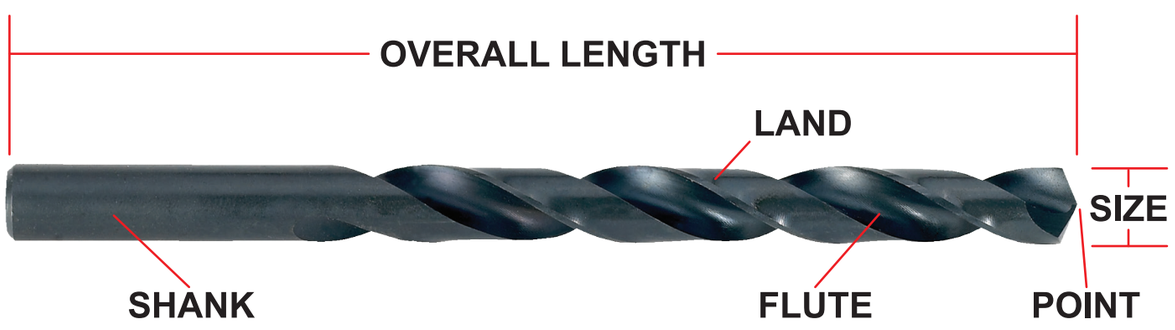
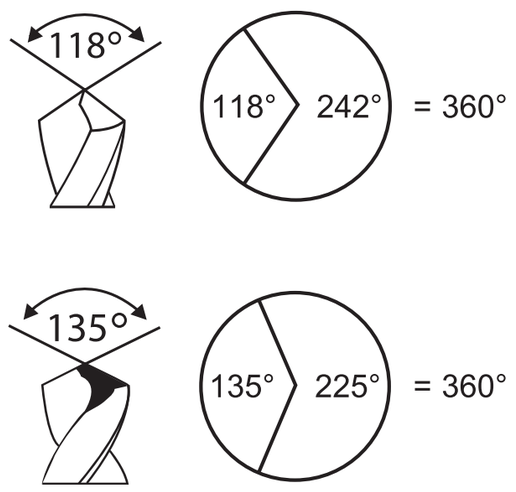
CENLA BOLTS & SUPPLY

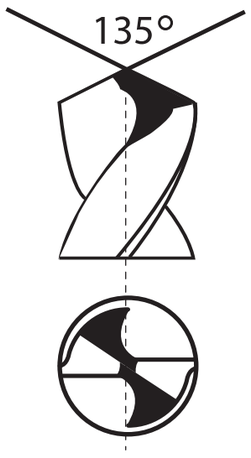
Drilling and Cutting Tools

Jobber Drill Characteristics



Differences In Drill Bit Points





SPLIT POINT

An extra cutting angle on the 2 cutting edges of a drill bit.

Split Point is designated here in black.

Split Pointing is almost always reserved for 135° HSS drill bits.

Drill Bit Diameter Graph

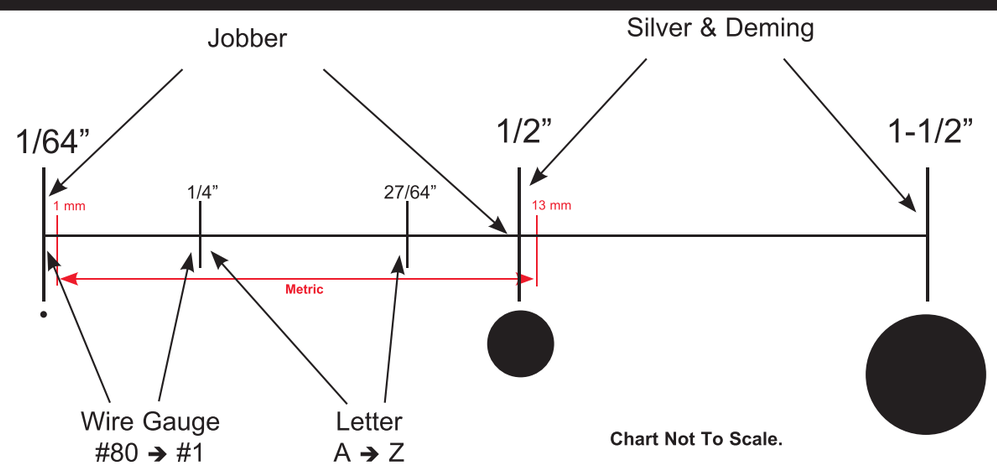


Chart Not To Scale.

Drill Bit Types

Metal drill bits

Annular cutters

TCT steel plate cutters

Reamers

Taps

Wood spade bits

Ship auger

Bi-Metal blades

Concrete SDS plus

SDS max

Drill Bit Diameter Chart

SIZE	CAT.	DEC.	SIZE	CAT.	DEC.	SIZE	CAT.	DEC.	SIZE	CAT.	DEC.	SIZE	CAT.	DEC.	SIZE	CAT.	DEC.	SIZE	CAT.	DEC.
60	N	0.0400	42	N	0.0935	27	N	0.1440	11	N	0.1910	E	L	0.2500	11/32"	J	0.3438	33/64"	S&D	0.5156	13/16"	S&D	0.8125
59	N	0.0410	3/32"	J	0.0938	26	N	0.1470	10	N	0.1935	F	L	0.2570	S	L	0.3480	17/32"	S&D	0.5312	53/64"	S&D	0.8281
58	N	0.0420	41	N	0.0960	25	N	0.1495	9	N	0.1960	G	L	0.2610	T	L	0.3580	35/64"	S&D	0.5469	27/32"	S&D	0.8438
57	N	0.0430	40	N	0.0980	24	N	0.1520	8	N	0.1990	17/64"	J	0.2656	23/64"	J	0.3594	9/16"	S&D	0.5625	55/64"	S&D	0.8594
56	N	0.0465	39	N	0.0995	23	N	0.1540	7	N	0.2010	H	L	0.2660	U	L	0.3680	37/64"	S&D	0.5781	7/8"	S&D	0.8750
55	N	0.0520	38	N	0.1015	5/32"	J	0.1562	13/64"	J	0.2031	I	L	0.2720	3/8"	J	0.3750	19/32"	S&D	0.5938	57/64"	S&D	0.8906
54	N	0.0550	37	N	0.1040	22	N	0.1570	6	N	0.2040	J	L	0.2770	V	L	0.3770	39/64"	S&D	0.6094	29/32"	S&D	0.9062
53	N	0.0595	36	N	0.1065	21	N	0.1590	5	N	0.2055	K	L	0.2810	W	L	0.3860	5/8"	S&D	0.6250	59/64"	S&D	0.9219
1/16"	J	0.0625	7/64"	J	0.1094	20	N	0.1610	4	N	0.2090	9/32"	J	0.2812	25/64"	J	0.3906	41/64"	S&D	0.6406	15/16"	S&D	0.9375
52	N	0.0635	35	N	0.1100	19	N	0.1660	3	N	0.2130	L	L	0.2900	X	L	0.3970	21/32"	S&D	0.6562	61/64"	S&D	0.9531
51	N	0.0670	34	N	0.1110	18	N	0.1695	7/32"	J	0.2188	M	L	0.2950	Y	L	0.4040	43/64"	S&D	0.6719	31/32"	S&D	0.9688
50	N	0.0700	33	N	0.1130	11/64"	J	0.1719	2	N	0.2210	19/64"	J	0.2969	13/32"	J	0.4062	11/16"	S&D	0.6875	63/64"	S&D	0.9844
49	N	0.0730	32	N	0.1160	17	N	0.1730	1	N	0.2280	N	L	0.3020	Z	L	0.4130	45/64"	S&D	0.7031	1"	S&D	1.0000
48	N	0.0760	31	N	0.1200	16	N	0.1770	A	L	0.2340	5/16"	J	0.3125	27/64"	J	0.4219	23/32"	S&D	0.7188	1-1/16"	S&D	1.0625
5/64"	J	0.0781	1/8"	J	0.1250	15	N	0.1800	15/64"	J	0.2344	O	L	0.3160	7/16"	J	0.4375	47/64"	S&D	0.7344	1-1/8"	S&D	1.1250
47	N	0.0785	30	N	0.1285	14	N	0.1820	B	L	0.2380	P	L	0.3230	29/64"	J	0.4531	3/4"	S&D	0.7500	1-3/16"	S&D	1.1875
46	N	0.0810	29	N	0.1362	13	N	0.1850	C	L	0.2420	21/64"	J	0.3281	15/32"	J	0.4688	49/64"	S&D	0.7656	1-1/4"	S&D	1.2500
45	N	0.0820	28	N	0.1405	3/16"	J	0.1875	D	L	0.2460	Q	L	0.3320	31/64"	J	0.4844	25/32"	S&D	0.7812	1-5/16"	S&D	1.3125
44	N	0.0860	9/64"	J	0.1406	12	N	0.1890	1/4"	J	0.2500	R	L	0.3390	1/2"	J	0.5000	51/64"	S&D	0.7969	1-3/8"	S&D	1.3750
43	N	0.0890																			1-1/2"	S&D	1.5000

CATEGORY (CAT.): N = Number, L = Letter, J = Jobber, S&D = Silver & Deming

Chemical Analysis of The Three Primary High Speed Steels Used To Manufacture HSS Drill Bits

TYPE	CHEMICAL COMPOSITION						ROCKWELL C HARDNESS	TERM
	CARBON	TUNGSTEN	MOLYBDENUM	CHROMIUM	VANADIUM	COBALT		
M2	0.85	6.00	5.00	4.00	1.90	-	63-65	HSS
M35	1.10	1.50	9.50	1.15	1.15	5.00	65-67	COBALT
M42	1.10	1.50	9.50	1.15	1.15	8.00	65-67	SUPER COBALT

M2 “HSS” is the standard material used for all Proferred® drill bits. M2 has good red-hardness and retains its cutting edge longer than other general purpose high speed steels because of its increased quantity of tungsten (dull red heat up to 1000°F without loss of hardness or rapid dulling of cutting edge).
M2 is generally favored for high production machine work.

M35 M35 is the standard cobalt material used for most Proferred® drill bits. M35 has excellent resistance to abrasion and very good red-hardness for working difficult materials.

M42 M42 “Super Cobalt” is American made premium cobalt material used for higher performance Proferred® drill bits. M42 has the best resistance to abrasion and red-hardness.

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