



BRIGHTON-BEST INTERNATIONAL

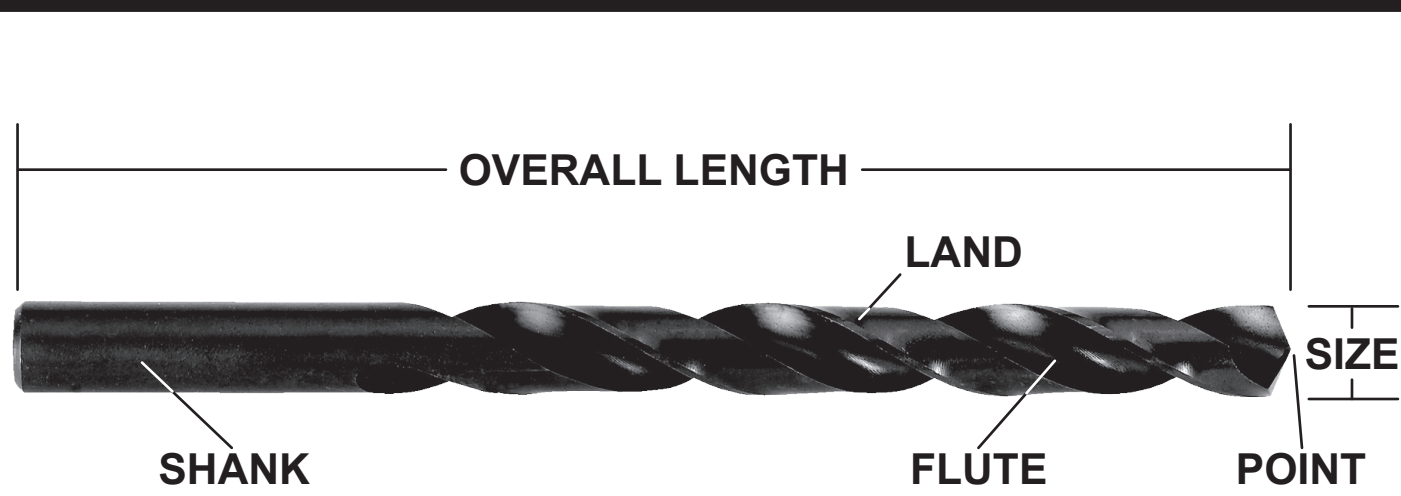
TECHNICAL GUIDE



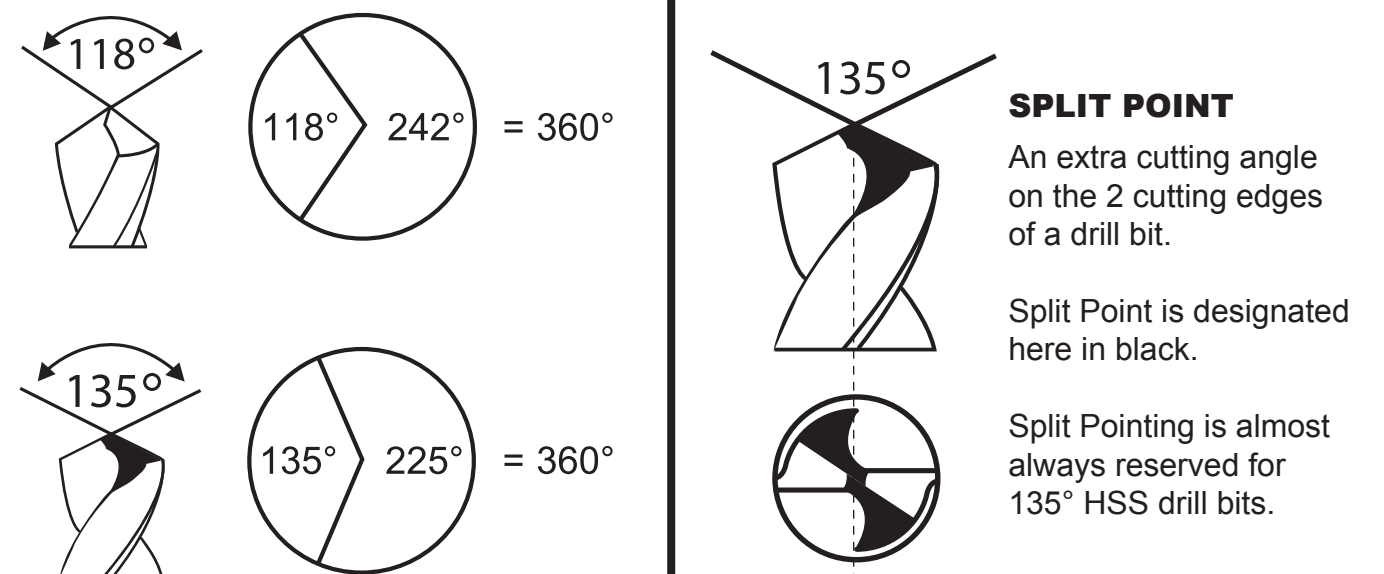
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Drilling and Cutting Tools

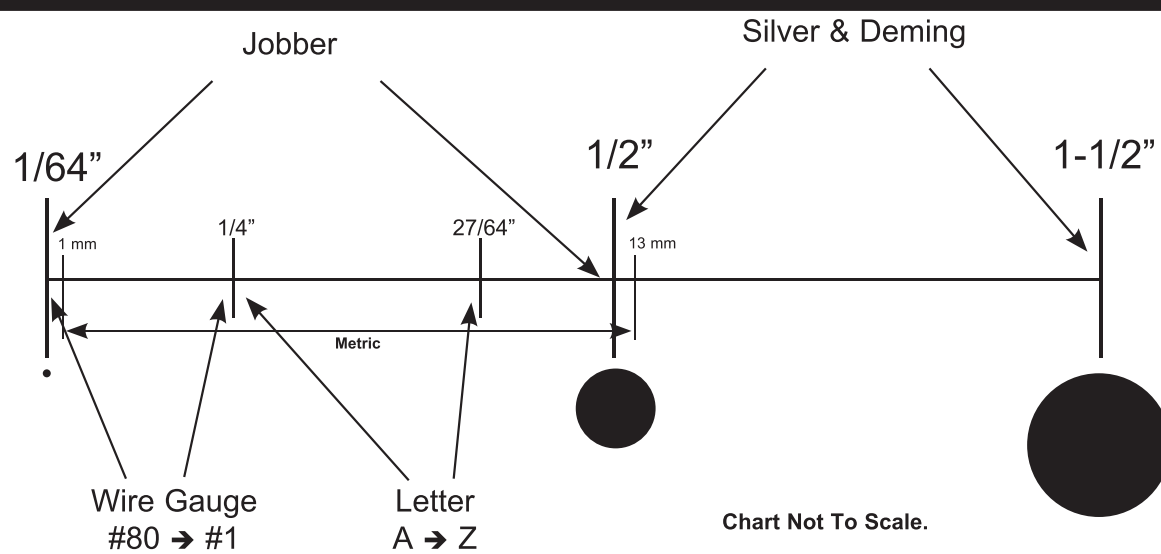
Jobber Drill Characteristics



Differences In Drill Bit Points



Drill Bit Diameter Graph



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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