W. L. Faller INC.

CATALOG TWENTY-FIVE

25

TAPER POINT DRILLS * BRAD POINT DRILLS * PLEXI POINT DRILLS

STEP DRILLS * COUNTERSINKS * COUNTERBORES * PLUG CUTTERS

STOP COLLARS * DRILL STOPS * SPECIALTY TOOLS



OVER 45 YEARS OF MANUFACTURING, DISTRIBUTING AND RECOMMENDING TOOLS TO CUT WOODS, PLASTICS AND METALS IN STANDARD AND SPECIAL SIZES.

FAMILY OWNED

We dedicate this catalog In memory of our father Warren L. Fuller

It is with our deepest regrets that we inform you of the loss of our father, Warren L. Fuller. His passing was due to Hurricane Katrina as he was a resident of the Gulf Coast of Mississippi. He survived and escaped the hurricane only to die of a heart attack one day later in a high school shelter where he was waiting for his companion of 20 years. She had been injured during the escape and was hospitalized. We had traveled to his town to rescue him and were only a few miles from him when he passed. As owner of W. L. Fuller, Inc., he had prepared his children to continue with the same service and quality you have become accustom to. We look forward to continuing the business relationships he enjoyed and building new relationships as he would have.



Warren L. Fuller May 14, 1929 to August 31, 2005

The **Fuller** Story

In the 1930's Warren L. Fuller Sr. (nick named Let) began building twelve foot boats in his Warwick Hudson car dealership quarters. The boats were built out of a new innovation, plywood, a material whose durability had to be proven. The boats, with a deep V hull were dry, fast and could be sailed as well as powered. During production Let found a need for an efficient and inexpensive method to drive the screws and set plugs. Let began to design his own tools and to turn his business expertise away from the car dealership and to the manufacture of woodworking tools, specifically countersinks. (Continued on page 150)

The Fire - March 17, 2003

On Monday, March 17, 2003, a fire destroyed most of W. L. Fuller, Inc. The fire was caused by sparks from a grinding machine getting into the dust collection system just after 1:30 in the afternoon. An employee noticed the fire, ran outside and started yelling there was a fire in the building. Fortunately it was a warm day and all of the windows were open in the 14,000 square foot, two story building. Everyone got out safely. Most employees left their personal belongings thinking the fire would be extinguished and they would be let

back in. That was not the case. The office and plant areas of the building were completely destroyed. There was nothing to go back to. (Continued on page 150)

Guarantee

This catalog illustrates and describes all the types of Countersinks, Counterbores, Plug Cutters and Drills manufactured under the name **Fuller** and fully guaranteed in normal use. The **Fuller** logo appears near each tool picture manufactured by us.

Also included are various types of drills, bits, cutters, and specialty type tools, made by reputable American manufacturers, worthy of showing in our catalog. These are to supplement our own line of tools and are also fully guaranteed.

We have now added a few very useful types of tools that are just not available in this country. So non-domestic tools have finally found a place in our catalog. We find these to be high quality products. They are identified on the catalog page showing the product.

Delivery

Made to sell at a low price and give satisfactory service so that the user of these tools, can, for a reasonable amount, purchase all the sizes which might be needed to increase production, do a professional job and save time in their work.

As these tools are time savers, every effort is directed toward shipping on the same day the order is received.

If you called us yesterday, you might have the tools you need today. Call us today, we'll try for tomorrow.

Samples & Return Policy

We do not furnish samples, but unused stock size tools can be returned to us at any time within two years for credit (cost at time of shipment) less a small restocking charge. Full credit is usually allowed if replacement tools are ordered at time of return.

Our tools should fill most needs to predrill for all sizes from number 2 wood screws up through 3/4" bolts and we are willing to work with our customers on any boring problem they might encounter.

Terms

All invoices are payable 30 days from date of shipment. Purchasers without adequate rating must remit payment with order or shipments will be C.O.D. We also accept **Visa**, **MasterCard**, **Discover Card and American Express**.

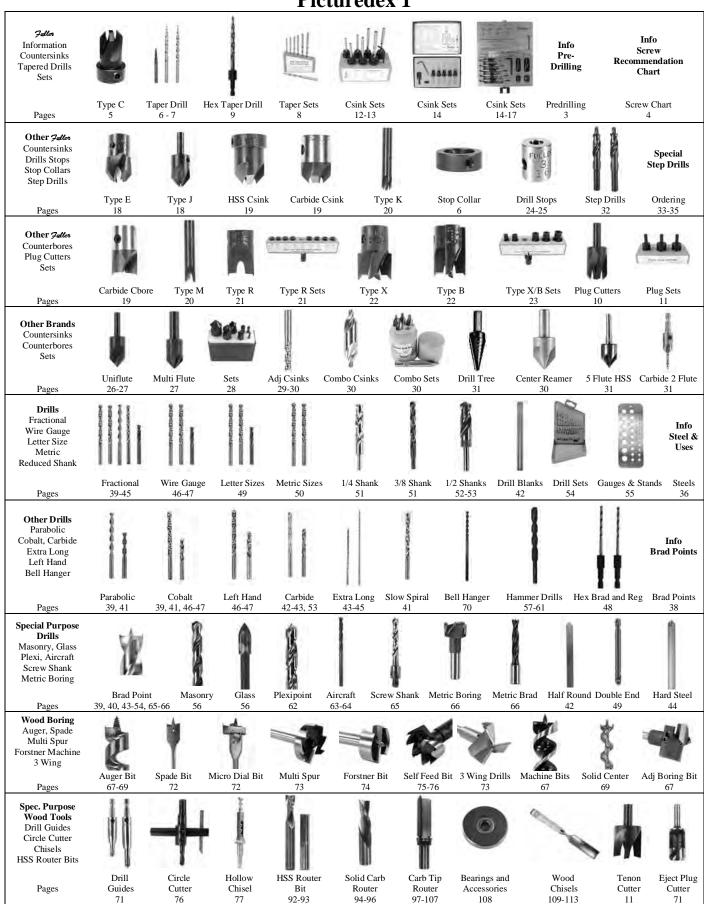
Electronic Information

The electronic version of Catalog 25 is available on CD and can be downloaded from our web site at www.wlfuller.com. The CD also contains our current price list, electronic images used in the catalog and Catalog 25 in Microsoft Word XP. We can also supply data in Excel format on 3-1/2" floppy disk or by e-mail. The Excel file contains part numbers, pricing, descriptions, UPC Codes and weights.

W. L. **Fuller Inc.** is not to be confused with any other company with the name Fuller. We are all under one roof, plant and office. We are not a branch nor do we have any branches.



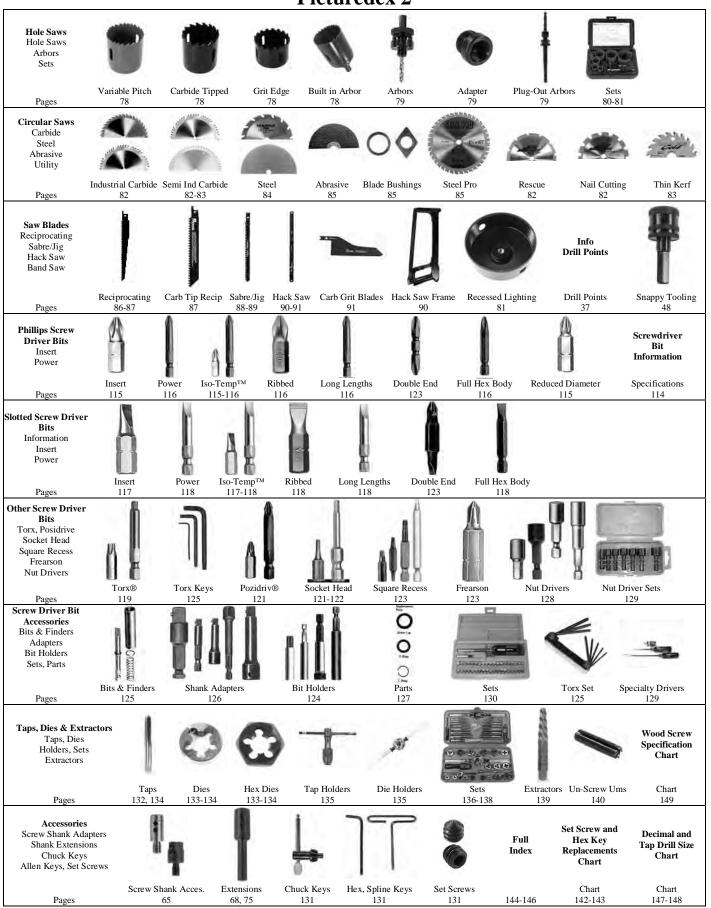
Picturedex 1



Full Index on pages 144-146



Picturedex 2



Full index on pages 144 – 146

The Fuller Tapered Drill, Countersink, Counterbore and Plug System

W. L. 7uller, Inc. has been manufacturing, recommending, supplying and distributing tools to cut woods, plastics and metals for over 45 years. We produce the best quality tools made in the U.S.A. to predrill, countersink, counterbore and plug for screws and bolts of all different sizes and shapes. Our High Speed Steel Taper Point Drills are specifically designed to predrill for wood screws of various sizes and lengths. Our Four Flute Countersinks, designed to mount on the Taper Point Drill, combine predrilling for the screw threads, clearance drilling for the screw shank, counterboring for a wood plug (if needed) and countersinking for the screw head in one operation. Our Plug Cutters are designed to produce wood plugs accurately sized to match our counterbores so the plug fits right every time. Made of the best quality steels and heat treated for long tool life, our tools are designed to save you time by saving you steps, and save you money with longer lasting cutting edges. Your satisfaction is guaranteed.

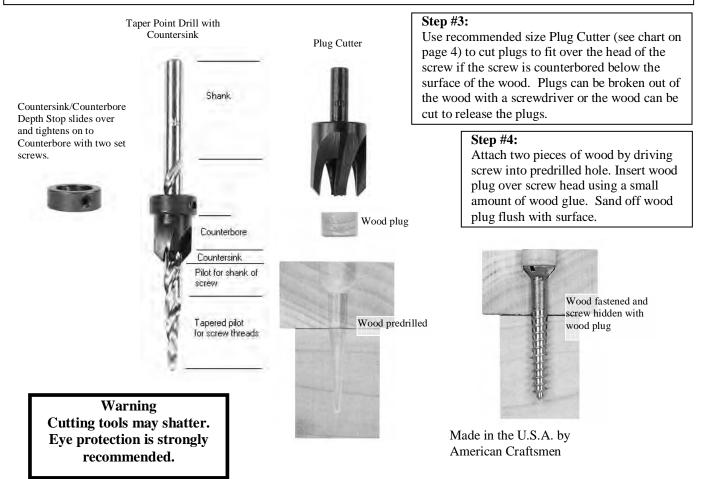
We have outlined the 4 easy steps below:

Step #1:

Select a wood screw size and length best suited for project at hand. When selecting a length of screw, keep in mind that 1/3 of the total length of the screw should be in the pieces of wood being attached and 2/3 of the total length of the screw should be in the piece of wood being attached to.

Step #2:

Use recommended size Tapered Drill and Countersink combination (see chart on page 4) to predrill pilot hole, countersink and counterbore for the screw size of your choice. Position the countersink on the tapered drill so that the point end of the drill extends from the countersink the same distance as the length of the wood screw measured from under the head. The force required to tighten the wood screw can be decreased by adjusting the countersink further away from the point of the drill or increased by moving the countersink closer to the point of the drill. The locking set screws should be positioned to lock into the flute of the tapered drill. Use the recommended Stop Collar (see chart on page 4) if needed to control the depth of the counterbore. Mount the Stop Collar on the Countersink and tighten with set screws.





Recommendations for Wood Screw Predrill Sizes and Lengths



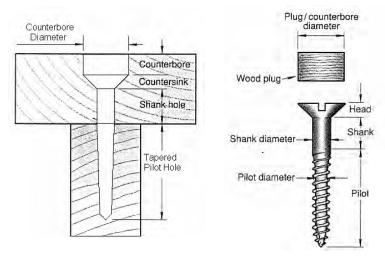
Standard Wood Screw Sizes and Predrilling Recommendations

S	crew S	Size (Gauge)	#2	#3	#4	#5	#6	#7	#8	#9	#10	#12	#14	#16	#18
Head	A	actual Head Size	11/64	13/64	15/64	1/4	9/32	5/16	11/32	23/64	25/64	7/16	1/2	35/64	39/64
Bore	Min	. Counterbore Dia.	1/4	1/4	1/4	1/4	5/16	5/16	3/8	3/8	7/16	7/16	1/2	9/16	5/8
Size	Size Recommended Size		1/4	5/16	5/16	3/8	3/8	3/8	3/8	3/8	1/2	1/2	1/2	5/8	5/8
Scre	ew Sha	ank - Hole Size	3/32	7/64	7/64	1/8	9/64	5/32	11/64	3/16	13/64	7/32	1/4	9/32	5/16
Straight	Pilot	Hardwood	1/16	5/64	5/64	3/32	7/64	7/64	1/8	9/64	9/64	5/32	11/64	3/16	7/32
Drill S	Size	Softwood	1/16	1/16	1/16	5/64	3/32	3/32	7/64	1/8	1/8	9/64	5/32	11/64	13/64
Tapered	Pilot	Hardwood	3/32	7/64	7/64	1/8	9/64	5/32	11/64	3/16	13/64	7/32	1/4	9/32	5/16
Drill Si	Size	Softwood	5/64	3/32	3/32	7/64	1/8	9/64	5/32	11/64	3/16	13/64	15/64	17/64	19/64
Recommended Countersink Number		С3	C4	C4	C5	C6	C7	C8	С9	C102	C12	C14	C169	C18	



Drill Length Recommendations for Countersink/Taper Point Drill Combos

Scre	ew Size (Gauge)	#2	#3	#4	#5	#6	#7	#8	#9	#10	#12	#14	#16	#18
Тар	Tapered Drill Size		7/64	7/64	1/8	9/64	5/32	11/64	3/16	13/64	7/32	1/4	9/32	5/16
Short	Min. Screw Length	1/4	5/16	5/16	3/8	7/16	1/2	5/8	11/16	3/4	7/8	3/4	13/16	7/8
Length Drill	Max. Screw Length *	5/8	11/16	11/16	5/8	11/16	13/16	7/8	15/16	1	1-1/8	1-1/4	1-7/16	1-9/16
Regular	Min. Screw Length	3/8	7/16	7/16	1/2	9/16	5/8	3/4	13/16	15/16	1	1-1/8	1-1/4	1-3/8
Length Drill	Max. Screw Length **	1	1-1/2	1-3/8	1-3/8	1-1/2	1-3/4	1-7/8	2-1/8	2-1/4	2-3/8	2-5/8	2-5/16	2-11/16
Long Length	Min. Screw Length	9/16	9/16	9/16	5/8	11/16	3/4	7/8	15/16	1-1/16	1-1/8	1-5/16	1-7/16	1-9/16
Drill	Max. Screw Length***	1-3/4	2	1-7/8	2-1/8	2-3/8	2-3/8	2-3/4	2-3/4	3	3	3-1/8	3-1/16	3-3/16
8" Long	Min. Screw Length	N/A	N/A	N/A	3/4	13/16	1	1-1/16	1-3/16	1-1/4	1-1/4	1-1/2	1-5/8	1-3/4
Drills	Max. Screw Length***	N/A	N/A	N/A	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-11/16	4-11/16
* = 1/2" to 3/4" of shank for chucking $** = 3/4$ " to 1" of shank for chucking $*** = 8$ set screws positioned at en					ed at end	of twist								



Use charts and graphs shown here to determine the correct counterbore size and pilot hole size for the wood screws you are using, correct drill lengths for Taper Point Drills and screwdriver point sizes.

Screwdriver Point Size Recommendations

Screw Size	Phillips	Square Recess		
#2				
#3	#1	#0		
#4				
#5				
#6		#1		
#7	#2			
#8	#2			
#9		#2		
#10]			
#12				
#14	#3	#3		
#16	#3	π3		
#18				

Type 'C' Four Flute Countersinks

See page 36 for explanation of steel types





C8

With 82 degree included angle

Used to countersink and counterbore for heads of screws in woods, plastics and non-ferrous materials. Heat-treated for long tool life. (See explanation on page 3 and size recommendations on page 4)

The countersink is held in place with two hex-socket screws and is easily adjustable up and down the drill so only one countersink and length of drill is required for one screw size.



Shown above Mounted on a Taper Point Drill with Stop Collar:

This combination of Tapered Drill and Countersinks, drills Countersinks and Counterbores in one quick operation. Makes driving screws easier and assures the best possible holding power. Designed for clean cutting and hardened for long wear. Complete list of Taper Point Drills shown on page 7 & 8. Stop Collar (shown above mounted on Type "C" Countersink) can be furnished to control depth of cut. Stop Collar sizes are shown on page 6.



Shown above Mounted on a Brad or Regular Point Drill:

This combination can be used to drill and countersink clearance through the material for screws and bolts or to drill pilot holes for other types of screws. The Countersinks can also be mounted on ordinary straight twist drills allowing the screw thread to cut its own hole or by using correct pilot drill size for root diameter of thread allowing shank of screw to force its way into the wood. See Screw Chart on page 4 for screw sizes.

Drills are not included unless specified. Types and sizes are shown on pages 39 through 54. To cut wood plug to fit in hole over head of screw, use matching Plug Cutter shown on page 10.

Special sizes - Quotation on request.

For left hand cutting add 50% to prices shown in price list and add L to stock number.

Price includes two hex-socket set screws. Does not include drill or stop collar. See page 142-143 for replacement set screws and hex keys.

Also see page 141 for all sizes of Countersinks mounted on Taper Point Drills (and Stop Collars if required).





C92



C16



C244



C324

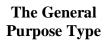
Stock Sizes									
Stock Number	Cutting Diameter	Drill Hole Size	Overall Length						
C2	1/4	5/64	3/4						
C3	1/4	3/32	3/4						
C4	5/16	7/64	7/8						
C44	5/16	1/8	7/8						
C65	5/16	9/64	7/8						
C410	5/16	5/32	7/8						
C411	5/16	11/64	7/8						
C43	5/16	3/16	7/8						
C56	3/8	3/32	7/8						
C57	3/8	7/64	7/8						
* C5	3/8	1/8	7/8						
* C6	3/8	9/64	7/8						
* C7	3/8	5/32	7/8						
* C8	3/8	11/64	7/8						
* C9	3/8	3/16	7/8						
C913	3/8	13/64	7/8						
C97	3/8	7/32	7/8						
C105	7/16	5/32	7/8						
C1011	7/16	11/64	7/8						
C103	7/16	3/16	7/8						
* C10	7/16	13/64	7/8						
C1014	7/16	7/32	7/8						
C104	7/16	1/4	7/8						
C122	1/2	1/8	7/8						
C129	1/2	9/64	7/8						
C125 C1211	1/2 1/2	5/32 11/64	7/8 7/8						
* C92	1/2	3/16	7/8						
* C102	1/2	13/64	7/8						
* C102	1/2	7/32	7/8						
C121	1/2	15/64	7/8						
* C1413	1/2	1/4	7/8						
C145	5/8	5/32	1-1/16						
* C143	5/8	3/16	1-1/16						
C167	5/8	7/32	1-1/16						
* C16	5/8	1/4	1-1/16						
C1617	5/8	17/64	1-1/16						
* C169	5/8	9/32	1-1/16						
C1619	5/8	19/64	1-1/16						
* C18	5/8	5/16	1-1/16						
C243	3/4	3/16	1-1/8						
C247	3/4	7/32	1-1/8						
C244	3/4	1/4	1-1/8						
C245	3/4	5/16	1-1/8						
C20	3/4	21/64	1-1/8						
C24	3/4	3/8	1-1/4						
C284	7/8	1/4	1-1/4						
C285	7/8	5/16	1-1/4						
C286	7/8	3/8	1-1/4						
C287	7/8	7/16	1-3/8						
C324	1	1/4	1-3/8						
C326	1	3/8	1-3/8						
C328	1	1/2	1-1/2						

st Indicates most popular sizes contained in sets.



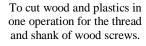
High Speed Steel Taper Point Drills & Stop Collars

High Speed Steel Taper Point Drills



Is recommended for most jobs whether in a drill press or in hand held equipment. They cut well in both hard and softwoods.





Made of **High Speed Steel** to hold their sharp cutting edges longer. See page 36 for steel types. Made in standard fractional sizes to fit all types of Countersinks and Counterbores, with sizes and lengths to match most popular wood screws. Lengths and stock numbers are shown on opposite page.

Refer to chart on page 4 for recommended sizes and page 7 for sizes and stock numbers. Hex Shank Taper Point Drills shown on page 9.

Special sizes price on request.



The Fast Spiral Type

Cuts faster and clears chips better than the general-purpose type. This type can only be used in a drill press or other stationary equipment. The cutting action is too aggressive for hand held equipment. Recommended for high production in hardwoods.

Stop Collars

Designed to be used with **Fuller** Countersinks and Counterbores. These steel collars are held solidly in place with two set screws, to control depth of Counterbores. The inside diameter of the Stop Collar fits the outside diameter of the Countersink or Counterbore. See Drill Stops on page 24-25 to control cutting depth of drills only.

Inside	XX/2 J41.	Stock			
Diameter	Width	Number			
1/4	1/4	11900250			
5/16	1/4	11900312			
3/8	1/4	11900375			
7/16	1/4	11900437			
1/2	1/4	11900500			
9/16	1/4	11900562			
5/8	1/4	11900625			
3/4	1/4	11900750			
7/8	1/4	11900875			
1	5/16	11901000			
1-1/8	5/16	11901125			
1-1/4	3/8	11901250			
1-3/8	3/8	11901375			
1-1/2	7/16	11901500			
Sets o	of Stop Col	lars			
#1 Set of 7		11990001			
#2 Set of 7		11990002			
(B) Set of 6		11990006			
(R) Set of 9		11990009			
(C) Set of 14		11990014			







Stop Collar Mounted on Countersink and Taper Point Drill.



High Speed Steel Taper Point Drills Sizes & Lengths

See descriptions on page 6 and recommendations on page 4

		Short	Length		Regular Length				
Wood Screw		Sizes		General Purpose	Si	zes	General Purpose	Fast Spiral	
Size	Drill	Flute	Overall	Stock	Flute	Overall	Stock	Stock	
	Dia	Length	Length	Number	Length	Length	Number	Number	
2	5/64	11/16	1-11/16	20000078	1	2	20100078	20800078	
3	3/32	3/4	1-3/4	20000093	1-1/4	2-1/4	20100093	20800093	
4	7/64	13/16	1-13/16	20000109	1-1/2	2-5/8	20100109	20800109	
5	1/8	7/8	1-7/8	20000125	1-5/8	2-3/4	20100125	20800125	
6	9/64	15/16	1-15/16	20000140	1-3/4	2-7/8	20100140	20800140	
7	5/32	1	2-1/16	20000156	2	3-1/8	20100156	20800156	
8	11/64	1-1/16	2-1/8	20000171	2-1/8	3-1/4	20100171	20800171	
9	3/16	1-1/8	2-3/16	20000187	2-5/16	3-1/2	20100187	20800187	
10	13/64	1-3/16	2-1/4	20000203	2-7/16	3-5/8	20100203	20800203	
12	7/32	1-1/4	2-3/8	20000218	2-1/2	3-3/4	20100218	20800218	
14	15/64	1-5/16	2-7/16	20000234	2-5/8	3-7/8	20100234	20800234	
14	1/4	1-3/8	2-1/2	20000250	2-3/4	4	20100250	20800250	
16	17/64	1-7/16	2-5/8	20000265	2-7/8	4-1/8	20100265	20800265	
16	9/32	1-1/2	2-11/16	20000281	2-15/16	4-1/4	20100281	20800281	
18	19/64	1-9/16	2-3/4	20000296	3-1/16	4-3/8	20100296	20800296	
18-20	5/16	1-5/8	2-13/16	20000312	3-3/16	4-1/2	20100312	20800312	
20	21/64	1-11/16	2-15/16	20000328	3-5/16	4-5/8	20100328	20800328	
20	11/32	1-11/16	3	20000343	3-7/16	4-3/4	20100343	20800343	
24	23/64	1-3/4	3-1/16	20000359	3-1/2	4-7/8	20100359	20800359	
24	3/8	1-13/16	3-1/8	20000375	3-5/8	5	20100375	20800375	
		•	Long Le	ngth			8" Over	all	

Fuller	SEE SE	- design
4		De-De-De

Style #
200
Short
Length
General
Purpose

Style # 201
Regular
Length
General
Purpose

s# Style #
208
ar Regular
th Length
ral Fast
Spiral

			Long Len	8'' Overall				
Wood Screw	Sizes		General Fast Purpose Spiral		Si	General Purpose		
Size	Drill	Flute	Overall	Stock	Stock	Flute	Overall	Stock
	Dia	Length	Length	Number	Number	Length	Length	Number
2	5/64	2-1/4	3-3/4	20200078	X	5-1/2"	8"	X
3	3/32	2-1/4	4-1/4	20200093	X	5-1/2"	8"	X
4	7/64	2-3/4	4-5/8	20200109	20900109	5-1/2"	8"	X
5	1/8	2-3/4	5-1/8	20200125	20900125	5-1/2"	8"	20300125
6	9/64	3	5-3/8	20200140	20900140	5-1/2"	8"	20300140
7	5/32	3	5-3/8	20200156	20900156	5-1/2"	8"	20300156
8	11/64	3-3/8	5-3/4	20200171	20900171	5-1/2"	8"	20300171
9	3/16	3-3/8	5-3/4	20200187	20900187	5-1/2"	8"	20300187
10	13/64	3-5/8	6	20200203	20900203	5-1/2"	8"	20300203
12	7/32	3-5/8	6	20200218	20900218	5-1/2"	8"	20300218
14	15/64	3-3/4	6-1/8	20200234	20900234	5-1/2"	8"	20300234
14	1/4	3-3/4	6-1/8	20200250	20900250	5-1/2"	8"	20300250
16	17/64	3-7/8	6-1/4	20200265	X	5-1/2"	8"	20300265
16	9/32	3-7/8	6-1/4	20200281	20900281	5-1/2"	8"	20300281
18	19/64	4	6-3/8	20200296	X	5-1/2"	8"	20300296
18-20	5/16	4	6-3/8	20200312	20900312	5-1/2"	8"	20300312
20	21/64	4-1/8	6-1/2	20200328	20900328	5-1/2"	8"	20300328
20	11/32	4-1/8	6-1/2	20200343	X	5-1/2"	8"	20300343
24	23/64	4-1/4	6-3/4	20200359	X	5-1/2"	8"	20300359
24	3/8	4-1/4	6-3/4	20200375	20900375	5-1/2"	8"	20300375

X = Not available

Other sizes available price on request.

WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.



Style # 202
Long
Length
General
Purpose

Style # 209
Long
h Length Fast Spiral

s# Style #
203
g 8"
th Overall
General
Purpose



Taper Point Drill SetsHigh Speed Steel

See Taper Point Drill descriptions on page 6 and size recommendations on page 4







Fast Spiral

Stock No.	Description
20890001	No. 1 Set of 7
20890501	No. 1 Set of 7 in wood block
20890002	No. 2 Set of 7
20890014	Set of 14

General Purpose

	general i arpose								
	Stock No.	Description							
ĺ	20190001	No. 1 Set of 7							
	20190501	No. 1 Set of 7 in wood block							
	20190002	No. 2 Set of 7							
	20190014	Set of 14							
	20192001	Set of 7 in pouch							

No. 1 Set of 7 has sizes 1/8" thru 7/32".

No. 2 Set of 7 has 1 each 3/16", 13/64", 7/32", 9/32", and 5/16" plus 2 ea. 1/4".

Set of 14 includes 1 ea. 1/8", 1 ea. 9/64" 1 ea. 5/32", 1 ea. 11/64", 3 ea. 3/16", 2 ea. 13/64, 1 ea. 7/32", 2 ea. 1/4", 1 ea. 9/32", and 1 ea. 5/16".

All sizes to match corresponding Countersink sets. Refer to pages 12 and 13.

TPS-Lock® Taper Point Drill Sets





TPS-Lock® Sets						
Stock Number Description						
20149001	No. 1 Set of 7					
20149501	No. 1 Set of 7 in wood block					



Hex Shank Taper Point Drills with Our Patent Pending TPS-Lock®System



These are the best professional High Speed Steel Taper Point Drills with 1/4" Hex Power Shanks available. And now with our new **TPS-Lock®** System, you have the positive drive provided by a one piece tool and cost savings provided by a drill with a detachable shank, plus a **Lifetime Guarantee**** against breakage. Our **TPS-Lock®** System *will not release* the drill until you are ready to take it apart.



How to engage the TPS-Lock® grip:

Align the flat provided on the shank of the new replacement drill with the set screw hole. Use a small hammer to tap the shank onto the replacement drill. Replace and tighten the set screw.

How to release the TPS-Lock® grip:

Loosen and remove the single hex socket set screw. Tap on the shank to drive it off the drill.

Replacement Drills for the TPS-Lock® System:

Replacement	Tapered Drill with	TPS-Lock®	Replacement
Drill Size	TPS-Lock® #	Shank#	Drill#
1/8	20140125	QST08	20130125
9/64	20140140	QST09	20130140
5/32	20140156	QST10	20130156
11/64	20140171	QST11	20130171
3/16	20140187	QST12	20130187
13/64	20140203	QST13	20130203
7/32	20140218	QST14	20130218
1/4	20140250	QST16	20130250

** We will replace any Taper Point Drill that breaks before the cutting edges have worn out **

WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.



Plug Cutters To Cut Your Own Wood Plugs

Designed for clean cutting and hardened for long life. These two and four-bladed Plug Cutters do not eject the plugs. The plug remains in the board and can be broken out with a screwdriver or the board can be sawed to free the plug. See explanation on page 3. These tools cut fast and make smooth chamfered plugs for easy starting in counterbored holes. See page 36 for explanation of steel types.





11680750



11640625T



11700375



11860375



QP8

Standard Plug Cutter Suitable for both soft and most hardwoods. Plug diameter is slightly larger than counterbore diameter for a tight fit every time. Tapered Plug Cutter Suitable for both soft and most hardwoods. Plug diameter is tapered slightly from on size to .010" oversize. All sizes have 1/4" shank. SS Plug Cutter
For hardwoods like
oak and teak. Plug
diameter is slightly
larger than counterbore
diameter for a tight fit
every time.

Carbide Tipped
2 Flute Plug Cutter
For high production in
hardwoods like oak and
teak and abrasive
materials. Plug
diameter is slightly
larger than counterbore
diameter for a tight fit
every time.

Tapered Quick-Change Plug Cutter Suitable for both soft and most hardwoods. Plug diameter is tapered slightly from on size to .025" oversize. 1/4" hex shanks with power groove for Quick-Change chucks.

Special Sizes - Quotation on Request

			Standard Typ	e	Tapered		Four Flute		pped Two Flute	Hex Shank
Dime	nsions		Four Flute		Plug		Cutters	Plug Cutters		Tapered
Plug Cutters Stock Number		Number	Cutters	Stock	Number	Stock Number		Plug Cutters		
Plug	Max	1/4	3/8	1/2	1/4	3/8	1/2	3/8	1/2	1/4
Size		Shank	Shank	Shank	Shank	Shank	Shank	Shank	Shank	Shank
Size	Lgth.	Dia.	Dia.	Dia.	Dia.	Dia.	Dia.	Dia.	Dia.	Dia.
1/4	3/8	11640250	X	X	11640250T	X	X	11860250	X	QP4
5/16	3/8	11640312	X	X	X	X	X	11860312	X	QP5
8mm	3/8	11640315	X	X	X	X	X	X	X	X
3/8	1/2	11640375	11660375	X	11640375T	11700375	X	11860375	X	QP6
10mm	1/2	11640393	X	X	X	X	X	X	X	X
7/16	1/2	11640437	11660437	X	X	11700437	X	11860437	X	QP7
12mm	1/2	11640472	X	X	X	X	X	X	X	X
1/2	1/2	11640500	11660500	X	11640500T	11700500	X	11860500	X	QP8
13mm	1/2	11640511	X	X	X	X	X	X	X	X
14mm	1/2	11640551	X	X	X	X	X	X	X	X
9/16	9/16	11640562	11660562	X	X	X	X	11860562	X	X
15mm	9/16	11640590	X	X	X	X	X	X	X	X
5/8	5/8	11640625	11660625	X	11640625T	11700625	X	11860625	X	QP10
16mm	5/8	11640629	X	X	X	X	X	X	X	X
3/4	3/4	X	X	11680750	X	X	11700750	X	11880750	X
20mm	3/4	X	11660787	X	X	X	X	X	X	X
7/8	3/4	X	X	11680875	X	X	11700875	X	11880875	X
25mm	3/4	X	X	11680984	X	X	X	X	X	X
1	3/4	X	X	11681000	X	X	11701000	X	11881000	X
1-1/8	3/4	X	X	11681125	X	X	X	X	11881125	X
1-1/4	3/4	X	X	11681250	X	X	X	X	11881250	X
1-3/8	3/4	X	X	11681375	X	X	X	X	11881375	X
1-1/2	3/4	X	X	11681500		X	X	X	11881500	X

X = Not available

See also Self-Ejecting type on page 71.



Plug Cutter Sets

These sets of four-flute style Plug Cutters contain the most popular sizes and are grouped to meet most needs. Available in both standard and SS type (see page 10). A choice of 1/4" or 3/8" shanks are available in sets with 3/8", 7/16", 1/2" or 5/8" Plug Cutters, except for SS type Plug Cutters which have 3/8" shanks. Larger Plug Cutters have 1/2" shanks.

Sets #2, #3, #4 and #5 are supplied complete with wood holders. The last set of 3 is supplied in a plastic pouch.

	Set Stock Numbers and Sizes included					
Sizes	#2 Set	#3 Set	#4 Set	#5 Set	Set of 3	
Sizes	of 2	of 3	of 4	of 5	in pouch	
1/4 Shank	11694002	11694003	11694004	11694005	11692003	
3/8 Shank	11696002	11696003	11696004	11696005	116920036	
SS Type	11790002	11790003	11790004	X	11792003	
3/8		*	*		*	
7/16		*	*			
1/2	*	*	*		*	
5/8	*		*	*	*	
3/4				*		
7/8				*		
1				*		
1-1/8				*		



* = Sizes included in sets

X = Not available

#11692003



#11790002





#11696005

#11694003





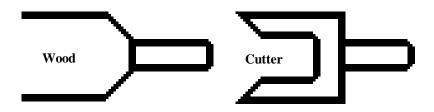
Tenon Cutters for Wood

Cut your Own Tenons

- To make round Tenons on any shape wood parts with width not more than outside diameter of cutter
- All sizes with 1/2" shank to fit chuck.
- Other Tenon sizes, outside diameters or shank sizes available
- Also available to cut flat

Quotation on request.

Stock Sizes - Four Flute				
Tool	Outside	Tenon	Tenon	
Number	Diameter	Size	Length	
T4	3/4	1/4	1/2	
T6	1-1/4	3/8	5/8	
T8	1-1/4	1/2	5/8	
T10	1-3/8	5/8	3/4	
T12	1-1/2	3/4	3/4	





Type 'C' Combination Countersink and Taper Point Drill Sets

See Countersink specifications on page 5, Taper Point Drill Specifications on page 7, Stop Collars on page 6





#1 or #2 Set of 7 Countersinks with Taper Point Drills and Stop Collars in Wood Holder

#1 or #2 Set of 7 Countersinks in Wood Holder

No. 1 set of 7 Countersinks - In wood holder. Includes tools No. C5, C6, C7, C8, C9, C10 and C12 with Drills and Stop Collars for #5 thru #12 wood screws.

Stock No. 10390001M

No. 2 Set of 7 Countersinks - In wood holder. Includes tools No. C102, C12, C14, C143, C16, C169 and C18 for #10 thru #18 wood screws.

'C' COUNTERSINKS

Stock No. 10390002

	Shown	Stock N	Stock Number	
Above sets are available with the following combinations of tools;		#1 Set of 7	#2 Set of 7	
Countersinks only	5	10390001	10390002	
Countersinks and Tapered Drills	5-7	10390001T	10390002T	
Countersinks, Tapered Drills and Stop Collars	5-7	10390001M	10390002M	
The following sets of Drills and Stop Collars can also be added to the above sets of Countersinks;				
Stop Collars	6	11990001	11990002	
High Speed Steel Regular Point Drills – Short Length	39	15090001	15090002	
High Speed Steel Regular Point Drills – Hex Shank	48	15140001	X	
High Speed Steel Regular Point Drills – Regular Length	40-42	15190001	15190002	
High Speed Steel Regular Point Drills – Long Length	43	15290001	15290002	
High Speed Steel Brad Point Drills – Short Length	39	25090001	25090002	
High Speed Steel Brad Point Drills – Hex Shank	48	25140001	X	
High Speed Steel Brad Point Drills – Regular Length	40-42	25190001	25190002	
High Speed Steel Brad Point Drills – Long Length	43	25290001	25290002	
High Speed Steel Taper Point Drills – Short Length	7	20090001	20090002	
High Speed Steel TPS Lock® Taper Point Drills – Hex Shank	8	20140001	X	
High Speed Steel Taper Point Drills – Regular Length		20190001	20190002	
High Speed Steel Taper Point Drills - Long Length	7	20290001	20290002	



Type 'C' Combination Countersink and Taper Point Drill Sets

See Countersinks on page 5, Tapered Drills on page 7 and Stop Collars on page 6



14-piece set with just Countersinks.

14 piece set shown with Countersinks and Taper Point Drills

Set of 14 type 'C' Countersinks in holder for all sizes #5 thru #18 wood screw. The set includes Type 'C' Countersinks C5, C6, C7, C8, C9, C10, C92, C102, C12, C14, C143, C16, C169 & C18.

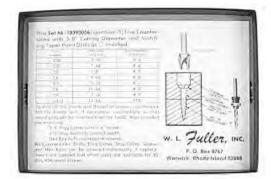
Set # 10390014

Above 14 piece set is available with the following;	Shown on Page	Stock Number
Countersinks only	5	10390014
Countersinks and Tapered Drills	5-7	10390014T
Countersinks, Tapered Drills and Stop Collars	5-7	10390014M
The following sets of Drills and Stop Collars can also be added to the above sets of Countersinks		
Stop Collars	6	11990014
High Speed Steel Regular Point Drills - Short Length	39	15090014
High Speed Steel Regular Point Drills - Regular Length	40-42	15190014
High Speed Steel Regular Point Drills - Long Length	43	15290014
High Speed Steel Brad Point Drills – Short Length	39	25090014
High Speed Steel Brad Point Drills - Regular Length	40-42	25190014
High Speed Steel Brad Point Drills - Long Length	43	25290014
High Speed Steel Taper Point Drills – Short Length	7	20090014
High Speed Steel Taper Point Drills - Regular Length	7	20190014
High Speed Steel Taper Point Drills - Long Length	7	20290014

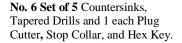


Type 'C' Combination Countersink and Taper Point Drill Sets

See Countersinks on page 5, Tapered Drills on page 7, Stop Collars on page 6 and Plug Cutters on page 10







Fuller

No. 6 Set Stock No. 10390006

Contains your choice of five Countersinks with 3/8" cutting diameter and matching Taper Point Drills, in a foam insert cardboard container.

Chose any five sizes from the list below.

Sizes C5 thru C9 will be included if not specified.

Sizes C5 thru C7 win be included it not specified.					
Tool	Taper Point	Recommended			
Number	Drill Size	Screw Size			
C56	3/32	#3			
C57	7/64	#4			
C5	1/8	#5			
C6	9/64	#6			
C7	5/32	#7			
C8	11/64	#8			
C9	3/16	#9			
C913	13/64	#10			

Retail packaging shown on page 17

Also includes: 3/8" Plug Cutter with 1/4" shank 3/8" Stop Collar to control depth 3/32" Hex Key



Also see same set with hex shank taper point drills on page 15.

Retail packaging shown on page 16



No. 8 Set Stock Number: 10393008

No. 8 Set of 5 Countersinks with Taper Point Drills mounted in attractive wood case with matching Stop Collars and Plug Cutters. For the most popular wood screw sizes #6 thru #14.

Also included are matching 3/8" and 1/2" Plug Cutters with 1/4" shank 3/8" and 1/2" Stop Collars to control depth Two Hex Keys to fit Countersink screws

Tool Number	Cutting Diameter	Taper Point Drill Size	Recommended Screw Size
C6	3/8	9/64	#6
C8	3/8	11/64	#8
C102	1/2	13/64	#10
C12	1/2	7/32	#12
C14	1/2.	1/4	#14

See Countersinks on page 5, Tapered Drills on page 7, Stop Collars on page 6, and Plug Cutters on page 10

WARNING

Cutting tools may shatter when Broken. The wearing of eye protection is strongly advised in the vicinity of their use.

Matching Sets of Type 'C' Countersinks

See Countersinks on page 5, Tapered Drills on page 7, Stop Collars on page 6 and Plug Cutters on page 10.



No. 5 Set Stock No: 10390005



No. 5 Set of 4 Countersinks with Taper Point Drills mounted in wood holder, with matching Stop Collar and Plug Cutter.

To predrill for most all size wood screws from #6 thru #12 and cut your own wood plugs.

Includes four Countersinks with 1/2" cutting diameter, one 1/2" inside diameter Stop Collar to control depth of cut, one 1/2" Plug Cutter with 1/4" shank, two hex keys to fit socket set screws and matching Taper Point Drills.

Tool	Cutting	Taper Point	Recommended
Number	Diameter	Drill Size	Screw Size
C129	1/2	9/64	#6
C1211	1/2	11/64	#8
C102	1/2	13/64	#10
C12	1/2	7/32	#12



No. 9 Set of 5 Countersinks in mahogany case. Mounted on TPS Lock® Hex Shank Taper Point Drills with Quick Release Snappy Chuck Adapter.

No. 9 Quick Release Set Stock No. 10393009

Also Included are:
One each 3/8" and 1/2" Stop Collars to control depth.
Two hex keys to fit Countersink screws.

Tool	Cutting	Taper Point	Recommended
Number	Diameter	Drill Size	Screw Size
C6	3/8	9/64	#6
C8	3/8	11/64	#8
C102	1/2	13/64	#10
C12	1/2	7/32	#12
C14	1/2	1/4	#14

See Countersinks on page 5, Tapered Drills on page 7, Stop Collars on page 6, Plug Cutters on page 10 and Snappy Chucks on page 48.

Retail packaging shown on page 17



WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.



Type 'C' Combination Countersink and Taper Point Quick Release Sets



No. 10 Quick Release Set With Plug Cutter Stock No. 10393010



No. 10 Set contains everything you need to pre-drill and plug for screw sizes 5, 6, 7, 8 and 9 with the added feature of Quick Release ability. All Taper Point Drills have 1/4" TPS Lock® Hex Shanks.

Also included are matching:

Quick Release Snappy Chuck Adapter 3/8 Stop Collar to Control Depth 3/8 Round Shank Tapered Plug Cutter 2 Hex Keys to Fit Countersink Screws

Retail packaging shown on page 17

Tool Number	Cutting Diameter	Quick Release Taper Point Drill Size	Recommended Screw Size
C5	3/8	1/8	#5
C6	3/8	9/64	#6
C7	3/8	5/32	#7
C8	3/8	11/64	#8
C9	3/8	3/16	#9



No. 11 Quick Release Set with Plug Cutters Stock No. 10393011



No. 11 Set contains everything you need to pre-drill and plug for screw sizes 6, 8, 10, 12, and 14 also with the added feature of Quick Release ability. All Taper Point Drills have 1/4" TPS Lock® Hex Shanks.

Also included are matching:

Quick Release Snappy Chuck Adapter 3/8" and 1/2" Stop Collars 3/8" and 1/2" Quick Release Tapered Plug Cutter 2 Hex Keys to Fit Countersink Screws

Tool Number	Cutting Diameter	Quick Release Taper Point Drill Size	Recommended Screw Size
C6	3/8	9/64	#6
C8	3/8	11/64	#8
C102	1/2	13/64	#10
C12	1/2	7/32	#12
C14	1/2	1/4	#14

Retail packaging shown on page 17

See Countersinks on page 5, Tapered Drills on page 7, Stop Collars on page 6, Plug Cutters on page 10 and Quick-Release Snappy Chucks on page 48.



Stock # 10390006C

No. 6 Set of 5 Countersinks Mounted on Taper Point Drills Includes: 1 Stop Collar 1 Plug Cutter 1 Hex Key See Page 14



Stock # 10393009C

No. 9 Set of 5 Countersinks Mounted on TPS-Lock® Taper Point Drills with a Quick Release Snappy Chuck Adapter Includes: 2 Stop Collars 2 Hex Keys See Page 15

Sets Packaged for Retail Sales

Five of our most popular combination Countersink and Taper Point Drill sets are now available in clear clamshell type display packaging suitable for pegboards. The rear of the packaging contains full how-to instructions as well as UPC bar codes and recommended drill size chart. The sets are held securely in heavy plastic displayed in the open position. Sets in wooden containers are laser marked with individual tool numbers for reordering and drill size recommendations.





Stock # 10393010C

No. 10 Set of 5 Countersinks Mounted on TPS-Lock® Taper Point Drills with a Quick Release Snappy
Chuck Adapter
Includes: 1 Stop Collar
1 Plug Cutter
2 Hex Keys
See Page 16



Stock # 10393008C

No. 8 Set of 5 Countersinks Mounted on Taper Point Drills Includes: 2 Stop Collars 2 Plug Cutters 2 Hex Keys See Page 14



Stock # 10393011C

No. 11 Set of 5 Countersinks Mounted on TPS-Lock® Taper Point Drills with a Quick Release Snappy Chuck Adapter Includes: 2 Stop Collars 2 Quick Release Tapered Plug Cutters 2 Hex Keys

See Page 16

Type E and Type J Countersinks

Four-flute construction, heat-treated for long tool life.

See page 36 for explanation of steel types

To cut woods, plastic & non-ferrous metals.



E16

Type E four flute Countersink for deep hole counterboring and countersinking. Mounts on standard fractional size drills.



J35

Type J four flute Countersink with 1/4" shank to fit chuck and help reduce breakage of small diameter drills. All sizes are 1-1/2" overall length and 3/4" long shanks.

long shanks. **Type JH** are 2"

OAL with a 1/4"
hex shank.



Type E Countersinks

Stock Sizes				
Stock	Cutting	Drill		
Number	Diameter	Hole Size		
E92	1/2	3/16		
E102	1/2	13/64		
E12	1/2	7/32		
E14	1/2	1/4		
E143	5/8	3/16		
E16	5/8	1/4		
E169	5/8	9/32		
E18	5/8	5/16		

All sizes 1" overall length Stop Collars not recommended.





WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.

Type J Countersinks

Stock Sizes				
Stock Number	Cutting Diameter	Drill Hole Size	Stock Num With 1/4" Hex Sh	
J56	3/8	3/32	J56H	
J4	3/8	7/64	J4H	
J5	3/8	1/8	J5H	N
J6	3/8	9/64	Ј6Н	\boldsymbol{E}
J7	3/8	5/32	J7H	W
J8	3/8	11/64	J8H	
J 9	3/8	3/16	Ј9Н	I
J25	1/2	1/8	J25H	T
J26	1/2	9/64	J26H	\boldsymbol{E}
J27	1/2	5/32	J27H	M
J28	1/2	11/64	J28H	
J29	1/2	3/16	X	
*J35	5/8	1/8	X	
*J37	5/8	5/32	X	
*J39	5/8	3/16	X	

* Overall length 1-3/4"

Special sizes - Quotation on request. Drills are not included unless specified. Types and sizes shown on pages 39-54. Stop Collars to control depth shown on page 6. Matching Plug Cutters shown on page 10.



High Speed Steel & Carbide Countersinks and Counterbores

See page 36 for steel types.





H169S

11093

High Speed Steel Countersinks

To cut wood, plastics and metal. Available with included angle of 60, 82, 90, 100, or 120 degree.

Four-blade rugged construction, these countersinks have shorter blades to reduce breakage and are designed to Countersink in metals and hardwoods. They are adjustable up and down on twist drills and held in place by two hex-socket set screws, which tighten into the flute of the drill.

Please specify stock number for wood or metal.

Stock Sizes				
Stock No. Cutting Metals	Cutting Diameter	Drill Hole Size	Overall Length	Stock No. Cutting Wood
H3S	1/4	3/32	3/4	H3SW
H4S	5/16	7/64	3/4	H4SW
H5S	3/8	1/8	7/8	H5SW
H6S	3/8	9/64	7/8	H6SW
H7S	3/8	5/32	7/8	H7SW
H8S	3/8	11/64	7/8	H8SW
H9S	3/8	3/16	7/8	H9SW
H913S	3/8	13/64	7/8	H913SW
H97S	3/8	7/32	7/8	H97SW
H10S	7/16	13/64	7/8	H10SW
H125S	1/2	5/32	7/8	H125SW
H92S	1/2	3/16	7/8	H92SW
H102S	1/2	13/64	7/8	H102SW
H12S	1/2	7/32	7/8	H12SW
H14S	1/2	1/4	7/8	H14SW
H143S	5/8	3/16	1-1/16	H143SW
H16S	5/8	1/4	1-1/16	H16SW
H169S	5/8	9/32	1-1/16	H169SW
H18S	5/8	5/16	1-1/16	H18SW
H244S	3/4	1/4	1-1/8	H244SW
H245S	3/4	5/16	1-1/8	H245SW
H24S	3/4	3/8	1-1/4	H24SW
H285S	7/8	5/16	1-1/4	H285SW
H286S	7/8	3/8	1-1/4	H286SW
H287S	7/8	7/16	1-3/8	H287SW
H328S	1	1/2	1-1/2	H328SW

*Unless otherwise specified 82-degree angle for flat head screws will be furnished. Drills are not included unless specified. Types and sizes are shown on pages 39-54. Stop Collars to control depth are shown on page 6. Sets can be furnished in wood holder with same sizes as type 'C' Countersinks shown on pages 12 & 13

No. 1 set of 7 High Speed Steel Countersinks 10890001 No. 2 set of 7 High Speed Steel Countersinks 10890002 Set of 14 High Speed Steel Countersinks 10890014

*Special sizes - Quotation on request.

Carbide Countersinks and Counterbores

Manufactured of Ferro-Tic® machinable carbide and hardened for long wear in abrasive materials. Great for Formica, Fiberglass, Particleboard, etc. See page 36 for steel types

Ferro-Tic Carbide			
Cor	untersink	S	
S	Stock Sizes		
Countersink	Cutting	Drill	
Stock No.	Diameter	Hole Size	
CC5	3/8	1/8	
CC6	3/8	9/64	
CC7	3/8	5/32	
CC8	3/8	11/64	
CC9	3/8	3/16	
CC125	1/2	5/32	
CC1211	1/2	11/64	
CC92	1/2	3/16	
CC102	1/2	13/64	
CC12	1/2	7/32	
CC14	1/2	1/4	
CC143	5/8	3/16	
CC16	5/8	1/4	
CC169	5/8	9/32	
CC18	5/8	5/16	
CC244	3/4	1/4	
CC245	3/4	5/16	
CC24	3/4	3/8	



CC143



Not recommended to cut any type of metal or for use in hand held equipment. Carbide Countersinks and Counterbores shown above are highly recommended and are made exclusively to cut abrasive materials. See page 36 for steel types.

® A product of Alloy Technology International, Inc.

Ferro-Tic Carbide				
	Counterbores			
\$	Stock Sizes			
Countersink Stock Number Cutting Diameter Hole Size				
CR1	3/8	1/8		
CR19	3/8	9/64		
CR15	3/8	5/32		
CR111	3/8	11/64		
CR13	3/8	3/16		
CR25	1/2	5/32		
CR211	1/2	11/64		
CR23	1/2	3/16		
CR213	1/2	13/64		
CR27	1/2	7/32		
CR24	1/2	1/4		
CB3	5/8	3/16		
CB34	5/8	1/4		
CB39	5/8	9/32		
CB310	5/8	5/16		
CB4	3/4	1/4		
CB5	3/4	5/16		
CB56	3/4	3/8		



CR211









Type K Countersinks and Type M Counterbores



Type K Countersinks and Type M Counterbores are both 3" overall length and designed for deep countersinking or counterboring. They can also be used with drill jig bushings. Available in both Carbon Steel and also Stainless Steel for cutting hardwoods indicated by adding "S" to the end of the stock number. See page 36 for explanation of steel types.





K081258 mounted on 1/8" x 5-1/8" long drill



Various combinations of Cutting diameters and shanks





M0811258 mounted on 1/8" x 5-1/8" long drill

Type 'K' Countersinks to cut wood and plastics

3" O.A. with 3/8" or 1/2" shanks. 82 degree included angle to cut in wood and plastics.

	Stock Numbers				
Drill Hole	Standard "K" Type			Type for I Woods	
Size	3/8"	1/2"	3/8"	1/2"	
Size	Shank	Shank	Shank	Shank	
	3,	8" Cutting Di	ameter		
1/8	K061256	K061258	KS061256	KS061258	
9/64	K061406	K061408	KS061406	KS061408	
5/32	K061566	K061568	KS061566	KS061568	
11/64	K061716	K061718	KS061716	KS061718	
3/16	K061876	K061878	KS061876	KS061878	
13/64	K062036	K062038	KS062036	KS062038	
7/32	K062186	K062188	KS062186	KS062188	
	7/1	6" Cutting Di	ameter		
13/64	K072036	K072038	KS072036	KS072038	
7/32	K072186	K072188	KS072186	KS072188	
9/32	X	K072818	KS072816	KS072818	
	1/2	2" Cutting Dia	ameter		
1/8	K081256	K081258	KS081256	KS081258	
9/64	K081406	K081408	KS081406	KS081408	
5/32	K081566	K081568	KS081566	KS081568	
11/64	K081716	K081718	KS081716	KS081718	
3/16	K081876	K081878	KS081876	KS081878	
13/64	K082036	K082038	KS082036	KS082038	
7/32	K082186	K082188	KS082186	KS082188	
1/4	K082506	K082508	KS082506	KS082508	
9/32	X	K082818	KS082816	KS082818	
5/16	X	K083128	KS083126	KS083128	
	5/8" Cutting Diameter				
1/4	K102506	K102508	X	X	
9/32	K102816	K102818	X	X	
5/16	K103126	K103128	X	X	
	3/4" Cutting Diameter				
1/4	K122506	K122508	X	X	
5/16	K123126	K123128	X	X	

Type 'M' Counterbores to cut wood and plastics

3" O.A. with 3/8" or 1/2" shank to cut flat bottom hole in wood and plastics.

Stock Numbers				
Drill Hole	Standard "M" Type			Type for Woods
Size	3/8"	1/2"	3/8"	1/2"
Size	Shank	Shank	Shank	Shank
	3/8	8" Cutting Di	ameter	
1/8	M061256	M061258	MS061256	MS061258
9/64	M061406	M061408	MS061406	MS061408
5/32	M061566	M061568	MS061566	MS061568
11/64	M061716	M061718	MS061716	MS061718
3/16	M061876	M061878	MS061876	MS061878
13/64	M062036	M062038	MS062036	MS062038
7/32	M062186	M062188	MS062186	MS062188
	7/1	6" Cutting D	iameter	
13/64	M072036	M072038	MS072036	MS072038
7/32	M072186	M072188	MS072186	MS072188
9/32	X	M072818	MS072816	MS072818
	1/2	2" Cutting Di	ameter	
1/8	M081256	M081258	MS081256	MS081258
9/64	M081406	M081408	MS081406	MS081408
5/32	M081566	M081568	MS081566	MS081568
11/64	M081716	M081718	MS081716	MS081718
3/16	M081876	M081878	MS081876	MS081878
13/64	M082036	M082038	MS082036	MS082038
7/32	M082186	M082188	MS082186	MS082188
1/4	M082506	M082508	MS082506	MS082508
9/32	X	M082818	MS082816	MS082818
5/16	X	M083128	MS083126	MS083128
5/8" Cutting Diameter				
1/4	M102506	M102508	X	X
9/32	M102816	M102818	X	X
5/16	M103126	M103128	X	X
	3/4" Cutting Diameter			
1/4	M122506	M122508	X	X
5/16	M123126	M123128	X	X

Special sizes priced on request.

X = Not available

Type 'R' Counterbores

To cut flat bottom holes in wood or plastic for heads of screws, rivets or nails, two flutes.





With extension lip pattern cutting edges, this Counterbore cuts a clean hole without tearing woods or plastics.

Made of Stainless Steel, hardened enough to hold an edge and yet can be sharpened with a file. Type 'R' Counterbores can counterbore deep enough for a wood plug over the head of the screw or rivet. See page 36 for explanation of steel types.

Set of Type 'R' Counterbores in Wood Holder Stock No. 11890009

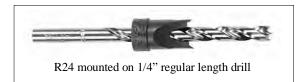
Stock Sizes

Stock Number	Cutting Diameter	Drill Size
R17	3/8	7/64
*R1	3/8	1/8
R19	3/8	9/64
R15	3/8	5/32
R111	3/8	11/64
R13	3/8	3/16
R113	3/8	13/64
*R72	7/16	1/8
*R75	7/16	5/32
R73	7/16	3/16
R713	7/16	13/64
*R22	1/2	1/8
*R25	1/2	5/32
R211	1/2	11/64
*R23	1/2	3/16
R213	1/2	13/64
*R27	1/2	7/32
*R215	1/2	15/64
*R24	1/2	1/4
R93	9/16	3/16
R97	9/16	7/32
R94	9/16	1/4

The following added to			
Type Drill	Length	Stock Number	Ref. Page
High Speed	-Short Length	15090009	39
Regular	-Regular Length	15190009	40-42
Point Drills	-Long Length	15290009	43
High Speed	-Short Length	20090009	39
Brad Point	-Regular Length	20190009	40-42
Drills	-Long Length	20290009	43
High Speed	-Short Length	25090009	7
Taper	-Regular Length	25190009	7
Point Drills	-Long Length	25290009	7
Stop Collars to	control depth -	11990009	6

^{*} Indicates sizes in set of 9 Type 'R' Counterbores shown above. Substitutions of the same cutting diameter Counterbore may be made.

All sizes 1" long overall
Drills are not included unless specified.
Types and sizes are shown on pages 39 - 54.
Stop collars shown on page 6.
Matching Plug Cutters shown on page 10.
Special sizes - Quotation on request.



WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.

Type 'B' and Type 'X' Counterbores

To cut wood and plastic, four flutes.

Type 'B' Counterbores



Designed to cut clean holes in softwood. Can also be used with stop collars (shown on page 6) to control depth of cut.

Counterbores for the flat under the head of nails, spikes and bolts to sink the heads under the surface or deep enough for wood plug to cover the head.



Can be set at any point on twist drill and held fast with two hex-socket set screws. Designed for clean cutting and hardened for long life.

Can be used in Drill Press, Electric Hand Drill or Bit Brace.

Sizes and types of drills available to fit Type 'B' Counterbores are shown on pages 39 thru 54.

B34

Stop Collars to control depth are shown on page 6.



B34 mounted on 1/4" Brad Point Drill with 5/8" Stop Collar



Type 'X' Counterbores

Designed to cut faster and deeper in hardwoods.



X34L

Adaptable to high or low speed spindles and hardened for long service.

Four-blade rugged construction cuts a smooth hole and stays sharp longer.

Sizes and types of drills available to fit type 'X' Counterbores are shown on pages 39 thru 54. Stop Collars not recommended on type 'X' Counterbores.

WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.

	T			
Type 'B'	Type 'X'		pecifications	
Stock	Stock	Cutting	Overall	Drill
Number	Number	Dia.	Length	Size
*B3	*X3L	5/8	1	3/16
B37	X37L	5/8	1	7/32
B34	X34L	5/8	1	1/4
B317	X317L	5/8	1	17/64
B39	X39L	5/8	1	9/32
B310	X310L	5/8	1-1/8	5/16
B43	X43L	3/4	1	3/16
B47	X47L	3/4	1	7/32
*B4	*X4L	3/4	1	1/4
B49	X49L	3/4	1	9/32
*B5	*X5L	3/4	1-1/8	5/16
B511	X511L	3/4	1-1/8	11/32
B56	X56L	3/4	1-1/4	3/8
B64	X64L	7/8	1-1/8	1/4
B610	X610L	7/8	1-1/8	5/16
*B6	*X6L	7/8	1-1/4	3/8
B67	X67L	7/8	1-3/8	7/16
B68	X68L	7/8	1-1/2	1/2
B74	X74L	1	1-1/8	1/4
B75	X75L	1	1-1/8	5/16
B76	X76L	1	1-1/4	3/8
*B7	*X7L	1	1-3/8	7/16
B78	X78L	1	1-1/2	1/2
B85	X85L	1-1/8	1-1/8	5/16
B86	X86L	1-1/8	1-1/4	3/8
B87	X87L	1-1/8	1-3/8	7/16
*B8	*X8L	1-1/8	1-1/2	1/2
B89	X89L	1-1/8	1-5/8	9/16
B96	X96L	1-1/4	1-1/4	3/8
B97	X97L	1-1/4	1-3/8	7/16
B98	X98L	1-1/4	1-1/2	1/2
B9	X9L	1-1/4	1-5/8	9/16
B910	X910L	1-1/4	2	5/8
B912	X912L	1-1/4	2-1/4	3/4
B106	X106L	1-3/8	1-3/8	3/8
B107	X107L	1-3/8	1-3/8	7/16
B108	X108L	1-3/8	1-1/2	1/2
B109	X109L	1-3/8	1-5/8	9/16
B10	X10L	1-3/8	2	5/8
B1012	X1012L	1-3/8	2-1/4	3/4
B126	X126L	1-1/2	1-1/2	3/8
B127	X127L	1-1/2	1-1/2	7/16
B128	X128L	1-1/2	1-1/2	1/2
B129	X129L	1-1/2	1-5/8	9/16
B1210	X1210L	1-1/2	2	5/8
B12	X12L	1-1/2	2-1/4	3/4

Types 'B' and 'X' Counterbores Special sizes - Quotation on request.

^{*} Indicates the sizes in set of Type 'B' or 'X' Counterbores shown on page 23. Substitutions with the same cutting diameter Counterbore may be made if desired. Quotation on request.

'X' and 'B' Counterbore Sets

Set of 6 Type 'B' Counterbores in Wood Holder Stock No. 10290006





Set of 6 Type 'X' Counterbores In Wood Holder Stock No. 12490006



The follow	The following sets of Drills and Stop Collars can be ordered with the above sets of			
	Counterbores			
Drill Type	Length	Stock Number	Page Reference	
High Speed	-Short Length	15090006	39	
Regular	-Regular Length	15190006	40-42	
Point drills	-Long Length	15290006	43	
High Speed	-Short Length	25090006	39	
Brad Point	-Regular Length	25190006	40-42	
Drills	-Long Length	25290006	43	
Stop Collars to o	control depth (Type B only)	11990006	6	

*Reference page 22 - Sizes in Set of 6

WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.



Drill

Drill Stops

These steel Drill Stops are held solidly in place with two set screws, to give positive control on depth of drill cut.

Stock

Size	Decimal	Number
		Overall Length
1/16	.0625	10600062
#52	.0635	10600063
#51	.0670	10600067
#50	.0700	10600070
#49	.0730	10600073
#48	.0760	10600076
5/64	.0781	10600078
#47	.0785	106000785
2.0 mm	.0787	106000787
#46	.0810	10600081
#45	.0820	10600082
#44	.0860	10600086
#43	.0890	10600089
#42	.0935	106000935
3/32	.0937	10600093
#41	.0960	10600096
#40	.0980	10600098
#39	.0995	10600099
#38	.1015	10600101
#37	.1040	10600104
#36	.1065	10600106
7/64	.1094	10600109
#35	.1100	10600110
#34	.1110	10600111
#33	.1130	10600113
#32	.1160	10600116
3.0 mm	.1181	10600118
#31	.1200	10600120
1/8	.1250	10600125
7/16" 1	Diameter by	
	Length	
#30	.1285	10600128
#29	.1360	10600136
#28	.1405	106001405
9/64	.1406	10600140
#27	.1440	10600144
#26	.1470	10600147
#25	.1495	10600149
#24	.1520	10600152
#23	.1540	10600154
5/32	.1562	10600156
#22	.1570	10600157
4.0 mm	.1575	106001575
#21	.1590	10600159
#20	.1610	10600161
#19	.1660	10600166
#18	.1695	10600169
11/64	.1719	10600171
#17	.1730	10600173
#16	.1770	10600177
#15	.1800	10600180
#14	.1820	10600182
#13	.1850	10600185
3/16	.1875	10600187



Drill

Size

Decimal



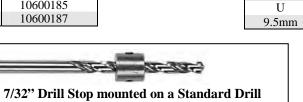
1/2" Diameter by 1/2" Overall Length			
#12	.1890		
#12	.1890	10600189 10600191	
#10	.1935	10600193	
#9	.1960	10600196	
5.0 mm	.1968	106001968	
#8	.1990	10600199	
#7	.2010	10600201	
13/64	.2031	10600203	
#6	.2040	10600204	
#5	.2055	10600205	
#4	.2090	10600209	
#3	.2130	10600213	
7/32	.2188	10600218	
#2	.2210	10600221	
#1	.2280	10600228	
A	.2340	106002340	
15/64	.2344	10600234	
6.0 mm	.2362	10600236	
В	.2380	10600238	
C	.2420	10600242	
D	.2460	10600246	
1/4 (E)	.2500	10600250	
		Overall Length	
F	.2570	10600257	
G	.2610	10600261	
17/64	.2656	10600265	
H	.2660	10600266	
I	.2720	10600272	
7.0 mm	.2756	10600275	
J	.2770	10600277	
K	.2810	106002810	
9/32	.2812	10600281	
L	.2900	10600290	
M	.2950	10600295	
19/64	.2969	10600296	
N	.3020	10600302	
7.75mm	.3051	10600305	
5/16	.3125	10600312	
3/4" Diame		Overall Length	
8.0 mm	.3150	10600315	
О	.3160	10600316	
8.1mm	.3189	10600318	
P	.3230	10600323	
21/64	.3281	10600328	
Q	.3320	10600332	
8.5mm	.3346	10600334	
R	.3390	10600339	
11/32	.3438	10600343	
S	.3480	10600348	
9.0 mm	.3543	10600354	
T	.3580	10600358	
22/64	2504	10600250	

Stock

Number



23/64



Continued on Page 25.

10600359

10600368

10600374

.3594

.3680

.3740



Drill Stops and Sets

Drill Stops Continued from page 24

These steel drill stops are held solidly in place with two set screws, to give positive control on depth of drill cut.







Size Decimal Number 7/8" Diameter by 7/8" Overall Length 3/8 .3750 10600375 V .3770 10600375 9.8mm .3858 10600385 W .3860 10600386 25/64 .3906 10600390 10.0 mm .3937 10600397 Y .4040 10600404 13/32 .4062 10600406 Z .4130 10600413 27/64 .4219 10600431 27/64 .4219 10600433 15/32 .4688 10600453 15/32 .4688 10600453 15/32 .4688 10600468 12.0 mm .4724 10600472 31/64 .4844 10600484 1/2 .5000 10600500 1" Diameter by 1" Overall Length 13.0 mm .5118 10600515 17/32 .5312 10600515 17/32 .5312 10600551 <t< th=""><th>Drill</th><th>D ' 1</th><th>Stock</th></t<>	Drill	D ' 1	Stock																																																																																																																																				
3/8	Size	Decimai	Number																																																																																																																																				
3/8	7/8" Diameter by 7/8" Overall Length																																																																																																																																						
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W .3860 10600386 25/64 .3906 10600390 10.0 mm .3937 10600393 X .3970 10600397 Y .4040 10600404 13/32 .4062 10600406 Z .4130 10600413 27/64 .4219 10600421 11.0 mm .4331 10600433 7/16 .4375 10600437 29/64 .4531 10600453 15/32 .4688 10600468 12.0 mm .4724 10600472 31/64 .4844 10600484 1/2 .5000 10600500 1" Diameter by 1" Overall Length 13.0 mm .5118 10600515 33/64 .5156 10600515 17/32 .5312 10600531 9/16 .5625 10600531 9/16 .5625 10600578 15.0 mm .5906 10600590 19/32 .5938 10600750	V	.3770	10600377																																																																																																																																				
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10.0 mm .3937 10600393 X .3970 10600397 Y .4040 10600404 13/32 .4062 10600406 Z .4130 10600413 27/64 .4219 10600431 11.0 mm .4331 10600433 7/16 .4375 10600433 29/64 .4531 10600453 15/32 .4688 10600468 12.0 mm .4724 10600472 31/64 .4844 10600484 1/2 .5000 10600500 1" Diameter by 1" Overall Length 13.0 mm .5118 10600511 33/64 .5156 10600515 17/32 .5312 10600531 9/16 .5625 10600562 37/64 .5781 10600578 15.0 mm .5906 10600593 1-1/8" Diameter by 1-1/8" Overall Length 5/8 .6250 10600659 21/32 .6562 10600666 <																																																																																																																																							
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Drill Stop Sets

Sets of Drill Stops	Stock Number
Set of $13 = \text{to fit } 1/16 \text{ to } 1/4 \text{ By } 64 \text{ths}$	10690013
Set of $15 = \text{to fit } 1/16 \text{ to } 1/2 \text{ By } 32\text{nds}$	10690015
Set of $21 = \text{to fit } 1/16 \text{ to } 3/8 \text{ By } 64 \text{ths}$	10690021
Set of $29 = \text{to fit } 1/16 \text{ to } 1/2 \text{ By } 64 \text{ths}$	10690029
Set of 50 = to fit #1 to #50 Wire Gage	10690050
Set of $26 = \text{to fit Letter sizes A to Z}$	10690026

Other sizes - Priced on request.



M. A. Ford Uniflute and Multiflute Countersinks

High Speed Steel and Carbide To cut steel and non-ferrous materials.

Note: All of these Countersinks also work well in wood and in some plastics.

** Change 8th digit of stock number to indicate degree required.

82 degrees will be supplied if not specified.

 $1 = 60^{\circ}$ $2 = 82^{\circ}$

 $3 = 90^{\circ}$

 $4 = 100^{\circ}$

 $6 = 120^{\circ}$



Series 60 Carbide Uniflute Countersink

Available in 60, 82, 90 and 100-degree angles. This solid carbide Countersink is recommended for abrasive materials and non-ferrous metals. It can also be used for hardened steel. Not recommended for hand held equipment.

Stock Number For 82° Angle	Body Dia.	End Dia.	O.A. Length	Shank Dia.	Shank Lgth.
60012502	1/8	.03	1.50	.125	-
60018702	3/16	.03	1.50	.187	-
60025002	1/4	.03	2.00	.250	-
60037502	3/8	.03	2.00	.250	1.00
60050002	1/2	.03	2.37	.250	1.62
60075002	3/4	.12	2.75	.500	1.25
60100002	1	.12	2.75	.500	1.25

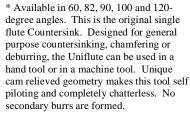


Series 66 HSS Triflute Countersink

* Available in 60, 82 and 90-degree angles. The Ford Tri-flute Countersink is designed for general purpose countersinking, chamfering or deburring. Cam relief geometry, similar to the Uniflute, makes the Tri-flute ideal for machining at feed rates greater than those possible with the Uniflute.

Stock Number For 82° Angle	Body Dia.	End Dia.	Overall Length	Shank Dia.
66025002	1/4	.06	2.00	.250
66037502	3/8	.09	2.00	.250
66050002	1/2	.15	2.00	.250
66062502	5/8	.18	2.25	.250
66075002	3/4	.21	2.75	.500
66100002	1	.25	2.75	.500
66125002	1-1/4	.35	3.00	.500
66150002	1-1/2	.50	3.50	.750

Series 61 HSS Uniflute Countersink



* Body diameters over 1" are not available in 100 and 120 degrees.

Stock Number For 82° Angle	Body Dia.	End Dia.	O.A. Lgth.	Shank Dia.	Shank Lgth.
61012502	1/8	.03	1.50	.125	-
61025002	1/4	.03	2.00	.250	-
61037502	3/8	.03	2.00	.250	1.00
61050002	1/2	.03	2.00	.250	1.00
61062502	5/8	.03	2.25	.250	1.00
61075002	3/4	.12	2.75	.500	1.25
61100002	1	.12	2.75	.500	1.25
61125002	1-1/4	.12	3.00	.500	1.25*
61150002	1-1/2	.25	3.50	.750	1.62*
61200002	2	.50	3.75	.750	1.62*
61250002	2-1/2	-	5.00	.750	1.62*
61300002	3	-	5.25	.750	1.62*

^{*} Straight Shank with Tang Drive.



Series 62 Hi-Alloy Uniflute

* Available in 60, 82, and 90-degree angles. Countersinks will handle those extra tough countersinking and deburring jobs encountered in stainless and other high tensile alloy steels. This Countersink will withstand the abrasion and higher temperatures with less edge wear, which permits longer production runs with less down time. Tools manufactured from premium high-speed steel.

Stock Number For 82° Angle	Body Dia.	End Dia.	O.A. Length	Shank Dia.	Shank Dia.
62025002	1/4	.03	2.00	.250	-
62050002	1/2	.03	2.00	.250	1.00
62075002	3/4	.12	2.75	.500	1.25
62100002	1	.12	2.75	.500	1.25

M. A. Ford Uniflute and Multiflute Countersinks

High Speed Steel and Carbide Countersinks To cut steel and non-ferrous material.

Note: All of these Countersinks also work well in wood and in some plastics.

** Change 8th digit of stock number to indicate degree required.

82 degrees will be supplied if not specified.

 $1 = 60^{\circ}$

 $2 = 82^{\circ}$

 $3 = 90^{\circ}$

 $4 = 100^{\circ}$

 $6 = 120^{\circ}$



Series 67 HSS Single Cutting Edge Countersink

- *Available in 60, 82, 90 and 100 degree angles.
- *Designed for general purpose
- countersinking, chamfering or deburring.
 *Efficient stock removal, chatter free finish.
- *3/16 and 1/4 tools are double ended.
- *Bright finish helps reduce chip build-up on cutting edge.

Stock		Dia.	of cut		
Number For 82° Angle	Body Dia.	*Min	*Max	O.A. Lgth	Shank Dia.
67018702	3/16	.06	.17	1.50	.187
67025002	1/4	.09	.23	2.00	.250
67043702	7/16	.15	.40	2.00	.250
67056202	9/16	.19	.53	2.00	.250
67081202	13/16	.25	.78	2.63	.500
67112502	1-1/8	.44	1.03	2.88	.500
67150002	1-1/2	.50	1.46	3.50	.500

^{*15%} to 30% greater for 60 degree countersinks only.



Series 78 Chatterless Carbide Six Flute Countersink

*Available in 60, 82, 90, 100 and 120-degree angles. The solid carbide construction (steel shanks on tools 3/8" and larger) makes this countersink ideal for hardened steel, high temperature alloys and other tough jobs. They are not recommended for hand held use.

Stock Number For 82° Angle	Body Dia.	Overall Length	Shank Dia.
78012502	1/8	1.50	.125
78018702	3/16	1.50	.187
78025002	1/4	2.00	.250
78037502	3/8	2.00	.250
78050002	1/2	2.125	.375
78062502	5/8	2.375	.375
78075002	3/4	2.75	.500
78100002	1	2.75	.500
78125002	1-1/4	3.00	.500
78150002	1-1/2	3.50	.750



Series 79 Multiflute Countersink HSS

*Available in 60, 82, 90, 100 and 120 degree angles. Designed for maximum feed rate countersinking and chamfering. Multiflute design reduces chip load and it insures chatter free cutting.

Stock Number For 82° Angle	Body Dia.	O. A. Lgth	Shank Dia.
79012502	1/8	1.50	.125
79018702	3/16	1.50	.187
79025002	1/4	2.00	.250
79031202	5/16	2.00	.250
79037502	3/8	2.00	.250
79050002	1/2	2.00	.375
79062502	5/8	2.25	.375
79075002	3/4	2.75	.500
79087502	7/8	2.75	.500
79100002	1	2.75	.500
79125002	1-1/4	3.00	.500
79150002	1-1/2	3.50	.750
79200002	2	3.75	.750
79250002	2-1/2	5.00	.750
79300002	3	5.25	.750

Series 92 Aircraft HSS Three Flute Countersink

* Available in 60, 82, 90, 100 and 120-degree angles. These are designed for countersinking, deburring and chamfering aircraft materials. The bright finish helps to reduce chip build-up on the cutting edge. Spiral flute geometry for a clean, chatterless finish. Each size may be used on a wide range of hole diameters.

Stock Number For 82° Angle	Body Dia.	Overall Length	Shank Dia.
92025002	1/4	1.25	.250
92037502	3/8	1.625	.250
92050002	1/2	2.00	.250
92062502	5/8	2.25	.250
92075002	3/4	3.00	.500
92087502	7/8	3.00	.500
92100002	1	3.25	.500
92112502	1-1/8	3.25	.500
92125002	1-1/4	3.50	.625
92150002	1-1/2	3.875	.750
92200002	2	4.25	.750





Uniflute and Chatterless Sets



Series 61

These are sets of seven Uniflute Countersinks. These sets include 3/16", 1/4", 3/8", 1/2", 5/8", 3/4" and 1" diameter tools, with the included angles below.

Set Numbers	Included Angle
64100071	60°
64100072	82°
64100073	90°
64100074	100°
64100076	120°

These are sets of four Uniflute Countersinks that include 1/4", 1/2", 3/4", and 1" diameter tools, with the included angles below.

Set Numbers	Included Angle
64100001	60°
64100002	82°
64100003	90°
64100004	100°
64100006	120°



Series 79

These are sets of seven Chatterless Countersinks that include 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" and 1" diameter tools, with the included angles below.

Set Numbers	Included Angle
79000001	60°
79000002	82°
79000003	90°
79000004	100°

These are sets of four Chatterless Countersinks that include 1/4", 1/2", 3/4" and 1" diameter tools, with the included angles below.

Set Numbers	Included Angle
79000011	60°
79000012	82°
79000013	90°
79000014	100°

Adjustable Countersinks and Counterbores for deep hole drilling made of High Carbon Steel

All sizes are 4-1/2" overall, 2-1/2" of twist, 1/2" split shank, and have one set screw.





Series 5C with 82 degree angle for countersinking

Series 5 with flat bottom and outlining spurs for counterboring

Drills not included - See below

Series	Series			Series			Series		
5C	5	Body	Hole	5	Body	Hole	5	Body	Hole
Stock	Stock	Dia.	Dia.	Stock	Dia.	Dia.	Stock	Dia.	Dia.
Number	Number			Number			Number		
5C03750125	503750125	3/8	1/8	506250156	5/8	5/32	508750187	7/8	3/16
5C03750156	503750156	3/8	5/32	506250187	5/8	3/16	508750218	7/8	7/32
5C03750187	503750187	3/8	3/16	506250218	5/8	7/32	508750250	7/8	1/4
X	504370156	7/16	5/32	506250250	5/8	1/4	508750312	7/8	5/16
5C04370187	504370187	7/16	3/16	506250281	5/8	9/32	508750375	7/8	3/8
5C04370218	504370218	7/16	7/32	506250312	5/8	5/16	510000250	1	1/4
5C04370250*	504370250	7/16	1/4	506870250	11/16	1/4	510000312	1	5/16
5C05000125	505000125	1/2	1/8	506870281	11/16	9/32	510000375	1	3/8
5C05000156	505000156	1/2	5/32	506870312	11/16	5/16	511250250	1-1/8	1/4
5C05000171	505000171	1/2	11/64	507500187	3/4	3/16	511250312	1-1/8	5/16
5C05000187	505000187	1/2	3/16	507500250	3/4	1/4	512500250	1-1/4	1/4
5C05000203	505000203	1/2	13/64	507500281	3/4	9/32	512500312	1-1/4	5/16
5C05000218	505000218	1/2	7/32	507500312	3/4	5/16	512500375	1-1/4	3/8
5C05000250	505000250	1/2	1/4	507500375	3/4	3/8	X	X	X
X	505620187	9/16	3/16	508120187	13/16	3/16	X	X	X
X	505620218	9/16	7/32	508120250	13/16	1/4	X	X	X
X	505620250	9/16	1/4	508120281	13/16	9/32	X	X	X
X	505620281	9/16	9/32	508120312	13/16	5/16	X	X	X

^{*} Only While Supplies Last.

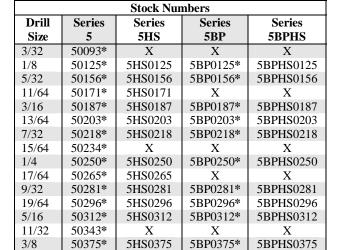
X = Not Avaliable



Carbon and High Speed Steel Drills for Series 5 and 5C Countersinks.

All sizes are 6" overall and have 2-1/4" of twist.

Series 5 (Carbon) and Series 5HS (HSS) Regular Point



*Only While Supplies Last. X= Not Avaliable

Series 5BP (Carbon) and Series 5BPHS (HSS) Brad Point





Countersinks and Counterbores

High Speed Steel and Carbide Tipped

Series 4CT Countersink Carbide Tipped

1-1/2" Overall

82 degree included angle

Drills not included. See below:



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Stock Number	Cutting Diameter	Hole Size
4CT8187	1/2	3/16
4CT8218	1/2	7/32
4CT8250	1/2	1/4

Series 8 Drills to fit 4CT Countersinks

All drills are 4-1/2" overall and have 2-1/2" of twist.



Series 8 (Carbon) & Series 8HS (HSS) Regular Point

Series 8BP (Carbon) & Series 8BPHS (HSS) Brad Point

	Stock Numbers				
Sizes	Series Series Series				
	8HS	8BP	8PBHS		
3/16	8HS0187	8BP0187*	8BPHS0187		
7/32	8HS0218	X	8BPHS0218		
1/4	8HS0250	8BP0250*	8BPHS0250		

* = Only While Supplies Last



Series 5CCT Countersink Carbide Tipped

4-1/2" O.A. – 2-1/2" Twist 1/2" Shank 82 degree included angle



Series 5CT Counterbore Carbide Tipped

4-1/2" O.A. - 2-1/2" Twist 1/2" Shank-Flat Bottom

Drills not included. See bottom of page 29

Stock 1	Numbers	Siz	es
Series Series		Cutting	Hole
5CCT	5CT	Diameter	Size
5CCT6187	5CT6187	3/8	3/16
5CCT8187	5CT8187	1/2	3/16
5CCT8218	5CT8218	1/2	7/32
5CCT8250	5CT8250	1/2	1/4

Combined Drills & Countersinks Double End 2 Flutes



The drill ends are both of same diameter. These Combined Drills and Countersinks have an included angle of 60 degrees.

Stock Number	Size	Cutting Dia.	Dia. of Drill	Length of Drill	Overall Length
05000020	000	1/8	.020	.020	1-1/4
05000025	00	1/8	.025	.025	1-1/4
05000031	0	1/8	1/32	1/32	1-1/4
05000046	1	1/8	3/64	3/64	1-1/4
05000078	2	3/16	5/64	5/64	1-7/8
05000109	3	1/4	7/64	7/64	2
05000125	4	5/16	1/8	1/8	2-1/8
05000187	5	7/16	3/16	3/16	2-3/4
05000218	6	1/2	7/32	7/32	3
05000250	7	5/8	1/4	1/4	3-1/4
05000312	8	3/4	5/16	5/16	3-1/2

Combined Drill and Countersink Sets

Stock Number	Description
04000003	Combination
	Countersinks
	Includes 1 each:
	#1, #2, #3, #4 & #5
05000001	Jig Bore Countersinks
with	Includes 1 each:
3/8" Body	1/16", 3/32", 1/8",
Diameter	5/32" & 3/16".
05000002	Jig Bore Countersinks
with	Includes 1 each:
1/2"Body	1/8", 3/16", 7/32", 1/4"
Diameter	& 9/32"



Center Reamer Type Countersinks 3 Flutes



Stock	Cutting	Shank	Shank	Overall
Number	Dia.	Dia.	Length	Length
04002502	1/4	1/4	7/8	1-1/2
04003752	3/8	1/4	7/8	1-3/4
04005002	1/2	1/4	7/8	2
04006252	5/8	3/8	1	2-1/4
04007502	3/4	1/2	1-1/4	2-5/8
04010002	1	1/2	1-1/4	2-3/4
04012502	1-1/4	1/2	1-1/4	2-3/4

82 degree-included angle will be furnished unless otherwise specified. See top of page 26 for specifications.

WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.



HSS and Carbide Tipped Countersinks and Drill Trees

5 Flute Rose Pattern Countersinks

All have an 82-degree point angle. All have a 1/4" round shank.

Stock Number	Size
195-1/2	1/2"
195-5/8	5/8"
195-3/4	3/4"

These High Speed Steel Countersinks have rose pattern cutting flutes which assure chatter free countersinking on steel, brass, aluminum, plastic, wood and other materials. 82 degree point angle, 1/4" round shank.



2 Flute Carbide Tipped Quick Change Countersinks

Stock# Stock# Stock# Stock# Stock# CTCSK078 CTCSK093 CTCSK109 CTCSK125 CTCSK140

These 2 Flute Carbide Tipped Countersinks are designed to cut fast at high spindle speeds in woods, plastics and nonferrous materials. All have 82-degree angle, 1/4" Quick Change shank and single set screw.

Stock	Cutting	Drill Hole
Number	Diameter	Size
CTCSK078	3/8	5/64
CTCSK093	3/8	3/32
CTCSK109	3/8	7/64
CTCSK125	3/8	1/8
CTCSK140	1/2	9/64
CTCSK156	1/2	5/32



Drill Tree Step Drill Bits High Speed Steel

The superior economy and convenience offered by Step Drill Bits make them especially popular in the professional construction market. By replacing as many as 13 separate drills bits, Step Drill Bits can save time, space and money. Made of High Speed Steel, these bits provide good performance and durability.



Stock Number	No. of Holes	Dia. Inches	OAL	Step Depth	Shank Size	Point Type	Application
44692	12	3/16-7/8 by 1/32nds	3	1/8	3/8	Self Starting	All common drilling needs
44685	13	1/8-1/2 by 1/32nds	3	1/8	1/4	Self Starting	All common drilling needs
44686	8	9/16-1 by 1/16ths	2-13/16	1/8	3/8	For enlarging, requires 1/2 or larger pilot holes.	Companion to bit #44685, these 2 bits will drill 99% of most common hole diameters.
44687	9	1/4-3/4 by 1/16ths	2-13/16	1/8	3/8	Self Starting	Ideal for cutting medium size holes
44694	6	3/16-1/2 by 1/16ths	3-1/4	3/8	1/4	Self Starting	Drill perfect size holes for 1/2 conduit. Ideal for making draw boltholes and miniature pilot light holes.



High Speed Steel Step Drills

To Cut Woods, Plastics and Metals



For high production in woods, plastics and metals. Made of High Speed Steel.

With 82 degree included angle or 180 degree flat step.

Drill and Countersink or Counterbore in one operation, clearance for the head and body of various types of screw.

Flutes are less likely to clog compared with two-piece Countersink and Drill combination particularly in materials such as aluminum.

Stock Sizes are available for immediate delivery.

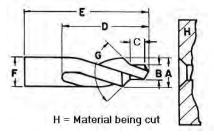


SD9F

Stock sizes and Stock numbers

82° Angled Step		Standard							180°	
Aligieu Step		Dimensions							Flat Step	
Stock No.	Degree	Screw Size	Major Diameter A	Minor Diameter B	Pilot Length C	Flute Length D	Overall Length E	Shank Size F	Degree	Stock No.
SD2	82°	2	3/16	.090	3/16	1-1/8	2-3/16	3/16	180°	SD2F
SD3	82°	3	7/32	.103	3/16	1-1/4	2-3/8	7/32	180°	SD3F
SD4	82°	4	15/64	.116	3/16	1-5/16	2-7/16	15/64	180°	SD4F
SD5	82°	5	17/64	.129	1/4	1-7/16	2-5/8	1/4	180°	SD5F
SD6	82°	6	19/64	.142	1/4	1-9/16	2-3/4	1/4	180°	SD6F
SD7	82°	7	21/64	.155	1/4	1-11/16	2-15/16	1/4	180°	SD7F
SD8	82°	8	11/32	.168	1/4	1-11/16	3	1/4	180°	SD8F
SD9	82°	9	3/8	.182	1/4	1-13/16	3-1/8	3/8	180°	SD9F
SD10	82°	10	13/32	.195	1/4	1-15/16	3-5/16	3/8	180°	SD10F
SD12	82°	12	29/64	.221	5/16	2-1/8	3-9/16	3/8	180°	SD12F
SD14	82°	14 or 1/4	1/2	.255	5/16	2-1/4	3-3/4	1/2	180°	SD14F
SD16	82°	16 or 9/32	9/16	.286	5/16	2-1/2	5	1/2	180°	SD16F
SD18	82°	18 or 5/16	5/8	.317	3/8	2-1/2	5	1/2	180°	SD18F
SD20	82°	20	11/16	.328	3/8	2-1/2	5	1/2	180°	SD20F
SD24	82°	24 or 3/8	3/4	.380	3/8	2-1/2	5	1/2	180°	SD24F





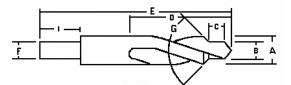
For other special sizes see pages 33-35

Special Step Drills

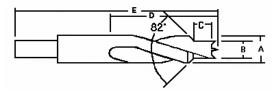
For Woods, Metals and Plastics

We can manufacture *Step Drills* to your specifications. Six basic styles to choose from are shown below. Simply fill in the dimensions or specifications for items **A** through **J** listed below. *Small quantities are our specialty*. In most cases we can ship within 1 to 2 weeks from the time you place your order with us. Large quantities can take longer. **Give us a call and let us give you a quote**.

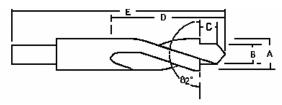
Style 1



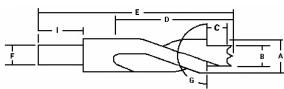
Style 2



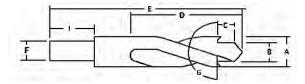
Style 3



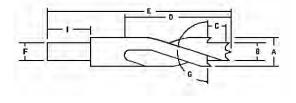
Style 4



Style 5



Style 6



High Speed Steel Step Drills work best in **high production applications** where clean, accurate holes are required in woods, metals and plastics. Two-piece tools used for combined drilling and countersinking or counterboring can clog with chips. A Step Drill offers better chip removal as well as longer tool life.

We use standard drills found on pages 39 through 53 to manufacture Step Drills. We can cut drills to length, grind one or more pilot diameters, grind reduced shank sizes, grind flats on shanks, change point configurations and thin the web thickness.

We try to avoid pilots that are too small or too long which could cause them to break prematurely. We also try to avoid cutting off the point end of a standard drill, which can take away from the cutting ability of the drill. When choosing a drill to use, always pick the shortest one possible for your application. The pilot length should also be as short as possible to avoid unnecessary breakage and reduce your cost for us to grind the Step Drill.

A Countersink diameter	Use the smallest size possible	Recommended minimum is 1/8		
B Pilot diameter	Use the largest size possible	Recommended minimum is 3/32		
C Pilot length	Use shortest length possible	Maximum length 4 times pilot diameter		
D Flute length	Use standard if possible	See drill lengths		
E Overall length	Use standard if possible	On pages 39 to 53		
F Shank diameter	Use same size as countersink diameter (A) if possible or 1/4", 3/8", 1/2", 10mm etc.			
G Countersink or Counterbore Angle	60 to 179 degree of included angle or 180 degree flat step Counterbore.			
H Material	Specify type of material to be cut			
I Length of Shank	Standards: 1/4" = 1" long, 3/8" = 1-1/4" long 1/2" = 1-1/2" long, 10mm = 1" w/flat.			
J Style Number	Choose one of 6 styles on left			

We do not manufacture Solid Carbide or Carbide Tipped Step Drills

Our Standard tolerances:

Cutting Diameters plus .000" to minus .0015"
Shank Diameters plus .000" to minus .005"
Pilot Lengths plus 1/32" to minus 1/32"
Shank Lengths plus 1/16" to minus 1/16"
Overall & Flute Lengths plus 1/8" to minus 1/8"



Step Drills for Wood Screws and Production Screws

These Step Drills are designed to predrill clearance holes through the first piece of wood and pilot holes for the threads in the second piece of wood. Sizes and lengths match standard screw sizes. Countersinks shown on page 5 can be used to complete a 3-step operation in 1 step. Made of top quality High Speed Steel.





		Wood	Production	A	В	С	D	E
Tool	Screw	Screw	Screw	Drill	Pilot	Pilot	Twist	Overall
Number	Size	Length	Depth **	Dia ***	Dia	Length	Length	Length
SD0404	#4	1/2	5/16	7/64	.075	5/16	1-1/2	2-5/8
SD0406		3/4	1/2			1/2		
SD0408		1	5/8			5/8*	2-1/2	3-3/4
SD0410		1-1/4	13/16			13/16*		
SD0604	#6	1/2	5/16	9/64	.094	5/16	1-3/4	2-7/8
SD0606		3/4	1/2			1/2		
SD0608		1	5/8			5/8		
SD0610		1-1/4	13/16			13/16*	3	4
SD0612		1-1/2	1			1*		
SD0616		2	1-5/16			1-5/16*		
SD0804	#8	1/2	5/16	11/64	.112	5/16	2-1/8	3-1/4
SD0806		3/4	1/2			1/2		
SD0808		1	5/8			5/8		
SD0810		1-1/4	13/16			13/16		
SD0812		1-1/2	1			1	3-3/8	4-1/2
SD0816		2	1-5/16			1-5/16*		
SD0820		2-1/2	1-5/8			1-5/8*		
SD0824		3	2			2*	6	8
SD1006	#10	3/4	1/2	13/64	.130	1/2	2-7/16	3-5/8
SD1008		1	5/8			5/8		
SD1010		1-1/4	13/16			13/16		
SD1012		1-1/2	1			1		
SD1016		2	1-5/16			1-5/16*	3-5/8	4-1/2
SD1020		2-1/2	1-5/8			1-5/8*		
SD1024		3	2			2*	6	8
SD1208	#12	1	5/8	7/32	.148	5/8	2-1/2	3-3/4
SD1210		1-1/4	13/16			13/16		
SD1212		1-1/2	1			1		
SD1216		2	1-5/16			1-5/16	3-5/8	5
SD1220		2-1/2	1-5/8			1-5/8*		
SD1224		3	2			2*	6	8
SD1228		3-1/2	2-5/16			2-5/16*		

Continued next page...



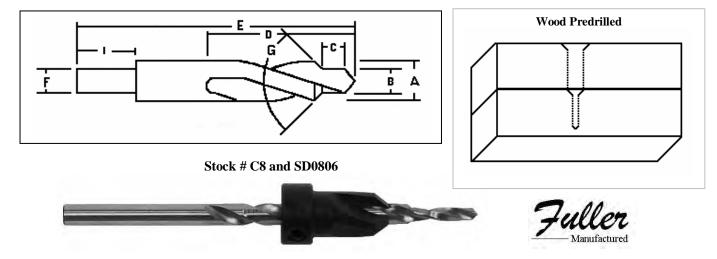
Step Drills for Wood Continued...

		Wood	Production	A	В	С	D	E
Tool	Screw	Screw	Screw	Drill	Pilot	Pilot	Twist	Overall
Number	Size	Length	Depth **	Dia ***	Dia	Length	Length	Length
SD1408	#14	1	5/8	1/4	.165	5/8	2-3/4	4
SD1410		1-1/4	13/16			13/16		
SD1412		1-1/2	1			1		
SD1416		2	1-5/16			1-5/16		
SD1420		2-1/2	1-5/8			1-5/8*	3-3/4	5
SD1424		3	2			2*		
SD1428		3-1/2	2-5/16			2-5/16*	6	8
SD1432		4	2-5/8			2-5/8*		
SD1610	#16	1-1/4		17/64	.184	13/16	2-7/8	4-1/8
SD1612		1-1/2				1		
SD1616		2				1-5/16		
SD1620		2-1/2				1-5/8*	3-7/8	5-1/4
SD1624		3				2*		
SD1628		3-1/2				2-5/16*	6	8
SD1632		4				2-5/8*		
SD1816	#18	2		19/64	.204	1-5/16	3-1/16	4-3/8
SD1820		2-1/2				1-5/8	4	5-1/4
SD1824		3				2*		
SD1828		3-1/2				2-5/16*	6	8
SD1832		4				2-5/8*		
SD2012	#20	2-1/2		5/16	.223	1-5/8	4	5-1/4
SD2024		3				2		
SD2028		3-1/2				2-5/16*	6	8
SD2032		4				2-5/8*		
SD2424	#24	3		3/8	.260	2	4-1/4	5-1/2
SD2432		4				2-5/8	6	8
SD2436		4-1/2				3*		
SD2448		6				4*	7-1/2	10

^{*} Step Drills with extra long pilot lengths are not guaranteed against breakage.

To find this dimension, subtract the thickness of the top piece of wood from the length of the screw.

*** All shank diameters are the same size as the (A) drill diameter.



^{**} Production Screw Depth (for Production or Sheet Rock screws)



Steel Types - Uses and Sharpening

All of the tools we sell are made from one of seven different types of steel. Each has its own unique characteristics and use. Generally speaking, you get what you pay for but each has a specific purpose. The types are, from cheapest to most expensive, Carbon Steel, Stainless Steel, High Speed Steel, Cobalt Steel, Ferro-Tic Carbide, Carbide Tipped and Solid Carbide. Some types of tools are offered in more than one type of steel. Please refer to this page to determine which type of steel is best for your purpose. We have the equipment and the expertise to resharpen most all of the tools we sell.

Carbon Steels, which can include High Carbon Steel and High Alloy Steel, are the softest and usually the cheapest of the seven types we offer. Many woodworking tools are made from this material. Many craftsmen like Carbon Steel because the tools are soft enough to sharpen with a file. Virtually any woodworking tool can be found in a carbon steel version. Some woodworking tools are only available in Carbon Steel or Carbide Tipped because it is too difficult to make them from anything else or they would be too expensive. If you are cutting softwood or just a few holes in hardwoods or plastics, Carbon Steel is your answer. If you have a lot of holes to cut in a hard material, you may want to choose a better grade of steel. The tools we manufacture from Carbon Steel are heat treated to 62c hardness and cannot be sharpened with a file. A stone type of grinding wheel is required to resharpen them.

Stainless Steel is not normally used to manufacture tools. However, we have found that heat-treating Stainless Steel produces tools that not only have longer lasting cutting edges than Carbon Steel but also have a spring steel quality that keeps the tools from breaking in tough applications. Stainless Steel generally costs only a little more than Carbon Steel. Our Stainless Steel is heat treated to 45c hardness and can be sharpened with a file or a stone type of grinding wheel.

High Speed Steel, sometimes abbreviated to HSS, comes in various different grades generally used in the metalworking industry to make drills, end mills, turning tools, and other tools designed specifically to cut metal. In woods and plastics, all grades of HSS far outlast the cheaper Carbon Steel or Stainless Steel. The various grades of HSS we use are identified by M1, M2, M7 and M50, M1 being the most expensive grade. Very few woodworking tools are made from HSS. It is too expensive to use for large tools, very tough to machine and can be subject to breakage with rough treatment in hand held equipment. M1 is the hardest and also the most brittle of the bunch. You can't have your cake and eat it too! We use M1, M2 and M7 for applications when better tool life is required and breakage is not a problem. M50 is used when breakage could be an issue. Tools made of High Speed Steel will always have HS or HSS stamped or etched on them. Don't be fooled by imitations. We recommend HSS for most applications because the tools are reasonably priced, last a long time in woods and plastics and have more sizes and lengths available than any other type of material. However, if you are cutting thousands of holes in hard materials, you need some type of Carbide Tooling. Sharpening HSS tools requires a grinding wheel made of stone or one that is Borazon plated.

Cobalt Steel is very similar to High Speed Steel. Its identifier is M40CO or M42. Most drills made of Cobalt have a brownish gold tint and are marked with their identifier. Cobalt is a step up from HSS and offers better tool life than HSS. Since Cobalt is harder and therefore more brittle than HSS, Cobalt drills usually have a more rugged construction with less room for chips to escape in the flute area. Although they work great cutting materials like stainless steel and cast iron, they do not work well in wood or plastics because they do not clear chips well. In an application in which a good grade of HSS Drill cut 2000 holes before becoming dull, a Cobalt Drill might cut 2200 holes before dulling. Sharpening Cobalt Steel tools requires a grinding wheel made of stone or one that is Borazon plated.

Ferro-Tic Carbide is a material developed and produced by Alloy Technologies®, which we use exclusively to produce Countersinks and Counterbores to cut abrasive materials like fiberglass, plywood, Masonite and particleboard. In its soft state, Ferro-Tic Carbide is somewhat machinable and in its hardened state it is a hard wear resistant tool. Ferro-Tic Carbide is a matrix of HSS and Carbide particles. In use, the HSS wears away and leaves the Carbide Particles exposed which greatly extends the tool life. These are not designed to cut metal or be used in hand held equipment. Sharpening Ferro-Tic Carbide tools requires a special stone grinding wheel or special Diamond plated grinding wheel.

Carbide Tipped is the material of choice for tools used in high production applications. The Carbide is super hard, resharpenable and replaceable. Carbide can cut faster at higher spindle speeds because it is impervious to the heat produced by those speeds. Since Carbide is extremely hard, it is also extremely brittle. This is especially true in the case of woodworking tools. The slightest contact with another metal object could cause the Carbide to chip. Although some grades of Carbide are designed to work well in metals and cement, the type found on woodworking tools in not. The Carbide Tips are usually brazed to the cutting edges of tools made of softer materials like Carbon Steel. Sharpening Carbide Tipped tools requires Diamond plated grinding wheels.

Solid Carbide tools are very expensive and are usually manufactured and used for special applications. Tools that are made from Solid Carbide usually have some type of spiral design or they are very small like Solid Carbide Spiral Router Bits and Solid Carbide Drill Bits. These types of tools are best sharpened by the original manufacturer.



Drill Points – Which one will work best?

The drills we supply have various different point configurations. Each type of point design has its specific uses. In order to choose the right drill, you need to know a little about drill points. We have 6 types of drill points:

Regular or Standard Point Split Point or Four Facet Point Brad Point Plexi Point Screw Point Taper Point

Standard Industrial or **Regular Point** drills have a 118 degree included angle point with cutting relief angles suited to cut metal. Drills with standard points specifically designed to cut wood usually have a longer point angle (i.e. 80 degrees). The longer 80 degree point can sometimes work better in wood if you are experiencing a problem with excess splintering on the backside when drilling through the wood. The 118-degree point is designed to be an *all purpose point* and will *cut most all materials*. If the standard drill point is not providing satisfactory results, one of the other types may be necessary.

Split Point drills usually have 135 degree included angle points and are designed to *cut metal*. Standard point drills have two cutting edges but there is a section in the center of the drill point called the chisel edge that does not actually cut, but chisels the material. The chisel edge can also cause the drill to walk across the material when you are trying to start the drill cutting on a particular spot. The Split Point drill has two additional edges ground into the chisel edge, which make the entire point of the drill one long cutting edge. This reduces the amount of pressure needed to make the drill cut. The Split Point is also *self centering* which means the drill starts cutting exactly where is comes into contact with the material. These characteristics were designed for drilling in metal but could be beneficial in some harder wood.

Plexi Point drills are designed to cut **Plexiglas**. The point can be between 60 degree and 80 degree included angle and the cutting angles are reduced to keep the drill from biting into the Plexiglas too fast. This point produces a clean hole and prevents the drill from breaking the Plexiglas when drilling through the backside.

Screw Points are found strictly on wood cutting tools. These types of points are sometimes called *Self Feeding* points. Screw Points are designed to assist and *control the rate of feed* for that tool. In other words, the screw point controls how fast the tool cuts, and all but *eliminates the need to push* the tool. It is a must when drilling large holes with hand held equipment. The disadvantage of tools with screw points is, unless the screw point is replaceable, the tool will only last until the screw wears out. That may not take long in hardwoods.

Taper Point Drills are designed specifically to **predrill for** the shank and threads of standard **wood screws**. Available in sizes and lengths to cover a wide variety of screws. Some customers have had success using this type of drill to cut through holes when a clean edge is required breaking through the backside. The Taper Point Drill breaks through gradually and produces clean edges on both sides.

Standard Drill Points



Brad Point for Hardwoods



Brad Point for Softwoods



Plexi Point



Taper Point



Standard Point



Split Point



Screw Point



Why Use Brad Point Drills?



A Brad Point Drill should provide the cleanest, straightest, and most accurately sized hole in wood of any reasonably priced tool on the market today. The brad in the center of the point allows accurate positioning when starting a hole even if the hole is not 90 degrees from the surface. The outlining spurs sheer the wood grain and leave a clean edge around the opening of the hole eliminating the need for sanding. The spurs continue to sheer the wood while drilling and produce an accurately sized hole. In most woods, the spurs also help to produce a cleaner edge when drilling through the backside of the wood.

W. L. Fuller, Inc. has been manufacturing High Speed Steel Brad Point Drills for over 40 years. We have worked with thousands of customers to produce Brad Point Drills that satisfy their needs. We stock Brad Point Drills in every size including Wire Gauge, Letter Sizes, Metric Sizes and longer or shorter lengths. If there is a need for a size not covered by these, we can take a standard size and grind and/or cut it to a needed special size. We use industrial quality High Speed Steel domestic drills designed to cut metal and rework them to cut wood. The result is a Brad Point Drill made to metalworking tolerances with cutting edges that long outlasts standard woodworking tools.

There are basically two types of brad point designs we use. One works best in **hardwoods** and the other works best in **softwoods**. Brad Point Drills that are specifically designed for softwood produce too much heat and are hard to push in hardwoods. Although Brad Point Drills specifically designed to cut hardwood will cut softwood, the aggressive cutting edges have a tendency to lift the weak grains of the softwood resulting in a ragged edge around the opening of the hole. All of the Brad Point Drills we manufacture and show in our catalog are specifically designed for hard wood and work fine for most applications.



Brad Point for Hardwood



Brad Point for Softwood

The difference between the two types of points is in the design of the **outlining spurs**. The Brad Point Drills that work best in softwood have rounded spurs, which help to hold the grains of the wood down while sheering them off. There is a certain amount of rubbing that occurs between the outlining spur and the wood before it is cut. The outlining spurs on Brad Point Drills for hardwood come to a sharp point and simply cut the stronger grains off clean. No rubbing occurs and therefore no unnecessary heat is produced by the cutting action.

If Brad Point Drills for softwood are needed, please specify "for softwood" on your order.

Another feature of the Brad Point Drill that could affect its cutting ability is the actual **brad or pyramid point** in the center. Although the sole purpose of the brad is to guide the drill through the material and keep it running straight, the shape of the brad can affect the results. The brad itself does not actually cut the wood. It mainly scrapes and pushes the wood aside. If the base of the brad is too thick or fat, the drill will be much harder to push especially in hardwoods. A brad that is too thin will allow the drill to cut freely but may break off in the process. It is also very important that the brad is exactly centered at the point of the drill. An off center brad can cause a drill to cut larger than it actually measures.

We often vary the **length of the brad** to achieve different results. A longer brad can be used when a hole needs to be drilled on an angle instead of straight into the wood. Drilling as much as 45 degrees or even 60 degrees from vertical is possible by extending the length of the brad. A shorter than normal brad may be required in the case of a hole that needs to be drilled close to but not through the back of the material.

Brad Point Drills also work well in most plastics, nylon, fiber, fiberglass and many other man made materials. If you have a question about Brad Point Drills, just call and ask a Fuller.



Short Length Drills

To Cut Wood, Plastic and Metal

	To Cut Wood, Plastic and Metal									
	Sizes and	d Dimensio	ns	150	250	210	1505	190		
	Dec.	Flute	Overall	HSS	HSS	Cobalt	HSS	HSS		
Size	Equiv.	Length	Length	Regular	Brad	Heavy	Regular	Parabolic		
	_	_	_	Point	Point	Duty	Pt. L.H.			
3/64	.0469	1/2	1-3/8	15000046	X	X	X	X		
1/16	.0625	5/8	1-5/8	15000062	X 25000070	21000062	15050062	19000062		
5/64 3/32	.0781 .0937	11/16 3/4	1-11/16 1-3/4	15000078 15000093	25000078 25000093	21000078 21000093	15050078 15050093	19000078 19000093		
7/64	.1094	13/16	1-3/4	15000109	25000109	21000093	15050109	19000093		
1/8	.1250	7/8	1-7/8	15000125	25000125	21000125	15050125	19000125		
9/64	.1406	15/16	1-15/16	15000140	25000140	21000140	15050140	19000140		
5/32	.1562	1	2-1/16	15000156	25000156	21000156	15050156	19000156		
11/64	.1719	1-1/16	2-1/8	15000171	25000171	21000171	15050171	19000171		
3/16	.1875	1-1/8	2-3/16	15000187	25000187	21000187	15050187	19000187		
13/64	.2031	1-3/16 1-1/4	2-1/4 2-3/8	15000203	25000203	21000203	15050203	19000203		
7/32 15/64	.2188 .2344	1-1/4	2-3/8 2-7/16	15000218 15000234	25000218 25000234	21000218 21000234	15050218 15050234	19000218 19000234		
1/4	.2500	1-3/10	2-1/10	15000250	25000254	21000254	15050254	19000250		
17/64	.2656	1-7/16	2-5/8	15000265	25000265	21000265	15050265	19000265		
9/32	.2812	1-1/2	2-11/16	15000281	25000281	21000281	15050281	19000281		
19/64	.2969	1-9/16	2-3/4	15000296	25000296	21000296	15050296	19000296		
5/16	.3125	1-5/8	2-13/16	15000312	25000312	21000312	15050312	19000312		
21/64	.3281	1-11/16	2-15/16	15000328	25000328	21000328	15050328	19000328		
11/32	.3438	1-11/16	3	15000343	25000343	21000343	15050343	19000343		
23/64	.3594	1-3/4	3-1/16	15000359	25000359	21000359 21000375	15050359	19000359		
3/8 25/64	.3750 .3906	1-13/16 1-7/8	3-1/8 3-1/4	15000375 15000390	25000375 25000390	21000375	15050375 15050390	19000375 19000390		
13/32	.4062	1-15/16	3-1/4	15000390	25000390	21000390	15050406	19000390		
27/64	.4219	2	3-3/8	15000421	25000421	21000421	15050421	19000421		
7/16	.4375	2-1/16	3-7/16	15000437	25000437	21000437	15050437	19000437		
29/64	.4531	2-1/8	3-9/16	15000453	25000453	21000453	15050453	19000453		
15/32	.4688	2-1/8	3-5/8	15000468	25000468	21000468	15050468	19000468		
31/64	.4844	2-3/16	3-11/16	15000484	25000484	21000484	15050484	19000484		
1/2	.5000	2-1/4	3-3/4	15000500	25000500	21000500	15050500	19000500		
					and may not					
33/64	.5156	2-3/8	3-7/8	15000515	diameters. I 25000515	X	15050515	X		
17/32	.5312	2-3/8	3-7/8	15000513	25000513	X	15050513	X		
35/64	.5469	2-1/2	4	15000531	25000531	X	15050546	X		
9/16	.5625	2-1/2	4	15000562	25000562	X	15050562	X		
37/64	.5781	2-5/8	4-1/8	15000578	25000578	X	15050578	X		
19/32	.5938	2-5/8	4-1/8	15000593	25000593	X	15050593	X		
39/64	.6094	2-3/4	4-1/4	15000609	25000609	X	15050609	X		
5/8	.6250	2-3/4	4-1/4	15000625	25000625	X	15050625	X		
41/64 21/32	.6406 .6562	2-7/8 2-7/8	4-1/2 4-1/2	15000640 15000656	25000640 25000656	X X	15050640 15050656	X X		
43/64	.6719	2-7/8	4-1/2	15000671	25000671	X	15050671	X		
11/16	.6875	2-7/8	4-5/8	15000687	25000671	X	15050687	X		
45/64	.7031	3	4-3/4	15000703	25000703	X	15050703	X		
23/32	.7188	3	4-3/4	15000718	25000718	X	15050718	X		
47/64	.7344	3-1/8	5	15000734	25000734	X	15050734	X		
3/4	.7500	3-1/8	5 1 /0	15000750	25000750	X	15050750	X		
49/64	.7656 .7812	3-1/4	5-1/8	15000765	25000765	X	15050765	X		
25/32 51/64	.7812	3-1/4 3-3/8	5-1/8 5-1/4	15000781 15000796	25000781 25000796	X X	15050781 15050796	X X		
13/16	.8125	3-3/8	5-1/4	15000790	25000790	X	15050790	X		
53/64	.8281	3-1/2	5-3/8	15000828	25000828	X	15050828	X		
27/32	.8438	3-1/2	5-3/8	15000843	25000843	X	15050843	X		
55/64	.8594	3-1/2	5-1/2	15000859	25000859	X	15050859	X		
7/8	.8750	3-1/2	5-1/2	15000875	25000875	X	15050875	X		
	0000	3-5/8	5-5/8	15000890	25000890	X	15050890	X		
57/64	.8906	2 5 10		15000906	25000906	X	15050906	X		
57/64 29/32	.9062	3-5/8	5-5/8		25000021	v	15050001	T/		
57/64 29/32 59/64	.9062 .9219	3-3/4	5-3/4	15000921	25000921	X	15050921	X		
57/64 29/32 59/64 15/16	.9062 .9219 .9375	3-3/4 3-3/4	5-3/4 5-3/4	15000921 15000937	25000937	X	15050937	X		
57/64 29/32 59/64 15/16 61/64	.9062 .9219 .9375 .9531	3-3/4 3-3/4 3-7/8	5-3/4	15000921 15000937 15000953	25000937 25000953	X X	15050937 15050953	X X		
57/64 29/32 59/64 15/16	.9062 .9219 .9375	3-3/4 3-3/4	5-3/4 5-3/4 5-7/8	15000921 15000937	25000937	X	15050937	X		
57/64 29/32 59/64 15/16 61/64 31/32	.9062 .9219 .9375 .9531 .9688	3-3/4 3-3/4 3-7/8 3-7/8	5-3/4 5-3/4 5-7/8 5-7/8	15000921 15000937 15000953 15000968	25000937 25000953 25000968	X X X	15050937 15050953 15050968	X X X		

Series 150 HSS Regular Point Drills most sizes have 135° split point.



Series 250 Brad Point for clean

holes in wood, plastic, and sheet metal.



Series 210
Heavy Duty
Cobalt for longer
point life and
higher heat
resistance. NOT
RECCOMENDED IN WOOD!



Series 1505

HSS Regular Point left hand cutting. Also available in Brad Point. P.O.R.



wide range of materials. Shorter flute and overall length for added strength and rigidity.



X = Not available



Regular or Jobbers Length Drills

High Speed Steel, Regular Point/Left Hand, Fast Spiral & Brad Point/Left Hand

To Cut Wood, Plastic and Metal

All drills can be modified by grinding to customer specifications.



Series 151
Regular Point
General purpose for drilling wood, plastic and metal.

Series 1515
Left Hand
General purpose left hand cutting.



Size Dec. Equiv Flute Lgth. O.A. Lgth Reg. Pt. General Purpose HSS Left Hand HSS Fast Spiral HSS Brad Point HSS 1/64 .0156 3/16 3/4 15100015 X X X 1/32 .0312 1/2 1-3/8 15100031 15150031 15800031 X	Brad Point Left Hand HSS X
	X
1/32 + 0.312 + 1/2 + 1.3/8 + 15100031 + 15150031 + 15800031 + V	X
3/64 .0469 3/4 1-3/4 15100046 15150046 15800046 X	X
1/16 .0625 7/8 1-7/8 15100062 15150062 15800062 X	X
	25150078
3/32 .0937 1-1/4 2-1/4 15100093 15150093 15800093 25100093	25150093
7/64 .1094 1-1/2 2-5/8 15100109 15150109 15800109 25100109	25150109
	25150125
9/64 .1406 1-3/4 2-7/8 15100140 15150140 15800140 25100140	25150140
	25150156
11/64 .1719 2-1/8 3-1/4 15100171 15150171 15800171 25100171	25150171
3/16 .1875 2-5/16 3-1/2 15100187 15150187 15800187 25100187	25150187
13/64 .2031 2-7/16 3-5/8 15100203 15150203 15800203 25100203	25150203
7/32 .2188 2-1/2 3-3/4 15100218 15150218 15800218 25100218	25150218
15/64 .2344 2-5/8 3-7/8 15100234 15150234 15800234 25100234	25150234
1/4 .2500 2-3/4 4 15100250 15150250 15800250 25100250	25150250
	25150265
9/32 .2812 2-15/16 4-1/4 15100281 15150281 15800281 25100281	25150281
19/64 .2969 3-1/16 4-3/8 15100296 15150296 15800296 25100296	25150296
	25150312
21/64 .3281 3-5/16 4-5/8 15100328 15150328 15800328 25100328	25150328
11/32 .3438 3-7/16 4-3/4 15100343 15150343 15800343 25100343	25150343
23/64 .3594 3-1/2 4-7/8 15100359 15150359 15800359 25100359	25150359
3/8 .3750 3-5/8 5 15100375 15150375 15800375 25100375	25150375
25/64 .3906 3-3/4 5-1/8 15100390 15150390 15800390 25100390	25150390
13/32 .4062 3-7/8 5-1/4 15100406 15150406 15800406 25100406	25150406
	25150421
	25150437
	25150453
	25150468
	25150484
	25150500
Shanks below are larger than 1/2" and may not fit in your chuck.	
Shanks can be ground to smaller diameters. Price on Request.	
33/64 .5156 4-13/16 6-5/8 15100515 X X 25100515	X
17/32 .5312 4-13/16 6-5/8 15100531 X X 25100531	X
35/64 .5469 4-1316 6-5/8 15100546 X X 25100546	X
9/16 .5625 4-13/16 6-5/8 15100562 X X 25100562	X
37/64 .5781 4-13/16 6-5/8 15100578 X X 25100578	X
19/32 .5938 5-3/16 7-1/8 15100593 X X 25100593	X
39/64 .6094 5-3/16 7-1/8 15100609 X	X
5/8	X
41/64 .6406 5-3/16 7-1/8 15100640 X X 25100640	X

Series 158
Fast Spiral
Fast spiral for
fast chip
removal and
high
production.

Series 251 Brad Point Brad point for clean holes in wood, plastic, and sheet metal.

Series 2515 Left Hand Left Hand Brad Points for clean holes in wood, plastic, and sheet metal.



X = Not available

.6562

.6719

.6875

5-3/16

5-5/8

5-5/8

7-1/8

7-5/8

7-5/8

15100656

15100671

15100687

21/32

43/64

11/16

X

X

25100656

25100671

25100687

X X

X

X



Regular or Jobbers Length Drills

High Speed Steel Heavy Duty, Slow Spiral, Heavy Duty Cobalt, & Parabolic

To Cut Wood, Plastic and Metal

All drills can be modified by grinding to customer specifications.

	Sizes and I	Dimensions		211	130	1516	191
Size	Dec. Equiv.	Flute Lgth.	O.A. Lgth.	Heavy Duty Cobalt	Slow Spiral HSS	Heavy Duty HSS	HSS Parabolic
1/64	.0156	3/16	3/4	21100015	X	X	X
1/32	.0312	1/2	1-3/8	21100031	X	X	X
3/64	.0469	3/4	1-3/4	21100046	X	X	X
1/16	.0625	7/8	1-7/8	21100062	13000062	15160062	19100062
5/64	.0781	1	2	21100078	13000078	15160078	19100078
3/32	.0937	1-1/4	2-1/4	21100093	13000093	15160093	19100093
7/64	.1094	1-1/2	2-5/8	21100109	13000109	15160109	19100109
1/8	.1250	1-5/8	2-3/4	21100125	13000125	15160125	19100125
9/64	.1406	1-3/4	2-7/8	21100140	13000140	15160140	19100140
5/32	.1562	2	3-1/8	21100156	13000156	15160156	19100156
11/64	.1719	2-1/8	3-1/4	21100171	13000171	15160171	19100171
3/16	.1875	2-5/16	3-1/2	21100187	13000187	15160187	19100187
13/64	.2031	2-7/16	3-5/8	21100203	13000203	15160203	19100203
7/32	.2188	2-1/2	3-3/4	21100218	13000218	15160218	19100218
15/64	.2344	2-5/8	3-7/8	21100234	13000234	15160234	19100234
1/4	.2500	2-3/4	4	21100250	13000250	15160250	19100250
17/64	.2656	2-7/8	4-1/8	21100265	13000265	15160265	19100265
9/32	.2812	2-15/16	4-1/4	21100281	13000281	15160281	19100281
19/64	.2969	3-1/16	4-3/8	21100296	13000296	15160296	19100296
5/16	.3125	3-3/16	4-1/2	21100312	13000312	15160312	19100312
21/64	.3281	3-5/16	4-5/8	21100328	13000328	15160328	19100328
11/32	.3438	3-7/16	4-3/4	21100343	13000343	15160343	19100343
23/64	.3594	3-1/2	4-7/8	21100359	13000359	15160359	19100359
3/8	.3750	3-5/8	5	21100375	13000375	15160375	19100375
25/64	.3906	3-3/4	5-1/8	21100375	13000373	15160390	19100390
13/32	.4062	3-7/8	5-1/4	21100406	13000406	15160406	19100406
27/64	.4219	3-15/16	5-3/8	21100421	13000421	15160421	19100421
7/16	.4375	4-1/16	5-1/2	21100437	13000437	15160437	19100437
29/64	.4531	4-3/16	5-5/8	21100453	13000453	15160453	19100453
15/32	.4688	4-5/16	5-3/4	21100468	13000468	15160468	19100468
31/64	.4844	4-3/8	5-7/8	21100484	13000484	15160484	19100484
1/2	.5000	4-1/2	6	21100500	13000500	15160500	19100500
1/2				than 1/2" and			17100300
				to smaller diai			
33/64	.5156	4-13/16	6-5/8	21100515	X	X	X
17/32	.5312	4-13/16	6-5/8	21100531	X	X	X
35/64	.5469	4-1316	6-5/8	21100546	X	X	X
9/16	.5625	4-13/16	6-5/8	21100562	X	X	X
37/64	.5781		6-5/8	21100578	X	X	X
19/32	.5938	5-3/16	7-1/8	21100593	X	X	X
39/64	.6094	5-3/16	7-1/8	21100609	X	X	X
5/8	.6250	5-3/16	7-1/8	21100625	X	X	X
41/64	.6406	5-3/16	7-1/8	21100640	X	X	X
21/32	.6562	5-3/16	7-1/8	21100656	X	X	X
43/64	.6719	5-5/8	7-5/8	21100671	X	X	X
11/16	.6875	5-5/8	7-5/8	21100671	X	X	X
	available	5 5/6	1 3/0	21100007	21	71	21





Regular or Jobbers Length Drills

Drill Blanks, Solid Carbide, Half Round & Carbide Tipped

To Cut Wood, Plastic and Metal

Series 1512 Drill Blanks

Made of High Speed Steel. Heat treated and ground to standard drill bit specifications. Can be used as a solid pilot for countersinks or counterbores to counterbore pre existing holes. Can also be used as a gauge to check hole diameters.



Recommended for use in the production drilling of cast iron, non-ferrous metals, and many composite materials. Features heavy-duty construction and heat treated body for optimum wear resistance and support of the carbide tip. NOT RECOMMENDED FOR DRILLING

Series 304 Half Round

Unique flute design permits higher feed rates and improved hole finish in horizontal drilling of free machining brass, bronze, nylon, and like materials. Hole is usually started with a centering drill.

Series 204 Solid Carbide

Recommended for drilling cast iron, aluminum, bronze and magnesium alloys and other abrasive, but easily machined materials.

- Designed to allow high feed rates with good chip flow.
- •Four facet drill point minimizes drill wander and assures accurately sized holes.

				STEEL!					
Dimensions		Series #1512	Series #191 Carbide	Series #304	Dime	ensions	Series #204 Solid Carbide		
Size Dec.	Dec. Equiv.	O.A. Lgth.	Flute Lgth	Drill Blanks	Tipped 118* Point	Half Round HSS	Flute Lgth.	O.A. Lgth	Solid Carbide
1/64	.0156	3/16	3/4	X	X	X	1/4	1	20401560
1/32	.0312	1/2	1-3/8	X	X	X	3/8	1-1/8	20403120
3/64	.0469	3/4	1-3/4	X	X	30400046	3/4	1-1/2	20404690
1/16	.0625	7/8	1-7/8	15120062	X	30400062	3/4	1-1/2	20406250
5/64	.0781	1	2	15120078	X	30400078	7/8	1-3/4	20407810
3/32	.0937	1-1/4	2-1/4	15120093	X	30400093	1	2	20409380
7/64	.1094	1-1/2	2-5/8	15120109	X	30400109	1-1/4	2-1/4	20410940
1/8	.1250	1-5/8	2-3/4	15120125	29100125	30400125	1-1/4	2-1/4	20412500
9/64	.1406	1-3/4	2-7/8	15120140	29100140	30400140	1-3/8	2-1/2	20414060
5/32	.1562	2	3-1/8	15120156	29100156	30400156	1-3/8	2-1/2	20415620
11/64	.1719	2-1/8	3-1/4	15120171	29100171	30400171	1-5/8	2-3/4	20417190
3/16	.1875	2-5/16	3-1/2	15120187	29100187	30400187	1-5/8	2-3/4	20418750
13/64	.2031	2-7/16	3-5/8	15120203	29100203	30400203	1-3/4	3	20420310
7/32	.2188	2-1/2	3-3/4	15120218	29100218	30400218	1-3/4	3	20421870
15/64	.2344	2-5/8	3-7/8	15120234	29100234	30400234	2	3-1/4	20423440
1/4	.2500	2-3/4	4	15120250	29100250	30400250	2	3-1/4	20425000
17/64	.2656	2-7/8	4-1/8	15120265	29100265	30400265	2-1/8	3-1/2	20426560
9/32	.2812	2-15/16	4-1/4	15120281	29100281	30400281	2-1/8	3-1/2	20428120
19/64	.2969	3-1/16	4-3/8	15120296	29100296	30400296	2-3/8	3-3/4	20429690

29100312

29100328

29100343

29100359

29100375

29100390

29100406

29100421

29100437

29100453

29100468

29100484

29100500

2 .5000 **X =Not available**

.3125

.3281

.3438

.3594

.3750

.3906

.4062

.4219

.4375

.4531

.4688

.4844

3-3/16

3-5/16

3-7/16

3-1/2

3-5/8

3-3/4

3-7/8

3-15/16

4-1/16

4-3/16

4-5/16

4-3/8

4-1/2

4-1/2

4-5/8

4-3/4

4-7/8

5

5-1/8

5-1/4

5-3/8

5-1/2

5-5/8

5 - 3/4

5-7/8

6

15120312

15120328

15120343

15120359

15120375

15120390

15120406

15120421

15120437

15120453

15120468

15120484

15120500

30400312

30400328

30400343

30400359

30400375

30400390

30400406

30400421

30400437

30400453

30400468

30400484

30400500

2 - 3/8

2-1/2

2-1/2

2-3/4

2 - 3/4

2-7/8

2 - 7/8

2 - 7/8

2 - 7/8

3

3

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3-3/4

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4

4-1/4

4-1/4

4-1/2

4-1/2

4-1/2

4-1/2

4-3/4

4-3/4

4-3/4

4-3/4

20431250

20432810

20434380

20435940

20437500

20439060

20440620

20442190

20443750

20445310

20446880

20448440

20450000

5/16

21/64

11/32

23/64

25/64

13/32

27/64

29/64

15/32

31/64

1/2

7/16

3/8



Long (or Taper) Length HSS Drills Fractional Sizes To Cut Wood, Plastic and Metal

		Sizes and	Dimension	16			Stock Numbers		
		Sizes and	Difficusion		Series 152			Series 259	Series 292
Equit. Length Length Professor P	Size					HSS	HSS	HSS	
164	Sille	Equiv.	Length	Length					
10.6					15200015		X	X	X
1166									
1764 1.094 2.1/2 4.5/8 1.5200109 2.5200109 1.5900109 2.5900109 X									
188									
9964 .1406 3 5.3/8 15200140 25200140 15900140 25900156 29200156 11/64 .1719 3.3/8 5.3/8 15200157 25200171 15900171 25900171 29200171 13/64 .1719 3.3/8 5.3/4 15200187 25200187 15900187 25900187 29200281 29200283									
1.562									
13/16									
1364									
732									
15/64									
17/64								25900234	
9/32									
19/64 2969									
S16									
21/64									
11/32 3438 4-1/8 6-1/2 15200343 25200343 15900343 25900343 25900359 25900359 25900359 25900359 25900359 25900359 25900359 25900359 25900359 25900359 25900359 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900375 25900406 25900406 25900406 25900406 25900406 25900406 25900406 25900406 25900406 25900406 25900406 25900406 25900407 25900473 25900437 25900437 25900437 25900437 25900437 25900437 25900437 25900437 25900437 25900453 25900453 25900453 25900453 25900453 25900453 25900453 25900453 25900453 25900453 25900453 25900454 25900468 15900484 25900468 25900468 25900468 25900468 25900468			4-1/8						
3/8	11/32		4-1/8						
25/64 3906 4-3/8 7 15200390 25200390 15900390 25900390 29200390 29200406 27/64 4-3/8 7 15200406 25200406 15900406 25900406 29200406 27/64 4219 4-5/8 7-1/4 15200421 25200421 15900421 25900421 29200421 29200421 29200421 29200421 29200437 25/64 4375 4-5/8 7-1/4 15200437 25200437 15900437 25900437 29200437 15/32 4.688 4-3/4 7-1/2 15200453 55200453 15900453 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 29200453 270004 27000 4-3/4 7-3/4 15200500 25200500 15900500 25900500									_
13/32 4/062 4-3/8 7 15200406 25200406 15900406 25900406 29200402 27/64 4-219 4-5/8 7-1/4 15200421 25200421 15900437 25900437 29200437 29/64 4-5/8 7-1/4 15200437 15900437 25900437 25900437 25900437 29200437 15/32 4-688 4-3/4 7-1/2 15200468 15900468 15900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900468 25900484 25900484 25900484 25900484 25900484 25900484 25900484 25900484 25900500 25900500 29200500 29200500 29200500 29200500 29200500 29200546 3764 3512 4-3/4 8 15200515 X X X 29200515 29205484 29200548 29200546 29200546 29200546 29200546 29200546 29200546 29200546 29200546 29200546									
27/64									
29/64									
15/32	7/16								
31/64									
1/2									
Shanks below are larger than 1/2" and may not fit in your chuck. Shanks can be ground to smaller diameters. Price on Request.									
33/64 .5156 4-3/4 8 15200515 25200515 X X 29200515 17/32 .5312 4-3/4 8 15200531 25200531 X X 29200531 35/64 .5469 4-7/8 8-1/4 15200546 25200546 X X 29200546 9/16 .5625 4-7/8 8-1/4 15200562 25200562 X X 29200566 37/64 .5781 4-7/8 8-3/4 15200578 25200578 X X 29200578 19/32 .5938 4-7/8 8-3/4 15200593 25200593 X X 29200593 39/64 .6094 4-7/8 8-3/4 15200699 25200609 X X 29200659 5/8 .6250 4-7/8 8-3/4 15200609 25200625 X X 29200656 41/64 .6406 5-1/8 9 15200656 X X 29200656 41/64 <t< th=""><th>-,-</th><th></th><th>Sh</th><th>anks belov</th><th>v are larger than</th><th>1/2" and may r</th><th>ot fit in your ch</th><th>uck.</th><th></th></t<>	-,-		Sh	anks belov	v are larger than	1/2" and may r	ot fit in your ch	uck.	
17/32 .5312 4-3/4 8 15200531 25200531 X X 29200531 35/64 .5469 4-7/8 8-1/4 15200546 25200546 X X 29200546 97/6 .5625 4-7/8 8-1/4 15200562 X X X 29200578 37/64 .5781 4-7/8 8-3/4 15200578 25200578 X X 29200578 19/32 .5938 4-7/8 8-3/4 15200690 25200609 X X 29200699 5/8 .6250 4-7/8 8-3/4 15200625 25200625 X X 29200609 5/8 .6250 4-7/8 8-3/4 15200625 25200625 X X 29200625 41/64 .6406 5-1/8 9 15200656 25200665 X X 29200662 41/64 .6619 5-3/8 9-1/4 15200671 25200656 X X 29200671	22/54	5156							20200515
35/64 .5469 4-7/8 8-1/4 15200546 25200546 X X 29200546 9/16 .5625 4-7/8 8-1/4 15200562 25200562 X X 29200578 37/64 .5781 4-7/8 8-3/4 15200573 25200578 X X 29200578 19/32 .5938 4-7/8 8-3/4 15200593 25200593 X X 29200609 5/8 .6250 4-7/8 8-3/4 15200609 25200625 X X 29200609 5/8 .6250 4-7/8 8-3/4 15200609 2520065 X X 29200625 41/64 .6406 5-1/8 9 15200656 25200656 X X 29200625 43/64 .6719 5-3/8 9-1/4 15200661 25200667 X X 29200671 11/16 .6875 5-3/8 9-1/4 15200671 25200687 X X 29200687									
9/16 .5625 4-7/8 8-1/4 15200562 25200562 X X 29200562 37/64 .5781 4-7/8 8-3/4 15200578 25200578 X X 29200578 39/64 .6094 4-7/8 8-3/4 15200593 X X 29200593 39/64 .6094 4-7/8 8-3/4 15200609 25200609 X X 29200625 5/8 .6250 4-7/8 8-3/4 15200625 25200625 X X 29200625 41/64 .6406 5-1/8 9 15200640 25200640 X X 29200626 43/64 .6719 5-3/8 9-1/4 15200671 252006671 X X 29200656 43/64 .6719 5-3/8 9-1/4 15200671 25200687 X X 29200763 45/64 .7031 5-5/8 9-1/2 15200730 25200763 X X 29200671 47/64									
19/32 .5938 4-7/8 8-3/4 15200593 25200593 X X 29200593 39/64 .6094 4-7/8 8-3/4 15200609 25200609 X X 29200609 5/8 .6250 4-7/8 8-3/4 15200605 25200625 X X 29200625 41/64 .6406 5-1/8 9 15200640 25200660 X X 29200640 21/32 .6562 5-1/8 9 15200656 25200656 X X 29200656 43/64 .6719 5-3/8 9-1/4 15200671 25200687 X X 29200671 11/16 .6875 5-3/8 9-1/2 15200733 25200703 X X 29200673 23/32 .7188 5-5/8 9-1/2 15200718 25200718 X X 29200718 47/64 .7344 5-7/8 9-3/4 15200734 25200786 X X 29200781					15200562	25200562			
39/64 .6094 4-7/8 8-3/4 15200609 25200609 X X 29200609 5/8 .6250 4-7/8 8-3/4 15200625 25200625 X X 29200625 41/64 .6406 5-1/8 9 15200640 25200640 X X 29200636 21/32 .6562 5-1/8 9 15200656 25200656 X X 29200656 43/64 .6719 5-3/8 9-1/4 15200671 25200671 X X 29200671 11/16 .6875 5-3/8 9-1/2 15200703 25200703 X X 29200763 45/64 .7031 5-5/8 9-1/2 15200718 25200718 X X 29200734 47/64 .7344 5-7/8 9-3/4 15200734 25200718 X X 29200734 3/4 .7500 5-7/8 9-3/4 15200765 25200750 X X X 29200781									
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63/64							X		
1 1.000 6-3/8 11 15201000 25201000 X X 29201000									

Series 159 **Fast Spiral** Engineered with a

fast spiral angle and wide flute for improved chip removal. Specially designed for drilling deep holes.

Series 259 **Fast Spiral Brad Point**

Same as 159 with a Brad Point.



Series 292 **Carbide Tipped**

Features heavyduty construction and heat treated body for optimum wear resistance and support of the carbide tip. Used in production drilling of cast iron, nonferrous materials, and many composites. NOT RECOMMENDED FOR DRILLING STEEL!

Series 152 **Regular Point** HSS Regular Point for drilling

wood, plastic and metal.

Series 252 **Brad Point HSS Brad Point**

for clean holes in wood, plastic and sheet metal.





Extra Length HSS Drills 8"and 10" long

To Cut Wood, Plastic and Metal

Dime	ensions		Stock N	Numbers	
		8" L	ong	10"	Long
	Decimal	6" F	lute		'' Flute
Size	Equivalent	153 HSS	253 HSS	154 HSS	254 HSS
	Equivalent	Regular	Brad	Regular	Brad
		Point	Point	Point	Point
1/8	.1250	15300125	25300125	15400125	25400125
9/64	.1406	15300140	25300140	15400140	25400140
5/32	.1562	15300156	25300156	15400156	25400156
11/64	.1719	15300171	25300171	15400171	25400171
3/16	.1875	15300187	25300187	15400187	25400187
13/64	.2031	15300203	25300203	15400203	25400203
7/32	.2188	15300218	25300218	15400218	25400218
15/64	.2344	15300234	25300234	15400234	25400234
1/4	.2500	15300250	25300250	15400250	25400250
17/64	.2656	15300265	25300265	15400265	25400265
9/32	.2812	15300281	25300281	15400281	25400281
19/64	.2969	15300296	25300296	15400296	25400296
5/16	.3125	15300312	25300312	15400312	25400312
21/64	.3281	15300328	25300328	15400328	25400328
11/32	.3438	15300343	25300343	15400343	25400343
23/64	.3594	15300359	25300359	15400359	25400359
3/8	.3750	15300375	25300375	15400375	25400375
25/64	.3906	15300390	25300390	15400390	25400390
13/32	.4062	15300406	25300406	15400406	25400406
27/64	.4219	X	X	15400421	25400421
7/16	.4375	15300437	25300437	15400437	25400437
29/64	.4531	15300453	25300453	15400453	25400453
15/32	.4688	15300468	25300468	15400468	25400468
31/64	.4844	15300484	25300484	15400484	25400484
1/2	.5000	15300500	25300500	15400500	25400500
X = Not ava	ailable				

* = Shanks of these drills are straight but can be ground to your requirements, price on request.





Series 154 HSS Regular Point

Series 254 HSS Brad

Point Fuller

Carbide Tipped Drills for Hardened Steel

	Carbide Tipped Drills for Hardened Steel											
Size	Flute Length	Overall Length	Shank Diameter	Stock Number								
1/8	1-1/2	2-3/4	1/8	CT7050125								
5/32	1-7/8	3	5/32	CT7050156								
11/64	1-7/8	3	11/64	CT7050171								
3/16	1-7/8	3	3/16	CT7050187								
7/32	2-1/2	4	7/32	CT7050218								
1/4	2-1/2	4	1/4	CT7050250								
1/4	4-1/4	6	1/4	CT70502506								
9/32	2-1/2	4	9/32	CT7050281								
5/16	2-1/2	4	1/4	CT7050312								
5/16	4-1/4	6	5/16	CT70503126								
3/8	4	6	3/8	CT7050375								
7/16	4	6	3/8	CT7050437								
1/2	4	6	1/2	CT7050500								
9/16	4	6	1/2	CT7050562								
5/8	4	6	1/2	CT7050625								

These carbide tipped drills are ideal for locksmiths, auto mechanics or any operator drilling into hardened steel. Can be used to drill out broken bolts, studs, taps and drill bits. They also cut hard steel such as safes, bearing races and dies. The carbide is designed to prevent chipping and dissipate heat quickly.



CT7050250

CT70502506



Extra Length HSS Drills 12" and 18" long

To Cut Wood, Plastic and Metal

Di	mensions			Numbers		_			
			Long Flute		Long Flute			MU	
Size	Decimal	155 HSS	255 HSS	156 HSS	256 HSS	+		107	- 1
Size	Equivalent							NA.	- 8
		Regular	Brad	Regular	Brad				- 1
1./0	1250	Point	Point	Point	Point			14	
/8	.1250	15500125	25500125	X	X			664	- 1
0/64 5/32	.1406	15500140	25500140 25500156	X	X			Will y	- 4
1/64	.1562 .1719	15500156 15500171	25500136	X X	X X			100	- 4
3/16	.1875	15500171	25500171	15600187	25600187			1000	- 8
3/64	.2031	15500203	25500203	15600203	25600203		bushesi	100	- 4
1/32	.2188	15500203	25500203	15600218	25600203			1	
5/64	.2344	15500234	25500234	15600234	25600234		10/	666	
/4	.2500	15500250	25500250	15600250	25600250		ALC: N	100	- 1
7/64	.2656	15500265	25500265	15600265	25600265	(F)	100	NI III	- 4
/32	.2812	15500281	25500281	15600281	25600281	1022/01	1000		- 11
9/64	.2969	15500296	25500296	15600296	25600296	11		100	1
/16	.3125	15500312	25500312	15600312	25600312	1/4		1	1
1/64	.3281	15500328	25500328	15600328	25600328	100	1	W. 150	
1/32	.3438	15500343	25500343	15600343	25600343			2.0	
3/64	.3594	15500359	25500359	15600359	25600359			W. C.	-
5/8	.3750	15500375	25500375	15600375	25600375	[/ \]	1 19		
5/64	.3906	15500390	25500390	15600390	25600390	11	1 11	1 1	N.
3/32	.4062	15500406	25500406	15600406	25600406		6 (2)		- 8
7/64	.4219	15500421	25500421	15600421	25600421		4 /	0.6	- 1
/16	.4375	15500437	25500437	15600437	25600437			400	- 6
9/64	.4531	15500453	25500453	15600453	25600453	NIE C	100		· W
5/32	.4688	15500468	25500468	15600468	25600468				- 1
1/64	.4844	15500484	25500484	15600484	25600484		100		- 0
/2	.5000	15500500	25500500	15600500	25600500	1000	W (7)		-
3/64	.5156	15500515	25500515	15600515	25600515	7	Y /	4	- 8
17/32	.5312	15500531	25500531	15600531	25600531				- 3
35/64	.5469	15500546	25500546	15600546	25600546		100		- 8
9/16	.5625	15500562	25500562	15600562	25600562	100	100		-
19/32	.5781 .5938	15500578 15500593	25500578 25500593	15600578 15600593	25600578 25600593	1414			- 9
39/64	.6094	15500609	25500609	15600609	25600609	4	C/ 1		n
5/8	.6250	15500609	25500625	15600625	25600625	VIII V		2	- 10
1/64	.6406	13300023 X	23300023 X	X	23000023 X		486	200	- 6
1/32	.6562	15500656	25500656	15600656	25600656			2000	- 8
13/64	.6719	X	X	X	X	100			- 8
1/16	.6875	15500687	25500687	15600687	25600687	100			- 11
15/64	.7031	X	X	X	X	V 100	121		- 8
23/32	.7188	15500718	25500718	15600718	25600718	5565			- 8
7/64	.7344	X	X	X	X				- 18
3/4	.7500	15500750	25500750	15600750	25600750				- 8
9/64	.7656	X	X	X	X	-	-		
5/32	.7812	X	X	15600781	25600781		100	100.0	
1/64	.7969	X	X	X	X				
3/16	.8125	X	X	15600812	25600812				
3/64	.8281	X	X	X	X				
27/32	.8438	X	X	X	X		10000		
5/64	.8594	X	X	X	X				
/8	.8750	X	X	15600875	25600875		10.00		
7/64	.8906	X	X	X	X			444	u
9/32	.9062	X	X	X	X	g	a ·		
9/64	.9219	X	X	X	X	Series 155	Series 255	-	
5/16	.9375	X	X	15600937	25600937	HSS Regular	HSS Brad		Sei
1/64	.9531	X	X	X	X	Point	Point	Series 156	HS
1/32	.9688	X	X	X	X		Fuller	HSS Regular	
53/64	.9844	X	X	X	X		Atlantacionii	Point	3
1/16	1.000	X	X	15601000	25601000				7
-1/16	1.062	X	X	X 15601125	X 25601125				
-1/8 3/16	1.125	X	X X	15601125 X	25601125 Y				
-3/16 -1/4	1.187 1.250	X X	X	15601250	X 25601250				



Wire Gage Size Drills Short Length

High Speed Steel and Cobalt To Cut Wood, Plastic and Metal

	Dimen	sions		Stock Numbers				
				160	260		1605	
Wire	Decimal	Flute	Overall	HSS	HSS	220	HSS	
Size	Equivalent	Length	Length	Regular	Brad	Cobalt	Reg. Pt.	
	_			Point	Point	Steel	Left Hand	
60	.0400	1/2	1-3/8	16000040	X	22000040	16050040	
59	.0410	1/2	1-3/8	16000041	X	22000041	16050041	
58	.0420	1/2	1-3/8	16000042 16000043	X	22000042	16050042	
57 56	.0430 .0465	1/2 1/2	1-3/8 1-3/8	16000043	X X	22000043 22000046	16050043 16050046	
55	.0520	5/8	1-5/8	16000052	X	22000052	16050052	
54	.0550	5/8	1-5/8	16000055	X	22000055	16050055	
53	.0595	5/8	1-5/8	16000059	X	22000059	16050059	
52 51	.0635 .0670	11/16 11/16	1-11/16 1-11/16	16000063	X X	22000063 22000067	16050063	
50	.0700	11/16	1-11/16	16000067 16000070	X	22000007	16050067 16050070	
49	.0730	11/16	1-11/16	16000073	X	22000073	16050073	
48	.0760	11/16	1-11/16	16000076	X	22000076	16050076	
47	.0785	11/16	1-11/16	16000078	26000078	22000078	16050078	
46 45	.0810 .0820	3/4 3/4	1-3/4 1-3/4	16000081	26000081 26000082	22000081	16050081	
43	.0860	3/4	1-3/4	16000082 16000086	26000082	22000082 22000086	16050082 16050086	
43	.0890	3/4	1-3/4	16000089	26000089	22000089	16050089	
42	.0935	3/4	1-3/4	16000093	26000093	22000093	16050093	
41	.0960	13/16	1-13/16	16000096	26000096	22000096	16050096	
40	.0980	13/16	1-13/16	16000098	26000098	22000098	16050098	
39 38	.0995 .1015	13/16 13/16	1-13/16 1-13/16	16000099 16000101	26000099 26000101	22000099 22000101	16050099 16050101	
37	.1040	13/16	1-13/16	16000101	26000101	22000101	16050104	
36	.1065	13/16	1-13/16	16000106	26000106	22000106	16050106	
35	.1100	7/8	1-7/8	16000110	26000110	22000110	16050110	
34	.1110	7/8	1-7/8	16000111	26000111	22000111	16050111	
33 32	.1130	7/8 7/8	1-7/8 1-7/8	16000113 16000116	26000113	22000113	16050113	
31	.1160 .1200	7/8	1-7/8	16000116	26000116 26000120	22000116 22000120	16050116 16050120	
30	.1285	15/16	1-15/16	16000128	26000128	22000128	16050128	
29	.1360	15/16	1-15/16	16000136	26000136	22000136	16050136	
28	.1405	15/16	1-15/16	16000140	26000140	22000140	16050140	
27 26	.1440	1	2-1/16	16000144 16000147	26000144	22000144	16050144	
25	.1470 .1495	1	2-1/16 2-1/16	16000147	26000147 26000149	22000147 22000149	16050147 16050149	
24	.1520	1	2-1/16	16000143	26000149	22000152	16050152	
23	.1540	1	2-1/16	16000154	26000154	22000154	16050154	
22	.1570	1-1/16	2-1/8	16000157	26000157	22000157	16050157	
21	.1590	1-1/16	2-1/8	16000159	26000159	22000159	16050159	
20	.1610	1-1/16 1-1/16	2-1/8 2-1/8	16000161	26000161	22000161	16050161	
19 18	.1660	1-1/16	2-1/8	16000166 16000169	26000166 26000169	22000166 22000169	16050166 16050169	
17	.1730	1-1/8	2-3/16	16000173	26000173	22000173	16050173	
16	.1770	1-1/8	2-3/16	16000177	26000177	22000177	16050177	
15	.1800	1-1/8	2-3/16	16000180	26000180	22000180	16050180	
14	.1820	1-1/8	2-3/16	16000182	26000182	22000182	16050182 16050185	
13 12	.1850 .1890	1-1/8 1-3/16	2-3/16 2-1/4	16000185 16000189	26000185 26000189	22000185 22000189	16050189	
11	.1910	1-3/16	2-1/4	16000191	26000191	22000191	16050191	
10	.1935	1-3/16	2-1/4	16000193	26000193	22000193	16050193	
9	.1960	1-3/16	2-1/4	16000196	26000196	22000196	16050196	
8	.1990	1-3/16	2-1/4	16000199	26000199	22000199	16050199	
7 6	.2010 .2040	1-3/16 1-1/4	2-1/4 2-3/8	16000201 16000204	26000201 26000204	22000201 22000204	16050201 16050204	
5	.2040	1-1/4	2-3/8	16000204	26000204	22000204	16050204	
4	.2090	1-1/4	2-3/8	16000209	26000209	22000209	16050209	
3	.2130	1-1/4	2-3/8	16000213	26000213	22000213	16050213	
2	.2210	1-5/16	2-7/16	16000221	26000221	22000221	16050221	
1	.2280 Sizes #61 to #80	1-5-16	2-7/16	16000228	26000228	22000228 ets on page 54	16050228	





Series 160 High Speed Steel Regular Point. For through holes in woods, plastics and metals.

Series 260
High Speed Steel
Brad Point for
clean accurate holes
in woods and
plastics.





Series 220 Cobalt Steel Heavy duty Cobalt for longer point life and higher heat resistance. Not recommended for cutting wood.



Series 1605 High Speed Steel Left Hand. Can be furnished with Brad Point, price on request

Sizes #61 to #80 also available in regular point drills only. See Sets on page 54. Also available in Long or Taper Length. -Price on request- X = Not available



Wire Gage Size Drills Regular Length

High Speed Steel and Cobalt Drills To Cut Wood, Plastic and Metal

	Dime	ensions		Stock Numbers					
				161 HSS	261 HSS	221	1615 HSS		
Wire	Decimal	Flute	Overall	Regular	Brad	Cobalt	Left		
Size	Equiv.	Length	Length	Point	Point	Steel	Hand		
60	.0400	11/16	1-5/8	16100040	X	22100040	16150040		
59	.0410	11/16	1-5/8	16100041	X	22100041	16150041		
58	.0420	11/16	1-5/8	16100042	X	22100042	16150042		
57 56	.0430	3/4 3/4	1-3/4	16100043	X X	22100043	16150043		
55	.0465	3/4 7/8	1-3/4 1-7/8	16100046 16100052	X	22100046 22100052	16150046 16150052		
54	.0520	7/8	1-7/8	16100055	X	22100055	16150055		
53	.0595	7/8	1-7/8	16100059	X	22100059	16150059		
52	.0635	7/8	1-7/8	16100063	X	22100063	16150063		
51	.0670	1	2	16100067	X	22100067	16150067		
50	.0700	1	2	16100070	X	22100070	16150070		
49	.0730	1	2	16100073	X	22100073	16150073		
48 47	.0760 .0785	1	2 2	16100076	X 26100078	22100076 22100078	16150076		
46	.0785	1-1/8	2-1/8	16100078 16100081	26100078	22100078	16150078 16150081		
45	.0810	1-1/8	2-1/8	16100081	26100081	22100081	16150081		
44	.0860	1-1/8	2-1/8	16100086	26100086	22100086	16150086		
43	.0890	1-1/4	2-1/4	16100089	26100089	22100089	16150089		
42	.0935	1-1/4	2-1/4	16100093	26100093	22100093	16150093		
41	.0960	1-3/8	2-3/8	16100096	26100096	22100096	16150096		
40	.0980	1-3/8	2-3/8	16100098	26100098	22100098	16150098		
39 38	.0995 .1015	1-3/8 1-7/16	2-3/8 2-1/2	16100099 16100101	26100099 26100101	22100099 22100101	16150099 16150101		
37	.1013	1-7/16	2-1/2	16100101	26100101	22100101	16150101		
36	.1065	1-7/16	2-1/2	16100104	26100104	22100104	16150104		
35	.1100	1-1/2	2-5/8	16100110	26100110	22100110	16150110		
34	.1110	1-1/2	2-5/8	16100111	26100111	22100111	16150111		
33	.1130	1-1/2	2-5/8	16100113	26100113	22100113	16150113		
32	.1160	1-5/8	2-3/4	16100116	26100116	22100116	16150116		
31 30	.1200 .1285	1-5/8 1-5/8	2-3/4 2-3/4	16100120 16100128	26100120 26100128	22100120 22100128	16150120 16150128		
29	.1285	1-3/8	2-3/4 2-7/8	16100128	26100128	22100128	16150128		
28	.1405	1-3/4	2-7/8	16100130	26100130	22100130	16150140		
27	.1440	1-7/8	3	16100144	26100144	22100144	16150144		
26	.1470	1-7/8	3	16100147	26100147	22100147	16150147		
25	.1495	1-7/8	3	16100149	26100149	22100149	16150149		
24	.1520	2	3-1/8	16100152	26100152	22100152	16150152		
23	.1540	2	3-1/8	16100154	26100154	22100154	16150154		
22 21	.1570 .1590	2 2-1/8	3-1/8 3-1/4	16100157	26100157	22100157	16150157		
20	.1610	2-1/8	3-1/4	16100159 16100161	26100159 26100161	22100159 22100161	16150159 16150161		
19	.1660	2-1/8	3-1/4	16100166	26100166	22100166	16150166		
18	.1695	2-1/8	3-1/4	16100169	26100169	22100169	16150169		
17	.1730	2-3/16	3-3/8	16100173	26100173	22100173	16150173		
16	.1770	2-3/16	3-3/8	16100177	26100177	22100177	16150177		
15	.1800	2-3/16	3-3/8	16100180	26100180	22100180	16150180		
14	.1820	2-3/16	3-3/8	16100182	26100182	22100182	16150182		
13 12	.1850	2-5/16 2-5/16	3-1/2 3-1/2	16100185 16100189	26100185 26100189	22100185 22100189	16150185		
11	.1890 .1910	2-5/16	3-1/2	16100189	26100189	22100189	16150189 16150191		
10	.1935	2-7/16	3-5/8	16100191	26100191	22100191	16150193		
9	.1960	2-7/16	3-5/8	16100196	26100196	22100196	16150196		
8	.1990	2-7/16	3-5/8	16100199	26100199	22100199	16150199		
7	.2010	2-7/16	3-5/8	16100201	26100201	22100201	16150201		
6	.2040	2-1/2	3-3/4	16100204	26100204	22100204	16150204		
5	.2055	2-1/2	3-3/4	16100205	26100205	22100205	16150205		
4	.2090	2-1/2	3-3/4	16100209	26100209	22100209	16150209		
3 2	.2130 .2210	2-1/2 2-5/8	3-3/4 3-7/8	16100213 16100221	26100213 26100221	22100213 22100221	16150213 16150221		
1	.2210	2-5/8	3-7/8	16100221	26100221	22100221	16150221		
	available	2 3/0	2 770	10100220	20100220	22130223	10130220		



Sizes #61 to #80 also available in regular point drills only. See page 54.

Also available in Long or Taper Length. -Price on request-



Series 161 High Speed Steel Regular Point. For through holes in woods, plastics and metals.



Series 261 High Speed Steel Brad Point for clean accurate holes in woods and plastics.





Cobalt Steel
Heavy duty cobalt
for longer point life
and higher heat
resistance. Not
recommended for
cutting wood.



Series 1615 High Speed Steel Left Hand. Can be furnished with Brad Point, price on request



Hex Shank Regular and Brad Point Drills / Snappy Chuck Adapters



C!	Dec.	Flute	OAL	1514	2514	Adapter
Size	Equiv	Length	Length	Reg. Point	Brad Point	only
5/64 or	.0781	1	3-1/8	15140078	25140078	QS078
2.0mm						
3/32	.0937	1-1/4	3-3/4	15140093	25140093	QS093
2.5mm	.0984	1-3/16	3-3/8	15140098	25140098	QS098
7/64	.1094	1-1/2	3-3/4	15140109	25140109	QS109
3.0mm	.1181	1-5/16	3-17/32	15140118	25140118	QS118
1/8	.1250	1-5/8	3-1/2	15140125	25140125	QS125
3.5mm	.1378	1-3/4	4	15140137	25140137	QS137
9/64	.1406	1-3/4	4	15140140	25140140	QS140
5/32	.1562	2	4-1/16	15140156	25140156	QS156
4.0mm	.1575	1-11/16	4-1/16	15140157	25140157	QS157
11/64	.1719	2-1/8	4-3/4	15140171	25140171	QS171
4.5mm	.1772	2-3/16	4-1/2	15140177	25140177	QS177
3/16	.1875	2-5/16	4-1/16	15140187	25140187	QS187
5.0mm	.1968	2-1/16	4-1/2	15140196	25140196	QS196
13/64	.2031	2-7/16	4-3/4	15140203	25140203	QS203
5.5mm	.2165	2-1/4	4-25/32	15140216	25140216	QS216
7/32	.2188	2-1/2	4-1/2	15140218	25140218	QS218
15/64	.2344	2-5/8	5	15140234	25140234	QS234
6.0mm	.2362	2-1/4	4-25/32	15140236	25140236	QS236
1/4	.2500	2-3/4	5-1/8	15140250	25140250	QS250
5/16	.3125	3-3/16	5-5/8	15140312	25140312	QS312
3/8	.3750	3-5/8	6-1/8	15140375	25140375	QS375



Stock # 15140140

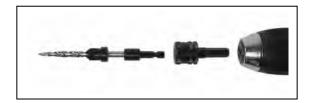
Stock # 25140140

Snappy Chuck Adapter (Hex Shank)

Snappy Diagram

When you insert the tool into the drive channel, the ball moves up the incline, retracting the sleeve and compressing the spring. As the tool reaches the bottom of the drive channel the ball is forced forward into the retaining groove of the tool, securely locking the tool into position.





Stock # 40011 - 3/8" shank

The standard industrial chuck with a knurled sleeve.



Stock # 40012

This mini-chuck is smaller for tight spaces. Tools are locked in drive channel with a uniquely formed tempered spring.



Stock # 41101 – 3/8" shank

The deluxe model with a molded rubber sleeve for better grip.



The Snappy Chuck Adapter, including the Snappy Chuck and the Snappy Chuck tooling was designed to save you time. Instantly change between different size drills or from drilling to driving without having to fumble with chuck keys. The Snappy Chuck eliminates drills slipping in the chuck, which could happen in a key type drill chuck. Simply insert the Snappy Chuck Adapter into your cordless or electric drill chuck, tighten the chuck and put away the key.



Letter Size High Speed Steel Drills

Series 170

High Speed Steel Regular Point Drill for through holes in woods, plastics and metals.

Regular Point and Brad Point

To Cut Wood, Plastic and Metal

Series 171

High Speed Steel Regular Point Drill for through holes in woods, plastics and metals.



Series 270

High Speed Steel Brad Point Drill for clean accurately sized holes in hardwoods and plastics.



Series 270

High Speed Steel Brad Point Drill for clean accurately sized holes in hardwoods and plastics.





-	Maraifactured			Manufactured					
Dime	ensions		Short Length				Reg	ular Length	
Letter Size	Decimal Equiv.	Flute Length	Overall Length	170 HSS Regular Point	270 HSS Brad Point	Flute Length	Overall Length	171 HSS Regular Point	271 HSS Brad Point
A	.234	1-15/16	2-7/16	17000234	27000234	2-5/8	3-7/8	17100234	27100234
В	.238	1-3/8	2-1/2	17000238	27000238	2-3/4	4	17100238	27100238
C	.242	1-3/8	2-1/2	17000242	27000242	2-3/4	4	17100242	27100242
D	.246	1-3/8	2-1/2	17000246	27000246	2-3/4	4	17100246	27100246
Е	.250	1-3/8	2-1/2	17000250	27000250	2-3/4	4	17100250	27100250
F	.257	1-7/16	2-5/8	17000257	27000257	2-7/8	4-1/8	17100257	27100257
G	.261	1-7/16	2-5/8	17000261	27000261	2-7/8	4-1/8	17100261	27100261
Н	.266	1-1/2	2-11/16	17000266	27000266	2-7/8	4-1/8	17100266	27100266
I	.272	1-1/2	2-11/16	17000272	27000272	2-7/8	4-1/8	17100272	27100272
J	.277	1-1/2	2-11/16	17000277	27000277	2-7/8	4-1/8	17100277	27100277
K	.281	1-1/2	2-11/16	17000281	27000281	2-15/16	4-1/4	17100281	27100281
L	.290	1-9/16	2-3/4	17000290	27000290	2-15/16	4-1/4	17100290	27100290
M	.295	1-9/16	2-3/4	17000295	27000295	3-1/16	4-3/8	17100295	27100295
N	.302	1-5/8	2-13/16	17000302	27000302	3-1/16	4-3/8	17100302	27100302
O	.316	1-11/16	2-15/16	17000316	27000316	3-3/16	4-1/2	17100316	27100316
P	.323	1-11/16	2-15/16	17000323	27000323	3-5/16	4-5/8	17100323	27100323
Q	.332	1-11/16	3	17000332	27000332	3-7/16	4-3/4	17100332	27100332
R	.339	1-11/16	3	17000339	27000339	3-7/16	4-3/4	17100339	27100339
S	.348	1-3/4	3-1/16	17000348	27000348	3-1/2	4-7/8	17100348	27100348
T	.358	1-3/4	3-1/16	17000358	27000358	3-1/2	4-7/8	17100358	27100358
U	.368	1-13/16	3-1/8	17000368	27000368	3-5/8	5	17100368	27100368
V	.377	1-7/8	3-1/4	17000377	27000377	3-5/8	5	17100377	27100377
W	.386	1-7/8	3-1/4	17000386	27000386	3-3/4	5-1/8	17100386	27100386
X	.397	1-15/16	3-5/16	17000397	27000397	3-3/4	5-1/8	17100397	27100397
Y	.404	1-15/16	3-5/16	17000404	27000404	3-7/8	5-1/4	17100404	27100404
Z	.413	2	3-3/8	17000413	27000413	3-7/8	5-1/4	17100413	27100413

^{*}Shanks can be ground to smaller sizes. Price on request

Double End Drills

High Speed Steel Fractional and Wire Sizes

Diameter	Decimal	Flute	Overall	Stock			
Size	Equivalent	Length	Length	Number			
	Fractional						
7/64	.1094	1/2	1-7/8	DE0109			
1/8	.1250	1/2	2	DE0125			
9/64	.1406	1/2	2	DE0140			
5/32	.1562	1/2	2-1/16	DE0156			
3/16	.1875	1/2	2-3/16	DE0187			
7/32	.2188	1/2	2-3/8	DE0218			
1/4	.2500	1/2	2-1/2	DE0250			
	Wire						
11	.1910	1/2	2-1/4	DE0191			
30	.1285	1/2	2	DE0128			

Double End Drills

HSS, Surface Treated 135° Split Points on each end. Used for drilling truck and auto bodies, and/or thin sheet metal. Popular for pop rivet drilling applications. 135° self-centering split point aids in penetration.



Metric Size High Speed Steel Drills

Regular Point and Brad Point to cut woods, plastics and metals

Dimensions			Sho	rt Length		Regular Length			
mm Size	Dec. Equiv.	Flute Length	Overall Length	Series 180 Regular Point	Series 280 Brad Point	Flute Length	Overall Length	Regular Point	Series 281 Brad Point
1.0	.0394	1/4	1-1/32	18000039	X	15/32	1-11/32	18100039	X
1.25	.0492	5/16	1-3/16	18000049	X	5/8	1-1/2	18100049	X
1.5	.0591	11/32	1-1/4	18000059	X	23/32	1-9/16	18100059	X
1.75	.0689	7/16	1-7/16	18000068	X	7/8	1-13/16	18100068	X
2.0	.0787	15/32	1-1/2	18000078	28000078	15/16	1-15/16	18100078	28100078
2.25	.0886	1/2	1-9/16	18000088	28000088	1-1/16	2-3/32	18100088	28100088
2.5	.0984	9/16	1-11/16	18000098	28000098	1-3/16	2-1/4	18100098	28100098
2.75	.1083			X	X	1-15/16	2-13/32	18100108	28100108
3.0	.1181	5/8	1-13/16	18000118	28000118	1-5/16	2-13/32	18100118	28100118
3.2	.1260	23/32	1-15/16	18000126	28000126	1-7/16	2-9/16	18100126	28100126
3.25	.1280	25/22	0 1/16	X	X	1-7/16	2-9/16	18100128	28100128
3.4	.1339	25/32	2-1/16	18100133	28000133	1-17/32	2-3/4	18100133	28100133
3.5	.1378	25/32	2-1/16	18000137	28000137	1-3/4	2-7/8	18100137	28100137
3.75	.1476	7/8	2-5/32	X 18000157	X 20000157	1-17/32	2-3/4	18100147 18100157	28100147
4.0		1/8	2-5/32		28000157	1-11/16	2-15/16		28100157
4.25	.1673 .1772	15/16	2-9/32	X 18000177	X 28000177	1-11/16 2-3/16	2-15/16 3-3/8	18100167 18100177	28100167
4.75	.1870	13/10	2-9/32	X	X	1-27/32	3-5/8	18100177	28100177 28100187
5.0	.1968	1-1/32	2-7/16	18000196	28000196	2-1/16	3-3/8	18100187	28100187
5.1	.2008	1-1/32	2-7/16	18000200	28000100	2-1/16	3-3/8	18100200	28100200
5.2	.2047	1-1/32	2-7/16	18000204	28000204	2-1/16	3-3/8	18100204	28100204
5.25	.2067	1 1/32	2 //10	X	X	2-1/16	3-3/8	18100204	28100204
5.3	.2087	1-1/32	2-7/16	18000208	28000208	2-1/16	3-3/8	18100208	28100208
5.4	.2126	1-3/32	2-19/32	18000212	28000212	2-1/4	3-21/32	18100212	28100212
5.5	.2165	1-3/32	2-19/32	18000216	28000216	2-1/4	3-21/32	18100216	28100216
5.6	.2205	1-3/32	2-19/32	18000220	28000220	2-1/4	3-21/32	18100220	28100220
5.7	.2244	1-3/32	2-19/32	18000224	28000224	2-1/4	3-21/32	18100224	28100224
5.75	.2264			X	X	2-1/4	3-21/32	18100226	28100226
5.8	.2283	1-3/32	2-19/32	18000228	28000228	2-1/4	3-21/32	18100228	28100228
5.9	.2323	1-3/32	2-19/32	18000232	28000232	2-1/4	3-21/32	18100232	28100232
6.0	.2362	1-3/32	2-19/32	18000236	28000236	2-1/4	3-21/32	18100236	28100236
6.2	.2441	1-7/32	2-3/4	18000244	28000244	2-15/32	3-31/32	18100244	28100244
6.25	.2461			X	X	2-15/32	3-31/32	18100246	28100246
6.4	.2520	1-7/32	2-3/4	18000252	28000252	2-15/32	3-31/32	18100252	28100252
6.5	.2559	1-7/32	2-3/4	18000255	28000255	2-15/32	3-31/32	18100255	28100255
6.6	.2598	1-7/32	2-3/4	18000259	28000259	2-15/32	3-31/32	18100259	28100259
6.75	.2657			X	X	2-23/32	4-9/32	18100265	28100265
6.8	.2677	1-11/32	2-29/32	18000267	28000267	2-23/32	4-9/32	18100267	28100267
7.0	.2756	1-11/32	2-29/32	18000275	28000275	2-23/32	4-9/32	18100275	28100275
7.25	.2854	1 11/22	2.20/22	X	X	2-23/32	4-9/32	18100285	28100285
7.5	.2953	1-11/32	2-29/32	18000295	28000295	2-23/32	4-9/32	18100295	28100295
7.75	.3051	1 15/22	2 1/0	X 19000215	X 20000215	2-15/16	4-19/32	18100305	28100305
8.0 8.25	.3150 .3248	1-15/32	3-1/8	18000315	28000315 X	2-15/16 2-15/16	4-19/32 4-19/32	18100315	28100315
8.5	.3346	1-15/32	3-1/8	X 18000334	28000334	2-15/16	4-19/32	18100324 18100334	28100324 28100334
8.75	.3346	1-13/32	3-1/6	X	X	3-3/16	4-19/32	18100334	28100334
9.0	.3543	1-9/16	3-5/16	18000354	28000354	3-3/16	4-29/32	18100344	28100344
9.25	.3642	1-9/10	3-3/10	X	X	3-3/16	4-29/32	18100354	28100354
9.23	.3740	1-9/16	3-5/16	18000374	28000374	3-3/16	4-29/32	18100304	28100304
9.75	.3839	1 //10	3 3/10	X	X	3-7/16	5-1/4	18100374	28100374
10.0	.3937	1-11/16	3-1/2	18000393	28000393	3-7/16	5-1/4	18100393	28100393
10.5	.4134	1-11/16	3-1/2	18000333	28000333	3-7/16	5-1/4	18100413	28100413
11.0	.4331	1-27/32	3-1/2	18000413	28000413	3-7/10	5-19/32	18100413	28100413
11.5	.4528	1-27/32	3-3/4	18000453	28000453	3-11/16	5-19/32	18100453	28100453
12.0	.4724	2	4-1/32	18000432	28000432	3-11/10	5-15/16	18100432	28100432
12.5	.4921	2	4-1/32	18000472	28000472	3-31/32	5-15/16	18100472	28100472
13.0	.5118	_	. 1,32	X	X	3-31/2	5-15/16	18100511	28100511
		i .	i .			· · · · · ·			



Series 180 High Speed Steel Regular Point for through holes in woods, plastics and metals.



Series 280 High Speed Steel Brad Point for clean accurately sized holes in hardwoods and plastics.





Series 181 High Speed Steel Regular Point for through holes in woods, plastics and metals.



Series 281 High Speed Steel Brad Point for clean accurately sized holes in hardwoods and plastics.



1/4 & 3/8 Reduced Shank High Speed Steel Drills

Brad Point for clean, accurately sized holes in Woods, Plastics and Sheet Metal

Regular Point for cutting though holes in Woods, Plastics and Metals

	1/4" Shank	Stock Numbers			
Size	Decimal	Flute	Overall	Series 400	Series 410
Size	Equiv.	Length	Length	Regular Point	Brad Point
1/4	.2500	2-1/2	4	40000250	41000250
5/16	.3125	2-1/2	4	40000312	41000312
3/8	.3750	2-1/2	4	40000375	41000375
7/16	.4375	2-1/2	4	40000437	41000437
1/2	.5000	2-1/2	4	40000500	41000500
	1/4" Shank - Un	iversal Lengtl	,	Series 401	Series 411
	1/4 Shank - Oh		<u> </u>	Regular Point	Brad Point
17/64	.2656	1-7/8	3-1/2	40100265	41100265
9/32	.2812	1-31/32	3-19/32	40100281	41100281
19/64	.2969	2-1/16	3-23/32	40100296	41100296
5/16	.3125	2-3/16	3-27/32	40100312	41100312
21/64	.3281	2-9/32	3-15/16	40100328	41100328
11/32	.3438	2-11/32	4-1/32	40100343	41100343
23/64	.3594	2-15/32	4-5/32	40100359	41100359
3/8	.3750	2-9/16	4-1/4	40100375	41100375
25/64	.3906	2-5/8	4-11/32	40100390	41100390
13/32	.4062	2-3/4	4-15/32	40100406	41100406
27/64	.4219	2-27/32	4-9/16	40100421	41100421
7/16	.4375	2-15/16	4-11/16	40100437	41100437
29/64	.4531	3-1/32	4-25/32	40100453	41100453
15/32	.4688	3-1/8	4-7/8	40100468	41100468
31/64	.4844	3-7/32	5	40100484	41100484
1/2	.5000	3-7/32	5	40100500	41100500
	3/8" Shank - Re	agular I angth		Series 402	Series 412
	5/6 Shank - K			Regular Point	Brad Point
25/64	.3906	3-3/4	5-1/8	40200390	41200390
13/32	.4062	3-7/8	5-1/4	40200406	41200406
27/64	.4219	3-15/16	5-3/8	40200421	41200421
7/16	.4375	4-1/16	5-1/2	40200437	41200437
29/64	.4531	4-3/16	5-5/8	40200453	41200453
15/32	.4688	4-5/16	5-3/4	40200468	41200468
31/64	.4844	4-3/8	5-7/8	40200484	41200484
1/2	.5000	4-1/2	6	40200500	41200500



Series 400 HSS Regular Point, 4" overall length with 1/4" shank.



Series 410 HSS Brad Point for clean accurate holes in hardwoods



Series 401 HSS Regular Point Universal Length with 1/4" shank.



Series 402 HSS Regular Point, regular length with 3/8" shank.



Set # 41092007

Set of most popular sizes 1/8" to 1/2" diameter High Speed Steel Brad Point Drills in handy vinyl pouch.



Set # 41092007								
Includes								
Drill	Drill O.A. Shank							
Dia.	Lgth.	Size						
1/8	2-3/4	1/8						
3/16	3-1/2	3/16						
1/4	4	1/4						
5/16	4	1/4						
3/8	4	1/4						
7/16	4	1/4						
1/2	4	1/4						

WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.

1/2" Reduced Shank Drills

High Speed Steel and Carbon Steel



Series 320 **Carbon Steel Brad Point**

For clean holes in soft to medium- hard woods and plastics. Can be sharpened with a file. All sizes are 6" overall length and have 4" of twist.



Series 330 **Carbon Steel Regular Point**

#Only Avaliable While Supplies Last!!

For through holes in soft to medium-hard woods and plastics. Can be sharpened with a file. All sizes are 6" overall length, have 4" of twist and 90 degree points.



Series 340 **High Speed Steel Brad** Point

For clean, accurately sized holes in hardwoods and plastics. Sizes 1/8" to 15/64" are 5" overall length. Sizes 1/4" to 1-1/2" are 6" overall length. All sizes have 3" of twist. Can be specifically ground for softer woods if specified when ordering. Can be ordered with long brad points for angle drilling.





For through holes in woods, plastics and metals. Sizes 1/8" to 15/64" are 5" overall length. Sizes 1/4" to 1-1/2" are 6" overall length. All sizes have 3" of twist.

	Series 320	Series #330	Series 340	Series 350		Series 320	Series 340	Series 350
Drill	Carbon	Carbon	HSS	HSS	Drill	Carbon	HSS	HSS
Size	Brad	Regular	Brad	Regular	Size	Brad	Brad	Regular
5120	Point	Point	Point	Point	2220	Point	Point	Point
1/8	32000125	#33000125	34000125	35000125	49/64	*	34000765	35000765
9/64	*	*	34000140	35000140	25/32	32000781	34000781	35000781
5/32	32000156	#33000156	34000156	35000156	51/64	*	34000796	35000796
11/64	*	*	34000171	35000171	13/16	32000812	34000812	35000812
3/16	32000187	#33000187	34000187	35000187	53/64	*	34000828	35000828
13/64	32000203	*	34000203	35000203	27/32	32000843	34000843	35000843
7/32	32000218	#33000218	34000218	35000218	55/64	*	34000859	35000859
15/64	*	*	34000234	35000234	7/8	32000875	34000875	35000875
1/4	32000250	#33000250	34000250	35000250	57/64	*	34000890	35000890
17/64	32000265	*	34000265	35000265	29/32	32000906	34000906	35000906
9/32	32000281	#33000281	34000281	35000281	59/64	*	34000921	35000921
19/64	32000296	*	34000296	35000296	15/16	32000937	34000937	35000937
5/16	32000312	#33000312	34000312	35000312	61/64	*	34000953	35000953
21/64	32000328	*	34000328	35000328	31/32	32000968	34000968	35000968
11/32	32000343	#33000343	34000343	35000343	63/64	*	34000984	35000984
23/64	*	*	34000359	35000359	1	32001000	34001000	35001000
3/8	32000375	#33000375	34000375	35000375	1-1/64	X	34001015	35001015
25/64	32000390	*	34000390	35000390	1-1/32	32001031	34001031	35001031
13/32	32000406	#33000406	34000406	35000406	1-3/64	X	34001046	35001046
27/64	*	*	34000421	35000421	1-1/16	32001062	34001062	35001062
7/16	32000437	#33000437	34000437	35000437	1-5/64	X	34001078	35001078
29/64	32000453	*	34000453	35000453	1-3/32	X	34001093	35001093
15/32	32000468	*	34000468	35000468	1-7/64	X	34001109	35001109
31/64	*	*	34000484	35000484	1-1/8	32001125	34001125	35001125
1/2	32000500	#33000500	34000500	35000500	1-9/64	X	34001140	35001140
33/64	32000515	*	34000515	35000515	1-5/32	X	34001156	35001156
17/32	32000531	*	34000531	35000531	1-11/64	X	34001171	35001171
35/64	*	*	34000546	35000546	1-3/16	32001187	34001187	35001187
9/16	32000562	#33000562	34000562	35000562	1-13/64	X	34001203	35001203
37/64	*	*	34000578	35000578	1-7/32	X	34001218	35001218
19/32	32000593	*	34000593	35000593	1-15/64	X	34001234	35001234
39/64	*	*	34000609	35000609	1-1/4	32001250	34001250	35001250
5/8	32000625	#33000625	34000625	35000625	1-17/64	X	34001265	35001265
41/64	*	*	34000640	35000640	1-9/32	X	34001281	35001281
21/32	32000656	*	34000656	35000656	1-5/16	32001312	34001312	35001312
43/64	*	*	34000671	35000671	1-11/32	X	34001343	35001343
11/16	32000687	*	34000687	35000687	1-3/8	32001375	34001375	35001375
45/64	*	*	34000703	35000703	1-13/32	X	34001406	35001406
23/32	32000718	*	34000718	35000718	1-7/16	*	34001437	35001437
47/64	*	*	34000734	35000734	1-15/32	X	34001468	35001468
3/4	32000750	#33000750	34000750	35000750	1-1/2	32001500	34001500	35001500
* - Price (on request	X = Not availa	hla			See sets	on Page 54	

^{* =} Price on request



1/2" Reduced Shank Drills High Speed Steel, Carbide Tipped and Cobalt Steel

Dimensions		Stock Numbers							
		19CT	200CT	224	284	X200			
D:4	D	C.T.	C.T.	Cobalt	HSS	HSS			
Diameter		Brad Pt.	Brad Pt.	Reg. Pt.	Brad Pt.	Brad Pt.			
Sizes	Equiv.	3" Twist	4" Twist	3" Twist	3" Twist	4" Twist			
		5" Overall	6" Overall	6" Overall	6" Overall	6" Overall			
1/4	.2500	19CT0250	200CT0250	X	X	X2000250			
9/32	.2812	19CT0281	X	X	X	X2000281			
5/16	.3125	19CT0312	200CT0312	X	X	X2000312			
8.0mm	.3150	19CT0315	X	X	X	X			
11/32	.3438	X	X	X	X	X2000343			
3/8	.3750	19CT0375	200CT0375	X	X	X2000375			
25/64	.3906	19CT0390	X	X	X	X			
10.0mm	.3937	19CT0393	X	X	X	X 20000406			
13/32 7/16	.4062 .4375	X 19CT0437	X 200CT0437	X X	X X	X2000406 X2000437			
12.0mm	.4724	19CT0437	200C10437 X	X	X	X2000437			
1/2	.5000	19CT0500	200CT0500	X	X	X2000500			
13.0mm	.5118	19CT0511	X	X	X	X			
33/64	.5156	X	X	22400515	X	X			
17/32	.5312	X	X	22400531	X	X2000531			
35/64	.5469	X	X	22400546	X	X			
14.0mm	.5512	X	X	X	28400551	X			
9/16	.5625	X	X	22400562	X	X2000562			
37/64	.5781	X	X	22400578	X	X			
15.0mm	.5906	X	X	X	28400590				
19/32	.5938	X	X	22400593	X	X			
39/64	.6094	X	X	22400609	X	X			
5/8	.6250	19CT0625	200CT0625	22400625	X 29400620	X2000625			
16.0mm 41/64	.6299 .6406	X	X	X 22400640	28400629 X	X			
21/32	.6562	X	X	22400640	X	X			
17.0mm	.6693	X	X	X	28400669	X			
43/64	.6719	X	X	22400671	X	X			
11/16	.6875	X	X	22400687	X	X2000687			
45/64	.7031	X	X	22400703	X	X			
18.0mm	.7087	X	X	X	28400708	X			
23/32	.7188	X	X	22400718	X	X			
47/64	.7344	X	X	22400734	X	X			
19.0mm	.7480	X	X	X	28400748	X			
3/4	.7500	19CT0750	200CT0750	22400750	X	X2000750			
49/64	.7656	X	X	22400765	X	X			
25/32 20.0mm	.7812 .7874	X X	X X	22400781 X	X 28400787	X X			
51/64	.7969	X	X	22400796	X	X			
13/16	.8125	X	X	22400730	X	X2000812			
21.0mm	.8268	X	X	X	28400826	X			
53/64	.8281	X	X	22400828	X	X			
27/32	.8438	X	X	22400843	X	X			
22.0mm	.8661	X	X	X	28400866	X			
7/8	.8750	X	X	22400875	X	X2000875			
23.0mm	.9055	X	X	X	28400905	X			
29/32	.9062	X	X	22400906	X	X			
59/64	.9219	X	X	22400921	X	X V2000027			
15/16	.9375	X	X	22400937	X 28400044	X2000937			
24.0mm 61/64	.9449 .9531	X	X X	X 22400953	28400944 X	X			
31/32	.9688	X	X	22400953	X	X			
63/64	.9844	X	X	22400984	X	X			
25.0mm	.9843	X	X	X	28400984	X			
1	1.000	19CT1000	200CT1000	22401000	X	X2001000			
V - Not ox	oiloblo				-				



Series 224 Cobalt Steel Regular Point

For through holes in woods, plastics and metals. Stands up to tough materials like stainless steel and cast iron. All sizes are 6" overall and have 3" of twist.



Series 200CT Carbide Tipped Brad Point

For accurately sized holes in hardwoods. Designed for high production at high spindle speeds. All sizes are 6" overall and have 4" of twist.



Series 284 High Speed Steel Brad Point Metric Sizes

For accurately sized holes in hardwoods and plastics. All sizes are 6" overall and have 3" of twist. Can be ordered to cut softwood or for angle drilling.

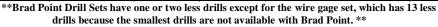


X = Not available



Drill SetsHigh Speed Steel Drills in Metal and Wood Indexes

	Stock Nu	Description			
Regular Point	Brad Point	Cobalt	Number Pieces	Size Range	Length
15095013	25095012*	21095013	13	1/16 to 1/4 by 64ths	GI .
15095021	25095020*	X	21	1/16 to 3/8 by 64ths	Short
15095029	25095028*	21095029	29	1/16 to 1/2 by 64ths	Length
15195013	25195012*	21195013	13	1/16 to 1/4 by 64ths	
15195015	25195014*	21195015	15	1/16 to 1/2 by 32nds	Regular
X	X	X	15	Ditto W/ 1/4" shanks	Length
151950156	251950146*	X	15	Ditto W/ 3/8" shanks	
15195021	25195020*	X	21	1/16 to 3/8 by 64ths	
15195029	25195028*	21195029	29	1/16 to 1/2 by 64ths	D 1
15195529	X	X	29	1/16 to 1/2 by 64ths (LH)	Regular Length
X	X	X	29	Ditto W/ 1/4" shanks	Length
151950296	251950286*	X	29	Ditto W/ 3/8" shanks	
16195060	26195047*	X	60	#1 to #60 Wire Gage	Regular
17195026	27195026	X	26	A to Z Letter Sizes	Length
18195011	28195009*	X	11	1.0 to 6.0 MM x .5 MM	
18195025	28195023*	X	25	1.0 to 13.0 MM x .5 MM	
15295029	25295028*	X	29	1/16 to 1/2 by 64ths	Long Length
15195115	POR	X	115	1/16 to 1/2 by 64ths #1 to #60 Wire Gage A to Z Letter Sizes	Regular Length
35095008	34095008	X	8	9/16 to 1" by 16ths 6" O.A. Length 1/2" Shanks w/metal index	6" Overall 1/2" Shank
35093008	34093008	X	8	9/16 to 1" by 16ths 6" O.A. Length 1/2" Shanks w/wood case	6" Overall 1/2" Shank
16195080	X	X	20	#61 to #80 Wire Gage (Not in metal index)	Regular Length



POR = **Price** on **Request**

X = Not available



Stock # 15095013



Stock # 25195020





Stock # 25195028



Stock # 17195026



Stock # 34093008



Stock # 34095008



Stock # 15195115

Stock Number: 34093008	Stock Number: 15195115
Holds eight popular sizes of 6" OAL with 1/2" shank drills securely by the	Holds 115 drills, 29 fractional, 26 letters and 60 wire gage, 1/16" to
shank and drill edges. Drills can be properly sized with this case. 9/16" to	1/2" by 64ths, 1 to 60 and A to Z letter sizes.
1" by 16ths.	

Empty indexes are available - Price on request.

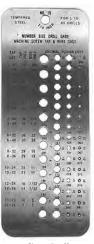
Drill Gages and Drill Stands



Stock # 12248



Stock # 12250



Stock # 12251

- •General's Drill Gages are used to quickly and conveniently identify drill bit sizes.
- •Made of heat treated heavy gage steel, machined and ground to close tolerances.
- •Hole sizes and decimal equivalents are permanently etched on the face.
- •Number 12250 conforms to government specifications GG-G-86b.

Stock	Size	Dimensions
Number	Range	Difficusions
12248	Letter size drills A to Z.	5" x 2" wide
12249	Number size drills 61 to 80.	3 x 1-1/8" wide
12250	Fractional size drills 1/16 to 1/2 by 64ths.	5" x 2" wide
12251	Number size drills 1 to 60.	5" x 2" wide



Stock # 12249

Drill Stands

•Sturdy metal stand with fractional, number or letter sizes marked for each drill.

Stock	Size
Number	Range
11850	Letter Sizes A to Z
11900	Fractional Sizes 1/16" to 1/2" by 64ths
11950	Number Sizes #1 to #60



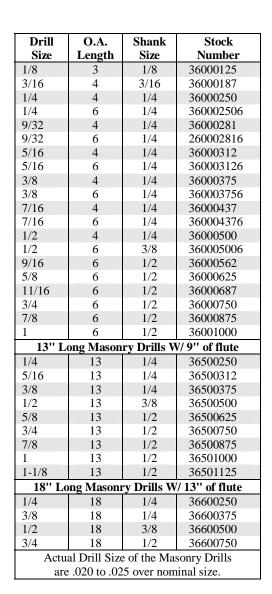
Stock # 11950



Stock # 11850



Carbide Tipped Masonry Drills





	Carbide Tipped Glass & Tile								
	Drill, Spear Point								
Drill Size									
1/8	.135	1/8	2-1/4	GLC0125					
3/16	.197	3/16	2-9/32	GLC0187					
1/4	.260	1/4	2-9/32	GLC0250					
5/16	.322	1/4	3	GLC0312					
3/8	.385	1/4	3-55/64	GLC0375					
1/2	.515	1/4	3-55/64	GLC0500					



Stock # GLC0375

SR-3822

SR-3824

3/8"

1/2"

20"

22"

22"

24"

Hammer Drill Bits

SDS-Plus® and SDS-Plus Hex/Tapcon®



SDS-Plus®- SR Series

Stock # SR-022

Stock	g.	Usable	Overall
Number	Size	Length	Length
SR-5324	5-32"	2"	4"
SR-001	3/16"	2"	4"
SR-002	1/4"	2"	4"
SR-5325	5/32"	4"	6"
SR-037	3/16"	4"	6"
SR-051	7/32"	4"	6"
SR-003	1/4"	4"	6"
SR-004	5/16"	4"	6"
SR-007	3/8"	4"	6"
SR-011	7/16"	4"	6"
SR-014	1/2"	4"	6"
SR-018	9/16"	4"	6"
SR-022	5/8"	4"	6"
SR-038	3/16"	6"	8"
SR-052 SR-060	7/32" 1/4"	6" 6"	8" 8"
SR-000 SR-005	5/16"	6"	8"
SR-003 SR-008	3/8"	6"	8"
SR-008 SR-026	11/16"	6"	8"
SR-020 SR-027	3/4"	6"	8"
SR-027 SR-032	7/8"	6"	8"
SR-023	5/8"	7"	9"
SR-015	1/2"	8"	10"
SR-035	1"	8"	10"
SR-044	3/16"	10"	12"
SR-053	7/32"	10"	12"
SR-062	1/4"	10"	12"
SR-006	5/16"	10"	12"
SR-009	3/8"	10"	12"
SR-012	7/16"	10"	12"
SR-016	1/2"	10"	12"
SR-019	9/16"	10"	12"
SR-024	5/8'	10"	12"
SR-028	3/4"	10"	12"
SR-033	7/8"	10"	12"
SR-045	3/16"	13"	16"
SR-055	7/32"	14"	16"
SR-063	1/4"	14"	16"
SR-010	3/8"	16"	18"
SR-017	1/2"	16"	18"
SR-020	9/16"	16"	18"
SR-025	5/8"	16"	18"
SR-029	3/4"	16"	18"
SR-034 SR-036	7/8" 1"	16" 16"	18" 18"
3K-030	1	10	10

SDS-Plus

The versatile Slot Drive System fits all rotary hammers that specify an SDS-Plus Shank. Positive drive slots deliver maximum drilling torque and maximum hammering energy for faster drilling. The manufacturer combined the "Ultra Flute", an asymmetrical spiral design with the popular SDS-Plus Shank to achieve a combination that makes the SR series the fastest drilling carbide-tipped hammer bit of its type!



SDS-Plus Hex/Tapcon® Bits (Masonry Anchor System)

These rotary hammer drill bits are specifically designed for use with Tapcon® concrete screw anchors. Each bit is precisely sized to match the required tolerances necessary to achieve the maximum holding power from self threading concrete screws. These SDS-Plus Hex Style drill bits have a 5/16" hex immediately below the shank, that fits directly into the concrete screw anchor installation tool.

Stock Number	Size	Usable Length	Overall Length
TH-5323	5/32"	2-1/2"	6"
TH-5325	5/32"	4-1/2"	7"
TH-3163	3/16"	2-1/2"	6"
TH-3165	3/16"	4-1/2"	7"

Stock # TH-3163





Percussion/ Hammer Drill Bits - Round Shank





Stock # SS-339

Round Shank -SS Series

Round Shank hammer drill bits are designed for use in hard hitting hammer drills that utilize a 3-jawed, Jacob's type chuck. These extra tough bits will give outstanding performance in the roughest drilling applications. The heat-treated and surface hardened alloy body, coupled with an extra tough percussion carbide tip, will stay sharper longer. The design allows for easy resharpening to extend the life of the bit.

Stock	Size	Overall	Shank	Stock	Size	Overall	Shank
Number		Length	Diameter	Number		Length	Diameter
SS-301	1/8"	2-3/4"	1/8"	SS-347	1"	6"	1/2"
SS-302	11/64"	3"	11/64"	SS-350	1-1/8"	6"	1/2"
SS-303	5/32"	3"	5/32"	SS-353	1-1/4"	6"	1/2"
SS-304	3/16"	3"	3/16"	SS-354	1-3/8"	6"	1/2"
SS-307	13/64"	3"	13/64"	SS-355	1-1/2"	6"	1/2"
SS-308	7/32"	3"	1/4"	SS-311	1/4"	12"	1/4"
SS-305	3/16"	4"	3/16"	SS-320	3/8"	12"	5/16"
SS-309	1/4"	4"	1/4"	SS-321	3/8"	12"	3/8"
SS-312	9/32"	4"	1/4"	SS-328	1/2"	12"	3/8"
SS-313	5/16"	4"	1/4"	SS-331	9/16"	12"	3/8"
SS-317	3/8"	4"	1/4"	SS-334	5/8"	12"	1/2"
SS-306	3/16"	6"	3/16"	SS-337	11/16"	12"	1/2"
SS-310	1/4"	6"	1/4"	SS-340	3/4"	12"	1/2"
SS-314	5/16"	6"	1/4"	SS-345	7/8"	12"	1/2"
SS-315	5/16"	6"	5/16"	SS-348	1"	12"	1/2"
SS-318	3/8"	6"	1/4"	SS-351	1-1/8"	12"	1/2"
SS-319	3/8"	6"	3/8"	SS-316	5/16"	18"	5/16"
SS-324	7/16"	6"	3/8"	SS-322	3/8"	18"	5/16"
SS-325	15/32"	6"	3/8"	SS-323	3/8"	18"	3/8"
SS-326	1/2"	6"	1/4"	SS-329	1/2"	18"	3/8"
SS-327	1/2"	6"	3/8"	SS-332	9/16"	18"	3/8"
SS-330	9/16"	6"	3/8"	SS-335	5/8"	18"	1/2"
SS-333	5/8"	6"	1/2"	SS-338	11/16"	18"	1/2"
SS-336	11/16"	6"	1/2"	SS-341	3/4"	18"	1/2"
SS-339	3/4"	6"	1/2"	SS-346	7/8"	18"	1/2"
SS-342	13/16"	6"	1/2"	SS-349	1"	18"	1/2"
SS-343	27/32"	6"	1/2"	SS-352	1-1/8"	18"	1/2"
SS-344	7/8"	6"	1/2"				



Spline-Drive/SDS-Max® Shank Hammer Drills





Spline-Drive RS Series

Designed and produced especially for spline-drive hammers. RS Series Spline-Drive bits are held to exacting tolerances to assure perfect fit as well as maximum impact and torque transmission. These Spline-Drive rotary/percussion bits are the best available and are designed with maximum strength to provide maximum life.

Stock	Size	Usable	Overall	Stock	Size	Usable	Overall
Number		Length	Length	Number		Length	Length
RS11-0375	3/8"	6"	11"	RS17-1250	1-1/4"	12"	17"
RS11-0500	1/2"	6"	11"	RS17-1500	1-1/2"	12"	17"
RS11-0625	5/8"	6"	11"	RS23-0500	1/2"	18"	23"
RS11-0750	3/4"	6"	11"	RS23-0625	5/8"	18"	23"
RS11-1000	1"	6"	11"	RS23-0750	3/4"	18"	23"
RS11-1125	1-1/8"	6"	11"	RS23-0875	7/8"	18"	23"
RS17-0375	3/8"	12"	17"	RS23-1000	1"	18"	23"
RS17-0500	1/2"	12"	17"	RS23-1125	1-1/8"	18"	23"
RS17-0562	9/16"	12"	17"	RS23-1250	1-1/4"	18"	23"
RS17-0625	5/8"	12"	17"	RS23-1500	1-1/2"	18"	23"
RS17-0687	11/16"	12"	17"	RS42-1000	1"	36"	42"
RS17-0750	3/4"	12"	17"	RS42-1125	1-1/8"	36"	42"
RS17-0875	7/8"	12"	17"	RS42-1250	1-1/4"	36"	42"
RS17-1000	1"	12"	17"	RS42-1500	1-1/2"	36"	42"
RS17-1125	1-1/8"	12"	17"				





SDS-MAX®

SDS-Max® heavy duty slot drive system maximizes the performance of any rotary hammer that is designed for use with an SDS-Max® drive system. Three positive drive slots and two ball retainer slot are incorporated into the SDS-Max® shank design allowing a SDS-Max® hammer to drill large diameter holes with ease. Bits of 5/8" diameter or larger are equipped with a multi-cutter tip design.

Stock	Size	Usable	Overall	Stock	Size	Usable	Overall
Number		Length	Length	Number		Length	Length
MP015	3/8"	7-1/4"	13-1/4"	MP450	1"	15-3/4"	21-1/4"
MP030	1/2"	7-1/4"	13-1/4"	MP060	1/2"	15"	21-1/2"
MP090	9/16"	7-1/4"	13-1/4"	MP105	9/16"	15"	21-1/2"
MP120	5/8"	7-1/4"	13-1/4"	MP150	5/8"	15-1/4"	21-1/2"
MP225	3/4"	7-1/4"	13-1/4"	MP210	11/16"	15-1/4"	21-1/2"
MP360	7/8"	8"	13-1/4"	MP255	3/4"	15-1/4"	21-1/2"
MP420	1"	8"	13-1/4"	MP510	1-1/8"	17"	22-1/2"
MP045	1/2"	10-3/4"	17"	MP555	1-1/4"	17"	22-1/2"
MP135	5/8"	11"	17"	MP650	1-3/8"	17"	22-1/2"
MP240	3/4"	11"	17"	MP705	1-1/2"	17"	22-1/2"
MP375	7/8"	11-1/2"	17"	MP165	5/8"	22"	28"
MP435	1"	11-1/2"	17"	MP180	5/8"	30-1/4"	36-1/4"
MP495	1-1/8"	11-1/2"	17"	MP285	3/4"	30-1/2"	36-1/4"
MP540	1-1/4"	11-1/2"	17"	MP456	1"	30-3/4"	36-1/4"
MP600	1-3/8"	11-1/2"	17"	MP525	1-1/8"	30-3/4"	36-1/4
MP690	1-1/2"	11-1/2"	17"	MP630	1-3/8"	30-3/4"	36-1/4"
MP390	7/8"	15-3/4"	21-1/4"				



Percussion / Hammer Core Bits

Percussion / Hammer Core Bodies (sold separately) -PC Series

The Hammer Core Bit is designed for heavy duty rotary hammers. The special carbide tip used is intended for continuous hammering action and is combined with extra tough alloy steel body to give maximum performance under the most demanding conditions.

Stock	Size	Overall	Stock	Size	Overall
Number		Length	Number		Length
PC-9888	1"	6"	PC-9145	2-3/4"	6"
PC-9999	1-1/8"	6"	PC-9150	3"	6"
PC-9100	1-1/4"	6"	PC-9160	3-1/2"	6"
PC-9110	1-1/2"	6"	PC-9170	4"	6"
PC-9120	1-3/4"	6"	PC-9172	4-1/2"	6"
PC-9130	2"	6"	PC-9173	5"	6"
PC-9140	2-1/2"	6"	PC-9174	6"	6"



Stock # PC-9150



Percussion / Hammer Core Pilot (sold separately)

The Hammer Core Pilot is used to make an initial starting groove and is then removed before further drilling is continued. Hammer core pilot bits are interchangeable with hammer core bodies from 1-1/2" diameter through 6" diameter. (The hammer core pilot drill will not fit 1" diameter through 1-1/4" diameter core bodies.)

Stock Number	Description			
PC-9200	Interchangeable pilot (fits hammer core bodies sizes 1-1/2" diameter through 6" diameter.)			



Stock # PDE-12

Percussion / Hammer Core Extensions (sold separately)

PDE Series Extensions have 3/4-10 female threaded ends. These extensions fit the Percussion Core drive shanks. (*They cannot be used with PC9888 or PC9999*.)

Stock Number	Overall Length
PDE-6	6" Extension
PDE-12	12" Extension
PDE-18	18" Extension

(Removal tool & T-750 Threaded Stud included)



Percussion / Hammer Core Adapters

(sold separately)

Percussion core bit shank adapters have a replaceable 3/4-10 threaded coupler for an extra long working life. You need only replace the threaded adapter if it should wear or break. Due to changes and additions in power tool models, other adapters may be available, but not listed in this catalog.









(Threaded Replacement Stud)

T-750
The stud is used to connect the shank to the extension and the extension to the cutter head. Each shank and extension comes with one stud.



High Speed Steel Plexi-Point Drills

Fractional, Number, Metric and Letter Sizes To cut plexiglas and hard plastics.

Drills are specially pointed to reduce chipping out when cutting through Plexiglas material.





	T	1	1	
Drill	Dec.	Flute	O.A.	Stock
Size	Equiv.	Length	Length	Number
1/16	.0625	7/8	1-7/8	14400062
#52	.0635	7/8	1-7/8	14400063
#50	.0700	1	2	14400070
#48	.0760	1	2	14400076
5/64	.0781	1	2	14400078
2.0	.0787	15/16	1-15/16	144000787
#42	.0935	1-1/4	2-1/4	144000935
3/32	.0938	1-1/4	2-1/4	14400093
#40	.0980	1-3/8	2-3/8	14400098
2.5	.0984	1-3/16	2-1/4	144000984
#38	.1015	1-7/16	2-1/2	14400101
7/64	.1094	1-1/2	2-5/8	14400109
#34	.1110	1-1/2	2-5/8	14400111
3.0	.1181	1-5/16	2-13/32	14400118
1/8	.1250	1-5/8	2-3/4	14400125
3.3	.1299	1-7/16	2-9/16	14400129
3.4	.1339	1-17/32	2-3/4	14400133
3.5	.1378	1-3/4	2-7/8	14400137
#28	.1405	1-3/4	2-7/8	144001405
9/64	.1406	1-3/4	2-7/8	14400140
5/32	.1562	2	3-1/8	14400156
4.0	.1575	1-11/16	2-15/16	144001575
#20	.1610	2-1/8	3-1/4	14400161
11/64	.1719	2-1/8	3-1/4	14400171
4.5	.1772	2-3/16	3-3/8	14400177
#14	.1820	2-3/16	3-3/8	14400182
3/16	.1875	2-5/16	3-1/2	14400187
#10	.1935	2-7/16	3-5/8	14400193
5.0	.1968	2-1/16	3-3/8	144001968
13/64	.2031	2-7/16	3-5/8	14400203
#6	.2040	2-1/2	3-3/4	14400204
5.5	.2165	2-1/4	3-21/32	14400216
7/32	.2188	2-1/2	3-3/4	14400218
#2	.2210	2-5/8	3-7/8	14400221
15/64	.2344	2-5/8	3-7/8	14400234
A	.2340	2-5/8	3-7/8	144002340
6.0	.2362	2-1/4	3-21/32	14400236
В	.2380	2-3/4	4	14400238
С	.2420	2-3/4	4	14400242
D	.2460	2-3/4	4	14400246
E (1/4)	.2500	2-3/4	4	14400250
6.5	.2559	2-7/8	4-1/8	14400255
F	.2570	2-7/8	4-1/8	14400257
G	.2610	2-7/8	4-1/8	14400261
17/64	.2656	2-7/8	4-1/8	14400265
17/04	.2030	2-1/0	4-1/0	14400203

Other sizes and lengths - Price on request.

29 piece set HSS Plexi Drills 1/16" to 1/2" by 64ths. In metal index -Stock # 14495029

Drill	Dec.	Flute	O.A.	Stock No.
Size	Equiv	Lgth.	Lgth.	Reg. Pt.
Н	.2660	2-7/8	4-1/8	14400266
I	.2720	2-7/8	4-1/8	14400272
7.0	.2756	2-23/32	4-9/32	14400275
J	.2770	2-7/8	4-1/8	14400277
K	.2810	2-15/16	4-1/4	144002810
9/32	.2812	2-15/16	4-1/4	14400281
L	.290	2-15/16	4-1/4	14400290
M	.2950	3-1/16	4-3/8	144002950
7.5	.2953	2-23/32	4-9/32	14400295
19/64	.2969	3-1/16	4-3/8	14400296
N	.3020	3-1/16	4-3/8	14400302
5/16	.3125	3-3/16	4-1/2	14400312
8.0	.3150	2-15/16	4-19/32	14400315
O	.3160	3-3/16	4-1/2	14400316
P	.3230	3-5/16	4-5/8	14400323
21/64	.3281	3-5/16	4-5/8	14400328
Q	.3320	3-7/16	4-3/4	14400332
8.5	.3346	2-15/16	4-19/32	14400334
R	.3390	3-7/16	4-3/4	14400339
11/32	.3438	3-7/16	4-3/4	14400343
9.0	.3543	3-3/16	4-29/32	14400354
23/64	.3594	3-1/2	4-7/8	14400359
9.5	.3740	3-3/16	4-29/32	14400374
3/8	.3750	3-5/8	5	14400375
V	.3770	3-5/8	5	14400377
9.7	.3819	3-7/16	5-1/4	14400381
W	.3860	3-3/4	5-1/8	14400386
25/64	.3906	3-3/4	5-1/8	14400390
10.0	.3937	3-7/16	5-1/4	14400393
X	.3970	3-3/4	5-1/8	14400397
Y	.4040	3-7/8	5-1/4	14400404
13/32	.4062	3-7/8	5-1/4	14400406
Z	.4130	3-7/8	5-1/4	14400413
10.5	.4134	3-7/16	5-1/4	144004134
27/64	.4219	3-15/16	5-3/8	14400421
11.0	.4331	3-11/16	5-19/32	14400433
7/16	.4375	4-1/16	5-1/2	14400437
11.5	.4528	3-11/16	5-19/32	14400452
29/64	.4531	4-3/16	5-5/8	14400453
15/32	.4688	4-5/16	5-3/4	14400468
12.0	.4724	3-31/32	5-15/16	11400472
31/64	.4844	4-3/8	5-7/8	14400484
12.5	.4921	3-31/32	5-15/16	14400492
1/2	.5000	4-1/2	6	14400500
13.0	.5118	3-31/2	5-15/16	14400511
*9/16	.5625	3	6	14400562
*5/8	.6250	3	6	14400625
*3/4	.7500	3	6	14400750

- Other sizes & Left Hand available - Price on request.

^{*6&}quot; long with 1/2" shank.



Aircraft Extension Bits 6" Overall

NAS 907, Type B, Surface Treated, 135°Split Point

Manufactured to National Aerospace Standard 907. 135° split point is self-centering and reduces thrust. Ideal for drilling in mild steels where extra length for reach is required.



Stock	Diameter	Decimal	Flute		
Numbers	Size	Equivalent	Length		
		ctional	ě		
6" Overall					
24000046	3/64*	.0469	3/4		
24000062	1/16	.0625	7/8		
24000078	5/64	.0781	1		
24000093	3/32	.0938	1-1/4		
24000109	7/64	.1094	1-1/2		
24000125	1/8	.1250	1-5/8		
24000140	9/64	.1406	1-3/4		
24000156	5/32	.1562	2		
24000171	11/64	.1719	2-1/8		
24000187	3/16	.1875	2-5/16		
24000203	13/64	.2031	2-7/16		
24000218	7/32	.2188	2-1/2		
24000234	15/64	.2344	2-5/8		
24000250	1/4	.2500	2-3/4		
24000265	17/64	.2656	2-7/8		
24000281	9/32	.2812	2-15/16		
24000296	19/64	.2969	3-1/16		
24000312	5/16	.3125	3-3/16		
24000328	21/64	.3281	3-5/16		
24000343	11/32	.3438	3-7/16		
24000359	23/64	.3594	3-1/2		
24000375	3/8	.3750	3-5/8		
24000390	25/64	.3906	3-3/4		
24000406	13/32	.4062	3-7/8		
24000421	27/64	.4219	3-15/16		
24000437	7/16	.4375	4-1/16		
24000453	29/64	.4531	4-3/16		
24000468	15/32	.4688	4-5/16		
24000484	31/64	.4844	4-3/8		
24000500	1/2	.5000	4-1/2		
		Vire			
		verall			
24100040	#60*	.0400	11/16		
24100041	#59*	.0410	11/16		
24100042	#58*	.0420	11/16		
24100043	#57*	.0430	3/4		
24100046	#56*	.0465	3/4		
24100052	#55*	.0520	7/8		
24100055	#54*	.0550	7/8		
24100059	#53*	.0595	7/8		
24100063	#52	.0635	7/8		
24100067	#51	.0670	1		
24100070	#50	.0700	1		
24100073	#49	.0730	1		
24100076	#48	.0760	1		
24100078	#47	.0785	1		
*Not Split Poi	4				

Stock	Diameter	Decimal	Flute
Numbers	Size	Equivalent	Length
	V	Vire	Ü
	Con	tinued	
24100081	#46	.0810	1-1/8
24100082	#45	.0820	1-1/8
24100086	#44	.0860	1-1/8
24100089	#43	.0890	1-1/4
24100093	#42	.0935	1-1/4
24100096	#41	.0960	1-3/8
24100098	#40	.0980	1-3/8
24100099	#39	.0995	1-3/8
24100101	#38	.1015	1-7/16
24100104	#37	.1040	1-7/16
24100106	#36	.1065	1-7/16
24100110	#35	.1100	1-1/2
24100111	#34	.1110	1-1/2
24100113	#33	.1130	1-1/2
24100116	#32	.1160	1-5/8
24100120	#31	.1200	1-5/8
24100128	#30	.1285	1-5/8
24100136	#29	.1360	1-3/4
24100140	#28	.1405	1-3/4
24100144	#27	.1440	1-7/8
24100147	#26	.1470	1-7/8
24100149	#25	.1495	1-7/8
24100152	#24	.1520	2
24100154	#23	.1540	2
24100157	#22	.1570	2
24100159	#21	.1590	2-1/8
24100161	#20	.1610	2-1/8
24100166	#19	.1660	2-1/8
24100169	#18	.1695	2-1/8
24100173	#17	.1730	2-3/16
24100177	#16	.1770	2-3/16
24100180	#15	.1800	2-3/16
24100182	#14	.1820	2-3/16
24100185	#13	.1850	2-5/16
24100189	#12	.1890	2-5/16
24100191	#11	.1910	2-5/16
24100193	#10	.1935	2-7/16
24100196	#9	.1960	2-7/16
24100199	#8	.1990	2-7/16
24100201	#7	.2010	2-7/16
24100204	#6	.2040	2-1/2
24100205	#5	.2055	2-1/2
24100209	#4	.2090	2-1/2
24100213	#3	.2130	2-1/2
24100221	#2	.2210	2-5/8
24100228	#1	.2280	2-5/8

^{*}Not Split Point



Aircraft Extension Bits 12" Overall

NAS 907, Type B, Surface Treated, 135° Split Point

Manufactured to National Aerospace Standard 907. 135° split point is self-centering and reduces thrust. Ideal for drilling in mild steels where extra length for reach is required.

Stock	Diameter	Decimal	Flute
Numbers	Size	Equivalent	Length
	Fra	ctional	
	12"	Overall	
24500046	3/64*	.0469	3/4
24500062	1/16	.0625	7/8
24500078	5/64	.0781	1
24500093	3/32	.0938	1-1/4
24500109	7/64	.1094	1-1/2
24500125	1/8	.1250	1-5/8
24500140	9/64	.1406	1-3/4
24500156	5/32	.1562	2
24500171	11/64	.1719	2-1/8
24500187	3/16	.1875	2-5/16
24500203	13/64	.2031	2-7/16
24500218	7/32	.2188	2-1/2
24500234	15/64	.2344	2-5/8
24500250	1/4	.2500	2-3/4
24500265	17/64	.2656	2-7/8
24500281	9/32	.2812	2-15/16
24500296	19/64	.2969	3-1/16
24500312	5/16	.3125	3-3/16
24500328	21/64	.3281	3-5/16
24500343	11/32	.3438	3-7/16
24500359	23/64	.3594	3-1/2
24500375	3/8	.3750	3-5/8
24500390	25/64	.3906	3-3/4
24500406	13/32	.4062	3-7/8
24500421	27/64	.4219	3-15/16
24500437	7/16	.4375	4-1/16
24500453	29/64	.4531	4-3/16
24500468	15/32	.4688	4-5/16
24500484	31/64	.4844	4-3/8
24500500	1/2	.5000	4-1/2
		re Size	
12" Overall			

24600040

24600070

24600073

24600076

#60*

#50

#49

#48

#47

.0400

.0700

.0730

.0760

.0785

Stock	Diameter	Decimal	Flute
Numbers	Size	Equivalent	Length
		ire	
	_	inued	
24600081	#46	.0810	1-1/8
24600082	#45	.0820	1-1/8
24600086	#44	.0860	1-1/8
24600089	#43	.0890	1-1/4
24600093	#42	.0935	1-1/4
24600096	#41	.0960	1-3/8
24600098	#40	.0980	1-3/8
24600099	#39	.0995	1-3/8
24600101	#38	.1015	1-7/16
24600104	#37	.1040	1-7/16
24600106	#36	.1065	1-7/16
24600110	#35	.1100	1-1/2
24600111	#34	.1110	1-1/2
24600113	#33	.1130	1-1/2
24600116	#32	.1160	1-5/8
24600120	#31	.1200	1-5/8
24600128	#30	.1285	1-5/8
24600136	#29	.1360	1-3/4
24600140	#28	.1405	1-3/4
24600144	#27	.1440	1-7/8
24600147	#26	.1470	1-7/8
24600149	#25	.1495	1-7/8
24600154	#23	.1540	2
24600157	#22	.1570	2
24600159	#21	.1590	2-1/8
24600161	#20	.1610	2-1/8
24600166	#19	.1660	2-1/8
24600169	#18	.1695	2-1/8
24600173	#17	.1730	2-3/16
24600177	#16	.1770	2-3/16
24600185	#13	.1850	2-5/16
24600189	#12	.1890	2-5/16
24600191	#11	.1910	2-5/16
24600193	#10	.1935	2-7/16
24600196	#9	.1960	2-7/16
24600199	#8	.1990	2-7/16
24600201	#7	.2010	2-7/16
24600205	#5	.2055	2-1/2
24600209	#4	.2090	2-1/2
24600213	#3	.2130	2-1/2
24600228	#1	.2280	2-5/8

11/16

²⁴⁶⁰⁰⁰⁷⁸ *Not Split Point



Threaded Shank Drills

High Speed Steel, Carbon and Carbide Tipped

7/16-14 Threaded Shanks 4-1/2" O.A.

Designed for use in multi spindle boring machines, all drills are 4-1/2" overall and have 7/16-14 threaded shanks. All have 3" of twist except the extended shank series, which have 1-3/4" of twist.









Carbide Tipped **Brad Point** Series #426

HSS Reg. Point Left Hand Series #4215

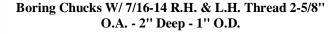
HSS Brad Point Series #423

HSS Extended Shank Brad Point Series #425

	Stock Numbers: All available in Left Hand Twist, change Fourth digit to 5.							
Drill Size	#420 Carbon Reg Point WHILE SUPPLIES LAST!	#421 HSS Reg Point	#422 Carbon Brad Point	#423 HSS Brad Point	#424 Carbon Extended Shank Brad Pt. WHILE SUPPLIES LAST!	#425 HSS Extended Shank Brad Pt.	#426 Carbide Tipped Brad Point	#164 Carbon Screw Point WHILE SUPPLIES LAST!
1/8	42000125	X	42200125	X	X	X	X	X
5/32	X	X	42200156	X	X	X	X	X
3/16	42000187	X	42200187	42300187	X	42500187	X	X
7/32	42000218	X	42200218	42300218	X	X	X	X
1/4	X	42100250	42200250	42300250	42400250	42500250	42600250	X
17/64	X	X	42200265	X	X	X	X	X
9/32	42000281	42100281	42200281	42300281	X	X	42600281	X
5/16	42000312	42100312	42200312	42300312	42400312	42500312	42600312	1640312
11/32	42000343	X	42200343	42300343	X	X	X	X
3/8	42000375	42100375	42200375	42300375	42400375	42500375	42600375	X
25/64	X	42100390	42200390	42300390	X	42500390	42600390	X
13/32	X	X	42200406	X	X	X	X	X
7/16	42000437	42100437	42200437	42300437	X	42500437	42600437	X
29/64	X	X	42200453	42300453	X	X	X	X
15/32	42000468	X	42200468	X	X	X	X	X
1/2	42000500	42100500	42200500	42300500	42400500	42500500	42600500	1640500
33/64	X	X	42200515	X	X	X	X	X
9/16	42000562	X	42200562	42300562	X	X	X	X
5/8	42000625	X	42200625	42300625	X	X	42600625	X
11/16	X	X	42200687	42300687	X	X	X	X
3/4	42000750	X	42200750	42300750	X	X	42600750	X
7/8	X	X	42200875	42300875	X	X	X	X
1	X	X	42201000	42301000	X	X	42601000	X

Metric Chuck Adapters

		Michie Ci	luck Auapu		
Stock	Inside	Outside	Threaded	Overall	Rotation
Number	Diameter	Diameter	Shanks	Length	Direction
D0013R	10mm	20mm	10mm	40mm	Right
D0013L	10mm	20mm	10mm	40mm	Left

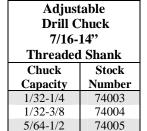


Stock No. Right	Stock No. Left	Drill & Shank		
Hand	Hand	Size		
10125R	10125L	1/8		
10156R	10156L	5/32		
10187R	10187L	3/16		
10218R	10218L	7/32		
10250R	10250L	1/4		
10281R	10281L	9/32		
10312R	10312L	5/16		
10375R	10375L	3/8		
10393R	10393L	10 mm		
10437R	10437L	7/16		
10500R	10500L	1/2		
To accept straight shank drill.				





Right Hand Hand





Chuck







Carbide Boring Tools

Carbide Tipped Drills

Brad Point Right or Left hand cutting. With chucking surface and adjustable set screw.

450 & 4505 Series 37 mm Cutting Length 57 mm Overall Length

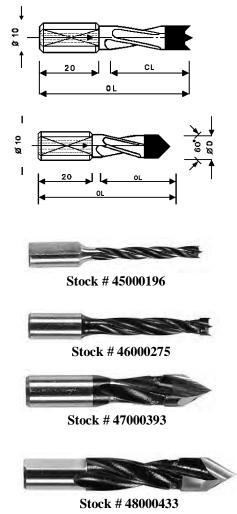
460 & 4605 Series 47 mm C.L. 70 mm O.A.

60 Degree point for clean through boring. Right or Left hand cutting. With chucking surface and adjustable set screw.

470 & 4705 Series 35 mm C.L. 58 mm O.A.

480 & 4805 Series 45 mm C.L. 70 mm O.A.

70 mm O.A.						70 1	mm O.A.	
	Stock No.	Stock No.	Stock No.	Stock No.	Stock No.	Stock No.	Stock No.	Stock No.
Drill	450	4505	460	4605	470	4705	480	4805
Size	Series	Series	Series	Series	Series	Series	Series	Series
	BP RH	BP LH	BP RH	BP LH	60 RH	60 LH	60 RH	60 LH
4 mm	45000157	45050157	46000157	46050157	47000157	47050157	48000157	48050157
4.5mm	X	X	X	X	X	X	48000177	48050177
3/16	45000187	45050187	46000187	46050187	X	X	X	X
5 mm	45000196	45050196	46000196	46050196	47000196	47050196	48000196	48050196
5.2mm	45000204	45050204	46000204	46050204	X	X	X	X
5.5mm	45000216	45050216	46000216	46050216	X	X	48000216	48050216
6 mm	45000236	45050236	46000236	46050236	47000236	47050236	48000236	48050236
1/4	45000250	45050250	46000250	46050250	47000250	47050250	48000250	48050250
6.5mm	45000255	45050255	46000255	46050255	X	X	48000255	48050255
6.7mm	45000263	45050263	46000263	46050263	X	X	X	X
7 mm	45000275	45050275	46000275	46050275	47000275	47050275	48000275	48050275
7.5mm	X	X	46000295	46050295	X	X	X	X
8 mm	45000315	45050315	46000315	46050315	47000315	47050315	48000315	48050315
8.2mm	45000322	45050322	X	X	X	X	X	X
9 mm	45000354	45050354	46000354	46050354	47000354	47050354	48000354	48050354
3/8	45000375	45050375	46000375	46050375	X	X	48000375	48050375
10 mm	45000393	45050393	46000393	46050393	47000393	47050393	48000393	48050393
11 mm	45000433	45050433	46000433	46050433	X	X	48000433	48050433
7/16	X	X	46000437	46050437	47000437	47050437	48000437	48050437
12 mm	45000472	45050472	46000472	46050472	47000472	47050472	48000472	48050472
1/2	45000500	45050500	46000500	46050500	X	X	48000500	48050500
14 mm	45000551	45050551	46000551	46050551	X	X	X	X
5/8	45000625	45050625	46000625	46050625	X	X	X	X
	All have	10 mm dian	neter shanks	that are 20 m	ım long with	an adjustal	ole set screv	v.

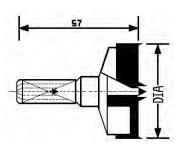


X = Not available

Carbide Tipped Boring Bits

Bit Size	Stock No.	Stock No.				
Dit Size	Right Hand	Left Hand				
15mm	44000590	44050590				
5/8	44000625	44050625				
16mm	44000629	44050629				
18mm	44000708	44050708				
3/4	44000750	44050750				
20mm	44000787	44050787				
22mm	44000866	44050866				
7/8	44000875	X				
24mm	44000944	44050944				
25mm	44000984	44050984				
26mm	44001023	44051023				
28mm	44001102	44051102				
30mm	44001181	44051181				
32mm	44001259	44051259				
34mm	44001338	44051338				
35mm	44001378	44051378				
36mm	44001417	44051417				
38mm	44001496	44051496				
40mm	44001574	44051574				
All have 10m	All have 10mm diameter shanks and are 57mm					
overall length with an adjustable set screw						





Carbide Tipped Adjustable Boring Bits, Wood Auger Bits & Screw Point Double Spur Machine Bits



Carbide Tipped Adjustable Boring Bits with 3/8" Shanks			
Stock No.	Range		
403060	30-60 mm Approx. 1-3/16 to 2-5/16		
403080	60-80 mm Approx. 2-5/16 to 3 1/8		

Screw Point Double Spur Machine Bits

Made of high carbon steel designed to increase chip removal for faster drilling. Available 6-1/4" overall with 4" of twist and 8-1/4" overall with 6" twist. All Sizes have 1/2" shanks except sizes over 1-3/4" which have 3/4" shanks.



Stock # 15020006

	Stock Numbers					
Diameter	6-1/4" Overall 4" Twist	8-1/4" Overall 6" Twist	Shank Size			
3/8	15003754	15003756	1/2			
7/16	15004374	15004376	1/2			
1/2	15005004	15005006	1/2			
9/16	X	15005626	1/2			
5/8	15006254	15006256	1/2			
11/16	X	15006876	1/2			
3/4	15007504	15007506	1/2			
13/16	X	15008126	1/2			
7/8	15008754	15008756	1/2			
15/16	X	15009376	1/2			
1	15010004	15010006	1/2			
1-1/2	X	X	1/2			
1-3/4	X	15017506*	1/2			

X = Not available

The Eliminator Carbide Tipped Wood Auger Bits With 7/16" Hex Shank and Power Groove

Carbide Tip combined with hardened steel cutting edge allows the Eliminator to bore holes in all types of wood quickly, leaving little or no residue. A truly clean, smooth hole is produced. The Eliminator requires less torque to operate and can be used with electric, air or gasoline powered drill motors. The lead screw is replaceable.

011 T. 1 1 1 1 1 0 1	A T #14 299 TT
9" Twist 12" OA	
Stock Number	Size
ER70908	1/2
ER70909	9/16
ER70910	5/8
ER70911	11/16
ER70912	3/4
ER70913	13/16
ER70914	7/8
ER70915	15/16 1
ER70916	1-1/16
ER70917	
ER70918 15" Twist 18" O	1-1/8 A1 7/16? How
Stock Number	Size
ER71508	1/2
ER71509	9/16
ER71510 ER71511	5/8 11/16
	3/4
ER71512 ER71513	13/16
ER71513 ER71514	7/8
ER71514 ER71515	15/16
ER71515 ER71516	13/10
ER71510 ER71517	1-1/16
ER71517 ER71518	1-1/10
21" Twist 24" O	
Stock Number	Size
ER72108	1/2
ER72109	9/16
ER72110	5/8
ER72111	11/16
ER72112	3/4
ER72113	13/16
ER72114	7/8
ER72115	15/16
ER72116	1
ER72117	1-1/16
ER72118	1-1/8
33" Twist 36" O	AL 7/16" Hex
Stock Number	Size
ER73308	1/2
ER73309	9/16
ER73310	5/8
ER73311	11/16
ER73312	3/4
ER73313	13/16
ER73314	7/8
ER73315	15/16
ER73316	1
ER73316 ER73317	1 1-1/16

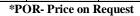
Stock # ER72112

^{* =} While supply lasts only



Wood Auger Bits and Extension Shanks

			Stoc	k Numbers		
	Ship .	Augers		Pole Bits		Barefoot
Size		12" Twist		Hex Shank		
	Hex	Sq. Taper	12" 18" 24"		12"	
	Shank	Shank	Twist	Twist	Twist	Twist
1/4	X	57000250S	X	X	X	*POR
5/16	X	57000312S	X	X	X	
3/8	57000375H	57000375S	X	X	X	Auger bits are
7/16	57000437H	57000437S	X	X	X	not made to cut
1/2	57000500H	57000500S	X	X	X	accurately
9/16	57000562H	57000562S	57300562	57100562	57200562	sized holes.
5/8	57000625H	57000625S	57300625	57100625	57200625	Oversized
11/16	57000687H	57000687S	57300687	57100687	57200687	clearance holes
3/4	57000750H	57000750S	57300750	57100750	57200750	will always
13/16	57000812H	57000812S	57300812	57100812	57200812	result.
7/8	57000875H	57000875S	X	57100875	57200875	A barefoot
15/16	57000937H	57000937S	X	57100937	57200937	auger bit will
1	57001000H	57001000S	X	57101000S	57201000	usually cut
1-1/16	57001062H	57001062S	X	X	57201062	smaller than
1-1/8	57001125H	57001125S	X	X	X	one with a
1-3/16	57001187H	X	X	X	X	screw point
1-1/4	57001250H	57001250S	X	X	X	but, in no
1-5/16	57001312H	X	X	X	X	instance
1-3/8	57001375H	X	X	X	X	can a precise
1-1/2	57001500H	57001500S	X	X	X	diameter be
1-5/8	57001625H	X	X	X	X	depended upon
1-3/4	57001750H	X	X	X	X	
2	57002000H	X	X	X	X	



X = Not available

- Square Taper Shanks -
Fit hand braces only
Square Taper can be cut off for use in power
drills on request.

- Hex Shanks -

For power drills with 3 jaw chucks Sizes 3/8 thru 1/2 have 5/16 hex Larger have 7/16 hex



Barefoot



Pole Bit



Ship Auger



5730812

Extension Shanks

Stock Number	Dia.	O.A. Lgth.	Use
72006004	1/4"	6"	follows 5/8" and larger drills.
72012000	1/4"	12"	follows 5/8" and larger drills
72018000	1/2"	18"	to fit 7/16" hex or 1/2" rd. shank follows 1-1/16" and larger drills
72018005	23/64	18"	to fit 5/16" hex shank follows 11/16" and larger drills.

See more extensions on page 75.



Stock # 72018005

Solid Center & Machine Auger Bits



Stock # 47724

Solid Center Wood Auger Bits 477 Series 18" Overall with a 12" Twist					
Diameter	Stock Number				
1/4"	47704				
5/16"	47705				
3/8"	47706				
7/16"	47707				
1/2"	47708				
9/16"	47709				
5/8"	47710				
11/16"	47711				
3/4"	47712				
13/16"	47713				
7/8"	47714				
15/16"	47715				
1"	47716				
1-1/8"	47718				
1-1/4"	47720				
1-1/2"	47724				



Solid Center or Machine Bit

Machine Auger Bits 1/2" Round Shank							
Size	Stock Numbers						
Diameter	8" Overall 6" Twist	10" Overall 8" Twist	12" Overall 10" Twist	14" Overall 12" Twist			
3/8"	45306	45406	X	45606			
7/16"	45307	45407	X	X			
1/2"	45308	X	X	45608			
9/16"	45309	45409	X	X			
5/8"	45310	X	X	45610			
11/16"	45311	45411	X	45611			
3/4"	45312	45412	X	45612			
13/16"	45313	X	45513	45613			
7/8"	45314	X	X	45614			
1"	45316	X	45516	45616			

X = Not available





Bell Hanger Drills (Installer Bits)

Round Shank (Carbon Steel) and Carbide Tipped

Round			Carbide Tipped							
Shank			Round Shank							
Shank		Stock	Shank	Stock						
Size	Diameter	Number	Size	Number						
	12" Overall Length									
3/16	X	X	X	X						
1/4	.230	812R0250	1/4	BH-1412						
5/16	.285	812R0312	5/16	BH-51612						
3/8	.370	812R0375	3/8	BH-3812						
7/16	.370	*812R0437	X	X						
1/2	.370	812R0500	3/8	BH-1212						
9/16	.370	812R0562	X	X						
5/8	.370	812R0625	X	X						
11/16	.370	*812R0687	X	X						
3/4	.370	812R0750	X	X						
18" Overall Length										
3/16	X	X	X	X						
1/4	.230	818R0250	1/4	BH-1418						
5/16	.285	818R0312	5/16	BH-51618						
3/8	.370	818R0375	3/8	BH-3818						
7/16	.370	818R0437	X	X						
1/2	.370	818R0500	3/8	BH-1218						
9/16	.370	818R0562	X	X						
5/8	.370	818R0625	X	X						
11/16	.370	X	X	X						
3/4	.370	X	X	X						
		24" Overall Leng								
3/16	X	X	X	X						
1/4	.230	824R0250	1/4	BH-1424						
5/16	.285	824R0312	5/16	BH-51624						
3/8	.370	824R0375	3/8	BH-3824						
1/2	.370	824R0500	3/8	BH-1224						
	30" Overall Length									
1/4	.230	830R0250	X	X						
5/16	.285	830R0312	X	X						
3/8	.370	830R0375	X	X						
1/2	.370	830R0500	X	X						
36" Overall Length										
1/4	X	X	1/4	BH-1436						
5/16	X	X	5/16	BH-51636						
3/8	X	X	3/8	BH-3836						
1/2	X	X	3/8	BH-1236						
48" Overall Length										
1/4	X	X	1/4	BH-1448						
5/16	X	X	5/16	BH-51648						
3/8	X	X	3/8	BH-3848						
1/2 V = N ot	X	X * - Only while	3/8	BH-1248						

Carbide Round Shank **Tipped** Round Stock # Shank 812R0375 Stock # BH-3812

X = Not available

^{* =} Only while supplies last!



Snappy Drill Guides and Self Centering Bits

Speedy, accurate drilling with Self-Centering Drill Guides Saves hours of time accurately drilling holes for hinges, Door butts, window pulls, window latches, door latch bolts, Striker plates and all hardware using screws.

Size	Hex Shank	Screw Size	Drill Size	Series 732 Stock Number
#3	1/4	3 & 4	5/64	73200078
#5	1/4	5 & 6	7/64	73200109
#9	1/4	8,9 & 10	9/64	73200140
#12	1/4	12	11/64	73200171
5.0mm	1/4	Shelf Pin	5.0mm	73200196
#14	1/4	14	13/64	73200203
1/4"	1/4	Shelf Pin	1/4"	73200250



Series #732

Replacement Springs, Washers		
	& Set Screws	1
g.	D 111	Series
Size	Drill	732
	Size	Stock
		Number
	Springs	
#3, #5, #9	5/64, 7/64, 9/64	73203078
#12, #14	11/64, 13/64	73203171
5.0mm, 1/4"	5.0mm, 1/4"	73203196
	Brass Washers	S
#3	5/64	73230078
#5	7/64	73230109
#9	9/64	73230140
#12	11/64	73230171
5.0mm	5.0mm	73230196
#14	13/64	73230203
1/4"	1/4"	73230250
	Set Screws	
1/4-28	3 X 3/16"	STSCR011



Replace	Replacement Drills & Guides			
Size	Drill Size	Series 732 Stock Number		
	Drills			
#3	5/64	73201078		
#5	7/64	73201109		
#9	9/64	73201140		
#12	11/64	73201171		
5.0mm	5.0mm	73201196		
#14	13/64	73201203		
1/4"	1/4"	73201250		
	Guides			
#3	5/64	73202078		
#5	7/64	73202109		
#9	9/64	73202140		
#12	11/64	73202171		
5.0mm	5.0mm	73202196		
#14	13/64	73202203		
1/4"	1/4"	73202250		

Self Ejecting Plug Cutters will eject up to 1"



X = Not available

Self-Ejecting Plug Cutters

Stock Numbers			
Plug Size	Spiral Type	Barrel Type	Spiral Carbide Tipped
1/4	X	9B0250	X
5/16	X	9B0312	X
3/8	14000375	9B0375	140CT0375
7/16	X	9B0437	X
1/2	14000500	9B0500	140CT0500
9/16	X	9B0562	X
5/8	14000625	9B0625	140CT0625
11/16	X	9B0687	X
3/4	14000750	9B0750	140CT0750
13/16	X	9B0812	X
7/8	X	9B0875	X
15/16	X	9B0937	X
1	14001000	9B1000	140CT1000
1-1/8	X	9B1125	X
1-1/4	X	9B1250	X
1-3/8	X	9B1375	X
1-1/2	X	9B1500	X
1-3/4	X	9B1750	X
2	X	9B2000	X

X = Not available



Type



Type



Spiral Carbide **Tipped**



Spade Bits

Cutting	Stock No	Stock No
Dia.	6''	16''
1/4	*74000250	X
5/16	X	X
3/8	X	74200375
7/16	X	X
1/2	X	74200500
9/16	X	X
5/8	X	X
11/16	X	X
3/4	X	74200750
13/16	X	X
7/8	X	74200875
15/16	X	X
1	X	74201000
1-1/8	X	X
1-1/4	X	X
1-3/8	*74001375	X

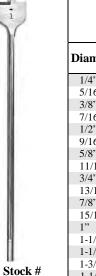
*740 Series only available while supplies last!

Speed Bore '2000'

For wood, bores two times faster. Lasts three times longer. 6" and 16" overall length.



Stock # 74001375



74201000

Lock-N-Load™ 4'' and 6'' SPEEDBORE®Bits			
Diameter	Stock No 4"		
1/4"	X	90304	
5/16"	X	90305	
3/8"	X	90306	
7/16"	X	90307	
1/2"	90208	90308	
9/16"	X	90309	
5/8"	90210	90310	
11/16"	X	90311	
3/4"	90212	90312	
13/16"	X	90313	
7/8"	90214	90314	
15/16"	X	90315	
1"	90216	90316	
1-1/8"	X	90318	
1-1/4"	90220	90320	
1-3/8"	X	90322	
1-1/2"	90224	90324	



Spade Bit Sets	Stock No.
Set of 3 –In plastic Pouch 1/2" to 1" by 1/4.	*74090003
Set of 13 - In Plastic Pouch contains one each 1/4" to 1" by 1/16ths.	*74090013
Set of 6 – In metal rack contains one each 3/8" to 1" by 1/8ths	*74091006
Set of 13 - In metal rack contains one each 1/4" to 1" by 1/16ths.	*74091013
Set of 3 - 4" Long Lock-N-Load with 1/2, 3/4 and 1" carded	90243
Set of 3 - 6" Long Lock-N-Load with 1/2, 3/4 and 1" carded	90343
Set of 4 - 6" Long Lock-N-Load with 1/2, 3/4, 1" and 6" extension pouched	90344
Set of 6 - 6" Long Lock-N-Load with 3/8, 1/2, 5/8, 3/4, 7/8 and 1" pouched	90346
Set of 13 – 6" Long Lock-N-Load 1/4" to 1-1/16" by 1/16ths	903913



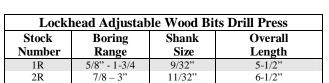
X = Not available

Stock # 903913

Adjustable Boring Bits



Stock # 2R





Stock # 2T

Lockhead Adjustable Wood Bit Hand Brace			
Stock			
Number	Range	Size	Length
*1T	5/8" – 1-3/4"	Square Taper	7-1/8"
2T	7/8" – 3"	Square Taper	8-1/8"

Replacement Parts for all			
	Adjustable I	Bits	
Stock	Stock Cutting Fits Stock		
Number Range		Number	
44031	5/8"-1"	1R	
44032	1" - 1-3/4	1R	
44233	7/8" – 1-3/4"	2R	
44234	1-3/4 – 3"	2R	

Only Available While Supplies Last!



Stock #'s 44233, 44234 & 44235

Multi Spur Bits

Multi-Spur Machine Bits

For Wood 1/2" Shank 6" O.A. Length



Carbon Steel

Multiple outlining spurs produce clean holes in wood and some plastics.



Carbide Tipped

Carbide Tipped Spur Bits are not recommended for hand held equipment. Smaller sizes thru 1" have carbide on every other tooth.



Carbide Tipped Three Wing Drill

Designed to bore Plastic, Plexiglas, Formica, Tempered Masonite, and other abrasive materials as well as hardwood. All have 1/2" shank diameter and are 6" overall.

Multi-spur Counterbores

All sizes have a 1/2" hole and one set screw.

Stock	Diameter	
Number		
1201125	1-1/8	
1201250	1-1/4	
1201375	1-3/8	
1201500	1-1/2	
1201625	1-5/8	
1201750	1-3/4	
1201875	1-7/8	
1202000	2	
1202125	2-1/8	
1202250	2-1/4	
1202500	2-1/2	



Stock # 1202000

	Stock				
	Numbers				
	Series # 550	Series #	Series #		
Cutting		560	812		
Dia	Carbon	Carbide	Carbide		
	Multi	Multi	Tipped		
1 /2	Spur Bit	Spur Bit	3-wing		
1/2	55000500	56000500	81200500		
9/16	55000562	56000562	81200562		
5/8	55000625	X 5,000,007	81200625		
11/16	55000687	56000687	81200687		
3/4	55000750	56000750	81200750		
13/16	55000812	56000812	81200812		
7/8	55000875	56000875	81200875		
15/16	55000937	56000937	X		
1	55001000	56001000	81201000		
1-1/16	55001062	56001062	X		
1-1/8	55001125	56001125	81201125		
1-3/16	55001187	56001187	X		
1-1/4	55001250	56001250	81201250		
1-5/16	55001312	56001312	X		
1-3/8	55001375	56001375	81201375		
1-7/16	55001437	56001437	X		
1-1/2	55001500	56001500	81201500		
1-9/16	55001562	56001562	X		
1-5/8	55001625	56001625	81201625		
1-11/16	55001687	56001687	X		
1-3/4	55001750	56001750	81201750		
1-13/16	55001812	56001812	X		
1-7/8	55001875	56001875	81201875		
1-15/16	55001937	56001937	X		
2	55002000	56002000	81202000		
2-1/8	55002125	56002125	81202125		
2-1/4	55002250	56002250	81202250		
2-3/8	55002375	56002375	X		
2-1/2	55002500	56002500	81202500		
2-5/8	55002625	56002625	X		
2-3/4	55002750	56002750	X		
2-7/8	55002875	56002875	X		
3	55003000	56003000	X		
3-1/8	55003125*	X	X		
3-1/4	55003250*	56003250*	X		
3-3/8	X	X	X		
3-1/2	55003500*	56003500*	X		
3-5/8	X	X	X		
3-3/4	55003750*	#56003750*	X		
3-7/8	X	X 5.00.4000*	X		
4	55004000*	56004000*	X		

*Sizes 3-1/8" and larger are available with 3/4" shank, add S to end of stock number.

X = Not available # = While Supplies Last



Forstner Bits

Forstner Bits are the superior boring bits for woodworking because they give you perfectly smooth, flat bottom and clean-sided holes in nearly every material. They will bore overlapping holes and pocket holes for greater versatility. Use them in portable drills and drill presses.

Stock Numbers				
	Series 060 Series 909			
Cutting	Forstner	Forstner		
Diameter	Bit	Bit		
3/16	X	90900187		
1/4	06000250	90900250		
5/16	06000312	90900312		
3/8	06000375	90900375		
10mm	X	90900393		
7/16	06000437	90900437		
12mm	X	90900472		
1/2	06000500	90900500		
14mm	X	90900551		
9/16	06000562	90900562		
15mm	X	90900590		
5/8	06000625	90900625		
16mm	X	90900629		
11/16	06000687	90900687		
18mm	X	90900708		
3/4	06000750	90900750		
20mm	X	90900787		
13/16	06000812	90900812		
7/8	06000875	90900875		
15/16	06000937	90900937		
25mm	X	90900984		
1	06001000	90901000		
1-1/16	06001062	90901062		
1-1/8	06001125	90901125		
30mm	X	90901181		
1-3/16	06001187	90901187		
1-1/4	06001250	90901250		
1-5/16	06001312	90901312		
1-3/8	06001375	90901375		
35mm	X	90901377		
1-7/16	06001437	90901437		
1-1/2	06001500	90901500		
1-9/16	X	90901562		
40mm	X	90901574		
1-5/8	06001625	90901625		
1-11/16	X	90901687		
1-3/4	06001750	90901750		
1-13/16	X	90901812		
1-7/8	06001875	90901875		
1-15/16	X	90901937		
2	06002000	90902000		
2-1/16	X	90902062		
2-1/8	06002125	90902125		
2-1/4	06002250	X		
2-5/16	X	X		
2-3/8	06002375	X		
2-1/2	06002500	X		
2-9/16	X	X		
2-5/8	06002625	X		
2-3/4	06002750	X		
2-7/8	06002875	X		
3	06003000	X		



Series # 060

Series 909 Specifications:

Manufactured to exacting tolerances using forged, heat treated steel. Designed with a centering point, periphery cutting edge, 2 edges and recessed cylindrical shank. Made in Austria.

All sizes are 3-1/2" overall.

Fractional sizes:

1/4" to 7/16" have 1/4" shanks. 1/2" to 11/16" have 5/16" shanks. 3/4" to 2-1/8" have 3/8" shanks.

Metric sizes:

10m to 30m have 8m shanks. 35m to 40m have 10m shanks.

Series 060 Specifications:

For smooth, round or oval boring. Cuts perfectly flat bottom holes and will bore any part of a circle leaving a true polished surface. It can be guided in any direction without regard to the grain of the wood or knots. Unlike other bits, this style Forstner is guided by its circular rim. *It does not have a center point.*

1/4" and 5/16" are 5" long and have 5/16" shanks. 3/8" is 5" long with 3/8" shank. 7/16" through 1-3/8" are 5" long with 1/2" shanks. 1-7/16" through 2-1/8" are 6-3/4" long with 1/2" shanks. 2-1/4" through 3" are 6-3/4" long with 1/2" shanks.

Series 909 Forstner Bit Sets					
Stock	Set				
Numbers	Description				
90990007	7 pc. 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1"				
90990016	16 pc. (1/8" increments)				
	1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4,				
	1-3/8, 1-1/2, 1-5/8, 1-3/4, 1-7/8, 2, 2-1/8"				
909900166	16 pc. (1/16" increments)				
	3/16, 5/16, 7/16, 9/16, 11/16, 13/16, 15/16,				
	1-1/16, 1-3/16, 1-5/16, 1-7/16, 1-9/16,				
	1-11/16, 1-3/16, 1-5/16, 2-1/16"				
90990016M	16 pc. (Metric)				
	10, 12, 15, 18, 20, 22, 24, 25, 26, 28, 30, 35,				
	38, 40, 45, 50.				



Stock # 90990007



Stock # 909900166

High Alloy Steel Plumbits and Self Feed Wood Bits



High Alloy Steel Plumbits

Series # 522

Applications:

Perfect for the Plumber, Electrician or other tradesman who needs clean cutting performance in boring holes for running pipe and conduit.

Features:

New one-piece assembly.

Cuts faster than a Hole Saw through wood framing, even through nails and wood knots. Replaceable center guide screw. Self feed blade bites quickly and deeply without slowdown for scrap lockup. Equipped with a fine center screw for hardwoods, a course screw for softwoods, and Hex Key for easy changeovers.

Plumbit Series # 522							
Only Avaliable							
Wh	ile Supplies	Last!					
Cutting	Stock	Shank					
Diameter	Number	Size					
1	52231	7/16 Hex					
1-1/8	52232	7/16 Hex					
1-1/4	52233	7/16 Hex					
1-3/8	52234	7/16 Hex					
1-1/2	52235	7/16 Hex					
1-3/4	52236	7/16 Hex					
2	52229	7/16 Hex					
2-1/8	52237	7/16 Hex					
2-1/4	52238	7/16 Hex					
2-9/16	52239	7/16 Hex					
3-5/8	52240	1/2 Round					
4-5/8	52168	1/2 Round					

Plumbit Accessories						
Stock No.	Stock No. Description					
	Extension Shanks					
42540	4" x 7/16 Hex					
44083	9" x 7/16 Hex					
44081	12" x 7/16 Hex					
44082	18" x 7/16 Hex					
44080	24" x 7/16 Hex					
Rep	placement Screw Pilots					
42411	1/4" x 1-1/2" course					
42722	1/4" x 1-1/2" fine					
43945	3/8" x 2" for 3-5/8" & 4-5/8"					
Set Screws and Keys						
42410	1/4" – 20 x 1/4" set screw					
K0125	1/8" hex key					







Stock # 42410



Hex Key

Included are:

Self Feed Wood Bits

Series # 430

Drill large holes in wood for pipe, conduit and other applications. Effortless cutting even in gummy wood. Each bit is packaged with one hex key and two feed screws.

Self Feeding Wood Bits Series #430							
Cutting	Stock	Shank					
Diameter	Number	Size					
1	43016	7/16 Hex					
1-1/8	43018	7/16 Hex					
1-1/4	43020	7/16 Hex					
1-3/8	43022	7/16 Hex					
1-1/2	43024	7/16 Hex					
1-3/4	43028	7/16 Hex					
2	43032	7/16 Hex					
2-1/8	43034	7/16 Hex					
2-1/4	43036	7/16 Hex					
2-9/16	43041	7/16 Hex					
3	43047	7/16 Hex					
3-5/8	43058	7/16 Hex					
4-5/8	43074	7/16 Hex					

*Extension shanks for the Plumbits will also work on the Series #430 Self Feeding Wood Bits.

Warning

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.

Stock #

44081

Stock

QH234

Woodchuck Self-Feed **Drills**

Dimb					
Size	Stock Number				
7/8"	QH78				
1-3/16"	QH1316				
1-3/8"	QH138				
1-1/2"	QH112				
1-3/4"	QH134				
2"	QH200				
2-1/8"	QH218				
2-1/4"	QH214				
2-9/16"	QH2916				
2-3/4"	QH234				

* Drill Tip comes with Tips and Set Screws. All Tips have a 3/8-24 thread.

Stock #

4C

Woodchuck Drills

The Woodchuck Drilling System is very similar to the old Planetor Bits in our last catalog but with a number of improvements. Machined from a solid piece of steel and hardened for long tool life, one shaft fits all drill heads. Drill more holes per hour and sharpen easily with a flat file.

All bits have 3/8-24 threads.



Woodchuck Replacement

Parts					
Stock Number	Description				
	Tips				
QT156	Fits 7/8" – 1-1/2"				
QT193	Fits 1-3/4" – 2-3/4"				
Set Screws					
QA1428	Fits All				
	Shafts				
QS35	3.5"				
QS60	6"				
QS120	12"				
QS180	18"				
QS240	24"				





Circle Cutters

Produce precision circle holes in sheet metal, brass, copper, soft steel, aluminum, plastic, wood and composition materials. Cutting blades are made of High Speed Steel.

Cutters are adjustable for cutting variable diameter holes. A hex wrench is included for diameter and depth adjustments.



Stock #

55



Stock # 6C



5B-C

Stock #

5B

Warning

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.

Stock Number	Capacity	Shank Size	Drill Size	Cutter Size		
4C	7/8" to 4"	3/8	11/64	3/16		
5B	1" to 6"	3/8	1/4	3/16		
55	1-3/4" to 8"	1/2	1/4	1/4		
6C	1" to 6"	3/8	1/4	9/32		
Replacement parts						
5B-C	5B-C Cutter Blade for #5B & #4C 3/16"					
55-C	Cutter Blade for #55 1/4"					
6C-C	Cutter Blade for #6C 9/32"					
4-P	Pilot Drill for #4C Circle Cutter 11/64"					
5-P	Pilot Drill for	#5B, #6C &	z #55 Circle C	Cutters 1/4"		

Caution these cutters should not be used in portable hand held equipment.



Stock # 5-P

Mortising Chisels and Bits

No. 28 Regular Hollow Mortising Chisel

No. 1-28 Hollow Chisel Bits For 4" Blade Hollow Chisels





For making square mortises in one stroke, and oblong mortises with each succeeding stroke. 4" blade, 5-1/2" overall length. 1/4" and 5/16" sizes have reinforced blade.

Bits have knife edged spurs and no point.

Stock	Size	Shank		Mortising	Stock	Stock Size		its	Twist	O.A.
Number	Size	Dia.	Length	Depth	Number	Size	Dia.	Length	Lgth.	Lgth.
280250	1/4	5/8	1-1/2	1-7/8	1-280250	1/4	3/16	5-3/4	3-1/4	9
280312	5/16	5/8	1-1/2	1-7/8	1-280312	5/16	1/4	5-3/4	3-1/4	9
280375	3/8	5/8	1-1/2	3-1/4	1-280375	3/8	19/64	3	6	9
280500	1/2	5/8	1-1/2	3-1/4	1-280500	1/2	19/64	3	6	9
280625	5/8	3/4	1-1/2	3-1/4	1-280625	5/8	1/2	3	6	9
280750	3/4	1-1/8	1-1/2	3-1/4	1-280750	3/4	1/2	3	6	9
281000	1	1-1/8	1-1/2	3-1/4	1-281000	1	1/2	3	6	9

No. 27 Hollow Mortising Chisel

No. 1-27 Hollow Chisel Bits





For making square mortises in one stroke, and oblong mortises with each succeeding stroke. 2-3/4" blade, 4-1/4" overall length. For shallow mortises.

Bits have knife edge spurs and no point.

Stock	Size	Sl	hank	Mortising	Stock	Size	В	its	Twist	O.A.
Number	Size	Dia.	Length	Depth	Number	Size	Dia.	Length	Lgth.	Lgth.
270250	1/4	5/8	1-1/2	1-7/8	1-270250	1/4	3/16	3-1/4	4-3/4	8
270312	5/16	5/8	1-1/2	1-7/8	1-270312	5/16	1/4	3-1/4	4-3/4	8
270375	3/8	5/8	1-1/2	1-7/8	1-270375	3/8	19/64	3-1/4	4-3/4	8
270500	1/2	5/8	1-1/2	1-7/8	1-270500	1/2	19/64	3-1/4	4-3/4	8

Chisels and Bits are sold separately



Chisel and Bit shown mounted.

WARNING

Cutting tools may shatter when broken. The wearing of eye protection is strongly advised in the vicinity of their use.

Hole Saws







Stock # 58402000



Stock # 58601812



Stock # 58902125

HSS Variable Pitch Hole Saws

To cut wood, plastic and metal. The Variable Pitch can reduce labor and costs; its faster cutting and longer life outlasts 6 pitch saws in most applications. High Speed Steel M3 cutting edge with varying tooth sets and gullet depths. (4-6 teeth per inch.)

HSS Built-in DeepCut

To cut holes in wood, plastic, or any machinable material. For locksmiths, remodeling, and general contractors. Cuts through 2" x 4"s, joists and most doors in one pass with extra clearance. Features a 1-7/8" cutting depth, attached arbor, M3 cutting edge, and a 4/6 variable pitch. Saves time, longer life and smoother cuts.

Carbide Tipped

Designed for sawing holes in abrasive materials such as fiberglass, particleboard and asbestos board. This hole saw offers three teeth per inch, carbide tipped to resist abrasion, with cutting depth of 1-7/8". Carbide is not recommended for ferrous metals but will outlast high-speed steel hole saws in applicable jobs. Available in 48 sizes 3/4"-6. Individually boxed.

Carbide Grit Hole Saws

Carbide particles permanently bonded to alloy steel for cutting extremely hard and abrasive materials ordinary hole saws cannot cut. No teeth to dull or chip so they last longer and cost less per cut. 1-1/8" cutting depth

Stock Number							Stock Number	er	
Size	Variable Pitch	Deep Cut	Carbide Tipped	Carbide Grit	Size	Variable Pitch	Deep Cut	Carbide Tipped	Carbide Grit
9/16	58300562	X	X	X	2-3/8	58302375	58402375	58602375	58902375
5/8	58300625	X	X	X	2-1/2	58302500	58402500	58602500	58902500
11/16	58300687	X	X	X	2-9/16	58302562	58402562	58602562	58902562
3/4	58300750	58400750	58600750	58900750	2-5/8	58302625	58402625	58602625	58902625
13/16	58300812	58400812	58600812	58900812	2-3/4	58302750	58402750	58602750	58902750
7/8	58300875	58400875	58600875	58900875	2-7/8	58302875	58402875	58602875	58902875
15/16	58300937	58400937	58600937	58900937	3	58303000	58403000	58603000	58903000
1	58301000	58401000	58601000	58901000	3-1/8	58303125	58403125	58603125	58903125
1-1/16	58301062	58401062	58601062	58901062	3-1/4	58303250	58403250	58603250	58903250
1-1/8	58301125	58401125	58601125	58901125	3-3/8	58303375	58403375	58603375	58903375
1-3/16	58301187	58401187	58601187	58901187	3-1/2	58303500	58403500	58603500	58903500
1-1/4	58301250	58401250	58601250	58901250	3-5/8	58303625	58403625	58603625	58903625
1-5/16	58301312	58401312	58601312	58901312	3-3/4	58303750	58403750	58603750	58903750
1-3/8	58301375	58401375	58601375	58901375	3-7/8	58303875	58403875	58603875	58903875
1-7/16	58301437	58401437	58601437	58901437	4	58304000	58404000	58604000	58904000
1-1/2	58301500	58401500	58601500	58901500	4-1/8	58304125	58404125	58604125	58904125
1-9/16	58301562	58401562	58601562	58901562	4-1/4	58304250	58404250	58604250	58904250
1-5/8	58301625	58401625	58601625	58901625	4-3/8	58304375	58404375	58604375	58904375
1-11/16	58301687	58401687	58601687	58901687	4-1/2	58304500	58404500	58604500	58904500
1-3/4	58301750	58401750	58601750	58901750	4-3/4	58304750	58404750	58604750	58904750
1-13/16	58301812	58401812	58601812	58901812	5	58305000	58405000	58605000	58905000
1-7/8	58301875	58401875	58601875	58901875	5-1/2	58305500	58405500	58605500	58905500
2	58302000	58402000	58602000	58902000	5-3/4	58305750	58405750	58605750	58905750
2-1/16	58302062	58402062	58602062	58902062	6	58306000	58406000	58606000	58906000
2-1/8	58302125	58402125	58602125	58902125	6-3/8	X	X	X	SEE
2-1/4	58302250	58402250	58602250	58902250	6-5/8	X	X	X	PAGE
2-5/16	58302312	58402312	58602312	58902312	6-7/8	X	X	X	81



Hole Saw Arbors, Pilot Drills, Mandrel Adapters and Plugouts™



High Speed Steel Hole Saw Arbors and Pilot Drills							
Fits Sizes	1/4" Round	3/8" Hex	3/8" Hex	7/16'' Hex	7/16" Hex	5/8" Hex	
rits sizes	Shank	Shank	Shk. W/2 pins	Shank	Shk. w/2 pins	Shank	
9/16" thru 1-3/16"	58000001	58000009*	X	58000002	X	X	
1-1/4" - 6"	X	X	58000008*	58000003	58000004	58000005	

X = Not available

All Arbors come complete with pilot drills

12" extensions available for 7/16" hex arbors Stock No. 58012000.



Mandrel Adapter Stock # 5511

Mandrel Adapter - Threaded adapter and washer allows Mandrels Nos. 58000001 - 58000002, and 58000009 to be used with 1-1/4" through 6" hole saws under light duty cutting conditions.



Ejector Spring Fits all 1/4" Pilot Drills

Stock Number: MES101



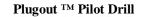
Extra Pilot Drills

Stock # 58000250 fits arbors 58000001 through 58000005 ***Stock # 58000250S** fits arbors 58000008 and 58000009

Plugout™ Eject-A-Plug®Arbor

Stock Number	Description	Thread Size	Shank Size in Inches
45322	Small Plugout TM	1/2-20	1/4" Hex
45323	Large Plugout TM	5/8-18	3/8" Hex
45447	Plugout TM Pilot Drills	X	X







Small Plugout™

Large Plugout™



Hole Saw Sets

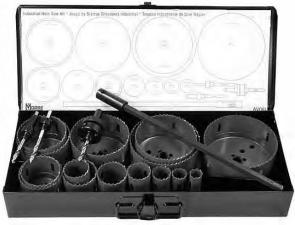


Electricians Hole Saw Kit

Stock # A02E

Designed for electricians, this kit contains pipe entrance sizes for pipe and conduit through 2".

Contents: (1 each) 7/8", 1-1/8", 1-3/8", 1-3/4", 2" and 2-1/2" saws w/ No. 58000002 and No. 58000004 Arbors.



Industrial Hole Saw Kit

Stock # A06I

Designed for a broad range of industrial applications, this kit contains 15 plumbing and electrical sizes for pipe and conduit through 4".

Contents: (1 each) 3/4", 7/8", 1-1/8", 1-3/8", 1-1/2", 1-3/4" 2", 2-1/4", 2-1/2", 3", 3-1/4", 3-5/8", 3-3/4", 4-1/4" and 4-1/2" saws w/ No. 58000001, No. 58000002, and No. 58000004 Arbors and No. 58012000 - 12" Extension.

Maintenance Hole Saw Kit

Stock # A100

Designed for plumbers, electricians, industrial and general purpose maintenance, this kit contains 9 plumbing and electrical sizes for pipe and conduit through 2".

Contents: (1 each) 3/4", 7/8", 1-1/8", 1-3/8", 1-1/2", 1-3/4" 2", 2-1/4"and 2-1/2 saws w/ No. 58000001, No. 58000002, and No. 58000004 Arbors and No. 58012000 12" Extension.



Plumbers Hole Saw Kit

Stock # A04P

Designed for plumbers, this kit contains pipe tap sizes for pipe through 2".

Contents: (1 each) 3/4", 7/8", 1-1/8", 1-1/2", 1-3/4" and 2-1/4" saws w/ No. 58000002 and No. 58000004 Arbors.



Master Electricians Kit

Stock # A08E

Pipe entrance sizes for pipe and conduit through 4".

Contents: : (1 each) 7/8", 1-1/8", 1-3/8", 1-3/4" 2", 2-1/2", 3", 3-5/8", 4-1/8" and 4-1/2" saws w/ No. 58000001, No. 58000002, and No. 58000004 Arbors.



Hole Saw Sets Continued...

Tungsten Carbide Grit Hole Saws

The long-lasting choice for cutting holes in materials too hard or abrasive for standard bi-metal saws, or so thin they would strip bi-metal or chip carbide teeth. Ideal for cutting ceramics, fiberglass, hardwoods, cast iron, composites, etc.

- *Super resistant to heat, wear and abrasion with shock resistant back.
- *Tungsten carbide grains are bonded to alloy backs with a gulleted, snag resistant edge.



Stock # ATCG100

Tungsten Carbide Grit Hole Saw Kit

Maintenance kit includes popular sizes for plumbing, electrical, and industrial maintenance jobs.

Saws (1 each): 3/4", 7/8", 1-1/8", 1-3/8", 1-1/2", 1-3/4", 2", 2-1/4", 2-1/2" Arbors (1 each): No. 58000001, No. 58000002, No. 58000004. Extensions(1): No. 58012000

Recessed Lighting Hole Saws Carbide Grit

Tungsten Carbide Grit Hole Saws are ideal for quick, easy installation of recessed lighting fixtures. They cut abrasive such as lath, plaster, and ceiling tile.



Stock	Diameter		Type of Light Fixture	
Number	Inches	MM	Type of Light Fixture	
58904375	4-3/8	111	Mini Juno, Capri, Marco, Halo	
58906375	6-3/8	162	Halo, Capri	
58906625	6-5/8	168	Juno, Progress	
58906875	6-7/8	174	Lithonla, Marco, Lightolier, Progress, Capri, Preacolite	



King Carbide Semi-Industrial Saw Blades with C-2 Carbide

Heavy duty hardened steel blanks for stiffer bodies and truer running saw blades

Rip – 12 Tooth						
Stock	Stock Tooth Diameter Bore					
Number	Grind	Inches	Inches			
70002	FTG	7-1/4	13/16 Rd.			
70003	FTG	8	13/16 Rd.			
70005	FTG	10	5/8 Rd.			
70006	FTG	12	5/8, 1Rd.			

General Purpose – 24 Tooth						
Stock	Stock Tooth Diameter Bore					
Number	Grind	Inches	Inches			
70012	ATB	7-1/4	13/16 Rd.			
70123	ATB	8	13/16 Rd.			
70015	ATB	10	5/8 Rd.			
70124	ATB	12	5/8, 1Rd.			

General Cutoff – 40 Tooth				
Stock	Stock Tooth Diamet		Bore	
Number	Grind	Inches	Inches	
70030	ATB	6-1/2	5/8 Rd., 13/16	
70032	ATB	7-1/4	5/8 Rd., 13/16	
70033	ATB	8	5/8 Rd., 13/16	
70125	ATB	9	5/8 Rd.	
70035	ATB	10	5/8 Rd.	
70036	ATB	12	5/8, 1Rd.	
70042	TCG	7-1/4	5/8 Rd., 13/16	
70126	TCG	8	5/8 Rd., 13/16	
70045	TCG	10	5/8 Rd.	



Stock # 70002

For general purpose rip or cutoff applications where smooth finish is not necessary. Fast cutting in soft and hard woods, plywood, chipboard, veneer, particleboard and composition materials.

For sawing with portable or stationary equipment. Rips hard and soft wood. Cuts hardboard and wallboard.



Stock # 70012



Stock # 70030

For trimming and crosscutting soft and hard woods. Expansion slots guard against warping and distortion caused by heat. Use TCG grind when cutting plastics, aluminum, and non-ferrous metals. Cuts particleboard, plywood, Masonite and other composition materials.

Circular Saw Blades

Types of Grinds			
ATB	Alternate Top Bevel		
TCG	Triple Chip Grind		
MCT	Multi-Purpose Carbide Tipped		
FTG	Flat Top Grind		
NCG	Nail Cutting Grind		

King Carbide Semi-Industrial Saw Blades with C-2 Carbide (continued)

Rescue Blades							
Stock	Stock Tooth Diameter Bore No. of						
Number	Grind	Inches	Inches	Teeth			
70116	NCG	12	1	12			
70118	NCG	12	20mm	12			
70121	NCG	12	20mm	24			
70119	NCG	12	1	24			
70120	NCG	14	1	24			



Designed for rough cutting applications. Special modified grind and 15 degree negative hook angle reduces the possibility of tooth damage.

Stock # 70116

Nail Cutting Blade						
Stock	Stock Tooth Diameter Bore No. of					
Number	Number Grind Inches Inches Teeth					
70102	NCG	7-1/4	5/8 Rd., 13/16	14		

For cutting lumber and flooring where occasional nails are present. Specially designed grind and negative hook angle reduces the possibility of tooth damage



Stock # 70102

Types of Grinds			
ATB	Alternate Top Bevel		
TCG	Triple Chip Grind		
MCT	Multi-Purpose Carbide Tipped		
FTG	Flat Top Grind		
NCG	Nail Cutting Grind		

Cutoff – 60 Tooth				
Stock	Stock Tooth		Bore	
Number	Grind	Inches	Inches	
70063	ATB	8	5/8 Rd., 13/16	
70129	ATB	9	5/8 Rd.	
70065	ATB	10	5/8 Rd.	
70066	ATB	12	5/8, 1Rd.	
70073	TCG	8	5/8 Rd., 13/16	
70075	TCG	10	5/8 Rd.	
70076	TCG	12	5/8, 1Rd.	



Stock # 70063

Crosscuts and miters in soft and hard woods. Ideal for fine cutoff or finish work. Cuts particleboard, Masonite and other composition materials. Use TCG grind when cutting plastics, aluminum and non-ferrous materials.

Planer – 50 Tooth					
Stock	Tooth	Diameter	Bore		
Number	Grind	Inches	Inches		
70127	MCT	10	5/8 Rd.		

An all-purpose combination blade. Gives accurate cuts on a wide variety of materials, including solid wood, plywood, plastics, Formica and Masonite. For use when a variety of cutting applications are performed. MCT tooth provides a special tooth grind where two sets of shear action top bevel teeth are followed by a raking action flat top tooth plus a special gullet for chip removal



Stock # 70127

American Pride™ Gold Thin Kerf Carbide Saw Blades with Dyanite Carbide

Engineered to provide fast easy cuts through lumber and other framing materials

ONLY AVAILIABLE WHILE SUPPLIES LAST!						
	Cordless Circular Saw Blades ATB Grind					
Stock	Diameter Bore No. of Kerf Hook					
Number	Inches Inches Teeth Kerf Hook					
60210	3-3/8	15mm	20	0.039	10°	
60213	5-3/8	10mm	24	0.068	20°	



Specially designed for cordless circular saws. Ultra-thin Kerf for extended battery life. Antifriction coating reduces friction and heat build-up during cutting. Dyanite Carbide teeth for extended life.

Stock # 60210

*ONLY AVAILIABLE WHILE SUPPLIES LAST! Portable Electric Circular Saw Blades ATB Grind Stock Diameter **Bore** No. of Hook Kerf Number **Inches Inches Teeth** *60212 4-3/8 20mm 20 0.039 10° 60214 5-1/25/8 Rd 18 0.080 20° *60216 6-1/2 5/8 Rd, 13/16 18 0.080 20° 7-1/4 60218 5/8 Rd, 13/16 18 0.080 20° 7-1/4 67003 5/8 Rd, 13/16 40 0.08020° *60224 8-1/4 5/8 Rd, 13/16 24 0.094 20° *60226 8-1/4 5/8 Rd, 13/16 40 0.094 20°

Specially designed for portable electric circular saws. Ultra-thin Kerf and straightened shoulder cut easier and extend tool life. Anti-friction coating reduces friction and heat build-up during cutting. Dyanite Carbide teeth for extended life. Optimally designed body slots evenly dissipate heat throughout the plate. Control cut design.



Stock # 60218



Magna Steel Blades

Professional blades manufactured of alloy steel and designed to cut most materials quickly and smoothly. Resistant to rust, gum and pitch accumulation.

Chisel Tooth Combination						
Stock Number						
71012	7-1/4	5/8 Rd., 13/16	20			
61015	10	5/8 Rd.	28			

Free cutting general purpose blade. For ripping, crosscutting, in both hard and soft woods



Stock # 71012

Master Combination				
Stock Diameter Bore No. of				
Number Inches Inches Teeth				
08001	10	5/8 Rd.	80	

Smooth, fast cutting all-purpose blade for crosscutting, ripping and mitering.

Stock # 08001

Crosscut					
Stock Diameter Bore No. of					
Number	Inches	Inches	Teeth		
61072	7-1/4	5/8 Rd., 13/16	100		
61073	8	5/8 Rd., 13/16	100		

Special-purpose blade for smooth, fast cutting across the grain of both hard and soft woods.



Stock # 61072

Plywood / Paneling					
Stock	Stock Diameter Bore No. of				
Number	Inches	Inches	Teeth		
61052	7-1/4	5/8 Rd., 13/16	150		
61053	8	5/8 Rd., 13/16	200		
61055	10	5/8 Rd.	200		



Fine, extra-clean cutting blade for use on plywood, veneer, cellotex and thin plastic.

Thin Rim Plywood Stock Diameter **Bore** No. of Number **Inches Inches Teeth** 7-7-1/4 5/8 Rd., 13/16 61061 200 5/8 Rd., 13/16 8 200 61063 61065 10 5/8 Rd. 200

Finest blade for satin smooth finish on plywood, veneers, laminates, plexiglas and other thin materials. Use for crosscutting and mitering.



Stock # 61061

Only Avaliable While Supplies Last!				
	Utility Blade – General Purpose			
Stock	Stock Tooth Diameter Bore			
Number	Grind	Inches	Inches	
70803	ATB	7-1/4	5/8rd.,13/16	

Economical blade with painted finish. Can be resharpened.





Magna Abrasive Blades

Resinoid-bonded and doubly reinforced with fiberglass for durability and performance.

Masonry Cutting				
Stock	Diameter	Bore	Maximum	
Number	Inches	Inches	RPM	
71501	6-1/2	5/8 Rd., 13/16	9300	
71502	7	5/8 Rd., 13/16	8700	
71503	8	5/8 Rd., 13/16	7600	
71504	12	1 Rd.	6300	
71505	14	1 Rd.	5400	

	ann.
1	-0
	Stock # 71501

Made of resinoid-bonded silicon carbide for cutting all types of masonry, concrete, concrete block, brick, limestone, sandstone, tile, cast iron and non-ferrous metals.

	Metal Cutting				
Stock Number	Diameter Inches	Bore Inches	Maximum RPM		
71601	6-1/2	5/8 Rd., 13/16	9300		
71602	7	5/8 Rd., 13/16	8700		
71603	8	5/8 Rd., 13/16	7600		
71604	12	1 Rd.	6300		
71605	14	1 Rd.	5400		

Made of resinoid-bonded aluminum oxide for deburring, cleaning, slotting, nicking and cutting all types of metal, including steel, bronze, brass, copper, aluminum, iron and wire products



Stock # 71601

Steel Pro Contractor Steel Cutting Blades (C7 Carbide)



Specifically designed for use on portable electric and stationary power tools. For cutting of steel, angle iron, bar stock or pipe with a hardness of less than 25 Rockwell C. Fine finish, no burns

All blades have a TCG (Triple Chip Grind), a 0° Hook and a 5/8 Round Bore Inches

Stock Number	Diameter Inches	Number of Teeth	Plate	Kerf	Maximum RPM
72801	6-1/2"	30	.070	.090095	5800
72803	7-1/4"	38	.070	.090095	5800
72806	8-1/4"	40	.080	.100105	5800
72811	10"	48	.080	.105110	5000

Blade Bushings for Circular Saw Blades



Stock # 63608 Stock # 63602

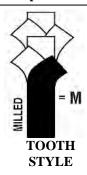
Stock Number	Blade used for	Round Arbor	Diameter Arbor
63600	Steel	3/4 x 1	X
63601	Steel	5/8 x 1	X
63602	Steel	1/2 x 5/8	13/16
63603	Steel	1/2 x 5/8	X
63604	Steel	5/8 x 3/4	X
63606	Abrasive	1/2(plastic)	13/16
63607	Abrasive	5/8(plastic)	13/16
63608	Abrasive	1 x 20mm	X

X = Not Avaliable



Reciprocating Saw Blades

Features	Advantages	Benefits
Matrix II Cutting Edge	•Shock Resistant Teeth	Resists Tooth Strippage
 Tooth Hardness Rc 65-67 	 High Edge Hardness 	•Long Life
•8% Cobalt	 More Wear Resistance 	•Excepts more Feed
 Vacuum Heat Treatment 	 High Heat Resistance 	Pressure For Faster
With Special Temper Process	•Greater Rigidity	Cutting with Less
		Distortion
•3/4" Width with .035" and .050		
thickness (thicker and wider		
than some competitors blades)		



Style # 2 Style # 3

Bi-Metal (1/2" Shank) Blades					
Stock Number			Length x Width x Thickness		Blade Style
Number	Use	Inches	mm	Inch	Style
	WOOD				
RB606ST	Wood, nail-embedded wood, all composition material.	6 x 3/4 x .035	150 x 20 x .9	6	1
RB63506 RB93506	Considerable in all area de anil ambadded	6 x 3/4 x .035 9 x 3/4 x .035	150 x 20 x .9 225 x 20 x .9	6	2 2
RB123506 RB65006	General rough-in, all woods, nail embedded woods.	12 x 3/4 x .035 6 x 3/4 x .050	300 x 20 x .9 150 x 20 x 1.3	6	3 2
RB125006		12 x 3/4 x .050	300 x 20 x 1.3	6	3
	WOOD AND M	IETAL			
RB41014	Heavy gauge metal, rubber & fiber, nail embedded wood.	4 x 3/4 x .035	100 x 20 x .9	10/14	4
RB121014	General purpose, metal cutting, nail embedded woods.	12 x 3/4 x .035	300 x 20 x .9	10/14	3
RB610	Wood, nail embedded wood, compositions, plastic,	6 x 3/4 x .035	150 x 20 x .9	10	1
RB1210	cast Aluminum and non-ferrous materials.	12 x 3/4 x .035	300 x 20 x .9	10	5
RB810	All woods, composition materials, plastic, nail-	8 x 3/4 x .035	200 x 20 x .9	10	5
RB1010	embedded wood, cast aluminum, light gauge metals.	10 x 3/4 x .035	250 x 20 x .9	10	5
RB61014	Wood, nail-embedded wood, compositions, plastic, metals 1/8" and above.	6 x 3/4 x .035	150 x 20 x .9	10/14	1
	METAL				
RB414	Heavy gauge metals 1/8" thick and above.	4 x 3/4 x .035	100 x 20 x .9	14	4
RB614	Barstock and angles.	6 x 3/4 x .035	150 x 20 x .9	14	4
RB1214	Barstock and angles.	12 x 3/4 x .035	300 x 20 x .9	14	5
RB814	Heavy gauge metals 1/8" thick and above. Barstock and angles.	8 x 3/4 x .035	200 x 20 x .9	14	5
RB418	Heavy gauge metals of 18 gauge to 1/8" thick	4 x 3/4 x .035	100 x 20 x .9	18	4
RB618	conduit, pipe, channels and tubing.	6 x 3/4 x .035	150 x 20 x .9	18	4
RB1218	7117	12 x 3/4 x .035	300 x 20 x .9	18	5
RB818	Heavy gauge metals, conduit & tubing 18 gauge to 1/8" thick.	8 x 3/4 x .035	200 x 20 x 9	18	5
RB424	Metal cutting 18 gauge and under. Trim and	4 x 3/4 x .035	100 x 20 x .9	24	1
RB624	tubing. Galvanized Pipe under 18 gauge.	6 x 3/4 x .035	150 x 20 x .9	24	1
	SPECIAL PUR	POSE			
RB606P	Plaster with metal lath, plasterboard, sheet rock, plaster walls. Tooth design cuts both forward and on backstroke.	6 x 3/4 x .035	150 x 20 x .9	6	6
RB318S	Scroll cuts in wood and cast aluminum, non- ferrous metals.	3 x 5/16 x .035	75 x 6 x .9	18	8
RB8501014	For soil pipe.	8 x 3/4 x .050	200 x 20 x 1.3	10/14	6
RB12501014	General rough-in, all woods, nail embedded woods.	12 x 3/4 x .050	300 x 20 x 1.3	10/14	3





Reciprocating Saw Blades

Features	Advantages	Benefits
Carbon Steel or Solid High Speed Construction	•Lower Cost than Bi-Metal Blades	•Reduces Operating Expense In General Purpose Applications

Style #1 Style #2

	Conventional (1	/2" Shank)	Blades			
		Length x Width x Thickness		Teeth Per	Blade Style	
Stock Number	Recommended Use	Inches	mm	Inch		
	WOOD					
RC610	Composition materials, smooth cutting in woods, fiberboard.	6 x 3/4 x .032	150 x 20 x .8	10	1	
RC606ST	Fast cutting nail-free wood and fiberboard.	6 x 3/4 x .032	150 x 20 x .8	6	1	
RC603	Course rough-in cuts in all woods.	6 x 3/4 x .050	150 x 20 x 1.3	3	2	
RC903		9 x 3/4 x .050	225 x 20 x 1.3	3	2	
RC1203		12 x 3/4 x .050	300 x 20 x 1.3	3	2	
RC606	Rough-in work in all woods. Fast cutting, long	6 x 3/4 x .050	150 x 20 x 1.3	6	2	
RC906	life.	9 x 3/4 x .050	225 x 20 x 1.3	6	2	
RC1206		12 x 3/4 x .050	300 x 20 x 1.3	6	2	
	SPECIAL	PURPOSE				
RH318S	Scroll cutting metals.	3 x 5/16 x .032	75 x 6 x .8	18	3	
RH324S		3 x 5/16 x .032	75 x 6 x .8	24	3	
RC905	Rough-in wood, very fast cutting-pruning.	9 x 3/4 x .050	230 x 19 x 1.3	5	4	





Style #3

Style

Style # 5

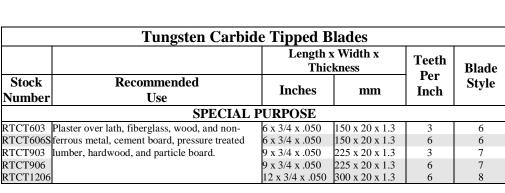
Style # 7

•U-Shank reciprocating blades are designed to fit vised pipe and tube cutting machines from Ridgid, REMS, Roller, Pace, and Flex.

	U-Shank Bi-Metal Blades					
		Length x Width x Thickness		Teeth	Blade	
Stock Number	Recommended Use	Inches	mm	Per Inch	Style	
	SPECIAL P	URPOSE				
RBU5508	Cuts pipe up to 2" diameter.	5-1/2 x 1 x .062	140 x 25 x 1.6	8	5	
RBU808	Cuts pipe up to 4" diameter.	8 x 1 x .062	200 x 25 x 1.6	8	5	
RBU10508	The state of the s	10-1/2 x 1 x .062	263 x 25 x 1.6	8	5	
	Cuts thin wall metal and plastic pipe up to 2" diameter.	5-1/2 x 1.083 x .035	140 x 27 x .9	14	5	
	Cuts thin wall metal and plastic pipe up to 4" diameter.	8 x 1.083 x .035	200 x 27 x .9	14	5	
	Cuts thin wall metal and plastic pipe up to 6" diameter.	10-1/2 x 1.083 x .035	263 x 27 x .9	14	5	









Universal Shank Sabre/Jig Saw Blades

Bi-Metal Blades							
		Length x Width	x Thickness				
Stock Number	Recommended Use	Inches	mm	Teeth Per Inch	Blade Style #		
WOOD							
SB3606	Wood, Fiber Board, Asbestos, Course- Cut	4 x 3/8 x .035	100 x 10 x .9	6	1		
SB3610	Wood, Plywood, Hardboard.	4 x 3/8 x .035	100 x 10 x .9	10	1		
	WOOD	AND METAL					
SB3614	Non-Ferrous Metals, Fiberglass, Hard Rubber, Nail Embedded Wood.	4 x 3/8 x .035	100 x 10 x .9	14	1		
]	METAL					
SB2718	Metal 18 gauge and under.	3 x 3/8 x .035	75 x 10 x .9	18	1		
SB2724	Metal and Non-Ferrous metal up to 1/8".	3 x 3/8 x .035	75 x 10 x .9	24	1		
•	SPECIAL PURPOSE						
SB2718S	Scroll – Metal 18 gauge and under.	2-3/4 x 3/16 x .035	70 x 5 x .9	18	2		

Style # 1

Style # 2

Monai \$83606

	High Speed Steel Blades						
	Length x Width x Thickness						
Stock Number	Recommended Use	Inches	mm	Teeth Per Inch	Blade Style #		
	WOOD A	AND METAL					
SH408	Hard Plastic, Non-Ferrous Metal, Wood with Nails, Very Hard Wood. Very Clean Cuts.	3-5/8 x 5/16 x .050	100 x 8 x 1.3	8	3		
	M	IETAL					
SH2712	Ferrous Metals 1/4" to 3/8" Thick. Non-Ferrous 1/8" to 1/4" Thick.	2-3/4 x 5/16 x .032	70 x 8 x .8	12	3		
SH2718	Ferrous Metals 1/8" to 1/4" Thick. Non-Ferrous 1/16" to 1/8" Thick.	3 x 5/16 x .032	75 x 8 x .8	18	3		
SH2724	Ferrous Metals 1/16" to 3/16" Thick. Non-Ferrous to 1/8" Thick.	3 x 5/16 x .032	75 x 8 x .8	24	3		
SH2732	Ferrous Metals 1/32" to 1/8" Thick. Non-Ferrous to 1/8" Thick.	3 x 5/16 x .032	75 x 8 x .8	32	3		



Style # 8	Style # 12
3	1

		Length x Width	x Thickness		
Stock Number	Recommended Use	Inches	mm	Teeth Per Inch	Blade Style #
	WOO	OD			
SC406	Softwood, Hardwood, Plywood, Chipboard, Plastic up to 2" thick. Clean Fast Cutting.	4 x 5/16 x .050	100 x 8 x 1.3	6	4
SC410	Softwood, Hardwood, Plywood, Chipboard, Plastic up to 1" thick. Very clean cuts.	4 x 5/16 x .050	100 x 8 x 1.3	10	6
	SPECIAL P	PURPOSE			
SC410R	Reverse tooth – Non-splitting cuts of Laminates, and chipboard. Very clean cuts.	4 x 5/16 x .050	100 x 8 x 1.3	10	8
SC2712	Scroll Cutting wood, Plywood, Plastics 1/4" to 1" thick. Smooth cuts.	2-3/4 x 1/4 x .035	70 x 6 x .9	12	12
SC2720	Scroll Cutting wood, Plywoods, Etc. Super fine finish. Ground, Taper back.	2-3/4 x 3/16 x .040	70 x 5 x 1.0	20	12



Bosch Shank Sabre/Jig Saw Blades

	Bi-Metal Blades							
		Length x Width	x Thickness					
Stock Number	Recommended Use	Inches	mm	Teeth Per Inch	Blade Style #			
	WOOD							
SB0406	Wood, Fiberboard, Asbestos, Roughing work.	4 x 5/16 x .040	100 x 8 x 1.0	6	1			
SB0408	General Purpose – Wood cutting, Compositions, Plastic.	4 x 5/16 x .035	100 x 8 x .9	8	1			
SB0410	All Woods, Compositions Material, Plastics, Plywood.	4 x 5/16 x .035	100 x 8 x .9	10	2			
	WOOD AN	D METAL						
SB0512L	Softwood, Aluminum, Non-Ferrous metal up to 3/8", Sandwich Material up to 3-3/4". Extra Long Blade.	5-1/4 x 5/16 x .042	132 x 8 x 1.1	12	3			
	MET	ΓAL						
SB0314	Steel and Non-Ferrous Metal 1/8" thick and up.	3 x 3/8 x .035	75 x 10 x .9	14	4			
SB0318	Metals over 18 gauge, Tubing, Conduit.	3 x 3/8 x .035	75 x 10 x .9	18	4			
SB0521L	Soft Wood, Aluminum, Non-Ferrous Metal up to 3/8", Sandwich material Up to 3-3/4". Extra long blade.	5-1/4 x 5/16 x .042	132 x 8 x 1.1	21	3			
SB0324	Thin Metals, Plastic, Fine cuts under 18 gauge.	3 x 3/8 x .035	75 x 10 x .9	24	4			

Style # 1	Style # 2	Style # 3	Style # 4
Morse SB0406	GERMANY WORSE SB0410CC	GERMANY WORSE SB0512L	Winner SB0314
	Style # 5 GERMANY MORSE SHOA	anananana	

High Speed Steel Blades						
Length x Width x Thickness						
Stock Number	Recommended Use	Inches mm		Teeth Per Inch	Blade Style #	
Number	WOOD AND METAL					
SH0408	Hard Plastic, Non-Ferrous Metal, Wood with Nails, Very hardwood. Very Clean Cuts	4 x 5/16 x .040	100 x 8 x 1	8	5	

	Carbon Blades					
		Length x Width	x Thickness			
Stock	Recommended	Inches	mm	Teeth	Blade	
Number	Use	Inches	111111	Per Inch	Style #	
	WOO	D				
SC0406	Softwood, Hardwood, Plywood, Chipboard,	4 x 5/16 x .060	100 x 8 x 1.5	6	1	
	Plastic up to 2" thick. Clean/Fast Cutting.					
SC0410	Softwood, Hardwood, Plywood, Chipboard,	4 x 5/16 x .060	100 x 8 x 1.5	10	2	
	Plastic up to 1" thick. Very clean cut.					
	SPECIAL PU	IRPOSE				
SC0410R	Reverse tooth – Non-splitting cuts of Laminates	4 x 5/16 x .060	100 x 8 x 1.5	10	8	
	and Chipboard. Very clean cutting.					
SC0416S	Curved cuts/Scroll in softwood and Hardwood	4 x 1/4 x .050	100 x 6 x 1.3	6	11	
	up to 2" thick. Fast Cutting.					



Style # 11



Hack Saw Blades and Frames

Hack Saw Frame Master McCoy®

Stock Number: HHBF02

- *Locking screw design allows for storage of extra blades and secures blade for "jab" sawing.
- *Alloy steel support beam makes frame stronger and allows over 30,000 PSI tensioning.
- *Ergonomic grip protects fingers and grips comfortably.
- *Multiple pin locations for mounting blade at 90° and 45° for standard or flush cut applications.
- *Tensioning handle provides extra torque to keep blades rigid for straighter cuts and longer blade life.



Bi-Metal Hack Saw Blades					
Stock Teeth		Description			
Number	Per Inch	Inches	mm		
HHB1018	18	10 x 1/2 x .025	250 x 12.7 x 0.6		
HHB1024	24	10 x 1/2 x .025	250 x 12.7 x 0.6		
HHB1032	32	10 x 1/2 x .025	250 x 12.7 x 0.6		
HHB1214	14	12 x 1/2 x .025	300 x 12.7 x 0.6		
HHB1218	18	12 x 1/2 x .025	300 x 12.7 x 0.6		
HHB1224	24	12 x 1/2 x .025	300 x 12.7 x 0.6		
HHB1232	32	12 x 1/2 x .025	300 x 12.7 x 0.6		
	Variable Pitch				
HHB121418	14/18	12 x 1/2 x .025	300 x 12.7 x 0.6		
HHB122024	20/24	12 x 1/2 x .025	300 x 12.7 x 0.6		
HHB122632	26/32	12 x 1/2 x .025	300 x 12.7 x 0.6		



- Pipe, tubing and solids.
- Cuts wood, plastic or any machinable metal; including conduit, stainless steel tubing, angle iron, copper tubing, structural materials, etc.

Features	Advantages	Benefits
* Bi-Metal Construction	* Flexibility	* Will not Shatter
	* Increased Heat and Wear	* Long Life
* Tooth Hardness Rc 65-67	Resistance	* Safe Operation
	* Higher Edge Hardness than	* Faster Cutting
* Vacuum Heat Treatment	other Heat Treatment Methods	* Labor Saving

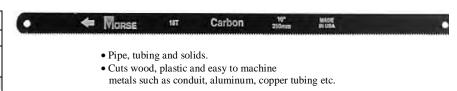
Н	High Speed Molybdenum					
Stock	Teeth	Desci	ription			
Number	Per Inch	Inches	mm			
HHM1018	18	10 x 1/2 x .025	250 x 12.7 x 0.6			
HHM1024	24	10 x 1/2 x .025	250 x 12.7 x 0.6			
HHM1032	32	10 x 1/2 x .025	250 x 12.7 x 0.6			
HHM1214	14	12 x 1/2 x .025	300 x 12.7 x 0.6			
HHM1218	18	12 x 1/2 x .025	300 x 12.7 x 0.6			
HHM1224	24	12 x 1/2 x .025	300 x 12.7 x 0.6			
HHM1232	32	12 x 1/2 x .025	300 x 12.7 x 0.6			



- Pipe, tubing and solids.
- Cuts wood, plastic or any machinable metal; including conduit, stainless steel tubing, angle iron, copper tubing, structural materials, etc.

Features	Advantages	Benefits
* High Speed Steel	* High Heat and Wear Resistant	* Long Life
Construction	* Extra Rigidity vs. other HSS	* Straighter and Faster Cuts
* Tooth Hardness Rc 62-64	Flexible Blades	* Good Performance in
* Flame Hardened Back		Low Tension Frames
* Non Hardened Center	* Shatter Resistant	* Safe Operation

Economy Carbon					
Stock	Teeth	Description			
Number	Per Inch	Inches	mm		
HHC1018	18	10 x 1/2 x .025	250 x 12.7 x 0.6		
HHC1024	24	10 x 1/2 x .025	250 x 12.7 x 0.6		
HHC1032	32	10 x 1/2 x .025	250 x 12.7 x 0.6		
HHC1214	14	12 x 1/2 x .025	300 x 12.7 x 0.6		
HHC1218	18	12 x 1/2 x .025	300 x 12.7 x 0.6		
HHC1224	24	12 x 1/2 x .025	300 x 12.7 x 0.6		
HHC1232	32	12 x 1/2 x .025	300 x 12.7 x 0.6		



Features	Advantages	Benefits
* Carbon Steel Blade	* Low Cost	* Reduces Operating
		Expenses in General
		Purpose Applications



Carbide Grit Jig, Rod and Hack Saw Blades

Carbide Grit Jig Saw Blades

For cutting materials too hard, abrasive or thin for bi-metal blades. Tungsten carbide grains are bonded to alloy body creating smooth cutting blades that will not tear thin materials and offer long life cutting difficult materials.

Cuts fiberglass, lath, plaster, ceramic tile, soil pipe, composites, particle board, laminates, hardwood flooring, marble, hardened steel and more.



Stock # SFTCG4-M

Stock Number	Description	Overall Length
SCTCG27-F	Fine Grit Saw	2-3/4"
SCTCG27-M	Medium Grit Saw	2-3/4"
SCTCG27-C	Course Grit Saw	2-3/4"
SCFTCG4-M	Flush Grit Saw	4"

Carbide Grit Rod Saw Blades and Hack Blades

These specialty blades fit standard hack saw frames and cut hard materials like glass, ceramic tile, hardened steel, and more. The carbide grit cutting edges are super resistant to heat, wear and abrasion. They also resist snagging.



Carbide Grit Rod Saws

The thin cutting profile mades it easy to cut shapes and patterns even in limited acces areas. Will not tear thin materials. Carbide Grit is permanently bonded to a steel alloy rod. Cuts in both directions.

	Dimensions			
Stock Number	Inches MM			
HRCTCG10	10	250		
HRCTCG12	12	300		



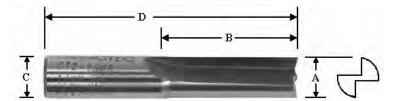
Carbide Grit Hack Saw Blades

Cut difficult materials including hydraulic hose and stranded cable. Blades cut on both the push and pull stroke for faster cutting and longer life.

	Dimensions			
Stock Number	Inches MM			
HHCTCG10	10	250		
HHCTCG12	12	300		



High Speed Steel Router Bits



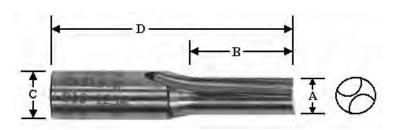
H.S.S. Double 'V' Flute

A Cutting Diameter	B Shank Diameter	C Cutting Length	D Overall Length	Stock Number	A Cutting Diameter	B Shank Diameter	C Cutting Length	D Overall Length	Stock Number
3/32	1/4	9/32	1-9/16	012-0309	3/8	1/4	1	2-1/4	012-1232
1/8	1/4	3/8	1-5/8	012-0412	3/8	3/8	1	2-1/4	012-1233
1/8	1/2	3/8	1-7/8	X	3/8	3/8	1	3	012-1234
*5/32	1/4	1/2	2	012-0516	3/8	1/2	1	2-1/2	012-1235
*3/16	1/4	5/8	1-7/8	012-0620	*3/8	1/2	1-1/4	2-3/4	012-1240
*3/16	1/4	3/4	2	012-0624	*3/8	1/2	1-1/2	3	012-1248
*3/16	1/4	1	2-1/4	012-0632	*3/8	1/2	2	3-1/2	012-1264
3/16	1/2	5/8	2-1/8	012-0621	13/32	1/2	1	2-1/2	012-1332
7/32	1/4	5/8	2	012-0720	*7/16	1/2	1-1/4	2-3/4	012-1440
1/4	1/4	5/8	1-7/8	012-0820	*7/16	1/2	1-1/2	3	X
1/4	1/4	3/4	2	012-0824	1/2	1/4	3/4	2	X
*1/4	1/4	1	2-1/4	012-0832	1/2	1/2	1-1/4	2-3/4	012-1640
*1/4	1/4	1	3	012-0833	*1/2	1/2	1-1/2	3	012-1648
*1/4	1/4	1-1/4	2-1/2	012-0840	*1/2	1/2	1-3/4	3-1/4	012-1656
*1/4	1/4	1-1/2	2-3/4	012-0848	*1/2	1/2	2	3-1/2	012-1664
*1/4	1/4	2	3-1/4	012-0864	*1/2	1/2	2	4-1/2	012-1666
1/4	1/2	3/4	2-1/4	012-0825	*1/2	1/2	2-1/4	4-1/4	012-1672
*1/4	1/2	1	2-1/2	012-0834	*17/32	1/2	1-1/4	2-3/4	012-1740
*1/4	1/2	1-1/4	2-3/4	012-0841	9/16	1/2	1-1/4	2-3/4	012-1840
*17/64	1/2	1	2-1/2	012-0931	5/8	1/2	1-1/4	2-3/4	012-2040
*9/32	1/4	1	2-1/4	012-0932	*5/8	1/2	2	3-1/2	012-2064
*9/32	1/2	1	2-1/2	012-0933	*11/16	1/2	1-1/4	2-3/4	012-2240
*5/16	1/4	1	2-1/4	012-1032	3/4	1/2	1-1/4	2-3/4	012-2440
*5/16	5/16	1	2-1/4	012-1033	3/4	1/2	2	3-1/2	012-2464
*5/16	1/2	1	2-1/2	012-1034	13/16	1/2	1-1/4	2-3/4	012-2640
*5/16	1/2	1-1/4	2-3/4	012-1040	7/8	1/2	1-1/4	2-3/4	012-2840
*5/16	1/2	1-1/2	3	012-1048	15/16	1/2	1-1/4	2-3/4	012-3040
*5/16	1/2	2	3-1/2	X	1	1/2	1-1/4	2-3/4	012-3240
11/32	1/2	1	2-1/2	012-1132	*1	1/2	2	3-1/2	012-3264

^{* =} Not guaranteed because of long cutting

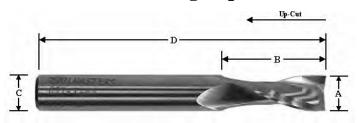
H.S.S. Double 'O' Flute

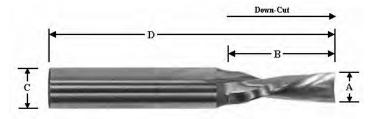
A Cutting Diameter	B Cutting Length	C Shank Diameter	D Overall Length	Stock Number
1/8	1/4	3/8	1-5/8	010-0412
3/16	1/4	5/8	2	010-0620
7/32	1/4	5/8	1-7/8	010-0720
1/4	1/4	3/4	2-1/8	010-0824
1/4	1/4	1	2-3/8	010-0832
1/4	1/2	1	2-1/2	010-0834
5/16	1/4	3/4	2-1/8	010-1024
3/8	3/8	1	2-1/2	010-1232
3/8	1/2	1	2-1/2	010-1234



Single edge cutters available sizes and prices on request.

High Speed Steel Router Bits and Adapters





H.S.S. Spiral Double Flute Up-Cut

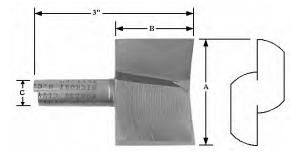
Single Edge Cutters Available

A	В	C	D	Stock
Cutting	Cutting	Shank	O.A.	Number
Dia.	Length	Dia.	Length	Number
1/8	3/8	1/4	2-1/2	072-0416
3/16	5/8	1/4	2-7/8	072-0620
7/32	7/8	1/4	3	072-0729
1/4	3/4	1/4	2-3/4	072-0824
1/4	3/4	1/2	3-1/4	072-0825
1/4	1	1/4	3	072-0832
5/16	3/4	1/2	3-1/4	072-1024
5/16	1	5/16	3-1/4	072-1032
5/16	1	1/2	3-3/8	072-1033
3/8	1	3/8	3	072-1232
3/8	1	1/2	3-1/2	072-1233
3/8	1-1/4	1/2	3-1/2	072-1240
1/2	1-1/4	1/2	4	072-1640
1/2	1-1/4	1/2	3-1/2	072-1644
1/2	1-1/2	1/2	4-1/4	072-1648
3/4	1-1/4	1/2	4	072-2440

H.S.S. Spiral Double Flute Down - Cut

Single Edge Cutters Available

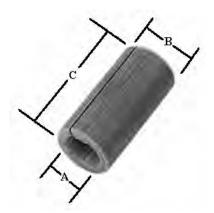
A	В	C	D	Stock
Cutting	Cutting	Shank	O.A.	Number
Dia.	Length	Dia.	Length	Number
1/8	3/8	1/4	2-1/2	073-0416
3/16	5/8	1/4	2-7/8	073-0620
1/4	3/4	1/4	2-3/4	073-0824
1/4	3/4	1/2	3-1/2	073-0825
1/4	1	1/4	3	073-0832
5/16	3/4	1/2	3-1/2	073-1024
5/16	1	5/16	3-1/4	073-1032
5/16	1	1/2	3-3/4	073-1033
3/8	1	3/8	3	073-1232
3/8	1	1/2	3-1/2	073-1233
3/8	1-1/4	1/2	3-1/2	073-1240
1/2	1-1/4	1/2	4	073-1640
1/2	1-1/4	1/2	3-1/2	073-1644
1/2	1-1/2	1/2	3-1/2	073-1647
1/2	1-1/2	1/2	4-1/4	073-1648
3/4	1-1/4	1/2	4	073-2440



H.S.S. Router Bit Blanks

Designed to be easily ground to your required pattern. All cutting edges are precision ground. 3" overall length.

Cutting		С	Stock
A	В	Shank	Number
Diameter	Length	Diameter	ramber
3/4	1-1/2	1/2	X4110750
1	1-1/2	1/2	X4111000
1-1/4	1-1/2	1/2	X4111250
1-1/2	1-1/2	1/2	X4111500
1-3/4	1-1/2	1/2	X4111750
2	1-1/2	1/2	X4112000
2-1/4	1-1/2	1/2	X4112250
2-1/2	1-1/2	1/2	X4112500
2-3/4	1-1/2	1/2	X4112750
3	1-1/2	1/2	X4113000



Fiber Adapters

A Inside Diameter	B Outside Diameter	C Length	Stock Number
1/8	1/4	1	003-0408
3/16	1/4	1	003-0608
1/4	3/8	1	003-0812
1/4	1/2	1	003-0816
5/16	1/2	1	003-1016
3/8	1/2	1-1/2	003-1216
1/2	3/4	1-1/2	003-1624



Solid Carbide Spiral Router Bits

Made in the USA by Whiteside Machine Company For full line of products, Please request a catalog.



	Standard Spiral Bits				
	Up Cut or Down Cut				
		arbide – Tv			
Up Cut Stock Number	Down Cut Stock Number	Cutting Diameter	Cutting Length	Overall Length	
	•	1/4" Shank			
RU1600	RD1600	1/8"	1/2"	2"	
RU1700	RD1700	5/32"	5/8"	2"	
RU1800	RD1800	3/16"	3/4"	2-1/2"	
RU1900	RD1900	7/32"	3/4"	2-1/2"	
RU2075	RD2075	1/4"	3/4"	2-1/2"	
RU2100	RD2100	1/4"	1"	2-1/2"	
		5/16" Shan	k		
RU3100	RD3100	5/16"	1"	2-1/2"	
	•	3/8" Shanl	ζ.	•	
RU4075	RD4075	3/8"	3/4"	2-1/2"	
RU4100	RD4100	3/8"	1"	2-1/2"	
RU4125	RD4125	3/8"	1-1/4"	3"	
		1/2" Shanl	ζ.	•	
RU4800	RD4800	9/32"	1"	3"	
RU4850	RD4850	5/16"	1"	3"	
RU4875	RD4875	3/8"	3/4"	3"	
RU4900	RD4900	3/8"	1-1/4"	3"	
RU4950	RD4950	7/16"	1-1/4"	3"	
RU5100	RD5100	1/2"	1"	3"	
RU5125	RD5125	1/2"	1-1/4"	3"	
RU5150	RD5150	1/2"	1-1/2"	3-1/2"	
RU5200	RD5200	1/2"	2"	4"	
		5/8" Shan	k		
RU6150	RD6150	5/8"	1-1/2"	3-1/2"	
RU6200	RD6200	5/8"	2"	4"	
		3/4" Shan	k		
RU7150	RD7150	3/4"	1-1/2"	3-1/2"	
RU7200	RD7200	3/4"	2"	4"	
RU7300	RD7300	3/4"	3"	5"	



	Chipbreaker Spiral Bits						
	Up Cut	or Down (Cut				
	Solid Carl	bide – Two	Flute				
Up Cut	^ Cutting Cutting Overall						
Number	Stock Stock Number Diameter Length Length						
	1/	2" Shank					
RU5125CB	RD5125CB	1/2"	1-1/4"	3"			
RU5150CB	RD5150CB	1/2"	1-1/2"	3-1/2"			
RU5200CB	RD5200CB						



Up/Down Cut Spiral Bits Up/Down Cut (1+1 Compression) Solid Carbide – Single Flute						
Stock Number						
UD2100	1/4"	1"	1/4"	2-1/2"		
UD4125	3/8"	1-1/4"	3/8"	3"		
UD5150	1/2"	1-1/2"	1/2"	3-1/2"		



Up/Down Cut Spiral Bits Up/Down Cut (2 +2 Compression) Solid Carbide – Two Flute					
Stock	Cutting	Cutting	Shank	Overall	
Number	Diameter	Length	Diameter	Length	
*UD4102M	3/8"	1"	3/8"	2-1/2"	
UD4122	3/8"	1-1/4"	3/8"	3"	
UD5122	1/2"	1-1/4"	1/2"	3"	
*UD5122M	1/2"	1-1/4"	1/2"	3"	
UD5152	1/2"	1-1/2"	1/2"	3-1/2"	
UD6152	5/8"	1-1/2"	5/8"	4"	
UD7202	3/4"	2"	3/4"	5"	

^{*}Mortise Style – 1/4" up cut on end.



Flush Trim Spiral Bits

Up Cut, Down Cut or Combination Solid Carbide – Two Flute

These spiral bits offer state-of-the-art results in flush trimming. Our 1/4" diameter tools are great for small inside corners. The 1/8" bit uses a brass pilot. All others feature a double ball bearing guide.

Up Cut Stock Number	Down Cut Stock Number	Cutting Diameter	Cutting Length	Overall Length	
	1/4" Shank				
RFT1600	RFTD1600	1/8"	3/8"	2"	
RFT2100	RFTD2100	1/4"	1"	3"	
	1/2	2" Shank			
RFT5125	RFTD5125	1/2"	1-1/4"	3-3/4"	
RFT5200	RFTD5200	1/2"	2"	4-3/4"	
Up/Down Combination					
UDF:	Γ5152	1/2"	1-1/2"	4-1/4"	

Solid Carbide Router Bits

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Solid Carbide Straight Bits				
Stock	Cutting	Cutting	Shank	Overall
Number	Diameter	Length	Diameter	Length
Single Flute				
SC01	1/16"	5/16"	1/4"	1-1/2"
SC01A	3/32"	5/16"	1/4"	1-1/2"
SC02	1/8"	3/8"	1/4"	1-1/2"
SC03	5/32"	5/8"	1/4"	1-1/2"
SC04	3/16"	1/2"	1/4"	1-1/2"
SC05	7/32"	3/4"	1/4"	2"
SC06	1/4"	3/4"	1/4"	2"
SC07	1/4"	1"	1/4"	2-1/2"
SC08	1/4"	1"	1/4"	3"
SC17	5/16"	1"	5/16"	2-1/2"
	Γ	Oouble Flut	e	
SC33	1/8"	1/4"	1/4"	2"
SC09	1/8"	3/8"	1/4"	1-1/2"
SC09A	1/8"	3/8"	1/4"	2"
SC10	5/32"	5/8"	1/4"	1-1/2"
SC10A	5/32"	5/8"	1/4"	2"
SC34	3/16"	3/8"	1/4"	2"
SC11	3/16"	1/2"	1/4"	1-1/2"
SC11A	3/16"	1/2"	1/4"	2"
SC12	3/16"	5/8"	1/4"	2"
SC13	7/32"	3/4"	1/4"	2"
SC35	1/4"	1/2"	1/4"	2"
SC14	1/4"	3/4"	1/4"	2"
SC15	1/4"	1"	1/4"	2-1/2"
SC16	1/4"	1"	1/4"	3"
SC18	5/16"	1"	5/16"	2-1/2"
SC19	3/8"	1"	3/8"	2-1/2"
SC19A	3/8"	1-1/4"	3/8"	3"
SC20	1/4"	3/4"	1/2"	2-3/4"
SC21	1/4"	1"	1/2"	3"
SC22	5/16"	1"	1/2"	3"
SC23	3/8"	1"	1/2"	3"
SC24	3/8"	1-1/4"	1/2"	3"
SC25	1/2"	1"	1/2"	3"
SC26	1/2"	1-1/4"	1/2"	3"
SC27	1/2"	1-1/2"	1/2"	3-1/2"



	O – Flute Straight Bits					
	Solid Carbide – One Flute					
	Used prima	rily for rout	ing plastics			
Stock	Cutting	Cutting	Shank	Overall		
Number	Diameter Length Diameter Length					
SA1600	1/8"	3/8"	1/4"	2-1/2"		
SA1700	5/32"	1/2"	1/4"	2-1/2"		
SA1800	3/16"	1/2"	1/4"	2-1/2"		
SA1900	7/32"	5/8"	1/4"	2-1/2"		
SA2075	1/4"	3/4"	1/4"	2-1/2"		
SA2100	1/4"	1"	1/4"	3-1/2"		
SA4100	3/8"	1"	3/8"	3"		



Standard Flush Trim				
Stock Cutting Shank Overall Number Length Diameter Length				
SC28	3/8"	1/4"	1-1/2"	
SC28B	1/4"	1/4"	1-1/2"	



7° Bevel Trim					
Stock Cutting Shank Overall					
Number Length Diameter Length					
SC29	1/4"	1/4"	1-1/2"		



Solid Carbide Router Bits Continued ...

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Flush and 7° Bevel Trim					
Stock Cutting Shank Overall Number Length Diameter Length					
SC30	3/8"	1/4"	1-1/2		



Solid Carbide Fiberglass Bit 2-1/2" Overall Length					
SC90	1/4"	3/4"	1/4"		
SC90V 1/4" 3/4" 1/4"					

*Note – order SC90 for flat plunge point order SC90V for vee plunge point



Flat Bottom Veining					
Stock Cutting Shank Overall Number Length Diameter Length					
SC33	1/8"	1/4"	2"		
SC34	3/16"	3/8"	2"		
SC35	1/4"	1/2"	2"		



Face Frame Counterbores						
Stock Number Diameter Pilot Diameter Type						
	3/8" Shank					
FF301	3/8"	.136	4"	Standard		
FF302	3/8"	.136	6"	Long		
FF303	FF303 Replacement .136 Pilot Fishtail Drill Bit (HSS)					

Standard type fits Unique, Norfield, Evans, Ritter, and Marcon face frame boring machines.

Long version is for use on drill press.



R	Round Bottom Veining 2" Overall Length				
Stock Number Radius Cutting Diameter Length					
SC39	1/16"	1/8"	1/4"		
SC40	3/32"	3/16"	3/8"		
SC41	1/8"	1/4"	1/2"		



Polished Solid Carbide Knives			
Stock Number	Size		
6902	1/8" x 5/8" x 4"		
6904	1/8" x 5/8" x 6"		
6906	1/8" x 5/8" x 8"		
6910	1/8" x 3/4" x 4"		
6912	1/8" x 3/4" x 6"		
6914	1/8" x 3/4" x 8"		

Sold Individually.

Carbide Tipped Straight Router Bits

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For full line of products, Please request a catalog.



CNC Router Bits Straight Cut - Carbide Tipped

CNC tools are designed to meet the severe applications of CNC routing. These tools offer superior performance over standard straight flute bits at the high feed rates commonly found on CNC routers. They also provide an economical alternative to the more expensive spiral bits. For the ultimate in CNC routing, choose from Whiteside's wide selection of Solid Carbide Spiral Bits listed in this catalog.

F- supplied with carbide flat bottom boring point. **V**- supplied with carbide vee bottom boring point.

Stock	Stock Cutting Cutting Overall				
Number	Diameter	Length	Length		
	1/2" Shank	- Single Flute			
C1052	1/2"	1-1/4"	2-7/8"		
C1055	1/2"	2"	4-1/8"		
	1/2" Shank -	Double Flute			
C1067	1/2"	1-1/4"	2-7/8"		
C1069	1/2"	1-1/2"	3-1/8"		
C1072	1/2"	2"	4-1/8"		
	5/8" Shank -	- Double Flute			
C6310	5/8"	1-1/4"	3"		
C6320	5/8"	2"	4"		
	3/4" Shank -	- Double Flute			
C7512	3/4"	1-1/4"	3"		
C7515	3/4"	1-1/2"	3-1/4"		
C7520	3/4"	2"	4"		
C7520F	3/4"	2"	4"		
C7520V	3/4"	2"	4"		
C7525	3/4"	2-1/2"	4-1/2"		
C7525F	3/4"	2-1/2"	4-1/2"		
C8820V	7/8"	2"	4"		
C1108	1"	1-1/2"	3-1/4"		
C1109	1"	2"	4-1/4"		



Template Bits with Oversize Bearings						
Stock Cutting Cutting Overall Bearing Number Diameter Length Length Number						
		1/4" Shank	•			
3025	3025 5/16" 3/4" 2-3/4" B9WM					
3028	1/2"	1/4"	1-7/8"	B4WM		
3032	9/16"	3/4"	2-1/4"	B6WM		



	Template Bits with						
Ball Bearing Guides							
Stock	Cutting	Cutting Cutting Overall Bearing					
Number	Diameter	Length	Length	Number			
	1	l/4" Shank					
*3000A	1/2"	1/8"	1-3/4"	B9WM			
*3000	1/2"	1/4"	1-7/8"	B9WM			
3002	1/2"	3/4"	2-1/4"	B9WM			
3004	1/2"	1"	2-1/2"	B9WM			
*3006	5/8"	1/4"	1-3/4"	B6WM			
K41	5/8"	1/2"	2-1/4"	B6WM			
K43	5/8"	3/4"	2-1/2"	B6WM			
3008	5/8"	1"	2-1/2"	B6WM			
*3010	3/4"	1/4"	1-3/4"	B4WM			
3012	3/4"	3/4"	2-3/8"	B4WM			
3014	3/4"	1"	2-5/8"	B4WM			
	3	3/8" Shank					
3015	7/8"	1"	2-5/8"	B12WM			
	1	1/2" Shank					
3016	1-1/8"	1"	3"	B11			
3018	1-1/8"	1-1/2"	3-1/2"	B11			
3019	1-1/8"	2"	4"	B11			
***3020	3/4"	1"	2-3/4"	B19			
***3021	3/4"	1-1/4"	3"	B19			
***3022	3/4"	1-1/2"	3-1/4"	B19			
***3023	3/4"	2"	3-5/8"	B19			
		Lead to coner					

- * = Dado clean out bits. Used to square the bottom of dado cuts made on a table saw.
- *** = The 1-1/8" dia tools with 1/2" shank are recommended whenever possible because of the fragile nature of the B19 bearing on the 3/4" dia bits.



Left Hand - Straight Cut					
Stock	Cutting	Cutting	Overall		
Number	Diameter	Length	Length		
1	/4" Shank -	Double Flu	te		
1014LH	1/4"	1"	2-1/2"		
1	1/2" Shank - Double Flute				
1062LH	3/8"	1"	2-5/8"		
1066LH	1/2"	1"	2-5/8"		
1069LH	1/2"	1-1/2"	3-1/8"		
1072LH	1/2"	2"	4-1/8"		
1085LH	3/4	1-1/4"	3"-		
3/4" Shank - Double Flute					
1105LH	3/4"	2"	5"		
1126LH*	3/4"	2-1/2"	5"		
1128LH*	3/4"	2-1/2"	5-1/2"		

^{* =} recommended for "Topmaster" machines



Carbide Tipped Straight Router Bits Continued ...

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1/4	" Shank	Straight	Bits				
Stock	Cutting	Cutting	Overall				
Number	Diameter	Length	Length				
	Single Flute						
1004	1/4"	3/4"	2-1/4"				
1005	1/4"	1"	2-1/2"				
1007	1/4"	1"	3-1/8"				
1008	9/32"	3/4"	2-1/4"				
		e Flute					
1012	1/4"	1/2"	2"				
1013	1/4"	3/4"	2-1/4"				
1014	1/4"	1"	2-1/2"				
1016	1/4"	1"	3"				
1016-01	1/4"	1"	3-1/4"				
1018	9/32"	1"	3"				
1019	5/16"	1"	2-1/2"				
1020	5/16"	1"	2-3/4"				
1020x8	5/16"	1"	2-3/4"				
1021	3/8"	3/4"	2-1/4"				
1022	3/8"	1"	2-1/2"				
1023	3/8"	1-1/4"	2-3/4"				
1024	7/16"	1"	2-1/2"				
1024A	31/64"	3/4"	2-1/4"				
1025	1/2"	3/4"	2-1/4"				
1026	1/2"	1"	2-1/2"				
1027	9/16"	3/4"	2-1/4"				
1027A	19/32"	3/4"	2-1/4"				
1028	5/8"	3/4"	2-1/8"				
1029	11/16"	3/4"	2-1/8"				
1029A	23/32"	3/4"	2-1/8"				
1030	3/4"	3/4"	2-1/8"				
1031	3/4"	1"	2-5/8"				
1033	1"	3/4"	2-1/8"				
1303	1-1/4"	1/2"	2-1/8"				



3/8" Shank Straight Bits					
Stock	Cutting	Cutting	Overall		
Number	Diameter	Length	Length		
	Single Flute				
1035	3/8"	1"	2-5/8"		
1036	3/8"	1-1/4"	2-7/8		
	Doubl	e Flute			
1039	3/8"	1"	2-5/8"		
1040WM	3/8"	1-1/4"	2-7/8"		
1041	3/8"	1-1/4"	3-5/8"		
1043	1/2"	1"	2-1/2'		
1045	7/8"	1"	2-1/2"		



	1/2" Shank Straight Bits						
Stock	Cutting	Cutting	Overall	Special			
Number	Diameter	Length	Length	Use			
	Single Flute						
1049	3/8"	1"	2-5/8"				
1050	3/8"	1-1/4"	2-7/8"				
1051	1/2"	3/4"	2-3/8"	Midwest Machine			
1052	1/2"	1-1/4"	2-7/8"				
1054 1055	1/2" 1/2"	1-1/2" 2"	3-1/8" 4-1/8"	_			
1055A	1/2"	2-1/2"	4-1/8				
100011	1/2		le Flute				
1058	1/4"	3/4"	2-3/8"	Incra TM			
1059	9/32"	3/4"	2-3/8"				
1060	5/16'	1"	2-5/8"				
1061	3/8"	3/4"	2-3/8"				
1062	3/8"	1"	2-5/8"	Incra TM			
1063	3/8"	1-1/4"	2-7/8"				
1064	13/32"	3/4"	2-1/2"				
1065	7/16"	1-1/4"	2-7/8"	7 1 11150			
1065L	7/16"	1-1/4"	3-1/4"	Leigh #150			
1065A	31/64"	1"	2-5/8"	Undersized Plywood Dado			
1066	1/2"	1"	2-5/8"				
1067	1/2"	1-1/4"	2-7/8"	Leigh # 160			
1067F	1/2"	1-1/4"	2-7/8"	Carbide Boring Point			
1069	1/2" 1/2"	1-1/2"	3-1/8" 3-1/8"	Danie Chan			
1069DS 1070	1/2"	1-1/2" 1-1/2"	3-1/8 4-1/8"	Down Shear			
1070	1/2"	2"	3-1/2"				
1071	1/2"	2"	4-1/8"	_			
1073	1/2"	2-1/2"	4-3/8"				
1074	17/32"	1-1/4"	2-7/8"				
1075	9/16"	1-1/4"	3"				
1075A	19/32"	3/4"	2-1/4"	Undersize Plywood Dado			
1076	5/8"	1"	2-1/2"				
1076F	5/8"	1"	2-1/2	Carbide Boring Point			
1077	5/8"	1-1/4"	3"				
1078	5/8"	1-1/2"	3"				
1079	5/8"	2"	4"				
1080	21/32"	1-1/4"	3"				
1082 1083	11/16" 11/16"	1"	2-1/2" 3"	_			
1083 1083A	23/32"	1-1/4	2-1/2"	Undersize Plywood Dado			
1302A	3/4"	5/8"	2-1/2"	Mortising Mortising			
1084	3/4"	1"	2-3/4"	Wortising			
1085	3/4"	1-1/4"	3"				
1085F	3/4"	1-1/4"	3"	Carbide Boring Point			
1086	3/4"	1-1/2"	3-1/4"				
1087	3/4"	2"	3-5/8"				
1088	25/32"	1-1/4"	3"				
1090	13/16"	1-1/4"	3"				
1091	7/8"	1-1/4"	3"				
1093	1"	1-1/4"	3"				
1093F	1"	1-1/4"	3"	Carbide Boring Point			
1094	1"	1-1/2"	3"				
1095	1"	2"	3-3/4"				
1096	1-1/8"	1-1/2"	3"	Mortisina			
1304 1097	1-1/4" 1-1/4"	1/2" 1-1/2"	2-1/8"	Mortising			
1097	1-1/4 1-3/8"	1-1/2"	3"				
1098	1-3/8	1-1/4"	3"				
1100	1-3/4"	1-1/4"	3"				
1101	2"	1-1/4"	3"				
1101	_	1 2 7 1					



Carbide Tipped Straight Router Bits – Metric Sizes

Made in Canada by FS Tool

1/4" Shank Straight Metric Bits				
Stock	Cutting	Cutting	Overall	
Number	Diameter	Length	Length	
RM100	3mm	5/16"	1-9/16"	
RM101	4mm	7/16"	2"	
RM102	5mm	7/16"	2"	
RM103	6mm	3/4"	2"	
RM104	7mm	3/4"	2"	
RM105	8mm	3/4"	2"	
RM106	8mm	1"	2-1/4"	
RM107	9mm	3/4"	2"	
RM108	10mm	3/4"	2"	
RM109	11mm	3/4"	2" 2"	
RM110	12mm	3/4"	2"	
RM111	13mm	3/4"	2"	
RM112	14mm	3/4"	2"	
RM113	15mm	3/4"	2"	
RM114	16mm	3/4"	2"	
RM115	16mm	1-1/4"	2-1/4"	
RM116	17mm	3/4"	2"	
RM117	18mm	3/4"	2"	
RM118	19mm	3/4"	2"	
RM119	20mm	3/4"	2"	
RM120	21mm	3/4"	2"	
RM121	22mm	3/4"	2"	
RM122	25mm	3/4"	2"	



1/2	1/2" Shank Straight Metric Bits				
Stock	Cutting	Cutting	Overall		
Number	Diameter	Length	Length		
RM130	6mm	3/4"	2-1/2"		
RM131	8mm	1"	2-5/8"		
RM132	10mm	1"	2-1/2"		
RM133	10mm	1-1/4"	3"		
RM134	12mm	1"	2-5/8"		
RM135	12mm	1-1/4"	2-7/8"		
RM136	12mm	1-1/2"	3"		
RM137	12mm	2"	4-1/4"		
RM138	14mm	1"	2-5/8"		
RM140	16mm	1"	2-5/8"		
RM141	16mm	1-1/4"	2-7/8"		
RM142	16mm	1-1/2"	3-1/8"		
RM143	18mm	1-1/4"	2-7/8"		
RM144	19mm	1"	2-5/8"		
RM145	19mm	1-1/4"	2-7/8"		
RM146	19mm	1-1/2"	3-1/8"		
RM147	20mm	1"	2-5/8"		
RM148	20mm	1-1/4"	2-7/8"		
RM149	22mm	1"	2-5/8"		
RM150	25mm	1-1/4"	2-7/8"		
RM151	25mm	1-1/2"	3-1/8"		
RM152	27mm	1-1/4"	2-7/8"		
RM153	30mm	1"	2-5/8"		
RM154	35mm	1"	2-5/8"		
RM155	40mm	1-1/4"	2-7/8"		
RM156	51mm	1-1/4"	2-7/8"		



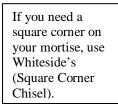


Mortising/ Staggertooth Router Bits

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Mortise Bits						
Stock	Stock Cutting Cutting Overall					
Number	Diameter	Length	Length			
	1/4" Shank					
1300	1/2"	3/4"	2-1/8"			
1301	5/8"	3/4"	2-1/8"			
1302	3/4"	3/4"	2-1/8"			
1303	1-1/4"	1/2"	2-1/8"			
1/2" Shank						
1302A	3/4"	5/8"	2-1/4"			
1304	1-1/4"	1/2"	2-1/8"			



9600 – Square Corner Chisel

Use this tool to square up the round corners left behind when routing hinge mortises. Hold unit in mortise corner and strike with hammer. This chisel features a sharp 3/8" square hardened steel cutting blade. Made in the USA by Whiteside Machine Company.





	Staggertooth Bits				
Stock Number	Overall Length				
	1/2" Shank				
1201	3/8"	1-1/2"	3-1/8"		
1202	1/2"	1-1/2"	3-1/8"		
1203	1/2"	2-1/8"	4"		
1205	1/2"	2-5/8"	5-1/2"		



Helix Mortise Arbors					
Stock Shank Thread Overall Length					
HMA-1/4	1/4"	1/4"-28	1-3/4"		
HMA-1/2	1/2"	1/4"-28	1-3/4"		
HMA-1/4A*	1/4"	5/16"-24	1-3/4"		
HMA-1/2A*	1/2"	5/16"-24	1-3/4"		

^{*} Fits #13-1250A only



	Screw Type Helix Mortise With Downshear – Cutter Only				
Stock	Cutting D	iameter	Cutting	Overall	
Number	Fractional	Decimal	Length	Length	
13-500	1/2"	.500	5/8"	7/8"	
13-515	33/64"	.515	5/8"	7/8"	
13-531	17/32"	.531	5/8"	7/8"	
13-562	9/16"	.562	5/8"	7/8"	
13-625	5/8"	.625	5/8"	7/8"	
13-640	41/64"	.640	5/8"	7/8"	
13-656	21/32"	.656	5/8"	7/8"	
13-687	11/16"	.687	5/8"	7/8"	
13-719	23/32"	.719	5/8"	7/8"	
13-750	3/4"	.750	5/8"	7/8"	
13-765	49/64"	.765	5/8"	7/8"	
13-781	25/32"	.781	5/8"	7/8"	
13-812	13/16"	.812	5/8"	7/8"	
13-875	7/8"	.875	5/8"	7/8"	
13-937	15/16"	.937	5/8"	7/8"	
13-1000	1"	1.000	1/2"	1/2"	
13-1125	1-1/8"	1.125	1/2"	1/2"	
13-1250	1-1/4"	1.250	1/2"	1/2"	
13-1250A*	1-1/4"	1.250	1/2"	1/2"	

* 13-1250A Supplied with 5/16"-24 threads All others supplied with 1/4"-28 threads Special cutting diameters available by special order.



Up/Down Staggertooth Bits						
Oppo	osite Shear	(compress	sion)			
Stock	211111					
Number	Diameter	Length	Length			
	1/2" Shank					
1250	1/2"	1-1/2"	3-1/2"			
1252	1/2"	2"	4"			
	5/8" SI	nank				
1260 3/4" 2" 4"						
3/4" Shank						
1270						

Round Nose and Half Round Router Bits

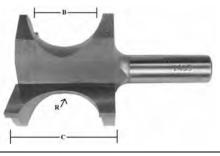
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Round Nose Bits (Core Box)				
Stock Number	Radius	Cutting Diameter	Cutting Length	Overall Length
		1/4" Shan	k	
SC39*	1/16"	1/8"	1/4"	2"
SC40*	3/32"	3/16"	3/8"	2"
SC41*	1/8"	1/4"	1/2"	2"
1403	3/16"	3/8"	1/2"	2"
1404	1/4"	1/2"	5/8"	2-1/4"
1405	5/16"	5/8"	3/8"	2"
1406	3/8"	3/4"	7/16"	2"
		1/2" Sha	nk	
1407	3/16"	3/8"	1"	2-5/8"
1408	1/4"	1/2"	1-1/4"	2-7/8"
1410	5/16"	5/8"	1-1/4"	2-7/8"
1411	3/8"	3/4"	1-1/4"	2-7/8"
1412	7/16"	7/8"	1-1/4"	2-7/8"
1413	1/2"	1"	1-1/4"	2-7/8"
1414	5/8"	1-1/4"	1-1/4"	3"
1415	3/4"	1-1/2"	1-1/4"	3"
1416	7/8"	1-3/4"	1-1/4"	3"
1417	1"	2"	1-1/4"	3"
		3/4" Sha	nk	
1420	3/8"	3/4"	2"	4"

^{*-}Solid Carbide



Half Round (Bull Nose)				
Stock Number	"R" Radius	"B" Opening of Cutter	"C" Cutting Length	Large Diameter
		1/4" Shank	•	
1425	3/32"	3/16"	1/2"	3/4"
1426	1/8"	1/4"	9/16"	7/8"
1427	3/16"	3/8"	7/8"	1"
1428	1/4"	1/2"	1"	1-1/8"
		1/2" Shank	•	
1429	3/32"	3/16"	1/2"	3/4"
1430	1/8"	1/4"	9/16"	7/8"
1431	3/16"	3/8"	7/8"	1"
1432	1/4"	1/2"	1"	1-1/8"
1432A	5/16"	5/8"	1"	1-1/4"
1433	3/8"	3/4"	1-1/4"	1-5/8"
1433A	7/16"	7/8"	1-1/2"	1-7/8"
1434	1/2"	1"	1-1/2"	1-15/16"
1434A	9/16"	1-1/8"	1-1/2"	1-15/16"
1435	5/8"	1-1/4"	1-3/4"	2-3/16"
1436	3/4"	1-1/2"	1-7/8"	2-7/16"

Note- Large Diameter minus "B" opening equals small diameter.



Round Nose With Bearing Guide

The addition of a shank mounted bearing extends the use of the round nose bits in lettering, veining, or decorative cuts when following a template.

Stock	Radius	Cutting	Cutting	Bearing
Number		Diameter	Length	Number
1404B	1/4"	1/2"	5/8"	B9WM
1405B	5/16"	5/8"	3/8"	B6WM
1406B	3/8"	3/4"	7/16"	B4WM

Oval Edge (Half Bull Nose)				
Stock Number	"A" Bead Opening	"B" Bead Depth	"C" Cutting Length	Large Diameter
	1	1/2" Shank	•	
1474	1/2"	1/8"	1"	3/4"
1476	3/4"	3/16"	1-1/4"	1"
1478	1"	3/16"	1-1/4"	1"
1480	1-1/2"	1/4"	1-3/4"	1-1/4"



Plunge Cut Hand Grip				
Stock Number Opening Depth Cutting Overall Length				
1440WM	7/8"	1/4"	1-3/8"	3-1/2"

Use with B11 Bearing and LC 1/2 lock collar on shank for guide template routing.





V Groove, Panel and Cove Router Bits

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V Groove - 90° Included Angle						
Stock Number			Overall Length			
	Number Diameter Length Length 1/4" Shank					
1500*	1/4"	1/8"	1-1/2"			
1501	3/8"	3/16"	1-7/8"			
1502	1/2"	1/4"	1-7/8"			
	1/2" Sh	ank				
1503	1/2"	1/4"	2"			
1504	3/4"	3/8"	2-1/4"			
1505	1"	1/2"	2-1/2"			
1507	1-1/2"	3/4"	2-3/4"			

^{* -} Solid Carbide



Panel Bits						
	-Pilot	Plunge P	oint-			
Stock	Cutting	Cutting	Shank	Overall		
Number	Diameter	Length	Diameter	Length		
	Single Flute					
1700	1/4"	3/4"	1/4"	2-5/8"		
1701	3/8"	1"	3/8"	3-1/4"		
1702	1/2"	1-1/4"	1/2"	4"		
	D	ouble Flut	e			
1704	3/8"	1"	1/4"	3-1/4"		
1705	3/8"	1"	3/8"	3"		
1706	1/2"	1-1/4"	1/2"	4"		



V Groove - 60° Included Angle					
Stock Number	Cutting Diameter	Point Length	Overall Length		
1/4" Shank					
*1540	1/4"	7/32"	1-1/2"		
*#1541	1/4"	7/32"	2"		
1550	1/2"	7/16"	2"		
1/2" Shank					
1560	1/2"	7/16"	2-1/4"		

^{* -} Solid Carbide

^{# -} Features three flutes for improved veining.



	Point Cutting Roundover					
	Decorative	Trimming a	nd Lettering	Ţ		
Stock	Radius					
Number	111111111111111111111111111111111111111	Diameter	Length	Length		
	1/4" Shank					
1570	3/16"	3/8"	3/8"	2"		
1572	1/4"	1/2"	1/2"	2"		
1574	1574 3/8" 3/4" 5/8" 2"					
	1/2" Shank					
1580	3/8"	3/4"	5/8"	2-1/4"		



Cove Bits -All have Bearing Number B3WM-				
Stock Number	Radius	Large Diameter	Cutting Length	
	1/4"	Shank		
1800A	3/16"	7/8"	1/2"	
1800	1/4"	1"	1/2"	
1801	3/8"	1-1/4"	1/2"	
1802	1/2"	1-1/2"	5/8"	
	1/2"	' Shank		
1803	1/4"	1"	1/2"	
1804	3/8"	1-1/4"	1/2"	
1805	1/2"	1-1/2"	5/8"	
1806	5/8"	1-3/4"	3/4"	
1807	3/4"	2"	7/8"	
1810	1"	2-1/2"	1"	



Rabbeting/Slotting Cutters and Roman Ogee Router Bits

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	Rabbet Bits					
Stock Number						
	1/4" Shank					
1900	1-1/4"	1/2"	3/8"	B3WM		
1951	1-3/8"	1/2"	1/2"	B2WM		
		1/2" Shank				
1901	1-1/4"	1/2"	3/8"	B3WM		
1954	1-3/8"	1/2"	1/2"	B2WM		
1959	1-7/8"	1"	3/4"	B2WM		



	Slotting and Rabbeting					
Stock	Large	Cutting	Cutting	Overall		
Number	Diameter	Length	Depth	Length		
		1/4" Shank				
1904	1-1/4"	1/8"	3/8"	2"		
1908*	1-1/2"	5/32"	1/2"	1-3/4"		
1912	1-1/4"	1/4"	3/8"	2"		
1916	1-1/4"	3/8"	3/8"	2"		
1920	1-1/2"	1/2"	1/2"	2"		
		1/2" Shank				
1906	1-1/4"	1/8"	3/8"	2"		
1910*	1-1/2"	5/32"	1/2"	2"		
1914	1-1/4"	1/4"	3/8"	2"		
1918	1-1/4"	3/8"	3/8"	2-1/8"		
1922	1-1/2"	1/2"	1/2"	2-1/4"		
1924	1-1/4"	3/4"	3/8"	2-1/2"		

B3WM Bearing Supplied

Increase the versatility of your Rabbeting Bits by simply changing the bearing size to vary your cutting depth.



	Roman Ogee						
	-Bear	ing Number	B3WM-				
Stock Number	Stock Radius Large Cutting Overall						
		1/4" Shank					
2200	5/32"	1-1/8"	9/16"	2"			
2201	1/4"	1-1/2"	11/16"	2-1/4"			
		1/2" Shank					
2202	2202 5/32" 1-1/8" 9/16" 2-1/4"						
2203	1/4"	1-1/2"	11/16"	2-3/8"			
2210	3/8"	2"	1"	2-3/4"			



Slotting Cutters -1-7/8" Cutting Diameter – 5/16" Bore-				
Stoc Numl		К	erf	
3 Wing	4 Wing	Decimal	Fractional	
6700A	6700B	.062	1/16"	
6701A	X	.070	X	
6702A	X	.080	X	
6703A	6703B	.094	3/32"	
6704A	X	.100	X	
6704C	X	.110	7/64"	
6705A	6705B	.125	1/8"	
6708A	X	.156	5/32"	
6709A	X	.187	3/16"	
6709C	X	.218	7/32"	
6710A	6710B	.250	1/4"	
6712A	X	.281	9/32"	

Special sizes available upon request.



Slotting Cutter Arbors -Includes B5WM Bearing for 1/2" depth of cut					
Stock	Stock Shank Overall				
Number	Number Size				
A200B	1/4"	2-3/8"			
A205B	3/8"	2-3/8"			
A210B	1/2"	2-3/8"			
A220B	1/2"	4"			

Note: A220B has an extra long shank for extended reach.

Use B20 Bearing for 9/16" depth of cut. Use B25 Bearing for 3/8" depth of cut. Use B26 Bearing for 1/4" depth of cut.

Use B27 Bearing for 5/8" depth of cut.

^{* -} Proper size for Biscuit Joining.



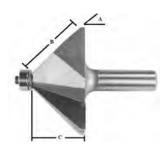
Roundover and Chamfer Router Bits

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Roundover & Beading Ball Bearing Guide				
Round- Over Stock Number	Beading Stock Number	1/4" Shank Radius	Large Diameter	Cutting Length
2000A	2100A	1/16"	5/8"	1/2"
2000C	2100C	1/8"	3/4"	1/2"
2000D	2100D	5/32"	13/16"	1/2"
2000	2100	3/16"	7/8"	1/2"
2001	2101	1/4"	1"	1/2"
2002	2102	5/16"	1-1/8"	1/2"
2003	2103	3/8"	1-1/4"	5/8"
2004	2104	1/2"	1-1/2"	3/4"
		1/2" Shank	C	
2005	2105	3/16"	7/8"	1/2"
2006	2106	1/4"	1"	1/2"
2007	2107	5/16"	1-1/8"	1/2"
2008	2108	3/8"	1-1/4"	5/8"
2008A	X	7/16"	1-3/8"	5/8"
2009	2109	1/2"	1-1/2"	3/4"
2009A	X	5/8"	1-3/4"	1"
2009B	X	9/16"	1-5/8"	3/4"
2010	2110	3/4"	2"	1"
2011	X	7/8"	2-1/4"	1-1/8"
2012	X	1"	2-1/2"	1-5/16"
2013	X	1-1/8"	3"	1-1/2"
2014	X	1-1/4"	3-1/4"	1-3/4"
2015	X	1-3/8"	3-1/2"	1-3/4"
2016	X	1-1/2"	3-3/4"	1-7/8"

Use B3WM for Rounding Over Use B2 for Beading Use B4WM for 2013 through 2016



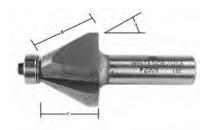
45° Chamfer						
	-Bearing Number B3WM-					
Stock	Stock "A" "B" "C" Overall					
Number	Degree	Cutting	Length			
Number	Of Angle	Height	Length			
		1/4" Shank				
2302	45°	5/8"	7/16"	2"		
		1/2" Shank				
2305	2305 45° 5/8" 7/16" 2-1/4"					
2306 45° 1-1/16" 3/4" 2-1/2"						
2310	45°	1-1/2"	1-1/16"	3"		



Plunge Roundover						
With Plunge Point						
Stock Number	"R" Radius	"A" Large Diameter	"B" Small Diameter	"C" Pattern Length	Overall Length	
	•	1/4" S	hank		•	
2050	1/8"	3/8"	1/8"	1/4"	1-3/4"	
2051	3/16"	5/8"	1/4"	1/8"	1-3/4"	
2052	1/4"	3/4"	1/4"	3/8"	1-7/8"	
1/2" Shank						
2055	1/4"	3/4"	1/4"	1/4"	2"	
2056	1/4"	3/4"	1/4"	3/8"	2"	
2057	3/8"	1"	1/4"	5/16"	2-1/8"	
2058	3/8"	1"	1/4"	9/16"	2-1/4"	
2060	1/2"	1-3/8"	3/8"	3/4"	2-1/2"	
2062	9/16"	1-5/8"	1/2"	1"	2-3/4"	
2064	5/8"	1-3/4"	1/2"	1-1/16"	3"	
2066	3/4"	2"	1/2"	1-1/8"	3"	
	Roundov	er & Edge	e Trim (lo	ng nose)		
		1/2" S	hank			
2068*	3/16"	1"	1/2"	13/16"	2-5/8"	
2070**	3/16"	1"	1/2"	1-5/16"	3-1/8"	
2072*	1/4"	1-1/8"	1/2"	13/16"	2-5/8"	
2074**	1/4"	1-1/8"	1/2"	1-5/16"	3-1/4"	
2076*	3/8"	1-3/8"	1/2"	13/16"	2-3/4"	
2078**	3/8"	1-3/8"	1/2"	1-5/16"	3-1/4"	

^{* -} Edge trim for 3/4" stock

^{** -} Edge trim for 1-1/4" stock



	Edge Bevel -Bearing Number B3WM-				
Stock Number	"A" Degree Of Angle	"B" Cutting Length	"C" Cutting Height	Overall Length	
		1/4" Shank			
2298*	7°	3/8"	3/8"	2-1/8"	
2300	15°	1/2"	1/2"	2"	
2300A*	15°	1/4"	1/4"	2"	
2301	25°	9/16"	1/2"	2"	
2308 1	30°	7/8"	3/4"	2-3/4"	
	1/2" Shank				
2325 3	15°	1"	15/16"	2-3/4"	
2307 2	22-1/2°	15/16"	7/8"	2-3/4"	
2309 1	30°	7/8"	3/4"	2-3/4"	

- * Used on Laminate Trim
- 1 Used for six sided boxes.
- 2 Used for eight sided boxes.
- 3 Used for twelve sided boxes.



Keyhole/ Carbide Tipped Flush Trim Router Bits

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Flush Trim - Two Flute				
Stock Number	Cutting Diameter	Cutting Length	Overall Length	Bearing Number
	1	/4" Shank		
2400	3/8"	1"	2-5/8"	B1
2401	3/8"	1/2"	2-1/8"	B1
2402	1/2"	1"	2-1/2"	B3WM
2403	1/2"	1/2"	2-1/8"	B3WM
	1	/2" Shank		
2404A	3/8"	1"	3-1/8"	B1
2405	1/2"	1"	3-1/4"	B3WM
2406	1/2"	1/2"	2-3/4"	B3WM
2407	1/2"	1-1/2"	3-5/8"	B3WM
2408	1/2"	2"	4"	B3WM
2410	3/4"	1-1/4"	3"	B4WM



Flush Trim - Two Flute With Double Bearings					
Stock Number	Cutting Diameter	Cutting Length	Overall Length	Bearing Number	
	1/2" Shank				
2457	1/2"	1-1/2"	3-7/8"	B3WM	
2458	1/2"	2"	4-1/4"	B3WM	



Down Shear Flush Trim – Two Flute -					
Stock	Cutting	Cutting	Overall	Bearing	
Number	Diameter	Length	Length	Number	
	1	/4" Shank			
2560	3/4"	5/8"	2-1/8"	B4WM	
	1/2" Shank				
2570	3/4"	1"	3"	B4WM	
2575	3/4"	1-1/2"	3-1/2"	B4WM	
2580	3/4"	2"	4"	B4WM	



Flush Trim V-Groove - Two Flute					
Stock Number	Cutting Diameter	Cutting Length	Shank Diameter	Overall Length	Bearing Number
2425	1/2"	1"	1/4"	2-1/2"	B3WM
2426	1/2"	1"	1/2"	3-1/4"	B3WM



]	Flush Trim - Three Flute				
Stock	Cutting	Cutting	Overall	Bearing	
Number	Diameter	Length	Length	Number	
	1	/4" Shank	•		
2500	1/2"	1"	2-1/2"	B3WM	
2501	1/2"	1/2"	2-1/8"	B3WM	
	1	/2" Shank			
2502	1/2"	1"	3-1/4"	B3WM	
2503	1/2"	1/2"	2-3/4"	B3WM	
2504	1/2"	1-1/2"	3-5/8"	B3WM	
2505	1/2"	2"	4"	B3WM	



Flush Trim - Three Flute With Double Bearings				
Stock Number	Cutting Diameter	Cutting Length	Overall Length	Bearing Number
1/2" Shank				
2554	1/2"	1-1/2"	3-7/8"	B3WM
2555	1/2"	2"	4-1/4"	B3WM



Overhang Trim Bit				
Stock Number	Overhang	Cutting Diameter	Cutting Length	Bearing Number
2468	1/16"	3/8"	1/2"	B3WM
2470	1/8"	3/8"	1/2"	B7WM



Keyhole					
Stock	Large	Small	Cutting	Overall	
Number	Diameter	Diameter	Length	Length	
	1/4" Shank				
3050	3/8"	3/16"	7/16"	1-1/2"	
3052	1/2"	5/16"	7/16"	1-1/2"	
1/2" Shank					
3051	3/8"	3/16"	7/16"	2-1/8"	
3053	1/2"	5/16"	7/16"	2-1/8"	



Laminate Trim/ Multi-sided Router Bits

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Laminate Trim Bits					
·	Two Flute -	Ball Beari	ng Guide		
Stock Number					
	1.	/4" Shank			
2401	Flush	3/8"	1/2"	B1	
2298	7°	9/16"	7/16"	B3WM	
2300A	15°	5/8"	1/4"	B3WM	
2301	25°	1"	9/16"	B3WM	



Combination Flush or Bevel Laminate					
	Trim Bits				
	T	wo Flute			
Stock	Cutting	Degree	Cutting	Overall	
Number	Diameter	of Angle	Length	Length	
1/4" Shank					
2800	7/16"	22-1/2°	1/2"	1-1/8"	
2801	7/16"	22-1/2°	1/2"	1-7/8"	



	Laminate Trimmers				
	With Eu	ro Square I	Bearing		
Stock Number					
	1/4" Shank				
2640	1/2"	1/4"	1-5/8"	B3SQ	
1/2" Shank					
2660	3/4"	5/8"	2-1/4"	B8SQ	



Multi Side Bits

A great way to join up many multi-sided projects (planters, columns, barrels, etc.). Very straightforward, this joint requires routing a notch in only one edge of each side. Notching also improves ease of assembly and total glue area. All bits are 1/2" shank and are designed for use in a router table with a fence guide.

Stock Number	Number Of Sides	Stock (Maximum)	Large Diameter
3506	6 or 12	7/8"	1-7/8"
3508	8	7/8"	1-3/4"
3516	16	1"	1-5/8"

On six and eight sided objects, the exterior side is cut face up on a router table. Twelve and sixteen sided objects are cut face down. The same bit (#3506) is used for six and twelve sided objects.

Either flush or ribbed (outside corners protruding) construction is possible. Ribbed construction is recommended with twelve and sixteen sides because the interior leg of the notch will be very small when made flush. Outside corners on ribbed construction can be cut or sanded down for flush appearance if desired.

Location of the inside corner of the notch (i.e. vertical bit adjustment) is important for final finish appearance. The outside leg of the notch (closest to the exterior) should be the same length as the stock thickness for flush construction. This will put the inside corner of the notch in the center of the side on six sided flush projects. The inside corner will be below center (furthest from exterior side) on all others. Allow extra stock to experiment and set corner height as desired. Move notch towards exterior side (raise the bit) to increase rib size (amount of outside corner protruding). Move notch away from exterior side (lower the bit) to decrease amount of rib. Note: bit adjustment is reversed on twelve and sixteen sides since those staves are cut face down.



Dovetail Router Bits

Made in the USA by Whiteside Machine Company For a full line of products, Please request a catalog.



Stock	Large	Depth	Shank	Overall	Cross
Number	Diameter	Of Cut	Diameter	Length	Reference
			7° Angle		
D7-625	5/8"	7/8"	1/2"	2-5/8"	Incra TM
D7-750	3/4"	7/8"	1/2"	2-5/8"	Incra TM
D7-875*	7/8"	7/8"	1/2"	2-1/2"	Stair Tread
			7-1/2° Angle		
D75-25 sc	1/4"	5/16"	1/4"	2-1/2	Incra TM /OmniJig® 43639
	•	•	8° Angle		
D8-250 sc	1/4"	1/4"	1/4"	2-1/2"	Leigh #50
D8-250x8 sc	1/4"	1/4"	8mm	2-1/2"	Leigh #50-8mm shank
D8-312	5/16"	3/8"	1/4"	2-1/4"	Leigh #60
D8-312x8	5/16"	3/8"	8mm	2-1/4"	Leigh #60-8mm shank
D8-375	3/8"	1/2"	1/4"	2-3/8"	Leigh #70
D8-375x8	3/8"	1/2"	8mm	2-3/8"	Leigh #70-8mm shank
D8-437	7/16"	5/8"	1/4"	2-3/8"	Leigh #75
D8-437x8	7/16"	5/8"	8mm	2-3/8"	Leigh #75-8mm shank
D8-500	1/2"	13/16"	1/4"	2-3/4"	Leigh #80
D8-500x8	1/2"	13/16"	8mm	2-3/4"	Leigh #80-8mm shank
D8-687	11/16"	1"	1/2"	3"	Leigh #90
D8-812	13/16"	1-1/4"	1/2"	3-1/4"	Leigh #100
			9° Angle		
D9-372	3/8"	3/8"	1/4"	2"	Incra TM
D9-373	3/8"	3/8"	3/8"	2"	
D9-375*	3/8"	3/8"	1/2"	2"	
D9-376*	3/8"	3/8"	1/2"	2-1/2"	Incra TM
D9-390*	.390	3/8"	1/2"	2"	
			10° Angle		•
D10-50	1/2"	5/8"	1/4"	2-1/2"	Incra TM /Leigh #101
D10-50x8	1/2"	5/8"	8mm	2-1/2"	Leigh #101-8mm shank
D10-55	1/2"	5/8"	1/2"	2-5/8"	Incra TM
	1		14° Angle		
D14-375	3/8"	3/8"	1/4"	2"	
D14-50	1/2"	1/2"	1/4"	2"	Incra TM /OmniJig® #43705
D14-51	1/2"	1/2"	1/4"	2-3/8"	Leigh #120
D14-51x8	1/2"	1/2"	8mm	2-3/8"	Leigh #120-8mm shank
D14-55	1/2"	1/2"	1/2"	2-1/2"	Incra TM /OmniJig® #43750
D14-531	17/32"	1/2"	1/4"	2"	Incra TM
D14-75	3/4"	3/4"	1/2"	3"	OmniJig® #43774
D14-100	1"	7/8"	1/2"	2-1/2"	
	•		18° Angle	•	•
D18-50	1/2"	3/8"	1/4"	2-1/4"	Leigh #128
D18-50x8	1/2"	3/8"	8mm	2-1/4"	Leigh #128-8mm shank
Straight Bits					
1020	5/16"	1"	1/4"	2-3/4"	Leigh #140
1020x8	5/16"	1"	8mm	2-3/4"	Leigh #140-8mm shank
* - Also stocked in				0, .	

^{* -} Also stocked in Left Hand add LH to stock number.

All bits designated $Incra^{TM}$ are also compatible with the $Jion-Tech^{TM}System$

sc - solid carbide



Bearings and Accessories

Made in the USA by Whiteside Machine Company For full line of products, Please request a catalog.



Ball Bearings					
Stock	Outside	Inside	4 1: 4:		
Number	Diameter	Diameter	Application		
B1A	1/4"	1/8"			
B1	3/8"	1/8"			
B2	3/8"	3/16"			
B3WM	1/2"	3/16"	Standard		
B3BLK	1/2"	3/16"	100pcs. Bulk		
B3S	1/2"	3/16"	Non-Mar Nylon Sleeve		
B3T	1/2"	3/16"	Teflon® Shield		
B3U	.490"	3/16	For re-sharps (undersize)		
B4WM	3/4"	1/4"	Standard		
B5WM	7/8"	5/16"			
B6WM	5/8"	1/4"			
B7WM	5/8"	3/16"			
B8WM	3/4"	3/16"			
B9WM	1/2"	1/4"			
B9U	.490"	1/4"	For re-sharps (undersize)		
B11	1-1/8"	1/2"	•		
B12WM	7/8"	3/8"			
B14	11/16"	3/16"			
B15	13/16"	3/16"			
B16	1-1/4"	1/2"			
B17	1-3/8"	1/2"			
B18	1-1/2"	1/2"			
B19	3/4"	1/2"			
B20	3/4"	5/16"			
B21	7/8"	1/4"			
B24	1-7/8"	1/2"			
B25	1-1/8"	5/16"			
B26	1-3/8"	5/16"			
B27	5/8"	5/16"			
B28	7/8"	3/16"			
B29	1"	3/16"			
BB300	7/8" X 10°	3/16"	Non-Mar Nylon Sleeve		



Square Bearings

Replace the standard 1/2" B3WM Bearing found on most of Whiteside's Edge Form Bits with the B3SQ square bearing if residue build-up on the bearing or marring of the work piece is a problem.

Recommended for solid surface applications. **B3SQ** is 1/2" square. **B8SQ** is 3/4" square. Both are standard 3/16" inside diameter.



Arbors				
Stock Number	Shank Diameter	Arbor Diameter	Arbor Length	Overall Length
A200	1/4"	5/16"	7/8"	2-3/8"
A205	3/8"	5/16"	7/8"	2-1/2"
A210	1/2"	5/16"	7/8"	2-5/8"
A220	1/2"	5/16"	7/8"	4"
A250	1/4"	5/16"	1-3/16"	2-3/4"
A260	1/2"	5/16"	1-3/16"	2-7/8"
A300	1/4"	5/16"	1-7/16"	3"
A310	1/2"	5/16"	1-7/16"	3-3/16"
A375	1/2"	5/16"	1-3/4"	3-3/8"
A550	1/2"	1/2"	1-7/8"	3-7/8"
A552	1/2"	1/2"	2-1/8"	4-1/8"
A560	1/2"	1/2"	2-3/8"	4-3/8"

Arbors include nut and washer



Steel Router Collets -Reducer Bushings-			
Stock Number	I.D.	O.D.	Overall Length
6400	1/4"	1/2"	1-1/4"
6400x8	8mm	1/2"	1-1/4"
6401	5/16"	1/2"	1-1/4"
6402	3/8"	1/2"	1-1/4"
6403	1/4"	3/4"	1-1/4"
6404	5/16"	3/4"	1-1/4"
6405	3/8"	3/4"	1-1/4"
6406	1/2"	3/4"	1-1/4"



Bearing Lock Collars				
Retaining Collars used when bearings are added to				
the shanks of router bits for following Templates.				
Stock Shank Outside				
Number Diameter Diameter				
LC-1/4	1/4"	7/16'		
LC-1/2 1/2" 11/16"				



Router Bit Sets and Wood Chisels

Router Bit Set # 401







	Router Bit Sets			
Stock Number	Number of Peices	Shank Size	Description	
Number	1 cices	Size	Contains most popular woodworking bits with 1/2" shanks.	
401	7 bits	1/2"	INCLUDES: 1/4" &1/2" Straight bits, 3/8" Roundover, 3/8"x 1/2" Rabbet, 3/8" Cove, 45°Chamfer, and 1/2" Flush Trim.	
402	7 bits	1/4"	Contains most popular woodworking bits with 1/4" shanks. INCLUDES: 1/4" &1/2" Straight bits, 3/8" Roundover, 3/8"x 1/2" Rabbet, 3/8" Cove, 45°Chamfer, and 1/2" Flush Trim.	
501	4 bits, 4 bearings	1/2"	Contains most popular Roudover/Beading bits with 1/2" shanks. Converts beading to roundover by changing bearing. INCLUDES: 1/4", 3/8", 1/2" & 3/4" Radii, extra bearings and wrench.	
502	5 bits, 5 bearings	1/4"	Contains whole range Roundover/Beading bits with 1/4" shanks. Converts beading to roundover by changing bearing. INCLUDES: 1/8", 3/16", 1/4", 3/8" & 1/2" Radii, extra bearings and wrench.	
600	8 bits	1/2"	Contains a collection of straight and half round bits. INCLUDES: 3/8", 1/2", 5/8" & 3/4" Straight bits, 3/8", 1/2", 5/8" & 3/4" Half Round bits This handy group covers the full assortment of bits needed for the INCRA® HingeCrafter.	

Firmer Chisels Firmer Gouges

Beveled Edges. Hardwood handles with leather cap to absorb mallet blows. All-purpose Chisel for work requiring a mallet. Good for detail work. 3" long blade.

Beveled outside. Made of high quality tool steel. Hardwood handles with leather cap to absorb mallet impact. Removes wood from concave surfaces.







Paring Tools

For fine finish work. Hand forged from high quality tool steel. Hand ground and finished by old time craftsmen. Enjoyed by woodworkers for over 100 years. Best grade hardwood handles.

No. 15 Paring Chisels

Beveled edges/bent shank. The 1" is 8-1/2 inches from bolster.



Stock Number	Width	
15-1	1/4	
15-2	3/8	
15-3	1/2	
15-4	5/8	
15-5	3/4	
15-6	1	
15-7	1-1/4	
15-8	1-1/2	

No. 32 Paring Chisels

Beveled Edges. The 1" is 8-1/2 inches from bolster.



Stock Number	Width
32-1	1/4
32-2	3/8
32-3	1/2
32-4	5/8
32-5	3/4
32-6	1
32-7	1-1/4
32-8	1-1/2
32-9	2

Series K33 are Only Available While Supples Last!

No. K33 Standard Wood Chisel

All have 2-1/2" blade length and high impact plastic handles.



*Stock Number	Width	
K331	1/4	
K332	3/8	
K333	1/2	
K334	5/8	
K335	3/4	
K336	1	
K337	1-1/4	
K338	1-1/2	
K339	2	

Replacement Handles Available When ordering handles specify blade width and number of tool to be fitted.

Professional Wood Chisels With Steel Capped Plastic Handles

Series BC are Only Available While Supplies Last!

Premiere line of wood chisels produced to Government Specifications #GGG-C-311. Blade, barrel and shank are forged from one piece of High Carbon Tool Steel. Two-zone heat treatment and temper for keen, long lasting cutting edge. 3" blade length with beveled edges, precision ground and polished. Steel cap to absorb hammer blows. Large, long life impact-resistant plastic handles. Made in the U.S.A. by Buck Bros.



Stock # 109BC

Individual Carded Chisels

*Stock Number	Width
101BC	1/4
102BC	3/8
103BC	1/2
104BC	5/8
105BC	3/4
106BC	1
107BC	1-1/4
108BC	1-1/2
109BC	2

Sets

Stock # 1040R

4 piece Chisel Set, consisting of 1/4", 1/2", 3/4", and 1" Chisels. Four of the most popular sizes.

Stock # 1060B

6 piece Chisel Set, consisting of 1/4", 1/2", 3/4", 1", 1-1/4", and 1-1/2" Chisels.



Stock # 1040R



Stock # 1060B



Wood Turning Chisels *All Wood Turning Chisels are Only Available While Supplies Last!*

For wood turners who strive for perfection, there is no finer wood turning tools. Made of the same fine steel for which Buck Brothers Tools are famous. The handles are made of the best well-seasoned hardwood available and are 10 inches long. Blades are 6 inches long.

Made in the U.S.A.



3/16 x 1/2

Stock	#	18-1

Turning Gouges

*Stock Number	Width
20-1	3/8
20-2	5/8
20-3	1"



Turning Chisels

Number

18-1

*Stock Number	Description
19-1	1/4 Skew Point
19-2	1/2 Skew Point
19-3	1" Skew Point
19-4	1/4 Square Point
19-5	1/2 Square Point
19-6	1" Square Point
19-7	1/2 Spear Point
19-8	1" Spear Point
19-9	1/4 Round Point
19-10	1/2 Round Point



Sets



*No. 812 - Set of 12 Tools

Skew Point	- 1/4	Round Point	- 1/4
Skew Point	- 1/2	Round Point	- 1/2
Skew Point	- 1"	Square Point	- 1/4
Gouge	- 3/8	Square Point	- 1/2
Gouge	- 5/8	Spear Point	- 1/2
Gouge	- 1"	Parting Tool	- 3/16x1/2



*No. 804- Set of 4 Tools

D T 1	1 /022
Paring Tool	-1/2"
Skew Point	- 1"
Spear Point	- 1/2"
Gouge	- 1"



*No. 808 - Set of 8 Tools

Skew Point	- 1/2"	Gouge	- 1"
Skew Point	- 1"	Spear Point	- 1/2
Gouge	- 3/8"	Round Point	- 1/2
Gouge	- 5/8"	Parting Tool	- 3/16x1/2

Professional Carvers

These fine carvers are forged from the finest steel, precision hardened and tempered, then hand finished with a fine cutting edge. The hardwood handles are 5" long, and the average total blade length is 5".



Some sizes Only Avaliable While Supplies Last!

Professional Carvers Individual						
*Stock	Tymo	Size	Description			
Number	Type	Size	Description			
BK010125	#1	1/8"	Firmer Chisel			
BK010250	#1	1/4"	Firmer Chisel			
BK010500	#1	1/2"	Firmer Chisel			
BK020125	#2	1/8"	Corner Chisel			
BK020250	#2	1/4"	Corner Chisel			
BK020500	#2	1/2"	Corner Chisel			
BK030500	#3	1/2"	Straight Gouge			
BK040250	#4	1/4"	Straight Gouge			
BK040500	#4	1/2"	Straight Gouge			
BK050750	#5	3/4"	Straight Gouge			
BK060250	#6	1/4"	Straight Gouge			
BK060625	#6	5/8"	Straight Gouge			
BK070750	#7	3/4"	Straight Gouge			
BK080250	#8	1/4"	Straight Gouge			
BK080500	#8	1/2"	Straight Gouge			
BK090750	#9	3/4"	Straight Gouge			
BK110062	#11	1/16"	Straight Gouge			
BK110250	#11	1/4"	Straight Gouge			
BK130500	#13	1/2"	Bent Gouge			
BK140625	#14	5/8"	Bent Gouge			
BK160250	#16	1/4"	Bent Gouge			
BK160500	#16	1/2"	Bent Gouge			
BK160625	#16	5/8"	Bent Gouge			
BK170250	#17	1/4"	Bent Gouge			
BK210125	#21	1/8"	Front Bent Chisel			
BK270250	#27	1/4"	Front Bent Chisel			
BK300250	#30	1/4"	Front Bent Gouge			
BK301000	#30	1"	Front Bent Gouge			
BK390250	#39	1/4"	Parting Tool			
BK390500	#39	1/2"	Parting Tool			

Professional Carver Sets

Stock Number: 6BK Six Piece Tool Set Contains: 1/2" - #1, 1/4" - #2, 1/4" - #6, 1/16" - #11, 1/8" - #21, and 1/4" - #39.

Stock Number: 8BK
Eight Piece Tool Set
Contains all tools in the 6BK set plus: 1/8" - #1 and 1/4" - #27.

Stock Number: 12BK Twelve Piece Tool Set Contains all tools in the 8BK set plus: 1/2" - #4, 3/4" - #7, 1/2" - #8, and 1/4" - #11.



What You Should Know About Screwdriver Bits

Commonly Asked Questions:

Are your screwdriver bits milled or forged? Most of our bits are forged for many reason such as life, performance, prompt delivery and better production. We do offer some as milled and they are indicated in the catalog as such.

How hard are your screwdriver bits? Extra Hard: 59-63 HRc, Medium Hard & Iso-Temp: 52-56 HRc

Why is this important? *Medium Bits* are recommended for driving standard (soft) screws and for impact use. *Extra Hard Bits* are for driving heat-treated or case hardened screws, such as sheet metal or self-tapping and self-drilling screws. *Iso-Temp* Screwdriver Bits are in the Medium Hard Range and also provide additional flex as needed in some applications such as Torq-Set or Tri-Wing Bits.

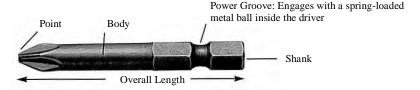
How do I determine if my bit failed due to being too hard or soft? In general soft bits will round while hard bits will shatter. Sometimes trial and error provides the best information.

Do your bits have ribbed tips? We offer ribbed tips in some of our Screwdriver Bit configurations and still offer bits without for those jobs where you may not need or want that tight of a fit. Ribs reduce slippage (cam-out) and can be a real advantage when desired.

Parts and Types of Screwdriver Bits:



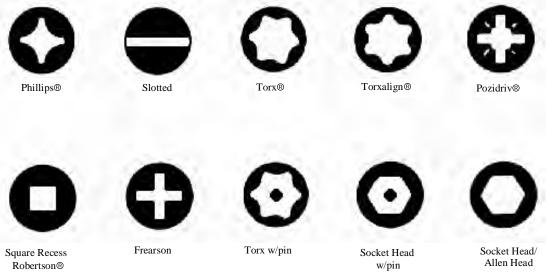
Insert Bits are compact bits that are economical, change over quickly, require less storage space and require a bit holder. They are 1" overall length with 1/4", 3/16"



Power Bits fit directly into the power tool for improved concentricity and easier clearance. They are 1-15/16" to 6" or longer overall length with 1/4" and 5/16" hex shanks.

Screw Head Types:

and 5/16" hex shanks.





Phillips®



Phillips® Drywall Bit

Drywall Bits 1/4" Shank Extra-hard					
Stock	Point	Overall			
Numbers Size Length					
24203	P2, rib	1"			



Phillips® Decking/Subflooring Bit

Decking / Subflooring Bits					
1/4" Shank					
]	Extra-hard				
Stock	Point	Overall			
Number Size Length					
24303	P2, rib	1"			



Phillips® Reduced Diameter Extra Length Bit

Reduced Diameter						
(.	(.187) Extra Length					
St	Stock Sizes					
Nur	nbers	51	LCS			
Extra	Iso-	Point	Overall			
Hard	Temp™	Size	Length			
	1/4" He	x Shank				
37513	X	1	2"			
37514	X	2	2"			
35715	X	2	3"			
	5/16" He	ex Shank				
27205	35352	1	1-1/4"			
27206	35353	2	1-1/4"			
27207	48280	3	1-1/4"			
27208	35354	4	1-1/4"			

Screw Driver Bits

Phillips® Insert Bits



Ribs:

The interlocking ribs of the anticam-out system provide higher torque. Components in the system are interchangeable with standard Phillips components.



Phillips®Insert Bit

- •Special bit design absorbs torque peaks reducing slippage and breakage.
- •Reduced diameter tip and ribs reduce cam-out and drywall damage.
- $\bullet \mbox{Cold}$ formed for optimum toughness and resistance to wear.
- •Most widely used style.
- •Many configurations and hardnesses.

	1/4" Hex Shank						
	Stock Numbers				S	Sizes	
Med Hard	Extra Hard	Ex. Hard Ribs	Iso- Temp™	Iso- Temp™ Ribs	Point Size	Overall Length	
X	27019	X	45143	X	0	1"	
25020	27020	46004	45189	45912	1	1"	
25021	27021	46005	45190	45913	2	1"	
25022	27022	X	45191	45914	3	1"	
X	27023	X	X	X	2	1-1/2"	
X	27024	X	X	X	2	2"	
X	27025	X	X	X	2	2-1/2"	
X	48429 -	Milled	X	X	2	1"	



Phillips® Reduced Diameter Bit

Reduced Diameter 1/4" Hex Shank						
	Stock Numbers Sizes					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					Point Size	Overall Length
X	27018	X	X	X	0R	1"
X	27035	X	X	X	1R	1"
25036	27036	45339	44963	45333	2R	1"

Screw Driver Bits Power Bits



Phillips®



Power Bit with Full Hex Body



Ribs: The interlocking ribs of the anti-camout system provide higher torque. Components in the system are interchangeable with standard Phillips components.



Power Bit with Round Body

1/4" Hex Shank with 1/4" Round Bodies						
Extra	Extra Point Overall					
Hard	Hard Size Length					
44150	2	1-15/16				
44153	44153 2 2-3/4					
44159	2	3-1/2				

- •Cold formed for optimum toughness and resistance to wear.
- •Most widely used style.
- •Many configurations and styles.

1/4" Hex Shank with Round Bodies							
St	ock Num	bers	Sizes				
Med	Extra Iso-		Point	Body	Overall		
Hard	Hard	Temp™	Size	Diameter	Length		
X	40938	X	0	3/16	1-15/16		
X	27360	35301	1	3/16	1-15/16		
25361	27361	49337	2	1/4	1-15/16		
X	42675	X	2R	1/4	1-15/16		
X	27362	35302	3	1/4	1-15/16		
X	37879	X	3	5/16	1-15/16		
X	27363	35303	1	3/16	2-3/4		
25364	27364	49338	2	1/4	2-3/4		
X	27365	35305	3	1/4	2-3/4		
X	37881	X	3	5/16	2-3/4		
X	28310	X	1	3/16	3		
X	28311	X	2	1/4	3		
X	28312	X	3	1/4	3		
X	27366	35306	1	3/16	3-1/2		
X	27367	49339	2	1/4	3-1/2		
X	27368	35308	3	1/4	3-1/2		
X	37885	X	3	5/16	3-1/2		
X	28313	35317	1	3/16	4		
X	28314	41251	2	1/4	4		
X	28315	X	3	1/4	4		
X	45794	X	1	3/16	6		
X	45625	41829	2	1/4	6		
X	45626	X	3	1/4	6		

1/4" Full Hex Body				
Extra	Iso-	Point	Overall	
Hard	Temp™	Size	Length	
37659	45326	1	1-15/16	
37661	45327	2	1-15/16	
37663	45328	3	1-15/16	
27369	45921	1	6	
27370	45922	2	6	
27371	35944	3	6	
44165	Milled	2	6	



Power Bit with 7/16" Hex Shank

7/16" Hex Shank 3-1/2" Overall			
Length			
Stock N	Stock Numbers		Sizes
Extra	Iso-	Point	Body
Hard	Hard Temp™		Diameter
27602	X	4	3/8



Power Bit Decking/Subflooring

Decking / Subflooring Bits				
1/4	1/4" Hex Shank			
Extra	Extra Point Overall			
Hard Size Length				
24310	P2, rib	1-15/16		
24311	P3, rib	1-15/16		
24325	P2, rib	3-1/2		



Screw Driver Bits Slotted Insert Bits

- $\bullet \text{Cold}$ formed for optimum toughness and resistance to wear.
- •Common in telephone and other electrical devices.
- •Proper sizing is important for efficiency.
- •Many configurations and hardnesses.

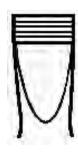
	1/4" Hex Shank				
Stock	Numbers	Sizes			
Extra	Iso-Temp™	Point	Blade	Blade	Overall
Hard	Ribbed	Size	Thickness	Width	Length
41175	X	0-1	.024	.109	1
41176	X	1-2	.026	.125	1
41177	X	2-3	.028	.140	1
41178	X	3-4	.032	.156	1
39534	X	4-5	.034	.187	1
39535	45329	5-6	.036	.218	1
39536	45330	6-8	.040	.250	1
39537	45331	8-10	.042	.281	1
39538	45332	10-12	.046	.281	1
39539	X	12-14	.050	.281	1
27000	X	4-5	.034	.187	1-1/2
27001	X	6-8	.040	.250	1-1/2
27002	X	8-10	.042	.281	1-1/2
27003	X	10-12	.046	.281	1-1/2
27004	X	12-14	.050	.281	1-1/2
27005	X	14-16	.055	.359	1-1/2



Slotted



Stock # 27005



Ribbed:

The interlocking teeth of the ribbed system provide higher torque. Components in the system are interchangeable with standard Slotted components.

5/16" Hex Shank				
Stock Numbers		Sizes		
Extra Hard	Point Size	Blade Thickness	Blade Width	Overall Length
27190	4-5	.034	.187	1-1/2
27191	6-8	.040	.250	1-1/2
27192	8-10	.042	.281	1-1/2
27193	10-12	.046	.281	1-1/2
27194	12-14	.050	.312	1-1/2
27195	14-16	.055	.359	1-1/2
27196	16-18	.064	.500	1-3/4



Stock # 27195

X = Not available



Screw Driver Bits Slotted Power Bits

1/4"	1/4" Hex Shank with Round Bodies			
Extra	Point	Blade	Blade	Overall
Hard	Size	Thickness	Diameter	Length
27460	1-2	.026	.122	1-15/16
27460	2-3	.028	.134	1-15/16
27461	3-4	.028	.154	1-15/16
27463	3-4 4-5	.032	.134	1-15/16
27463	5-6	.034	.167	1-15/16
27465	6-7	.038	.213	1-15/16
27466	8-10	.038	.275	1-15/16
27467	10-12	.042	.312	1-15/16
27468	12-14	.050	.360	1-15/16
27469	1-2	.026	.122	2-3/4
27470	2-3	.028	.134	2-3/4
27471	3-4	.032	.154	2-3/4
27472	4-5	.034	.187	2-3/4
27473	5-6	.036	.215	2-3/4
27474	6-7	.038	.250	2-3/4
27475	8-10	.042	.275	2-3/4
27476	10-12	.046	.312	2-3/4
27477	12-14	.050	.360	2-3/4
28290	1-2	.026	.122	3
28291	2-3	.028	.134	3
28292	3-4	.032	.154	3
28293	4-5	.034	.187	3
28294	5-6	.036	.215	3
28295	6-7	.038	.250	3
28296	8-10	.042	.275	3
28297	10-12	.046	.312	3
28298	12-14	.050	.360	3
27478	1-2	.026	.122	3-1/2
27479	2-3	.028	.134	3-1/2
27480	3-4	.032	.154	3-1/2
27481	4-5	.034	.187	3-1/2
27482	5-6	.036	.215	3-1/2
27483	6-7	.038	.250	3-1/2
27484	8-10	.042	.275	3-1/2
27485	10-12	.046	.312	3-1/2
27486	12-14	.050	.360	3-1/2
28300	1-2	.026	.122	4
28301	2-3	.028	.134	4
28302	3-4	.032	.154	4
28303	4-5	.034	.187	4
28304	5-6	.036	.215	4
28305	6-7	.038	.250	4
28306	8-10	.042	.275	4
28307	10-12	.046	.312	4
28308	12-14	.050	.360	4
27496	1-2	.020	.122	6
27497	2-3	.028	.134	6
27498	3-4	.032	.154	6
27499	4-5	.034	.187	6
27500	5-6	.036	.215	6
27501	6-7	.038	.250	6
27502	8-10	.042	.275	6
27503	10-12	.046	.312	6
27504	12-14	.050	.360	6



Slotted Ribbed:

The interlocking teeth of the ribbed system provide higher torque. Components in the system are interchangeable with standard Slotted components.



Slotted Round Body

- •Cold formed for optimum toughness and resistance to wear.
- •Common in telephone and other electrical devices.
- •Proper sizing is important for efficiency
- •Many configurations and hardnesses.

1/4" Full Hex Body			
1-15/16"Overall Length			
Iso- Point Blade			
Temp™	Size	Thickness	
Ribbed Size Thickness			
45334	5-6	.036	
45335	6-8	.040	
45336	8-10	.042	
45337	10-12	.046	



Slotted Full Hex Body

X = Not available

Torx® and Torxalign®

Torx®Tamper Resistant Insert Bits

•Tip drilled to fit Torx® tamper resistant screws.

1/4" Hex Shank 1" Overall Length		
Extra Point Hard Size		
38911	T7H	
38338	T8H	
38340	T9H	
38342	T10H	
38344	T15H	
38346	T20H	
38348	T25H	
38350	T27H	
38352	T30H	
38354	T40H	

5/16" Hex Shank 1-1/4" Overall Length		
Iso-Temp™ Point Size		
35380	T45H	
35381	T50H	
35382	T55H	



Torx® W/Pin



Torx® Tamper Resistant

Torxalign® Insert Bits (wedge)

- •Bits wedge into the screw.
- •Fits same screws as standard Torx® bits.

1/4" Hex Shank 1" Overall Length		
Extra	Point	
Hard	Size	
38763	T6W	
38765	T7W	
38767	T8W	
38769	T9W	
38771	T10W	
38365	T15W	
38367	T20W	
38369	T25W	
38371	T27W	
38373	T30W	



Torxalign®



Torxalign® Insert Bit

Torx®Female Square Drive

- •For ratchet wrenches
- •One-piece construction
- •Internal ball lock and groove.
- Automotive mechanic's choice.

Female Drive	
nes.	
ction.	
nd groove.	T D 6
nic's choice.	Torx®



Torx® Female Square Drive

Torxalign® Power Bits (wedge)

- •Bits wedge into the screw.
- •Fits same screws as standard Torx® bits.

1/4" Hex Shank				
1-15/16	1-15/16" Overall Length			
Extra	Point	Body		
Hard	Size	Diameter		
38728	T6W	.187		
38730	T7W	.187		
38734	T9W	.187		
38736	T10W	.187		
38375	T15W	.187		
38377	T20W	.240		
38379	T25W	.240		
38381	T27W	.240		
38383	T30W	.240		
	•			



Torxalign® Power Bit

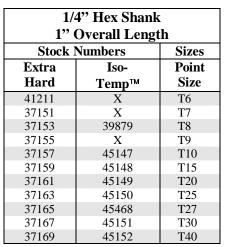
1/4", 3/8", & 1/2" Square Drive		
Iso-	Point	Square
Temp™	Size	Drive
38850	T9	1/4
38689	T10	1/4
38690	T15	1/4
38692	T25	1/4
38693	T27	1/4
38694	T30	1/4
38695	T40	3/8
38696	T45	3/8
40651	T47	3/8
38697	T50	3/8
38699	9-piece carded set includes	
	1/4"sq. dr.: T10; T15;	
	T20; T25; T27; T30; 3/8"	
	sq. dr.: T40; T45; T50.	



Screw Driver Bits

Torx® Insert Bits

- •Positive torque control with no cam-outs.
- •Maximum drive surface and longer drive life.
- •Hot formed for optimum toughness and resistance to wear.
- •Fastest growing style.
- •Many configurations and hardnesses.
- •Milled and chamfered.



5/16" Hex Shank 1-1/4" Overall Length

Point

Size

T30 T40

T45

T47

T50

T55

Extra

Hard

37171

37173

37175

X 37177

38333



Torx®

Torx® Insert

Torx® Power Bits

- Positive torque control with no cam-outs.
- •Maximum drive surface and longer drive life.
- •Hot formed for optimum toughness and resistance to wear.
- Fastest growing style.
- Many configurations and hardnesses.

1/4" Hex Shank					
Stock N	Stock Numbers		Sizes		
Extra	Iso-	Point	Body	Overall	
Hard	Temp™	Size	Diameter	Length	
41751	X	T6	.125	1-15/16	
37713	35391	Т8	.125	1-15/16	
37715	45573	T10	.125	1-15/16	
37717	45574	T15	.156	1-15/16	
37719	45575	T20	.187	1-15/16	
37721	X	T25	.187	1-15/16	
37723	42312	T27	.250	1-15/16	
37725	45578	T30	.250	1-15/16	
37727	X	T40	.296	1-15/16	
37729	X	T8	.125	2-3/4	
37731	X	T10	.125	2-3/4	
37733	X	T15	.156	2-3/4	
37735	X	T20	.187	2-3/4	
37737	X	T25	.187	2-3/4	
37739	X	T27	.250	2-3/4	
37741	X	T30	.250	2-3/4	
37743	X	T40	.296	2-3/4	
37745	X	T8	.125	3-1/2	
39941	X	T9	.125	3-1/2	
37747	X	T10	.125	3-1/2	
37749	X	T15	.156	3-1/2	
37751	X	T20	.187	3-1/2	
37753	X	T25	.187	3-1/2	
37755	X	T27	.250	3-1/2	
37757	X	T30	.250	3-1/2	
37759	X	T40	.296	3-1/2	
37761	X	T8	.125	6	
37763	X	T10	.125	6	
37765	X	T15	.156	6	
37767	X	T20	.187	6	
37769	X	T25	.187	6	
37771	X	T27	.250	6	
37773	X	T30	.250	6	
37775	X	T40	.296	6	

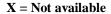
	1/4" Full Hex Body			
Stock I	Numbers	Sizes		
Extra	Iso-	Point Body Overall		Overall
Hard	Temp™	Size	Diameter	Length
X	45371	T15	.250	1-15/16
X	45372	T20	.250	1-15/16
X	45373	T25	.250	1-15/16
X	45400	T30	.250	1-15/16



Torx® Power



Body







Pozidriv®

Insert Bits

- •Cold formed for optimum toughness and resistance to wear.
- •Reduces cam-out.
- •Popular in automotive and other applications.

1/4" Hex Shank			
Stock Numbers		Sizes	
Extra Iso-		Point	Overall
Hard	Temp™	Size	Length
27045	45153	1PZD	1
27046	45154	2PZD	1
27047	45939	3PZD	1
27049	X	2PZD	2

5/16" Hex Shank		
1-1/4" Overall Length		
Extra	Point	
Hard Size		
27221	2PZD	



Pozidriv®



Pozidriv® Insert

Socket Head Insert Bit (ALLEN® type bits)

- •Machined for optimum toughness and resistance to wear.
- •Also called "Hex" style.
- •Popular in machine tools.

1/4" Hex Shank 1" Overall Length		
Extra	Iso-	Point
Hard	Temp™	Size(mm)
27094	X	.050
27095	X	1/16
27096	45164	5/64
27097	45165	3/32
37475	45166	7/64
27098	45167	1/8
37476	45168	9/64
27099	48781	5/32
27100	35091	3/16
27101	X	7/32
27102	48783	1/4
27103	X	5/16
27104	X	3/8





Socket Head Allen® Type

Pozidriv® Power Bits

- •Cold formed for optimum toughness and resistance to wear.
- •Reduces cam-out.
- •Popular in automotive and other applications.

	4 / 494 TT CI I			
	1/4" Hex Shank			
Stock N	lumbers	Sizes		
Extra	Iso-	Point	Body	Overall
Hard	Temp™	Size	Diameter	Length
27380	45940	1PZD	3/16	1-15/16
27381	45941	2PZD	1/4	1-15/16
27382	45942	3PZD	1/4	1-15/16
27383	X	1PZD	3/16	2-3/4
27384	X	2PZD	1/4	2-3/4
27385	X	3PZD	1/4	2-3/4
28316	X	1PZD	3/16	3
28317	X	2PZD	1/4	3
28318	X	3PZD	1/4	3
27386	X	1PZD	3/16	3-1/2
27387	X	2PZD	1/4	3-1/2
27388	X	3PZD	1/4	3-1/2
27389	X	1PZD	3/16	6
27390	X	2PZD	1/4	6
27391	X	3PZD	1/4	6



For Metric Socket Head Screws 1/4" Hex Shank 1" Overall Length Extra **Point** Hard Size(mm) 36538 39545 2.5 36539 3 36540 4 36541 5 36542 6 43939

36543



Socket Head Bits



Socket Head Insert Bits Allen®/ Hex Style



Socket Head

For M	For Metric Socket Head			
	Screws			
5,	/16" Hex Sh	ank		
Extra	Point	Overall		
Hard	Size (mm)	Length		
36545	4	1-1/8		
36546	5	1-1/8		
36547	6	1-1/8		
44997	7	1-5/16		
36548	8	1-1/8		
36549	10	1-1/8		
36550	12	1-5/16		
36551	14	1-5/16		

Socket Head Tamper Resistant Bits

- •Machined for optimum toughness and resistance to wear.
- •Also called "Hex" style.
- •Popular in machine tools.
- •For Allen® screws with pin.

1/4" Hex Shank 1" Overall Length		
Iso-	Point	
Temp™	Size	
35693	1/8	
35694	9/64	
35695	5/32	
35696	3/16	
35697	7/32	
35698	1/4	
35699	5/16	
35701	3/8	





Socket Head W/Pin

Socket Head Power Bits

- •Machined for optimum toughness and resistance to wear.
- •Also called "Hex" style.
- •Popular in machine tools.

_, -,	1/4" Hex Shank		
1-15/16	6" Overall		
Le	ength		
Extra	Point		
Hard	Size		
27420	1/16		
27422	3/32		
37563	7/64		
27423	1/8		
37565	9/64		
27424	5/32		
27425	3/16		
27427	1/4		

For Metri	For Metric Socket Head		
Screws			
1/4" Hex Shank			
1-15/16" Overall Length			
Extra Point			
Hard Size			
39869	2.5		
39870	3		
39871	4		
39872	5		
30873	6		



Power Bit

7/16" Hex Shank 3-1/2" Overall		
Ler	ngth	
Extra	Extra Point	
Hard	Size	
27645	1/8	
37567	9/64	
27646	5/32	
27647	3/16	
27648	7/32	
27649	1/4	
27650	5/16	
27651	3/8	

Insert Bits

Square Recess Robertson Insert Bits

- •Cold formed for optimum toughness and resistance to wear.
- CRYO-Temp™ manufacturing process provides maximum strength and durability.
- •Popular in mobile homes, recreation vehicles, and some furniture.

1/4" Hex Shank 1" Overall Length				
Extra Iso- Point Nomina				
Hard	Temp™	Size	Size	
38509	X	0	1/16	
29049	45195	1	3/32	
29050	45196	2	1/8	
29051	45197	3	9/64	
29051	45197	3	9/04	

Square Recess Robertson Power •Cold formed for optimum toughness and resistance to wear. •Popular in mobile homes, recreation vehicles, and some furniture. 1/4" Hex Shank

Point

Size

2

3

1

2

3

2

3

1

2

1

2

3

2

Sizes

Overall

Length

1-15/16

1-15/16

1-15/16

2 - 3/4

2 - 3/4

2 - 3/4

3-1/2

3-1/2

3

3

3

4

4

6

6

Nominal

Size

3/32

1/8

9/64

3/32

1/8

9/64

3/32

1/8

9/64

3/32

1/8

3/32

1/8

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Stock Numbers

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45184

45185

45186

X

X

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X

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X

X

X

X

X

X

Extra

Hard

29052

29053

29054

29055

29056

29057

29058

29059

29060

X

39947

44136

39953

44138

39957

39959

39961







Frearson Insert Bits

- •Cold formed for optimum toughness and resistance to wear.
- •Insert style only.
- •Size 1 for #5 and smaller screws.
- •Size 2 for #6 and larger.
- •Found in some golf clubs.

1/4" Hex Shank			
Extra	Point	Overall	
Hard	Size	Length	
27070	1	1-1/8	
37382	2	1-1/8	





Double End Insert Bits

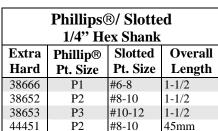
- •Milled for optimum toughness and resistance to wear.
- •Maximizes value.
- Many styles and hardness combinations.

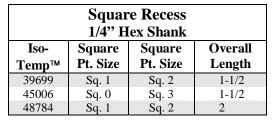
Phillips® 1/4" Hex Shank				
Extra Hard	Phillips® Pt. Size	Phillips® Pt. Size	Overall Length	
44103	P2	P2	1-3/4	
44071	P2	P2	2-1/2	



mun ela u l					
	Phillips®/ Slotted 1/4" Hex Shank				
Extra					
Hard	Pt. Size	Pt. Size	Length		
38666	P1	#6-8	1-1/2		
38652	P2	#8-10	1-1/2		
38653	P3	#10-12	1-1/2		
44451	D2	40.10	45		



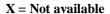


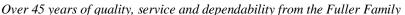




•CRYO-Temp™ manufacturing process provides maximum

strength an	strength and durability.				
Dec	Decking / Subflooring Bits				
	1/4" Hex Shank				
Extra	Extra Point Nominal Overall				
Hard	Iard Size Size Length		Length		
24314	2	1/8	1-15/16		







Bit HoldersFor Hex Insert Bits



Stock # 41180

- •Industrial quality.
- •Adapt power tools for insert bits.
- •Magnetic and non-magnetic.
- •For the most popular power tools.

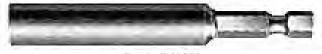
Insert Drive Style				
1/4" Hex Tool Steel Shank				
Mag- Body netic Diameter		Nose	Insert Bit Size	Overall Length
41180	3/8	3/8	1/4	1-3/4



Stock # 27710

- •C-ring retainer (38304).
- •Various body diameters.
- •Stainless steel body.

	Heavy Use Application (i.e. high torque assembly) 1/4" Hex Tool Steel Shank				
MagneticBody DiameterNose DiameterInsert Bit SizeOverall Length					
27690	3/8	3/8	1/4	2-7/8	
27710	3/8	3/8	1/4	4	
27730	3/8	3/8	1/4	5	
27750	3/8	3/8	1/4	6	
27792	3/8	3/8	1/4	11	



Stock # 40832

- •C-ring retainer.
- •Straight or turned body.
- •Stainless steel.

	One-Piece Construction					
	(stainless steel)					
	1/4" Hex Tool Steel Shank					
Non-	Maamatia	Body	Nose	Insert	Overall	
Magnetic	Magnetic	Diameter	Diameter	Bit Size	Length	
38215	40831	7/16	7/16	1/4	2-1/8	
X	40833	7/16	7/16	1/4	2-31/32	
X	40832	3/8	7/16	1/4	2-31/32	
X	39972	3/8	3/8	1/4	2-7/8	



Stock # 38310

- •Popular with electrical applications.
- •Spark retardant.
- •Selection of retainers and styles.
- •Heavy Duty.
- •Magnetic.
- •One-piece #26797

	Silicon Bronze 7/16" and 1/4" Hex Tool Steel Shank					
Stock Number Sizes						
O- Ring	C- Ring	Shank Size Body Nose Diameter Diameter Size Insert Size				Overall Length
26797	X	7/16	1/2	1/2	1/4	2
X	36310	1/4	7/16	7/16	1/4	3
38310	X	1/4	3/8	7/16	1/4	3
X	37376	1/4	3/8	7/16	1/4	3



Stock # 31890

- •Screw cap retainer (32664) with O-ring (34403).
- •Stainless steel body.

Screw Cap Style 1/4" Hex Tool Steel Shank 3/8" Body Diameter 7/16" Nose Diameter 1/4" Insert Bit Size

Non-	Magnetic	Overall
Magnetic	Magnetic	Length
X	26791	2-3/8
31889	X	2-7/16
X	26790	2-7/8
31890	27675	4
X	27695	5
31891	27715	6
X	27775	11



Bits and Finders

Screw Driver Bits
Bits & Finders and replacement parts

		non-mag	gneuc		
Complete Assembly Stock Number	Overall Length	Point Size	Outer Sleeve Diameter	Blade Width	Blade Thickness
		1/4" He	x Shanks		
39664	2-5/32	4-5	3/8	.193	.034
39665	2-5/32	5-6	3/8	.193	.036
39666	2-5/32	6-8	7/16	.241	.040
39667	2-5/32	8-10	1/2	.290	.042
39668	2-5/32	10-12	9/16	.290	.046
39669	2-5/32	12-14	5/8	.395	.050
39624	3-3/4	4-5	3/8	.193	.034
39625	3-3/4	5-6	3/8	.193	.036
39626	3-3/4	6-8	7/16	.241	.040
39627	3-3/4	8-10	1/2	.290	.042
39628	3-3/4	10-12	9/16	.350	.046
39629	3-7/8	12-14	5/8	.395	.050
39630	4-1/8	14-16	11/16	.457	.055
39631	6-3/4	5-6	3/8	.193	.036
39632	6-3/4	6-8	7/16	.241	.040
39633	6-3/4	8-10	1/2	.290	.042
39634	6-3/4	10-12	9/16	.350	.046

Stock # 39626



Torx® Wrenches

Key Wrench Sets				
Stock Number	Description	Point Size		
39472	6-piece pouched	T10; T15; T20; T25; T27; T30		
39473	9-piece pouched	T10; T15; T20; T25; T27; T30; T40; T45; T50		
39474	13-piece pouched	T7; T8; T9; T10; T15; T20; T25; T27; T30; T40; T45; T50; T55		
41791	8-piece fold-up-set	T9; T10; T15; T20; T25; T27; T30; T40		





Single Keys (short arm)					
Stock	Stock Point Body Overall				
Number	Size	Diameter	Length		
39456	T7	.093	1-7/8		
39457	T8	.093	1-7/8		
39458	T9	.125	1-7/8		
39459	T10	.125	2-1/8		
39460	T15	.125	2-3/8		
39461	T20	.125	2-3/8		
39462	T25	.187	2-5/8		
39464	T30	.218	2-7/8		
39466	T45	.312	3-3/4		



Extensions And Adapters

Insert Drive Extensions

- Engineered for the toughest industrial applications.
- Adapts screwdrivers and drills to drive sockets.
- Pin lock recommended for industrial use.

Extensions					
Stock Number Stock Number					
Black	Gray	Shank	Overall		
Medium Hard	Extra Hard	Size	Length		
Pin Lock	Ball Lock				
37429	41181	1/4 Hex	1"		



37429

Stock

Power Drive Extensions

- Manufactured from the best materials.
- Engineered for the toughest industrial applications.
- Adapts screwdrivers and drills to drive sockets.
- Pin lock recommended for industrial use.

	1/4 " Male Square						
Sto	ck Number		Stock Number			Shank	Overall
I	Pin Lock			all Lock		Size	Length
34610	Gray	XH	45267	Gray	XH	1/4 Hex	2"
37570	Black	MH	X			1/4 Hex	3"
31594	Gray	XH	X			1/4 Hex	4"
31595	Black	MH	X			1/4 Hex	6"
37571	Black	MH	X			1/4 Hex	8"
31596	Black	MH	X			1/4 Female Sqr.	2"
31597	Black	MH	X			1/4 Female Sqr.	6"

1/4 " Male Square								
Sto	Stock Number		Stock Number			Shank	Overall	
I	Pin Lock		Ball Lock		Ball Lock		Size	Length
34610	Gray	XH	45267	Gray	XH	1/4 Hex	2"	
37570	Black	MH	X			1/4 Hex	3"	
31594	Gray	XH	X			1/4 Hex	4"	
31595	Black	MH	X			1/4 Hex	6"	
37571	Black	MH	X			1/4 Hex	8"	
31596	Black	MH	X			1/4 Female Sqr.	2"	
31597	Black	MH	X			1/4 Female Sqr.	6"	

3/8" Male Square				
Stock Number Pin Lock Black (MH) Shank Size Overall Length				
34611	1/4 Hex	2"		
38209	1/4 Hex	3"		
31601	3/8 Female Sqr.	3"		

1/2" Male Square				
Stock Number Pin Lock Black (MH) Size Overall Length				
37845	7/16 Hex	2-3/4"		



Stock # 37845



MH = medium hard XH = extra hard X = not available

37570 31596



Stock # 38209 31601



Specialty Bit HoldersFor Hex Insert Bits

	Female Square Drive						
Stock Numbers		Sizes					
Non- Magnetic	Magnetic	Drive Body Nose Bit Diameter Bit Size Overall					
31894	X	1/4Sq.	7/16	7/16	1/4	1-1/8	
31895	X	3/8Sq.	11/16	1/2	1/4	1-1/8	
X	26799	1/4Sq.	3/8	7/16	1/4	2	
X	26800	3/8Sq.	3/8	7/16	1/4	2-1/8	
31896	X	3/8Sq.	7/8	9/16	5/16	1-3/8	
31897	X	1/2Sq.	15/16	9/16	5/16	1-7/16	



Stock # 31894 & 29031

Hex Drive						
Stock Numbers Sizes						
Non- Magnetic	Magnetic	Drive Body Nose Bit Diameter Diameter Size Overall Length				
31898	X	7/16	1/2	9/16	5/16	2
X	31876	7/16	1/2	9/16	5/16	2-3/4

X = Not available

Replacement Parts			
Stock Numbers	Description		
32664	Screw cap for all quick-change holders with 7/16" nose diameter.		
34403	O-ring retainer for 7/16" nose diameter.		
38304	C-ring retainer for 1/4" size inserts bits.		
33336	Collar for 1/2" nose diameter.		
32665	Collar for 9/16" nose diameter.		
32667	O-ring retainer for 9/16" nose diameter.		
60871	O-ring retainer for 1/2" nose diameter.		
30726	Part No's 32665 + 32667 assembled.		
30725	Part No's 34403 + 32664 assembled.		







Over 45 years of quality, service and dependability from the Fuller Family



Nutsetters

Insert Nutsetters

- •Precision formed for consistent dimensions.
- •Popular in the pre-engineered building industry.
- •Manufactured from shock-resistant tool steel utilizing SPC quality control to ensure maximum life.
- •Engineered for the toughest industrial applications.
- •Available in fractional and metric.
- •For use with Hex Head screws.

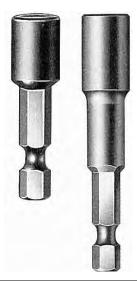


Nutsetters Insert						
Mag-						
netic	netic NutSize Diameter Length					
38686	1/4	7/16	1-1/4			
38687	5/16	1/2	1-1/4			
38688	3/8	9/16	1-5/16			

Nutsetters Insert Metric Sizes				
Mag- Hex Socket Body Overall netic Nut Size Diameter Length				
41048	7mm	7/16	1-1/8	
41049	8mm	1/2	1-1/8	
41050	10mm	9/16	1-1/8	

Power Nutsetters

- •1/4" hex shank.
- •Precision formed for consistent dimensions.
- •Popular in the pre-engineered building industry.
- •Manufactured from the best materials available utilizing SPC quality control to ensure maximum life.
- •Engineered for the toughest industrial applications.
- •Available in fractional and metric.
- •For use with Hex Head screws.



	Nutsetters Power					
Stock 1	Numbers	Sizes				
Mag- netic	Non- Magnetic	Hex Opening Size	Socket Body Diameter	Overall Length		
31450	29090	1/4	7/16	1-5/8		
31452	29091	5/16	1/2	1-5/8		
36165	36166	3/8	9/16	1-7/8		
37893	X	7/16	9/16	2		
37427	X	1/4	7/16*	2		
42665	X	5/16	1/2	2-1/8		
42666	X	3/8	9/16	2-1/8		
42667	X	7/16	9/16	2-1/8		
37582	37585	1/4	7/16	2-9/16		
37583	37586	5/16	1/2	2-9/16		
37584	37587	3/8	9/16	2-9/16		
38639	X	7/16	9/16	2-9/16		

*Tapered

X = Not available

Steel Stud Nutsetters

- •Non-magnetic feature eliminates metal shavings from building up inside the nutsetter and causing premature hex rounding.
- •Spring nib firmly holds all fasteners that magnetic nutsetters do not (i.e. Stainless Steel, Aluminum, Plastic, Zinc coated, etc.)
- $\bullet \text{Iso-Temp}^{\intercal M}$ toughening process provides additional strength and durability.
- $\bullet Excellent$ for use with all Self-tapping Fasteners.

Steel Stud Power Nutsetters 1/4" Hex Shank				
Stock Numbers				
24000	1/4	1-5/8		
24001	5/16	1-5/8		
24002	3/8	1-5/8		



	Nutsetters Power – Metric Sizes				
	Mag- netic	Hex Opening Size	Socket Body Diameter	Overall Length	
İ	44982	5.5mm	1/4	1-5/8	
	38327	6mm	1/4	1-5/8	
	40813	7mm	7/16	1-5/8	
	38328	8mm	1/2	1-5/8	
	38329	10mm	9/16	1-7/8	



Specialty Drivers

Magna-Tip® Screwdrivers For 1/4" Hex Insert Bits (steel shank)

Stock Numbers				Sizes	
W/O Bits	With Bits	Carded W/Bits	Description	Point Size	Overall Length
37030	X	X	Solid - Stubby	X	2-1/2"
36845	37936	37031	Storage – Stubby	P1; P2; 4; 6	2-1/2"
40638	37937	37327	Storage	P1; P2; 4; 6	7"
37033	X	X	Solid	X	7"
37038	X	X	Solid	X	11"
36849	37938	37331	Storage	P1; P2; 4; 6	11"

- •Industrial quality screwdriver.
- Magnetic shank.
- Storage or solid handle.
- •Screw-on cap (38698).
- •Snap-cap (replacement not available).



- •Industrial quality screwdriver.
- •Magnetic or non-magnetic (NM) shank.
- •Storage or solid handle.



Magna-Tip® Screwdrivers For 1/4" Hex Insert Bits (aluminum shank)

Stock Numbers				Sizes	
W/O Bits	With Bits	Carded W/Bits	Description	Point Size	Overall Length
X	37540	41995	Storage	P1; P2; 4; 6	8"
38958	X	X	Storage – NM	X	8"
X	41935	X	Storage – Dbl. End	P1-6; P2-4; P3-8;	8"
				T15 - T20	

- •Driver has solid handle, reversible shank.
- •Two double end bits included-5/16" hex.

4 in 1 Screwdriver			
Stock	Description	Point	Overall
Number	Description	Size	Length
BD12E	Bulk Driver	Phillips #1	7"
	2 Dbl ends	Slotted,5-6	
		Phillips #2	
		Slotted, 8-12	





Power Nutdriver 7-Piece Set

1/4" Hex Shank Insert Style				
Fractional	Fractional Metric Description			
41787	X	1/4, 5/16, 11/32, 3/16, 7/16, 9/32, 3/8		

- •Fits electric drills, cordless tools and 1/4" hand drivers.
- •For use with hex screws.
- •Non-magnetic.
- •Packaged in durable, molded plastic case.



X = Not available



Kits And Sets

	Thing-A-Majig® Kit -contains extra hard bits-				
Stock Number	Number Of Pieces	Includes:	Bit/Point Size	Overall Length	
42530	20	Driver	1/4 (solid handle) (37033)	7"	
		Bit Holder	1/4 (41180)	1-3/4"	
		Allen Bits	3/32 (27097) 7/64 (37475) 1/8 (27098) 9/64 (37476)	1"	
		Torx® Bits	T15 (37159) T20 (37161) T25 (37163) T30 (37167) T40 (37169)	1"	
		Square Recess Bit	2 (29050)	1"	
		Slotted Bits	3-4 (41178) 5-6 (39535) 8-10 (39537) 10-12 (39538)	1"	
		Phillips Bits	1 (27020) 2 (27021) 3 (27022)	1"	
		POZIDRIV®Bit	2 (27046)	1"	



	Whatcha-Callit® Kit -contains Extra Hard bits-				
Stock Number	Number Of Pieces	Includes:	Bit/Point Size	Overall Length	
41786	29	Driver	1/4 (magnetic w/storage handle) (40638)	7"	
		Phillips Bits	0 (27019) 1 (27020) 2 (27021) 3 (27022)	1"	
		Slotted Bits	0-1 (41175) 3-4 (41178) 5-6(39535)	1"	
			8-10 (39537) 12-14 (39539)		
		Allen Bits	5/64 (27096) 3/32 (27097) 7/64 (37475)	1"	
			1/8 (27098) 9/64 (37476)		
		Square Recess Bits	0 (38509) 1 (29049) 2 (29050) 3 (29051)	1"	
		Torx® Bits	T10 (37157) T15 (37159) T20 (37161)	1"	
			T25 (37163) T30 (37167) T40 (37169)		
		POZIDRIV®Bits	1 (27045) 2 (27046)	1"	
		Socket Adapter	1/4 (37429)	1"	
		Bit Holder	1/4 (for use with power tools) (41180)	1-3/4"	



	Super Whatcha-Callit® Kit -contains extra hard bits-				
Stock Number	Number Of Pieces	Includes:	Bit/Point Size	Overall Length	
42826	40	Driver	1/4 (magnetic w/storage handle) (40638)	7"	
		Phillips Bits	0 (27019) 1 (27020) 2 (27021) 3 (27022)	1"	
		Slotted Bits	0-1 (41175) 3-4 (41178) 5-6(39535) 8-10 (39537) 12-14 (39539)	1"	
		Allen Bits	5/64 (27096) 3/32 (27097) 7/64 (37475) 1/8 (27098) 9/64 (37476) 5/32 (27099) 3/16 (27100) 7/32 (27101) 1/4 (27102) 2.5mm (39545) 3mm (36539) 4mm (36540) 5mm (36541) 6mm (36542)	1"	
		Square Recess Bits	0 (38509) 1 (29049) 2 (29050) 3 (29051)	1"	
		Torx® Bits	T10 (37157) T15 (37159) T20 (37161) T25 (37163) T27 (37165) T30 (37167) T40 (37169)	1"	
		POZIDRIV®Bits	1 (27045) 2 (27046)	1"	
		Clutch Bit	3 (27082)	1"	
		Socket Adapter	1/4 (37429)	1"	
		Bit Holder	1/4 (for use with power tools) (41180)	1-3/4"	

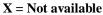


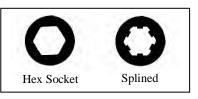
Set Screws, Hex Keys & Drill Chuck Keys

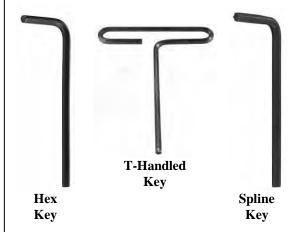


Set Screws

		Screw S	tyle Stock N	Numbers	
Dimensions	Cone	Cup	Spline Cone	Spline Cup	Jam
5-40 x 1/8	X	STSCR037	X	X	X
8-32 x 1/8	X	STSCR030	X	X	X
10-24 x 3/16	STSCR034	X	X	X	X
10-24 x 1/4	X	STSCR001	X	X	X
10-32 x 1/8	X	STSCR002	X	X	STSCR032
10-32 x 3/16	STSCR003	STSCR005	STSCR004	X	X
10-32 x 1/4	STSCR008	STSCR006	STSCR009	STSCR007	X
10-32 x 5/16	X	STSCR010	X	X	X
10-32 x 3/8	X	STSCR027	X	X	X
1/4-20 x 3/16	X	STSCR036	X	X	X
1/4-20 x 1/4	X	STSCR031	X	X	X
1/4-20 x 3/8	X	STSCR028	X	X	X
1/4-28 x 3/16	X	STSCR011	X	X	X
1/4-28 x 1/4	X	STSCR012	X	X	X
1/4-28 x 5/16	X	STSCR013	X	X	X
1/4-28 x 3/8	X	STSCR014	X	X	X
1/4-28 x 1/2	X	STSCR015	X	X	X
1/4-28 x 5/8	X	STSCR016	X	X	X
5/16-24 x 5/32	X	X	X	X	STSCR029
5/16-24 x 1/4	X	STSCR017	X	X	X
5/16-24 x 5/16	X	STSCR018	X	X	X
5/16-24 x 3/8	X	STSCR019	X	X	X
5/16-24 x 1/2	X	STSCR020	X	X	X
5/16-24 x 5/8	X	STSCR021	X	X	X
3/8-16 x 3/8	X	STSCR039	X	X	X
3/8-16 x 1	X	STSCR033	X	X	X
3/8-24 x 1/4	X	STSCR022	X	X	X
3/8-24 x 5/16	X	STSCR023	X	X	X
3/8-24 x 3/8	X	STSCR024	X	X	X
3/8-24 x 1/2	X	STSCR025	X	X	X
3/8-24 x 5/8	X	STSCR026	X	X	X
7/16-14 x 3/8	X	STSCR038	X	X	X
1/2-13 x 3/8	X	STSCR035	X	X	X
1/2-13 x 1/2	X	STSCR040	X	X	X







Hex Keys

Size	Stock Number Reg. Hex	Stock Number T-handle	Stock Number Spline
.035	K0035	X	X
1/16	K0062	X	X
5/64	K0078	X	X
3/32	K0093	K0093T	SPK0093
7/64	K0109	X	X
3MM	K0118	K0118T	X
1/8	K0125	K0125T	X
9/64	K0140	X	X
5/32	K0156	K0156T	X
4MM	K0157	X	X
3/16	K0187	K0187T	X
7/32	K0218	K0218T	X
1/4	K0250	X	X
5/16	K0312	X	X

X = Not available

Drill Chuck Keys

Stock Number	Key Number	Fits Jacobs Chuck Model No.
CK0	K0	0, 0B
CK1	K1	1A, 1B
CK2	K2	2A, 2B
CK3	K3	6A, 6AE, 6B, 34, 34B, 34KD,
		34PD, 3, 3A, 3AE, 3B, 3KD
		3PD, 14N, 55B, 56B, 58B, 75A
CK4	K4	36, 36B, 37PD, 37KD, 59B, 16N, 18N
CK30	K30	30, 30B, 31B, 31BA, 8-1/2N
CK32	K32	32, 32B. 33. 33B. 33BA,
		3326A, 33F, 11N
CK3C	K3C	633C, 633D
CK7	K7	7, 7B



Over 45 years of quality, service and dependability from the Fuller Family



Carbon and High Speed Steel Taps

Spiral Pointed Taps For thru holes

High Speed Steel Ground Thread Plug 2 Flute



Stock # 50837516

	Stock Numbers			
Cutting	Threads	Stock		
Size	Per Inch	Number		
4	36	50800436		
4	40	50800440		
4	48	50800448		
5	40	50800540		
5	44	50800544		
6	32	50800632		
6	40	50800640		
8	32	50800832		
8	36	50800836		
10	24	50801024		
10	32	50801032		
12	24	50801224		
12	28	50801228		
14	20	50801420		
14	24	50801424		
1/4	20	50825020		
*1/4	28	50825028		
*5/16	18	50831218		
*5/16	24	50831224		
*3/8	16	50837516		
*3/8	24	50837524		
*7/16	14	50843714		
*7/16	20	50843720		
*1/2	13	50850013		
*1/2	20	50850020		
*9/16	12	50856212		
*9/16	18	50856218		
*5/8	11	50862511		
*5/8	18	50862518		
*3/4	10	50875010		
*3/4	16	50875016		

^{*}Indicates the sizes that have 3 Flutes. Tap handles - see page 135

Taper Pipe Taps

Carbon Steel and High Speed Steel



Stock # 50900500

	Four Flute - * =5 Flute - #=6 Flute		
	Size	Stock Numbers	
Cutting	Threads Per	Cut	Thread
Sizes	Inch NPT	Carbon	H.S.S.
1/8	27	50300125	50900125
1/4	18	50300250	50900250
3/8	18	50300375	50900375
1/2	14	50300500	50900500
3/4	14	*50300750	*50900750
1	11-1/2	*50301000	*50901000
1-1/4	11-1/2	*50301250	#50901250
1-1/2	11-1/2	#50301500	#50901500
2	11-1/2	#50302000	X

Carbon Pipe Taps will be furnished unless otherwise specified. Ground Thread taps are recommended for higher production requirements and tougher materials.

Machine Screw and Fractional Hand Taps

Available in Taper, Plug, and Bottoming, Four Flute*

**Add 'T', 'P', or 'B' to the end of the stock number to indicate Taper, Plug, or Bottoming Styles. Plug Style will be furnished unless otherwise specified.



•Taper Style - 8 to 10 threads chamfered. Easy tap starting in through holes.



•Plug Style - 3 to 5 threads chamfered. Standard type for general tapping.



•Bottoming Style - 1-1/2 thread chamfered. For tapping blind holes only. Must start with Taper or Plug style first.

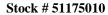
	Four Flute				
S	Size Stock Numbers				
G 44:	Threads	Cut Thread		Ground	
Cutting Size	Per Inch	Carbon	H.S.S	3	Thread H.S.S
*4	40	50000440	50500440	0	50600440
*4	48	50000448***	50500448	N	50600448
*5	40	50000540	50500540	L	50600540
*5	44	50000544	50500544	Y	50600544
*6	32	50000632	50500632		50600632
*6	40	50000640	50500640	\mathbf{W}	50600640
8	32	50000832	50500832	H	50600832
8	36	50000836	50500836	I	50600836
10	24	50001024	50501024	L	50601024
10	32	50001032	50501032	E	50601032
12	24	50001224***	50501224		50601224
12	28	50001228***	50501228	S	50601228
3/16	24	50118724	X	\mathbf{U}	X
3/16	32	50118732***	X	P	X
1/4	20	50125020	50425020	P	50725020
1/4	28	50125028	50425028	L	50725028
5/16	18	50131218	50431218	I	50731218
5/16	24	50131224	50431224	E	50731224
3/8	16	50137516	50437516	S	50737516
3/8	24	50137524	50437524		50737524
7/16	14	50143714	50443714	L	50743714
7/16	20	50143720	50443720	A	50743720
1/2	13	50150013	50450013	S	50750013
1/2	20	50150020	50450020	T	50750020
9/16	12	50156212	50456212		50756212
9/16	18	50156218	50456218		50756218
5/8	11	50162511	50462511		50762511
5/8	18	50162518	50462518		50762518
3/4	10	50175010	50475010		50775010
3/4	16	50175016	50475016		50775016
7/8	9	50187509	50487509		50787509
7/8	14	50187514***	50487514		50787514
1	8	50100008	50400008		50700008
1	12	50100012***	50400012		50700012

*** Only avaliable while supplies last!

Unless otherwise specified, HSS Cut Thread Plug Taps will be furnished. *Sizes 4, 5 & 6 have 3 flutes.

Carbon and High Speed Adjustable Round and Hexagon Dies







Stock # 6849



Stock # 51210012

Carbon Steel Dies Round and Hex

Size	Round Die Stock Number	Dia.	Hex Die Stock Number	Dia.
4-36	X	X	6411	1"
4-40	51100440	1"	6412	1"
5-40	X	X	6416	1"
6-32	51100632	1"	6418	1"
8-32	51100832	1"	6424	1"
10-24	51101024	1"	6428	1"
10-32	51101032	1"	6431	1"
12-24	51101224	1"	6432	1"
14-20	X	X	6435	1"
3/16-24	X	X	6512	1"
3/16-32	51118732	1"	X	X
1/4-20	51125020	1"	6520	1"
1/4-28	51125028	1"	6523	1"
1/4-32	51125032	1"	X	1"
1/4-40	51125040	1"	X	1"
5/16-18	51131218	1"	6527	1"
5/16-24	51131224	1"	6529	1"
5/16-32	51131232	1"	X	1"
3/8-16	51137516	1"	6534	1"
3/8-24	51137524	1"	6536	1"
7/16-14	51143714	1"	6539	1"
7/16-20	51143720	1"	6540	1"
1/2-13	51150013	1"	6544	1"
1/2-20	51150020	1"	6545	1"
9/16-12	51156212	1-1/2"	6848	1-7/16"
9/16-18	51156218	1-1/2"	6849	1-7/16"
5/8-11	51162511	1-1/2"	6852	1-7/16"
5/8-18	51162518	1-1/2"	6854	1-7/16"
3/4-10	51175010	1-1/2"	6858	1-7/16"
3/4-16	51175016	1-1/2"	6860	1-7/16"
7/8-9	51187509	2"	8461	1-13/16"
7/8-14	51187514	2"	8463	1-13/16"
1"-8	X	X	8465	1-13/16"
1"-14	X	X	8467	1-13/16"

High Speed Steel Dies

Stock Number	Size	Dia.
51200440	4-40	1"
51200632	6-32	1"
51200640	6-40	1"
51200832	8-32	1"
51200836	8-36	1"
51201024	10-24	1"
51201032	10-32	1"
51201224	12-24	1"
51201228	12-28	1"
51225020	1/4-20	1"
51225028	1/4-28	1"
51231218	5/16-18	1"
51231224	5/16-24	1"
51237516	3/8-16	1"
51237524	3/8-24	1"
51243714	7/16-14	1"
51243720	1/16-20	1"
51250013	1/2-13	1"
51250020	1/2-20	1"
51287509	7/8-9	2"
51287514	7/8-14	2"
51210008	1-8	2"
51210012	1-12	2"
51210014	1-14	2"



Stock # 51400125



Stock # 51610250

HS THE

Stock # 51000125

High Speed Steel Pipe Dies

Stock Number	Size	Description
51000125	1/8-27	HSS round ADJ. 1"

Carbon Pipe Dies Round and Hex

carson ripe Bies riound and rien			
Stock Number	Size	Description	
51400125	1/8-27	Cbn. 1-1/2" rd. O.D.	
51400250	1/4-18	Cbn. 1-1/2" rd. O.D.	
51400375	3/8-18	Cbn. 1-1/2" rd. O.D.	
51400500	1/2-14	Cbn. 1-1/2" rd. O.D.	
51500750	3/4-14	Cbn. 2" rd O.D.*	
Carbon Pipe Dies Hexagon			
51600125	1/8"-27 NPT	1" Across Flat	
51600250	1/4"-18 NPT	1" Across Flat	
51600375	3/8"-18 NPT	1-7/16" Across Flat	
51600500	1/2"-14 NPT	1-7/16" Across Flat	
51610125	1/8"-28 BSP	1"Across Flat	
51610250	1/4"-19 BSP	1" Across Flat	

^{* =} adjustable



Metric Taps and Dies

•Ideal for automotive repair and machinery where metric threads are specified.



Stock # 8352



Stock # 9749

High Carbon Steel Metric Thread Taps Plug Style

Stock Number	Description	No. Of Flutes
1712	3mm-0.50	3
1713	3mm-0.60	3
1717	4mm-0.70	4
1718	4mm-0.75	4
1722	5mm-0.80	4
1723	5mm-0.90	4
1727	6mm-1.00	4
1729	6.3mm-1.00	4
1731	7mm-1.00	4
1733	8mm-1.00	4
1734	8mm-1.25	4
1737	9mm-1.25	4
1738	10mm-1.00	4
1739	10mm-1.25	4
1740	10mm-1.50	4
1741	11mm-1.50	4
1742	12mm-1.25	4
1743	12mm-1.50	4
1744	12mm-1.75	4
1749	14mm-1.25	4
1750	14mm-1.50	4
1752	14mm-2.00	4
1755	16mm-1.50	4
1756	16mm-2.00	4
1759	18mm-1.50	4
1761	18mm-2.50	4
1764	20mm-2.50	4
1765	22mm-1.50	4
1768	24mm-2.00	4
1769	24mm-3.00	4

High Carbon Steel Hexagon Metric Dies

Stock Number	Description	
1" Acr	oss Flat	
9712	3mm-0.50	
9717	4mm-0.70	
9718	4mm-0.75	
9722	5mm-0.80	
9723	5mm-0.90	
9727	6mm-1.00	
9731	7mm-1.00	
9733	8mm-1.00	
9734	8mm-1.25	
9735	9mm-0.75	
9736	9mm-1.00	
9737	9mm-1.25	
9738	10mm-1.00	
9739	10mm-1.25	
9740	10mm-1.50	
9741	11mm-1.50	
9742	12mm-1.25	
9743	12mm-1.50	
9744	12mm-1.75	
1-7/16" Across Flat		
6949	14mm-1.25	
6950	14mm-1.50	
6952	14mm-2.00	
6955	16mm-1.50	
6956	16mm-2.00	
6959	18mm-1.50	
6961	18mm-2.50	
1-13/16" A	Across Flat	
8564	20mm-2.50	
8565	22mm-1.50	
8568	24mm-2.00	
8569	24mm-3.00	



Tap and Die Handles

Tap Handles

Size	Stock Number
No. 0 to 1/4"	311001
1/4" to 1/2"	311002

- * Designed for use with taps and on many other tools to be turned by hand.
- * Adjusted and tightened to size by twisting knurled nut.
- * Additional holding jaws are recessed inside hole for gripping onto smaller sized taps.
- * T-handle may be extended full length in either direction for more leverage.
- * Ideal for hand tapping in difficult-to-reach places.



Ratchet Tap Handle

riacence rup riantare			
Size (Nos. and Inches)	Length	Stock Number	
No. 0 to No. 8	2-3/4"	160-R	
(1.6mm to 4mm)	(70mm)		
No. 0 to 1/4"	3-1/2"	161-R	
(1.6mm to 6.3mm)	(88mm)		
No. 12 to 1/2"	4-1/4"	162-R	
(6 to 12.5mm)	(106mm)		

- * Ratchet can be set for right or left-hand operation or locked for non-ratchet use.
- * Self-centering hardened tool steel jaws and knurled chuck sleeve provide positive grip on taps, reamers and small tools.
- * Sliding T-handle for fitting into tight spaces with operator leverage.
- * No. 161-R conforms to government specifications GGG-W-680a.



Two-in-One Wrench

Size	Stock Number
For Taps 1/4" to 1/2"	311050
(6mm to 12mm)	
For Taps No. 0 to 1/4"	311073
(3mm to 6mm)	

- * End of #311050 wrench has 3/8" square drive to accommodate socket wrench or extension when desired.
- * Hexagon nut for tightening tap square.
- * Additional holding jaws are recessed inside hole for gripping onto smaller sized taps.
- * Sliding T-handle has spring tension stop.



Adjustable Straight Handle Tap and Reamer Wrench

Tup and Reamer Witche				
Size	Stock			
Size	Number			
3/8" – 1"	311003			
#10 – 1/2"	311004			
#0 – 3/16"	311005			
#0 - 1/2"	311006			

- * Solid construction for long life and ease of use.
- * Straight handle design provides greater leverage, especially when using larger diameter taps.
- * Ideal for hand tapping.



Round And Hex Die Handles

Size	Stock Number Round	Stock Number Hex
1"	311025	
1"		311026
1-1/2"	311035	
1-7/16"		311036
2"	311045	
1-13/16"		311046

Other sizes available price on request.

- * Maintains alignment for accurate, straight threading.
- * Dies easily lock into position with set screw.





Hanson® Tap and Die Sets

Titan Tap and Drill Set

•Includes metal index.

18 Piece Set

Stock Number: 15195018

Set Contains:

1each Tap sizes: 6-32, 8-32, 10-24, 10-32, 1/4-20, 5/16-18, 3/8-16, 7/16-14, 1/2-13.

1 each Drill sizes: #36, #29, #25, #21, #7, "F", 5/16", "U", 27/64".



Metric Tap and Hexagon Die Set

•In plastic storage case.

24 Piece Set

Stock Number: TD26313

Set Contains:

1 each Tap and Die sizes: 3mm-0.50, 4mm-0.70, 5mm-0.80, 6mm-1.00, 7mm-1.00, 8mm-1.25, 9mm-1.25, 10mm-1.50, 12mm-1.50, 12mm-1.75.

1 each Pipe sizes: 1/8"-28.

1 each Threading Tools: Plain Die Stock – 1" Hexagon Dies. Offset Adjustable Tap Wrench – Taps No. 0 to 1/2".





Hanson® Tap and Die Sets

High Carbon Steel Tap and Solid Round Die Super Set

•In plastic storage case.

39 Piece Set

Stock Number: TD23614

Set Contains:

1 each Tap and Die sizes: 4-40, 6-32, 8-32, 10-24, 10-32, 12-24, 1/4"-20, 1/4"-28, 5/16"-18, 5/16"-24, 3/8"-16, 3/8"-24, 7/16"-14, 7/16"-20, 1/2"-13, 1/2"-20.

1 each Pipe sizes: 1/8"-27 NPT

1 each Threading Tools sizes: Adjustable Die stock – 1" Solid Round Dies T-Handle Wrench – Taps No. 0 to 1/4" Adjustable Handle Tap Wrench – Taps No. 0 to 1/2" 18 Leaf Standard Thread Pitch Gauge Screwdriver.



Machine Screw/Fractional Tap and Die Super Set

•Plastic storage case with removable tray keeps all tools organized.

41 Piece Set

Stock Number: TD24606

Set Contains:

1 each Tap and Die sizes: 4-40, 6-32, 8-32, 10-24, 10-32, 12-24, 1/4"-20, 1/4"-28, 5/16"-18, 5/16"-24, 3/8"-16, 3/8"-24, 7/16"-14, 7/16"-20, 1/2"-13, 1/2"-20.

1 each Pipe sizes: 1/8"-27 NPT

1each Threading Tools:
Adjustable Die Stock – 1" Hexagon dies
Plain Die Stock – 5/8" Hexagon Dies
Adjustable Handle Tap Wrench – Taps No. 0 to 1/2"
T-Handle Wrench – Taps No. 0 to 1/4"
Two-in-one Tap Wrench – Taps 1/4" to 1/2"
18 Leaf Standard Thread Pitch Gauge Screwdriver.





Hanson® Tap and Die Sets

Fractional/Metric Tap and Die Super Set

•In plastic storage case.

41 Piece Set

Stock Number: TD26319

Set Contains:

1 each Tap and Die sizes: 6-32, 8-32, 10-24, 1/4"-20, 5/16"-18, 3/8"-16, 7/16"-14, 1/2"-13, 1/8"-27, 4mm-0.75, 5mm-0.80, 6mm-1.00, 7mm-1.00, 8mm-1.25, 10mm-1.25, 10mm-1.50, 12mm-1.75.

1 each Threading Tools:
Adjustable Die Stock – 1" Hexagon Dies
Plain Die Stock – 5/8" Hexagon Dies
Adjustable Handle Tap Wrench – Taps No. 0 to 1/2"
T-Handle Wrench – Taps No. 0 to 1/4"
Two-in-one Tap Wrench – Taps 1/4" to 1/2"
Standard and Metric Thread Pitch Gauge Screwdriver.



Metric Tap and Die Super Set

•In plastic storage case.

41 Piece Set

Stock Number: TD26317

Set Contains:

1 each Tap and Die sizes: 3mm-0.50, 4mm-0.70, 4mm-0.75, 5mm-0.80, 5mm-0.90, 6mm-1.00, 7mm-1.00, 8mm-1.00, 8mm-1.25, 9mm-1.00, 9mm-1.25, 10mm-1.25, 10mm-1.50, 11mm-1.50, 12mm-1.50, 12mm-1.50, 12mm-1.75.

1 each Pipe sizes: 1/8"-28 BSP

1 each Threading Tools:
Adjustable Die Stock – 1" Hexagon Dies
Plain Die Stock – 5/8" Hexagon Dies
Adjustable Handle Tap Wrench – Taps No. 0 to 1/2"
T-Handle Wrench – Taps No. 0 to 1/4"
Two-in-one Tap Wrench – Taps 1/4" to 1/2"
16 Leaf Metric Thread Pitch Gauge Screwdriver



Hanson® Screw Extractors

Method of Use for Both Types:

- After drilling hole with either right or left-handed drill bit (left is recommended) insert extractor, turn counter clockwise.
- Grips into side of drill hole and removes broken parts without damaging the threaded hole.



Stock # 2210003

Straight Flute 221 Series

- Will not expand material being removed, resulting in easier removal.
- Ideal for soft materials or thin-walled pieces such as pipe and fittings.

Stock	Use	Removes These Bolts		
Numbers	Drill Size	and Screws		
2210001	9/64"	3/16"-5/16", 5mm-8mm, No. 10		
2210002	3/16"	3/8", 10mm		
2210003	15/64"	7/16" and 1/8" NPT, 10mm, 1/8" BSP		
2210004	5/16"	1/2"-9/16" and 1/4" NPT, 12mm-14mm, 1/4" BSP		
2210005	3/8"	5/8" and 3/8" NPT, 16mm, 3/8" BSP		

Stock	Set	Contents of	
Numbers	Size	Set	
2210100	5 Piece set	2210001 – 2210005 in plastic pouch	



Stock # 2220005

Spiral Flute 222 Series

- Designed to remove broken studs, bolts, socket screws and fittings.
- •Aggressive left hand spiral design for extra gripping power.

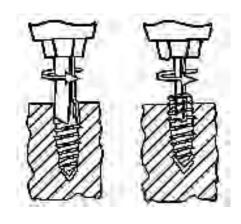
Stock	Use	Removes These Bolts
Numbers	Drill Size	and Screws
2220001	5/64"	3/32"-5/32", 2.5mm-4mm, No. 3-No. 6
2220002	7/64"	5/32"-7/32", 4mm-6mm, No. 6-No. 12
2220003	5/32"	7/32"-9/32", 6mm-8mm, No.12
2220004	1/4"	9/32"-3/8" and 1/8" NPT, 1/8" BSP, 8mm-10mm
2220005	19/64"	3/8"-5/8" and 1/4"NPT, 1/4" BSP, 10mm-16mm

Stock	Set	Contents of
Numbers	Size	Set
2220100	5 Piece Set	2220001-2220005 in plastic pouch



Unscrew-UmsTM





Choosing the proper size:

Find out the wire size of your screw and refer to Figure 1 and the adjacent table to determine the size you need.

About UNSCREW-UMSTM

The UNSCREW-UMSTM are designed to back out broken screws and remove other fasteners with minimal damage to surrounding wood. Often the broken screw can be replaced with the same-sized screw; however, a longer and/or thicker screw may be needed, especially if the structural strength is important. Occasionally, the hole must be epoxied or plugged and redrilled. The important thing is that something can be done because the old screw is gone.

Common		Recommended Unscrew-Ums			
Screv	v Sizes	for Common Screw Sizes		w Sizes	
A Shank Size	B Thread Size	Outside Diameter	Length(s)	Stock Number	
X	#2	1/16"	1"	SXTR0062	
#2	#4	3/32"	1-3/8"	SXTR0002 SXTR0093	
#4	#6	1/8"	2"	SXTR0125	
#6	#8	5/32"	2" 2-1/2"	SXTR0156 SXTR0156L	
#8	#10	3/16"	2-1/2 2" 2-1/2"	SXTR0130L SXTR0187 SXTR0187L	
#10	#12	7/32"	2"	SXTR0167E SXTR0218 SXTR0218L	
#12, 14	#14, 16, 18	1/4"	2" 3-1/2"	SXTR0250 SXTR0250L	
#14, 16, 18	#16, 18, 20	5/16"	2" 4"	SXTR0312 SXTR0312L	
#16, 18, 20	#20	3/8"	2" 4"	SXTR0375 SXTR0375L	
X	X	7/16"	2" 4"	SXTR0437 SXTR0437L	
X	X	1/2"	2" 4"	SXTR0500 SXTR0500L	
SETS					
Name		Description		Stock Number	
Boat Builders Standard Set		Set of 5 – 5/32" to 5/16"		SXTR0001	
Handy Ones S	Handy Ones Set		Set of $5 - 1/8$ " to $1/4$ "		
Boat Builders	Long Set	Set of 5 Long – 5	SXTR0003		
D:- C-4		C-4-£ (1/0224-	CVTD 0004		

Set of 6 - 1/8" to 5/16"

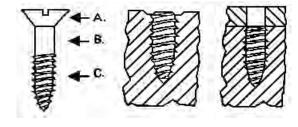


Fig. 1A If the slot is baldy damaged, remove the head with a twist drill of make a deep hole in the head and cut through the rest of the head with an Unscrew-Ums.

Fig. 1B When the shank is exposed, select the proper sized Unscrew-Ums selected from column A in the adjacent table.

Fig. 1C When dealing only with the threaded portion of the screw, select the proper sized Unscrew-Ums form column B in the adjacent table.

Your own skill and familiarity with the Unscrew-Ums may influence your choice of starters. If in doubt, make a practice board and choose a larger Unscrew-Ums and work your way down to smaller sizes as you become more proficient.

Basic Set

SXTR0004



Countersink, Tapered Drill and Stop Collars Mounted Combinations Available Types

CT - Countersink mounted on Round Shank Taper Point Drill

CM - Countersink mounted on Round Shank Taper Point Drill with Stop Collar

CHT - Countersink mounted on TPS Lock® Hex Shank Taper Point Drill

CHM - Countersink mounted on TPS Lock® Hex Shank Taper Point Drill with Stop Collar

Stock Sizes					
Type CM		nsions	Type CT	Type CHT	Type CHM
Stock	Cutting	Drill	Stock	Stock	Stock
Number	Diameter	Hole Size	Number	Number	Number
C2M	1/4	5/64	C2T	X	X
C3M	1/4	3/32	C3T	X	X
C4M	5/16	7/64	C4T	X	X
C44M	5/16	1/8	C44T	C44HT	C44HM
C65M	5/16	9/64	C65T	C65HT	C65HM
C410M	5/16	5/32	C410T	C410HT	C410HM
C411M	5/16	11/64	C411T	C411HT	C411HM
C43M	5/16	3/16	C43T	C43HT	C43HM
C56M	3/8	3/32	C56T	X	X
C57M	3/8	7/64	C57T	X	X
C5M	3/8	1/8	C5T	C5HT	C5HM
C6M	3/8	9/64	C6T	С6НТ	С6НМ
C7M	3/8	5/32	C7T	C7HT	C7HM
C8M	3/8	11/64	C8T	C8HT	C8HM
C9M	3/8	3/16	C9T	C9HT	С9НМ
C913M	3/8	13/64	C913T	C913HT	C913HM
C97M	3/8	7/32	C97T	C97HT	C97HM
C105M	7/16	5/32	C105T	C105HT	C105HM
C1011M	7/16	11/64	C1011T	C1011HT	C1011HM
C103M	7/16	3/16	C103T	C103HT	C103HM
C10M	7/16	13/64	C10T	C10HT	C10HM
C1014M	7/16	7/32	C1014T	C1014HT	C1014HM
C104M	7/16	1/4	C104T	C104HT	C104HM
C122M	1/2	1/8	C122T	C122HT	C122HM
C129M	1/2	9/64	C129T	C129HT	C129HM
C125M	1/2	5/32	C125T	C125HT	C125HM
C1211M	1/2	11/64	C1211T	C1211HT	C1211HM
C92M	1/2	3/16	C92T	C92HT	C92HM
C102M	1/2	13/64	C102T	C102HT	C102HM
C12M	1/2	7/32	C12T	C12HT	C12HM
C1415M	1/2	15/64	C1415T	X	X
C14M	1/2	1/4	C14T	C14HT	C14HM
C145M	5/8	5/32	C145T	C145HT	C145HM
C143M	5/8	3/16	C143T	C143HT	C143HM
C167M	5/8	7/32	C167T	C167HT	C167HM
C16M	5/8	1/4	C16T	C16HT	C16HM
C1617M	5/8	17/64	C1617T	X	X
C169M	5/8	9/32	C169T	X	X
C1619M	5/8	19/64	C1619T	X	X
C18M	5/8	5/16	C18T	X	X
C243M	3/4	3/16	C243T	C243HT	C243HM
C247M	3/4	7/32	C247T	C247HT	C247HM
C244M	3/4	1/4	C244T	C244HT	C244HM
C245M	3/4	5/16	C245T	X	X
C20M	3/4	21/64	C2431	X	X
C24M	3/4	3/8	C24T	X	X
C284M	7/8	1/4	C284T	X	X
C285M	7/8	5/16	C285T	X	X
C286M	7/8	3/8	C286T	X	X
C324M	1	1/4	C324T	X	X
C324M	1	3/8	C3241 C326T	X	X
		3/6	C3201	Λ	Λ
X = Not av	vailable				





Replacement Set Screws and Keys (part 1)

W 131 1	Set Screw Size	Standard Screw/	Standard Key/
Tool Number	and Length	Spline Screw	Spline Key
C2 C3	10-32 X 1/8 CUP	STSCR002	3/32 K0093
C4 C44 C65 C410 C411			
C43 C56 C57 C5 C6 C7	10-32 X 3/16 CONE	STSCRO03/ STSCR004	3/32 K0093 / SPK0093
C8 C9 C913 C97			
C105 C1011 C103 C10	10-32 X 1/4 CONE	STSCR008/STSCR009	"
C1014 C104	10-32 X 1/4 CUP	STSCR006/STSCR007	"
C122 C129 C125 C1211 C92	10-32 X 1/4 CONE	STSCR008/STSCR009	"
C102			
C12 C1415 C14	10-32 X 1/4 CUP	STSCR006/STSCR007	"
C145 C143	10-32 X 1/4 CONE	STSCR008/STSCR009	"
C167 C16 C1617 C169 C1619	10-32 X 5/16 CUP	STSCR010	3/32 K0093
C18			
C243	10-32 X 1/4 CONE	STSCR008/STSCR009	3/32 K0093 / SPK0093
C247 C244 C245 C20 C24	10-32 X 5/16 CUP	STSCR010	3/32 K0093
C24			
C284 C285 C286 C287 C324	1/4-28 X 3/8	STSCR014	1/8 K0125
C326 C328			
H3S H4S	10-32 X 1/8 CUP	STSCR002	3/32 K0093
H5S H6S H7S H8S H9S	10-32 X 3/16 CONE	STSCR003/STSCR004	3/32 K0093 / SPK0093
H913S H97S H10S	10.00.77.1/1.00.77	ama an	"
H125S H92S H102S	10-32 X 1/4 CONE	STSCR008/STSCR009	"
H12S H14S	10-32 X 1/4 CUP	STSCR006/STSCR007	"
H143S	10-32 X 1/4 CONE	STSCR008/STSCR009	
H16S H169S H18S	10-32 X 5/16 CUP	STSCR010	3/32 K0093
H244S H245S H24S	1/4-28 X 5/16	STSCR013	1/8 K0125
H285S H286S H287S H328S	1/4-28 X 3/8	STSCR014	"
CC5 CC6 CC7 CC8 CC9	1/4-28 X 1/2 10-32 X 1/8 CUP	STSCR015 STSCR002	3/32 K0093
CC125 CC1211 CC92 CC102	10-32 X 1/8 COP 10-32 X 3/16 CONE	STSCR002 STSCR003 / STSCR004	3/32 K0093 / SPK0093
CC12 CC14	10-32 X 3/10 CONE	313CK003 / 313CK004	3/32 K0093 / SI K0093
CC143	10-32 X 1/4 CONE	STSCR008/STSCR009	"
CC16 CC169 CC18	10-32 X 1/4 CONE 10-32 X 1/4 CUP	STSCR006/STSCR007	"
CC244 CC245 CC24	1/4-28 X 1/4	STSCR000/STSCR007	1/8 K0125
B3	10-32 X 1/4 CONE	STSCR008/STSCR009	3/32 K0093 / SPK0093
B37 B34 B317 B39 B310	10-32 X 1/4 CUP	STSCR006/STSCR007	" "
B43	10-32 X 1/4 CONE	STSCR008 STSCR009	"
B47 B4 B49 B5 B511 B56	10-32 X 1/4 CUP	STSCR006/STSCR007	"
B64 B610 B6 B67 B68	10-32 X 5/16 CUP	STSCR010	3/32 K0093
B74 B75 B76 B7 B78 B85	1/4-28 X 3/8	STSCR014	1/8 K0125
B86 B87 B8 B89	_,3 11 0, 0	2 - 2 32101 .	2. 0 230220
B96 B97 B98 B9 B910 B912	1/4-28 X 1/2	STSCR015	"
B106 B107 B108 B109 B10	5/16-24 X 1/2	STSCR020	5/32 K0156
B1012			2422
B126 B127 B128 B129 B1210	5/16-24 X 5/8	STSCR021	"
B12			
ALL 'E' CSINKS	10-32 X 3/16 CONE	STSCR003 / STSCR004	3/32 K0093 / SPK0093
J56 J4 J5 J6 J7 J8 J9	10-32 X 1/8 CUP	STSCRO02	3/32 K0093
J25 J26 J27 J28 J29	10-32 X 3/16 CONE	STSCR003 / STSCR004	3/32 K0093 / SPK0093
J35 J37 J39	10-32 X 1/4 CONE	STSCR008/STSCR009	"

Continued on next page



Replacement Set Screws and Keys (part 2)

Tool Number	Set Screw Size	Standard Set Screw/ Spline Set Screw	Standard Key/ Spline Key
X3L	and Length 10-32 X 3/16 CONE	STSCR003/STSCR004	3/32 K0093 / SPK0093
X37L X34L X317L X39L	10-32 X 3/16 CUP	STSCR005/STSCR004 STSCR005	3/32 K0093 / SPK0093
X37L X34L X317L X39L X310L	10-32 X 3/10 CUP	SISCROOS	3/32 K 0093
X43L X47L X4L X49L X5L			
X511L X56L X64L X610L	10-32 X 1/4 CUP	STSCR006/ STSCR007	"
X6L	10-32 X 1/4 COI	SISCROOO/ SISCROO/	
X67L X68L	1/4-28 X 5/16	STSCR013	1/8 K00125
X74L X75L	1/4-28 X 1/4	STSCR012	"
X78L	1/4-28 X 5/16	STSCR013	"
X85L	1/4-28 X 1/4	STSCR012	"
X76 X76L X86L X87L X8L	1/4-28 X 5/16	STSCR013	"
X89L	1/4-28 X 5/16	STSCR014	"
X96L X97L X98L	1/4-28 X 5/16	STSCR013	"
X9L	1/4-28 X 3/8	STSCR014	11
X910L X912L	1/4-28 X 1/2	STSCR015	"
X106L X107L X108L X109L X10L X1012L X26L X127L	5/16-24 X 3/8	STSCR019	5/32 K0156
X128L X129L X1210L X12L	5/16-24 X 1/2	STSCR020	"
ALL 'R' CBORES	5/16-24 X 1/2 10-32 X 3/16 CONE	STSCR020 STSCR003 / STSCR004	3/32 K0093 / SPK0093
	10-32 X 3/16 CONE	515CR003 / 515CR004	3/32 K0093 / SPK0093
STOP COLLARS 1/4 5/16 3/8 7/16 1/2 9/16 5/8	10-32 X 1/8 CUP	STSCR002	3/32 K0093
3/4 7/8	10-32 X 1/8 CUF		3/32 K0093
11-1/8 1-1/4	1/4-28 X 3/16	STSCR011	1/8 K0125
1-3/8 1-1/2	5/16-24 JAM	STSCR029	5/32 K0156
DRILL STOPS .046"125"	10-32 X 1/8 CUP	STSCR002	3/32 K0093
.126"2031"	10-32 X 3/16 CONE	STSCR003/STSCR004	3/32 K0093 / SPK0093
.204"2638"	10-32 X 3/16 CUP	STSCR005	3/32 K0093
.261"374"	10-32 X 1/4 CUP	STSCR006/STSCR007	3/32 K0093 / SPK0093
.375"	10/32 X 5/16 CUP	STSCR010	3/32 K0093
.377"500"	1/4-28 X 3/8	STSCR014	1/8 K0125
.5118"5781"	1/4-28 X 3/8	STSCR014	"
.5906"625"	516-24 X 3/8	STSCR019	5/32 K0145
.6299"875"	5/16-24 X 1/2	STSCR020	5/32 K0156
1 "	3/8-24 X 1/2	STSCR025	3/16 K0187
WASHERS	1/8	WSH1	
	3/16	WSH2	
	1/8 X 7/32 LOCK	WSH4	
DALL DEADING GUIDE	5/16	WSH3	
BALL BEARING GUIDE	3-48 X 3/8 CAP	SCR0	
SCREWS	5-40 X 3/8 CAP 5-40 X 1/2 CAP	SCR1	
		SCR3	
	10-32 X 3/4 CAP	SCR4	



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Decimal Equivalency Chart (Part 1)

							arcii	J OI	iai i (i		Ĺ			ī
Inch	Dec-	Wire	mm	Tap	Inch	Dec-	Wire	mm	Tap	Inch	Dec-	Wire	mm	Tap
Inch	imal	11116	111111	Sizes	Inch	imal	11116	111111	Sizes	Inch	imal	11116	111111	Sizes
	.0059	97	.15			.0390	61				.1100	35		
	.0063	96	.16			.0394		1.			.1102		2.8	
	.0067	95	.17			.0400	60				.1110	34		
	.0071	94	.18			.0410	59				.1130	33		#6-40
	.0075	93	.19			.0413		1.05			.1142		2.9	
	.0079	92	.20			.0420	58				.1160	32		
	.0083	91	.21			.0430	57				.1181		3.	
	.0087	90	.22			.0433		1.1			.1200	31		
	.0091	89	.23			.0453		1.15			.1220		3.1	
	.0094		.24			.0465	56			1/8	.1250			5/32-32NS
	.0095	88			3/64	.0469			#0-80		.1260		3.2	
	.0098		.25			.0472		1.2			.1280		3.25	
	.0100	87				.0492		1.25			.1285	30		5/32-36NS
	.0102		.26			.0512		1.3			.1299		3.3	
	.0105	86				.0520	55				.1339	•	3.4	
	.0106	0.7	.27			.0531	- 4	1.35			.1360	29	2.5	#8-32
	.0110	85	.28			.0550	54	4.4			.1378	20	3.5	
	.0114	0.4	.29			.0551		1.4		0/64	.1405	28		
	.0015	84	.30			.0571		1.45		9/64	.1406		3.6	
	.0118	92	.30			.0591	53	1.5			.1417 .1440	27	3.0	
	.0120	83				.0595	53	1 55				21	3.7	
	.0125 .0126	82	.32		1/16	.0610 .0625		1.55	#1-64		.1457 .1470	26	3.1	3/16-24NS
	.0120	81	.54		1/10	.0623		1.6	#1-04		.1476	20	3.75	3/10-24NS
	.0130	01	.34			.0635	52	1.0	#1-72		.1476	25	3.73	#10-24
	.0134	80	.34			.0650	34	1.65	#1-72		.1495	23	3.8	#10-24
	.0138	00	.35			.0669		1.7			.1520	24	3.0	
	.0142		.36			.0670	51	1.7	#2-56		.1535	27	3.9	
	.0145	79				.0689		1.75	#2 30		.1540	23		
	.0150		.38			.0700	50		#2-64	5/32	.1562			
1/64	.0156					.0709		1.8		0,00	.1570	22		3/16-32NS
	.0157		.4			.0728		1.85			.1575		4.	
	.0160	78				.0730	49				.1590	21		#10-32
	.0165		.42			.0748		1.9			.1610	20		
	.0173		.44			.0760	48				.1614		4.1	
	.0177		.45			.0768		1.95			.1654		4.2	
	.0180	77			5/64	.0781			#3-48		.1660	19		
	.0181		.46			.0785	47				.1673		4.25	
	.0189		.48			.0787		2.			.1693		4.3	
	.0197		.5			.0807		2.05			.1695	18		
	.0200	76				.0810	46		#3-56	11/64	.1719			
	.0210	75				.0820	45				.1730	17		#12-24
	.0217	5 .	.55			.0827		2.1			.1732	1.	4.4	7/00 04370
	.0225	74				.0846		2.15			.1770	16	4.5	7/32-24NS
	.0236	5 2	.6			.0860	44	2.2			.1772	1.5	4.5	#12.20
	.0240	73				.0866		2.2			.1800	15	4.6	#12-28
	.0250	72	65			.0886	12	2.25	#4 40		.1811	14	4.0	
	.0256	71	.65			.0890	43	2.3	#4-40		.1820	14 13		
	.0260 .0276	/1	.7			.0906 .0925		2.35			.1850 .1850	13	4.7	
	.0276	70	• /			.0925	42	2.33	#4-48		.1870		4.75	
	.0280	69			3/32	.0933	72		11 1111 0	3/16	.1875		7.73	
	.0292	0,7	.75		3132	.0938		2.4		3/10	.1890		4.8	
	.0293	68	.,5			.0943	41	2.7			.1890	12		7/32-32NS
1/32	.0310					.0965		2.45			.1910	11		.,52 52115
	.0315		.8			.0980	40				.1929		4.9	
	.0320	67				.0984		2.5			.1935	10		
	.0330	66				.0995	39		#5-40		.1960	9		
	.0335		.85			.1015	38				.1969		5.	
	.0350	65				.1024		2.6			.1990	8		1/4-20
	.0354		.9			.1040	37		#5-44		.2008		5.1	
	.0360	64				.1063		2.7			.2010	7		
	.0370	63				.1065	36		#6-32	13/64	.2031			
	.0374		.95			.1083		2.75						
	.0380	62			7/64	.1094								



Decimal Equivalency Chart (Part 2)

				Decima	пра	uivai		<u>ınaı t</u>	(Part 2				
Inch	Dec-	Wire &	***	Tap	Inch	Dec-	Wire &	***	Tap	Inch	Dec-	744 744	Tap
Incn	imal	Letter	mm	Sizes	Incn	imal	Letter	mm	Sizes	incn	imal	mm	Sizes
	.2040	6			21/64	.3281			21,012	11/16	.6875		3/4-16NF
	.2047	v	5.2		21/01	.3307		8.4		11/10	.6890	17.5	5/ 1 10111
	.2055	5	U.2			.3320	Q	0.1	3/8-24NF	45/64	.7031	17.00	
	.2067		5.25	_		.3346	Q	8.5	3/0 2-111	45/04	.7087	18.	
	.2087		5.3			.3386		8.6		23/32	.7188	10.	1/2-14 Pipe
	.2090	4	5.5			.3390	R	0.0	1/8-27 Pipe	23/32	.7283	18.5	1/2-14 1 lpc
	.2126	7	5.4			.3425	N.	8.7	1/6-2/11pc	47/64	.7344	10.5	
	.2120	3	3.4	1/4-28	11/32	.3423		0.7		4//04	.7480	19.	
	.2165	3	5.5	1/4-20	11/32	.3445		8.75		3/4	.7500	19.	
7/32			3.3	_	_			8.8	_	49/64			7/9 ONC
1/34	.2188		5.6			.3465	C	0.0		49/04	.7656	10.5	7/8-9NC
	.2205	2	5.0			.3480	S	8.9		25/22	.7677 .7812	19.5	
	.2210	4	5.7			.3504				25/32		20	
	.2244					.3543	TD.	9.		F1 /64	.7874	20.	
	.2264	1	5.75			.3580	T	0.1		51/64	.7969	20.5	
	.2280	1	7 0		22/64	.3583		9.1		12/16	.8071	20.5	7/0 1 ANTE
	.2283		5.8		23/64	.3594		0.2		13/16	.8125	01	7/8-14NF
	.2323		5.9			.3622		9.2		5 0/64	.8268	21.	
4.715.4	.2340	A				.3642		9.25		53/64	.8281		
15/64	.2344					.3661		9.3	-4-1110	27/32	.8438		
	.2362	_	6.			.3680	U		7/16-14NC		.8465	21.5	
	.2380	В				.3701		9.4		55/64	.8594		
	.2402		6.1			.3740		9.5			.8661	22.	
	.2420	C			3/8	.3750				7/8	.8750		1-8NC
	.2441		6.2			.3770	V				.8858	22.5	
	.2460	D				.3780		9.6		57/64	.8906		
	.2461		6.25			.3819		9.7			.9055	23.	
	.2480		6.3			.3839		9.75		29/32	.9062		1-12NF
1/4	.2500	E				.3858		9.8		59/64	.9219		3/4-14 Pipe
	.2520		6.4			.3860	W		7/16-20		.9252	23.5	
	.2559		6.5			.3898		9.9		15/16	.9375		1-14NS
	.2570	F		5/16-18NC	25/64	.3906					.9449	24.	
	.2598		6.6			.3937		10.		61/64	.9531		
	.2610	G				.3970	X				.9646	24.5	
	.2638		6.7			.4040	Y			31/32	.9688		
17/64	.2656				13/32	.4062					.9843	25.	
	.2657		6.75			.4130	Z			63/64	.9844		1-1/8-7NC
	.2660	H				.4134		10.5		1	1.0000		
	.2677		6.8		27/64	.4219			1/2-13		1.0093	25.5	
	.2717		6.9			.4331		11.		1-1/64	1.0156		
	.2720	I		5/16-24NF	7/16	.4375			1/4-18 Pipe		1.0236	26.	
	.2756		7.			.4528		11.5	,	1-1/32	1.0312		
	.2770	J			29/64	.4531			1/2-20		1.0433	26.5	
	.2795		7.1		15/32	.4688				1-3/64	1.0469		1-1/8-12NF
	.2810	K				.4724		12.		1-1/16	1.0625		
9/32	.2812			5/16-32NS	31/64	.4844			9/16-12		1.0630	27.	
	.2835		7.2			.4921		12.5		1-5/64	1.0781		
	.2854		7.25		1/2	.5000					1.0827	27.5	
	.2874		7.3			.5118		13.		1-3/32	1.0938		
	.2900	L			33/64	.5156			9/16-18	-,	1.1024	28.	
	.2913	_	7.4		17/32	.5312				1-7/64	1.1094		1-1/4-7NC
	.2950	M				.5315		13.5		/ • .	1.1220	28.5	2. 7.1.0
	.2953		7.5		35/64	.5469				1-1/8	1.1250		
19/64	.2969				22,01	.5512		14.	5/8-11	1-9/64	1.1406		
27/04	.2992		7.6		9/16	.5625			2,3 11	2 2/04	1.1417	29.	
	.3020	N	7.0		2/10	.5709		14.5		1-5/32	1.1562	2 7.	1-11-1/2 Pipe
	.3020	11	7.7		37/64	.5781		1 710	5/8-18NF	1-0/32	1.1502	29.5	1 11 1/2 1 Ipc
	.3051		7.75		511 04	.5906		15.	3/8-18 Pipe	1-11/64	1.1719	27.3	1-1/4-12NF
	.3071		7.75		19/32	.5938		13.	3/6-16 Fipe	1-11/04	1.1719	30.0	1-1/4-121NI
	.3110		7.9		39/64	.6094				1-3/16	1.1811	30.0	1-3/8 x 6
5/16			1.9	3/8 16NC	37/04			15.5		1-3/10		30.5	1-3/0 X U
5/10	.3125		0	3/8-16NC	F /0	.6102		15.5	11/16 1 OVE	1 12/64	1.2008	30.5	
	.3150	•	8.		5/8	.6250		16	11/16-16NS	1-13/64	1.2031		
	.3160	О	0.1		11/64	.6299		16.		1-7/32	1.2188	21.0	
	.3189		8.1		41/64	.6406		16.5		1.15%	1.2205	31.0	
	.3228	n	8.2		24/22	.6496		16.5	2/4 1037	1-15/64	1.2344	21.5	
	.3230	P	0.25		21/32	.6562			3/4-10NC		1.2402	31.5	
	.3248		8.25		46.10	.6693		17.		1-1/4	1.2500		
	.3268		8.3		43/64	.6719							

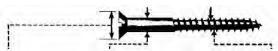


Anatomy of Wood Screws

How to Use This Chart

This chart lists the actual dimensions of wood screws and the closest fractional size equivalents. The root diameters are measured at the middle of the threaded portion of the screw. The root diameter on some wood screws tapers along the length of the threads. If drilling a straight pilot hole, we recommend the same drill size as the root diameter in hardwoods and 15% smaller in softwoods. Head diameters listed are standard for Flat Head and Oval-head screws. Round Head screws can be 5% to 10% smaller. Refer to page 4 for Taper Point Drill, Countersink, Plug Cutter and Straight Pilot Drill recommendations.

When selecting the wood screw size and length that best suits your requirements, keep in mind that the threaded portion of a wood screw takes up approximately 2/3 of the total length of the screw leaving 1/3 for the shank and head.



	95 1		. 64			MULTAR			
No.	Maximum	Sl	nank Diame	eter	F	Root Diame	Threads	No.	
Of Screw	Head Diameter	Basic Dec. Size		Fractional valent	Average Dec. Size		Fractional valent	Per Inch	Of Screw
0	.119	.060	1/16	Oversize .002	.040	3/64	Oversize .007	32	0
1	.146	.073	5/64	Oversize .005	.046	3/64	Basic Size	28	1
2	.172	.086	3/32	Oversize .007	.054	1/16	Oversize .008	26	2
3	.199	.099	7/64	Oversize .010	.065	1/16	Undersize .002	24	3
4	.225	.112	7/64	Undersize .003	.075	5/64	Oversize .003	22	4
5	.252	.125	1/8	Basic Size	.085	5/64	Undersize .007	20	5
6	.279	.138	9/64	Oversize .002	.094	3/32	Basic Size	18	6
7	.305	.151	5/32	Oversize .005	.102	7/64	Oversize .007	16	7
8	.332	.164	5/32	Undersize .007	.112	7/64	Undersize .003	15	8
9	.358	.177	11/64	Undersize .005	.122	1/8	Oversize .003	14	9
10	.385	.190	3/16	Undersize .002	.130	1/8	Undersize .005	13	10
11	.411	.203	13/64	Basic Size	.139	9/64	Oversize .001	12	11
12	.438	.216	7/32	Oversize .003	.148	9/64	Undersize .007	11	12
14	.491	.242	1/4	Oversize .008	.165	5/32	Undersize .009	10	14
16	.544	.268	17/64	Undersize .002	.184	3/16	Oversize .003	9	16
18	.597	.294	19/64	Oversize .003	.204	13/64	Undersize .001	8	18
20	.650	.320	5/16	Undersize .007	.223	7/32	Undersize .004	8	20
24	.756	.372	3/8	Oversize .003	.260	1/4	Undersize 0101	7	24

Actual Wood Screw Shank Sizes

To determine the size of a screw visually, lay the screw shank on the silhouette.

140.	U	_
Na	1	

No. 10



The **Fuller Story** - continued

The growth of the Fuller family provided the business with its first employees. In 1946 Warren Fuller Jr. began to work on a full time basis, drilling, tapping, deburring and sharpening the countersinks. The tools were being sold to boat builders and hardware stores locally and in other areas of the country by an uncle. At this time the first catalog was printed - a pocket fitting edition complete with photographs and prices of the latest countersinks. The catalog also included a line of tools to make Venetian blinds.

During the late 1950's Warren Jr. renovated the countersink design - a change that is extensively used today. Originally the flutes of the countersink were straight in design. In the new model the flutes are slightly slanted. This modified the tool from a scraper to a cutter. The design allowed the wood chips to clear, preventing clogging.

In 1955, following the death of Let, Warren Jr. incorporated the business. During the next years the Fuller family and business grew rapidly. By the 1970's it became obvious that even the expanded Warwick Ave. location was a far from adequate space. The younger members of the Fuller family were taking an active interest in the business and by 1979 when Fuller moved to its present location, most of the seven children of Warren Fuller Jr. were working in the business.

Today W.L. Fuller Inc. is operated by the team effort of the Fuller family members. The company is now owned and managed by Warren L. Fuller's children, Diane Nobile, David Fuller, Gary Fuller, Warren (Sandy) Fuller, Debbie Fuller/Burke, and Lisa Fuller. Since personal service is the secret of the Fuller success, great pride is taken in customer service, fast delivery and a superior product line. While computerizing in the early 80's has allowed a complete control over inventory, all orders are still manually priced and personally checked. Even though sales have increased 300 times over those of the early days, W.L. Fuller Inc. advertises very little, proving the success of word-of-mouth advertising and customer satisfaction expressed over the years.

* Postscript - In an effort to save money during the war years, Warren Fuller Sr. located a deal on gallons of near orange paint for his boats. With this purchase began the use of orange as the Fuller business color. The reader will note the use of orange in Fuller advertising flyers, packaging and throughout this catalog.

The Fire - March 17, 2003 continued

What remained was a three story addition that was added on to the rear of the original building. The first floor of the addition housed the grinder and dust collection system that started the fire as well as our heating treating facility. The addition was fire proof (brick & steel) and remained standing. The second floor of the addition housed our stock room. The stock room was not damaged from the fire but was soaked by hoses of the fire department.

For the next few days, some of our employees helped to rummage through the debris finding anything that was salvageable. We did recover a number of file cabinets, desks with items still in the draws and one printer, but very little remained from the fire.

Others began setting up a temporary office in a mobile office trailer that had been stored on the property. A spare computer we had purchased years ago was brought in from its dusty location at one of our homes. The back up tape from the night before was loaded onto the spare computer (thank god it was a good backup). A small telephone system was purchased and installed in the mobile office trailer and hooked up by the local cable service. Within two days we had a functioning office with one computer, telephones, printer and a fax machine.

Next we began cleaning, rust preventing and repackaging all of the tools that had been sitting on our stockroom shelves ready to ship and had been soaked during the fire. It was a monumental task that took months. To this day we still have a number of products that do not sell very well which we have not had time to clean.

We had approximately two to four months of sales worth of items on inventory. Some of the items we purchased from other companies and we continued ordering as we did before the fire. The items we manufactured were a different story. We had lost all of our machinery. We could not manufacture anything.

Another office trailer was rented and both trailers were moved along side the remaining building with the stock room on the second floor. A dumb waiter was constructed to move tools that were ready to ship, down to the office trailer where we set up our shipping room. The office trailers were kind of like working in a sardine can. We did not have any running water or indoor bathrooms. Fortunately there was a donut shop right next store. The spring, summer and fall months were not too bad but winter was a very difficult time for us.

Three 6500 watt generators had to be started and kept running each morning, one for each trailer and one for the stock room. We began shipping orders with partial quantities of our products in order to get small quantities to as many customers as possible. The backorders started piling up and created a mountain of paper work that we were not accustomed to handle.

A number of years before the fire we had purchased the building next door to us because we did not want to have to move out of the building we were in. We moved once in 1979 when we were a smaller company. We would do anything to avoid having to move again. The company continued to grow and we knew that eventually we would need more space. Our plan was to move the manufacturing to the second building allowing us to spread the offices and stock room out in the first building. The fire pushed those plans ahead. The second building was being rented out to two other companies. We had to ask one of the companies that was renting on a month to month basis to leave. The first building was destroyed and would take over one year to rebuild and get ready to move the office and stock room back in.

The most difficult part of recovering from our fire was rebuilding our manufacturing facility. We had a building but the electrical service was insufficient for our needs and we needed all new machinery. Many of the machines we had before the fire were custom manufactured just for our products. Some of the machines were quite old. We found a twelve station CNC machining center that could combine the individual steps we did in the past into one process that produced a finished tool. After successful testing of the machines running our parts, we ordered three of them. The slow economy, all though bad for sales, turned out to be good for machine purchasing. Instead of waiting fourteen to sixteen weeks for delivery, the manufacturer actually had one machine on the floor, one almost finished and the third would be four to six weeks. Even though we had found some equipment, it would still be some time before we could get electricity to those machines. Electrical panels had to be installed. Circuits had to be run. The machines had to be installed and set up. A large generator was purchased to run the automatic machinery. We had hired an electrical contractor shortly after the fire. Between the manufacturing facility and the new office building, they worked here every day for a little over a year.

During the time we were getting the manufacturing facility ready, we tried to have our tools manufactured by other companies who had equipment capable of producing our most popular products. The companies, who were not going to charge us more than we sold the tools for, could not meet our quality standards. Our efforts were fruitless. The backorders for our products continued to pile up.

There were many other things needed in our plant to be fully operational like heating and air conditioning, compressed air, lighting, work benches, shelving, measuring and testing equipment, safety equipment, air cleaning and vacuum system, grinders, hand tools and much more.

Among the first tools we were able to produce were Brad Point Drills, Step Drills and small quantities of Taper Point Drills. It took about eight months for us to be back in full production to the point were we could produce enough tools to fill new orders and complete backorders. We had a number of set backs during that long process. Our three CNC machine centers turned out to have a manufacturing defect which caused an internal part of the turret to break, shutting the machine down until a new turret was shipped to us and installed. That new turret would also eventually break. Each time a turret broke, the machine would be down for up to a week or more. We were running these machine twenty four hours a day, seven days a week. The loss of production while we were trying to recover and get tools to our customers was maddening. We were making promises to customers that they would get their orders by a certain time and then we were not able to keep that promise because yet another turret broke. We even had the company get us a spare turret to save shipping time when one failed. It took the machine manufacturer almost two years to finally solve the issues we had with their machinery.

We are very grateful to all those customers who stuck by us during one of the most difficult periods this company has ever had. There were some days that we just could not see any light at the end of the tunnel. During the winter months we would come in to ice cold office trailers, computers shut down and phone system shut down. We would wait for the generators to be started so the heat would come on, the

computers would start and the phones and fax machine would start ringing. Most of the calls were answered with "Sorry, we do not have those in stock yet".

As it turned out, the fire was a double edged sword. We now have new automated machinery that has allowed us to design and produce additional products. We have expanded our office and stock room into our new building. We are now up to date on all new fire and safety codes. We have a fire proof building and a vacuum system with its own sprinkler system. We have our family, our employees and we have our customers.

Front of old building.



Side of old building.



Front and side of building completely destroyed.





Notes

Special Sizes

Special size Countersinks, Counterbores, Plug Cutters and Drills can usually be manufactured and shipped within 1 to 6 weeks, depending on size, type and quantity. Use stock price of outside diameter you require and add the following percentages to obtain price on all types of Countersinks and Counterbores with drill hole size and/or included angles different than stock sizes listed.

One tool of any one size and type	List plus	100%
Two tools of any one size and type	. List plus	90%
Three tools of any one size and type	. List plus	80%
Four tools of any one size and type	List plus	70%
Five tools of any one size and type	. List plus	60%
6 to 11 tools of any one size and type	. List plus	50%
12 to 23 tools of any one size and type	. List plus	40%
24 to 47 tools of any one size and type	. List plus	30%
48 to 95 tools of any one size and type	List plus	20%
96 to 143 tools of any one size and type	List plus	10%

For special outside diameters use price of next larger stock size. Example: 19/32" = 5/8" diameter and add quantity percentage.

Sharpening Service

All Countersinks, Counterbores, Plug Cutters and Drills can be sharpened economically in our plant.

Our charges will depend on condition, the following being average.

Types 'C', 'E', 'J', 'K' and	
High Speed Steel Countersinks	15% of list price
Countersinks, Carbide	30% of list price
Counterbores, (all)	25% of list price
Plug Cutters	15% of list price
Drills, Brad Point	
Taper Point	50% of list price
Regular Point	30% of list price
Step Drills	30% of list price
We also sharpen most tools we sell	

Multi Spur Bits Woodchuck Drills Forstner Bits etc.

These prices are estimates only. Please call for sharpening quotations. There is a minimum sharpening charge on small quantities. See price list.

All Countersinks and Counterbores come complete with two set screws.

Extra screws and extra hex socket keys are available.

See catalog pages 131 & 142-143 and price list.

Manufactured by:

W.L. Fuller Inc. P.O. Box 8767 7 Cypress Street, Warwick, R.I. 02888 Tel (401) 467-2900 Fax - (401) 467-2905

If you don't see it in this catalog - Ask for it - We have many sizes and types of tools in stock that are not shown in this catalog.

Catalog created by Lisa M. Fuller & David W. Fuller



Welcome to the New **Fuller** Catalog 25

It has been almost 2 years since our fire and we have been working hard on this new catalog for the last year. The biggest change is the addition of the Whiteside Manufacturing line of Solid Carbide and Carbide Tipped Router Bits and accessories. We have also added a number of new products and removed some that have been discontinued or that we are no longer handling. Those items are listed below. We hope you enjoy Catalog 25 which we have dedicated to the memory of our father, Warren L. Fuller, who died as a result of Hurricane Katrina in Mississippi. This catalog is available in both hard copy and electronic formats.

New products in Catalog 25

Description	Page
The Fire – A brief story about the fire that all but destroyed W. L. Fuller, Inc. March 17, 2003	Cover
TPS Lock® System- Taper Point Drills	9
JH Countersinks- Type J Countersinks with a 1/4" Hex Shank	18
Standard sized Step Drills to pre drill for wood and production screws	34-35
Series #2515- High Speed Steel Brad Point Left Hand Regular Length Drills	40
Drill Blanks	42
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Quick Release 1/4" Shank- Regular Point and Brad Point Drills	48
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Hammer Drills- SDS-Plus Hex/Tapcon	57
Hammer Drills- Round Shank	58
Hammer Drills- Spline Shank	59
Hammer Drills- SDS-Max®	59
Percussion/Hammer Core Bits	60
Percussion/Hammer Core Adapters and Accessories	61
Hole Saw Ejector Spring- fits all 1/4" Pilot Drills	79
Recessed Lighting Hole Saws- Carbide Grit Edge	81
Tungsten Carbide Grit Hole Saw Kit	81
Steel Pro- Contractor Steel Circular Saw Cutting Blades	85
Hack Saw Frame	90
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Solid Carbide Spiral Router Bits	94
Solid Carbide Router Bits	95-96
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Round Nose and Half Round Router Bits	101
V-Groove, Panel and Cove Router Bits	102
Rabbeting and Roman Ogee Router Bits	103
Roundover and Chamfer Router Bits	104
Keyhole/ Carbide Tipped Flush Trim Router Bits	105
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What's Discontinued from Catalog 25

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Series #420, #422, #424, and #164	56
Bell Hanger Drills- Square Taper Shank	61
Insty-Bit Drill Guides- Series #733	62
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Forstner Bit Set- 4 piece	65
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Circular Saw Blades- Delux Industrial with C-4 Carbide -Cutoff 60 Tooth	72
Circular Saw Blades- Delux Industrial with C-4 Carbide- Trim 80 Tooth	72
Circular Saw Blades- Delux Industrial with C-4 Carbide- Planer 50 Tooth	72
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Screw Driver Bits- Pozidriv® Reduced Diameter	97
Screw Driver Bits- Socket Head Insert Bits Allen®/Hex Style- 5/16" Hex Shank	98
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