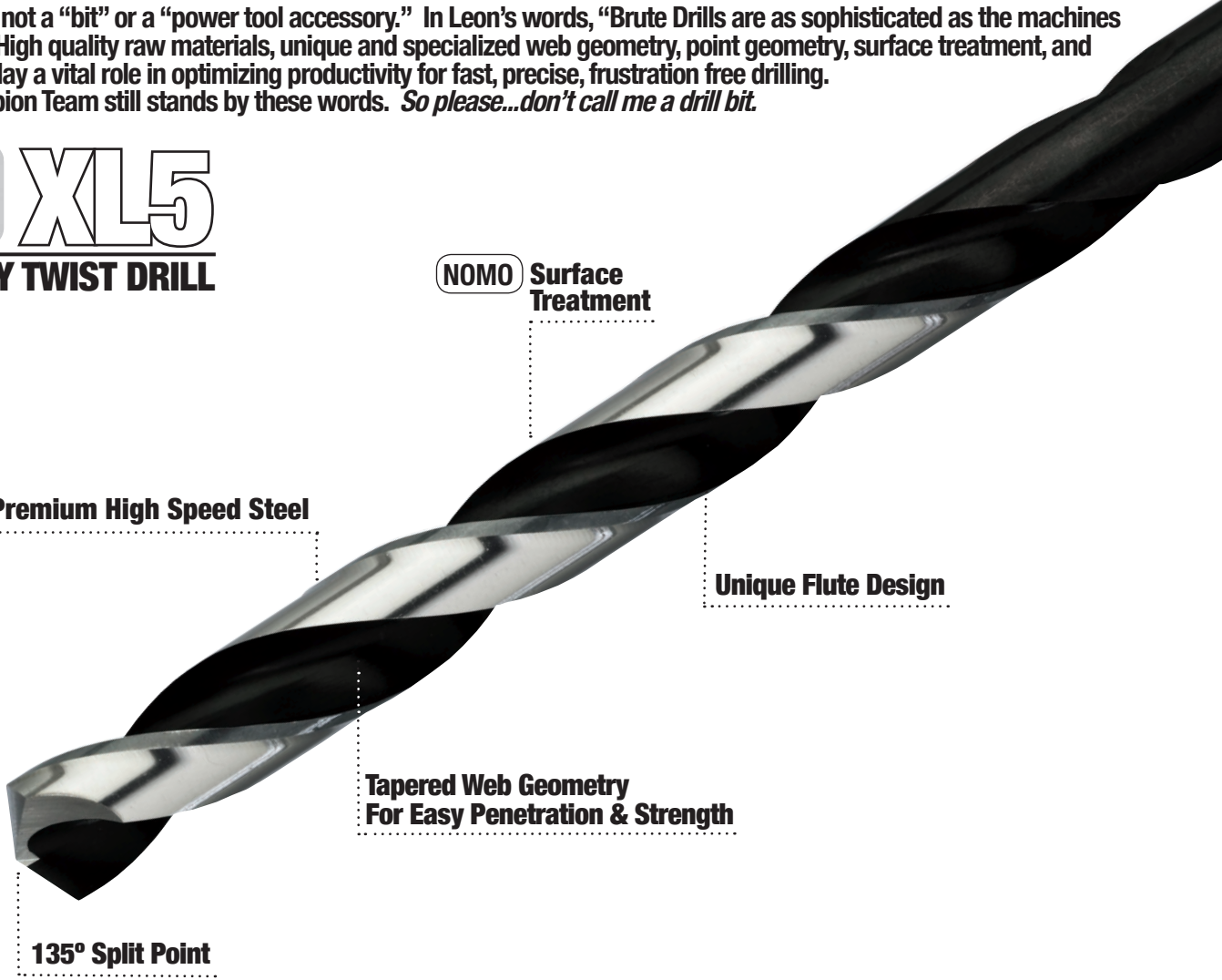


# Don't Call Me A Drill Bit

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.

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NOMO Surface Treatment

Premium High Speed Steel

Unique Flute Design

Tapered Web Geometry For Easy Penetration & Strength

135° Split Point

\*Brute Platinum has expanded to include many categories of high performance tools

# Sets



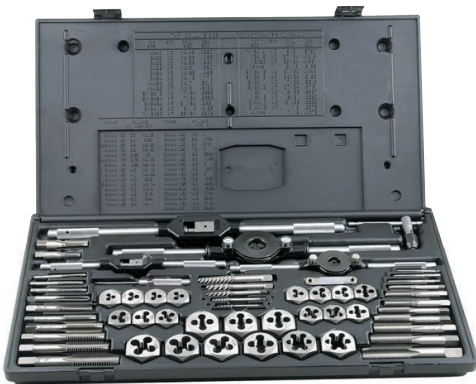
**Twist Drills**



**Drill Dispensers**



**Drill & Tap Indexes**



**Taps & Dies**



**Reamers**



**Step Drills**



**Carbide Burs**



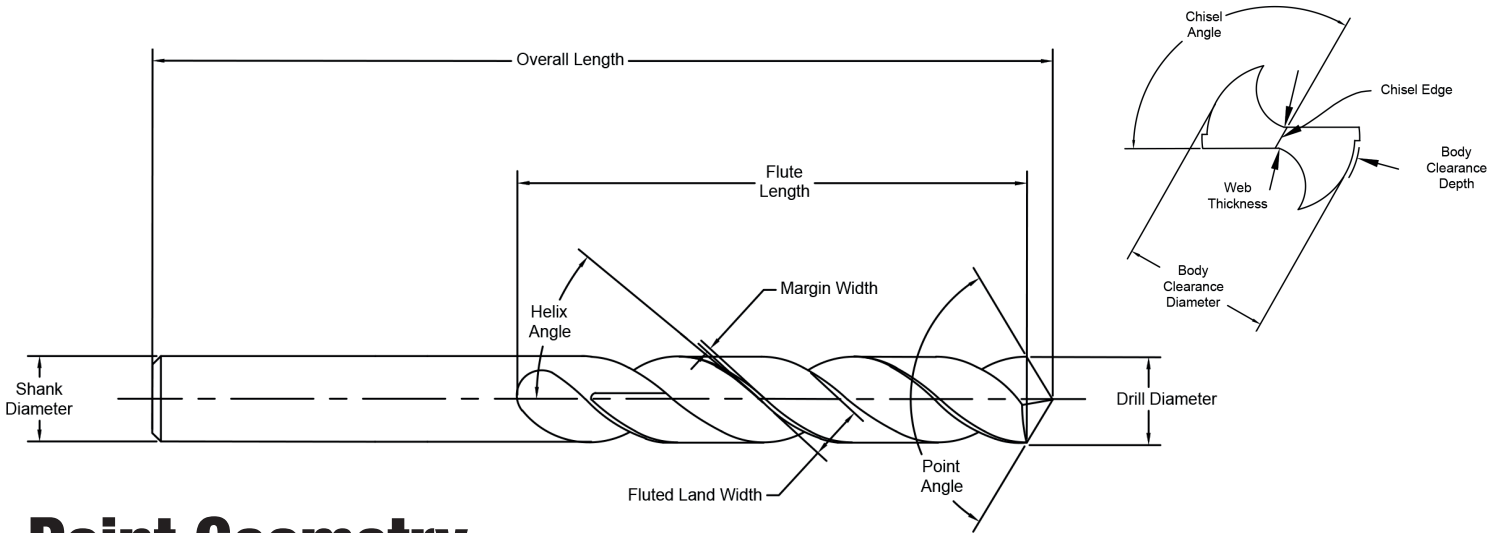
**Carbide Tipped Hole Cutters**



**Countersinks**

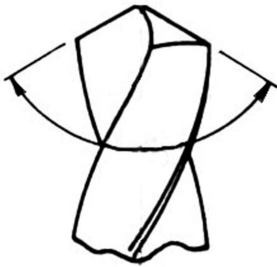


## Anatomy & Nomenclature



## 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.

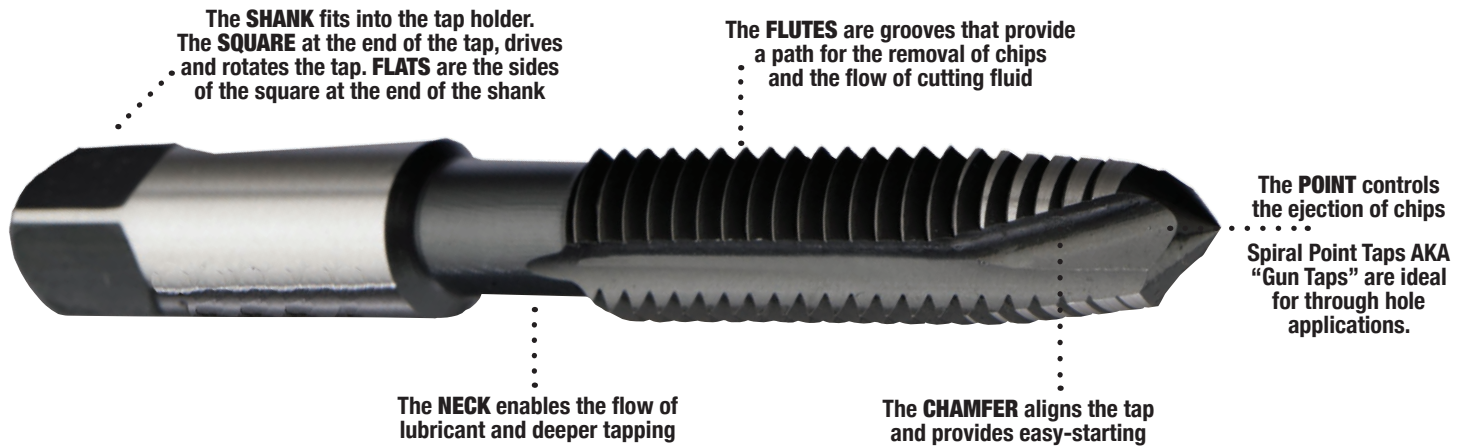
Cutting Fluid	Cutting Wax
XLUB4 (4oz)	XLUB-WAX-2 (2oz)
XLUB16 (16oz)	XLUB-WAX-16 (16oz)
XLUB128 (Gal)	XLUB-STICK-16 (16oz)

\*BruteLube is environmentally safe. MSDS available upon request.

# Drill Size Decimal Equivalency Chart

Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.
80	.0135	37	.1040	C	.2420	17/32"	.5312
79	.0145	36	.1065	D	.2460	13.50mm	.5315
1/64"	.0156	7/64"	.1094	1/4" E	.2500	35/64"	.5469
78	.0160	35	.1100	6.50mm	.2559	14.00mm	.5512
77	.0180	34	.1110	F	.2570	9/16"	.5625
0.50mm	.0197	33	.1130	G	.2610	14.50mm	.5709
76	.0200	32	.1160	17/64"	.2656	37/64"	.5781
75	.0210	3.00mm	.1181	H	.2660	15.00mm	.5906
74	.0225	31	.1200	I	.2720	19/32"	.5938
73	.2420	1/8"	.1250	7.00mm	.2756	39/64"	.6094
72	.0250	30	.1285	J	.2770	15.50mm	.6102
71	.0260	29	.1360	K	.2810	5/8"	.6250
70	.0280	3.50mm	.1378	9/32"	.2812	16.00mm	.6299
69	.0292	28	.1405	L	.2900	41/64"	.6406
68	.0310	9/64"	.1406	M	.2950	16.50mm	.6496
1/32"	.0312	27	.1440	7.50mm	.2953	21/32"	.6562
67	.0320	26	.1470	19/64"	.2969	17.00mm	.6693
66	.0330	25	.1495	N	.3020	43/64"	.6719
65	.0350	24	.1520	5/16"	.3125	11/16"	.6875
64	.0360	23	.1540	8.0mm	.3150	17.50mm	.6890
63	.0370	5/32"	.1562	O	.3160	45/64"	.7031
62	.0380	22	.1570	P	.3230	18.00mm	.7087
61	.0390	4.00mm	.1575	21/64"	.3281	23/32"	.7188
1.00mm	.0394	21	.1590	Q	.3320	18.50mm	.7283
60	.0400	20	.1610	8.50mm	.3346	47/64"	.7344
59	.0410	19	.1660	R	.3390	19.00mm	.7480
58	.0420	18	.1695	11/32"	.3438	3/4"	.7500
57	.0430	11/64"	.1719	S	.3480	49/64"	.7656
56	.0465	17	.1730	9.0mm	.3543	19.50mm	.7677
3/64"	.0469	16	.1770	T	.3580	25/32"	.7812
55	.0520	4.50mm	.1772	23/64"	.3594	20.00mm	.7874
54	.0550	15	.1800	U	.3680	51/64"	.7969
1.50mm	.0591	14	.1820	9.50mm	.3740	20.50mm	.8071
53	.0595	13	.1850	3/8"	.3750	13/16"	.8125
1/16"	.0625	3/16"	.1875	V	.3770	21.00mm	.8268
52	.0635	12	.1890	W	.3860	53/64"	.8281
1.70mm	.0669	11	.1910	25/64"	.3906	27/32"	.8438
51	.0670	10	.1935	10.00mm	.3937	21.50mm	.8465
50	.0700	9	.1960	X	.3970	55/64"	.8594
49	.0730	5.00mm	.1969	Y	.4040	22.00mm	.8661
48	.0760	8	.1990	13/32"	.4062	7/8"	.8750
5/64"	.0781	7	.2010	Z	.4130	22.50mm	.8858
47	.0785	13/64"	.2031	10.50mm	.4134	57/64"	.8906
2.00mm	.0787	6	.2040	27/64"	.4219	23.00mm	.9055
46	.0810	5	.2055	11.00mm	.4331	29/32"	.9062
45	.0820	4	.2090	7/16"	.4375	59/64"	.9219
44	.0860	3	.2130	11.50mm	.4528	23.50mm	.9252
43	.0890	5.50mm	.2165	29/64"	.4531	15/16"	.9375
42	.0935	7/32"	.2188	15/32"	.4688	24.00mm	.9449
3/32"	.0938	2	.2210	12.00mm	.4724	61/64"	.9531
41	.0960	1	.2280	31/64"	.4844	24.50mm	.9646
40	.0980	A	.2340	12.50mm	.4921	31/32"	.9688
2.50mm	.0984	15/64"	.2344	1/2"	.5000	25.00mm	.9843
39	.0995	6.00mm	.2362	13.00mm	.5118	63/64"	.9844
38	.1015	B	.2380	33/64"	.5156	1"	1.000

## Anatomy & Nomenclature



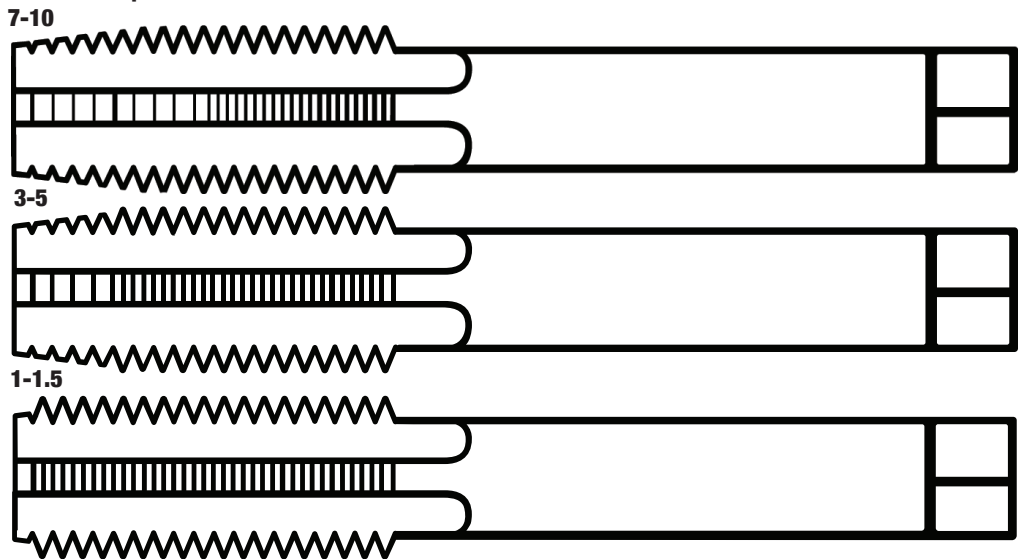
## Chamfer Styles

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.

# Drill & Tap Chart

Tap Drill Sizes					
Tap Size	Tap Drill Size	Prob % of Thread	Tap Size	Tap Drill Size	Prob % of Thread
0-80	56 3/64"	74 71	3/8-24	Q 8.5mm	75 70
1-64	54 53	81 59	7/16-14	U	75
1-72	1.50mm 53	68 67	7/16-20	W	75
2-56	51 50	74 62	1/2-13	25/64"	68
2-64	49 48	56 78	1/2-20	27/64"	75
3-48	5/64"	70	9/16-12	11.0mm	64
3-56	46 45	69 56 5	1/2-20	11.4mm	74
4-40	44 43	74 65	9/16-12	29/64"	67
4-48	2.35mm 42	72 61	9/16-18	15/32"	84
5-40	39 38	71 65	5/8-11	31/64"	69
5-44	37 36	63 72	5/8-11	33/64"	60
6-32	7/64"	64	5/8-18	17/32"	76
6-40	33 32	69 60	5/8-18	35/64"	63
8-32	3.40mm 29	74 62	5/8-18	9/16"	82
8-36	29 9/64"	70 60	11/16-11	37/64"	60
10-24	3.70mm 25	76 69	11/16-11	19/32"	75
10-32	5/32"	75	11/16-16	5/8"	75
12-24	11/64"	75	3/4-10	41/64"	81
12-28	17 15	73 70	3/4-10	21/32"	69
1/4-20	9 7	77 70	3/14-16	11/16"	72
1/4-28	13/64"	66	7/8-9	17.5mm	70
5/16-18	F G	72 66	7/8-9	49/64"	73
5/16-24	6.80mm I	78 70	7/8-14	25/32"	62
3/8-16	5/16" O	74 69	7/8-14	51/64"	79
			1-8	13/16"	62
			1-8	7/8"	74
			1-12	57/64"	64
			1-12	29/32"	82
			1-14	59/64"	79
			1-1/2	29/32"	82
			1-1/4	59/64"	79
			1-1/8-7	15/16"	62
			1-1/8-7	63/64"	73
			1-1/8-12	1"	65
			1-1/8-12	1-1/32"	82
			1-1/4-7	1-3/64"	67
			1-1/4-7	1-3/32"	81
			1-1/4-12	1-7/64"	73
			1-1/4-12	1-1/8"	64
			1-1/4-12	1-5/32"	81
			1-3/8-6	1-11/64"	67
			1-3/8-6	1-13/64"	81
			1-3/8-12	1-19/64"	66
			1-3/8-12	1-9/32"	81
			1-1/2-6	1-19/64"	66
			1-1/2-6	1-11/32"	69
			1-1/2-12	1-23/64"	62
			1-1/2-12	1-13/32"	80
				1-27/64"	66

Tap Drill Sizes					
Tap Size	Tap Drill Size	Prob % of Thread	Tap Size	Tap Drill Size	Prob % of Thread
1.6x.35	1.25mm	69	9.0x1.25	7.75mm	73
1.8x.35	1.45mm	69	10x1.5	8.50mm	71
2.0x.4	1.60mm	69		Q	75
	52	66	10x1.25	8.70mm	73
2.2x.45	1.75mm	70		11/32"	71
2.5x.45	2.05mm	69	11x1.5	9.50mm	70
	46	67		3/8"	71
3.0x2.5	2.50mm	68	12x1.75	10.20mm	74
	40	70		Y	71
3.5x6	2.90mm	68	12x1.25	10.80mm	67
	33	72		27/64"	72
4.0x.7	3.30mm	69	14x2.0	12.00mm	72
	30	73		15/32"	76
4.5x.75	3.70mm	74	14x1.5	12.50mm	71
	26	70	16x2.0	14.00mm	72
5.0x.8	4.20mm	69		35/64"	76
	19	68	16x1.5	14.50mm	71
5.5x.9	4.60mm	68	18x2.5	15.50mm	73
	14	67		39/64"	74
6.0x.75	5.30mm	74	18x1.5	16.50mm	70
	4	73	20x2.5	17.50mm	73
6.0x1.0	5.00mm	70		11/16"	74
	9	71	22x2.5	19.50mm	73
7.0x.75	6.30mm	74		49/64"	75
	D	72	24x3.0	21.00mm	73
7.0x1.0	6.00mm	70		53/64"	72
	15/64"	73	27x3.0	24.00mm	73
8.0x1.25	6.70mm	74		15/16"	78
	17/64"	71	30x3.5	26.50mm	74
8.0x1.0	7.00mm	69		1-3/64"	73
	J	66	33x3.5	29.50mm	74
				1-11/64"	72

Pipe Tap Drill Sizes		
Tap Size	NPT Tap Drill	NPS Tap Drill
1/16-27	D	1/4"
1/8-27	Q	11/32"
1/4-18	7/16"	7/16"
3/8-18	9/16"	37/64"
1/2-14	45/64"	23/32"
3/4-14	29/32"	59/64"
1-11-1/2	1-9/64"	1-5/32"
1-1/4-11-1/2	1-31/64"	1-1/2"
1-1/2-11-1/2	1-47/64"	1-3/4"
2-11-1/2	2-13/64"	2-7/32"
2-1/2-8	2-5/8"	2-21/32"

## Reading Tap Sizes

### IMPERIAL FRACTIONAL TAPS

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

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

Champion Series Name    Nominal Size (inch) (diameter)    # Threads Per Inch    Plug Style Chamfer

### METRIC TAPS

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

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

Champion Series Name    Nominal Size (mm) (diameter)    Pitch Between Threads (mm)    Plug Style Chamfer

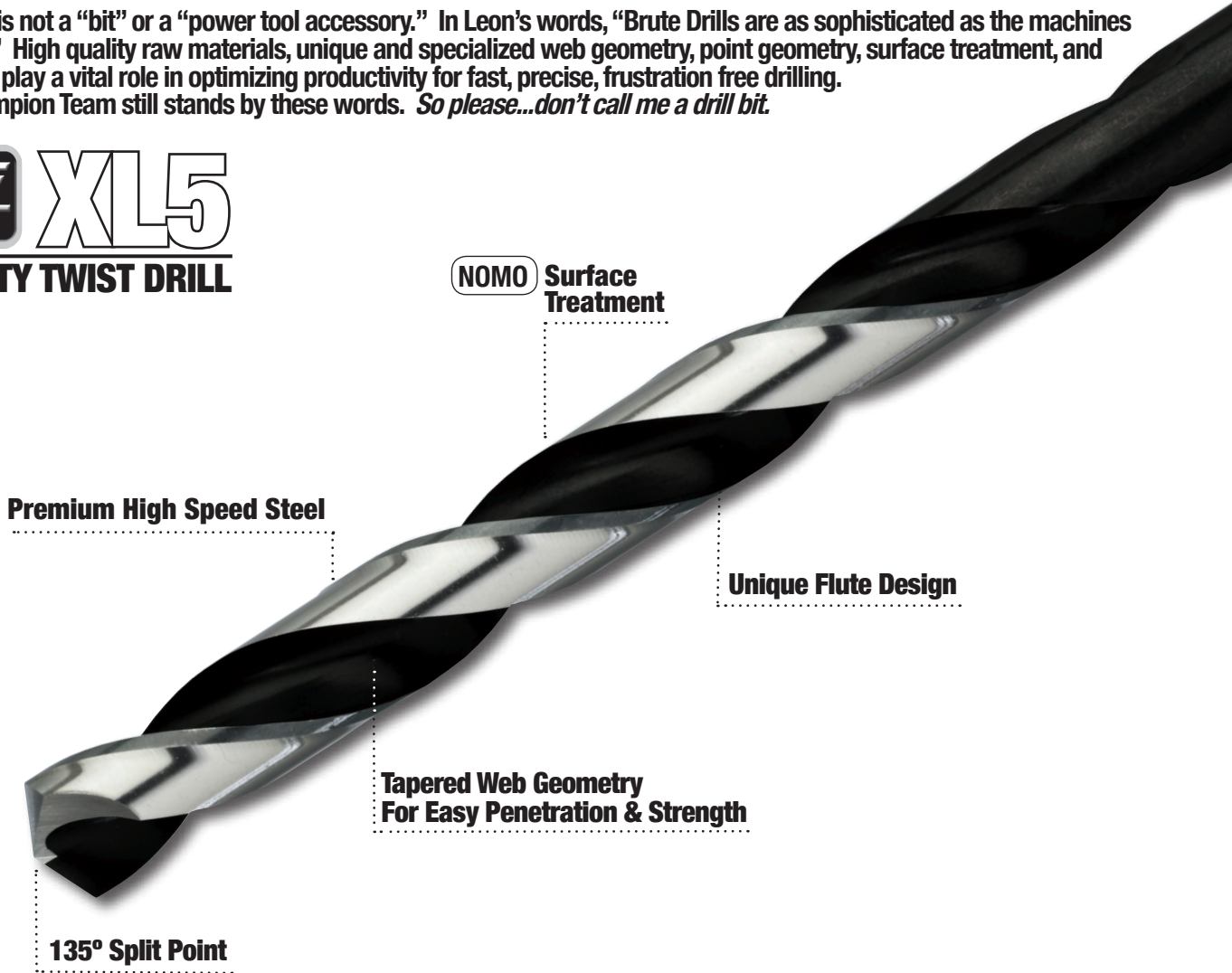
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**BRUTE**  
PLATINUM **XL5**  
**HEAVY DUTY TWIST DRILL**



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