



ABABA BOLT
Commercial Hardware

Cutting Tools
PLC 2020



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



*

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



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



*



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



*



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

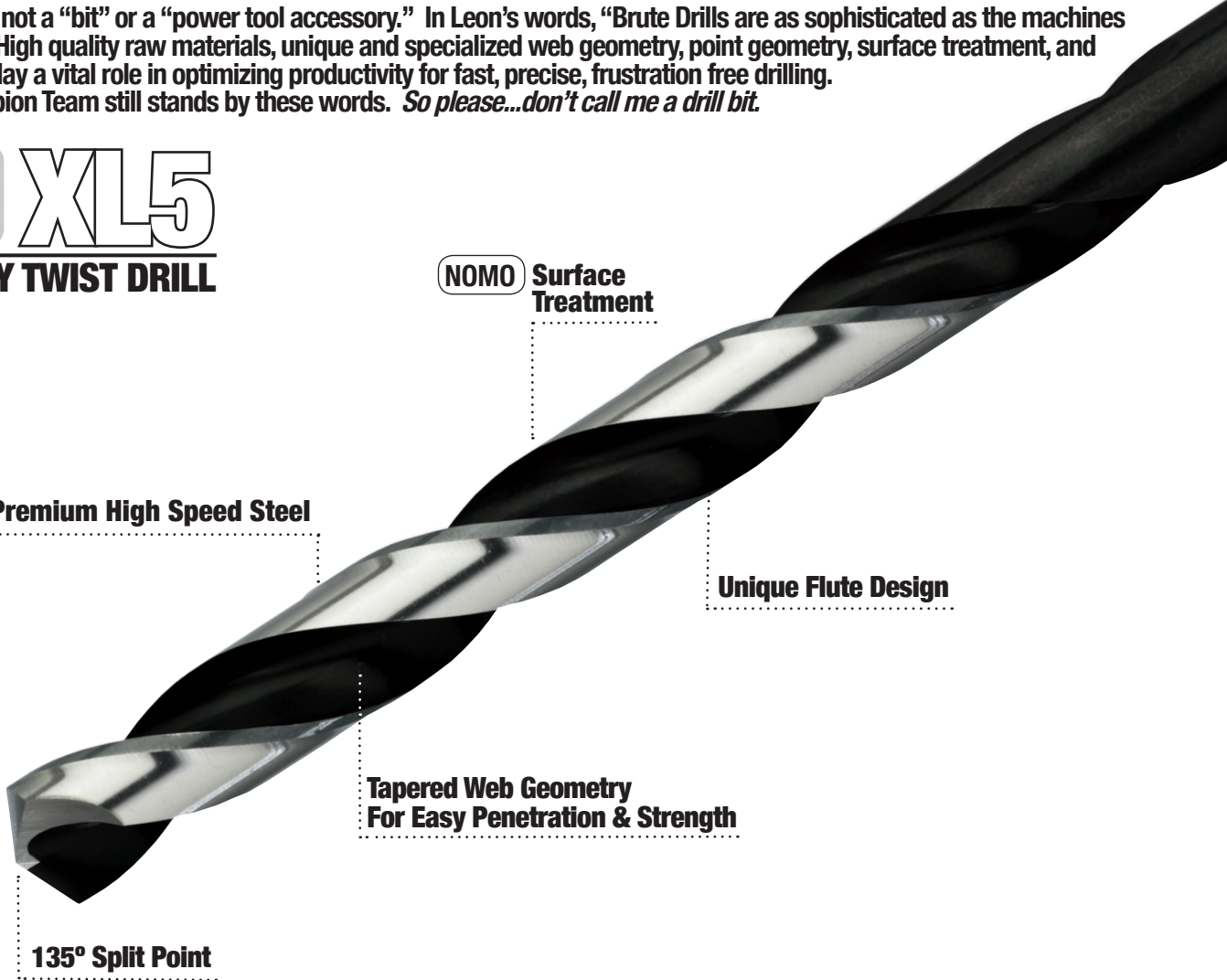


Don't Call Me A Drill Bit

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.

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.*



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

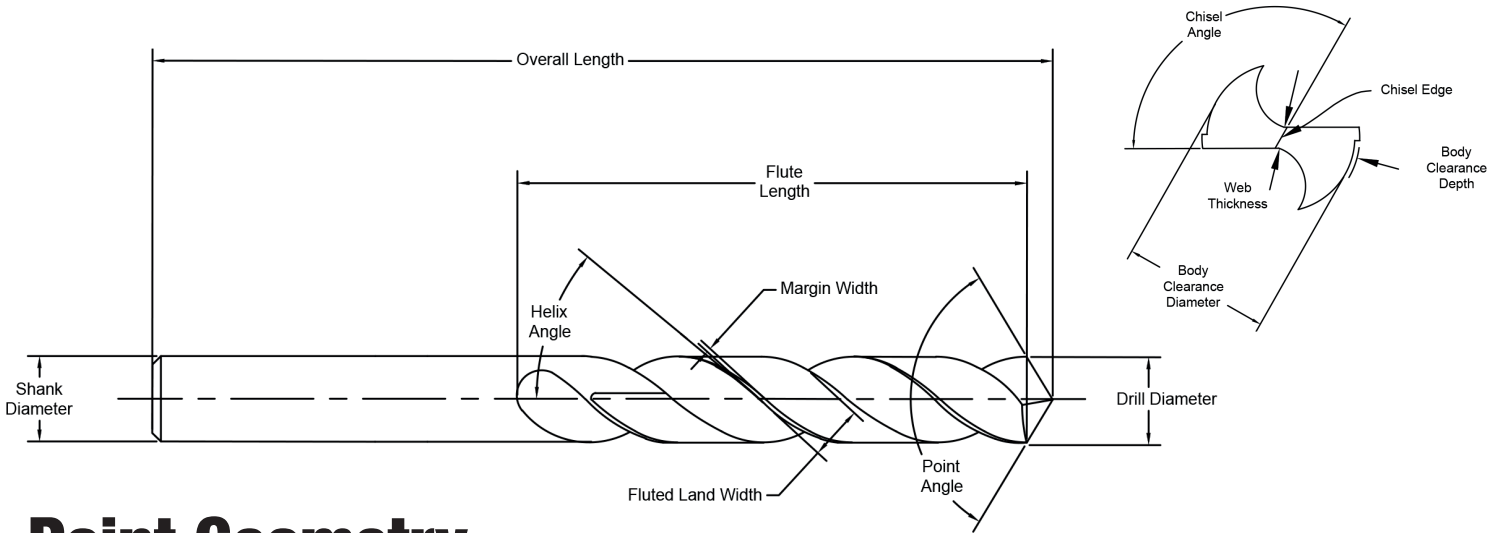


Carbide Tipped Hole Cutters



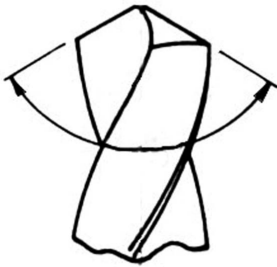
Countersinks

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.

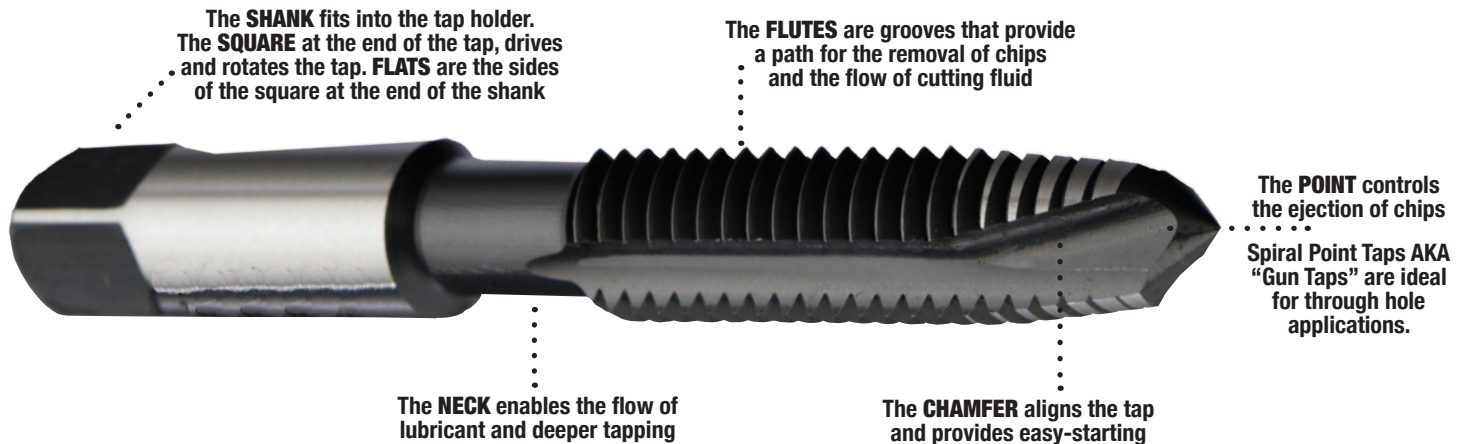
Cutting Fluid	Cutting Wax
XLUB4 (4oz)	XLUB-WAX-2 (2oz)
XLUB16 (16oz)	XLUB-WAX-16 (16oz)
XLUB128 (Gal)	XLUB-STICK-16 (16oz)

*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



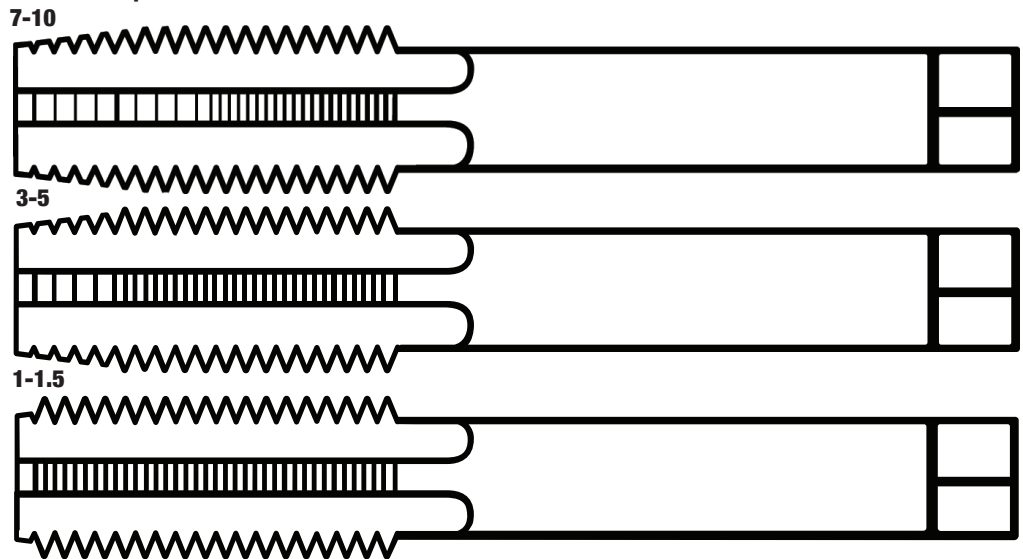
Chamfer Styles

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	38 37	72 63	5/8-11	1/2"	82
6-32	36 7/64"	72 64	5/8-11	33/64"	60
6-40	33 32	69 60	5/8-18	17/32"	76
8-32	3.40mm 29	74 62	5/8-18	35/64"	63
8-36	29 9/64"	70 60	5/8-18	9/16"	82
10-24	3.70mm 25	76 69	11/16-11	37/64"	60
10-32	5/32"	75	11/16-11	19/32"	75
12-24	11/64"	75	11/16-16	5/8"	75
12-28	17 15	73 70	3/4-10	41/64"	81
1/4-20	9 7	77 70	3/4-10	21/32"	69
1/4-28	13/64"	66	3/14-16	11/16"	72
5/16-18	3 5.50mm	70 67	7/8-9	17.5mm	70
5/16-24	F G	72 66	7/8-9	49/64"	73
3/8-16	6.80mm I	78 70	7/8-14	25/32"	62
	5/16"	74	7/8-14	51/64"	79
	0	69	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
			1-1/8-7	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

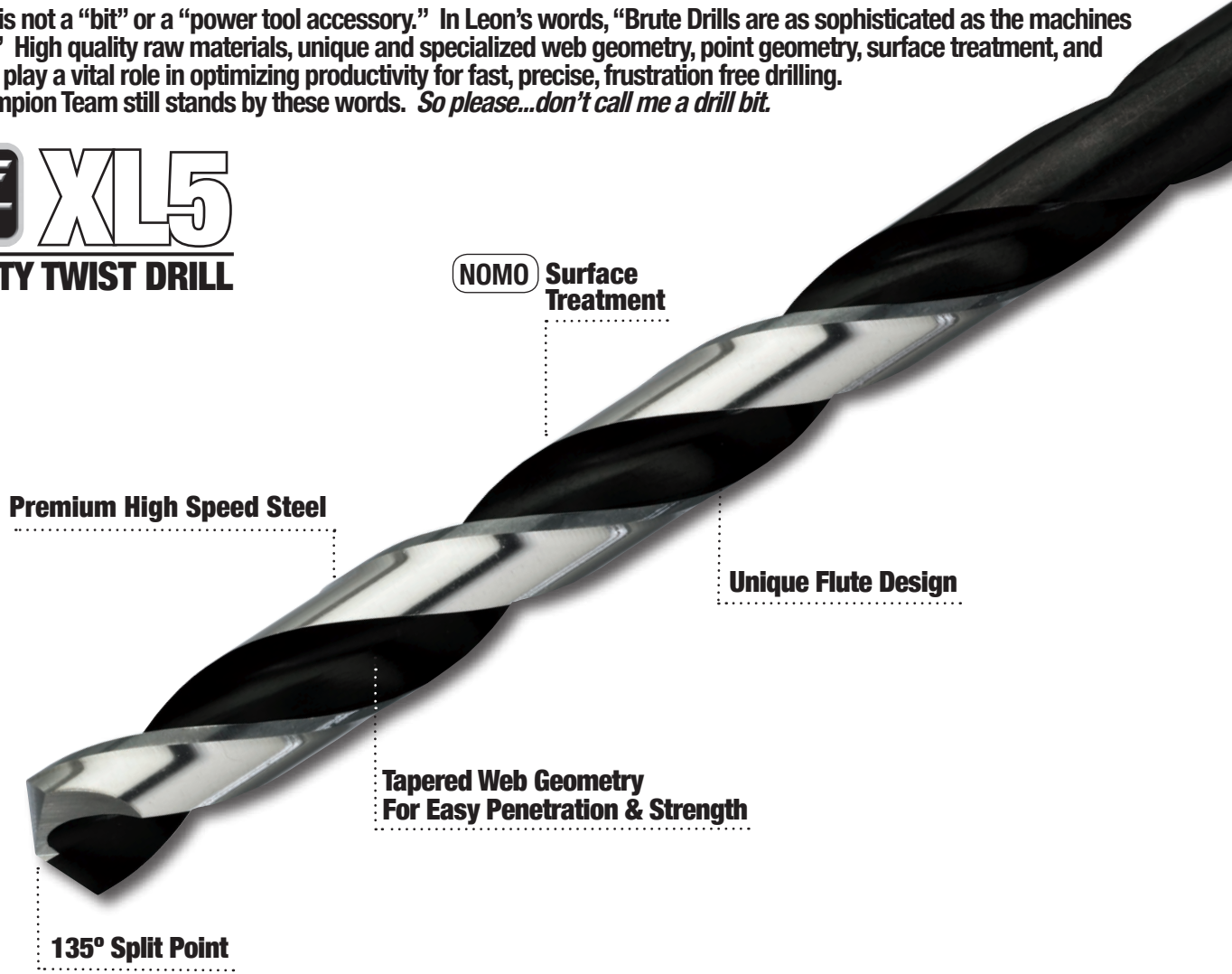
Don't Call Me A Drill Bit

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.

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.*

BRUTE
PLATINUM **XL5**
HEAVY DUTY TWIST DRILL



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