W. L. Fuller 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 & OPERATED

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**.

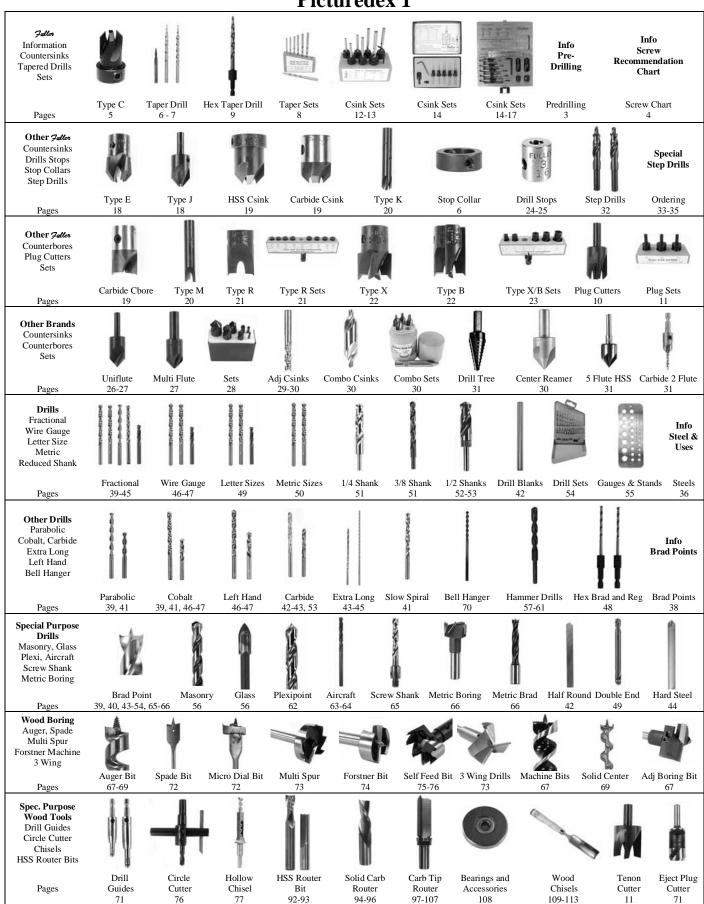
Electronic Information

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.



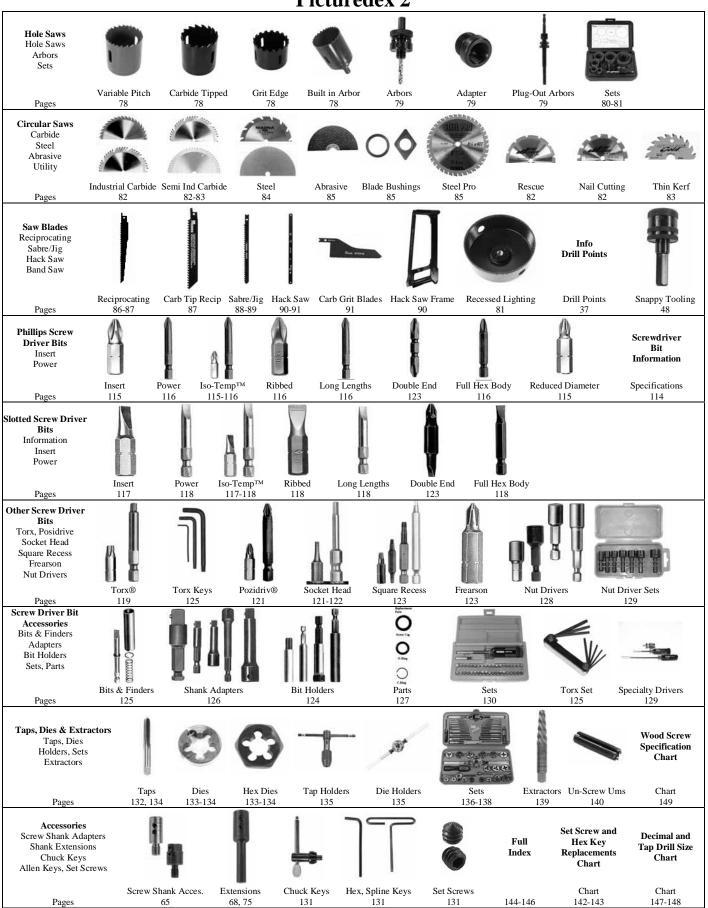
Picturedex 1



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. 74tter, 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.

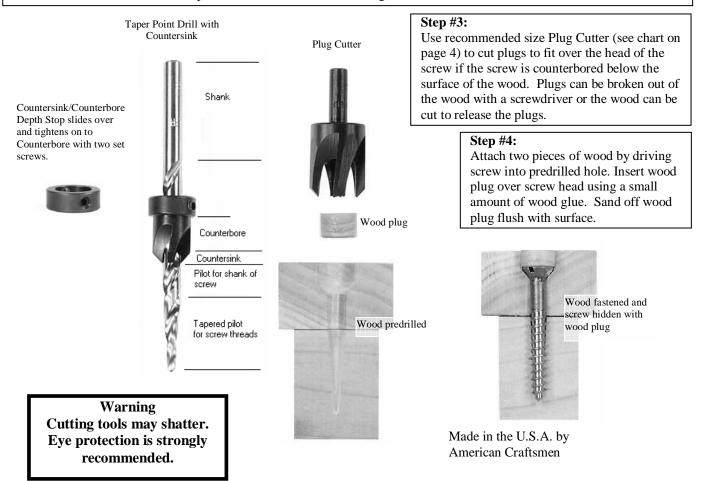
We have outlined the 4 easy steps below:

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



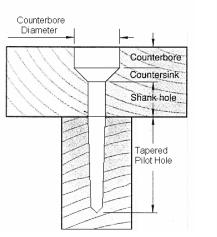
Standard Wood Screw Sizes and Predrilling Recommendations

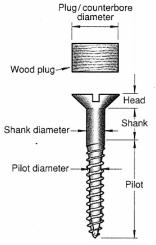
S	crew S	Size (Gauge)	#2	#3	#4	#5	#6	#7	#8	#9	#10	#12	#14	#16	#18
Head	A	Actual Head Size	11/64	13/64	15/64	1/4	9/32	5/16	11/32	23/64	25/64	7/16	1/2	35/64	39/64
Bore	Min	a. Counterbore Dia.	1/4	1/4	1/4	1/4	5/16	5/16	3/8	3/8	7/16	7/16	1/2	9/16	5/8
Size	Re	commended Size	1/4	5/16	5/16	3/8	3/8	3/8	3/8	3/8	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 Size	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	C9	C102	C12	C14	C169	C18	



Drill Length Recommendations for Countersink/Taper Point Drill Combos

				_							-			
Scr	ew Size (Gauge)	#2	#3	#4	#5	#6	#7	#8	#9	#10	#12	#14	#16	#18
Tapered Drill 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
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 shan	k for chu	cking	**=	3/4" to	1" of sha	nk for chu	ıcking	***	= Set screw	s position	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		"0
#3	#1	#0
# 4 #5		
#6		#1
#7	#2	
#8	#2	
#9]	#2
#10		
#12		
#14	#3	#3
#16	π3	πJ
#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).









C16



C244



C324

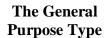
Stock Sizes									
Stock Number	Cutting Diameter	Drill Hole Size	Overall Length						
C2	1/4	5/64	3/4						
C3	1/4	3/32	3/4						
C4	5/16	7/64	7/8						
C44	5/16	1/8	7/8						
C65	5/16	9/64	7/8						
C410	5/16	5/32	7/8						
C411	5/16	11/64	7/8						
C43	5/16	3/16	7/8						
C56	3/8	3/32	7/8						
C57	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						
C1011	7/16	3/16	7/8						
* C103	7/16	13/64	7/8						
C1014	7/16	7/32	7/8						
C1014 C104	7/16	1/32	7/8						
C104 C122	1/2	1/4	7/8						
C122	1/2	9/64	7/8						
C129	1/2	5/32	7/8						
C123	1/2	11/64	7/8						
* C92	1/2	3/16	7/8						
* C102	1/2	13/64	7/8						
* C102									
	1/2	7/32	7/8						
* C1415	1/2	15/64	7/8						
	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						
C326	1	3/8	1-3/8						

st Indicates most popular sizes contained in sets.



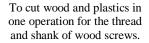
High Speed Steel Taper Point Drills & Stop Collars

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.

I	1					
Inside	Width	Stock				
Diameter	wian	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 11901000				
1	5/16					
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 Manufactured	17.45.76	SE SE
Å		STATE OF A CHARLES
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Style # 200 Short Length General Purpose

Style # 201 Regular Length General Purpose

Style # 208 Regular Length Fast Spiral

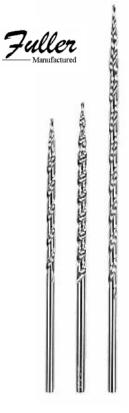
			Long Len	gth		8" Overall			
Wood Screw		Sizes		General Fast Purpose Spiral		Si	General Purpose		
Size	Drill	Flute	Overall	Stock	Stock	Flute	Overall	Stock	
	Dia	Length	Length	Number	Number	Length	Length	Number	
2	5/64	2-1/4	3-3/4	20200078	X	5-1/2"	8"	X	
3	3/32	2-1/4	4-1/4	20200093	X	5-1/2"	8"	X	
4	7/64	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

209 Long Length Fast Spiral

Style # Style # 203 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

L									
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 Larpose									
ĺ	Stock No.	Description								
	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.

1 t

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

Dimensions		Standard Type Four Flute		Tapered		Four Flute			Hex Shank	
		Plug C	Plug Cutters Stock Number		Plug Cutters	Plug Cutters Stock Number		Plug Cutters Stock Number		Tapered Plug Cutters
Plug Size	Max Lgth.	1/4 Shank Dia.	3/8 Shank Dia.	1/2 Shank Dia.	1/4 Shank Dia.	3/8 Shank Dia.	1/2 Shank Dia.	3/8 Shank Dia.	1/2 Shank Dia.	1/4 Shank Dia.
1/4	3/8	11640250	X	X	11640250T	X	X	11860250	X	QP4
5/16	3/8	11640312	X	X	X	X	X	11860230	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			
	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





with width not more than outside diameter of cutter All sizes with 1/2" shank

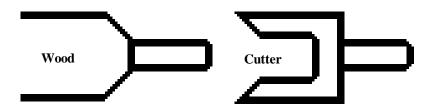
To make round Tenons on any shape wood parts

- to fit chuck.
- Other Tenon sizes, outside diameters or shank sizes available
- Also available to cut flat

Quotation	on request.
Stock Sizes	- Four Flute

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		

Quotation on request





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

Along the many model the wide the College in a combination of	Shown	Stock N	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	7	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.

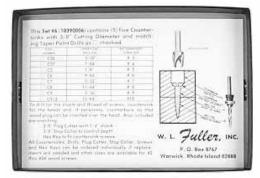
Set # 10390014

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





No. 6 Set of 5 Countersinks, Tapered Drills and 1 each Plug Cutter, Stop Collar, and Hex Key.

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.

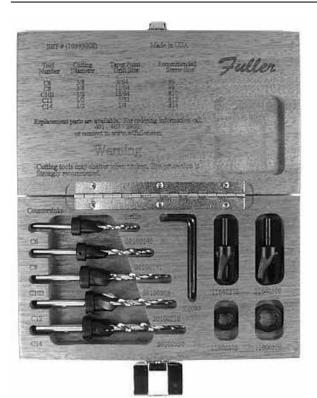
Chose any five sizes from the list below.

Sizes C5 thru C9 will be included if not specified.

Sizes es tina es vin se included il not specifica.						
Tool Number	Taper Point Drill Size	Recommended 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	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, 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 Number	Cutting Diameter	Taper Point Drill Size	Recommended 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.



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.





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 Number	Cutting Diameter	Drill 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		

E18 A	5/8 Sizes 1" overall	5/16 length	
	Collars not recom	_	
ьюр	commis not recom	menaca.	



E92 on a 3/16" Regular Point Drill

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 Number With 1/4" Hex Shank	
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	E
J7	3/8	5/32	J7H	W
J8	3/8	11/64	J8H	
J9	3/8	3/16	J9H	Ι
J25	1/2	1/8	J25H	T
J26	1/2	9/64	J26H	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

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					
5	Stock Sizes				
Countersink Stock Number	Cutting Diameter	Drill 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	iameter		
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" 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 Dia	ameter		
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
	3/8"	1/2"	3/8"	1/2"
Size	Shank	Shank	Shank	Shank
	3/8	3" Cutting Di	iameter	
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	iameter	
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	3" Cutting Di	iameter	
1/4	M102506	M102508	X	X
9/32	M102816	M102818	X	X
5/16	M103126	M103128	X	X
	3/	4" Cutting D	iameter	
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.





R93

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.

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

^{*} 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.

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



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



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

Fuller

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'	Specifications			
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	1-1/6	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	
B107	X107L X108L	1-3/8	1-1/2	1/2	
B109	X109L	1-3/8	1-5/8	9/16	
B10	X10)L	1-3/8	2	5/8	
B1012	X10L X1012L	1-3/8	2-1/4	3/4	
B1012 B126	X1012L X126L	1-1/2	1-1/2	3/4	
B120 B127	X120L X127L	1-1/2	1-1/2	7/16	
B127 B128		1-1/2			
B128 B129	X128L X129L	1-1/2	1-1/2 1-5/8	1/2	
			1-5/8	9/16	
B1210	X1210L	1-1/2		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 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 Stops

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

Drill	Decimal	Stock
Size		Number
3/8" Diam	eter by 1/2"	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	.1265	10600128
#29	.1300	10600130
9/64	.1405	106001403
#27	.1440	10600140
#26	.1470	10600144
#25	.1495	10600147
#23	.1520	10600149
#23	.1540	10600154
5/32	.1562	10600154
#22	.1570	10600150
4.0 mm	.1575	10600157
#21	.1590	106001575
#20	.1610	10600157
#19	.1660	10600161
#18	.1695	10600169
11/64	.1719	10600171
#17	.1730	10600171
#16	.1770	10600173
#15	.1800	10600177
#14	.1820	10600180
#13	.1850	10600185
3/16	.1875	10600187
5/10	.1073	10000107



Drill



Drin Decimal		Stock
Size		Number
1/2" Diame	ter by 1/2" (Overall Length
#12	.1890	10600189
#11	.1910	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	10600257
17/64	.2656	10600265
H	.2660	10600266
I	.2720	10600272
7.0 mm	.2756	10600272
J	.2770	10600273
K	.2810	106002810
9/32	.2812	10600281
L	.2900	10600290
M	.2950	10600295
19/64	.2969	10600296
N	.3020	10600290
7.75mm	.3051	10600302
5/16	.3125	10600303
		Overall Length
8.0 mm	.3150	10600315
0.0 11111	.3160	10600313
8.1mm	.3189	10600316
P 8.1111111		
21/64	.3230 .3281	10600323 10600328
Q Q	.3320	10600328
8.5mm	.3346	10600332
8.5mm R	.3340	10600334
11/32	.3438	10600339
S 11/32	.3480	
9.0 mm	.3543	10600348 10600354
9.0 mm T	.3543	10600354
1	.5580	10000338

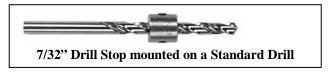
Stock



23/64

U

9.5mm



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.







Drill	Decimal	Stock				
Size		Number				
7/8" Diameter by 7/8" Overall Length						
3/8	.3750	10600375				
V	.3770	10600377				
9.8mm	.3858	10600385				
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				
	eter by 1" Ov					
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	10600590				
19/32	.5938	10600593				
		Overall Length				
5/8	.6250	10600625				
21/32	.6562	10600656				
11/16	.6875	10600687				
45/64	.7031	10600703				
23/32	.7188	10600718				
47/64	.7344	10600734				
1-1/4" Diam		Overall Length				
3/4	.7500	10600750				
20.0 mm	.7874	10600787				
51/64	.7969	10600796				
1-3/8" Diam	1-3/8" Diameter by 1-3/8" Overall Length					
13/16	.8125	10600812				
7/8	.8750	10600875				
1-1/2" Diam	1-1/2" Diameter by 1-1/2" Overall Length					
15/16	.9375	10600937				
31/32	.9688	10600968				
1	1.000	10601000				

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.



Page 25

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

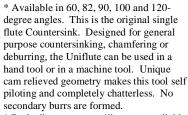


Series 66 HSS Triflute Countersink

* 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 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



	Stock Numbers						
Drill	Series	Series	Series	Series			
Size	5	5HS	5BP	5BPHS			
3/32	50093*	X	X	X			
1/8	50125*	5HS0125	5BP0125*	5BPHS0125			
5/32	50156*	5HS0156	5BP0156*	5BPHS0156			
11/64	50171*	5HS0171	X	X			
3/16	50187*	5HS0187	5BP0187*	5BPHS0187			
13/64	50203*	5HS0203	5BP0203*	5BPHS0203			
7/32	50218*	5HS0218	5BP0218*	5BPHS0218			
15/64	50234*	X	X	X			
1/4	50250*	5HS0250	5BP0250*	5BPHS0250			
17/64	50265*	5HS0265	X	X			
9/32	50281*	5HS0281	5BP0281*	5BPHS0281			
19/64	50296*	5HS0296	5BP0296*	5BPHS0296			
5/16	50312*	5HS0312	5BP0312*	5BPHS0312			
11/32	50343*	X	X	X			
3/8	50375*	5HS0375	5BP0375*	5BPHS0375			

*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:



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	Stock Numbers		æs
Series Series 5CCT 5CT		Cutting Diameter	Hole 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.

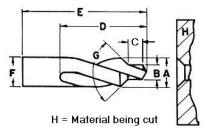


SD9F

Stock sizes and Stock numbers

_	32°		Standard							180°	
Angio	ed 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	





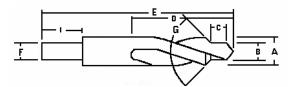
For other special sizes see pages 33-35

Special Step Drills

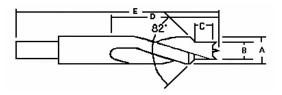
For Woods, Metals and Plastics

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**.

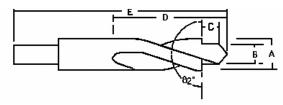




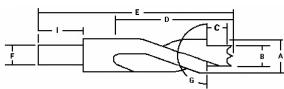
Style 2



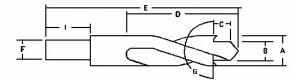
Style 3



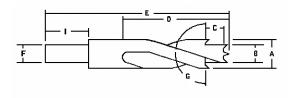
Style 4



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	Е
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...



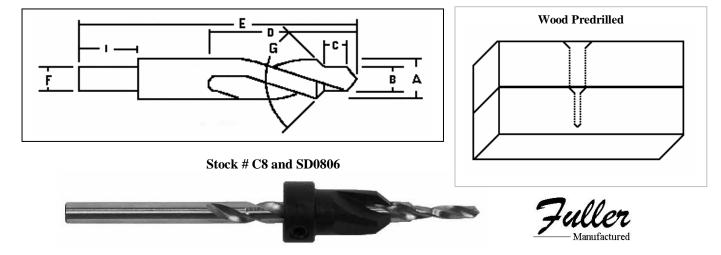
Step Drills for Wood Continued...

		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?



Brad Poin

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				
	Sizes and	d Dimensio	ns	150	250	210	1505	190
	D	T-14-	0	HSS	HSS	Cobalt	HSS	IICC
Size	Dec.	Flute	Overall	Regular	Brad	Heavy	Regular	HSS
	Equiv.	Length	Length	Point	Point	Duty	Pt. L.H.	Parabolic
3/64	.0469	1/2	1-3/8	15000046	X	X	X	X
1/16	.0625	5/8	1-5/8	15000062	X	21000062	15050062	19000062
5/64	.0781	11/16	1-11/16	15000078	25000078	21000078	15050078	19000078
3/32 7/64	.0937 .1094	3/4 13/16	1-3/4 1-13/16	15000093 15000109	25000093 25000109	21000093 21000109	15050093	19000093
1/8	.1094	7/8	1-13/10	15000109	25000109	21000109	15050109 15050125	19000109 19000125
9/64	.1406	15/16	1-15/16	15000123	25000123	21000123	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	2-1/4	15000203	25000203	21000203	15050203	19000203
7/32 15/64	.2188 .2344	1-1/4 1-5/16	2-3/8 2-7/16	15000218 15000234	25000218	21000218 21000234	15050218 15050234	19000218
1/4	.2544	1-3/16	2-1/10	15000254	25000234 25000250	21000254	15050254	19000234 19000250
17/64	.2656	1-7/16	2-5/8	15000250	25000250	21000250	15050265	19000250
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 23/64	.3438 .3594	1-11/16 1-3/4	3 3-1/16	15000343 15000359	25000343 25000359	21000343 21000359	15050343 15050359	19000343 19000359
3/8	.3750	1-3/4	3-1/10	15000339	25000339	21000339	15050339	19000339
25/64	.3906	1-7/8	3-1/4	15000373	25000373	21000373	15050375	19000379
13/32	.4062	1-15/16	3-5/16	15000406	25000406	21000406	15050406	19000406
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 31/64	.4688 .4844	2-1/8 2-3/16	3-5/8	15000468	25000468	21000468	15050468 15050484	19000468
1/2	.5000	2-3/16	3-11/16 3-3/4	15000484 15000500	25000484 25000500	21000484 21000500	15050500	19000484 19000500
1,2				ger than 1/2"				13000000
		Shanks of	can be grou	nd to smaller	diameters. I	Price on Requ	iest.	
33/64	.5156	2-3/8	3-7/8	15000515	25000515	X	15050515	X
17/32	.5312	2-3/8	3-7/8	15000531	25000531	X	15050531	X
35/64 9/16	.5469 .5625	2-1/2 2-1/2	4	15000546	25000546 25000562	X X	15050546	X X
37/64	.5781	2-1/2	4-1/8	15000562 15000578	25000578	X	15050562 15050578	X
19/32	.5938	2-5/8	4-1/8	15000578	25000578	X	15050576	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	.6406	2-7/8	4-1/2	15000640	25000640	X	15050640	X
21/32	.6562	2-7/8	4-1/2	15000656	25000656	X	15050656	X
43/64	.6719 .6875	2-7/8 2-7/8	4-5/8 4-5/8	15000671 15000687	25000671 25000687	X	15050671 15050687	X X
45/64	.7031	3	4-3/6	15000087	25000087	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	15000750	25000750	X	15050750	X
49/64	.7656	3-1/4	5-1/8	15000765	25000765	X	15050765	X
25/32 51/64	.7812 .7969	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 5-1/4	15000796	25000796	X	15050796	X
53/64	.8281	3-3/8	5-3/8	15000812	25000812	X	15050812	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
57/64	.8906	3-5/8	5-5/8	15000890	25000890	X	15050890	X
29/32 59/64	.9062 .9219	3-5/8 3-3/4	5-5/8 5-3/4	15000906 15000921	25000906 25000921	X X	15050906 15050921	X X
15/16	.9375	3-3/4	5-3/4	15000921	25000921	X	15050921	X
61/64	.9531	3-7/8	5-7/8	15000953	25000953	X	15050953	X
31/32	.9688	3-7/8	5-7/8	15000968	25000968	X	15050968	X
63/64	.9844	4	6	15000984	25000984	X	15050984	X
1	1.000	4	6	15001000	25001000	X	15051000	X
1-1/8	1.125	4	6-3/8	15001125	25001125	X	15051125	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 RECCOMEN-DED IN WOOD!



Series 1505 HSS Regular Point left hand cutting. Also available in Brad Point. P.O.R.



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.





				Reg. Pt.	1515	150	231	Brad
Size	Dec.	Flute	O.A.	General	Left	Fast	Brad	Point
	Equiv	Lgth.	Lgth	Purpose	Hand	Spiral	Point	Left Hand
				HSS	HSS	HSS	HSS	HSS
1/64	.0156	3/16	3/4	15100015	X	X	X	X
1/32	.0312	1/2	1-3/8	15100031	15150031	15800031	X	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
5/64	.0781	1	2	15100078	15150078	15800078	25100078	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
1/8	.1250	1-5/8	2-3/4	15100125	15150125	15800125	25100125	25150125
9/64	.1406	1-3/4	2-7/8	15100140	15150140	15800140	25100140	25150140
5/32	.1562	2	3-1/8	15100156	15150156	15800156	25100156	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
17/64	.2656	2-7/8	4-1/8	15100265	15150265	15800265	25100265	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
5/16	.3125	3-3/16	4-1/2	15100312	15150312	15800312	25100312	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
27/64	.4219	3-15/16	5-3/8	15100421	15150421	15800421	25100421	25150421
7/16	.4375	4-1/16	5-1/2	15100437	15150437	15800437	25100437	25150437
29/64	.4531	4-3/16	5-5/8	15100453	15150453	15800453	25100453	25150453
15/32	.4688	4-5/16	5-3/4	15100468	15150468	15800468	25100468	25150468
31/64	.4844	4-3/8	5-7/8	15100484	15150484	15800484	25100484	25150484
1/2	.5000	4-1/2	6	15100500	15150500	15800500	25100500	25150500
						not fit in you		
						s. Price on R		
33/64	.5156	4-13/16	6-5/8	15100515	X	X	25100515	X
17/32	5312	1 13/16	6 5/8	15100531	v	v	25100531	v

17/32 4-13/16 15100531 25100531 .5312 6-5/8 35/64 .5469 4-1316 6-5/8 15100546 X X 25100546 X 6-5/8 4-13/16 15100562 25100562 9/16 .5625 Χ X X 4-13/16 15100578 X X 25100578 X 37/64 .5781 6-5/8 19/32 .5938 5-3/16 7-1/8 15100593 X 25100593 X X X X 39/64 .6094 5-3/16 7-1/8 15100609 X 25100609 5/8 .6250 5-3/16 7-1/8 15100625 X X 25100625 X 41/64 .6406 7-1/8 15100640 X X 25100640 X 5-3/16

X

X

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





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.



21/32

43/64

11/16

X

X

X

25100656

25100671

25100687

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	21100171	13000171	15160187	19100187
13/64	.2031	2-7/16	3-5/8	21100203	13000203	15160203	19100203
7/32	.2188	2-1/2	3-3/4	21100203	13000203	15160203	19100203
15/64	.2344	2-5/8	3-7/8	21100216	13000216	15160234	19100216
1/4	.2500	2-3/4	4	21100254	13000254	15160250	19100250
17/64	.2656	2-3/4	4-1/8	21100250	13000250	15160250	19100250
9/32	.2812	2-1/8	4-1/8	21100203	13000203	15160203	19100203
19/64	.2969	3-1/16	4-1/4	21100281	13000281	15160281	19100281
5/16	.3125	3-1/16	4-3/8	21100296	13000290	15160290	19100296
				21100312			
21/64	.3281	3-5/16	4-5/8		13000328 13000343	15160328 15160343	19100328
11/32	.3438	3-7/16	4-3/4	21100343			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	21100390	13000390	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
				than 1/2" and			
22/64				to smaller diar			V
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	4-13/16	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	21100687	X	X	X

X = Not available



materials.



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 STEEL!

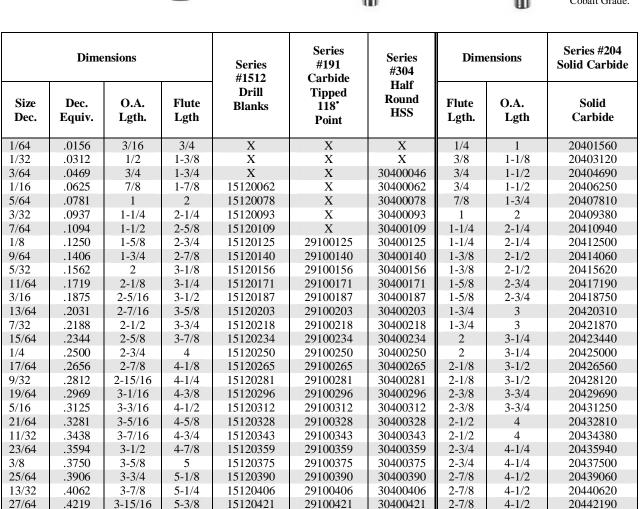
Series 304 Half Round

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.
- Micrograin 10%
 Cobalt Grade.





.4375

.4531

.4688

.4844

4-1/16

4-3/16

4-5/16

4-3/8

4-1/2

5-1/2

5-5/8

5 - 3/4

5-7/8

6

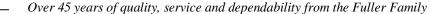
15120437

15120453

15120468

15120484

15120500



29100437

29100453

29100468

29100484

29100500

30400437

30400453

30400468

30400484

30400500

2 - 7/8

3

3

3

4-1/2

4-3/4

4-3/4

4-3/4

4-3/4

20443750

20445310

20446880

20448440

20450000

7/16

29/64

15/32

31/64

1/2



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 252	Series 159	Series 259	Series 292		
Size	Decimal	Flute	Overall	HSS	HSS	HSS	HSS	Carbide		
Sile	Equiv.	Length	Length	Regular Point	Brad Point	Fast Spiral Regular Point	Fast Spiral Brad Point	Tipped Regular Point		
1/64	.0156	5/16	1-1/2	15200015	X	X	X	X		
1/32 3/64	.0312	3/4 1-1/8	2 2-1/4	15200031 15200046	X X	X 15900046	X X	X X		
1/16	.0625	1-1/8	3	15200046	X	15900046	X	X		
5/64	.0781	2	3-3/4	15200078	25200078	15900078	25900078	X		
3/32	.0937	2-1/4	4-1/4	15200093	25200093	15900093	25900093	X		
7/64 1/8	.1094 .1250	2-1/2 2-3/4	4-5/8 5-1/8	15200109 15200125	25200109 25200125	15900109 15900125	25900109 25900125	X 29200125		
9/64	.1406	3	5-3/8	15200123	25200123	15900123	25900123	29200123		
5/32	.1562	3	5-3/8	15200156	25200156	15900156	25900156	29200156		
11/64	.1719	3-3/8	5-3/4	15200171	25200171	15900171	25900171	29200171		
3/16 13/64	.1875 .2031	3-3/8 3-5/8	5-3/4 6	15200187 15200203	25200187 25200203	15900187 15900203	25900187 25900203	29200187 29200203		
7/32	.2188	3-5/8	6	15200203	25200203	15900203	25900203	29200203		
15/64	.2344	3-3/4	6-1/8	15200234	25200234	15900234	25900234	29500234		
1/4	.2500	3-3/4	6-1/8	15200250	25200250	15900250	25900250	29200250		
17/64	.2656	3-7/8 3-7/8	6-1/4 6-1/4	15200265	25200265	15900265	25900265	29200265		
9/32 19/64	.2812 .2969	3-1/8 4	6-1/4	15200281 15200296	25200281 25200296	15900281 15900296	25900281 25900296	29200281 29200296		
5/16	.3125	4	6-3/8	15200312	25200312	15900312	25900312	29200312		
21/64	.3281	4-1/8	6-1/2	15200328	25200328	15900328	25900328	29200328		
11/32	.3438	4-1/8 4-1/4	6-1/2	15200343 15200359	25200343	15900343 15900359	25900343	29200343 29200359		
23/64 3/8	.3594 .3750	4-1/4	6-3/4 6-3/4	15200359	25200359 25200375	15900359	25900359 25900375	29200359		
25/64	.3906	4-3/8	7	15200373	25200373	15900379	25900379	29200373		
13/32	.4062	4-3/8	7	15200406	25200406	15900406	25900406	29200406		
27/64	.4219	4-5/8	7-1/4	15200421	25200421	15900421	25900421	29200421		
7/16 29/64	.4375 .4531	4-5/8 4-3/4	7-1/4 7-1/2	15200437 15200453	25200437 25200453	15900437 15900453	25900437 25900453	29200437 29200453		
15/32	.4688	4-3/4	7-1/2	15200455	25200455	15900455	25900433	29200433		
31/64	.4844	4-3/4	7-3/4	15200484	25200484	15900484	25900484	29200484		
1/2	.5000	4-3/4	7-3/4	15200500	25200500	15900500	25900500	29200500		
				vare larger than be ground to sma						
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	29200562		
37/64 19/32	.5781 .5938	4-7/8 4-7/8	8-3/4 8-3/4	15200578 15200593	25200578 25200593	X X	X X	29200578 29200593		
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	29200640		
21/32 43/64	.6562 .6719	5-1/8 5-3/8	9 9-1/4	15200656 15200671	25200656 25200671	X X	X	29200656 29200671		
11/16	.6875	5-3/8	9-1/4	15200671	25200687	X	X	29200671		
45/64	.7031	5-5/8	9-1/2	15200703	25200703	X	X	29200703		
23/32	.7188	5-5/8	9-1/2	15200718	25200718	X	X	29200718		
47/64	.7344	5-7/8	9-3/4	15200734	25200734	X	X	29200734		
3/4 49/64	.7500 .7656	5-7/8 6	9-3/4 9-7/8	15200750 15200765	25200750 25200765	X	X	29200750 X		
25/32	.7812	6	9-7/8	15200763	25200781	X	X	29200781		
51/64	.7969	6-1/8	10	15200796	25200796	X	X	X		
13/16	.8125	6-1/8	10	15200812	25200812	X	X	29200812		
53/64	.8281	6-1/8	10	15200828	25200828	X	X	X 20200842		
27/32 55/64	.8438 .8594	6-1/8 6-1/8	10 10	15200843 15200859	25200843 25200859	X X	X X	29200843 X		
7/8	.8750	6-1/8	10	15200839	25200839	X	X	29200875		
57/64	.8906	6-1/8	10	15200890	25200890	X	X	X		
29/32	.9062	6-1/8	10	15200906	25200906	X	X	29200906		
59/64 15/16	.9219 .9375	6-1/8 6-1/8	10-3/4 10-3/4	15200921 15200937	25200921 25200937	X X	X X	X 29200937		
61/64	.9531	6-3/8	10-3/4	15200957	25200957	X	X	29200937 X		
31/32	.9688	6-3/8	11	15200968	25200968	X	X	29200968		
63/64	.9844	6-3/8	11	15200984	25200984	X	X	X		
1 1/9	1.000	6-3/8	11	15201000	25201000	X	X	29201000 V		
1-1/8	1.125	7-1/8	11-3/4	15201125	25201125	X	X	X		

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 heavy-duty 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

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			Numbers	
		8" L	ong	10"	Long
	Decimal	6" F			'' 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





Series 154 HSS Regular Point

uller

Series 254 HSS Brad Point

Point Fuller

X = Not available

Carbide Tipped Drills for Hardened Steel

	C		ped Drills for ed 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.



Stock # CT7050250

Stock # CT70502506

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



Extra Length HSS Drills 12" and 18" long

To Cut Wood, Plastic and Metal

Di	mensions		Stock	Numbers	
			Long		Long
Size	Decimal		lute 255 HGG		Flute
Size	Equivalent	155 HSS Regular	255 HSS Brad	156 HSS Regular	256 HSS Brad
		Point	Point	Point	Point
1/8	.1250	15500125	25500125	X	X
9/64	.1406	15500140	25500140	X	X
5/32	.1562	15500156	25500156	X	X
11/64 3/16	.1719 .1875	15500171 15500187	25500171 25500187	X 15600187	X 25600187
13/64	.2031	15500203	25500187	15600203	25600203
7/32	.2188	15500218	25500218	15600218	25600218
15/64	.2344	15500234	25500234	15600234	25600234
1/4	.2500	15500250	25500250	15600250	25600250
17/64 9/32	.2656 .2812	15500265 15500281	25500265	15600265	25600265
9/32 19/64	.2969	15500281	25500281 25500296	15600281 15600296	25600281 25600296
5/16	.3125	15500230	25500230	15600312	25600312
21/64	.3281	15500328	25500328	15600328	25600328
11/32	.3438	15500343	25500343	15600343	25600343
23/64	.3594	15500359	25500359	15600359	25600359
3/8	.3750	15500375	25500375	15600375	25600375
25/64 13/32	.3906 .4062	15500390 15500406	25500390 25500406	15600390 15600406	25600390 25600406
27/64	.4219	15500400	25500400	15600400	25600400
7/16	.4375	15500437	25500437	15600437	25600437
29/64	.4531	15500453	25500453	15600453	25600453
15/32	.4688	15500468	25500468	15600468	25600468
31/64	.4844	15500484	25500484	15600484	25600484
1/2	.5000	15500500	25500500	15600500	25600500
				not fit your chuc Price on Reque	
33/64	.5156	15500515	25500515	15600515	25600515
17/32	.5312	15500531	25500531	15600531	25600531
35/64	.5469	15500546	25500546	15600546	25600546
9/16	.5625	15500562	25500562	15600562	25600562
37/64	.5781	15500578	25500578	15600578	25600578
19/32	.5938 .6094	15500593 15500609	25500593 25500609	15600593 15600609	25600593
39/64 5/8	.6250	15500609	25500609	15600609	25600609 25600625
41/64	.6406	X	X	X	X
21/32	.6562	15500656	25500656	15600656	25600656
43/64	.6719	X	X	X	X
11/16	.6875	15500687	25500687	15600687	25600687
45/64	.7031	X	X	X	X
23/32	.7188	15500718 X	25500718 X	15600718 X	25600718 X
47/64 3/4	.7344 .7500	15500750	25500750	15600750	25600750
49/64	.7656	X	X	X	23000730 X
25/32	.7812	X	X	15600781	25600781
51/64	.7969	X	X	X	X
13/16	.8125	X	X	15600812	25600812
53/64	.8281	X	X	X	X
27/32	.8438	X	X	X	X
55/64 7/8	.8594 .8750	X	X	X 15600875	X 25600875
57/64	.8906	X	X	X	23000873 X
29/32	.9062	X	X	X	X
59/64	.9219	X	X	X	X
15/16	.9375	X	X	15600937	25600937
61/64	.9531	X	X	X	X
31/32	.9688	X	X	X	X
63/64	.9844 1.000	X X	X	X 15601000	X 25601000
1-1/16	1.062	X	X	15601000 X	25601000 X
1-1/8	1.125	X	X	15601125	25601125
1-3/16	1.187	X	X	X	X
1-1/4	1.250	X	X	15601250	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.		
	1	. 8		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	X	22000042	16050042		
57	.0430	1/2	1-3/8	16000043	X	22000043	16050043		
56 55	.0465 .0520	1/2 5/8	1-3/8 1-5/8	16000046 16000052	X X	22000046 22000052	16050046 16050052		
54	.0550	5/8	1-5/8	16000055	X	22000055	16050055		
53	.0595	5/8	1-5/8	16000059	X	22000059	16050059		
52	.0635	11/16	1-11/16	16000063	X	22000063	16050063		
51	.0670	11/16	1-11/16	16000067	X	22000067	16050067		
50	.0700	11/16	1-11/16	16000070	X	22000070	16050070		
49 48	.0730 .0760	11/16 11/16	1-11/16 1-11/16	16000073 16000076	X X	22000073 22000076	16050073 16050076		
47	.0785	11/16	1-11/16	16000078	26000078	22000078	16050078		
46	.0810	3/4	1-3/4	16000081	26000070	22000081	16050070		
45	.0820	3/4	1-3/4	16000082	26000082	22000082	16050082		
44	.0860	3/4	1-3/4	16000086	26000086	22000086	16050086		
43	.0890	3/4	1-3/4	16000089	26000089	22000089	16050089		
42	.0935	3/4	1-3/4	16000093	26000093	22000093	16050093		
41 40	.0960 .0980	13/16 13/16	1-13/16 1-13/16	16000096 16000098	26000096 26000098	22000096 22000098	16050096 16050098		
39	.0980	13/16	1-13/16	16000099	26000099	22000098	16050099		
38	.1015	13/16	1-13/16	16000101	26000101	22000101	16050101		
37	.1040	13/16	1-13/16	16000104	26000104	22000104	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 .1160	7/8 7/8	1-7/8 1-7/8	16000113 16000116	26000113 26000116	22000113 22000116	16050113 16050116		
31	.1200	7/8	1-7/8	16000110	26000110	22000110	16050110		
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	.1440	1	2-1/16	16000144	26000144	22000144	16050144		
26 25	.1470 .1495	1 1	2-1/16 2-1/16	16000147 16000149	26000147 26000149	22000147 22000149	16050147 16050149		
23	.1520	1	2-1/16	16000149	26000149	22000149	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	2-1/8	16000161	26000161	22000161	16050161		
19	.1660	1-1/16	2-1/8	16000166	26000166	22000166	16050166		
18	.1695 .1730	1-1/16 1-1/8	2-1/8 2-3/16	16000169 16000173	26000169 26000173	22000169 22000173	16050169		
17 16	.1770	1-1/8	2-3/16	16000173	26000173	22000173	16050173 16050177		
15	.1800	1-1/8	2-3/16	16000177	26000177	22000177	16050180		
14	.1820	1-1/8	2-3/16	16000182	26000182	22000182	16050182		
13	.1850	1-1/8	2-3/16	16000185	26000185	22000185	16050185		
12	.1890	1-3/16	2-1/4	16000189	26000189	22000189	16050189		
11	.1910	1-3/16	2-1/4	16000191	26000191	22000191	16050191		
10 9	.1935 .1960	1-3/16 1-3/16	2-1/4 2-1/4	16000193 16000196	26000193 26000196	22000193 22000196	16050193		
8	.1960	1-3/16	2-1/4 2-1/4	16000196	26000196	22000196	16050196 16050199		
7	.2010	1-3/16	2-1/4	16000199	26000199	22000199	16050201		
6	.2040	1-1/4	2-3/8	16000204	26000204	22000204	16050204		
5	.2055	1-1/4	2-3/8	16000205	26000205	22000205	16050205		
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 .2280	1-5/16 1-5-16	2-7/16 2-7/16	16000221 16000228	26000221 26000228	22000221 22000228	16050221 16050228		
1				r point drills		ets on page 54			





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 N	lumbers	
				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	.0430	3/4	1-3/4	16100043	X	22100043	16150043
56 55	.0465	3/4 7/8	1-3/4 1-7/8	16100046	X X	22100046 22100052	16150046 16150052
54	.0520	7/8	1-7/8	16100052 16100055	X	22100052	16150052
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	.0760	1	2	16100076	X	22100076	16150076
47	.0785	1	2	16100078	26100078	22100078	16150078
46	.0810	1-1/8	2-1/8	16100081	26100081	22100081	16150081
45 44	.0820	1-1/8 1-1/8	2-1/8 2-1/8	16100082 16100086	26100082 26100086	22100082 22100086	16150082 16150086
43	.0890	1-1/6	2-1/8	16100089	26100089	22100080	16150089
42	.0935	1-1/4	2-1/4	16100089	26100089	22100089	16150089
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	.0995	1-3/8	2-3/8	16100099	26100099	22100099	16150099
38	.1015	1-7/16	2-1/2	16100101	26100101	22100101	16150101
37	.1040	1-7/16	2-1/2	16100104	26100104	22100104	16150104
36	.1065	1-7/16	2-1/2	16100106	26100106	22100106	16150106
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 32	.1130 .1160	1-1/2 1-5/8	2-5/8 2-3/4	16100113 16100116	26100113 26100116	22100113 22100116	16150113 16150116
31	.1200	1-5/8	2-3/4	16100110	26100110	22100110	16150110
30	.1285	1-5/8	2-3/4	16100128	26100128	22100128	16150128
29	.1360	1-3/4	2-7/8	16100136	26100136	22100136	16150136
28	.1405	1-3/4	2-7/8	16100140	26100140	22100140	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 23	.1520 .1540	2 2	3-1/8 3-1/8	16100152	26100152	22100152	16150152
23	.1570	2	3-1/8	16100154 16100157	26100154 26100157	22100154 22100157	16150154 16150157
21	.1570	2-1/8	3-1/6	16100157	26100157	22100157	16150157
20	.1610	2-1/8	3-1/4	16100161	26100161	22100161	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	3-1/2 3-1/2	16100185 16100189	26100185 26100189	22100185	16150185 16150189
11	.1890 .1910	2-5/16 2-5/16	3-1/2	16100189	26100189	22100189 22100191	16150189
10	.1910	2-3/16	3-1/2	16100191	26100191	22100191	16150191
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	.2130	2-1/2	3-3/4	16100213	26100213	22100213	16150213
2	.2210	2-5/8 2-5/8	3-7/8 3-7/8	16100221 16100228	26100221 26100228	22100221 22100228	16150221 16150228
	available	2-3/0	3-1/0	10100228	20100220	22100228	10130226



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



Cina	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.





-	Manufactured									
Dime	ensions		Short	Length		Regular 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	
О	.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

Name Dec. Fittle Copt Point Froit Point Copt Poi	Dime	ensions		Sho	rt Length			Regul	ar Length	
1.25 .0492					Regular	Brad				
1.5 0.591				1-1/32	18000039		15/32		18100039	
1.75					18000049				18100049	
2.0										
2.25										
2.5 .0.984 .9/16 .1-11/16 .18000098 .28000098 .1-3/16 .2-13/32 .18100108 .28100103 .3.0 .1181 .5/8 .1-13/16 18000118 .28000118 .1-5/16 .2-13/32 .18100118 .28100113 .3.2 .1.20 .2.3/32 .1-15/16 .18000126 .28000126 .1-7/16 .2-9/16 .18100128 .2810012 .3.2 .3.2 .1.20 .2.3/32 .1-15/16 .2.3/32 .18100118 .2810012 .3.2 .3										28100078
2.75 1.088										28100088
3.0			9/16	1-11/16						
3.2 1260			5 (0	1 10/16						
3.25 1.280										
3.4 .1339 25/32 2-1/16 18000137 28000137 1-1/32 2-3/4 18100133 2810013 3.5 1.476 X			23/32	1-15/16						
3.5 1.378 2.5/32 2.1/16 18000137 28000137 1.3/4 2.7/8 18100137 2810013 3.75 1.476 X			25/22	0.1/16						
3.75										
4.0			25/32	2-1/16						
4.25			7/9	2 5/22						
4.5			7/0	2-3/32						
4.75			15/16	2-0/32						
5.0 .1968 1-1/32 2-7/16 18000196 28000200 2-1/16 3-3/8 18100196 2810029 5.1 .2008 1-1/32 2-7/16 18000204 28000200 2-1/16 3-3/8 18100200 2810020 5.2 .2047 1-1/32 2-7/16 18000204 28000208 2-1/16 3-3/8 18100206 2810020 5.3 .2087 1-1/32 2-7/16 18000208 28000208 2-1/16 3-3/8 18100206 2810020 5.4 .2126 1-3/32 2-19/32 18000212 28000216 2-1/4 3-21/32 18100216 2810021 5.5 .2165 1-3/32 2-19/32 18000224 28000220 2-1/4 3-21/32 18100216 2810022 5.6 .2264 1-3/32 2-19/32 18000224 28000224 2-1/4 3-21/32 18100224 2810022 5.7 .2244 1-3/32 2-19/32 18000224 2800224 2-1/4 3-21/32 <t< td=""><td></td><td></td><td>13/10</td><td>2-7/32</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			13/10	2-7/32						
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8.75 .3445 X X X 3-3/16 4-29/32 18100344 2810034 9.0 .3543 1-9/16 3-5/16 18000354 28000354 3-3/16 4-29/32 18100354 2810035 9.25 .3642 X X X 3-3/16 4-29/32 18100364 2810036 9.5 .3740 1-9/16 3-5/16 18000374 28000374 3-3/16 4-29/32 18100374 2810037 9.75 .3839 X X X 3-7/16 5-1/4 18100383 2810038 10.0 .3937 1-11/16 3-1/2 18000393 28000393 3-7/16 5-1/4 18100393 2810039 10.5 .4134 1-11/16 3-1/2 18000413 28000413 3-7/16 5-1/4 18100413 2810041 11.0 .4331 1-27/32 3-3/4 18000433 28000433 3-11/16 5-19/32 18100433 2810043 11.5 .4528 1-			1_15/32	3_1/8						
9.0 .3543 1-9/16 3-5/16 18000354 28000354 3-3/16 4-29/32 18100354 2810035 9.25 .3642 X X X 3-3/16 4-29/32 18100364 2810036 9.5 .3740 1-9/16 3-5/16 18000374 28000374 3-3/16 4-29/32 18100374 2810037 9.75 .3839 X X X 3-7/16 5-1/4 18100383 2810038 10.0 .3937 1-11/16 3-1/2 18000393 28000393 3-7/16 5-1/4 18100393 2810039 10.5 .4134 1-11/16 3-1/2 18000413 28000413 3-7/16 5-1/4 18100413 2810041 11.0 .4331 1-27/32 3-3/4 18000433 28000433 3-11/16 5-19/32 18100433 2810043 11.5 .4528 1-27/32 3-3/4 18000452 28000452 3-11/16 5-19/32 18100452 2810045 12.			1-13/32	3-1/6						
9.25 .3642 X X X 3-3/16 4-29/32 18100364 2810036 9.5 .3740 1-9/16 3-5/16 18000374 28000374 3-3/16 4-29/32 18100374 2810037 9.75 .3839 X X X 3-7/16 5-1/4 18100383 2810038 10.0 .3937 1-11/16 3-1/2 18000393 28000393 3-7/16 5-1/4 18100393 2810039 10.5 .4134 1-11/16 3-1/2 18000413 28000413 3-7/16 5-1/4 18100413 2810041 11.0 .4331 1-27/32 3-3/4 18000433 28000433 3-11/16 5-19/32 18100433 2810043 11.5 .4528 1-27/32 3-3/4 18000452 28000452 3-11/16 5-19/32 18100452 2810045 12.0 .4724 2 4-1/32 18000472 28000472 3-31/32 5-15/16 18100492 2810049 12.5 </td <td></td> <td></td> <td>1-9/16</td> <td>3-5/16</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			1-9/16	3-5/16						
9.5 .3740 1-9/16 3-5/16 18000374 28000374 3-3/16 4-29/32 18100374 2810037 9.75 .3839 X X 3-7/16 5-1/4 18100383 2810038 10.0 .3937 1-11/16 3-1/2 18000393 28000393 3-7/16 5-1/4 18100393 2810039 10.5 .4134 1-11/16 3-1/2 18000413 28000413 3-7/16 5-1/4 18100413 2810041 11.0 .4331 1-27/32 3-3/4 18000433 28000433 3-11/16 5-19/32 18100433 2810043 11.5 .4528 1-27/32 3-3/4 18000452 28000452 3-11/16 5-19/32 18100452 2810045 12.0 .4724 2 4-1/32 18000472 28000472 3-31/32 5-15/16 18100492 2810049 12.5 .4921 2 4-1/32 18000492 28000492 3-31/32 5-15/16 18100492 2810049 <td></td> <td></td> <td>1 //10</td> <td>3 3/10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			1 //10	3 3/10						
9.75 .3839 X X X 3-7/16 5-1/4 18100383 2810038 10.0 .3937 1-11/16 3-1/2 18000393 28000393 3-7/16 5-1/4 18100393 2810039 10.5 .4134 1-11/16 3-1/2 18000413 28000413 3-7/16 5-1/4 18100413 2810041 11.0 .4331 1-27/32 3-3/4 18000433 28000433 3-11/16 5-19/32 18100433 2810043 11.5 .4528 1-27/32 3-3/4 18000452 28000452 3-11/16 5-19/32 18100452 2810045 12.0 .4724 2 4-1/32 18000472 28000472 3-31/32 5-15/16 18100492 2810049 12.5 .4921 2 4-1/32 18000492 28000492 3-31/32 5-15/16 18100492 2810049			1-9/16	3-5/16						
10.0 .3937 1-11/16 3-1/2 18000393 28000393 3-7/16 5-1/4 18100393 2810039 10.5 .4134 1-11/16 3-1/2 18000413 28000413 3-7/16 5-1/4 18100413 2810041 11.0 .4331 1-27/32 3-3/4 18000433 28000433 3-11/16 5-19/32 18100433 2810043 11.5 .4528 1-27/32 3-3/4 18000452 28000452 3-11/16 5-19/32 18100452 2810045 12.0 .4724 2 4-1/32 18000472 28000472 3-31/32 5-15/16 18100492 2810049 12.5 .4921 2 4-1/32 18000492 28000492 3-31/32 5-15/16 18100492 2810049			2.10	2.10						28100383
10.5 .4134 1-11/16 3-1/2 18000413 28000413 3-7/16 5-1/4 18100413 2810041 11.0 .4331 1-27/32 3-3/4 18000433 28000433 3-11/16 5-19/32 18100433 2810043 11.5 .4528 1-27/32 3-3/4 18000452 28000452 3-11/16 5-19/32 18100452 2810045 12.0 .4724 2 4-1/32 18000472 28000472 3-31/32 5-15/16 18100472 2810047 12.5 .4921 2 4-1/32 18000492 28000492 3-31/32 5-15/16 18100492 2810049			1-11/16	3-1/2						28100393
11.0 .4331 1-27/32 3-3/4 18000433 28000433 3-11/16 5-19/32 18100433 2810043 11.5 .4528 1-27/32 3-3/4 18000452 28000452 3-11/16 5-19/32 18100452 2810045 12.0 .4724 2 4-1/32 18000472 28000472 3-31/32 5-15/16 18100472 2810047 12.5 .4921 2 4-1/32 18000492 28000492 3-31/32 5-15/16 18100492 2810049										28100413
11.5 .4528 1-27/32 3-3/4 18000452 28000452 3-11/16 5-19/32 18100452 2810045 12.0 .4724 2 4-1/32 18000472 28000472 3-31/32 5-15/16 18100472 2810047 12.5 .4921 2 4-1/32 18000492 28000492 3-31/32 5-15/16 18100492 2810049										28100433
12.0 .4724 2 4-1/32 18000472 28000472 3-31/32 5-15/16 18100472 2810047 12.5 .4921 2 4-1/32 18000492 28000492 3-31/32 5-15/16 18100492 2810049										28100452
12.5 .4921 2 4-1/32 18000492 28000492 3-31/32 5-15/16 18100492 2810049										28100472
										28100492
A 3 3 1/2 3-13/10 10100311 2010031	13.0	.5118			X	X	3-31/2	5-15/16	18100511	28100511



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



Brad Point for clean accurately sized holes in hardwoods and plastics.

High Speed Steel



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	- 4" Long		Stock Numbers			
G*	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	ivorcal Lanatk		Series 401	Series 411		
	1/4 Shank - On	iversai Lengu	1	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 - R	ogulan I angth		Series 402	Series 412		
	3/6 Shank - K	eguiai Lengui		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 Dia.	O.A. Lgth.	Shank 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 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!!

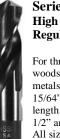
For through holes in soft to medium-hard woods and plastics. Can be sharpened with a file. All sizes are 6" overall length, have 4" of twist and 90 degree points.



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.





Series 350 **High Speed Steel Regular Point**

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	Series 350		Series 320	Series 340	Series 350
Drill	Carbon	#330 Carbon	340 HSS	HSS	Drill	320 Carbon	HSS	HSS
Size	Brad	Regular	Brad	Regular	Size	Brad	Brad	Regular
Size	Point	Point	Point	Point	Size	Point	Point	Point
1/8	32000125	#33000125	34000125	35000125	49/64	*	34000765	35000765
9/64	*	*35000125	34000123	35000123	25/32	32000781	34000781	35000781
5/32	32000156	#33000156	34000140	35000140	51/64	32000781 *	34000796	35000781
11/64	*	*35000150	34000171	35000130	13/16	32000812	34000770	35000730
3/16	32000187	#33000187	34000171	35000171	53/64	*	34000812	35000812
13/64	32000187	#33000187 *	34000187	35000187	27/32	32000843	34000828	35000828
7/32	32000203	#33000218	34000203	35000203	55/64	32000643	34000843	35000843
15/64	32000218	#33000218	34000218	35000218	7/8	32000875	34000839	35000839
1/4	32000250	#33000250	34000250	35000254	57/64	32000873	34000873	35000873
17/64	32000230	#33000230 *	34000230	35000230	29/32	32000906	34000890	35000890
9/32						32000900 *		
19/64	32000281 32000296	#33000281	34000281 34000296	35000281 35000296	59/64 15/16	32000937	34000921 34000937	35000921 35000937
5/16		#33000312		35000296	61/64	32000937	34000937	35000937
	32000312	#33000312	34000312			220000		
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 1/64	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 available See sets on Page 54								



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

Dimen	sions		Si	rs		
Diffici	1510115	19CT	200CT	tock Numbe 224	284	X200
		C.T.	C.T.	Cobalt	HSS	HSS
Diameter	Dec.	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
13/32	.4062	X	X	X	X	X2000406
7/16	.4375	19CT0437	200CT0437	X	X	X2000437
12.0mm	.4724	19CT0472	X 200CT0500	X	X	X X2000500
1/2 13.0mm	.5000 .5118	19CT0500 19CT0511	200C10500 X	X	X X	X2000500 X
33/64	.5118	19C10511 X	X	22400515	X	X
17/32	.5312	X	X	22400513	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	X2000625
16.0mm	.6299	X	X	X	28400629	X
41/64	.6406	X	X	22400640	X	X
21/32	.6562	X X	X X	22400656 X	X 28400669	X X
17.0mm 43/64	.6693 .6719	X	X	22400671	X	X
11/16	.6875	X	X	22400671	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	.7812	X	X	22400781	X	X
20.0mm	.7874	X	X	X	28400787	X
51/64 13/16	.7969	X X	X X	22400796 22400812	X X	X X2000812
21.0mm	.8125 .8268	X	X	X	28400826	X2000812 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
15/16	.9375	X	X	22400937	X	X2000937
24.0mm	.9449	X	X	X 22400052	28400944	X
61/64	.9531	X	X	22400953	X	X
31/32 63/64	.9688 .9844	X	X X	22400968	X X	X X
25.0mm	.9844	X	X	22400984 X	28400984	X
1	1.000	19CT1000	200CT1000	22401000	X	X2001000



Series 224 Cobalt Steel Regular Point For through holes in woods plastics and

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.

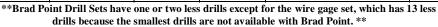


X = Not available



Drill SetsHigh Speed Steel Drills in Metal and Wood Indexes

	Stock Nu	mbers		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) Reg		



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

X = Not available



Stock # 15095013



Stock # 25195020





Stock # 25195028



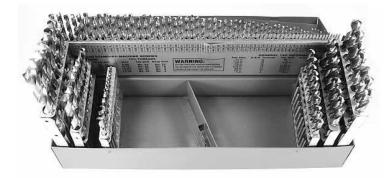
Stock # 17195026



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.

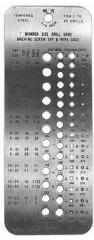
Drill Gages and Drill Stands



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



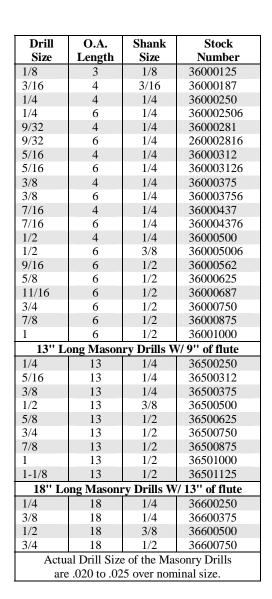
Stock # 11950



Stock # 11850



Carbide Tipped Masonry Drills





Carbide Tipped Glass & Tile							
	Drill, Spear Point						
Drill Size	Min. Shank O.A. Stock Diameter Size Length Number						
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

Stock

Number

SR-5324

SR-001

SR-002

SR-5325

SR-037

SR-051

SR-003

SR-004

SR-007

SR-011

SR-014

SR-018

SR-022

SR-038

SR-052

SR-060

SR-005

SR-008

SR-026

SR-027

SR-032

SR-023

SR-015

SR-035

SR-044

SR-053

SR-062

SR-006

SR-009

SR-012

SR-016

SR-019

SR-024

SR-028

SR-033

SR-045

SR-055

SR-063

SR-010

SR-017

SR-020

SR-025

SR-029 SR-034

SR-036

SR-3822

SR-3824

Hammer Drill Bits

SDS-Plus® and SDS-Plus Hex/Tapcon®



SDS-Plus®- SR Series

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9/16"

5/8" 3/4"

7/8"

3/8"

1/2"

1"

1"

11/16"

Usable

Length

Overall

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18"

18"

22"

24"

Stock # SR-022

SDS-Plus
t Drive Svete

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"





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.





Drill	Dec.	Flute	O.A.	Stock
Size	Equiv.	Length	Length	Number
1/16	.0625	7/8	1-7/8	14400062
#52	.0625	7/8	1-7/8	14400062
#50	.0700	1/6	2	14400070
#48	.0760	1	2	14400076
5/64	.0781	1	2.	14400078
2.0	.0787	15/16	1-15/16	14400078
#42	.0787	1-1/4	2-1/4	144000787
3/32		1-1/4	2-1/4	144000933
#40	.0938	1-1/4	2-1/4	14400093
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
C	.2420	2-3/4	4	14400242
Ď	.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			, .	14400261
_				
_	.2610	2-7/8 2-7/8 2-7/8	4-1/8 4-1/8 4-1/8	

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.

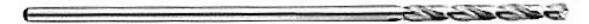
^{*6&}quot; long with 1/2" shank.



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.



Numbers	Size	Equivalent	Length			
		ctional				
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				
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			
		/ire				
		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			
*Not Split Point	#47	.0785	1			

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	Stock	Diameter	Decimal	Flute
Numbers	Size	Equivalent	Length	Numbers	Size	Equivalent	Length
Fractional				Wire			
				1			

Stock	Diameter	Decimal	Flute			
Numbers	Size	Equivalent	Length			
	Fractional					
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			
	Wil	re Size				
		Overall				
24600040	#60*	.0400	11/16			
24600070	#50	.0700	1			
24600073	#49	.0730	1			
24600076	#48	.0760	1			
24600078	#47	.0785	1			

*Not	Split	Point
------	-------	-------

Stock	Diameter	Decimal	Flute				
Numbers Size		Equivalent	Length				
	V	ire					
Continued							
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				



Threaded Shank Drills

High Speed Steel, Carbon and Carbide Tipped

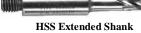
7/16-14 Threaded Shanks 4-1/2" O.A.

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

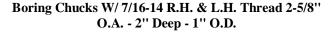
HSS Reg. Point Left Hand Series #4215

HSS Brad Point Series #423 HSS Extended Shank Brad Point Series #425

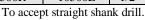
	Stock Numbers: All available in Left Hand Twist, change Fourth digit to 5.							
Drill Size	#420 Carbon Reg Point WHILE SUPPLIES LAST!	#421 HSS Reg Point	#422 Carbon Brad Point	#423 HSS Brad Point	#424 Carbon Extended Shank Brad Pt. WHILE SUPPLIES LAST!	#425 HSS Extended Shank Brad Pt.	#426 Carbide 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

With Chuck Huapters					
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 Hand	Stock No. Left Hand	Drill & Shank 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





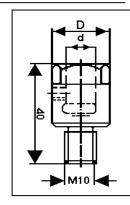
Right Hand



Left Hand



Metric Chuck



Adjustable Drill Chuck 7/16-14"				
Threaded Shank				
Chuck	Chuck Stock			
Capacity	Number			
1/32-1/4	74003			
1/32-3/8 74004				
5/64-1/2	74005			
•				





Carbide Boring Tools

Carbide Tipped Drills

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

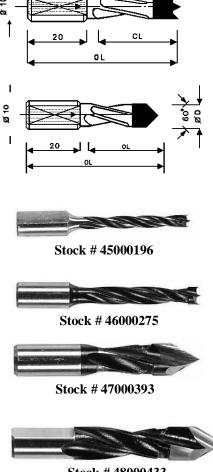
450 & 4505 Series 37 mm Cutting Length 57 mm Overall Length

460 & 4605 Series 47 mm C.L. 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.

77 mm C.21						0.1		
	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 t	that are 20 m	m long with	an adjustal	ole set screv	v



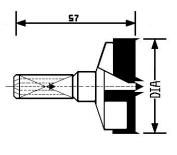
Stock # 48000433

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 10mm diameter shanks and are 57mm				
overall len	gth with an adjusta	ble 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.

9" Twist 12" OA	I. 7/16" Hov
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
ER70916	13/10
ER70917	1-1/16
ER70918	1-1/8
15" Twist 18" OA	
Stock Number	Size
ER71508	1/2
ER71508 ER71509	9/16
ER71510	5/8
ER71511	11/16
ER71511 ER71512	3/4
ER71512 ER71513	13/16
ER71514	7/8
ER71515	15/16
ER71516	13/10
ER71517	1-1/16
ER71518	1-1/8
21" Twist 24" OA	
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" OA	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
ER73317	1-1/16
ER73318	1-1/8
LIC/3310	

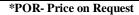
Stock # ER72112

^{* =} While supply lasts only



Wood Auger Bits and Extension Shanks

	Stock Numbers						
	Ship Augers 12'' Twist			Barefoot			
Size			Hex Shank			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



Stock # 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







Se



Series # 456



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 Leng	gth					
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 Leng	,					
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 3/8	BH-51636				
3/8		X X		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	X	X	3/8	BH-1248				
Y – Not available * – Only while supplies last!								

Carbide Round Tipped Shank 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				
Size	Drill Size	Series 732 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	}		
#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 X 3/16" STSCR011				



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" long plugs, but will cut up to 2" long plugs.



X = Not available

Self-Ejecting Plug Cutters

Stock Numbers				
Plug	Spiral	Barrel	Spiral	
Size	Type	Type	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





Spiral Carbide **Tipped**

Over 45 years of quality, service and dependability from the Fuller Family



1-3/8

1-1/2

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	Y	Y

*740 Series only available while supplies last!

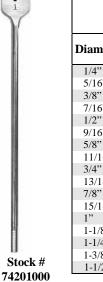
*74001375

Speed Bore ⁷2000'

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



74001375



Lock-N-Load™ 4'' and 6'' SPEEDBORE®Bits				
Diameter Stock No		Stock No 6"		
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		



Stock	#
9031	6

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



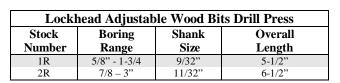
X = Not available

Stock # 903913

Adjustable Boring Bits



Stock # 2R





Stock # 2T

Lockhead Adjustable Wood Bit Hand Brace			
Stock Boring Shank Overall			Overall
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!



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 #	Series #	Series #	
	550	560	812	
Cutting	Carbon	Carbide	Carbide	
Dia	Multi	Multi	Tipped	
	Spur Bit	Spur Bit	3-wing	
1/2	55000500	56000500	81200500	
9/16	55000562	56000562	81200562	
5/8	55000625	X	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	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.

5	Stock Numbers								
G 44	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.

S	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	While Supplies Last!								
Cutting	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							

P	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



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**

	21110					
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.

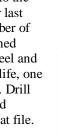
Stock #

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.

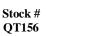


Stock # **QA1428**



Woodchuck Replacement Parts

rarts							
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 #

OS60





Stock # 6C



Stock #

5B

5B-C

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"						

Cutter Blade for #6C 9/32 4-P Pilot Drill for #4C Circle Cutter 11/64" 5-P Pilot Drill for #5B, #6C & #55 Circle 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	Sh	ank	Mortising	Stock Size		В	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	S	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™



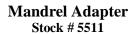
High Speed Steel Hole Saw Arbors and Pilot Drills								
Fits Sizes 1/4" Round 3/8" Hex 3/8" Hex 7/16" Hex Shank Shank Shk, W/2 pins Shank Shk, w/2 pins								
9/16" thru 1-3/16"	Shank 58000001	Shank 58000009*	Shk. W/2 pins X	58000002	Shk. w/2 pins X	Shank X		
1-1/4" - 6"	X	X	58000008*	58000003	58000004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

X = Not available

All Arbors come complete with pilot drills



 $12\ensuremath{^{\circ}}$ extensions available for 7/16 $\ensuremath{^{\circ}}$ hex arbors Stock No. 58012000.



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 SpringFits 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



Plugout TM Pilot Drill



Large Plugout™

Small Plugout™



Hole Saw Sets

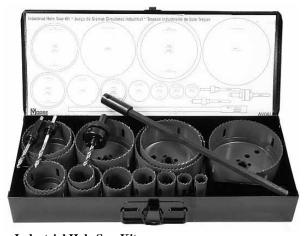


Electricians Hole Saw Kit

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.

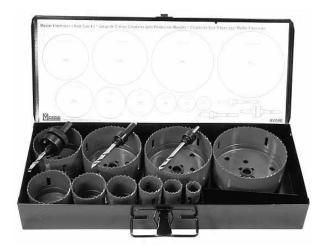


Plumbers Hole Saw Kit

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.

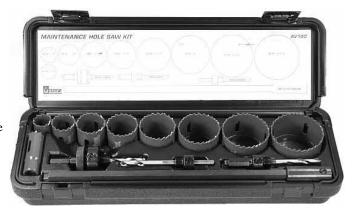


Master Electricians Kit

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

5/8 Rd., 13/16

5/8 Rd.

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 7	Γooth
Stock	Tooth	Diameter	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

8

10



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 Tooth Diameter Bore No.						
Number	er 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 Tooth Diameter Bore No. of						
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

70126

70045

TCG

TCG



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 Tooth		Diameter	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	Keri	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 Diameter Bore No. of				
Number	Inches	Inches	Teeth	
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	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 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

0	Only Avaliable While Supplies Last!				
	Utility Blade – General Purpose				
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		

4	A	
	ABRASIVE BS	APE .
	MAGAN	
		7

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.

Stock # 71501

	Metal Cutting			
Stock	Diameter	Bore	Maximum	
Number	Inches	Inches	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

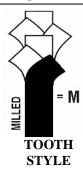
Stock Number	Blade used for	Round Arbor	Diameter Arbor
63600	Steel	3/4 x 1	X
63601	Steel	5/8 x 1	X
63602	Steel	1/2 x 5/8	13/16
63603	Steel	1/2 x 5/8	X
63604	Steel	5/8 x 3/4	X
63606	Abrasive	1/2(plastic)	13/16
63607	Abrasive	5/8(plastic)	13/16
63608	Abrasive	1 x 20mm	X

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)		
İ		



Style #1 Style #2 Style #3

	Bi-Metal (1/2" Shank) Blades				
Stock Recommended		Length x		Teeth	Blade
Number	Use	Thickness		Per	Style
- 1022220		Inches	mm	Inch	~ J = C
	WOOD				
RB606ST	Wood, nail-embedded wood, all composition material.	6 x 3/4 x .035	150 x 20 x .9	6	1
RB63506		6 x 3/4 x .035	150 x 20 x .9	6	2
RB93506	General rough-in, all woods, nail embedded	9 x 3/4 x .035	225 x 20 x .9	6	2
RB123506	woods.	12 x 3/4 x .035	300 x 20 x .9	6	3
RB65006	woods.	6 x 3/4 x .050	150 x 20 x 1.3	6	2
RB125006		12 x 3/4 x .050	300 x 20 x 1.3	6	3
	WOOD AND M	ETAL			
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 cause metals 1/0" thick and shove	4 x 3/4 x .035	100 x 20 x .9	14	4
RB614	Heavy gauge metals 1/8" thick and above. 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	conduit, pipe, channers and tubing.	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			
	Plaster with metal lath, plasterboard, sheet rock,				
RB606P	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	•Lower Cost than Bi-Metal	•Reduces Operating Expense
Speed Construction	Blades	In General Purpose Applications

Style # 1 Style # 2

	Conventional (1/2" Shank) Blades							
		_	Length x Width x Thickness		Blade Style			
Stock Number	Recommended Use	Inches	mm	Per Inch				
	W	OOD						
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 PURPOSE								
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				
RBU10514	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				





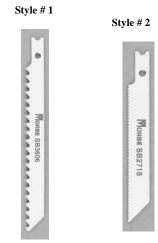
Style #6

Tungsten Carbide Tipped Blades								
		Length x Width x Thickness		Teeth	Blade			
Stock Number	Recommended Use	Inches	mm	Per Inch	Style			
	SPECIAL	PURPOSE						
RTCT603	Plaster over lath, fiberglass, wood, and non-	6 x 3/4 x .050	150 x 20 x 1.3	3	6			
RTCT606S	ferrous metal, cement board, pressure treated	6 x 3/4 x .050	150 x 20 x 1.3	6	6			
RTCT903	lumber, hardwood, and particle board.	9 x 3/4 x .050	225 x 20 x 1.3	3	7			
RTCT906		9 x 3/4 x .050	225 x 20 x 1.3	6	7			
RTCT1206		12 x 3/4 x .050	300 x 20 x 1.3	6	8			



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			
	SPECI	AL PURPOSE	•		•			
SB2718S	Scroll – Metal 18 gauge and under.	2-3/4 x 3/16 x .035	70 x 5 x .9	18	2			



High Speed Steel Blades								
		Length x Width	x Thickness					
Stock Number	Recommended Use	Inches	mm	Teeth Per Inch	Blade Style #			
WOOD 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	ETAL						
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			

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Style #3

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Style # 6

Carbon Blades								
		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 F	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-Meta	l Blades			
		Length x Width	x Thickness		
Stock Number	Recommended Use	Inches	mm	Teeth Per Inch	Blade Style #
	WO	OD			
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 #
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Worse SB0406	Worse SB0410CC	Worse SB0512L	Vionese SB0314
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High Speed Steel Blades								
		Length x Widt	Length x Width x Thickness					
Stock	Recommended	Inches	mm	Teeth	Blade			
Number	Use			Per Inch	Style #			
	WOOD AND METAL							
SH0408	Hard Plastic, Non-Ferrous Metal, Wood with	4 x 5/16 x .040	100 x 8 x 1	8	5			
	Nails, Very hardwood. Very Clean Cuts							

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



Style #8



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 Construct	ion	* Flexibility	* Will not Shatter
		* Increased Heat and Wear	* Long Life
* Tooth Hardness Ro	65-67	Resistance	* Safe Operation
		* Higher Edge Hardness than	* Faster Cutting
* Vacuum Heat Trea	tment	other Heat Treatment Methods	* Labor Saving

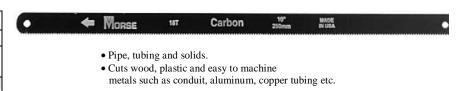
High Speed Molybdenum						
Stock	Teeth	Desci	ription			
Number	Per Inch	Inches mm				
HHM1018	18	10 x 1/2 x .025	250 x 12.7 x 0.6			
HHM1024	24	10 x 1/2 x .025	250 x 12.7 x 0.6			
HHM1032	32	10 x 1/2 x .025	250 x 12.7 x 0.6			
HHM1214	14	12 x 1/2 x .025	300 x 12.7 x 0.6			
HHM1218	18	12 x 1/2 x .025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

MADE IN UX	
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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

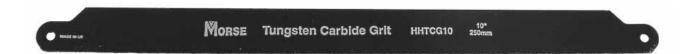
These specialty blades fit standard hack saw frames and cut hard materials like glass, ceramic tile, hardened steel, and more. The carbide grit cutting edges are super resistant to heat, wear and abrasion. They also resist snagging.



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			



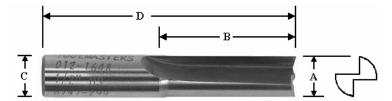
Carbide Grit Hack Saw Blades

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 Inches MM				
Stock Number					
HHCTCG10	10	250			
HHCTCG12	12	300			



High Speed Steel Router Bits



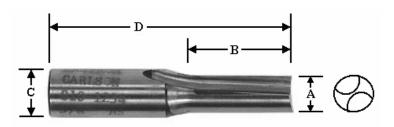
H.S.S. Double 'V' Flute

A Cutting	B Shank	C Cutting	D Overall	Stock	A Cutting	B Shank	C Cutting	D Overall	Stock
Diameter	Diameter	Length	Length	Number	Diameter	Diameter	Length	Length	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

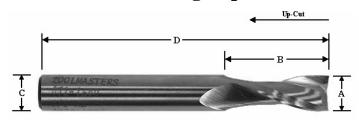
H.S.S. Double 'O' Flute

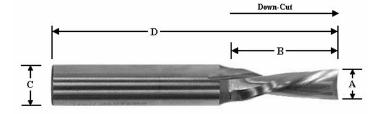
A Cutting Diameter	B Cutting Length	C Shank Diameter	D Overall Length	Stock Number
1/8	1/4	3/8	1-5/8	010-0412
3/16	1/4	5/8	2	010-0620
7/32	1/4	5/8	1-7/8	010-0720
1/4	1/4	3/4	2-1/8	010-0824
1/4	1/4	1	2-3/8	010-0832
1/4	1/2	1	2-1/2	010-0834
5/16	1/4	3/4	2-1/8	010-1024
3/8	3/8	1	2-1/2	010-1232
3/8	1/2	1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

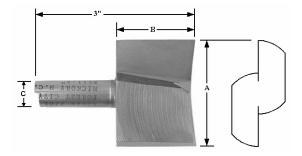
Single Edge Cutters Available

A	В	C	D	Charle
Cutting	Cutting	Shank	O.A.	Stock 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

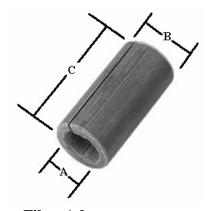
A	В	C	D	
Cutting	Cutting	Shank	O.A.	Stock Number
Dia.	Length	Dia.	Length	Nullibei
1/8	3/8	1/4	2-1/2	073-0416
3/16	5/8	1/4	2-7/8	073-0620
1/4	3/4	1/4	2-3/4	073-0824
1/4	3/4	1/2	3-1/2	073-0825
1/4	1	1/4	3	073-0832
5/16	3/4	1/2	3-1/2	073-1024
5/16	1	5/16	3-1/4	073-1032
5/16	1	1/2	3-3/4	073-1033
3/8	1	3/8	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.

Cut	Cutting		Stock
A	В	Shank	Number
Diameter	Length	Diameter	Number
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

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	Standard Spiral Bits				
	Up Cut or Down Cut				
	Solid Carbide – Two Flute				
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					
	•	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" Shank				
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 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	1/2"	2"	4"	



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	D4125 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	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	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 primarily for routing plastics						
Stock	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						
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	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	Counterbore Diameter	Pilot Diameter	Length	Туре
	3/8" Shank			
FF301	3/8"	.136	4"	Standard
FF302	3/8"	.136	6"	Long
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.



Round Bottom Veining 2" Overall Length					
Stock Number	Radius	Cutting Diameter	Cutting 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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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	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 Number						
		1/4" Shank	•			
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	Overall	Bearing	
Number	Diameter	Length	Length	Number	
	1	1/4" 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	

^{* =} 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	/2" Shank -	Double Flu	te		
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	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					
Number		Length	Length			
	Single	e 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 Single	Length e Flute	Length	
		c 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" 1/2"	1-1/4" 1-1/2"	2-7/8"			
1054 1055	1/2"	2"	3-1/8" 4-1/8"			
1055A	1/2"	2-1/2"	4-3/8"			
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"			
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 1067E	1/2"	1-1/4"	2-7/8"	Leigh # 160 Carbide Boring Point		
1067F 1069	1/2" 1/2"	1-1/4"	2-7/8" 3-1/8"	Carbide Boring Point		
1069 1069DS	1/2"	1-1/2"	3-1/8"	Down Shear		
1009D3	1/2"	1-1/2"	4-1/8"	Down Shear		
1071	1/2"	2"	3-1/2"			
1072	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 1078	5/8" 5/8"	1-1/4" 1-1/2"	3" 3"			
1078	5/8"	2"	3 4"			
1080	21/32"	1-1/4"	3"			
1082	11/16"	1"	2-1/2"			
1083	11/16"	1-1/4"	3"			
1083A	23/32"	1"	2-1/2"	Undersize Plywood Dado		
1302A	3/4"	5/8"	2-1/4"	Mortising		
1084	3/4"	1"	2-3/4"			
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 1090	25/32" 13/16"	1-1/4"	3"			
1090	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"	ů.		
1095	1"	2"	3-3/4"			
1096	1-1/8"	1-1/2"	3"			
1304	1-1/4"	1/2"	2-1/8"	Mortising		
1097	1-1/4"	1-1/2"	3"			
1098	1-3/8"	1-1/4"	3"			
1099 1100	1-1/2" 1-3/4"	1-1/4" 1-1/4"	3" 3"			
1100	2"	1-1/4"	3"			
1101	2	1-1/-	3			



Carbide Tipped Straight Router Bits – Metric Sizes

Made in Canada by FS Tool

1/4" Shank Straight Metric Bits				
Stock	Cutting Cutting Over			
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" 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"	
RM110	12mm	3/4"	2" 2"	
RM111	13mm	3/4"	2"	
RM112	14mm	3/4"	2"	
RM113	15mm	3/4"	2"	
RM114	16mm	3/4"	2" 2" 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" 2" 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

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



Mortise Bits					
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"		

If you need a
square corner on
your mortise, use
Whiteside's
(Square Corner
Chisel).

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	Stock Cutting Cutting Overall					
Number	Diameter	Length	Length			
	1/2" Shank					
1250	1/2"	1-1/2"	3-1/2"			
1252	1/2"	2"	4"			
	5/8" SI	ıank				
1260	3/4"	2"	4"			
	3/4" Shank					
1270	3/4"	2"	4"			

Round Nose and Half Round Router Bits

Made in the USA by Whiteside Machine Company

For full line of products, Please request a catalog.



Round Nose Bits (Core Box)						
Stock Number	Radius	Cutting Diameter	Cutting Length	Overall Length		
rumber	1/4" Shank					
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" Shank					
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	<u> </u>	
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 Number	Radius	Cutting Diameter	Cutting Length	Bearing 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					
]	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	"A" Bead Opening	"B" Bead Depth	Cutting Length	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

Made in the USA by Whiteside Machine Company

For full line of products, Please request a catalog.



V Groove - 90° Included Angle					
Stock Number	Cutting Diameter	Point Length	Overall 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 and Lettering				
Stock Number Radius Cutting Cutting Overall Diameter Length Length					
	1/4" Shank				
1570	3/16"	3/8"	3/8"	2"	
1572	1/4"	1/2"	1/2"	2"	
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

Made in the USA by Whiteside Machine Company



For full line of products, Please request a catalog.

	Rabbet Bits				
Stock Large Cutting Cutting Bearing Number Diameter Length Depth 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 -Bearing 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	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 Numb		K	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	Size	Length			
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.



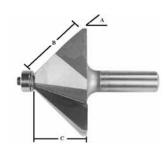
Roundover and Chamfer Router Bits

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



Roundover & Beading					
Ball Bearing Guide					
	I	1/4" Shank	1		
Round- Over Stock Number	Beading Stock Number	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	•		
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"	

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



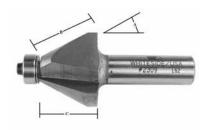
45° Chamfer						
	-Bearing Number B3WM-					
Stock	Stock "A" "B" "C" Overall					
Number	Degree	Cutting	Cutting	Length		
rumber	Of Angle	Length	Height	Bengui		
		1/4" Shank				
2302	45°	5/8"	7/16"	2"		
		1/2" Shank				
2305	45°	5/8"	7/16"	2-1/4"		
2306	45°	1-1/16"	3/4"	2-1/2"		
2310	45°	1-1/2"	1-1/16"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

Made in the USA by Whiteside Machine Company

For full line of products, Please request a catalog.



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					
	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						
	-7	Γwo 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 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					
	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 Length Nu					
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					
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

Made in the USA by Whiteside Machine Company

For full line of products, Please request a catalog.



Laminate Trim Bits					
Two Flute – Ball Bearing Guide					
Stock Bevel Large Number Degree Diameter		Large Diameter	Cut Length	Bearing 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						
Two 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 Euro Square Bearing					
Stock	Cutting Cutting Overall Bearing				
Number	Diameter	Length	Length	Number	
1/4" Shank					
2640	1/2"	1/4"	1-5/8"	B3SQ	
1/2" Shank					
2660	3/4"	5/8"	2-1/4"	B8SO	



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.

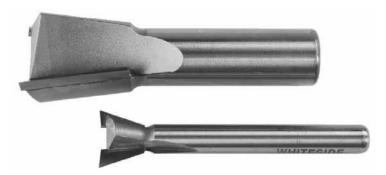
Either flush or ribbed (outside corners protruding) construction is possible. Ribbed construction is recommended with twelve and sixteen sides because the interior leg of the notch will be very small when made flush. Outside corners on ribbed construction can be cut or sanded down for flush appearance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

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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
			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					

^{* -} 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	A 3: 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	Shank	Arbor	Arbor	Overall	
Number	Diameter	Diameter	Length	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 Set # 501



Router Bit Set # 600



	Router Bit Sets			
Stock Number	Number of Peices	Shank Size	Description	
401	7 bits	1/2"	Contains most popular woodworking bits with 1/2" 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.	
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

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.

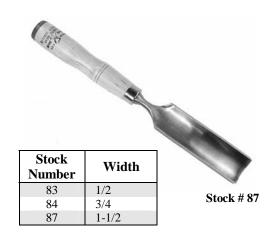
Firmer Gouges

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



1-1/2

308 309





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



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

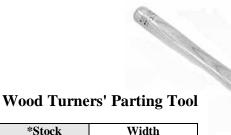


Stock # 1060B



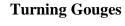
Wood Turning Chisels *All Wood Turning Chisels are Only Available While Supplies Last!*

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



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



Turning Chisels

*Stock

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

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	Т	G!	D		
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.

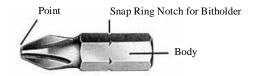
How hard are your screwdriver bits? Extra Hard: 59-63 HRc, Medium Hard & Iso-Temp: 52-56 HRc

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:



Power Groove: Engages with a spring-loaded metal ball inside the driver

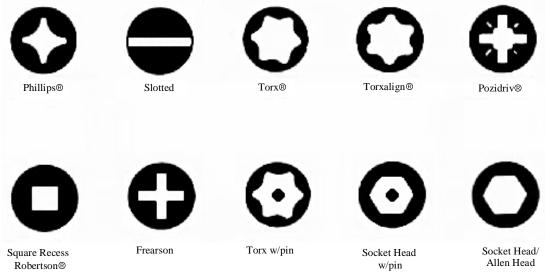
Shank

Overall Length

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" and 5/16" hex shanks.

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:





Phillips®



Phillips® Drywall Bit

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



Phillips® Decking/Subflooring Bit

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



Phillips® Reduced Diameter Extra Length Bit

Reduced Diameter						
(.	(.187) Extra Length					
St	ock	Çi	zes			
Nur	nbers	51	ZCS			
Extra	Iso-	Point	Overall			
Hard	Temp™	Size	Length			
	1/4" Hex Shank					
37513	X	1	2"			
37514	X	2	2"			
35715	X	2	3"			
	5/16" Hex 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					
	S	tock Num	bers		S	Sizes
Med Hard	Extra Hard	Ex. Hard Ribs	ard Iso- Temp™ Temp™		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					
	St	ock Nu	mbers		,	Sizes
Med Hard	Hard Temn ^{IM}					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®

components.



Power Bit with Full Hex Body



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

Power Bit with Round Body

1/4" Hex Shank with 1/4" Round Bodies				
Extra Point Overall Hard Size Length				
44150	2	1-15/16		
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	Stock Numbers			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 Numbers Sizes				
Extra	Iso-	Iso- Point Body		
Hard	Temp™ Size		Diameter	
27602	X	4	3/8	



Power Bit Decking/Subflooring

Decking / Subflooring Bits				
1/4" Hex Shank				
Extra	Extra Point Overall			
Hard	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

- •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 Hard	Iso-Temp™ Ribbed	Point Size	Blade Thickness	Blade Width	Overall 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	PointBladeBladeOverallSizeThicknessWidthLength				
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		
27460	1-2		.122	Length	
		.026		1-15/16	
27461	2-3 3-4	.028	.134	1-15/16	
27462		.032	.154	1-15/16	
27463	4-5	.034	.187	1-15/16	
27464	5-6	.036	.215	1-15/16	
27465	6-7	.038	.250	1-15/16	
27466	8-10	.042	.275	1-15/16	
27467	10-12	.046	.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	.034	.215	3-1/2	
27483	6-7	.038	.250	3-1/2	
27484	8-10	.042	.275	3-1/2	
27485	10-12	.042	.312	3-1/2	
27486	10-12	.050	.360	3-1/2	
28300	1-2	.026	.122	4	
	2-3			4	
28301	3-4	.028	.134	4	
28302	_	.032	.154	•	
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- Temp™ Point Blade 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	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 Т50Н		
35382 T55H		



Torx® W/Pin



Torx® Tamper Resistant

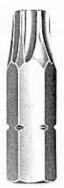
Torxalign® Insert Bits (wedge)

- •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.

1/4", 3/8	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.			



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	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



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

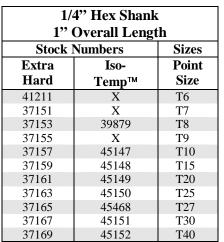
37171

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 Overa		
Hard	Temp™	Size	Diameter	Length
41751	X	T6	.125	1-15/16
37713	35391	T8	.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	Т8	.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	Stock Numbers Sizes			
Extra	Iso-	Point	Body	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



Power



Torx® **Power** Full **Body**

X = Not available



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 N	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®



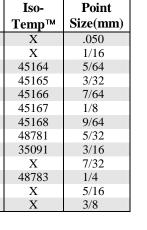
Pozidriv® Insert

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"	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

For Metric Socket **Head Screws** 1/4" Hex Shank 1" Overall Length

Extra	Point
Hard	Size(mm)
36538	2
39545	2.5
36539	3
36540	4
36541	5
36542	6
43939	7
36543	8

Pozidriv® Power Bits

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

1/4" Hex Shank					
Stock N	Stock Numbers 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	



Power



Socket Head Bits



Insert Bits



For Metric Socket Head					
	Screws				
5,	5/16" Hex Shank				
Extra	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

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-	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

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" Overall		
Length		
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 Metric Socket Head			
Screws			
1/4" Hex Shank			
1-15/16" Overall Length			
Extra	Extra Point		
Hard	Hard Size		
39869	2.5		
39870	3		
39871	4		
39872	5		
39873	6		



Power Bit

7/16" Hex Shank			
3-1/2" Overall Length			
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 Nominal				
Hard	Temp™	Size	Size	
38509	X	0	1/16	
29049	45195	1	3/32	
29050	45196	2	1/8	
29051	45197	3	9/64	
		_		









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 Hard	Point Size	Overall 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	- I minpse I minpse E i i i i i i i i i i i i i i i i i i					
Haru	Hard Pt. Size Pt. Size Length					
44103	P2	P2	1-3/4			
44071	P2	P2	2-1/2			



Phillips®/ Slotted						
	1/4" Hex Shank					
Extra Phillip® Slotted Overa						
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			





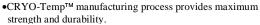
Square Recess 1/4" Hex Shank						
Iso-	Iso- Square Square Overall					
Temp™	Pt. Size	Length				
39699	Sq. 1	Sq. 2	1-1/2			
45006	Sq. 0	Sq. 3	1-1/2			
48784	Sq. 1	Sq. 2	2			



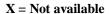
Square Recess Robertson Power

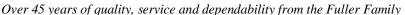
- •Cold formed for optimum toughness and resistance to wear.
- •Popular in mobile homes, recreation vehicles, and some furniture.

1/4" Hex Shank					
Stock N	Numbers		Sizes		
Extra	Iso-	Point	Point Nominal O		
Hard	Temp™	Size	Size	Length	
29052	45184	1	3/32	1-15/16	
29053	45185	2	1/8	1-15/16	
29054	45186	3	9/64	1-15/16	
29055	X	1	3/32	2-3/4	
29056	X	2	1/8	2-3/4	
29057	X	3	9/64	2-3/4	
29058	X	1	3/32	3	
29059	X	2	1/8	3	
29060	X	3	9/64	3	
X	X	1	3/32	3-1/2	
39947	X	2	1/8	3-1/2	
44136	X	1	3/32	4	
39953	X	2	1/8	4	
44138	X	3	9/64	4	
39957	X	1	3/32	6	
39959	X	2	1/8	6	
39961	X	3	9/64	6	



Decking / Subflooring Bits 1/4" Hex Shank							
Extra	Extra Point Nominal Overall						
Hard	Hard Size Size 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- netic Body Nose Nose Diameter Diameter Size Insert 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							
Magnetic	Rody Nose Insert Overall						
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	l" Hex Too	l Steel Shan	ık					
Non-	Non- Body Nose Insert Overall								
Magnetic	Magneuc	Magnetic Diameter Diameter Bit Size							
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 N	Number			Sizes			
O- Ring	C- Ring	Shank Size	Rif				
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-	Magnetie	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-magnetic							
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			
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"		



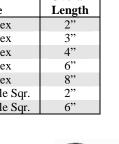
Stock #

37429

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						
	Stock Number Pin Lock		Stock Number Ball Lock		Shank Size	Overall 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	2"		
38209	1/4 Hex	3"	
31601	3/8 Female Sqr.	3"	

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



Stock # 37845



Stock # 38209



37570 31596

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



Specialty Bit HoldersFor Hex Insert Bits

	Female Square Drive						
Stock N	umbers	Sizes					
Non- Magnetic	Magnetic	Drive	Drive Body Nose Bit Size Overall Length				
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 N	umbers			Sizes		
Non- Magnetic	Magnetic	Drive Body Nose 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.				





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.

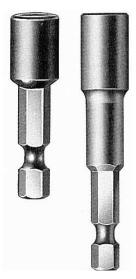


Nutsetters Insert					
Mag-	Mag- Hex Socket Body Overall				
netic	netic NutSize Diameter Length				
38686	1/4	7/16	1-1/4		
38687	5/16	1/2	1-1/4		
38688	3/8	9/16	1-5/16		

Nutsetters Insert Metric Sizes					
Mag- netic					
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	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.)
- $\bullet Iso\text{-}Temp^{\intercal \! \! \! M}$ toughening process provides additional strength and durability.
- $\bullet Excellent \ for \ use \ with \ all \ Self-tapping \ Fasteners. \\$

Steel Stud Power Nutsetters				
1	1/4" Hex Shank			
Stock	Stock Hex Overall			
Numbers	Opening Size	Length		
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
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).



- $\bullet Industrial\ quality\ screwdriver.$
- •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) 8-10 (39537) 12-14 (39539)	1"	
		Allen Bits	5/64 (27096) 3/32 (27097) 7/64 (37475) 1/8 (27098) 9/64 (37476)	1"	
		Square Recess Bits	0 (38509) 1 (29049) 2 (29050) 3 (29051)	1"	
		Torx® Bits	T10 (37157) T15 (37159) T20 (37161) T25 (37163) T30 (37167) T40 (37169)	1"	
		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)	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) 5/32 (27099) 3/16		
			(27100) 7/32 (27101) 1/4 (27102)		
			2.5mm (39545) 3mm (36539) 4mm (36540)		
			5mm (36541) 6mm (36542)		
		Square Recess Bits	0 (38509) 1 (29049) 2 (29050) 3 (29051)	1"	
		Torx® Bits	T10 (37157) T15 (37159) T20 (37161) T25	1"	
			(37163) T27 (37165) T30 (37167) T40 (37169)		
		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"	

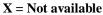


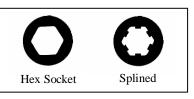
Set Screws, Hex Keys & Drill Chuck Keys

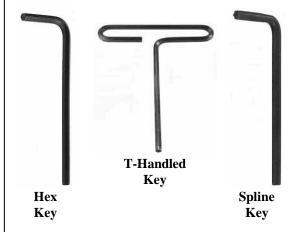


Set Screws

		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





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	t 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 Groun		Ground	
Cutting Size	Per Inch	Carbon	H.S.S	3	Thread H.S.S
*4	40	50000440	50500440	O	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

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"

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"



Stock # 51000125

High Speed Steel Pipe Dies

Stock Number	Size	Description
51000125	1/8-27	HSS round ADJ. 1"



Stock # 51400125



Stock # 51610250

Carbon Pipe Dies Round and Hex

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.*	
Car	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"	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

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 nonratchet 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 una reamer wrene				
Size	Stock 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-1.75.

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.

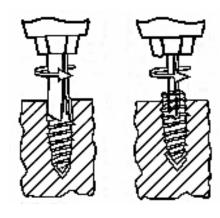
Stock	Use	Removes These Bolts	
Numbers	Drill Size	and Screws	
2220001	5/64"	3/32"-5/32", 2.5mm-4mm, No. 3-No. 6	
2220002	7/64"	5/32"-7/32", 4mm-6mm, No. 6-No. 12	
2220003	5/32"	7/32"-9/32", 6mm-8mm, No.12	
2220004	1/4"	9/32"-3/8" and 1/8" NPT, 1/8" BSP, 8mm-10mm	
2220005	19/64"	3/8"-5/8" and 1/4"NPT, 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.

Con	nmon	Recom	mended Unsc	rew-Ums	
Screv	v Sizes	for Common Screw Sizes		w Sizes	
A Shank Size	B Thread Size	Thread Outside		Stock Number	
X	#2	1/16"	1"	SXTR0062	
#2	#4	3/32"	1-3/8"	SXTR0093	
#4	#6	1/8"	2"	SXTR0125	
#6	#8	5/32"	2"	SXTR0156	
			2-1/2"	SXTR0156L	
#8	#10	3/16"	2"	SXTR0187	
			2-1/2"	SXTR0187L	
#10	#12	7/32"	2"	SXTR0218	
			3"	SXTR0218L	
#12, 14	#14, 16, 18	1/4"	2"	SXTR0250	
			3-1/2"	SXTR0250L	
#14, 16, 18	#16, 18, 20	5/16"	2"	SXTR0312	
			4"	SXTR0312L	
#16, 18, 20	#20	3/8"	2"	SXTR0375	
			4"	SXTR0375L	
X	X	7/16"	2"	SXTR0437	
			4"	SXTR0437L	
X	X	1/2"	2"	SXTR0500	
			4"	SXTR0500L	
	SETS				
N		Dagan	D : ()		
Nan	Name		Description		
Boat Builders Standard Set S		Set of 5 – 5/32" to 5/16"		SXTR0001	
Handy Ones Set		Set of 5 – 1/8" to 1/4"		SXTR0002	
Boat Builders Long Set		Set of 5 Long – 5/32" to 5/16"		SXTR0003	

Set of 6 - 1/8" to 5/16

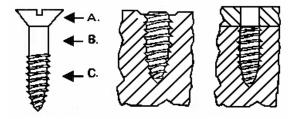


Fig. 1A If the slot is baldy damaged, remove the head with a twist drill of make a deep hole in the head and cut through the rest of the head with an Unscrew-Ums.

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	Dime	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	C6HT	C6HM
C7M	3/8	5/32	C7T	C7HT	C7HM
C8M	3/8	11/64	C8T	C8HT	C8HM
C9M	3/8	3/16	C9T	C9HT	C9HM
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	C122T	C129HT	C129HM
C125M	1/2	5/32	C125T	C125HT	C125HM
C1211M	1/2	11/64	C1211T	C1211HT	C1231HM
C92M	1/2	3/16	C92T	C92HT	C92HM
C102M	1/2	13/64	C102T	C102HT	C102HM
C12M	1/2	7/32	C1021	C102HT	C102HM
C121VI C1415M	1/2	15/64	C121	X	X
C14I3M C14M	1/2	1/4	C14131	C14HT	C14HM
C145M	5/8	5/32	C141 C145T	C145HT	C141IW C145HM
C143M	5/8	3/16	C143T	C143HT	C143HM
C143M	5/8	7/32	C1431	C143111	C1431IM C167HM
C16/M	5/8	1/32	C1671 C16T	C16/H1 C16HT	C16/HM C16HM
C1617M	5/8	17/64	C161 C1617T	X	X
C1617M C169M	5/8	9/32		X	X
C1619M	5/8	19/64	C169T C1619T	X	X
		_			X
C18M	5/8	5/16	C18T	Х	
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	C20T	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
C326M	1	3/8	C326T	X	X
X = Not a	vailable				





Replacement Set Screws and Keys (part 1)

To al Normaliano	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 C102	10-32 X 1/4 CONE	STSCR008/STSCR009	"
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 C18	10-32 X 5/16 CUP	STSCR010	3/32 K0093
C243	10-32 X 1/4 CONE	STSCR008/STSCR009	3/32 K0093 / SPK0093
C247 C244 C245 C20 C24 C24	10-32 X 5/16 CUP	STSCR010	3/32 K0093
C284 C285 C286 C287 C324 C326 C328	1/4-28 X 3/8	STSCR014	1/8 K0125
H3S H4S	10-32 X 1/8 CUP	STSCR002	3/32 K0093
H5S H6S H7S H8S H9S H913S H97S H10S	10-32 X 3/16 CONE	STSCR003/STSCR004	3/32 K0093 / SPK0093
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	1/4-28 X 3/8	STSCR014	"
H328S	1/4-28 X 1/2	STSCR015	"
CC5 CC6 CC7 CC8 CC9	10-32 X 1/8 CUP	STSCR002	3/32 K0093
CC125 CC1211 CC92 CC102 CC12 CC14	10-32 X 3/16 CONE	STSCR003 / STSCR004	3/32 K0093 / SPK0093
CC143	10-32 X 1/4 CONE	STSCR008/STSCR009	"
CC16 CC169 CC18	10-32 X 1/4 CUP	STSCR006/STSCR007	"
CC244 CC245 CC24	1/4-28 X 1/4	STSCR012	1/8 K0125
В3	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 B86 B87 B8 B89	1/4-28 X 3/8	STSCR014	1/8 K0125
B96 B97 B98 B9 B910 B912	1/4-28 X 1/2	STSCR015	"
B106 B107 B108 B109 B10 B1012	5/16-24 X 1/2	STSCR020	5/32 K0156
B126 B127 B128 B129 B1210 B12	5/16-24 X 5/8	STSCR021	11
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 and Length	Standard Set Screw/ Spline Set Screw	Standard Key/ Spline Key
X3L	10-32 X 3/16 CONE	STSCR003/STSCR004	3/32 K0093 / SPK0093
X37L X34L X317L X39L	10-32 X 3/16 CUP	STSCR005	3/32 K0093
X310L			
X43L X47L X4L X49L X5L			
X511L X56L X64L X610L X6L	10-32 X 1/4 CUP	STSCR006/ STSCR007	"
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	ii .
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	"
X910L X912L	1/4-28 X 1/2	STSCR015	"
X106L X107L X108L X109L X10L X1012L X26L X127L X128L X129L	5/16-24 X 3/8	STSCR019	5/32 K0156
X1210L X12L	5/16-24 X 1/2	STSCR020	"
ALL 'R' CBORES	10-32 X 3/16 CONE	STSCR003 / STSCR004	3/32 K0093 / SPK0093
STOP COLLARS			
1/4 5/16 3/8 7/16 1/2 9/16 5/8 3/4 7/8	10-32 X 1/8 CUP	STSCR002	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	
	5/16	WSH3	
BALL BEARING GUIDE	3-48 X 3/8 CAP	SCR0	
SCREWS	5-40 X 3/8 CAP	SCR1	
	5-40 X 1/2 CAP	SCR3	
	10-32 X 3/4 CAP	SCR4	



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Decimal Equivalency Chart (Part 1)

	Dec-			Тар		Dec-			Тар		Dec-			Тар
Inch		Wire	mm	Sizes	Inch		Wire	mm		Inch		Wire	mm	
	imal	0.7	1.5	Sizes		imal	(1		Sizes		imal	25		Sizes
	.0059	97	.15			.0390	61				.1100	35	2.0	
	.0063	96	.16			.0394	60	1.			.1102	2.4	2.8	
	.0067	95	.17			.0400	60				.1110	34		#6 40
	.0071	94	.18			.0410	59	1.05			.1130	33	2.9	#6-40
	.0075	93	.19			.0413	50	1.05			.1142	22	2.9	
	.0079	92	.20			.0420	58				.1160	32	2	
	.0083	91	.21			.0430	57	1.1			.1181	31	3.	
	.0087	90 89	.22			.0433		1.15			.1200	31	3.1	
	.0091	89	.23			.0453	56	1.15		1/8	.1220		3.1	5/22 22NG
	.0094	88	.24		3/64	.0465	50		#0-80	1/8	.1250 .1260		3.2	5/32-32NS
	.0093	00	.25		3/04	.0409		1.2	#0-80		.1280		3.25	
	.0100	87	.25			.0472		1.25			.1285	30	3.23	5/32-36NS
	.0100	07	.26			.0492		1.25			.1283	30	3.3	3/32-30INS
	.0102	86	.20			.0512	55	1.5			.1339		3.4	
	.0105	00	.27			.0520	33	1.35			.1360	29	3.4	#8-32
	.0110	85	.28			.0550	54	1.33			.1378	23	3.5	#6-32
	.0114	0.5	.29			.0551	34	1.4			.1405	28	3.3	
	.0015	84	.27			.0571		1.45		9/64	.1405	20		
	.0013	07	.30			.0571		1.43)/U -	.1417		3.6	
	.0120	83				.0595	53	1			.1440	27	2.0	
	.0125	82				.0610		1.55			.1457		3.7	
	.0126	32	.32		1/16	.0625			#1-64		.1470	26		3/16-24NS
	.0130	81			1/10	.0630		1.6	<i>"</i> 1 0 1		.1476		3.75	3/10 21113
	.0134	01	.34			.0635	52		#1-72		.1495	25	01.0	#10-24
	.0135	80				.0650		1.65	"1 /Z		.1496		3.8	#10 Z !
	.0138		.35			.0669		1.7			.1520	24		
	.0142		.36			.0670	51		#2-56		.1535		3.9	
	.0145	79				.0689		1.75			.1540	23		
	.0150		.38			.0700	50		#2-64	5/32	.1562			
1/64	.0156					.0709		1.8			.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		.55			.0827		2.1			.1732		4.4	
	.0225	74				.0846		2.15			.1770	16		7/32-24NS
	.0236		.6			.0860	44				.1772		4.5	W10.00
	.0240	73				.0866		2.2			.1800	15	4.7	#12-28
	.0250	72				.0886	42	2.25	W4 40		.1811	4.	4.6	
	.0256	71	.65			.0890	43	2.2	#4-40		.1820	14		
	.0260	71	7			.0906		2.3			.1850	13	4.7	
	.0276	70	.7			.0925	42	2.35	#4 40		.1850		4.7	
	.0280	70			2/22	.0935	42		#4-48	2/16	.1870		4.75	
	.0292	69	.75		3/32	.0938		2.4		3/16	.1875		4.8	
	.0295	60	./3			.0945	/11	2.4			.1890	12	4.0	7/22 22NG
1/32	.0310	68				.0960	41	2.45			.1890 .1910	12 11		7/32-32NS
1/32	.0312		.8			.0980	40	2.45			.1910	11	4.9	
	.0313	67	.0			.0980	40	2.5			.1929	10	4.7	
	.0320	66				.0984	39	2.5	#5-40		.1935	9		
	.0335	UU	.85			.1015	38		#J-4U		.1960	, ,	5.	
		65	.03				30	2.6				0	3.	1/4-20
	.0350	05	.9			.1024	37	2.0	#5-44		.1990 .2008	8	5.1	1/4-20
	.0354	64	.9			.1040 .1063	31	2.7	#3-44		.2008	7	3.1	
	.0360	63				.1063	36	4.1	#6-32	13/64	.2010	,		
		03	.95				30	2.75	#0-32	13/04	.2031			
	.0374	62	.73		7/64	.1083		2.75						
	.0380	02			//04	.1094								



Decimal Equivalency Chart (Part 2)

	Decimal Equivalency Chart (Part 2)												
Inch	Dec- imal	Wire & Letter	mm	Tap Sizes	Inch	Dec- imal	Wire & Letter	mm	Tap Sizes	Inch	Dec- imal	mm	Tap Sizes
	.2040	6			21/64	.3281				11/16	.6875		3/4-16NF
	.2047		5.2			.3307		8.4			.6890	17.5	
	.2055	5				.3320	Q		3/8-24NF	45/64	.7031		
	.2067		5.25			.3346		8.5			.7087	18.	
	.2087		5.3			.3386		8.6		23/32	.7188		1/2-14 Pipe
	.2090	4				.3390	R		1/8-27 Pipe		.7283	18.5	
	.2126		5.4			.3425		8.7	1	47/64	.7344		
	.2130	3		1/4-28	11/32	.3438					.7480	19.	
	.2165		5.5			.3445		8.75		3/4	.7500		
7/32	.2188					.3465		8.8		49/64	.7656		7/8-9NC
	.2205		5.6			.3480	S				.7677	19.5	
	.2210	2				.3504		8.9		25/32	.7812		
	.2244		5.7			.3543		9.			.7874	20.	
	.2264		5.75			.3580	T			51/64	.7969		
	.2280	1				.3583		9.1			.8071	20.5	
	.2283		5.8		23/64	.3594				13/16	.8125		7/8-14NF
	.2323		5.9			.3622		9.2			.8268	21.	
	.2340	A				.3642		9.25		53/64	.8281		
15/64	.2344					.3661		9.3		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			24/22	.9646	24.5	
4=164	.2638		6.7		10/00	.4040	Y			31/32	.9688	2.5	
17/64	.2656		C 55		13/32	.4062	-			(2)(4	.9843	25.	1 1 /0 7NG
	.2657	TT	6.75			.4130	Z	10.5		63/64	.9844		1-1/8-7NC
	.2660	H	60		27/64	.4134		10.5	1/2 12	1	1.0000	25.5	
	.2677		6.8 6.9		27/64	.4219		11.	1/2-13	1-1/64	1.0093	25.5	
	.2717 .2720	т	0.9	5/16-24NF	7/16	.4331 .4375		11.	1/4 10 Din a	1-1/04	1.0156 1.0236	26.	
	.2756	I	7.	3/10-24NF	7/16	.4528		11.5	1/4-18 Pipe	1-1/32	1.0236	20.	
	.2770	J	/.		29/64	.4528		11.5	1/2-20	1-1/32	1.0312	26.5	
	.2795	J	7.1		15/32	.4688			1/2-20	1-3/64	1.0453	20.3	1-1/8-12NF
	.2810	K	7.1		13/32	.4724		12.		1-1/16	1.0625		1-1/0-12111
9/32	.2812			5/16-32NS	31/64	.4844		12.	9/16-12	1-1/10	1.0630	27.	
7132	.2835		7.2	3/13/32110	01/07	.4921		12.5	7/10 12	1-5/64	1.0781		
	.2854		7.25		1/2	.5000				2 0,04	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	
	.2953		7.5		35/64	.5469				1-1/8	1.1250		
19/64	.2969					.5512		14.	5/8-11	1-9/64	1.1406		
	.2992		7.6		9/16	.5625					1.1417	29.	
	.3020	N				.5709		14.5		1-5/32	1.1562		1-11-1/2 Pipe
	.3031		7.7		37/64	.5781			5/8-18NF		1.1614	29.5	
	.3051		7.75			.5906		15.	3/8-18 Pipe	1-11/64	1.1719		1-1/4-12NF
	.3071		7.8		19/32	.5938					1.1811	30.0	
	.3110		7.9		39/64	.6094				1-3/16	1.1875		1-3/8 x 6
5/16	.3125			3/8-16NC		.6102		15.5			1.2008	30.5	
	.3150		8.		5/8	.6250			11/16-16NS	1-13/64	1.2031		
	.3160	0				.6299		16.		1-7/32	1.2188		
	.3189		8.1		41/64	.6406					1.2205	31.0	
	.3228	-	8.2		0.7.17.	.6496		16.5	0/4 1035	1-15/64	1.2344	25.5	
	.3230	P	0.25		21/32	.6562			3/4-10NC	4 4 4 4	1.2402	31.5	
	.3248		8.25		40164	.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.



		C1	l. D:-			D4 D:	4	I	
No. Of	Maximum Head		nank Diame		Root Diameter		Threads Per	No. Of	
Screw	Diameter	Basic Dec. Size		Fractional valent	Average Dec. Size		Fractional valent	Inch	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.

No.	U	
No	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	
Drills, Brad Point	
Taper Point	50% of list price
Regular Point	30% of list price
Step Drills	30% of list price
XX 1 1	•

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

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