

### **ROCKY MOUNTAIN TWIST**

### THE AMERICAN DRILL COMPANY



"WEKNOW THE DRILL"



### RMT Pride of American-Made

Rocky Mountain Twist (RMT) is the leading U.S. manufacturer of high-performance, precision industrial cutting tools. Founded in 2001, RMT headquarters and 300,000 square foot facility is located at the base of the Rocky Mountains in Ronan, Montana – a region known for great hunting, fly-fishing, four-season recreation, and now superior performance industrial cutting tools.

Dedicated to the community and it's employee's, RMT strives to keep the spirit of "American Made" alive and strong.



### True quality. Trusted performance.

In today's ever-changing world of manufacturing you need more than just a supplier.

You need a partner that is committed to meeting your specifications. You need experienced engineers who understand the challenges you face. And, you need the capabilities to meet them head on. It means knowing the cutting tool industry and its rigorous demands.

Depend on RMT for professional, consistent service. Rely on expert technical and product support. Experience a true partnership in manufacturing, and trusted cutting tool performance that will exceed your expectations.

















### **Perfecting the Technology**

Maintaining extreme tolerances and consistent quality doesn't happen by chance. Utilizing innovative, advanced manufacturing technology is a universal rule at RMT. Our proprietary state-of-the-art CNC drill grinding cells transform high-speed steel blanks into precision, high performance cutting tools. This revolutionary

process ensures exact specifications and superior quality that surpasses National Aerospace Standards.



RMT Proprietary CNC Drill Grinding Cell

### **RMT Peak Performance**

RMT Peak Performance is our pledge to be more than just a supplier providing unparalleled customer service and innovative, solution based technical support.

It's a principle that fostering collaborative customer partnerships, delivering exceptional product quality and value is truly beneficial for all.





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CHUED & DEMINO		28			200
SILVER & DEMING	Description		Material Application	Sizes	Page
SILVER & DEMING		LVER	Material Application  Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal	Sizes Fractional	Page 54
SILVER & DEMING	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity	LVER	Aluminum, Copper, Wood, Plastic,		
	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications	LVER	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal	Fractional	54
SILVER & DEMING  THREADED SHANK	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description	LVER	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal	Fractional	<u>54</u>
	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)		Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum	Fractional	54
	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description  Heavy duty - 135° split point - HSS Precision ground for faster, more efficient chip removal	Cast	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum  Material Application	Fractional Fractional Sizes Fractional Wire	54 55 Page
THREADED SHANK	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description  Heavy duty - 135° split point - HSS Precision ground for faster, more efficient chip removal Industrial-Grade NAS High Speed Steel (HSS)  Premium - 135° split point - COBALT Hard surface with high lubricity Industrial-Grade NAS Cobalt Steel (HSCO)	Cast	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum  Material Application  Iron, Steel Alloy, Aluminum  (low and medium carbon), Steel Alloy, less Steel, Strength Alloys	Fractional Fractional Sizes Fractional Wire Letter Fractional Wire	54 55 Page 56-57
	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description  Heavy duty - 135° split point - HSS Precision ground for faster, more efficient chip removal Industrial-Grade NAS High Speed Steel (HSS)  Premium - 135° split point - COBALT Hard surface with high lubricity Industrial-Grade NAS Cobalt Steel (HSCO)	Cast Steel Stain	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum  Material Application  Iron, Steel Alloy, Aluminum  (low and medium carbon), Steel Alloy, less Steel, Strength Alloys  Available in	Fractional  Fractional  Sizes  Fractional Wire Letter  Fractional Wire Letter  Sizes	54 55 Page 56-57 58-59
THREADED SHANK	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description  Heavy duty - 135° split point - HSS Precision ground for faster, more efficient chip removal Industrial-Grade NAS High Speed Steel (HSS)  Premium - 135° split point - COBALT Hard surface with high lubricity Industrial-Grade NAS Cobalt Steel (HSCO)  Description  13 Piece (Jobber Length)  Bright,	Cast Steel Stain	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum  Material Application  Iron, Steel Alloy, Aluminum  (low and medium carbon), Steel Alloy, less Steel, Strength Alloys  Available in	Fractional  Fractional  Sizes  Fractional Wire Letter  Fractional Wire Letter  Fractional Fractional Fractional Fractional Fractional	54 55 Page 56-57 58-59
THREADED SHANK	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description  Heavy duty - 135° split point - HSS Precision ground for faster, more efficient chip removal Industrial-Grade NAS High Speed Steel (HSS)  Premium - 135° split point - COBALT Hard surface with high lubricity Industrial-Grade NAS Cobalt Steel (HSCO)  Description  13 Piece (Jobber Length)  Bright, 15 Piece (Jobber Length)  Bright,	Cast Steel Stain Black Ox Black Ox	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum  Material Application  Iron, Steel Alloy, Aluminum  (low and medium carbon), Steel Alloy, less Steel, Strength Alloys  Available in kide, Titanium, BlackGold™, Cobalt kide, Titanium, BlackGold™, Cobalt	Fractional  Fractional  Sizes  Fractional Wire Letter  Fractional Wire Letter  Sizes	54 55 Page 56-57 58-59 Page 60 61
THREADED SHANK	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description  Heavy duty - 135° split point - HSS Precision ground for faster, more efficient chip removal Industrial-Grade NAS High Speed Steel (HSS)  Premium - 135° split point - COBALT Hard surface with high lubricity Industrial-Grade NAS Cobalt Steel (HSCO)  Description  13 Piece (Jobber Length)  Bright, 21 Piece (Jobber Length)  Bright,	Cast Steel Stain Black Ox Black Ox	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum  Material Application  Iron, Steel Alloy, Aluminum  (low and medium carbon), Steel Alloy, less Steel, Strength Alloys  Available in	Fractional  Fractional  Sizes  Fractional Wire Letter  Fractional Wire Letter  Fractional Fractional Fractional Fractional Fractional	54 55 Page 56-57 58-59
THREADED SHANK	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description  Heavy duty - 135° split point - HSS Precision ground for faster, more efficient chip removal Industrial-Grade NAS High Speed Steel (HSS)  Premium - 135° split point - COBALT Hard surface with high lubricity Industrial-Grade NAS Cobalt Steel (HSCO)  Description  13 Piece (Jobber Length)  Bright, 21 Piece (Jobber Length)  Bright,	Cast Steel Stain Black Ox Black Ox Black Ox	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum  Material Application  Iron, Steel Alloy, Aluminum  (low and medium carbon), Steel Alloy, less Steel, Strength Alloys  Available in kide, Titanium, BlackGold™, Cobalt kide, Titanium, BlackGold™, Cobalt	Fractional  Fractional  Sizes  Fractional Wire Letter  Fractional Wire Letter  Fractional Fractional Fractional Fractional	54 55 Page 56-57 58-59 Page 60 61
THREADED SHANK	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description  Heavy duty - 135° split point - HSS Precision ground for faster, more efficient chip removal Industrial-Grade NAS High Speed Steel (HSS)  Premium - 135° split point - COBALT Hard surface with high lubricity Industrial-Grade NAS Cobalt Steel (HSCO)  Description  13 Piece (Jobber Length)  Bright, 26 Piece (Jobber Length)  Bright, 26 Piece (Jobber Length)  Bright,	Cast Steel Stain Black Ox Black Ox Black Ox Black Ox	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum  Material Application  Iron, Steel Alloy, Aluminum  (low and medium carbon), Steel Alloy, less Steel, Strength Alloys  Available in  kide, Titanium, BlackGold™, Cobalt kide, Titanium, BlackGold™, Cobalt	Fractional  Fractional  Sizes  Fractional Wire Letter  Fractional Wire Letter  Fractional Fractional Fractional Fractional	54 55 Page 56-57 58-59 Page 60 61 62
THREADED SHANK	Description  General purpose - 118° split point - HSS BLACK & S Surface treated for corrosion resistance and high increased lubricity Industrial-Grade AIS1 High Speed Steel (HSS)  General purpose- 118° split point - COBALT Superior red harness for high temperature applications Industrial-Grade AIS1 Cobalt Steel (HSCO)  Description  Heavy duty - 135° split point - HSS Precision ground for faster, more efficient chip removal Industrial-Grade NAS High Speed Steel (HSS)  Premium - 135° split point - COBALT Hard surface with high lubricity Industrial-Grade NAS Cobalt Steel (HSCO)  Description  13 Piece (Jobber Length)  Bright, 21 Piece (Jobber Length)  Bright, 26 Piece (Jobber Length & Screw Machine)  Bright, 29 Piece (Jobber Length & Screw Machine)  Bright,	Cast Steel Stain Black Ox Black Ox Black Ox Black Ox Black Ox	Aluminum, Copper, Wood, Plastic, Mild Steel, Sheet Metal  Cast Iron, Steel Alloy, Aluminum  Material Application  Iron, Steel Alloy, Aluminum  (low and medium carbon), Steel Alloy, less Steel, Strength Alloys  Available in  cide, Titanium, BlackGold™, Cobalt  cide, Titanium, BlackGold™, Cobalt  cide, Titanium, BlackGold™, Cobalt  cide, Titanium, BlackGold™, Cobalt	Fractional  Fractional  Sizes  Fractional Wire Letter  Fractional Wire Letter  Fractional Fractional Fractional Fractional Fractional Fractional Letter	54 55 Page 56-57 58-59 Page 60 61 62 63

## PHOTO INDEX / APPLICATION DETAILS

COUNTERSINK	Description	Material Application	Sizes	Page		
	100° Microstop Countersink Piloted aircraft microstop countersink cutters.	Aluminum	Wire	<u>67</u>		
HEX SHANK	Descript	ion	Sizes	Page		
	The Fast Change Connector is at the heart of the H Shank accessories quickly without re-chucking your of drills. (Not compatible with 1" insert bits)	ex Shank System. It allows you to change Hex Irill. Connectors will fit all 3/8" and 1/2" drive	1/4" Hex	<u>68</u>		
	General purpose - 135° split point - BRIGHT - Hex Industrial-Grade NAS High Speed Steel (HSS) - for u	shank Fast Change drill bits. se on Aluminum/Copper, Wood, Plastic.	Fractional	<u>68</u>		
	Nut Setter Quick change chuck fitment and premium impact S2	steel. 1/4" hex shank.	1/4", 5/16", 3/8", 7/16"	69		
RMT RMT	Screw Guide holds and guides in correct position with Simply push the retractable guide sleeve over the bit	hout wobbling or disengaging from the bit. and screw and drive it straight in!	Compact Standard	70		
	Power Groove Countersinks allow you to countersing precision ground flutes that cut fast and stay sharp lo		#6, #8, #10, #12	70		
RAT		vs you to pre-drill, countersink or counter bore ve a screw without re-chucking by using the ure.	#6, #8, #10, #12	71		
DIAMOND THE DDILL DITE			Sizes	Page		
DIAMOND FILE DRILL BITS	Description  Diamond Tile Drill Bits provide high quality precision holes in ceramic, porcelain, granite, slate, marble, glass and most all hard surface materials.					
	000000000000000000000000000000000000000	90000000000	0000	00		
TAPS	Description		Sizes	Page		
	Hand, Form, Spiral Point, Pipe and Interrupted Threa Industrial-Grade NAS High Speed Steel (HSS)	nd taps. Precision ground thread cuts fast.	Variety of sizes please see section	73-77		



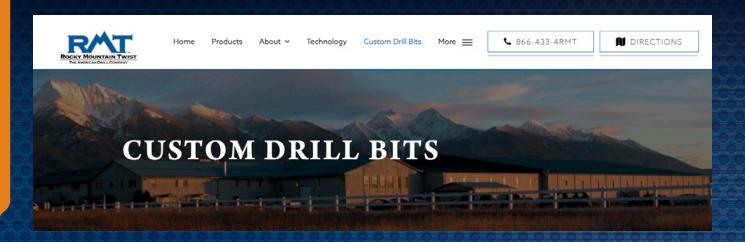
Rocky Mountain Twist is unsurpassed in assisting our customers with design and engineering support for their specific needs. Ranging from the Aerospace Industry to the small machine shop, we can manufacture to your exact specifications.

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Made in the USA quality you can trust and guarantee to be the sharpest tool at the right price. Designed, engineered and manufactured to your specific needs. Call RMT today.

# **SERIES JH800**BRIGHT 118° GENERAL PURPOSE





- Excellent general use drill bit
- Flutes are precision ground for faster, more efficient chip removal
- Industrial-Grade NAS High Speed Steel (HSS)

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic



### FRACTIONAL SIZES

FRACTIONAL Sizes	DECIMAL Equivalent	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
1/16	0.0625	7/8"	1-7/8"	<u>95000550</u>	12
5/64	0.0781	1"	2"	<u>95000551</u>	12
3/32	0.0938	1-1/4"	2-1/4"	<u>95000552</u>	12
7/64	0.1094	1-1/2"	2-5/8"	<u>95000553</u>	12
1/8	0.1250	1-5/8"	2-3/4"	<u>95000554</u>	12
9/64	0.1406	1-3/4"	2-7/8"	<u>95000555</u>	12
5/32	0.1562	2"	3-1/8"	<u>95000556</u>	12
11/64	0.1719	2-1/8"	3-1/4"	95000557	12
3/16	0.1875	2-5/16"	3-1/2"	<u>95000558</u>	12
13/64	0.2031	2-7/16"	3-5/8"	<u>95000559</u>	12
7/32	0.2188	2-1/2"	3-3/4"	<u>95000560</u>	12
15/64	0.2344	2-5/8"	3-7/8"	<u>95000561</u>	12
1/4	0.2500	2-3/4"	4"	<u>95000562</u>	12
17/64	0.2656	2-7/8"	4-1/8"	95000563	12
9/32	0.2812	2-15/16"	4-1/4"	<u>95000564</u>	12
19/64	0.2969	3-1/16"	4-3/8"	<u>95000565</u>	12
5/16	0.3125	3-3/16"	4-1/2"	<u>95000566</u>	6
21/64	0.3281	3-5/16"	4-5/8"	<u>95000567</u>	6
11/32	0.3438	3-7/16"	4-3/4"	<u>95000568</u>	6
23/64	0.3594	3-1/2"	4-7/8"	<u>95000569</u>	6
3/8	0.3750	3-5/8"	5"	<u>95000570</u>	6
25/64	0.3906	3-3/4"	5-1/8"	<u>95000571</u>	6
13/32	0.4062	3-7/8"	5-1/4"	95000572	6
27/64	0.4219	3-15/16"	5-3/8"	95000573	6
7/16	0.4375	4-1/16"	5" 5-1/2" <b>950005</b>		6
29/64	0.4531	4-3/16"	5-5/8"	95000575	6
15/32	0.4688	4-5/16"	5-3/4"	95000576	6
31/64	0.4844	4-3/8"	5-7/8"	95000577	6
1/2	0.5000	4-1/2"	6"	95000578	6

# **SERIES JH800**BRIGHT 118° GENERAL PURPOSE





- Excellent general use drill bit
- Flutes are precision ground for faster, more efficient chip removal
- Industrial-Grade NAS High Speed Steel (HSS)

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic



### WIRE SIZES

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY		WIRE SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY
#1	0.2280	2-5/8"	3-7/8"	95001600	12	00	#31	0.1200	1-5/8"	2-3/4"	95001630	12
#2	0.2210	2-5/8"	3-7/8"	95001601	12	00	#32	0.1160	1-5/8"	2-3/4"	95001631	12
#3	0.2130	2-1/2"	3-3/4"	95001602	12		#33	0.1130	1-1/2"	2-5/8"	95001632	12
#4	0.2090	2-1/2"	3-3/4"	95001603	12	XX	#34	0.1110	1-1/2"	2-5/8"	95001633	12
#5	0.2055	2-1/2"	3-3/4"	95001604	12	XX	#35	0.1100	1-1/2"	2-5/8"	95001634	12
#6	0.2040	2-1/2"	3-3/4"	95001605	12	90	#36	0.1065	1-7/16"	2-1/2"	95001635	12
#7	0.2010	2-7/16"	3-5/8"	<u>95001606</u>	12		#37	0.1040	1-7/16"	2-1/2"	<u>95001636</u>	12
#8	0.1990	2-7/16"	3-5/8"	95001607	12		#38	0.1015	1-7/16"	2-1/2"	<u>95001637</u>	12
#9	0.1960	2-7/16"	3-5/8"	95001608	12		#39	0.0995	1-3/8"	2-3/8"	95001638	12
#10	0.1935	2-7/16"	3-5/8"	95001609	12	XX	#40	0.0980	1-3/8"	2-3/8"	95001639	12
#11	0.1910	2-5/16"	3-1/2"	95001610	12	00	#41	0.0960	1-3/8"	2-3/8"	95001640	12
#12	0.1890	2-5/16"	3-1/2"	<u>95001611</u>	12	00	#42	0.0935	1-1/4"	2-1/4"	<u>95001641</u>	12
#13	0.1850	2-5/16"	3-1/2"	95001612	12		#43	0.0890	1-1/4"	2-1/4"	95001642	12
#14	0.1820	2-3/16"	3-3/8"	95001613	12		#44	0.0860	1-1/8"	2-1/8"	95001643	12
#15	0.1800	2-3/16"	3-3/8"	95001614	12		#45	0.0820	1-1/8"	2-1/8"	95001644	12
#16	0.1770	2-3/16"	3-3/8"	95001615	12	00	#46	0.0810	1-1/8"	2-1/8"	95001645	12
#17	0.1730	2-3/16"	3-3/8"	95001616	12	00	#47	0.0785	1"	2"	95001646	12
#18	0.1695	2-1/8"	3-1/4"	95001617	12		#48	0.0760	1"	2"	95001647	12
#19	0.1660	2-1/8"	3-1/4"	95001618	12	XX	#49	0.0730	1"	2"	95001648	12
#20	0.1610	2-1/8"	3-1/4"	95001619	12		#50	0.0700	1"	2"	95001649	12
#21	0.1590	2-1/8"	3-1/4"	95001620	12	00	#51	0.0670	1"	2"	95001650	12
#22	0.1570	2"	3-1/8"	95001621	12	00	#52	0.0635	7/8"	1-7/8"	<u>95001651</u>	12
#23	0.1540	2"	3-1/8"	95001622	12	100	#53	0.0595	7/8"	1-7/8"	95001652	12
#24	0.1520	2"	3-1/8"	<u>95001623</u>	12	XX	#54	0.0550	7/8"	1-7/8"	95001653	12
#25	0.1495	1-7/8"	3"	95001624	12	00	#55	0.0520	7/8"	1-7/8"	95001654	12
#26	0.1470	1-7/8"	3"	95001625	12	00	#56	0.0465	3/4"	1-3/4"	95001655	12
#27	0.1440	1-7/8"	3"	<u>95001626</u>	12	00	#57	0.0430	3/4"	1-3/4"	<u>95001656</u>	12
#28	0.1405	1-3/4"	2-7/8"	<u>95001627</u>	12	200	#58	0.0420	11/16"	1-5/8"	<u>95001657</u>	12
#29	0.1360	1-3/4"	2-7/8"	95001628	12		#59	0.0410	11/16"	1-5/8"	95001658	12
#30	0.1285	1-5/8"	2-3/4"	95001629	12	00	#60	0.0400	11/16"	1-5/8"	95001659	12

### SERIES JH800 BRIGHT 118° GENERAL PURPOSE





- Excellent general use drill bit
- Flutes are precision ground for faster, more efficient chip removal
- Industrial-Grade NAS High Speed Steel (HSS)

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic



### LETTER SIZES

LETTER Sizes	DECIMAL Equivalent	FLUTE Length	OVERALL LENGTH	PART Number	SHIP Quantity
А	0.2340	2-5/8"	3-7/8"	95001700	12
В	0.2380	2-3/4"	4"	<u>95001701</u>	12
С	0.2420	2-3/4"	4"	95001702	12
D	0.2460	2-3/4"	4"	95001703	12
E	0.2500	2-3/4"	4"	<u>95001704</u>	12
F	0.2570	2-7/8"	4-1/8"	<u>95001705</u>	12
G	0.2610	2-7/8"	4-1/8"	<u>95001706</u>	12
Н	0.2660	2-7/8"	4-1/8"	<u>95001707</u>	12
I	0.2720	2-7/8"	4-1/8"	<u>95001708</u>	12
J	0.2770	2-7/8"	4-1/8"	<u>95001709</u>	12
K	0.2810	2-15/16"	4-1/4"	<u>95001710</u>	12
L	0.2900	2-15/16"	4-1/4"	<u>95001711</u>	12
М	0.2950	3-1/16"	4-3/8"	<u>95001712</u>	12
N	0.3020	3-1/16"	4-3/8"	<u>95001713</u>	12
0	0.3160	3-3/16"	4-1/2"	<u>95001714</u>	6
P	0.3230	3-5/16"	4-5/8"	<u>95001715</u>	6
Q	0.3320	3-7/16"	4-3/4"	<u>95001716</u>	6
R	0.3390	3-7/16"	4-3/4"	<u>95001717</u>	6
S	0.3480	3-1/2"	4-7/8"	<u>95001718</u>	6
Т	0.3580	3-1/2"	4-7/8"	<u>95001719</u>	6
U	0.3680	3-5/8"	5"	<u>95001720</u>	6
V	0.3770	3-5/8"	5"	<u>95001721</u>	6
W	0.3860	3-3/4"	5-1/8"	<u>95001722</u>	6
Х	0.3970	3-3/4"	5-1/8"	<u>95001723</u>	6
Υ	0.4040	3-7/8"	5-1/4"	<u>95001724</u>	6
Z	0.4130	3-7/8"	5-1/4"	<u>95001725</u>	6



### SERIES JH801 BLACK OXIDE 118° GENERAL PURPOSE





- Industrial-Grade NAS High Speed Steel (HSS)
- Excellent general use drill bit
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Cast Iron
- Steel (low & medium carbon)



			000000		
FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
1/16	0.0625	7/8"	1-7/8"	95000500	12
5/64	0.0781	1"	2"	95000501	12
3/32	0.0938	1-1/4"	2-1/4"	95000502	12
7/64	0.1094	1-1/2"	2-5/8"	95000503	12
1/8	0.1250	1-5/8"	2-3/4"	<u>95000504</u>	12
9/64	0.1406	1-3/4"	2-7/8"	<u>95000505</u>	12
5/32	0.1562	2"	3-1/8"	<u>95000506</u>	12
11/64	0.1719	2-1/8"	3-1/4"	<u>95000507</u>	12
3/16	0.1875	2-5/16"	3-1/2"	<u>95000508</u>	12
13/64	0.2031	2-7/16"	3-5/8"	<u>95000509</u>	12
7/32	0.2188	2-1/2"	3-3/4"	<u>95000510</u>	12
15/64	0.2344	2-5/8"	3-7/8"	<u>95000511</u>	12
1/4	0.2500	2-3/4"	4"	95000512	12
17/64	0.2656	2-7/8"	4-1/8"	<u>95000513</u>	12
9/32	0.2812	2-15/16"	4-1/4"	<u>95000514</u>	12
19/64	0.2969	3-1/16"	4-3/8"	<u>95000515</u>	12
5/16	0.3125	3-3/16"	4-1/2"	<u>95000516</u>	6
21/64	0.3281	3-5/16"	4-5/8"	<u>95000517</u>	6
11/32	0.3438	3-7/16"	4-3/4"	<u>95000518</u>	6
23/64	0.3594	3-1/2"	4-7/8"	<u>95000519</u>	6
3/8	0.3750	3-5/8"	5"	<u>95000520</u>	6
25/64	0.3906	3-3/4"	5-1/8"	<u>95000521</u>	6
13/32	0.4062	3-7/8"	5-1/4"	95000522	6
27/64	0.4219	3-15/16"	5-3/8"	95000523	6
7/16	0.4375	4-1/16"	5-1/2"	95000524	6
29/64	0.4531	4-3/16"	5-5/8"	95000525	6
15/32	0.4688	4-5/16"	5-3/4"	95000526	6
31/64	0.4844	4-3/8"	5-7/8"	95000527	6
1/2	0.5000	4-1/2"	6"	<u>95000528</u>	6

### SERIES JH801

### **BLACK OXIDE 118° GENERAL PURPOSE**





- Industrial-Grade NAS High Speed Steel (HSS)
- Excellent general use drill bit
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Cast Iron
- Steel (low & medium carbon)



WIRE SIZES

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP Quantity		WIRE Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP QUANTITY
#1	0.2280	2-5/8"	3-7/8"	95005601	12		#31	0.1200	1-5/8"	2-3/4"	95005631	12
#2	0.2210	2-5/8"	3-7/8"	95005602	12	300	#32	0.1160	1-5/8"	2-3/4"	95005632	12
#3	0.2130	2-1/2"	3-3/4"	95005603	12	90	#33	0.1130	1-1/2"	2-5/8"	95005633	12
#4	0.2090	2-1/2"	3-3/4"	95005604	12	00	#34	0.1110	1-1/2"	2-5/8"	95005634	12
#5	0.2055	2-1/2"	3-3/4"	95005605	12	66	#35	0.1100	1-1/2"	2-5/8"	95005635	12
#6	0.2040	2-1/2"	3-3/4"	95005606	12		#36	0.1065	1-7/16"	2-1/2"	95005636	12
#7	0.2010	2-7/16"	3-5/8"	95005607	12	$\mathcal{M}$	#37	0.1040	1-7/16"	2-1/2"	95005637	12
#8	0.1990	2-7/16"	3-5/8"	95005608	12		#38	0.1015	1-7/16"	2-1/2"	95005638	12
#9	0.1960	2-7/16"	3-5/8"	<u>95005609</u>	12	00	#39	0.0995	1-3/8"	2-3/8"	95005639	12
#10	0.1935	2-7/16"	3-5/8"	95005610	12	00	#40	0.0980	1-3/8"	2-3/8"	95005640	12
#11	0.1910	2-5/16"	3-1/2"	<u>95005611</u>	12		#41	0.0960	1-3/8"	2-3/8"	95005641	12
#12	0.1890	2-5/16"	3-1/2"	95005612	12	XX	#42	0.0935	1-1/4"	2-1/4"	95005642	12
#13	0.1850	2-5/16"	3-1/2"	95005613	12		#43	0.0890	1-1/4"	2-1/4"	95005643	12
#14	0.1820	2-3/16"	3-3/8"	95005614	12	00	#44	0.0860	1-1/8"	2-1/8"	95005644	12
#15	0.1800	2-3/16"	3-3/8"	<u>95005615</u>	12		#45	0.0820	1-1/8"	2-1/8"	95005645	12
#16	0.1770	2-3/16"	3-3/8"	95005616	12		#46	0.0810	1-1/8"	2-1/8"	95005646	12
#17	0.1730	2-3/16"	3-3/8"	95005617	12		#47	0.0785	1"	2"	95005647	12
#18	0.1695	2-1/8"	3-1/4"	<u>95005618</u>	12		#48	0.0760	1"	2"	95005648	12
#19	0.1660	2-1/8"	3-1/4"	95005619	12	00	#49	0.0730	1"	2"	95005649	12
#20	0.1610	2-1/8"	3-1/4"	<u>95005620</u>	12		#50	0.0700	1"	2"	<u>95005650</u>	12
#21	0.1590	2-1/8"	3-1/4"	<u>95005621</u>	12		#51	0.0670	1"	2"	95005651	12
#22	0.1570	2"	3-1/8"	95005622	12	500	#52	0.0635	7/8"	1-7/8"	95005652	12
#23	0.1540	2"	3-1/8"	<u>95005623</u>	12	00	#53	0.0595	7/8"	1-7/8"	95005653	12
#24	0.1520	2"	3-1/8"	<u>95005624</u>	12	00	#54	0.0550	7/8"	1-7/8"	95005654	12
#25	0.1495	1-7/8"	3"	95005625	12	00	#55	0.0520	7/8"	1-7/8"	<u>95005655</u>	12
#26	0.1470	1-7/8"	3"	<u>95005626</u>	12		#56	0.0465	3/4"	1-3/4"	<u>95005656</u>	12
#27	0.1440	1-7/8"	3"	95005627	12	500	#57	0.0430	3/4"	1-3/4"	<u>95005657</u>	12
#28	0.1405	1-3/4"	2-7/8"	<u>95005628</u>	12	0,0	#58	0.0420	11/16"	1-5/8"	<u>95005658</u>	12
#29	0.1360	1-3/4"	2-7/8"	<u>95005629</u>	12	00	#59	0.0410	11/16"	1-5/8"	<u>95005659</u>	12
#30	0.1285	1-5/8"	2-3/4"	<u>95005630</u>	12	20	#60	0.0400	11/16"	1-5/8"	95005660	12

# **SERIES JH801 BLACK OXIDE 118° GENERAL PURPOSE**





- Industrial-Grade NAS High Speed Steel (HSS)
- Excellent general use drill bit
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Cast Iron
- Steel (low & medium carbon)

### LETTER SIZES

LETTER Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
A	0.2340	2-5/8"	3-7/8"	95005700	12
	0.20.0	_ 5/5	1 11		
В	0.2380	2-3/4"	4"	<u>95005701</u>	12
С	0.2420	2-3/4"	4"	95005702	12
D	0.2460	2-3/4"	4"	<u>95005703</u>	12
Е	0.2500	2-3/4"	4"	<u>95005704</u>	12
F	0.2570	2-7/8"	4-1/8"	<u>95005705</u>	12
G	0.2610	2-7/8"	4-1/8"	<u>95005706</u>	12
Н	0.2660	2-7/8"	4-1/8"	<u>95005707</u>	12
I I	0.2720	2-7/8"	4-1/8"	<u>95005708</u>	12
J	0.2770	2-7/8"	4-1/8"	95005709	12
K	0.2810	2-15/16"	4-1/4"	<u>95005710</u>	12
L	0.2900	2-15/16"	4-1/4"	<u>95005711</u>	12
М	0.2950	3-1/16"	4-3/8"	<u>95005712</u>	12
N	0.3020	3-1/16"	4-3/8"	<u>95005713</u>	12
0	0.3160	3-3/16"	4-1/2"	<u>95005714</u>	6
Р	0.3230	3-5/16"	4-5/8"	95005715	6
Q	0.3320	3-7/16"	4-3/4"	<u>95005716</u>	6
R	0.3390	3-7/16"	4-3/4"	<u>95005717</u>	6
S	0.3480	3-1/2"	4-7/8"	<u>95005718</u>	6
T	0.3580	3-1/2"	4-7/8"	<u>95005719</u>	6
U	0.3680	3-5/8"	5"	<u>95005720</u>	6
V	0.3770	3-5/8"	5"	<u>95005721</u>	6
W	0.3860	3-3/4"	5-1/8"	95005722	6
Х	0.3970	3-3/4"	5-1/8"	95005723	6
Υ	0.4040	3-7/8"	5-1/4"	95005724	6
Z	0.4130	3-7/8"	5-1/4"	95005725	6

### SERIES JH500 BRIGHT 135° HEAVY DUTY





- Excellent general use drill bit
- Split point tip penetrates surface on contact and prevents drill bit "walking"
- Flutes are precision CNC ground for faster, more efficient chip evacuation
- Industrial-grade NAS High Speed Steel (HSS)

#### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic
- Steel (low & medium carbon)
- •Steel Alloy



### FRACTIONAL SIZES

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP Quantity
1/16	0.0625	7/8"	1-7/8"	95003300	12
5/64	0.0781	1"	2"	95003301	12
3/32	0.0938	1-1/4"	2-1/4"	95003302	12
7/64	0.1094	1-1/2"	2-5/8"	95003303	12
1/8	0.1250	1-5/8"	2-3/4"	<u>95003304</u>	12
9/64	0.1406	1-3/4"	2-7/8"	<u>95003305</u>	12
5/32	0.1562	2"	3-1/8"	<u>95003306</u>	12
11/64	0.1719	2-1/8"	3-1/4"	<u>95003307</u>	12
3/16	0.1875	2-5/16"	3-1/2"	<u>95003308</u>	12
13/64	0.2031	2-7/16"	3-5/8"	<u>95003309</u>	12
7/32	0.2188	2-1/2"	3-3/4"	<u>95003310</u>	12
15/64	0.2344	2-5/8"	3-7/8"	<u>95003311</u>	12
1/4	0.2500	2-3/4"	4"	<u>95003312</u>	12
17/64	0.2656	2-7/8"	4-1/8"	<u>95003313</u>	12
9/32	0.2812	2-15/16"	4-1/4"	<u>95003314</u>	12
19/64	0.2969	3-1-16"	4-3/8"	<u>95003315</u>	12
5/16	0.3125	3-3/16"	4-1/2"	<u>95003316</u>	6
21/64	0.3281	3-5/16"	4-5/8"	<u>95003317</u>	6
11/32	0.3438	3-7/16"	4-3/4"	<u>95003318</u>	6
23/64	0.3591	3-1/2"	4-7/8"	<u>95003319</u>	6
3/8	0.3750	3-5/8"	5"	95003320	6
25/64	0.3906	3-3/4"	5-1/8"	<u>95003321</u>	6
13/32	0.4062	3-7/8"	5-1/4"	95003322	6
27/64	0.4219	3-15/16"	5-3/8"	95003323	6
7/16	0.4375	4-1/16"	5-1/2"	95003324	6
29/64	0.4531	4-3/16"	5-5/8"	<u>95003325</u>	6
15/32	0.4688	4-5/16"	5-3/4"	95003326	6
31/64	0.4844	4-3/8"	5-7/8"	<u>95003327</u>	6
1/2	0.5000	4-1/2"	6"	95003328	6

Drill bits from 7/64" to 1/2" are Split Point



# **SERIES JH500 BRIGHT 135° HEAVY DUTY**





- Excellent general use drill bit
- Split point tip penetrates surface on contact and prevents drill bit "walking"
- Flutes are precision CNC ground for faster, more efficient chip evacuation
- Industrial-grade NAS High Speed Steel (HSS)

#### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic
- Steel (low & medium carbon)
- •Steel Alloy



0.00	270000	0.0.0.0	0000		0.00			770000			0.0.0.	0.00
WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY		WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
#1	0.2280	2-5/8"	3-7/8"	95003400	12	90	#31	0.1200	1-5/8"	2-3/4"	95003430	12
#2	0.2210	2-5/8"	3-7/8"	95003401	12	00	#32	0.1160	1-5/8"	2-3/4"	95003431	12
#3	0.2130	2-1/2"	3-3/4"	95003402	12		#33	0.1130	1-1/2"	2-5/8"	95003432	12
#4	0.2090	2-1/2"	3-3/4"	95003403	12		#34	0.1110	1-1/2"	2-5/8"	95003433	12
#5	0.2055	2-1/2"	3-3/4"	95003404	12	<b>TOC</b>	#35	0.1100	1-1/2"	2-5/8"	95003434	12
#6	0.2040	2-1/2"	3-3/4"	95003405	12		#36	0.1065	1-7/16"	2-1/2"	95003435	12
#7	0.2010	2-7/16"	3-5/8"	95003406	12		#37	0.1040	1-7/16"	2-1/2"	95003436	12
#8	0.1990	2-7/16"	3-5/8"	95003407	12		#38	0.1015	1-7/16"	2-1/2"	95003437	12
#9	0.1960	2-7/16"	3-5/8"	95003408	12		#39	0.0995	1-3/8"	2-3/8"	95003438	12
#10	0.1935	2-7/16"	3-5/8"	95003409	12	XX C	#40	0.0980	1-3/8"	2-3/8"	95003439	12
#11	0.1910	2-5/16"	3-1/2"	95003410	12		#41	0.0960	1-3/8"	2-3/8"	95003440	12
#12	0.1890	2-5/16"	3-1/2"	95003411	12	50	#42	0.0935	1-1/4"	2-1/4"	95003441	12
#13	0.1850	2-5/16"	3-1/2"	95003412	12		#43	0.0890	1-1/4"	2-1/4"	95003442	12
#14	0.1820	2-3/16"	3-3/8"	95003413	12		#44	0.0860	1-1/8"	2-1/8"	95003443	12
#15	0.1800	2-3/16"	3-3/8"	95003414	12		#45	0.0820	1-1/8"	2-1/8"	95003444	12
#16	0.1770	2-3/16"	3-3/8"	95003415	12	00	#46	0.0810	1-1/8"	2-1/8"	95003445	12
#17	0.1730	2-3/16"	3-3/8"	95003416	12		#47	0.0785	1"	2"	95003446	12
#18	0.1695	2-1/8"	3-1/4"	95003417	12		#48	0.0760	1"	2"	95003447	12
#19	0.1660	2-1/8"	3-1/4"	95003418	12	XX	#49	0.0730	1"	2"	95003448	12
#20	0.1610	2-1/8"	3-1/4"	95003419	12		#50	0.0700	1"	2"	95003449	12
#21	0.1590	2-1/8"	3-1/4"	95003420	12		#51	0.0670	1"	2"	95003450	12
#22	0.1570	2"	3-1/8"	95003421	12	50	#52	0.0635	7/8"	1-7/8"	95003451	12
#23	0.1540	2"	3-1/8"	95003422	12	100	#53	0.0595	7/8"	1-7/8"	95003452	12
#24	0.1520	2"	3-1/8"	95003423	12	TOC	#54	0.0550	7/8"	1-7/8"	95003453	12
#25	0.1495	1-7/8"	3"	95003424	12		#55	0.0520	7/8"	1-7/8"	<u>95003454</u>	12
#26	0.1470	1-7/8"	3"	95003425	12	00	#56	0.0465	3/4"	1-3/4"	95003455	12
#27	0.1440	1-7/8"	3"	95003426	12	00	#57	0.0430	3/4"	1-3/4"	95003456	12
#28	0.1405	1-3/4"	2-7/8"	<u>95003427</u>	12	0,0	#58	0.0420	11/16"	1-5/8"	<u>95003457</u>	12
#29	0.1360	1-3/4"	2-7/8"	95003428	12	No c	#59	0.0410	11/16"	1-5/8"	95003458	12
#30	0.1285	1-5/8"	2-3/4"	95003429	12	$\cup$ $\cup$	#60	0.0400	11/16"	1-5/8"	95003459	12

Drill bits from #1 to #52 are Split Point

### SERIES JH500 BRIGHT 135° HEAVY DUTY





- Excellent general use drill bit
- Split point tip penetrates surface on contact and prevents drill bit "walking"
- Flutes are precision CNC ground for faster, more efficient chip evacuation
- Industrial-grade NAS High Speed Steel (HSS)

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Plastic
- Steel (low & medium carbon)
- Steel Alloy
- Wood



LETTER Sizes	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL Length	PART Number	SHIP Quantity
A	0.2340	2-5/8"	3-7/8"	95003500	12
В	0.2380	2-3/4"	4"	<u>95003501</u>	12
С	0.2420	2-3/4"	4"	95003502	12
D	0.2460	2-3/4"	4"	95003503	12
E	0.2500	2-3/4"	4"	95003504	12
F	0.2570	2-7/8"	4-1/8"	95003505	12
G	0.2610	2-7/8"	4-1/8"	95003506	12
Н	0.2660	2-7/8"	4-1/8"	95003507	12
I	0.2720	2-7/8"	4-1/8"	95003508	12
J	0.2770	2-7/8"	4-1/8"	95003509	12
К	0.2810	2-15/16"	4-1/4"	95003510	12
L	0.2900	2-15/16"	4-1/4"	95003511	12
М	0.2950	3-1/16"	4-3/8"	95003512	12
N	0.3020	3-1/16"	4-3/8"	95003513	12
0	0.3160	3-3/16"	4-3/8"	<u>95003514</u>	6
P	0.3230	3-5/16"	4-5/8"	95003515	6
Q	0.3320	3-7/16"	4-3/4"	<u>95003516</u>	6
R	0.3390	3-7/16"	4-3/4"	95003517	6
S	0.3480	3-1/2"	4-7/8"	<u>95003518</u>	6
Т	0.3580	3-1/2"	4-7/8"	<u>95003519</u>	6
U	0.3680	3-5/8"	5"	<u>95003520</u>	6
V	0.3770	3-5/8"	5"	<u>95003521</u>	6
W	0.3860	3-3/4"	5-1/8"	95003522	6
Х	0.3970	3-3/4"	5-1/8"	95003523	6
Υ	0.4040	3-7/8"	5-1/4"	95003524	6
Z	0.4130	3-7/8"	5-1/4"	95003525	6

# **SERIES JH501 BLACK OXIDE 135° HEAVY DUTY**





- Industrial-Grade NAS High Speed Steel (HSS)
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Aluminum
- Cast Iron
- Plastic
- Steel Alloy



FRACTIONAL SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP Quantity
1/16	0.0625	7/8"	1-7/8"	95000600	12
5/64	0.0781	1"	2"	95000601	12
3/32	0.0938	1-1/4"	2-1/4"	95000602	12
7/64	0.1094	1-1/2"	2-5/8"	95000603	12
1/8	0.1250	1-5/8"	2-3/4"	<u>95000604</u>	12
9/64	0.1406	1-3/4"	2-7/8"	95000605	12
5/32	0.1562	2"	3-1/8"	<u>95000606</u>	12
11/64	0.1719	2-1/8"	3-1/4"	<u>95000607</u>	12
3/16	0.1875	2-5/16"	3-1/2"	<u>95000608</u>	12
13/64	0.2031	2-7/16"	3-5/8"	<u>95000609</u>	12
7/32	0.2188	2-1/2"	3-3/4"	<u>95000610</u>	12
15/64	0.2344	2-5/8"	3-7/8"	<u>95000611</u>	12
1/4	0.2500	2-3/4"	4"	<u>95000612</u>	12
17/64	0.2656	2-7/8"	4-1/8"	95000613	12
9/32	0.2812	2-15/16"	4-1/4"	<u>95000614</u>	12
19/64	0.2969	3-1/16"	4-3/8"	<u>95000615</u>	12
5/16	0.3125	3-3/16"	4-1/2"	<u>95000616</u>	6
21/64	0.3281	3-5/16"	4-5/8"	<u>95000617</u>	6
11/32	0.3438	3-7/16"	4-3/4"	<u>95000618</u>	6
23/64	0.3594	3-1/2"	4-7/8"	<u>95000619</u>	6
3/8	0.3750	3-5/8"	5"	95000620	6
25/64	0.3906	3-3/4"	5-1/8"	<u>95000621</u>	6
13/32	0.4062	3-7/8"	5-1/4"	95000622	6
27/64	0.4219	3-15/16"	5-3/8"	95000623	6
7/16	0.4375	4-1/16"	5-1/2"	95000624	6
29/64	0.4531	4-3/16"	5-5/8"	<u>95000625</u>	6
15/32	0.4688	4-5/16"	5-3/4"	<u>95000626</u>	6
31/64	0.4844	4-3/8"	5-7/8"	<u>95000627</u>	6
1/2	0.5000	4-1/2"	6"	95000628	6

Drill bits from 7/64" to 1/2" are Split Point

# **SERIES JH501 BLACK DXIDE 135° HEAVY DUTY**





- Industrial-Grade NAS High Speed Steel (HSS)
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Aluminum
- Cast Iron
- Plastic
- Steel Alloy



WIRE SIZES

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP QUANTITY		WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP QUANTITY
#1	0.2280	2-5/8"	3-7/8"	95002600	12	60	#31	0.1200	1-5/8"	2-3/4"	<u>95002630</u>	12
#2	0.2210	2-5/8"	3-7/8"	95002601	12		#32	0.1160	1-5/8"	2-3/4"	95002631	12
#3	0.2130	2-1/2"	3-3/4"	95002602	12	$\mathcal{X}$	#33	0.1130	1-1/2"	2-5/8"	95002632	12
#4	0.2090	2-1/2"	3-3/4"	95002603	12	00	#34	0.1110	1-1/2"	2-5/8"	95002633	12
#5	0.2055	2-1/2"	3-3/4"	95002604	12	00	#35	0.1100	1-1/2"	2-5/8"	95002634	12
#6	0.2040	2-1/2"	3-3/4"	95002605	12		#36	0.1065	1-7/16"	2-1/2"	95002635	12
#7	0.2010	2-7/16"	3-5/8"	<u>95002606</u>	12		#37	0.1040	1-7/16"	2-1/2"	<u>95002636</u>	12
#8	0.1990	2-7/16"	3-5/8"	<u>95002607</u>	12	Y	#38	0.1015	1-7/16"	2-1/2"	<u>95002637</u>	12
#9	0.1960	2-7/16"	3-5/8"	95002608	12	00	#39	0.0995	1-3/8"	2-3/8"	95002638	12
#10	0.1935	2-7/16"	3-5/8"	95002609	12	00	#40	0.0980	1-3/8"	2-3/8"	95002639	12
#11	0.1910	2-5/16"	3-1/2"	95002610	12		#41	0.0960	1-3/8"	2-3/8"	95002640	12
#12	0.1890	2-5/16"	3-1/2"	95002611	12	XX	#42	0.0935	1-1/4"	2-1/4"	95002641	12
#13	0.1850	2-5/16"	3-1/2"	95002612	12		#43	0.0890	1-1/4"	2-1/4"	95002642	12
#14	0.1820	2-3/16"	3-3/8"	95002613	12	00	#44	0.0860	1-1/8"	2-1/8"	95002643	12
#15	0.1800	2-3/16"	3-3/8"	95002614	12		#45	0.0820	1-1/8"	2-1/8"	95002644	12
#16	0.1770	2-3/16"	3-3/8"	95002615	12		#46	0.0810	1-1/8"	2-1/8"	95002645	12
#17	0.1730	2-3/16"	3-3/8"	<u>95002616</u>	12		#47	0.0785	1"	2"	95002646	12
#18	0.1695	2-1/8"	3-1/4"	95002617	12	00	#48	0.0760	1"	2"	95002647	12
#19	0.1660	2-1/8"	3-1/4"	95002618	12	00	#49	0.0730	1"	2"	<u>95002648</u>	12
#20	0.1610	2-1/8"	3-1/4"	95002619	12		#50	0.0700	1"	2"	95002649	12
#21	0.1590	2-1/8"	3-1/4"	95002620	12		#51	0.0670	1"	2"	95002650	12
#22	0.1570	2"	3-1/8"	95002621	12		#52	0.0635	7/8"	1-7/8"	<u>95002651</u>	12
#23	0.1540	2"	3-1/8"	95002622	12	00	#53	0.0595	7/8"	1-7/8"	95002652	12
#24	0.1520	2"	3-1/8"	95002623	12	00	#54	0.0550	7/8"	1-7/8"	95002653	12
#25	0.1495	1-7/8"	3"	95002624	12		#55	0.0520	7/8"	1-7/8"	95002654	12
#26	0.1470	1-7/8"	3"	95002625	12		#56	0.0465	3/4"	1-3/4"	95002655	12
#27	0.1440	1-7/8"	3"	95002626	12	90	#57	0.0430	3/4"	1-3/4"	95002656	12
#28	0.1405	1-3/4"	2-7/8"	95002627	12	00	#58	0.0420	11/16"	1-5/8"	95002657	12
#29	0.1360	1-3/4"	2-7/8"	95002628	12	00	#59	0.0410	11/16"	1-5/8"	95002658	12
#30	0.1285	1-5/8"	2-3/4"	95002629	12		#60	0.0400	11/16"	1-5/8"	95002659	12

Drill bits from #1 to #52 are Split Point



# **SERIES JH501**BLACK DXIDE 135° HEAVY DUTY





- Industrial-Grade NAS High Speed Steel (HSS)
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### **MATERIAL APPLICATION**

- Aluminum
- Cast Iron
- Plastic
- Steel Alloy



LETTER Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP Quantity
А	0.2340	2-5/8"	3-7/8"	95002700	12
В	0.2380	2-3/4"	4"	95002701	12
C	0.2420	2-3/4"	4"	95002702	12
D	0.2460	2-3/4"	4"	<u>95002703</u>	12
E	0.2500	2-3/4"	4"	<u>95002704</u>	12
F	0.2570	2-7/8"	4-1/8"	<u>95002705</u>	12
G	0.2610	2-7/8"	4-1/8"	<u>95002706</u>	12
Н	0.2660	2-7/8"	4-1/8"	<u>95002707</u>	12
I	0.2720	2-7/8"	4-1/8"	<u>95002708</u>	12
J	0.2770	2-7/8"	4-1/8"	<u>95002709</u>	12
K	0.2810	2-15/16"	4-1/4"	<u>95002710</u>	12
L	0.2900	2-15/16"	4-1/4"	<u>95002711</u>	12
M	0.2950	3-1/16"	4-3/8"	<u>95002712</u>	12
N	0.3020	3-1/16"	4-3/8"	<u>95002713</u>	12
0	0.3160	3-3/16"	4-1/2"	<u>95002714</u>	6
P	0.3230	3-5/16"	4-5/8"	<u>95002715</u>	6
Q	0.3320	3-7/16"	4-3/4"	<u>95002716</u>	6
R	0.3390	3-7/16"	4-3/4"	<u>95002717</u>	6
S	0.3480	3-1/2"	4-7/8"	<u>95002718</u>	6
Т	0.3580	3-1/2"	4-7/8"	<u>95002719</u>	6
U	0.3680	3-5/8"	5"	95002720	6
V	0.3770	3-5/8"	5"	<u>95002721</u>	6
W	0.3860	3-3/4"	5-1/8"	95002722	6
Х	0.3970	3-3/4"	5-1/8"	<u>95002723</u>	6
Υ	0.4040	3-7/8"	5-1/4"	95002724	6
Z	0.4130	3-7/8"	5-1/4"	<u>95002725</u>	6

# **SERIES JH501 BLACK DXIDE 135° HEAVY DUTY**





- Industrial-Grade NAS High Speed Steel (HSS)
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Aluminum
- Cast Iron
- Plastic
- Steel Alloy



### METRIC SIZES

METRIC Sizes MM	DECIMAL Equivalent	FLUTE Length Inches	FLUTE LENGTH METRIC	OVERALL LENGTH INCHES	OVERALL LENGTH METRIC	PART Number	SHIP Quantity
1.50	0.0591	7/8"	22	1-7/8"	48	95002329	12
2.00	0.0787	1"	25	2"	51	<u>95002339</u>	12
2.50	0.0984	1-3/8"	35	2-3/8"	60	<u>95002349</u>	12
3.00	0.1181	1-5/8"	41	2-3/4"	70	<u>95002355</u>	12
3.50	0.1378	1-3/4"	44	2-7/8"	73	<u>95002361</u>	12
4.00	0.1575	2-1/8"	54	3-1/4"	83	<u>95002367</u>	12
4.50	0.1772	2-3/16"	56	3-3/8"	86	95002373	12
5.00	0.1969	2-7/16"	62	3-5/8"	92	95002379	12
5.50	0.2165	2-1/2"	64	3-3/4"	95	<u>95002385</u>	12
6.00	0.2362	2-3/4"	70	4"	102	<u>95002391</u>	12
6.50	0.2559	2-7/8"	73	4-1/8"	105	<u>95002397</u>	12
7.00	0.2756	2-7/8"	73	4-1/8"	105	<u>95002403</u>	12
7.50	0.2953	3-1/16"	78	4-3/8"	111	<u>95002409</u>	12
8.00	0.3150	3-3/16"	81	4-1/2"	114	<u>95002416</u>	6
8.50	0.3346	3-7/16"	87	4-1/2"	121	95002422	6
9.00	0.3543	3-1/2"	89	4-7/8"	124	<u>95002428</u>	6
9.50	0.3740	3-5/8"	92	5"	127	<u>95002434</u>	6
10.00	0.3937	3-3/4"	95	5-1/8"	130	<u>95002440</u>	6
10.50	0.4134	3-7/8"	98	5-1/4"	133	95002442	6
11.00	0.4331	4-1/16"	103	5-1/2"	140	95002444	6
11.50	0.4528	4-3/16"	106	5-5/8"	143	<u>95002446</u>	6
12.00	0.4724	4-3/8"	111	5-7/8"	149	<u>95002448</u>	6
12.50	0.4921	4-1/2"	114	6"	152	<u>95002450</u>	6
13.00	0.5118	4-1/2"	114	6"	152	<u>95002451</u>	6

Drill bits from 2.5mm to 13.0mm are Split Point



# **SERIES JH513**TITANIUM 135° HEAVY DUTY





- Superior performance in high speed machining applications
- Precision Flute for faster, more efficient chip removal
- Hard surface with high lubricity extends tool life
- Industrial-Grade NAS High Speed Steel (HSS)
- Split Point penetrates on contact and prevents "walking" of the bit

#### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Cast Iron
- Plastic
- Steel (low & medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



### FRACTIONAL SIZES

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY
1/16	0.0625	7/8"	1-7/8"	<u>95000750</u>	12
5/64	0.0781	1"	2"	<u>95000751</u>	12
3/32	0.0938	1-1/4"	2-1/4"	<u>95000752</u>	12
7/64	0.1094	1-1/2"	2-5/8"	<u>95000753</u>	12
1/8	0.1250	1-5/8"	2-3/4"	<u>95000754</u>	12
9/64	0.1406	1-3/4"	2-7/8"	<u>95000755</u>	12
5/32	0.1562	2"	3-1/8"	<u>95000756</u>	12
11/64	0.1719	2-1/8"	3-1/4"	<u>95000757</u>	12
3/16	0.1875	2-5/16"	3-1/2"	<u>95000758</u>	12
13/64	0.2031	2-7/16"	3-5/8"	<u>95000759</u>	12
7/32	0.2188	2-1/2"	3-3/4"	<u>95000760</u>	12
15/64	0.2344	2-5/8"	3-7/8"	<u>95000761</u>	12
1/4	0.2500	2-3/4"	4"	<u>95000762</u>	12
17/64	0.2656	2-7/8"	4-1/8"	<u>95000763</u>	12
9/32	0.2812	2-15/16"	4-1/4"	<u>95000764</u>	12
19/64	0.2969	3-1/16"	4-3/8"	<u>95000765</u>	12
5/16	0.3125	3-3/16"	4-1/2"	<u>95000766</u>	6
21/64	0.3281	3-5/16"	4-5/8"	<u>95000767</u>	6
11/32	0.3438	3-7/16"	4-3/4"	<u>95000768</u>	6
23/64	0.3594	3-1/2"	4-7/8"	<u>95000769</u>	6
3/8	0.3750	3-5/8"	5"	<u>95000770</u>	6
25/64	0.3906	3-3/4"	5-1/8"	<u>95000771</u>	6
13/32	0.40620	3-7/8"	5-1/4"	<u>95000772</u>	6
27/64	0.4219	3-15/16"	5-3/8"	<u>95000773</u>	6
7/16	0.4375	4-1/16"	5-1/2"	95000774	6
29/64	0.4531	4-3/16"	5-5/8"	<u>95000775</u>	6
15/32	0.4688	4-5/16"	5-3/4"	<u>95000776</u>	6
31/64	0.4844	4-3/8"	5-7/8"	<u>95000777</u>	6
1/2	0.5000	4-1/2"	6"	<u>95000778</u>	6

Drill bits from 7/64" to 1/2" are Split Point

# **SERIES JH513**TITANIUM 135° HEAVY DUTY

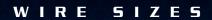




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- Industrial-Grade NAS High Speed Steel (HSS)
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#### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Cast Iron
- Plastic
- Steel (low & medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



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WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP Quantity		WIRE Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
#1	0.2280	2-5/8"	3-7/8"	95003100	12		#31	0.1200	1-5/8"	2-3/4"	95003130	12
#2	0.2210	2-5/8"	3-7/8"	95003101	12	500	#32	0.1160	1-5/8"	2-3/4"	95003131	12
#3	0.2130	2-1/2"	3-3/4"	95003102	12	0.0	#33	0.1130	1-1/2"	2-5/8"	95003132	12
#4	0.2090	2-1/2"	3-3/4"	95003103	12	00	#34	0.1110	1-1/2"	2-5/8"	95003133	12
#5	0.2055	2-1/2"	3-3/4"	95003104	12		#35	0.1100	1-1/2"	2-5/8"	95003134	12
#6	0.2040	2-1/2"	3-3/4"	95003105	12		#36	0.1065	1-7/16"	2-1/2"	95003135	12
#7	0.2010	2-7/16"	3-5/8"	95003106	12	500	#37	0.1040	1-7/16"	2-1/2"	95003136	12
#8	0.1990	2-7/16"	3-5/8"	95003107	12	00	#38	0.1015	1-7/16"	2-1/2"	95003137	12
#9	0.1960	2-7/16"	3-5/8"	95003108	12	00	#39	0.0995	1-3/8"	2-3/8"	95003138	12
#10	0.1935	2-7/16"	3-5/8"	<u>95003109</u>	12		#40	0.0980	1-3/8"	2-3/8"	<u>95003139</u>	12
#11	0.1910	2-5/16"	3-1/2"	<u>95003110</u>	12		#41	0.0960	1-3/8"	2-3/8"	<u>95003140</u>	12
#12	0.1890	2-5/16"	3-1/2"	<u>95003111</u>	12	$\mathcal{T}$	#42	0.0935	1-1/4"	2-1/4"	<u>95003141</u>	12
#13	0.1850	2-5/16"	3-1/2"	<u>95003112</u>	12	0,0	#43	0.0890	1-1/4"	2-1/4"	<u>95003142</u>	12
#14	0.1820	2-3/16"	3-3/8"	95003113	12	00	#44	0.0860	1-1/8"	2-1/8"	95003143	12
#15	0.1800	2-3/16"	3-3/8"	95003114	12		#45	0.0820	1-1/8"	2-1/8"	95003144	12
#16	0.1770	2-3/16"	3-3/8"	95003115	12		#46	0.0810	1-1/8"	2-1/8"	95003145	12
#17	0.1730	2-3/16"	3-3/8"	<u>95003116</u>	12	500	#47	0.0785	1"	2"	95003146	12
#18	0.1695	2-1/8"	3-1/4"	95003117	12	00	#48	0.0760	1"	2"	95003147	12
#19	0.1660	2-1/8"	3-1/4"	95003118	12	00	#49	0.0730	1"	2"	95003148	12
#20	0.1610	2-1/8"	3-1/4"	<u>95003119</u>	12		#50	0.0700	1"	2"	<u>95003149</u>	12
#21	0.1590	2-1/8"	3-1/4"	<u>95003120</u>	12		#51	0.0670	1"	2"	<u>95003150</u>	12
#22	0.1570	2"	3-1/8"	95003121	12		#52	0.0635	7/8"	1-7/8"	<u>95003151</u>	12
#23	0.1540	2"	3-1/8"	95003122	12	00	#53	0.0595	7/8"	1-7/8"	95003152	12
#24	0.1520	2"	3-1/8"	95003123	12	00	#54	0.0550	7/8"	1-7/8"	95003153	12
#25	0.1495	1-7/8"	3"	<u>95003124</u>	12	200	#55	0.0520	7/8"	1-7/8"	<u>95003154</u>	12
#26	0.1470	1-7/8"	3"	<u>95003125</u>	12		#56	0.0465	3/4"	1-3/4"	<u>95003155</u>	12
#27	0.1440	1-7/8"	3"	<u>95003126</u>	12		#57	0.0430	3/4"	1-3/4"	<u>95003156</u>	12
#28	0.1405	1-3/4"	2-7/8"	<u>95003127</u>	12	00	#58	0.0420	11/16"	1-5/8"	<u>95003157</u>	12
#29	0.1360	1-3/4"	2-7/8"	<u>95003128</u>	12	66	#59	0.0410	11/16"	1-5/8"	<u>95003158</u>	12
#30	0.1285	1-5/8"	2-3/4"	95003129	12		#60	0.0400	11/16"	1-5/8"	95003159	12

Drill bits from #1 to #52 are Split Point



# **SERIES JH513**TITANIUM 135° HEAVY DUTY





- Superior performance in high speed machining applications
- Precision Flute for faster, more efficient chip removal
- Hard surface with high lubricity extends tool life
- Industrial-Grade NAS High Speed Steel (HSS)
- Split Point penetrates on contact and prevents "walking" of the bit



### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Cast Iron
- Plastic
- Steel (low & medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys

### LETTER SIZES

000000	0.0.0.0.0.0	0.000000	OUTDALL	0 0 0 0 0 0	0.00000
LETTER SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
Α	0.2340	2-5/8"	3-7/8"	95003200	12
В	0.2380	2-3/4"	4"	95003201	12
C	0.2420	2-3/4"	4"	95003202	12
D	0.2460	2-3/4"	4"	95003203	12
E	0.2500	2-3/4"	4"	95003204	12
F	0.2570	2-7/8"	4-1/8"	<u>95003205</u>	12
G	0.2610	2-7/8"	4-1/8"	95003206	12
Н	0.2660	2-7/8"	4-1/8"	<u>95003207</u>	12
I	0.2720	2-7/8"	4-1/8"	95003208	12
J	0.2770	2-7/8"	4-1/8"	<u>95003209</u>	12
K	0.2810	2-15/16"	4-1/4"	<u>95003210</u>	12
L	0.2900	2-15/16"	4-1/4"	<u>95003211</u>	12
М	0.2950	3-1/16"	4-3/8"	95003212	12
N	0.3020	3-1/16"	4-3/8"	<u>95003213</u>	12
0	0.3160	3-3/16"	4-1/2"	<u>95003214</u>	6
Р	0.3230	3-5/16"	4-5/8"	<u>95003215</u>	6
Q	0.3320	3-7/16"	4-3/4"	<u>95003216</u>	6
R	0.3390	3-7/16"	4-3/4"	<u>95003217</u>	6
S	0.3480	3-1/2"	4-7/8"	<u>95003218</u>	6
Т	0.3580	3-1/2"	4-7/8"	<u>95003219</u>	6
U	0.3680	3-5/8"	5"	95003220	6
V	0.3770	3-5/8"	5"	<u>95003221</u>	6
W	0.3860	3-3/4"	5-1/8"	95003222	6
Х	0.3970	3-3/4"	5-1/8"	95003223	6
Υ	0.4040	3-7/8"	5-1/4"	95003224	6
Z	0.4130	3-7/8"	5-1/4"	95003225	6

## <u>SERIES JH522</u>

### BLACKGOLD™ 137° HEAVY DUTY





- Aggressive web taper prevents breakage for more holes per drill bit
- Split point tip penetrates surface on contact and prevents drill bit "walking"
- Shorter, stronger cutting lip for easier drilling and longer life
- Heavy taper with narrow tip for quick starts without sacrificing the structure
- Engineered for less torque and lightens operator load
- Industrial-Grade NAS High Speed Steel (HSS)

#### **MATERIAL APPLICATION**

- Steel (low & medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



### FRACTIONAL SIZES

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP Quantity
1/16	.0625	3/4"	1-7/8"	95006000	12
5/64	.0781	7/8"	2"	<u>95006001</u>	12
3/32	.0938	1"	2-1/4"	95006002	12
7/64	.1094	1-1/4"	2-5/8"	95006003	12
1/8	.1250	1-1/4"	2-3/4"	<u>95006004</u>	12
9/64	.1406	1-3/8"	2-7/8"	<u>95006005</u>	12
5/32	.1562	1-5/8"	3-1/8"	<u>95006006</u>	12
11/64	.1719	1-5/8"	3-1/4"	<u>95006007</u>	12
3/16	.1875	1-3/4"	3-1/2"	<u>95006008</u>	12
13/64	.2031	1-7/8"	3-5/8"	<u>95006009</u>	12
7/32	.2188	2"	3-3/4"	<u>95006010</u>	12
15/64	.2344	2"	3-7/8"	<u>95006011</u>	12
1/4	.2500	2-1/8"	4"	95006012	12
17/64	.2656	2-1/4"	4-1/8"	<u>95006013</u>	12
9/32	.2812	2-1/4"	4-1/4"	<u>95006014</u>	12
19/64	.2969	2-3/8"	4-3/8"	<u>95006015</u>	12
5/16	.3125	2-1/2"	4-1/2"	<u>95006016</u>	6
21/64	.3281	2-1/2"	4-5/8"	<u>95006017</u>	6
11/32	.3438	2-5/8	4-3/4"	<u>95006018</u>	6
23/64	.3594	2-3/4"	4-7/8"	<u>95006019</u>	6
3/8	.3750	2-3/4"	5"	95006020	6
25/64	.3906	2-7/8"	5-1/8"	<u>95006021</u>	6
13/32	.4062	3"	5-1/4"	95006022	6
27/64	.4219	3"	5-3/8"	95006023	6
7/16	.4375	3-1/8"	5-1/2"	95006024	6
29/64	.4531	3-1/4"	5-5/8"	<u>95006025</u>	6
15/32	.4688	3-1/4"	5-3/4"	<u>95006026</u>	6
31/64	.4844	3-3/8"	5-7/8"	95006027	6
1/2	.5000	3-1/2"	6"	<u>95006028</u>	6

Drill bits from 7/64" to 1/2" are Split Point Tri-flat shank on drill bits 3/16" thru 1/2"



## SERIES JH522 BLACKGOLD™ 137° HEAVY DUTY





- Aggressive web taper prevents breakage for more holes per drill bit
- Split point tip penetrates surface on contact and prevents drill bit "walking"
- Shorter, stronger cutting lip for easier drilling and longer life
- Heavy taper with narrow tip for quick starts without sacrificing the structure
- Engineered for less torque and lightens operator load
- Industrial-Grade NAS High Speed Steel (HSS)

#### **MATERIAL APPLICATION**

- Steel (low & medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



#### WIRE SIZES

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP		WIRE SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP OUANTITY
JIZEO	EQUIVALENT	LLINGTH	LLINGTH	HOMBEN	QUARTITI		OIZEO	EQUIVALENT	LENGTH	LENGIII	HOMBEN	QUARTITI
#1	0.2280	2"	3-7/8"	<u>95006100</u>	12		#21	0.1590	1-5/8"	3-1/4"	95006120	12
#2	0.2210	2"	3-7/8"	95006101	12		#22	0.1570	1-5/8"	3-1/8"	95006121	12
#3	0.2130	1-7/8"	3-3/4"	95006102	12		#23	0.1540	1-1/2"	3-1/8"	95006122	12
#4	0.2090	1-7/8"	3-3/4"	95006103	12		#24	0.1520	1-1/2"	3-1/8"	95006123	12
#5	0.2055	1-7/8"	3-3/4"	95006104	12		#25	0.1495	1-1/2"	3"	95006124	12
#6	0.2040	1-7/8"	3-3/4"	95006105	12		#26	0.1470	1-1/2"	3"	95006125	12
#7	0.2010	1-7/8"	3-5/8"	95006106	12		#27	0.1440	1-3/8"	3"	95006126	12
#8	0.1990	1-7/8"	3-5/8"	95006107	12		#28	0.1405	1-3/8"	2-7/8"	95006127	12
#9	0.1960	1-7/8"	3-5/8"	95006108	12		#29	0.1360	1-3/8"	2-7/8"	95006128	12
#10	0.1935	1-7/8"	3-5/8"	95006109	12		#30	0.1285	1-1/4"	2-3/4"	95006129	12
#11	0.1910	1-7/8"	3-1/2"	95006110	12	00	#31	0.1200	1-1/4"	2-3/4"	95006130	12
#12	0.1890	1-3/4"	3-1/2"	<u>95006111</u>	12	50	#32	0.1160	1-1/4"	2-3/4"	95006131	12
#13	0.1850	1-3/4"	3-1/2"	95006112	12		#33	0.1130	1-1/4"	2-5/8"	95006132	12
#14	0.1820	1-3/4"	3-3/8"	95006113	12		#34	0.1110	1-1/4"	2-5/8"	95006133	12
#15	0.1800	1-3/4"	3-3/8"	95006114	12		#35	0.1100	1-1/4"	2-5/8"	95006134	12
#16	0.1770	1-3/4"	3-3/8"	95006115	12		#36	0.1065	1-1/8"	2-1/2"	95006135	12
#17	0.1730	1-5/8"	3-3/8"	95006116	12		#37	0.1040	1-1/8"	2-1/2"	95006136	12
#18	0.1695	1-5/8"	3-1/4"	95006117	12		#38	0.1015	1-1/8"	2-1/2"	95006137	12
#19	0.1660	1-5/8"	3-1/4"	95006118	12		#39	0.0995	1-1/8"	2-3/8"	95006138	12
#20	0.1610	1-5/8"	3-1/4"	95006119	12		#40	0.0980	1"	2-3/8"	95006139	12

Tri-flat shank on drill bits #1 thru #13

## SERIES JH522







- Aggressive web taper prevents breakage for more holes per drill bit
- Split point tip penetrates surface on contact and prevents drill bit "walking"
- Shorter, stronger cutting lip for easier drilling and longer life
- Heavy taper with narrow tip for quick starts without sacrificing the structure
- Engineered for less torque and lightens operator load
- Industrial-Grade NAS High Speed Steel (HSS)

#### **MATERIAL APPLICATION**

- Steel (low & medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



### LETTER SIZES

LETTER Sizes	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP Quantity
A	0.2340	2"	3-7/8"	95006200	12
В	0.2380	2"	4"	95006201	12
С	0.2420	2"	4"	95006202	12
D	0.2460	2"	4"	95006203	12
E	0.2500	2"	4"	95006204	12
F	0.2570	2-1/4"	4-1/8"	95006205	12
G	0.2610	2-1/4"	4-1/8"	95006206	12
н	0.2660	2-1/4"	4-1/8"	95006207	12
- 1	0.2720	2-1/4"	4-1/8"	95006208	12
J	0.2770	2-1/4"	4-1/8"	95006209	12
К	0.2810	2-1/4"	4-1/4"	95006210	12
L	0.2900	2-1/4"	4-1/4"	95006211	12
М	0.2950	2-3/8"	4-3/8"	95006212	12
N	0.3020	2-3/8"	4-3/8"	95006213	12
0	0.3160	2-3/8"	4-3/8"	95006214	6
Р	0.3230	2-3/8"	4-5/8"	95006215	6
Q	0.3320	2-3/8"	4-3/4"	95006216	6
R	0.3390	2-3/8"	4-3/4"	95006217	6
S	0.3480	2-1/2"	4-7/8"	95006218	6
Т	0.3580	2-1/2"	4-7/8"	<u>95006219</u>	6
U	0.3680	2-1/2"	5"	95006220	6
V	0.3770	2-1/2"	5"	<u>95006221</u>	6
W	0.3860	2-5/8"	5-1/8"	95006222	6
Х	0.3970	2-5/8"	5-1/8"	95006223	6
Υ	0.4040	3"	5-1/4"	95006224	6
Z	0.4130	3"	5-1/4"	95006225	6

## SERIES JH522-P BLACKGOLD<sup>™</sup> 135° HEAVY DUTY





## PARABOLIC PERFORMANCE CUTTING TOOLS

- Heavy-duty web improves strength and structural stability
- Flatter web taper for more consistent chip evacuation
- 32° High helix enhances lift and reduces chip turbulence
- Parabolic, wide flutes for superior performance in deep-hole drilling
- Industrial-Grade NAS High Speed Steel (HSS)

#### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Brass
- Plastic
- Steel (low & medium carbon)
- Steel Alloy

### FRACTIONAL & WIRE 51ZE5

FRACT. SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY
1/16	0.0625	7/8"	1-7/8"	<u>95004800</u>	12
5/64	0.0781	1"	2"	95004801	12
3/32	0.0938	1-1/4"	2-1/4"	<u>95004802</u>	12
7/64	0.1094	1-1/2"	2-5/8"	<u>95004803</u>	12
1/8	0.1250	1-5/8"	2-3/4"	95004804	12
9/64	0.1406	1-3/4"	2-7/8"	<u>95004805</u>	12
5/32	0.1562	2"	3-1/8"	95004806	12
11/64	0.1719	2-1/8"	3-1/4"	95004807	12
3/16	0.1875	2-5/16"	3-1/2"	<u>95004808</u>	12
13/64	0.2031	2-7/16"	3-5/8"	95004809	12
7/32	0.2188	2-1/2"	3-3/4"	<u>95004810</u>	12
15/64	0.2344	2-5/8"	3-7/8"	<u>95004811</u>	12
1/4	0.2500	2-3/4"	4"	95004812	12
17/64	0.2656	2-7/8"	4-1/8"	95004813	12
9/32	0.2812	2-15/16"	4-1/4"	95004814	12
19/64	0.2969	3-1/16"	4-3/8"	95004815	12
5/16	0.3125	3-3/16"	4-1/2"	<u>95004816</u>	6
21/64	0.3281	3-5/16"	4-5/8"	<u>95004817</u>	6
11/32	0.3438	3-7/16"	4-3/4"	95004818	6

FRACT. SIZES	DECIMAL Equivalent	FLUTE Length	OVERALL Length	PART Number	SHIP QUANTITY
23/64	0.3594	3-1/2"	4-7/8"	<u>95004819</u>	6
3/8	0.3750	3-5/8"	5"	95004820	6
25/64	0.3906	3-3/4"	5-1/8"	<u>95004821</u>	6
13/32	0.4062	3-7/8"	5-1/4"	95004822	6
27/64	0.4219	3-15/16"	5-3/8"	95004823	6
7/16	0.4375	4-1/16"	5-1/2"	95004824	6
29/64	0.4531	4-3/16"	5-5/8"	95004825	6
15/32	0.4688	4-5/16"	5-3/4"	95004826	6
31/64	0.4844	4-3/8"	5-7/8"	<u>95004827</u>	6
1/2	0.5000	4-1/2"	6"	95004828	6

WIRE SIZES	DECIMAL Equivalent	FLUTE Length	OVERALL Length	PART Number	SHIP QUANTITY
#10	0.1935	1-7/8"	3-5/8"	95004910	12
#20	0.1610	1-5/8"	3-1/4"	95004920	12
#21	0.1590	1-5/8"	3-1/4"	<u>95004921</u>	12
#30	0.1285	1-1/4"	2-3/4"	95004930	12
#40	0.0980	1"	2-3/8"	95004940	12

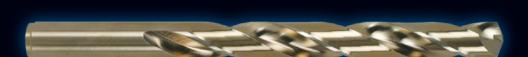
Drill bits from 7/64" to 1/2" are Split Point

# SERIES JC514 COBALT 135° HEAVY DUTY





- Produced from industrial-grade NAS Cobalt steel
- Superior red hardness for high temperature applications
- Less end load pressure required
- Split Point penetrates on contact and prevents "walking" of the bit



### **MATERIAL APPLICATION**

- Steel (low & medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys

### FRACTIONAL SIZES

		ALIIBN			
FRACTIONAL SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY
1/16	0.0625	7/8"	1-7/8"	<u>95004200</u>	12
5/64	0.0781	1"	2"	<u>95004201</u>	12
3/32	0.0938	1-1/4"	2-1/4"	<u>95004203</u>	12
7/64	0.1094	1-1/2"	2-5/8"	<u>95004204</u>	12
1/8	0.1250	1-5/8"	2-3/4"	<u>95004205</u>	12
9/64	0.1406	1-3/4"	2-7/8"	<u>95004206</u>	12
5/32	0.1562	2"	3-1/8"	<u>95004207</u>	12
11/64	0.1719	2-1/8"	3-1/4"	<u>95004208</u>	12
3/16	0.1875	2-5/16"	3-1/2"	<u>95004209</u>	12
13/64	0.2031	2-7/16"	3-5/8"	<u>95004210</u>	12
7/32	0.2188	2-1/2"	3-3/4"	<u>95004211</u>	12
15/64	0.2344	2-5/8"	3-7/8"	<u>95004212</u>	12
1/4	0.2500	2-3/4"	4"	<u>95004213</u>	12
17/64	0.2656	2-7/8"	4-1/8"	95004214	12
9/32	0.2812	2-15/16"	4-1/4"	<u>95004215</u>	12
19/64	0.2969	3-1/16"	4-3/8"	<u>95004216</u>	12
5/16	0.3125	3-3/16"	4-1/2"	<u>95004217</u>	6
21/64	0.3281	3-5/16"	4-5/8"	95004218	6
11/32	0.3438	3-7/16"	4-3/4"	<u>95004219</u>	6
23/64	0.3594	3-1/2"	4-7/8"	<u>95004220</u>	6
3/8	0.3750	3-5/8"	5"	95004221	6
25/64	0.3906	3-3/4"	5-1/8"	95004222	6
13/32	0.4062	3-7/8"	5-1/4"	95004223	6
27/64	0.4219	3-15/16"	5-3/8"	95004224	6
7/16	0.4375	4-1/16"	5-1/2"	95004225	6
29/64	0.4531	4-3/16"	5-5/8"	95004226	6
15/32	0.4688	4-5/16"	5-3/4"	95004227	6
31/64	0.4844	4-3/8"	5-7/8"	95004228	6
1/2	0.5000	4-1/2"	6"	95004229	6

### SERIES JC514 COBALT 135° HEAVY DUTY





- Produced from industrial-grade NAS Cobalt steel
- Superior red hardness for high temperature applications
- Less end load pressure required
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Steel (low & medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



WIRE SIZES

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL Length	PART Number	SHIP Quantity		WIRE Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP QUANTITY
#1	0.2280	2-5/8"	3-7/8"	95004600	12		#31	0.1200	1-5/8"	2-3/4"	95004630	12
#2	0.2210	2-5/8"	3-7/8"	95004601	12		#32	0.1160	1-5/8"	2-3/4"	95004631	12
#3	0.2130	2-1/2"	3-3/4"	95004602	12		#33	0.1130	1-1/2"	2-5/8"	95004632	12
#4	0.2090	2-1/2"	3-3/4"	95004603	12	XX	#34	0.1110	1-1/2"	2-5/8"	95004633	12
#5	0.2055	2-1/2"	3-3/4"	95004604	12	<b>XX</b>	#35	0.1100	1-1/2"	2-5/8"	95004634	12
#6	0.2040	2-1/2"	3-3/4"	95004605	12	00	#36	0.1065	1-7/16"	2-1/2"	95004635	12
#7	0.2010	2-7/16"	3-5/8"	95004606	12	50	#37	0.1040	1-7/16"	2-1/2"	95004636	12
#8	0.1990	2-7/16"	3-5/8"	95004607	12		#38	0.1015	1-7/16"	2-1/2"	95004637	12
#9	0.1960	2-7/16"	3-5/8"	95004608	12		#39	0.0995	1-3/8"	2-3/8"	95004638	12
#10	0.1935	2-7/16"	3-5/8"	95004609	12	XX	#40	0.0980	1-3/8"	2-3/8"	95004639	12
#11	0.1910	2-5/16"	3-1/2"	<u>95004610</u>	12	$\bigcirc$	#41	0.0960	1-3/8"	2-3/8"	95004640	12
#12	0.1890	2-5/16"	3-1/2"	95004611	12	50	#42	0.0935	1-1/4"	2-1/4"	95004641	12
#13	0.1850	2-5/16"	3-1/2"	95004612	12		#43	0.0890	1-1/4"	2-1/4"	95004642	12
#14	0.1820	2-3/16"	3-3/8"	95004613	12		#44	0.0860	1-1/8"	2-1/8"	95004643	12
#15	0.1800	2-3/16"	3-3/8"	95004614	12	XX	#45	0.0820	1-1/8"	2-1/8"	95004644	12
#16	0.1770	2-3/16"	3-3/8"	<u>95004615</u>	12	90	#46	0.0810	1-1/8"	2-1/8"	95004645	12
#17	0.1730	2-3/16"	3-3/8"	95004616	12	00	#47	0.0785	1"	2"	95004646	12
#18	0.1695	2-1/8"	3-1/4"	<u>95004617</u>	12		#48	0.0760	1"	2"	95004647	12
#19	0.1660	2-1/8"	3-1/4"	95004618	12	XX C	#49	0.0730	1"	2"	95004648	12
#20	0.1610	2-1/8"	3-1/4"	95004619	12		#50	0.0700	1"	2"	95004649	12
#21	0.1590	2-1/8"	3-1/4"	95004620	12		#51	0.0670	1"	2"	95004650	12
#22	0.1570	2"	3-1/8"	95004621	12	50	#52	0.0635	7/8"	1-7/8"	<u>95004651</u>	12
#23	0.1540	2"	3-1/8"	95004622	12		#53	0.0595	7/8"	1-7/8"	95004652	12
#24	0.1520	2"	3-1/8"	95004623	12	TO C	#54	0.0550	7/8"	1-7/8"	95004653	12
#25	0.1495	1-7/8"	3"	95004624	12		#55	0.0520	7/8"	1-7/8"	<u>95004654</u>	12
#26	0.1470	1-7/8"	3"	<u>95004625</u>	12	00	#56	0.0465	3/4"	1-3/4"	95004655	12
#27	0.1440	1-7/8"	3"	<u>95004626</u>	12	00	#57	0.0430	3/4"	1-3/4"	<u>95004656</u>	12
#28	0.1405	1-3/4"	2-7/8"	<u>95004627</u>	12	000	#58	0.0420	11/16"	1-5/8"	<u>95004657</u>	12
#29	0.1360	1-3/4"	2-7/8"	95004628	12	No c	#59	0.0410	11/16"	1-5/8"	95004658	12
#30	0.1285	1-5/8"	2-3/4"	95004629	12	00	#60	0.0400	11/16"	1-5/8"	95004659	12

Drill bits from #1 to #52 are Split Point

# SERIES JC514 COBALT 135° HEAVY DUTY



- Produced from industrial-grade NAS Cobalt steel
- Superior red hardness for high temperature applications
- Less end load pressure required
- Split Point penetrates on contact and prevents "walking" of the bit

### MATERIAL APPLICATION

- Steel (low & medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



### LETTER SIZES

LETTER Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP Quantity
А	0.2340	2-5/8"	3-7/8"	95006400	12
В	0.2380	2-3/4"	4"	95006401	12
С	0.2420	2-3/4"	4"	95006402	12
D	0.2460	2-3/4"	4"	95006403	12
E	0.2500	2-3/4"	4"	95006404	12
F	0.2570	2-7/8"	4-1/8"	95006405	12
G	0.2610	2-7/8"	4-1/8"	<u>95006406</u>	12
Н	0.2660	2-7/8"	4-1/8"	<u>95006407</u>	12
I I	0.2720	2-7/8"	4-1/8"	<u>95006408</u>	12
J	0.2770	2-7/8"	4-1/8"	<u>95006409</u>	12
K	0.2810	2-15/16"	4-1/4"	<u>95006410</u>	12
L	0.2900	2-15/16"	4-1/4"	<u>95006411</u>	12
М	0.2950	3-1/16"	4-3/8"	<u>95006412</u>	12
N	0.3020	3-1/16"	4-3/8"	<u>95006413</u>	12
0	0.3160	3-3/16"	4-1/2"	<u>95006414</u>	6
P	0.3230	3-5/16"	4-5/8"	<u>95006415</u>	6
Q	0.3320	3-7/16"	4-3/4"	<u>95006416</u>	6
R	0.3390	3-7/16"	4-3/4"	<u>95006417</u>	6
S	0.3480	3-1/2"	4-7/8"	<u>95006418</u>	6
Т	0.3580	3-1/2"	4-7/8"	<u>95006419</u>	6
U	0.3680	3-5/8"	5"	95006420	6
V	0.3770	3-5/8"	5"	<u>95006421</u>	6
W	0.3860	3-3/4"	5-1/8"	95006422	6
Х	0.3970	3-3/4"	5-1/8"	<u>95006423</u>	6
Υ	0.4040	3-7/8"	5-1/4"	<u>95006424</u>	6
Z	0.4130	3-7/8"	5-1/4"	<u>95006425</u>	6

# Series 127-XP COBALT 127° HEAVY DUTY





- Exclusively engineered with specific design and cutting characteristics
- Improve penetration speed
- TIALN Coated

- Reduce thrust load
- Increase productivity
- Deliver premium performance and results

### **MATERIAL APPLICATION**

- Stainless Steel
- Titanium



### FRACTIONAL SIZES

FRACTIONAL SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART NUMBER	SHIP Quantity
	¥-		-		
1/16	0.0625	7/8"	1-7/8"	95006800	12
5/64	0.0781	1"	2"	<u>95006801</u>	12
3/32	0.0938	1-1/4"	2-1/4"	<u>95006802</u>	12
7/64	0.1094	1-1/2"	2-5/8"	95006803	12
1/8	0.1250	1-5/8"	2-3/4"	<u>95006804</u>	12
9/64	0.1406	1-3/4"	2-7/8"	<u>95006805</u>	12
5/32	0.1562	2"	3-1/8"	<u>95006806</u>	12
11/64	0.1719	2-1/8"	3-1/4"	<u>95006807</u>	12
3/16	0.1875	2-5/16"	3-1/2"	<u>95006808</u>	12
13/64	0.2031	2-7/16"	3-5/8"	<u>95006809</u>	12
7/32	0.2188	2-1/2"	3-3/4"	<u>95006810</u>	12
15/64	0.2344	2-5/8"	3-7/8"	95006811	12
1/4	0.2500	2-3/4"	4"	95006812	12
17/64	0.2656	2-7/8"	4-1/8"	95006813	12
9/32	0.2812	2-15/16"	4-1/4"	95006814	12
19/64	0.2969	3-1/16"	4-3/8"	95006815	12
5/16	0.3125	3-3/16"	4-1/2"	95006816	6
21/64	0.3281	3-5/16"	4-5/8"	95006817	6
11/32	0.3438	3-7/16"	4-3/4"	95006818	6
23/64	0.3594	3-1/2"	4-7/8"	<u>95006819</u>	6
3/8	0.3750	3-5/8"	5"	95006820	6
25/64	0.3906	3-3/4"	5-1/8"	95006821	6
13/32	0.4062	3-7/8"	5-1/4"	95006822	6
27/64	0.4219	3-15/16"	5-3/8"	95006823	6
7/16	0.4375	4-1/16"	5-1/2"	95006824	6
29/64	0.4531	4-3/16"	5-5/8"	95006825	6
15/32	0.4688	4-5/16"	5-3/4"	95006826	6
31/64	0.4844	4-3/8"	5-7/8"	95006827	6
1/2	0.5000	4-1/2"	6"	95006828	6

### SERIES JH800-R BRIGHT 118° GENERAL PURPOSE







- Reduced shank for use with any chuck 3/8" diameter or larger
- Industrial-Grade NAS High Speed Steel (HSS)
- Excellent general use drill bit
- Flutes are precision ground for faster, more efficient chip removal

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic



### FRACTIONAL SIZES

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP Quantity
25/64	0.3906	3-3/4"	5-1/8"	95000580	6
13/32	0.4062	3-7/8"	5-1/4"	<u>95000581</u>	6
27/64	0.4219	3-15/16"	5-3/8"	<u>95000582</u>	6
7/16	0.4375	4-1/16"	5-1/2"	<u>95000583</u>	6
29/64	0.4531	4-3/16"	5-5/8"	<u>95000584</u>	6
15/32	0.4688	4-5/16"	5-3/4"	<u>95000585</u>	6
31/64	0.4844	4-3/8"	5-7/8"	<u>95000586</u>	6
1/2	0.5000	4-1/2"	6"	95000587	6

### SERIES JH501-R BLACK OXIDE 135° HEAVY DUTY







- Reduced shank for use with any chuck 3/8" diameter or larger
- Industrial-Grade NAS High Speed Steel (HSS)
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals
- Split Point penetrates on contact and prevents "walking" of the bit

#### **MATERIAL APPLICATION**

- Cast Iron
- Steel Alloy



FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP Quantity
25/64	.3906	3-3/4"	5-1/8"	<u>95000630</u>	6
13/32	.4062	3-7/8"	5-1/4"	<u>95000631</u>	6
27/64	.4219	3-15/16"	5-3/8"	<u>95000632</u>	6
7/16	.4375	4-1/16"	5-1/2"	<u>95000633</u>	6
29/64	.4531	4-3/16"	5-5/8"	<u>95000634</u>	6
15/32	.4688	4-5/16"	5-3/4"	<u>95000635</u>	6
31/64	.4844	4-3/8"	5-7/8"	<u>95000636</u>	6
1/2	.5000	4-1/2"	6"	<u>95000637</u>	6









- Excellent for drilling in wood and a broad range of plastics – including acrylic
- Dihedral point geometry engineered to drill extremely fast and clean, U.S. Patent #D585,919
- Unrivaled hole accuracy and quality from entry to exit
- Task specific flutes designed for optimal chip evacuation
- Generates minimal heat and material burn
- Industrial-Grade High Speed Steel (HSS)

#### **MATERIAL APPLICATION**

- Plastics (including acrylic)
- Sheet Metal
- Wood



### FRACTIONAL SIZES

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP Quantity
1/8"	0.1250	1-5/8"	2-3/4"	<u>95006504</u>	12
3/16"	0.1875	2-5/16"	3-1/2"	<u>95006508</u>	12
1/4"	0.2500	2-3/4"	4"	95006512	12
5/16"	0.3125	3-3/16"	4-1/2"	95006516	6
3/8"	0.3750	3-5/8"	5"	<u>95006520</u>	6
7/16"	0.4375	4-1/16"	5-1/2"	95006524	6
1/2"	0.5000	4-1/2"	6"	<u>95006528</u>	6

Tri-flat shank on drill bits 3/16" thru 1/2"

### JH522-M BLACKGOLD™ 137° MAINTENANCE





- Stronger structure reduces breakage and tri-lobular hole effect due to flute torsion
- Increased material for improved heat absorption and dissipation at the cutting edges
- Improved support for better on size hole characteristics
- Tri-Flat shank provides secure drill chuck grip that eliminates bit spin out
- Penetrates material surface on contact preventing drill bit "skating"
- Industrial-Grade NAS High Speed Steel (HSS)

#### **MATERIAL APPLICATION**

- Pre-Hard Materials
- Sheet Metal Stack
  IIn
- Stainless Steel
- Steel Alloy



### FRACTIONAL SIZES

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP Quantity
1/16"	0.0625	21/32"	1-7/8"	95008700	12
5/64"	0.0781	3/4"	2"	95008701	12
3/32"	0.0938	15/16"	2-1/4"	95008702	12
7/64"	0.1094	1-1/8"	2-3/8"	<u>95008703</u>	12
1/8"	0.1250	1-7/32"	2-1/2"	<u>95008704</u>	12
9/64"	0.1406	1-5/16"	2-5/8"	<u>95008705</u>	12
5/32"	0.1562	1-1/2"	2-3/4"	<u>95008706</u>	12
11/64"	0.1719	1-19/32"	2-7/8"	<u>95008707</u>	12
3/16"	0.1875	1-47/64"	3	<u>95008708</u>	12
13/64"	0.2031	1-53/64"	3-1/8"	<u>95008709</u>	12
7/32"	0.2188	1-7/8"	3-1/4"	<u>95008710</u>	12
15/64"	0.2344	1-31/32	3-3/8"	<u>95008711</u>	12
1/4"	0.2500	2-1/16"	3-1/2"	<u>95008712</u>	12
17/64"	0.2656	2-5/32"	3-5/8"	<u>95008713</u>	12
9/32"	0.2812	2-13/64"	3-3/4"	<u>95008714</u>	12
19/64"	0.2969	2-19/64"	3-7/8"	<u>95008715</u>	12
5/16"	0.3125	2-25/64"	4	<u>95008716</u>	12
21/64"	0.3281	2-31/64"	4-1/16"	<u>95008717</u>	6
11/32"	0.3438	2-37/64"	4-1/8"	<u>95008718</u>	6
23/64"	0.3594	2-5/8"	4-3/16"	<u>95008719</u>	6
3/8"	0.3750	2-23/32"	4-1/4"	<u>95008720</u>	6
25/64"	0.3906	2-13/16"	4-5/16"	<u>95008721</u>	6
13/32"	0.4062	2-29/32"	4-3/8"	95008722	6
27/64"	0.4219	2-61/64"	4-7/16"	<u>95008723</u>	6
7/16"	0.4375	3-3/64"	4-1/2"	95008724	6
29/64"	0.4531	3-9/64"	4-5/8"	<u>95008725</u>	6
15/32"	0.4688	3-15/64"	4-3/4"	<u>95008726</u>	6
31/64"	0.4844	3-9/32"	4-7/8"	95008727	6
1/2"	0.5000	3-3/8"	5"	<u>95008728</u>	6

Tri-flat shank on drill bits 3/16" thru 1/2"

### SERIES SH500 BRIGHT 135° HEAVY DUTY





- Excellent general use drill bit
- Flutes are precision ground for faster, more efficient chip removal
- Industrial-Grade NAS High Speed Steel (HSS)
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic



### FRACTIONAL SIZES

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP QUANTITY
1/16	0.0625	5/8"	1-5/8"	95002900	12
5/64	0.0781	11/16"	1-11/16"	95002901	12
3/32	0.0938	3/4"	1-3/4"	95002902	12
7/64	0.1094	13/16"	1-13/16"	95002903	12
1/8	0.1250	7/8"	1-7/8"	95002904	12
9/64	0.1406	15/16"	1-15/16"	<u>95002905</u>	12
5/32	0.1562	1"	2-1/16"	<u>95002906</u>	12
11/64	0.1719	1-1/16"	2-1/8"	<u>95002907</u>	12
3/16	0.1875	1-1/8"	2-3/16"	95002908	12
13/64	0.2031	1-3/16"	2-1/4"	<u>95002909</u>	12
7/32	0.2188	1-1/4"	2-3/8"	<u>95002910</u>	12
15/64	0.2334	1-5/16"	2-7/16"	<u>95002911</u>	12
1/4	0.2500	1-3/8"	2-1/2"	95002912	12
17/64	0.2656	1-7/16"	2-5/8"	<u>95002913</u>	12
9/32	0.2812	1-1/2"	2-11/16"	<u>95002914</u>	12
19/64	0.2969	1-9/16"	2-3/4"	<u>95002915</u>	12
5/16	0.3125	1-5/8"	2-13/16"	<u>95002916</u>	6
21/64	0.3281	1-11/16"	2-15/16"	<u>95002917</u>	6
11/32	0.3438	1-11/16"	3"	<u>95002918</u>	6
23/64	0.3594	1-3/4"	3-1/16"	<u>95002919</u>	6
3/8	0.3750	1-13/16"	3-1/8"	95002920	6
25/64	0.3906	1-7/8"	3-1/4"	<u>95002921</u>	6
13/32	0.4062	1-15/16"	3-5/16"	95002922	6
27/64	0.4219	2"	3-3/8"	95002923	6
7/16	0.4375	2-1/16"	3-7/16"	95002924	6
29/64	0.4531	2-1/8"	3-9/16"	<u>95002925</u>	6
15/32	0.4688	2-1/8"	3-5/8"	95002926	6
31/64	0.4844	2-3/16"	3-11/16"	<u>95002927</u>	6
1/2	0.5000	2-1/4"	3-3/4"	95002928	6

Drill bits from 7/64" to 1/2" are Split Point



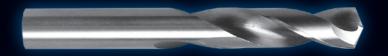
## SERIES SH500 BRIGHT 135° HEAVY DUTY



- Excellent general use drill bit
- Flutes are precision ground for faster, more efficient chip removal
- Industrial-Grade NAS High Speed Steel (HSS)
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic



WIRE SIZES

WIDE	DECIMAL	FLUTE	OVEDALL	DADT	CUID		WIDE	DECIMAL	FLUTE	OVERALL	DADT	SHIP
WIRE SIZES	EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP Quantity		WIRE SIZES	EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	QUANTITY
#1	0.2280	1-5/16"	2-7/16"	95002801	12	90	#31	0.1200	7/8"	1-7/8"	95002831	12
#2	0.2210	1-5/16"	2-7/16"	95002802	12	00	#32	0.1160	7/8"	1-7/8"	95002832	12
#3	0.2130	1-1/4"	2-3/8"	95002803	12	56	#33	0.1130	7/8"	1-7/8"	95002833	12
#4	0.2090	1-1/4"	2-3/8"	95002804	12		#34	0.1110	7/8"	1-7/8"	95002834	12
#5	0.2055	1-1/4"	2-3/8"	95002805	12	XX	#35	0.1100	7/8"	1-7/8"	95002835	12
#6	0.2040	1-1/4"	2-3/8"	95002806	12		#36	0.1065	13/16"	1-13/16"	95002836	12
#7	0.2010	1-3/16"	2-1/4"	<u>95002807</u>	12		#37	0.1040	13/16"	1-13/16"	95002837	12
#8	0.1990	1-3/16"	2-1/4"	95002808	12	36	#38	0.1015	13/16"	1-13/16"	95002838	12
#9	0.1960	1-3/16"	2-1/4"	95002809	12	000	#39	0.0995	13/16"	1-13/16"	95002839	12
#10	0.1935	1-3/16"	2-1/4"	95002810	12	XX	#40	0.0980	13/16"	1-13/16"	95002840	12
#11	0.1910	1-3/16"	2-1/4"	95002811	12		#41	0.0960	13/16"	1-13/16"	95002841	12
#12	0.1890	1-3/16"	2-1/4"	95002812	12	00	#42	0.0935	3/4"	1-3/4"	95002842	12
#13	0.1850	1-1/8"	2-3/16"	95002813	12		#43	0.0890	3/4"	1-3/4"	95002843	12
#14	0.1820	1-1/8"	2-3/16"	95002814	12		#44	0.0860	3/4"	1-3/4"	95002844	12
#15	0.1800	1-1/8"	2-3/16"	95002815	12		#45	0.0820	3/4"	1-3/4"	95002845	12
#16	0.1770	1-1/8"	2-3/16"	95002816	12	90	#46	0.0810	3/4"	1-3/4"	95002846	12
#17	0.1730	1-1/8"	2-3/16"	95002817	12	00	#47	0.0785	11/16"	1-11/16"	95002847	12
#18	0.1695	1-1/16"	2-1/8"	95002818	12		#48	0.0760	11/16"	1-11/16"	95002848	12
#19	0.1660	1-1/16"	2-1/8"	95002819	12	ZO C	#49	0.0730	11/16"	1-11/16"	<u>95002849</u>	12
#20	0.1610	1-1/16"	2-1/8"	<u>95002820</u>	12		#50	0.0700	11/16"	1-11/16"	95002850	12
#21	0.1590	1-1/16"	2-1/8"	<u>95002821</u>	12		#51	0.0670	11/16"	1-11/16"	<u>95002851</u>	12
#22	0.1570	1-1/16"	2-1/8"	95002822	12	50	#52	0.0635	11/16"	1-11/16"	95002852	12
#23	0.1540	1"	2-1/16"	95002823	12	406	#53	0.0595	5/8"	1-5/8"	<u>95002853</u>	12
#24	0.1520	1"	2-1/16"	<u>95002824</u>	12	OC	#54	0.0550	5/8"	1-5/8"	<u>95002854</u>	12
#25	0.1495	1"	2-1/16"	95002825	12		#55	0.0520	5/8"	1-5/8"	95002855	12
#26	0.1470	1"	2-1/16"	<u>95002826</u>	12	00	#56	0.0465	1/2"	1-3/8"	<u>95002856</u>	12
#27	0.1440	1"	2-1/16"	95002827	12	56	#57	0.0430	1/2"	1-3/8"	95002857	12
#28	0.1405	15/16"	1-15/16"	95002828	12	000	#58	0.0420	1/2"	1-3/8"	<u>95002858</u>	12
#29	0.1360	15/16"	1-15/16"	<u>95002829</u>	12	TO C	#59	0.0410	1/2"	1-3/8"	<u>95002859</u>	12
#30	0.1285	15/16"	1-15/16"	<u>95002830</u>	12	90	#60	0.0400	1/2"	1-3/8"	<u>95002860</u>	12

Drill bits from #1 to #52 are Split Point

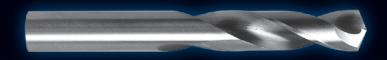
### SERIES SH500 BRIGHT 135° HEAVY DUTY



- Excellent general use drill bit
- Flutes are precision ground for faster, more efficient chip removal
- Industrial-Grade NAS High Speed Steel (HSS)
- Split Point penetrates on contact and prevents "walking" of the bit

### MATERIAL APPLICATION

- Aluminum
- Copper
- Wood
- Plastic



### LETTER SIZES

LETTER SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP Quantity
Α	0.2340	1-5/16"	2-7/16"	95003000	12
В	0.2380	1-3/8"	2-1/2"	95003001	12
C	0.2420	1-3/8"	2-1/2"	<u>95003002</u>	12
D	0.2460	1-3/8"	2-1/2"	<u>95003003</u>	12
E	0.2500	1-3/8"	2-1/2"	<u>95003004</u>	12
F	0.2570	1-7/16"	2-5/8"	<u>95003005</u>	12
G	0.2610	1-7/16"	2-5/8"	<u>95003006</u>	12
Н	0.2660	1-1/2"	2-11/16"	<u>95003007</u>	12
I I	0.2720	1-1/2"	2-11/16"	<u>95003008</u>	12
J	0.2770	1-1/2"	2-11/16"	<u>95003009</u>	12
K	0.2810	1-1/2"	2-11/16"	<u>95003010</u>	12
L	0.2900	1-9/16"	2-3/4"	<u>95003011</u>	12
М	0.2950	1-9/16"	2-3/4"	<u>95003012</u>	12
N	0.3020	1-5/8"	2-13/16"	<u>95003013</u>	12
0	0.3160	1-11/16"	2-15/16"	<u>95003014</u>	6
P	0.3230	1-11/16"	2-15/16"	<u>95003015</u>	6
Q	0.3320	1-11/16"	3"	<u>95003016</u>	6
R	0.3390	1-11/16"	3"	<u>95003017</u>	6
S	0.3480	1-3/4"	3-1/16"	<u>95003018</u>	6
Т	0.3580	1-3/4"	3-1/16"	<u>95003019</u>	6
U	0.3680	1-13/16"	3-1/8"	<u>95003020</u>	6
v	0.3770	1-7/8"	3-1/4"	<u>95003021</u>	6
W	0.3860	1-7/8"	3-1/4"	95003022	6
Х	0.3970	1-15/16"	3-5/16"	<u>95003023</u>	6
Υ	0.4040	1-15/16"	3-5/16"	<u>95003024</u>	6
Z	0.4130	2"	3-3/8"	<u>95003025</u>	6

## **SERIES SH501**BLACK DXIDE 135° HEAVY DUTY





- Industrial-Grade NAS High Speed Steel (HSS)
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Cast Iron
- Steel Alloy

### FRACTIONAL SIZES

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP Quantity
1/16	0.0625	5/8"	1-5/8"	95001860	12
5/64	0.0781	11/16"	1-11/16"	95001861	12
3/32	0.0938	3/4"	1-3/4"	95001862	12
7/64	0.1094	13/16"	1-13/16"	95001863	12
1/8	0.1250	7/8"	1-7/8"	95001864	12
9/64	0.1406	15/16"	1-15/16"	95001865	12
5/32	0.1562	1"	2-1/16"	95001866	12
11/64	0.1719	1-1/16"	2-1/8"	95001867	12
3/16	0.1875	1-1/8"	2-3/16"	95001868	12
13/64	0.2031	1-3/16"	2-1/4"	95001869	12
7/32	0.2188	1-1/4"	2-3/8"	<u>95001870</u>	12
15/64	0.2334	1-5/16"	2-7/16"	<u>95001871</u>	12
1/4	0.2500	1-3/8"	2-1/2"	<u>95001872</u>	12
17/64	0.2656	1-7/16"	2-5/8"	<u>95001873</u>	12
9/32	0.2812	1-1/2"	2-11/16"	<u>95001874</u>	12
19/64	0.2969	1-9/16"	2-3/4"	<u>95001875</u>	12
5/16	0.3125	1-5/8"	2-13/16"	<u>95001876</u>	6
21/64	0.3281	1-11/16"	2-15/16"	<u>95001877</u>	6
11/32	0.3438	1-11/16"	3"	<u>95001878</u>	6
23/64	0.3594	1-3/4"	3-1/16"	<u>95001879</u>	6
3/8	0.3750	1-13/16"	3-1/8"	<u>95001880</u>	6
25/64	0.3906	1-7/8"	3-1/4"	<u>95001881</u>	6
13/32	0.4062	1-15/16"	3-5/16"	<u>95001882</u>	6
27/64	0.4219	2"	3-3/8"	95001883	6
7/16	0.4375	2-1/16"	3-7/16"	<u>95001884</u>	6
29/64	0.4531	2-1/8"	3-9/16"	<u>95001885</u>	6
15/32	0.4688	2-1/8"	3-5/8"	<u>95001886</u>	6
31/64	0.4844	2-3/16"	3-11/16"	<u>95001887</u>	6
1/2	0.5000	2-1/4"	3-3/4"	<u>95001888</u>	6

Drill bits from 7/64" to 1/2" are Split Point

# **SERIES SH501 BLACK OXIDE 135° HEAVY DUTY**





- Industrial-Grade NAS High Speed Steel (HSS)
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Cast Iron
- Steel Alloy



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WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY		WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
#1	0.2280	1-5/16"	2-7/16"	95001800	12		#31	0.1200	7/8"	1-7/8"	95001830	12
#2	0.2210	1-5/16"	2-7/16"	<u>95001801</u>	12		#32	0.1160	7/8"	1-7/8"	95001831	12
#3	0.2130	1-1/4"	2-3/8"	95001802	12	500	#33	0.1130	7/8"	1-7/8"	95001832	12
#4	0.2090	1-1/4"	2-3/8"	95001803	12	00	#34	0.1110	7/8"	1-7/8"	95001833	12
#5	0.2055	1-1/4"	2-3/8"	95001804	12	00	#35	0.1100	7/8"	1-7/8"	95001834	12
#6	0.2040	1-1/4"	2-3/8"	95001805	12		#36	0.1065	13/16"	1-13/16"	95001835	12
#7	0.2010	1-3/16"	2-1/4"	<u>95001806</u>	12		#37	0.1040	13/16"	1-13/16"	95001836	12
#8	0.1990	1-3/16"	2-1/4"	95001807	12		#38	0.1015	13/16"	1-13/16"	95001837	12
#9	0.1960	1-3/16"	2-1/4"	95001808	12	00	#39	0.0995	13/16"	1-13/16"	95001838	12
#10	0.1935	1-3/16"	2-1/4"	95001809	12	OC	#40	0.0980	13/16"	1-13/16"	95001839	12
#11	0.1910	1-3/16"	2-1/4"	95001810	12		#41	0.0960	13/16"	1-13/16"	95001840	12
#12	0.1890	1-3/16"	2-1/4"	<u>95001811</u>	12		#42	0.0935	3/4"	1-3/4"	95001841	12
#13	0.1850	1-1/8"	2-3/16"	95001812	12		#43	0.0890	3/4"	1-3/4"	95001842	12
#14	0.1820	1-1/8"	2-3/16"	95001813	12	00	#44	0.0860	3/4"	1-3/4"	95001843	12
#15	0.1800	1-1/8"	2-3/16"	95001814	12		#45	0.0820	3/4"	1-3/4"	95001844	12
#16	0.1770	1-1/8"	2-3/16"	<u>95001815</u>	12		#46	0.0810	3/4"	1-3/4"	95001845	12
#17	0.1730	1-1/8"	2-3/16"	95001816	12		#47	0.0785	11/16"	1-11/16"	95001846	12
#18	0.1695	1-1/16"	2-1/8"	95001817	12	00	#48	0.0760	11/16"	1-11/16"	95001847	12
#19	0.1660	1-1/16"	2-1/8"	<u>95001818</u>	12	00	#49	0.0730	11/16"	1-11/16"	95001848	12
#20	0.1610	1-1/16"	2-1/8"	<u>95001819</u>	12		#50	0.0700	11/16"	1-11/16"	95001849	12
#21	0.1590	1-1/16"	2-1/8"	<u>95001820</u>	12		#51	0.0670	11/16"	1-11/16"	<u>95001850</u>	12
#22	0.1570	1-1/16"	2-1/8"	95001821	12		#52	0.0635	11/16"	1-11/16"	95001851	12
#23	0.1540	1"	2-1/16"	95001822	12	00	#53	0.0595	5/8"	1-5/8"	95001852	12
#24	0.1520	1"	2-1/16"	95001823	12	00	#54	0.0550	5/8"	1-5/8"	95001853	12
#25	0.1495	1"	2-1/16"	95001824	12		#55	0.0520	5/8"	1-5/8"	95001854	12
#26	0.1470	1"	2-1/16"	95001825	12	000	#56	0.0465	1/2"	1-3/8"	95001855	12
#27	0.1440	1"	2-1/16"	95001826	12		#57	0.0430	1/2"	1-3/8"	95001856	12
#28	0.1405	15/16"	1-15/16"	95001827	12	0.0	#58	0.0420	1/2"	1-3/8"	95001857	12
#29	0.1360	15/16"	1-15/16"	95001828	12	00	#59	0.0410	1/2"	1-3/8"	95001858	12
#30	0.1285	15/16"	1-15/16"	95001829	12		#60	0.0400	1/2"	1-3/8"	95001859	12

Drill bits from #1 to #52 are Split Point



# **SERIES SH501 BLACK OXIDE 135° HEAVY DUTY**





- Industrial-Grade NAS High Speed Steel (HSS)
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Cast Iron
- Steel Alloy

### LETTER SIZES

LETTER Sizes	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY
A	0.2340	1-5/16"	2-7/16"	95006450	12
В	0.2380	1-3/8"	2-1/2"	95006451	12
C	0.2420	1-3/8"	2-1/2"	95006452	12
D	0.2460	1-3/8"	2-1/2"	95006453	12
E	0.2500	1-3/8"	2-1/2"	95006454	12
F	0.2570	1-7/16"	2-5/8"	95006455	12
G	0.2610	1-7/16"	2-5/8"	95006456	12
Н	0.2660	1-1/2"	2-11/16"	95006457	12
n 	0.2720	1-1/2"	2-11/16"	95006458	12
J	0.2720	1-1/2"	2-11/16"	95006459	12
K	0.2810	1-1/2"	2-11/16"	95006460	12
L	0.2900	1-9/16"	2-3/4"	95006461	12
M	0.2950	1-9/16"	2-3/4"	95006462	12
N	0.3020	1-5/8"	2-13/16"		12
	0.3020	1-5/8	2-13/16"	95006463	
0				95006464	6
P	0.3230	1-11/16"	2-15/16"	95006465	6
Q	0.3320	1-11/16"	3"	95006466	6
R	0.3390	1-11/16"	3"	95006467	6
S -	0.3480	1-3/4"	3-1/16"	95006468	6
T	0.3580	1-3/4"	3-1/16"	95006469	6
U	0.3680	1-13/16"	3-1/8"	95006470	6
V	0.3770	1-7/8"	3-1/4"	95006471	6
W	0.3860	1-7/8"	3-1/4"	95006472	6
Х	0.3970	1-15/16"	3-5/16"	95006473	6
Υ	0.4040	1-15/16"	3-5/16"	95006474	6
Z	0.4130	2"	3-3/8"	<u>95006475</u>	6

### **SERIES 5C514 COBALT 135° HEAVY DUTY**





- Produced from industrial-grade NAS Cobalt steel
- Superior red hardness for high temperature applications
- Less end load pressure required
- Split Point penetrates on contact and prevents "walking" of the bit



### **MATERIAL APPLICATION**

- Steel (low and medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP Quantity
1/16	0.0625	5/8"	1-5/8"	<u>95001746</u>	12
5/64	0.0781	11/16"	1-11/16"	95001747	12
3/32	0.0938	3/4"	1-3/4"	95001748	12
7/64	0.1094	13/16"	1-13/16"	95001749	12
1/8	0.1250	7/8"	1-7/8"	<u>95001750</u>	12
9/64	0.1406	15/16"	1-15/16"	95001763	12
5/32	0.1562	1"	2-1/16"	<u>95001751</u>	12
11/64	0.1719	1-1/16"	2-1/8"	<u>95001764</u>	12
3/16	0.1875	1-1/8"	2-3/16"	95001752	12
13/64	0.2031	1-3/16"	2-1/4"	<u>95001765</u>	12
7/32	0.2188	1-1/4"	2-3/8"	95001753	12
15/64	0.2334	1-5/16"	2-7/16"	<u>95001766</u>	12
1/4	0.2500	1-3/8"	2-1/2"	<u>95001754</u>	12
17/64	0.2656	1-7/16"	2-5/8"	<u>95001767</u>	12
9/32	0.2812	1-1/2"	2-11/16"	<u>95001755</u>	12
19/64	0.2969	1-9/16"	2-3/4"	95001768	12
5/16	0.3125	1-5/8"	2-13/16"	<u>95001756</u>	6
21/64	0.3281	1-11/16"	2-15/16"	<u>95001769</u>	6
11/32	0.3438	1-11/16"	3"	<u>95001757</u>	6
23/64	0.3594	1-3/4"	3-1/16"	<u>95001770</u>	6
3/8	0.3750	1-13/16"	3-1/8"	<u>95001758</u>	6
25/64	0.3906	1-7/8"	3-1/4"	<u>95001771</u>	6
13/32	0.4062	1-15/16"	3-5/16"	<u>95001759</u>	6
27/64	0.4219	2"	3-3/8"	95001772	6
7/16	0.4375	2-1/16"	3-7/16"	<u>95001760</u>	6
29/64	0.4531	2-1/8"	3-9/16"	<u>95001773</u>	6
15/32	0.4688	2-1/8"	3-5/8"	<u>95001761</u>	6
31/64	0.4844	2-3/16"	3-11/16"	95001774	6
1/2	0.5000	2-1/4"	3-3/4"	95001762	6

## SERIES SC514 COBALT 135° HEAVY DUTY





- Produced from industrial-grade NAS Cobalt steel
- Superior red hardness for high temperature applications
- Less end load pressure required
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Steel (low and medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



WIRE SIZES

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY		WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
#1	0.2280	1-5/16"	2-7/16"	95006300	12	NO C	#31	0.1200	7/8"	1-7/8"	95006330	12
#2	0.2210	1-5/16"	2-7/16"	<u>95006301</u>	12	00	#32	0.1160	7/8"	1-7/8"	95006331	12
#3	0.2130	1-1/4"	2-3/8"	95006302	12	50	#33	0.1130	7/8"	1-7/8"	95006332	12
#4	0.2090	1-1/4"	2-3/8"	95006303	12		#34	0.1110	7/8"	1-7/8"	95006333	12
#5	0.2055	1-1/4"	2-3/8"	95006304	12	XX	#35	0.1100	7/8"	1-7/8"	95006334	12
#6	0.2040	1-1/4"	2-3/8"	95006305	12		#36	0.1065	13/16"	1-13/16"	95006335	12
#7	0.2010	1-3/16"	2-1/4"	<u>95006306</u>	12		#37	0.1040	13/16"	1-13/16"	95006336	12
#8	0.1990	1-3/16"	2-1/4"	95006307	12	30	#38	0.1015	13/16"	1-13/16"	95006337	12
#9	0.1960	1-3/16"	2-1/4"	95006308	12	<b>OC</b>	#39	0.0995	13/16"	1-13/16"	95006338	12
#10	0.1935	1-3/16"	2-1/4"	<u>95006309</u>	12	XX	#40	0.0980	13/16"	1-13/16"	95006339	12
#11	0.1910	1-3/16"	2-1/4"	95006310	12		#41	0.0960	13/16"	1-13/16"	95006340	12
#12	0.1890	1-3/16"	2-1/4"	<u>95006311</u>	12		#42	0.0935	3/4"	1-3/4"	95006341	12
#13	0.1850	1-1/8"	2-3/16"	95006312	12	56	#43	0.0890	3/4"	1-3/4"	95006342	12
#14	0.1820	1-1/8"	2-3/16"	95006313	12	OC	#44	0.0860	3/4"	1-3/4"	<u>95006343</u>	12
#15	0.1800	1-1/8"	2-3/16"	95006314	12		#45	0.0820	3/4"	1-3/4"	95006344	12
#16	0.1770	1-1/8"	2-3/16"	<u>95006315</u>	12		#46	0.0810	3/4"	1-3/4"	<u>95006345</u>	12
#17	0.1730	1-1/8"	2-3/16"	<u>95006316</u>	12	00	#47	0.0785	11/16"	1-11/16"	95006346	12
#18	0.1695	1-1/16"	2-1/8"	<u>95006317</u>	12		#48	0.0760	11/16"	1-11/16"	95006347	12
#19	0.1660	1-1/16"	2-1/8"	95006318	12	ZO C	#49	0.0730	11/16"	1-11/16"	<u>95006348</u>	12
#20	0.1610	1-1/16"	2-1/8"	<u>95006319</u>	12		#50	0.0700	11/16"	1-11/16"	95006349	12
#21	0.1590	1-1/16"	2-1/8"	<u>95006320</u>	12		#51	0.0670	11/16"	1-11/16"	<u>95006376</u>	12
#22	0.1570	1-1/16"	2-1/8"	95006321	12	50	#52	0.0635	11/16"	1-11/16"	95006377	12
#23	0.1540	1"	2-1/16"	95006322	12		#53	0.0595	5/8"	1-5/8"	<u>95006378</u>	12
#24	0.1520	1"	2-1/16"	95006323	12	OC	#54	0.0550	5/8"	1-5/8"	95006379	12
#25	0.1495	1"	2-1/16"	95006324	12		#55	0.0520	5/8"	1-5/8"	95006380	12
#26	0.1470	1"	2-1/16"	<u>95006325</u>	12	00	#56	0.0465	1/2"	1-3/8"	95006381	12
#27	0.1440	1"	2-1/16"	95006326	12	00	#57	0.0430	1/2"	1-3/8"	95006382	12
#28	0.1405	15/16"	1-15/16"	95006327	12	000	#58	0.0420	1/2"	1-3/8"	95006383	12
#29	0.1360	15/16"	1-15/16"	95006328	12	No c	#59	0.0410	1/2"	1-3/8"	95006384	12
#30	0.1285	15/16"	1-15/16"	95006329	12	0,0	#60	0.0400	1/2"	1-3/8"	95006385	12

Drill bits from #1 to #52 are Split Point

### SERIES SC514 COBALT 135° HEAVY DUTY



- Produced from industrial-grade NAS Cobalt steel
- Superior red hardness for high temperature applications
- Less end load pressure required
- Split Point penetrates on contact and prevents "walking" of the bit

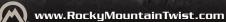


### **MATERIAL APPLICATION**

- Steel (low and medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys

### LETTER SIZES

LETTER SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL Length	PART Number	SHIP Quantity
А	0.2340	1-5/16"	2-7/16"	<u>95006350</u>	12
В	0.2380	1-3/8"	2-1/2"	<u>95006351</u>	12
С	0.2420	1-3/8"	2-1/2"	95006352	12
D	0.2460	1-3/8"	2-1/2"	95006353	12
E	0.2500	1-3/8"	2-1/2"	<u>95006354</u>	12
F	0.2570	1-7/16"	2-5/8"	<u>95006355</u>	12
G	0.2610	1-7/16"	2-5/8"	<u>95006356</u>	12
Н	0.2660	1-1/2"	2-11/16"	<u>95006357</u>	12
I I	0.2720	1-1/2"	2-11/16"	<u>95006358</u>	12
J	0.2770	1-1/2"	2-11/16"	<u>95006359</u>	12
K	0.2810	1-1/2"	2-11/16"	<u>95006360</u>	12
L	0.2900	1-9/16"	2-3/4"	<u>95006361</u>	12
М	0.2950	1-9/16"	2-3/4"	<u>95006362</u>	12
N	0.3020	1-5/8"	2-13/16"	<u>95006363</u>	12
0	0.3160	1-11/16"	2-15/16"	<u>95006364</u>	6
P	0.3230	1-11/16"	2-15/16"	<u>95006365</u>	6
Q	0.3320	1-11/16"	3"	<u>95006366</u>	6
R	0.3390	1-11/16"	3"	<u>95006367</u>	6
S	0.3480	1-3/4"	3-1/16"	<u>95006368</u>	6
Т	0.3580	1-3/4"	3-1/16"	<u>95006369</u>	6
U	0.3680	1-13/16"	3-1/8"	<u>95006370</u>	6
V	0.3770	1-7/8"	3-1/4"	<u>95006371</u>	6
W	0.3860	1-7/8"	3-1/4"	<u>95006372</u>	6
Х	0.3970	1-15/16"	3-5/16"	<u>95006373</u>	6
Υ	0.4040	1-15/16"	3-5/16"	<u>95006374</u>	6
Z	0.4130	2"	3-3/8"	<u>95006375</u>	6



## Series 127-XP COBALT 127° HEAVY DUTY





- Exclusively engineered with specific design and cutting characteristics
- Improve penetration speed
- TIALN coated

- Reduce thrust load
- Increase productivity
- Deliver premium performance and results

### **MATERIAL APPLICATION**

- Stainless Steel
- Titanium



FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART NUMBER	SHIP Quantity
1/16	0.0625	5/8"	1-5/8"	95007000	12
5/64	0.0781	11/16"	1-11/16"	<u>95007001</u>	12
3/32	0.0938	3/4"	1-3/4"	<u>95007002</u>	12
7/64	0.1094	13/16"	1-13/16"	<u>95007003</u>	12
1/8	0.1250	7/8"	1-7/8"	<u>95007004</u>	12
9/64	0.1406	15/16"	1-15/16"	<u>95007005</u>	12
5/32	0.1562	1"	2-1/16"	<u>95007006</u>	12
11/64	0.1719	1-1/16"	2-1/8"	<u>95007007</u>	12
3/16	0.1875	1-1/8"	2-3/16"	<u>95007008</u>	12
13/64	0.2031	1-3/16"	2-1/4"	<u>95007009</u>	12
7/32	0.2188	1-1/4"	2-3/8"	<u>95007010</u>	12
15/64	0.2334	1-5/16"	2-7/16"	<u>95007011</u>	12
1/4	0.2500	1-3/8"	2-1/2"	95007012	12
17/64	0.2656	1-7/16"	2-5/8"	<u>95007013</u>	12
9/32	0.2812	1-1/2"	2-11/16"	<u>95007014</u>	12
19/64	0.2969	1-9/16"	2-3/4"	<u>95007015</u>	12
5/16	0.3125	1-5/8"	2-13/16"	<u>95007016</u>	6
21/64	0.3281	1-11/16"	2-15/16"	<u>95007017</u>	6
11/32	0.3438	1-11/16"	3"	<u>95007018</u>	6
23/64	0.3594	1-3/4"	3-1/16"	<u>95007019</u>	6
3/8	0.3750	1-13/16"	3-1/8"	<u>95007020</u>	6
25/64	0.3906	1-7/8"	3-1/4"	<u>95007021</u>	6
13/32	0.4062	1-15/16"	3-5/16"	<u>95007022</u>	6
27/64	0.4219	2"	3-3/8"	95007023	6
7/16	0.4375	2-1/16"	3-7/16"	95007024	6
29/64	0.4531	2-1/8"	3-9/16"	<u>95007025</u>	6
15/32	0.4688	2-1/8"	3-5/8"	<u>95007026</u>	6
31/64	0.4844	2-3/16"	3-11/16"	95007027	6
1/2	0.5000	2-1/4"	3-3/4"	<u>95007028</u>	6

## <u>Series 127-XP</u> COBALT 127° HEAVY DUTY





- Exclusively engineered with specific design and cutting characteristics
- Improve penetration speed
- TIALN coated

- Reduce thrust load
- Increase productivity
- Deliver premium performance and results

### **MATERIAL APPLICATION**

- Stainless Steel
- Titanium



#### WIRE 5 I Z E 5

WIRE SIZES	DECIMAL Equivalent	FLUTE Length	OVERALL Length	PART Number	SHIP QUANTITY
#1	0.2280	1-5/16"	2-7/16"	<u>95007100</u>	12
#2	0.2210	1-5/16"	2-7/16"	<u>95007101</u>	12
#3	0.2130	1-1/4"	2-3/8"	95007102	12
#4	0.2090	1-1/4"	2-3/8"	95007103	12
#5	0.2055	1-1/4"	2-3/8"	95007104	12
#6	0.2040	1-1/4"	2-3/8"	95007105	12
#7	0.2010	1-3/16"	2-1/4"	<u>95007106</u>	12
#8	0.1990	1-3/16"	2-1/4"	95007107	12
#9	0.1960	1-3/16"	2-1/4"	95007108	12
#10	0.1935	1-3/16"	2-1/4"	<u>95007109</u>	12
#11	0.1910	1-3/16"	2-1/4"	<u>95007110</u>	12
#12	0.1890	1-3/16"	2-1/4"	95007111	12
#13	0.1850	1-1/8"	2-3/16"	95007112	12
#14	0.1820	1-1/8"	2-3/16"	95007113	12
#15	0.1800	1-1/8"	2-3/16"	95007114	12
#16	0.1770	1-1/8"	2-3/16"	95007115	12
#17	0.1730	1-1/8"	2-3/16"	<u>95007116</u>	12
#18	0.1695	1-1/16"	2-1/8"	95007117	12
#19	0.1660	1-1/16"	2-1/8"	95007118	12
#20	0.1610	1-1/16"	2-1/8"	95007119	12
#21	0.1590	1-1/16"	2-1/8"	95007120	12
#22	0.1570	1-1/16"	2-1/8"	<u>95007121</u>	12
#23	0.1540	1"	2-1/16"	95007122	12
#24	0.1520	1"	2-1/16"	95007123	12
#25	0.1495	1"	2-1/16"	95007124	12
#26	0.1470	1"	2-1/16"	95007125	12
#27	0.1440	1"	2-1/16"	95007126	12
#28	0.1405	15/16"	1-15/16"	95007127	12
#29	0.1360	15/16"	1-15/16"	95007128	12
#30	0.1285	15/16"	1-15/16"	<u>95007129</u>	12

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
#31	0.1200	7/8"	1-7/8"	<u>95007130</u>	12
#32	0.1160	7/8"	1-7/8"	<u>95007131</u>	12
#33	0.1130	7/8"	1-7/8"	95007132	12
#34	0.1110	7/8"	1-7/8"	95007133	12
#35	0.1100	7/8"	1-7/8"	95007134	12
#36	0.1065	13/16"	1-13/16"	95007135	12
#37	0.1040	13/16"	1-13/16"	<u>95007136</u>	12
#38	0.1015	13/16"	1-13/16"	95007137	12
#39	0.0995	13/16"	1-13/16"	<u>95007138</u>	12
#40	0.0980	13/16"	1-13/16"	95007139	12
#41	0.0960	13/16"	1-13/16"	<u>95007140</u>	12
#42	0.0935	3/4"	1-3/4"	95007141	12
#43	0.0890	3/4"	1-3/4"	<u>95007142</u>	12
#44	0.0860	3/4"	1-3/4"	<u>95007143</u>	12
#45	0.0820	3/4"	1-3/4"	95007144	12
#46	0.0810	3/4"	1-3/4"	<u>95007145</u>	12
#47	0.0785	11/16"	1-11/16"	<u>95007146</u>	12
#48	0.0760	11/16"	1-11/16"	95007147	12
#49	0.0730	11/16"	1-11/16"	95007148	12
#50	0.0700	11/16"	1-11/16"	<u>95007149</u>	12
#51	0.0670	11/16"	1-11/16"	<u>95007150</u>	12
#52	0.0635	11/16"	1-11/16"	95007151	12

# Series 127-XP COBALT 127° HEAVY DUTY





- Exclusively engineered with specific design and cutting characteristics
- Improve penetration speed
- TIALN coated

- Reduce thrust load
- Increase productivity
- Deliver premium performance and results

### **MATERIAL APPLICATION**

- Stainless Steel
- Titanium



### LETTER SIZES-

LETTER SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART NUMBER	SHIP Quantity
Α	0.2340	1-5/16"	2-7/16"	95007050	12
В	0.2380	1-3/8"	2-1/2"	<u>95007051</u>	12
C	0.2420	1-3/8"	2-1/2"	<u>95007052</u>	12
D	0.2460	1-3/8"	2-1/2"	<u>95007053</u>	12
E	0.2500	1-3/8"	2-1/2"	<u>95007054</u>	12
F	0.2570	1-7/16"	2-5/8"	<u>95007055</u>	12
G	0.2610	1-7/16"	2-5/8"	<u>95007056</u>	12
Н	0.2660	1-1/2"	2-11/16"	<u>95007057</u>	12
1	0.2720	1-1/2"	2-11/16"	<u>95007058</u>	12
J	0.2770	1-1/2"	2-11/16"	<u>95007059</u>	12
K	0.2810	1-1/2"	2-11/16"	<u>95007060</u>	12
L	0.2900	1-9/16"	2-3/4"	<u>95007061</u>	12
M	0.2950	1-9/16"	2-3/4"	<u>95007062</u>	12
N	0.3020	1-5/8"	2-13/16"	<u>95007063</u>	12
0	0.3160	1-11/16"	2-15/16"	<u>95007064</u>	6
P	0.3230	1-11/16"	2-15/16"	<u>95007065</u>	6
Q	0.3320	1-11/16"	3"	<u>95007066</u>	6
R	0.3390	1-11/16"	3"	<u>95007067</u>	6
S	0.3480	1-3/4"	3-1/16"	<u>95007068</u>	6
Т	0.3580	1-3/4"	3-1/16"	<u>95007069</u>	6
U	0.3680	1-13/16"	3-1/8"	<u>95007070</u>	6
V	0.3770	1-7/8"	3-1/4"	<u>95007071</u>	6
W	0.3860	1-7/8"	3-1/4"	95007072	6
Х	0.3970	1-15/16"	3-5/16"	<u>95007073</u>	6
Υ	0.4040	1-15/16"	3-5/16"	<u>95007074</u>	6
Z	0.4130	2"	3-3/8"	<u>95007075</u>	6

### SERIES 6H500 BRIGHT 6" 135° HEAVY DUTY





- Industrial-Grade NAS High Speed Steel (HSS) constructed for superior strength and run-out characteristics
- Mid length extension for deep holes in confined working conditions
- Split Point penetrates on contact and prevents "walking" of the bit
- NAS 907 Compliant
- One piece construction

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic



FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
1/8	0.1250	1-5/8"	6"	<u>95002100</u>	12
9/64	0.1406	1-3/4"	6"	<u>95002101</u>	12
5/32	0.1562	2"	6"	<u>95002102</u>	12
11/64	0.1719	2-1/8"	6"	<u>95002103</u>	12
3/16	0.1875	2-5/16"	6"	<u>95002104</u>	12
13/64	0.2031	2-7/16"	6"	<u>95002105</u>	12
7/32	0.2188	2-1/2"	6"	<u>95002106</u>	12
15/64	0.2344	2-5/8"	6"	<u>95002107</u>	12
1/4	0.2500	2-3/4"	6"	<u>95002108</u>	12
17/64	0.2656	2-7/8"	6"	<u>95002109</u>	12
9/32	0.2812	2-15/16"	6"	<u>95002110</u>	12
19/64	0.2969	3-1/16"	6"	<u>95002111</u>	12
5/16	0.3125	3-3/16"	6"	<u>95002112</u>	6
21/64	0.3281	3-5/16"	6"	<u>95002113</u>	6
11/32	0.3438	3-7/16"	6"	<u>95002114</u>	6
23/64	0.3594	3-1/2"	6"	<u>95002115</u>	6
3/8	0.3750	3-5/8"	6"	<u>95002116</u>	6
25/64	0.3906	3-3/4"	6"	<u>95002117</u>	6
13/32	0.4062	3-7/8"	6"	<u>95002118</u>	6
27/64	0.4219	3-15/16"	6"	<u>95002119</u>	6
7/16	0.4375	4-1/16"	6"	<u>95002120</u>	6
29/64	0.4531	4-3/16"	6"	<u>95002121</u>	6
15/32	0.4688	4-5/16"	6"	95002122	6
31/64	0.4844	4-3/8"	6"	95002123	6
1/2	0.5000	4-1/2"	6"	95002124	6

### SERIES 6H500 BRIGHT 6" 135° HEAVY DUTY





- Industrial-Grade NAS High Speed Steel (HSS) constructed for superior strength and run-out characteristics
- Mid length extension for deep holes in confined working conditions
- Split Point penetrates on contact and prevents "walking" of the bit
- NAS 907 Compliant
- One piece construction

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic



### WIRE SIZES

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY		WIRE SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY
#1	0.2280	2-5/8"	6"	95002151	12		#20	0.1610	2-1/8"	6"	95002170	12
#2	0.2210	2-5/8"	6"	95002152	12		#21	0.1590	2-1/8"	6"	95002171	12
#3	0.2130	2-1/2"	6"	95002153	12		#22	0.1570	2"	6"	95002172	12
#4	0.2090	2-1/2"	6"	95002154	12		#23	0.1540	2"	6"	95002173	12
#5	0.2055	2-1/2"	6"	95002155	12		#24	0.1520	2"	6"	95002174	12
#6	0.2040	2-1/2"	6"	95002156	12		#25	0.1495	1-7/8"	6"	95002175	12
#7	0.2010	2-7/16"	6"	<u>95002157</u>	12		#26	0.1470	1-7/8"	6"	<u>95002176</u>	12
#8	0.1990	2-7/16"	6"	95002158	12		#27	0.1440	1-7/8"	6"	95002177	12
#9	0.1960	2-7/16"	6"	95002159	12	XX	#28	0.1405	1-3/4"	6"	95002178	12
#10	0.1935	2-7/16"	6"	<u>95002160</u>	12		#29	0.1360	1-3/4"	6"	95002179	12
#11	0.1910	2-5/16"	6"	<u>95002161</u>	12	$\bigcirc$ $\bigcirc$	#30	0.1285	1-5/8"	6"	<u>95002180</u>	12
#12	0.1890	2-5/16"	6"	95002162	12	00	#31	0.1200	1-5/8"	6"	95002181	12
#13	0.1850	2-5/16"	6"	95002163	12		#32	0.1160	1-5/8"	6"	95002182	12
#14	0.1820	2-3/16"	6"	95002164	12	XX	#33	0.1130	1-1/2"	6"	95002183	12
#15	0.1800	2-3/16"	6"	95002165	12		#34	0.1110	1-1/2"	6"	95002184	12
#16	0.1770	2-3/16"	6"	<u>95002166</u>	12		#35	0.1100	1-1/2"	6"	95002185	12
#17	0.1730	2-3/16"	6"	95002167	12		#36	0.1065	1-7/16"	6"	95002186	12
#18	0.1695	2-1/8"	6"	95002168	12		#37	0.1040	1-7/16"	6"	95002187	12
#19	0.1660	2-1/8"	6"	95002169	12		#40	0.0980	1-3/8"	6"	95002190	12

## SERIES 6H501 BLACK OXIDE 6" 135° HEAVY DUTY





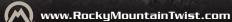
- Industrial-Grade NAS High Speed Steel (HSS) constructed for superior strength and run-out characteristics
- Surface treated for corrosion resistance and increased lubricity
- Mid length extension for deep holes in confined working conditions
- Split Point penetrates on contact and prevents "walking" of the bit
- NAS 907 Compliant
- One piece construction

#### **MATERIAL APPLICATION**

- Cast Iron
- Steel Alloy



FRACTIONAL Sizes	DECIMAL Equivalent	FLUTE Length	OVERALL Length	PART Number	SHIP Quantity
1/8	0.1250	1-5/8"	6"	<u>95001904</u>	12
9/64	0.1406	1-3/4"	6"	<u>95001905</u>	12
5/32	0.1562	2"	6"	95001906	12
11/64	0.1719	2-1/8"	6"	<u>95001907</u>	12
3/16	0.1875	2-5/16"	6"	<u>95001908</u>	12
13/64	0.2031	2-7/16"	6"	95001909	12
7/32	0.2188	2-1/2"	6"	<u>95001910</u>	12
15/64	0.2344	2-5/8"	6"	<u>95001911</u>	12
1/4	0.2500	2-3/4"	6"	<u>95001912</u>	12
17/64	0.2656	2-7/8"	6"	<u>95001913</u>	12
9/32	0.2812	2-15/16"	6"	<u>95001914</u>	12
19/64	0.2969	3-1/16"	6"	<u>95001915</u>	12
5/16	0.3125	3-3/16"	6"	<u>95001916</u>	6
21/64	0.3281	3-5/16"	6"	<u>95001917</u>	6
11/32	0.3438	3-7/16"	6"	<u>95001918</u>	6
23/64	0.3594	3-1/2"	6"	<u>95001919</u>	6
3/8	0.3750	3-5/8"	6"	<u>95001920</u>	6
25/64	0.3906	3-3/4"	6"	<u>95001921</u>	6
13/32	0.4062	3-7/8"	6"	<u>95001922</u>	6
27/64	0.4219	3-15/16"	6"	<u>95001923</u>	6
7/16	0.4375	4-1/16"	6"	<u>95001924</u>	6
29/64	0.4531	4-3/16"	6"	<u>95001925</u>	6
15/32	0.4688	4-5/16"	6"	<u>95001926</u>	6
31/64	0.4844	4-3/8"	6"	<u>95001927</u>	6
1/2	0.5000	4-1/2"	6"	<u>95001928</u>	6



## SERIES 6H501 BLACK OXIDE 6" 135° HEAVY DUTY





- Industrial-Grade NAS High Speed Steel (HSS) constructed for superior strength and run-out characteristics
- Surface treated for corrosion resistance and increased lubricity
- Mid length extension for deep holes in confined working conditions

- Split Point penetrates on contact and prevents "walking" of the bit
- NAS 907 Compliant
- One piece construction

#### **MATERIAL APPLICATION**

- Cast Iron
- Steel Alloy

### WIRE 5 IZES

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY		WIRE SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY
#1	0.2280	2-5/8"	6"	95005800	12		#20	0.1610	2-1/8"	6"	95005819	12
#2	0.2210	2-5/8"	6"	95005801	12		#21	0.1590	2-1/8"	6"	95005820	12
#3	0.2130	2-1/2"	6"	95005802	12		#22	0.1570	2"	6"	<u>95005821</u>	12
#4	0.2090	2-1/2"	6"	95005803	12		#23	0.1540	2"	6"	95005822	12
#5	0.2055	2-1/2"	6"	95005804	12		#24	0.1520	2"	6"	95005823	12
#6	0.2040	2-1/2"	6"	95005805	12		#25	0.1495	1-7/8"	6"	95005824	12
#7	0.2010	2-7/16"	6"	95005806	12		#26	0.1470	1-7/8"	6"	95005825	12
#8	0.1990	2-7/16"	6"	95005807	12		#27	0.1440	1-7/8"	6"	95005826	12
#9	0.1960	2-7/16"	6"	95005808	12	ŽÓ.C	#28	0.1405	1-3/4"	6"	95005827	12
#10	0.1935	2-7/16"	6"	95005809	12	XX	#29	0.1360	1-3/4"	6"	95005828	12
#11	0.1910	2-5/16"	6"	95005810	12	$\circ \circ$	#30	0.1285	1-5/8"	6"	95005829	12
#12	0.1890	2-5/16"	6"	95005811	12		#31	0.1200	1-5/8"	6"	95005830	12
#13	0.1850	2-5/16"	6"	95005812	12		#32	0.1160	1-5/8"	6"	95005831	12
#14	0.1820	2-3/16"	6"	95005813	12	XX	#33	0.1130	1-1/2"	6"	95005832	12
#15	0.1800	2-3/16"	6"	95005814	12		#34	0.1110	1-1/2"	6"	95005833	12
#16	0.1770	2-3/16"	6"	95005815	12		#35	0.1100	1-1/2"	6"	95005834	12
#17	0.1730	2-3/16"	6"	95005816	12		#36	0.1065	1-7/16"	6"	95005835	12
#18	0.1695	2-1/8"	6"	95005817	12		#37	0.1040	1-7/16"	6"	95005836	12
#19	0.1660	2-1/8"	6"	95005818	12	XX	#40	0.0980	1-3/8"	6"	95005837	12

### SERIES 6C514 COBALT 6" 135° HEAVY DUTY





- Produced from industrial-grade NAS Cobalt steel
- Superior red hardness for high temperature applications
- Less end load pressure required
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Steel (low and medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP Quantity
1/16	0.0625	7/8"	6"	95005896	12
5/64	0.0781	1"	6"	95005897	12
3/32	0.0938	1-1/4"	6"	95005898	12
7/64	0.1094	1-1/2"	6"	95005899	12
1/8	0.1250	1-5/8"	6"	95005900	12
9/64	0.1406	1-3/4"	6"	<u>95005901</u>	12
5/32	0.1562	2"	6"	95005902	12
11/64	0.1719	2-1/8"	6"	95005903	12
3/16	0.1875	2-5/16"	6"	95005904	12
13/64	0.2031	2-7/16"	6"	<u>95005905</u>	12
7/32	0.2188	2-1/2"	6"	95005906	12
15/64	0.2344	2-5/8"	6"	<u>95005907</u>	12
1/4	0.2500	2-3/4"	6"	<u>95005908</u>	12
5/16	0.3125	3-3/16"	6"	95005912	6

### SERIES 6C514 COBALT 6" 135° HEAVY DUTY

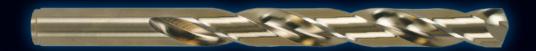




- Produced from industrial-grade NAS Cobalt steel
- Superior red hardness for high temperature applications
- Less end load pressure required
- Split Point penetrates on contact and prevents "walking" of the bit

### **MATERIAL APPLICATION**

- Steel (low and medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



WIRE SIZES

WIRE SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY		WIRE SIZES	DECIMAL EQUIVALENT	FLUTE LENGTH	OVERALL LENGTH	PART Number	SHIP QUANTITY
#1	0.2280	2-5/8"	6"	95005950	12		#20	0.1610	2-1/8"	6"	95005969	12
#2	0.2210	2-5/8"	6"	<u>95005951</u>	12		#21	0.1590	2-1/8"	6"	95005970	12
#3	0.2130	2-1/2"	6"	95005952	12		#22	0.1570	2"	6"	95005971	12
#4	0.2090	2-1/2"	6"	95005953	12		#23	0.1540	2"	6"	95005972	12
#5	0.2055	2-1/2"	6"	95005954	12		#24	0.1520	2"	6"	95005973	12
#6	0.2040	2-1/2"	6"	95005955	12		#25	0.1495	1-7/8"	6"	95005974	12
#7	0.2010	2-7/16"	6"	<u>95005956</u>	12		#26	0.1470	1-7/8"	6"	95005975	12
#8	0.1990	2-7/16"	6"	95005957	12		#27	0.1440	1-7/8"	6"	95005976	12
#9	0.1960	2-7/16"	6"	95005958	12	XX	#28	0.1405	1-3/4"	6"	95005977	12
#10	0.1935	2-7/16"	6"	95005959	12		#29	0.1360	1-3/4"	6"	95005978	12
#11	0.1910	2-5/16"	6"	<u>95005960</u>	12	00	#30	0.1285	1-5/8"	6"	95005979	12
#12	0.1890	2-5/16"	6"	95005961	12	$\circ \circ$	#31	0.1200	1-5/8"	6"	95005980	12
#13	0.1850	2-5/16"	6"	95005962	12		#32	0.1160	1-5/8"	6"	95005981	12
#14	0.1820	2-3/16"	6"	95005963	12	XX	#33	0.1130	1-1/2"	6"	95005982	12
#15	0.1800	2-3/16"	6"	95005964	12		#34	0.1110	1-1/2"	6"	95005983	12
#16	0.1770	2-3/16"	6"	95005965	12		#35	0.1100	1-1/2"	6"	95005984	12
#17	0.1730	2-3/16"	6"	95005966	12		#36	0.1065	1-7/16"	6"	95005985	12
#18	0.1695	2-1/8"	6"	95005967	12		#37	0.1040	1-7/16"	6"	95005986	12
#19	0.1660	2-1/8"	6"	95005968	12		#40	0.0980	1-3/8"	6"	95005987	12

### SERIES 12H501 BLACK OXIDE 12" 135° HEAVY DUTY



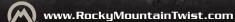


- Industrial-Grade NAS High Speed Steel (HSS) constructed for superior strength and run-out characteristics
- Surface treated for corrosion resistance and increased lubricity
- Mid length extension for deep holes in confined working conditions
- Split Point penetrates on contact and prevents "walking" of the bit
- NAS 907 Compliant
- One piece construction

#### **MATERIAL APPLICATION**

- Cast Iron
- Steel Alloy

FRACTIONAL Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP Quantity
1/8	0.1250	1-5/8"	12"	<u>95001951</u>	12
5/32	0.1562	2"	12"	95001952	12
3/16	0.1875	2-5/16"	12"	<u>95001953</u>	12
7/32	0.2188	2-1/2"	12"	<u>95001954</u>	12
1/4	0.2500	2-3/4"	12"	<u>95001955</u>	12
9/32	0.2812	2-15/16"	12"	<u>95001956</u>	12
5/16	0.3125	3-3/16"	12"	<u>95001957</u>	6
11/32	0.3438	3-7/16"	12"	<u>95001958</u>	6
3/8	0.3750	3-5/8"	12"	95001959	6
13/32	0.4062	3-7/8"	12"	<u>95001960</u>	6
7/16	0.4375	4-1/16"	12"	<u>95001961</u>	6
15/32	0.4688	4-5/16"	12"	<u>95001962</u>	6
1/2	0.5000	4-1/2"	12"	<u>95001963</u>	6



## BLACK & SILVER 118° GENERAL PURPOSE

- 1/2" Round Shank
- 3" Flute / 6" Overall Length
- Industrial-Grade AISI High Speed Steel
- Excellent general use drill bit
- Surface treated for corrosion resistance and increased lubricity
- Oil treated finish ideal for drilling in various types of metals

### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Wood
- Plastic
- Mild SteelSheet Metal



Fractional Sizes	DECIMAL Equivalent	PART Number	SHIP Quantity
33/64	0.5156	<u>95004750</u>	1
17/32	0.5312	<u>95005750</u>	1
35/64	0.5468	<u>95004751</u>	1
9/16	0.5625	<u>95005751</u>	1
37/64	0.5781	<u>95004752</u>	1
19/32	0.5937	<u>95005752</u>	1
39/64	0.6093	<u>95004753</u>	1
5/8	0.6250	95005753	1
41/64	0.6406	<u>95004754</u>	1
21/32	0.6562	<u>95005754</u>	1
43/64	0.6718	<u>95004755</u>	1
11/16	0.6875	<u>95005755</u>	1
45/64	0.7031	<u>95004756</u>	1
23/32	0.7187	<u>95005756</u>	1
47/64	0.7343	<u>95004757</u>	1
3/4	0.7500	<u>95005757</u>	1

FRACTIONAL SIZES	DECIMAL Equivalent	PART Number	SHIP Quantity
49/64	0.7656	95004758	1
25/32	0.7812	95005758	1
51/64	0.7968	95004759	1
13/16	0.8125	95005759	1
53/64	0.8281	95004760	1
27/32	0.8437	95005760	1
55/64	0.8593	95004761	1
7/8	0.8750	95005761	1
57/64	0.8906	95004762	1
29/32	0.9062	<u>95005762</u>	1
59/64	0.9218	95004763	1
15/16	0.9375	95005763	1
61/64	0.9531	95004764	1
31/32	0.9687	95005764	1
63/64	0.9843	<u>95004765</u>	1
1	1.0000	95005765	1

# **COBALT**118° GENERAL PURPOSE



- 1/2" Round Shank
- 3" Flute / 6" Overall Length
- Produced from industrial-grade AISI Cobalt steel (HSCO)
- Superior red hardness for high temperature applications
- Less end load pressure required

### **MATERIAL APPLICATION**

- Aluminum
- Cast Iron
- Steel Alloy



Fractional Sizes	DECIMAL Equivalent	PART Number	SHIP Quantity		FRACTIONAL Sizes	DECIMAL Equivalent	PART Number	SHIP QUANTITY
33/64	0.5156	<u>95004766</u>	1		49/64	0.7656	<u>95004774</u>	1
17/32	0.5312	<u>95005766</u>	1		25/32	0.7812	<u>95005774</u>	1
35/64	0.5468	<u>95004767</u>	1	500	51/64	0.7968	<u>95004775</u>	1
9/16	0.5625	<u>95005767</u>	1		13/16	0.8125	<u>95005775</u>	1
37/64	0.5781	<u>95004768</u>	1	00	53/64	0.8281	<u>95004776</u>	1
19/32	0.5937	<u>95005768</u>	1	100	27/32	0.8437	<u>95005776</u>	1
39/64	0.6093	95004769	1		55/64	0.8593	<u>95004777</u>	1
5/8	0.6250	<u>95005769</u>	1		7/8	0.8750	<u>95005777</u>	1
41/64	0.6406	<u>95004770</u>	1		57/64	0.8906	<u>95004778</u>	1
21/32	0.6562	<u>95005770</u>	1	00	29/32	0.9062	<u>95005778</u>	1
43/64	0.6718	<u>95004771</u>	1		59/64	0.9218	<u>95004779</u>	1
11/16	0.6875	<u>95005771</u>	1		15/16	0.9375	<u>95005779</u>	1
45/64	0.7031	<u>95004772</u>	1		61/64	0.9531	<u>95004780</u>	1
23/32	0.7187	<u>95005772</u>	1	500	31/32	0.9687	<u>95005780</u>	1
47/64	0.7343	<u>95004773</u>	1	00	63/64	0.9843	<u>95004781</u>	1
3/4	0.7500	<u>95005773</u>	1	100	1"	1.0000	<u>95005781</u>	1

## HIGH SPEED STEEL 135° THREADED SHANK





- Industrial-Grade NAS High Speed Steel (HSS) constructed for superior strength and run-out characteristics
- Surface treated for corrosion resistance and increased lubricity
- Split Point penetrates on contact and prevents "walking" of the bit
- Built to NAS 965

#### **MATERIAL APPLICATION**

- Aluminum
- Cast Iron
- Steel Alloy



### FRACTIONAL • WIRE • LETTER SIZES

DRILL SIZES	DECIMAL EQUIVALENT	OVERALL LENGTH	PART Number	SHIP Quantity		DRILL Sizes	DECIMAL EQUIVALENT	OVERALL Length	PART Number	SHIP Quantity
3/32	0.0937	2-1/8"	953HS3/32LS	50		3/8	0.3750	1-1/4"	953HS3/8SS	50
3/32	0.0937	1"	953HS3/32SS	50	00	3/8	0.3750	5/8"	953HS3/8ST	50
3/32	0.0937	1/2"	953HS3/32ST	50	00	#40	0.0980	2-1/8"	953HS40LS	50
3/32	0.0937	13/32"	953HS3/32VS	50		#40	0.0980	1"	953HS40SS	50
1/8	0.1250	2-1/8"	953HS1/8LS	50	XX	#40	0.0980	1/2"	953HS40ST	50
1/8	0.1250	1"	953HS1/8SS	50		#40	0.0980	13/32"	953HS40VS	50
1/8	0.1250	1/2"	953HS1/8ST	50	00	#35	0.1100	2-1/8"	953HS35LS	50
1/8	0.1250	13/32"	953HS1/8VS	50		#35	0.1100	1"	953HS35SS	50
5/32	0.1562	2-1/8"	953HS5/32LS	50		#35	0.1100	1/2"	953HS35ST	50
5/32	0.1562	1-1/4"	953HS5/32SS	50	XO C	#30	0.1285	2-1/8"	953HS30LS	50
5/32	0.1562	9/16"	953HS5/32ST	50	XX	#30	0.1285	1-1/4"	953HS30SS	50
5/32	0.1562	13/32"	953HS5/32VS	50	$\circ \circ$	#30	0.1285	9/16"	953HS30ST	50
3/16	0.1875	2-1/8"	953HS3/16LS	50		#30	0.1285	13/32"	953HS30VS	50
3/16	0.1875	1-1/4"	953HS3/16SS	50		#27	0.1440	2-1/8"	953HS27LS	50
3/16	0.1875	9/16"	953HS3/16ST	50		#27	0.1440	1-1/4"	953HS27SS	50
3/16	0.1875	13/32"	953HS3/16VS	50	XX	#27	0.1440	9/16"	953HS27ST	50
7/32	0.2187	2-1/8"	953HS7/32LS	50		#27	0.1440	13/32"	953HS27VS	50
7/32	0.2187	1-1/4"	953HS7/32SS	50	$\bigcirc$	#21	0.1590	2-1/8"	953HS21LS	50
7/32	0.2187	9/16"	953HS7/32ST	50	00	#21	0.1590	1-1/4"	953HS21SS	50
1/4	0.2500	2-1/8"	953HS1/4LS	50		#21	0.1590	9/16"	953HS21ST	50
1/4	0.2500	1-1/4"	953HS1/4SS	50	XX	#21	0.1590	13/32"	953HS21VS	50
1/4	0.2500	9/16"	953HS1/4ST	50	XX	#20	0.1610	2-1/8"	953HS20LS	50
1/4	0.2500	13/32"	953HS1/4VS	50	90	#20	0.1610	1-1/4"	953HS20SS	50
5/16	0.3125	2-1/8"	953HS5/16LS	50	00	#20	0.1610	9/16"	953HS20ST	50
5/16	0.3125	1-1/4"	953HS5/16SS	50		#20	0.1610	13/32"	953HS20VS	50
5/16	0.3125	5/8"	953HS5/16ST	50	000	#19	0.1660	2-1/8"	953HS19LS	50
3/8	0.3750	2-1/8"	953HS3/8LS	50	OC	#19	0.1660	1-1/4"	<u>953HS19SS</u>	50

# HIGH SPEED STEEL CONTINUED



DRILL Sizes	DECIMAL EQUIVALENT	OVERALL LENGTH	PART Number	SHIP Quantity		DRILL Sizes	DECIMAL EQUIVALENT	OVERALL LENGTH	PART Number	SHIP QUANTITY
#19	0.1660	9/16"	953HS19ST	50		#5	0.2055	1-1/4"	953HS5SS	50
#19	0.1660	13/32"	953HS19VS	50		#5	0.2055	5/8"	953HS5ST	50
#16	0.1770	2-1/8"	953HS16LS	50		#5	0.2055	13/32"	<u>953HS5VS</u>	50
#16	0.1770	1-1/4"	953HS16SS	50		#2	0.2210	2-1/8"	953HS2LS	50
#16	0.1770	9/16"	953HS16ST	50		#2	0.2210	1-1/4"	953HS2SS	50
#16	0.1770	13/32"	953HS16VS	50		#2	0.2210	5/8"	953HS2ST	50
#13	0.1850	2-1/8"	953HS13LS	50		#2	0.2210	13/32"	<u>953HS2VS</u>	50
#13	0.1850	1-1/4"	953HS13SS	50		Α	0.2340	2-1/8"	953HSALS	50
#13	0.1850	9/16"	953HS13ST	50		Α	0.2340	1-1/4"	953HSASS	50
#13	0.1850	13/32"	953HS13VS	50		Α	0.2340	9/16"	953HSAST	50
#11	0.1910	2-1/8"	953HS11LS	50		В	0.2380	2-1/8"	953HSBLS	50
#11	0.1910	1-1/4"	953HS11SS	50		В	0.2380	1-1/4"	953HSBSS	50
#11	0.1910	9/16"	953HS11ST	50		В	0.2380	9/16"	953HSBST	50
#11	0.1910	13/32"	953HS11VS	50		С	0.2420	2-1/8"	953HSCLS	50
#10	0.1935	2-1/8"	953HS10LS	50		C	0.2420	1-1/4"	953HSCSS	50
#10	0.1935	1-1/4"	953HS10SS	50		C	0.2420	9/16"	953HSCST	50
#10	0.1935	9/16"	953HS10ST	50		D	0.2460	2-1/8"	953HSDLS	50
#10	0.1935	13/32"	953HS10VS	50		D	0.2460	1-1/4"	953HSDSS	50
#8	0.1990	2-1/8"	<u>953HS8LS</u>	50		D	0.2460	9/16"	953HSDST	50
#8	0.1990	1-1/4"	<u>953HS8SS</u>	50		D	0.2460	13/32"	953HSDVS	50
#8	0.1990	5/8"	<u>953HS8ST</u>	50		F	0.2570	2-1/8"	953HSFLS	50
#8	0.1990	13/32"	953HS8VS	50	00	F	0.2570	1-1/4"	953HSFSS	50
#7	0.2010	2-1/8"	<u>953HS7LS</u>	50		F	0.2570	9/16"	953HSFST	50
#7	0.2010	1-1/4"	953HS7SS	50	200	F	0.2570	13/32"	953HSFVS	50
#7	0.2010	5/8"	953HS7ST	50		G	0.2610	2-1/8"	953HSGLS	50
#7	0.2010	13/32"	<u>953HS7VS</u>	50		G	0.2610	1-1/4"	953HSGSS	50
#5	0.2055	2-1/8"	<u>953HS5LS</u>	50		G	0.2610	9/16"	953HSGST	50

## COBALT 135° THREADED SHANK





- Produced from Industrial-Grade NAS Cobalt Steel
- Superior red hardness for high temperature applications
- Less end load pressure required

- Split Point penetrates on contact and prevents "walking" of the bit
- Built to NAS 965

#### **MATERIAL APPLICATION**

- Steel (low and medium carbon)
- Steel Alloy
- Stainless Steel
- Strength Alloys



### FRACTIONAL • WIRE • LETTER SIZES

DRILL Sizes	DECIMAL EQUIVALENT	OVERALL Length	PART Number	SHIP Quantity		DRILL Sizes	DECIMAL EQUIVALENT	OVERALL Length	PART Number	SHIP Quantity
3/32	0.0937	2-1/8"	953C03/32LS	50		3/8	0.3750	1-1/4"	953C03/8SS	50
3/32	0.0937	1"	953C03/32SS	50	00	3/8	0.3750	5/8"	953C03/8ST	50
3/32	0.0937	1/2"	953C03/32ST	50	66	#40	0.0980	2-1/8"	953C040LS	50
3/32	0.0937	13/32"	953C03/32VS	50		#40	0.0980	1"	953C040SS	50
1/8	0.1250	2-1/8"	953C01/8LS	50	XX	#40	0.0980	1/2"	953C040ST	50
1/8	0.1250	1"	953C01/8SS	50		#40	0.0980	13/32"	953C040VS	50
1/8	0.1250	1/2"	953C01/8ST	50	00	#35	0.1100	2-1/8"	953C035LS	50
1/8	0.1250	13/32"	953C01/8VS	50		#35	0.1100	1"	953C035SS	50
5/32	0.1562	2-1/8"	953C05/32LS	50		#35	0.1100	1/2"	953C035ST	50
5/32	0.1562	1-1/4"	953C05/32SS	50	) O C	#30	0.1285	2-1/8"	953C030LS	50
5/32	0.1562	9/16"	953C05/32ST	50	XX	#30	0.1285	1-1/4"	953C030SS	50
5/32	0.1562	13/32"	953C05/32VS	50		#30	0.1285	9/16"	953C030ST	50
3/16	0.1875	2-1/8"	953C03/16LS	50		#30	0.1285	13/32"	953C030VS	50
3/16	0.1875	1-1/4"	953C03/16SS	50		#27	0.1440	2-1/8"	953C027LS	50
3/16	0.1875	9/16"	953C03/16ST	50		#27	0.1440	1-1/4"	953C027SS	50
3/16	0.1875	13/32"	953C03/16VS	50	XXC	#27	0.1440	9/16"	953C027ST	50
7/32	0.2187	2-1/8"	953C07/32LS	50		#27	0.1440	13/32"	953C027VS	50
7/32	0.2187	1-1/4"	953C07/32SS	50	$\bigcirc$	#21	0.1590	2-1/8"	953C021LS	50
7/32	0.2187	9/16"	953C07/32ST	50	00	#21	0.1590	1-1/4"	953C021SS	50
1/4	0.2500	2-1/8"	953C01/4LS	50		#21	0.1590	9/16"	953C021ST	50
1/4	0.2500	1-1/4"	953C01/4SS	50	XX	#21	0.1590	13/32"	953C021VS	50
1/4	0.2500	9/16"	953C01/4ST	50	) o c	#20	0.1610	2-1/8"	953C020LS	50
1/4	0.2500	13/32"	953C01/4VS	50		#20	0.1610	1-1/4"	953C020SS	50
5/16	0.3125	2-1/8"	953C05/16LS	50	00	#20	0.1610	9/16"	953C020ST	50
5/16	0.3125	1-1/4"	953C05/16SS	50	00	#20	0.1610	13/32"	953C020VS	50
5/16	0.3125	5/8"	953C05/16ST	50	000	#19	0.1660	2-1/8"	953C019LS	50
3/8"	0.3750	2-1/8"	953C03/8LS	50	OC	#19	0.1660	1-1/4"	<u>953C019SS</u>	50





DRILL Sizes	DECIMAL Equivalent	OVERALL LENGTH	PART Number	SHIP Quantity		DRILL Sizes	DECIMAL EQUIVALENT	OVERALL LENGTH	PART Number	SHIP Quantity
#19	0.1660	9/16"	953C019ST	50		#5	0.2055	1-1/4"	<u>953C05SS</u>	50
#19	0.1660	13/32"	953C019VS	50		#5	0.2055	5/8"	953C05ST	50
#16	0.1770	2-1/8"	953C016LS	50		#5	0.2055	13/32"	953C05VS	50
#16	0.1770	1-1/4"	953C016SS	50		#2	0.2210	2-1/8"	953C02LS	50
#16	0.1770	9/16"	953C016ST	50		#2	0.2210	1-1/4"	953C02SS	50
#16	0.1770	13/32"	953C016VS	50		#2	0.2210	5/8"	953C02ST	50
#13	0.1850	2-1/8"	953C013LS	50		#2	0.2210	13/32"	953C02VS	50
#13	0.1850	1-1/4"	953C013SS	50		Α	0.2340	2-1/8"	953COALS	50
#13	0.1850	9/16"	953C013ST	50		Α	0.2340	1-1/4"	953C0ASS	50
#13	0.1850	13/32"	953C013VS	50		Α	0.2340	9/16"	<u>953COAST</u>	50
#11	0.1910	2-1/8"	953C011LS	50		В	0.2380	2-1/8"	953COBLS	50
#11	0.1910	1-1/4"	953C011SS	50		В	0.2380	1-1/4"	953C0BSS	50
#11	0.1910	9/16"	953C011ST	50		В	0.2380	9/16"	<u>953COBST</u>	50
#11	0.1910	13/32"	953C011VS	50		С	0.2420	2-1/8"	953COCLS	50
#10	0.1935	2-1/8"	953C010LS	50		C	0.2420	1-1/4"	953COCSS	50
#10	0.1935	1-1/4"	953C010SS	50		C	0.2420	9/16"	953COCST	50
#10	0.1935	9/16"	953C010ST	50		D	0.2460	2-1/8"	953CODLS	50
#10	0.1935	13/32"	953C010VS	50		D	0.2460	1-1/4"	953CODSS	50
#8	0.1990	2-1/8"	953C08LS	50		D	0.2460	9/16"	953CODST	50
#8	0.1990	1-1/4"	953C08SS	50		D	0.2460	13/32"	953CODVS	50
#8	0.1990	5/8"	953C08ST	50		F	0.2570	2-1/8"	953C0FLS	50
#8	0.1990	13/32"	953C08VS	50	00	F	0.2570	1-1/4"	953C0FSS	50
#7	0.2010	2-1/8"	953C07LS	50		F	0.2570	9/16"	953C0FST	50
#7	0.2010	1-1/4"	953C07SS	50	200	F	0.2570	13/32"	953C0FVS	50
#7	0.2010	5/8"	953C07ST	50		G	0.2610	2-1/8"	953C0GLS	50
#7	0.2010	13/32"	953C07VS	50		G	0.2610	1-1/4"	953COGSS	50
#5	0.2055	2-1/8"	953C05LS	50		G	0.2610	9/16"	953COGST	50

## 13 PIECE SETS JOBBER LENGTH





- Rugged metal carrying case
- Tip-out storage indexes
- Numbered indexes help keep bits organized Material Application-details on page 3

#### **AVAILABLE IN**

- Bright
- Black Oxide
- Titanium
- Cobalt
- BlackGold™



### FRACTIONAL SIZE SETS

PIECE Count	SIZE RANGE	DRILL BIT FINISH	POINT GEOMETRY	CASE DIMENSIONS	PART Number
13	1/16" to 1/4"	Bright	118° Point	5-1/4"H x 4-1/16"W x 1/2"D	<u>95090800</u>
13	1/16" to 1/4"	Black Oxide	118° Point	5-1/4"H x 4-1/16"W x 1/2"D	<u>95090801</u>
13	1/16" to 1/4"	Black Oxide	135° Split Point *	5-1/4"H x 4-1/16"W x 1/2"D	95090802
13	1/16" to 1/4"	Titanium	135° Split Point *	5-1/4"H x 4-1/16"W x 1/2"D	95090803
13	1/16" to 1/4"	Cobalt	135° Split Point	5-1/4"H x 4-1/16"W x 1/2"D	<u>95090870</u>
13	1/16" to 1/4"	BlackGold™	137° Split Point *	5-1/4"H x 4-1/16"W x 1/2"D	95090804

\*Drill bits from 7/64" to 1/4" are Split Point

# 15 PIECE SETS JOBBER LENGTH





- Rugged metal carrying case
- Tip-out storage indexes
- Numbered indexes help keep bits organized Material Application-details on page 3

### **AVAILABLE IN**

- Bright
- Black Oxide
- Titanium
- Cobalt
- BlackGold™

### FRACTIONAL SIZE SETS

PIECE Count	SIZE Range	DRILL BIT Finish	POINT GEOMETRY	CASE DIMENSIONS	PART Number
15	1/16" to 1/2"	Bright	118° Point	7-1/16"H x 4-1/8"W x 1-1/4"D	<u>95090810</u>
15	1/16" to 1/2"	Black Oxide	118° Point	7-1/16"H x 4-1/8"W x 1-1/4"D	<u>95090811</u>
15	1/16" to 1/2"	Black Oxide	135° Split Point *	7-1/16"H x 4-1/8"W x 1-1/4"D	<u>95090812</u>
15	1/16" to 1/2"	Titanium	135° Split Point *	7-1/16"H x 4-1/8"W x 1-1/4"D	<u>95090813</u>
15	1/16" to 1/2"	Cobalt	135° Split Point	7-1/16"H x 4-1/8"W x 1-1/4"D	<u>95090871</u>
15	1/16" to 1/2"	BlackGold™	137° Split Point *	7-1/16"H x 4-1/8"W x 1-1/4"D	<u>95090814</u>

\*Drill bits from 7/64" to 1/2" are Split Point



# 21 PIECE SETS JOBBER LENGTH

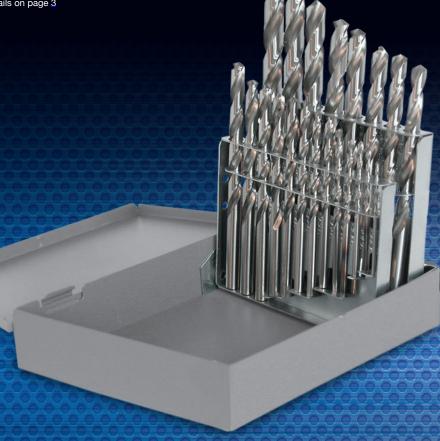




- Rugged metal carrying case
- Tip-out storage indexes
- Numbered indexes help keep bits organized Material Application-details on page 3

### **AVAILABLE IN**

- Bright
- Black Oxide
- Titanium
- Cobalt
- BlackGold™



### FRACTIONAL SIZE SETS

PIECE Count	SIZE RANGE	DRILL BIT FINISH	POINT GEOMETRY	CASE DIMENSIONS	PART Number
21	1/16" to 3/8"	Bright	118° Point	6"H x 4-1/8"W x 1-1/8"D	95090820
21	1/16" to 3/8"	Black Oxide	118° Point	6"H x 4-1/8"W x 1-1/8"D	<u>95090821</u>
21	1/16" to 3/8"	Black Oxide	135° Split Point *	6"H x 4-1/8"W x 1-1/8"D	95090822
21	1/16" to 3/8"	Titanium	135° Split Point *	6"H x 4-1/8"W x 1-1/8"D	95090823
21	1/16" to 3/8"	Cobalt	135° Split Point	6"H x 4-1/8"W x 1-1/8"D	<u>95090872</u>
21	1/16" to 3/8"	BlackGold™	137° Split Point *	6"H x 4-1/8"W x 1-1/8"D	95090824

\*Drill bits from 7/64" to 3/8" are Split Point

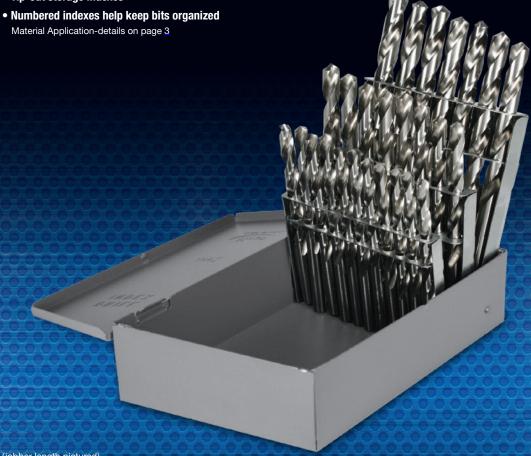




- Rugged metal carrying case
- Tip-out storage indexes

### **AVAILABLE IN**

- Bright
- Black Oxide
- BlackGold™
- Cobalt



(jobber length pictured)

#### LETTER 5 1 Z E 5 E T 5

### **JOBBER LENGTH**

PIECE Count	SIZE RANGE	DRILL BIT Finish	POINT GEOMETRY	CASE DIMENSIONS	PART Number
26	Letter A-Z	Bright	118° Point	7-1/2"H x 4-3/8"W x 2-3/16"D	<u>95090830</u>
26	Letter A-Z	Black Oxide	135° Split Point	7-1/2"H x 4-3/8"W x 2-3/16"D	95090831
26	Letter A-Z	BlackGold™	137° Split Point	7-1/2"H x 4-3/8"W x 2-3/16"D	95090832
26	Letter A-Z	Cobalt	135° Split Point	7-1/2"H x 4-3/8"W x 2-3/16"D	95090873

### **SCREW MACHINE**

PIECE Count	SIZE Range	DRILL BIT FINISH	POINT GEOMETRY	CASE DIMENSIONS	PART NUMBER
26	Letter A-Z	Black Oxide	135° Split Point	7-1/2"H x 4-3/8"W x 2-3/16"D	<u>95090881</u>
26	Letter A-Z	Cobalt	135° Split Point	7-1/2"H x 4-3/8"W x 2-3/16"D	95090879

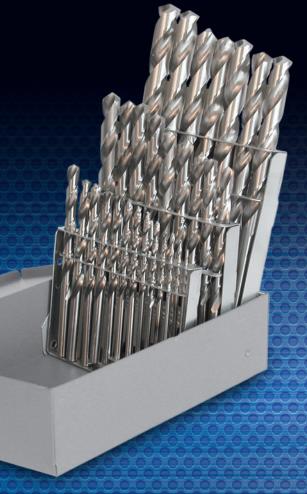




- Rugged metal carrying case
- Tip-out storage indexes
- Numbered indexes help keep bits organized Material Application-details on page 3

### **AVAILABLE IN**

- Bright
- Black Oxide
- Titanium
- Cobalt
- BlackGold™



(jobber length pictured)

#### FRACTIONAL 5 1 Z E 5 E T 5

### **JOBBER LENGTH**

PIECE Count	SIZE RANGE	DRILL BIT FINISH	POINT GEOMETRY	CASE DIMENSIONS	PART Number
29	1/16" to 1/2"	Bright	118° Point	7-1/16"H x 4-1/8"W x 1-13/16"D	95090840
29	1/16" to 1/2"	Black Oxide	118° Point	7-1/16"H x 4-1/8"W x 1-13/16"D	<u>95090841</u>
29	1/16" to 1/2"	Black Oxide	135° Split Point *	7-1/16"H x 4-1/8"W x 1-13/16"D	95090842
29	1/16" to 1/2"	Titanium	135° Split Point *	7-1/16"H x 4-1/8"W x 1-13/16"D	95090843
29	1/16" to 1/2"	Cobalt	135° Split Point	7-1/16"H x 4-1/8"W x 1-13/16"D	<u>95090844</u>
29	1/16" to 1/2"	BlackGold™	137° Split Point *	7-1/16"H x 4-1/8"W x 1-13/16"D	<u>95090845</u>

### **SCREW MACHINE**

PIECE Count	SIZE Range	DRILL BIT Finish	POINT Geometry	CASE Dimensions	PART Number
29	1/16" to 1/2"	Black Oxide	135° Split Point *	7-1/16"H x 4-1/8"W x 1-13/16"D	<u>95090875</u>
29	1/16" to 1/2"	Cobalt	135° Split Point	7-1/16"H x 4-1/8"W x 1-13/16"D	<u>95090877</u>

\*Drill bits from 7/64" to 1/2" are Split Point

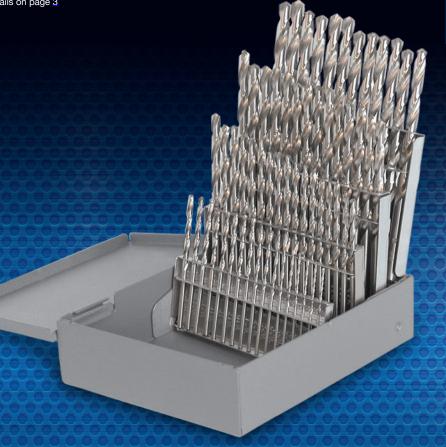




- Rugged metal carrying case
- Tip-out storage indexes
- Numbered indexes help keep bits organized Material Application-details on page 3

### **AVAILABLE IN**

- Bright
- Black Oxide
- Titanium
- Cobalt



(jobber length pictured)

### WIRE SIZE SETS

### **JOBBER LENGTH**

	PIECE COUNT	SIZE RANGE	DRILL BIT Finish	POINT Geometry	CASE DIMENSIONS	PART Number
Ā	60	Wire #1-#60	Bright	118° Point	4-9/16"H x 3-7/16"W x 1-1/8"D	95090850
Ă	60	Wire #1-#60	Black Oxide	135° Split Point *	4-9/16"H x 3-7/16"W x 1-1/8"D	<u>95090851</u>
H	60	Wire #1-#60	Titanium	135° Split Point *	4-9/16"H x 3-7/16"W x 1-1/8"D	<u>95090852</u>
	60	Wire #1-#60	Cobalt	135° Split Point *	4-9/16"H x 3-7/16"W x 1-1/8"D	<u>95090854</u>

### **SCREW MACHINE**

PIECE Count	SIZE RANGE	DRILL BIT Finish	POINT GEOMETRY	CASE DIMENSIONS	PART Number
60	Wire #1-#60	Black Oxide	135° Split Point *	4-9/16"H x 3-7/16"W x 1-1/8"D	95090876
60	Wire #1-#60	Cobalt	135° Split Point *	4-9/16"H x 3-7/16"W x 1-1/8"D	95090878

<sup>\*</sup>Drill bits from #1 to #52 are Split Point







- Rugged metal carrying case
- Tip-out storage indexes
- Numbered indexes help keep bits organized

Material Application-details on page 3

### **AVAILABLE IN**

- Bright
- Black Oxide
- Cobalt



(jobber length pictured)

### COMBINATION SETS

### **JOBBER LENGTH**

PIECE Count	SIZE Range	DRILL BIT Finish	POINT GEOMETRY	CASE DIMENSIONS	PART Number
115	1/16" to 1/2" & A-Z & #1-#60	Bright	118° Point	2-1/4"H x 4-5/8"W x 13-1/4"L	<u>95090860</u>
115	1/16" to 1/2" & A-Z & #1-#60	Black Oxide	135° Split Point *•	2-1/4"H x 4-5/8"W x 13-1/4"L	<u>95090861</u>
115	1/16" to 1/2" & A-Z & #1-#60	Bright	135° Split Point **	2-1/4"H x 4-5/8"W x 13-1/4"L	95090862
115	1/16" to 1/2" & A-Z & #1-#60	Cobalt	135° Split Point •	2-1/4"H x 4-5/8"W x 13-1/4"L	95090874

### **SCREW MACHINE**

PIECE COUNT	SIZE Range	DRILL BIT FINISH	POINT Geometry	CASE Dimensions	PART Number
115	1/16" to 1/2" & A-Z & #1-#60	Black Oxide	135° Split Point *•	2-1/4"H x 4-5/8"W x 13-1/4"L	95090882
115	1/16" to 1/2" & A-Z & #1-#60	Cobalt	135° Split Point •	2-1/4"H x 4-5/8"W x 13-1/4"L	95090880

\*Drill bits from 7/64" to 1/2" are Split Point •Drill bits from #1 to #52 are Split Point



## 100° MICROSTOP COUNTERSINK

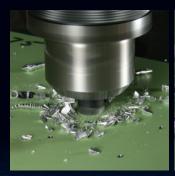
TRI-CAM



- Precision CNC diamond machining insures exact specifications and consistency
- Finely tuned cutting edges delivers smoother countersink finish
- High-flow flutes for excellent material evacuation
- Oversized cross hole allows easy countersink removal

**MATERIAL APPLICATION** • Aluminum









Smooth, consistent finish for true fastener interface.



Chatter generates a rough finish for inferior fastener fitment.

#### **HIGH SPEED STEEL MICROSTOP COUNTERSINK**

COUNTERSINK DIAMETER	DRILL BIT/PILOT Hole Size	PART NUMBER	SHIP QUANTITY
1/2"	#40	954HS5-40	1
1/2"	#21	954HS5-21	1
1/2"	#10	954HS5-10	1
1/2"	#30	954HS5-30	1

### **COBALT MICROSTOP COUNTERSINK**

COUNTERSINK DIAMETER	DRILL BIT/PILOT Hole Size	PART NUMBER	SHIP QUANTITY
1/2"	#40	954C05-40	1
1/2"	#21	954C05-21	1
1/2"	#10	954C05-10	1
1/2"	#30	<u>954C05-30</u>	1

## **CONNECTOR**FAST CHANGE





- Knurled design for maximum grip
- Compact size for tight working spaces
- Positive locking mechanism for optimum bit retention

#### COMPATIBILITY

• 3/8" and 1/2" drive drills









Fast Change Connector allows for fast accessory changes and locks in tool securely

CONNECTOR SIZE	DECIMAL EQUIVALENT	DIAMETER	OVERALL LENGTH	PART NUMBER	SHIP QUANTITY
1/4"	0.2500	3/4"	2-1/4"	<u>95000232</u>	2

### BRIGHT 135° HEAVY DUTY





### HEX 5HANK

- Hex shank increases torque and stops bit from slipping in chuck
- Industrial grade NAS High Speed Steel (HSS)
- Flutes are precision ground for faster, more efficient chip removal
- Excellent TIR
- Cordless impact compatible

#### **MATERIAL APPLICATION**

- Aluminum
- Copper
- Plastic
- Wood



#### FRACTIONAL SIZES

FRAC. Sizes	DECIMAL EQUIVALENT	FLUTE Length	OVERALL LENGTH	PART Number	SHIP QUANTITY		FRAC. SIZES	DECIMAL EQUIVALENT	FLUTE Length	OVERALL Length	PART Number	SHIP QUANTITY
1/16	0.0625	7/8"	2-1/2"	95000400	12	50	11/64	0.1719	2-1/8"	3-7/8"	95000411	12
5/64	0.0781	1"	2-5/8"	95000402	12	0	3/16	0.1875	2-5/16"	4"	95000412	12
3/32	0.0938	1-1/4"	2-3/4"	95000404	12	<b>O</b> C	13/64	0.2031	2-7/16"	4-1/4"	95000413	12
7/64	0.1094	1-1/2"	3-1/4"	95000406	12		7/32	0.2188	2-1/2"	4-3/8"	95000414	12
1/8	0.1250	1-5/8"	3-3/8"	95000408	12	00	15/64	0.2344	2-5/8"	4-1/2"	95000415	12
9/64	0.1406	1-3/4"	3-1/2"	95000409	12		1/4	0.2500	2-3/4"	4-5/8"	<u>95000416</u>	12
5/32	0.1562	2"	3-3/4"	95000410	12	000	17/64	0.2656	2-7/8"	4-7/8"	95000417	12

Drill bits from 7/64" to 17/64" are Split Point







- Manufactured utilizing premium shock resistant S2 steel to reduce stress fractures and accessory failure
- Proprietary, task specific heat treatment to control hardness for superior strength
- Engineered and machined to prevent slipping and stripping
- Industry-leading torque and impact rating





### **Test Results**

Brand	Size (inches)	Mfg. Origin	Hardness	Torque Ratin (lbs.)	g Failure Point
RMT	5/16	USA	53.6 (S2)	864	Shank Failure
RMT	5/16	USA	53.4 (S2)	860	Shank Failure
RMT	5/16	USA	54.1 (S2)	894	Shank Failure
Competitor #1	5/16	China	54.2 (CRV)	484	Rounded Broach
Competitor #1	5/16	China	55.6 (CRV)	426	<b>Rounded Broach</b>
Competitor #1	5/16	China	48.1 (CRV)	320	<b>Rounded Broach</b>
Competitor #2	5/16	USA	45.5 (CRV)	618	Shank Failure
Competitor #2	5/16	USA	46.7 (CRV)	632	Shank Failure
Competitor #2	5/16	USA	48.2 (CRV)	613	Shank Failure
Competitor #3	5/16	China	55.8 (CRV)	506	Shattered Broach
Competitor #3	5/16	China	59.5 (CRV)	511	Shattered Broach
Competitor #3	5/16	China	58.4 (CRV)	502	<b>Shattered Broach</b>

SIZES	OVERALL SIZE	PART NUMBER	SHIPPING QUANTITY
1/4	1-7/8"	<u>95000161</u>	5
5/16	1-7/8"	<u>95000162</u>	5
3/8	1-7/8"	<u>95000163</u>	5
7/16	1-7/8"	<u>95000164</u>	5



# SCREW GUIDE COMPACT & STANDARD





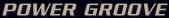
- High strength neodyium magnet
- Tough, durable construction
- Holds and guides screw in corrrect position without wobbling or disengaging from the bit
- For use with standard and impact drill/drivers and compatible with quick change connectors
- Reduces material surface damage



TOOL SIZE	OVERALL LENGTH	PART NUMBER	SHIP QUANTITY
Compact *	3-1/16"	<u>95000020</u>	2
Standard *	4-5/16"	<u>95000010</u>	2

<sup>\*1-</sup>inch P2 bit not included

## <u>COUNTERSINK</u>





- Drill, Countersink, or Counterbore
- Heat treated for longer life
- Countersink with adjustable drill bit that features precision ground flutes that cut fast and stay sharp longer

#### **MATERIAL APPLICATION**

- Plastic
- Wood



TOOL SIZE	COUNTERSINK DIAMETER	DRILL BIT/PILOT Hole Size	PART NUMBER	SHIP Quantity
#6	5/16"	3/32"	<u>95000270</u>	2
#8	5/16"	7/64"	<u>95000271</u>	2
#10	3/8"	1/8"	<u>95000272</u>	2
#12	7/16"	1/8"	<u>95000273</u>	2



4-IN-1



- Drill, Countersink, or Counterbore then flip to drive screw
- Heat treated for longer life
- Countersink with adjustable drill bit that features precision ground flutes that cut fast and stay sharp longer
- On-board hex key allows you to quickly change countersinks, drill bits, and driver bits

#### **MATERIAL APPLICATION**

- Plastic
- Wood











**DRILL** 

**FLIP** 

**DRIVE** 

TOOL SIZE	COUNTERSINK DIAMETER	DRILL BIT/PILOT HOLE SIZE	PART NUMBER	SHIP QUANTITY
#6	5/16"	3/32"	<u>95000090</u>	2
#8	5/16"	7/64"	95000092	2
#10	3/8"	1/8"	95000094	2
#12	7/16"	1/8"	95000096	2

# DIAMOND TILE DRILL BIT HEAVY DUTY SINTERED DIAMOND EDGE





- 10x Faster than standard glass and tile drill bits
- Heat treated high-alloy steel for longer life
- Segmented cutting edge for irrigation and material evacuation
- Durable, self-sharpening diamong cutting edge
- Heavy-duty single piece construction
- Black oxide finish prevents corrosion and increases performance

#### **MATERIAL APPLICATION**

- Ceramic
- Glass
- Granite
- Marble
- Porcelain
- Slate



TOOL SIZE	OVERALL LENGTH	PART NUMBER	SHIP QUANTITY
3/16"	2.165"	<u>95001100</u>	2
1/4"	2.165"	<u>95001101</u>	2
5/16"	2.165"	<u>95001102</u>	2
3/8"	2.165"	<u>95001103</u>	2
1/2"	2.165"	<u>95001104</u>	2
5/8"	2.165"	<u>95001105</u>	2
3/4"	2.165"	<u>95001106</u>	2
1"	2.165"	<u>95001107</u>	2
1-3/8"	2.165"	<u>95001108</u>	2

#### **Comparative Testing**



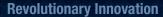


Material: 1/2" granite slab Hole Size: 5/8"

Power Tool: 18v power drill

1) Drill Style: Standard/Spade
Drill Time: 2 minutes 30 seconds
Hole: Incomplete

2) Drill Style: Diamond Drill Bit Drill Time: 45 seconds Hole: Complete







Core ejection slot for easy plug removal

UP TO 40 plus holes per bit



- Ideal for general use in a variety of materials and applications
- Ground Thread

Tap application chart available on page 78



## WIRE • FRACTIONAL SIZES -

SIZES								
1-64 H1 2 95101001 95102001 95103001 1-72 H1 2 95100002 95101002 95102002 95103002 2-56 H2 3 95100003 95101003 95102003 95103003 2-64 H2 3 95100005 95101005 95102004 95103005 3-48 H2 3 95100005 95101005 95102005 95103005 3-56 H2 3 95100006 95101006 95102006 95103006 4-40 H2 3 95100007 95101007 95103007 4-48 H2 3 95100009 95101008 95102008 95103008 5-40 H2 3 95100009 95101009 95102009 95103009 5-44 H2 3 95100009 95101009 95102009 95103009 5-44 H2 3 95100010 95101010 95102010 95103010 6-32 H3 3 95100011 95101011 95102011 95103011 6-32 H3 4 9510001 95101012 95102012 95103012 8-32 H3 4 95100014 95101013 95102013 95103012 8-36 H2 4 95100014 95101014 95102014 95103012 10-24 H3 4 95100015 95101015 95102014 95103014 10-24 H3 4 95100016 95101015 95102011 95103011 10-32 H3 4 95100016 95101015 95102011 95103011 10-32 H3 4 95100016 95101016 95103016 11-2-24 H3 4 95100016 95101016 95103016 11-2-24 H3 4 95100017 95101017 95102017 95102017 11-2-28 H3 4 95100018 95101018 95102012 95103018 11-2-24 H3 4 95100012 95101012 95102012 95103012 11-2-28 H3 4 95100015 95101015 95102017 95103016 11-2-24 H3 4 95100016 95101016 95103016 11-2-24 H3 4 95100017 95101017 95102017 95103018 11-2-24 H3 4 95100017 95101017 95102017 95103018 11-2-24 H3 4 95100019 95101019 95102012 95103018 11-2-24 H3 4 95100019 95101019 95102012 95103018 11-2-24 H3 4 95100021 95101018 95102012 95103018 11-2-24 H3 4 95100021 95101017 9510201 95103018 11-2-24 H3 4 95100021 95101017 9510201 95103018 11-2-24 H3 4 95100021 95101019 9510201 95103018 11-2-24 H3 4 95100021 95101012 95102021 95103020 11-2-28 H3 4 95100021 95101022 9510202 95103020 11-2-28 H3 4 95100021 95101022 9510202 95103020 11-2-28 H3 4 95100021 95101022 95102021 95103020 11-2-28 H3 4 95100022 95101022 95102020 95103020 11-2-28 H3 4 95100022 95101022 95102024 95103022 11-2-28 H3 4 95100023 95101023 95102024 95103022 11-2-20 H3 4 95100025 95101026 95102024 95103028 11-2-20 H3 4 95100029 9510020 9510020 95103020		SIZES	H-LIMIT	# FLUTES				SETS Part number
1-72         H1         2         95100002         95101002         95102002         95103002           2-56         H2         3         95100003         95101003         95102003         95103004           2-64         H2         3         95100006         95101005         95102005         95102006         95103006           3-48         H2         3         95100006         95101006         95102006         95103006           4-40         H2         3         95100007         -         95103007         -         95103007           4-48         H2         3         95100008         95101008         95102008         95103008           5-40         H2         3         95100009         95101009         95102009         95103008           6-32         H3         3         95100010         95101010         95102010         95103010           6-32         H3         3         95100012         95101011         95102012         95103012           8-32         H3         4         95100012         95101012         95102013         95103012           8-36         H2         4         95100014         95101014         95102013         951030		0-80	H1	2	<u>95100000</u>	<u>95101000</u>	<u>95102000</u>	<u>95103000</u>
2-56 H2 3 95100003 95101003 95102003 95103003 2-64 H2 3 95100004 - 95102004 95103004 3-48 H2 3 95100005 95101005 95102005 95103006 4-40 H2 3 95100007 95101007 - 95103007 4-48 H2 3 95100008 95101008 95102008 95103008 5-40 H2 3 95100009 95101008 95102008 95103008 5-40 H2 3 95100009 95101009 95102009 95103009 6-32 H3 3 95100010 95101010 95102011 95103011 6-32 H3 3 95100011 95101011 95102011 95103011 6-40 H2 3 95100012 9510102 95103012 8-32 H3 4 95100013 95101013 95102013 95103013 8-36 H2 4 95100014 95101013 95102014 95103011 10-24 H3 4 95100015 95101014 95102014 95103015 10-32 H3 4 95100015 95101014 95102014 95103015 11-32 H3 4 95100015 95101014 95102015 95103015 11-32 H3 4 95100016 95101014 95102015 95103015 11-32 H3 4 95100016 95101014 95102015 95103015 11-32 H3 4 95100015 95101014 95102015 95103015 11-32 H3 4 95100016 95101016 - 95103016 11-32 H3 4 95100016 95101016 - 95103016 11-32 H3 4 95100017 95101017 95102017 95103016 11-32 H3 4 95100018 95101010 95102015 95103016 11-32 H3 4 95100016 9501016 - 95103016 11-32 H3 4 95100016 95101016 - 95103016 11-32 H3 4 95100016 95101017 95102015 95103016 11-32 H3 4 95100016 95101017 95102017 95103016 11-32 H3 4 95100018 95101017 95102017 95103018 11/4-20 H3 4 95100020 95101020 95102019 95103019 11/4-28 H3 4 95100020 95101020 95102019 95103019 11/4-28 H3 4 95100020 95101020 9510202 95103020 11/4-28 H3 4 95100021 95101021 95102021 95103020 11/4-29 H3 4 95100022 95101022 95102022 95103022 11/2-20 H3 4 95100024 95101020 95102023 95103024 11/4-20 H3 4 95100024 95101022 95102023 95103028 11/4-20 H3 4 95100024 95101026 95102023 95103028 11/2-13 H3 4 95100029 95101028 95102028 95103028 11/2-13 H3 4 95100029 95101028 95102028 95103028 11/2-13 H3 4 95100029 95101029 95103020 95103020	$\mathbb{X}$	1-64	H1	2	-	<u>95101001</u>	<u>95102001</u>	<u>95103001</u>
2-64         H2         3         95100004         -         95102004         95102005           3-48         H2         3         95100006         95101006         95102006         95103006           3-56         H2         3         95100006         95101007         -         95103006           4-40         H2         3         95100007         95101007         -         95103007           4-48         H2         3         95100008         95101008         95102008         95103008           5-40         H2         3         95100009         95101009         95102009         95103009           5-44         H2         3         95100010         95101010         95102010         95103010           6-32         H3         3         95100011         95101011         95102012         95103012           8-32         H3         4         95100013         95101013         95102013         95103013           8-36         H2         4         95100014         95101014         95102014         95103015           10-24         H3         4         95100015         95101015         95102015         95103016           10-24		1-72	H1	2	<u>95100002</u>	95101002	95102002	<u>95103002</u>
3-48 H2 3 95100005 95101005 95102005 95103005 3-56 H2 3 95100006 95101006 95102006 95103006 4-40 H2 3 95100007 95101007 - 95103008 5-40 H2 3 95100009 95101009 95102008 95103008 5-40 H2 3 95100009 95101009 95102009 95103009 5-44 H2 3 95100010 9510101 95102010 95103010 6-32 H3 3 95100011 95101011 95102011 95103011 6-40 H2 3 95100012 95101012 95102012 95103012 8-32 H3 4 95100013 95101013 95102013 95103013 8-36 H2 4 95100014 95101014 95102014 95103014 10-24 H3 4 95100015 95101014 95102015 95103012 10-32 H3 4 95100016 95101016 - 95103015 10-32 H3 4 95100017 95101016 - 95103016 12-24 H3 4 95100017 95101016 - 95103016 12-24 H3 4 95100018 95101019 95102017 95103011 114-20 H3 4 95100018 95101019 95102017 95103018 114-20 H3 4 95100019 95101019 95102017 95103018 114-20 H3 4 95100020 95101019 95102018 95103018 114-20 H3 4 95100020 95101020 95102020 95103012 5/16-18 H3 4 95100020 9510102 9510202 95103022 5/16-18 H3 4 95100024 95101024 9510202 95103022 1/2-24 H3 4 95100024 95101024 9510202 95103022 1/2-24 H3 4 95100024 95101020 9510202 95103022 1/2-25 H3 4 95100027 95101020 9510202 95103022 1/2-28 H3 4 95100020 95101020 95102020 95103022 1/2-28 H3 4 95100021 95101020 95102020 95103022 1/2-28 H3 4 95100020 95101020 95102020 95103022 1/2-28 H3 4 95100024 95101020 95102020 95103022 1/2-28 H3 4 95100024 95101024 95102024 95103022 1/2-28 H3 4 95100024 95101024 95102025 95103022 1/2-28 H3 4 95100026 95101026 95102025 95103022 1/2-20 H3 4 95100028 95101028 95102027 95103022 1/2-20 H3 4 95100029 95101029 95102029 95103022 1/2-20 H3 4 95100029 95101029 95102029 95103022		2-56	H2	3	<u>95100003</u>	<u>95101003</u>	<u>95102003</u>	<u>95103003</u>
3-56 H2 3 95100006 95101006 95102006 95103006 4-40 H2 3 95100007 95101007 - 95103007 4-48 H2 3 95100008 95101008 95102008 95103008 5-40 H2 3 95100009 95101009 95102009 95103009 5-44 H2 3 95100010 9510101 95102010 95103011 6-32 H3 3 95100011 95101011 95102011 95103011 6-40 H2 3 95100012 95101012 95102012 95103012 8-32 H3 4 95100013 95101013 95102013 95103013 8-36 H2 4 95100014 95101014 95102014 95103014 10-24 H3 4 95100015 95101016 - 95103016 112-24 H3 4 95100016 95101016 - 95103016 112-24 H3 4 95100017 95101017 95102017 95103015 112-28 H3 4 95100017 95101017 95102017 95103018 114-20 H3 4 95100018 95101018 95102019 95103018 114-20 H3 4 95100019 95101019 95102019 95103019 114-28 H3 4 95100019 95101019 95102019 95103019 114-28 H3 4 95100020 95101020 95102020 95103020 5/16-18 H3 4 95100021 95101021 95102021 95103021 5/16-24 H3 4 95100022 95101020 95102021 95103021 5/16-14 H3 4 95100023 95101024 9510202 95103024 7/16-14 H3 4 95100024 9510102 9510202 95103023 3/8-24 H3 4 95100025 95101024 9510202 95103024 7/16-14 H3 4 95100026 95101026 9510202 95103022 1/2-13 H3 4 95100027 95101027 95102027 95103026 1/2-13 H3 4 95100027 95101027 95102027 95103026 1/2-13 H3 4 95100029 95101029 95102029 95103022 1/2-20 H3 4 95100029 95101029 95102029 95103022 9/16-12 H3 4 95100029 95101029 95102029 95103029 9/16-12 H3 4 95100029 95101029 95102029 95103029	Ă	2-64	H2	3	<u>95100004</u>	-	<u>95102004</u>	<u>95103004</u>
4-40         H2         3         95100007         95101007         -         95103007           4-48         H2         3         95100008         95101008         95102008         95103008           5-40         H2         3         95100009         95101009         95102009         95103008           5-44         H2         3         95100010         95101010         95102010         95103010           6-32         H3         3         95100011         95101011         95102012         95103011           8-32         H3         4         95100013         95101013         95102013         95103013           8-36         H2         4         95100014         95101014         95102014         95103014           10-24         H3         4         95100015         95101015         95102015         95103015           10-32         H3         4         95100015         95101015         95102015         95103016           10-32         H3         4         95100015         95101015         95102015         95103016           10-32         H3         4         95100017         95102017         95103016         -         95103016	$\asymp$	3-48	H2	3	<u>95100005</u>	<u>95101005</u>	<u>95102005</u>	<u>95103005</u>
4-48         H2         3         95100008         95101008         95102008         95103008           5-40         H2         3         95100009         95101009         95102009         95103009           5-44         H2         3         95100010         95101010         95102010         95103010           6-32         H3         3         95100011         95101012         95102012         95103012           6-40         H2         3         95100012         95101013         95102013         95103013           8-32         H3         4         95100014         95101013         95102013         95103013           8-36         H2         4         95100014         95101015         95102015         95103014           10-24         H3         4         95100015         95101016         -         95103015           10-32         H3         4         95100016         95101016         -         95103017           12-24         H3         4         95100017         95101017         95102017         95103012           1/4-20         H3         4         95100018         95101017         95102017         95103018           1/4-28 </th <th></th> <td>3-56</td> <td>H2</td> <td>3</td> <td><u>95100006</u></td> <td><u>95101006</u></td> <td><u>95102006</u></td> <td><u>95103006</u></td>		3-56	H2	3	<u>95100006</u>	<u>95101006</u>	<u>95102006</u>	<u>95103006</u>
5-40         H2         3         95100009         95101009         95102009         95103009           5-44         H2         3         95100010         95101010         95102010         95103010           6-32         H3         3         95100011         95101011         95102011         95103011           6-40         H2         3         95100012         95101012         95102012         95103012           8-32         H3         4         95100013         95101013         95102013         95103014           8-36         H2         4         95100014         95101014         95102014         95103014           10-24         H3         4         95100015         95101015         95102015         95103015           10-32         H3         4         95100016         95101016         -         95103016           12-24         H3         4         95100017         95101017         95102017         95103017           12-28         H3         4         95100018         95101018         95102018         95103018           1/4-20         H3         4         95100020         95101020         95102019         95103019		4-40	H2	3	<u>95100007</u>	<u>95101007</u>	-	<u>95103007</u>
5-44         H2         3         95100010         95102010         95103010           6-32         H3         3         95100011         95101011         95102011         95103011           6-40         H2         3         95100012         95101012         95102012         95103012           8-32         H3         4         95100013         95101013         95102013         95103013           8-36         H2         4         95100014         95101014         95102014         95103014           10-24         H3         4         95100015         95101015         95102015         95103015           10-32         H3         4         95100016         95101016         -         95103016           12-24         H3         4         95100017         95101017         95102017         95103016           12-24         H3         4         95100018         95101018         95102017         95103016           12-28         H3         4         95100018         95101018         95102017         95103018           1/4-20         H3         4         95100019         95101019         95102019         95103019           1/4-28         H	X	4-48	H2	3	<u>95100008</u>	<u>95101008</u>	<u>95102008</u>	<u>95103008</u>
6-32         H3         3         95100011         95101011         95102011         95103011           6-40         H2         3         95100012         95101012         95102012         95103012           8-32         H3         4         95100013         95101013         95102013         95103013           8-36         H2         4         95100014         95101014         95102014         95103014           10-24         H3         4         95100015         95101015         95102015         95103015           10-32         H3         4         95100016         95101016         -         95103016           12-24         H3         4         95100017         95101017         95102017         95103017           12-28         H3         4         95100018         95101018         95102018         95103018           1/4-20         H3         4         95100019         95101018         95102018         95103019           1/4-28         H3         4         95100020         95101020         95102020         95103020           5/16-18         H3         4         95100021         95101021         95102020         95103022		5-40	H2	3	<u>95100009</u>	<u>95101009</u>	<u>95102009</u>	<u>95103009</u>
6-40         H2         3         95100012         95101012         95102012         95103012           8-32         H3         4         95100013         95101013         95102013         95103013           8-36         H2         4         95100014         95101014         95102014         95103014           10-24         H3         4         95100015         95101015         95102015         95103015           10-32         H3         4         95100016         95101016         -         95103017           12-24         H3         4         95100017         95101017         95102017         95103017           12-28         H3         4         95100018         95101018         95102018         95103018           1/4-20         H3         4         95100019         95101019         95102019         95103021           1/4-28         H3         4         95100020         95101020         95102020         95103021           5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102021         95103023		5-44	H2	3	<u>95100010</u>	<u>95101010</u>	<u>95102010</u>	<u>95103010</u>
8-32         H3         4         95100013         95101013         95102013         95103013           8-36         H2         4         95100014         95101014         95102014         95103014           10-24         H3         4         95100015         95101015         95102015         95103015           10-32         H3         4         95100016         95101016         -         95103016           12-24         H3         4         95100017         95101017         95102017         95103017           12-28         H3         4         95100018         95101018         95102018         95103018           1/4-20         H3         4         95100019         95101019         95102019         95103019           1/4-28         H3         4         95100020         95101020         95102020         95103020           5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023	其	6-32	Н3	3	<u>95100011</u>	<u>95101011</u>	<u>95102011</u>	<u>95103011</u>
8-36         H2         4         95100014         95101014         95102014         95103014           10-24         H3         4         95100015         95101015         95102015         95103015           10-32         H3         4         95100016         95101016         -         95103016           12-24         H3         4         95100017         95101017         95102017         95103017           12-28         H3         4         95100018         95101018         95102018         95103018           1/4-20         H3         4         95100019         95101019         95102019         95103019           1/4-28         H3         4         95100020         95101020         95102020         95103020           5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023           3/8-24         H3         4         95100024         95101024         95102024         95103025	Ħ	6-40	H2	3	<u>95100012</u>	95101012	95102012	<u>95103012</u>
10-24         H3         4         95100015         95101015         95102015         95103015           10-32         H3         4         95100016         95101016         -         95103016           12-24         H3         4         95100017         95101017         95102017         95103017           12-28         H3         4         95100018         95101018         95102018         95103018           1/4-20         H3         4         95100019         95101019         95102019         95103019           1/4-28         H3         4         95100020         95101020         95102020         95103020           5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023           3/8-24         H3         4         95100024         95101024         95102024         95103024           7/16-14         H3         4         95100025         95101025         95102025         95103026 <t< th=""><th></th><th>8-32</th><th>H3</th><th>4</th><th><u>95100013</u></th><th><u>95101013</u></th><th><u>95102013</u></th><th><u>95103013</u></th></t<>		8-32	H3	4	<u>95100013</u>	<u>95101013</u>	<u>95102013</u>	<u>95103013</u>
10-32         H3         4         95100016         95101016         -         95103016           12-24         H3         4         95100017         95101017         95102017         95103017           12-28         H3         4         95100018         95101018         95102018         95103018           1/4-20         H3         4         95100019         95101019         95102019         95103019           1/4-28         H3         4         95100020         95101020         95102020         95103020           5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023           3/8-24         H3         4         95100024         95101024         95102024         95103024           7/16-14         H3         4         95100025         95101025         95102025         95103025           7/16-20         H3         4         95100027         95101026         95102026         95103027		8-36	H2	4	<u>95100014</u>	<u>95101014</u>	<u>95102014</u>	<u>95103014</u>
12-24         H3         4         95100017         95101017         95102017         95103017           12-28         H3         4         95100018         95101018         95102018         95103018           1/4-20         H3         4         95100019         95101019         95102019         95103019           1/4-28         H3         4         95100020         95101020         95102020         95103020           5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023           3/8-24         H3         4         95100024         95101024         95102024         95103024           7/16-14         H3         4         95100025         95101025         95102025         95103025           7/16-20         H3         4         95100026         95101026         95102026         95103027           1/2-13         H3         4         95100027         95101027         95102028         95103027 </th <th>Ă</th> <th>10-24</th> <th>Н3</th> <th>4</th> <th><u>95100015</u></th> <th><u>95101015</u></th> <th><u>95102015</u></th> <th><u>95103015</u></th>	Ă	10-24	Н3	4	<u>95100015</u>	<u>95101015</u>	<u>95102015</u>	<u>95103015</u>
12-28         H3         4         95100018         95101018         95102018         95103018           1/4-20         H3         4         95100019         95101019         95102019         95103019           1/4-28         H3         4         95100020         95101020         95102020         95103020           5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023           3/8-24         H3         4         95100024         95101024         95102024         95103024           7/16-14         H3         4         95100025         95101025         95102025         95103025           7/16-20         H3         4         95100026         95101026         95102026         95103026           1/2-13         H3         4         95100027         95101027         95102027         95103027           1/2-20         H3         4         95100028         95101028         95102029         95103029     <	$\subseteq$	10-32	Н3	4	<u>95100016</u>	<u>95101016</u>	-	<u>95103016</u>
1/4-20         H3         4         95100019         95101019         95102019         95103019           1/4-28         H3         4         95100020         95101020         95102020         95103020           5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023           3/8-24         H3         4         95100024         95101024         95102024         95103024           7/16-14         H3         4         95100025         95101025         95102025         95103025           7/16-20         H3         4         95100026         95101026         95102026         95103026           1/2-13         H3         4         95100027         95101027         95102027         95103027           1/2-20         H3         4         95100028         95101028         95102029         95103029           9/16-12         H3         4         95100029         95101029         95102030         95103030		12-24	Н3	4	<u>95100017</u>	<u>95101017</u>	<u>95102017</u>	<u>95103017</u>
1/4-28         H3         4         95100020         95101020         95102020         95103020           5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023           3/8-24         H3         4         95100024         95101024         95102024         95103024           7/16-14         H3         4         95100025         95101025         95102025         95103025           7/16-20         H3         4         95100026         95101026         95102026         95103026           1/2-13         H3         4         95100027         95101027         95102027         95103027           1/2-20         H3         4         95100028         95101028         95102028         95103028           9/16-12         H3         4         95100029         95101029         95102030         95103030           9/16-18         H3         4         95100030         95101030         95102030         95103030	Ą	12-28	Н3	4	<u>95100018</u>	<u>95101018</u>	<u>95102018</u>	<u>95103018</u>
5/16-18         H3         4         95100021         95101021         95102021         95103021           5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023           3/8-24         H3         4         95100024         95101024         95102024         95103024           7/16-14         H3         4         95100025         95101025         95102025         95103025           7/16-20         H3         4         95100026         95101026         95102026         95103026           1/2-13         H3         4         95100027         95101027         95102027         95103027           1/2-20         H3         4         95100028         95101028         95102028         95103028           9/16-12         H3         4         95100029         95101029         95102029         95103029           9/16-18         H3         4         95100030         95101030         95102030         95103030	Ħ	1/4-20	H3	4	<u>95100019</u>	<u>95101019</u>	<u>95102019</u>	<u>95103019</u>
5/16-24         H3         4         95100022         95101022         95102022         95103022           3/8-16         H3         4         95100023         95101023         95102023         95103023           3/8-24         H3         4         95100024         95101024         95102024         95103024           7/16-14         H3         4         95100025         95101025         95102025         95103025           7/16-20         H3         4         95100026         95101026         95102026         95103026           1/2-13         H3         4         95100027         95101027         95102027         95103027           1/2-20         H3         4         95100028         95101028         95102028         95103028           9/16-12         H3         4         95100029         95101029         95102029         95103029           9/16-18         H3         4         95100030         95101030         95102030         95103030		1/4-28	Н3	4	<u>95100020</u>	<u>95101020</u>	<u>95102020</u>	<u>95103020</u>
3/8-16 H3 4 95100023 95101023 95102023 95103023 3/8-24 H3 4 95100024 95101024 95102024 95103024  7/16-14 H3 4 95100025 95101025 95102025 95103025  7/16-20 H3 4 95100026 95101026 95102026 95103026  1/2-13 H3 4 95100027 95101027 95102027 95103027  1/2-20 H3 4 95100028 95101028 95102028 95103028  9/16-12 H3 4 95100029 95101029 95102029 95103029  9/16-18 H3 4 95100030 95101030 95102030 95103030		5/16-18	Н3	4	<u>95100021</u>	<u>95101021</u>	<u>95102021</u>	<u>95103021</u>
3/8-24         H3         4         95100024         95101024         95102024         95103024           7/16-14         H3         4         95100025         95101025         95102025         95103025           7/16-20         H3         4         95100026         95101026         95102026         95103026           1/2-13         H3         4         95100027         95101027         95102027         95103027           1/2-20         H3         4         95100028         95101028         95102028         95103028           9/16-12         H3         4         95100029         95101029         95102029         95103029           9/16-18         H3         4         95100030         95101030         95102030         95103030	Ă	5/16-24	Н3	4	<u>95100022</u>	95101022	95102022	<u>95103022</u>
7/16-14         H3         4         95100025         95101025         95102025         95103025           7/16-20         H3         4         95100026         95101026         95102026         95103026           1/2-13         H3         4         95100027         95101027         95102027         95103027           1/2-20         H3         4         95100028         95101028         95102028         95103028           9/16-12         H3         4         95100029         95101029         95102029         95103029           9/16-18         H3         4         95100030         95101030         95102030         95103030	$\subseteq$	3/8-16	Н3	4	<u>95100023</u>	<u>95101023</u>	<u>95102023</u>	<u>95103023</u>
7/16-20         H3         4         95100026         95101026         95102026         95103026           1/2-13         H3         4         95100027         95101027         95102027         95103027           1/2-20         H3         4         95100028         95101028         95102028         95103028           9/16-12         H3         4         95100029         95101029         95102029         95103029           9/16-18         H3         4         95100030         95101030         95102030         95103030		3/8-24	H3	4	<u>95100024</u>	<u>95101024</u>	<u>95102024</u>	<u>95103024</u>
1/2-13     H3     4     95100027     95101027     95102027     95103027       1/2-20     H3     4     95100028     95101028     95102028     95103028       9/16-12     H3     4     95100029     95101029     95102029     95103029       9/16-18     H3     4     95100030     95101030     95102030     95103030		7/16-14	Н3	4	<u>95100025</u>	<u>95101025</u>	<u>95102025</u>	<u>95103025</u>
1/2-20     H3     4     95100028     95101028     95102028     95103028       9/16-12     H3     4     95100029     95101029     95102029     95103029       9/16-18     H3     4     95100030     95101030     95102030     95103030	X	7/16-20	H3	4	<u>95100026</u>	<u>95101026</u>	<u>95102026</u>	<u>95103026</u>
9/16-12         H3         4         95100029         95101029         95102029         95103029           9/16-18         H3         4         95100030         95101030         95102030         95103030		1/2-13	H3	4	<u>95100027</u>	<u>95101027</u>	<u>95102027</u>	<u>95103027</u>
9/16-18         H3         4         95100030         95101030         95102030         95103030		1/2-20	Н3	4	95100028	95101028	95102028	<u>95103028</u>
	A	9/16-12	Н3	4	95100029	<u>95101029</u>	<u>95102029</u>	<u>95103029</u>
5/8-11         H3         4         95100031         95101031         95102031         95103031	9	9/16-18	Н3	4	<u>95100030</u>	<u>95101030</u>	<u>95102030</u>	<u>95103030</u>
		5/8-11	Н3	4	<u>95100031</u>	<u>95101031</u>	<u>95102031</u>	<u>95103031</u>
<b>5/8-18</b> H3 4 <b>95100032</b> - <b>95102032 95103032</b>		5/8-18	НЗ	4	<u>95100032</u>	-	<u>95102032</u>	95103032

# HAND TAPS CONTINUED

SIZES	H-LIMIT	# FLUTES	TAPER Part Number	PLUG Part Number	BOTTOM Part Number	SETS Part number
3/4-10	Н3	4	<u>95100033</u>	<u>95101033</u>	<u>95102033</u>	<u>95103033</u>
3/4-16	Н3	4	95100034	<u>95101034</u>	95102034	95103034
7/8-9	H4	4	<u>95100035</u>	<u>95101035</u>	95102035	95103035
7/8-14	H4	4	<u>95100036</u>	<u>95101036</u>	<u>95102036</u>	<u>95103036</u>
1-8	H4	4	<u>95100037</u>	<u>95101037</u>	95102037	95103037
1-12	H4	4	<u>95100038</u>	<u>95101038</u>	95102038	95103038
1 1/8-7	H4	4	<u>95100039</u>	<u>95101039</u>	<u>95102039</u>	<u>95103039</u>
1 1/8-12	H4	4	<u>95100040</u>	<u>95101040</u>	<u>95102040</u>	<u>95103040</u>
1 1/4-7	H4	4	<u>95100041</u>	<u>95101041</u>	-	<u>95103041</u>
1 1/4-12	H4	6	95100042	<u>95101042</u>	95102042	95103042
1 3/8-6	H4	4	<u>95100043</u>	<u>95101043</u>	<u>95102043</u>	<u>95103043</u>
1 3/8-12	H4	6	95100044	95101044	95102044	95103044
1 1/2-6	H4	4	<u>95100045</u>	<u>95101045</u>	95102045	<u>95103045</u>
1 1/2-12	H4	6	<u>95100046</u>	<u>95101046</u>	95102046	<u>95103046</u>

## METRIC SIZES

SIZES	H-LIMIT	# FLUTES	TAPER Part Number	PLUG Part number	BOTTOM Part Number	SETS Part number
M2 - 0.4	D3	3	<u>95100048</u>	<u>95101048</u>	<u>95102048</u>	-
M3 - 0.5	D3	3	<u>95100050</u>	<u>95101050</u>	<u>95102050</u>	<u>95103050</u>
M4 - 0.7	D4	4	95100052	95101052	95102052	95103052
M5 - 0.8	D4	4	95100054	95101054	95102054	<u>95103054</u>
M6 - 1	D5	4	<u>95100055</u>	<u>95101055</u>	95102055	<u>95103055</u>
M7 - 1	D5	4	<u>95100056</u>	<u>95101056</u>	<u>95102056</u>	<u>95103056</u>
M8 - 1.25	D5	4	<u>95100058</u>	<u>95101058</u>	<u>95102058</u>	<u>95103058</u>
M10 - 1.25	D5	4	<u>95100059</u>	<u>95101059</u>	<u>95102059</u>	<u>95103059</u>
M10 - 1.5	D6	4	<u>95100060</u>	<u>95101060</u>	<u>95102060</u>	<u>95103060</u>
M12 - 1.75	D6	4	<u>95100062</u>	<u>95101062</u>	<u>95102062</u>	<u>95103062</u>
M14 - 1.5	D6	4	<u>95100063</u>	95101063	95102063	-
M14 - 2	D7	4	95100064	95101064	95102064	-
M16 - 1.5	D6	4	<u>95100065</u>	<u>95101065</u>	<u>95102065</u>	-
M16 - 2	D7	4	<u>95100066</u>	<u>95101066</u>	<u>95102066</u>	-
M18 - 1.5	D6	4	<u>95100067</u>	<u>95101067</u>	<u>95102067</u>	-
M18 - 2.5	D7	4	95100068	95101068	95102068	<u>95103068</u>
M20 - 2.5	D7	4	<u>95100070</u>	<u>95101070</u>	-	-
M24 - 3	D8	4	<u>95100074</u>	<u>95101074</u>	<u>95102074</u>	-



- Ideal for general use in a variety of materials and applications
- Ground Thread
- TIN Coated

Tap application chart available on page 78



### WIRE • FRACTIONAL • METRIC SIZES

SIZES	H-LIMIT	PLUG Part Number	BOTTOM Part Number
0-80	H2	-	<u>95132000</u>
1-64	H2	-	<u>95132001</u>
1-72	H2	-	<u>95132002</u>
2-56	H2	-	<u>95132003</u>
2-64	H2	-	<u>95132004</u>
3-48	Н3	-	<u>95132005</u>
3-56	Н3	-	<u>95132006</u>
4-40	Н3	<u>95131007</u>	<u>95132007</u>
4-48	Н3	-	<u>95132008</u>
5-40	Н3	<u>95131009</u>	<u>95132009</u>
5-44	Н3	-	<u>95132010</u>
6-32	Н3	<u>95131011</u>	<u>95132011</u>
6-40	Н3	<u>95131012</u>	<u>95132012</u>
8-32	Н3	<u>95131013</u>	<u>95132013</u>
8-36	Н3	<u>95131014</u>	<u>95132014</u>
10-24	H4	<u>95131015</u>	<u>95132015</u>
10-32	H4	<u>95131016</u>	<u>95132016</u>
12-24	H4	<u>95131017</u>	<u>95132017</u>

SIZES	H-LIMIT	PLUG Part number	BOTTOM Part Number
12-28	H4	<u>95131018</u>	95132018
1/4-20	H4	<u>95131019</u>	<u>95132019</u>
1/4-28	H4	<u>95131020</u>	<u>95132020</u>
5/16-18	H5	<u>95131021</u>	<u>95132021</u>
5/16-24	H5	<u>95131022</u>	<u>95132022</u>
3/8-16	H5	<u>95131023</u>	<u>95132023</u>
3/8-24	H5	<u>95131024</u>	<u>95132024</u>
7/16-14	H5	<u>95131025</u>	<u>95132025</u>
7/16-20	H5	<u>95131026</u>	<u>95132026</u>
1/2-13	H5	<u>95131027</u>	<u>95132027</u>
1/2-20	H5	<u>95131028</u>	<u>95132028</u>
M3 - 0.5	D5	-	<u>95132050</u>
M4 - 0.7	D6	95131052	95132052
M5 - 0.8	D7	95131054	95132054
M6 - 1	D8	<u>95131055</u>	<u>95132055</u>
M8 - 1.25	D9	<u>95131058</u>	<u>95132058</u>
M10 - 1.5	D10	<u>95131060</u>	<u>95132060</u>
M12 - 1.75	D11	95131062	95132062

# SPIRAL POINT TAPS HIGH SPEED STEEL

- Ideal for general use in a variety of materials and applications
- Ground Thread

Tap application chart available on page 78



### WIRE • FRACTIONAL • METRIC SIZES

SIZES	H-LIMIT	# FLUTES	PART NUMBER		SIZES	H-LIMIT	# FLUTES	PART NUMBER
0-80 NC	H1	2	95111000	00	3/8-16 NC	Н3	3	95111023
1-64 NC	H1	2	<u>95111001</u>	00	3/8-24 NF	Н3	3	95111024
1-72 NF	H1	2	95111002	50	7/16-14 NC	Н3	3	<u>95111025</u>
2-56 NC	H2	2	<u>95111003</u>		7/16-20 NF	Н3	3	<u>95111026</u>
2-64 NF	H2	2	<u>95111004</u>	XX	1/2-13 NC	Н3	3	<u>95111027</u>
3-48 NC	H2	2	<u>95111005</u>		1/2-20 NF	Н3	3	<u>95111028</u>
3-56 NF	H2	2	<u>95111006</u>		5/8-11	Н3	3	<u>95111031</u>
4-40 NC	H2	2	<u>95111007</u>	00	3/4-10	Н3	3	<u>95111033</u>
4-48 NF	H2	2	<u>95111008</u>		M2 - 0.4	D3	2	<u>95111048</u>
5-40 NC	H2	2	<u>95111009</u>		M2.5 - 0.45	D3	2	<u>95111049</u>
5-44 NF	H2	2	<u>95111010</u>		M3 - 0.5	D3	2	<u>95111050</u>
6-32 NC	Н3	2	<u>95111011</u>		M3.5 - 0.6	D4	2	<u>95111051</u>
6-40 NF	H2	2	<u>95111012</u>	00	M4 - 0.7	D4	2	<u>95111052</u>
8-32 NC	Н3	2	<u>95111013</u>		M5 - 0.8	D4	2	<u>95111054</u>
8-36 NF	H2	2	<u>95111014</u>		M6 - 1	D5	2	<u>95111055</u>
10-24 NC	Н3	2	<u>95111015</u>	XX	M7 - 1	D5	2	<u>95111056</u>
10-32 NF	Н3	2	<u>95111016</u>	XX	M8 - 1.25	D5	2	<u>95111058</u>
12-24 NC	Н3	2	<u>95111017</u>	0,0	M10 - 1.5	D6	3	<u>95111060</u>
12-28 NF	Н3	2	<u>95111018</u>		M12 - 1.75	D6	3	<u>95111062</u>
1/4-20 NC	Н3	2	<u>95111019</u>	00	M14 - 2	D7	3	<u>95111064</u>
1/4-28 NF	Н3	2	<u>95111020</u>	ĬŎ.	M16 - 2	D7	3	<u>95111066</u>
5/16-18 NC	Н3	2	<u>95111021</u>	O	M18 - 2.5	D7	3	<u>95111068</u>
5/16-24 NF	Н3	2	<u>95111022</u>		-	-	-	-



- Ideal for general use in a variety of materials and applications
- Ground Thread
   Tap application chart available on page 78



#### FRACTIONAL SIZES

SIZES	# FLUTES	PART NUMBER		
1/16 - 27 NPT	4	95144004	00	
1/16 - 27 NPTF	4	<u>95145004</u>		
1/8 - 27 NPT	4	<u>95144008</u>		
1/8 - 27 NPTF	4	<u>95145008</u>		
1/4 - 18 NPT	4	<u>95144016</u>		1
1/4 - 18 NPTF	4	<u>95145016</u>	00	1
3/8 - 18 NPT	4	95144024		1
3/8 - 18 NPTF	4	95145024		1
1/2 - 14 NPT	4	95144032		
1/2 - 14 NPTF	4	<u>95145032</u>		

SIZES	# FLUTES	PART NUMBER
3/4 - 14 NPT	5	<u>95144048</u>
3/4 - 14 NPTF	5	<u>95145048</u>
1 - 11 1/2 NPT	5	<u>95144064</u>
1 - 11 1/2 NPTF	5	<u>95145064</u>
1 1/4 - 11 1/2 NPT	5	<u>95144080</u>
1 1/4 - 11 1/2 NPTF	5	95145080
1 1/2 - 11 1/2 NPT	7	95144096
1 1/2 - 11 1/2 NPTF	7	95145096
2 - 11 1/2 NPT	7	95144128
-	-	-

# INTERRUPTED THREAD TAPS

### HIGH SPEED STEEL

- Ideal for general use in a variety of materials and applications
- Ground Thread

Tap application chart available on page 78

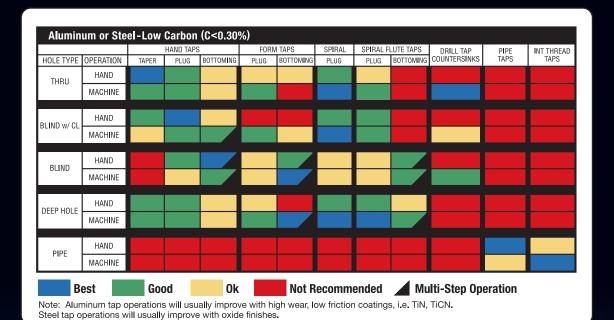


#### FRACTIONAL SIZES

SIZES	# FLUTES	PART NUMBER
1/8 - 27 NPT	5	<u>95154008</u>
1/8 - 27 NPTF	5	<u>95155008</u>
1/4 - 18 NPT	5	<u>95154016</u>
1/4 - 18 NPTF	5	<u>95155016</u>
3/8 - 18 NPT	5	<u>95154024</u>
3/8 - 18 NPTF	5	95155024
1/2 - 14 NPT	5	95154032
1/2 - 14 NPTF	5	95155032
_	_	-

SIZES	# FLUTES	PART NUMBER
3/4 - 14 NPT	5	<u>95154048</u>
3/4 - 14 NPTF	5	<u>95155048</u>
1 - 11 1/2 NPT	5	<u>95154064</u>
1 - 11 1/2 NPTF	5	<u>95155064</u>
1 1/4 - 11 1/2 NPT	5	<u>95154080</u>
1 1/4 - 11 1/2 NPTF	5	<u>95155080</u>
1 1/2 - 11 1/2 NPTF	7	<u>95155096</u>
2 - 11 1/2 NPTF	7	<u>95155128</u>

# TAP APPLICATION MATRIX



Steel-Medium Carbon (0.30%<C<0.06%) Under HRC 35 HAND TAPS SPIRAL SPIRAL FLUTE TAPS DRILL TAP COUNTERSINKS PIPE TAPS INT THREAD TAPS HOLE TYPE OPERATION PLUG BOTTOMING BOTTOMING PLUG PLUG BOTTOMING PLUG HAND THRU MACHINE HAND BLIND w/ CL MACHINE HAND BLIND MACHINE HAND DEEP HOLE MACHINE HAND MACHINE Good Not Recommended Multi-Step Operation

# DRILL AND TAP USE CHART

STANDARD Approx. 75	TAP & DRILL 5% Thread
0-80	3/64
1-64	53
1-72	53
2-56	50
2-64	50
3-48	47
3-56	46
4-40	43
4-48	42
5-40	39
5-44	38
6-32	36
6-40	33
8-32	29
8-36	29
10-24	25
10-32	21
12-24	17
12-28	15
1/4-20	7
1/4-28	3
5/16-18	F
5/16-24	I
3/8-16	5/16
3/8-24	Q
7/16-14	U
7/16-20	W
1/2-12	27/64
1/2-13	27/64
1/2-20	29/64
9/16-12	31/64
9/16-18	33/64
5/8-11	17/32
5/8-18	37/64
3/4-10	21/32
3/4-16	11/16
7/8-9	49/64
7/8-14	13/16
1-8	7/8
1-12	59/64
1-14	15/16

	AP & DRILL -75% Thread
M1.6 x .35	1.25mm
M2.0 x .40	1.6mm
M2.5 x .45	2.05mm
M3.0 x .50	2.5mm
M3.5 x .60	2.9mm
M4.0 x .70	3.3 mm
M4.5 x .75	3.75mm
M5.0 x .80	4.2mm
M6.0 x 1.0	5mm
M7.0 x 1.0	6mm
M8.0 x 1.0	6.75mm
M10 x 1.50	8.5mm
M12 x 1.75	Υ
M14 x 2.0	12mm
M16 x 2.0	14mm
M18 x 2.5	15.5mm
M20 x 2.5	17.5mm

	OLL FORM DRILL 5% Thread
M1.6 x .35	1.45mm
M2.0 x .40	1.85mm
M2.5 x .45	2.30mm
M3.0 x .50	35
M3.5 x .60	30
M4.0 x .70	3.7mm
M5.0 x .80	14
M6.0 x 1.0	5.5mm
M8.0 x 1.25	7.4mm
M10 x 1.75	9.3mm
M12 x 1.75	7/16
M14 x 2.0	13mm
M16 x 2.0	15mm
M20 x 2.5	18.75mm

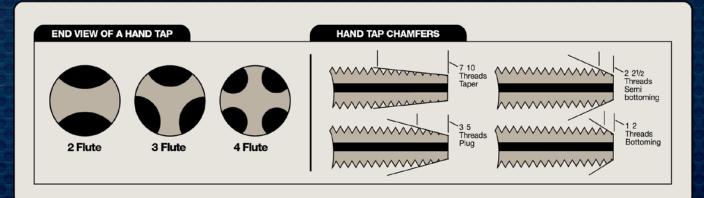
	HELI	COIL TAP & DR	ILL (For Alumiı	num)	
SIZES	DRILL	TAP	DRLL	TAP	DRILL
2 - 56	3/32	8 - 32	17	5/16 - 24	21/64
3 - 48	36	8 - 36	17	3/8 - 16	X
3 - 56	37	10 - 24	13/64	3/8 - 24	25/64
4 - 40	31	10 - 32	7	7/16 -14	29/64
4 - 48	3mm	12 - 24	1	7/16 - 20	29/64
5 - 40	3.4mm	1/4 - 20	Н	1/2 - 13	33/64
6 - 32	26	1/4 - 28	G	1/2 - 20	33/64
6 - 40	26	5/16 - 18	Q	-	-

TAPER PIPE TA	P & DRILL NPS
1/16 - 27	D
1/8 - 27	R
1/4 - 18	7/16
3/8 - 18	37/64
1/2 - 14	45/64
3/4 - 14	59/64
1 - 11 1/2	1 5/32
1 1/4 - 11 1/2	1 1/2
1 1/2 11 1/2	1 47/64
2 - 11 1/2	2 7/32

		HT PIPE Rill NPS
Н	1/16 - 27	1/4
d	1/8 - 27	11/32
Л	1/4 - 18	7/16
g	3/8 - 18	37/64
	1/2 - 14	23/32
Ų	3/4 - 14	59/64
4	1 - 11 1/2	1 5/32
Ч	1 1/4 - 11 1/2	1 1/2
	1 1/2 - 11 1/2	1 3/4
	2 - 11 1/2	2 7/32

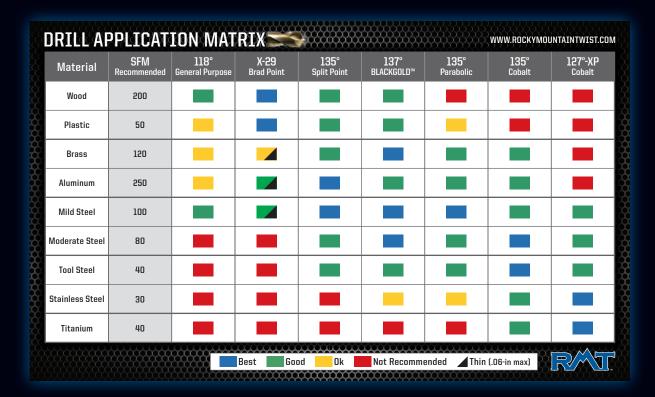
For 65%	Thread
0-80	54
1-64	1.65mm
1-72	1.7mm
2-56	5/64
2-64	2mm
3-48	43
3-56	2.3mm
4-40	39
4-48	2.6mm
5-40	33
5-44	2.9mm
6-32	1/8
6-40	3.2mm
8-32	25
8-36	24
10-24	11/64
10-32	16
12-24	5mm
12-28	8
1/4-20	1
1/4-28	Α
5/16-18	7.3mm
5/16-24	М
3/8-16	S
3/8-24	T
7/16-14	13/32
7/16-20	10.5mm
1/2-13	15/32
1/2-20	31/64
9/16-12	17/32
9/16-18	13.5mm
5/8-11	15mm
5/8-18	19/32
3/4-10	45/64
3/4-16	23/32
7/8-9	.823
7/8-14	27/32
1-8	15/16
1-12	.963

ROLLFORM TAP & DRILL



# DRILL APPLICATION MATRIX

#### **RECOMMENDATIONS**



FM-RPI	M ESTIM	ATOR					USA	PRIDE
SFM	#40	1/8"/#30	#20	3/16"	#10	1/4"	3/8"	1/2"
250	9749	7435	5934	5096	4938	3822	2548	1911
200	7799	5948	4747	4076	3950	3057	2038	1529
150	5849	4461	3561	3057	2963	2293	1529	1146
100	3900	2974	2374	2038	1975	1529	1019	764
80	3120	2379	1899	1631	1580	1223	815	611
60	2340	1784	1424	1223	1185	917	611	459
40	1560	1190	949	815	790	611	408	306
30	1170	892	712	611	593	459	306	229
20	780	595	475	408	395	306	204	153
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		ive • Ronan MT-			

# DRILL FEEDS AND SPEEDS

### **RECOMMENDATIONS**

MATERIALS	Recommen	ded drill s <sub>l</sub>	peeds in s	surface ft./mi	n. for High S	peed Steel Twis	st Drill Bits	
MATERIALS	15-20	20-40	40-6	60-80	80-120	120-200	200-300	300-400
Aluminum								
Aluminum Alloys								
Bronze (High-Tensile)								
Die Casting (Zinc Base)								
Cast Iron (Soft)								
Cast Iron (Medium Hard)								
Cast Iron (Hard Chilled)								
Cast Iron (Malleable)								
Hastelloy								
Inconel								
Magnesium								
Magnesium Alloy								
Monel								
High Nickel Steel								
Mild Steel (.23 Carbon)								
Steel (.45 Carbon)								
Tool Steel								
Forgings								
Steel Alloy (300-400 Brinell)								
35-40 Rockwell C								
40-45 Rockwell C								
45-50 Rockwell C								
50-55 Rockwell C								
Stainless Steel Free Machining								
Stainless Work Hardening								
TI-75A								
RS-120								
TI-150A								
RC-130B								
MST6A1-4 VA								
MST3A1-5 CR								

Different drilling conditions make it impossible to develop a rigid rule for feeds and speeds. The following tables contain guidelines that can be utilized when drilling standard materials. Also, the following "rules of thumb" can be used to determine proper feeds and speeds for drilling ferrous materials. (Note: varying conditions can easily require adjustments)

DRILL SIZE	INCHES PER REVOLUTION	DRILL SIZE	INCHES PER REVOLUTION
.062	.0015	.453-500	.013
.078125	.003	.514625	.016
.140187	.004	.640750	.019
.203250	.007	.765875	.022
.265313	.009	.890-1.000	.024
.328375	.011	1.015-1.250	.026
.390437	.012	1.265-1.500	.027

RECOMMENDED FEEDS: INCHES/REVOLUTION FOR GROUND TWIST DRILL BITS

D	RILLING FORMULAS
SURFACE FEET/MIN.	Multiply RPM times drill diameter (IN) times 0.26
R.P.M.	Surface feet per minute divided by (0.26 multiplied by drill diameter)
Feed Rate In./Min	Multiply RPM times inches per revolution
These charts are application	intended as a guideline. Material and can affect drill feeds and speeds.





#### (A) TIP DIAMETER

Drill bit diameter at tip.

#### (B) SHANK DIAMETER

Drill bit diameter at shank end. Also includes 3/8" reduction diameter.

#### (C) DRILL LENGTH

The length of drill bit from shank end surface to the leading edge of the primary chisel. (measured at the outer diameter)

#### (D) TIP THICKNESS

Thickness of the web at the point. (unless another specific location is indicated)

#### (E) RELIEVED DIAMETER

Diameter of the drill bit body that has been cut away to minimize friction from the hole.

#### (F) MARGIN WIDTH

The portion of the land width that is unaffected by the relieved diameter grind. Located adjacent to the leading edge.

#### (G) CHISEL ANGLE

Included angle between the chisel edge and the leading edge of the cutting lip, as viewed from the front end of the drill.

#### (H) SECONDARY CHISEL ANGLE

Included angle formed by the intersection of the cutting edge and the face of the notch with the relief surface of the point, resulting in partial removal of the primary chisel edge. (applies to split point geometry only)

#### (I) POINT ANGLE

The angle included between the cutting lips projected on a plain parallel to the cutting axis and parallel to the cutting lips. In form this angle resembles a cone, but it departs from a true cone to furnish clearance behind the cutting lips.

#### (J) LIP RELIEF ANGLE

The clearance angle of the cutting lips. Measured by projection onto a plain tangent to the periphery at the outer corner of the lip. The lip relief angle is usually measured across the margins of a twist drill.

#### (K) SECONDARY CLEARANCE ANGLE

The included angle generated from the clearance operation for the secondary cutting edge.

### (L) FLUTE LENGTH

Length of helical flute measured from outer edge of cutting lip to back leadout edge of the flute.

#### (M) CUTTING LENGTH

Length of relieved diameter measured from outer edge of cutting lip to back lead out edge of the relieved diameter grind.

#### (N) WEE

The central portion of the body that joins the lands. Extreme end of the web forms the chisel edge on a two flute drill bit.

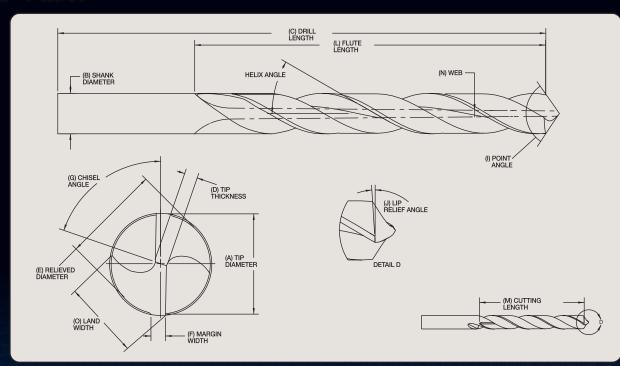
#### (O) LAND WIDTH

Peripheral portion of the body between adjacent flutes.

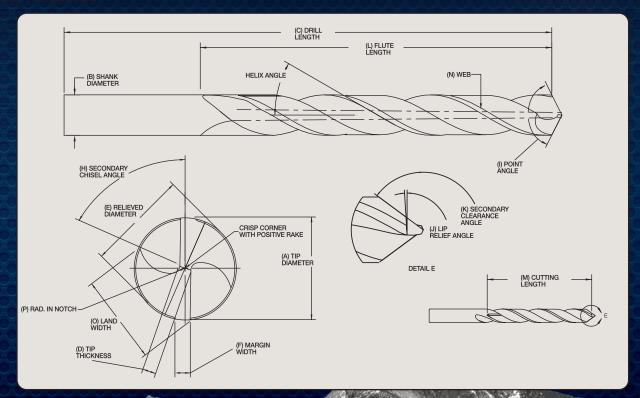
#### (P) RADIUS IN NOTCH

Radius at the intersection of the secondary chisel, and the split depth line.

### 118° POINT



### 135° POINT



## TERMS AND CONDITIONS

#### **Minimum Order Quantity**

Rocky Mountain Twist has a minimum order amount of \$100.00.

#### **Pricing**

Orders will be billed at current pricing. If you have pricing questions, please contact the RMT customer services department. Quotations are valid 30 days from the date of quote unless otherwise noted. Typographical or similar errors are subject to correction. Terms are 1% 10, net 30.

#### **Delivery**

Orders are shipped via regular ground service unless otherwise indicated. Due to size, weight or delivery requirements it may be necessary to split your order into more than one carton or ship your order via freight carrier. Rocky Mountain Twist will pay the shipping costs on orders of \$500 or more (net price) using our preferred carrier (destination within the continental U.S.). All orders are F.O.B. Rocky Mountain Twist, Ronan, Montana 59864.

#### **Return of Merchandise**

Returns are accepted for credit within 30 days of receipt of order and only when accompanied by a Returned Merchandise Agreement Number (RMA#). RMA numbers can be obtained by contacting our customer service department. All returned merchandise must be in original packaging and quantities. Custom Orders, Discontinued Items and Special Tooling cannot be returned. All returns are subject to a 15% restocking fee. All return costs to be prepaid. Freight collect returns will not be accepted. Rocky Mountain Twist reserves the right to refuse return of any item that is found unsuitable for resale due to use, mishandling, or other acts following receipt of the tools by the customer.

#### **Warranty and Limitations of Liability**

Rocky Mountain Twist has attempted to provide current and accurate information herein; however, Seller makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage or injury of any kind which may result from or arise out of the use of or reliance on the information by any person. Rocky Mountain Twist warrants its products shall be free from defects in material and workmanship under normal use and service when correctly installed and maintained. Normal wear and tear is not covered. This warranty shall terminate thirty (30) days after delivery of the products to the Buyer and shall not apply to products that have been subjected to misuse, abuse, neglect or improper storage, handling or maintenance.

#### **Large Quantity Discounts and Blanket Orders**

Rocky Mountain Twist can arrange customized discounts to suit the specific needs of your business. For large quantities and ongoing purchases, customized pricing and terms can be established. Please call (866) 433-4RMT.

#### **NAS (National Aerospace Standard) Special Orders**

Manufactured to NAS specification call outs: Type A, B, C, D, E, J and Extensions. These orders will be manufactured under standard lead times or agreed upon lead times. Call in reference to ordering any NAS type drills.

#### **Foreign Customers**

Our export department is set up to ship anywhere in the world, except those areas prohibited by the U.S. State Department. Payments shall be made in US Dollars via Wire Transfer, International Money Order or by credit card. Our 24 hour Fax service is provided for fast and accurate communications.

# CONTACTS & NOTES

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# **DRILL CHART DECIMAL EQUIVALENTS**

DRILL SIZE	DEC.	DRILL SIZE	DEC.	DRILL SIZE	DEC.	DRILL SIZE	DEC.
0.1mm	.0039	41	.0960	<b>15/64</b>	.2344	<b>33/64</b>	.5156
0.2mm	.0079	40	.0980	6mm	.2362	<b>17/32</b>	.5313
0.3mm	.0118	2.5mm	.0984	B	.2380	13.5mm	.5315
80	.0135	39	.0995	C	.2420	<b>35/64</b>	.5469
79	.0145	38	.1015	D	.2460	14mm	.5512
1/64	.0156	37	.1040	1/4 & E	.2500	9/16	.5625
0.4mm	.0157	36	.1065	6.5mm	.2559	14.5mm	.5709
78	.0160	<b>7/64</b>	<b>.1094</b>	F	.2570	37/64	.5781
77	.0180	35	.1100	G	.2610	15mm	.5906
0.5mm	.0197	34	.1110	17/64	.2656	19/32	.5938
76	.0200	33	.1130	H	.2660	<b>39/64</b>	.6094
75	.0210	32	.1160	I	.2720	15.5mm	.6102
74	.0225	3mm	.1181	7mm	.2756	<b>5/8</b>	.6250
0.6mm	.0236	31	.1200	J	.2770	16mm	.6299
73	.0240	<b>1/8</b>	<b>.1250</b>	K	.2810	<b>41/64</b>	.6406
72	.0250	30	.1285	<b>9/32</b>	.2812	16.5mm	.6496
71	.0260	29	.1360	L	.2900	<b>21/32</b>	. <b>6562</b>
0.7mm	.0276	3.5mm	.1378	M	.2950	17mm	.6693
70	.0280	28	.1405	7.5mm	.2953	<b>43/64</b>	. <b>6719</b>
69	.0292	<b>9/64</b>	<b>.1406</b>	<b>19/64</b>	.2969	11/16	. <b>6875</b>
68	.0310	27	.1440	N	.3020	17.5mm	.6890
<b>1/32</b>	.0312	26	.1470	<b>5/16</b>	<b>.3125</b>	<b>45/64</b>	. <b>7031</b>
0.8mm	.0315	25	.1495	8mm	.3150	18mm	.7087
67	.0320	24	.1520	O	.3160	<b>23/32</b>	<b>.7188</b>
66	.0330	23	.1540	P	.3230	18.5mm	.7283
65	.0350	<b>5/32</b>	.1562	<b>21/64</b>	.3281	<b>47/64</b>	.7344
0.9mm	.0354	22	.1570	Q	.3320	19mm	.7480
64	.0360	4mm	.1575	8.5mm	.3346	<b>3/4</b>	.7500
63	.0370	21	.1590	R	.3390	<b>49/64</b>	.7656
62	.0380	20	.1610	<b>11/32</b>	.3438	19.5mm	.7677
61	.0390	19	.1660	S	.3480	25/32	.7812
1mm	.0394	18	.1695	9mm	.3543	20mm	.7874
60	.0400	<b>11/64</b>	<b>.1719</b>	T	.3580	51/64	.7969
59	.0410	17	.1730	<b>23/64</b>	<b>.3594</b>	20.5mm	.8071
58	.0420	16	.1770	U	.3680	13/16	.8125
57	.0430	4.5mm	.1772	9.5mm	.3740	21mm	.8268
56	.0465	15	.1800	<b>3/8</b>	<b>.3750</b>	<b>53/64</b>	. <b>8281</b>
<b>3/64</b>	<b>.0469</b>	14	.1820	V	.3770	<b>27/32</b>	. <b>8438</b>
55	.0520	13	.1850	W	.3860	21.5mm	.8465
54	.0550	<b>3/16</b>	<b>.1875</b>	<b>25/64</b>	<b>.3906</b>	<b>55/64</b>	. <b>8594</b>
1.5mm	.0591	12	.1890	10mm	.3937	22mm	.8661
53	.0595	11	.1910	X	.3970	<b>7/8</b>	.8750
<b>1/16</b>	<b>.0625</b>	10	.1935	Y	.4040	22.5mm	.8858
52	.0635	9	.1960	<b>13/32</b>	<b>.4062</b>	<b>57/64</b>	.8906
51	.0670	5mm	.1969	Z	.4130	23mm	.9055
50	.0700	8	.1990	10.5mm	.4134	29/32	.9062
49	.0730	7	.2010	<b>27/64</b>	<b>.4219</b>	59/64	.9219
48	.0760	<b>13/64</b>	<b>.2031</b>	11mm	.4331	23.5mm	.9252
<b>5/64</b>	<b>.0781</b>	6	.2040	<b>7/16</b>	<b>.4375</b>	15/16	.9375
47	.0785	5	.2055	11.5mm	.4528	24mm	.9449
2mm	.0787	4	.2090	<b>29/64</b>	. <b>4531</b>	61/64	.9531
46	.0810	3	.2130	<b>15/32</b>	. <b>4688</b>	24.5mm	.9646
45	.0820	5.5mm	.2165	12mm	.4724	31/32	.9688
44	.0860	<b>7/32</b>	<b>.2188</b>	<b>31/64</b>	. <b>4844</b>	25mm	.9843
43	.0890	2	.2210	12.5	.4921	63/64	.9844
42 <b>3/32</b>	.0935 <b>.0938</b>	1 A	.2280 .2340	<b>1/2</b> 13mm	<b>.5000</b> .5118	1	1.000

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