SHANGHAI INDUSTRIAL TOOL SUPPLY INC.

PRODUCTION SOLUTIONS
PRODUCTION TOOLS
HIGH PERFORMANCE TOOLS
SPECIAL APPLICATION TOOLS

www.its-cut.com

- DRILLS
- COUNTERBORES
- COUNTERSINKS
- REAMERS
- END MILLS
- CUTTERS
- TAPS
- DIES
- TOOL BITS
- SAWS
- MASONRY WORKING
- WOODWORKING TOOLS
- CARBIDE BURRS

ABOUT US

SHANGHAI INDUSTRIAL TOOL SUPPLY INC is a professional manufacturer & distributor specialized in cutting tools industry. We sell wholesale to industrial distributors.

We can provide cutting tools such as HSS twist drills, reamers, end mills, taps & dies, tool bits ,woodworking tools, solid carbide and carbide-tipped cutting tools according to the standards of ISO, DIN, JIS and American Standard.

OUR MISSION is to meet the worldwide demand for high-quality manufactured products along with outstanding service – while still providing our customers with the lowest possible prices and on-time delivery.

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Jobber Length Drills

- High Speed Steel and Cobalt ·118° Standard Point
- General Purpose Drills suitable for most applications.
- Works well in a wide variety of materials
- Standard：ANSI B94.11M

Fractional Sizes

Size (in.)	Flute Length (in.)	OAL (in.)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
1/64	3/16	3/4	DJ01001	DJ10001	DJ11001	DJ12001	DJ15001
1/32	1/2	1-3/8	DJ01002	DJ10002	DJ11002	DJ12002	DJ15002
3/64	3/4	1-3/4	DJ01003	DJ10003	DJ11003	DJ12003	DJ15003
1/16	7/8	1-7/8	DJ01004	DJ10004	DJ11004	DJ12004	DJ15004
5/64	1"	2"	DJ01005	DJ10005	DJ11005	DJ12005	DJ15005
3/32	1-1/4	2-1/4	DJ01006	DJ10006	DJ11006	DJ12006	DJ15006
7/64	1-1/2	2-5/8	DJ01007	DJ10007	DJ11007	DJ12007	DJ15007
1/8	1-5/8	2-3/4	DJ01008	DJ10008	DJ11008	DJ12008	DJ15008
9/64	1-3/4	2-7/8	DJ01009	DJ10009	DJ11009	DJ12009	DJ15009
5/32	2 "	3-1/8	DJ01010	DJ10010	DJ11010	DJ12010	DJ15010
11/64	2-1/8	3-1/4	DJ01011	DJ10011	DJ11011	DJ12011	DJ15011
3/16	2-5/16	3-1/2	DJ01012	DJ10012	DJ11012	DJ12012	DJ15012
13/64	2-7/16	3-5/8	DJ01013	DJ10013	DJ11013	DJ12013	DJ15013
7/32	2-1/2	3-3/4	DJ01014	DJ10014	DJ11014	DJ12014	DJ15014
15/64	2-5/8	3-7/8	DJ01015	DJ10015	DJ11015	DJ12015	DJ15015
1/4	2-3/4	4"	DJ01016	DJ10016	DJ11016	DJ12016	DJ15016
17/64	2-7/8	4-1/8	DJ01017	DJ10017	DJ11017	DJ12017	DJ15017
9/32	2-15/16	4-1/4	DJ01018	DJ10018	DJ11018	DJ12018	DJ15018
19/64	3-1/16	4-3/8	DJ01019	DJ10019	DJ11019	DJ12019	DJ15019
5/16	3-3/16	4-1/2	DJ01020	DJ10020	DJ11020	DJ12020	DJ15020
21/64	3-5/16	4-5/8	DJ01021	DJ10021	DJ11021	DJ12021	DJ15021
11/32	3-7/16	4-3/4	DJ01022	DJ10022	DJ11022	DJ12022	DJ15022
23/64	3-1/2	4-7/8	DJ01023	DJ10023	DJ11023	DJ12023	DJ15023
3/8	3-5/8	5"	DJ01024	DJ10024	DJ11024	DJ12024	DJ15024
25/64	3-3/4	5-1/8	DJ01025	DJ10025	DJ11025	DJ12025	DJ15025
13/32	3-7/8	5-1/4	DJ01026	DJ10026	DJ11026	DJ12026	DJ15026
27/64	3-15/16	5-3/8	DJ01027	DJ10027	DJ11027	DJ12027	DJ15027
7/16	4-1/16	5-1/2	DJ01028	DJ10028	DJ11028	DJ12028	DJ15028
29/64	4-3/16	5-5/8	DJ01029	DJ10029	DJ11029	DJ12029	DJ15029
15/32	4-5/16	5-3/4	DJ01030	DJ10030	DJ11030	DJ12030	DJ15030
31/64	4-3/8	5-7/8	DJ01031	DJ10031	DJ11031	DJ12031	DJ15031
1/2	4-1/2	6"	DJ01032	DJ10032	DJ11032	DJ12032	DJ15032
33/64	4-13/16	6-5/8	DJ01033	DJ10033	DJ11033	DJ12033	DJ15033
17/32	4-13/16	6-5/8	DJ01034	DJ10034	DJ11034	DJ12034	DJ15034
35/64	4-13/16	6-5/8	DJ01035	DJ10035	DJ11035	DJ12035	DJ15035
9/16	4-13/16	6-5/8	DJ01036	DJ10036	DJ11036	DJ12036	DJ15036
37/64	4-13/16	6-5/8	DJ01037	DJ10037	DJ11037	DJ12037	DJ15037
19/32	5-3/16	7-1/8	DJ01038	DJ10038	DJ11038	DJ12038	DJ15038
39/64	5-3/16	7-1/8	DJ01039	DJ10039	DJ11039	DJ12039	DJ15039
5/8	5-3/16	7-1/8	DJ01040	DJ10040	DJ11040	DJ12040	DJ15040
41/64	5-3/16	7-1/8	DJ01041	DJ10041	DJ11041	DJ12041	DJ15041
21/32	5-3/16	7-1/8	DJ01042	DJ10042	DJ11042	DJ12042	DJ15042
43/64	5-5/8	7-5/8	DJ01043	DJ10043	DJ11043	DJ12043	DJ15043
11/16	5-5/8	7-5/8	DJ01044	DJ10044	DJ11044	DJ12044	DJ15044
23/32	5-5/8	7-5/8	DJ01046	DJ10046	DJ11046	DJ12046	DJ15045
3/4	5-5/8	7-5/8	DJ01048	DJ10048	DJ11048	DJ12048	DJ15046

Wire Gage Size

Size	Flute Length (in.)	OAL (in.)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
1	2-5/8	3-7/8	DJ01501	DJ10501	DJ11501	DJ12501	DJ15501
2	2-5/8	3-7/8	DJ01502	DJ10502	DJ11502	DJ12502	DJ15502
3	2-1/2	3-3/4	DJ01503	DJ10503	DJ11503	DJ12503	DJ15503
4	2-1/2	3-3/4	DJ01504	DJ10504	DJ11504	DJ12504	DJ15504
5	2-1/2	3-3/4	DJ01505	DJ10505	DJ11505	DJ12505	DJ15505
6	2-1/2	3-3/4	DJ01506	DJ10506	DJ11506	DJ12506	DJ15506
7	2-7/16	3-5/8	DJ01507	DJ10507	DJ11507	DJ12507	DJ15507
8	2-7/16	3-5/8	DJ01508	DJ10508	DJ11508	DJ12508	DJ15508
9	2-7/16	3-5/8	DJ01509	DJ10509	DJ11509	DJ12509	DJ15509
10	2-7/16	3-5/8	DJ01510	DJ10510	DJ11510	DJ12510	DJ15510
11	2-5/16	3-1/2	DJ01511	DJ10511	DJ11511	DJ12511	DJ15511
12	2-5/16	3-1/2	DJ01512	DJ10512	DJ11512	DJ12512	DJ15512
13	2-5/16	3-1/2	DJ01513	DJ10513	DJ11513	DJ12513	DJ15513
14	2-3/16	3-3/8	DJ01514	DJ10514	DJ11514	DJ12514	DJ15514
15	2-3/16	3-3/8	DJ01515	DJ10515	DJ11515	DJ12515	DJ15515
16	2-3/16	3-3/8	DJ01516	DJ10516	DJ11516	DJ12516	DJ15516
17	2-3/16	3-3/8	DJ01517	DJ10517	DJ11517	DJ12517	DJ15517
18	2-1/8	3-1/4	DJ01518	DJ10518	DJ11518	DJ12518	DJ15518
19	2-1/8	3-1/4	DJ01519	DJ10519	DJ11519	DJ12519	DJ15519
20	2-1/8	3-1/4	DJ01520	DJ10520	DJ11520	DJ12520	DJ15520
21	2-1/8	3-1/4	DJ01521	DJ10521	DJ11521	DJ12521	DJ15521
22	2"	3-1/8	DJ01522	DJ10522	DJ11522	DJ12522	DJ15522
23	2"	3-1/8	DJ01523	DJ10523	DJ11523	DJ12523	DJ15523
24	2"	3-1/8	DJ01524	DJ10524	DJ11524	DJ12524	DJ15524
25	1-7/8	3"	DJ01525	DJ10525	DJ11525	DJ12525	DJ15525
26	1-7/8	3"	DJ01526	DJ10526	DJ11526	DJ12526	DJ15526
27	1-7/8	3"	DJ01527	DJ10527	DJ11527	DJ12527	DJ15527
28	1-3/4	2-7/8	DJ01528	DJ10528	DJ11528	DJ12528	DJ15528
29	1-3/4	2-7/8	DJ01529	DJ10529	DJ11529	DJ12529	DJ15529
30	1-5/8	2-3/4	DJ01530	DJ10530	DJ11530	DJ12530	DJ15530
31	1-5/8	2-3/4	DJ01531	DJ10531	DJ11531	DJ12531	DJ15531
32	1-5/8	2-3/4	DJ01532	DJ10532	DJ11532	DJ12532	DJ15532
33	1-1/2	2-5/8	DJ01533	DJ10533	DJ11533	DJ12533	DJ15533
34	1-1/2	2-5/8	DJ01534	DJ10534	DJ11534	DJ12534	DJ15534
35	1-1/2	2-5/8	DJ01535	DJ10535	DJ11535	DJ12535	DJ15535
36	1-7/16	2-1/2	DJ01536	DJ10536	DJ11536	DJ12536	DJ15536
37	1-7/16	2-1/2	DJ01537	DJ10537	DJ11537	DJ12537	DJ15537
38	1-7/16	2-1/2	DJ01538	DJ10538	DJ11538	DJ12538	DJ15538
39	1-3/8	2-3/8	DJ01539	DJ10539	DJ11539	DJ12539	DJ15539
40	1-3/8	2-3/8	DJ01540	DJ10540	DJ11540	DJ12540	DJ15540
41	1-3/8	2-3/8	DJ01541	DJ10541	DJ11541	DJ12541	DJ15541
42	1-1/4	2-1/4	DJ01542	DJ10542	DJ11542	DJ12542	DJ15542
43	1-1/4	2-1/4	DJ01543	DJ10543	DJ11543	DJ12543	DJ15543
44	1-1/8	2-1/8	DJ01544	DJ10544	DJ11544	DJ12544	DJ15544
45	1-1/8	2-1/8	DJ01545	DJ10545	DJ11545	DJ12545	DJ15545
46	1-1/8	2-1/8	DJ01546	DJ10546	DJ11546	DJ12546	DJ15546
47	1"	2"	DJ01547	DJ10547	DJ11547	DJ12547	DJ15547
48	1"	2"	DJ01548	DJ10548	DJ11548	DJ12548	DJ15548
49	1"	2"	DJ01549	DJ10549	DJ11549	DJ12549	DJ15549
50	1"	2"	DJ01550	DJ10550	DJ11550	DJ12550	DJ15550
51	1"	2"	DJ01551	DJ10551	DJ11551	DJ12551	DJ15551
52	7/8	1-7/8	DJ01552	DJ10552	DJ11552	DJ12552	DJ15552
53	7/8	1-7/8	DJ01553	DJ10553	DJ11553	DJ12553	DJ15553
54	7/8	1-7/8	DJ01554	DJ10554	DJ11554	DJ12554	DJ15554
55	7/8	1-7/8	DJ01555	DJ10555	DJ11555	DJ12555	DJ15555
56	3/4	1-3/4	DJ01556	DJ10556	DJ11556	DJ12556	DJ15556
57	3/4	1-3/4	DJ01557	DJ10557	DJ11557	DJ12557	DJ15557
58	11/16	1-5/8	DJ01558	DJ10558	DJ11558	DJ12558	DJ15558

Jobber Length Drills

- High Speed Steel and Cobalt ·118° Standard Point
- General Purpose Drills suitable for most applications.
- Works well in a wide variety of materials
- Standard：ANSI B94.11M

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
59	11/16	1-5/8	DJ01559	DJ10559	DJ11559	DJ12559	DJ15559
60	11/16	1-5/8	DJ01560	DJ10560	DJ11560	DJ12560	DJ15560
61	11/16	1-5/8	DJ01561	DJ10561	DJ11561	DJ12561	DJ15561
62	5/8	1-1/2	DJ01562	DJ10562	DJ11562	DJ12562	DJ15562
63	5/8	1-1/2	DJ01563	DJ10563	DJ11563	DJ12563	DJ15563
64	5/8	1-1/2	DJ01564	DJ10564	DJ11564	DJ12564	DJ15564
65	5/8	1-1/2	DJ01565	DJ10565	DJ11565	DJ12565	DJ15565
66	1/2	1-3/8	DJ01566	DJ10566	DJ11566	DJ12566	DJ15566
67	1/2	1-3/8	DJ01567	DJ10567	DJ11567	DJ12567	DJ15567
68	1/2	1-3/8	DJ01568	DJ10568	DJ11568	DJ12568	DJ15568
69	1/2	1-3/8	DJ01569	DJ10569	DJ11569	DJ12569	DJ15569
70	3/8	1-1/4	DJ01570	DJ10570	DJ11570	DJ12570	DJ15570
71	3/8	1-1/4	DJ01571	DJ10571	DJ11571	DJ12571	DJ15571
72	5/16	1-1/8	DJ01572	DJ10572	DJ11572	DJ12572	DJ15572
73	5/16	1-1/8	DJ01573	DJ10573	DJ11573	DJ12573	DJ15573
74	1/4	1"	DJ01574	DJ10574	DJ11574	DJ12574	DJ15574
75	1/4	1"	DJ01575	DJ10575	DJ11575	DJ12575	DJ15575
76	3/16	7/8	DJ01576	DJ10576	DJ11576	DJ12576	DJ15576
77	3/16	7/8	DJ01577	DJ10577	DJ11577	DJ12577	DJ15577
78	3/16	7/8	DJ01578	DJ10578	DJ11578	DJ12578	DJ15578
79	1/8	3/4	DJ01579	DJ10579	DJ11579	DJ12579	DJ15579
80	1/8	3/4	DJ01580	DJ10580	DJ11580	DJ12580	DJ15580

Letter Size

Size	Flute Length(in.)	OAL (in.)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
A	2-5/8	3-7/8	DJ01601	DJ10601	DJ11601	DJ12601	DJ15601
B	2-3/4	4"	DJ01602	DJ10602	DJ11602	DJ12601	DJ15601
C	2-3/4	4"	DJ01603	DJ10603	DJ11603	DJ12601	DJ15601
D	2-3/4	4"	DJ01604	DJ10604	DJ11604	DJ12601	DJ15601
E	2-3/4	4"	DJ01605	DJ10605	DJ11605	DJ12601	DJ15601
F	2-7/8	4-1/8	DJ01606	DJ10606	DJ11606	DJ12601	DJ15601
G	2-7/8	4-1/8	DJ01607	DJ10607	DJ11607	DJ12601	DJ15601
H	2-7/8	4-1/8	DJ01608	DJ10608	DJ11608	DJ12601	DJ15601
I	2-7/8	4-1/8	DJ01609	DJ10609	DJ11609	DJ12601	DJ15601
J	2-7/8	4-1/8	DJ01610	DJ10610	DJ11610	DJ12601	DJ15601
K	2-15/16	4-1/4	DJ01611	DJ10611	DJ11611	DJ12601	DJ15601
L	2-15/16	4-1/4	DJ01612	DJ10612	DJ11612	DJ12601	DJ15601
M	3-1/16	4-3/8	DJ01613	DJ10613	DJ11613	DJ12601	DJ15601
N	3-1/16	4-3/8	DJ01614	DJ10614	DJ11614	DJ12601	DJ15601
O	3-3/16	4-1/2	DJ01615	DJ10615	DJ11615	DJ12601	DJ15601
P	3-5/16	4-5/8	DJ01616	DJ10616	DJ11616	DJ12601	DJ15601
Q	3-7/16	4-3/4	DJ01617	DJ10617	DJ11617	DJ12601	DJ15601
R	3-7/16	4-3/4	DJ01618	DJ10618	DJ11618	DJ12601	DJ15601
S	3-1/2	4-7/8	DJ01619	DJ10619	DJ11619	DJ12601	DJ15601
T	3-1/2	4-7/8	DJ01620	DJ10620	DJ11620	DJ12601	DJ15601
U	3-5/8	5"	DJ01621	DJ10621	DJ11621	DJ12601	DJ15601
V	3-5/8	5"	DJ01622	DJ10622	DJ11622	DJ12601	DJ15601
W	3-3/4	5-1/8	DJ01623	DJ10623	DJ11623	DJ12601	DJ15601
X	3-3/4	5-1/8	DJ01624	DJ10624	DJ11624	DJ12601	DJ15601
Y	3-7/8	5-1/4	DJ01625	DJ10625	DJ11625	DJ12601	DJ15601
Z	3-7/8	5-1/4	DJ01626	DJ10626	DJ11626	DJ12601	DJ15601

Heavy Duty Jobber Drills

- High Speed Steel and Cobalt ·135° Split Point
- 135° Split point is self-centering and reduces thrust.
- Heavy duty operations in stainless steel, titanium, inconel, and other hard metals.
- Standard：ANSI B94.11M

Fractional Sizes

Size (in.)	Flute Length(in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Bi-colored Order No.	Ground Cobalt Order No.
1/16	7/8	1-7/8	DJ20004	DJ21004	DJ22004	DJ23004	DJ25004
5/64	1"	2"	DJ20005	DJ21005	DJ22005	DJ23005	DJ25005
3/32	1-1/4	2-1/4	DJ20006	DJ21006	DJ22006	DJ23006	DJ25006
7/64	1-1/2	2-5/8	DJ20007	DJ21007	DJ22007	DJ23007	DJ25007
1/8	1-5/8	2-3/4	DJ20008	DJ21008	DJ22008	DJ23008	DJ25008
9/64	1-3/4	2-7/8	DJ20009	DJ21009	DJ22009	DJ23009	DJ25009
5/32	2"	3-1/8	DJ20010	DJ21010	DJ22010	DJ23010	DJ25010
11/64	2-1/8	3-1/4	DJ20011	DJ21011	DJ22011	DJ23011	DJ25011
3/16	2-5/16	3-1/2	DJ20012	DJ21012	DJ22012	DJ23012	DJ25012
13/64	2-7/16	3-5/8	DJ20013	DJ21013	DJ22013	DJ23013	DJ25013
7/32	2-1/2	3-3/4	DJ20014	DJ21014	DJ22014	DJ23014	DJ25014
15/64	2-5/8	3-7/8	DJ20015	DJ21015	DJ22015	DJ23015	DJ25015
1/4	2-3/4	4"	DJ20016	DJ21016	DJ22016	DJ23016	DJ25016
17/64	2-7/8	4-1/8	DJ20017	DJ21017	DJ22017	DJ23017	DJ25017
9/32	2-15/16	4-1/4	DJ20018	DJ21018	DJ22018	DJ23018	DJ25018
19/64	3-1/16	4-3/8	DJ20019	DJ21019	DJ22019	DJ23019	DJ25019
5/16	3-3/16	4-1/2	DJ20020	DJ21020	DJ22020	DJ23020	DJ25020
21/64	3-5/16	4-5/8	DJ20021	DJ21021	DJ22021	DJ23021	DJ25021
11/32	3-7/16	4-3/4	DJ20022	DJ21022	DJ22022	DJ23022	DJ25022
23/64	3-1/2	4-7/8	DJ20023	DJ21023	DJ22023	DJ23023	DJ25023
3/8	3-5/8	5"	DJ20024	DJ21024	DJ22024	DJ23024	DJ25024
25/64	3-3/4	5-1/8	DJ20025	DJ21025	DJ22025	DJ23025	DJ25025
13/32	3-7/8	5-1/4	DJ20026	DJ21026	DJ22026	DJ23026	DJ25026
27/64	3-15/16	5-3/8	DJ20027	DJ21027	DJ22027	DJ23027	DJ25027
7/16	4-1/16	5-1/2	DJ20028	DJ21028	DJ22028	DJ23028	DJ25028
29/64	4-3/16	5-5/8	DJ20029	DJ21029	DJ22029	DJ23029	DJ25029
15/32	4-5/16	5-3/4	DJ20030	DJ21030	DJ22030	DJ23030	DJ25030
31/64	4-3/8	5-7/8	DJ20031	DJ21031	DJ22031	DJ23031	DJ25031
1/2	4-1/2	6"	DJ20032	DJ21032	DJ22032	DJ23032	DJ25032
33/64	4-13/16	6-5/8	DJ20033	DJ21033	DJ22033	DJ23033	DJ25033
17/32	4-13/16	6-5/8	DJ20034	DJ21034	DJ22034	DJ23034	DJ25034
35/64	4-13/16	6-5/8	DJ20035	DJ21035	DJ22035	DJ23035	DJ25035
9/16	4-13/16	6-5/8	DJ20036	DJ21036	DJ22036	DJ23036	DJ25036
37/64	4-13/16	6-5/8	DJ20037	DJ21037	DJ22037	DJ23037	DJ25037
19/32	5-3/16	7-1/8	DJ20038	DJ21038	DJ22038	DJ23038	DJ25038
39/64	5-3/16	7-1/8	DJ20039	DJ21039	DJ22039	DJ23039	DJ25039
5/8	5-3/16	7-1/8	DJ20040	DJ21040	DJ22040	DJ23040	DJ25040
41/64	5-3/16	7-1/8	DJ20041	DJ21041	DJ22041	DJ23041	DJ25041
21/32	5-3/16	7-1/8	DJ20042	DJ21042	DJ22042	DJ23042	DJ25042
43/64	5-5/8	7-5/8	DJ20043	DJ21043	DJ22043	DJ23043	DJ25043
11/16	5-5/8	7-5/8	DJ20044	DJ21044	DJ22044	DJ23044	DJ25044
3/4	5-5/8	7-5/8	DJ20048	DJ21048	DJ22048	DJ23048	DJ25048

Heavy Duty Jobber Drills

- High Speed Steel and Cobalt ·135° Split Point
- 135° Split point is self-centering and reduces thrust.
- Heavy duty operations in stainless steel, titanium, inconel, and other hard metals.
- Standard：ANSI B94.11M

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiNCoated Order No.	Ground Bicolored Order No.	Ground Cobalt Order No.
1	2-5/8	3-7/8	DJ20501	DJ21501	DJ22501	DJ23501	DJ25501
2	2-5/8	3-7/8	DJ20502	DJ21502	DJ22502	DJ23502	DJ25502
3	2-1/2	3-3/4	DJ20503	DJ21503	DJ22503	DJ23503	DJ25503
4	2-1/2	3-3/4	DJ20504	DJ21504	DJ22504	DJ23504	DJ25504
5	2-1/2	3-3/4	DJ20505	DJ21505	DJ22505	DJ23505	DJ25505
6	2-1/2	3-3/4	DJ20506	DJ21506	DJ22506	DJ23506	DJ25506
7	2-7/16	3-5/8	DJ20507	DJ21507	DJ22507	DJ23507	DJ25507
8	2-7/16	3-5/8	DJ20508	DJ21508	DJ22508	DJ23508	DJ25508
9	2-7/16	3-5/8	DJ20509	DJ21509	DJ22509	DJ23509	DJ25509
10	2-7/16	3-5/8	DJ20510	DJ21510	DJ22510	DJ23510	DJ25510
11	2-5/16	3-1/2	DJ20511	DJ21511	DJ22511	DJ23511	DJ25511
12	2-5/16	3-1/2	DJ20512	DJ21512	DJ22512	DJ23512	DJ25512
13	2-5/16	3-1/2	DJ20513	DJ21513	DJ22513	DJ23513	DJ25513
14	2-3/16	3-3/8	DJ20514	DJ21514	DJ22514	DJ23514	DJ25514
15	2-3/16	3-3/8	DJ20515	DJ21515	DJ22515	DJ23515	DJ25515
16	2-3/16	3-3/8	DJ20516	DJ21516	DJ22516	DJ23516	DJ25516
17	2-3/16	3-3/8	DJ20517	DJ21517	DJ22517	DJ23517	DJ25517
18	2-1/8	3-1/4	DJ20518	DJ21518	DJ22518	DJ23518	DJ25518
19	2-1/8	3-1/4	DJ20519	DJ21519	DJ22519	DJ23519	DJ25519
20	2-1/8	3-1/4	DJ20520	DJ21520	DJ22520	DJ23520	DJ25520
21	2-1/8	3-1/4	DJ20521	DJ21521	DJ22521	DJ23521	DJ25521
22	2"	3-1/8	DJ20522	DJ21522	DJ22522	DJ23522	DJ25522
23	2"	3-1/8	DJ20523	DJ21523	DJ22523	DJ23523	DJ25523
24	2"	3-1/8	DJ20524	DJ21524	DJ22524	DJ23524	DJ25524
25	1-7/8	3"	DJ20525	DJ21525	DJ22525	DJ23525	DJ25525
26	1-7/8	3"	DJ20526	DJ21526	DJ22526	DJ23526	DJ25526
27	1-7/8	3"	DJ20527	DJ21527	DJ22527	DJ23527	DJ25527
28	1-3/4	2-7/8	DJ20528	DJ21528	DJ22528	DJ23528	DJ25528
29	1-3/4	2-7/8	DJ20529	DJ21529	DJ22529	DJ23529	DJ25529
30	1-5/8	2-3/4	DJ20530	DJ21530	DJ22530	DJ23530	DJ25530
31	1-5/8	2-3/4	DJ20531	DJ21531	DJ22531	DJ23531	DJ25531
32	1-5/8	2-3/4	DJ20532	DJ21532	DJ22532	DJ23532	DJ25532
33	1-1/2	2-5/8	DJ20533	DJ21533	DJ22533	DJ23533	DJ25533
34	1-1/2	2-5/8	DJ20534	DJ21534	DJ22534	DJ23534	DJ25534
35	1-1/2	2-5/8	DJ20535	DJ21535	DJ22535	DJ23535	DJ25535
36	1-7/16	2-1/2	DJ20536	DJ21536	DJ22536	DJ23536	DJ25536
37	1-7/16	2-1/2	DJ20537	DJ21537	DJ22537	DJ23537	DJ25537
38	1-7/16	2-1/2	DJ20538	DJ21538	DJ22538	DJ23538	DJ25538
39	1-3/8	2-3/8	DJ20539	DJ21539	DJ22539	DJ23539	DJ25539
40	1-3/8	2-3/8	DJ20540	DJ21540	DJ22540	DJ23540	DJ25540
41	1-3/8	2-3/8	DJ20541	DJ21541	DJ22541	DJ23541	DJ25541
42	1-1/4	2-1/4	DJ20542	DJ21542	DJ22542	DJ23542	DJ25542
43	1-1/4	2-1/4	DJ20543	DJ21543	DJ22543	DJ23543	DJ25543
44	1-1/8	2-1/8	DJ20544	DJ21544	DJ22544	DJ23544	DJ25544
45	1-1/8	2-1/8	DJ20545	DJ21545	DJ22545	DJ23545	DJ25545
46	1-1/8	2-1/8	DJ20546	DJ21546	DJ22546	DJ23546	DJ25546
47	1"	2"	DJ20547	DJ21547	DJ22547	DJ23547	DJ25547
48	1"	2"	DJ20548	DJ21548	DJ22548	DJ23548	DJ25548
49	1"	2"	DJ20549	DJ21549	DJ22549	DJ23549	DJ25549
50	1"	2"	DJ20550	DJ21550	DJ22550	DJ23550	DJ25550
51	1"	2"	DJ20551	DJ21551	DJ22551	DJ23551	DJ25551
52	7/8	1-7/8	DJ20552	DJ21552	DJ22552	DJ23552	DJ25552
53	7/8	1-7/8	DJ20553	DJ21553	DJ22553	DJ23553	DJ25553
54	7/8	1-7/8	DJ20554	DJ21554	DJ22554	DJ23554	DJ25554
55	7/8	1-7/8	DJ20555	DJ21555	DJ22555	DJ23555	DJ25555
56	3/4	1-3/4	DJ20556	DJ21556	DJ22556	DJ23556	DJ25556
57	3/4	1-3/4	DJ20557	DJ21557	DJ22557	DJ23557	DJ25557
58	11/16	1-5/8	DJ20558	DJ21558	DJ22558	DJ23558	DJ25558
59	11/16	1-5/8	DJ20559	DJ21559	DJ22559	DJ23559	DJ25559
60	11/16	1-5/8	DJ20560	DJ21560	DJ22560	DJ23560	DJ25560

Letter Size

Size	Flute Length(in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiNCoated Order No.	Ground Bicolored Order No.	Ground Cobalt Order No.
A	2-5/8	3-7/8	DJ20601	DJ21601	DJ22601	DJ23601	DJ25601
B	2-3/4	4"	DJ20602	DJ21602	DJ22602	DJ23602	DJ25602
C	2-3/4	4"	DJ20603	DJ21603	DJ22603	DJ23603	DJ25603
D	2-3/4	4"	DJ20604	DJ21604	DJ22604	DJ23604	DJ25604
E	2-3/4	4"	DJ20605	DJ21605	DJ22605	DJ23605	DJ25605
F	2-7/8	4-1/8	DJ20606	DJ21606	DJ22606	DJ23606	DJ25606
G	2-7/8	4-1/8	DJ20607	DJ21607	DJ22607	DJ23607	DJ25607
H	2-7/8	4-1/8	DJ20608	DJ21608	DJ22608	DJ23608	DJ25608
I	2-7/8	4-1/8	DJ20609	DJ21609	DJ22609	DJ23609	DJ25609
J	2-7/8	4-1/8	DJ20610	DJ21610	DJ22610	DJ23610	DJ25610
K	2-15/16	4-1/4	DJ20611	DJ21611	DJ22611	DJ23611	DJ25611
L	2-15/16	4-1/4	DJ20612	DJ21612	DJ22612	DJ23612	DJ25612
M	3-1/16	4-3/8	DJ20613	DJ21613	DJ22613	DJ23613	DJ25613
N	3-1/16	4-3/8	DJ20614	DJ21614	DJ22614	DJ23614	DJ25614
O	3-3/16	4-1/2	DJ20615	DJ21615	DJ22615	DJ23615	DJ25615
P	3-5/16	4-5/8	DJ20616	DJ21616	DJ22616	DJ23616	DJ25616
Q	3-7/16	4-3/4	DJ20617	DJ21617	DJ22617	DJ23617	DJ25617
R	3-7/16	4-3/4	DJ20618	DJ21618	DJ22618	DJ23618	DJ25618
S	3-1/2	4-7/8	DJ20619	DJ21619	DJ22619	DJ23619	DJ25619
T	3-1/2	4-7/8	DJ20620	DJ21620	DJ22620	DJ23620	DJ25620
U	3-5/8	5"	DJ20621	DJ21621	DJ22621	DJ23621	DJ25621
V	3-5/8	5"	DJ20622	DJ21622	DJ22622	DJ23622	DJ25622
W	3-3/4	5-1/8	DJ20623	DJ21623	DJ22623	DJ23623	DJ25623
X	3-3/4	5-1/8	DJ20624	DJ21624	DJ22624	DJ23624	DJ25624
Y	3-7/8	5-1/4	DJ20625	DJ21625	DJ22625	DJ23625	DJ25625
Z	3-7/8	5-1/4	DJ20626	DJ21626	DJ22626	DJ23626	DJ25626

Left Hand Jobber Drills

- High Speed Steel ·118° Point
- Bright Finish
- StandardANSI B94.11M-1979

Fractional Sizes

Size (in.)	Flute Length(in.)	OAL (in.)	Order No.
1/32	1/2	1-3/8	DJ30002
3/64	3/4	1-3/4	DJ30003
1/16	7/8	1-7/8	DJ30004
5/64	1"	2"	DJ30005
3/32	1-1/4	2-1/4	DJ30006
7/64	1-1/2	2-5/8	DJ30007
1/8	1-5/8	2-3/4	DJ30008
9/64	1-3/4	2-7/8	DJ30009
5/32	2"	3-1/8	DJ30010
11/64	2-1/8	3-1/4	DJ30011
3/16	2-5/16	3-1/2	DJ30012

Size (in.)	Flute Length(in.	OAL (in.)	Order No.
13/64	2-7/16	3-5/8	DJ30013
7/32	2-1/2	3-3/4	DJ30014
15/64	2-5/8	3-7/8	DJ30015
1/4	2-3/4	4"	DJ30016
17/64	2-7/8	4-1/8	DJ30017
9/32	2-15/16	4-1/4	DJ30018
19/64	3-1/16	4-3/8	DJ30019
5/16	3-3/16	4-1/2	DJ30020
21/64	3-5/16	4-5/8	DJ30021
11/32	3-7/16	4-3/4	DJ30022
23/64	3-1/2	4-7/8	DJ30023

Size (in.)	Flute Length(in.	OAL (in.)	Order No.
3/8	3-5/8	5"	DJ30024
25/64	3-3/4	5-1/8	DJ30025
13/32	3-7/8	5-1/4	DJ30026
27/64	3-15/16	5-3/8	DJ30027
7/16	4-1/16	5-1/2	DJ30028
29/64	4-3/16	5-5/8	DJ30029
15/32	4-5/16	5-3/4	DJ30030
31/64	4-3/8	5-7/8	DJ30031
1/2	4-1/2	6"	DJ30032

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	Order No.
1	2-5/8	3-7/8	DJ30501
2	2-5/8	3-7/8	DJ30502
3	2-1/2	3-3/4	DJ30503
4	2-1/2	3-3/4	DJ30504
5	2-1/2	3-3/4	DJ30505
6	2-1/2	3-3/4	DJ30506
7	2-7/16	3-5/8	DJ30507
8	2-7/16	3-5/8	DJ30508
9	2-7/16	3-5/8	DJ30509
10	2-7/16	3-5/8	DJ30510
11	2-5/16	3-1/2	DJ30511
12	2-5/16	3-1/2	DJ30512
13	2-5/16	3-1/2	DJ30513
14	2-3/16	3-3/8	DJ30514
15	2-3/16	3-3/8	DJ30515
16	2-3/16	3-3/8	DJ30516
17	2-3/16	3-3/8	DJ30517
18	2-1/8	3-1/4	DJ30518
19	2-1/8	3-1/4	DJ30519
20	2-1/8	3-1/4	DJ30520
21	2-1/8	3-1/4	DJ30521
22	2"	3-1/8	DJ30522
23	2"	3-1/8	DJ30523
24	2"	3-1/8	DJ30524
25	1-7/8	3"	DJ30525
26	1-7/8	3"	DJ30526
27	1-7/8	3"	DJ30527

Size	Flute Length(in.)	OAL (in.)	Order No.
28	1-3/4	2-7/8	DJ30528
29	1-3/4	2-7/8	DJ30529
30	1-5/8	2-3/4	DJ30530
31	1-5/8	2-3/4	DJ30531
32	1-5/8	2-3/4	DJ30532
33	1-1/2	2-5/8	DJ30533
34	1-1/2	2-5/8	DJ30534
35	1-1/2	2-5/8	DJ30535
36	1-7/16	2-1/2	DJ30536
37	1-7/16	2-1/2	DJ30537
38	1-7/16	2-1/2	DJ30538
39	1-3/8	2-3/8	DJ30539
40	1-3/8	2-3/8	DJ30540
41	1-3/8	2-3/8	DJ30541
42	1-1/4	2-1/4	DJ30542
43	1-1/4	2-1/4	DJ30543
44	1-1/8	2-1/8	DJ30544
45	1-1/8	2-1/8	DJ30545
46	1-1/8	2-1/8	DJ30546
47	1"	2"	DJ30547
48	1"	2"	DJ30548
49	1"	2"	DJ30549
50	1"	2"	DJ30550
51	1"	2"	DJ30551
52	7/8	1-7/8	DJ30552
53	7/8	1-7/8	DJ30553
54	7/8	1-7/8	DJ30554

Size	Flute Length(in.)	OAL (in.)	Order No.
55	7/8	1-7/8	DJ30555
56	3/4	1-3/4	DJ30556
57	3/4	1-3/4	DJ30557
58	11/16	1-5/8	DJ30558
59	11/16	1-5/8	DJ30559
60	11/16	1-5/8	DJ30560
61	11/16	1-5/8	DJ30561
62	5/8	1-1/2	DJ30562
63	5/8	1-1/2	DJ30563
64	5/8	1-1/2	DJ30564
65	5/8	1-1/2	DJ30565
66	1/2	1-3/8	DJ30566
67	1/2	1-3/8	DJ30567
68	1/2	1-3/8	DJ30568
69	1/2	1-3/8	DJ30569
70	3/8	1-1/4	DJ30570
71	3/8	1-1/4	DJ30571
72	5/16	1-1/8	DJ30572
73	5/16	1-1/8	DJ30573
74	1/4	1"	DJ30574
75	1/4	1"	DJ30575
76	3/16	7/8	DJ30576
77	3/16	7/8	DJ30577
78	3/16	7/8	DJ30578
79	1/8	3/4	DJ30579
80	1/8	3/4	DJ30580

Letter Size

Size	Flute Length(in.)	OAL (in.)	Order No.
A	2-5/8	3-7/8	DJ30601
B	2-3/4	4"	DJ30602
C	2-3/4	4"	DJ30603
D	2-3/4	4"	DJ30604
E	2-3/4	4"	DJ30605
F	2-7/8	4-1/8	DJ30606
G	2-7/8	4-1/8	DJ30607
H	2-7/8	4-1/8	DJ30608
I	2-7/8	4-1/8	DJ30609

Size	Flute Length(in.)	OAL (in.)	Order No.
J	2-7/8	4-1/8	DJ30610
K	2-15/16	4-1/4	DJ30611
L	2-15/16	4-1/4	DJ30612
M	3-1/16	4-3/8	DJ30613
N	3-1/16	4-3/8	DJ30614
O	3-3/16	4-1/2	DJ30615
P	3-5/16	4-5/8	DJ30616
Q	3-7/16	4-3/4	DJ30617
R	3-7/16	4-3/4	DJ30618

Size	Flute Length(in.)	OAL (in.)	Order No.
S	3-1/2	4-7/8	DJ30619
T	3-1/2	4-7/8	DJ30620
U	3-5/8	5"	DJ30621
V	3-5/8	5"	DJ30622
W	3-3/4	5-1/8	DJ30623
X	3-3/4	5-1/8	DJ30624
Y	3-7/8	5-1/4	DJ30625
Z	3-7/8	5-1/4	DJ30626

Fast & Slow Spiral Jobber Drills

- High Speed Steel ,Bright Finish,118°Point

Fractional Sizes

Size (in.)	Flute Length(in.)	OAL (in.)	Fast Spiral Order No.	Slow Spiral Order No.
1/64	3/16	3/4	DJ40001	DJ41001
1/32	1/2	1-3/8	DJ40002	DJ41002
3/64	3/4	1-3/4	DJ40003	DJ41003
1/16	7/8	1-7/8	DJ40004	DJ41004
5/64	1"	2"	DJ40005	DJ41005
3/32	1-1/4	2-1/4	DJ40006	DJ41006
7/64	1-1/2	2-5/8	DJ40007	DJ41007
1/8	1-1/2	2-3/4	DJ40008	DJ41008
9/64	1-5/8	2-7/8	DJ40009	DJ41009
5/32	2"	3-1/8	DJ40010	DJ41010
11/64	2-1/8	3-1/4	DJ40011	DJ41011
3/16	2-5/16	3-1/2	DJ40012	DJ41012
13/64	2-7/16	3-5/8	DJ40013	DJ41013
7/32	2-1/2	3-3/4	DJ40014	DJ41014
15/64	2-5/8	3-7/8	DJ40015	DJ41015
1/4	2-3/4	4"	DJ40016	DJ41016

Size (in.)	Flute Length(in.)	OAL (in.)	Fast Spiral Order No.	Slow Spiral Order No.
17/64	2-7/8	4-1/8	DJ40017	DJ41017
9/32	2-15/16	4-1/4	DJ40018	DJ41018
19/64	3-1/16	4-3/8	DJ40019	DJ41019
5/16	3-3/16	4-1/2	DJ40020	DJ41020
21/64	3-5/16	4-5/8	DJ40021	DJ41021
11/32	3-7/16	4-3/4	DJ40022	DJ41022
23/64	3-1/2	4-7/8	DJ40023	DJ41023
3/8	3-5/8	5"	DJ40024	DJ41024
25/64	3-3/4	5-1/8	DJ40025	DJ41025
13/32	3-7/8	5-1/2	DJ40026	DJ41026
27/64	3-15/16	5-3/8	DJ40027	DJ41027
7/16	4-1/16	5-1/2	DJ40028	DJ41028
29/64	4-3/16	5-5/8	DJ40029	DJ41029
15/32	4-5/16	5-3/4	DJ40030	DJ41030
31/64	4-3/8	5-7/8	DJ40031	DJ41031
1/2	4-1/2	6"	DJ40032	DJ41032

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	Fast Spiral Order No.	Slow Spiral Order No.
1	2-5/8	3-7/8	DJ40501	DJ41501
2	2-5/8	3-7/8	DJ40502	DJ41502
3	2-1/2	3-3/4	DJ40503	DJ41503
4	2-1/2	3-3/4	DJ40504	DJ41504
5	2-1/2	3-3/4	DJ40505	DJ41505
6	2-1/2	3-3/4	DJ40506	DJ41506
7	2-7/16	3-5/8	DJ40507	DJ41507
8	2-7/16	3-5/8	DJ40508	DJ41508
9	2-7/16	3-5/8	DJ40509	DJ41509
10	2-7/16	3-5/8	DJ40510	DJ41510
11	2-5/16	3-1/2	DJ40511	DJ41511
12	2-5/16	3-1/2	DJ40512	DJ41512
13	2-5/16	3-1/2	DJ40513	DJ41513
14	2-3/16	3-3/8	DJ40514	DJ41514
15	2-3/16	3-3/8	DJ40515	DJ41515
16	2-3/16	3-3/8	DJ40516	DJ41516
17	2-3/16	3-3/8	DJ40517	DJ41517
18	2-1/8	3-1/4	DJ40518	DJ41518
19	2-1/8	3-1/4	DJ40519	DJ41519
20	2-1/8	3-1/4	DJ40520	DJ41520
21	2-1/8	3-1/4	DJ40521	DJ41521
22	2"	3-1/8	DJ40522	DJ41522
23	2"	3-1/8	DJ40523	DJ41523
24	2"	3-1/8	DJ40524	DJ41524
25	1-7/8	3"	DJ40525	DJ41525
26	1-7/8	3"	DJ40526	DJ41526
27	1-7/8	3"	DJ40527	DJ41527
28	1-3/4	2-7/8	DJ40528	DJ41528
29	1-3/4	2-7/8	DJ40529	DJ41529
30	1-5/8	2-3/4	DJ40530	DJ41530
31	1-5/8	2-3/4	DJ40531	DJ41531
32	1-5/8	2-3/4	DJ40532	DJ41532
33	1-1/2	2-5/8	DJ40533	DJ41533
34	1-1/2	2-5/8	DJ40534	DJ41534
35	1-1/2	2-5/8	DJ40535	DJ41535
36	1-7/16	2-1/2	DJ40536	DJ41536
37	1-7/16	2-1/2	DJ40537	DJ41537
38	1-7/16	2-1/2	DJ40538	DJ41538
39	1-3/8	2-3/8	DJ40539	DJ41539
40	1-3/8	2-3/8	DJ40540	DJ41540

Size	Flute Length(in.)	OAL (in.)	Fast Spiral Order No.	Slow Spiral Order No.
41	1-3/8	2-3/8	DJ40541	DJ41541
42	1-1/4	2-1/4	DJ40542	DJ41542
43	1-1/4	2-1/4	DJ40543	DJ41543
44	1-1/8	2-1/8	DJ40544	DJ41544
45	1-1/8	2-1/8	DJ40545	DJ41545
46	1-1/8	2-1/8	DJ40546	DJ41546
47	1"	2"	DJ40547	DJ41547
48	1"	2"	DJ40548	DJ41548
49	1"	2"	DJ40549	DJ41549
50	1"	2"	DJ40550	DJ41550
51	1"	2"	DJ40551	DJ41551
52	7/8	1-7/8	DJ40552	DJ41552
53	7/8	1-7/8	DJ40553	DJ41553
54	7/8	1-7/8	DJ40554	DJ41554
55	7/8	1-7/8	DJ40555	DJ41555
56	3/4	1-3/4	DJ40556	DJ41556
57	3/4	1-3/4	DJ40557	DJ41557
58	11/16	1-5/8	DJ40558	DJ41558
59	11/16	1-5/8	DJ40559	DJ41559
60	11/16	1-5/8	DJ40560	DJ41560
61	11/16	1-5/8	DJ40561	DJ41561
62	5/8	1-1/2	DJ40562	DJ41562
63	5/8	1-1/2	DJ40563	DJ41563
64	5/8	1-1/2	DJ40564	DJ41564
65	5/8	1-1/2	DJ40565	DJ41565
66	1/2	1-3/8	DJ40566	DJ41566
67	1/2	1-3/8	DJ40567	DJ41567
68	1/2	1-3/8	DJ40568	DJ41568
69	1/2	1-3/8	DJ40569	DJ41569
70	3/8	1-1/4	DJ40570	DJ41570
71	3/8	1-1/4	DJ40571	DJ41571
72	5/16	1-1/8	DJ40572	DJ41572
73	5/16	1-1/8	DJ40573	DJ41573
74	1/4	1"	DJ40574	DJ41574
75	1/4	1"	DJ40575	DJ41575
76	3/16	7/8	DJ40576	DJ41576
77	3/16	7/8	DJ40577	DJ41577
78	3/16	7/8	DJ40578	DJ41578
79	1/8	3/4	DJ40579	DJ41579
80	1/8	3/4	DJ40580	DJ41580

Fast & Slow Spiral Jobber Drills

- High Speed Steel ,Bright Finish,118°Point

Letter Size

Size	Flute Length(in.)	OAL (in.)	Fast Spiral Order No.	Slow Spiral Order No.
A	2-5/8	3-7/8	DJ40601	DJ41601
B	2-3/4	4"	DJ40602	DJ41602
C	2-3/4	4"	DJ40603	DJ41603
D	2-3/4	4"	DJ40604	DJ41604
E	2-3/4	4"	DJ40605	DJ41605
F	2-7/8	4-1/8	DJ40606	DJ41606
G	2-7/8	4-1/8	DJ40607	DJ41607
H	2-7/8	4-1/8	DJ40608	DJ41608
I	2-7/8	4-1/8	DJ40609	DJ41609
J	2-7/8	4-1/8	DJ40610	DJ41610
K	2-15/16	4-1/4	DJ40611	DJ41611
L	2-15/16	4-1/4	DJ40612	DJ41612
M	3-1/16	4-3/8	DJ40613	DJ41613

Size	Flute Length(in.)	OAL (in.)	Fast Spiral Order No.	Slow Spiral Order No.
N	3-1/16	4-3/8	DJ40614	DJ41614
O	3-3/16	4-1/2	DJ40615	DJ41615
P	3-5/16	4-5/8	DJ40616	DJ41616
Q	3-7/16	4-3/4	DJ40617	DJ41617
R	3-7/16	4-3/4	DJ40618	DJ41618
S	3-1/2	4-7/8	DJ40619	DJ41619
T	3-1/2	4-7/8	DJ40620	DJ41620
U	3-5/8	5"	DJ40621	DJ41621
V	3-5/8	5"	DJ40622	DJ41622
W	3-3/4	5-1/8	DJ40623	DJ41623
X	3-3/4	5-1/8	DJ40624	DJ41624
Y	3-7/8	5-1/4	DJ40625	DJ41625
Z	3-7/8	5-1/4	DJ40626	DJ41626

Parabolic Flute Jobber Drills

- High Speed Steel ·135° Split Point
- StandardANSI B94.11M

Fractional Sizes

Size (in.)	Flute Length (in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Finish Order No.	Ground TiN-Coated Order No.
1/16	7/8	1-7/8	DJ50004	DJ51004	DJ52004
5/64	1"	2"	DJ50005	DJ51005	DJ52005
3/32	1-1/4	2-1/4	DJ50006	DJ51006	DJ52006
7/64	1-1/2	2-5/8	DJ50007	DJ51007	DJ52007
1/8	1-5/8	2-3/4	DJ50008	DJ51008	DJ52008
9/64	1-1/2	2-7/8	DJ50009	DJ51009	DJ52009
5/32	2"	3-1/8	DJ50010	DJ51010	DJ52010
11/64	2-1/8	3-1/4	DJ50011	DJ51011	DJ52011
3/16	2-5/16	3-1/2	DJ50012	DJ51012	DJ52012
13/64	2-7/16	3-5/8	DJ50013	DJ51013	DJ52013
7/32	2-1/2	3-3/4	DJ50014	DJ51014	DJ52014
15/64	2-5/8	3-7/8	DJ50015	DJ51015	DJ52015
1/4	2-3/4	4"	DJ50016	DJ51016	DJ52016
17/64	2-7/8	4-1/8	DJ50017	DJ51017	DJ52017
9/32	2-15/16	4-1/4	DJ50018	DJ51018	DJ52018

Size (in.)	Flute Length (in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Finish Order No.	Ground TiN-Coated Order No.
19/64	3-1/16	4-3/8	DJ50019	DJ51019	DJ52019
5/16	3-3/16	4-1/2	DJ50020	DJ51020	DJ52020
21/64	3-5/16	4-5/8	DJ50021	DJ51021	DJ52021
11/32	3-7/16	4-3/4	DJ50022	DJ51022	DJ52022
23/64	3-1/2	4-7/8	DJ50023	DJ51023	DJ52023
3/8	3-5/8	5"	DJ50024	DJ51024	DJ52024
25/64	3-3/4	5-1/8	DJ50025	DJ51025	DJ52025
13/32	3-7/8	5-1/2	DJ50026	DJ51026	DJ52026
27/64	3-15/16	5-3/8	DJ50027	DJ51027	DJ52027
7/16	4-1/16	5-1/2	DJ50028	DJ51028	DJ52028
29/64	4-3/16	5-5/8	DJ50029	DJ51029	DJ52029
15/32	4-5/16	5-3/4	DJ50030	DJ51030	DJ52030
31/64	4-3/8	5-7/8	DJ50031	DJ51031	DJ52031
1/2	4-1/2	6"	DJ50032	DJ51032	DJ52032

Wire Gage Size

Size	Flute Length (in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Finish Order No.	Ground TiN-Coated Order No.
1	2-5/8	3-7/8	DJ50501	DJ51501	DJ52501
2	2-5/8	3-7/8	DJ50502	DJ51502	DJ52502
3	2-1/2	3-3/4	DJ50503	DJ51503	DJ52503
4	2-1/2	3-3/4	DJ50504	DJ51504	DJ52504
5	2-1/2	3-3/4	DJ50505	DJ51505	DJ52505
6	2-1/2	3-3/4	DJ50506	DJ51506	DJ52506
7	2-7/16	3-5/8	DJ50507	DJ51507	DJ52507

Size	Flute Length (in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Finish Order No.	Ground TiN-Coated Order No.
8	2-7/16	3-5/8	DJ50508	DJ51508	DJ52508
9	2-7/16	3-5/8	DJ50509	DJ51509	DJ52509
10	2-7/16	3-5/8	DJ50510	DJ51510	DJ52510
11	2-5/16	3-1/2	DJ50511	DJ51511	DJ52511
12	2-5/16	3-1/2	DJ50512	DJ51512	DJ52512
13	2-5/16	3-1/2	DJ50513	DJ51513	DJ52513
14	2-3/16	3-3/8	DJ50514	DJ51514	DJ52514

Size	Flute Length (in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Finish Order No.	Ground TiN-Coated Order No.
15	2-3/16	3-3/8	DJ50515	DJ51515	DJ52515
16	2-3/16	3-3/8	DJ50516	DJ51516	DJ52516
17	2-3/16	3-3/8	DJ50517	DJ51517	DJ52517
18	2-1/8	3-1/4	DJ50518	DJ51518	DJ52518
19	2-1/8	3-1/4	DJ50519	DJ51519	DJ52519
20	2-1/8	3-1/4	DJ50520	DJ51520	DJ52520
21	2-1/8	3-1/4	DJ50521	DJ51521	DJ52521
22	2"	3-1/8	DJ50522	DJ51522	DJ52522
23	2"	3-1/8	DJ50523	DJ51523	DJ52523
24	2"	3-1/8	DJ50524	DJ51524	DJ52524
25	1-7/8	3"	DJ50525	DJ51525	DJ52525
26	1-7/8	3"	DJ50526	DJ51526	DJ52526
27	1-7/8	3"	DJ50527	DJ51527	DJ52527
28	1-3/4	2-7/8	DJ50528	DJ51528	DJ52528
29	1-3/4	2-7/8	DJ50529	DJ51529	DJ52529
30	1-5/8	2-3/4	DJ50530	DJ51530	DJ52530
31	1-5/8	2-3/4	DJ50531	DJ51531	DJ52531
32	1-5/8	2-3/4	DJ50532	DJ51532	DJ52532
33	1-1/2	2-5/8	DJ50533	DJ51533	DJ52533
34	1-1/2	2-5/8	DJ50534	DJ51534	DJ52534
35	1-1/2	2-5/8	DJ50535	DJ51535	DJ52535
36	1-7/16	2-1/2	DJ50536	DJ51536	DJ52536
37	1-7/16	2-1/2	DJ50537	DJ51537	DJ52537

Size	Flute Length (in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Finish Order No.	Ground TiN-Coated Order No.
38	1-7/16	2-1/2	DJ50538	DJ51538	DJ52538
39	1-3/8	2-3/8	DJ50539	DJ51539	DJ52539
40	1-3/8	2-3/8	DJ50540	DJ51540	DJ52540
41	1-3/8	2-3/8	DJ50541	DJ51541	DJ52541
42	1-1/4	2-1/4	DJ50542	DJ51542	DJ52542
43	1-1/4	2-1/4	DJ50543	DJ51543	DJ52543
44	1-1/8	2-1/8	DJ50544	DJ51544	DJ52544
45	1-1/8	2-1/8	DJ50545	DJ51545	DJ52545
46	1-1/8	2-1/8	DJ50546	DJ51546	DJ52546
47	1"	2"	DJ50547	DJ51547	DJ52547
48	1"	2"	DJ50548	DJ51548	DJ52548
49	1"	2"	DJ50549	DJ51549	DJ52549
50	1"	2"	DJ50550	DJ51550	DJ52550
51	1"	2"	DJ50551	DJ51551	DJ52551
52	7/8	1-7/8	DJ50552	DJ51552	DJ52552
53	7/8	1-7/8	DJ50553	DJ51553	DJ52553
54	7/8	1-7/8	DJ50554	DJ51554	DJ52554
55	7/8	1-7/8	DJ50555	DJ51555	DJ52555
56	3/4	1-3/4	DJ50556	DJ51556	DJ52556
57	3/4	1-3/4	DJ50557	DJ51557	DJ52557
58	11/16	1-5/8	DJ50558	DJ51558	DJ52558
59	11/16	1-5/8	DJ50559	DJ51559	DJ52559
60	11/16	1-5/8	DJ50560	DJ51560	DJ52560

Letter Size

Size	Flute Length (in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Finish Order No.	Ground TiN-Coated Order No.
A	2-5/8	3-7/8	DJ50601	DJ51601	DJ52601
B	2-3/4	4"	DJ50602	DJ51602	DJ52602
C	2-3/4	4"	DJ50603	DJ51603	DJ52603
D	2-3/4	4"	DJ50604	DJ51604	DJ52604
E	2-3/4	4"	DJ50605	DJ51605	DJ52605
F	2-7/8	4-1/8	DJ50606	DJ51606	DJ52606
G	2-7/8	4-1/8	DJ50607	DJ51607	DJ52607
H	2-7/8	4-1/8	DJ50608	DJ51608	DJ52608
I	2-7/8	4-1/8	DJ50609	DJ51609	DJ52609
J	2-7/8	4-1/8	DJ50610	DJ51610	DJ52610
K	2-15/16	4-1/4	DJ50611	DJ51611	DJ52611
L	2-15/16	4-1/4	DJ50612	DJ51612	DJ52612
M	3-1/16	4-3/8	DJ50613	DJ51613	DJ52613

Size	Flute Length (in.)	OAL (in.)	Ground Bright Finish Order No.	Ground Black Oxide Finish Order No.	Ground TiN-Coated Order No.
N	3-1/16	4-3/8	DJ50614	DJ51614	DJ52614
O	3-3/16	4-1/2	DJ50615	DJ51615	DJ52615
P	3-5/16	4-5/8	DJ50616	DJ51616	DJ52616
Q	3-7/16	4-3/4	DJ50617	DJ51617	DJ52617
R	3-7/16	4-3/4	DJ50618	DJ51618	DJ52618
S	3-1/2	4-7/8	DJ50619	DJ51619	DJ52619
T	3-1/2	4-7/8	DJ50620	DJ51620	DJ52620
U	3-5/8	5"	DJ50621	DJ51621	DJ52621
V	3-5/8	5"	DJ50622	DJ51622	DJ52622
W	3-3/4	5-1/8	DJ50623	DJ51623	DJ52623
X	3-3/4	5-1/8	DJ50624	DJ51624	DJ52624
Y	3-7/8	5-1/4	DJ50625	DJ51625	DJ52625
Z	3-7/8	5-1/4	DJ50626	DJ51626	DJ52626

Metric Jobber Drills

- High Speed Steel and Cobalt
- Standard：ANSI B94.11M

Size (mm)	Decimal Equiv.(in.)	Flute Length(in.)	OAL (in.)	HSS 118° Bright Finish Order No.	HSS 118° Black Oxide Order No.	Cobalt 135° Order No.
0.20	0.0079	1/16	3/4	DJ60020	DJ61020	DJ65020
0.21	0.0083	1/16	3/4	DJ60021	DJ61021	DJ65021
0.22	0.0087	1/16	3/4	DJ60022	DJ61022	DJ65022
0.23	0.0091	5/64	3/4	DJ60023	DJ61023	DJ65023
0.24	0.0094	5/64	3/4	DJ60024	DJ61024	DJ65024
0.25	0.0098	5/64	3/4	DJ60025	DJ61025	DJ65025
0.26	0.0102	5/64	3/4	DJ60026	DJ61026	DJ65026
0.27	0.0106	5/64	3/4	DJ60027	DJ61027	DJ65027
0.28	0.0110	3/32	3/4	DJ60028	DJ61028	DJ65028
0.29	0.0114	3/32	3/4	DJ60029	DJ61029	DJ65029

Metric Jobber Drills

- High Speed Steel and Cobalt
- Standard：ANSI B94.11M

Size (mm)	Decimal Equiv.(in.)	Flute Length(in.)	OAL (in.)	HSS 118° Bright Finish Order No.	HSS 118° Black Oxide Order No.	Cobalt 135° Order No.
0.30	0.0118	3/32	3/4	DJ60030	DJ61030	DJ65030
0.32	0.0126	3/32	3/4	DJ60032	DJ61032	DJ65032
0.34	0.0134	1/8	3/4	DJ60034	DJ61034	DJ65034
0.35	0.0138	1/8	3/4	DJ60035	DJ61035	DJ65035
0.36	0.0142	1/8	3/4	DJ60036	DJ61036	DJ65036
0.38	0.0150	3/16	3/4	DJ60038	DJ61038	DJ65038
0.40	0.0158	3/16	7/8	DJ60040	DJ61040	DJ65040
0.42	0.0165	3/16	7/8	DJ60042	DJ61042	DJ65042
0.44	0.0173	3/16	7/8	DJ60044	DJ61044	DJ65044
0.45	0.0177	3/16	7/8	DJ60045	DJ61045	DJ65045
0.46	0.0181	3/16	7/8	DJ60046	DJ61046	DJ65046
0.48	0.0189	3/16	7/8	DJ60048	DJ61048	DJ65048
0.50	0.0197	3/16	7/8	DJ60050	DJ61050	DJ65050
0.55	0.0217	1/4	1"	DJ60055	DJ61055	DJ65055
0.60	0.0236	5/16	1-1/8	DJ60060	DJ61060	DJ65060
0.65	0.0256	3/8	1-1/4	DJ60065	DJ61065	DJ65065
0.70	0.0276	3/8	1-1/4	DJ60070	DJ61070	DJ65070
0.75	0.0295	1/2	1-3/8	DJ60075	DJ61075	DJ65075
0.80	0.0315	1/2	1-3/8	DJ60080	DJ61080	DJ65080
0.85	0.0335	5/8	1-1/2	DJ60085	DJ61085	DJ65085
0.90	0.0354	5/8	1-1/2	DJ60090	DJ61090	DJ65090
0.95	0.0374	5/8	1-1/2	DJ60095	DJ61095	DJ65095
1.00	0.0394	11/16	1-5/8	DJ60100	DJ61100	DJ65100
1.05	0.0413	11/16	1-5/8	DJ60105	DJ61105	DJ65105
1.10	0.0433	3/4	1-3/4	DJ60110	DJ61110	DJ65110
1.15	0.0453	3/4	1-3/4	DJ60115	DJ61115	DJ65115
1.20	0.0472	7/8	1-7/8	DJ60120	DJ61120	DJ65120
1.25	0.0492	7/8	1-7/8	DJ60125	DJ61125	DJ65125
1.30	0.0512	7/8	1-7/8	DJ60130	DJ61130	DJ65130
1.35	0.0531	7/8	1-7/8	DJ60135	DJ61135	DJ65135
1.40	0.0551	7/8	1-7/8	DJ60140	DJ61140	DJ65140
1.45	0.0571	7/8	1-7/8	DJ60145	DJ61145	DJ65145
1.50	0.0591	7/8	1-7/8	DJ60150	DJ61150	DJ65150
1.55	0.0610	7/8	1-7/8	DJ60155	DJ61155	DJ65155
1.60	0.0630	7/8	1-7/8	DJ60160	DJ61160	DJ65160
1.65	0.0650	1"	2"	DJ60165	DJ61165	DJ65165
1.70	0.0669	1"	2"	DJ60170	DJ61170	DJ65170
1.75	0.0689	1"	2"	DJ60175	DJ61175	DJ65175
1.80	0.0709	1"	2"	DJ60180	DJ61180	DJ65180
1.85	0.0728	1"	2"	DJ60185	DJ61185	DJ65185
1.90	0.0784	1"	2"	DJ60190	DJ61190	DJ65190
1.95	0.0768	1"	2"	DJ60195	DJ61195	DJ65195
2.00	0.0787	1-1/8	2-1/8	DJ60200	DJ61200	DJ65200
2.05	0.0807	1-1/8	2-1/8	DJ60205	DJ61205	DJ65205
2.10	0.0827	1-1/8	2-1/8	DJ60210	DJ61210	DJ65210
2.15	0.0846	1-1/8	2-1/8	DJ60215	DJ61215	DJ65215
2.20	0.0866	1-1/4	2-1/4	DJ60220	DJ61220	DJ65220
2.25	0.0886	1-1/4	2-1/4	DJ60225	DJ61225	DJ65225
2.30	0.0906	1-1/4	2-1/4	DJ60230	DJ61230	DJ65230
2.35	0.0925	1-1/4	2-1/4	DJ60235	DJ61235	DJ65235
2.40	0.0945	1-3/8	2-3/8	DJ60240	DJ61240	DJ65240
2.45	0.0965	1-3/8	2-3/8	DJ60245	DJ61245	DJ65245
2.50	0.0984	1-3/8	2-3/8	DJ60250	DJ61250	DJ65250
2.60	0.1024	1-7/16	2-1/2	DJ60260	DJ61260	DJ65260
2.70	0.1063	1-7/16	2-1/2	DJ60270	DJ61270	DJ65270

Size (mm)	Decimal Equiv.(in.)	Flute Length(in.)	OAL (in.)	HSS 118° Bright Finish Order No.	HSS 118° Black Oxide Order No.	Cobalt 135° Order No.
2.75	0.1083	1-7/16	2-1/2	DJ60275	DJ61275	DJ65275
2.80	0.1102	1-1/2	2-5/8	DJ60280	DJ61280	DJ65280
2.90	0.1142	1-5/8	2-3/4	DJ60290	DJ61290	DJ65290
3.00	0.1181	1-5/8	2-3/4	DJ60300	DJ61300	DJ65300
3.10	0.1220	1-5/8	2-3/4	DJ60310	DJ61310	DJ65310
3.20	0.1260	1-5/8	2-3/4	DJ60320	DJ61320	DJ65320
3.25	0.1280	1-5/8	2-3/4	DJ60325	DJ61325	DJ65325
3.30	0.1299	1-3/4	2-7/8	DJ60330	DJ61330	DJ65330
3.40	0.1339	1-3/4	2-7/8	DJ60340	DJ61340	DJ65340
3.50	0.1378	1-3/4	2-7/8	DJ60350	DJ61350	DJ65350
3.60	0.1417	1-7/8	3"	DJ60360	DJ61360	DJ65360
3.70	0.1457	1-7/8	3"	DJ60370	DJ61370	DJ65370
3.75	0.1476	1-7/8	3"	DJ60375	DJ61375	DJ65375
3.80	0.1496	2"	3"	DJ60380	DJ61380	DJ65380
3.90	0.1535	2"	3"	DJ60390	DJ61390	DJ65390
4.00	0.1575	2-1/8	3-1/4	DJ60400	DJ61400	DJ65400
4.10	0.1614	2-1/8	3-1/4	DJ60410	DJ61410	DJ65410
4.20	0.1654	2-1/8	3-1/4	DJ60420	DJ61420	DJ65420
4.25	0.1673	2-1/8	3-1/4	DJ60425	DJ61425	DJ65425
4.30	0.1693	2-1/8	3-1/4	DJ60430	DJ61430	DJ65430
4.40	0.1732	2-3/16	3-3/8	DJ60440	DJ61440	DJ65440
4.50	0.1772	2-3/16	3-3/8	DJ60450	DJ61450	DJ65450
4.60	0.1811	2-3/16	3-3/8	DJ60460	DJ61460	DJ65460
4.70	0.1850	2-5/16	3-1/2	DJ60470	DJ61470	DJ65470
4.75	0.1870	2-5/16	3-1/2	DJ60475	DJ61475	DJ65475
4.80	0.1890	2-5/16	3-1/2	DJ60480	DJ61480	DJ65480
4.90	0.1929	2-7/16	3-5/8	DJ60490	DJ61490	DJ65490
5.00	0.1968	2-7/16	3-5/8	DJ60500	DJ61500	DJ65500
5.10	0.2008	2-7/16	3-5/8	DJ60510	DJ61510	DJ65510
5.20	0.2047	2-1/2	3-3/4	DJ60520	DJ61520	DJ65520
5.25	0.2067	2-1/2	3-3/4	DJ60525	DJ61525	DJ65525
5.30	0.2087	2-1/2	3-3/4	DJ60530	DJ61530	DJ65530
5.40	0.2126	2-1/2	3-3/4	DJ60540	DJ61540	DJ65540
5.50	0.2165	2-1/2	3-3/4	DJ60550	DJ61550	DJ65550
5.60	0.2205	2-5/8	3-7/8	DJ60560	DJ61560	DJ65560
5.70	0.2244	2-5/8	3-7/8	DJ60570	DJ61570	DJ65570
5.75	0.2264	2-5/8	3-7/8	DJ60575	DJ61575	DJ65575
5.80	0.2283	2-5/8	3-7/8	DJ60580	DJ61580	DJ65580
5.90	0.2323	2-5/8	3-7/8	DJ60590	DJ61590	DJ65590
6.00	0.2362	2-3/4	4"	DJ60600	DJ61600	DJ65600
6.10	0.2402	2-3/4	4"	DJ60610	DJ61610	DJ65610
6.20	0.2441	2-3/4	4"	DJ60620	DJ61620	DJ65620
6.25	0.2461	2-3/4	4"	DJ60625	DJ61625	DJ65625
6.30	0.2480	2-3/4	4"	DJ60630	DJ61630	DJ65630
6.40	0.2520	2-7/8	4-1/8	DJ60640	DJ61640	DJ65640
6.50	0.2559	2-7/8	4-1/8	DJ60650	DJ61650	DJ65650
6.60	0.2598	2-7/8	4-1/8	DJ60660	DJ61660	DJ65660
6.70	0.2638	2-7/8	4-1/8	DJ60670	DJ61670	DJ65670
6.75	0.2657	2-7/8	4-1/8	DJ60675	DJ61675	DJ65675
6.80	0.2677	2-7/8	4-1/8	DJ60680	DJ61680	DJ65680
6.90	0.2717	2-7/8	4-1/8	DJ60690	DJ61690	DJ65690
7.00	0.2756	2-7/8	4-1/8	DJ60700	DJ61700	DJ65700
7.10	0.2795	2-15/16	4-1/4	DJ60710	DJ61710	DJ65710
7.20	0.2835	2-15/16	4-1/4	DJ60720	DJ61720	DJ65720
7.25	0.2854	2-15/16	4-1/4	DJ60725	DJ61725	DJ65725
7.30	0.2874	2-15/16	4-1/4	DJ60730	DJ61730	DJ65730
7.40	0.2913	3-1/16	4-3/8	DJ60740	DJ61740	DJ65740
7.50	0.2953	3-1/16	4-3/8	DJ60750	DJ61750	DJ65750
7.60	0.2992	3-1/16	4-3/8	DJ60760	DJ61760	DJ65760

Metric Jobber Drills

- High Speed Steel and Cobalt
- Standard：ANSI B94.11M

Size (mm)	Decimal Equiv.(in.)	Flute Length(in.)	OAL (in.)	HSS 118° Bright Finish Order No.	HSS 118° Black Oxide Order No.	Cobalt 135° Order No.
7.70	0.3031	3-3/16	4-1/2	DJ60770	DJ61770	DJ65770
7.75	0.3051	3-3/16	4-1/2	DJ60775	DJ61775	DJ65775
7.80	0.3071	3-3/16	4-1/2	DJ60780	DJ61780	DJ65780
7.85	0.3091	3-3/16	4-1/2	DJ60785	DJ61785	DJ65785
7.90	0.3110	3-3/16	4-1/2	DJ60790	DJ61790	DJ65790
8.00	0.3150	3-3/16	4-1/2	DJ60800	DJ61800	DJ65800
8.10	0.3189	3-5/16	4-5/8	DJ60810	DJ61810	DJ65810
8.20	0.3228	3-5/16	4-5/8	DJ60820	DJ61820	DJ65820
8.25	0.3248	3-5/16	4-5/8	DJ60825	DJ61825	DJ65825
8.30	0.3268	3-5/16	4-5/8	DJ60830	DJ61830	DJ65830
8.40	0.3307	3-7/16	4-3/4	DJ60840	DJ61840	DJ65840
8.50	0.3346	3-7/16	4-3/4	DJ60850	DJ61850	DJ65850
8.60	0.3386	3-7/16	4-3/4	DJ60860	DJ61860	DJ65860
8.70	0.3425	3-7/16	4-3/4	DJ60870	DJ61870	DJ65870
8.75	0.3445	3-7/16	4-3/4	DJ60875	DJ61875	DJ65875
8.80	0.3465	3-1/2	4-7/8	DJ60880	DJ61880	DJ65880
8.90	0.3504	3-1/2	4-7/8	DJ60890	DJ61890	DJ65890
9.00	0.3543	3-1/2	4-7/8	DJ60900	DJ61900	DJ65900
9.10	0.3583	3-1/2	4-7/8	DJ60910	DJ61910	DJ65910
9.20	0.3622	3-5/8	5"	DJ60920	DJ61920	DJ65920
9.25	0.3642	3-5/8	5"	DJ60925	DJ61925	DJ65925
9.30	0.3661	3-5/8	5"	DJ60930	DJ61930	DJ65930
9.40	0.3701	3-5/8	5"	DJ60940	DJ61940	DJ65940
9.50	0.3740	3-5/8	5"	DJ60950	DJ61950	DJ65950
9.60	0.3780	3-3/4	5-1/8	DJ60960	DJ61960	DJ65960
9.70	0.3819	3-3/4	5-1/8	DJ60970	DJ61970	DJ65970
9.75	0.3839	3-3/4	5-1/8	DJ60975	DJ61975	DJ65975
9.80	0.3858	3-3/4	5-1/8	DJ60980	DJ61980	DJ65980
9.90	0.3898	3-3/4	5-1/8	DJ60990	DJ61990	DJ65990
10.00	0.3937	3-3/4	5-1/8	DJ601000	DJ611000	DJ651000
10.20	0.4016	3-7/8	5-1/4	DJ601020	DJ611020	DJ651020
10.50	0.4134	3-15/16	5-3/8	DJ601050	DJ611050	DJ651050
10.80	0.4252	4-1/16	5-1/2	DJ601080	DJ611080	DJ651080
11.00	0.4331	4-1/16	5-1/2	DJ601100	DJ611100	DJ651100
11.20	0.4409	4-3/16	5-5/8	DJ601120	DJ611120	DJ651120
11.50	0.4528	4-3/16	5-5/8	DJ601150	DJ611150	DJ651150
11.80	0.4646	4-5/16	5-3/4	DJ601180	DJ611180	DJ651180
12.00	0.4724	4-3/8	5-7/8	DJ601200	DJ611200	DJ651200
12.20	0.4803	4-3/8	5-7/8	DJ601220	DJ611220	DJ651220
12.50	0.4921	4-1/2	6"	DJ601250	DJ611250	DJ651250
13.00	0.5118	4-1/2	6"	DJ601300	DJ611300	DJ651300
13.50	0.5315	4-13/16	6-5/8	DJ601350	DJ611350	DJ651350
14.00	0.5512	4-13/16	6-5/8	DJ601400	DJ611400	DJ651400
14.50	0.5709	4-13/16	6-5/8	DJ601450	DJ611450	DJ651450
15.00	0.5906	5-3/16	7-1/8	DJ601500	DJ611500	DJ651500
15.50	0.6102	5-3/16	7-1/8	DJ601550	DJ611550	DJ651550
16.00	0.6299	5-3/16	7-1/8	DJ601600	DJ611600	DJ651600
16.50	0.6496	5-3/16	7-1/8	DJ601650	DJ611650	DJ651650
17.00	0.6693	5-5/8	7-5/8	DJ601700	DJ611700	DJ651700
17.50	0.6890	5-5/8	7-5/8	DJ601750	DJ611750	DJ651750

HSS Metric Straight Shank Twist Drill Right Hand

- Standard：JIS B4301-97
- 118/135 degree point angle design for all types of metal,no walking and skating.
- Fully ground body for the most accurate holedimentions and high concentricity.
- Black oxide finish / bright finish / titanium finish for greaterresistance to wear.
- Hardened high speed steel body provides additional safeguard.
- For general using in steel,cast steel,malleable iron,sintered metal,non-ferrous metal and plastic.

Size (mm)	Flute Length(mm)	OAL (mm)	118° Bright Finish Order No.	118° Black Oxide Order No.	118° TiN-Coated Order No.	135° Cobalt Order No.
2.00	29	55	DJ70200	DJ71200	DJ72200	DJ75200
2.05	29	55	DJ70205	DJ71205	DJ72205	DJ75205
2.10	29	55	DJ70210	DJ71210	DJ72210	DJ75210
2.15	29	55	DJ70215	DJ71215	DJ72215	DJ75215
2.20	33	58	DJ70220	DJ71220	DJ72220	DJ75220
2.30	33	58	DJ70230	DJ71230	DJ72230	DJ75230
2.40	35	61	DJ70240	DJ71240	DJ72240	DJ75240
2.50	35	61	DJ70250	DJ71250	DJ72250	DJ75250
2.60	37	64	DJ70260	DJ71260	DJ72260	DJ75260
2.65	37	64	DJ70265	DJ71265	DJ72265	DJ75265
2.70	37	64	DJ70270	DJ71270	DJ72270	DJ75270
2.80	39	67	DJ70280	DJ71280	DJ72280	DJ75280
2.90	42	71	DJ70290	DJ71290	DJ72290	DJ75290
3.00	42	71	DJ70300	DJ71300	DJ72300	DJ75300
3.10	42	71	DJ70310	DJ71310	DJ72310	DJ75310
3.15	42	71	DJ70315	DJ71315	DJ72315	DJ75315
3.20	42	71	DJ70320	DJ71320	DJ72320	DJ75320
3.30	45	73	DJ70330	DJ71330	DJ72330	DJ75330
3.40	45	73	DJ70340	DJ71340	DJ72340	DJ75340
3.50	45	73	DJ70350	DJ71350	DJ72350	DJ75350
3.60	48	76	DJ70360	DJ71360	DJ72360	DJ75360
3.70	48	76	DJ70370	DJ71370	DJ72370	DJ75370
3.80	48	76	DJ70380	DJ71380	DJ72380	DJ75380
3.90	51	79	DJ70390	DJ71390	DJ72390	DJ75390
4.00	54	83	DJ70400	DJ71400	DJ72400	DJ75400
4.10	54	83	DJ70410	DJ71410	DJ72410	DJ75410
4.20	54	83	DJ70420	DJ71420	DJ72420	DJ75420
4.30	54	83	DJ70430	DJ71430	DJ72430	DJ75430
4.40	56	86	DJ70440	DJ71440	DJ72440	DJ75440
4.50	56	86	DJ70450	DJ71450	DJ72450	DJ75450
4.60	56	86	DJ70460	DJ71460	DJ72460	DJ75460
4.70	59	89	DJ70470	DJ71470	DJ72470	DJ75470
4.80	59	89	DJ70480	DJ71480	DJ72480	DJ75480
4.90	62	92	DJ70490	DJ71490	DJ72490	DJ75490
5.00	62	92	DJ70500	DJ71500	DJ72500	DJ75500
5.10	62	92	DJ70510	DJ71510	DJ72510	DJ75510
5.20	64	95	DJ70520	DJ71520	DJ72520	DJ75520
5.30	64	95	DJ70530	DJ71530	DJ72530	DJ75530
5.40	64	95	DJ70540	DJ71540	DJ72540	DJ75540
5.50	64	95	DJ70550	DJ71550	DJ72550	DJ75550
5.60	67	98	DJ70560	DJ71560	DJ72560	DJ75560
5.70	67	98	DJ70570	DJ71570	DJ72570	DJ75570
5.80	67	98	DJ70580	DJ71580	DJ72580	DJ75580
5.90	67	98	DJ70590	DJ71590	DJ72590	DJ75590
6.00	70	102	DJ70600	DJ71600	DJ72600	DJ75600
6.10	70	102	DJ70610	DJ71610	DJ72610	DJ75610
6.20	70	102	DJ70620	DJ71620	DJ72620	DJ75620
6.30	70	102	DJ70630	DJ71630	DJ72630	DJ75630
6.40	73	105	DJ70640	DJ71640	DJ72640	DJ75640
6.50	73	105	DJ70650	DJ71650	DJ72650	DJ75650
6.60	73	105	DJ70660	DJ71660	DJ72660	DJ75660
6.70	73	105	DJ70670	DJ71670	DJ72670	DJ75670
6.80	73	105	DJ70680	DJ71680	DJ72680	DJ75680
6.90	73	105	DJ70690	DJ71690	DJ72690	DJ75690

HSS Metric Straight Shank Twist Drill Right Hand

- Standard：JIS B4301-97
- 118/135 degree point angle design for all types of metal,no walking and skating.
- Fully ground body for the most accurate holedimentions and high concentricity.
- Black oxide finish / bright finish / titanium finish for greaterresistance to wear.
- Hardened high speed steel body provides additional safeguard.
- For general using in steel,cast steel,malleable iron,sintered metal,non-ferrous metal and plastic.

Size (mm)	Flute Length(mm)	OAL (mm)	118° Bright Finish Order No.	118° Black Oxide Order No.	118° TiN-Coated Order No.	135° Cobalt Order No.
7.00	73	105	DJ70700	DJ71700	DJ72700	DJ75700
7.10	75	108	DJ70710	DJ71710	DJ72710	DJ75710
7.20	75	108	DJ70720	DJ71720	DJ72720	DJ75720
7.30	75	108	DJ70730	DJ71730	DJ72730	DJ75730
7.40	78	111	DJ70740	DJ71740	DJ72740	DJ75740
7.50	78	111	DJ70750	DJ71750	DJ72750	DJ75750
7.60	78	111	DJ70760	DJ71760	DJ72760	DJ75760
7.70	81	114	DJ70770	DJ71770	DJ72770	DJ75770
7.80	81	114	DJ70780	DJ71780	DJ72780	DJ75780
7.90	81	114	DJ70790	DJ71790	DJ72790	DJ75790
8.00	81	114	DJ70800	DJ71800	DJ72800	DJ75800
8.10	84	117	DJ70810	DJ71810	DJ72810	DJ75810
8.20	84	117	DJ70820	DJ71820	DJ72820	DJ75820
8.30	84	117	DJ70830	DJ71830	DJ72830	DJ75830
8.40	87	121	DJ70840	DJ71840	DJ72840	DJ75840
8.50	87	121	DJ70850	DJ71850	DJ72850	DJ75850
8.60	87	121	DJ70860	DJ71860	DJ72860	DJ75860
8.70	87	121	DJ70870	DJ71870	DJ72870	DJ75870
8.80	89	124	DJ70880	DJ71880	DJ72880	DJ75880
8.90	89	124	DJ70890	DJ71890	DJ72890	DJ75890
9.00	89	124	DJ70900	DJ71900	DJ72900	DJ75900
9.10	89	124	DJ70910	DJ71910	DJ72910	DJ75910
9.20	92	127	DJ70920	DJ71920	DJ72920	DJ75920
9.30	92	127	DJ70930	DJ71930	DJ72930	DJ75930
9.40	92	127	DJ70940	DJ71940	DJ72940	DJ75940
9.50	92	127	DJ70950	DJ71950	DJ72950	DJ75950
9.60	95	130	DJ70960	DJ71960	DJ72960	DJ75960
9.70	95	130	DJ70970	DJ71970	DJ72970	DJ75970
9.80	95	130	DJ70980	DJ71980	DJ72980	DJ75980
9.90	95	130	DJ70990	DJ71990	DJ72990	DJ75990
10.00	95	130	DJ701000	DJ711000	DJ721000	DJ751000
10.10	98	133	DJ701010	DJ711010	DJ721010	DJ751010
10.20	98	133	DJ701020	DJ711020	DJ721020	DJ751020
10.30	98	133	DJ701030	DJ711030	DJ721030	DJ751030
10.40	98	133	DJ701040	DJ711040	DJ721040	DJ751040
10.50	100	137	DJ701050	DJ711050	DJ721050	DJ751050
10.70	100	137	DJ701070	DJ711070	DJ721070	DJ751070
10.80	103	140	DJ701080	DJ711080	DJ721080	DJ751080
10.90	103	140	DJ701090	DJ711090	DJ721090	DJ751090
11.00	103	140	DJ701100	DJ711100	DJ721100	DJ751100
11.10	103	140	DJ701110	DJ711110	DJ721110	DJ751110
11.20	106	143	DJ701120	DJ711120	DJ721120	DJ751120
11.30	106	143	DJ701130	DJ711130	DJ721130	DJ751130
11.40	106	143	DJ701140	DJ711140	DJ721140	DJ751140
11.50	106	143	DJ701150	DJ711150	DJ721150	DJ751150
11.70	109	146	DJ701170	DJ711170	DJ721170	DJ751170
11.80	109	146	DJ701180	DJ711180	DJ721180	DJ751180
11.90	109	146	DJ701190	DJ711190	DJ721190	DJ751190
12.00	111	149	DJ701200	DJ711200	DJ721200	DJ751200
12.10	111	149	DJ701210	DJ711210	DJ721210	DJ751210
12.30	111	149	DJ701230	DJ711230	DJ721230	DJ751230
12.50	114	152	DJ701250	DJ711250	DJ721250	DJ751250
12.70	114	152	DJ701270	DJ711270	DJ721270	DJ751270
13.00	114	152	DJ701300	DJ711300	DJ721300	DJ751300

Metric Left Hand Jobber Drills

- High Speed Steel ·118° Point
- Bright Finish
- Standard：DIN338

Size (mm)	Flute Length(mm)	OAL (mm)	Order No.
1.60	20	43	DJ80160
1.65	20	43	DJ80165
1.70	20	43	DJ80170
1.75	22	46	DJ80175
1.80	22	46	DJ80180
1.85	22	46	DJ80185
1.90	22	46	DJ80190
1.95	24	49	DJ80195
2.00	24	49	DJ80200
2.10	24	49	DJ80210
2.20	24	53	DJ80220
2.30	27	53	DJ80230
2.40	27	57	DJ80240
2.50	30	57	DJ80250
2.60	30	57	DJ80260
2.70	30	61	DJ80270
2.80	33	61	DJ80280
2.90	33	61	DJ80290
3.00	33	61	DJ80300
3.10	33	65	DJ80310
3.20	36	65	DJ80320
3.30	36	65	DJ80330
3.40	36	70	DJ80340
3.50	39	70	DJ80350
3.60	39	70	DJ80360
3.70	39	70	DJ80370
3.80	39	75	DJ80380
3.90	43	75	DJ80390
4.00	43	75	DJ80400

Size (mm)	Flute Length(mm)	OAL (mm)	Order No.
4.10	43	75	DJ80410
4.20	43	75	DJ80420
4.30	47	80	DJ80430
4.40	47	80	DJ80440
4.50	47	80	DJ80450
4.60	47	80	DJ80460
4.70	47	80	DJ80470
4.80	52	86	DJ80480
4.90	52	86	DJ80490
5.00	52	86	DJ80500
5.20	52	86	DJ80520
5.50	57	93	DJ80550
5.60	57	93	DJ80560
5.80	57	93	DJ80580
6.00	57	93	DJ80600
6.50	63	101	DJ80650
7.00	69	109	DJ80700
7.50	75	117	DJ80750
8.00	75	117	DJ80800
8.50	81	125	DJ80850
9.00	81	125	DJ80900
9.50	87	133	DJ80950
10.00	87	133	DJ801000
10.50	87	133	DJ801050
11.00	94	142	DJ801100
11.50	94	142	DJ801150
12.00	101	151	DJ801200
12.50	101	151	DJ801250
13.00	101	151	DJ801300

Screw Machine Drills

- High Speed Steel ·118° Standard Point
- High Speed Steel ·135° Split Point
- Cobalt 135° Split Point

Fractional Sizes

Size (in.)	Flute Length(in.)	OAL (in.)	118º Bright Finish Order No.	135º Black Oxide Order No.	135ºTin Coated Order No.	135ºCobalt Gold Order No.
*3/64	1/2	1-3/8	DS00003	DS11003	DS12003	DS15003
1/16	5/8	1-5/8	DS00004	DS11004	DS12004	DS15004
5/64	11/16	1-11/16	DS00005	DS11005	DS12005	DS15005
3/32	3/4	1-3/4	DS00006	DS11006	DS12006	DS15006
7/64	13/16	1-13/16	DS00007	DS11007	DS12007	DS15007

*Not split point

Screw Machine Drills

- High Speed Steel ·118° Standard Point
- High Speed Steel ·135° Split Point
- Cobalt 135° Split Point

Fractional Sizes

Size (in.)	Flute Length(in.)	OAL (in.)	118º Bright Finish Order No.	135º Black Oxide Order No.	135ºTin Coated Order No.	135ºCobalt Gold Order No.
1/8	7/8	1-7/8	DS00008	DS11008	DS12008	DS15008
9/64	15/16	1-15/16	DS00009	DS11009	DS12009	DS15009
5/32	1"	2-1/16	DS00010	DS11010	DS12010	DS15010
11/64	1-1/16	2-1/8	DS00011	DS11011	DS12011	DS15011
3/16	1-1/8	2-3/16	DS00012	DS11012	DS12012	DS15012
13/64	1-3/16	2-1/4	DS00013	DS11013	DS12013	DS15013
7/32	1-1/4	2-3/8	DS00014	DS11014	DS12014	DS15014
15/64	1-5/16	2-7/16	DS00015	DS11015	DS12015	DS15015
1/4	1-3/8	2-1/2	DS00016	DS11016	DS12016	DS15016
17/64	1-7/16	2-5/8	DS00017	DS11017	DS12017	DS15017
9/32	1-1/2	2-11/16	DS00018	DS11018	DS12018	DS15018
19/64	1-9/16	2-3/4	DS00019	DS11019	DS12019	DS15019
5/16	1-5/8	2-13/16	DS00020	DS11020	DS12020	DS15020
21/64	1-11/16	2-15/16	DS00021	DS11021	DS12021	DS15021
11/32	1-11/16	3"	DS00022	DS11022	DS12022	DS15022
23/64	1-3/4	3-1/16	DS00023	DS11023	DS12023	DS15023
3/8	1-13/16	3-1/8	DS00024	DS11024	DS12024	DS15024
25/64	1-7/8	3-1/4	DS00025	DS11025	DS12025	DS15025
13/32	1-15/16	3-5/16	DS00026	DS11026	DS12026	DS15026
27/64	2"	3-3/8	DS00027	DS11027	DS12027	DS15027
7/16	2-1/16	3-7/16	DS00028	DS11028	DS12028	DS15028
29/64	2-1/8	3-9/16	DS00029	DS11029	DS12029	DS15029
15/32	2-1/8	3-5/8	DS00030	DS11030	DS12030	DS15030
31/64	2-3/16	3-11/16	DS00031	DS11031	DS12031	DS15031
1/2	2-1/4	3-3/4	DS00032	DS11032	DS12032	DS15032
33/64	2-3/8	3-7/8	DS00033	DS11033	DS12033	DS15033
17/32	2-3/8	3-7/8	DS00034	DS11034	DS12034	DS15034
35/64	2-1/2	4"	DS00035	DS11035	DS12035	DS15035
9/16	2-1/2	4"	DS00036	DS11036	DS12036	DS15036
37/64	2-5/8	4-1/8	DS00037	DS11037	DS12037	DS15037
19/32	2-5/8	4-1/8	DS00038	DS11038	DS12038	DS15038
39/64	2-3/4	4-1/4	DS00039	DS11039	DS12039	DS15039
5/8	2-3/4	4-1/4	DS00040	DS11040	DS12040	DS15040
41/64	2-7/8	4-1/2	DS00041	DS11041	DS12041	DS15041
21/32	2-7/8	4-1/2	DS00042	DS11042	DS12042	DS15042
43/64	2-7/8	4-5/8	DS00043	DS11043	DS12043	DS15043
11/16	2-7/8	4-5/8	DS00044	DS11044	DS12044	DS15044
45/64	3 "	4-3/4	DS00045	DS11045	DS12045	DS15045
23/32	3 "	4-3/4	DS00046	DS11046	DS12046	DS15046
47/64	3-1/8	5"	DS00047	DS11047	DS12047	DS15047
3/4	3-1/8	5"	DS00048	DS11048	DS12048	DS15048
49/64	3-1/4	5-1/8	DS00049	DS11049	DS12049	DS15049
25/32	3-1/4	5-1/8	DS00050	DS11050	DS12050	DS15050
51/64	3-3/8	5-1/4	DS00051	DS11051	DS12051	DS15051
13/16	3-3/8	5-1/4	DS00052	DS11052	DS12052	DS15052
53/64	3-1/2	5-3/8	DS00053	DS11053	DS12053	DS15053
27/32	3-1/2	5-3/8	DS00054	DS11054	DS12054	DS15054
55/64	3-1/2	5-1/2	DS00055	DS11055	DS12055	DS15055
7/8	3-1/2	5-1/2	DS00056	DS11056	DS12056	DS15056
57/64	3-5/8	5-5/8	DS00057	DS11057	DS12057	DS15057
29/32	3-5/8	5-5/8	DS00058	DS11058	DS12058	DS15058
59/64	3-3/4	5-3/4	DS00059	DS11059	DS12059	DS15059
15/16	3-3/4	5-3/4	DS00060	DS11060	DS12060	DS15060
61/64	3-7/8	5-7/8	DS00061	DS11061	DS12061	DS15061
31/32	3-7/8	5-7/8	DS00062	DS11062	DS12062	DS15062
63/64	4"	6"	DS00063	DS11063	DS12063	DS15063

Size (in.)	Flute Length(in.)	OAL (in.)	118º Bright Finish Order No.	135º Black Oxide Order No.	135ºTin Coated Order No.	135ºCobalt Gold Order No.
1"	4"	6"	DS00100	DS11100	DS12100	DS15100
1-1/16	4"	6-1/4	DS00104	DS11104	DS12104	DS15104
1-1/8	4"	6-3/8	DS00108	DS11108	DS12108	DS15108
1-3/16	4-1/4	6-5/8	DS00112	DS11112	DS12112	DS15112
1-1/4	4-3/8	6-3/4	DS00116	DS11116	DS12116	DS15116
1-5/16	4-3/8	7"	DS00120	DS11120	DS12120	DS15120
1-3/8	4-1/2	7-1/8	DS00124	DS11124	DS12124	DS15124
1-7/16	4-3/4	7-3/8	DS00128	DS11128	DS12128	DS15128
1-1/2	4-7/8	7-1/2	DS00132	DS11132	DS12132	DS15132
1-9/16	4-7/8	7-3/4	DS00136	DS11136	DS12136	DS15136
1-5/8	4-7/8	7-3/4	DS00140	DS11140	DS12140	DS15140
1-11/16	5-1/8	8"	DS00144	DS11144	DS12144	DS15144
1-3/4	5-1/8	8"	DS00148	DS11148	DS12148	DS15148
1-13/16	5-3/8	8-1/4	DS00152	DS11152	DS12152	DS15152
1-7/8	5-3/8	8-1/4	DS00156	DS11156	DS12156	DS15156
1-15/16	5-5/8	8-1/2	DS00160	DS11160	DS12160	DS15160
2"	5-5/8	8-1/2	DS00200	DS11200	DS12200	DS15200

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	118º Bright Finish Order No.	135º Black Oxide Order No.	135ºTin Coated Order No.	135ºCobalt Gold Order No.
1	1-5/16	2-7/16	DS00501	DS11501	DS12501	DS15501
2	1-5/16	2-7/16	DS00502	DS11502	DS12502	DS15502
3	1-1/4	2-3/8	DS00503	DS11503	DS12503	DS15503
4	1-1/4	2-3/8	DS00504	DS11504	DS12504	DS15504
5	1-1/4	2-3/8	DS00505	DS11505	DS12505	DS15505
6	1-1/4	2-3/8	DS00506	DS11506	DS12506	DS15506
7	1-3/16	2-1/4	DS00507	DS11507	DS12507	DS15507
8	1-3/16	2-1/4	DS00508	DS11508	DS12508	DS15508
9	1-3/16	2-1/4	DS00509	DS11509	DS12509	DS15509
10	1-3/16	2-1/4	DS00510	DS11510	DS12510	DS15510
11	1-3/16	2-1/4	DS00511	DS11511	DS12511	DS15511
12	1-3/16	2-1/4	DS00512	DS11512	DS12512	DS15512
13	1-1/8	2-3/16	DS00513	DS11513	DS12513	DS15513
14	1-1/8	2-3/16	DS00514	DS11514	DS12514	DS15514
15	1-1/8	2-3/16	DS00515	DS11515	DS12515	DS15515
16	1-1/8	2-3/16	DS00516	DS11516	DS12516	DS15516
17	1-1/8	2-3/16	DS00517	DS11517	DS12517	DS15517
18	1-1/16	2-1/8	DS00518	DS11518	DS12518	DS15518
19	1-1/16	2-1/8	DS00519	DS11519	DS12519	DS15519
20	1-1/16	2-1/8	DS00520	DS11520	DS12520	DS15520
21	1-1/16	2-1/8	DS00521	DS11521	DS12521	DS15521
22	1-1/16	2-1/8	DS00522	DS11522	DS12522	DS15522
23	1"	2-1/16	DS00523	DS11523	DS12523	DS15523
24	1"	2-1/16	DS00524	DS11524	DS12524	DS15524
25	1"	2-1/16	DS00525	DS11525	DS12525	DS15525
26	1"	2-1/16	DS00526	DS11526	DS12526	DS15526
27	1"	2-1/16	DS00527	DS11527	DS12527	DS15527
28	15/16	1-15/16	DS00528	DS11528	DS12528	DS15528
29	15/16	1-15/16	DS00529	DS11529	DS12529	DS15529
30	15/16	1-15/16	DS00530	DS11530	DS12530	DS15530
31	7/8	1-7/8	DS00531	DS11531	DS12531	DS15531
32	7/8	1-7/8	DS00532	DS11532	DS12532	DS15532
33	7/8	1-7/8	DS00533	DS11533	DS12533	DS15533
34	7/8	1-7/8	DS00534	DS11534	DS12534	DS15534
35	7/8	1-7/8	DS00535	DS11535	DS12535	DS15535
36	13/16	1-13/16	DS00536	DS11536	DS12536	DS15536
37	13/16	1-13/16	DS00537	DS11537	DS12537	DS15537
38	13/16	1-13/16	DS00538	DS11538	DS12538	DS15538
39	13/16	1-13/16	DS00539	DS11539	DS12539	DS15539
40	13/16	1-13/16	DS00540	DS11540	DS12540	DS15540
41	13/16	1-13/16	DS00541	DS11541	DS12541	DS15541

Screw Machine Drills

- High Speed Steel ·118° Standard Point
- High Speed Steel ·135° Split Point
- Cobalt 135° Split Point

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	118º Bright Finish Order No.	135º Black Oxide Order No.	135ºTin Coated Order No.	135ºCobalt Gold Order No.
42	3/4	1-3/4	DS00542	DS11542	DS12542	DS15542
43	3/4	1-3/4	DS00543	DS11543	DS12543	DS15543
44	3/4	1-3/4	DS00544	DS11544	DS12544	DS15544
45	3/4	1-3/4	DS00545	DS11545	DS12545	DS15545
46	3/4	1-3/4	DS00546	DS11546	DS12546	DS15546
47	11/16	1-11/16	DS00547	DS11547	DS12547	DS15547
48	11/16	1-11/16	DS00548	DS11548	DS12548	DS15548
49	11/16	1-11/16	DS00549	DS11549	DS12549	DS15549
50	11/16	1-11/16	DS00550	DS11550	DS12550	DS15550
51	11/16	1-11/16	DS00551	DS11551	DS12551	DS15551
52	11/16	1-11/16	DS00552	DS11552	DS12552	DS15552
53	5/8	1-5/8	DS00553	DS11553	DS12553	DS15553
54	5/8	1-5/8	DS00554	DS11554	DS12554	DS15554
55	5/8	1-5/8	DS00555	DS11555	DS12555	DS15555
56	1/2	1-3/8	DS00556	DS11556	DS12556	DS15556
57	1/2	1-3/8	DS00557	DS11557	DS12557	DS15557
58	1/2	1-3/8	DS00558	DS11558	DS12558	DS15558
59	1/2	1-3/8	DS00559	DS11559	DS12559	DS15559
60	1/2	1-3/8	DS00560	DS11560	DS12560	DS15560

Letter Size

Size	Flute Length(in.)	OAL (in.)	118º Bright Finish Order No.	135º Black Oxide Order No.	135ºTin Coated Order No.	135ºCobalt Gold Order No.
A	1-5/16	2-7/16	DS00601	DS11601	DS12601	DS15601
B	1-3/8	2-1/2	DS00602	DS11602	DS12602	DS15602
C	1-3/8	2-1/2	DS00603	DS11603	DS12603	DS15603
D	1-3/8	2-1/2	DS00604	DS11604	DS12604	DS15604
E	1-3/8	2-1/2	DS00605	DS11605	DS12605	DS15605
F	1-7/16	2-5/8	DS00606	DS11606	DS12606	DS15606
G	1-7/16	2-5/8	DS00607	DS11607	DS12607	DS15607
H	1-1/2	2-11/16	DS00608	DS11608	DS12608	DS15608
I	1-1/2	2-11/16	DS00609	DS11609	DS12609	DS15609
J	1-1/2	2-11/16	DS00610	DS11610	DS12610	DS15610
K	1-1/2	2-11/16	DS00611	DS11611	DS12611	DS15611
L	1-9/16	2-3/4	DS00612	DS11612	DS12612	DS15612
M	1-9/16	2-3/4	DS00613	DS11613	DS12613	DS15613
N	1-5/8	2-13/16	DS00614	DS11614	DS12614	DS15614
O	1-11/16	2-15/16	DS00615	DS11615	DS12615	DS15615
P	1-11/16	2-15/16	DS00616	DS11616	DS12616	DS15616
Q	1-11/16	3"	DS00617	DS11617	DS12617	DS15617
R	1-11/16	3"	DS00618	DS11618	DS12618	DS15618
S	1-3/4	3-1/16	DS00619	DS11619	DS12619	DS15619
T	1-3/4	3-1/16	DS00620	DS11620	DS12620	DS15620
U	1-13/16	3-1/8	DS00621	DS11621	DS12621	DS15621
V	1-7/8	3-1/4	DS00622	DS11622	DS12622	DS15622
W	1-7/8	3-1/4	DS00623	DS11623	DS12623	DS15623
X	1-15/16	3-5/16	DS00624	DS11624	DS12624	DS15624
Y	1-15/16	3-5/16	DS00625	DS11625	DS12625	DS15625
Z	2"	3-3/8	DS00626	DS11626	DS12626	DS15626

Left Hand Screw Machine Drills

- High Speed Steel ·118° Standard Point
- Standard：ANSI B94.11M

Fractional Sizes

Size(in.)	Flute Length(in.)	OAL(in.)	Bright Finish Order No.	Black Oxide Order No.
1/16	5/8	1-5/8	DS20004	DS21004
5/64	11/16	1-11/16	DS20005	DS21005
3/32	3/4	1-3/4	DS20006	DS21006
7/64	13/16	1-13/16	DS20007	DS21007
1/8	7/8	1-7/8	DS20008	DS21008
9/64	15/16	1-15/16	DS20009	DS21009
5/32	1"	2-1/16	DS20010	DS21010
11/64	1-1/16	2-1/8	DS20011	DS21011
3/16	1-1/8	2-3/16	DS20012	DS21012
13/64	1-3/16	2-1/4	DS20013	DS21013
7/32	1-1/4	2-3/8	DS20014	DS21014
15/64	1-5/16	2-7/16	DS20015	DS21015
1/4	1-3/8	2-1/2	DS20016	DS21016
17/64	1-7/16	2-5/8	DS20017	DS21017
9/32	1-1/2	2-11/16	DS20018	DS21018
19/64	1-9/16	2-3/4	DS20019	DS21019
5/16	1-5/8	2-13/16	DS20020	DS21020
21/64	1-11/16	2-15/16	DS20021	DS21021
11/32	1-11/16	3"	DS20022	DS21022
23/64	1-3/4	3-1/16	DS20023	DS21023
3/8	1-13/16	3-1/8	DS20024	DS21024
25/64	1-7/8	3-1/4	DS20025	DS21025
13/32	1-15/16	3-5/16	DS20026	DS21026
27/64	2"	3-3/8	DS20027	DS21027
7/16	2-1/16	3-7/16	DS20028	DS21028
29/64	2-1/8	3-9/16	DS20029	DS21029
15/32	2-1/8	3-5/8	DS20030	DS21030
31/64	2-3/16	3-11/16	DS20031	DS21031
1/2	2-1/4	3-3/4	DS20032	DS21032
33/64	2-3/8	3-7/8	DS20033	DS21033
17/32	2-3/8	3-7/8	DS20034	DS21034
35/64	2-1/2	4"	DS20035	DS21035
9/16	2-1/2	4"	DS20036	DS21036

Size(in.)	Flute Length(in.)	OAL(in.)	Bright Finish Order No.	Black Oxide Order No.
37/64	2-5/8	4-1/8	DS20037	DS21037
19/32	2-5/8	4-1/8	DS20038	DS21038
39/64	2-3/4	4-1/4	DS20039	DS21039
5/8	2-3/4	4-1/4	DS20040	DS21040
41/64	2-7/8	4-1/2	DS20041	DS21041
21/32	2-7/8	4-1/2	DS20042	DS21042
43/64	2-7/8	4-5/8	DS20043	DS21043
11/16	2-7/8	4-5/8	DS20044	DS21044
45/64	3"	4-3/4	DS20045	DS21045
23/32	3"	4-3/4	DS20046	DS21046
47/64	3-1/8	5"	DS20047	DS21047
3/4	3-1/8	5"	DS20048	DS21048
49/64	3-1/4	5-1/8	DS20049	DS21049
25/32	3-1/4	5-1/8	DS20050	DS21050
51/64	3-3/8	5-1/4	DS20051	DS21051
13/16	3-3/8	5-1/4	DS20052	DS21052
53/64	3-1/2	5-3/8	DS20053	DS21053
27/32	3-1/2	5-3/8	DS20054	DS21054
55/64	3-1/2	5-1/2	DS20055	DS21055
7/8	3-1/2	5-1/2	DS20056	DS21056
57/64	3-5/8	5-5/8	DS20057	DS21057
29/32	3-5/8	5-5/8	DS20058	DS21058
59/64	3-3/4	5-3/4	DS20059	DS21059
15/16	3-3/4	5-3/4	DS20060	DS21060
61/64	3-7/8	5-7/8	DS20061	DS21061
31/32	3-7/8	5-7/8	DS20062	DS21062
63/64	4"	6"	DS20063	DS21063
1"	4"	6"	DS20100	DS21100
1-1/16	4"	6-1/4	DS20104	DS21104
1-1/8	4"	6-3/8	DS20108	DS21108
1-3/16	4-1/4	6-5/8	DS20112	DS21112
1-1/4	4-3/8	6-3/4	DS20116	DS21116

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	Bright Finish Order No.	Black Oxide Order No.
1	1-5/16	2-7/16	DS20501	DS21501
2	1-5/16	2-7/16	DS20502	DS21502
3	1-1/4	2-3/8	DS20503	DS21503
4	1-1/4	2-3/8	DS20504	DS21504
5	1-1/4	2-3/8	DS20505	DS21505
6	1-1/4	2-3/8	DS20506	DS21506
7	1-3/16	2-1/4	DS20507	DS21507
8	1-3/16	2-1/4	DS20508	DS21508
9	1-3/16	2-1/4	DS20509	DS21509
10	1-3/16	2-1/4	DS20510	DS21510
11	1-3/16	2-1/4	DS20511	DS21511
12	1-3/16	2-1/4	DS20512	DS21512
13	1-1/8	2-3/16	DS20513	DS21513
14	1-1/8	2-3/16	DS20514	DS21514
15	1-1/8	2-3/16	DS20515	DS21515

Size	Flute Length(in.)	OAL (in.)	Bright Finish Order No.	Black Oxide Order No.
16	1-1/8	2-3/16	DS20516	DS21516
17	1-1/8	2-3/16	DS20517	DS21517
18	1-1/16	2-1/8	DS20518	DS21518
19	1-1/16	2-1/8	DS20519	DS21519
20	1-1/16	2-1/8	DS20520	DS21520
21	1-1/16	2-1/8	DS20521	DS21521
22	1-1/16	2-1/8	DS20522	DS21522
23	1"	2-1/16	DS20523	DS21523
24	1"	2-1/16	DS20524	DS21524
25	1"	2-1/16	DS20525	DS21525
26	1"	2-1/16	DS20526	DS21526
27	1"	2-1/16	DS20527	DS21527
28	15/16	1-15/16	DS20528	DS21528
29	15/16	1-15/16	DS20529	DS21529
30	15/16	1-15/16	DS20530	DS21530

Left Hand Screw Machine Drills

- High Speed Steel ·118° Standard Point
- Standard：ANSI B94.11M

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	Bright Finish Order No.	Black Oxide Order No.
31	7/8	1-7/8	DS20531	DS21531
32	7/8	1-7/8	DS20532	DS21532
33	7/8	1-7/8	DS20533	DS21533
34	7/8	1-7/8	DS20534	DS21534
35	7/8	1-7/8	DS20535	DS21535
36	13/16	1-13/16	DS20536	DS21536
37	13/16	1-13/16	DS20537	DS21537
38	13/16	1-13/16	DS20538	DS21538
39	13/16	1-13/16	DS20539	DS21539
40	13/16	1-13/16	DS20540	DS21540
41	3/4	1-3/4	DS20541	DS21541
42	3/4	1-3/4	DS20542	DS21542
43	3/4	1-3/4	DS20543	DS21543
44	3/4	1-3/4	DS20544	DS21544
45	3/4	1-3/4	DS20545	DS21545

Size	Flute Length(in.)	OAL (in.)	Bright Finish Order No.	Black Oxide Order No.
46	3/4	1-3/4	DS20546	DS21546
47	11/16	1-11/16	DS20547	DS21547
48	11/16	1-11/16	DS20548	DS21548
49	11/16	1-11/16	DS20549	DS21549
50	11/16	1-11/16	DS20550	DS21550
51	11/16	1-11/16	DS20551	DS21551
52	11/16	1-11/16	DS20552	DS21552
53	5/8	1-5/8	DS20553	DS21553
54	5/8	1-5/8	DS20554	DS21554
55	5/8	1-5/8	DS20555	DS21555
56	1/2	1-3/8	DS20556	DS21556
57	1/2	1-3/8	DS20557	DS21557
58	1/2	1-3/8	DS20558	DS21558
59	1/2	1-3/8	DS20559	DS21559
60	1/2	1-3/8	DS20560	DS21560

Letter Size

Size	Flute Length(in.)	OAL (in.)	Bright Finish Order No.	Black Oxide Order No.
A	1-5/16	2-7/16	DS20601	DS21601
B	1-3/8	2-1/2	DS20602	DS21602
C	1-3/8	2-1/2	DS20603	DS21603
D	1-3/8	2-1/2	DS20604	DS21604
E	1-3/8	2-1/2	DS20605	DS21605
F	1-7/16	2-5/8	DS20606	DS21606
G	1-7/16	2-5/8	DS20607	DS21607
H	1-1/2	2-1/16	DS20608	DS21608
I	1-1/2	2-1/16	DS20609	DS21609
J	1-1/2	2-1/16	DS20610	DS21610
K	1-1/2	2-1/16	DS20611	DS21611
L	1-9/16	2-3/4	DS20612	DS21612
M	1-9/16	2-3/4	DS20613	DS21613

Size	Flute Length(in.)	OAL (in.)	Bright Finish Order No.	Black Oxide Order No.
N	1-5/8	2-13/16	DS20614	DS21614
O	1-11/16	2-15/16	DS20615	DS21615
P	1-11/16	2-15/16	DS20616	DS21616
Q	1-11/16	3"	DS20617	DS21617
R	1-11/16	3"	DS20618	DS21618
S	1-3/4	3-1/16	DS20619	DS21619
T	1-3/4	3-1/16	DS20620	DS21620
U	1-13/16	3-1/8	DS20621	DS21621
V	1-7/8	3-1/4	DS20622	DS21622
W	1-7/8	3-1/4	DS20623	DS21623
X	1-15/16	3-5/16	DS20624	DS21624
Y	1-15/16	3-5/16	DS20625	DS21625
Z	2"	3-3/8	DS20626	DS21626

Taper Length Drills

- High Speed Steel ·118° Standard Point
- Cobalt ·135° Split Point

Fractional Sizes

Size (in.)	Flute Length (in.)	OAL (in.)	HSS 118° Bright Finish Order No.	HSS 118° Black Finish Order No.	Cobalt 135° Order No.
1/64	5/16	1-1/2	DT0001	DT0101	DT15001
1/32	3/4	2"	DT0002	DT0102	DT15002
3/64	1-1/8	2-1/4	DT0003	DT0103	DT15003
1/16	1-3/4	3"	DT0004	DT0104	DT15004
5/64	2"	3-3/4	DT0005	DT0105	DT15005
3/32	2-1/4	4-1/4	DT0006	DT0106	DT15006
7/64	2-1/2	4-5/8	DT0007	DT0107	DT15007
1/8	2-3/4	5-1/8	DT0008	DT0108	DT15008
9/64	3"	5-3/8	DT0009	DT0109	DT15009
5/32	3"	5-3/8	DT0010	DT0110	DT15010
11/64	3-3/8	5-3/4	DT0011	DT0111	DT15011
3/16	3-3/8	5-3/4	DT0012	DT0112	DT15012
13/64	3-5/8	6"	DT0013	DT0113	DT15013
7/32	3-5/8	6"	DT0014	DT0114	DT15014
15/64	3-3/4	6-1/8	DT0015	DT0115	DT15015
1/4	3-3/4	6-1/8	DT0016	DT0116	DT15016
17/64	3-7/8	6-1/4	DT0017	DT0117	DT15017
9/32	3-7/8	6-1/4	DT0018	DT0118	DT15018
19/64	4"	6-3/8	DT0019	DT0119	DT15019
5/16	4"	6-3/8	DT0020	DT0120	DT15020
21/64	4-1/8	6-1/2	DT0021	DT0121	DT15021
11/32	4-1/8	6-1/2	DT0022	DT0122	DT15022
23/64	4-1/4	6-3/4	DT0023	DT0123	DT15023
3/8	4-1/4	6-3/4	DT0024	DT0124	DT15024
25/64	4-3/8	7"	DT0025	DT0125	DT15025
13/32	4-3/8	7"	DT0026	DT0126	DT15026
27/64	4-5/8	7-1/4	DT0027	DT0127	DT15027
7/16	4-5/8	7-1/4	DT0028	DT0128	DT15028
29/64	4-3/4	7-1/2	DT0029	DT0129	DT15029
15/32	4-3/4	7-1/2	DT0030	DT0130	DT15030
31/64	4-3/4	7-3/4	DT0031	DT0131	DT15031
1/2	4-3/4	7-3/4	DT0032	DT0132	DT15032
33/64	4-3/4	8"	DT0033	DT0133	DT15033
17/32	4-3/4	8"	DT0034	DT0134	DT15034
35/64	4-7/8	8-1/4	DT0035	DT0135	DT15035
9/16	4-7/8	8-1/4	DT0036	DT0136	DT15036
37/64	4-7/8	8-3/4	DT0037	DT0137	DT15037
19/32	4-7/8	8-3/4	DT0038	DT0138	DT15038
39/64	4-7/8	8-3/4	DT0039	DT0139	DT15039
5/8	4-7/8	8-3/4	DT0040	DT0140	DT15040
41/64	5-1/8	9"	DT0041	DT0141	DT15041
21/32	5-1/8	9"	DT0042	DT0142	DT15042
43/64	5-3/8	9-1/4	DT0043	DT0143	DT15043
11/16	5-3/8	9-1/4	DT0044	DT0144	DT15044
45/64	5-5/8	9-1/2	DT0045	DT0145	DT15045
23/32	5-5/8	9-1/2	DT0046	DT0146	DT15046
47/64	5-7/8	9-3/4	DT0047	DT0147	DT15047
3/4	5-7/8	9-3/4	DT0048	DT0148	DT15048

Size (in.)	Flute Length (in.)	OAL (in.)	HSS 118° Bright Finish Order No	HSS 118° Black Finish Order No.	Cobalt 135° Order No.
49/64	6"	9-7/8	DT0049	DT0149	DT15049
25/32	6"	9-7/8	DT0050	DT0150	DT15050
51/64	6-1/8	10"	DT0051	DT0151	DT15051
13/16	6-1/8	10"	DT0052	DT0152	DT15052
53/64	6-1/8	10"	DT0053	DT0153	DT15053
27/32	6-1/8	10"	DT0054	DT0154	DT15054
55/64	6-1/8	10"	DT0055	DT0155	DT15055
7/8	6-1/8	10"	DT0056	DT0156	DT15056
57/64	6-1/8	10"	DT0057	DT0157	DT15057
29/32	6-1/8	10"	DT0058	DT0158	DT15058
59/64	6-1/8	10-3/4	DT0059	DT0159	DT15059
15/16	6-1/8	10-3/4	DT0060	DT0160	DT15060
61/64	6-3/8	11"	DT0061	DT0161	DT15061
31/32	6-3/8	11"	DT0062	DT0162	DT15062
63/64	6-3/8	11"	DT0063	DT0163	DT15063
1"	6-3/8	11"	DT00100	DT01100	DT15100
1-1/64	6-1/2	11-1/8	DT00101	DT01101	DT15101
1-1/32	6-1/2	11-1/8	DT00102	DT01002	DT15102
1-3/64	6-5/8	11-1/4	DT00103	DT01103	DT15103
1-1/16	6-5/8	11-1/4	DT00104	DT01104	DT15104
1-5/64	6-7/8	11-1/2	DT00105	DT01105	DT15105
1-3/32	6-7/8	11-1/2	DT00106	DT01106	DT15106
1-7/64	7-1/8	11-3/4	DT00107	DT01107	DT15107
1-1/8	7-1/8	11-3/4	DT00108	DT01108	DT15108
1-9/64	7-1/4	11-7/8	DT00109	DT01109	DT15109
1-5/32	7-1/4	11-7/8	DT00110	DT01110	DT15110
1-11/64	7-3/8	12"	DT00111	DT01111	DT15111
1-3/16	7-3/8	12"	DT00112	DT01112	DT15112
1-13/64	7-1/2	12-1/8	DT00113	DT01113	DT15113
1-7/32	7-1/2	12-1/8	DT00114	DT01114	DT15114
1-15/64	7-7/8	12-1/2	DT00115	DT01115	DT15115
1-1/4	7-7/8	12-1/2	DT00116	DT01116	DT15116
1-9/32	8-1/2	14-1/8	DT00118	DT01118	DT15118
1-5/16	8-5/8	14-1/4	DT00120	DT01120	DT15120
1-11/32	8-3/4	14-3/8	DT00122	DT01122	DT15122
1-3/8	8-7/8	14-1/2	DT00124	DT01124	DT15124
1-13/32	9"	14-5/8	DT00126	DT01126	DT15126
1-7/16	9-1/8	14-3/4	DT00128	DT01128	DT15128
1-15/32	9-1/4	14-7/8	DT00130	DT01130	DT15130
1-1/2	9-3/8	15"	DT00132	DT01132	DT15132
1-9/16	9-5/8	15-1/4	DT00136	DT01136	DT15136
1-5/8	9-7/8	15-5/8	DT00140	DT01140	DT15140
1-11/16	10"	15-3/4	DT00144	DT01144	DT15144
1-3/4	10-1/2	16-1/4	DT00148	DT01148	DT15148
1-13/16	10-1/2	16-1/4	DT00152	DT01152	DT15152
1-7/8	10-3/4	16-1/2	DT00156	DT01156	DT15156
1-15/16	10-3/4	16-5/8	DT00160	DT01160	DT15160
2"	10-3/4	16-5/8	DT00200	DT01200	DT15200

Taper Length Drills

- High Speed Steel ·118° Standard Point
- Cobalt ·135° Split Point

Wire Gage Size

Size	Flute Length (in.)	OAL (in.)	HSS 118° Bright Finish Order No.	HSS 118° Black Finish Order No.	Cobalt 135° Order No.
1	3-3/4	6-1/8	DT00501	DT01501	DT15501
2	3-3/4	6-1/8	DT00502	DT01502	DT15502
3	3-5/8	6"	DT00503	DT01503	DT15503
4	3-5/8	6"	DT00504	DT01504	DT15504
5	3-5/8	6"	DT00505	DT01505	DT15505
6	3-5/8	6"	DT00506	DT01506	DT15506
7	3-5/8	6"	DT00507	DT01507	DT15507
8	3-5/8	6"	DT00508	DT01508	DT15508
9	3-5/8	6"	DT00509	DT01509	DT15509
10	3-5/8	6"	DT00510	DT01510	DT15510
11	3-5/8	6"	DT00511	DT01511	DT15511
12	3-5/8	6"	DT00512	DT01512	DT15512
13	3-3/8	5-3/4	DT00513	DT01513	DT15513
14	3-3/8	5-3/4	DT00514	DT01514	DT15514
15	3-3/8	5-3/4	DT00515	DT01515	DT15515
16	3-3/8	5-3/4	DT00516	DT01516	DT15516
17	3-3/8	5-3/4	DT00517	DT01517	DT15517
18	3-3/8	5-3/4	DT00518	DT01518	DT15518
19	3-3/8	5-3/4	DT00519	DT01519	DT15519
20	3-3/8	5-3/4	DT00520	DT01520	DT15520
21	3-3/8	5-3/4	DT00521	DT01521	DT15521
22	3-3/8	5-3/4	DT00522	DT01522	DT15522
23	3"	5-3/8	DT00523	DT01523	DT15523
24	3"	5-3/8	DT00524	DT01524	DT15524
25	3"	5-3/8	DT00525	DT01525	DT15525
26	3"	5-3/8	DT00526	DT01526	DT15526
27	3"	5-3/8	DT00527	DT01527	DT15527
28	3"	5-3/8	DT00528	DT01528	DT15528
29	3"	5-3/8	DT00529	DT01529	DT15529
30	3"	5-3/8	DT00530	DT01530	DT15530

Size	Flute Length (in.)	OAL (in.)	HSS 118° Bright Finish Order No.	HSS 118° Black Finish Order No.	Cobalt 135° Order No.
31	2-3/4	5-1/8	DT00531	DT01531	DT15531
32	2-3/4	5-1/8	DT00532	DT01532	DT15532
33	2-3/4	5-1/8	DT00533	DT01533	DT15533
34	2-3/4	5-1/8	DT00534	DT01534	DT15534
35	2-3/4	5-1/8	DT00535	DT01535	DT15535
36	2-1/2	4-5/8	DT00536	DT01536	DT15536
37	2-1/2	4-5/8	DT00537	DT01537	DT15537
38	2-1/2	4-5/8	DT00538	DT01538	DT15538
39	2-1/2	4-5/8	DT00539	DT01539	DT15539
40	2-1/2	4-5/8	DT00540	DT01540	DT15540
41	2-1/2	4-5/8	DT00541	DT01541	DT15541
42	2-1/4	4-1/4	DT00542	DT01542	DT15542
43	2-1/4	4-1/4	DT00543	DT01543	DT15543
44	2-1/4	4-1/4	DT00544	DT01544	DT15544
45	2-1/4	4-1/4	DT00545	DT01545	DT15545
46	2-1/4	4-1/4	DT00546	DT01546	DT15546
47	2-1/4	4-1/4	DT00547	DT01547	DT15547
48	2"	3-3/4	DT00548	DT01548	DT15548
49	2"	3-3/4	DT00549	DT01549	DT15549
50	2"	3-3/4	DT00550	DT01550	DT15550
51	2"	3-3/4	DT00551	DT01551	DT15551
52	2"	3-3/4	DT00552	DT01552	DT15552
53	1-3/4	3"	DT00553	DT01553	DT15553
54	1-3/4	3"	DT00554	DT01554	DT15554
55	1-3/4	3"	DT00555	DT01555	DT15555
56	1-1/8	2-1/4	DT00556	DT01556	DT15556
57	1-1/8	2-1/4	DT00557	DT01557	DT15557
58	1-1/8	2-1/4	DT00558	DT01558	DT15558
59	1-1/8	2-1/4	DT00559	DT01559	DT15559
60	1-1/8	2-1/4	DT00560	DT01560	DT15560

Letter Size

Size	Flute Length (in.)	OAL (in.)	HSS 118° Bright Finish Order No.	HSS 118° Black Finish Order No.	Cobalt 135° Order No.
A	3-3/4	6-1/8	DT00601	DT01601	DT15601
B	3-3/4	6-1/8	DT00602	DT01602	DT15602
C	3-3/4	6-1/8	DT00603	DT01603	DT15603
D	3-3/4	6-1/8	DT00604	DT01604	DT15604
E	3-3/4	6-1/8	DT00605	DT01605	DT15605
F	3-7/8	6-1/4	DT00606	DT01606	DT15606
G	3-7/8	6-1/4	DT00607	DT01607	DT15607
H	3-7/8	6-1/4	DT00608	DT01608	DT15608
I	3-7/8	6-1/4	DT00609	DT01609	DT15609
J	3-7/8	6-1/4	DT00610	DT01610	DT15610
K	3-7/8	6-1/4	DT00611	DT01611	DT15611
L	4"	6-3/8	DT00612	DT01612	DT15612
M	4"	6-3/8	DT00613	DT01613	DT15613

Size	Flute Length (in.)	OAL (in.)	HSS 118° Bright Finish Order No.	HSS 118° Black Finish Order No.	Cobalt 135° Order No.
N	4"	6-3/8	DT00614	DT01614	DT15614
O	4-1/8	6-1/2	DT00615	DT01615	DT15615
P	4-1/8	6-1/2	DT00616	DT01616	DT15616
Q	4-1/8	6-1/2	DT00617	DT01617	DT15617
R	4-1/8	6-1/2	DT00618	DT01618	DT15618
S	4-1/4	6-3/4	DT00619	DT01619	DT15619
T	4-1/4	6-3/4	DT00620	DT01620	DT15620
U	4-1/4	6-3/4	DT00621	DT01621	DT15621
V	4-3/8	7"	DT00622	DT01622	DT15622
W	4-3/8	7"	DT00623	DT01623	DT15623
X	4-3/8	7"	DT00624	DT01624	DT15624
Y	4-3/8	7"	DT00625	DT01625	DT15625
Z	4-5/8	7-1/4	DT00626	DT01626	DT15626

Metric Taper Length Drills

- High Speed Steel ·118° Standard Point
- Black Oxide Finish

Size (mm)	Flute Length(in.)	OAL (in.)	Order No.
1.00	1-1/8	2-1/4	DT11100
1.05	1-1/8	2-1/4	DT11105
1.10	1-1/8	2-1/4	DT11110
1.15	1-1/8	2-1/4	DT11115
1.20	1-3/4	3"	DT11120
1.25	1-3/4	3"	DT11125
1.30	1-3/4	3"	DT11130
1.35	1-3/4	3"	DT11135
1.40	1-3/4	3"	DT11140
1.45	1-3/4	3"	DT11145
1.50	1-3/4	3"	DT11150
1.55	1-3/4	3"	DT11155
1.60	2"	3-3/4	DT11160
1.65	2"	3-3/4	DT11165
1.70	2"	3-3/4	DT11170
1.75	2"	3-3/4	DT11175
1.80	2"	3-3/4	DT11180
1.85	2"	3-3/4	DT11185
1.90	2"	3-3/4	DT11190
1.95	2"	3-3/4	DT11195
2.00	2-1/4	4-1/4	DT11200
2.05	2-1/4	4-1/4	DT11205
2.10	2-1/4	4-1/4	DT11210
2.15	2-1/4	4-1/4	DT11215
2.20	2-1/4	4-1/4	DT11220
2.25	2-1/4	4-1/4	DT11225
2.30	2-1/4	4-1/4	DT11230
2.35	2-1/4	4-1/4	DT11235
2.40	2-1/2	4-5/8	DT11240
2.45	2-1/2	4-5/8	DT11245
2.50	2-1/2	4-5/8	DT11250
2.60	2-1/2	4-5/8	DT11260
2.70	2-1/2	4-5/8	DT11270
2.80	2-3/4	5-1/8	DT11280
2.90	2-3/4	5-1/8	DT11290
3.00	2-3/4	5-1/8	DT11300
3.10	2-3/4	5-1/8	DT11310
3.20	3"	5-3/8	DT11320
3.30	3"	5-3/8	DT11330
3.40	3"	5-3/8	DT11340
3.50	3"	5-3/8	DT11350
3.60	3"	5-3/8	DT11360
3.70	3"	5-3/8	DT11370
3.80	3"	5-3/8	DT11380
3.90	3"	5-3/8	DT11390
4.00	3-3/8	5-3/4	DT11400
4.10	3-3/8	5-3/4	DT11410
4.20	3-3/8	5-3/4	DT11420
4.30	3-3/8	5-3/4	DT11430
4.40	3-3/8	5-3/4	DT11440
4.50	3-3/8	5-3/4	DT11450
4.60	3-3/8	5-3/4	DT11460
4.70	3-3/8	5-3/4	DT11470
4.80	3-5/8	6"	DT11480
4.90	3-5/8	6"	DT11490
5.00	3-5/8	6"	DT11500
5.10	3-5/8	6"	DT11510
5.20	3-5/8	6"	DT11520
5.30	3-5/8	6"	DT11530

Size (mm)	Flute Length(in.	OAL (in.)	Order No.
5.40	3-5/8	6"	DT11540
5.50	3-5/8	6"	DT11550
5.60	3-3/4	6-1/8	DT11560
5.70	3-3/4	6-1/8	DT11570
5.80	3-3/4	6-1/8	DT11580
5.90	3-3/4	6-1/8	DT11590
6.00	3-3/4	6-1/8	DT11600
6.10	3-3/4	6-1/8	DT11610
6.20	3-3/4	6-1/8	DT11620
6.30	3-3/4	6-1/8	DT11630
6.40	3-7/8	6-1/4	DT11640
6.50	3-7/8	6-1/4	DT11650
6.80	3-7/8	6-1/4	DT11680
7.00	3-7/8	6-1/4	DT11700
7.20	4"	6-3/8	DT11720
7.50	4"	6-3/8	DT11750
7.80	4"	6-3/8	DT11780
8.00	4-1/8	6-1/2	DT11800
8.20	4-1/8	6-1/2	DT11820
8.50	4-1/8	6-1/2	DT11850
8.80	4-1/4	6-3/4	DT11880
9.00	4-1/4	6-3/4	DT11900
9.20	4-1/4	6-3/4	DT11920
9.50	4-1/4	6-3/4	DT11950
9.80	4-3/8	7"	DT11980
10.00	4-3/8	7"	DT111000
10.20	4-3/8	7"	DT111020
10.50	4-5/8	7-1/4	DT111050
10.80	4-5/8	7-1/4	DT111080
11.00	4-5/8	7-1/4	DT111100
11.20	4-3/4	7-1/2	DT111120
11.50	4-3/4	7-1/2	DT111150
11.80	4-3/4	7-1/2	DT111180
12.00	4-3/4	7-3/4	DT111200
12.20	4-3/4	7-3/4	DT111220
12.50	4-3/4	7-3/4	DT111250
12.80	4-3/4	8"	DT111280
13.00	4-3/4	8"	DT111300
13.20	4-3/4	8"	DT111320
13.50	4-3/4	8"	DT111350
13.80	4-7/8	8-1/4	DT111380
14.00	4-7/8	8-1/4	DT111400
14.25	4-7/8	8-1/4	DT111425
14.50	4-7/8	8-3/4	DT111450
14.75	4-7/8	8-3/4	DT111475
15.00	4-7/8	8-3/4	DT111500
15.25	4-7/8	8-3/4	DT111525
15.50	4-7/8	8-3/4	DT111550
15.75	4-7/8	8-3/4	DT111575
16.00	5-1/8	9"	DT111600
16.25	5-1/8	9"	DT111625
16.50	5-1/8	9"	DT111650
16.75	5-3/8	9-1/4	DT111675
17.00	5-3/8	9-1/4	DT111700
17.25	5-3/8	9-1/4	DT111725
17.50	5-5/8	9-1/2	DT111750
18.00	5-5/8	9-1/2	DT111800
18.50	5-7/8	9-3/4	DT111850
19.00	5-7/8	9-3/4	DT111900

Metric Taper Length Drills

- High Speed Steel ·118° Standard Point
- Black Oxide Finish

Size (mm)	Flute Length(in.)	OAL (in.)	Order No.
19.50	6"	9-7/8	DT111950
20.00	6-1/8	10"	DT112000
20.50	6-1/8	10"	DT112050
21.00	6-1/8	10"	DT112100
21.50	6-1/8	10"	DT112150
22.00	6-1/8	10"	DT112200
22.50	6-1/8	10"	DT112250
23.00	6-1/8	10"	DT112300
23.50	6-1/8	10-3/4	DT112350
24.00	6-3/8	11"	DT112400
24.50	6-3/8	11"	DT112450
25.00	6-3/8	11"	DT112500
25.50	6-1/2	11-1/8	DT112550
26.00	6-1/2	11-1/8	DT112600
26.50	6-5/8	11-1/4	DT112650
27.00	6-5/8	11-1/4	DT112700
27.50	6-7/8	11-1/2	DT112750
28.00	7-1/8	11-3/4	DT112800
28.50	7-1/8	11-3/4	DT112850

Size (mm)	Flute Length(in.)	OAL (in.)	Order No.
29.00	7-1/4	11-7/8	DT112900
29.50	7-3/8	12"	DT112950
30.00	7-3/8	12"	DT113000
30.50	7-1/2	12-1/8	DT113050
31.00	7-7/8	12-1/2	DT113100
31.50	7-7/8	12-1/2	DT113150
32.00	8-1/2	14-1/8	DT113200
32.50	8-1/2	14-1/8	DT113250
33.00	8-5/8	14-1/4	DT113300
33.50	8-3/4	14-3/8	DT113350
34.00	8-3/4	14-3/8	DT113400
34.50	8-7/8	14-1/2	DT113450
35.00	9"	14-5/8	DT113500
35.50	9"	14-5/8	DT113550
36.00	9-1/8	14-3/4	DT113600
36.50	9-1/8	14-3/4	DT113650
37.00	9-1/4	14-7/8	DT113700
37.50	9-3/8	15"	DT113750
38.00	9-3/8	15"	DT113800

Solid Carbide Circuit Board Drills

- Use for drilling epoxy resin-glass fiber circuit boards
- Solid carbide construction offers great rigidity
- 1/8" Shank 1-1/2" Overall
- 130º included angle drill point

Fractional Sizes

Size (in.)	Flute Length(in.)	Order No.
1/64	3/16	DN40001
1/32	1/4	DN40002
3/64	3/8	DN40003
1/16	3/8	DN40004
5/64	3/8	DN40005
3/32	3/8	DN40006

Size (in.)	Flute Length(in.)	Order No.
7/64	3/8	DN40007
1/8	3/8	DN40008
9/64	0.49	DN40009
5/32	0.49	DN40010
11/64	0.49	DN40011
3/16	0.49	DN40012

Size (in.)	Flute Length(in.)	Order No.
13/64	0.49	DN40013
7/32	0.49	DN40014
15/64	0.49	DN40015
1/4	0.49	DN40016

Metric Sizes

Size (mm)	Flute Length(mm)	Order No.
0.30	5	DN41030
0.35	5	DN41035
0.40	5	DN41040
0.45	5	DN41045
0.50	5	DN41050

Size (mm)	Flute Length(mm)	Order No.
0.75	5	DN41075
1.00	9.5	DN41100
1.25	9.5	DN41125
1.75	9.5	DN41175
2.00	9.5	DN41200

Size (mm)	Flute Length(mm)	Order No.
2.25	9.5	DN41225
2.50	9.5	DN41250
2.75	9.5	DN41275
3.00	9.5	DN41300

Number Sizes

Size	Flute Length(in.)	Order No.
31	3/8	DN40531
32	3/8	DN40532
33	3/8	DN40533
34	3/8	DN40534
35	3/8	DN40535
36	3/8	DN40536
37	3/8	DN40537
38	3/8	DN40538
39	3/8	DN40539
40	3/8	DN40540
41	3/8	DN40541
42	3/8	DN40542
43	3/8	DN40543
44	3/8	DN40544
45	3/8	DN40545
46	3/8	DN40546
47	3/8	DN40547

Size	Flute Length(in.)	Order No.
48	3/8	DN40548
49	3/8	DN40549
50	3/8	DN40550
51	3/8	DN40551
52	3/8	DN40552
53	3/8	DN40553
54	3/8	DN40554
55	3/8	DN40555
56	3/8	DN40556
57	3/8	DN40557
58	3/8	DN40558
59	3/8	DN40559
60	3/8	DN40560
61	3/8	DN40561
62	3/8	DN40562
63	3/8	DN40563
64	3/8	DN40564

Size	Flute Length(in.)	Order No.
65	3/8	DN40565
66	3/8	DN40566
67	3/8	DN40567
68	3/8	DN40568
69	3/8	DN40569
70	3/8	DN40570
71	3/8	DN40571
72	3/8	DN40572
73	3/8	DN40573
74	3/8	DN40574
75	3/8	DN40575
76	3/8	DN40576
77	3/8	DN40577
78	3/8	DN40578
79	3/8	DN40579
80	3/8	DN40580

Solid Carbide Jobber Length Drills

- 118º Point
- Precision ground to close diameter tolerance
- Recommended for general purpose drilling in Cast iron,Aluminum,Magnesium,Bronze,Masonite and Resin-Fiberglass Laminates

Fractional Sizes

Size (in.)	Flute Length(in.)	OAL (in.)	Ground Bright Order No.
1/32	3/8	1-1/8	DC00002
3/64	3/4	1-1/2	DC00003
1/16	3/4	1-1/2	DC00004
5/64	7/8	1-3/4	DC00005
3/32	1"	1-3/4	DC00006
7/64	1-1/4	2"	DC00007
1/8	1-1/4	2"	DC00008
9/64	1-3/8	2-1/2	DC00009
5/32	1-3/8	2-1/2	DC00010
11/64	1-5/8	2-3/4	DC00011
3/16	1-5/8	2-3/4	DC00012
13/64	1-3/4	3"	DC00013
7/32	1-3/4	3"	DC00014
15/64	2"	3-1/4	DC00015
1/4	2"	3-1/4	DC00016
17/64	2-1/8	3-1/2	DC00017
9/32	2-1/8	3-1/2	DC00018

Size (in.)	Flute Length(in.)	OAL (in.)	Ground Bright Order No.
19/64	2-3/8	3-3/4	DC00019
5/16	2-3/8	3-3/4	DC00020
21/64	2-1/2	4"	DC00021
11/32	2-1/2	4"	DC00022
23/64	2-3/4	4-1/4	DC00023
3/8	2-3/4	4-1/4	DC00024
25/64	2-7/8	4-1/2	DC00025
13/32	2-7/8	4-1/2	DC00026
27/64	2-7/8	4-1/2	DC00027
7/16	2-7/8	4-1/2	DC00028
29/64	3"	4-3/4	DC00029
15/32	3"	4-3/4	DC00030
31/64	3"	4-3/4	DC00031
1/2	3"	4-3/4	DC00032
9/16	3"	4-3/4	DC00036
5/8	3-1/2	5-3/4	DC00040
3/4	4-1/2	5-3/4	DC00048

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	Ground Bright Order No.
1	1-3/4	3"	DC00501
2	1-3/4	3"	DC00502
3	1-3/4	3"	DC00503
4	1-3/4	3"	DC00504

Size	Flute Length(in.)	OAL (in.)	Ground Bright Order No.
5	1-3/4	3"	DC00505
6	1-3/4	3"	DC00506
7	1-3/4	3"	DC00507
8	1-3/4	3"	DC00508

Solid Carbide Jobber Length Drills

- 118º Point
- Precision ground to close diameter tolerance
- Recommended for general purpose drilling in Cast iron,Aluminum,Magnesium,Bronze,Masonite and Resin-Fiberglass Laminates

Wire Gage Size

Size	Flute Length(in.)	OAL (in.)	Ground Bright Order No.
9	1-3/4	3"	DC00509
10	1-5/8	2-3/4	DC00510
11	1-5/8	2-3/4	DC00511
12	1-5/8	2-3/4	DC00512
13	1-5/8	2-3/4	DC00513
14	1-5/8	2-3/4	DC00514
15	1-5/8	2-3/4	DC00515
16	1-5/8	2-3/4	DC00516
17	1-5/8	2-3/4	DC00517
18	1-5/8	2-3/4	DC00518
19	1-5/8	2-3/4	DC00519
20	1-3/8	2-1/2	DC00520
21	1-3/8	2-1/2	DC00521
22	1-3/8	2-1/2	DC00522
23	1-3/8	2-1/2	DC00523
24	1-3/8	2-1/2	DC00524
25	1-3/8	2-1/2	DC00525
26	1-3/8	2-1/2	DC00526
27	1-3/8	2-1/2	DC00527
28	1-3/8	2-1/2	DC00528
29	1-3/8	2-1/2	DC00529
30	1-1/4	2-1/4	DC00530
31	1-1/4	2-1/4	DC00531
32	1-1/4	2-1/4	DC00532
33	1-1/4	2-1/4	DC00533
34	1-1/4	2-1/4	DC00534

Size	Flute Length(in.)	OAL (in.)	Ground Bright Order No.
35	1-1/4	2-1/4	DC00535
36	1-1/4	2-1/4	DC00536
37	1-1/4	2-1/4	DC00537
38	1-1/4	2-1/4	DC00538
39	1-1/4	2-1/4	DC00539
40	1"	2"	DC00540
41	1"	2"	DC00541
42	1"	2"	DC00542
43	1"	2"	DC00543
44	1"	2"	DC00544
45	7/8	1-3/4	DC00545
46	7/8	1-3/4	DC00546
47	7/8	1-3/4	DC00547
48	7/8	1-3/4	DC00548
49	7/8	1-3/4	DC00549
50	7/8	1-3/4	DC00550
51	3/4	1-1/2	DC00551
52	3/4	1-1/2	DC00552
53	3/4	1-1/2	DC00553
54	3/4	1-1/2	DC00554
55	3/4	1-1/2	DC00555
56	3/4	1-1/2	DC00556
57	3/4	1-1/2	DC00557
58	3/4	1-1/2	DC00558
59	3/4	1-1/2	DC00559
60	3/4	1-1/2	DC00560

Letter Size

Size	Flute Length(in.)	OAL (in.)	Ground Bright Order No.
A	2"	3-1/4	DC00601
B	2"	3-1/4	DC00602
C	2"	3-1/4	DC00603
D	2"	3-1/4	DC00604
E	2"	3-1/4	DC00605
F	2"	3-1/4	DC00606
G	2-1/8	3-1/2	DC00607
H	2-1/8	3-1/2	DC00608
I	2-1/8	3-1/2	DC00609
J	2-1/8	3-1/2	DC00610
K	2-1/8	3-1/2	DC00611
L	2-1/8	3-1/2	DC00612
M	2-3/8	3-3/4	DC00613

Size	Flute Length(in.)	OAL (in.)	Ground Bright Order No.
N	2-3/8	3-3/4	DC00614
O	2-3/8	3-3/4	DC00615
P	2-3/8	3-3/4	DC00616
Q	2-1/2	4"	DC00617
R	2-1/2	4"	DC00618
S	2-1/2	4"	DC00619
T	2-3/4	4-1/4	DC00620
U	2-3/4	4-1/4	DC00621
V	2-3/4	4-1/4	DC00622
W	2-7/8	4-1/2	DC00623
X	2-7/8	4-1/2	DC00624
Y	2-7/8	4-1/2	DC00625
Z	2-7/8	4-1/2	DC00626

Metric Sizes

Size (mm)	Flute Length(mm)	OAL (mm)	Ground Bright Order No.
2.0	22	44	DC10200
2.5	25	50	DC10250
3.0	32	57	DC10300
3.5	35	63	DC10350
4.0	35	63	DC10400
4.5	41	70	DC10450
5.0	44	75	DC10500
5.5	44	75	DC10550
6.0	50	82	DC10600
6.5	50	82	DC10650
7.0	54	89	DC10700

Size (mm)	Flute Length(mm)	OAL (mm)	Ground Bright Order No.
7.5	60	95	DC10750
8.0	60	95	DC10800
8.5	63	100	DC10850
9.0	70	100	DC10900
9.5	70	108	DC10950
10.0	73	114	DC101000
10.5	73	114	DC101050
11.0	73	114	DC101100
11.5	76	120	DC101150
12.0	76	120	DC101200

Carbide Tipped Straight Shank Jobber Drills

- 118° point angle.
- Heavy-duty construction and heat treated body for optimum wear-resistant and support of the carbide tip.
- Special twist drill bits for drilling abrasive materials.
- Used in the production drilling of cast iron, non-ferrous metals and many composite materials.
- Not recommended for drilling steel.

Fractional Sizes

Size (in.)	Flute Length(in.)	OAL (in.)	HSS Shank Order No.	Alloy Shank Order No.
1/8	1-5/8	2-3/4	DC20008	DC21008
9/64	1-3/4	2-7/8	DC20009	DC21009
5/32	2"	3-1/8	DC20010	DC21010
11/64	2-1/8	3-1/4	DC20011	DC21011
3/16	2-5/16	3-1/2	DC20012	DC21012
13/64	2-7/16	3-5/8	DC20013	DC21013
7/32	2-1/2	3-3/4	DC20014	DC21014
15/64	2-5/8	3-7/8	DC20015	DC21015
1/4	2-3/4	4"	DC20016	DC21016
17/64	2-7/8	4-1/8	DC20017	DC21017
9/32	2-15/16	4-1/4	DC20018	DC21018
19/64	3-1/16	4-3/8	DC20019	DC21019
5/16	3-3/16	4-1/2	DC20020	DC21020

Size (in.)	Flute Length(in.)	OAL (in.)	HSS Shank Order No.	Alloy Shank Order No.
21/64	3-5/16	4-5/8	DC20021	DC21021
11/32	3-7/16	4-3/4	DC20022	DC21022
23/64	3-1/2	4-7/8	DC20023	DC21023
3/8	3-5/8	5"	DC20024	DC21024
25/64	3-3/4	5-1/8	DC20025	DC21025
13/32	3-7/8	5-1/4	DC20026	DC21026
27/64	3-15/16	5-3/8	DC20027	DC21027
7/16	4-1/16	5-1/2	DC20028	DC21028
29/64	4-3/16	5-5/8	DC20029	DC21029
15/32	4-5/16	5-3/4	DC20030	DC21030
31/64	4-3/8	5-7/8	DC20031	DC21031
1/2	4-1/2	6"	DC20032	DC21032

Letter Sizes

Size	Flute Length(in.)	OAL (in.)	HSS Shank Order No.	Alloy Shank Order No.
A	2-5/8	3-7/8	DC20601	DC21601
B	2-3/4	4"	DC20602	DC21602
C	2-3/4	4"	DC20603	DC21603
D	2-3/4	4"	DC20604	DC21604
E	2-3/4	4"	DC20605	DC21605
F	2-7/8	4-1/8	DC20606	DC21606
G	2-7/8	4-1/8	DC20607	DC21607
H	2-7/8	4-1/8	DC20608	DC21608
I	2-7/8	4-1/8	DC20609	DC21609
J	2-7/8	4-1/8	DC20610	DC21610
K	2-15/16	4-1/4	DC20611	DC21611
L	2-15/16	4-1/4	DC20612	DC21612
M	3-1/16	4-3/8	DC20613	DC21613

Size	Flute Length(in.)	OAL (in.)	HSS Shank Order No.	Alloy Shank Order No.
N	3-1/16	4-3/8	DC20614	DC21614
O	3-3/16	4-1/2	DC20615	DC21615
P	3-5/16	4-5/8	DC20616	DC21616
Q	3-7/16	4-3/4	DC20617	DC21617
R	3-7/16	4-3/4	DC20618	DC21618
S	3-1/2	4-7/8	DC20619	DC21619
T	3-1/2	4-7/8	DC20620	DC21620
U	3-5/8	5"	DC20621	DC21621
V	3-5/8	5"	DC20622	DC21622
W	3-3/4	5-1/8	DC20623	DC21623
X	3-3/4	5-1/8	DC20624	DC21624
Y	3-7/8	5-1/4	DC20625	DC21625
Z	3-7/8	5-1/4	DC20626	DC21626

Number Sizes

Size	Flute Length(in.)	OAL (in.)	HSS Shank Order No.	Alloy Shank Order No.
1	2-5/8	3-7/8	DC20501	DC21501
2	2-5/8	3-7/8	DC20502	DC21502
3	2-1/2	3-3/4	DC20503	DC21503
4	2-1/2	3-3/4	DC20504	DC21504
5	2-1/2	3-3/4	DC20505	DC21505
6	2-1/2	3-3/4	DC20506	DC21506
7	2-7/16	3-5/8	DC20507	DC21507
8	2-7/16	3-5/8	DC20508	DC21508
9	2-7/16	3-5/8	DC20509	DC21509
10	2-7/16	3-5/8	DC20510	DC21510
11	2-5/16	3-1/2	DC20511	DC21511
12	2-5/16	3-1/2	DC20512	DC21512
13	2-5/16	3-1/2	DC20513	DC21513
14	2-3/16	3-3/8	DC20514	DC21514
15	2-3/16	3-3/8	DC20515	DC21515
16	2-3/16	3-3/8	DC20516	DC21516

Size	Flute Length(in.)	OAL (in.)	HSS Shank Order No.	Alloy Shank Order No.
17	2-3/16	3-3/8	DC20517	DC21517
18	2-1/8	3-1/4	DC20518	DC21518
19	2-1/8	3-1/4	DC20519	DC21519
20	2-1/8	3-1/4	DC20520	DC21520
21	2-1/8	3-1/4	DC20521	DC21521
22	2"	3-1/8	DC20522	DC21522
23	2"	3-1/8	DC20523	DC21523
24	2"	3-1/8	DC20524	DC21524
25	1-7/8	3"	DC20525	DC21525
26	1-7/8	3"	DC20526	DC21526
27	1-7/8	3"	DC20527	DC21527
28	1-3/4	2-7/8	DC20528	DC21528
29	1-3/4	2-7/8	DC20529	DC21529
30	1-5/8	2-3/4	DC20530	DC21530
31	1-5/8	2-3/4	DC20531	DC21531
32	1-5/8	2-3/4	DC20532	DC21532

DIN 338 Carbide Tipped Straight Shank Jobber Drills

- 118° point angle.
- Heavy-duty construction and heat treated body for optimum wear-resistant and support of the carbide tip.
- Special twist drill bits for drilling abrasive materials.
- Used in the production drilling of cast iron, non-ferrous metals and many composite materials.
- Not recommended for drilling steel.

Size (mm)	Flute Length (mm)	OAL (mm)	HSS Shank Order No.	Alloy Shank Order No.
3.0	33	61	DC30300	DC31300
3.2	36	65	DC30320	DC31320
3.5	39	70	DC30350	DC31350
4.0	43	75	DC30400	DC31400
4.5	47	80	DC30450	DC31450
4.8	52	86	DC30480	DC31480
5.0	52	86	DC30500	DC31500
5.5	57	93	DC30550	DC31550
6.0	57	93	DC30600	DC31600
6.5	63	101	DC30650	DC31650
7.0	69	109	DC30700	DC31700
7.5	69	109	DC30750	DC31750

Size (mm)	Flute Length(mm)	OAL (mm)	HSS Shank Order No.	Alloy Shank Order No.
8.0	75	117	DC30800	DC31800
8.5	75	117	DC30850	DC31850
9.0	81	125	DC30900	DC31900
9.5	81	125	DC30950	DC31950
10.0	87	133	DC301000	DC311000
10.5	87	133	DC301050	DC311050
11.0	94	142	DC301100	DC311100
11.5	94	142	DC301150	DC311150
12.0	101	151	DC301200	DC311200
12.5	101	151	DC301250	DC311250
13.0	101	151	DC301300	DC311300

High Speed Steel Double-End Body Drills

- 135° Split Point

Size	Flute Length(in.)	OAL (in.)	Order No.
5/64	3/8	2"	DD10005
7/64	1/2	1-7/8	DD10007
1/8	1/2	2"	DD10008
5/32	1/2	2-1/16	DD10010
11/64	3/8	2"	DD10011
3/16	1/2	2-3/16	DD10012

Size	Flute Length(in.)	OAL (in.)	Order No.
7/32	1/2	2-3/8	DD10014
1/4	1/2	2-1/2	DD10016
#11	1/2	2-1/4	DD10511
#20	1/2	2-1/8	DD10520
#30	1/2	2"	DD10530

High Speed Steel Metric Double-End Body Drills

- 135° Split Point

Size	Flute Length(in.)	OAL (in.)	Order No.
2.50	9.5	43	DD20250
3.00	11	46	DD20300
3.10	11	49	DD20310
3.20	11	49	DD20320
3.25	11	49	DD20325
3.30	11	49	DD20330
3.40	14	52	DD20340
3.50	14	52	DD20350
4.00	14	55	DD20400
4.10	14	55	DD20410
4.20	14	55	DD20420

Size	Flute Length(in.)	OAL (in.)	Order No.
4.50	17	58	DD20450
4.80	17	62	DD20480
5.00	17	62	DD20500
5.10	17	62	DD20510
5.20	17	62	DD20520
5.25	17	62	DD20525
5.50	20	66	DD20550
6.00	20	66	DD20600
6.50	20	70	DD20650
7.00	20	70	DD20700
7.50	20	70	DD20750
8.00	20	81	DD20800

Aircraft Extension Drills

- High Speed Steel and Cobalt ·135° Split Point
- 6" OAL & 12"OAL Black Finish

Fractional Sizes

Size(in.)	Flute Length(in.)	6"OAL HSS Order No.	6"OAL Cobalt Order No.	12"OAL HSS Order No.	12"OAL Cobalt Order No.
1/16	7/8	DA11004	DA15004	DA21004	DA25004
5/64	1"	DA11005	DA15005	DA21005	DA25005
3/32	1-1/4	DA11006	DA15006	DA21006	DA25006
7/64	1-1/2	DA11007	DA15007	DA21007	DA25007
1/8	1-5/8	DA11008	DA15008	DA21008	DA25008
9/64	1-3/4	DA11009	DA15009	DA21009	DA25009

Size(in.)	Flute Length(in.)	6"OAL HSS Order No.	6"OAL Cobalt Order No.	12"OAL HSS Order No.	12"OAL Cobalt Order No.
5/32	2"	DA11010	DA15010	DA21010	DA25010
11/64	2-1/8	DA11011	DA15011	DA21011	DA25011
3/16	2-5/16	DA11012	DA15012	DA21012	DA25012
13/64	2-7/16	DA11013	DA15013	DA21013	DA25013
7/32	2-1/2	DA11014	DA15014	DA21014	DA25014
15/64	2-5/8	DA11015	DA15015	DA21015	DA25015
1/4	2-3/4	DA11016	DA15016	DA21016	DA25016
17/64	2-7/8	DA11017	DA15017	DA21017	DA25017
9/32	2-15/16	DA11018	DA15018	DA21018	DA25018
19/64	3-1/16	DA11019	DA15019	DA21019	DA25019
5/16	3-3/16	DA11020	DA15020	DA21020	DA25020
21/64	3-5/16	DA11021	DA15021	DA21021	DA25021
11/32	3-7/16	DA11022	DA15022	DA21022	DA25022
23/64	3-1/2	DA11023	DA15023	DA21023	DA25023
3/8	3-5/8	DA11024	DA15024	DA21024	DA25024
25/64	3-3/4	DA11025	DA15025	DA21025	DA25025
13/32	3-7/8	DA11026	DA15026	DA21026	DA25026
27/64	3-15/16	DA11027	DA15027	DA21027	DA25027
7/16	4-1/16	DA11028	DA15028	DA21028	DA25028
29/64	4-3/16	DA11029	DA15029	DA21029	DA25029
15/32	4-5/16	DA11030	DA15030	DA21030	DA25030
31/64	4-3/8	DA11031	DA15031	DA21031	DA25031
1/2	4-1/2	DA11032	DA15032	DA21032	DA25032

Wire Gage Size

Size	Flute Length(in.)	6"OAL HSS Order No.	6"OAL Cobalt Order No.	12"OAL HSS Order No.	12"OAL Cobalt Order No.
1	2-5/8	DA11501	DA15501	DA21501	DA25501
2	2-5/8	DA11502	DA15502	DA21502	DA25502
3	2-1/2	DA11503	DA15503	DA21503	DA25503
4	2-1/2	DA11504	DA15504	DA21504	DA25504
5	2-1/2	DA11505	DA15505	DA21505	DA25505
6	2-1/2	DA11506	DA15506	DA21506	DA25506
7	2-7/16	DA11507	DA15507	DA21507	DA25507
8	2-7/16	DA11508	DA15508	DA21508	DA25508
9	2-7/16	DA11509	DA15509	DA21509	DA25509
10	2-7/16	DA11510	DA15510	DA21510	DA25510
11	2-5/16	DA11511	DA15511	DA21511	DA25511
12	2-5/16	DA11512	DA15512	DA21512	DA25512
13	2-5/16	DA11513	DA15513	DA21513	DA25513
14	2-3/16	DA11514	DA15514	DA21514	DA25514
15	2-3/16	DA11515	DA15515	DA21515	DA25515
16	2-3/16	DA11516	DA15516	DA21516	DA25516
17	2-3/16	DA11517	DA15517	DA21517	DA25517
18	2-1/8	DA11518	DA15518	DA21518	DA25518
19	2-1/8	DA11519	DA15519	DA21519	DA25519
20	2-1/8	DA11520	DA15520	DA21520	DA25520
21	2-1/8	DA11521	DA15521	DA21521	DA25521
22	2"	DA11522	DA15522	DA21522	DA25522
23	2"	DA11523	DA15523	DA21523	DA25523
24	2"	DA11524	DA15524	DA21524	DA25524
25	1-7/8	DA11525	DA15525	DA21525	DA25525
26	1-7/8	DA11526	DA15526	DA21526	DA25526
27	1-7/8	DA11527	DA15527	DA21527	DA25527
28	1-3/4	DA11528	DA15528	DA21528	DA25528
29	1-3/4	DA11529	DA15529	DA21529	DA25529
30	1-5/8	DA11530	DA15530	DA21530	DA25530
31	1-5/8	DA11531	DA15531	DA21531	DA25531
32	1-5/8	DA11532	DA15532	DA21532	DA25532
33	1-1/2	DA11533	DA15533	DA21533	DA25533
34	1-1/2	DA11534	DA15534	DA21534	DA25534
35	1-1/2	DA11535	DA15535	DA21535	DA25535
36	1-7/16	DA11536	DA15536	DA21536	DA25536
37	1-7/16	DA11537	DA15537	DA21537	DA25537
38	1-7/16	DA11538	DA15538	DA21538	DA25538
39	1-3/8	DA11539	DA15539	DA21539	DA25539

Aircraft Extension Drills

- High Speed Steel and Cobalt ·135° Split Point
- 6" OAL & 12"OAL Black Finish

Fractional Sizes

Size	Flute Length(in.)	6"OAL HSS Order No.	6"OAL Cobalt Order No.	12"OAL HSS Order No.	12"OAL Cobalt Order No.
40	1-3/8	DA11540	DA15540	DA21540	DA25540
41	1-3/8	DA11541	DA15541	DA21541	DA25541
42	1-1/4	DA11542	DA15542	DA21542	DA25542
43	1-1/4	DA11543	DA15543	DA21543	DA25543
44	1-1/8	DA11544	DA15544	DA21544	DA25544
45	1-1/8	DA11545	DA15545	DA21545	DA25545
46	1-1/8	DA11546	DA15546	DA21546	DA25546
47	1"	DA11547	DA15547	DA21547	DA25547
48	1"	DA11548	DA15548	DA21548	DA25548
49	1"	DA11549	DA15549	DA21549	DA25549
50	1"	DA11550	DA15550	DA21550	DA25550
51	1"	DA11551	DA15551	DA21551	DA25551
52	7/8	DA11552	DA15552	DA21552	DA25552
53	7/8	DA11553	DA15553	DA21553	DA25553
54	7/8	DA11554	DA15554	DA21554	DA25554
55	7/8	DA11555	DA15555	DA21555	DA25555
56	3/4	DA11556	DA15556	DA21556	DA25556
57	3/4	DA11557	DA15557	DA21557	DA25557
58	11/16	DA11558	DA15558	DA21558	DA25558
59	11/16	DA11559	DA15559	DA21559	DA25559
60	11/16	DA11560	DA15560	DA21560	DA25560

Letter Size

Size	Flute Length(in.)	6"OAL HSS Order No.	6"OAL Cobalt Order No.	12"OAL HSS Order No.	12"OAL Cobalt Order No.
A	2-5/8	DA11601	DA15601	DA21601	DA25601
B	2-3/4	DA11602	DA15602	DA21602	DA25602
C	2-3/4	DA11603	DA15603	DA21603	DA25603
D	2-3/4	DA11604	DA15604	DA21604	DA25604
E	2-3/4	DA11605	DA15605	DA21605	DA25605
F	2-7/8	DA11606	DA15606	DA21606	DA25606
G	2-7/8	DA11607	DA15607	DA21607	DA25607
H	2-7/8	DA11608	DA15608	DA21608	DA25608
I	2-7/8	DA11609	DA15609	DA21609	DA25609
J	2-7/8	DA11610	DA15610	DA21610	DA25610
K	2-15/16	DA11611	DA15611	DA21611	DA25611
L	2-15/16	DA11612	DA15612	DA21612	DA25612
M	3-1/16	DA11613	DA15613	DA21613	DA25613
N	3-1/16	DA11614	DA15614	DA21614	DA25614
O	3-3/16	DA11615	DA15615	DA21615	DA25615
P	3-5/16	DA11616	DA15616	DA21616	DA25616
Q	3-7/16	DA11617	DA15617	DA21617	DA25617
R	3-7/16	DA11618	DA15618	DA21618	DA25618
S	3-1/2	DA11619	DA15619	DA21619	DA25619
T	3-1/2	DA11620	DA15620	DA21620	DA25620
U	3-5/8	DA11621	DA15621	DA21621	DA25621
V	3-5/8	DA11622	DA15622	DA21622	DA25622
W	3-3/4	DA11623	DA15623	DA21623	DA25623
X	3-3/4	DA11624	DA15624	DA21624	DA25624
Y	3-7/8	DA11625	DA15625	DA21625	DA25625
Z	3-7/8	DA11626	DA15626	DA21626	DA25626

Metric Aircraft Extension Drills

- High Speed Steel and Cobalt ·135° Split Point
- 150mmOAL &300mmOAL Black Finish
- Used in hard-to-reach places not accessible to regular lengh drills,as in the aircraft industry.
- Designed for drilling through materials less than 4" thick.
- Extension drills are used in areas where extra reach is important.

Size (mm)	Flute Length(mm)	150mmOAL HSS Order No.	150mmOAL Cobalt Order No.	300mmOAL HSS Order No.	300mmOAL Cobalt Order No.
3.0	40	DA31300	DA35300	DA41300	DA45300
3.5	45	DA31350	DA35350	DA41350	DA45350
4.0	50	DA31400	DA35400	DA41400	DA45400
4.5	54	DA31450	DA35450	DA41450	DA45450
5.0	60	DA31500	DA35500	DA41500	DA45500
5.5	65	DA31550	DA35550	DA41550	DA45550
6.0	70	DA31600	DA35600	DA41600	DA45600
6.5	70	DA31650	DA35650	DA41650	DA45650
7.0	75	DA31700	DA35700	DA41700	DA45700
7.5	75	DA31750	DA35750	DA41750	DA45750
8.0	80	DA31800	DA35800	DA41800	DA45800
8.5	85	DA31850	DA35850	DA41850	DA45850
9.0	90	DA31900	DA35900	DA41900	DA45900
9.5	92	DA31950	DA35950	DA41950	DA45950
10.0	95	DA311000	DA351000	DA411000	DA451000
10.5	100	DA311050	DA351050	DA411050	DA451050
11.0	102	DA311100	DA351100	DA411100	DA451100
11.5	105	DA311150	DA351150	DA411150	DA451150
12.0	110	DA311200	DA351200	DA411200	DA451200
12.5	110	DA311250	DA351250	DA411250	DA451250
13.0	115	DA311300	DA351300	DA411300	DA451300

Extra Long Straight Shank Drills

- High Speed Steel ·118° Standard Point
- Bright Finish to 1/2 Diameter, Surface Treated over 1/2
- These drills are utilized in deep hole or long reach drilling applications in many kinds of materials for either hand held or fixed spindle use.

Size (in.)	6" OAL Length 4" Flute Length Order No.	8" OAL Length 6" Flute Length Order No.	10" OAL Length 8" Flute Length Order No.	12" OAL Length 9" Flute Length Order No.	15" OAL Length 11" Flute Length Order No.	18" OAL Length 13" Flute Length Order No.	24" OAL Length 18" Flute Length Order No.
1/8	DE00008	DE10008	DE20008	DE30008	DE40008	DE50008	DE60008
9/64	DE00009	DE10009	DE20009	DE30009	DE40009	DE50009	DE60009
5/32	DE00010	DE10010	DE20010	DE30010	DE40010	DE50010	DE60010
11/64	DE00011	DE10011	DE20011	DE30011	DE40011	DE50011	DE60011
3/16	DE00012	DE10012	DE20012	DE30012	DE40012	DE50012	DE60012
13/64	-	DE10013	DE20013	DE30013	DE40013	DE50013	DE60013
7/32	-	DE10014	DE20014	DE30014	DE40014	DE50014	DE60014
15/64	-	DE10015	DE20015	DE30015	DE40015	DE50015	DE60015
1/4	-	DE10016	DE20016	DE30016	DE40016	DE50016	DE60016
17/64	-	DE10017	DE20017	DE30017	DE40017	DE50017	DE60017
9/32	-	DE10018	DE20018	DE30018	DE40018	DE50018	DE60018
19/64	-	DE10019	DE20019	DE30019	DE40019	DE50019	DE60019
5/16	-	DE10020	DE20020	DE30020	DE40020	DE50020	DE60020
21/64	-	DE10021	DE20021	DE30021	DE40021	DE50021	DE60021

Extra Long Straight Shank Drills

- High Speed Steel ·118° Standard Point
- Bright Finish to 1/2 Diameter, Surface Treated over 1/2
- These drills are utilized in deep hole or long reach drilling applications in many kinds of materials for either hand held or fixed spindle use.

Size (in.)	6" OAL Length 4" Flute Length Order No.	8" OAL Length 6" Flute Length Order No.	10" OAL Length 8" Flute Length Order No.	12" OAL Length 9" Flute Length Order No.	15" OAL Length 11" Flute Length Order No.	18" OAL Length 13" Flute Length Order No.	24" OAL Length 18" Flute Length Order No.
11/32	-	DE10022	DE20022	DE30022	DE40022	DE50022	DE60022
23/64	-	DE10023	DE20023	DE30023	DE40023	DE50023	DE60023
3/8	-	DE10024	DE20024	DE30024	DE40024	DE50024	DE60024
25/64	-	DE10025	DE20025	DE30025	DE40025	DE50025	DE60025
13/32	-	DE10026	DE20026	DE30026	DE40026	DE50026	DE60026
27/64	-	DE10027	DE20027	DE30027	DE40027	DE50027	DE60027
7/16	-	DE10028	DE20028	DE30028	DE40028	DE50028	DE60028
29/64	-	DE10029	DE20029	DE30029	DE40029	DE50029	DE60029
15/32	-	DE10030	DE20030	DE30030	DE40030	DE50030	DE60030
31/64	-	DE10031	DE20031	DE30031	DE40031	DE50031	DE60031
1/2	-	DE10032	DE20032	DE30032	DE40032	DE50032	DE60032
33/64	-	-	-	DE31033	DE41033	DE51033	DE61033
17/32	-	-	-	DE31034	DE41034	DE51034	DE61034
35/64	-	-	-	DE31035	DE41035	DE51035	DE61035
9/16	-	-	-	DE31036	DE41036	DE51036	DE61036
37/64	-	-	-	DE31037	DE41037	DE51037	DE61037
19/32	-	-	-	DE31038	DE41038	DE51038	DE61038
39/64	-	-	-	DE31039	DE41039	DE51039	DE61039
5/8	-	-	-	DE31040	DE41040	DE51040	DE61040
41/64	-	-	-	DE31041	DE41041	DE51041	DE61041
21/32	-	-	-	DE31042	DE41042	DE51042	DE61042
43/64	-	-	-	DE31043	DE41043	DE51043	DE61043
11/16	-	-	-	DE31044	DE41044	DE51044	DE61044
45/64	-	-	-	DE31045	DE41045	DE51045	DE61045
23/32	-	-	-	DE31046	DE41046	DE51046	DE61046
47/64	-	-	-	DE31047	DE41047	DE51047	DE61047
3/4	-	-	-	DE31048	DE41048	DE51048	DE61048
49/64	-	-	-	DE31049	DE41049	DE51049	DE61049
25/32	-	-	-	DE31050	DE41050	DE51050	DE61050
51/64	-	-	-	DE31051	DE41051	DE51051	DE61051
13/16	-	-	-	DE31052	DE41052	DE51052	DE61052
53/64	-	-	-	DE31053	DE41053	DE51053	DE61053
27/32	-	-	-	DE31054	DE41054	DE51054	DE61054
55/64	-	-	-	DE31055	DE41055	DE51055	DE61055
7/8	-	-	-	DE31056	DE41056	DE51056	DE61056
57/64	-	-	-	DE31057	DE41057	DE51057	DE61057
29/32	-	-	-	DE31058	DE41058	DE51058	DE61058
59/64	-	-	-	DE31059	DE41059	DE51059	DE61059
15/16	-	-	-	DE31060	DE41060	DE51060	DE61060
61/64	-	-	-	DE31061	DE41061	DE51061	DE61061
31/32	-	-	-	DE31062	DE41062	DE51062	DE61062
63/64	-	-	-	DE31063	DE41063	DE51063	DE61063
1"	-	-	-	DE31100	DE41100	DE51100	DE61100

Metric 118° Standard Point Straight Shank Twist Drills

- High Speed Steel and Cobalt
- General Purpose Drills suitable for most applications.
- Works well in a wide variety of materials
- Standard：DIN 338

DIN338 HSS roll-forged drill

DIN338 HSS fully ground drill bright finished

DIN338 HSS fully ground drill black oxide

DIN338 HSS fully ground drill TiN coated

DIN338 HSS fully ground cobalt drill

Size (mm)	Flute Length(mm)	OAL (mm)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
0.20	2.5	19	DM01020	DM10020	DM11020	DM12020	DM15020
0.30	3	19	DM01030	DM10030	DM11030	DM12030	DM15030
0.50	6	22	DM01050	DM10050	DM11050	DM12050	DM15050
0.55	7	24	DM01055	DM10055	DM11055	DM12055	DM15055
0.60	7	24	DM01060	DM10060	DM11060	DM12060	DM15060
0.65	8	26	DM01065	DM10065	DM11065	DM12065	DM15065
0.70	9	28	DM01070	DM10070	DM11070	DM12070	DM15070
0.75	9	28	DM01075	DM10075	DM11075	DM12075	DM15075
0.80	10	30	DM01080	DM10080	DM11080	DM12080	DM15080
0.85	11	32	DM01085	DM10085	DM11085	DM12085	DM15085
0.90	11	32	DM01090	DM10090	DM11090	DM12090	DM15090
0.95	11	32	DM01095	DM10095	DM11095	DM12095	DM15095
0.98	12	34	DM01098	DM10098	DM11098	DM12098	DM15098
1.00	12	34	DM01100	DM10100	DM11100	DM12100	DM15100
1.05	12	34	DM01105	DM10105	DM11105	DM12105	DM15105
1.10	14	36	DM01110	DM10110	DM11110	DM12110	DM15110
1.15	14	36	DM01115	DM10115	DM11115	DM12115	DM15115
1.20	16	38	DM01120	DM10120	DM11120	DM12120	DM15120
1.25	16	38	DM01125	DM10125	DM11125	DM12125	DM15125
1.30	16	38	DM01130	DM10130	DM11130	DM12130	DM15130
1.35	18	40	DM01135	DM10135	DM11135	DM12135	DM15135
1.40	18	40	DM01140	DM10140	DM11140	DM12140	DM15140
1.45	18	40	DM01145	DM10145	DM11145	DM12145	DM15145
1.50	18	40	DM01150	DM10150	DM11150	DM12150	DM15150
1.55	20	43	DM01155	DM10155	DM11155	DM12155	DM15155
1.60	20	43	DM01160	DM10160	DM11160	DM12160	DM15160
1.65	20	43	DM01165	DM10165	DM11165	DM12165	DM15165
1.70	20	43	DM01170	DM10170	DM11170	DM12170	DM15170
1.75	22	48	DM01175	DM10175	DM11175	DM12175	DM15175
1.80	22	48	DM01180	DM10180	DM11180	DM12180	DM15180
1.85	22	48	DM01185	DM10185	DM11185	DM12185	DM15185
1.90	22	48	DM01190	DM10190	DM11190	DM12190	DM15190
1.95	24	49	DM01195	DM10195	DM11195	DM12195	DM15195
2.00	24	49	DM01200	DM10200	DM11200	DM12200	DM15200
2.05	24	49	DM01205	DM10205	DM11205	DM12205	DM15205
2.10	24	49	DM01210	DM10210	DM11210	DM12210	DM15210
2.15	27	53	DM01215	DM10215	DM11215	DM12215	DM15215
2.20	27	53	DM01220	DM10220	DM11220	DM12220	DM15220
2.25	27	53	DM01225	DM10225	DM11225	DM12225	DM15225
2.30	27	53	DM01230	DM10230	DM11230	DM12230	DM15230
2.35	27	53	DM01235	DM10235	DM11235	DM12235	DM15235
2.40	30	57	DM01240	DM10240	DM11240	DM12240	DM15240

Metric 118° Standard Point Straight Shank Twist Drills

- High Speed Steel and Cobalt
- General Purpose Drills suitable for most applications.
- Works well in a wide variety of materials
- Standard：DIN 338

DIN338 HSS roll-forged drill

DIN338 HSS fully ground drill bright finished

DIN338 HSS fully ground drill black oxide

DIN338 HSS fully ground drill TiN coated

DIN338 HSS fully ground cobalt drill

Size (mm)	Flute Length(mm)	OAL (mm)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
2.45	30	57	DM01245	DM10245	DM11245	DM12245	DM15245
2.50	30	57	DM01250	DM10250	DM11250	DM12250	DM15250
2.55	30	57	DM01255	DM10255	DM11255	DM12255	DM15255
2.60	30	57	DM01260	DM10260	DM11260	DM12260	DM15260
2.65	30	57	DM01265	DM10265	DM11265	DM12265	DM15265
2.70	33	61	DM01270	DM10270	DM11270	DM12270	DM15270
2.75	33	61	DM01275	DM10275	DM11275	DM12275	DM15275
2.80	33	61	DM01280	DM10280	DM11280	DM12280	DM15280
2.85	33	61	DM01285	DM10285	DM11285	DM12285	DM15285
2.90	33	61	DM01290	DM10290	DM11290	DM12290	DM15290
2.95	33	61	DM01295	DM10295	DM11295	DM12295	DM15295
3.00	33	61	DM01300	DM10300	DM11300	DM12300	DM15300
3.05	36	65	DM01305	DM10305	DM11305	DM12305	DM15305
3.10	36	65	DM01310	DM10310	DM11310	DM12310	DM15310
3.15	36	65	DM01315	DM10315	DM11315	DM12315	DM15315
3.20	36	65	DM01320	DM10320	DM11320	DM12320	DM15320
3.25	36	65	DM01325	DM10325	DM11325	DM12325	DM15325
3.30	36	65	DM01330	DM10330	DM11330	DM12330	DM15330
3.35	36	65	DM01335	DM10335	DM11335	DM12335	DM15335
3.40	39	70	DM01340	DM10340	DM11340	DM12340	DM15340
3.45	39	70	DM01345	DM10345	DM11345	DM12345	DM15345
3.50	39	70	DM01350	DM10350	DM11350	DM12350	DM15350
3.55	39	70	DM01355	DM10355	DM11355	DM12355	DM15355
3.60	39	70	DM01360	DM10360	DM11360	DM12360	DM15360
3.65	39	70	DM01365	DM10365	DM11365	DM12365	DM15365
3.70	39	70	DM01370	DM10370	DM11370	DM12370	DM15370
3.75	39	70	DM01375	DM10375	DM11375	DM12375	DM15375
3.80	43	75	DM01380	DM10380	DM11380	DM12380	DM15380
3.85	43	75	DM01385	DM10385	DM11385	DM12385	DM15385
3.90	43	75	DM01390	DM10390	DM11390	DM12390	DM15390
3.95	43	75	DM01395	DM10395	DM11395	DM12395	DM15395
4.00	43	75	DM01400	DM10400	DM11400	DM12400	DM15400
4.05	43	75	DM01405	DM10405	DM11405	DM12405	DM15405
4.10	43	75	DM01410	DM10410	DM11410	DM12410	DM15410
4.15	43	75	DM01415	DM10415	DM11415	DM12415	DM15415
4.20	43	75	DM01420	DM10420	DM11420	DM12420	DM15420
4.25	43	75	DM01425	DM10425	DM11425	DM12425	DM15425
4.30	47	80	DM01430	DM10430	DM11430	DM12430	DM15430
4.35	47	80	DM01435	DM10435	DM11435	DM12435	DM15435
4.40	47	80	DM01440	DM10440	DM11440	DM12440	DM15440
4.45	47	80	DM01445	DM10445	DM11445	DM12445	DM15445
4.50	47	80	DM01450	DM10450	DM11450	DM12450	DM15450
4.55	47	80	DM01455	DM10455	DM11455	DM12455	DM15455

Size (mm)	Flute Length(mm)	OAL (mm)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
4.60	47	80	DM01460	DM10460	DM11460	DM12460	DM15460
4.65	47	80	DM01465	DM10465	DM11465	DM12465	DM15465
4.70	47	80	DM01470	DM10470	DM11470	DM12470	DM15470
4.75	47	80	DM01475	DM10475	DM11475	DM12475	DM15475
4.80	52	86	DM01480	DM10480	DM11480	DM12480	DM15480
4.85	52	86	DM01485	DM10485	DM11485	DM12485	DM15485
4.90	52	86	DM01490	DM10490	DM11490	DM12490	DM15490
4.95	52	86	DM01495	DM10495	DM11495	DM12495	DM15495
5.00	52	86	DM01500	DM10500	DM11500	DM12500	DM15500
5.10	52	86	DM01510	DM10510	DM11510	DM12510	DM15510
5.20	52	86	DM01520	DM10520	DM11520	DM12520	DM15520
5.25	52	86	DM01525	DM10525	DM11525	DM12525	DM15525
5.30	52	86	DM01530	DM10530	DM11530	DM12530	DM15530
5.40	57	93	DM01540	DM10540	DM11540	DM12540	DM15540
5.50	57	93	DM01550	DM10550	DM11550	DM12550	DM15550
5.60	57	93	DM01560	DM10560	DM11560	DM12560	DM15560
5.70	57	93	DM01570	DM10570	DM11570	DM12570	DM15570
5.75	57	93	DM01575	DM10575	DM11575	DM12575	DM15575
5.80	57	93	DM01580	DM10580	DM11580	DM12580	DM15580
5.90	57	93	DM01590	DM10590	DM11590	DM12590	DM15590
6.00	57	93	DM01600	DM10600	DM11600	DM12600	DM15600
6.10	63	101	DM01610	DM10610	DM11610	DM12610	DM15610
6.20	63	101	DM01620	DM10620	DM11620	DM12620	DM15620
6.25	63	101	DM01625	DM10625	DM11625	DM12625	DM15625
6.30	63	101	DM01630	DM10630	DM11630	DM12630	DM15630
6.35	63	101	DM01635	DM10635	DM11635	DM12635	DM15635
6.40	63	101	DM01640	DM10640	DM11640	DM12640	DM15640
6.50	63	101	DM01650	DM10650	DM11650	DM12650	DM15650
6.60	63	101	DM01660	DM10660	DM11660	DM12660	DM15660
6.70	63	101	DM01670	DM10670	DM11670	DM12670	DM15670
6.75	69	109	DM01675	DM10675	DM11675	DM12675	DM15675
6.80	69	109	DM01680	DM10680	DM11680	DM12680	DM15680
6.90	69	109	DM01690	DM10690	DM11690	DM12690	DM15690
7.00	69	109	DM01700	DM10700	DM11700	DM12700	DM15700
7.10	69	109	DM01710	DM10710	DM11710	DM12710	DM15710
7.20	69	109	DM01720	DM10720	DM11720	DM12720	DM15720
7.25	69	109	DM01725	DM10725	DM11725	DM12725	DM15725
7.30	69	109	DM01730	DM10730	DM11730	DM12730	DM15730
7.40	69	109	DM01740	DM10740	DM11740	DM12740	DM15740
7.50	69	109	DM01750	DM10750	DM11750	DM12750	DM15750
7.60	75	117	DM01760	DM10760	DM11760	DM12760	DM15760
7.70	75	117	DM01770	DM10770	DM11770	DM12770	DM15770
7.75	75	117	DM01775	DM10775	DM11775	DM12775	DM15775
7.80	75	117	DM01780	DM10780	DM11780	DM12780	DM15780
7.90	75	117	DM01790	DM10790	DM11790	DM12790	DM15790
8.00	75	117	DM01800	DM10800	DM11800	DM12800	DM15800
8.10	75	117	DM01810	DM10810	DM11810	DM12810	DM15810
8.20	75	117	DM01820	DM10820	DM11820	DM12820	DM15820
8.25	75	117	DM01825	DM10825	DM11825	DM12825	DM15825
8.30	75	117	DM01830	DM10830	DM11830	DM12830	DM15830
8.40	75	117	DM01840	DM10840	DM11840	DM12840	DM15840
8.50	75	117	DM01850	DM10850	DM11850	DM12850	DM15850
8.60	81	125	DM01860	DM10860	DM11860	DM12860	DM15860
8.70	81	125	DM01870	DM10870	DM11870	DM12870	DM15870
8.75	81	125	DM01875	DM10875	DM11875	DM12875	DM15875
8.80	81	125	DM01880	DM10880	DM11880	DM12880	DM15880

Metric 118° Standard Point Straight Shank Twist Drills

- High Speed Steel and Cobalt
- General Purpose Drills suitable for most applications.
- Works well in a wide variety of materials
- Standard：DIN 338

DIN338 HSS roll-forged drill

DIN338 HSS fully ground drill bright finished

DIN338 HSS fully ground drill black oxide

DIN338 HSS fully ground drill TiN coated

DIN338 HSS fully ground cobalt drill

Size (mm)	Flute Length(mm)	OAL (mm)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No	Ground TiN-Coated Order No.	Ground Cobalt Order No.
8.90	81	125	DM01890	DM10890	DM11890	DM12890	DM15890
9.00	81	125	DM01900	DM10900	DM11900	DM12900	DM15900
9.10	81	125	DM01910	DM10910	DM11910	DM12910	DM15910
9.20	81	125	DM01920	DM10920	DM11920	DM12920	DM15920
9.25	81	125	DM01925	DM10925	DM11925	DM12925	DM15925
9.30	81	125	DM01930	DM10930	DM11930	DM12930	DM15930
9.40	81	125	DM01940	DM10940	DM11940	DM12940	DM15940
9.50	81	125	DM01950	DM10950	DM11950	DM12950	DM15950
9.60	87	133	DM01960	DM10960	DM11960	DM12960	DM15960
9.70	87	133	DM01970	DM10970	DM11970	DM12970	DM15970
9.75	87	133	DM01975	DM10975	DM11975	DM12975	DM15975
9.80	87	133	DM01980	DM10980	DM11980	DM12980	DM15980
9.90	87	133	DM01990	DM10990	DM11990	DM12990	DM15990
10.00	87	133	DM011000	DM101000	DM111000	DM121000	DM151000
10.10	87	133	DM011010	DM101010	DM111010	DM121010	DM151010
10.20	87	133	DM011020	DM101020	DM111020	DM121020	DM151020
10.25	87	133	DM011025	DM101025	DM111025	DM121025	DM151025
10.30	87	133	DM011030	DM101030	DM111030	DM121030	DM151030
10.40	87	133	DM011040	DM101040	DM111040	DM121040	DM151040
10.50	87	133	DM011050	DM101050	DM111050	DM121050	DM151050
10.60	94	142	DM011060	DM101060	DM111060	DM121060	DM151060
10.70	94	142	DM011070	DM101070	DM111070	DM121070	DM151070
10.75	94	142	DM011075	DM101075	DM111075	DM121075	DM151075
10.80	94	142	DM011080	DM101080	DM111080	DM121080	DM151080
10.90	94	142	DM011090	DM101090	DM111090	DM121090	DM151090
11.00	94	142	DM011100	DM101100	DM111100	DM121100	DM151100
11.10	94	142	DM011110	DM101110	DM111110	DM121110	DM151110
11.20	94	142	DM011120	DM101120	DM111120	DM121120	DM151120
11.25	94	142	DM011125	DM101125	DM111125	DM121125	DM151125
11.30	94	142	DM011130	DM101130	DM111130	DM121130	DM151130
11.40	94	142	DM011140	DM101140	DM111140	DM121140	DM151140
11.50	94	142	DM011150	DM101150	DM111150	DM121150	DM151150
11.60	94	142	DM011160	DM101160	DM111160	DM121160	DM151160
11.70	94	142	DM011170	DM101170	DM111170	DM121170	DM151170
11.75	94	142	DM011175	DM101175	DM111175	DM121175	DM151175
11.80	94	142	DM011180	DM101180	DM111180	DM121180	DM151180
11.90	101	151	DM011190	DM101190	DM111190	DM121190	DM151190
12.00	101	151	DM011200	DM101200	DM111200	DM121200	DM151200

Size (mm)	Flute Length(mm)	OAL (mm)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No	Ground TiN-Coated Order No.	Ground Cobalt Order No.
12.10	101	151	DM011210	DM101210	DM111210	DM121210	DM151210
12.20	101	151	DM011220	DM101220	DM111220	DM121220	DM151220
12.25	101	151	DM011225	DM101225	DM111225	DM121225	DM151225
12.30	101	151	DM011230	DM101230	DM111230	DM121230	DM151230
12.40	101	151	DM011240	DM101240	DM111240	DM121240	DM151240
12.50	101	151	DM011250	DM101250	DM111250	DM121250	DM151250
12.60	101	151	DM011260	DM101260	DM111260	DM121260	DM151260
12.70	101	151	DM011270	DM101270	DM111270	DM121270	DM151270
12.75	101	151	DM011275	DM101275	DM111275	DM121275	DM151275
12.80	101	151	DM011280	DM101280	DM111280	DM121280	DM151280
12.90	101	151	DM011290	DM101290	DM111290	DM121290	DM151290
13.00	101	151	DM011300	DM101300	DM111300	DM121300	DM151300
13.10	101	151	DM011310	DM101310	DM111310	DM121310	DM151310
13.20	101	151	DM011320	DM101320	DM111320	DM121320	DM151320
13.25	108	160	DM011325	DM101325	DM111325	DM121325	DM151325
13.30	108	160	DM011330	DM101330	DM111330	DM121330	DM151330
13.40	108	160	DM011340	DM101340	DM111340	DM121340	DM151340
13.50	108	160	DM011350	DM101350	DM111350	DM121350	DM151350
13.60	108	160	DM011360	DM101360	DM111360	DM121360	DM151360
13.70	108	160	DM011370	DM101370	DM111370	DM121370	DM151370
13.75	108	160	DM011375	DM101375	DM111375	DM121375	DM151375
13.80	108	160	DM011380	DM101380	DM111380	DM121380	DM151380
13.90	108	160	DM011390	DM101390	DM111390	DM121390	DM151390
14.00	108	160	DM011400	DM101400	DM111400	DM121400	DM151400
14.25	114	169	DM011425	DM101425	DM111425	DM121425	DM151425
14.50	114	169	DM011450	DM101450	DM111450	DM121450	DM151450
14.75	114	169	DM011475	DM101475	DM111475	DM121475	DM151475
15.00	114	169	DM011500	DM101500	DM111500	DM121500	DM151500
15.25	120	178	DM011525	DM101525	DM111525	DM121525	DM151525
15.50	120	178	DM011550	DM101550	DM111550	DM121550	DM151550
15.75	120	178	DM011575	DM101575	DM111575	DM121575	DM151575
16.00	120	178	DM011600	DM101600	DM111600	DM121600	DM151600
16.50	125	187	DM011650	DM101650	DM111650	DM121650	DM151650
17.00	125	187	DM011700	DM101700	DM111700	DM121700	DM151700
17.50	130	191	DM011750	DM101750	DM111750	DM121750	DM151750
18.00	130	191	DM011800	DM101800	DM111800	DM121800	DM151800
18.50	135	198	DM011850	DM101850	DM111850	DM121850	DM151850
19.00	135	198	DM011900	DM101900	DM111900	DM121900	DM151900
19.50	140	205	DM011950	DM101950	DM111950	DM121950	DM151950
20.00	140	205	DM012000	DM102000	DM112000	DM122000	DM152000

Metric 135° Split Point Straight Shank Twist Drills

- High Speed Steel and Cobalt
- 135° Split point is self-centering and reduces thrust.
- Heavy duty operations in stainless steel, titanium, inconel, and other hard metals.
- Standard DIN 338

DIN338 HSS fully ground drill TiN coated

DIN338 HSS fully ground drill bright finished

DIN338 HSS Black&Golden drill

DIN338 HSS fully ground drill black oxide

DIN338 HSS fully ground cobalt drill

Size (mm)	Flute Length(mm)	OAL (mm)	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Bi-colored Order No.	Ground Cobalt Order No.
0.20	2.5	19	DM20020	DM21020	DM22020	DM23020	DM25020
0.30	3	19	DM20030	DM21030	DM22030	DM23030	DM25030
0.50	6	22	DM20050	DM21050	DM22050	DM23050	DM25050
0.55	7	24	DM20055	DM21055	DM22055	DM23055	DM25055
0.60	7	24	DM20060	DM21060	DM22060	DM23060	DM25060
0.65	8	26	DM20065	DM21065	DM22065	DM23065	DM25065
0.70	9	28	DM20070	DM21070	DM22070	DM23070	DM25070
0.75	9	28	DM20075	DM21075	DM22075	DM23075	DM25075
0.80	10	30	DM20080	DM21080	DM22080	DM23080	DM25080
0.85	11	32	DM20085	DM21085	DM22085	DM23085	DM25085
0.90	11	32	DM20090	DM21090	DM22090	DM23090	DM25090
0.95	11	32	DM20095	DM21095	DM22095	DM23095	DM25095
0.98	12	34	DM20098	DM21098	DM22098	DM23098	DM25098
1.00	12	34	DM20100	DM21100	DM22100	DM23100	DM25100
1.05	12	34	DM20105	DM21105	DM22105	DM23105	DM25105
1.10	14	36	DM20110	DM21110	DM22110	DM23110	DM25110
1.15	14	36	DM20115	DM21115	DM22115	DM23115	DM25115
1.20	16	38	DM20120	DM21120	DM22120	DM23120	DM25120
1.25	16	38	DM20125	DM21125	DM22125	DM23125	DM25125
1.30	16	38	DM20130	DM21130	DM22130	DM23130	DM25130
1.35	18	40	DM20135	DM21135	DM22135	DM23135	DM25135
1.40	18	40	DM20140	DM21140	DM22140	DM23140	DM25140
1.45	18	40	DM20145	DM21145	DM22145	DM23145	DM25145
1.50	18	40	DM20150	DM21150	DM22150	DM23150	DM25150
1.55	20	43	DM20155	DM21155	DM22155	DM23155	DM25155
1.60	20	43	DM20160	DM21160	DM22160	DM23160	DM25160
1.65	20	43	DM20165	DM21165	DM22165	DM23165	DM25165
1.70	20	43	DM20170	DM21170	DM22170	DM23170	DM25170
1.75	22	48	DM20175	DM21175	DM22175	DM23175	DM25175
1.80	22	48	DM20180	DM21180	DM22180	DM23180	DM25180
1.85	22	48	DM20185	DM21185	DM22185	DM23185	DM25185
1.90	22	48	DM20190	DM21190	DM22190	DM23190	DM25190
1.95	24	49	DM20195	DM21195	DM22195	DM23195	DM25195
2.00	24	49	DM20200	DM21200	DM22200	DM23200	DM25200
2.05	24	49	DM20205	DM21205	DM22205	DM23205	DM25205
2.10	24	49	DM20210	DM21210	DM22210	DM23210	DM25210
2.15	27	53	DM20215	DM21215	DM22215	DM23215	DM25215
2.20	27	53	DM20220	DM21220	DM22220	DM23220	DM25220
2.25	27	53	DM20225	DM21225	DM22225	DM23225	DM25225

Size (mm)	Flute Length(mm)	OAL (mm)	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Bi-colored Order No.	Ground Cobalt Order No.
2.30	27	53	DM20230	DM21230	DM22230	DM23230	DM25230
2.35	27	53	DM20235	DM21235	DM22235	DM23235	DM25235
2.40	30	57	DM20240	DM21240	DM22240	DM23240	DM25240
2.45	30	57	DM20245	DM21245	DM22245	DM23245	DM25245
2.50	30	57	DM20250	DM21250	DM22250	DM23250	DM25250
2.55	30	57	DM20255	DM21255	DM22255	DM23255	DM25255
2.60	30	57	DM20260	DM21260	DM22260	DM23260	DM25260
2.65	30	57	DM20265	DM21265	DM22265	DM23265	DM25265
2.70	33	61	DM20270	DM21270	DM22270	DM23270	DM25270
2.75	33	61	DM20275	DM21275	DM22275	DM23275	DM25275
2.80	33	61	DM20280	DM21280	DM22280	DM23280	DM25280
2.85	33	61	DM20285	DM21285	DM22285	DM23285	DM25285
2.90	33	61	DM20290	DM21290	DM22290	DM23290	DM25290
2.95	33	61	DM20295	DM21295	DM22295	DM23295	DM25295
3.00	33	61	DM20300	DM21300	DM22300	DM23300	DM25300
3.05	36	65	DM20305	DM21305	DM22305	DM23305	DM25305
3.10	36	65	DM20310	DM21310	DM22310	DM23310	DM25310
3.15	36	65	DM20315	DM21315	DM22315	DM23315	DM25315
3.20	36	65	DM20320	DM21320	DM22320	DM23320	DM25320
3.25	36	65	DM20325	DM21325	DM22325	DM23325	DM25325
3.30	36	65	DM20330	DM21330	DM22330	DM23330	DM25330
3.35	36	65	DM20335	DM21335	DM22335	DM23335	DM25335
3.40	39	70	DM20340	DM21340	DM22340	DM23340	DM25340
3.45	39	70	DM20345	DM21345	DM22345	DM23345	DM25345
3.50	39	70	DM20350	DM21350	DM22350	DM23350	DM25350
3.55	39	70	DM20355	DM21355	DM22355	DM23355	DM25355
3.60	39	70	DM20360	DM21360	DM22360	DM23360	DM25360
3.65	39	70	DM20365	DM21365	DM22365	DM23365	DM25365
3.70	39	70	DM20370	DM21370	DM22370	DM23370	DM25370
3.75	39	70	DM20375	DM21375	DM22375	DM23375	DM25375
3.80	43	75	DM20380	DM21380	DM22380	DM23380	DM25380
3.85	43	75	DM20385	DM21385	DM22385	DM23385	DM25385
3.90	43	75	DM20390	DM21390	DM22390	DM23390	DM25390
3.95	43	75	DM20395	DM21395	DM22395	DM23395	DM25395
4.00	43	75	DM20400	DM21400	DM22400	DM23400	DM25400
4.05	43	75	DM20405	DM21405	DM22405	DM23405	DM25405
4.10	43	75	DM20410	DM21410	DM22410	DM23410	DM25410
4.15	43	75	DM20415	DM21415	DM22415	DM23415	DM25415
4.20	43	75	DM20420	DM21420	DM22420	DM23420	DM25420
4.25	43	75	DM20425	DM21425	DM22425	DM23425	DM25425
4.30	47	80	DM20430	DM21430	DM22430	DM23430	DM25430
4.35	47	80	DM20435	DM21435	DM22435	DM23435	DM25435
4.40	47	80	DM20440	DM21440	DM22440	DM23440	DM25440
4.45	47	80	DM20445	DM21445	DM22445	DM23445	DM25445
4.50	47	80	DM20450	DM21450	DM22450	DM23450	DM25450
4.55	47	80	DM20455	DM21455	DM22455	DM23455	DM25455
4.60	47	80	DM20460	DM21460	DM22460	DM23460	DM25460
4.65	47	80	DM20465	DM21465	DM22465	DM23465	DM25465
4.70	47	80	DM20470	DM21470	DM22470	DM23470	DM25470
4.75	47	80	DM20475	DM21475	DM22475	DM23475	DM25475
4.80	52	86	DM20480	DM21480	DM22480	DM23480	DM25480

Metric 135° Split Point Straight Shank Twist Drills

- High Speed Steel and Cobalt
- 135° Split point is self-centering and reduces thrust.
- Heavy duty operations in stainless steel, titanium, inconel, and other hard metals.
- Standard DIN 338

DIN338 HSS fully ground drill TiN coated

DIN338 HSS fully ground drill bright finished

DIN338 HSS Black&Golden drill

DIN338 HSS fully ground drill black oxide

DIN338 HSS fully ground cobalt drill

Size (mm)	Flute Length(mm)	OAL (mm)	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Bi-colored Order No.	Ground Cobalt Order No.
4.85	52	86	DM20485	DM21485	DM22485	DM23485	DM25485
4.90	52	86	DM20490	DM21490	DM22490	DM23490	DM25490
4.95	52	86	DM20495	DM21495	DM22495	DM23495	DM25495
5.00	52	86	DM20500	DM21500	DM22500	DM23500	DM25500
5.10	52	86	DM20510	DM21510	DM22510	DM23510	DM25510
5.20	52	86	DM20520	DM21520	DM22520	DM23520	DM25520
5.25	52	86	DM20525	DM21525	DM22525	DM23525	DM25525
5.30	52	86	DM20530	DM21530	DM22530	DM23530	DM25530
5.40	57	93	DM20540	DM21540	DM22540	DM23540	DM25540
5.50	57	93	DM20550	DM21550	DM22550	DM23550	DM25550
5.60	57	93	DM20560	DM21560	DM22560	DM23560	DM25560
5.70	57	93	DM20570	DM21570	DM22570	DM23570	DM25570
5.75	57	93	DM20575	DM21575	DM22575	DM23575	DM25575
5.80	57	93	DM20580	DM21580	DM22580	DM23580	DM25580
5.90	57	93	DM20590	DM21590	DM22590	DM23590	DM25590
6.00	57	93	DM20600	DM21600	DM22600	DM23600	DM25600
6.10	63	101	DM20610	DM21610	DM22610	DM23610	DM25610
6.20	63	101	DM20620	DM21620	DM22620	DM23620	DM25620
6.25	63	101	DM20625	DM21625	DM22625	DM23625	DM25625
6.30	63	101	DM20630	DM21630	DM22630	DM23630	DM25630
6.35	63	101	DM20635	DM21635	DM22635	DM23635	DM25635
6.40	63	101	DM20640	DM21640	DM22640	DM23640	DM25640
6.50	63	101	DM20650	DM21650	DM22650	DM23650	DM25650
6.60	63	101	DM20660	DM21660	DM22660	DM23660	DM25660
6.70	63	101	DM20670	DM21670	DM22670	DM23670	DM25670
6.75	69	109	DM20675	DM21675	DM22675	DM23675	DM25675
6.80	69	109	DM20680	DM21680	DM22680	DM23680	DM25680
6.90	69	109	DM20690	DM21690	DM22690	DM23690	DM25690
7.00	69	109	DM20700	DM21700	DM22700	DM23700	DM25700
7.10	69	109	DM20710	DM21710	DM22710	DM23710	DM25710
7.20	69	109	DM20720	DM21720	DM22720	DM23720	DM25720
7.25	69	109	DM20725	DM21725	DM22725	DM23725	DM25725
7.30	69	109	DM20730	DM21730	DM22730	DM23730	DM25730
7.40	69	109	DM20740	DM21740	DM22740	DM23740	DM25740
7.50	69	109	DM20750	DM21750	DM22750	DM23750	DM25750
7.60	75	117	DM20760	DM21760	DM22760	DM23760	DM25760
7.70	75	117	DM20770	DM21770	DM22770	DM23770	DM25770
7.75	75	117	DM20775	DM21775	DM22775	DM23775	DM25775
7.80	75	117	DM20780	DM21780	DM22780	DM23780	DM25780
7.90	75	117	DM20790	DM21790	DM22790	DM23790	DM25790
8.00	75	117	DM20800	DM21800	DM22800	DM23800	DM25800
8.10	75	117	DM20810	DM21810	DM22810	DM23810	DM25810

Size (mm)	Flute Length(mm)	OAL (mm)	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Bi-colored Order No.	Ground Cobalt Order No.
8.20	75	117	DM20820	DM21820	DM22820	DM23820	DM25820
8.25	75	117	DM20825	DM21825	DM22825	DM23825	DM25825
8.30	75	117	DM20830	DM21830	DM22830	DM23830	DM25830
8.40	75	117	DM20840	DM21840	DM22840	DM23840	DM25840
8.50	75	117	DM20850	DM21850	DM22850	DM23850	DM25850
8.60	81	125	DM20860	DM21860	DM22860	DM23860	DM25860
8.70	81	125	DM20870	DM21870	DM22870	DM23870	DM25870
8.75	81	125	DM20875	DM21875	DM22875	DM23875	DM25875
8.80	81	125	DM20880	DM21880	DM22880	DM23880	DM25880
8.90	81	125	DM20890	DM21890	DM22890	DM23890	DM25890
9.00	81	125	DM20900	DM21900	DM22900	DM23900	DM25900
9.10	81	125	DM20910	DM21910	DM22910	DM23910	DM25910
9.20	81	125	DM20920	DM21920	DM22920	DM23920	DM25920
9.25	81	125	DM20925	DM21925	DM22925	DM23925	DM25925
9.30	81	125	DM20930	DM21930	DM22930	DM23930	DM25930
9.40	81	125	DM20940	DM21940	DM22940	DM23940	DM25940
9.50	81	125	DM20950	DM21950	DM22950	DM23950	DM25950
9.60	87	133	DM20960	DM21960	DM22960	DM23960	DM25960
9.70	87	133	DM20970	DM21970	DM22970	DM23970	DM25970
9.75	87	133	DM20975	DM21975	DM22975	DM23975	DM25975
9.80	87	133	DM20980	DM21980	DM22980	DM23980	DM25980
9.90	87	133	DM20990	DM21990	DM22990	DM23990	DM25990
10.00	87	133	DM201000	DM211000	DM221000	DM231000	DM251000
10.10	87	133	DM201010	DM211010	DM221010	DM231010	DM251010
10.20	87	133	DM201020	DM211020	DM221020	DM231020	DM251020
10.25	87	133	DM201025	DM211025	DM221025	DM231025	DM251025
10.30	87	133	DM201030	DM211030	DM221030	DM231030	DM251030
10.40	87	133	DM201040	DM211040	DM221040	DM231040	DM251040
10.50	87	133	DM201050	DM211050	DM221050	DM231050	DM251050
10.60	94	142	DM201060	DM211060	DM221060	DM231060	DM251060
10.70	94	142	DM201070	DM211070	DM221070	DM231070	DM251070
10.75	94	142	DM201075	DM211075	DM221075	DM231075	DM251075
10.80	94	142	DM201080	DM211080	DM221080	DM231080	DM251080
10.90	94	142	DM201090	DM211090	DM221090	DM231090	DM251090
11.00	94	142	DM201100	DM211100	DM221100	DM231100	DM251100
11.10	94	142	DM201110	DM211110	DM221110	DM231110	DM251110
11.20	94	142	DM201120	DM211120	DM221120	DM231120	DM251120
11.25	94	142	DM201125	DM211125	DM221125	DM231125	DM251125
11.30	94	142	DM201130	DM211130	DM221130	DM231130	DM251130
11.40	94	142	DM201140	DM211140	DM221140	DM231140	DM251140
11.50	94	142	DM201150	DM211150	DM221150	DM231150	DM251150
11.60	94	142	DM201160	DM211160	DM221160	DM231160	DM251160
11.70	94	142	DM201170	DM211170	DM221170	DM231170	DM251170
11.75	94	142	DM201175	DM211175	DM221175	DM231175	DM251175
11.80	94	142	DM201180	DM211180	DM221180	DM231180	DM251180
11.90	101	151	DM201190	DM211190	DM221190	DM231190	DM251190
12.00	101	151	DM201200	DM211200	DM221200	DM231200	DM251200
12.10	101	151	DM201210	DM211210	DM221210	DM231210	DM251210
12.20	101	151	DM201220	DM211220	DM221220	DM231220	DM251220
12.25	101	151	DM201225	DM211225	DM221225	DM231225	DM251225
12.30	101	151	DM201230	DM211230	DM221230	DM231230	DM251230

Metric 135° Split Point Straight Shank Twist Drills

- High Speed Steel and Cobalt
- 135° Split point is self-centering and reduces thrust.
- Heavy duty operations in stainless steel, titanium, inconel, and other hard metals.
- Standard DIN 338

DIN338 HSS fully ground drill bright finished

DIN338 HSS fully ground drill black oxide

DIN338 HSS fully ground drill TiN coated

DIN338 HSS Black&Golden drill

DIN338 HSS fully ground cobalt drill

Size (mm)	Flute Length(mm)	OAL (mm)	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Bi-colored Order No.	Ground Cobalt Order No.
12.40	101	151	DM201240	DM211240	DM221240	DM231240	DM251240
12.50	101	151	DM201250	DM211250	DM221250	DM231250	DM251250
12.60	101	151	DM201260	DM211260	DM221260	DM231260	DM251260
12.70	101	151	DM201270	DM211270	DM221270	DM231270	DM251270
12.75	101	151	DM201275	DM211275	DM221275	DM231275	DM251275
12.80	101	151	DM201280	DM211280	DM221280	DM231280	DM251280
12.90	101	151	DM201290	DM211290	DM221290	DM231290	DM251290
13.00	101	151	DM201300	DM211300	DM221300	DM231300	DM251300
13.10	101	151	DM201310	DM211310	DM221310	DM231310	DM251310
13.20	101	151	DM201320	DM211320	DM221320	DM231320	DM251320
13.25	108	160	DM201325	DM211325	DM221325	DM231325	DM251325
13.30	108	160	DM201330	DM211330	DM221330	DM231330	DM251330
13.40	108	160	DM201340	DM211340	DM221340	DM231340	DM251340
13.50	108	160	DM201350	DM211350	DM221350	DM231350	DM251350
13.60	108	160	DM201360	DM211360	DM221360	DM231360	DM251360
13.70	108	160	DM201370	DM211370	DM221370	DM231370	DM251370
13.75	108	160	DM201375	DM211375	DM221375	DM231375	DM251375
13.80	108	160	DM201380	DM211380	DM221380	DM231380	DM251380
13.90	108	160	DM201390	DM211390	DM221390	DM231390	DM251390
14.00	108	160	DM201400	DM211400	DM221400	DM231400	DM251400
14.25	114	169	DM201425	DM211425	DM221425	DM231425	DM251425
14.50	114	169	DM201450	DM211450	DM221450	DM231450	DM251450
14.75	114	169	DM201475	DM211475	DM221475	DM231475	DM251475
15.00	114	169	DM201500	DM211500	DM221500	DM231500	DM251500
15.25	120	178	DM201525	DM211525	DM221525	DM231525	DM251525
15.50	120	178	DM201550	DM211550	DM221550	DM231550	DM251550
15.75	120	178	DM201575	DM211575	DM221575	DM231575	DM251575
16.00	120	178	DM201600	DM211600	DM221600	DM231600	DM251600
16.50	125	187	DM201650	DM211650	DM221650	DM231650	DM251650
17.00	125	187	DM201700	DM211700	DM221700	DM231700	DM251700
17.50	130	191	DM201750	DM211750	DM221750	DM231750	DM251750
18.00	130	191	DM201800	DM211800	DM221800	DM231800	DM251800
18.50	135	198	DM201850	DM211850	DM221850	DM231850	DM251850
19.00	135	198	DM201900	DM211900	DM221900	DM231900	DM251900
19.50	140	205	DM201950	DM211950	DM221950	DM231950	DM251950
20.00	140	205	DM202000	DM212000	DM222000	DM232000	DM252000

Metric Straight Shank Twist Drills

- High Speed Steel
- Standard：DIN 340

Wire Gage Size

Size (mm)	Flute Length(mm)	OAL (mm)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
1.00	33	56	DM41100	DM50100	DM51100	DM52100	DM55100
1.10	37	60	DM41110	DM50110	DM51110	DM52110	DM55110
1.20	41	65	DM41120	DM50120	DM51120	DM52120	DM55120
1.30	41	65	DM41130	DM50130	DM51130	DM52130	DM55130
1.40	45	70	DM41140	DM50140	DM51140	DM52140	DM55140
1.50	45	70	DM41150	DM50150	DM51150	DM52150	DM55150
1.60	50	76	DM41160	DM50160	DM51160	DM52160	DM55160
1.70	50	76	DM41170	DM50170	DM51170	DM52170	DM55170
1.80	53	80	DM41180	DM50180	DM51180	DM52180	DM55180
1.90	53	80	DM41190	DM50190	DM51190	DM52190	DM55190
2.00	56	85	DM41200	DM50200	DM51200	DM52200	DM55200
2.10	56	85	DM41210	DM50210	DM51210	DM52210	DM55210
2.20	56	90	DM41220	DM50220	DM51220	DM52220	DM55220
2.30	56	90	DM41230	DM50230	DM51230	DM52230	DM55230
2.40	62	95	DM41240	DM50240	DM51240	DM52240	DM55240
2.50	62	95	DM41250	DM50250	DM51250	DM52250	DM55250
3.00	63	100	DM41300	DM50300	DM51300	DM52300	DM55300
3.10	69	106	DM41310	DM50310	DM51310	DM52310	DM55310
3.20	69	106	DM41320	DM50320	DM51320	DM52320	DM55320
3.30	69	106	DM41330	DM50330	DM51330	DM52330	DM55330
3.40	73	110	DM41340	DM50340	DM51340	DM52340	DM55340
3.50	73	110	DM41350	DM50350	DM51350	DM52350	DM55350
3.60	73	110	DM41360	DM50360	DM51360	DM52360	DM55360
3.70	73	110	DM41370	DM50370	DM51370	DM52370	DM55370
3.80	78	119	DM41380	DM50380	DM51380	DM52380	DM55380
3.90	78	119	DM41390	DM50390	DM51390	DM52390	DM55390
4.00	78	119	DM41400	DM50400	DM51400	DM52400	DM55400
4.10	78	119	DM41410	DM50410	DM51410	DM52410	DM55410
4.20	78	119	DM41420	DM50420	DM51420	DM52420	DM55420
4.30	82	126	DM41430	DM50430	DM51430	DM52430	DM55430
4.40	82	126	DM41440	DM50440	DM51440	DM52440	DM55440
4.50	82	126	DM41450	DM50450	DM51450	DM52450	DM55450
4.60	82	126	DM41460	DM50460	DM51460	DM52460	DM55460
4.70	82	126	DM41470	DM50470	DM51470	DM52470	DM55470
4.80	87	132	DM41480	DM50480	DM51480	DM52480	DM55480
4.90	87	132	DM41490	DM50490	DM51490	DM52490	DM55490
5.00	87	132	DM41500	DM50500	DM51500	DM52500	DM55500
5.10	87	132	DM41510	DM50510	DM51510	DM52510	DM55510
5.20	87	132	DM41520	DM50520	DM51520	DM52520	DM55520
5.30	87	132	DM41530	DM50530	DM51530	DM52530	DM55530
5.40	91	139	DM41540	DM50540	DM51540	DM52540	DM55540
5.50	91	139	DM41550	DM50550	DM51550	DM52550	DM55550
5.60	91	139	DM41560	DM50560	DM51560	DM52560	DM55560
5.70	91	139	DM41570	DM50570	DM51570	DM52570	DM55570
5.80	91	139	DM41580	DM50580	DM51580	DM52580	DM55580
5.90	91	139	DM41590	DM50590	DM51590	DM52590	DM55590
6.00	91	139	DM41600	DM50600	DM51600	DM52600	DM55600
6.10	97	148	DM41610	DM50610	DM51610	DM52610	DM55610
6.20	97	148	DM41620	DM50620	DM51620	DM52620	DM55620
6.30	97	148	DM41630	DM50630	DM51630	DM52630	DM55630

Metric Straight Shank Twist Drills

- High Speed Steel
- Standard：DIN 340

Wire Gage Size

Size (mm)	Flute Length(mm)	OAL (mm)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
6.40	97	148	DM41640	DM50640	DM51640	DM52640	DM55640
6.50	97	148	DM41650	DM50650	DM51650	DM52650	DM55650
6.60	97	148	DM41660	DM50660	DM51660	DM52660	DM55660
6.70	97	148	DM41670	DM50670	DM51670	DM52670	DM55670
6.80	102	156	DM41680	DM50680	DM51680	DM52680	DM55680
6.90	102	156	DM41690	DM50690	DM51690	DM52690	DM55690
7.00	102	156	DM41700	DM50700	DM51700	DM52700	DM55700
7.10	102	156	DM41710	DM50710	DM51710	DM52710	DM55710
7.20	102	156	DM41720	DM50720	DM51720	DM52720	DM55720
7.30	102	156	DM41730	DM50730	DM51730	DM52730	DM55730
7.40	102	156	DM41740	DM50740	DM51740	DM52740	DM55740
7.50	102	156	DM41750	DM50750	DM51750	DM52750	DM55750
7.60	109	165	DM41760	DM50760	DM51760	DM52760	DM55760
7.70	109	165	DM41770	DM50770	DM51770	DM52770	DM55770
7.80	109	165	DM41780	DM50780	DM51780	DM52780	DM55780
7.90	109	165	DM41790	DM50790	DM51790	DM52790	DM55790
8.00	109	165	DM41800	DM50800	DM51800	DM52800	DM55800
8.10	109	165	DM41810	DM50810	DM51810	DM52810	DM55810
8.20	109	165	DM41820	DM50820	DM51820	DM52820	DM55820
8.30	109	165	DM41830	DM50830	DM51830	DM52830	DM55830
8.40	109	165	DM41840	DM50840	DM51840	DM52840	DM55840
8.50	109	165	DM41850	DM50850	DM51850	DM52850	DM55850
8.60	115	175	DM41860	DM50860	DM51860	DM52860	DM55860
8.70	115	175	DM41870	DM50870	DM51870	DM52870	DM55870
8.80	115	175	DM41880	DM50880	DM51880	DM52880	DM55880
8.90	115	175	DM41890	DM50890	DM51890	DM52890	DM55890
9.00	115	175	DM41900	DM50900	DM51900	DM52900	DM55900
9.10	115	175	DM41910	DM50910	DM51910	DM52910	DM55910
9.20	115	175	DM41920	DM50920	DM51920	DM52920	DM55920
9.30	115	175	DM41930	DM50930	DM51930	DM52930	DM55930
9.40	115	175	DM41940	DM50940	DM51940	DM52940	DM55940
9.50	115	175	DM41950	DM50950	DM51950	DM52950	DM55950
9.60	121	184	DM41960	DM50960	DM51960	DM52960	DM55960
9.70	121	184	DM41970	DM50970	DM51970	DM52970	DM55970
9.80	121	184	DM41980	DM50980	DM51980	DM52980	DM55980
9.90	121	184	DM41990	DM50990	DM51990	DM52990	DM55990
10.00	121	184	DM411000	DM501000	DM511000	DM521000	DM551000
10.50	121	184	DM411050	DM501050	DM511050	DM521050	DM551050
11.00	128	195	DM411100	DM501100	DM511100	DM521100	DM551100
11.50	128	195	DM411150	DM501150	DM511150	DM521150	DM551150
12.00	134	205	DM411200	DM501200	DM511200	DM521200	DM551200

Size (mm)	Flute Length(mm)	OAL (mm)	Roll-Forged Black Oxide Order No.	Ground Bright Finish Order No.	Ground Black Oxide Order No.	Ground TiN-Coated Order No.	Ground Cobalt Order No.
12.10	134	205	DM411210	DM501210	DM511210	DM521210	DM551210
12.20	134	205	DM411220	DM501220	DM511220	DM521220	DM551220
12.30	134	205	DM411230	DM501230	DM511230	DM521230	DM551230
12.40	134	205	DM411240	DM501240	DM511240	DM521240	DM551240
12.50	134	205	DM411250	DM501250	DM511250	DM521250	DM551250
12.60	134	205	DM411260	DM501260	DM511260	DM521260	DM551260
12.70	134	205	DM411270	DM501270	DM511270	DM521270	DM551270
12.80	134	205	DM411280	DM501280	DM511280	DM521280	DM551280
12.90	134	205	DM411290	DM501290	DM511290	DM521290	DM551290
13.00	134	205	DM411300	DM501300	DM511300	DM521300	DM551300
13.10	134	205	DM411310	DM501310	DM511310	DM521310	DM551310
13.20	134	205	DM411320	DM501320	DM511320	DM521320	DM551320
13.30	140	214	DM411330	DM501330	DM511330	DM521330	DM551330
13.40	140	214	DM411340	DM501340	DM511340	DM521340	DM551340
13.50	140	214	DM411350	DM501350	DM511350	DM521350	DM551350
13.60	140	214	DM411360	DM501360	DM511360	DM521360	DM551360
13.70	140	214	DM411370	DM501370	DM511370	DM521370	DM551370
13.80	140	214	DM411380	DM501380	DM511380	DM521380	DM551380
13.90	140	214	DM411390	DM501390	DM511390	DM521390	DM551390
14.00	140	214	DM411400	DM501400	DM511400	DM521400	DM551400
14.25	144	220	DM411425	DM501425	DM511425	DM521425	DM551425
14.50	144	220	DM411450	DM501450	DM511450	DM521450	DM551450
14.75	144	220	DM411475	DM501475	DM511475	DM521475	DM551475
15.00	144	220	DM411500	DM501500	DM511500	DM521500	DM551500
15.25	149	227	DM411525	DM501525	DM511525	DM521525	DM551525
15.50	149	227	DM411550	DM501550	DM511550	DM521550	DM551550
15.75	149	227	DM411575	DM501575	DM511575	DM521575	DM551575
16.00	149	227	DM411600	DM501600	DM511600	DM521600	DM551600
16.25	154	235	DM411625	DM501625	DM511625	DM521625	DM551625
16.50	154	235	DM411650	DM501650	DM511650	DM521650	DM551650
16.75	154	235	DM411675	DM501675	DM511675	DM521675	DM551675
17.00	154	235	DM411700	DM501700	DM511700	DM521700	DM551700
17.25	158	241	DM411725	DM501725	DM511725	DM521725	DM551725
17.50	158	241	DM411750	DM501750	DM511750	DM521750	DM551750
17.75	158	241	DM411775	DM501775	DM511775	DM521775	DM551775
18.00	158	241	DM411800	DM501800	DM511800	DM521800	DM551800
18.25	162	247	DM411825	DM501825	DM511825	DM521825	DM551825
18.50	162	247	DM411850	DM501850	DM511850	DM521850	DM551850
18.75	162	247	DM411875	DM501875	DM511875	DM521875	DM551875
19.00	162	247	DM411900	DM501900	DM511900	DM521900	DM551900
19.25	166	254	DM411925	DM501925	DM511925	DM521925	DM551925
19.50	166	254	DM411950	DM501950	DM511950	DM521950	DM551950
19.75	166	254	DM411975	DM501975	DM511975	DM521975	DM551975
20.00	166	254	DM412000	DM502000	DM512000	DM522000	DM552000

Metric Straight Shank Twist Drills

- High Speed Steel
- Standard:DIN 1897

Size (mm)	Flute Length(mm)	OAL (mm)	Bright Finish Order No.	Black Oxide Finish Order No.	TiN Coated Order No.	Cobalt Order No.
1.00	6	26	DM30100	DM31100	DM32100	DM35100
1.05	6	26	DM30105	DM31105	DM32105	DM35105
1.10	7	28	DM30110	DM31110	DM32110	DM35110
1.15	7	28	DM30115	DM31115	DM32115	DM35115
1.20	8	30	DM30120	DM31120	DM32120	DM35120
1.25	8	30	DM30125	DM31125	DM32125	DM35125
1.30	8	30	DM30130	DM31130	DM32130	DM35130
1.35	9	32	DM30135	DM31135	DM32135	DM35135
1.40	9	32	DM30140	DM31140	DM32140	DM35140
1.45	9	32	DM30145	DM31145	DM32145	DM35145
1.50	9	32	DM30150	DM31150	DM32150	DM35150
1.55	10	34	DM30155	DM31155	DM32155	DM35155
1.60	10	34	DM30160	DM31160	DM32160	DM35160
1.65	10	34	DM30165	DM31165	DM32165	DM35165
1.70	10	34	DM30170	DM31170	DM32170	DM35170
1.75	11	36	DM30175	DM31175	DM32175	DM35175
1.80	11	36	DM30180	DM31180	DM32180	DM35180
1.85	11	36	DM30185	DM31185	DM32185	DM35185
1.90	11	36	DM30190	DM31190	DM32190	DM35190
1.95	12	38	DM30195	DM31195	DM32195	DM35195
2.00	12	38	DM30200	DM31200	DM32200	DM35200
2.05	12	38	DM30205	DM31205	DM32205	DM35205
2.10	12	38	DM30210	DM31210	DM32210	DM35210
2.15	13	40	DM30215	DM31215	DM32215	DM35215
2.20	13	40	DM30220	DM31220	DM32220	DM35220
2.25	13	40	DM30225	DM31225	DM32225	DM35225
2.30	13	40	DM30230	DM31230	DM32230	DM35230
2.35	13	40	DM30235	DM31235	DM32235	DM35235
2.40	14	43	DM30240	DM31240	DM32240	DM35240
2.45	14	43	DM30245	DM31245	DM32245	DM35245
2.50	14	43	DM30250	DM31250	DM32250	DM35250
2.55	14	43	DM30255	DM31255	DM32255	DM35255
2.60	14	43	DM30260	DM31260	DM32260	DM35260
2.65	14	43	DM30265	DM31265	DM32265	DM35265
2.70	16	46	DM30270	DM31270	DM32270	DM35270
2.75	16	46	DM30275	DM31275	DM32275	DM35275
2.80	16	46	DM30280	DM31280	DM32280	DM35280
2.85	16	46	DM30285	DM31285	DM32285	DM35285
2.90	16	46	DM30290	DM31290	DM32290	DM35290
2.95	16	46	DM30295	DM31295	DM32295	DM35295
3.00	16	46	DM30300	DM31300	DM32300	DM35300

Size (mm)	Flute Length(mm)	OAL (mm)	Bright Finish Order No.	Black Oxide Finish Order No.	TiN Coated Order No.	Cobalt Order No.
3.05	18	49	DM30305	DM31305	DM32305	DM35305
3.10	18	49	DM30310	DM31310	DM32310	DM35310
3.15	18	49	DM30315	DM31315	DM32315	DM35315
3.20	18	49	DM30320	DM31320	DM32320	DM35320
3.25	18	49	DM30325	DM31325	DM32325	DM35325
3.30	18	49	DM30330	DM31330	DM32330	DM35330
3.35	18	49	DM30335	DM31335	DM32335	DM35335
3.40	20	52	DM30340	DM31340	DM32340	DM35340
3.45	20	52	DM30345	DM31345	DM32345	DM35345
3.50	20	52	DM30350	DM31350	DM32350	DM35350
3.55	20	52	DM30355	DM31355	DM32355	DM35355
3.60	20	52	DM30360	DM31360	DM32360	DM35360
3.65	20	52	DM30365	DM31365	DM32365	DM35365
3.70	20	52	DM30370	DM31370	DM32370	DM35370
3.75	20	52	DM30375	DM31375	DM32375	DM35375
3.80	22	55	DM30380	DM31380	DM32380	DM35380
3.85	22	55	DM30385	DM31385	DM32385	DM35385
3.90	22	55	DM30390	DM31390	DM32390	DM35390
3.95	22	55	DM30395	DM31395	DM32395	DM35395
4.00	22	55	DM30400	DM31400	DM32400	DM35400
4.05	22	55	DM30405	DM31405	DM32405	DM35405
4.10	22	55	DM30410	DM31410	DM32410	DM35410
4.15	22	55	DM30415	DM31415	DM32415	DM35415
4.20	22	55	DM30420	DM31420	DM32420	DM35420
4.25	22	55	DM30425	DM31425	DM32425	DM35425
4.30	24	58	DM30430	DM31430	DM32430	DM35430
4.35	24	58	DM30435	DM31435	DM32435	DM35435
4.40	24	58	DM30440	DM31440	DM32440	DM35440
4.45	24	58	DM30445	DM31445	DM32445	DM35445
4.50	24	58	DM30450	DM31450	DM32450	DM35450
4.55	24	58	DM30455	DM31455	DM32455	DM35455
4.60	24	58	DM30460	DM31460	DM32460	DM35460
4.65	24	58	DM30465	DM31465	DM32465	DM35465
4.70	24	58	DM30470	DM31470	DM32470	DM35470
4.75	24	58	DM30475	DM31475	DM32475	DM35475
4.80	26	62	DM30480	DM31480	DM32480	DM35480
4.85	26	62	DM30485	DM31485	DM32485	DM35485
4.90	26	62	DM30490	DM31490	DM32490	DM35490
4.95	26	62	DM30495	DM31495	DM32495	DM35495
5.00	26	62	DM30500	DM31500	DM32500	DM35500
5.10	26	62	DM30510	DM31510	DM32510	DM35510
5.20	26	62	DM30520	DM31520	DM32520	DM35520
5.25	26	62	DM30525	DM31525	DM32525	DM35525
5.30	26	62	DM30530	DM31530	DM32530	DM35530
5.40	28	66	DM30540	DM31540	DM32540	DM35540
5.50	28	66	DM30550	DM31550	DM32550	DM35550
5.60	28	66	DM30560	DM31560	DM32560	DM35560
5.70	28	66	DM30570	DM31570	DM32570	DM35570
5.75	28	66	DM30575	DM31575	DM32575	DM35575
5.80	28	66	DM30580	DM31580	DM32580	DM35580
5.90	28	66	DM30590	DM31590	DM32590	DM35590
6.00	28	66	DM30600	DM31600	DM32600	DM35600
6.10	31	70	DM30610	DM31610	DM32610	DM35610
6.20	31	70	DM30620	DM31620	DM32620	DM35620
6.25	31	70	DM30625	DM31625	DM32625	DM35625
6.30	31	70	DM30630	DM31630	DM32630	DM35630
6.35	31	70	DM30635	DM31635	DM32635	DM35635
6.40	31	70	DM30640	DM31640	DM32640	DM35640
6.50	31	70	DM30650	DM31650	DM32650	DM35650
6.60	31	70	DM30660	DM31660	DM32660	DM35660
6.70	31	70	DM30670	DM31670	DM32670	DM35670

Metric Straight Shank Twist Drills

- High Speed Steel
- Standard:DIN 1897

Size (mm)	Flute Length(mm)	OAL (mm)	Bright Finish Order No.	Black Oxide Finish Order No.	TiN Coated Order No.	Cobalt Order No.
6.75	34	74	DM30675	DM31675	DM32675	DM35675
6.80	34	74	DM30680	DM31680	DM32680	DM35680
6.90	34	74	DM30690	DM31690	DM32690	DM35690
7.00	34	74	DM30700	DM31700	DM32700	DM35700
7.10	34	74	DM30710	DM31710	DM32710	DM35710
7.20	34	74	DM30720	DM31720	DM32720	DM35720
7.25	34	74	DM30725	DM31725	DM32725	DM35725
7.30	34	74	DM30730	DM31730	DM32730	DM35730
7.40	34	74	DM30740	DM31740	DM32740	DM35740
7.50	34	74	DM30750	DM31750	DM32750	DM35750
7.60	37	79	DM30760	DM31760	DM32760	DM35760
7.70	37	79	DM30770	DM31770	DM32770	DM35770
7.75	37	79	DM30775	DM31775	DM32775	DM35775
7.80	37	79	DM30780	DM31780	DM32780	DM35780
7.90	37	79	DM30790	DM31790	DM32790	DM35790
8.00	37	79	DM30800	DM31800	DM32800	DM35800
8.10	37	79	DM30810	DM31810	DM32810	DM35810
8.20	37	79	DM30820	DM31820	DM32820	DM35820
8.25	37	79	DM30825	DM31825	DM32825	DM35825
8.30	37	79	DM30830	DM31830	DM32830	DM35830
8.40	37	79	DM30840	DM31840	DM32840	DM35840
8.50	37	79	DM30850	DM31850	DM32850	DM35850
8.60	40	84	DM30860	DM31860	DM32860	DM35860
8.70	40	84	DM30870	DM31870	DM32870	DM35870
8.75	40	84	DM30875	DM31875	DM32875	DM35875
8.80	40	84	DM30880	DM31880	DM32880	DM35880
8.90	40	84	DM30890	DM31890	DM32890	DM35890
9.00	40	84	DM30900	DM31900	DM32900	DM35900
9.10	40	84	DM30910	DM31910	DM32910	DM35910
9.20	40	84	DM30920	DM31920	DM32920	DM35920
9.25	40	84	DM30925	DM31925	DM32925	DM35925
9.30	40	84	DM30930	DM31930	DM32930	DM35930
9.40	40	84	DM30940	DM31940	DM32940	DM35940
9.50	40	84	DM30950	DM31950	DM32950	DM35950
9.60	43	89	DM30960	DM31960	DM32960	DM35960
9.70	43	89	DM30970	DM31970	DM32970	DM35970
9.75	43	89	DM30975	DM31975	DM32975	DM35975
9.80	43	89	DM30980	DM31980	DM32980	DM35980
9.90	43	89	DM30990	DM31990	DM32990	DM35990
10.00	43	89	DM301000	DM311000	DM321000	DM351000
10.10	43	89	DM301010	DM311010	DM321010	DM351010
10.20	43	89	DM301020	DM311020	DM321020	DM351020
10.25	43	89	DM301025	DM311025	DM321025	DM351025
10.30	43	89	DM301030	DM311030	DM321030	DM351030
10.40	43	89	DM301040	DM311040	DM321040	DM351040
10.50	43	89	DM301050	DM311050	DM321050	DM351050
10.60	43	89	DM301060	DM311060	DM321060	DM351060
10.70	47	95	DM301070	DM311070	DM321070	DM351070
10.75	47	95	DM301075	DM311075	DM321075	DM351075
10.80	47	95	DM301080	DM311080	DM321080	DM351080
10.90	47	95	DM301090	DM311090	DM321090	DM351090
11.00	47	95	DM301100	DM311100	DM321100	DM351100
11.10	47	95	DM301110	DM311110	DM321110	DM351110

Size (mm)	Flute Length(mm)	OAL (mm)	Bright Finish Order No.	Black Oxide Finish Order No.	TiN Coated Order No.	Cobalt Order No.
11.20	47	95	DM301120	DM311120	DM321120	DM351120
11.25	47	95	DM301125	DM311125	DM321125	DM351125
11.30	47	95	DM301130	DM311130	DM321130	DM351130
11.40	47	95	DM301140	DM311140	DM321140	DM351140
11.50	47	95	DM301150	DM311150	DM321150	DM351150
11.60	47	95	DM301160	DM311160	DM321160	DM351160
11.70	47	95	DM301170	DM311170	DM321170	DM351170
11.75	47	95	DM301175	DM311175	DM321175	DM351175
11.80	47	95	DM301180	DM311180	DM321180	DM351180
11.90	51	102	DM301190	DM311190	DM321190	DM351190
12.00	51	102	DM301200	DM311200	DM321200	DM351200
12.10	51	102	DM301210	DM311210	DM321210	DM351210
12.20	51	102	DM301220	DM311220	DM321220	DM351220
12.25	51	102	DM301225	DM311225	DM321225	DM351225
12.30	51	102	DM301230	DM311230	DM321230	DM351230
12.40	51	102	DM301240	DM311240	DM321240	DM351240
12.50	51	102	DM301250	DM311250	DM321250	DM351250
12.60	51	102	DM301260	DM311260	DM321260	DM351260
12.70	51	102	DM301270	DM311270	DM321270	DM351270
12.75	51	102	DM301275	DM311275	DM321275	DM351275
12.80	51	102	DM301280	DM311280	DM321280	DM351280
12.90	51	102	DM301290	DM311290	DM321290	DM351290
13.00	51	102	DM301300	DM311300	DM321300	DM351300
13.10	51	102	DM301310	DM311310	DM321310	DM351310
13.20	51	102	DM301320	DM311320	DM321320	DM351320
13.25	54	107	DM301325	DM311325	DM321325	DM351325
13.30	54	107	DM301330	DM311330	DM321330	DM351330
13.40	54	107	DM301340	DM311340	DM321340	DM351340
13.50	54	107	DM301350	DM311350	DM321350	DM351350
13.60	54	107	DM301360	DM311360	DM321360	DM351360
13.70	54	107	DM301370	DM311370	DM321370	DM351370
13.75	54	107	DM301375	DM311375	DM321375	DM351375
13.80	54	107	DM301380	DM311380	DM321380	DM351380
13.90	54	107	DM301390	DM311390	DM321390	DM351390
14.00	54	107	DM301400	DM311400	DM321400	DM351400
14.25	56	111	DM301425	DM311425	DM321425	DM351425
14.50	56	111	DM301450	DM311450	DM321450	DM351450
14.75	56	111	DM301475	DM311475	DM321475	DM351475
15.00	56	111	DM301500	DM311500	DM321500	DM351500
15.25	58	115	DM301525	DM311525	DM321525	DM351525
15.50	58	115	DM301550	DM311550	DM321550	DM351550
15.75	58	115	DM301575	DM311575	DM321575	DM351575
16.00	58	115	DM301600	DM311600	DM321600	DM351600
16.50	60	119	DM301650	DM311650	DM321650	DM351650
17.00	60	119	DM301700	DM311700	DM321700	DM351700
17.50	62	123	DM301750	DM311750	DM321750	DM351750
18.00	62	123	DM301800	DM311800	DM321800	DM351800
18.50	64	127	DM301850	DM311850	DM321850	DM351850
19.00	64	127	DM301900	DM311900	DM321900	DM351900
19.50	66	131	DM301950	DM311950	DM321950	DM351950
20.00	66	131	DM302000	DM312000	DM322000	DM352000

DIN1869 Deep Hole Ground Drill

- High Speed Steel and Cobalt
- For steel and cast steel alloyed and unalloyed, cast iron,annealed cast iron, ductile graphite iron, diecast
- Especially suitable for medium and long chipping materials

Series I

Size (mm)	Flute Length (mm)	OAL (mm)	Bright Finish Order No.	Black Oxide Order No.	Cobalt Order No.
2.0	85	125	DH10200	DH11200	DH15200
2.5	95	140	DH10250	DH11250	DH15250
3.0	100	150	DH10300	DH11300	DH15300
3.2	105	155	DH10320	DH11320	DH15320
3.3	105	155	DH10330	DH11330	DH15330
3.5	115	165	DH10350	DH11350	DH15350
4.0	120	175	DH10400	DH11400	DH15400
4.2	120	175	DH10420	DH11420	DH15420
4.5	125	185	DH10450	DH11450	DH15450
5.0	135	195	DH10500	DH11500	DH15500
5.5	140	205	DH10550	DH11550	DH15550
6.0	140	205	DH10600	DH11600	DH15600
6.5	150	215	DH10650	DH11650	DH15650
7.0	155	225	DH10700	DH11700	DH15700
7.5	155	225	DH10750	DH11750	DH15750
8.0	165	240	DH10800	DH11800	DH15800
8.5	165	240	DH10850	DH11850	DH15850
9.0	175	250	DH10900	DH11900	DH15900
9.5	175	250	DH10950	DH11950	DH15950
10.0	185	265	DH101000	DH111000	DH151000
10.5	185	265	DH101050	DH111050	DH151050
11.0	195	280	DH101100	DH111100	DH151100
11.5	195	280	DH101150	DH111150	DH151150
12.0	205	295	DH101200	DH111200	DH151200
12.5	205	295	DH101250	DH111250	DH151250
13.0	205	295	DH101300	DH111300	DH151300

Series II

Size (mm)	Flute Length (mm)	OAL (mm)	Bright Finish Order No.	Black Oxide Order No.	Cobalt Order No.
3.0	130	190	DH20300	DH21300	DH25300
3.2	135	200	DH20320	DH21320	DH25320
3.3	135	200	DH20330	DH21330	DH25330
3.5	145	210	DH20350	DH21350	DH25350
4.0	150	220	DH20400	DH21400	DH25400
4.2	150	220	DH20420	DH21420	DH25420
4.5	160	235	DH20450	DH21450	DH25450
5.0	170	245	DH20500	DH21500	DH25500
5.5	180	260	DH20550	DH21550	DH25550
6.0	180	260	DH20600	DH21600	DH25600
6.5	190	275	DH20650	DH21650	DH25650
7.0	200	290	DH20700	DH21700	DH25700
7.5	200	290	DH20750	DH21750	DH25750
8.0	210	305	DH20800	DH21800	DH25800
8.5	210	305	DH20850	DH21850	DH25850
9.0	220	320	DH20900	DH21900	DH25900
9.5	220	320	DH20950	DH21950	DH25950
10.0	235	340	DH201000	DH211000	DH251000
10.5	235	340	DH201050	DH211050	DH251050
11.0	250	365	DH201100	DH211100	DH251100
11.5	250	365	DH201150	DH211150	DH251150
12.0	260	375	DH201200	DH211200	DH251200
12.5	260	375	DH201250	DH211250	DH251250
13.0	260	375	DH201300	DH211300	DH251300

Series III

Size (mm)	Flute Length (mm)	OAL (mm)	Bright Finish Order No.	Black Oxide Order No.	Cobalt Order No.
3.5	180	265	DH30350	DH31350	DH35350
4.0	190	280	DH30400	DH31400	DH35400
4.2	190	280	DH30420	DH31420	DH35420
4.5	200	295	DH30450	DH31450	DH35450
5.0	210	315	DH30500	DH31500	DH35500
5.5	225	330	DH30550	DH31550	DH35550
6.0	225	330	DH30600	DH31600	DH35600
6.5	235	350	DH30650	DH31650	DH35650
7.0	250	370	DH30700	DH31700	DH35700
7.5	250	370	DH30750	DH31750	DH35750
8.0	265	390	DH30800	DH31800	DH35800

Series III

Size (mm)	Flute Length (mm)	OAL (mm)	Bright Finish Order No.	Black Oxide Order No.	Cobalt Order No.
8.5	265	390	DH30850	DH31850	DH35850
9.0	280	410	DH30900	DH31900	DH35900
9.5	280	410	DH30950	DH31950	DH35950
10.0	295	430	DH301000	DH311000	DH351000
10.5	295	430	DH301050	DH311050	DH351050
11.0	310	455	DH301100	DH311100	DH351100
11.5	310	455	DH301150	DH311150	DH351150
12.0	330	480	DH301200	DH311200	DH351200
12.5	330	480	DH301250	DH311250	DH351250
13.0	330	480	DH301300	DH311300	DH351300

Drill Blanks and Reamer Blanks

- High Speed Steel
- Bright Finish ,Hardened and Ground

Fractions

Size(in.)	OAL(in.)	Order No.
1/64	3/4	DB00001
1/32	1-3/8	DB00002
3/64	1-3/4	DB00003
1/16	1-7/8	DB00004
5/64	2"	DB00005
3/32	2-1/4	DB00006
7/64	2-5/8	DB00007
1/8	2-3/4	DB00008
9/64	2-7/8	DB00009
5/32	3"	DB00010
11/64	3-1/4	DB00011
3/16	3-1/2	DB00012
13/64	3-5/8	DB00013
7/32	3-3/4	DB00014
15/64	3-7/8	DB00015
1/4	4"	DB00016
17/64	4-1/8	DB00017
9/32	4-1/4	DB00018
19/64	4-3/8	DB00019
5/16	4-1/2	DB00020
21/64	4-5/8	DB00021
11/32	4-3/4	DB00022

Size(in.)	OAL(in.)	Order No.
23/64	4-7/8	DB00023
3/8	5"	DB00024
25/64	5-1/8	DB00025
13/32	5-1/4	DB00026
27/64	5-3/8	DB00027
7/16	5-1/2	DB00028
29/64	5-5/8	DB00029
15/32	5-3/4	DB00030
31/64	5-7/8	DB00031
1/2	6"	DB00032
33/64	6"	DB00033
17/32	6"	DB00034
35/64	6"	DB00035
9/16	6"	DB00036
37/64	6"	DB00037
19/32	6"	DB00038
39/64	6"	DB00039
5/8	6"	DB00040
41/64	6"	DB00041
21/32	6"	DB00042
43/64	6"	DB00043
11/16	6"	DB00044

Size(in.)	OAL(in.)	Order No.
45/64	6"	DB00045
23/32	6"	DB00046
47/64	6"	DB00047
3/4	6"	DB00048
49/64	6"	DB00049
25/32	6"	DB00050
51/64	6"	DB00051
13/16	6"	DB00052
53/64	6"	DB00053
27/32	6"	DB00054
55/64	6"	DB00055
7/8	6"	DB00056
57/64	6"	DB00057
29/32	6"	DB00058
59/64	6"	DB00059
15/16	6"	DB00060
61/64	6"	DB00061
31/62	6"	DB00062
63/64	6"	DB00063
1"	6"	DB00100

Letters

Size	OAL(in.)	Order No.
A	3-7/8	DB00601
B	4"	DB00602
C	4"	DB00603
D	4"	DB00604
E	4"	DB00605
F	4-1/8	DB00606
G	4-1/8	DB00607
H	4-1/8	DB00608
I	4-1/8	DB00609

Size	OAL(in.)	Order No.
J	4-1/8	DB00610
K	4-1/4	DB00611
L	4-1/4	DB00612
M	4-3/8	DB00613
N	4-3/8	DB00614
O	4-1/2	DB00615
P	4-5/8	DB00616
Q	4-3/4	DB00617
R	4-3/4	DB00618

Size	OAL(in.)	Order No.
S	4-7/8	DB00619
T	4-7/8	DB00620
U	5"	DB00621
V	5"	DB00622
W	5-1/8	DB00623
X	5-1/8	DB00624
Y	5-1/4	DB00625
Z	5-1/4	DB00626

Wire Gage

Size	OAL(in.)	Order No.
1	3-7/8	DB00501
2	3-7/8	DB00502
3	3-3/4	DB00503
4	3-3/4	DB00504
5	3-3/4	DB00505
6	3-3/4	DB00506
7	3-5/8	DB00507
8	3-5/8	DB00508
9	3-5/8	DB00509
10	3-5/8	DB00510
11	3-1/2	DB00511
12	3-1/2	DB00512
13	3-1/2	DB00513
14	3-3/8	DB00514
15	3-3/8	DB00515
16	3-3/8	DB00516
17	3-3/8	DB00517
18	3-1/4	DB00518
19	3-1/4	DB00519
20	3-1/4	DB00520
21	3-1/4	DB00521

Size	OAL(in.)	Order No.
22	3-1/8	DB00522
23	3-1/8	DB00523
24	3-1/8	DB00524
25	3"	DB00525
26	3"	DB00526
27	3"	DB00527
28	2-7/8	DB00528
29	2-7/8	DB00529
30	2-3/4	DB00530
31	2-3/4	DB00531
32	2-3/4	DB00532
33	2-5/8	DB00533
34	2-5/8	DB00534
35	2-5/8	DB00535
36	2-1/2	DB00536
37	2-1/2	DB00537
38	2-1/2	DB00538
39	2-3/8	DB00539
40	2-3/8	DB00540
41	2-3/8	DB00541
42	2-1/4	DB00542

Size	OAL(in.)	Order No.
43	2-1/4	DB00543
44	2-1/8	DB00544
45	2-1/8	DB00545
46	2-1/8	DB00546
47	2"	DB00547
48	2"	DB00548
49	2"	DB00549
50	2"	DB00550
51	2"	DB00551
52	1-7/8	DB00552
53	1-7/8	DB00553
54	1-7/8	DB00554
55	1-7/8	DB00555
56	1-3/4	DB00556
57	1-3/4	DB00557
58	1-5/8	DB00558
59	1-5/8	DB00559
60	1-5/8	DB00560
61	1-5/8	DB00561
62	1-1/2	DB00562
63	1-1/2	DB00563

Drill Blanks and Reamer Blanks

- High Speed Steel
- Bright Finish ,Hardened and Ground

Wire Gage

Size	OAL(in.)	Order No.
64	1-1/2	DB00564
65	1-1/2	DB00565
66	1-3/8	DB00566
67	1-3/8	DB00567
68	1-3/8	DB00568
69	1-3/8	DB00569

Size	OAL(in.)	Order No.
70	1-1/4	DB00570
71	1-1/4	DB00571
72	1-1/8	DB00572
73	1-1/8	DB00573
74	1"	DB00574
75	1"	DB00575

Size	OAL(in.)	Order No.
76	7/8	DB00576
77	7/8	DB00577
78	7/8	DB00578
79	3/4	DB00579
80	3/4	DB00580

Metric Jobber Drill Blanks

- High Speed Steel

Size(mm)	OAL(in.)	Order No.
1.00	1-5/8	DB10100
1.50	1-7/8	DB10150
2.00	2-1/8	DB10200
2.50	2-3/8	DB10250
3.00	2-3/4	DB10300
3.50	2-7/8	DB10350
4.00	3-1/4	DB10400
4.50	3-3/8	DB10450
5.00	3-5/8	DB10500
5.50	3-7/8	DB10550
6.00	4"	DB10600
6.50	4-1/8	DB10650
7.00	4-1/8	DB10700
7.50	4-3/8	DB10750
8.00	4-1/2	DB10800
8.50	4-3/4	DB10850
9.00	4-7/8	DB10900

Size(mm)	OAL(in.)	Order No.
9.50	5"	DB10950
10.00	5-1/8	DB101000
10.50	5-3/8	DB101050
11.00	5-1/2	DB101100
11.50	5-5/8	DB101150
12.00	5-7/8	DB101200
12.50	6"	DB101250
13.00	6"	DB101300
13.50	6"	DB101350
14.00	6"	DB101400
14.50	6"	DB101450
15.00	6"	DB101500
15.50	6"	DB101550
16.00	6"	DB101600
16.50	6"	DB101650
17.00	6"	DB101700
17.50	6"	DB101750

Size(mm)	OAL(in.)	Order No.
18.00	6"	DB101800
18.50	6"	DB101850
19.00	6"	DB101900
19.50	6"	DB101950
20.00	6"	DB102000
20.50	6"	DB102050
21.00	6"	DB102100
21.50	6"	DB102150
22.00	6"	DB102200
22.50	6"	DB102250
23.00	6"	DB102300
23.50	6"	DB102350
24.00	6"	DB102400
24.50	6"	DB102450
25.00	6"	DB102500

1/2" Shank Silver & Deming Drills

- 3" Flute Length · 6" Over Length
- High Speed Steel and Cobalt 118º Standard Point

Size (in.)	HSS Black Oxide Finish Order No.	HSS Black/ White Order No.	HSS Gold/Black 3 Flats Order No.	Cobalt Gold 3 Flats Order No.
33/64	DV01033	DV04033	DV03033	DV05033
17/32	DV01034	DV04034	DV03034	DV05034
35/64	DV01035	DV04035	DV03035	DV05035
9/16	DV01036	DV04036	DV03036	DV05036
37/64	DV01037	DV04037	DV03037	DV05037
19/32	DV01038	DV04038	DV03038	DV05038
39/64	DV01039	DV04039	DV03039	DV05039
5/8	DV01040	DV04040	DV03040	DV05040
41/64	DV01041	DV04041	DV03041	DV05041
21/32	DV01042	DV04042	DV03042	DV05042
43/64	DV01043	DV04043	DV03043	DV05043
11/16	DV01044	DV04044	DV03044	DV05044
45/64	DV01045	DV04045	DV03045	DV05045
23/32	DV01046	DV04046	DV03046	DV05046
47/64	DV01047	DV04047	DV03047	DV05047
3/4	DV01048	DV04048	DV03048	DV05048
49/64	DV01049	DV04049	DV03049	DV05049
25/32	DV01050	DV04050	DV03050	DV05050

Size (in.)	HSS Black Oxide Finish Order No.	HSS Black/ White Order No.	HSS Gold/Black 3 Flats Order No.	Cobalt Gold 3 Flats Order No.
51/64	DV01051	DV04051	DV03051	DV05051
13/16	DV01052	DV04052	DV03052	DV05052
53/64	DV01053	DV04053	DV03053	DV05053
27/32	DV01054	DV04054	DV03054	DV05054
55/64	DV01055	DV04055	DV03055	DV05055
7/8	DV01056	DV04056	DV03056	DV05056
57/64	DV01057	DV04057	DV03057	DV05057
29/32	DV01058	DV04058	DV03058	DV05058
59/64	DV01059	DV04059	DV03059	DV05059
15/16	DV01060	DV04060	DV03060	DV05060
61/64	DV01061	DV04061	DV03061	DV05061
31/32	DV01062	DV04062	DV03062	DV05062
63/64	DV01063	DV04063	DV03063	DV05063
1"	DV01100	DV04100	DV03100	DV05100
1-1/64	DV01101	DV04101	DV03101	DV05101
1-1/32	DV01102	DV04102	DV03102	DV05102
1-3/64	DV01103	DV04103	DV03103	DV05103
1-1/16	DV01104	DV04104	DV03104	DV05104

Size (in.)	HSS Black Oxide Finish Order No.	HSS Black/ White Order No.	HSS Gold/Black 3 Flats Order No.	Cobalt Gold 3 Flats Order No.
1-5/64	DV01105	DV04105	DV03105	DV05105
1-3/32	DV01106	DV04106	DV03106	DV05106
1-7/64	DV01107	DV04107	DV03107	DV05107
1-1/8	DV01108	DV04108	DV03108	DV05108
1-9/64	DV01109	DV04109	DV03109	DV05109
1-5/32	DV01110	DV04110	DV03110	DV05110
1-11/64	DV01111	DV04111	DV03111	DV05111
1-3/16	DV01112	DV04112	DV03112	DV05112
1-13/64	DV01113	DV04113	DV03113	DV05113
1-7/32	DV01114	DV04114	DV03114	DV05114
1-15/64	DV01115	DV04115	DV03115	DV05115
1-1/4	DV01116	DV04116	DV03116	DV05116
1-17/64	DV01117	DV04117	DV03117	DV05117
1-9/32	DV01118	DV04118	DV03118	DV05118
1-19/64	DV01119	DV04119	DV03119	DV05119
1-5/16	DV01120	DV04120	DV03120	DV05120

Size (in.)	HSS Black Oxide Finish Order No.	HSS Black/ White Order No.	HSS Gold/Black 3 Flats Order No.	Cobalt Gold 3 Flats Order No.
1-21/64	DV01121	DV04121	DV03121	DV05121
1-11/32	DV01122	DV04122	DV03122	DV05122
1-23/64	DV01123	DV04123	DV03123	DV05123
1-3/8	DV01124	DV04124	DV03124	DV05124
1-25/64	DV01125	DV04125	DV03125	DV05125
1-13/32	DV01126	DV04126	DV03126	DV05126
1-27/64	DV01127	DV04127	DV03127	DV05127
1-7/16	DV01128	DV04128	DV03128	DV05128
1-29/64	DV01129	DV04129	DV03129	DV05129
1-15/32	DV01130	DV04130	DV03130	DV05130
1-31/32	DV01131	DV04131	DV03131	DV05131
1-1/2	DV01132	DV04132	DV03132	DV05132

Metric-High Speed steel 12.7mm Shank Silver & Deming Drills

- 82mm Flute Length · 140mm Over Length

Size (mm)	HSS Black Oxide Finish Order No.	HSS Black/ White Order No.	HSS Gold/Black 3 Flats Order No.	Cobalt Gold 3 Flats Order No.
13.0	DV111300	DV141300	DV131300	DV151300
13.5	DV111350	DV141350	DV131350	DV151350
14.0	DV111400	DV141400	DV131400	DV151400
14.5	DV111450	DV141450	DV131450	DV151450
15.0	DV111500	DV141500	DV131500	DV151500
15.5	DV111550	DV141550	DV131550	DV151550
16.0	DV111600	DV141600	DV131600	DV151600
16.5	DV111650	DV141650	DV131650	DV151650
17.0	DV111700	DV141700	DV131700	DV151700
17.5	DV111750	DV141750	DV131750	DV151750
18.0	DV111800	DV141800	DV131800	DV151800
18.5	DV111850	DV141850	DV131850	DV151850
19.0	DV111900	DV141900	DV131900	DV151900
19.5	DV111950	DV141950	DV131950	DV151950
20.0	DV112000	DV142000	DV132000	DV152000
20.5	DV112050	DV142050	DV132050	DV152050
21.0	DV112100	DV142100	DV132100	DV152100
21.5	DV112150	DV142150	DV132150	DV152150
22.0	DV112200	DV142200	DV132200	DV152200
22.5	DV112250	DV142250	DV132250	DV152250
23.0	DV112300	DV142300	DV132300	DV152300
23.5	DV112350	DV142350	DV132350	DV152350
24.0	DV112400	DV142400	DV132400	DV152400
24.5	DV112450	DV142450	DV132450	DV152450
25.0	DV112500	DV142500	DV132500	DV152500

Size (mm)	HSS Black Oxide Finish Order No.	HSS Black/ White Order No.	HSS Gold/Black 3 Flats Order No.	Cobalt Gold 3 Flats Order No.
25.5	DV112550	DV142550	DV132550	DV152550
26.0	DV112600	DV142600	DV132600	DV152600
26.5	DV112650	DV142650	DV132650	DV152650
27.0	DV112700	DV142700	DV132700	DV152700
27.5	DV112750	DV142750	DV132750	DV152750
28.0	DV112800	DV142800	DV132800	DV152800
28.5	DV112850	DV142850	DV132850	DV152850
29.0	DV112900	DV142900	DV132900	DV152900
29.5	DV112950	DV142950	DV132950	DV152950
30.0	DV113000	DV143000	DV133000	DV153000
30.5	DV113050	DV143050	DV133050	DV153050
31.0	DV113100	DV143100	DV133100	DV153100
31.5	DV113150	DV143150	DV133150	DV153150
32.0	DV113200	DV143200	DV133200	DV153200
32.5	DV113250	DV143250	DV133250	DV153250
33.0	DV113300	DV143300	DV133300	DV153300
33.5	DV113350	DV143350	DV133350	DV153350
34.0	DV113400	DV143400	DV133400	DV153400
34.5	DV113450	DV143450	DV133450	DV153450
35.0	DV113500	DV143500	DV133500	DV153500
35.5	DV113550	DV143550	DV133550	DV153550
36.0	DV113600	DV143600	DV133600	DV153600
36.5	DV113650	DV143650	DV133650	DV153650
37.0	DV113700	DV143700	DV133700	DV153700
37.5	DV113750	DV143750	DV133750	DV153750
38.0	DV113800	DV143800	DV133800	DV153800

3/4" Shank Drills

- 3" Flute Length · 6" Over Length
- High Speed Steel and Cobalt
- 118º Standard Point

Size (in.)	HSS Black Oxide Finish Order No.	HSS Black/ White Order No.	HSS Gold/Black 3 Flats Order No.	Cobalt Gold 3 Flats Order No.
25/32	DV21050	DV24050	DV23050	DV25050
13/16	DV21052	DV24052	DV23052	DV25052
27/32	DV21054	DV24054	DV23054	DV25054
7/8	DV21056	DV24056	DV23056	DV25056
29/32	DV21058	DV24058	DV23058	DV25058
15/16	DV21060	DV24060	DV23060	DV25060
31/32	DV21062	DV24062	DV23062	DV25062
1"	DV21100	DV24100	DV23100	DV25100
1-1/32	DV21102	DV24102	DV23102	DV25102
1-1/16	DV21104	DV24104	DV23104	DV25104
1-3/32	DV21106	DV24106	DV23106	DV25106
1-1/8	DV21108	DV24108	DV23108	DV25108
1-5/32	DV21110	DV24110	DV23110	DV25110
1-3/16	DV21112	DV24112	DV23112	DV25112
1-7/32	DV21114	DV24114	DV23114	DV25114
1-1/4	DV21116	DV24116	DV23116	DV25116
1-9/32	DV21118	DV24118	DV23118	DV25118
1-5/16	DV21120	DV24120	DV23120	DV25120
1-11/32	DV21122	DV24122	DV23122	DV25122
1-3/8	DV21124	DV24124	DV23124	DV25124

Size (in.)	HSS Black Oxide Finish Order No.	HSS Black/ White Order No.	HSS Gold/Black 3 Flats Order No.	Cobalt Gold 3 Flats Order No.
1-13/32	DV21126	DV24126	DV23126	DV25126
1-7/16	DV21128	DV24128	DV23128	DV25128
1-15/32	DV21130	DV24130	DV23130	DV25130
1-1/2	DV21132	DV24132	DV23132	DV25132
1-17/32	DV21134	DV24134	DV23134	DV25134
1-9/16	DV21136	DV24136	DV23136	DV25136
1-19/32	DV21138	DV24138	DV23138	DV25138
1-5/8	DV21140	DV24140	DV23140	DV25140
1-21/32	DV21142	DV24142	DV23142	DV25142
1-11/16	DV21144	DV24144	DV23144	DV25144
1-23/32	DV21146	DV24146	DV23146	DV25146
1-3/4	DV21148	DV24148	DV23148	DV25148
1-25/32	DV21150	DV24150	DV23150	DV25150
1-13/16	DV21152	DV24152	DV23152	DV25152
1-27/32	DV21154	DV24154	DV23154	DV25154
1-7/8	DV21156	DV24156	DV23156	DV25156
1-15/16	DV21160	DV24160	DV23160	DV25160
1-31/32	DV21162	DV24162	DV23162	DV25162
2"	DV21200	DV24200	DV23200	DV25200

1/4"Shank Regular Length Drills

- High Speed Steel

Size (in.)	Flute Length(in.)	OAL (in.)	Order No.
17/64	2-1/4	3-1/2	DV30017
9/32	2-1/4	3-9/16	DV30018
19/64	2-3/8	3-11/16	DV30019
5/16	2-1/2	3-13/16	DV30020
21/64	2-9/16	3-15/16	DV30021
11/32	2-5/8	4"	DV30022
23/64	2-3/4	4-1/8	DV30023
3/8	2-7/8	4-1/4	DV30024

Size (in.)	Flute Length(in.)	OAL (in.)	Order No.
25/64	3"	4-5/16	DV30025
13/32	3-1/8	4-7/16	DV30026
27/64	3-1/8	4-9/16	DV30027
7/16	3-3/8	4-11/16	DV30028
29/64	3-3/8	4-3/4	DV30029
15/32	3-1/2	4-7/8	DV30030
31/64	3-1/2	5"	DV30031
1/2	3-5/8	5-1/16	DV30032

1/4"Shank Screw Machine Drills

- High Speed Steel

Size (in.)	Flute Length(in.)	OAL (in.)	Order No.
17/64	1-1/4	2-5/8	DV40017
9/32	1-1/4	2-11/16	DV40018
19/64	1-3/8	2-3/4	DV40019
11/32	1-9/16	3"	DV40022
13/32	1-7/8	3-5/16	DV40026

Size (in.)	Flute Length(in.)	OAL (in.)	Order No.
27/64	2"	3-3/8	DV40027
7/16	2"	3-7/16	DV40028
29/64	2"	3-7/16	DV40029
15/32	2-1/8	3-5/8	DV40030
31/64	2-1/8	3-5/8	DV40031

3/8"Shank Jobber Drills

- High Speed Steel
- Extend the Range of 3/8" Chuck Tools

Size(in.)	Flute Length(in.)	OAL(in.)	Order No.
25/64	2-3/4	5-1/4	DV50025
13/32	3-1/4	5-1/4	DV50026
27/64	3-1/2	5-1/2	DV50027
7/16	2-1/4	4"	DV50028
7/16	4-1/16	5-1/2	DV51028

Size(in.)	Flute Length(in.)	OAL(in.)	Order No.
29/64	3-1/2	5-1/2	DV50029
15/32	3-1/2	5-1/2	DV50030
31/64	3-1/2	5-3/4	DV50031
1/2	4"	6"	DV50032

Jobber Length Drill Sets

1/16"-1/4" by 64ths 13 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU100113
118° Surface Treated	DU100213
135° Heavy Duty Split Point Surface Treated	DU100313
118° Tin Coated	DU100413

1/16"-1/2" by 32nds 15 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU110115
118° Surface Treated	DU110215
135°Heavy Duty Split Point Surface Treated	DU110315

- Cobalt Heavy Duty

135°Split Point — Surface Treated	DU110415

1/16"-3/8" by 64ths 21 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU120121
118° Surface Treated	DU120221
118° Roll Forged Surface Treated	DU120321

1/16"-1/2" by 64ths 29 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
135°Heavy Duty Split Point Gold & Black Finish	DU130129
118° Bright Finish	DU130229
118° Surface Treated	DU130329
135° Heavy Duty Split Point Surface Treated	DU130429
118° Roll Forged Surface Treated	DU130529
118° Tin Coated	DU130629
Left Hand 118°Surface Treated	DU130729

- Cobalt Heavy Duty

135°Split Point — Surface Treated	DU130929

3 IN 1 Combination Sets
1/16"-1/2" by 64ths, A-Z, 1-60 115 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU1401115
118° Surface Treated	DU1402115
135° Heavy Duty Split Point Surface Treated	DU1403115
118° Roll Forged Surface Treated	DU1404115
118° Tin Coated	DU1405115

- Cobalt Heavy Duty

135°Split Point	DU1406115

#1-#60 Wire Gage 60 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU150160
118° Surface Treated	DU150260
135° Heavy Duty Split Point Surface Treated	DU150360
118° Roll Forged Surface Treated	DU150460
118° Roll Forged Surface Treated in Vinyl pouch	DU150560

- Cobalt Heavy Duty

135°Split Point	DU150660

#1-#60 Wire Gage 60 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU160120
118° Surface Treated	DU160220

A-Z Letter Size 26 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU170126
118° Surface Treated	DU170226
135° Heavy Duty Split Point Surface Treated	DU170326
118° Roll Forged Surface Treated	DU170426

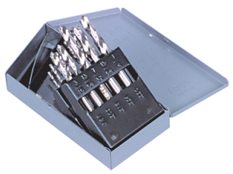
- Cobalt Heavy Duty

135°Split Point	DU170526

Screw Machine Drill Sets
1/16"-1/4" by64ths 13 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU180113



1/16"-1/2" by 32nds 15 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU190115

1/16"-1/2" by 64ths 29 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU200129
135° Heavy Duty Split Point Surface Treated	DU200229

- Cobalt Heavy Duty

135°Split Point Surface Treated	DU200329

#1-#60 Wire Gage 60 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU210160
135° Heavy Duty Split Point Surface Treated	DU210260

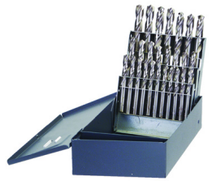
- Cobalt Heavy Duty

135°Split Point Surface Treated	DU210360

A-Z Letter Size 26 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU220126
135° Heavy Duty Split Point Surface Treated	DU220226



- Cobalt Heavy Duty

135°Split Point Surface Treated	DU220326

3 IN 1 Combination Sets
1/16"-1/2" by 64ths, A-Z, 1-60 115 Pc.Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU2301115

Metric Jobber Length Drill Sets
1mm-13mm by 0.5mm 25 Pc.Metric Set Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Surface Treated	DU240125
118° Bright Finish	DU240225

- Cobalt Heavy Duty

135°Split Point	DU240325

1mm-10mm by 0.5mm 19 Pc.Metric Set
Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU250119

1.5mm-6.5mm by 0.5mm 13 Pc.Metric Set
Complete with Metal Index

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU260113

Taper length Drill Sets
1/16"-1/2" by 64ths 29 Pc.Set

- Drills Ground from Solid
- High Speed Steel

Description	Order No.
118° Bright Finish	DU270129

Extra-Long Straight Shank Drill Sets

- High Speed Steel
- Supplied in drill stands
- 118° point

Description	OAL	No.of Drills	Order No.
1/8"thru 1/2"x64ths	8"	25	DU280125
1/8"thru 1/2"x64ths	12"	25	DU280225
3/16"thru 1/2"x32nds	16"	11	DU280311

Taper Shank Drill Sets

- High Speed Steel
- All drills furnished with standard taper shanks
- Complete with Metal Index

Description	No.of Drills	Order No.
33/64" thru	16	DU290116
49/64" thru	16	DU290216

Reduced Shank Drill Sets
3/8" Reduced Shank Sets
1/16"-1/2" by 64ths 29 Pc.Set Complete with Metal Index

- Ground from Solid(Sizes Over 3/8"have 3/8 shanks)
- High Speed Steel

Description	Order No.
118° Surface Treated — Ground	DU300129
118° Surface Treated — Roll Forged	DU300229

1/2" Reduced Shank Sets
9/16"-1" by 16ths 8 Pc.Set

- High Speed Stee

Description	Order No.
118°3 Flat Shank with metal index	DU310108
118° with metal index	DU310208
118° with plastic case	DU310308
118° with wooden case	DU310409

- Cobalt Heavy Duty

118° Bright Finish	DU260113

17/32"-1" by 32nds 13 Pc.Set

- High Speed Steel

Description	Order No.
118° with wooden stand	DU320113

- Cobalt Heavy Duty

118° with wooden stand	DU320213

33/64"-1" by 64ths 32 Pc.Set

- High Speed Steel

Description	Order No.
118° with wooden stand	DU330132

- Cobalt Heavy Duty

118° with wooden stand	DU330232

1/2"-1" by 64 ths 33 Pc.Set

- High Speed Steel

Description	Order No.
118° 3 Flat Shank with wooden stand	DU340133
118°Round Shank with wooden stand	DU340233

1-1/16" - 1-1/2" by 16ths 8 Pc.Set

- High Speed Steel

Description	Order No.
118° with wooden stand	DU350108

3/4" Reduced Shank Set
1" - 1-1/2" by 8ths 5 Pc.Set

- High Speed Steel

Description	Order No.
118° with wooden case	DU360105

HSS Step Drills

- Two Flute Metric
- Round Shank
- Triangle Shank
- Hex Shank
- Bright Finish
- Tin Coated

Straight Flute

Size(mm)	Hole Sizes(mm)	Steps	Shank Dia(mm)	OAL (mm)	Straight FL Order No.	Straight FL TiN-Coated Order No.	Straight FLCobalt Order No.
4 ~ 10	4,5,6,7,8,9,10	7	6	65	DY007410	DY027410	DY057410
4 ~ 12	4,6,8,10,12	5	6	65	DY005412	DY025412	DY055412
4 ~ 12	4,5,6,7,8,9,10,11,12	9	6	65	DY009412	DY029412	DY059412
4 ~ 20	4,5,6,7,8,9,10,11,12,14,16,18,20	9	8	75	DY009420	DY029420	DY059420
4 ~ 22	4,5,6,7,8,9,10,11,12,14,16,18,20,22	14	8	80	DY000422	DY020422	DY050422
4 ~ 30	4,6,8,10,12,14,16,18,20,22,24,26,28,30	14	10	100	DY000430	DY020430	DY050430
6 ~ 20	6,8,10,12,14,16,18,20	8	8	71	DY008620	DY028620	DY058620
6 ~ 30	6,8,10,12,14,16,18,20,22,24,26,28,30	13	10	100	DY000630	DY020630	DY050630
5 ~ 35	5,8,10,12,15,18,20,22,25,27,30,32,35	13	13	100	DY000535	DY020535	DY050535
6 ~ 38	6,9,13,16,19,21,23,26,29,32,35,38	12	12	100	DY000638	DY020638	DY050638
6 ~ 26.75	6,9,11.4,17.25,19,21,25,26.75	8	10	75	DY008626	DY028626	DY058626
4 ~ 39	4,6,9,12,15,18,21,24,27,30,33,36,39	13	12	107	DY000439	DY020439	DY050439
6 ~ 39	6,9,12,15,18,21,24,27,30,33,36,39	12	12	111	DY000639	DY020639	DY050639
6 ~ 32	6,9,11.2,14.5,18.2,22.3,27.9,32	8	10	75	DY008632	DY028632	DY058632
5 ~ 28	5,8.8,11.8,15.3,19,24.5,28	7	10	69	DY007528	DY027528	DY057528
6 ~ 37	6,9,12.5,15.2,18.6,20.4,22.5,26,28.3,30.5,24,37	12	12	100	DY000637	DY020637	DY050637
4.8 ~ 10.65	4.8,6.4,7.2,9.6,10.65	5	6	54	DY005410	DY025410	DY055410
6 ~ 25	6,9,12,16,20,22.5,25	7	10	65	DY007625	DY027625	DY057625
6 ~ 32	6,8,10,12,14,16,18,20,22,24,26,28,30,32	14	10	100	DY000632	DY020632	DY050632
6 ~ 40	6,9,17,23,29,30,31,32,33,34,35,36,37,38,39,40	16	13	105	DY000640	DY020640	DY050640
12.5 ~ 30.5	12.5,15.2,18.6,20.4,22.5,28.3,30.5	7	10	85	DY001230	DY021230	DY051230
9 ~ 36	9,12,15,18,21,24,27,30,33,36	10	12	85	DY000936	DY020936	DY050936
5 ~ 30.5	5,7.5,10,12.5,15.2,18.6,20.4,22.5,25.5,28.3,30.5	11	10	90	DY000530	DY020530	DY050530
5 ~ 38	5,7.5,10,13,16,19,21,23,26,29,31,33,35,38	14	12	95	DY000538	DY020538	DY050538
6 ~ 32	6,9,12,16,20,22.5,25,28.5,32	9	10	76	DY009632	DY029632	DY059632

Spiral Flute

Size(mm)	Hole Sizes(mm)	Steps	Shank Dia(mm)	OAL (mm)	Spiral FL Order No.	Spiral FL TiN-Coated Order No.	Spiral FL Cobalt Order No.
4 ~ 10	4,5,6,7,8,9,10	7	6	65	DY107410	DY127410	DY157410
4 ~ 12	4,6,8,10,12	5	6	65	DY105412	DY125412	DY155412
4 ~ 12	4,5,6,7,8,9,10,11,12	9	6	65	DY109412	DY129412	DY159412
4 ~ 20	4,5,6,7,8,9,10,11,12,14,16,18,20	9	8	75	DY109420	DY129420	DY159420
4 ~ 22	4,5,6,7,8,9,10,11,12,14,16,18,20,22	14	8	80	DY100422	DY120422	DY150422
4 ~ 30	4,6,8,10,12,14,16,18,20,22,24,26,28,30	14	10	100	DY100430	DY120430	DY150430
6 ~ 20	6,8,10,12,14,16,18,20	8	8	71	DY108620	DY128620	DY158620
6 ~ 30	6,8,10,12,14,16,18,20,22,24,26,28,30	13	10	100	DY100630	DY120630	DY150630
5 ~ 35	5,8,10,12,15,18,20,22,25,27,30,32,35	13	13	100	DY100535	DY120535	DY150535
6 ~ 38	6,9,13,16,19,21,23,26,29,32,35,38	12	12	100	DY100638	DY120638	DY150638
6 ~ 26.75	6,9,11.4,17.25,19,21,25,26.75	8	10	75	DY108626	DY128626	DY158626
4 ~ 39	4,6,9,12,15,18,21,24,27,30,33,36,39	13	12	107	DY100439	DY120439	DY150439
6 ~ 39	6,9,12,15,18,21,24,27,30,33,36,39	12	12	111	DY100639	DY120639	DY150639
6 ~ 32	6,9,11.2,14.5,18.2,22.3,27.9,32	8	10	75	DY108632	DY128632	DY158632
5 ~ 28	5,8.8,11.8,15.3,19,24.5,28	7	10	69	DY107528	DY127528	DY157528
6 ~ 37	6,9,12.5,15.2,18.6,20.4,22.5,26,28.3,30.5,24,37	12	12	100	DY100637	DY120637	DY150637
4.8 ~ 10.65	4.8,6.4,7.2,9.6,10.65	5	6	54	DY105410	DY125410	DY155410
6 ~ 25	6,9,12,16,20,22.5,25	7	10	65	DY107625	DY127625	DY157625
6 ~ 32	6,8,10,12,14,16,18,20,22,24,26,28,30,32	14	10	100	DY100632	DY120632	DY150632
6 ~ 40	6,9,17,23,29,30,31,32,33,34,35,36,37,38,39,40	16	13	105	DY100640	DY120640	DY150640
12.5 ~ 30.5	12.5,15.2,18.6,20.4,22.5,28.3,30.5	7	10	85	DY101230	DY121230	DY151230
9 ~ 36	9,12,15,18,21,24,27,30,33,36	10	12	85	DY100936	DY120936	DY150936
5 ~ 30.5	5,7.5,10,12.5,15.2,18.6,20.4,22.5,25.5,28.3,30.5	11	10	90	DY100530	DY120530	DY150530
5 ~ 38	5,7.5,10,13,16,19,21,23,26,29,31,33,35,38	14	12	95	DY100538	DY120538	DY150538
6 ~ 32	6,9,12,16,20,22.5,25,28.5,32	9	10	76	DY109632	DY129632	DY159632

HSS Step Drills

- Two Flute Inch

Spiral Flute

Size(in.)	Hole Sizes(in.)	Steps	Shank Dia(in.)	OAL (in.)	Straight FL Order No.	Straight FL TiN-Coated Order No.	Straight FLCobalt Order No.
3/16 ~ 1/2	3/16,1/4,5/16,3/8,7/16,1/2	6	1/4	3-1/8	DY203162	DY223162	DY253162
1/8 ~ 1/2	1/8,5/32,3/16,7/32,1/4,9/32,5/16,11/32,3/8,13/32,7/16,15/32,1/2	13	1/4	3-1/8	DY201812	DY221812	DY251812
1/4 ~ 3/4	1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4	9	3/8	2-3/4	DY201434	DY221434	DY251434
3/16 ~ 7/8	3/16,1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8	12	3/8	3-1/4	DY203178	DY223178	DY253178
1/4 ~ 1	1/4,1/2,9/16,5/8,11/16,3/4,13/16,7/8,15/16,1	10	3/8	3-1/4	DY201410	DY221410	DY251410
1/4 ~ 1-3/8	1/4,3/8,1/2,5/8,3/4,7/8,1,1-1/8,1-1/4,1-3/8	10	3/8	3-1/4	DY201413	DY221413	DY251413
1/4 ~ 7/8	1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8	11	3/8	3"	DY201478	DY221478	DY251478
9/16 ~ 1	9/16,5/8,11/16,3/4,13/16,7/8,15/16,1	8	3/8	3-1/4	DY209610	DY229610	DY259610
13/16 ~ 1-3/8	13/16,7/8,15/16,1,1-1/16,1-1/8,1-3/16,1-1/4,1-5/16,1-3/8	10	1/2	3-5/16	DY201316	DY221316	DY251316

Spiral Flute

Size(in.)	Hole Sizes(in.)	Steps	Shank Dia(in.)	OAL (in.)	Spiral FL Order No.	Spiral FL TiN-Coated Order No.	Spiral FL Cobalt Order No.
3/16 ~ 1/2	3/16,1/4,5/16,3/8,7/16,1/2	6	1/4	3-1/8	DY303162	DY323162	DY353162
1/8 ~ 1/2	1/8,5/32,3/16,7/32,1/4,9/32,5/16,11/32,3/8,13/32,7/16,15/32,1/2	13	1/4	3-1/8	DY301812	DY321812	DY351812
1/4 ~ 3/4	1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4	9	3/8	2-3/4	DY301434	DY321434	DY351434
3/16 ~ 7/8	3/16,1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8	12	3/8	3-1/4	DY303178	DY323178	DY353178
1/4 ~ 1	1/4,1/2,9/16,5/8,11/16,3/4,13/16,7/8,15/16,1	10	3/8	3-1/4	DY301410	DY321410	DY351410
1/4 ~ 1-3/8	1/4,3/8,1/2,5/8,3/4,7/8,1,1-1/8,1-1/4,1-3/8	10	3/8	3-1/4	DY301413	DY321413	DY351413
1/4 ~ 7/8	1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8	11	3/8	3"	DY301478	DY321478	DY351478
9/16 ~ 1	9/16,5/8,11/16,3/4,13/16,7/8,15/16,1	8	3/8	3-1/4	DY309610	DY329610	DY359610
13/16 ~ 1-3/8	13/16,7/8,15/16,1,1-1/16,1-1/8,1-3/16,1-1/4,1-5/16,1-3/8	10	1/2	3-5/16	DY301316	DY321316	DY351316

HSS Step Drills Set

- Packing:Wooden Case, Metal Case,Double Blister, Plastic Case, Aluminium Alloy Case

3pcs/Set Size	Straight FL Order No.	Straight FL TiN-Coated Order No.	Straight FL Cobalt Order No.	Spiral FL Order No.	Spiral FL TiN-Coated Order No.	Spiral FL Cobalt Order No.
4~12mm,4~20mm,6~30mm	DYU400103	DYU420103	DYU450103	DYU500103	DYU520103	DYU550103
4~12mm,6~20mm,6~30mm	DYU400203	DYU420203	DYU450203	DYU500203	DYU520203	DYU550203
4~12mm,4~20mm,4~32mm	DYU400303	DYU420303	DYU450303	DYU500303	DYU520303	DYU550303
4~12mm,4~20mm,4~30mm	DYU400403	DYU420403	DYU450403	DYU500403	DYU520403	DYU550403
1/8~1/2",1/4~3/4",3/16~7/8"	DYU400503	DYU420503	DYU450503	DYU500503	DYU520503	DYU550503

Conical Drills(Tube & Sheet Metal Drills)

- Straight Flute
- Round Shank
- 3-Flates Shank
- Hex Shank
- Bright Finish
- Tin Coated

Size(mm)	Shank Dia(mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.	Cobalt Order No.
3~14	6	58	DY620314	DY620314	DY650314
4~20	8	71	DY650420	DY650420	DY650420
4~31	9	103	DY620431	DY620431	DY650431
5~20	8	71	DY620520	DY620520	DY650520
5~25.4	10	87	DY620525	DY620525	DY650525
5~31	9	103	DY620531	DY620531	DY650531
5~22.5	8	79	DY620522	DY620522	DY650522
16~30.5	9	76	DY621630	DY621630	DY651630
24~40	10	89	DY622440	DY622440	DY652440
36~50	12	97	DY623650	DY623650	DY653650
40~61	13	103	DY624061	DY624061	DY654061

HSS Conical Drills Set

- Packing:Wooden Case, Metal Case, Plastic Case

3pcs/Set Size	HSS Order No.	TiN-Coated Order No.	Cobalt Order No.
3~14,8~20,16~30.5	DYU700301	DYU720301	DYU750301

HSS Spot Weld Drill

- High Speed Steel and Cobalt
- For automobile or car body repair, to remove the
- weld spots.
- Fully ground process.
- High speed steel materials.
- Bright or TiN coted finish.

Size(mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.	Cobalt Order No.
6	66	DW00600	DW02600	DW05600
7	74	DW00700	DW02700	DW05700
8	80	DW00800	DW02800	DW05800
9	88	DW001000	DW021000	DW051000

DIN 338 HSS Fully Ground Turbo Drill

- New designed multi point angle
- Clean round holes without burr
- Precise centering due to self-centering tip
- Triangle-shank for sizes above 5.0 mm forbetter power transmission
- For clean round holes in steel, iron, non ferrousmetals, aluminium, plastics and wood.

Size (mm)	Flute Length(mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.	Cobalt Order No.	Triangle Shank Order No.
3.0	33	61	DF10300	DF12300	DF15300	DF20300
3.5	39	70	DF10350	DF12350	DF15350	DF20350
4.0	43	75	DF10400	DF12400	DF15400	DF20400
4.5	47	80	DF10450	DF12450	DF15450	DF20450
5.0	52	86	DF10500	DF12500	DF15500	DF20500
5.5	57	93	DF10550	DF12550	DF15550	DF20550
6.0	57	93	DF10600	DF12600	DF15600	DF20600
6.6	63	101	DF10650	DF12650	DF15650	DF20650
7.0	69	109	DF10700	DF12700	DF15700	DF20700
7.5	69	109	DF10750	DF12750	DF15750	DF20750

Size (mm)	Flute Length(mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.	Cobalt Order No.	Triangle Shank Order No.
8.0	75	117	DF10800	DF12800	DF15800	DF20800
8.5	75	117	DF10850	DF12850	DF15850	DF20850
9.0	81	125	DF10900	DF12900	DF15900	DF20900
9.5	81	125	DF10950	DF12950	DF15950	DF20950
10.0	87	133	DF101000	DF121000	DF151000	DF201000
10.5	87	133	DF101050	DF121050	DF151050	DF201050
11.0	94	142	DF101100	DF121100	DF151100	DF201100
11.5	94	142	DF101150	DF121150	DF151150	DF201150
12.0	101	151	DF101200	DF121200	DF151200	DF201200
12.5	101	151	DF101250	DF121250	DF151250	DF201250
13.0	101	151	DF101300	DF121300	DF151300	DF201300

Straight Shank Core Drills

- High Speed Steel
- Standard:B94.11M

Size (in.)	Flute Length(in.)	OAL (in.)	3-Flute Order No.	4-Flute Order No.
1/4	3-3/4	6-1/8	DR31016	DR41016
9/32	3-7/8	6-1/4	DR31018	DR41018
5/16	4"	6-3/8	DR31020	DR41020
11/32	4-1/8	6-1/2	DR31022	DR41022
3/8	4-1/4	6-3/4	DR31024	DR41024
13/32	4-3/8	7"	DR31026	DR41026
7/16	4-5/8	7-1/4	DR31028	DR41028
15/32	4-3/4	7-1/2	DR31030	DR41030
1/2	4-3/4	7-1/2	DR31032	DR41032
17/32	4-3/4	8"	DR31034	DR41034
9/16	4-7/8	8-1/4	DR31036	DR41036
19/32	4-7/8	8-3/4	DR31038	DR41038
5/8	4-7/8	8-3/4	DR31040	DR41040
21/32	5-1/8	9"	DR31042	DR41042
11/16	5-3/8	9-1/4	DR31044	DR41044
23/32	5-5/8	9-1/2	DR31046	DR41046
3/4	5-7/8	9-3/4	DR31048	DR41048
25/32	6"	9-7/8	DR31050	DR41050
13/16	6-1/8	10"	DR31052	DR41052
27/32	6-1/8	10"	DR31054	DR41054
7/8	6-1/8	10"	DR31056	DR41056

Size (in.)	Flute Length(in.)	OAL (in.)	3-Flute Order No.	4-Flute Order No.
29/32	6-1/8	10"	DR31058	DR41058
15/16	6-1/8	10-3/4	DR31060	DR41060
31/32	6-3/8	11"	DR31062	DR41062
1"	6-3/8	11"	DR31100	DR41100
1-1/32	6-1/2	11-1/8	DR31102	DR41102
1-1/16	6-5/8	11-1/4	DR31104	DR41104
1-3/32	6-7/8	11-1/2	DR31106	DR41106
1-1/8	7-1/8	11-3/4	DR31108	DR41108
1-5/32	7-1/4	11-7/8	DR31110	DR41110
1-3/16	7-3/8	12"	DR31112	DR41112
1-7/32	7-1/2	12-1/8	DR31114	DR41114
1-1/4	7-7/8	12-1/2	DR31116	DR41116
1-9/32	8-1/2	14-1/8	DR31118	DR41118
1-5/16	8-5/8	14-1/4	DR31120	DR41120
1-11/32	8-3/4	14-3/8	DR31122	DR41122
1-3/8	8-7/8	14-1/2	DR31124	DR41124
1-13/32	9"	14-5/8	DR31126	DR41126
1-7/16	9-1/8	14-3/4	DR31128	DR41128
1-15/32	9-1/4	14-7/8	DR31130	DR41130
1-1/2	9-3/8	15"	DR31132	DR41132

Taper Shank Core Drills

- High Speed Steel
- Core Drills are used for enlarging holes that have been previously drilled,cored or punched
- Standard:B94.11M

Size (in.)	Flute Length(in.)	OAL (in.)	Taper Shank	3-Flute Order No.	4-Flute Order No.
1/4	2-7/8	6-1/8	1	DR11016	DR21016
9/32	3"	6-1/4	1	DR11018	DR21018
5/16	3-1/8	6-3/8	1	DR11020	DR21020
11/32	3-1/4	6-1/2	1	DR11022	DR21022
3/8	3-1/2	6-3/4	1	DR11024	DR21024
13/32	3-5/8	7"	1	DR11026	DR21026
7/16	3-7/8	7-1/4	1	DR11028	DR21028
15/32	4-1/8	7-1/2	1	DR11030	DR21030
1/2	4-3/8	8-1/4	2	DR11032	DR21032
17/32	4-5/8	8-1/2	2	DR11034	DR21034
9/16	4-7/8	8-3/4	2	DR11036	DR21036
19/32	4-7/8	8-3/4	2	DR11038	DR21038
5/8	4-7/8	8-3/4	2	DR11040	DR21040

Size (in.)	Flute Length(in.)	OAL (in.)	Taper Shank	3-Flute Order No.	4-Flute Order No.
1-13/32	9"	14-5/8	4	DR11126	DR21126
1-7/16	9-1/8	14-3/4	4	DR11128	DR21128
1-15/32	9-1/4	14-7/8	4	DR11130	DR21130
1-1/2	9-3/8	15"	4	DR11132	DR21132
1-17/32	9-3/8	16-3/8	5	DR11134	DR21134
1-9/16	9-5/8	16-5/8	5	DR11136	DR21136
1-19/32	9-7/8	16-7/8	5	DR11138	DR21138
1-5/8	10"	17"	5	DR11140	DR21140
1-21/32	10-1/8	17-1/8	5	DR11142	DR21142
1-11/16	10-1/8	17-1/8	5	DR11144	DR21144
1-23/32	10-1/8	17-1/8	5	DR11146	DR21146
1-3/4	10-1/8	17-1/8	5	DR11148	DR21148
1-25/32	10-1/8	17-1/8	5	DR11150	DR21150

Taper Shank Core Drills

- High Speed Steel
- Core Drills are used for enlarging holes that have been previously drilled,cored or punched
- Standard:B94.11M

Size (in.)	Flute Length(in.)	OAL (in.)	Taper Shank	3-Flute Order No.	4-Flute Order No.
21/32	5-1/8	9"	2	DR11042	DR21042
11/16	5-3/8	9-1/4	2	DR11044	DR21044
23/32	5-5/8	9-1/2	2	DR11046	DR21046
3/4	5-7/8	9-3/4	2	DR11048	DR21048
25/32	6"	9-7/8	2	DR11050	DR21050
13/16	6-1/8	10-3/4	3	DR11052	DR21052
27/32	6-1/8	10-3/4	3	DR11054	DR21054
7/8	6-1/8	10-3/4	3	DR11056	DR21056
29/32	6-1/8	10-3/4	3	DR11058	DR21058
15/16	6-1/8	10-3/4	3	DR11060	DR21060
31/32	6-3/8	11"	3	DR11062	DR21062
1"	6-3/8	11"	3	DR11100	DR21100
1-1/32	6-1/2	11-1/8	3	DR11102	DR21102
1-1/16	6-5/8	11-1/4	3	DR11104	DR21104
1-3/32	6-7/8	12-1/2	4	DR11106	DR21106
1-1/8	7-1/8	12-3/4	4	DR11108	DR21108
1-5/32	7-1/4	12-7/8	4	DR11110	DR21110
1-3/16	7-3/8	13"	4	DR11112	DR21112
1-7/32	7-1/2	13-1/8	4	DR11114	DR21114
1-1/4	7-5/8	13-1/2	4	DR11116	DR21116
1-9/32	8-1/2	14-1/8	4	DR11118	DR21118
1-5/16	8-5/8	14-1/4	4	DR11120	DR21120
1-11/32	8-3/4	14-3/8	4	DR11122	DR21122
1-3/8	8-7/8	14-1/2	4	DR11124	DR21124

Size (in.)	Flute Length(in.)	OAL (in.)	Taper Shank	3-Flute Order No.	4-Flute Order No.
1-13/16	10-1/8	17-1/8	5	DR11152	DR21152
1-27/32	10-1/8	17-1/8	5	DR11154	DR21154
1-7/8	10-3/8	17-3/8	5	DR11156	DR21156
1-29/32	10-3/8	17-3/8	5	DR11158	DR21158
1-15/16	10-3/8	17-3/8	5	DR11160	DR21160
1-31/32	10-3/8	17-3/8	5	DR11162	DR21162
2"	10-3/8	17-3/8	5	DR11200	DR21200
2-1/32	10-3/8	17-3/8	5	DR11202	DR21202
2-1/16	10-1/4	17-3/8	5	DR11204	DR21204
2-1/8	10-1/4	17-3/8	5	DR11208	DR21208
2-3/16	10-1/4	17-3/8	5	DR11212	DR21212
2-1/4	10-3/8	17-3/8	5	DR11216	DR21216
2-5/16	10-3/8	17-3/8	5	DR11220	DR21220
2-3/8	10-3/8	17-3/8	5	DR11224	DR21224
2-7/16	11-1/4	18-3/4	5	DR11228	DR21228
2-1/2	11-1/4	18-3/4	5	DR11232	DR21232
2-9/16	11-7/8	19-1/2	5	DR11236	DR21236
2-5/8	11-7/8	19-1/2	5	DR11240	DR21240
2-11/16	12-3/4	20-3/8	5	DR11244	DR21244
2-3/4	12-3/4	20-3/8	5	DR11248	DR21248
2-13/16	13-3/8	21-1/8	5	DR11252	DR21252
2-7/8	13-3/8	21-1/8	5	DR11256	DR21256
2-15/16	14"	21-3/4	5	DR11260	DR21260
3"	14"	21-3/4	5	DR11300	DR21300

Taper Shank Drills

- High Speed Steel and Cobalt
- 118° point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard:ANSI B94.11M

Size (in.)	Flute length(in.)	OAL (in.)	Taper Shank	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
1/8	1-7/8	5-1/8	1	DP011008	DP041008	DP001008	DP051008
9/64	2-1/8	5-3/8	1	DP011009	DP041009	DP001009	DP051009
5/32	2-1/8	5-3/8	1	DP011010	DP041010	DP001010	DP051010
11/64	2-1/2	5-3/4	1	DP011011	DP041011	DP001011	DP051011
3/16	2-1/2	5-3/4	1	DP011012	DP041012	DP001012	DP051012
13/64	2-3/4	6"	1	DP011013	DP041013	DP001013	DP051013
7/32	2-3/4	6"	1	DP011014	DP041014	DP001014	DP051014
15/64	2-7/8	6-1/8	1	DP011015	DP041015	DP001015	DP051015
1/4	2-7/8	6-1/8	1	DP011016	DP041016	DP001016	DP051016
1/4	3"	7-1/8	2	DP012016	DP042016	DP002016	DP052016
17/64	3"	6-1/4	1	DP011017	DP041017	DP001017	DP051017
9/32	3"	6-1/4	1	DP011018	DP041018	DP001018	DP051018
19/64	3-1/8	6-3/8	1	DP011019	DP041019	DP001019	DP051019
5/16	3-1/8	6-3/8	1	DP011020	DP041020	DP001020	DP051020
21/64	3-1/4	6-1/2	1	DP011021	DP041021	DP001021	DP051021
11/32	3-1/4	6-1/2	1	DP011022	DP041022	DP001022	DP051022
23/64	3-1/2	6-3/4	1	DP011023	DP041023	DP001023	DP051023
3/8	3-1/2	6-3/4	1	DP011024	DP041024	DP001024	DP051024
3/8	3-1/2	7-3/8	2+	DP012024	DP042024	DP002024	DP052024
25/64	3-1/2	6-3/4	1	DP011025	DP041025	DP001025	DP051025
25/64	3-5/8	7-1/2	2+	DP012025	DP042025	DP002025	DP052025
13/32	3-5/8	7"	1	DP011026	DP041026	DP001026	DP051026

Size (in.)	Flute length(in.)	OAL (in.)	Taper Shank	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
13/32	3-5/8	7-1/2	2	DP012026	DP042026	DP002026	DP052026
27/64	3-7/8	7-1/4	1	DP011027	DP041027	DP001027	DP051027
27/64	3-7/8	7-3/4	2+	DP012027	DP042027	DP002027	DP052027
7/16	3-7/8	7-1/4	1	DP011028	DP041028	DP001028	DP051028
7/16	3-7/8	7-3/4	2+	DP012028	DP042028	DP002028	DP052028
29/64	4-1/8	7-1/2	1	DP011029	DP041029	DP001029	DP051029
29/64	4-1/8	8"	2+	DP012029	DP042029	DP002029	DP052029
15/32	4-1/8	7-1/2	1	DP011030	DP041030	DP001030	DP051030
15/32	4-1/8	8"	2+	DP012030	DP042030	DP002030	DP052030
31/64	4-3/8	8-1/4	2	DP011031	DP041031	DP001031	DP051031
31/64	4-3/8	7-3/4	1+	DP012031	DP042031	DP002031	DP052031
1/2	4-3/8	8-1/4	2	DP011032	DP041032	DP001032	DP051032
1/2	4-3/8	7-3/4	1+	DP012032	DP042032	DP002032	DP052032
33/64	4-5/8	8-1/2	2	DP011033	DP041033	DP001033	DP051033
33/64	4-5/8	8"	1+	DP012033	DP042033	DP002033	DP052033
17/32	4-5/8	8-1/2	2	DP011034	DP041034	DP001034	DP051034
17/32	4-5/8	8"	1+	DP012034	DP042034	DP002034	DP052034
35/64	4-7/8	8-3/4	2	DP011035	DP041035	DP001035	DP051035
35/64	4-7/8	8-1/4	1+	DP012035	DP042035	DP002035	DP052035
9/16	4-7/8	8-3/4	2	DP011036	DP041036	DP001036	DP051036
9/16	4-7/8	8-1/4	1+	DP012036	DP042036	DP002036	DP052036
37/64	4-7/8	8-3/4	2	DP011037	DP041037	DP001037	DP051037
37/64	4-7/8	8-1/4	1+	DP012037	DP042037	DP002037	DP052037
19/32	4-7/8	8-3/4	2	DP012038	DP042038	DP002038	DP052038
39/64	4-7/8	8-3/4	2	DP012039	DP042039	DP002039	DP052039
5/8	4-7/8	8-3/4	2	DP012040	DP042040	DP002040	DP052040
41/64	5-1/8	9"	2	DP012041	DP042041	DP002041	DP052041
41/64	5-1/8	9-3/4	3+	DP013041	DP043041	DP003041	DP053041
21/32	5-1/8	9"	2	DP012042	DP042042	DP002042	DP052042
21/32	5-1/8	9-3/4	3+	DP013042	DP043042	DP003042	DP053042
43/64	5-3/8	9-1/4	2	DP012043	DP042043	DP002043	DP052043
43/64	5-3/8	10"	3+	DP013043	DP043043	DP003043	DP053043
11/16	5-3/8	9-1/4	2	DP012044	DP042044	DP002044	DP052044
11/16	5-3/8	10"	3+	DP013044	DP043044	DP003044	DP053044
45/64	5-5/8	9-1/2	2	DP012045	DP042045	DP002045	DP052045
45/64	5-5/8	10-1/4	3+	DP013045	DP043045	DP003045	DP053045
23/32	5-5/8	9-1/2	2	DP012046	DP042046	DP002046	DP052046
23/32	5-5/8	10-1/4	3+	DP013046	DP043046	DP003046	DP053046
47/64	5-7/8	9-3/4	2	DP012047	DP042047	DP002047	DP052047
47/64	5-7/8	10-1/2	3+	DP013047	DP043047	DP003047	DP053047
3/4	5-7/8	9-3/4	2	DP012048	DP042048	DP002048	DP052048
3/4	5-7/8	10-1/2	3+	DP013048	DP043048	DP003048	DP053048
49/64	6"	9-7/8	2	DP012049	DP042049	DP002049	DP052049
49/64	6"	10-5/8	3+	DP013049	DP043049	DP003049	DP053049
25/32	6"	9-7/8	2	DP012050	DP042050	DP002050	DP052050
25/32	6"	10-5/8	3+	DP013050	DP043050	DP003050	DP053050
51/64	6-1/8	10-3/4	3	DP013051	DP043051	DP003051	DP053051
51/64	6-1/8	10"	2+	DP012051	DP042051	DP002051	DP052051
13/16	6-1/8	10-3/4	3	DP013052	DP043052	DP003052	DP053052
13/16	6-1/8	10"	2+	DP012052	DP042052	DP002052	DP052052
53/64	6-1/8	10-3/4	3	DP013053	DP043053	DP003053	DP053053
53/64	6-1/8	10"	2+	DP012053	DP042053	DP002053	DP052053
27/32	6-1/8	10-3/4	3	DP013054	DP043054	DP003054	DP053054
27/32	6-1/8	10"	2+	DP012054	DP042054	DP002054	DP052054
55/64	6-1/8	10-3/4	3	DP013055	DP043055	DP003055	DP053055
55/64	6-1/8	10"	2+	DP012055	DP042055	DP002055	DP052055
7/8	6-1/8	10-3/4	3	DP013056	DP043056	DP003056	DP053056
7/8	6-1/8	10"	2+	DP012056	DP042056	DP002056	DP052056
57/64	6-1/8	10-3/4	3	DP013057	DP043057	DP003057	DP053057
57/64	6-1/8	10	2+	DP012057	DP042057	DP002057	DP052057
29/32	6-1/8	10-3/4	3	DP013058	DP043058	DP003058	DP053058
29/32	6-1/8	10	2+	DP012058	DP042058	DP002058	DP052058
59/64	6-1/8	10-3/4	3	DP013059	DP043059	DP003059	DP053059

Taper Shank Drills

- High Speed Steel and Cobalt
- 118° point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard:ANSI B94.11M

Size (in.)	Flute length(in.)	OAL (in.)	Taper Shank	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
15/16	6-1/8	10-3/4	3	DP013060	DP043060	DP003060	DP053060
61/64	6-3/8	11"	3	DP013061	DP043061	DP003061	DP053061
31/32	6-3/8	11"	3	DP013062	DP043062	DP003062	DP053062
63/64	6-3/8	11"	3	DP013063	DP043063	DP003063	DP053063
1"	6-3/8	11"	3	DP013100	DP043100	DP003100	DP053100
1"	6-3/8	12"	4+	DP014100	DP044100	DP004100	DP054100
1-1/64	6-1/2	11-1/8	3	DP013101	DP043101	DP003101	DP053101
1-1/64	6-1/2	12-1/8	4+	DP014101	DP044101	DP004101	DP054101
1-1/32	6-1/2	11-1/8	3	DP014102	DP044102	DP004102	DP054102
1-1/32	6-1/2	12-1/8	4+	DP014102	DP044102	DP004102	DP054102
1-3/64	6-5/8	11-1/4	3	DP014103	DP044103	DP004103	DP054103
1-3/64	6-5/8	12-1/4	4+	DP014103	DP044103	DP004103	DP054103
1-1/16	6-5/8	11-1/4	3	DP014104	DP044104	DP004104	DP054104
1-1/16	6-5/8	12-1/4	4+	DP014104	DP044104	DP004104	DP054104
1-5/64	6-7/8	12-1/2	4+	DP014105	DP044105	DP004105	DP054105
1-5/64	6-7/8	11-1/2	3+	DP013105	DP043105	DP003105	DP053105
1-3/32	6-7/8	12-1/2	4	DP014106	DP044106	DP004106	DP054106
1-3/32	6-7/8	11-1/2	3+	DP013106	DP043106	DP003106	DP053106
1-7/64	7-1/8	12-3/4	4	DP014107	DP044107	DP004107	DP054107
1-7/64	7-1/8	11-3/4	3+	DP013107	DP043107	DP003107	DP053107
1-1/8	7-1/8	12-3/4	4	DP014108	DP044108	DP004108	DP054108
1-1/8	7-1/8	11-3/4	3+	DP013108	DP043108	DP003108	DP053108
1-9/64	7-1/4	12-7/8	4	DP014109	DP044109	DP004109	DP054109
1-9/64	7-1/4	11-7/8	3+	DP013109	DP043109	DP003109	DP053109
1-5/32	7-1/4	12-7/8	4	DP014110	DP044110	DP004110	DP054110
1-5/32	7-1/4	11-7/8	3+	DP013110	DP043110	DP003110	DP053110
1-11/64	7-3/8	13"	4	DP014111	DP044111	DP004111	DP054111
1-11/64	7-3/8	12"	3+	DP013111	DP043111	DP003111	DP053111
1-3/16	7-3/8	13"	4	DP014112	DP044112	DP004112	DP054112
1-3/16'	7-3/8	12"	3+	DP013112	DP043112	DP003112	DP053112
1-13/64	7-1/2	13-1/8	4	DP014113	DP044113	DP004113	DP054113
1-13/64	7-1/2	12-1/8	3+	DP013113	DP043113	DP003113	DP053113
1-7/32	7-1/2	13-1/8	4	DP014114	DP044114	DP004114	DP054114
1-7/32	7-1/2	12-1/8	3+	DP013114	DP043114	DP003114	DP053114
1-15/64	7-7/8	13-1/2	4	DP014115	DP044115	DP004115	DP054115
1-15/64	7-7/8	12-1/2	3+	DP013115	DP043115	DP003115	DP053115
1-1/4	7-7/8	13-1/2	4	DP014116	DP044116	DP004116	DP054116
1-1/4	7-7/8	12-1/2	3+	DP013116	DP043116	DP003116	DP053116
1-17/64	8-1/2	14-1/8	4	DP014117	DP044117	DP004117	DP054117
1-9/32	8-1/2	14-1/8	4	DP014118	DP044118	DP004118	DP054118
1-19/64	8-5/8	14-1/4	4	DP014119	DP044119	DP004119	DP054119
1-5/16	8-5/8	14-1/4	4	DP014120	DP044120	DP004120	DP054120
1-5/16	8-5/8	13-1/4	3+	DP013120	DP043120	DP003120	DP053120
1-21/64	8-3/4	14-3/8	4	DP014121	DP044121	DP004121	DP054121
1-11/32	8-3/4	14-3/8	4	DP014122	DP044122	DP004122	DP054122
1-23/64	8-7/8	14-1/2	4	DP014123	DP044123	DP004123	DP054123
1-3/8	8-7/8	14-1/2	4	DP014124	DP044124	DP004124	DP054124
1-3/8	8-7/8	13-1/2	3+	DP013124	DP043124	DP003124	DP053124
1-25/64	9"	14-5/8	4	DP014125	DP044125	DP004125	DP054125
1-13/32	9"	14-5/8	4	DP014126	DP044126	DP004126	DP054126
1-27/64	9-1/8	14-3/4	4	DP014127	DP044127	DP004127	DP054127
1-7/16	9-1/8	14-3/4	4	DP014128	DP044128	DP004128	DP054128
1-7/16	9-1/8	13-7/8	3+	DP013128	DP043128	DP003128	DP053128
1-29/64	9-1/4	14-7/8	4	DP014129	DP044129	DP004129	DP054129
1-15/32	9-1/4	14-7/8	4	DP014130	DP044130	DP004130	DP054130

Size (in.)	Flute length(in.)	OAL (in.)	Taper Shank	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
1-31/64	9-3/8	15"	4	DP014131	DP044131	DP004131	DP054131
1-1/2	9-3/8	15"	4	DP014132	DP044132	DP004132	DP054132
1-1/2	9-3/8	14"	3+	DP013132	DP043132	DP003132	DP053132
1-33/64	9-3/8	16-3/8	5	DP015133	DP045133	DP005133	DP055133
1-33/64	9-3/8	15"	4+	DP014133	DP044133	DP004133	DP054133
1-17/32	9-3/8	16-3/8	5	DP015134	DP045134	DP005134	DP055134
1-17/32	9-3/8	15"	4+	DP014134	DP044134	DP004134	DP054134
1-35/64	9-5/8	16-5/8	5	DP015135	DP045135	DP005135	DP055135
1-35/64	9-5/8	15-1/4	4+	DP014135	DP044135	DP004135	DP054135
1-9/16	9-5/8	16-5/8	5	DP015136	DP045136	DP005136	DP055136
1-9/16	9-5/8	15-1/4	4+	DP014136	DP044136	DP004136	DP054136
1-37/64	9-7/8	16-7/8	5	DP015137	DP045137	DP005137	DP055137
1-37/64	9-7/8	15-1/2	4+	DP014137	DP044137	DP004137	DP054137
1-19/32	9-7/8	16-7/8	5	DP015138	DP045138	DP005138	DP055138
1-19/32	9-7/8	15-1/2	4+	DP014138	DP044138	DP004138	DP054138
1-39/64	10"	15-5/8	4+	DP014139	DP044139	DP004139	DP054139
1-39/64	10"	17"	5	DP015139	DP045139	DP005139	DP055139
1-5/8	10"	17"	5	DP015140	DP045140	DP005140	DP055140
1-5/8	10"	15-5/8	4+	DP014140	DP044140	DP004140	DP054140
1-41/64	10-1/8	17-1/8	5	DP015141	DP045141	DP005141	DP055141
1-41/64	10-1/8	15-3/4	4+	DP014141	DP044141	DP004141	DP054141
1-21/32	10-1/8	17-1/8	5	DP015142	DP045142	DP005142	DP055142
1-21/32	10-1/8	15-3/4	4+	DP014142	DP044142	DP004142	DP054142
1-43/64	10-1/8	17-1/8	5	DP015143	DP045143	DP005143	DP055143
1-43/64	10-1/8	15-3/4	4+	DP014143	DP044143	DP004143	DP054143
1-11/16	10-1/8	17-1/8	5	DP015144	DP045144	DP005144	DP055144
1-11/16	10-1/8	15-3/4	4+	DP014144	DP044144	DP004144	DP054144
1-45/64	10-1/8	17-1/8	5	DP015145	DP045145	DP005145	DP055145
1-45/64	10-1/8	15-3/4	4+	DP014145	DP044145	DP004145	DP054145
1-23/32	10-1/8	17-1/8	5	DP015146	DP045146	DP005146	DP055146
1-23/32	10-1/8	15-3/4	4+	DP014146	DP044146	DP004146	DP054146
1-47/64	10-1/8	17-1/8	5	DP015147	DP045147	DP005147	DP055147
1-47/64	10-3/8	16-1/4	4+	DP014147	DP044147	DP004147	DP054147
1-3/4	10-1/8	17-1/8	5	DP015148	DP045148	DP005148	DP055148
1-3/4	10-3/8	16-1/4	4+	DP014148	DP044148	DP004148	DP054148
1-25/32	10-1/8	17-1/8'	5	DP015150	DP045150	DP005150	DP055150
1-25/32	10-3/8	16-1/4	4+	DP014150	DP044150	DP004150	DP054150
1-51/64	10-3/8	16-1/4	4+	DP014151	DP044151	DP004151	DP054151
1-51/64	10-1/8	17-1/8	5	DP015151	DP045151	DP005151	DP055151
1-13/16	10-1/8	17-1/8	5	DP015152	DP045152	DP005152	DP055152
1-13/16	10-3/8	16-1/4	4+	DP014152	DP044152	DP004152	DP054152
1-53/64	10-3/8	16-1/4	4+	DP014153	DP044153	DP004153	DP054153
1-53/64	10-1/8	17-1/8	5	DP015153	DP045153	DP005153	DP055153
1-27/32	10-3/8	17-1/8	5	DP015154	DP045154	DP005154	DP055154
1-27/32	10-3/8	16-1/4	4+	DP014154	DP044154	DP004154	DP054154
1-55/64	10-3/8	16-1/2	4+	DP014155	DP044155	DP004155	DP054155
1-55/64	10-3/8	17-3/8	5	DP015155	DP045155	DP005155	DP055155
1-7/8	10-3/8	17-3/8	5	DP015156	DP045156	DP005156	DP055156
1-7/8	10-1/2	16-1/2	4+	DP014156	DP044156	DP004156	DP054156
1-57/64	10-1/2	16-1/2	4+	DP014157	DP044157	DP004157	DP054157
1-57/64	10-3/8	17-3/8	5	DP015157	DP045157	DP005157	DP055157
1-29/32	10-3/8	17-3/8	5	DP015158	DP045158	DP005158	DP055158
1-29/32	10-1/2	16-1/2	4+	DP014158	DP044158	DP004158	DP054158
1-59/64	10-1/2	16-1/2	4+	DP014159	DP044159	DP004159	DP054159
1-59/64	10-3/8	17-3/8	5	DP015159	DP045159	DP005159	DP055159
1-15/16	10-3/8	17-3/8	5	DP015160	DP045160	DP005160	DP055160
1-15/16	10-5/8	16-5/8	4+	DP014160	DP044160	DP004160	DP054160
1-61/64	10-5/8	16-5/8	4+	DP014161	DP044161	DP004161	DP054161
1-61/64	10-3/8	17-3/8	5	DP015161	DP045161	DP005161	DP055161
1-31/32	10-3/8	17-3/8	5	DP015162	DP045162	DP005162	DP055162
1-31/32	10-3/8	16-5/8	4+	DP014162	DP044162	DP004162	DP054162
1-63/64	10-5/8	16-5/8	4+	DP014163	DP044163	DP004163	DP054163
1-63/64	10-3/8	17-3/8	5	DP015163	DP045163	DP005163	DP055163
2"	10-3/8	17-3/8	5	DP015200	DP045200	DP005200	DP055200

Taper Shank Drills

- High Speed Steel and Cobalt
- 118° point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard:ANSI B94.11M

Size (in.)	Flute length(in.)	OAL (in.)	Taper Shank	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
2"	10-5/8	16-5/8	4+	DP014200	DP044200	DP004200	DP054200
2-1/32	10-3/8	17-3/8	5	DP015202	DP045202	DP005202	DP055202
2-1/16	10-1/4	17-3/8	5	DP015204	DP045204	DP005204	DP055204
2-1/16	10-1/4	16-5/8	4+	DP014204	DP044204	DP004204	DP054204
2-3/32	10-1/4	17-3/8	5	DP015206	DP045206	DP005206	DP055206
2-3/32	10-1/4	16-1/4	4+	DP014206	DP044206	DP004206	DP054206
2-1/8	10-1/4	17-3/8	5	DP015208	DP045208	DP005208	DP055208
2-1/8	10-1/4	16-5/8	4+	DP014208	DP044208	DP004208	DP054208
2-5/32	9"	16-5/8	4+	DP014210	DP044210	DP004210	DP054210
2-5/32	10-1/4	17-3/8	5	DP015210	DP045210	DP005210	DP055210
2-3/16	10-1/4	17-3/8	5	DP015212	DP045212	DP005212	DP055212
2-3/16	10-1/4	16-5/8	4+	DP014212	DP044212	DP004212	DP054212
2-7/32	10-1/8	17-3/8	5	DP015214	DP045214	DP005214	DP055214
2-15/64	10-1/8	17-3/8	5	DP015215	DP045215	DP005215	DP055215
2-1/4	10-1/8	17-3/8	5	DP015216	DP045216	DP005216	DP055216
2-1/4	10-1/8	16-5/8	4+	DP014216	DP044216	DP004216	DP054216
2-17/64	10-1/8	17-3/8	5	DP015217	DP045217	DP005217	DP055217
2-9/32	10-1/8	17-3/8	5	DP015218	DP045218	DP005218	DP055218
2-5/16	10-1/8	17-3/8	5	DP015220	DP045220	DP005220	DP055220
2-5/16	10-1/8	16-5/8	4+	DP014220	DP044220	DP004220	DP054220
2-21/64	10-1/8	17-3/8	5	DP015221	DP045221	DP005221	DP055221
2-11/32	10-1/8	16-5/8	4+	DP014222	DP044222	DP004222	DP054222
2-11/32	10-1/8	17-3/8	5	DP015222	DP045222	DP005222	DP055222
2-3/8	10-1/8	17-3/8	5	DP015224	DP045224	DP005224	DP055224
2-3/8	10-1/8	16-5/8	4+	DP014224	DP044224	DP004224	DP054224
2-13/32	11-1/4	18-3/4	5	DP015226	DP045226	DP005226	DP055226
2-27/64	11-1/4	18-3/4	5	DP015227	DP045227	DP005227	DP055227
2-7/16	11-1/4	18-3/4	5	DP015228	DP045228	DP005228	DP055228
2-7/16	10-1/4	18-1/4	4+	DP014228	DP044228	DP004228	DP054228
2-15/32	11-1/4	18-3/4	5	DP015230	DP045230	DP005230	DP055230
2-1/2	11-1/4	18-3/4	5	DP015232	DP045232	DP005232	DP055232
2-1/2	11-1/4	17-3/8	4+	DP014232	DP044232	DP004232	DP054232
2-17/32	11-7/8	19-1/2	5	DP015234	DP045234	DP005234	DP055234
2-9/16	11-1/2	17-1/2	4+	DP014236	DP044236	DP004236	DP054236
2-9/16	11-7/8	19-1/2	5	DP015236	DP045236	DP005236	DP055236
2-37/64	11-7/8	19-1/2	5	DP015237	DP045237	DP005237	DP055237
2-19/32	11-7/8	19-1/2	5	DP015238	DP045238	DP005238	DP055238
2-5/8	11-7/8	18"	4+	DP014240	DP044240	DP004240	DP054240
2-5/8	11-7/8	19-1/2	5	DP015240	DP045240	DP005240	DP055240
2-21/32	12-3/4	20-3/8	5	DP015242	DP045242	DP005242	DP055242
2-11/16	12-1/4	18-1/2	4+	DP014244	DP044244	DP004244	DP054244
2-11/16	12-3/4	20-3/8	5	DP015244	DP045244	DP005244	DP055244
2-45/64	12-3/4	20-3/8	5	DP015245	DP045245	DP005245	DP055245
2-23/32	12-3/4	20-3/8	5	DP015246	DP045246	DP005246	DP055246
2-3/4	12-3/4	20-3/8	5	DP015248	DP045248	DP005248	DP055248
2-25/32	13-3/8	21-1/8	5	DP015250	DP045250	DP005250	DP055250
2-13/16	12-3/4	19-1/8	4+	DP014252	DP044252	DP004252	DP054252
2-13/16	13-3/8	21-1/8	5	DP015252	DP045252	DP005252	DP055252
2-27/32	13-3/8	21-1/8	5	DP015254	DP045254	DP005254	DP055254
2-7/8	13-3/8	21-1/8	5	DP015256	DP045256	DP005256	DP055256
2-57/64	13-3/8	21-1/8	5	DP015257	DP045257	DP005257	DP055257
2-15/16	14"	21-3/4	5	DP015260	DP045260	DP005260	DP055260
2-31/32	14"	21-3/4	5	DP015262	DP045262	DP005262	DP055262
3"	14"	21-3/4	5	DP015300	DP045300	DP005300	DP055300
3-1/16	14-1/12	24-1/2	6	DP016304	DP046304	DP006304	DP056304
3-1/16	14-1/8	22"	5+	DP015304	DP045304	DP005304	DP055304
3-1/8	14-5/8	24-1/2	6	DP016308	DP046308	DP006308	DP056308
3-1/8	14-1/4	22"	5+	DP015308	DP045308	DP005308	DP055308
3-3/16	14-5/8	24-1/2	6	DP016312	DP046312	DP006312	DP056312
3-3/16	14-1/4	22"	5+	DP015312	DP045312	DP005312	DP055312
3-1/4	15-1/2	25-1/2	6	DP016316	DP046316	DP006316	DP056316
3-1/4	15-1/4	23"	5+	DP015316	DP045316	DP005316	DP055316
3-5/16	15-1/2	25-1/2	6	DP016320	DP046320	DP006320	DP056320
3-5/16	15-1/4	23"	5+	DP015320	DP045320	DP005320	DP055320
3-3/8	15-1/2	25-1/2	6	DP016324	DP046324	DP006324	DP056324
3-3/8	15-1/4	23"	5+	DP015324	DP045324	DP005324	DP055324
3-7/16	15-1/2	25-1/2	6	DP016328	DP046328	DP006328	DP056328
3-7/16	15-1/4	23"	5+	DP015328	DP045328	DP005328	DP055328
3-1/2	16-1/4	20-1/2	6	DP016332	DP046332	DP006332	DP056332
3-1/2	16-1/4	24"	5+	DP015332	DP045332	DP005332	DP055332
3-17/32	16-1/4	25-3/4	5+	DP015334	DP045334	DP005334	DP055334
3-5/8	16-1/4	25-7/8	5+	DP015340	DP045340	DP005340	DP055340
3-3/4	16-1/2	29"	6	DP016348	DP046348	DP006348	DP056348
3-3/4	16-1/4	25-7/8	5+	DP015348	DP045348	DP005348	DP055348
3-7/8	16-1/2	29"	6	DP016356	DP046356	DP006356	DP056356
4"	16-1/2	29"	6	DP016400	DP046400	DP006400	DP056400
4"	16-1/2	29"	5+	DP015400	DP045400	DP005400	DP055400

+ Indicates small or larger shank than standard

Metric Taper Shank Drills

- High Speed Steel and Cobalt
- 118° point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard:ANSI B94.11M

Size (mm)	Taper Shank	Dec. Equiv.	Flute Length(in.)	OAL (in.)	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
3.0	1MT	0.1181	1-7/8	5-1/8	DP11300	DP14300	DP10300	DP15300
3.2	1MT	0.126	2-1/8	5-3/8	DP11320	DP14320	DP10320	DP15320
3.5	1MT	0.1378	2-1/8	5-3/8	DP11350	DP14350	DP10350	DP15350
3.8	1MT	0.1496	2-1/8	5-3/8	DP11380	DP14380	DP10380	DP15380
4.0	1MT	0.1575	2-1/2	5-3/4	DP11400	DP14400	DP10400	DP15400
4.2	1MT	0.1654	2-1/2	5-3/4	DP11420	DP14420	DP10420	DP15420
4.5	1MT	0.1772	2-1/2	5-3/4	DP11450	DP14450	DP10450	DP15450
4.8	1MT	0.189	2-3/4	6"	DP11480	DP14480	DP10480	DP15480
5.0	1MT	0.1968	2-3/4	6"	DP11500	DP14500	DP10500	DP15500
5.2	1MT	0.2047	2-3/4	6"	DP11520	DP14520	DP10520	DP15520
5.5	1MT	0.2165	2-3/4	6"	DP11550	DP14550	DP10550	DP15550
5.8	1MT	0.2283	2-7/8	6-1/8	DP11580	DP14580	DP10580	DP15580
6.0	1MT	0.2362	2-7/8	6-1/8	DP11600	DP14600	DP10600	DP15600
6.2	1MT	0.2441	2-7/8	6-1/8	DP11620	DP14620	DP10620	DP15620
6.5	1MT	0.2559	3"	6-1/4	DP11650	DP14650	DP10650	DP15650
6.8	1MT	0.2677	3"	6-1/4	DP11680	DP14680	DP10680	DP15680
7.0	1MT	0.2756	3"	6-1/4	DP11700	DP14700	DP10700	DP15700
7.2	1MT	0.2835	3-1/8	6-3/8	DP11720	DP14720	DP10720	DP15720
7.5	1MT	0.2953	3-1/8	6-3/8	DP11750	DP14750	DP10750	DP15750
7.8	1MT	0.3071	3-1/8	6-3/8	DP11780	DP14780	DP10780	DP15780
8.0	1MT	0.315	3-1/4	6-1/2	DP11800	DP14800	DP10800	DP15800

Metric Taper Shank Drills

- High Speed Steel and Cobalt
- 118° point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard:ANSI B94.11M

Size (mm)	Taper Shank	Dec. Equiv.	Flute Length(in.)	OAL (in.)	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
8.2	1MT	0.3228	3-1/4	6-1/2	DP11820	DP14820	DP10820	DP15820
8.5	1MT	0.3346	3-1/4	6-1/2	DP11850	DP14850	DP10850	DP15850
8.8	1MT	0.3465	3-1/2	6-3/4	DP11880	DP14880	DP10880	DP15880
9.0	1MT	0.3543	3-1/2	6-3/4	DP11900	DP14900	DP10900	DP15900
9.2	1MT	0.3622	3-1/2	6-3/4	DP11920	DP14920	DP10920	DP15920
9.5	1MT	0.374	3-1/2	6-3/4	DP11950	DP14950	DP10950	DP15950
9.8	1MT	0.3858	3-5/8	7"	DP11980	DP14980	DP10980	DP15980
10.0	1MT	0.3937	3-5/8	7"	DP111000	DP141000	DP101000	DP151000
10.2	1MT	0.4016	3-5/8	7"	DP111020	DP141020	DP101020	DP151020
10.5	1MT	0.4134	3-7/8	7-1/4	DP111050	DP141050	DP101050	DP151050
10.8	1MT	0.4252	3-7/8	7-1/4	DP111080	DP141080	DP101080	DP151080
11.0	1MT	0.4331	3-7/8	7-1/4	DP111100	DP141100	DP101100	DP151100
11.2	1MT	0.4409	4-1/8	7-1/2	DP111120	DP141120	DP101120	DP151120
11.5	1MT	0.4528	4-1/8	7-1/2	DP111150	DP141150	DP101150	DP151150
11.8	1MT	0.4646	4-1/8	7-1/2	DP111180	DP141180	DP101180	DP151180
12.0	2MT	0.4724	4-3/8	8-1/4	DP111200	DP141200	DP101200	DP151200
12.2	2MT	0.4803	4-3/8	8-1/4	DP111220	DP141220	DP101220	DP151220
12.5	2MT	0.4921	4-3/8	8-1/4	DP111250	DP141250	DP101250	DP151250
12.8	2MT	0.5039	4-5/8	8-1/2	DP111280	DP141280	DP101280	DP151280
13.0	2MT	0.5118	4-5/8	8-1/2	DP111300	DP141300	DP101300	DP151300
13.2	2MT	0.5197	4-5/8	8-1/2	DP111320	DP141320	DP101320	DP151320
13.5	2MT	0.5315	4-5/8	8-1/2	DP111350	DP141350	DP101350	DP151350
13.8	2MT	0.5433	4-7/8	8-3/4	DP111380	DP141380	DP101380	DP151380
14.0	2MT	0.5512	4-7/8	8-3/4	DP111400	DP141400	DP101400	DP151400
14.3	2MT	0.561	4-7/8	8-3/4	DP111425	DP141425	DP101425	DP151425
14.5	2MT	0.5709	4-7/8	8-3/4	DP111450	DP141450	DP101450	DP151450
14.8	2MT	0.5807	4-7/8	8-3/4	DP111475	DP141475	DP101475	DP151475
15.0	2MT	0.5906	4-7/8	8-3/4	DP111500	DP141500	DP101500	DP151500
15.3	2MT	0.6004	4-7/8	8-3/4	DP111525	DP141525	DP101525	DP151525
15.5	2MT	0.6102	4-7/8	8-3/4	DP111550	DP141550	DP101550	DP151550
15.8	2MT	0.6201	4-7/8	8-3/4	DP111575	DP141575	DP101575	DP151575
16.0	2MT	0.6299	5-1/8	9"	DP111600	DP141600	DP101600	DP151600
16.3	2MT	0.6398	5-1/8	9"	DP111625	DP141625	DP101625	DP151625
16.5	2MT	0.6496	5-1/8	9"	DP111650	DP141650	DP101650	DP151650
16.8	2MT	0.6594	5-3/8	9-1/4	DP111675	DP141675	DP101675	DP151675
17.0	2MT	0.6693	5-3/8	9-1/4	DP111700	DP141700	DP101700	DP151700
17.3	2MT	0.6791	5-3/8	9-1/4	DP111725	DP141725	DP101725	DP151725
17.5	2MT	0.689	5-5/8	9-1/2	DP111750	DP141750	DP101750	DP151750
18.0	2MT	0.7087	5-5/8	9-1/2	DP111800	DP141800	DP101800	DP151800
18.5	2MT	0.7283	5-7/8	9-3/4	DP111850	DP141850	DP101850	DP151850
19.0	2MT	0.748	5-7/8	9-3/4	DP111900	DP141900	DP101900	DP151900
19.5	2MT	0.7677	6"	9-7/8	DP111950	DP141950	DP101950	DP151950
20.0	3MT	0.7874	6-1/8	10-3/4	DP112000	DP142000	DP102000	DP152000
20.5	3MT	0.8071	6-1/8	10-3/4	DP112050	DP142050	DP102050	DP152050
21.0	3MT	0.8268	6-1/8	10-3/4	DP112100	DP142100	DP102100	DP152100
21.5	3MT	0.8465	6-1/8	10-3/4	DP112150	DP142150	DP102150	DP152150
22.0	3MT	0.8661	6-1/8	10-3/4	DP112200	DP142200	DP102200	DP152200
22.5	3MT	0.8858	6-1/8	10-3/4	DP112250	DP142250	DP102250	DP152250
23.0	3MT	0.9055	6-1/8	10-3/4	DP112300	DP142300	DP102300	DP152300
23.5	3MT	0.9252	6-1/8	10-3/4	DP112350	DP142350	DP102350	DP152350
24.0	3MT	0.9449	6-3/8	11"	DP112400	DP142400	DP102400	DP152400
24.5	3MT	0.9646	6-3/8	11"	DP112450	DP142450	DP102450	DP152450
25.0	3MT	0.9843	6-3/8	11"	DP112500	DP142500	DP102500	DP152500
25.5	3MT	1.0039	6-1/2	11-1/8	DP112550	DP142550	DP102550	DP152550
26.0	3MT	1.0236	6-1/2	11-1/8	DP112600	DP142600	DP102600	DP152600
26.5	3MT	1.0433	6-5/8	11-1/4	DP112650	DP142650	DP102650	DP152650

Size (mm)	Taper Shank	Dec. Equiv.	Flute Length(in.)	OAL (in.)	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
27.0	3MT	1.063	6-5/8	11-1/4	DP112700	DP142700	DP102700	DP152700
27.5	4MT	1.0827	6-7/8	12-1/2	DP112750	DP142750	DP102750	DP152750
28.0	4MT	1.1024	7-1/8	12-3/4	DP112800	DP142800	DP102800	DP152800
28.5	4MT	1.122	7-1/8	12-3/4	DP112850	DP142850	DP102850	DP152850
29.0	4MT	1.1417	7-1/4	12-7/8	DP112900	DP142900	DP102900	DP152900
29.5	4MT	1.1614	7-3/8	13"	DP112950	DP142950	DP102950	DP152950
30.0	4MT	1.1811	7-3/8	13"	DP113000	DP143000	DP103000	DP153000
30.5	4MT	1.2008	7-1/2	13-1/8	DP113050	DP143050	DP103050	DP153050
31.0	4MT	1.2205	7-7/8	13-1/2	DP113100	DP143100	DP103100	DP153100
31.5	4MT	1.2402	7-7/8	13-1/2	DP113150	DP143150	DP103150	DP153150
32.0	4MT	1.2598	8-1/2	14-1/8	DP113200	DP143200	DP103200	DP153200
32.5	4MT	1.2795	8-1/2	14-1/8	DP113250	DP143250	DP103250	DP153250
33.0	4MT	1.2992	8-5/8	14-1/4	DP113300	DP143300	DP103300	DP153300
33.5	4MT	1.3189	8-3/4	14-3/8	DP113350	DP143350	DP103350	DP153350
34.0	4MT	1.3386	8-3/4	14-3/8	DP113400	DP143400	DP103400	DP153400
34.5	4MT	1.3583	8-7/8	14-1/2	DP113450	DP143450	DP103450	DP153450
35.0	4MT	1.378	9"	14-5/8	DP113500	DP143500	DP103500	DP153500
35.5	4MT	1.3976	9"	14-5/8	DP113550	DP143550	DP103550	DP153550
36.0	4MT	1.4173	9-1/8	14-3/4	DP113600	DP143600	DP103600	DP153600
36.5	4MT	1.437	9-1/8	14-3/4	DP113650	DP143650	DP103650	DP153650
37.0	4MT	1.4567	9-1/4	14-7/8	DP113700	DP143700	DP103700	DP153700
37.5	4MT	1.4764	9-3/8	15"	DP113750	DP143750	DP103750	DP153750
38.0	4MT	1.4961	9-3/8	15"	DP113800	DP143800	DP103800	DP153800
39.0	5MT	1.5354	9-5/8	16-5/8	DP113900	DP143900	DP103900	DP153900
40.0	5MT	1.5748	9-7/8	16-7/8	DP114000	DP144000	DP104000	DP154000
41.0	5MT	1.6142	10"	17"	DP114100	DP144100	DP104100	DP154100
42.0	5MT	1.6535	10-1/8	17-1/8	DP114200	DP144200	DP104200	DP154200
43.0	5MT	1.6929	10-1/8	17-1/8	DP114300	DP144300	DP104300	DP154300
44.0	5MT	1.7323	10-1/8	17-1/8	DP114400	DP144400	DP104400	DP154400
45.0	5MT	1.7717	10-1/8	17-1/8	DP114500	DP144500	DP104500	DP154500
46.0	5MT	1.811	10-1/8	17-3/8	DP114600	DP144600	DP104600	DP154600
47.0	5MT	1.8504	10-3/8	17-3/8	DP114700	DP144700	DP104700	DP154700
48.0	5MT	1.8898	10-3/8	17-3/8	DP114800	DP144800	DP104800	DP154800
49.0	5MT	1.9291	10-3/8	17-3/8	DP114900	DP144900	DP104900	DP154900
50.0	5MT	1.9685	10-3/8	17-3/8	DP115000	DP145000	DP105000	DP155000
51.0	5MT	2.0079	10-3/8	17-3/8	DP115100	DP145100	DP105100	DP155100

DIN341 Taper Shank Drill

- High Speed Steel
- 118°point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard: DIN341

Size (mm)	Morse Taper Shank	Flute Length (mm)	OAL (mm)	Black Oxide Order No.	Black/White Order No.
5.00	1MT	74	155	DP21500	DP24500
5.20	1MT	74	155	DP21520	DP24520
5.50	1MT	80	161	DP21550	DP24550
5.80	1MT	80	161	DP21580	DP24580
6.00	1MT	80	161	DP21600	DP24600
6.20	1MT	86	167	DP21620	DP24620
6.50	1MT	86	167	DP21650	DP24650
6.80	1MT	93	174	DP21680	DP24680
7.00	1MT	93	174	DP21700	DP24700
7.20	1MT	93	174	DP21720	DP24720
7.50	1MT	93	181	DP21750	DP24750
7.80	1MT	100	181	DP21780	DP24780
8.00	1MT	100	181	DP21800	DP24800
8.20	1MT	100	181	DP21820	DP24820
8.50	1MT	100	181	DP21850	DP24850
8.80	1MT	107	188	DP21880	DP24880

Size (mm)	Morse Taper Shank	Flute Length (mm)	OAL (mm)	Black Oxide Order No.	Black/White Order No.
9.00	1MT	107	188	DP21900	DP24900
9.20	1MT	107	188	DP21920	DP24920
9.50	1MT	107	188	DP21950	DP24950
9.80	1MT	116	197	DP21980	DP24980
10.00	1MT	116	197	DP211000	DP241000
10.20	1MT	116	197	DP211020	DP241020
10.50	1MT	116	197	DP211050	DP241050
10.80	1MT	125	206	DP211080	DP241080
11.00	1MT	125	206	DP211100	DP241100
11.20	1MT	125	206	DP211120	DP241120
11.50	1MT	125	206	DP211150	DP241150
11.80	1MT	125	206	DP211180	DP241180
12.00	1MT	134	215	DP211200	DP241200
12.20	1MT	134	215	DP211220	DP241220
12.50	1MT	134	215	DP211250	DP241250
12.80	1MT	134	215	DP211280	DP241280

DIN341 Taper Shank Drill

- High Speed Steel
- 118°point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard: DIN341

Size (mm)	Morse Taper Shank	Flute Length (mm)	OAL (mm)	Black Oxide Order No.	Black/White Order No.
13.00	1MT	134	215	DP211300	DP241300
13.20	1MT	134	215	DP211320	DP241320
13.50	1MT	142	223	DP211350	DP241350
13.80	1MT	142	223	DP211380	DP241380
14.00	1MT	142	223	DP211400	DP241400
14.25	2MT	147	245	DP211425	DP241425
14.50	2MT	147	245	DP211450	DP241450
14.75	2MT	147	245	DP211475	DP241475
15.00	2MT	147	245	DP211500	DP241500
15.25	2MT	153	251	DP211525	DP241525
15.50	2MT	153	251	DP211550	DP241550
15.75	2MT	153	251	DP211575	DP241575
16.00	2MT	153	251	DP211600	DP241600
16.25	2MT	159	255	DP211625	DP241625
16.50	2MT	159	255	DP211650	DP241650
16.75	2MT	159	255	DP211675	DP241675
17.00	2MT	159	255	DP211700	DP241700
17.25	2MT	165	263	DP211725	DP241725
17.50	2MT	165	263	DP211750	DP241750
17.75	2MT	165	263	DP211775	DP241775
18.00	2MT	165	263	DP211800	DP241800
18.25	2MT	171	269	DP211825	DP241825
18.50	2MT	171	269	DP211850	DP241850
18.75	2MT	171	269	DP211875	DP241875
19.00	2MT	171	269	DP211900	DP241900
19.25	2MT	177	275	DP211925	DP241925
19.50	2MT	177	275	DP211950	DP241950
19.75	2MT	177	275	DP211975	DP241975
20.00	2MT	177	275	DP212000	DP242000
20.25	2MT	184	282	DP212025	DP242025
20.50	2MT	184	282	DP212050	DP242050
20.75	2MT	184	282	DP212075	DP242075
21.00	2MT	184	282	DP212100	DP242100
21.25	2MT	191	289	DP212125	DP242125
21.50	2MT	191	289	DP212150	DP242150
21.75	2MT	191	289	DP212175	DP242175
22.00	2MT	191	289	DP212200	DP242200
22.25	2MT	191	289	DP212225	DP242225
22.50	2MT	198	296	DP212250	DP242250
22.75	2MT	198	296	DP212275	DP242275
23.00	2MT	198	296	DP212300	DP242300
23.25	3MT	198	319	DP212325	DP242325
23.50	3MT	198	319	DP212350	DP242350
23.75	3MT	206	327	DP212375	DP242375
24.00	3MT	206	327	DP212400	DP242400
24.25	3MT	206	327	DP212425	DP242425
24.50	3MT	206	327	DP212450	DP242450
24.75	3MT	206	327	DP212475	DP242475
25.00	3MT	206	327	DP212500	DP242500
25.25	3MT	214	335	DP212525	DP242525
25.50	3MT	214	335	DP212550	DP242550
25.75	3MT	214	335	DP212575	DP242575
26.00	3MT	214	335	DP212600	DP242600
26.25	3MT	214	335	DP212625	DP242625
26.50	3MT	214	335	DP212650	DP242650
26.75	3MT	222	343	DP212675	DP242675
27.00	3MT	222	343	DP212700	DP242700

Size (mm)	Morse Taper Shank	Flute Length (mm)	OAL (mm)	Black Oxide Order No.	Black/White Order No.
27.25	3MT	222	343	DP212725	DP242725
27.50	3MT	222	343	DP212750	DP242750
27.75	3MT	222	343	DP212775	DP242775
28.00	3MT	222	343	DP212800	DP242800
28.25	3MT	230	351	DP212825	DP242825
28.50	3MT	230	351	DP212850	DP242850
28.75	3MT	230	351	DP212875	DP242875
29.00	3MT	230	351	DP212900	DP242900
29.25	3MT	230	351	DP212925	DP242925
29.50	3MT	230	351	DP212950	DP242950
29.75	3MT	230	351	DP212975	DP242975
30.00	3MT	230	351	DP213000	DP243000
30.25	3MT	239	360	DP213025	DP243025
30.50	3MT	239	360	DP213050	DP243050
30.75	3MT	239	360	DP213075	DP243075
31.00	3MT	239	360	DP213100	DP243100
31.25	3MT	239	360	DP213125	DP243125
31.50	3MT	239	360	DP213150	DP243150
31.75	3MT	248	369	DP213175	DP243175
32.00	4MT	248	397	DP213200	DP243200
32.50	4MT	248	397	DP213250	DP243250
33.00	4MT	248	397	DP213300	DP243300
33.50	4MT	248	397	DP213350	DP243350
34.00	4MT	257	406	DP213400	DP243400
34.50	4MT	257	406	DP213450	DP243450
35.00	4MT	257	406	DP213500	DP243500
35.50	4MT	257	406	DP213550	DP243550
36.00	4MT	267	416	DP213600	DP243600
36.50	4MT	267	416	DP213650	DP243650
37.00	4MT	267	416	DP213700	DP243700
37.50	4MT	267	416	DP213750	DP243750
38.00	4MT	277	426	DP213800	DP243800
38.50	4MT	277	426	DP213850	DP243850
39.00	4MT	277	426	DP213900	DP243900
39.50	4MT	277	426	DP213950	DP243950
40.00	4MT	277	426	DP214000	DP244000
40.50	4MT	287	436	DP214050	DP244050
41.00	4MT	287	436	DP214100	DP244100
41.50	4MT	287	436	DP214150	DP244150
42.00	4MT	287	436	DP214200	DP244200
42.50	4MT	287	436	DP214250	DP244250
43.00	4MT	298	447	DP214300	DP244300
43.50	4MT	298	447	DP214350	DP244350
44.00	4MT	298	447	DP214400	DP244400
44.50	4MT	298	447	DP214450	DP244450
45.00	4MT	298	447	DP214500	DP244500
45.50	4MT	310	459	DP214550	DP244550
46.00	4MT	310	459	DP214600	DP244600
46.50	4MT	310	459	DP214650	DP244650
47.00	4MT	310	459	DP214700	DP244700
47.50	4MT	310	459	DP214750	DP244750
48.00	4MT	321	470	DP214800	DP244800
48.50	4MT	321	470	DP214850	DP244850
49.00	4MT	321	470	DP214900	DP244900
49.50	4MT	321	470	DP214950	DP244950
50.00	4MT	321	470	DP215000	DP245000

Taper Shank Drill

- High Speed Steel and Cobalt,Right Hand
- 118°point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard: DIN345

Size mm	Morse Taper Shank	Flute Length(mm)	OAL (mm)	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
5.00	1MT	52	133	DP310500	DP340500	DP300500	DP350500
5.25	1MT	52	133	DP310525	DP340525	DP300525	DP350525
5.50	1MT	57	138	DP310550	DP340550	DP300550	DP350550
5.75	1MT	57	138	DP310575	DP340575	DP300575	DP350575
6.00	1MT	57	138	DP310600	DP340600	DP300600	DP350600
6.25	1MT	63	144	DP310625	DP340625	DP300625	DP350625
6.50	1MT	63	144	DP310650	DP340650	DP300650	DP350650
6.75	1MT	69	150	DP310675	DP340675	DP300675	DP350675
7.00	1MT	69	150	DP310700	DP340700	DP300700	DP350700
7.25	1MT	69	150	DP310725	DP340725	DP300725	DP350725
7.50	1MT	69	150	DP310750	DP340750	DP300750	DP350750
7.75	1MT	75	156	DP310775	DP340775	DP300775	DP350775
8.00	1MT	75	156	DP310800	DP340800	DP300800	DP350800
8.25	1MT	75	156	DP310825	DP340825	DP300825	DP350825
8.50	1MT	75	156	DP310850	DP340850	DP300850	DP350850
8.75	1MT	81	162	DP310875	DP340875	DP300875	DP350875
9.00	1MT	81	162	DP310900	DP340900	DP300900	DP350900
9.25	1MT	81	162	DP310925	DP340925	DP300925	DP350925
9.50	1MT	81	162	DP310950	DP340950	DP300950	DP350950
9.75	1MT	87	168	DP310975	DP340975	DP300975	DP350975
10.00	1MT	87	168	DP311000	DP341000	DP301000	DP351000
10.25	1MT	87	168	DP311025	DP341025	DP301025	DP351025
10.50	1MT	87	168	DP311050	DP341050	DP301050	DP351050
10.75	1MT	94	175	DP311075	DP341075	DP301075	DP351075
11.00	1MT	94	175	DP311100	DP341100	DP301100	DP351100
11.25	1MT	94	175	DP311125	DP341125	DP301125	DP351125
11.50	1MT	94	175	DP311150	DP341150	DP301150	DP351150
11.75	1MT	94	175	DP311175	DP341175	DP301175	DP351175
12.00	1MT	101	182	DP311200	DP341200	DP301200	DP351200
12.25	1MT	101	182	DP311225	DP341225	DP301225	DP351225
12.50	1MT	101	182	DP311250	DP341250	DP301250	DP351250
12.75	1MT	101	182	DP311275	DP341275	DP301275	DP351275
13.00	1MT	101	182	DP311300	DP341300	DP301300	DP351300
13.25	1MT	101	182	DP311325	DP341325	DP301325	DP351325
13.50	1MT	108	189	DP311350	DP341350	DP301350	DP351350
13.75	1MT	108	189	DP311375	DP341375	DP301375	DP351375
14.00	2MT	108	189	DP311400	DP341400	DP301400	DP351400
14.25	2MT	114	212	DP311425	DP341425	DP301425	DP351425
14.50	2MT	114	212	DP311450	DP341450	DP301450	DP351450
14.75	2MT	114	212	DP311475	DP341475	DP301475	DP351475
15.00	2MT	114	212	DP311500	DP341500	DP301500	DP351500
15.25	2MT	120	218	DP311525	DP341525	DP301525	DP351525
15.50	2MT	120	218	DP311550	DP341550	DP301550	DP351550
15.75	2MT	120	218	DP311575	DP341575	DP301575	DP351575
16.00	2MT	120	218	DP311600	DP341600	DP301600	DP351600
16.25	2MT	125	223	DP311625	DP341625	DP301625	DP351625
16.50	2MT	125	223	DP311650	DP341650	DP301650	DP351650
16.75	2MT	125	223	DP311675	DP341675	DP301675	DP351675
17.00	2MT	125	223	DP311700	DP341700	DP301700	DP351700
17.25	2MT	130	228	DP311725	DP341725	DP301725	DP351725
17.50	2MT	130	228	DP311750	DP341750	DP301750	DP351750
17.75	2MT	130	228	DP311775	DP341775	DP301775	DP351775
18.00	2MT	130	228	DP311800	DP341800	DP301800	DP351800
18.25	2MT	135	233	DP311825	DP341825	DP301825	DP351825
18.50	2MT	135	233	DP311850	DP341850	DP301850	DP351850

Taper Shank Drill

- High Speed Steel and Cobalt,Right Hand
- 118°point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard: DIN345

Size mm	Morse Taper Shank	Flute Length(mm	OAL (mm)	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
18.75	2MT	135	233	DP311875	DP341875	DP301875	DP351875
19.00	2MT	135	233	DP311900	DP341900	DP301900	DP351900
19.25	2MT	140	238	DP311925	DP341925	DP301925	DP351925
19.50	2MT	140	238	DP311950	DP341950	DP301950	DP351950
19.75	2MT	140	238	DP311975	DP341975	DP301975	DP351975
20.00	2MT	140	238	DP312000	DP342000	DP302000	DP352000
20.25	2MT	145	243	DP312025	DP342025	DP302025	DP352025
20.50	2MT	145	243	DP312050	DP342050	DP302050	DP352050
20.75	2MT	145	243	DP312075	DP342075	DP302075	DP352075
21.00	2MT	145	243	DP312100	DP342100	DP302100	DP352100
21.25	2MT	150	248	DP312125	DP342125	DP302125	DP352125
21.50	2MT	150	248	DP312150	DP342150	DP302150	DP352150
21.75	2MT	150	248	DP312175	DP342175	DP302175	DP352175
22.00	2MT	150	248	DP312200	DP342200	DP302200	DP352200
22.25	2MT	150	248	DP312225	DP342225	DP302225	DP352225
22.50	2MT	155	253	DP312250	DP342250	DP302250	DP352250
22.75	2MT	155	253	DP312275	DP342275	DP302275	DP352275
23.00	2MT	155	253	DP312300	DP342300	DP302300	DP352300
23.25	3MT	155	276	DP312325	DP342325	DP302325	DP352325
23.50	3MT	155	276	DP312350	DP342350	DP302350	DP352350
23.75	3MT	160	281	DP312375	DP342375	DP302375	DP352375
24.00	3MT	160	281	DP312400	DP342400	DP302400	DP352400
24.25	3MT	160	281	DP312425	DP342425	DP302425	DP352425
24.50	3MT	160	281	DP312450	DP342450	DP302450	DP352450
24.75	3MT	160	281	DP312475	DP342475	DP302475	DP352475
25.00	3MT	160	281	DP312500	DP342500	DP302500	DP352500
25.25	3MT	165	286	DP312525	DP342525	DP302525	DP352525
25.50	3MT	165	286	DP312550	DP342550	DP302550	DP352550
25.75	3MT	165	286	DP312575	DP342575	DP302575	DP352575
26.00	3MT	165	286	DP312600	DP342600	DP302600	DP352600
26.25	3MT	165	286	DP312625	DP342625	DP302625	DP352625
26.50	3MT	165	286	DP312650	DP342650	DP302650	DP352650
26.75	3MT	170	291	DP312675	DP342675	DP302675	DP352675
27.00	3MT	170	291	DP312700	DP342700	DP302700	DP352700
27.25	3MT	170	291	DP312725	DP342725	DP302725	DP352725
27.50	3MT	170	291	DP312750	DP342750	DP302750	DP352750
27.75	3MT	170	291	DP312775	DP342775	DP302775	DP352775
28.00	3MT	170	291	DP312800	DP342800	DP302800	DP352800
28.25	3MT	175	296	DP312825	DP342825	DP302825	DP352825
28.50	3MT	175	296	DP312850	DP342850	DP302850	DP352850
28.75	3MT	175	296	DP312875	DP342875	DP302875	DP352875
29.00	3MT	175	296	DP312900	DP342900	DP302900	DP352900
29.25	3MT	175	296	DP312925	DP342925	DP302925	DP352925
29.50	3MT	175	296	DP312950	DP342950	DP302950	DP352950
29.75	3MT	175	296	DP312975	DP342975	DP302975	DP352975
30.00	3MT	175	296	DP313000	DP343000	DP303000	DP353000
30.25	3MT	180	301	DP313025	DP343025	DP303025	DP353025
30.50	3MT	180	301	DP313050	DP343050	DP303050	DP353050
30.75	3MT	180	301	DP313075	DP343075	DP303075	DP353075
31.00	3MT	180	301	DP313100	DP343100	DP303100	DP353100
31.25	3MT	180	301	DP313125	DP343125	DP303125	DP353125
31.50	3MT	180	301	DP313150	DP343150	DP303150	DP353150
31.75	3MT	185	306	DP313175	DP343175	DP303175	DP353175
32.00	4MT	185	334	DP313200	DP343200	DP303200	DP353200
32.50	4MT	185	334	DP313250	DP343250	DP303250	DP353250
33.00	4MT	185	334	DP313300	DP343300	DP303300	DP353300

Size mm	Morse Taper Shank	Flute Length(mm	OAL (mm)	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
33.50	4MT	185	334	DP313350	DP343350	DP303350	DP353350
34.00	4MT	190	339	DP313400	DP343400	DP303400	DP353400
34.50	4MT	190	339	DP313450	DP343450	DP303450	DP353450
35.00	4MT	190	339	DP313500	DP343500	DP303500	DP353500
35.50	4MT	190	339	DP313550	DP343550	DP303550	DP353550
36.00	4MT	195	344	DP313600	DP343600	DP303600	DP353600
36.50	4MT	195	344	DP313650	DP343650	DP303650	DP353650
37.00	4MT	195	344	DP313700	DP343700	DP303700	DP353700
37.50	4MT	195	344	DP313750	DP343750	DP303750	DP353750
38.00	4MT	200	349	DP313800	DP343800	DP303800	DP353800
38.50	4MT	200	349	DP313850	DP343850	DP303850	DP353850
39.00	4MT	200	349	DP313900	DP343900	DP303900	DP353900
39.50	4MT	200	349	DP313950	DP343950	DP303950	DP353950
40.00	4MT	200	349	DP314000	DP344000	DP304000	DP354000
40.50	4MT	205	354	DP314050	DP344050	DP304050	DP354050
41.00	4MT	205	354	DP314100	DP344100	DP304100	DP354100
41.50	4MT	205	354	DP314150	DP344150	DP304150	DP354150
42.00	4MT	205	354	DP314200	DP344200	DP304200	DP354200
42.50	4MT	205	354	DP314250	DP344250	DP304250	DP354250
43.00	4MT	210	359	DP314300	DP344300	DP304300	DP354300
43.50	4MT	210	359	DP314350	DP344350	DP304350	DP354350
44.00	4MT	210	359	DP314400	DP344400	DP304400	DP354400
44.50	4MT	210	359	DP314450	DP344450	DP304450	DP354450
45.00	4MT	210	359	DP314500	DP344500	DP304500	DP354500
45.50	4MT	215	364	DP314550	DP344550	DP304550	DP354550
46.00	4MT	215	364	DP314600	DP344600	DP304600	DP354600
46.50	4MT	215	364	DP314650	DP344650	DP304650	DP354650
47.00	4MT	215	364	DP314700	DP344700	DP304700	DP354700
47.50	4MT	215	364	DP314750	DP344750	DP304750	DP354750
48.00	4MT	220	369	DP314800	DP344800	DP304800	DP354800
48.50	4MT	220	369	DP314850	DP344850	DP304850	DP354850
49.00	4MT	220	369	DP314900	DP344900	DP304900	DP354900
49.50	4MT	220	369	DP314950	DP344950	DP304950	DP354950
50.00	4MT	220	369	DP315000	DP345000	DP305000	DP355000
50.50	4MT	225	374	DP315050	DP345050	DP305050	DP355050
51.00	5MT	225	412	DP315100	DP345100	DP305100	DP355100
52.00	5MT	225	412	DP315200	DP345200	DP305200	DP355200
53.00	5MT	225	412	DP315300	DP345300	DP305300	DP355300
54.00	5MT	230	417	DP315400	DP345400	DP305400	DP355400
55.00	5MT	230	417	DP315500	DP345500	DP305500	DP355500
56.00	5MT	230	417	DP315600	DP345600	DP305600	DP355600
57.00	5MT	235	422	DP315700	DP345700	DP305700	DP355700
58.00	5MT	235	422	DP315800	DP345800	DP305800	DP355800
59.00	5MT	235	422	DP315900	DP345900	DP305900	DP355900
60.00	5MT	235	422	DP316000	DP346000	DP306000	DP356000
61.00	5MT	240	427	DP316100	DP346100	DP306100	DP356100
62.00	5MT	240	427	DP316200	DP346200	DP306200	DP356200
63.00	5MT	240	427	DP316300	DP346300	DP306300	DP356300
64.00	5MT	245	432	DP316400	DP346400	DP306400	DP356400
65.00	5MT	245	432	DP316500	DP346500	DP306500	DP356500
66.00	5MT	245	432	DP316600	DP346600	DP306600	DP356600
67.00	5MT	245	432	DP316700	DP346700	DP306700	DP356700
68.00	5MT	250	437	DP316800	DP346800	DP306800	DP356800
69.00	5MT	250	437	DP316900	DP346900	DP306900	DP356900
70.00	5MT	250	437	DP317000	DP347000	DP307000	DP357000
71.00	5MT	250	437	DP317100	DP347100	DP307100	DP357100
72.00	5MT	255	442	DP317200	DP347200	DP307200	DP357200
73.00	5MT	255	442	DP317300	DP347300	DP307300	DP357300
74.00	5MT	255	442	DP317400	DP347400	DP307400	DP357400
75.00	5MT	255	442	DP317500	DP347500	DP307500	DP357500
76.00	5MT	260	447	DP317600	DP347600	DP307600	DP357600
77.00	6MT	260	514	DP317700	DP347700	DP307700	DP357700
78.00	6MT	260	514	DP317800	DP347800	DP307800	DP357800
79.00	6MT	260	514	DP317900	DP347900	DP307900	DP357900
80.00	6MT	260	514	DP318000	DP348000	DP308000	DP358000

Taper Shank Drill

- High Speed Steel and Cobalt,Right Hand
- 118°point angle.
- For drilling steel,alloyed steel,all common working steel.
- Standard: DIN345

Size mm	Morse Taper Shank	Flute Length(mm	OAL (mm)	Black Oxide Order No.	Black/White Order No.	Bright Finish Order No.	Cobalt Amber Order No.
81.00	6MT	265	519	DP318100	DP348100	DP308100	DP358100
82.00	6MT	265	519	DP318200	DP348200	DP308200	DP358200
83.00	6MT	265	519	DP318300	DP348300	DP308300	DP358300
84.00	6MT	265	519	DP318400	DP348400	DP308400	DP358400
85.00	6MT	265	519	DP318500	DP348500	DP308500	DP358500
86.00	6MT	270	524	DP318600	DP348600	DP308600	DP358600
87.00	6MT	270	524	DP318700	DP348700	DP308700	DP358700
88.00	6MT	270	524	DP318800	DP348800	DP308800	DP358800
89.00	6MT	270	524	DP318900	DP348900	DP308900	DP358900
90.00	6MT	270	524	DP319000	DP349000	DP309000	DP359000
91.00	6MT	275	529	DP319100	DP349100	DP309100	DP359100
92.00	6MT	275	529	DP319200	DP349200	DP309200	DP359200
93.00	6MT	275	529	DP319300	DP349300	DP309300	DP359300
94.00	6MT	275	529	DP319400	DP349400	DP309400	DP359400
95.00	6MT	275	529	DP319500	DP349500	DP309500	DP359500
96.00	6MT	280	534	DP319600	DP349600	DP309600	DP359600
97.00	6MT	280	534	DP319700	DP349700	DP309700	DP359700
98.00	6MT	280	534	DP319800	DP349800	DP309800	DP359800
99.00	6MT	280	534	DP319900	DP349900	DP309900	DP359900
100.00	6MT	280	534	DP3110000	DP3410000	DP3010000	DP3510000

DIN345 Carbide Tipped Taper Shank Drills

- High Speed Steel 118° Standard Point
- 118°point angle.
- Heavy-duty construction and heat treated body foroptimum wear-resistant and support of the carbide tip.
- Special twist drill bits for drilling abrasive materials.
- Used in the production drilling of cast iron, nonferrousmetals and many composite materials.
- Not recommended for drilling steel.
- Standard: DIN345

Size (mm)	MT	Flute Length(mm)	OAL (mm)	HSS Shank Order No.	Carbon Shank Order No.
4.0	1	43	124	DP40400	DP50400
4.2	1	43	124	DP40420	DP50420
4.5	1	43	128	DP40450	DP50450
4.8	1	52	133	DP40480	DP50480
5.0	1	52	133	DP40500	DP50500
5.5	1	57	138	DP40550	DP50550
6.0	1	57	138	DP40600	DP50600
6.5	1	63	144	DP40650	DP50650
7.0	1	69	150	DP40700	DP50700
7.5	1	69	150	DP40750	DP50750
8.0	1	75	156	DP40800	DP50800
8.5	1	75	156	DP40850	DP50850
9.0	1	81	162	DP40900	DP50900
9.5	1	81	162	DP40950	DP50950
10.0	1	87	168	DP401000	DP501000
10.5	1	87	168	DP401050	DP501050

Size (mm)	MT	Flute Length(mm)	OAL (mm)	HSS Shank Order No.	Carbon Shank Order No.
11.0	1	94	175	DP401100	DP501100
11.5	1	94	175	DP401150	DP501150
12.0	1	101	182	DP401200	DP501200
12.5	1	101	182	DP401250	DP501250
13.0	1	101	182	DP401300	DP501300
13.5	1	108	189	DP401350	DP501350
14.0	1	108	189	DP401400	DP501400
14.5	2	114	212	DP401450	DP501450
15.0	2	114	212	DP401500	DP501500
15.5	2	120	218	DP401550	DP501550
16.0	2	120	218	DP401600	DP501600
16.5	2	125	223	DP401650	DP501650
17.0	2	125	223	DP401700	DP501700
17.5	2	130	228	DP401750	DP501750
18.0	2	130	228	DP401800	DP501800
18.5	2	135	233	DP401850	DP501850

Size (mm)	MT	Flute Length(mm)	OAL (mm)	HSS Shank Order No.	Carbon Shank Order No.
19.0	2	135	233	DP401900	DP501900
19.5	2	140	238	DP401950	DP501950
20.0	2	140	238	DP402000	DP502000
20.5	2	145	243	DP402050	DP502050
21.0	2	145	243	DP402100	DP502100
21.5	2	150	248	DP402150	DP502150
22.0	2	150	248	DP402200	DP502200
22.5	2	155	253	DP402250	DP502250
23.0	3	155	253	DP402300	DP502300
23.5	3	155	276	DP402350	DP502350
24.0	3	160	281	DP402400	DP502400
24.5	3	160	281	DP402450	DP502450
25.0	3	165	286	DP402500	DP502500
25.5	3	165	286	DP402550	DP502550
26.0	3	165	286	DP402600	DP502600
26.5	3	165	286	DP402650	DP502650
27.0	3	170	291	DP402700	DP502700
27.5	3	170	291	DP402750	DP502750
28.0	3	170	291	DP402800	DP502800
28.5	3	175	296	DP402850	DP502850
29.0	3	175	296	DP402900	DP502900
29.5	3	175	296	DP402950	DP502950
30.0	3	175	296	DP403000	DP503000
30.5	3	180	301	DP403050	DP503050
31.0	3	180	301	DP403100	DP503100
31.5	3	180	301	DP403150	DP503150
32.0	4	185	334	DP403200	DP503200
32.5	4	185	334	DP403250	DP503250
33.0	4	185	334	DP403300	DP503300
33.5	4	185	334	DP403350	DP503350
34.0	4	190	339	DP403400	DP503400
34.5	4	190	339	DP403450	DP503450
35.0	4	190	339	DP403500	DP503500
35.5	4	190	339	DP403550	DP503550
36.0	4	195	344	DP403600	DP503600
36.5	4	195	344	DP403650	DP503650
37.0	4	195	344	DP403700	DP503700

Size (mm)	MT	Flute Length(mm)	OAL (mm)	HSS Shank Order No.	Carbon Shank Order No.
37.5	4	195	344	DP403750	DP503750
38.0	4	200	349	DP403800	DP503800
38.5	4	200	349	DP403850	DP503850
39.0	4	200	349	DP403900	DP503900
39.5	4	200	349	DP403950	DP503950
40.0	4	200	349	DP404000	DP504000
40.5	4	205	354	DP404050	DP504050
41.0	4	205	354	DP404100	DP504100
41.5	4	205	354	DP404150	DP504150
42.0	4	205	354	DP404200	DP504200
42.5	4	205	354	DP404250	DP504250
43.0	4	210	359	DP404300	DP504300
43.5	4	210	359	DP404350	DP504350
44.0	4	210	359	DP404400	DP504400
44.5	4	210	359	DP404450	DP504450
45.0	4	210	359	DP404500	DP504500
45.5	4	215	364	DP404550	DP504550
46.0	4	215	364	DP404600	DP504600
46.5	4	215	364	DP404650	DP504650
47.0	4	215	364	DP404700	DP504700
47.5	4	215	364	DP404750	DP504750
48.0	4	220	369	DP404800	DP504800
48.5	4	220	369	DP404850	DP504850
49.0	4	220	369	DP404900	DP504900
49.5	4	220	369	DP404950	DP504950
50.0	4	220	369	DP405000	DP505000
50.5	4	225	374	DP405050	DP505050
51.0	5	225	412	DP405100	DP505100
52.0	5	225	412	DP405200	DP505200
53.0	5	225	412	DP405300	DP505300
54.0	5	230	417	DP405400	DP505400
55.0	5	230	417	DP405500	DP505500
57.0	5	235	422	DP405700	DP505700
58.0	5	235	422	DP405800	DP505800
59.0	5	235	422	DP405900	DP505900
60.0	5	235	422	DP406000	DP506000

Stub Length Taper Shank Drills

- High Speed Steel
- 12" OAL , 5" Flute Length

Size(in.)	Shank	Order No.
2"	4 MT	DP604200
2"	5 MT	DP605200
2-1/16	4 MT	DP604204
2-1/16	5 MT	DP605204
2-1/8	4 MT	DP604208
2-1/8	5 MT	DP605208
2-3/16	4 MT	DP604212
2-3/16	5 MT	DP605212
2-1/4	4 MT	DP604216
2-1/4	5 MT	DP605216
2-5/16	4 MT	DP604220
2-5/16	5 MT	DP605220
2-3/8	4 MT	DP604224

Size(in.)	Shank	Order No.
2-3/8	5 MT	DP605224
2-7/16	4 MT	DP604228
2-7/16	5 MT	DP605228
2-1/2	4 MT	DP604232
2-1/2	5 MT	DP605232
2-9/16	4 MT	DP604236
2-9/16	5 MT	DP605236
2-5/8	4 MT	DP604240
2-5/8	5 MT	DP605240
2-11/16	4 MT	DP604244
2-11/16	5 MT	DP605244
2-3/4	4 MT	DP604248
2-3/4	5 MT	DP605248

Size(in.)	Shank	Order No.
2-13/16	4 MT	DP604252
2-13/16	5 MT	DP605252
2-7/8	4 MT	DP604256
2-7/8	5 MT	DP605256
2-15/16	4 MT	DP604260
2-15/16	5 MT	DP605260
3"	4 MT	DP604300
3"	5 MT	DP605300
3-1/8	5 MT	DP605308
3-1/4	5 MT	DP605316
3-3/8	5 MT	DP605324
3-1/2	5 MT	DP605332

Extra Long Taper Shank Drills

- High Speed Steel 118° Standard Point
- These drills are utilized in deep hole or long reach drilling applications in many kinds of material.

12" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
1/8	1	8-13/16	DL101008
3/16	1	8-13/16	DL101012
7/32	1	8-13/16	DL101014
1/4	1	8-13/16	DL101016
17/64	1	8-13/16	DL101017
9/32	1	8-13/16	DL101018
19/64	1	8-13/16	DL101019
5/16	1	8-13/16	DL101020
21/64	1	8-13/16	DL101021
11/32	1	8-13/16	DL101022
23/64	1	8-13/16	DL101023
3/8	1	8-13/16	DL101024
25/64	1	8-13/16	DL101025
13/32	1	8-13/16	DL101026
27/64	1	8-13/16	DL101027
7/16	1	8-13/16	DL101028

12" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
29/64	1	8-13/16	DL101029
15/32	1	8-13/16	DL101030
31/64	2	8-1/8	DL102031
1/2	2	8-1/8	DL102032
33/64	2	8-1/8	DL102033
17/32	2	8-1/8	DL102034
35/64	1*	8-13/16	DL101035
35/64	2	8-1/8	DL102035
9/16	2	8-1/8	DL102036
37/64	2	8-1/8	DL102037
19/32	2	8-1/8	DL102038
39/64	2	8-1/8	DL102039
5/8	2	8-1/8	DL102040
41/64	2	8-1/8	DL102041
21/32	2	8-1/8	DL102042
43/64	2	8-1/8	DL102043

12" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
11/16	2	8-1/8	DL102044
45/64	2	8-1/8	DL102045
23/32	2	8-1/8	DL102046
47/64	2	8-1/8	DL102047
3/4	2	8-1/8	DL102048
49/64	2	8-1/8	DL102049
25/32	2	8-1/8	DL102050
51/64	2	8-1/8	DL102051
51/64	3	7-1/4	DL103051
13/16	3	7-1/4	DL103052
53/64	3	7-1/4	DL103053
27/32	3	7-1/4	DL103054
7/8	3	7-1/4	DL103056
15/16	3	7-1/4	DL103060

15" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
1/4	1	11-13/16	DL201016
17/64	1	11-13/16	DL201017
9/32	1	11-13/16	DL201018
19/64	1	11-13/16	DL201019
5/16	1	11-13/16	DL201020
21/64	1	11-13/16	DL201021
11/32	1	11-13/16	DL201022
23/64	1	11-13/16	DL201023
3/8	1	11-13/16	DL201024
25/64	1	11-13/16	DL201025
13/32	1	11-13/16	DL201026
27/64	1	11-13/16	DL201027
7/16	1	11-13/16	DL201028
29/64	1	11-13/16	DL201029
15/32	1	11-13/16	DL201030
31/64	2	11-1/8	DL202031
1/2	2	11-1/8	DL202032
33/64	2	11-1/8	DL202033
17/32	2	11-1/8	DL202034
35/64	2	11-1/8	DL202035
9/16	2	11-1/8	DL202036
37/64	2	11-1/8	DL202037
19/32	2	11-1/8	DL202038

15" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
39/64	2	11-1/8	DL202039
5/8	2	11-1/8	DL202040
41/64	2	11-1/8	DL202041
21/32	2	11-1/8	DL202042
43/64	2	11-1/8	DL202043
11/16	2	11-1/8	DL202044
45/64	2	11-1/8	DL202045
23/32	2	11-1/8	DL202046
47/64	2	11-1/8	DL202047
3/4	2	11-1/8	DL202048
49/64	2	11-1/8	DL202049
25/32	2	11-1/8	DL202050
51/64	3	10-1/4	DL203051
13/16	3	10-1/4	DL203052
53/64	3	10-1/4	DL203053
27/32	3	10-1/4	DL203054
55/64	3	10-1/4	DL203055
7/8	3	10-1/4	DL203056
57/64	3	10-1/4	DL203057
29/32	3	10-1/4	DL203058
59/64	3	10-1/4	DL203059
15/16	3	10-1/4	DL203060
61/64	3	10-1/4	DL203061

15" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
31/32	3	10-1/4	DL203062
63/64	3	10-1/4	DL203063
1"	3	10-1/4	DL203100
1-1/64	3	10-1/4	DL203101
1-1/32	3	10-1/4	DL203102
1-3/64	3	10-1/4	DL203103
1-1/16	3	10-1/4	DL203104
1-5/64	4	9-1/8	DL204105
1-3/32	3*	10-1/4	DL203106
1-3/32	4	9-1/8	DL204106
1-7/64	4	9-1/8	DL204107
1-1/8	4	9-1/8	DL204108
1-9/64	4	9-1/8	DL204109
1-5/32	4	9-1/8	DL204110
1-11/64	4	9-1/8	DL204111
1-3/16	3*	10-1/4	DL203112
1-3/16	4	9-1/8	DL204112
1-13/64	4	9-1/8	DL204113
1-7/32	4	9-1/8	DL204114
1-15/64	4	9-1/8	DL204115
1-1/4	4	9-1/8	DL204116
1-9/32	4	9-1/8	DL204118
1-5/16	4	9-1/8	DL204120

18" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
1/4	1	14-13/16	DL301016
17/64	1	14-13/16	DL301017
9/32	1	14-13/16	DL301018
19/64	1	14-13/16	DL301019
5/16	1	14-13/16	DL301020
21/64	1	14-13/16	DL301021
11/32	1	14-13/16	DL301022
23/64	1	14-13/16	DL301023
3/8	1	14-13/16	DL301024
25/64	1	14-13/16	DL301025
13/32	1	14-13/16	DL301026
27/64	1	14-13/16	DL301027
7/16	1	14-13/16	DL301028

18" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	OrderNo.
29/64	1	14-13/16	DL301029
15/32	1	14-13/16	DL301030
15/32	2*	14-1/8	DL302030
31/64	1*	14-13/16	DL301031
31/64	2	14-1/8	DL302031
1/2	2	14-1/8	DL302032
33/64	1*	14-13/16	DL301033
33/64	2	14-1/8	DL302033
17/32	2	14-1/8	DL302034
35/64	1*	14-13/16	DL301035
35/64	2	14-1/8	DL302035
9/16	2	14-1/8	DL302036
37/64	2	14-1/8	DL302037

18" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
19/32	2	14-1/8	DL302038
39/64	2	14-1/8	DL302039
5/8	2	14-1/8	DL302040
41/64	2	14-1/8	DL302041
21/32	2	14-1/8	DL302042
43/64	2	14-1/8	DL302043
11/16	2	14-1/8	DL302044
45/64	2	14-1/8	DL302045
23/32	2	14-1/8	DL302046
47/64	2	14-1/8	DL302047
3/4	2	14-1/8	DL302048
49/64	2	14-1/8	DL302049
49/64	4*	12-1/8	DL304049

18" OAL			
Size (in.)	Shank Taper	Flute Length(in.	Order No.
25/32	2	14-1/8	DL302050
51/64	2	14-1/8	DL302051
51/64	3	13-1/4	DL303051
13/16	3	13-1/4	DL303052
53/64	3	13-1/4	DL303053
27/32	2*	14-1/8	DL302054
27/32	3	13-1/4	DL303054
55/64	3	13-1/4	DL303055
7/8	3	13-1/4	DL303056
57/64	3	13-1/4	DL303057
29/32	2*	14-1/8	DL302058
29/32	3	13-1/4	DL303058
59/64	3	13-1/4	DL303059
15/16	3	13-1/4	DL303060
61/64	3	13-1/4	DL303061
31/32	3	13-1/4	DL303062
31/32	4*	12-1/8	DL304062
63/64	3	13-1/4	DL303063
1"	3	13-1/4	DL303100
1-1/64	3	13-1/4	DL303101
1-1/32	3	13-1/4	DL303102
1-3/64	3	13-1/4	DL303103
1-1/16	3	13-1/4	DL303104
1-5/64	4	12-1/8	DL304105
1-3/32	3*	13-1/4	DL303106
1-3/32	4	12-1/8	DL304106
1-7/64	4	12-1/8	DL304107
1-1/8	4	12-1/8	DL304108
1-9/64	4	12-1/8	DL304109
1-5/32	4	12-1/8	DL304110

18" OAL			
Size (in.)	Shank Taper	Flute Length(in.	Order No.
1-11/64	3*	13-1/4	DL303111
1-11/64	4	12-1/8	DL304111
1-3/16	3*	13-1/4	DL303112
1-3/16	4	12-1/8	DL304112
1-13/64	4	12-1/8	DL304113
1-7/32	4	12-1/8	DL304114
1-15/64	4	12-1/8	DL304115
1-1/4	4	12-1/8	DL304116
1-17/64	4	12-1/8	DL304117
1-9/32	4	12-1/8	DL304118
1-19/64	4	12-1/8	DL304119
1-5/16	4	12-1/8	DL304120
1-5/16	5*	10-5/8	DL305120
1-21/64	4	12-1/8	DL304121
1-11/32	4	12-1/8	DL304122
1-23/64	4	12-1/8	DL304123
1-3/8	4	12-1/8	DL304124
1-25/64	4	12-1/8	DL304125
1-13/32	4	12-1/8	DL304126
1-27/64	4	12-1/8	DL304127
1-7/16	4	12-1/8	DL304128
1-29/64	4	12-1/8	DL304129
1-15/32	4	12-1/8	DL304130
1-31/64	4	12-1/8	DL304131
1-1/2	4	12-1/8	DL304132
1-17/32	4*	12-1/8	DL304133
1-17/32	5	10-5/8	DL305133
1-9/16	4*	12-1/8	DL304134
1-9/16	5	10-5/8	DL305134
1-19/32	5	10-5/8	DL305138

18" OAL			
Size (in.)	Shank Taper	Flute Length(in.	Order No.
1-5/8	5	10-5/8	DL305140
1-21/32	4*	12-1/8	DL304142
1-21/32	5	10-5/8	DL305142
1-11/16	4*	12-1/8	DL304144
1-11/16	5	10-5/8	DL305144
1-23/32	4*	12-1/8	DL304146
1-23/32	5	10-5/8	DL305146
1-3/4	5	10-5/8	DL305148
1-25/32	5	10-5/8	DL305150
1-13/16	5	10-5/8	DL305152
1-53/64	5*	10-5/8	DL305153
1-27/32	5	10-5/8	DL305154
1-7/8	4*	12-1/8	DL304156
1-7/8	5	10-5/8	DL305156
1-29/32	5	10-5/8	DL305158
1-15/16	5	10-5/8	DL305160
1-31/32	5	10-5/8	DL305162
2"	4*	12-1/8	DL304200
2"	5	10-5/8	DL305200
2-1/16	5	10-5/8	DL305204
2-1/8	5	10-5/8	DL305208
2-5/32	5*	10-5/8	DL305210
2-3/16	5	10-5/8	DL305212
2-1/4	5	10-5/8	DL305216
2-19/64	5*	10-5/8	DL305219
2-5/16	5	10-5/8	DL305220
2-23/64	5*	10-5/8	DL305223
2-3/8	5	10-5/8	DL305224
2-7/16	5	10-5/8	DL305228
2-1/2	5	10-5/8	DL305232

24" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
5/16	1	20-13/16	DL401020
3/8	1	20-13/16	DL401024
25/64	1	20-13/16	DL401025
13/32	1	20-13/16	DL401026
27/64	1	20-13/16	DL401027
7/16	1	20-13/16	DL401028
29/64	1	20-13/16	DL401029
15/32	1	20-13/16	DL401030
31/64	2	20-1/8	DL402031
1/2	2	20-1/8	DL402032
33/64	2	20-1/8	DL402033
17/32	2	20-1/8	DL402034
35/64	2	20-1/8	DL402035
9/16	2	20-1/8	DL402036
37/64	2	20-1/8	DL402037
19/32	2	20-1/8	DL402038
39/64	2	20-1/8	DL402039
5/8	2	20-1/8	DL402040
41/64	2	20-1/8	DL402041
21/32	2	20-1/8	DL402042
43/64	2	20-1/8	DL402043
11/16	2	20-1/8	DL402044
45/64	2	20-1/8	DL402045
23/32	2	20-1/8	DL402046
47/64	2	20-1/8	DL402047

24" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
3/4	2	20-1/8	DL402048
49/64	2	20-1/8	DL402049
25/32	2	20-1/8	DL402050
51/64	3	19-1/4	DL403051
13/16	3	19-1/4	DL403052
53/64	3	19-1/4	DL403053
27/32	3	19-1/4	DL403054
55/64	3	19-1/4	DL403055
7/8	3	19-1/4	DL403056
57/64	3	19-1/4	DL403057
29/32	3	19-1/4	DL403058
59/64	3	19-1/4	DL403059
15/16	3	19-1/4	DL403060
61/64	3	19-1/4	DL403061
31/32	3	19-1/4	DL403062
31/32	4*	18-1/8	DL404062
63/64	3	19-1/4	DL403063
1"	3	19-1/4	DL403100
1-1/64	3	19-1/4	DL403101
1-1/32	3	19-1/4	DL403102
1-3/64	3	19-1/4	DL403103
1-1/16	3	19-1/4	DL403104
1-5/64	4	18-1/8	DL404105
1-3/32	4	18-1/8	DL404106
1-7/64	4	18-1/8	DL404107

24" OAL			
Size (in.)	Shank Taper	Flute Length(in.	Order No.
1-1/8	4	18-1/8	DL404108
1-9/64	4	18-1/8	DL404109
1-5/32	4	18-1/8	DL404110
1-11/64	3*	19-1/4	DL403111
1-11/64	4	18-1/8	DL404111
1-3/16	4	18-1/8	DL404112
1-13/64	4	18-1/8	DL404113
1-7/32	4	18-1/8	DL404114
1-15/64	4	18-1/8	DL404115
1-1/4	4	18-1/8	DL404116
1-17/64	4	18-1/8	DL404117
1-9/32	4	18-1/8	DL404118
1-19/64	4	18-1/8	DL404119
1-5/16	4	18-1/8	DL404120
1-21/64	4	18-1/8	DL404121
1-11/32	4	18-1/8	DL404122
1-23/64	4	18-1/8	DL404123
1-3/8	4	18-1/8	DL404124
1-25/64	4	18-1/8	DL404125
1-13/32	4	18-1/8	DL404126
1-27/64	4	18-1/8	DL404127
1-7/16	4	18-1/8	DL404128
1-29/64	4	18-1/8	DL404129
1-15/32	4	18-1/8	DL404130
1-31/64	4	18-1/8	DL404131

Extra Long Taper Shank Drills

- High Speed Steel 118° Standard Point
- These drills are utilized in deep hole or long reach drilling applications in many kinds of material.

24" OAL			
Size (in.)	Shank Taper	Flute Length(in.	Order No.
1-1/2	4	18-1/8	DL404132
1-17/32	4*	18-1/8	DL404134
1-17/32	5	16-5/8	DL405134
1-9/16	5	16-5/8	DL405136
1-19/32	4*	18-1/8	DL404138
1-19/32	5	16-5/8	DL405138
1-5/8	5	16-5/8	DL405140
1-21/32	4*	18-1/8	DL404142
1-21/32	5	16-5/8	DL405142
1-11/16	4*	18-1/8	DL404144
1-11/16	5	16-5/8	DL405144
1-23/32	4*	18-1/8	DL404146
1-23/32	5	16-5/8	DL405146
1-3/4	5	16-5/8	DL405148
1-25/32	4*	18-1/8	DL404150
1-25/32	5	16-5/8	DL405150
1-13/16	4*	18-1/8	DL404152
1-13/16	5	16-5/8	DL405152

24" OAL			
Size (in.)	Shank Taper	Flute Length(in.	Order No.
1-27/32	4*	18-1/8	DL404154
1-27/32	5	16-5/8	DL405154
1-7/8	4*	18-1/8	DL404156
1-7/8	5	16-5/8	DL405156
1-29/32	4*	18-1/8	DL404158
1-29/32	5	16-5/8	DL405158
1-15/16	4*	18-1/8	DL404160
1-15/16	5	16-5/8	DL405160
1-31/32	5	16-5/8	DL405162
1-63/64	5*	16-5/8	DL405163
2"	5	16-5/8	DL405200
2-1/32	4*	18-1/8	DL404202
2-1/32	5*	16-5/8	DL405202
2-1/16	4*	18-1/8	DL404204
2-1/16	5	16-5/8	DL405204
2-1/8	4*	18-1/8	DL404208
2-1/8	5	16-5/8	DL405208
2-3/16	5	16-5/8	DL405212

24" OAL			
Size (in.)	Shank Taper	Flute Length(in.	Order No.
2-7/32	5*	16-5/8	DL405214
2-1/4	5	16-5/8	DL405216
2-5/16	5	16-5/8	DL405220
2-11/32	5*	16-5/8	DL405222
2-3/8	4*	18-1/8	DL404224
2-3/8	5	16-5/8	DL405224
2-13/32	5*	16-5/8	DL405226
2-7/16	5	16-5/8	DL405228
2-1/2	4*	18-1/8	DL404232
2-1/2	5	16-5/8	DL405232
2-9/16	5	16-5/8	DL405236
2-5/8	5	16-5/8	DL405240
2-11/16	5	16-5/8	DL405244
2-3/4	5	16-5/8	DL405248
2-13/16	5	16-5/8	DL405252
2-7/8	5	16-5/8	DL405256
2-15/16	5	16-5/8	DL405260
3"	5	16-5/8	DL405300

30" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
3/4	2	26-1/8	DL502048
13/16	3	25-1/4	DL503052
7/8	3	25-1/4	DL503056
15/16	3	25-1/4	DL503060
1"	3	25-1/4	DL503100
1-3/32	4	24-1/8	DL504106
1-1/8	4	24-1/8	DL504108
1-3/16	4	24-1/8	DL504112
1-1/4	4	24-1/8	DL504116
1-5/16	4	24-1/8	DL504120
1-3/8	4	24-1/8	DL504124
1-7/16	4	24-1/8	DL504128

30" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
1-1/2	4	24-1/8	DL504132
1-17/32	5	22-5/8	DL505134
1-9/16	5	22-5/8	DL505136
1-5/8	5	22-5/8	DL505140
1-11/16	4*	24-1/8	DL504144
1-11/16	5	22-5/8	DL505144
1-3/4	5	22-5/8	DL505148
1-13/16	5	22-5/8	DL505152
1-27/32	5	22-5/8	DL505154
1-7/8	5	22-5/8	DL505156
1-15/16	5	22-5/8	DL505160
2"	5	22-5/8	DL505200

30" OAL			
Size (in.)	Shank Taper	Flute Length(in.)	Order No.
2-1/16	5	22-5/8	DL505204
2-1/8	5	22-5/8	DL505208
2-3/16	5	22-5/8	DL505212
2-1/4	5	22-5/8	DL505216
2-5/16	5	22-5/8	DL505220
2-3/8	5	22-5/8	DL505224
2-7/16	5	22-5/8	DL505232
2-1/2	5	22-5/8	DL505236
2-5/8	5	22-5/8	DL505240
2-3/4	5	22-5/8	DL505248
2-7/8	5	22-5/8	DL505256
2-15/16	5	22-5/8	DL505260
3"	5	22-5/8	DL505300

36" OAL			
Size(in.)	Shank Taper	Flute Length(in.)	Order No.
1-1/2	4	30-1/8	DL604132
1-33/64	5*	28-5/8	DL605133
1-9/16	5	28-5/8	DL605136
1-5/8	5	28-5/8	DL605140
1-11/16	5	28-5/8	DL605144
1-3/4	5	28-5/8	DL605148

36" OAL			
Size(in.)	Shank Taper	Flute Length(in.)	Order No.
1-13/16	5	28-5/8	DL605152
1-7/8	5	28-5/8	DL605156
1-15/16	5	28-5/8	DL605160
2"	5	28-5/8	DL605200
2-1/8	5	28-5/8	DL605208
2-1/4	5	28-5/8	DL605216

36" OAL			
Size(in.)	Shank Taper	Flute Length(in.)	Order No.
2-3/8	5	28-5/8	DL605224
2-1/2	5	28-5/8	DL605232
2-5/8	5	28-5/8	DL605240
2-3/4	5	28-5/8	DL605248
2-7/8	5	28-5/8	DL605256
3"	5	28-5/8	DL605300
3-1/2	5	28-5/8	DL605336

Taper Shank Long Drills

- High Speed Steel 118° Standard Point
- Standard: DIN1870

Size(mm)	MT	Ⅰ type			Ⅱ type		
		Flute Length(mm)	OAL(mm)	Order No.	Flute Length(mm)	OAL(mm)	Order No.
8.0	1	165	265	DL70800	210	330	DL80800
8.5	1	165	265	DL70850	210	330	DL80850
9.0	1	175	275	DL70900	220	345	DL80900
10.0	1	185	285	DL701000	235	360	DL801000
10.5	1	185	285	DL701050	235	360	DL801050
11.0	1	195	300	DL701100	250	375	DL801100
11.5	1	195	300	DL701150	250	375	DL801150
12.0	1	205	310	DL701200	260	395	DL801200
12.5	1	205	310	DL701250	260	395	DL801250
13.0	1	205	310	DL701300	260	395	DL801300
13.5	1	220	325	DL701350	275	410	DL801350
14.0	1	220	325	DL701400	275	410	DL801400
14.5	2	220	340	DL701450	275	425	DL801450
15.0	2	220	340	DL701500	275	425	DL801500
15.5	2	230	355	DL701550	295	445	DL801550
16.0	2	230	355	DL701600	295	445	DL801600
16.5	2	230	355	DL701650	295	445	DL801650
17.0	2	230	355	DL701700	295	445	DL801700
17.5	2	245	370	DL701750	310	465	DL801750
18.0	2	245	370	DL701800	310	465	DL801800
18.5	2	245	370	DL701850	310	465	DL801850
19.0	2	245	370	DL701900	310	465	DL801900
19.5	2	260	385	DL701950	325	490	DL801950
20.0	2	260	385	DL702000	325	490	DL802000
20.5	2	260	385	DL702050	325	490	DL802050
21.0	2	260	385	DL702100	325	490	DL802100
21.5	2	270	405	DL702150	345	515	DL802150
22.0	2	270	405	DL702200	345	515	DL802200
22.5	2	270	405	DL702250	345	515	DL802250
23.0	2	270	405	DL702300	345	515	DL802300
23.5	3	275	425	DL702350	345	515	DL802350
24.0	3	290	440	DL702400	365	555	DL802400
24.5	3	290	440	DL702450	365	555	DL802450
25.0	3	290	440	DL702500	365	555	DL802500
25.5	3	290	440	DL702550	365	555	DL802550
26.0	3	290	440	DL702600	365	555	DL802600
26.5	3	290	440	DL702650	365	555	DL802650
27.0	3	305	460	DL702700	385	580	DL802700
27.5	3	305	460	DL702750	385	580	DL802750
28.0	3	305	460	DL702800	385	580	DL802800
28.5	3	305	460	DL702850	385	580	DL802850
29.0	3	305	460	DL702900	385	580	DL802900
29.5	3	305	460	DL702950	385	580	DL802950
30.0	3	305	460	DL703000	385	580	DL803000
31.0	3	320	480	DL703100	410	610	DL803100
32.0	4	320	505	DL703200	410	635	DL803200
33.0	4	320	505	DL703300	410	635	DL803300
34.0	4	340	530	DL703400	430	665	DL803400
35.0	4	340	530	DL703500	430	665	DL803500
36.0	4	340	530	DL703600	430	665	DL803600
37.0	4	340	530	DL703700	430	665	DL803700
38.0	4	360	555	DL703800	460	695	DL803800
39.0	4	360	555	DL703900	460	695	DL803900
40.0	4	360	555	DL704000	460	695	DL804000
41.0	4	360	555	DL704100	460	695	DL804100
42.0	4	360	555	DL704200	460	695	DL804200
43.0	4	385	585	DL704300	490	735	DL804300
44.0	4	385	585	DL704400	490	735	DL804400
45.0	4	385	585	DL704500	490	735	DL804500
46.0	4	385	585	DL704600	490	735	DL804600
47.0	4	385	585	DL704700	490	735	DL804700
48.0	4	405	605	DL704800	510	765	DL804800
49.0	4	405	605	DL704900	510	765	DL804900
50.0	4	405	605	DL705000	510	765	DL805000

DIN 338 Hex Shank Drill

- Hexagon shank for the quick change of tools in bit holders.
- 118° point angle or 135° split point.
- High durability under high loads.
- For steel,cast steel,annealed cast iron,grey cast iron,non-ferrous metals,plastic materials.
- Used with cordless power drill.

Size (mm)	Flute Length (mm)	OAL (mm)	HSS 118° Order No.	TiN-Coated 118°Order No.	Cobalt 135° Order No.
2	24	49	DX00200	DX02200	DX05200
3	33	61	DX00300	DX02300	DX05300
4	43	75	DX00400	DX02400	DX05400
5	52	86	DX00500	DX02500	DX05500
6	57	93	DX00600	DX02600	DX05600
7	63	101	DX00700	DX02700	DX05700

Size (mm)	Flute Length (mm)	OAL (mm)	HSS 118° Order No.	TiN-Coated 118°Order No.	Cobalt 135° Order No.
8	75	117	DX00800	DX02800	DX05800
9	81	125	DX00900	DX02900	DX05900
10	87	133	DX01000	DX03000	DX06000
11	94	142	DX01100	DX03100	DX06100
12	101	151	DX01200	DX03200	DX06200
13	101	151	DX01300	DX03300	DX06300

Hex Shank Short Drill (B Type Shank)

Size (mm)	Flute Length (mm)	OAL (mm)	HSS 118° Order No.	TiN-Coated 118°Order No.	Cobalt 135° Order No.
1.0	7	32	DX10100	DX12100	DX15100
1.5	10	34	DX10150	DX12150	DX15150
2.0	12	36	DX10200	DX12200	DX15200
2.5	14	38	DX10250	DX12250	DX15250
3.0	16	38	DX10300	DX12300	DX15300
3.1	16	40	DX10310	DX12310	DX15310
3.3	18	40	DX10330	DX12330	DX15330
3.5	18	44	DX10350	DX12350	DX15350
4.0	20	44	DX10400	DX12400	DX15400
4.1	20	44	DX10410	DX12410	DX15410
4.2	20	46	DX10420	DX12420	DX15420
4.5	24	46	DX10450	DX12450	DX15450
4.9	24	50	DX10490	DX12490	DX15490
5.0	26	50	DX10500	DX12500	DX15500
5.1	26	50	DX10510	DX12510	DX15510
5.5	26	50	DX10550	DX12550	DX15550
6.0	26	50	DX10600	DX12600	DX15600
6.1	26	50	DX10610	DX12610	DX15610

Size (mm)	Flute Length (mm)	OAL (mm)	HSS 118° Order No.	TiN-Coated 118°Order No.	Cobalt 135° Order No.
6.5	30	50	DX10650	DX12650	DX15650
6.8	30	50	DX10680	DX12680	DX15680
7.0	30	50	DX10700	DX12700	DX15700
7.5	32	51	DX10750	DX12750	DX15750
8.0	32	51	DX10800	DX12800	DX15800
8.5	33	53	DX10850	DX12850	DX15850
9.0	38	53	DX10900	DX12900	DX15900
9.5	38	54	DX10950	DX12950	DX15950
10.0	38	54	DX101000	DX121000	DX151000
10.2	38	54	DX101020	DX121020	DX151020
10.5	44	60	DX101050	DX121050	DX151050
11.0	44	60	DX101100	DX121100	DX151100
12.0	44	60	DX101200	DX121200	DX151200
12.5	44	60	DX101250	DX121250	DX151250
13.0	44	60	DX101300	DX121300	DX151300

Hex Shank Short Drill (A Type Shank)

Size (mm)	Flute Length (mm)	OAL (mm)	HSS 118° Order No.	TiN-Coated 118°Order No.	Cobalt 135° Order No.
3	16	47	DX20300	DX22300	DX25300
3.2	16	47	DX20320	DX22320	DX25320
3.5	16	47	DX20350	DX22350	DX25350
4	20	53	DX20400	DX22400	DX25400
5	26	59	DX20500	DX22500	DX25500

Size (mm)	Flute Length (mm)	OAL (mm)	HSS 118° Order No.	TiN-Coated 118°Order No.	Cobalt 135° Order No.
6	26	59	DX20600	DX22600	DX25600
7	30	59	DX20700	DX22700	DX25700
8	32	60	DX20800	DX22800	DX25800
9	40	84	DX20900	DX22900	DX25900
10	43	89	DX201000	DX221000	DX251000

Annular Cutters

- For Use With Portable Magnetic Drills
- Weldon Shank and One -touch Shank
- HSS M2,M35 or M42
- Bright Finish
- Tin Coated
- TiAIN Coated

Size	1" Depth of Cut Order No.	2" Depth of Cut Order No.	3" Depth of Cut Order No.	4" Depth of Cut Order No.
7/16	DG10028	DG20028	—	—
1/2	DG10032	DG20032	—	—
9/16	DG10036	DG20036	—	—
5/8	DG10040	DG20040	—	—
11/16	DG10044	DG20044	—	—
3/4	DG10048	DG20048	DG30048	—
13/16	DG10052	DG20052	DG30052	—
7/8	DG10056	DG20056	DG30056	—
15/16	DG10060	DG20060	DG30060	DG40060
1"	DG10100	DG20100	DG30100	DG40100
1-1/16	DG10104	DG20104	DG30104	DG40104
1-1/8	DG10108	DG20108	DG30108	DG40108
1-3/16	DG10112	DG20112	DG30112	DG40112
1-1/4	DG10116	DG20116	DG30116	DG40116
1-5/16	DG10120	DG20120	DG30120	DG40120
1-3/8	DG10124	DG20124	DG30124	DG40124
1-7/16	DG10128	DG20128	DG30128	DG40128
1-1/2	DG10132	DG20132	DG30132	DG40132
1-9/16	DG10136	DG20136	DG30136	DG40136
1-5/8	DG10140	DG20140	DG30140	DG40140
1-11/16	DG10144	DG20144	DG30144	DG40144
1-3/4	DG10148	DG20148	DG30148	DG40148
1-13/16	DG10152	DG20152	DG30152	DG40152
1-7/8	DG10156	DG20156	DG30156	DG40156
1-15/16	DG10160	DG20160	DG30160	DG40160
2"	DG10200	DG20200	DG30200	DG40200
2-1/16	DG10204	DG20204	DG30204	DG40204
2-1/8	DG10208	DG20208	DG30208	DG40208
2-3/16	DG10212	DG20212	DG30212	DG40212
2-1/4	DG10216	DG20216	DG30216	DG40216
2-5/16	DG10220	DG20220	DG30220	DG40220
2-3/8	DG10224	DG20224	DG30224	DG40224
2-1/2	DG10232	DG20232	DG30232	DG40232
2-9/16	DG10236	DG20236	DG30236	DG40236
2-5/8	DG10240	DG20240	DG30240	DG40240
2-11/16	DG10244	DG20244	DG30244	DG40244
2-3/4	DG10248	DG20248	DG30248	DG40248
2-13/16	DG10252	DG20252	DG30252	DG40252
2-7/8	DG10256	DG20256	DG30256	DG40256
2-15/16	DG10260	DG20260	DG30260	DG40260
3"	DG10300	DG20300	DG30300	DG40300

Annular Cutters Set

- For Use With Portable Magnetic Drills
- Weldon Shank and One -touch Shank
- HSS M2,M35 or M42
- Bright Finish
- Tin Coated
- TiAIN Coated

Set Qty	Set Contents(in.)	Depth of Cut Cutters(in.)	Order No.
6Pcs	9/16, 11/16, 13/16, 15/16, 1-1/16，1 Ejector Pilot Set in wood block	1"	DGUS106
6Pcs	9/16, 11/16, 13/16, 15/16, 1-1/16，1 Ejector Pilot Set in wood block	2"	DGUS206
7Pcs	9/16, 5/8, 11/16, 3/4, 7/8, 1-1/16,1 Ejector Pilot Set in steel index	1"	DGUS107

Annular Cutters

- For Use With Portable Magnetic Drills
- Weldon Shank and One -touch Shank
- HSS M2,M35 or M42
- Bright Finish
- Tin Coated
- TiAlN Coated

Cutter Dia. (mm)	30mm Cutting Length Order No.	55mm Cutting Length Order No.	75mm Cutting Length Order No.	100mm Cutting Length Order No.
12	DG50120	DG60120	–	–
13	DG50130	DG60130	–	–
14	DG50140	DG60140	–	–
15	DG50150	DG60150	–	–
16	DG50160	DG60160	–	–
17	DG50170	DG60170	–	–
18	DG50180	DG60180	–	–
19	DG50190	DG60190	–	–
20	DG50200	DG60200	DG70200	–
21	DG50210	DG60210	DG70210	–
22	DG50220	DG60220	DG70220	–
23	DG50230	DG60230	DG70230	–
24	DG50240	DG60240	DG70240	DG80240
25	DG50250	DG60250	DG70250	DG80250
26	DG50260	DG60260	DG70260	DG80260
27	DG50270	DG60270	DG70270	DG80270
28	DG50280	DG60280	DG70280	DG80280
29	DG50290	DG60290	DG70290	DG80290
30	DG50300	DG60300	DG70300	DG80300
31	DG50310	DG60310	DG70310	DG80310
32	DG50320	DG60320	DG70320	DG80320
33	DG50330	DG60330	DG70330	DG80330
34	DG50340	DG60340	DG70340	DG80340
35	DG50350	DG60350	DG70350	DG80350
36	DG50360	DG60360	DG70360	DG80360
37	DG50370	DG60370	DG70370	DG80370
38	DG50380	DG60380	DG70380	DG80380
39	DG50390	DG60390	DG70390	DG80390
40	DG50400	DG60400	DG70400	DG80400
41	DG50410	DG60410	DG70410	DG80410
42	DG50420	DG60420	DG70420	DG80420
43	DG50430	DG60430	DG70430	DG80430
44	DG50440	DG60440	DG70440	DG80440
45	DG50450	DG60450	DG70450	DG80450
46	DG50460	DG60460	DG70460	DG80460
47	DG50470	DG60470	DG70470	DG80470
48	DG50480	DG60480	DG70480	DG80480
49	DG50490	DG60490	DG70490	DG80490
50	DG50500	DG60500	DG70500	DG80500
51	DG50510	DG60510	DG70510	DG80510
52	DG50520	DG60520	DG70520	DG80520
53	DG50530	DG60530	DG70530	DG80530
54	DG50540	DG60540	DG70540	DG80540
55	DG50550	DG60550	DG70550	DG80550
56	DG50560	DG60560	DG70560	DG80560
57	DG50570	DG60570	DG70570	DG80570
58	DG50580	DG60580	DG70580	DG80580
59	DG50590	DG60590	DG70590	DG80590
60	DG50600	DG60600	DG70600	DG80600
61	DG50610	DG60610	DG70610	DG80610
62	DG50620	DG60620	DG70620	DG80620
63	DG50630	DG60630	DG70630	DG80630
64	DG50640	DG60640	DG70640	DG80640
65	DG50650	DG60650	DG70650	DG80650
70	DG50700	DG60700	DG70700	DG80700
75	DG50750	DG60750	DG70750	DG80750

TCT Annular Cutters

- Weldon Shank and One -touch Shank

Cutter Dia. (mm)	30mm Cutting Length Order No.	55mm Cutting Length Order No.	75mm Cutting Length Order No.	100mm Cutting Length Order No.
14	DG90140	DG91140	–	–
15	DG90150	DG91150	–	–
16	DG90160	DG91160	–	–
17	DG90170	DG91170	–	–
18	DG90180	DG91180	DG92180	DG93180
19	DG90190	DG91190	DG92190	DG93190
20	DG90200	DG91200	DG92200	DG93200
21	DG90210	DG91210	DG92210	DG93210
22	DG90220	DG91220	DG92220	DG93220
23	DG90230	DG91230	DG92230	DG93230
24	DG90240	DG91240	DG92240	DG93240
25	DG90250	DG91250	DG92250	DG93250
26	DG90260	DG91260	DG92260	DG93260
27	DG90270	DG91270	DG92270	DG93270
28	DG90280	DG91280	DG92280	DG93280
29	DG90290	DG91290	DG92290	DG93290
30	DG90300	DG91300	DG92300	DG93300
31	DG90310	DG91310	DG92310	DG93310
32	DG90320	DG91320	DG92320	DG93320
33	DG90330	DG91330	DG92330	DG93330
34	DG90340	DG91340	DG92340	DG93340
35	DG90350	DG91350	DG92350	DG93350
36	DG90360	DG91360	DG92360	DG93360
37	DG90370	DG91370	DG92370	DG93370
38	DG90380	DG91380	DG92380	DG93380
39	DG90390	DG91390	DG92390	DG93390
40	DG90400	DG91400	DG92400	DG93400
41	DG90410	DG91410	DG92410	DG93410
42	DG90420	DG91420	DG92420	DG93420
43	DG90430	DG91430	DG92430	DG93430
44	DG90440	DG91440	DG92440	DG93440
45	DG90450	DG91450	DG92450	DG93450
46	DG90460	DG91460	DG92460	DG93460
47	DG90470	DG91470	DG92470	DG93470
48	DG90480	DG91480	DG92480	DG93480
49	DG90490	DG91490	DG92490	DG93490
50	DG90500	DG91500	DG92500	DG93500
51	DG90510	DG91510	DG92510	DG93510
52	DG90520	DG91520	DG92520	DG93520
53	DG90530	DG91530	DG92530	DG93530
54	DG90540	DG91540	DG92540	DG93540
55	DG90550	DG91550	DG92550	DG93550
56	DG90560	DG91560	DG92560	DG93560
57	DG90570	DG91570	DG92570	DG93570
58	DG90580	DG91580	DG92580	DG93580
59	DG90590	DG91590	DG92590	DG93590
60	DG90600	DG91600	DG92600	DG93600
61	DG90610	DG91610	DG92610	DG93610
62	DG90620	DG91620	DG92620	DG93620
63	DG90630	DG91630	DG92630	DG93630
64	DG90640	DG91640	DG92640	DG93640
65	DG90650	DG91650	DG92650	DG93650
70	DG90700	DG91700	DG92700	DG93700
75	DG90750	DG91750	DG92750	DG93750
80	DG90800	DG91800	DG92800	DG93800
85	DG90850	DG91850	DG92850	DG93850
90	DG90900	DG91900	DG92900	DG93900
95	DG90950	DG91950	DG92950	DG93950
100	DG901000	DG911000	DG921000	DG931000

Combined Drills & Countersinks

- 60º High Speed Steel·Cobalt
- Bright Finish
- Tin Coated

PLAIN TYPE

Size	Body Dia.(in.)	Drill Dia.(in.)	Drill Length(in.)	OAL (in.)	Bright Finish Order No.	TiN-Coated Order No.	Cobalt Order No.
00	1/8	0.025	0.025	1-1/4	DK00008	DK02008	DK05008
0	1/8	1/32	1/32	1-1/4	DK00108	DK02108	DK05108
1	1/8	3/64	3/64	1-1/4	DK00208	DK02208	DK05208
2	3/16	5/64	5/64	1-7/8	DK00012	DK02012	DK05012
3	1/4	7/64	7/64	2"	DK00016	DK02016	DK05016
4	5/16	1/8	1/8	2-1/8	DK00020	DK02020	DK05020
4-1/2	3/8	9/64	9/64	2-1/2	DK00024	DK02024	DK05024
5	7/16	3/16	3/16	2-3/4	DK00028	DK02028	DK05028
6	1/2	7/32	7/32	3"	DK00032	DK02032	DK05032
7	5/8	1/4	1/4	3-1/4	DK00040	DK02040	DK05040
8	3/4	5/16	5/16	3-1/2	DK00048	DK02048	DK05048
9	7/8	11/32	11/32	3-5/8	DK00056	DK02056	DK05056
10	1"	3/8	3/8	3-3/4	DK00100	DK02100	DK05100

BELL TYPE

Size	Body Dia.(in.)	Drill Dia.(in.)	Drill Length(in.)	OAL(in.)	Bright Finish Order No.	TiN-Coated Order No.	Cobalt Order No.
11	1/8	3/64	3/64	1-1/4	DK10008	DK12008	DK15008
12	3/16	1/16	1/16	1-7/8	DK10012	DK12012	DK15012
13	1/4	3/32	3/32	2"	DK10016	DK12016	DK15016
14	5/16	7/64	7/64	2-1/8	DK10020	DK12020	DK15020
15	7/16	5/32	5/32	2-3/4	DK10028	DK12028	DK15028
16	1/2	3/16	3/16	3"	DK10032	DK12032	DK15032
17	5/8	7/32	7/32	3-1/4	DK10040	DK12040	DK15040
18	3/4	1/4	1/4	3-1/2	DK10048	DK12048	DK15048
19	7/8	5/16	5/16	3-5/8	DK10056	DK12056	DK15056
20	1"	3/8	3/8	3-3/4	DK10100	DK12100	DK15100

Long Series Combined Drills and Countersinks

- 60º High Speed Steel

Size	OAL(in.)	Body Dia.(in.)	Drill Dia.(in.)	Bright Finish Order No.	TiN-Coated Order No.	Cobalt Order No.
1	3"	1/8	3/64	DK20130	DK22130	DK25130
1	4"	1/8	3/64	DK20140	DK22140	DK25140
1	5"	1/8	3/64	DK20150	DK22150	DK25150
1	6"	1/8	3/64	DK20160	DK22160	DK25160
2	4"	3/16	5/64	DK20240	DK22240	DK25240
2	5"	3/16	5/64	DK20250	DK22250	DK25250
2	6"	3/16	5/64	DK20260	DK22260	DK25260
3	4"	1/4	7/64	DK20340	DK22340	DK25340
3	5"	1/4	7/64	DK20350	DK22350	DK25350
3	6"	1/4	7/64	DK20360	DK22360	DK25360
4	4"	5/16	1/8	DK20440	DK22440	DK25440
4	5"	5/16	1/8	DK20450	DK22450	DK25450
4	6"	5/16	1/8	DK20460	DK22460	DK25460
5	4"	7/16	3/16	DK20540	DK22540	DK25540
5	5"	7/16	3/16	DK20550	DK22550	DK25550
5	6"	7/16	3/16	DK20560	DK22560	DK25560
6	4"	1/2	7/32	DK20640	DK22640	DK25640
6	5"	1/2	7/32	DK20650	DK22650	DK25650
6	6"	1/2	7/32	DK20660	DK22660	DK25660
7	6"	5/8	1/4	DK20760	DK22760	DK25760
8	6"	3/4	5/16	DK20860	DK22860	DK25860

Center Drill DIN 333A

Size (mm)	Body Dia.(mm)	OAL (mm)	Drill Length(mm)	Bright Finish Order No.	TiN-Coated Order No.	Cobalt Order No.
0.50	3.15	20	0.8	DK30050	DK32050	DK35050
0.80	3.15	20	1.1	DK30080	DK32080	DK35080
1.00	3.15	31.5	1.3	DK30100	DK32100	DK35100
1.25	3.15	31.5	1.6	DK30125	DK32125	DK35125
1.60	4	35.5	2	DK30160	DK32160	DK35160
2.00	5	40	2.5	DK30200	DK32200	DK35200
2.50	6.3	45	3.1	DK30250	DK32250	DK35250
3.15	8	50	3.9	DK30315	DK32315	DK35315
4.00	10	56	5	DK30400	DK32400	DK35400
5.00	12.5	63	6.3	DK30500	DK32500	DK35500
6.30	16	71	8	DK30630	DK32630	DK3W5630
8.00	20	80	10.1	DK30800	DK32800	DK35800
10.00	25	100	12.8	DK301000	DK321000	DK351000
12.50	31	125	16.5	DK301250	DK321250	DK351250

Center Drill DIN 333B

Size (mm)	Body Dia.(mm)	OAL (mm)	Drill Length(mm)	Bright Finish Order No.	TiN-Coated Order No.	Cobalt Order No.
1.00	4	35.5	1.3	DK40100	DK42100	DK45100
1.25	5	40	1.6	DK40125	DK42125	DK45125
1.60	6.3	45	2	DK40160	DK42160	DK45160
2.00	8	50	2.5	DK40200	DK42200	DK45200
2.50	10	56	3.1	DK40250	DK42250	DK45250
3.15	11.2	60	3.9	DK40315	DK42315	DK45315
4.00	14	67	5	DK40400	DK42400	DK45400
5.00	18	75	6.3	DK40500	DK42500	DK45500
6.30	20	80	8	DK40630	DK42630	DK45630
8.00	25	100	10.1	DK40800	DK42800	DK45800
10.00	31.5	125	12.8	DK401000	DK421000	DK451000

Center Drill DIN 333R

Size (mm)	Body Dia.(mm)	OAL (mm)	Drill Length(mm)	Bright Finish Order No.	TiN-Coated Order No.	Cobalt Order No.
0.50	3.15	20	2.12	DK50050	DK52050	DK55050
0.80	3.15	20	2.65	DK50080	DK52080	DK55080
1.00	3.15	31.5	3	DK50100	DK52100	DK55100
1.60	4	35.5	4.25	DK50160	DK52160	DK55160
2.00	5	40	5.3	DK50200	DK52200	DK55200
2.50	6.3	45	6.7	DK50250	DK52250	DK55250
3.15	8	50	8.5	DK50315	DK52315	DK55315
4.00	10	56	10.6	DK50400	DK52400	DK55400
5.00	12.5	63	13.2	DK50500	DK52500	DK55500
6.30	16	71	17	DK50630	DK52630	DK55630
8.00	20	80	21.2	DK50800	DK52800	DK55800
10.00	25	100	26.5	DK501000	DK521000	DK551000
12.50	31.5	125	33.5	DK501250	DK521250	DK551250

Center Drill Set DIN 333A

12PCS HSS Center Drills Plain	Bright Finish Order No.	TiN-Coated Order No.	Cobalt Order No.
1PCS: 1.0mm, 1.6mm, 5.0mm 2PCS: 2.0mm ,2.5mm, 4mm 3PCS: 3.15mmin wooden case	DKUS0012	DKUS0212	DKUS0512

Solid Carbide Center Drill DIN 333A

Size (mm)	Body Dia. (mm)	OAL (mm)	Drill Length(mm)	Order No.
0.50	3.15	20	0.8	DK60050
0.80	3.15	20	1.1	DK60080
1.00	3.15	31.5	1.3	DK60100
1.25	3.15	31.5	1.6	DK60125
1.60	4	35.5	2	DK60160
2.00	5	40	2.5	DK60200
2.50	6.3	45	3.1	DK60250
3.15	8	50	3.9	DK60315
4.00	10	56	5	DK60400
5.00	12.5	63	6.3	DK60500

Solid Carbide Center Drill Inch Size

Size	Body Dia.(in)	OAL(in)	Drill Length(in)	Order No.
00	1/8	1-1/4	0.025	DK70025
0	1/8	1-1/4	1/32	DK70002
1	1/8	1-1/4	3/64	DK70003
2	3/16	1-7/8	5/64	DK70005
3	1/4	2"	7/64	DK70007
4	5/16	2-1/8	1/8	DK70008
5	7/16	2-3/4	3/16	DK70012
6	1/2	3"	7/32	DK70014

Solid Carbide Center Drill Inch Size

5PCS HSS Center Drills Plain	Order No.
1,2,3,4,5 in Plastic Case	DUKS1105

Capscrew Counterbores

- Straight Shank
- 3-Flute·High Speed Steel

CapScrew Size	Pilot Dia.(in.)	Cutter Dia.(in.)	Shank Dia.(in.)	OAL (in.)	Order No.
#5	0.141	0.221	3-16	3"	CB10105
#6	0.15	0.242	7-32	3"	CB10106
#8	11/64	19/64	1-4	3"	CB10108
#10	13/64	21/64	5-16	3-1/2	CB10110
1/4"	9/32	13/32	3/8	5"	CB10016
5/16"	11/32	1/2	7-16	5"	CB10020
3/8"	13/32	19/32	1-2	6"	CB10024
7/16"	15-32	11/16	1-2	7"	CB10028

CapScrew Size	Pilot Dia.(in.)	Cutter Dia.(in.)	Shank Dia.(in.)	OAL (in.)	Order No.
1/2"	17/32	25/32	1-2	7-1/2	CB10032
1/2"	9-16	13/16	1-2	7-1/2	CB10132
5/8"	21/32	31/32	3/4	7-1/2	CB10040
5/8"	11/16	1"	3/4	7-1/2	CB10140
3/4"	13/16	1-3/16	1"	8"	CB10048
7/8"	15/16	1-3/8	1"	8"	CB10056
1"	1-1/16	1-9/16	1"	10"	CB10100

- Taper Shank
- High Speed Steel · 3 Flute

Capscrew Size(in.)	Pilot Dia.(in.)	Cutter Dia.(in.)	Shank Taper	OAL	Order No.
1/4	9/32	13/32	2MT	5-3/4	CB20016
5/16	11/32	1/2	2MT	6"	CB20020
3/8	13/32	19/32	2MT	6-1/2	CB20024
7/16	15/32	11/16	2MT	7"	CB20028
1/2	17/32	25/32	2MT	7-1/4	CB20032

Capscrew Size(in.)	Pilot Dia.(in.)	Cutter Dia.(in.)	Shank Taper	OAL	Order No.
5/8	21/32	31/32	2MT	7-1/2	CB20040
5/8	11/16	1"	2MT	7-1/2	CB20140
3/4	13/16	1-3/16	3MT	9"	CB20048
7/8	15/16'	1-3/8	3MT	9"	CB20056
1"	1-1/16	1-9/16	3MT	10"	CB20100

- Capscrew Counterbore Sets-Straight Shank HSS

Set Includes	Order No.
#6,#8,#10,1/4,5/16,3/8,1/2 - 7PC Set	CBU10107
1/4,5/16,3/8,1/2,5/8,3/4 - 6PC Set	CBU10206
M3,M4,M5,M6,M8,M10,M12 - 7PC Set	CBU10307

- Capscrew Counterbore Sets-Straight Shank HSS

Taper Shank-HSS	Order No.
1/4,5/16,3/8,1/2,5/8,3/4 - 6PC SET	CBU20106

- Metric Capscrew Counterbore-Straight Shank· 3 Flute

Capscrew Size(mm)	Pilot Dia.(mm)	Cutter Dia.(mm)	Flute Length(mm)	Shank Dia. (mm)	OAL (mm)	Pilot Length(mm)	Shank Length(in.)	Order No.
M3	3.4	6	25	5.556	76	3/16	1-3/16	CB13003
M4	4.5	8	25	7.938	89	3/16	1-3/16	CB13004
M5	5.5	10	32	9.525	127	3/16	1-9/16	CB13005
M6	6.6	11	35	11.112	127	1/4	1-1/2	CB13006
M8	9	15	38	12.7	152	5/16	1-5/8	CB13008
M10	11	18	44.5	12.7	178	1/2	1-3/4	CB13010
M12	14	20	50	12.7	190	1/2	1-3/4	CB13012

- Metric Capscrew Counterbore-Taper Shank

Capscrew Size(mm)	Pilot Dia.(mm)	Cutter Dia.(mm)	Flute Length(mm)	Shank Taper	OAL (mm)	Pilot Length(m)	Order No.
M14	15	24	60	2MT	209	9/16	CB23014
M16	17	26	70	2MT	228	11/16	CB23016
M20	21	33	70	2MT	254	15/16	CB23020
M24	25	44	70	3MT	254	1-1/16	CB23024

Straight Shank Flat Countersink Fixed Guide

- Counters. angle:180°
- Shank:Cylindrical
- Cutting edges:3
- Standard:DIN 373

For thread (mm)	Cutter Dia. (mm)	Pilot Dia. (mm)	Shank Dia (mm)	OAL (mm)	Bright Finish Order No.	Tin Coated Order No.
M 3	6	3.2	5.0	71	CB30003	CB32003
M 4	8	4.3	5.0	71	CB30004	CB32004
M 5	10	5.3	8.0	80	CB30005	CB32005
M 6	11	6.4	8.0	80	CB30006	CB32006
M 8	15	8.4	12.5	100	CB30008	CB32008
M 10	18	10.5	12.5	100	CB30010	CB32010
M 12	20	13.0	12.5	100	CB30012	CB32012
M 14	24	14.4	12.5	100	CB30014	CB32014
M 16	26	16.5	16.0	100	CB30016	CB32016

Flat Countersink 6pcs/set

For threads(mm)	Bright Finish Order No.	Tin Coated Order No.
M 3 - M 4 - M 5 - M 6 - M 8 - M 10	CBU30106	CBU30206

Flat Countersink 7pcs/set

For threads(mm)	Bright Finish Order No.	Tin Coated Order No.
M 3 - M 4 - M 5 - M 6 - M 8 - M 10 - M 12	CBU30307	CBU30407

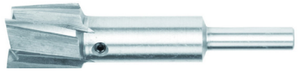
Taper Shank Flat Countersink Fixed Guide

- Counters. angle:180°
- Shank:Morse taper
- Cutting edges:3
- Surface:bright
- Standard：DIN 375

For Thread(mm)	Cutter Dia. (mm)	Medium Pilot Dia.(mm).	Fine Pilot Dia.(mm)	Flute Length	Shank MT No.	OAL (mm)	Medium Order No.	Fine Order No.
M 8	15	9	8.4	22	MT 2	132	CB40008	CB41008
M 10	18	11	10.5	25	MT 2	140	CB40010	CB41010
M 12	20	14	13	25	MT 2	140	CB40012	CB41012
M 14	24	16	15	30	MT 2	150	CB40014	CB41014
M 16	26	18	17	35	MT 3	180	CB40016	CB41016
M 18	30	20	19	35	MT 3	180	CB40018	CB41018
M 20	33	22	21	40	MT 3	190	CB40020	CB41020
M 22	36	24	23	40	MT 3	190	CB40022	CB41022
M 24	40	26	25	40	MT 3	190	CB40024	CB41024

High Speed Steel Interchangeable Pilot Aircraft Counterbores

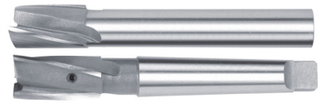
- 1/4" Shank On Size Up To 1"
- 1/2" Shank On Size Over 1"



Square Corner

Size(in.)	Shank Length(in.)	Flute Length(in.)	HoleSize(in.)	OAL(in.)	Body Dia.(in.)	Order No.
1/4	1-1/8	1/2	3/32	2-3/8	1/4	CB50016
9/32	7/8	1/2	3/32	2-3/8	1/4	CB50018
5/16	7/8	1/2	3/32	2-3/8	1/4	CB50020
11/32	7/8	1/2	3/32	2-3/8	1/4	CB50022
3/8	7/8	1/2	3/32	2-3/8	1/4	CB50024
13/32	7/8	1/2	1/8	2-13/16	1/4	CB50026
7/16	7/8	5/8	1/8	2-13/16	1/4	CB50028
15/32	7/8	5/8	1/8	2-13/16	3/8	CB50030
1/2	7/8	5/8	1/8	2-13/16	3/8	CB50032
17/32	7/8	5/8	1/8	2-13/16	3/8	CB50034
9/16	7/8	5/8	1/8	2-13/16	3/8	CB50036
19/32	7/8	5/8	1/8	2-13/16	3/8	CB50038
5/8	7/8	5/8	1/8	2-13/16	7/16	CB50040
21/32	7/8	3/4	3/16	3-1/8	7/16	CB50042
11/16	7/8	3/4	3/16	3-1/8	7/16	CB50044
23/32	7/8	3/4	3/16	3-1/8	7/16	CB50046
3/4	7/8	3/4	3/16	3-1/8	1/2	CB50048
25/32	7/8	3/4	3/16	3-1/8	1/2	CB50050
13/16	7/8	3/4	3/16	3-1/8	1/2	CB50052
27/32	7/8	3/4	3/16	3-1/8	1/2	CB50054
7/8	7/8	3/4	3/16	3-1/8	1/2	CB50056
29/32	7/8	3/4	3/16	3-1/8	1/2	CB50058
15/16	7/8	3/4	3/16	3-1/8	1/2	CB50060
31/32	7/8	3/4	3/16	3-1/8	1/2	CB50062
1"	7/8	3/4	3/16	3-1/8	1/2	CB50100
1-5/16	7/8	7/8	1/4	3-1/4	5/8	CB50120
1-3/8	7/8	7/8	5/16	3-1/4	5/8	CB50124

High Speed Steel Interchangeable Pilot Counterbores



Size(in.)	No.ofFlute	OAL(in.)	HoleSize(in.)	M.T.No.	Straight Shank Size(in.)	Straight Shank Order No.	Taper Shank Order No.
1/4	3	3-13/16	3/32	1	15/64 x 3-1/16	CB51016	CB52016
9/32	3	3-13/16	3/32	1	17/64 x 3-1/16	CB51018	CB52018
5/16	3	3-13/16	3/32	1	19/64 x 3-1/16	CB51020	CB52020
11/32	3	3-13/16	3/32	1	5/16 x 3-1/16	CB51022	CB52022
3/8	3	4-1/16	5/32	1	5/16 x 3-1/16	CB51024	CB52024
13/32	3	4-1/16	5/32	1	3/8 x 3-1/16	CB51026	CB52026
7/16	3	4-1/16	5/32	1	3/8 x 3-1/16	CB51028	CB52028
15/32	3	4-5/16	3/16	1	7/16 x 3-1/16	CB51030	CB52030
1/2	3	4-5/16	3/16	1	7/16 x 3-1/16	CB51032	CB52032
17/32	3	4-5/16	3/16	1	1/2 x 3-1/16	CB51034	CB52034
9/16	3	4-5/16	3/16	1	1/2 x 3-1/16	CB51036	CB52036
19/32	3	5-1/8	3/16	2	1/2 x 3-7/8	CB51038	CB52038
5/8	3	5-1/8	3/16	2	1/2 x 3-7/8	CB51040	CB52040
21/32	3	5-1/8	3/16	2	1/2 x 3-7/8	CB51042	CB52042
11/16	3	5-1/8	3/16	2	1/2 x 3-7/8	CB51044	CB52044
23/32	3	5-3/8	1/4	2	1/2 x 3-7/8	CB51046	CB52046
3/4	3	5-3/8	1/4	2	1/2 x 3-7/8	CB51048	CB52048
25/32	3	5-3/8	1/4	2	5/8 x 3-7/8	CB51050	CB52050
13/16	3	5-3/8	1/4	2	5/8 x 3-7/8	CB51052	CB52052
27/32	3	5-3/8	1/4	2	3/4 x 3-7/8	CB51054	CB52054
7/8	3	5-3/8	1/4	2	3/4 x 3-7/8	CB51056	CB52056
29/32	3	6-1/8	1/4	2	3/4 x 4-5/8	CB51058	CB52058
15/16	3	6-1/8	1/4	3	3/4 x 4-5/8	CB51060	CB52060
1"	3	6-3/8	5/16	3	3/4 x 4-5/8	CB51100	CB52100
1-1/16	3	6-3/8	5/16	3	3/4 x 4-5/8	CB51104	CB52104
1-1/8	3	6-3/8	5/16	3	1 x 4-5/8	CB51108	CB52108
1-3/16	3	6-3/8	5/16	3	1 x 4-5/8	CB51112	CB52112
1-1/4	5	6-5/8	3/8	3	1 x 4-5/8	CB51116	CB52116
1-5/16	5	6-5/8	3/8	3	1 x 4-5/8	CB51120	CB52120
1-3/8	5	6-5/8	3/8	3	1 x 4-5/8	CB51124	CB52124
1-7/16	5	7-7/8	3/8	4	1-1/4 x 5-7/8	CB51128	CB52128
1-1/2	5	7-7/8	3/8	4	1-1/4 x 5-7/8	CB51132	CB52132
1-9/16	5	8-1/8	7/16	4	1-1/4 x 5-7/8	CB51136	CB52136
1-5/8	5	8-1/8	7/16	4	1-1/4 x 5-7/8	CB51140	CB52140
1-11/16	5	8-1/8	7/16	4	1-1/4 x 5-7/8	CB51144	CB52144
1-3/4	5	8-1/8	7/16	4	1-1/4 x 5-7/8	CB51148	CB52148
1-13/16	5	8-1/8	7/16	4	1-1/2 x 5-7/8	CB51152	CB52152
1-7/8	5	8-1/8	7/16	4	1-1/2 x 5-7/8	CB51156	CB52156
1-15/16	5	8-1/8	7/16	4	1-1/2 x 5-7/8	CB51160	CB52160
2"	5	8-3/8	1/2	4	1-1/2 x 5-7/8	CB51200	CB52200
2-1/8	5	9-7/8	1/2	5	—	—	CB52208
2-1/4	5	9-7/8	1/2	5	—	—	CB52216
2-3/8	5	9-7/8	1/2	5	—	—	CB52224
2-1/2	5	9-7/8	1/2	5	—	—	CB52232
2-5/8	5	9-7/8	1/2	5	—	—	CB52240
2-3/4	5	9-7/8	1/2	5	—	—	CB52248
2-7/8	5	9-7/8	1/2	5	—	—	CB52256
3"	5	9-7/8	1/2	5	—	—	CB52300

Countersink and Deburring Tools

- High Speed Steel

Size	Range Of Hole Diameter Which Can be Cut		Shank Size(in.)	60° Order No.	82° Order No.82°	90° Order No.90°
	Smallest Dia.	Largest Dia.				
0 Double end	1/16	15/64	1/4	CS00060	CS00082	CS00090
1 Single end	5/32	13/32	1/4	CS00160	CS00182	CS00190
2 Single end	3/16	17/32	1/4	CS00260	CS00282	CS00290
3 Single end	5/16	25/32	1/2	CS00360	CS00382	CS00390
4 Single end	9/16	1-1/16	1/2	CS00460	CS00482	CS00490
5 Single end	5/8	1-15/32	1/2	CS00560	CS00582	CS00590
6 Single end	3/4	1-3/4	5/8	CS00660	CS00682	CS00690
7 Single end	1"	2"	5/8	CS00760	CS00782	CS00790
8 Single end	1-1/4	2-1/2	3/4	CS00860	CS00882	CS00890

Countersink and Deburring Tools-5 Pcs/Set

Set Qty	Set Contents	60° Order No.	82° Order No.	90° Order No.
5pcs	#0, #1, #2, #3, #4	CSU000560	CSU000582	CSU000590

Single Flute Countersinks

- High Speed Steel and Carbide
- 60°,82°,and 90°

Size (in.)	Shank Dia.(in.)	OAL (in.)	60° Order No.	82° Order No.	90° Order No.
3/16	3/16	1-1/2	CS0101260	CS0101282	CS0101290
1/4	1/4	2"	CS0101660	CS0101682	CS0101690
5/16	1/4	2"	CS0102060	CS0102082	CS0102090
3/8	1/4	2"	CS0102460	CS0102482	CS0102490
1/2	1/4	2"	CS0103260	CS0103282	CS0103290
5/8	1/2"	2-1/2	CS0104060	CS0104082	CS0104090
3/4	1/2"	2-3/4	CS0104860	CS0104882	CS0104890
7/8	1/2"	2-3/4	CS0105660	CS0105682	CS0105690
1"	1/2"	2-3/4	CS0110060	CS0110082	CS0110090
1-1/4	3/4"	3-3/8	CS0111660	CS0111682	CS0111690
1-1/2	3/4"	3-3/8	CS0113260	CS0113282	CS0113290
2"	3/4"	3-3/4	CS0120060	CS0120082	CS0120090

Single Flute Countersink Sets

- High Speed Steel ·60°,82°. and 90°

Set Qty	Set Contents(in.)	60° Order No.	82° Order No.	90° Order No.
5pcs	1/4,3/8,1/2, 3/4,1"	CSU010560	CSU010582	CSU010590
9pcs	3/16, 1/4, 5/16, 3/8, 1/2,5/8, 3/4, 7/8, 1"	CSU010960	CSU010981	CSU010990
12pcs	3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8,1", 1-1/4, 1-1/2, 2"	CSU011260	CSU011282	CSU011290

3-Flute Center Reamer Sets

- High Speed Steel 60°,82° and 90°

Set Qty	Set Contents(in.)	60° Order No.	82° Order No.	90° Order No.
5pcs	1/4 ,3/8 ,1/2 ,3/4 ,1	CSU020560	CSU020582	CSU020590
9pcs	1/4 ,3/8 ,1/2 ,5/8 ,3/4 1,1-1/4 ,1-1/2 ,2	CSU020960	CSU020982	CSU020990

3-Flute Center Reamers

- High Speed Steel
- 60°,82°,90°,110°,and 120°

Size(in.)	Shank Dia.(in.)	OAL (in.)	60° Order No.	82° Order No.	90° Order No.	110° Order No.	120° Order No.
1/4	3/16	1-1/2	CS0201660	CS0201682	CS0201690	CS02016110	CS02016120
3/8	1/4	1-3/4	CS0202460	CS0202482	CS0202490	CS02024110	CS02024120
1/2	3/8	2"	CS0203260	CS0203282	CS0203290	CS02032110	CS02032120
5/8	3/8	2-1/4	CS0204060	CS0204082	CS0204090	CS02040110	CS02040120
3/4	1/2	2-5/8	CS0204860	CS0204882	CS0204890	CS02048110	CS02048120
1"	1/2	2-3/4	CS0210060	CS0210082	CS0210090	CS02100110	CS02100120
1-1/4	5/8	3"	CS0211660	CS0211682	CS0211690	CS02116110	CS02116120
1-1/2	3/4	3"	CS0213260	CS0213282	CS0213290	CS02132110	CS02132120
2"	3/4	3-1/4	CS0220060	CS0220082	CS0220090	CS02200110	CS02200120

4-Flute Machine Countersinks

- High Speed Steel 60°,82° and 90°

Size (in.)	Shank Dia.(in.)	OAL (in.)	60° Order No.	82° Order No.	90° Order No.
1/2	1/2	3-7/8	CS0303260	CS0303282	CS0303290
5/8	1/2	4"	CS0304060	CS0304082	CS0304090
3/4	1/2	4-1/8	CS0304860	CS0304882	CS0304890
7/8	1/2	4-1/4	CS0305660	CS0305682	CS0305690
1"	1/2	4-3/8	CS0310060	CS0310082	CS0310090
1-1/4	1/2	5"	CS0311660	CS0311682	CS0311690
1-1/2	1/2	5-3/8	CS0313260	CS0313282	CS0313290

4-Flute Machine Countersink Sets

- High Speed Steel 60°,82° and 90°

Set Qty	Set Contents(in.)	60° Order No.	82° Order No.	90° Order No.
5pcs	1/2 ,5/8 ,3/4 ,7/8 ,1"	CSU030560	CSU030582	CSU030590
7pcs	1/2 ,5/8 ,3/4 ,7/8 , 1" ,1-1/4 ,1-1/2	CSU030760	CSU030782	CSU030790

6-Flute Chatterless Countersinks

- 60°,82°,90°,100°,110°,and 120°
- High Speed Steel

Size (in.)	Shank Dia.(in.)	Shank Length(in.)	OAL (in.)	60° Order No.	82° Order No.	90° Order No.	110° Order No.	120° Order No.
3/16	3/16	1"	1-1/2	CS0401260	CS0401282	CS0401290	CS04012110	CS04012120
1/4	1/4	1"	2"	CS0401660	CS0401682	CS0401690	CS04016110	CS04016120
5/16	1/4	1"	2"	CS0402060	CS0402082	CS0402090	CS04020110	CS04020120
3/8	1/4	1"	2"	CS0402460	CS0402482	CS0402490	CS04024110	CS04024120
1/2	1/4	1"	2"	CS0403260	CS0403282	CS0403290	CS04032110	CS04032120
5/8	1/2	1-1/8	2-1/2	CS0404060	CS0404082	CS0404090	CS04040110	CS04040120
3/4	1/2	1-5/16	2-3/4	CS0404860	CS0404882	CS0404890	CS04048110	CS04048120
7/8	1/2	1-5/16	2-3/4	CS0405660	CS0405682	CS0405690	CS04056110	CS04056120
1"	1/2	1-5/16	2-3/4	CS0410060	CS0410082	CS0410090	CS04100110	CS04100120
1-1/4	3/4	1-5/8	3-3/8	CS0411660	CS0411682	CS0411690	CS04116110	CS04116120
1-1/2	3/4	1-5/8	3-1/2	CS0413260	CS0413282	CS0413290	CS04132110	CS04132120
1-3/4	1"	2-1/8	4-1/4	CS0414860	CS0414882	CS0414890	CS04148110	CS04148120
2"	1"	2-1/8	4-3/8	CS0420060	CS0420082	CS0420090	CS04200110	CS04200120

6-Flute Chatterless Countersink Sets

- High Speed Steel ·
- 60°,82°,and 90°

Set Qty	Set Contents(in.)	60° Order No.	82° Order No.	90° Order No.
8pcs	1/4, 5/16,3/8,1/2,5/8,3/4,7/8,1"	CSU040860	CSU040882	CSU040890
11pcs	3/16,1/4,5/16,3/8,1/2,5/8,3/4,7/8,1", 1-1/4,1-1/2	CSU041160	CSU041182	CSU041190

Straight Shank Countersink

- Counters. angle: 60°
- Shank: Cylindrical
- Cutting edges:1

Size (mm)	Total Length(mm)	Shank Dia. (mm)	Order No.
6	45	5	CS05006
8	50	6	CS05008
10	50	6	CS05010
12	56	8	CS05012
16	63	10	CS05016
20	67	10	CS05020
25	71	10	CS05025
30	81	12	CS05030
40	89	15	CS05040
50	98	15	CS05050

- Counters. angle: 90°
- Cutting edges: 1

Size (mm)	Total Length(mm)	Shank Dia. (mm)	Order No.
6	45	5	CS06006
8	50	6	CS06008
10	50	6	CS06010
12	50	8	CS06012
16	63	10	CS06016
20	67	10	CS06020
25	71	10	CS06025
30	81	12	CS06030
40	89	15	CS06040
50	98	15	CS06050

- Counters. angle:75°
- Cutting edges:3

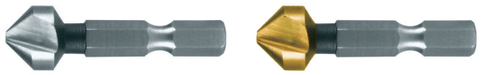
Size (mm)	Point Dia. (mm)	Total length(mm)	Shank Dia. (mm)	Order No.
6.3	1.6	45	5	CS07063
8.3	2	50	6	CS07083
10.4	2.5	50	6	CS07104
12.4	3.2	56	8	CS07124
16.5	4	63	10	CS07165
20.5	5	67	10	CS07205
25	6.3	71	10	CS07250

- Counters. angle: 120°
- Cutting edges: 3

Size (mm)	Point Dia. (mm)	Total length (mm)	Shank Dia. (mm)	Order No.
6.3	1.5	45	5	CS08063
8.3	2	50	6	CS08083
10.4	2.5	50	6	CS08104
12.4	3	56	8	CS08124
16.5	3.5	63	10	CS08165
20.5	4	67	10	CS08205
25	5	71	10	CS08250

Countersink With Hexagon Shank

- Counters angle :90°
- Shank :1/4" hexagon
- Cutting edges :3



Size (mm)	Point Dia. (mm)	Totallength (mm)	Shank Dia.(hexagon)	Bright Finish Order No.	Tin Coated Order No.
6.3	1.5	38	1/4"	CS09063	CS09063TN
8.3	2	38	1/4"	CS09083	CS09083TN
10.4	2.5	41	1/4"	CS09104	CS09104TN
12.4	2.8	42	1/4"	CS09124	CS09124TN
16.5	3.2	47	1/4"	CS09165	CS09165TN
20.5	3.5	48	1/4"	CS09205	CS09205TN

Countersink With Hexagon Shank 6pcs/set

Set Contents(mm)	Bright Finish Order No.	Tin Coated Order No.
6.3 , 8.3 , 10.4 , 12.4 , 16.5 , 20.5 in Metal Case	CSU0906	CSU0906TN

Taper Shank Countersink

- Counters. angle: 60°
- Shank: Morse taper
- Cutting edge: 1

Size (mm)	Total length (mm)	Shank No.	Order No.
16	92	MT 1	CS10116
20	107	MT 2	CS10220
25	110	MT 2	CS10225
30	114	MT 2	CS10230
40	145	MT 3	CS10340
50	152	MT 3	CS10350

- Counters. angle: 90°
- Shank: Morse taper
- Cutting edge: 1

Size (mm)	Total Length (mm)	Shank MT	Order No.
16	92	MT 1	CS11116
20	107	MT 2	CS11220
25	110	MT 2	CS11225
30	114	MT 2	CS11230
40	145	MT 3	CS11340
50	152	MT 3	CS11350

- Counters. angle:75°
- Shank:Morse taper
- Cutting edges:3

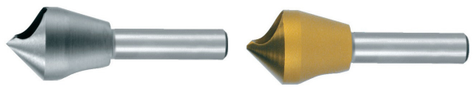
Size (mm)	Point Dia(mm)	Total length (mm)	Shank	Order No.
16.5	3.5	87	MT 1	CS121165
20.5	4.5	102	MT 2	CS122205
25	5	109	MT 2	CS122250
31	5	116	MT 2	CS122310
40	10	145	MT 3	CS123400

- Counters. angle:120°
- Shank:Morse taper
- Cutting edges:3
- Right Hand Cutting

Size (mm)	Point Dia(mm)	Total length (mm)	Shank	Order No.
16.5	3.5	87	MT 1	CS131165
20.5	4.5	102	MT 2	CS132205
25	5	109	MT 2	CS132250
31	5	116	MT 2	CS132310
40	10	145	MT 3	CS133400

Zero Flute Countersink & Deburring Tools

- Counters. angle:90°
- Shank:Cylindrical



Size	Rrange	Head Dia (mm)	Shank Dia. (mm)	Total Length(mm)	Bright Finish Order No.	TiN-Coated Order No.
1/4	1-4	6.35	6.35	45	CS140104	CS140104TN
2/5	2-5	10	6	45	CS140205	CS140205TN
5/10	5-10	14	8	48	CS140510	CS140510TN
10/15	10-15	21	10	65	CS141015	CS141015TN
15/20	15 - 20	28	12	85	CS141520	CS141520TN
20/25	20 - 25	35	12	102	CS142025	CS142025TN
25/30	25 - 30	44	15	115	CS142530	CS142530TN
30/35	30 - 35	48	15	127	CS143035	CS143035TN
35/40	35 - 40	53	15	136	CS143540	CS143540TN
40/50	40 - 50	64	18	166	CS144050	CS144050TN

Zero Flute Countersink & Deburring Tool Sets

- Slotted taper and deburring countersinkers 90° in Plastic case

Description	Bright Finish Order No.	TiN-Coated Order No.
4 pcs nominal Ø mm: 2/5，5/10，10/15，15/20	CSU140104	CSU140104TN
5 pcs nominal Ø mm: 2/5，5/10，10/15，15/20，20/25	CSU140205	CSU140205TN

Straight Shank Multi-flute Countersink

- Counters. angle:60°
- Shank:Cylindrical
- Surface:bright
- Standard:DIN334A

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length(mm)	No. of Flutes	Order No.
8	1.5	8	50	5	CS15080
10	1.8	8	50	5	CS15100
12.5	2	8	50	6	CS15125
16	3.2	10	60	6	CS15160
20	5	10	63	7	CS15200

Taper Shank Multi-flute Countersink

- Counters. angle:60°
- Shank:Morse taper
- Surface:bright
- Standard:DIN334B

Size (mm)	Point Dia. (mm)	Total length(mm)	MT	No. of Flutes	Order No.
16	3.2	100	1	6	CS16160
25	7	125	2	8	CS16250
31.5	9	132	2	9	CS16315
40	12	160	3	10	CS16400
50	16	170	3	12	CS16500
63	20	200	4	14	CS16630
80	25	215	4	16	CS16800

Straight Shank Countersink

- Counters. angle:60°
- Shank:Cylindrical
- Cutting edges:3
- Surface:bright
- Standard:DIN334C

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length(mm)	Order No.
6.3	1.5	5	45	CS17063
8	2	6	50	CS17080
10	2.5	6	50	CS17100
12.5	3.2	8	56	CS17125
16	4	10	63	CS17160
20	5	10	67	CS17200
25	6.3	10	71	CS17250

Taper and Deburring Countersinkers

- Type D 60° HSS
- Shank:Morse taper
- Cutting edges:3
- Surface:bright
- Standard:DIN 334D

Size (mm)	Point Dia. (mm)	Total length (mm)	MT	Order No.
16	4	90	1	CS18160
20	5	106	2	CS18200
25	6.3	112	2	CS18250
31.5	10	118	2	CS18315
40	12.5	150	3	CS18400
50	16	160	3	CS18500
63	20	190	4	CS18630
80	25	200	4	CS18800

Straight Shank Multi-flute Countersink

- Counters. angle:90°
- Shank:Cylindrical
- Surface:bright
- Standard:DIN335A

Size (mm)	Point Dia. (mm)	Total length(mm)	Shank Dia. (mm)	No. of Flutes	Order No.
8	1.5	48	8	5	CS19080
10	1.8	48	8	5	CS19100
12.5	2	48	8	6	CS19125
16	3.2	56	10	6	CS19160
20	5	60	10	7	CS19200

Taper Shank Multi-flute Countersink

- Counters. angle:90°
- Shank:Cylindrical
- Surface:bright
- Standard:DIN335B

Size (mm)	Point Dia. (mm)	Total length(mm)	MT	No. of Flutes	Order No.
16	3.2	95	1	6	CS20160
25	7	118	2	8	CS20250
31.5	9	122	2	9	CS20315
40	12	150	3	10	CS20400
50	16	155	3	12	CS20500
63	20	185	4	14	CS20630
80	25	196	4	16	CS20800

Straight Shank Countersink

- Counters. angle:90°
- Cutting edges:3
- Standard: DIN335C

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	Bright Finish Order No.	TiN-Coated Order No.
4.3	1.3	4	40	CS211043	CS211043TN
4.8	1.5	4	40	CS211048	CS211048TN
5.0	1.5	4	40	CS211050	CS211050TN
5.3	1.5	4	40	CS211053	CS211053TN
5.8	1.5	5	45	CS211058	CS211058TN
6.0	1.5	5	45	CS211060	CS211060TN
6.3	1.5	5	45	CS211063	CS211063TN
7.0	1.8	6	50	CS211070	CS211070TN
7.3	1.8	6	50	CS211073	CS211073TN
8.0	2	6	50	CS211080	CS211080TN
8.3	2	6	50	CS211083	CS211083TN
9.4	2.2	6	50	CS211094	CS211094TN
10.0	2.5	6	50	CS211100	CS211100TN
10.4	2.5	6	50	CS211104	CS211104TN

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	Bright Finish Order No.	TiN-Coated Order No.
11.5	2.8	8	56	CS211115	CS211115TN
12.4	2.8	8	56	CS211124	CS211124TN
13.4	2.9	8	56	CS211134	CS211134TN
15.0	3.2	10	60	CS211150	CS211150TN
16.5	3.2	10	60	CS211165	CS211165TN
19.0	3.5	10	63	CS211190	CS211190TN
20.5	3.5	10	63	CS211205	CS211205TN
23.0	3.8	10	67	CS211230	CS211230TN
25.0	3.8	10	67	CS211250	CS211250TN
26.0	3.9	12	71	CS211260	CS211260TN
28.0	4	12	71	CS211280	CS211280TN
30.0	4.2	12	71	CS211300	CS211300TN
31.0	4.2	12	71	CS211310	CS211310TN
37.0	4.8	12	80	CS211370	CS211370TN
40.0	5	15	80	CS211400	CS211400TN

- Straight Shank Long Countersink

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	Bright Finish Order No.	TiN-Coated Order No.
6.3	1.5	5	85	CS212063	CS212063TN
8.3	2	6	85	CS212083	CS212083TN
10.4	2.5	6	88	CS212104	CS212104TN
12.4	2.8	8	108	CS212124	CS212124TN
15.0	3.2	10	110	CS212150	CS212150TN
16.5	3.2	10	112	CS212165	CS212165TN
20.5	3.5	10	115	CS212205	CS212205TN
25.0	3.8	10	118	CS212250	CS212250TN

- Straight Shank Extra Long Countersink

Size (mm)	Point Dia. (mm)	Shank Dia. mm)	Total length (mm)	Bright Finish Order No.	TiN-Coated Order No.
6.3	1.5	5	154	CS213063	CS213063TN
8.3	2	6	155	CS213083	CS213083TN
10.4	2.5	6	157	CS213104	CS213104TN
12.4	2.8	8	158	CS213124	CS213124TN
16.5	3.2	10	161	CS213165	CS213165TN
20.5	3.5	10	164	CS213205	CS213205TN

- Taper and deburring countersinker sets DIN 335 type C 90°

Set Qty	Set Contents (mm)	Package Material	Order No.
6pcs	6, 8, 10, 11.5, 15, 19	Plastic Case	CSU210106
6pcs	6.3 , 8.3 , 10.4 , 12.4 , 16.5, 20.5	Metal Case	CSU210206
17pcs	4.3 , 5, 6 , 6.3 , 7 , 8 , 8.3 , 10 , 10.4 , 11.5 ,12.4 ,15 , 16.5, 19 , 20.5 , 23 ,25	Plastic Case	CSU210317

Taper Shank Countersink

- Counters. angle:90°
- Cutting edges:3
- Surface:bright
- Standard:DIN335D

Size (mm)	Point Dia. (mm)	Total length (mm)	MT	Order No.
15	3.2	85	1	CS22150
16.5	3.2	85	1	CS22165
19	3.5	100	2	CS22190
20.5	3.5	100	2	CS22205
23	3.8	106	2	CS22230
25	3.8	106	2	CS22250
26	3.8	106	2	CS22260
28	4	112	2	CS22280
30	4.2	112	2	CS22300
31	4.2	112	2	CS22310

Size (mm)	Point Dia. (mm)	Total length (mm)	MT	Order No.
34	4.5	118	2	CS22340
37	4.8	118	2	CS22370
40	10	140	3	CS22400
45	12	145	3	CS22450
50	14	150	3	CS22500
63	16	180	4	CS22630
80	22	190	4	CS22800
100	28	200	4	CS221000
120	34	208	4	CS221200

Straight Shank Countersink

- Counters. angle:120°
- Shank:Cylindrical
- Surface:Bright
- Standard:DIN347A

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	No. of Flutes	Order No.
16	3.2	10	53	6	CS23160

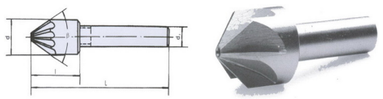
Taper Shank Countersink

- Counters. angle:120°
- Shank:Morse taper
- Cutting edges:3
- Surface:Bright
- Standard:DIN347B

Size (mm)	Point Dia. (mm)	Total length (mm)	MT	No. of Flutes	Order No.
25	7	112	2	8	CS24250
40	12	140	3	10	CS24400

Straight Shank Countersink

- Shank: Cylindrical
- Standard:ГОСТ14953-80
- Surface:bright



Point angle:60°

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	Flute Length (mm)	No. of Flutes	Order No.
8	1.6	8	48	16	8	CS2508060
10	2	8	50	18	8	CS2510060
12.5	2.5	8	52	20	8	CS2512560
16	3.2	10	60	24	8	CS2516060
20	4	10	64	28	8	CS2520060
25	7	10	69	33	8	CS2525060

Point angle:90°

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	Flute Length (mm)	No. of Flutes	Order No.
8	1.6	8	44	12	10	CS2508090
10	2	8	46	14	10	CS2510090
12.5	2.5	8	48	16	10	CS2512590
16	3.2	10	56	20	10	CS2516090
20	4	10	60	24	10	CS2520090
25	7	10	65	29	10	CS2525090

Point angle:120°

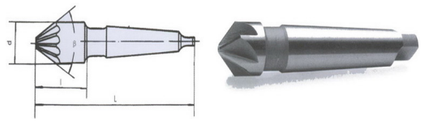
Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	Flute Length (mm)	No. of Flutes	Order No.
8	1.6	8	44	12	11	CS25080120
10	2	8	46	14	11	CS25100120
12.5	2.5	8	48	16	11	CS25125120

Point angle:120°

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	Flute Length (mm)	No. of Flutes	Order No.
16	3.2	10	56	20	11	CS25160120
20	4	10	60	24	11	CS25200120
25	7	10	65	29	11	CS25250120

Taper Shank Countersink

- Shank: Morse taper
- Standard:ГОСТ14953-80
- Surface:bright



Point angle:60°

Size (mm)	Point Dia. (mm)	Shank Dia.(mm)	Total length (mm)	Flute Length (mm)	No. of Flutes	Order No.
16	3.2	97	24	1	8	CS2616060
20	4	120	28	2	8	CS2620060
25	7	125	33	2	8	CS2625060
31.5	9	132	40	2	8	CS2631560
40	12.5	160	45	3	8	CS2640060
50	16	165	50	3	8	CS2650060
63	20	200	58	4	8	CS2663060
80	25	215	73	4	8	CS2680060

Point angle:90°

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	Flute Length (mm)	No. of Flutes	Order No.
16	3.2	93	20	1	10	CS2616090
20	4	116	24	2	10	CS2620090
25	7	121	29	2	10	CS2625090
31.5	9	124	32	2	10	CS2631590
40	12.5	150	35	3	10	CS2640090
50	16	153	38	3	10	CS2650090
63	20	185	43	4	10	CS2663090
80	25	196	54	4	10	CS2680090

Point angle:120°

Size (mm)	Point Dia. (mm)	Shank Dia. (mm)	Total length (mm)	Flute Length (mm)	No. of Flutes	Order No.
16	3.2	93	20	1	11	CS26160120
20	4	116	24	2	11	CS26200120
25	7	121	29	2	11	CS26250120
31.5	9	124	32	2	11	CS26315120
40	12.5	150	35	3	11	CS26400120
50	16	153	38	3	11	CS26500120
63	20	185	43	4	11	CS26630120
80	25	196	54	4	11	CS26800120

Straight Shank Chucking Reamers

- Right Hand Cut
- Standard:ANSI B94.2
- Diameter Tolerances:
  thru 1/2" diameter +.0002-.0000
  above 1/2" to 5/8" +.0003-.0000
  above 5/8" to 1-1/2"+.0001+.0004

Straight Flute

Spiral Flute

Fractional Size

Size (in.)	Dec.Equiv. (in.)	Flute Length(in.)	OAL (in.)	HSS Straight Flute Order No.	HSS Spiral Flute Order No.	Cobalt Straight Flute Order No.	Cobalt Spiral Flute Order No.
3/64	0.0469	1/2	2-1/2	RC10003	RC20003	RC15003	RC25003
1/16	0.0625	1/2	2-1/2	RC10004	RC20004	RC15004	RC25004
5/64	0.0781	3/4	3"	RC10005	RC20005	RC15005	RC25005
3/32	0.0938	3/4	3"	RC10006	RC20006	RC15006	RC25006
7/64	0.1094	7/8	3-1/2	RC10007	RC20007	RC15007	RC25007
1/8	0.1250	7/8	3-1/2	RC10008	RC20008	RC15008	RC25008
9/64	0.1406	1"	4"	RC10009	RC20009	RC15009	RC25009
5/32	0.1562	1"	4"	RC10010	RC20010	RC15010	RC25010
11/64	0.1719	1-1/8	4-1/2	RC10011	RC20011	RC15011	RC25011
3/16	0.1875	1-1/8	4-1/2	RC10012	RC20012	RC15012	RC25012
13/64	0.2031	1-1/4	5"	RC10013	RC20013	RC15013	RC25013
7/32	0.2188	1-1/4	5"	RC10014	RC20014	RC15014	RC25014
15/64	0.2344	1-1/2	6"	RC10015	RC20015	RC15015	RC25015
1/4	0.2500	1-1/2	6"	RC10016	RC20016	RC15016	RC25016
17/64	0.2656	1-1/2	6"	RC10017	RC20017	RC15017	RC25017
9/32	0.2812	1-1/2	6"	RC10018	RC20018	RC15018	RC25018
19/64	0.2969	1-1/2	6"	RC10019	RC20019	RC15019	RC25019
5/16	0.3125	1-1/2	6"	RC10020	RC20020	RC15020	RC25020
21/64	0.3281	1-1/2	6"	RC10021	RC20021	RC15021	RC25021
11/32	0.3437	1-1/2	6"	RC10022	RC20022	RC15022	RC25022
23/64	0.3594	1-3/4	7"	RC10023	RC20023	RC15023	RC25023
3/8	0.3750	1-3/4	7"	RC10024	RC20024	RC15024	RC25024
25/64	0.3906	1-3/4	7"	RC10025	RC20025	RC15025	RC25025
13/32	0.4062	1-3/4	7"	RC10026	RC20026	RC15026	RC25026
27/64	0.4219	1-3/4	7"	RC10027	RC20027	RC15027	RC25027
7/16	0.4375	1-3/4	7"	RC10028	RC20028	RC15028	RC25028
29/64	0.4531	1-3/4	7"	RC10029	RC20029	RC15029	RC25029
15/32	0.4687	1-3/4	7"	RC10030	RC20030	RC15030	RC25030
31/64	0.4844	2"	8"	RC10031	RC20031	RC15031	RC25031
1/2	0.5000	2"	8"	RC10032	RC20032	RC15032	RC25032
33/64	0.5156	2"	8"	RC10033	RC20033	RC15033	RC25033
17/32	0.5312	2"	8"	RC10034	RC20034	RC15034	RC25034
35/64	0.5469	2"	8"	RC10035	RC20035	RC15035	RC25035
9/16	0.5625	2"	8"	RC10036	RC20036	RC15036	RC25036
37/64	0.5781	2"	8"	RC10037	RC20037	RC15037	RC25037
19/32	0.5938	2"	8"	RC10038	RC20038	RC15038	RC25038
39/64	0.6094	2-1/4	9"	RC10039	RC20039	RC15039	RC25039
5/8	0.6250	2-1/4	9"	RC10040	RC20040	RC15040	RC25040
41/64	0.6406	2-1/4	9"	RC10041	RC20041	RC15041	RC25041
21/32	0.6562	2-1/4	9"	RC10042	RC20042	RC15042	RC25042
43/64	0.6719	2-1/4	9"	RC10043	RC20043	RC15043	RC25043
11/16	0.6875	2-1/4	9"	RC10044	RC20044	RC15044	RC25044
45/64	0.7031	2-1/4	9"	RC10045	RC20045	RC15045	RC25045
23/32	0.7187	2-1/4	9"	RC10046	RC20046	RC15046	RC25046
47/64	0.7344	2-1/2	9-1/2	RC10047	RC20047	RC15047	RC25047
3/4	0.7500	2-1/2	9-1/2	RC10048	RC20048	RC15048	RC25048
49/64	0.7656	2-1/2	9-1/2	RC10049	RC20049	RC15049	RC25049
25/32	0.7812	2-1/2	9-1/2	RC10050	RC20050	RC15050	RC25050
51/64	0.7969	2-1/2	9-1/2	RC10051	RC20051	RC15051	RC25051
13/16	0.8125	2-1/2	9-1/2	RC10052	RC20052	RC15052	RC25052

Fractional Size

Size (in.)	Dec.Equiv. (in.)	Flute Length(in.)	OAL (in.)	HSS Straight Flute Order No.	HSS Spiral Flute Order No.	Cobalt Straight Flute Order No.	Cobalt Spiral Flute Order No.
53/64	0.8281	2-1/2	9-1/2	RC10053	RC20053	RC15053	RC25053
27/32	0.8437	2-1/2	9-1/2	RC10054	RC20054	RC15054	RC25054
55/64	0.8594	2-5/8	10"	RC10055	RC20055	RC15055	RC25055
7/8	0.8750	2-5/8	10"	RC10056	RC20056	RC15056	RC25056
57/64	0.8906	2-5/8	10"	RC10057	RC20057	RC15057	RC25057
29/32	0.9062	2-5/8	10"	RC10058	RC20058	RC15058	RC25058
59/64	0.9219	2-5/8	10"	RC10059	RC20059	RC15059	RC25059
15/16	0.9375	2-5/8	10"	RC10060	RC20060	RC15060	RC25060
61/64	0.9531	2-5/8	10"	RC10061	RC20061	RC15061	RC25061
31/32	0.9687	2-5/8	10"	RC10062	RC20062	RC15062	RC25062
63/64	0.9844	2-3/4	10-1/2	RC10063	RC20063	RC15063	RC25063
1"	1.0000	2-3/4	10-1/2	RC10100	RC20100	RC15100	RC25100
1-1/32	1.0313	2-3/4	10-1/2	RC10102	RC20102	RC15102	RC25102
1-1/16	1.0625	2-3/4	10-1/2	RC10104	RC20104	RC15104	RC25104
1-3/32	1.0938	2-7/8	11"	RC10106	RC20106	RC15106	RC25106
1-1/8	1.1250	2-7/8	11"	RC10108	RC20108	RC15108	RC25108
1-5/32	1.1563	2-7/8	11"	RC10110	RC20110	RC15110	RC25110
1-3/16	1.1875	2-7/8	11"	RC10112	RC20112	RC15112	RC25112
1-7/32	1.2180	3"	11-1/2	RC10114	RC20114	RC15114	RC25114
1-1/4	1.2500	3"	11-1/2	RC10116	RC20116	RC15116	RC25116
1-5/16	1.3125	3"	11-1/2	RC10120	RC20120	RC15120	RC25120
1-3/8	1.3750	3-1/4	12"	RC10124	RC20124	RC15124	RC25124
1-7/16	1.4375	3-1/4	12"	RC10128	RC20128	RC15128	RC25128
1-1/2	1.5000	3-1/2	12-1/2	RC10132	RC20132	RC15132	RC25132
1-9/16	1.5625	3-1/2	12-1/2	RC10136	RC20136	RC15136	RC25136
1-5/8	1.6250	3-5/8	13"	RC10140	RC20140	RC15140	RC25140
1-11/16	1.6875	3-5/8	13"	RC10144	RC20144	RC15144	RC25144
1-3/4	1.7500	4"	13-1/2	RC10148	RC20148	RC15148	RC25148
1-7/8	1.8750	4"	14"	RC10156	RC20156	RC15156	RC25156
2"	2.0000	4"	14"	RC10200	RC20200	RC15200	RC25200

Number Size

Size	Dec.Equiv. (in.)	Flute Length(in.)	OAL (in.)	HSS Straight Flute Order No.	HSS Spiral Flute Order No.	Cobalt Straight Flute Order No.	Cobalt Spiral Flute Order No.
1	0.228	1-1/2	6"	RC10501	RC20501	RC15501	RC25501
2	0.221	1-1/2	6"	RC10502	RC20502	RC15502	RC25502
3	0.213	1-1/4	5"	RC10503	RC20503	RC15503	RC25503
4	0.209	1-1/4	5"	RC10504	RC20504	RC15504	RC25504
5	0.2055	1-1/4	5"	RC10505	RC20505	RC15505	RC25505
6	0.204	1-1/4	5"	RC10506	RC20506	RC15506	RC25506
7	0.201	1-1/4	5"	RC10507	RC20507	RC15507	RC25507
8	0.199	1-1/4	5"	RC10508	RC20508	RC15508	RC25508
9	0.196	1-1/4	5"	RC10509	RC20509	RC15509	RC25509
10	0.1935	1-1/4	5"	RC10510	RC20510	RC15510	RC25510
11	0.191	1-1/4	5"	RC10511	RC20511	RC15511	RC25511
12	0.189	1-1/8	4-1/2	RC10512	RC20512	RC15512	RC25512
13	0.185	1-1/8	4-1/2	RC10513	RC20513	RC15513	RC25513
14	0.182	1-1/8	4-1/2	RC10514	RC20514	RC15514	RC25514
15	0.18	1-1/8	4-1/2	RC10515	RC20515	RC15515	RC25515
16	0.177	1-1/8	4-1/2	RC10516	RC20516	RC15516	RC25516
17	0.173	1-1/8	4-1/2	RC10517	RC20517	RC15517	RC25517
18	0.1695	1-1/8	4-1/2	RC10518	RC20518	RC15518	RC25518
19	0.166	1-1/8	4-1/2	RC10519	RC20519	RC15519	RC25519
20	0.161	1-1/8	4-1/2	RC10520	RC20520	RC15520	RC25520
21	0.159	1-1/8	4-1/2	RC10521	RC20521	RC15521	RC25521
22	0.157	1"	4"	RC10522	RC20522	RC15522	RC25522
23	0.154	1"	4"	RC10523	RC20523	RC15523	RC25523

Straight Shank Chucking Reamers

- Right Hand Cut
- Standard:ANSI B94.2
- Diameter Tolerances:
  thru 1/2" diameter +.0002-.0000
  above 1/2" to 5/8" +.0003-.0000
  above 5/8" to 1-1/2"+.0001+.0004

Straight Flute

Spiral Flute

Number Size

Size	Dec.Equiv. (in.)	Flute Length(in.)	OAL (in.)	HSS Straight Flute Order No.	HSS Spiral Flute Order No.	Cobalt Straight Flute Order No.	Cobalt Spiral Flute Order No.
24	0.152	1"	4"	RC10524	RC20524	RC15524	RC25524
25	0.1495	1"	4"	RC10525	RC20525	RC15525	RC25525
26	0.147	1"	4"	RC10526	RC20526	RC15526	RC25526
27	0.144	1"	4"	RC10527	RC20527	RC15527	RC25527
28	0.1405	1"	4"	RC10528	RC20528	RC15528	RC25528
29	0.136	1"	4"	RC10529	RC20529	RC15529	RC25529
30	0.1285	7/8	3-1/2	RC10530	RC20530	RC15530	RC25530
31	0.12	7/8	3-1/2	RC10531	RC20531	RC15531	RC25531
32	0.116	7/8	3-1/2	RC10532	RC20532	RC15532	RC25532
33	0.113	7/8	3-1/2	RC10533	RC20533	RC15533	RC25533
34	0.111	7/8	3-1/2	RC10534	RC20534	RC15534	RC25534
35	0.11	7/8	3-1/2	RC10535	RC20535	RC15535	RC25535
36	0.1065	7/8	3-1/2	RC10536	RC20536	RC15536	RC25536
37	0.104	7/8	3-1/2	RC10537	RC20537	RC15537	RC25537
38	0.1015	7/8	3-1/2	RC10538	RC20538	RC15538	RC25538
39	0.0995	7/8	3-1/2	RC10539	RC20539	RC15539	RC25539
40	0.098	7/8	3-1/2	RC10540	RC20540	RC15540	RC25540
41	0.096	7/8	3-1/2	RC10541	RC20541	RC15541	RC25541
42	0.0935	3/4	3"	RC10542	RC20542	RC15542	RC25542
43	0.089	3/4	3"	RC10543	RC20543	RC15543	RC25543
44	0.086	3/4	3"	RC10544	RC20544	RC15544	RC25544
45	0.082	3/4	3"	RC10545	RC20545	RC15545	RC25545
46	0.081	3/4	3"	RC10546	RC20546	RC15546	RC25546
47	0.0785	3/4	3"	RC10547	RC20547	RC15547	RC25547
48	0.076	3/4	3"	RC10548	RC20548	RC15548	RC25548
49	0.073	3/4	3"	RC10549	RC20549	RC15549	RC25549
50	0.07	3/4	3"	RC10550	RC20550	RC15550	RC25550
51	0.067	3/4	3"	RC10551	RC20551	RC15551	RC25551
52	0.0635	1/2	2-1/2	RC10552	RC20552	RC15552	RC25552
53	0.0595	1/2	2-1/2	RC10553	RC20553	RC15553	RC25553
54	0.055	1/2	2-1/2	RC10554	RC20554	RC15554	RC25554
55	0.052	1/2	2-1/2	RC10555	RC20555	RC15555	RC25555
56	0.0465	1/2	2-1/2	RC10556	RC20556	RC15556	RC25556
57	0.043	1/2	2-1/2	RC10557	RC20557	RC15557	RC25557
58	0.042	1/2	2-1/2	RC10558	RC20558	RC15558	RC25558
59	0.041	1/2	2-1/2	RC10559	RC20559	RC15559	RC25559
60	0.04	1/2	2-1/2	RC10560	RC20560	RC15560	RC25560

Letter Size

Size	Dec.Equiv. (in.)	Flute Length(in.)	OAL (in.)	HSS Straight Flute Order No.	HSS Spiral Flute Order No.	Cobalt Straight Flute Order No.	Cobalt Spiral Flute Order No.
A	0.234	1-1/2	6"	RC10601	RC20601	RC15601	RC25601
B	0.238	1-1/2	6"	RC10602	RC20602	RC15602	RC25602
C	0.242	1-1/2	6"	RC10603	RC20603	RC15603	RC25603
D	0.246	1-1/2	6"	RC10604	RC20604	RC15604	RC25604
E	0.25	1-1/2	6"	RC10605	RC20605	RC15605	RC25605
F	0.257	1-1/2	6"	RC10606	RC20606	RC15606	RC25606
G	0.261	1-1/2	6"	RC10607	RC20607	RC15607	RC25607
H	0.266	1-1/2	6"	RC10608	RC20608	RC15608	RC25608
I	0.272	1-1/2	6"	RC10609	RC20609	RC15609	RC25609
J	0.277	1-1/2	6"	RC10610	RC20610	RC15610	RC25610

Letter Size

Size	Dec.Equiv. (in.)	Flute Length(in.)	OAL (in.)	HSS Straight Flute Order No.	HSS Spiral Flute Order No.	Cobalt Straight Flute Order No.	Cobalt Spiral Flute Order No.
K	0.281	1-1/2	6"	RC10611	RC20611	RC15611	RC25611
L	0.29	1-1/2	6"	RC10612	RC20612	RC15612	RC25612
M	0.295	1-1/2	6"	RC10613	RC20613	RC15613	RC25613
N	0.302	1-1/2	6"	RC10614	RC20614	RC15614	RC25614
O	0.316	1-1/2	6"	RC10615	RC20615	RC15615	RC25615
P	0.323	1-1/2	6"	RC10616	RC20616	RC15616	RC25616
Q	0.332	1-1/2	6"	RC10617	RC20617	RC15617	RC25617
R	0.339	1-1/2	6"	RC10618	RC20618	RC15618	RC25618
S	0.348	1-3/4	7"	RC10619	RC20619	RC15619	RC25619
T	0.358	1-3/4	7"	RC10620	RC20620	RC15620	RC25620
U	0.368	1-3/4	7"	RC10621	RC20621	RC15621	RC25621
V	0.377	1-3/4	7"	RC10622	RC20622	RC15622	RC25622
W	0.386	1-3/4	7"	RC10623	RC20623	RC15623	RC25623
X	0.397	1-3/4	7"	RC10624	RC20624	RC15624	RC25624
Y	0.404	1-3/4	7"	RC10625	RC20625	RC15625	RC25625
Z	0.413	1-3/4	7"	RC10626	RC20626	RC15626	RC25626

Metric Chucking Reamers

- High Speed Steel
- Right Hand Cut
- Straight Shank Straight Flute
- Standard：ANSI B94.2
- Diameter Tolerance:
  thru 12.50mm +.0002-.0000
  13.00 to 22.00mm +.0003-.0000
  22.50 to 25.00mm +.0001+.0004

Size (mm)	Dec.Equiv. (in.)	Flute Length(in.)	OAL(in.)	Order No.
1.0	0.0394	1/2	2-1/2	RC30100
1.5	0.0591	1/2	2-1/2	RC30150
2.0	0.0787	3/4	3"	RC30200
2.5	0.0984	7/8	3-1/2	RC30250
3.0	0.1181	7/8	3-1/2	RC30300
3.5	0.1378	1"	4"	RC30350
4.0	0.1575	1"	4"	RC30400
4.5	0.1772	1-1/8	4-1/2	RC30450
5.0	0.1968	1-1/4	5"	RC30500
5.5	0.2165	1-1/4	5"	RC30550
6.0	0.2362	1-1/2	6"	RC30600
6.5	0.2559	1-1/2	6"	RC30650
7.0	0.2756	1-1/2	6"	RC30700
7.5	0.2953	1-1/2	6"	RC30750
8.0	0.3150	1-1/2	6"	RC30800
8.5	0.3346	1-1/2	6"	RC30850
9.0	0.3543	1-3/4	7"	RC30900
9.5	0.3740	1-3/4	7"	RC30950
10.0	0.3937	1-3/4	7"	RC301000
10.5	0.4134	1-3/4	7"	RC301050
11.0	0.4331	1-3/4	7"	RC301100
11.5	0.4528	1-3/4	7"	RC301150
12.0	0.4724	1-3/4	7"	RC301200
12.5	0.4921	1-3/4	7"	RC301250
13.0	0.5118	1-3/4	7"	RC301300

Size (mm)	Dec.Equiv. (in.)	Flute Length(in.)	OAL(in.)	Order No.
13.5	0.5315	2"	8"	RC301350
14.0	0.5512	2"	8"	RC301400
14.5	0.5709	2"	8"	RC301450
15.0	0.5906	2"	8"	RC301500
15.5	0.6102	2"	8"	RC301550
16.0	0.6299	2-1/4	9"	RC301600
16.5	0.6496	2-1/4	9"	RC301650
17.0	0.6693	2-1/4	9"	RC301700
17.5	0.6890	2-1/4	9"	RC301750
18.0	0.7087	2-1/4	9"	RC301800
18.5	0.7283	2-1/2	9-1/2	RC301850
19.0	0.7480	2-1/2	9-1/2	RC301900
19.5	0.7677	2-1/2	9-1/2	RC301950
20.0	0.7874	2-1/2	9-1/2	RC302000
20.5	0.8071	2-1/2	9-1/2	RC302050
21.0	0.8268	2-1/2	9-1/2	RC302100
21.5	0.8465	2-5/8	10"	RC302150
22.0	0.8661	2-5/8	10"	RC302200
22.5	0.8858	2-5/8	10"	RC302250
23.0	0.9055	2-5/8	10"	RC302300
23.5	0.9252	2-5/8	10"	RC302350
24.0	0.9449	2-5/8	10"	RC302400
24.5	0.9646	2-5/8	10"	RC302450
25.0	0.9843	2-3/4	10-1/2	RC302500

Popular Over/Under Size Chucking Reamers

- High Speed Steel
- Straight Shank
- Straight Flute
- Right Hand Cut
- Standard：ANSI B94.2
- Diameter Tolerances :
  thru 1/2" diameter +.0002-.0000
  above 1/2" to 5/8" +.0003-.0000
  above 5/8" to 1-1/2" +.0001+.0004

Decimal Size

Size (in.)	Flute Length(in.)	OAL (in.)	Order No.
0.1240	7/8	3-1/2	RC401240
0.1260	7/8	3-1/2	RC401260
0.1865	1-1/8	4-1/2	RC401865
0.1885	1-1/8	4-1/2	RC401885
0.2490	1-1/2	6"	RC402490
0.2510	1-1/2	6"	RC402510
0.3115	1-1/2	6"	RC403115
0.3135	1-1/2	6"	RC403135
0.3740	1-3/4	7"	RC403740
0.3760	1-3/4	7"	RC403760
0.4365	1-3/4	7"	RC404365
0.4385	1-3/4	7"	RC404385

Size (in.)	Flute Length(in.)	OAL (in.)	Order No.
0.4990	2"	8"	RC404990
0.5010	2"	8"	RC405010
0.5615	2"	8"	RC405615
0.5635	2"	8"	RC405635
0.6240	2-1/4	9"	RC406240
0.6260	2-1/4	9"	RC406260
0.7490	2-1/2	9-1/2	RC407490
0.7510	2-1/2	9-1/2	RC407510
0.8740	2-5/8	10"	RC408740
0.8760	2-5/8	10"	RC408760
0.9990	2-5/8	10-1/2	RC409990
1.0010	2-3/4	10-1/2	RC401001

Dowel Pin Chucking Reamers

- Right Hand Cut
- Straight Shank Straight Flute
- Standard：ANSI B94.2
- Diameter Tolenrance: +0.0000-0.0002

Size (in.)	Flute Length(in.)	OAL (in.)	HSS Order No.	Carbide Tipped Order No.
0.1230	7/8	3-1/2	RC501230	RC601230
0.1247	7/8	3-1/2	RC501247	RC601247
0.1855	1-1/8	4-1/2	RC501855	RC601855
0.1870	1-1/8	4-1/2	RC501870	RC601870
0.2480	1-1/2	6"	RC502480	RC602480
0.2495	1-1/2	6"	RC502495	RC602495
0.3105	1-1/2	6"	RC503105	RC603105

Size (in.)	Flute Length(in.)	OAL (in.)	HSS Order No.	Carbide Tipped Order No.
0.3120	1-1/2	6"	RC503120	RC603120
0.3730	1-3/4	7"	RC503730	RC603730
0.3745	1-3/4	7"	RC503745	RC603745
0.4355	1-3/4	7"	RC504355	RC604355
0.4370	1-3/4	7"	RC504370	RC604370
0.4980	2"	8"	RC504980	RC604980
0.4995	2"	8"	RC504995	RC604995

Solid Carbide Chucking Reamers

- Right Hand Cut
- Straight Shank Straight Flute
- Standard：ANSI B94.2
- Diameter Tolenrance: +0.0002-0.0000

Size (in.)	Dec. Equiv. (in.)	Flute Length (in.)	OAL (in.)	Order No.
1/16	0.0625	3/8	1-1/2	RC70004
5/64	0.0781	1/2	1-3/4	RC70005
3/32	0.0937	1/2	2"	RC70006
7/64	0.1094	5/8	2-1/4	RC70007
1/8	0.1250	5/8	2-1/4	RC70008
9/64	0.1406	3/4	2-1/2	RC70009
5/32	0.1562	3/4	2-1/2	RC70010
11/64	0.1719	7/8	2-3/4	RC70011
3/16	0.1875	7/8	2-3/4	RC70012
13/64	0.2031	1"	3"	RC70013
7/32	0.2187	1"	3"	RC70014
15/64	0.2344	1"	3"	RC70015

Size (in.)	Dec. Equiv. (in.)	Flute Length (in.)	OAL (in.)	Order No.
1/4	0.2500	1"	3"	RC70016
17/64	0.2656	1-1/2	6"	RC70017
9/32	0.2812	1-1/2	6"	RC70018
19/64	0.2969	1-1/2	6"	RC70019
5/16	0.3125	1-1/2	6"	RC70020
21/64	0.3281	1-1/2	6"	RC70021
11/32	0.3438	1-1/2	6"	RC70022
23/64	0.3594	1-3/4	7"	RC70023
3/8	0.3750	1-3/4	7"	RC70024
13/32	0.4062	1-3/4	7"	RC70026
7/16	0.4375	1-3/4	7"	RC70028
1/2	0.5000	2"	8"	RC70032

Metric Straight Shank Machine Reamers

- High Speed Steel
- Straight Flute
- Helix Flute
- Standard:DIN 212

Straight Flutes (Form C)
Helix Flutes (Form D)

Size (mm)	Flute Length(mm)	OAL (mm)	Straight Flutes (Form C) Order No.	Helix Flutes (Form D) Order No.
1.4	8	40	RC80140	RC81140
1.5	8	40	RC80150	RC81150
1.6	9	43	RC80160	RC81160
1.8	10	46	RC80180	RC81180
2.0	11	49	RC80200	RC81200
2.2	12	53	RC80220	RC81220
2.5	14	57	RC80250	RC81250
2.8	15	61	RC80280	RC81280
3.0	15	61	RC80300	RC81300
3.2	16	65	RC80320	RC81320
3.5	18	70	RC80350	RC81350
4.0	19	75	RC80400	RC81400
4.5	21	80	RC80450	RC81450
5.0	23	86	RC80500	RC81500
5.5	26	93	RC80550	RC81550

Size (mm)	Flute Length(mm)	OAL (mm)	Straight Flutes (Form C) Order No.	Helix Flutes (Form D) Order No.
6.0	26	93	RC80600	RC81600
6.5	28	101	RC80650	RC81650
7.0	31	109	RC80700	RC81700
8.0	33	117	RC80800	RC81800
9.0	36	125	RC80900	RC81900
10.0	38	133	RC801000	RC811000
11.0	41	142	RC801100	RC811100
12.0	44	151	RC801200	RC811200
13.0	44	151	RC801300	RC811300
14.0	47	160	RC801400	RC811400
15.0	50	162	RC801500	RC811500
16.0	52	170	RC801600	RC811600
17.0	54	175	RC801700	RC811700
18.0	56	182	RC801800	RC811800
19.0	58	189	RC801900	RC811900
20.0	60	195	RC802000	RC812000

Chucking Reamer Sets

- Straight Shank Straight Flute
- High Speed Steel

No. of Reamers	Size Range	Type	In Vinyl Pouch Order No.	In Metal Folding Index Order No.
14	.1230-.4995	Dowel Pin	RU100114	RU110114
14	.1240-.5010	Over and Under	RU100214	RU110214
25	1-13mm×.5mm	Metric	RU100325	RU110325
30	#1-30	Wire Gauge	RU100430	RU110430
60	#1-60	Wire Gauge	RU100560	RU110560
25	1/8"-1/2"×64ths	Fractional	RU100625	RU110625
29	1/16"-1/2"×64ths	Fractional	RU100729	RU110729
26	A-Z	Letter	RU100826	RU110826

Hand Reamers

- High Speed Steel
- Straight Flute
- Spiral Flute
- Standard:ANSI B94.2-1983

Size (in.)	Flute Length(in.)	OAL (in.)	Straight Flute Order No.	Spiral Flute Order No.
1/8	1-1/2	3"	RH10008	RH20008
9/64	1-5/8	3-1/4	RH10009	RH20009
5/32	1-5/8	3-1/4	RH10010	RH20010
11/64	1-3/4	3-1/2	RH10011	RH20011
3/16	1-3/4	3-1/2	RH10012	RH20012
13/64	1-7/8	3-3/4	RH10013	RH20013
7/32	1-7/8	3-3/4	RH10014	RH20014
15/64	2"	4"	RH10015	RH20015
1/4	2"	4"	RH10016	RH20016
17/64	2-1/8	4-1/4	RH10017	RH20017
9/32	2-1/8	4-1/4	RH10018	RH20018
19/64	2-1/4	4-1/2	RH10019	RH20019
5/16	2-1/4	4-1/2	RH10020	RH20020

Size (in.)	Flute Length(in.)	OAL (in.)	Straight Flute Order No.	Spiral Flute Order No.
11/32	2-3/8	4-3/4	RH10022	RH20022
23/64	2-1/2	5"	RH10023	RH20023
3/8	2-1/2	5"	RH10024	RH20024
25/64	2-1/2	4-3/4	RH10025	RH20025
13/32	2-5/8	5-1/4	RH10026	RH20026
27/64	2-3/4	5-1/2	RH10027	RH20027
7/16	2-3/4	5-1/2	RH10028	RH20028
15/32	2-7/8	5-3/4	RH10030	RH20030
31/64	3"	6"	RH10031	RH20031
1/2	3"	6"	RH10032	RH20032
17/32	3-1/8	6-1/4	RH10034	RH20034
35/64	3-1/4	6-1/2	RH10035	RH20035
9/16	3-1/4	6-1/2	RH10036	RH20036

Hand Reamers

- High Speed Steel
- Straight Flute
- Spiral Flute
- Standard:ANSI B94.2-1983

Size (in.)	Flute Length(in.)	OAL (in.)	Straight Flute Order No.	Spiral Flute Order No.
19/32	3-3/8	6-3/4	RH10038	RH20038
39/64	3-1/2	7"	RH10039	RH20039
5/8	3-1/2	7"	RH10040	RH20040
21/32	3-11/16	7-3/8	RH10042	RH20042
11/16	3-7/8	7-3/4	RH10044	RH20044
45/64	4-1/16	8-1/8	RH10045	RH20045
23/32	4-1/16	8-1/8	RH10046	RH20046
47/64	4-3/16	8-3/8	RH10047	RH20047
3/4	4-3/16	8-3/8	RH10048	RH20048
25/32	4-3/8	8-3/4	RH10050	RH20050
13/16	4-9/16	9-1/8	RH10052	RH20052
27/32	4-11/16	9-3/8	RH10054	RH20054
7/8	4-7/8	9-3/4	RH10056	RH20056

Size (in.)	Flute Length(in.)	OAL (in.)	Straight Flute Order No.	Spiral Flute Order No.
29/32	5"	10"	RH10058	RH20058
15/16	5-1/8	10-1/4	RH10060	RH20060
31/32	5-5/16	10-5/8	RH10062	RH20062
1"	5-7/16	10-7/8	RH10100	RH20100
1-1/16	5-5/8	11-1/4	RH10104	RH20104
1-1/8	5-13/16	11-5/8	RH10108	RH20108
1-3/16	6"	12"	RH10112	RH20112
1-1/4	6-1/8	12-1/4	RH10116	RH20116
1-5/16	6-1/4	12-1/2	RH10120	RH20120
1-3/8	6-5/16	12-5/8	RH10124	RH20124
1-7/16	6-7/16	12-7/8	RH10128	RH20128
1-1/2	6-1/2	13"	RH10132	RH20132
1-3/4	6-3/4	13-1/2	RH10148	RH20148

Metric Hand Reamers

- High Speed Steel
- Straight Shank
- Standard:DIN 206

Straight Flute
Spiral Flute

Size (mm)	Flute Length(mm)	OAL (mm)	Straight Flute Order No.	Spiral Flute Order No.
2.0	25	50	RH30200	RH40200
2.2	27	54	RH30220	RH40220
2.5	29	58	RH30250	RH40250
2.8	31	62	RH30280	RH40280
3.0	31	62	RH30300	RH40300
3.2	33	66	RH30320	RH40320
3.5	35	71	RH30350	RH40350
4.0	38	76	RH30400	RH40400
4.5	41	81	RH30450	RH40450
5.0	44	87	RH30500	RH40500
5.5	47	93	RH30550	RH40550
6.0	47	93	RH30600	RH40600
6.5	50	100	RH30650	RH40650
7.0	54	107	RH30700	RH40700
7.5	54	107	RH30750	RH40750
8.0	58	115	RH30800	RH40800
8.5	58	115	RH30850	RH40850
9.0	62	124	RH30900	RH40900
9.5	62	124	RH30950	RH40950
10.0	66	133	RH301000	RH401000
10.5	66	133	RH301050	RH401050
11.0	71	142	RH301100	RH401100
11.5	71	142	RH301150	RH401150
12.0	76	152	RH301200	RH401200
12.5	76	152	RH301250	RH401250
13.0	76	152	RH301300	RH401300
13.5	81	163	RH301350	RH401350
14.0	81	163	RH301400	RH401400
14.5	81	163	RH301450	RH401450
15.0	81	163	RH301500	RH401500
15.5	87	175	RH301550	RH401550
16.0	87	175	RH301600	RH401600

Size (mm)	Flute Length(mm)	OAL (mm)	Straight Flute Order No.	Spiral Flute Order No.
16.5	87	175	RH301650	RH401650
17.0	87	175	RH301700	RH401700
17.5	93	188	RH301750	RH401750
18.0	93	188	RH301800	RH401800
18.5	93	188	RH301850	RH401850
19.0	93	188	RH301900	RH401900
19.5	100	201	RH301950	RH401950
20.0	100	201	RH302000	RH402000
21.0	100	201	RH302100	RH402100
22.0	107	215	RH302200	RH402200
23.0	107	215	RH302300	RH402300
24.0	115	231	RH302400	RH402400
25.0	115	231	RH302500	RH402500
26.0	115	231	RH302600	RH402600
27.0	124	247	RH302700	RH402700
28.0	124	247	RH302800	RH402800
30.0	124	247	RH303000	RH403000
32.0	133	265	RH303200	RH403200
34.0	142	284	RH303400	RH403400
35.0	142	284	RH303500	RH403500
36.0	142	284	RH303600	RH403600
37.0	152	305	RH303700	RH403700
38.0	152	305	RH303800	RH403800
40.0	152	305	RH304000	RH404000
42.0	152	305	RH304200	RH404200
44.0	163	326	RH304400	RH404400
45.0	163	326	RH304500	RH404500
46.0	163	326	RH304600	RH404600
47.0	163	326	RH304700	RH404700
48.0	174	347	RH304800	RH404800
50.0	174	347	RH305000	RH405000

Morse Taper Finishing & Roughing Reamers

- High Speed Steel
- Straight Shank & Taper Shank
- Standard:ANSI B94.2-1983

Straight Shank

MT Size	Dia. of Reamer (in.)		Flute Length (in.)	OAL (in.)	Finishing Order No.	Roughing Order No.
	Large End	Small End				
#0	.3674	.2503	2-1/4	3-3/4	RT10500	RT11500
#1	.5170	.3674	3"	5"	RT10501	RT11501
#2	.7444	.5696	3-1/2	6"	RT10502	RT11502
#3	.9881	.7748	4-1/4	7-1/4	RT10503	RT11503
#4	1.2893	1.0167	5-1/4	8-1/2	RT10504	RT11504
#5	1.8005	1.4717	6-1/4	9-3/4	RT10505	RT11505
#6	2.555	2.112	8-1/2	12-1/4	RT10506	RT11506

Taper Shank

MT Size	Dia. of Reamer (in.)		Flute Length (in.)	OAL (in.)	Finishing Order No.	Roughing Order No.
	Large End	Small End				
#0	.3674	.2503	2-1/4	5-11/32	RT20500	RT21500
#1	.5170	.3674	3"	6-5/16	RT20501	RT21501
#2	.7444	.5696	3-1/2	7-3/8	RT20502	RT21502
#3	.9881	.7748	4-1/4	8-7/8	RT20503	RT21503
#4	1.2893	1.0167	5-1/4	10-7/8	RT20504	RT21504
#5	1.8005	1.4717	6-1/4	13-1/8	RT20505	RT21505
#6	2.555	2.112	8-1/2	17-13/16	RT20506	RT21506

Metric Morse Taper Reamers

- High Speed Steel
- Straight Shank
- Straight Flute
- Spiral Flute
- Standard:DIN 204

Size	Dia. ofReamer (mm)		Flute Length (mm)	OAL (mm)	Straight Flute Order No.	Spiral Flute Order No.
	Large End	Small End				
0MT	9.722	6.547	61	93	RT30500	RT40500
1MT	12.863	9.571	66	102	RT30501	RT40501
2MT	18.679	14.733	79	121	RT30502	RT40502
3MT	24.829	20.010	96	146	RT30503	RT40503
4MT	32.410	26.229	119	179	RT30504	RT40504
5MT	45.767	37.873	150	222	RT30505	RT40505
6MT	65.016	54.172	208	300	RT30506	RT40506

Brown & Sharpe Taper Reamers

- Finishing Reamers
- High Speed Steel·
- Straight Shank Straight Flute
- Standard:ANSI B94.2-1983

B&S Size	Dia. of Reamer(in.)		Flute Length (in.)	OAL (in.)	Order No.
	Large End	Small End			
#1	.3176	.1974	2-7/8	4-3/4	RT50501
#2	.3781	.2474	3-1/8	5-1/8	RT50502
#3	.4510	.3099	3-3/8	5-1/2	RT50503
#4	.5017	.3474	3-11/16	5-7/8	RT50504
#5	.6145	.4474	4"	6-3/8	RT50505
#6	.6808	.4974	4-3/8	6-7/8	RT50506
#7	.8011	.5974	4-7/8	7-1/2	RT50507
#8	.9770	.7474	5-1/2	8-1/8	RT50508
#9	1.153	.8974	6-1/8	8-7/8	RT50509
#10	1.337	1.042	6-7/8	9-3/4	RT50510
#11	1.568	1.250	7-5/8	10-5/8	RT50511
#12	1.844	1.500	8-1/4	11-3/8	RT50512

Metric Straight Shank Hand Taper Reamers

- Straight Flute
- Spiral Flute
- Standard:DIN 9
- Taper: 1:50

Straight flute (Form A)
Spiral flute (Form B)

Size (mm)	Shank Dia. (mm)	Flute Length (mm)	OAL (mm)	Straight Flute Order No.	Spiral Flute Order No.
3	4	58	80	RT60300	RT70300
4	5	68	93	RT60400	RT70400
5	6.3	73	100	RT60500	RT70500
6	8	105	135	RT60600	RT70600
7	8	105	135	RT60700	RT70700
8	10	145	180	RT60800	RT70800
10	12.5	175	215	RT601000	RT701000
12	14	210	255	RT601200	RT701200

Size (mm)	Shank Dia. (mm)	Flute Length (mm)	OAL (mm)	Straight Flute Order No.	Spiral Flute Order No.
13	17.2	220	265	RT601300	RT701300
16	18	230	280	RT601600	RT701600
20	22.4	250	310	RT602000	RT702000
25	28	300	370	RT602500	RT702500
30	31.5	320	400	RT603000	RT703000
32	31.5	320	400	RT603200	RT703200
40	40	340	430	RT604000	RT704000
50	50	360	460	RT605000	RT705000

Metric Straight Shank Machine Taper Reamers

- High Speed Steel
- Spiral Flute
- Standard:DIN 2179

Size (mm)	Flute Length (mm)	OAL (mm)	Shank Dia. (mm)	Shank Length (mm)	Spiral Flute Order No.
4	68	112	5	34	RT80400
5	73	122	6.3	38	RT80500
6	105	160	8	42	RT80600

Size (mm)	Flute Length (mm)	OAL (mm)	Shank Dia. (mm)	Shank Length (mm)	Spiral Flute Order No.
8	145	207	10	46	RT80800
10	175	245	12.5	50	RT801000
12	210	290	16	58	RT801200

Taper Shank Chucking Reamers

- High Speed Steel
- Straight Fulte
- Spiral Flute
- Standard:ANSI B94.2-1983

Size (in.)	Flute Length(in.)	OAL (in.)	Taper Shank	No. of Flutes	Straight Flute Order No.	Spiral Flute Order No.
1/4	1-1/2	6"	1 MT	6	RP10016	RP11016
9/32	1-1/2	6"	1 MT	6	RP10018	RP11018
5/16	1-1/2	6"	1 MT	6	RP10020	RP11020
11/32	1-1/2	6"	1 MT	6	RP10022	RP11022
3/8	1-3/4	7"	1 MT	6	RP10024	RP11024
13/32	1-3/4	7"	1 MT	6	RP10026	RP11026
7/16	1-3/4	7"	1 MT	6	RP10028	RP11028
15/32	1-3/4	7"	1 MT	6	RP10030	RP11030
1/2	2"	8"	1 MT	6	RP10032	RP11032
17/32	2"	8"	1 MT	6	RP10034	RP11034
9/16	2"	8"	1 MT	6	RP10036	RP11036
19/32	2"	8"	1 MT	6	RP10038	RP11038
5/8	2-1/4	9"	2 MT	6	RP10040	RP11040
21/32	2-1/4	9"	2 MT	6	RP10042	RP11042
11/16	2-1/4	9"	2 MT	6	RP10044	RP11044
23/32	2-1/4	9"	2 MT	6	RP10046	RP11046
3/4	2-1/2	9-1/2	2 MT	6	RP10048	RP11048
25/32	2-1/2	9-1/2	2 MT	6	RP10050	RP11050
13/16	2-1/2	9-1/2	2 MT	8	RP10052	RP11052
27/32	2-1/2	9-1/2	2 MT	8	RP10054	RP11054
7/8	2-5/8	10"	2 MT	8	RP10056	RP11056
29/32	2-5/8	10"	2 MT	8	RP10058	RP11058
15/16	2-5/8	10"	3 MT	8	RP10060	RP11060
31/32	2-5/8	10"	3 MT	8	RP10062	RP11062
1"	2-3/4	10-1/2	3 MT	8	RP10100	RP11100
1-1/16	2-3/4	10-1/2	3 MT	8	RP10104	RP11104
1-3/32	2-3/4	10-1/2	3 MT	8	RP10106	RP11106
1-1/8	2-7/8	11"	3 MT	8	RP10108	RP11108
1-5/32	2-7/8	11"	3 MT	8	RP10110	RP11110
1-3/16	2-7/8	11"	3 MT	8	RP10112	RP11112
1-1/4	3"	11-1/2	4 MT	8	RP10116	RP11116
1-9/32	3"	11-1/2	4 MT	10	RP10118	RP11118
1-5/16	3"	11-1/2	4 MT	10	RP10120	RP11120
1-3/8	3-1/4	12"	4 MT	10	RP10124	RP11124
1-7/16	3-1/4	12"	4 MT	10	RP10128	RP11128
1-1/2	3-1/2	12-1/2	4 MT	10	RP10132	RP11132
1-9/16	3-1/2	12-1/2	4 MT	12	RP10136	RP11136
1-5/8	4"	13"	4 MT	12	RP10140	RP11140
1-11/16	4"	13-1/2	4 MT	12	RP10144	RP11144
1-3/4	4"	13-1/2	4 MT	12	RP10148	RP11148
1-7/8	4"	14"	4 MT	12	RP10156	RP11156
2"	4"	14-1/2	4 MT	12	RP10200	RP11200

Metric Taper Shank Machine Reamers

- High Speed Steel
- Straight Flute
- Spiral Flute
- Standard:DIN 208

Size (mm)	Flute Length (mm)	OAL (mm)	MT No.	Straight Flute Order No.	Spiral Flute Order No.
5	23	133	1	RP12500	RP13500
6	26	138	1	RP12600	RP13600
7	31	150	1	RP12700	RP13700
8	33	156	1	RP12800	RP13800
9	36	162	1	RP12900	RP13900
10	38	168	1	RP121000	RP131000
11	41	175	1	RP121100	RP131100
12	44	182	1	RP121200	RP131200
13	44	182	1	RP121300	RP131300
14	47	189	1	RP121400	RP131400
15	50	204	2	RP121500	RP131500
16	52	210	2	RP121600	RP131600
17	54	214	2	RP121700	RP131700
18	56	219	2	RP121800	RP131800
19	58	223	2	RP121900	RP131900
20	60	228	2	RP122000	RP132000
21	62	232	2	RP122100	RP132100
22	64	237	2	RP122200	RP132200
23	66	241	2	RP122300	RP132300
24	68	268	3	RP122400	RP132400

Size (mm)	Flute Length (mm)	OAL (mm)	MT No.	Straight Flute Order No.	Spiral Flute Order No.
25	68	268	3	RP122500	RP132500
26	70	273	3	RP122600	RP132600
27	71	277	3	RP122700	RP132700
28	71	277	3	RP122800	RP132800
29	73	281	3	RP122900	RP132900
30	73	281	3	RP123000	RP133000
31	75	285	3	RP123100	RP133100
32	77	317	4	RP123200	RP133200
33	77	317	4	RP123300	RP133300
34	78	321	4	RP123400	RP133400
35	78	321	4	RP123500	RP133500
36	79	325	4	RP123600	RP133600
37	79	325	4	RP123700	RP133700
38	81	329	4	RP123800	RP133800
40	81	329	4	RP124000	RP134000
42	82	333	4	RP124200	RP134200
44	83	336	4	RP124400	RP134400
45	83	336	4	RP124500	RP134500
46	84	340	4	RP124600	RP134600
48	86	344	4	RP124800	RP134800
50	86	344	4	RP125000	RP135000

Metric Taper Shank Machine Taper Reamers

- High Speed Steel
- Helix Flutes
- Standard:DIN 2180
- Taper: 1:50

Size (mm)	OAL (mm)	Flute Length(mm)	MT No.	Order No.
5	155	73	1	RP14500
6	187	105	1	RP14600
8	227	145	1	RP14800
10	257	175	1	RP141000
12	315	210	2	RP141200
16	335	230	2	RP141600

Size (mm)	OAL (mm)	Flute Length(mm)	MT No.	Order No.
20	377	250	3	RP142000
25	427	300	3	RP142500
30	475	320	4	RP143000
32	475	320	4	RP143200
40	495	340	4	RP144000
50	550	360	5	RP145000

Machine Reamers With Taper Shank

- High Speed Steel
- Right Hand Cut
- Standard:BS 328

Size mm	Size inch	l2(mm)	l1(mm)	Order No.
No.1 Morse Taper Shank				
6		45	127	RP15600
8		58	138	RP15800
8.5		58	138	RP15850
9		62	142	RP15900
9.5		62	142	RP15950
9.525	3/8	66	146	RP16024
10		66	146	RP151000
10.5		66	146	RP151050
11		71	151	RP151100
11.112	7/16	71	151	RP16028
11.5		71	151	RP151150
11.906	15/32	76	156	RP16030
12		76	156	RP151200
12.5		76	156	RP151250
12.7	1/2	76	156	RP16032
13		76	156	RP151300
13.494	17/32	81	161	RP16034
13.5		81	161	RP151350
14		81	161	RP151400
No.2 Morse Taper Shank				
14.287	9/16	81	181	RP16036
14.5		81	181	RP151450
15		81	181	RP151500
15.5		87	187	RP151550
15.875	5/8	87	187	RP16040
16		87	187	RP151600
16.668	21/32	87	187	RP16042
17		87	187	RP151700
17.462	11/16	93	193	RP16044
17.5		93	193	RP151750
18		93	193	RP151800
18.256	23/32	93	193	RP16046
18.5		93	193	RP151850
19		93	193	RP151900
19.05	3/4	100	200	RP16048
19.5		100	200	RP151950
19.844	25/32	100	200	RP16050
20		100	200	RP152000
20.5		100	200	RP152050
20.637	13/16	100	200	RP16052
21		100	200	RP152100
21.5		107	207	RP152150
22		107	207	RP152200
22.225	7/8	107	207	RP16056
22.5		107	207	RP152250
23		107	207	RP152300

Size mm	Size inch	l2(mm)	l1(mm)	Order No.
No.3 Morse Taper Shank				
23.812	15/16	115	242	RP16060
24		115	242	RP152400
25		115	242	RP152500
25.4	1"	115	242	RP16100
25.5		115	242	RP152550
26		115	242	RP152600
26.5		115	242	RP152650
26.987	1-1/16	124	251	RP16114
27		124	251	RP152700
28		124	251	RP152800
28.5		124	251	RP152850
28.575	1-1/8	124	251	RP16118
29		124	251	RP15290
29.5		124	251	RP152950
30		124	251	RP153000
30.162	1-3/16	133	260	RP16112
31		133	260	RP153100
31.75	1-1/4	133	260	RP16116
No.4 Morse Taper Shank				
32		133	293	RP153200
33		133	293	RP153300
33.337	1-5/16	133	293	RP16120
34		142	302	RP153400
34.925	1-3/8	142	302	RP16124
35		142	302	RP153500
36		142	302	RP153600
37		142	302	RP153700
38		152	312	RP153800
38.1	1-1/2	152	312	RP16132
39		152	312	RP153900
40		152	312	RP154000
41		152	312	RP154100
41.275	1-5/8	152	312	RP16140
42		152	312	RP154200
43		163	323	RP154300
44		163	323	RP154400
44.45	1-3/4	163	323	RP16148
45		163	323	RP154500
46		163	323	RP154600
47		163	323	RP154700
47.625	1-7/8	174	334	RP16156
48		174	334	RP154800
49		174	334	RP154900
50		174	334	RP155000

Bridge Reamers

- High Speed Steel
- Taper Shank
- Straight Flute
- Spiral Flute
- Standard:ANSI B94.2-1983

Full Size(in.)	Approx.Point Size(in.)	Flute Length(in.)	OAL (in.)	Taper Shank	Straight Flute Order No.	Spiral Flute Order No.
5/16	11/64	4-3/8	8-1/4"	2	RP17020	RP18020
13/32	7/32	4-3/8	8-1/4"	2	RP17026	RP18026
7/16	17/64	4-3/8	8-1/4"	2	RP17028	RP18028
15/32	9/32	5-1/8	9"	2	RP17030	RP18030
1/2	5/16	5-1/8	9"	2	RP17032	RP18032
17/32	11/32	5-1/8	9"	2	RP17034	RP18034
9/16	3/8	5-1/8	9"	2	RP17036	RP18036
19/32	3/8	5-1/8	9"	2	RP17038	RP18038
5/8	25/64	6-1/8	10"	2	RP17040	RP18040
21/32	25/64	6-1/8	10"	2	RP17042	RP18042
11/16	13/32	7-1/8	11-3/4"	3	RP17044	RP18044
3/4	15/32	7-3/8	12"	3	RP17048	RP18048
25/32	31/64	7-3/8	12"	3	RP17050	RP18050
13/16	35/64	7-3/8	12"	3	RP17052	RP18052
27/32	9/16	7-3/8	12"	3	RP17054	RP18054
7/8	39/64	7-3/8	12"	3	RP17056	RP18056
29/32	41/64	7-3/8	12"	3	RP17058	RP18058
15/16	43/64	7-3/8	12"	3	RP17060	RP18060
1"	47/64	7-3/8	12"	3	RP17100	RP18100
1-1/16	13/16	7-3/8	12"	3	RP17104	RP18104
1-1/8	55/64	7-3/8	12"	3	RP17108	RP18108
1-3/16	59/64	7-3/8	12"	3	RP17112	RP18112
1-1/4	63/64	7-3/8	13"	4	RP17116	RP18116
1-5/16	1-1/16	7-3/8	13"	4	RP17120	RP18120
1-3/8	1-1/8	7-3/8	13"	4	RP17124	RP18124
1-7/16	1-3/16	7-3/8	13"	4	RP17128	RP18128
1-1/2	1-1/4	7-3/8	13"	4	RP17132	RP18132
1-9/16	1-1/4	7-3/8	13"	4	RP17136	RP18136
1-5/8	1-3/8	7-3/8	13"	4	RP17140	RP18140
1-11/16	1-3/8	7-3/8	13"	4	RP17144	RP18144
1-3/4	1-7/16	7-3/8	13"	4	RP17148	RP18148
1-13/16	1-7/16	7-3/8	13"	4	RP17152	RP18152
1-7/8	1-1/2	7-3/8	13"	4	RP17156	RP18156
1-15/16	1-1/2	7-3/8	13"	4	RP17160	RP18160
2"	1-3/4	7-3/8	13"	4	RP17200	RP18200

Metric Taper Shank Machine Bridge Reamers

- High Speed Steel
- Straight Flute
- Spiral Flute
- Standard:DIN 311-1975

Size (mm)	Flute Length(mm)	OAL (mm)	MT No.	Straight Flute Order No.	Spiral Flute Order No.
6.4	75	151	1	RP19640	RP20640
7.4	80	156	1	RP19740	RP20740
8.4	85	161	1	RP19840	RP20840
9.5	90	166	1	RP19950	RP20950
10	95	171	1	RP191000	RP201000
11	100	176	1	RP191100	RP201100
12	105	199	2	RP191200	RP201200
13	105	199	2	RP191300	RP201300
14	115	209	2	RP191400	RP201400
15	125	219	2	RP191500	RP201500
16	135	229	2	RP191600	RP201600
17	135	251	3	RP191700	RP201700
18	145	261	3	RP191800	RP201800
19	145	261	3	RP191900	RP201900
20	155	271	3	RP192000	RP202000

Size (mm)	Flute Length(mm)	OAL (mm)	MT No.	Straight Flute Order No.	Spiral Flute Order No.
21	155	271	3	RP192100	RP202100
22	165	281	3	RP192200	RP202200
23	165	281	3	RP192300	RP202300
24	180	296	3	RP192400	RP202400
25	180	296	3	RP192500	RP202500
26	180	296	3	RP192600	RP202600
27	195	311	3	RP192700	RP202700
28	195	311	3	RP192800	RP202800
29	195	311	3	RP192900	RP202900
30	195	311	3	RP193000	RP203000
31	210	326	3	RP193100	RP203100
32	210	354	4	RP193200	RP203200
33	210	354	4	RP193300	RP203300
34	220	364	4	RP193400	RP203400
37	220	364	4	RP193700	RP203700
40	230	374	4	RP194000	RP204000

Short Length Car Reamers

- High Speed Steel
- Taper Shank
- Straight Flute
- Helical Flute

Full Size (in.)	Apporox. Point Size(in.)	Flute Length(in.)	OAL (in.)	Taper Shank	Straight Flute Order No.	Helical Flute Order No.
1/4	1/8	2-1/2	5-7/16	1 MT	RP21016	RP22016
17/64	5/32	2-1/2	5-7/16	1 MT	RP21017	RP22017
9/32	5/32	2-1/2	5-7/16	1 MT	RP21018	RP22018
5/16	11/64	2-3/4	5-11/16	1 MT	RP21020	RP22020
11/32	13/64	2-3/4	5-11/16	1 MT	RP21022	RP22022
3/8	15/64	2-3/4	5-11/16	1 MT	RP21024	RP22024
13/32	17/64	2-3/4	6-3/16	2 MT	RP21026	RP22026
7/16	1/4	3-1/2	6-15/16	2 MT	RP21028	RP22028
17/32	1/4	4"	7-9/16	2 MT	RP21034	RP22034
9/16	9/32	4"	7-9/16	2 MT	RP21036	RP22036
11/16	3/8	4-1/2	8-13/16	3 MT	RP21044	RP22044
3/4	13/32	5"	9-1/2	3 MT	RP21048	RP22048
13/16	15/32	5"	9-1/2	3 MT	RP21052	RP22052
15/16	19/32	5"	9-1/2	3 MT	RP21060	RP22060
1"	21/32	5"	9-1/2	3 MT	RP21100	RP22100
1-1/8	25/32	5"	9-1/2	3 MT	RP21108	RP22108
1-3/16	27/32	5"	9-1/2	3 MT	RP21112	RP22112
1-1/4	29/32	5"	9-1/2	3 MT	RP21116	RP22116

Jobber Reamers

- High Speed Steel
- Straight Flute
- Taper Shank
- Standard:ANSI B94.2-1983

Size (in.)	Flute Length(in.)	OAL (in.)	Taper Shank	Order No.
1/4	2"	5-3/16	1 MT	RP23016
9/32	2"	5-3/16	1 MT	RP23018
5/16	2-1/4	5-1/2	1 MT	RP23020
11/32	2-1/4	5-1/2	1 MT	RP23022
3/8	2-1/2	5-13/16	1 MT	RP23024
13/32	2-1/2	5-13/16	1 MT	RP23026
7/16	2-3/4	6-1/8	1 MT	RP23028
15/32	2-3/4	6-1/8	1 MT	RP23030
1/2	3"	6-7/16	1 MT	RP23032
17/32	3"	6-7/16	1 MT	RP23034
9/16	3-1/4	6-3/4	1 MT	RP23036
19/32	3-1/4	6-3/4	1 MT	RP23038
5/8	3-1/2	7-9/16	2 MT	RP23040
21/32	3-1/2	7-9/16	2 MT	RP23042
11/16	3-7/8	8"	2 MT	RP23044
23/32	3-7/8	8"	2 MT	RP23046

Size (in.)	Flute Length(in.)	OAL (in.)	Taper Shank	Order No.
3/4	4-3/16	8-3/8	2 MT	RP23048
25/32	4-3/16	8-3/8	2 MT	RP23050
13/16	4-9/16	8-13/16	2 MT	RP23052
27/32	4-7/8	9-3/16	2 MT	RP23054
7/8	4-7/8	9-3/16	2 MT	RP23056
15/16	5-1/8	10"	3 MT	RP23060
1"	5-7/16	10-3/8	3 MT	RP23100
1-1/16	5-5/8	10-5/8	3 MT	RP23104
1-1/8	5-13/16	10-7/8	3 MT	RP23108
1-3/16	6"	11-1/8	3 MT	RP23112
1-1/4	6-1/8	12-9/16	4 MT	RP23116
1-5/16	6-1/4	12-11/16	4 MT	RP23120
1-3/8	6-5/16	12-13/16	4 MT	RP23124
1-7/16	6-7/16	13"	4 MT	RP23128
1-1/2	6-1/2	13-1/8	4 MT	RP23132

Taper Pin Reamers

- High Speed Steel
- Straight Flute
- Spiral Flute
- Helical Flute
- Standard：ANSI B94.2-1983

Size	Small End Dia. (in.)	Large End Dia. (in.)	FluteLength (in.)	OAL (in.)	Shank Dia. (in.)	Straight Flute Order No.	Spiral Flute Order No.	Helical Flute Order No.
7/0	.0497	.0666	13/16"	1-13/16"	5/64	RD10070	RD11070	RD12070
6/0	.0611	.0806	15/16"	1-15/16"	3/32	RD10060	RD11060	RD12060
5/0	.0719	.0966	1-3/16"	2-3/16"	7/64	RD10050	RD11050	RD12050
4/0	.0869	.1142	1-5/16"	2-5/16"	1/8	RD10040	RD11040	RD12040
3/0	.1029	.1302	1-5/16"	2-5/16"	9/64	RD10030	RD11030	RD12030
2/0	.1137	.1462	1-9/16"	2-9/16"	5/32	RD10020	RD11020	RD12020
0	.1287	.1638	1-11/16"	2-15/16"	11/64	RD10000	RD11000	RD12000
1	.1447	.1798	1-11/16"	2-15/16"	3/16	RD10001	RD11001	RD12001
2	.1605	.2008	1-15/16"	3-3/16"	13/64	RD10002	RD11002	RD12002
3	.1813	.2294	2-5/16"	3-11/16"	15/64	RD10003	RD11003	RD12003
4	.2071	.2604	2-9/16"	4-1/16"	17/64	RD10004	RD11004	RD12004
5	.2409	.2994	2-13/16"	4-5/16"	5/16	RD10005	RD11005	RD12005
6	.2773	.3540	3-11/16"	5-7/16"	23/64	RD10006	RD11006	RD12006
7	.3297	.4220	4-7/16"	6-5/16"	13/32	RD10007	RD11007	RD12007
8	.3971	.5050	5-3/16"	7-3/16"	7/16	RD10008	RD11008	RD12008
9	.4805	.6066	6-1/16"	8-5/16"	9/16	RD10009	RD11009	RD12009
10	.5799	.7216	6-13/16"	9-5/16"	5/8	RD10010	RD11010	RD12010
11	.7060	.8780	8-1/4"	11-1/4"	11/16	RD10011	RD11011	RD12011
12	.8420	1.0500	10"	13-5/8"	3/4	RD10012	RD11012	RD12012
13	1.0090	1.2590	12"	16"	1-1/16	RD10013	RD11013	RD12013
14	1.2500	1.5420	14"	18-1/4"	1-3/8	RD10014	RD11014	RD12014

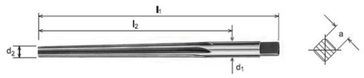
Taper Pin Reamer Sets

- High Speed Steel-In Vinyl Roll Pouch

Size	Straight Flute Order No.	Spiral Flute Order No.
#0 ~ #5	RDU200106	RDU210106
#0 ~ #10	RDU200211	RDU210211

Hand Taper Pin Reamers

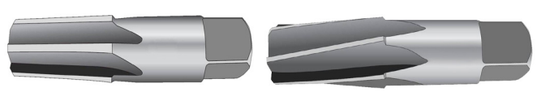
- High Speed Steel
- Straight Flute
- Standard:BS 328
- Taper: 1:48



Size (in)	Equiv. (mm)	a (mm)	d1 (mm)	d2 (mm)	l2 (mm)	l1 (mm)	Order No.
5/64	1.984	1.60	2.03	1.50	25.40	50.80	RD20005
3/32	2.381	2.00	2.41	1.75	31.80	57.20	RD20006
7/64	2.778	2.24	2.82	2.03	38.10	63.50	RD20007
1/8	3.175	2.50	3.23	2.29	44.50	69.90	RD20008
9/64	3.572	2.80	3.63	2.64	47.60	73.00	RD20009
5/32	3.969	3.15	4.01	2.95	50.80	76.20	RD20010
11/64	4.366	3.55	4.42	3.23	52.20	88.90	RD20011
3/16	4.762	4.00	4.95	3.50	69.90	101.60	RD20012
7/32	5.556	4.50	5.59	4.13	69.90	101.60	RD20014
1/4	6.35	5.00	6.43	4.64	85.70	117.50	RD20016
9/32	7.144	5.60	7.42	5.23	104.80	142.90	RD20018
5/16	7.937	6.30	8.03	5.84	104.80	142.90	RD20020
11/32	8.731	7.10	8.81	6.43	114.30	152.40	RD20022
3/8	9.525	8.00	9.68	7.03	127.00	165.10	RD20024
7/16	11.112	9.00	11.25	8.21	146.10	190.50	RD20028
1/2	12.7	10.00	12.85	9.41	165.10	209.60	RD20032
9/16	14.287	11.20	14.50	10.93	171.50	215.90	RD20036
5/8	15.875	12.50	16.08	12.11	190.50	235.00	RD20040
3/4	19.05	16.00	19.30	14.67	222.30	273.10	RD20048
7/8	22.225	18.00	22.48	17.45	241.30	304.80	RD20056

Taper Pipe Reamers

- High Speed Steel
- Straight Flute
- Spiral Flute
- Standard：ANSI B94.2-1983



Size (in.)	Diameter(in.)		Flute Length(in.)	OAL (in.)	Straight Flute Order No.	Spiral Flute Order No.
	Large End	Small End				
1/16	0.291	0.245	3/4	2"	RF10004	RF20004
1/8	0.362	0.316	3/4	2-1/8	RF10008	RF20008
1/4	0.472	0.406	1-1/16	2-7/16	RF10016	RF20016
3/8	0.606	0.540	1-1/16	2-9/16	RF10024	RF20024
1/2	0.751	0.665	1-3/8	3-1/8	RF10032	RF20032
3/4	0.962	0.876	1-3/8	3-1/4	RF10048	RF20048
1"	1.212	1.103	1-3/4	3-3/4	RF10100	RF20100
1-1/4	1.553	1.444	1-3/4	4"	RF10116	RF20116
1-1/2	1.793	1.684	1-3/4	4-1/4	RF10132	RF20132
2"	2.268	2.159	1-3/4	4-1/2	RF10200	RF20200
2-1/2	2.722	2.561	2-5/8	5-1/2	RF10232	RF20232
3"	3.380	3.302	2-3/4	6"	RF10300	RF20300

Adjustable Blade Reamers

- High Speed Steel

Size	Size Range (in.)	OAL (in.)	Order No.
8A	1/4 ~ 9/32	3-1/4	RB10016
7A	9/32 ~ 5/16	3-1/2	RB10018
6A	5/16 ~ 11/32	4-1/8	RB10020
5A	11/32 ~ 3/8	4-3/8	RB10022
4A	3/8 ~ 13/32	4-3/4	RB10024
3A	13/32 ~ 7/16	5"	RB10026
2A	7/16 ~ 15/32	5-1/4	RB10028
A	15/32 ~ 17/32	5-1/2	RB10030
B	17/32 ~ 19/32	5-3/4	RB10034
C	19/32 ~ 21/32	6-1/2	RB10038
D	21/32 ~ 23/32	6-3/4	RB10042

Size	Size Range (in.)	OAL (in.)	Order No.
E	23/32 ~ 25/32	7"	RB10046
F	25/32 ~ 27/32	7-3/8	RB10050
G	27/32 ~ 15/16	8"	RB10054
H	15/16 ~ 1-1/16	9"	RB10060
I	1-1/16 ~ 1-3/16	10"	RB10104
J	1-3/16 ~ 1-11/32	11"	RB10112
K	1-11/32 ~ 1-1/2	12"	RB10122
L	1-1/2 ~ 1-13/16	14"	RB10132
M	1-13/16 ~ 2-7/32	16"	RB10152
N	2-7/32 ~ 2-3/4	18"	RB10214
O	2-3/4 ~ 3-11/32	20"	RB10248

Adjustable Blade Reamer Sets

- High Speed Steel

Size	Range(in.)	Order No.
7-Pc. Set 8/A thru 2/A	1/4 to 15/32	RBU300107
8-Pc. Set A thru H	15/32 to 1-1/16	RBU300208
11-Pc. Set A thru K	15/32 to 1-1/2	RBU300311

Aligning Reamers - 3 Equal Flats

- Straight Shank With 3-Equal-Flats To Fit 1/2" Chucks
- High Speed Steel
- Spiral Flute

Size (in.)	Flute Length(in.)	OAL (in.)	Shank Size (in.)	Order No.
1/4	2-1/2	4-3/8	1/4*	RA10016
5/16	2-3/4	4-5/8	5/16	RA10020
3/8	2-3/4	4-5/8	3/8	RA10024
7/16	3-1/2	5-3/8	7/16	RA10028
1/2	4"	5-7/8	1/2	RA10032
9/16	4"	5-7/8	1/2	RA10036
39/64	4-1/2	6-3/8	1/2	RA10039
5/8	4-1/2	6-3/8	1/2	RA10040

Size (in.)	Flute Length(in.)	OAL (in.)	Shank Size (in.)	Order No.
11/16	4-1/2	6-3/8	1/2	RA10044
3/4	5"	6-7/8	1/2	RA10048
13/16	5"	6-7/8	1/2	RA10052
7/8	5"	6-7/8	1/2	RA10056
15/16	5"	6-7/8	1/2	RA10060
1"	5"	6-7/8	1/2	RA10100
1-1/16	5"	6-7/8	1/2	RA10104

* No flats on shank

Straight Shank Aligning Reamers

- Supplied in Wood Block

4 Piece Set	Order No.
Contains 1 piece of each: 1/2, 9/16, 5/8, 3/4	RU400104

Aligning Reamers - Hex Shank Style

Size (in.)	Head Dia. (in.)	Flute Length(in.)	OAL (in.)	Hex Shank Size(in.)	Order No.
11/16	3/8	4-1/2	6-1/2	1-1/16	RA20044
13/16	15/32	5"	7"	1-1/4	RA20052
15/16	19/32	5"	7"	1-7/16	RA20060

Size (in.)	Head Dia. (in.)	Flute Length(in.)	OAL (in.)	Hex Shank Size(in.)	Order No.
1-1/16	5/8	5"	7"	1-5/8	RA20104
1-3/16	59/64	5"	7"	1-13/16	RA20112
1-5/16	1-1/16	5"	7-7/8	2"	RA20120

Construction Taper Reamers

- High Speed Steel
- Left Hand Spiral
- Fast Helix
- 1-1/2" Shank Length

Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.
3/8	3/8	5"	RG10024
7/16	7/16	5-1/4	RG10028
1/2	1/2	5-15/16	RG10032
9/16	1/2	6-1/4	RG10036
5/8	1/2	6-9/16	RG10040
11/16	1/2	7"	RG10044
3/4	1/2	7"	RG10048
13/16	1/2	7-1/4	RG10052
7/8	1/2	7-1/4	RG10056
15/16	1/2	7-1/4	RG10060

Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.
1"	1/2	7-1/4	RG10100
1-1/16	1/2	7-1/4	RG10104
1-1/8	1/2	7-1/4	RG10108
1-3/16	1/2	7-1/4	RG10112
1-1/4	1/2	7-1/2	RG10116
1-5/16	1/2	7-1/2	RG10120
1-3/8	1/2	7-1/2	RG10124
1-7/16	1/2	7-1/2	RG10128
1-1/2	1/2	7-1/2	RG10132

Shell Reamers

- High Speed Steel
- Straight Flute
- Spiral Flute
- Standard：ANSI B94.2-1983

Size (in.)	OAL (in.)	Hole Size (in.)	Fits Arbor No.	Straight Flute Order No.	Spiral Flute Order No.
3/4	2-1/4	3/8	4	RS10048	RS20048
13/16	2-1/2	1/2	5	RS10052	RS20052
7/8	2-1/2	1/2	5	RS10056	RS20056
15/16	2-1/2	1/2	5	RS10060	RS20060
1"	2-1/2	1/2	5	RS10100	RS20100
1-1/16	2-3/4	5/8	6	RS10104	RS20104
1-1/8	2-3/4	5/8	6	RS10108	RS20108
1-3/16	2-3/4	5/8	6	RS10112	RS20112
1-1/4	2-3/4	5/8	6	RS10116	RS20116
1-5/16	3"	3/4	7	RS10120	RS20120
1-3/8	3"	3/4	7	RS10124	RS20124
1-7/16	3"	3/4	7	RS10128	RS20128
1-1/2	3"	3/4	7	RS10132	RS20132
1-9/16	3"	3/4	7	RS10136	RS20136
1-5/8	3"	3/4	7	RS10140	RS20140
1-11/16	3-1/2	1"	8	RS10144	RS20144
1-3/4	3-1/2	1"	8	RS10148	RS20148
1-13/16	3-1/2	1"	8	RS10152	RS20152
1-7/8	3-1/2	1"	8	RS10156	RS20156
1-15/16	3-1/2	1"	8	RS10160	RS20160
2"	3-1/2	1"	8	RS10200	RS20200
2-1/16	3-3/4	1-1/4	9	RS10204	RS20204
2-1/8	3-3/4	1-1/4	9	RS10208	RS20208
2-3/16	3-3/4	1-1/4	9	RS10212	RS20212
2-1/4	3-3/4	1-1/4	9	RS10216	RS20216
2-5/16	3-3/4	1-1/4	9	RS10220	RS20220
2-3/8	3-3/4	1-1/4	9	RS10224	RS20224

Size (in.)	OAL (in.)	Hole Size (in.)	Fits Arbor No.	Straight Flute Order No.	Spiral Flute Order No.
2-7/16	3-3/4	1-1/4	9	RS10228	RS20228
2-1/2	3-3/4	1-1/4	9	RS10232	RS20232
2-9/16	4"	1-1/2	10	RS10236	RS20236
2-5/8	4"	1-1/2	10	RS10240	RS20240
2-11/16	4"	1-1/2	10	RS10244	RS20244
2-3/4	4"	1-1/2	10	RS10248	RS20248
2-13/16	4"	1-1/2	10	RS10252	RS20252
2-7/8	4"	1-1/2	10	RS10256	RS20256
2-15/16	4"	1-1/2	10	RS10260	RS20260
3"	4"	1-1/2	10	RS10300	RS20300
3-1/16	4-1/2	1-3/4	11	RS10304	RS20304
3-1/8	4-1/2	1-3/4	11	RS10308	RS20308
3-3/16	4-1/2	1-3/4	11	RS10312	RS20312
3-1/4	4-1/2	1-3/4	11	RS10316	RS20316
3-5/16	4-1/2	1-3/4	11	RS10320	RS20320
3-3/8	4-1/2	1-3/4	11	RS10324	RS20324
3-7/16	4-1/2	1-3/4	11	RS10328	RS20328
3-1/2	4-1/2	1-3/4	11	RS10332	RS20332
3-9/16	5"	2"	12	RS10336	RS20336
3-5/8	5"	2"	12	RS10340	RS20340
3-11/16	5"	2"	12	RS10344	RS20344
3-3/4	5"	2"	12	RS10348	RS20348
3-7/8	5"	2"	12	RS10356	RS20356
3-15/16	5"	2"	12	RS10360	RS20360
4"	5"	2"	12	RS10400	RS20400

Metric Shell Reamers

- High Speed Steel
- Straight Flute
- Spiral Flute
- Standard:DIN219

Size (mm)	Flute Length (mm)	OAL (mm)	Hole (mm)	Straight Flute Order No.	Spiral Flute Order No.
25	32	45	13	RS302500	RS402500
26	32	45	13	RS302600	RS402600
27	32	45	13	RS302700	RS402700
28	32	45	13	RS302800	RS402800
30	32	45	13	RS303000	RS403000
32	36	50	16	RS303200	RS403200
34	36	50	16	RS303400	RS403400
35	36	50	16	RS303500	RS403500
36	40	56	19	RS303600	RS403600
38	40	56	19	RS303800	RS403800
40	40	56	19	RS304000	RS404000
42	40	56	19	RS304200	RS404200
45	45	63	22	RS304500	RS404500
47	45	63	22	RS304700	RS404700
48	45	63	22	RS304800	RS404800

Size (mm)	Flute Length (mm)	OAL (mm)	Hole (mm)	Straight Flute Order No.	Spiral Flute Order No.
50	45	63	22	RS305000	RS405000
52	50	71	27	RS305200	RS405200
55	50	71	27	RS305500	RS405500
58	50	71	27	RS305800	RS405800
60	50	71	27	RS306000	RS406000
62	56	80	32	RS306200	RS406200
65	56	80	32	RS306500	RS406500
70	56	80	32	RS307000	RS407000
72	63	90	40	RS307200	RS407200
75	63	90	40	RS307500	RS407500
80	63	90	40	RS308000	RS408000
85	63	90	40	RS308500	RS408500
90	71	100	50	RS309000	RS409000
95	71	100	50	RS309500	RS409500
100	71	100	50	RS300100	RS400100

Expansion Chucking Reamers

- High Speed Steel
- Screw Adjustment Type
- Straight Shank
- Taper Shank
- Standard：ANSI B94.2-1983

Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Straight Shank Order No.	Taper Shank Order No.
3/8	3/4	7"	1 MT	RE10024	RE20024
13/32	3/4	7"	1 MT	RE10026	RE20026
7/16	7/8	7"	1 MT	RE10028	RE20028
15/32	7/8	7"	1 MT	RE10030	RE20030
1/2	1"	8"	1 MT	RE10032	RE20032
17/32	1"	8"	1 MT	RE10034	RE20034
9/16	1-1/8	8"	1 MT	RE10036	RE20036
19/32	1-1/8	8"	1 MT	RE10038	RE20038
5/8	1-1/4	9"	2 MT	RE10040	RE20040
21/32	1-1/4	9"	2 MT	RE10042	RE20042
11/16	1-1/4	9"	2 MT	RE10044	RE20044
23/32	1-1/4	9"	2 MT	RE10046	RE20046
3/4	1-3/8	9-1/2	2 MT	RE10048	RE20048
25/32	1-3/8	9-1/2	2 MT	RE10050	RE20050
13/16	1-3/8	9-1/2	2 MT	RE10052	RE20052
27/32	1-3/8	9-1/2	2 MT	RE10054	RE20054
7/8	1-1/2	10"	2 MT	RE10056	RE20056
29/32	1-1/2	10"	2 MT	RE10058	RE20058
15/16	1-1/2	10"	3 MT	RE10060	RE20060
31/32	1-1/2	10"	3 MT	RE10062	RE20062
1"	1-5/8	10-1/2	3 MT	RE10100	RE20100
1-1/32	1-5/8	10-1/2	3 MT	RE10102	RE20102
1-1/16	1-5/8	10-1/2	3 MT	RE10104	RE20104
1-3/32	1-3/4	10-1/2	3 MT	RE10106	RE20106

Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Straight Shank Order No.	Taper Shank Order No.
1-1/8	1-3/4	11"	3 MT	RE10108	RE20108
1-5/32	1-3/4	11"	3 MT	RE10110	RE20110
1-3/16	1-3/4	11"	3 MT	RE10112	RE20112
1-7/32	1-3/4	11"	3 MT	RE10114	RE20114
1-1/4	1-7/8	11-1/2	4 MT	RE10116	RE20116
1-5/16	1-7/8	11-1/2	4 MT	RE10120	RE20120
1-3/8	2"	12"	4 MT	RE10124	RE20124
1-7/16	2"	12"	4 MT	RE10128	RE20128
1-1/2	2-1/8	12-1/2	4 MT	RE10132	RE20132
1-9/16	2-1/8	12-1/2	4 MT	RE10136	RE20136
1-5/8	2-1/4	13"	4 MT	RE10140	RE20140
1-11/16	2-1/4	13"	4 MT	RE10144	RE20144
1-3/4	2-3/8	13-1/2	5 MT	RE10148	RE20148
1-13/16	2-3/8	13-1/2	5 MT	RE10152	RE20152
1-7/8	2-1/2	14"	5 MT	RE10156	RE20156
1-15/16	2-1/2	14"	5 MT	RE10160	RE20160
2"	2-1/2	14"	5 MT	RE10200	RE20200
2-1/16	2-3/4	14-1/2	5 MT	RE10204	RE20204
2-1/8	2-3/4	14-1/2	5 MT	RE10208	RE20208
2-3/16	2-3/4	14-1/2	5 MT	RE10212	RE20212
2-1/4	2-3/4	14-1/2	5 MT	RE10216	RE20216
2-5/16	3"	15"	5 MT	RE10220	RE20220
2-3/8	3"	15"	5 MT	RE10224	RE20224
2-7/16	3"	15"	5 MT	RE10228	RE20228
2-1/2	3"	15"	5 MT	RE10232	RE20232
2-3/4	3-1/4	15-1/2	5 MT	RE10248	RE20248
3"	3-1/2	16"	5 MT	RE10300	RE20300

Hand Expansion Reamers

- High Speed Steel
- Straight Flute
- Spiral Flute
- Standard：ANSI B94.2-1983

Size (in.)	Flute Length (in.)	OAL (in.)	Straight Flute Order No.	Spiral Flute Order No.
5/16	1-3/4	4"	RE30020	RE40020
3/8	2"	5"	RE30024	RE40024
13/32	2"	5"	RE30026	RE40026
7/16	2"	5"	RE30028	RE40028
15/32	2"	5"	RE30030	RE40030
1/2	2"	5-1/2	RE30032	RE40032
17/32	2"	5-1/2	RE30034	RE40034
9/16	2-1/2	6"	RE30036	RE40036
19/32	2-1/2	6"	RE30038	RE40038
5/8	3"	7"	RE30040	RE40040
21/32	3"	7"	RE30042	RE40042
11/16	3"	7"	RE30044	RE40044
23/32	3"	7"	RE30046	RE40046
3/4	3-1/2	8"	RE30048	RE40048
25/32	3-1/2	8"	RE30050	RE40050
13/16	3-1/2	8"	RE30052	RE40052
27/32	3-1/2	8"	RE30054	RE40054
7/8	4"	9"	RE30056	RE40056

Size (in.)	Flute Length (in.)	OAL (in.)	Straight Flute Order No.	Spiral Flute Order No.
29/32	4"	9"	RE30058	RE40058
15/16	4"	9"	RE30060	RE40060
31/32	4"	9"	RE30062	RE40062
1"	4-1/2	10"	RE30100	RE40100
1-1/16	4-1/2	10"	RE30104	RE40104
1-1/8	4-3/4	10-1/2	RE30108	RE40108
1-3/16	4-3/4	10-1/2	RE30112	RE40112
1-1/4	5"	11"	RE30116	RE40116
1-5/16	5"	11"	RE30120	RE40120
1-3/8	5-1/4	11-1/2	RE30124	RE40124
1-7/16	5-1/4	11-1/2	RE30128	RE40128
1-1/2	5-1/2	12"	RE30132	RE40132
1-9/16	4-13/16	11-1/4	RE30136	RE40136
1-5/8	4-7/8	11-1/2	RE30140	RE40140
1-11/16	4-7/8	11-5/8	RE30144	RE40144
1-3/4	5-1/2"	12-3/8	RE30148	RE40148
1-13/16	5"	12-1/16	RE30152	RE40152
1-7/8	5-1/2	12-3/8	RE30156	RE40156
2"	5-1/2	13-1/8	RE30200	RE40200

Metric Hand Expannsion Reamers

- High Speed Steel
- Straight Shank
- Straight Flute
- Spiral Flute
- Standard：DIN 859

Size (mm)	Flute Length(mm)	OAL (mm)	Straight Flute Order No.	Spiral Flute Order No.
8	42	115	RE50800	RE60800
9	46	124	RE50900	RE60900
10	50	133	RE501000	RE601000
11	51	142	RE501100	RE601100
12	56	152	RE501200	RE601200
13	56	152	RE501300	RE601300
14	61	163	RE501400	RE601400
15	61	163	RE501500	RE601500
16	67	175	RE501600	RE601600
17	67	175	RE501700	RE601700
18	68	188	RE501800	RE601800
19	68	188	RE501900	RE601900

Size (mm)	Flute Length(mm)	OAL (mm)	Straight Flute Order No.	Spiral Flute Order No.
20	75	201	RE502000	RE602000
22	82	215	RE502200	RE602200
24	85	231	RE502400	RE602400
25	85	231	RE502500	RE602500
26	85	231	RE502600	RE602600
28	94	247	RE502800	RE602800
30	94	247	RE503000	RE603000
32	99	265	RE503200	RE603200
34	108	284	RE503400	RE603400
35	108	284	RE503500	RE603500
36	108	284	RE503600	RE603600

2-Flute Single End Mills

- Center Cutting-Regular Length
- Standard:ANSI B94.19-1985

Dia. (in.)	Shank Dia. (in.)	Length Of Cut(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/8	3/8	3/8	2-5/16	ES200008	ES220008	ES250008
5/32	3/8	3/8	2-5/16	ES200010	ES220010	ES250010
3/16	3/8	7/16	2-5/16	ES200012	ES220012	ES250012
7/32	3/8	7/16	2-5/16	ES200014	ES220014	ES250014
1/4	3/8	1/2	2-5/16	ES200016	ES220016	ES250016
9/32	3/8	1/2	2-5/16	ES200018	ES220018	ES250018
5/16	3/8	9/16	2-5/16	ES200020	ES220020	ES250020
11/32	3/8	9/16	2-5/16	ES200022	ES220022	ES250022
3/8	3/8	9/16	2-5/16	ES200024	ES220024	ES250024
13/32	3/8	13/16	2-1/2	ES200026	ES220026	ES250026
7/16	3/8	13/16	2-1/2	ES200028	ES220028	ES250028
15/32	1/2	1"	3"	ES200030	ES220030	ES250030
1/2	3/8	13/16	2-1/2	ES200032	ES220032	ES250032
1/2	1/2	1"	3"	ES201032	ES221032	ES251032
9/16	1/2	1-1/8	3-1/8	ES200036	ES220036	ES250036
5/8	1/2	1-1/8	3-1/8	ES200040	ES220040	ES250040
5/8	5/8	1-5/16	3-7/16	ES201040	ES221040	ES251040
11/16	1/2	1-5/16	3-5/16	ES200044	ES220044	ES250044
11/16	5/8	1-5/16	3-7/16	ES201044	ES221044	ES251044
3/4	1/2	1-5/16	3-5/16	ES200048	ES220048	ES250048
3/4	5/8	1-5/16	3-7/16	ES201048	ES221048	ES251048
3/4	3/4	1-5/16	3-7/16	ES202048	ES222048	ES252048
13/16	5/8	1-1/2	3-5/8	ES200052	ES220052	ES250052
13/16	3/4	1-1/2	3-3/4	ES201052	ES221052	ES251052
7/8	5/8	1-1/2	3-5/8	ES200056	ES220056	ES250056
7/8	3/4	1-1/2	3-3/4	ES201056	ES221056	ES251056
7/8	7/8	1-1/2	3-3/4	ES202056	ES222056	ES252056
15/16	5/8	1-1/2	3-5/8	ES200060	ES220060	ES250060
15/16	3/4	1-1/2	3-3/4	ES201060	ES221060	ES251060
15/16	7/8	1-1/2	3-3/4	ES202060	ES222060	ES252060
1"	1/2	1-1/2	3-1/2	ES200100	ES220100	ES250100
1"	5/8	1-1/2	3-5/8	ES201100	ES221100	ES251100
1"	3/4	1-1/2	3-3/4	ES202100	ES222100	ES252100
1"	7/8	1-1/2	3-3/4	ES203100	ES223100	ES253100
1"	1"	1-5/8	4-1/8	ES204100	ES224100	ES254100
1-1/8	3/4	1-5/8	3-7/8	ES200108	ES220108	ES250108
1-1/8	7/8	1-5/8	3-7/8	ES201108	ES221108	ES251108
1-1/8	1"	1-5/8	4-1/8	ES202108	ES222108	ES252108
1-1/4	3/4	1-5/8	3-7/8	ES200116	ES220116	ES250116
1-1/4	7/8	1-5/8	3-7/8	ES201116	ES221116	ES251116
1-1/4	1"	1-5/8	4-1/8	ES202116	ES222116	ES252116
1-1/4	1-1/4	1-5/8	4-1/8	ES203116	ES223116	ES253116
1-3/8	3/4	1-5/8	4"	ES200124	ES220124	ES250124
1-3/8	1"	1-5/8	4-1/8	ES201124	ES221124	ES251124
1-1/2	3/4	1-5/8	4"	ES200132	ES220132	ES250132
1-1/2	1"	1-5/8	4-1/8	ES201132	ES221132	ES251132
1-1/2	1-1/4	1-5/8	4-1/8	ES202132	ES222132	ES252132
1-5/8	1-1/4	1-5/8	4-1/8	ES200140	ES220140	ES250140
1-3/4	1-1/4	1-5/8	4-1/8	ES200148	ES220148	ES250148
1-7/8	1-1/4	1-5/8	4-1/8	ES200156	ES220156	ES250156
2"	3/4	1-5/8	4-1/8	ES200200	ES220200	ES250200
2"	1-1/4	1-5/8	4-1/8	ES201200	ES221200	ES251200
2"	1-1/4	1-5/8	5"	ES202200	ES222200	ES252200

2-Flute Long Single End Mills

- Allows For Deep Slotting And Cavity
- Milling Operation In All Types Of Materials
- Standard: ANSI B94.19-1985

Dia. (in.)	Shank Dia. (in.)	Length of Cut(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/4	3/8	1"	2-3/4	ES300016	ES320016	ES350016
1/4	3/8	1-1/4	3-1/8	ES301016	ES321016	ES351016
5/16	3/8	1-1/4	3"	ES300020	ES320020	ES350020
3/8	3/8	1"	2-3/4	ES300024	ES320024	ES350024
3/8	3/8	1-1/2	3-1/4	ES301024	ES321024	ES351024
1/2	1/2	1-1/2	3-1/2	ES300032	ES320032	ES350032
1/2	1/2	2"	4"	ES301032	ES321032	ES351032
1/2	1/2	3"	5"	ES302032	ES322032	ES352032
5/8	5/8	2"	4-1/8	ES300040	ES320040	ES350040
5/8	5/8	2-3/8	4-1/2	ES301040	ES321040	ES351040
5/8	5/8	3"	5-1/8	ES302040	ES322040	ES352040
5/8	5/8	4"	6-1/8	ES303040	ES323040	ES353040
3/4	3/4	2-1/4	4-1/2	ES300048	ES320048	ES350048
3/4	3/4	3"	5-1/4	ES301048	ES321048	ES351048
3/4	1/2	3-1/8	5-1/8	ES302048	ES322048	ES352048
3/4	3/4	4	6-1/4	ES303048	ES323048	ES353048
7/8	3/4	2-1/2	4-3/4	ES300056	ES320056	ES350056
7/8	7/8	2-1/2	4-3/4	ES301056	ES321056	ES351056
7/8	7/8	3-1/2	5-3/4	ES302056	ES322056	ES352056
1"	1"	2-1/2	5"	ES300100	ES320100	ES350100
1"	1"	3"	5-1/2	ES301100	ES321100	ES351100
1"	1"	4-1/2	7"	ES302100	ES322100	ES352100
1-1/8	1"	3"	5-1/2	ES300108	ES320108	ES350108
1-1/4	1"	3"	5-1/2	ES300116	ES320116	ES350116
1-1/4	1-1/4	3"	5-1/2	ES301116	ES321116	ES351116
1-1/4	1-1/4	3-1/2	6"	ES302116	ES322116	ES352116
1-1/4	1-1/4	4-3/4	7-1/4	ES303116	ES323116	ES353116
1-3/8	1"	3"	5-1/2	ES300124	ES320124	ES350124
1-1/2	1-1/4	3"	5-1/2	ES300132	ES320132	ES350132
1-1/2	1-1/4	4"	6-1/2	ES301132	ES321132	ES351132
1-1/2	1-1/4	6"	8-1/2	ES302132	ES322132	ES352132
1-5/8	1-1/4	3"	5-1/2	ES300140	ES320140	ES350140
1-3/4	1-1/4	3"	5-1/2	ES300148	ES320148	ES350148
1-7/8	1-1/4	3"	5-1/2	ES300156	ES320156	ES350156
2"	1-1/4	3"	5-1/2	ES300200	ES320200	ES350200
2"	1-1/4	4"	6-1/2	ES301200	ES321200	ES351200

2-Flute Long Extension Type Single End Mills

- Standard: ANSI B94.19-1985

Dia. (in.)	Shank Dia. (in.)	Length Below Shank (in.)	Flute Length(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
3/16	3/8	1-1/4	1/2	2-11/16	ES400012	ES420012	ES450012
1/4	3/8	1-1/2	5/8	3-1/16	ES400016	ES420016	ES450016
5/16	3/8	1-3/4	3/4	3-5/16	ES400020	ES420020	ES450020
3/8	3/8	1-3/4	3/4	3-5/16	ES400024	ES420024	ES450024
1/2	1/2	2-7/32	1"	4"	ES400032	ES420032	ES450032
5/8	5/8	2-23/32	1-3/8	4-5/8	ES400040	ES420040	ES450040
5/8	1/2	2-23/32	1-3/8	4-5/8	ES401040	ES421040	ES451040
3/4	3/4	3-11/32	1-5/8	5-3/8	ES400048	ES420048	ES450048
3/4	1/2	3-11/32	1-5/8	5-3/8	ES401048	ES421048	ES451048
7/8	7/8	4"	2"	6"	ES400056	ES420056	ES450056
1"	1"	4-31/32	2-1/2	7-1/4	ES400100	ES420100	ES450100
1-1/4	1-1/4	4-31/32	3"	7-1/4	ES400116	ES420116	ES450116

Metric 2-Flute Single End Mills

Dia. (mm)	Shank Dia.(mm)	Length of Cut(mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
2.0	3/8	5/16	2-5/16	ES50200	ES52200	ES55200
2.5	3/8	5/16	2-5/16	ES50250	ES52250	ES55250
3.0	3/8	5/16	2-5/16	ES50300	ES52300	ES55300
3.5	3/8	7/16	2-5/16	ES50350	ES52350	ES55350
4.0	3/8	7/16	2-5/16	ES50400	ES52400	ES55400
4.5	3/8	1/2	2-5/16	ES50450	ES52450	ES55450
5.0	3/8	1/2	2-5/16	ES50500	ES52500	ES55500
5.5	3/8	1/2	2-5/16	ES50550	ES52550	ES55550
6.0	3/8	1/2	2-5/16	ES50600	ES52600	ES55600
6.5	3/8	1/2	2-5/16	ES50650	ES52650	ES55650
7.0	3/8	9/16	2-5/16	ES50700	ES52700	ES55700
7.5	3/8	9/16	2-5/16	ES50750	ES52750	ES55750
8.0	3/8	9/16	2-5/16	ES50800	ES52800	ES55800
8.5	3/8	9/16	2-5/16	ES50850	ES52850	ES55850
9.0	3/8	9/16	2-5/16	ES50900	ES52900	ES55900
9.5	3/8	9/16	2-5/16	ES50950	ES52950	ES55950
10.0	3/8	13/16	2-1/2	ES501000	ES521000	ES551000
10.5	3/8	13/16	2-1/2	ES501050	ES521050	ES551050
11.0	3/8	13/16	2-1/2	ES501100	ES521100	ES551100
11.5	3/8	13/16	2-1/2	ES501150	ES521150	ES551150
12.0	3/8	13/16	2-1/2	ES501200	ES521200	ES551200
12.5	1/2	1-1/8	3-1/8	ES501250	ES521250	ES551250
13.0	1/2	1-1/8	3-1/8	ES501300	ES521300	ES551300
13.5	1/2	1-1/8	3-1/8	ES501350	ES521350	ES551350
14.0	1/2	1-1/8	3-1/8	ES501400	ES521400	ES551400
14.5	1/2	1-1/8	3-1/8	ES501450	ES521450	ES551450
15.0	1/2	1-1/8	3-1/8	ES501500	ES521500	ES551500
16.0	5/8	1-5/16	3-7/16	ES501600	ES521600	ES551600
18.0	5/8	1-5/16	3-7/16	ES501800	ES521800	ES551800
19.0	5/8	1-5/16	3-7/16	ES501900	ES521900	ES551900
20.0	5/8	1-1/2	3-3/4	ES502000	ES522000	ES552000
20.0	3/4	1-1/2	3-3/4	ES502001	ES522001	ES552001
22.0	3/4	1-1/2	3-3/4	ES502200	ES522200	ES552200
24.0	3/4	2"	4-1/2	ES502400	ES522400	ES552400
25.0	1"	2"	4-1/2	ES502500	ES522500	ES552500

HSS End Mills

- Fully Ground;
- Round Shank, Weldon Shank
- Standard: DIN327

Size (mm)	Shank Dia.(mm)	Flute Length(mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
2.0	6	4	48	ES60200	ES62200	ES65200
2.5	6	5	49	ES60250	ES62250	ES65250
3.0	6	6	50	ES60300	ES62300	ES65300
3.5	6	7	51	ES60350	ES62350	ES65350
4.0	6	7	51	ES60400	ES62400	ES65400
4.5	6	8	52	ES60450	ES62450	ES65450
5.0	6	8	52	ES60500	ES62500	ES65500
5.5	6	8	52	ES60550	ES62550	ES65550
6.0	6	8	52	ES60600	ES62600	ES65600
6.5	10	10	60	ES60650	ES62650	ES65650
7.0	10	10	60	ES60700	ES62700	ES65700
7.5	10	11	61	ES60750	ES62750	ES65750
8.0	10	11	61	ES60800	ES62800	ES65800
8.5	10	13	63	ES60850	ES62850	ES65850
9.0	10	13	63	ES60900	ES62900	ES65900

HSS End Mills

- Fully Ground;
- Round Shank, Weldon Shank
- Standard: DIN327

Size (mm)	Shank Dia.(mm)	Flute Length(mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
10.0	10	13	73	ES601000	ES621000	ES651000
11.0	12	16	73	ES601100	ES621100	ES651100
12.0	12	16	73	ES601200	ES621200	ES651200
13.0	12	16	73	ES601300	ES621300	ES651300
14.0	12	16	73	ES601400	ES621400	ES651400
15.0	12	16	73	ES601500	ES621500	ES651500
16.0	16	19	79	ES601600	ES621600	ES651600
17.0	16	19	79	ES601700	ES621700	ES651700
18.0	16	19	79	ES601800	ES621800	ES651800
19.0	16	19	79	ES601900	ES621900	ES651900
20.0	22	22	88	ES602000	ES622000	ES652000
21.0	22	22	88	ES602100	ES622100	ES652100
22.0	22	22	88	ES602200	ES622200	ES652200
23.0	22	22	88	ES602300	ES622300	ES652300
24.0	26	26	102	ES602400	ES622400	ES652400
25.0	26	26	102	ES602500	ES622500	ES652500
26.0	26	26	102	ES602600	ES622600	ES652600
28.0	26	26	102	ES602800	ES622800	ES652800

2-Flute Double End Mills

- Center Cutting
- Standard: ANSI B94.19-1985

Dia. (in.)	Shank Dia. (in.)	Flute Length(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/8	3/8	3/8	3-1/16	ED20008	ED22008	ED25008
9/64	3/8	7/16	3-1/16	ED20009	ED22009	ED25009
5/32	3/8	7/16	3-1/8	ED20010	ED22010	ED25010
11/64	3/8	7/16	3-1/8	ED20011	ED22011	ED25011
3/16	3/8	7/16	3-1/8	ED20012	ED22012	ED25012
13/64	3/8	1/2	3-1/8	ED20013	ED22013	ED25013
7/32	3/8	1/2	3-1/8	ED20014	ED22014	ED25014
15/64	3/8	1/2	3-1/8	ED20015	ED22015	ED25015
1/4	3/8	1/2	3-1/8	ED20016	ED22016	ED25016
17/64	3/8	9/16	3-1/8	ED20017	ED22017	ED25017
9/32	3/8	9/16	3-1/8	ED20018	ED22018	ED25018
19/64	3/8	9/16	3-1/8	ED20019	ED22019	ED25019
5/16	3/8	9/16	3-1/8	ED20020	ED22020	ED25020
21/64	3/8	9/16	3-1/8	ED20021	ED22021	ED25021
11/32	3/8	9/16	3-1/8	ED20022	ED22022	ED25022
23/64	3/8	9/16	3-1/8	ED20023	ED22023	ED25023
3/8	3/8	9/16	3-1/8	ED20024	ED22024	ED25024
25/64	1/2	13/16	3-3/4	ED20025	ED22025	ED25025
13/32	1/2	13/16	3-3/4	ED20026	ED22026	ED25026
27/64	1/2	13/16	3-3/4	ED20027	ED22027	ED25027
7/16	1/2	13/16	3-3/4	ED20028	ED22028	ED25028
29/64	1/2	13/16	3-3/4	ED20029	ED22029	ED25029
15/32	1/2	13/16	3-3/4	ED20030	ED22030	ED25030
31/64	1/2	13/16	3-3/4	ED20031	ED22031	ED25031
1/2	1/2	13/16	3-3/4	ED20032	ED22032	ED25032
17/32	5/8	1-1/8	4-1/2	ED20034	ED22034	ED25034
9/16	5/8	1-1/8	4-1/2	ED20036	ED22036	ED25036
19/32	5/8	1-1/8	4-1/2	ED20038	ED22038	ED25038
5/8	5/8	1-1/8	4-1/2	ED20040	ED22040	ED25040
21/32	3/4	1-5/16	5"	ED20042	ED22042	ED25042
11/16	3/4	1-5/16	5"	ED20044	ED22044	ED25044
23/32	3/4	1-5/16	5"	ED20046	ED22046	ED25046
3/4	3/4	1-5/16	5"	ED20048	ED22048	ED25048
13/16	7/8	1-9/16	5-1/2	ED20052	ED22052	ED25052
27/32	7/8	1-9/16	5-1/2	ED20054	ED22054	ED25054
7/8	7/8	1-9/16	5-1/2	ED20056	ED22056	ED25056
29/32	1"	1-5/8	5-7/8	ED20058	ED22058	ED25058
15/16	1"	1-5/8	5-7/8	ED20060	ED22060	ED25060
31/32	1"	1-5/8	5-7/8	ED20062	ED22062	ED25062
1"	1"	1-5/8	5-7/8	ED20100	ED22100	ED25100

4-Flute Double End Mills

- Center Cutting
- Standard:ANSI B94.19-1985

Mill Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/8	3/8	3/8	3-1/16	ED40008	ED42008	ED45008
9/64	3/8	7/16	3-1/8	ED40009	ED42009	ED45009
5/32	3/8	7/16	3-1/8	ED40010	ED42010	ED45010
11/64	3/8	1/2	3-1/4	ED40011	ED42011	ED45011
3/16	3/8	1/2	3-1/4	ED40012	ED42012	ED45012
13/64	3/8	9/16	3-1/4	ED40013	ED42013	ED45013
7/32	3/8	9/16	3-1/4	ED40014	ED42014	ED45014
15/64	3/8	5/8	3-3/8	ED40015	ED42015	ED45015
1/4	3/8	5/8	3-3/8	ED40016	ED42016	ED45016
17/64	3/8	11/16	3-3/8	ED40017	ED42017	ED45017
9/32	3/8	11/16	3-3/8	ED40018	ED42018	ED45018
19/64	3/8	3/4	3-1/2	ED40019	ED42019	ED45019
5/16	3/8	3/4	3-1/2	ED40020	ED42020	ED45020
21/64	3/8	3/4	3-1/2	ED40021	ED42021	ED45021
11/32	3/8	3/4	3-1/2	ED40022	ED42022	ED45022
23/64	3/8	3/4	3-1/2	ED40023	ED42023	ED45023
3/8	3/8	3/4	3-1/2	ED40024	ED42024	ED45024
25/64	1/2	1"	4-1/8	ED40025	ED42025	ED45025
13/32	1/2	1"	4-1/8	ED40026	ED42026	ED45026
27/64	1/2	1"	4-1/8	ED40027	ED42027	ED45027
7/16	1/2	1"	4-1/8	ED40028	ED42028	ED45028
29/64	1/2	1"	4-1/8	ED40029	ED42029	ED45029
15/32	1/2	1"	4-1/8	ED40030	ED42030	ED45030
31/64	1/2	1"	4-1/8	ED40031	ED42031	ED45031
1/2	1/2	1"	4-1/8	ED40032	ED42032	ED45032
17/32	5/8	1-3/8	5"	ED40034	ED42034	ED45034
9/16	5/8	1-3/8	5"	ED40036	ED42036	ED45036
19/32	5/8	1-3/8	5"	ED40038	ED42038	ED45038
5/8	5/8	1-3/8	5"	ED40040	ED42040	ED45040
21/32	3/4	1-5/8	5-5/8	ED40042	ED42042	ED45042
11/16	3/4	1-5/8	5-5/8	ED40044	ED42044	ED45044
23/32	3/4	1-5/8	5-5/8	ED40046	ED42046	ED45046
3/4	3/4	1-5/8	5-5/8	ED40048	ED42048	ED45048
25/32	1"	1-7/8	6-1/8	ED40050	ED42050	ED45050
13/16	7/8	1-7/8	6-1/8	ED40052	ED42052	ED45052
27/32	7/8	1-7/8	6-1/8	ED40054	ED42054	ED45054
7/8	7/8	1-7/8	6-1/8	ED40056	ED42056	ED45056
29/32	1"	1-7/8	6-3/8	ED40058	ED42058	ED45058
15/16	1"	1-7/8	6-3/8	ED40060	ED42060	ED45060
31/32	1"	1-7/8	6-3/8	ED40062	ED42062	ED45062
1"	1"	1-7/8	6-3/8	ED40100	ED42100	ED45100

3-Flute Double End Mills

- Center Cutting

Dia. (in.)	Shank Dia. (in.)	Length of Cut(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/8	3/8	3/8	3-1/8	ED30008	ED32008	ED35008
5/32	3/8	7/16	3-1/8	ED30010	ED32010	ED35010
3/16	3/8	1/2	3-1/4	ED30012	ED32012	ED35012
1/4	3/8	5/8	3-3/8	ED30016	ED32016	ED35016
5/16	3/8	3/4	3-1/2	ED30020	ED32020	ED35020
3/8	3/8	3/4	3-3/8	ED30024	ED32024	ED35024
7/16	1/2	1"	4-1/4	ED30028	ED32028	ED35028
1/2	1/2	1"	4-1/4	ED30032	ED32032	ED35032
9/16	5/8	1-3/8	5"	ED30036	ED32036	ED35036
5/8	5/8	1-3/8	5"	ED30040	ED32040	ED35040
11/16	3/4	1-5/8	5-5/8	ED30044	ED32044	ED35044
3/4	3/4	1-5/8	5-5/8	ED30048	ED32048	ED35048
13/16	7/8	1-3/4	6-1/4	ED30052	ED32052	ED35052
7/8	7/8	1-3/4	6-1/4	ED30056	ED32056	ED35056
15/16	1"	1-3/4	6-1/2	ED30060	ED32060	ED35060
1"	1"	1-3/4	6-1/2	ED30100	ED32100	ED35100

3-Flute Single End Mills

- Center Cutting
- Three Flute Design Allows For Better Chip Removal.
- Center Cut Design Allows For Plunge Milling.
- Standard: ANSI B94.19-1985

Regular Length

Dia. (in.)	Shank Dia. (in.)	Length of Cut(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/8	3/8	3/8	2-5/16	EE300008	EE320008	EE350008
3/16	3/8	1/2	2-3/8	EE300012	EE320012	EE350012
1/4	3/8	5/8	2-1/2	EE300016	EE320016	EE350016
5/16	3/8	3/4	2-1/2	EE300020	EE320020	EE350020
3/8	3/8	3/4	2-1/2	EE300024	EE320024	EE350024
7/16	3/8	1"	2-11/16	EE300028	EE320028	EE350028
1/2	1/2	1-1/4	3-1/4	EE300032	EE320032	EE350032
1/2	3/8	1"	2-11/16	EE301032	EE321032	EE351032
9/16	1/2	1-3/8	3-3/8	EE300036	EE320036	EE350036
5/8	5/8	1-5/8	3-3/4	EE300040	EE320040	EE350040
5/8	1/2	1-3/8	3-3/8	EE301040	EE321040	EE351040
11/16	1/2	1-5/8	3-5/8	EE300044	EE320044	EE350044
3/4	5/8	1-5/8	3-3/4	EE300048	EE320048	EE350048
3/4	3/4	1-5/8	3-7/8	EE301048	EE321048	EE351048
7/8	7/8	1-7/8	4-1/8	EE300056	EE320056	EE350056
7/8	5/8	1-7/8	4"	EE301056	EE321056	EE351056
7/8	1/2	1-5/8	3-5/8	EE302056	EE322056	EE352056
7/8	3/4	1-7/8	4-1/8	EE303056	EE323056	EE353056
15/16	5/8	1-7/8	4"	EE300060	EE320060	EE350060
1"	7/8	1-7/8	4-1/8	EE300100	EE320100	EE350100
1"	5/8	1-7/8	4"	EE301100	EE321100	EE351100
1"	3/4	1-7/8	4-1/8	EE302100	EE322100	EE352100
1"	1"	2"	4-1/2	EE303100	EE323100	EE353100

3-Flute Single End Mills

- High Speed Steel · Center Cutting
- Standard: ANSI B94.19-1985

Long Length

Dia. (in.)	Shank Dia. (in.)	Length of Cut(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
3/8	3/8	1-1/2	3-1/4	EE40024	EE42024	EE45024
1/2	1/2	2"	4"	EE40032	EE42032	EE45032
5/8	5/8	2-1/2	4-5/8	EE40040	EE42040	EE45040
3/4	3/4	3"	5-1/4	EE40048	EE42048	EE45048
7/8	7/8	3-1/2	5-3/4	EE40056	EE42056	EE45056
1"	1	4"	6-1/2	EE40100	EE42100	EE45100
1-1/4	1-1/4	4"	6-1/2	EE40116	EE42116	EE45116

Metric 4-Flute Single End Mills

Dia. (mm)	Shank Dia.(in.)	Length of Cut(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
2.0	3/8	3/8	2-5/16	EF40200	EF42200	EF45200
2.5	3/8	3/8	2-5/16	EF40250	EF42250	EF45250
3.0	3/8	3/8	2-5/16	EF40300	EF42300	EF45300
3.5	3/8	1/2	2-3/8	EF40350	EF42350	EF45350
4.0	3/8	1/2	2-3/8	EF40400	EF42400	EF45400
4.5	3/8	9/16	2-1/2	EF40450	EF42450	EF45450
5.0	3/8	9/16	2-1/2	EF40500	EF42500	EF45500
5.5	3/8	5/8	2-1/2	EF40550	EF42550	EF45550
6.0	3/8	5/8	2-1/2	EF40600	EF42600	EF45600
7.0	3/8	11/16	2-1/2	EF40700	EF42700	EF45700
7.5	3/8	3/4	2-1/2	EF40750	EF42750	EF45750
8.0	3/8	3/4	2-1/2	EF40800	EF42800	EF45800
8.5	3/8	3/4	2-1/2	EF40850	EF42850	EF45850
9.0	3/8	3/4	2-1/2	EF40900	EF42900	EF45900
9.5	3/8	3/4	2-1/2	EF40950	EF42950	EF45950
10.0	3/8	1"	2-11/16	EF401000	EF421000	EF451000
10.5	3/8	1"	2-11/16	EF401050	EF421050	EF451050
11.0	3/8	1"	2-11/16	EF401100	EF421100	EF451100
11.5	3/8	1"	2-11/16	EF401150	EF421150	EF451150
12.0	3/8	1"	2-11/16	EF401200	EF421200	EF451200
12.5	1/2	1-1/4	3-1/4	EF401250	EF421250	EF451250
13.0	1/2	1-1/4	3-1/4	EF401300	EF421300	EF451300
13.5	1/2	1-1/4	3-1/4	EF401350	EF421350	EF451350
14.0	1/2	1-3/8	3-3/8	EF401400	EF421400	EF451400
14.5	1/2	1-3/8	3-3/8	EF401450	EF421450	EF451450
16.0	5/8	1-5/8	3-3/4	EF401600	EF421600	EF451600
18.0	5/8	1-5/8	3-3/4	EF401800	EF421800	EF451800
20.0	5/8	1-7/8	4-1/8	EF402000	EF422000	EF452000
20.0	3/4	1-7/8	4-1/8	EF402001	EF422001	EF452001
22.0	3/4	1-7/8	4-1/8	EF402200	EF422200	EF452200
24.0	3/4	2"	4-1/2	EF402400	EF422400	EF452400
25.0	1"	2"	4-1/2	EF402500	EF422500	EF452500

HSS End Mills

- Fully Ground;
- Round Shank, Weldon Shank
- Standard: DIN844

Size (mm)	Shank Dia.(mm)	Flute Length (mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
2	6	7	51	EF50200	EF52200	EF55200
3	6	8	52	EF50300	EF52300	EF55300
4	6	11	55	EF50400	EF52400	EF55400
5	6	13	57	EF50500	EF52500	EF55500
6	6	13	57	EF50600	EF52600	EF55600
7	10	16	66	EF50700	EF52700	EF55700
8	10	19	69	EF50800	EF52800	EF55800
9	10	19	69	EF50900	EF52900	EF55900
10	10	22	72	EF501000	EF521000	EF551000
11	12	22	79	EF501100	EF521100	EF551100
12	12	26	83	EF501200	EF521200	EF551200
13	12	26	83	EF501300	EF521300	EF551300
14	12	26	83	EF501400	EF521400	EF551400
15	12	26	83	EF501500	EF521500	EF551500
16	16	32	92	EF501600	EF521600	EF551600
17	16	32	92	EF501700	EF521700	EF551700
18	16	32	92	EF501800	EF521800	EF551800
19	16	32	92	EF501900	EF521900	EF551900
20	20	38	104	EF502000	EF522000	EF552000
21	20	38	104	EF502100	EF522100	EF552100
22	20	38	104	EF502200	EF522200	EF552200
23	20	38	104	EF502300	EF522300	EF552300
24	25	45	121	EF502400	EF522400	EF552400
25	25	45	121	EF502500	EF522500	EF552500
26	25	45	121	EF502600	EF522600	EF552600
27	25	45	121	EF502700	EF522700	EF552700
28	25	45	121	EF502800	EF522800	EF552800
29	25	45	121	EF502900	EF522900	EF552900
30	25	45	121	EF503000	EF523000	EF553000
32	32	53	133	EF503200	EF523200	EF553200
36	32	53	133	EF503600	EF523600	EF553600
40	40	63	155	EF504000	EF524000	EF554000
45	40	63	155	EF504500	EF524500	EF554500
50	50	75	177	EF505000	EF525000	EF555000

DIN844 HSS End Mills - Long Series

Size (mm)	Shank Dia.(mm)	Flute Length (mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
2	6	10	54	EF60200	EF62200	EF65200
3	6	12	56	EF60300	EF62300	EF65300
4	6	19	63	EF60400	EF62400	EF65400
5	6	24	68	EF60500	EF62500	EF65500
6	6	24	68	EF60600	EF62600	EF65600
7	10	30	80	EF60700	EF62700	EF65700
8	10	38	88	EF60800	EF62800	EF65800
9	10	38	88	EF60900	EF62900	EF65900
10	10	45	95	EF601000	EF621000	EF651000
11	12	45	102	EF601100	EF621100	EF651100
12	12	53	110	EF601200	EF621200	EF651200
13	12	53	110	EF601300	EF621300	EF651300
14	12	53	110	EF601400	EF621400	EF651400
15	16	63	123	EF601500	EF621500	EF651500
16	16	63	123	EF601600	EF621600	EF651600
17	16	63	123	EF601700	EF621700	EF651700
18	16	63	123	EF601800	EF621800	EF651800
19	20	75	141	EF601900	EF621900	EF651900
20	20	75	141	EF602000	EF622000	EF652000
21	20	75	141	EF602100	EF622100	EF652100
22	20	75	141	EF602200	EF622200	EF652200
23	20	75	141	EF602300	EF622300	EF652300
24	25	90	166	EF602400	EF622400	EF652400
25	25	90	166	EF602500	EF622500	EF652500
26	25	90	166	EF602600	EF622600	EF652600
27	25	90	166	EF602700	EF622700	EF652700
28	25	90	166	EF602800	EF622800	EF652800
29	25	90	166	EF602900	EF622900	EF652900
30	25	90	166	EF603000	EF623000	EF653000
32	32	106	186	EF603200	EF623200	EF653200
36	32	106	186	EF603600	EF623600	EF653600
40	40	125	217	EF604000	EF624000	EF654000
45	40	125	217	EF604500	EF624500	EF654500
50	50	150	252	EF605000	EF625000	EF655000

Multi-Flute Single End Mills

- Regular Length

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. Of Flutes	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/8	3/8	3/8	2-5/16	4	EM100008	EM120008	EM150008
3/16	3/8	1/2	2-3/8	4	EM100012	EM120012	EM150012
1/4	3/8	5/8	2-7/16	4	EM100016	EM120016	EM150016
5/16	3/8	3/4	2-1/2	4	EM100020	EM120020	EM150020
3/8	3/8	3/4	2-1/2	4	EM100024	EM120024	EM150024
7/16	3/8	1"	2-11/16	4	EM100028	EM120028	EM150028
1/2	3/8	1"	2-11/16	4	EM100032	EM120032	EM150032
1/2	1/2	1-1/4	3-1/4	4	EM101032	EM121032	EM151032
9/16	1/2	1-3/8	3-3/8	4	EM100036	EM120036	EM150036
5/8	1/2	1-3/8	3-3/8	4	EM100040	EM120040	EM150040
5/8	5/8	1-5/8	3-3/4	4	EM101040	EM121040	EM151040
11/16	1/2	1-5/8	3-5/8	4	EM100044	EM120044	EM150044
11/16	5/8	1-5/8	3-3/4	4	EM101044	EM121044	EM151044
3/4	1/2	1-5/8	3-5/8	4	EM100048	EM120048	EM150048
3/4	5/8	1-5/8	3-3/4	4	EM101048	EM121048	EM151048
3/4	3/4	1-5/8	3-7/8	4	EM102048	EM122048	EM152048
13/16	5/8	1-7/8	4"	6	EM100052	EM120052	EM150052
13/16	3/4	1-7/8	4-1/8	4	EM101052	EM121052	EM151052
7/8	1/2	1-7/8	3-5/8	4	EM100056	EM120056	EM150056
7/8	5/8	1-7/8	4"	6	EM101056	EM121056	EM151056
7/8	3/4	1-7/8	4-1/8	4	EM102056	EM122056	EM152056
7/8	7/8	1-7/8	4-1/8	4	EM103056	EM123056	EM153056
15/16	5/8	1-7/8	4-1/8	6	EM100060	EM120060	EM150060
15/16	3/4	1-7/8	4-1/8	4	EM101060	EM121060	EM151060
15/16	7/8	1-7/8	4-1/8	4	EM102060	EM122060	EM152060
1"	1/2	1-7/8	3-7/8	4	EM100100	EM120100	EM150100
1"	5/8	1-7/8	4"	6	EM101100	EM121100	EM151100
1"	3/4	1-7/8	4-1/8	4	EM102100	EM122100	EM152100
1"	7/8	1-7/8	4-1/8	4	EM103100	EM123100	EM153100
1"	1"	2"	4-1/2	6	EM104100	EM124100	EM154100
1-1/8	3/4	2"	4-1/4	6	EM100108	EM120108	EM150108
1-1/8	7/8	2"	4-1/4	6	EM101108	EM121108	EM151108
1-1/8	1"	2"	4-1/2	6	EM102108	EM122108	EM152108
1-1/8	1"	2"	4-1/2	4	EM103108	EM123108	EM153108
1-1/4	3/4	2"	4-1/2	6	EM100116	EM120116	EM150116
1-1/4	7/8	2"	4-1/4	6	EM101116	EM121116	EM151116

Multi-Flute Single End Mills

- Regular Length

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. Of Flutes	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1-1/4	1"	2"	4-1/2	6	EM102116	EM122116	EM152116
1-1/4	1-1/4	2"	4-1/2	4	EM103116	EM123116	EM153116
1-1/4	1-1/4	2"	4-1/2	6	EM104116	EM124116	EM154116
1-3/8	3/4	2"	4-1/4	6	EM100124	EM120124	EM150124
1-3/8	1"	2"	4-1/2	6	EM101124	EM121124	EM151124
1-1/2	3/4	2"	4-1/4	6	EM100132	EM120132	EM150132
1-1/2	1"	2"	4-1/2	6	EM101132	EM121132	EM151132
1-1/2	1-1/4	2"	4-1/2	4	EM102132	EM122132	EM152132
1-1/2	1-1/4	2"	4-1/2	6	EM103132	EM123132	EM153132
1-5/8	1-1/4	2"	4-1/2	6	EM100140	EM120140	EM150140
1-3/4	1-1/4	2"	4-1/2	4	EM100148	EM120148	EM150148
1-3/4	1-1/4	2"	4-1/2	6	EM101148	EM121148	EM151148
1-7/8	1-1/4	2"	4-1/2	6	EM100156	EM120156	EM150156
2"	3/4	2"	4-1/2	8	EM100200	EM120200	EM150200
2"	1-1/4	2"	4-1/2	4	EM101200	EM121200	EM151200
2"	1-1/4	2"	4-1/2	6	EM102200	EM122200	EM152200
2"	1-1/4	2"	4-1/2	8	EM103200	EM123200	EM153200

Multi-Flute Long Single End Mills

- Center Cutting

Dia. (in.)	Shank Dia.(in.)	Length of Cut(in.)	OAL (in.)	No. Of Flutes	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/4	3/8	1-1/4	3-1/16	4	EM200016	EM220016	EM250016
5/16	3/8	1-3/8	3-1/8	4	EM200020	EM220020	EM250020
3/8	3/8	1-1/2	3-1/4	4	EM200024	EM220024	EM250024
7/16	1/2	1-3/4	3-3/4	4	EM200028	EM220028	EM250028
1/2	1/2	2"	4"	4	EM200032	EM220032	EM250032
5/8	5/8	2-1/2	4-5/8	4	EM200040	EM220040	EM250040
5/8	1/2	2-1/2	4-5/8	4	EM201040	EM221040	EM251040
3/4	3/4	3"	5-1/4	4	EM200048	EM220048	EM250048
3/4	1/2	3"	5-1/4	4	EM201048	EM221048	EM251048
7/8	7/8	3-1/2	5-3/4	4	EM200056	EM220056	EM250056
1"	1"	4"	6-1/2	4	EM200100	EM220100	EM250100
1-1/8	1"	4"	6-1/2	6	EM200108	EM220108	EM250108
1-1/4	1"	4"	6-1/2	6	EM200116	EM220116	EM250116
1-1/4	1-1/4	4"	6-1/2	6	EM201116	EM221116	EM251116
1-1/4	1-1/4	4"	6-1/2	4	EM202116	EM222116	EM252116
1-3/8	1"	4"	6-1/2	6	EM200124	EM220124	EM250124
1-1/2	1-1/4	4"	6-1/2	6	EM200132	EM220132	EM250132
1-1/2	1-1/4	4"	6-1/2	4	EM201132	EM221132	EM251132
1-1/2	1"	4"	6-1/2	6	EM202132	EM222132	EM252132
1-3/4	1-1/4	4"	6-1/2	6	EM200148	EM220148	EM250148
1-3/4	1-1/4	4"	6-1/2	4	EM201148	EM221148	EM251148
2"	1-1/4	4"	6-1/2	8	EM200200	EM220200	EM250200
2"	1-1/4	4"	6-1/2	4	EM201200	EM221200	EM251200
2"	1-1/4	4"	6-1/2	6	EM202200	EM222200	EM252200

Multi-Flute Extra Long Single End Mills

- Center Cutting

Dia. (in.)	Shank Dia.(in.)	Length of Cut(in.)	OAL (in.)	No. Of Flutes	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/4	3/8	1-3/4	3-9/16	4	EM300016	EM320016	EM350016
5/16	3/8	2"	3-3/4	4	EM300020	EM320020	EM350020
3/8	3/8	2-1/2	4-1/4	4	EM300024	EM320024	EM350024
1/2	1/2	3"	5"	4	EM300032	EM320032	EM350032
5/8	5/8	4"	6-1/8	4	EM300040	EM320040	EM350040
5/8	1/2	4"	6-1/8	4	EM301040	EM321040	EM351040
3/4	3/4	4"	6-1/4	4	EM300048	EM320048	EM350048
3/4	1/2	4"	6-1/4	4	EM301048	EM321048	EM351048
7/8	7/8	5"	7-1/4	4	EM300056	EM320056	EM350056
1"	1"	6"	8-1/2	4	EM300100	EM320100	EM350100
1-1/4	1-1/4	6"	8-1/2	6	EM300116	EM320116	EM350116
1-1/4	1-1/4	6"	8-1/2	4	EM301116	EM321116	EM351116
1-1/2	1-1/4	6"	8-1/2	6	EM300132	EM320132	EM350132
1-1/2	1-1/4	6"	8-1/2	4	EM301132	EM321132	EM351132
1-1/2	1-1/4	6"	10-1/2	6	EM302132	EM322132	EM352132

Multi-Flute Heavy Duty End Mills

- Large Diameter,Positive Lock.

Size (in.)	ShankDia. (in.)	FluteLength (in.)	OAL (in.)	No. of Flutes	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
2"	2"	2"	5-3/4	4	EM400200	EM420200	EM450200
2"	2"	3"	6-3/4	4	EM401200	EM421200	EM451200
2"	2"	4"	7-3/4	4	EM402200	EM422200	EM452200
2"	2"	4"	7-3/4	6	EM403200	EM423200	EM453200
2"	2"	6"	9-3/4	4	EM404200	EM424200	EM454200
2"	2"	6"	9-3/4	6	EM405200	EM425200	EM455200
2"	2"	8"	11-3/4	4	EM406200	EM426200	EM456200
2"	2"	8"	11-3/4	6	EM407200	EM427200	EM457200
2"	2"	10"	13-3/4	4	EM408200	EM428200	EM458200
2"	2"	10"	13-3/4	6	EM409200	EM429200	EM459200
2"	2"	12"	15-3/4	4	EM4010200	EM4210200	EM4510200
2"	2"	12"	15-3/4	6	EM4011200	EM4211200	EM4511200
2-1/2"	2-1/2"	4"	7-3/4	4	EM400232	EM420232	EM450232
2-1/2"	2-1/2"	4"	7-3/4	6	EM401232	EM421232	EM451232
2-1/2"	2-1/2"	6"	9-3/4	4	EM402232	EM422232	EM452232
2-1/2"	2-1/2"	6"	9-3/4	6	EM403232	EM423232	EM453232
2-1/2"	2-1/2"	8"	11-3/4	4	EM404232	EM424232	EM454232
2-1/2"	2-1/2"	8"	11-3/4	6	EM405232	EM425232	EM455232
2-1/2"	2-1/2"	10"	13-3/4	4	EM406232	EM426232	EM456232
2-1/2"	2-1/2"	10"	13-3/4	6	EM407232	EM427232	EM457232
3"	2-1/2"	4"	8"	4	EM400300	EM420300	EM450300
3"	2-1/2"	4"	8"	6	EM401300	EM421300	EM451300
3"	2-1/2"	6"	10"	4	EM402300	EM422300	EM452300
3"	2-1/2"	6"	10"	6	EM403300	EM423300	EM453300
3"	2-1/2"	8"	12"	4	EM404300	EM424300	EM454300
3"	2-1/2"	8"	12"	6	EM405300	EM425300	EM455300
3"	2-1/2"	10"	14"	4	EM406300	EM426300	EM456300
3"	2-1/2"	10"	14"	6	EM407300	EM427300	EM457300

2 Flute Single End Ball Nose

- Regular & Extension Length
- Center Cutting

Dia. (in.)	Shank Dia. (in.)	Flute Length(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/8	3/8	3/8	2-5/16	EB200008	EB220008	EB250008
3/16	3/8	1/2	2-3/8	EB200012	EB220012	EB250012
1/4	3/8	5/8	2-7/16	EB200016	EB220016	EB250016
1/4	3/8	5/8	3-1/16	EB201016	EB221016	EB251016
5/16	3/8	3/4	2-1/2	EB200020	EB220020	EB250020
5/16	3/8	3/4	3-5/16	EB201020	EB221020	EB251020

2 Flute Single End Ball Nose

- Regular & Extension Length
- Center Cutting

Dia. (in.)	Shank Dia. (in.)	Flute Length(in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
3/8	3/8	3/4	2-1/2	EB200024	EB220024	EB250024
3/8	3/8	3/4	3-5/16	EB201024	EB221024	EB251024
7/16	1/2	1"	3"	EB200028	EB220028	EB250028
7/16	1/2	1"	3-11/16	EB201028	EB221028	EB251028
1/2	1/2	1"	3"	EB200032	EB220032	EB250032
1/2	1/2	1"	4"	EB201032	EB221032	EB251032
9/16	1/2	1"	3"	EB200036	EB220036	EB250036
5/8	5/8	1-3/8	3-1/2	EB200040	EB220040	EB250040
5/8	5/8	1-3/8	4-5/8	EB201040	EB221040	EB251040
5/8	1/2	1-3/8	3-3/8	EB202040	EB222040	EB252040
3/4	3/4	1-5/8	3-7/8	EB200048	EB220048	EB250048
3/4	3/4	1-5/8	5-3/8	EB201048	EB221048	EB251048
3/4	1/2	1-5/8	3-5/8	EB202048	EB222048	EB252048
13/16	3/4	2"	4-1/4	EB200052	EB220052	EB250052
7/8	7/8	2"	4-1/4	EB200056	EB220056	EB250056
7/8	7/8	2"	6"	EB201056	EB221056	EB251056
7/8	3/4	2"	4-1/4	EB202056	EB222056	EB252056
15/16	3/4	2-1/4	4-1/4	EB200060	EB220060	EB250060
1"	1"	2-1/4	4-3/4	EB200100	EB220100	EB250100
1"	1"	2-1/2	7-1/4	EB201100	EB221100	EB251100
1"	3/4	2-1/4	4-1/2	EB202100	EB222100	EB252100
1-1/8	1"	2-1/4	4-3/4	EB200108	EB220108	EB250108
1-1/4	1-1/4	2-1/2	5"	EB200116	EB220116	EB250116
1-1/4	1-1/4	3"	7-1/4	EB201116	EB221116	EB251116
1-3/8	1-1/4	2-1/2	5"	EB200124	EB220124	EB250124
1-1/2	1-1/4	2-1/2	5"	EB200132	EB220132	EB250132
2"	1-1/4	2-1/2	5"	EB200200	EB220200	EB250200

2 Flute Ball Nose Double End Mills

- Center Cutting

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/8	3/8	3/8	3-3/16	EB300008	EB320008	EB350008
9/64	3/8	7/16	3-1/8	EB300009	EB320009	EB350009
5/32	3/8	1/2	3-1/8	EB300010	EB320010	EB350010
11/64	3/8	7/16	3-1/8	EB300011	EB320011	EB350011
3/16	3/8	7/16	3-1/8	EB300012	EB320012	EB350012
13/64	3/8	1/2	3-1/8	EB300013	EB320013	EB350013
7/32	3/8	1/2	3-1/8	EB300014	EB320014	EB350014
15/64	3/8	1/2	3-1/8	EB300015	EB320015	EB350015
1/4	3/8	1/2	3-1/8	EB300016	EB320016	EB350016
17/64	3/8	9/16	3-1/8	EB300017	EB320017	EB350017
9/32	3/8	9/16	3-1/8	EB300018	EB320018	EB350018
19/64	3/8	9/16	3-1/8	EB300019	EB320019	EB350019
5/16	3/8	9/16	3-1/8	EB300020	EB320020	EB350020
21/64	3/8	9/16	3-1/8	EB300021	EB320021	EB350021
11/32	3/8	9/16	3-1/8	EB300022	EB320022	EB350022
23/64	1/2	9/16	3-1/8	EB300023	EB320023	EB350023
3/8	3/8	9/16	3-1/8	EB300024	EB320024	EB350024
13/32	1/2	13/16	3-3/4	EB300026	EB320026	EB350026
7/16	1/2	13/16	3-3/4	EB300028	EB320028	EB350028
1/2	1/2	13/16	3-3/4	EB300032	EB320032	EB350032
5/8	5/8	1-1/8	4-1/2	EB300040	EB320040	EB350040
3/4	3/4	1-5/16	5"	EB300048	EB320048	EB350048
7/8	7/8	1-9/16	5-1/2	EB300056	EB320056	EB350056
1"	1"	1-5/8	5-7/8	EB300100	EB320100	EB350100

4-Flute Ball Nose Single-End Mills

- High Speed Steel·Center Cuntting
- Regular & Long Length

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1/4	3/8	5/8	2-7/16	EB400016	EB420016	EB450016
1/4	3/8	1-1/4	3-1/16	EB401016	EB421016	EB451016
5/16	3/8	3/4	2-1/2	EB400020	EB420020	EB450020
5/16	3/8	1-1/2	3-1/4	EB401020	EB421020	EB451020
3/8	3/8	3/4	2-1/2	EB400024	EB420024	EB450024
3/8	3/8	1-1/2	3-1/4	EB401024	EB421024	EB451024
1/2	1/2	1-1/4	3-1/4	EB400032	EB420032	EB450032
1/2	1/2	2"	4"	EB401032	EB421032	EB451032
5/8	5/8	1-5/8	3-3/4	EB400040	EB420040	EB450040
5/8	5/8	2-1/2	4-5/8	EB401040	EB421040	EB451040
3/4	3/4	1-5/8	3-7/8	EB400048	EB420048	EB450048
3/4	3/4	3"	5-1/4	EB401048	EB421048	EB451048
7/8	7/8	1-7/8	4-1/8	EB400056	EB420056	EB450056
1"	1"	2"	4-1/2	EB400100	EB420100	EB450100
1"	1"	4"	6-1/2	EB401100	EB421100	EB451100
1-1/4	1-1/4	2"	4-1/2	EB400116	EB420116	EB450116
1-1/4	1-1/4	3"	5-1/2	EB401116	EB421116	EB451116
1-1/4	1-1/4	4"	6-1/2	EB402116	EB422116	EB452116
1-1/4	1-1/4	6"	8-1/2	EB403116	EB423116	EB453116
1-1/4	1-1/4	6"	8-1/2	EB404116	EB424116	EB454116
1-1/2	1-1/4	2"	4-1/2	EB400132	EB420132	EB450132
1-1/2	1-1/4	4"	6-1/2	EB401132	EB421132	EB451132
1-1/2	1-1/4	6"	8-1/2	EB402132	EB422132	EB452132

HSS Ball Nose End Mills

- Fully Ground;
- Round Shank, Weldon Shank
- Standard: DIN327

Size (mm)	Shank Dia.(mm)	Flute Length (mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
2.0	6	4	48	EB50200	EB52200	EB55200
2.5	6	5	49	EB50250	EB52250	EB55250
3.0	6	6	50	EB50300	EB52300	EB55300
3.5	6	7	51	EB50350	EB52350	EB55350
4.0	6	7	51	EB50400	EB52400	EB55400
4.5	6	8	52	EB50450	EB52450	EB55450
5.0	6	8	52	EB50500	EB52500	EB55500
5.5	6	8	52	EB50550	EB52550	EB55550
6.0	6	8	52	EB50600	EB52600	EB55600
6.5	10	10	60	EB50650	EB52650	EB55650
7.0	10	10	60	EB50700	EB52700	EB55700
7.5	10	11	61	EB50750	EB52750	EB55750
8.0	10	11	61	EB50800	EB52800	EB55800
8.5	10	13	63	EB50850	EB52850	EB55850
9.0	10	13	63	EB50900	EB52900	EB55900
10.0	10	13	73	EB501000	EB521000	EB551000
11.0	12	16	73	EB501100	EB521100	EB551100
12.0	12	16	73	EB501200	EB521200	EB551200
13.0	12	16	73	EB501300	EB521300	EB551300
14.0	12	16	73	EB501400	EB521400	EB551400
15.0	12	16	73	EB501500	EB521500	EB551500
16.0	16	19	79	EB501600	EB521600	EB551600
17.0	16	19	79	EB501700	EB521700	EB551700
18.0	16	19	79	EB501800	EB521800	EB551800
19.0	16	19	79	EB501900	EB521900	EB551900
20.0	22	22	88	EB502000	EB522000	EB552000
21.0	22	22	88	EB502100	EB522100	EB552100

HSS Ball Nose End Mills

- Fully Ground;
- Round Shank, Weldon Shank
- Standard: DIN327

Size (mm)	Shank Dia.(mm)	Flute Length (mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
22.0	22	22	88	EB502200	EB522200	EB552200
23.0	22	22	88	EB502300	EB522300	EB552300
24.0	26	26	102	EB502400	EB522400	EB552400
25.0	26	26	102	EB502500	EB522500	EB552500
26.0	26	26	102	EB502600	EB522600	EB552600
28.0	26	26	102	EB502800	EB522800	EB552800

DIN844 HSS Ball Nose End Mills

- Material: W4341, W9341, M2, M35, M42;
- Fully Ground;
- Round Shank, Weldon Shank
- Standard:DIN844

Size (mm)	Shank Dia.(mm)	Flute Length(mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
2	6	7	51	EB60200	EB62200	EB65200
3	6	8	52	EB60300	EB62300	EB65300
4	6	11	55	EB60400	EB62400	EB65400
5	6	13	57	EB60500	EB62500	EB65500
6	6	13	57	EB60600	EB62600	EB65600
7	10	16	66	EB60700	EB62700	EB65700
8	10	19	69	EB60800	EB62800	EB65800
9	10	19	69	EB60900	EB62900	EB65900
10	10	22	72	EB601000	EB621000	EB651000
11	12	22	79	EB601100	EB621100	EB651100
12	12	26	83	EB601200	EB621200	EB651200
13	12	26	83	EB601300	EB621300	EB651300
14	12	26	83	EB601400	EB621400	EB651400
15	12	26	83	EB601500	EB621500	EB651500
16	16	32	92	EB601600	EB621600	EB651600
17	16	32	92	EB601700	EB621700	EB651700
18	16	32	92	EB601800	EB621800	EB651800
19	16	32	92	EB601900	EB621900	EB651900
20	20	38	104	EB602000	EB622000	EB652000
21	20	38	104	EB602100	EB622100	EB652100
22	20	38	104	EB602200	EB622200	EB652200
23	20	38	104	EB602300	EB622300	EB652300
24	25	45	121	EB602400	EB622400	EB652400
25	25	45	121	EB602500	EB622500	EB652500
26	25	45	121	EB602600	EB622600	EB652600
27	25	45	121	EB602700	EB622700	EB652700
28	25	45	121	EB602800	EB622800	EB652800
29	25	45	121	EB602900	EB622900	EB652900
30	25	45	121	EB603000	EB623000	EB653000
32	32	53	133	EB603200	EB623200	EB653200
36	32	53	133	EB603600	EB623600	EB653600
40	40	63	155	EB604000	EB624000	EB654000
45	40	63	155	EB604500	EB624500	EB654500
50	50	75	177	EB605000	EB625000	EB655000

DIN844 HSS Ball Nose End Mills - Long Series

Size mm	Shank Dia.(mm)	Flute Length(mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
2	6	10	54	EB70200	EB72200	EB75200
3	6	12	56	EB70300	EB72300	EB75300
4	6	19	63	EB70400	EB72400	EB75400
5	6	24	68	EB70500	EB72500	EB75500
6	6	24	68	EB70600	EB72600	EB75600
7	10	30	80	EB70700	EB72700	EB75700
8	10	38	88	EB70800	EB72800	EB75800
9	10	38	88	EB70900	EB72900	EB75900
10	10	45	95	EB701000	EB721000	EB751000
11	12	45	102	EB701100	EB721100	EB751100
12	12	53	110	EB701200	EB721200	EB751200
13	12	53	110	EB701300	EB721300	EB751300
14	12	53	110	EB701400	EB721400	EB751400
15	16	63	123	EB701500	EB721500	EB751500
16	16	63	123	EB701600	EB721600	EB751600
17	16	63	123	EB701700	EB721700	EB751700
18	16	63	123	EB701800	EB721800	EB751800
19	20	75	141	EB701900	EB721900	EB751900
20	20	75	141	EB702000	EB722000	EB752000
21	20	75	141	EB702100	EB722100	EB752100
22	20	75	141	EB702200	EB722200	EB752200
23	20	75	141	EB702300	EB722300	EB752300
24	25	90	166	EB702400	EB722400	EB752400
25	25	90	166	EB702500	EB722500	EB752500
26	25	90	166	EB702600	EB722600	EB752600
27	25	90	166	EB702700	EB722700	EB752700
28	25	90	166	EB702800	EB722800	EB752800
29	25	90	166	EB702900	EB722900	EB752900
30	25	90	166	EB703000	EB723000	EB753000
32	32	106	186	EB703200	EB723200	EB753200
36	32	106	186	EB703600	EB723600	EB753600
40	40	125	217	EB704000	EB724000	EB754000
45	40	125	217	EB704500	EB724500	EB754500
50	50	150	252	EB705000	EB725000	EB755000

Single Flute End Mills

Dia. (mm)	Shank Dia.(mm)	Length of Cut(mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
3	8	12	60	EA100300	EA120300	EA150300
4	8	12	60	EA100400	EA120400	EA150400
4	8	40	100	EA101400	EA121400	EA151400
5	8	12	60	EA100500	EA120500	EA150500
5	8	12	60	EA101500	EA121500	EA151500
5	8	14	100	EA102500	EA122500	EA152500
5	8	14	120	EA103500	EA123500	EA153500
5	8	18	60	EA104500	EA124500	EA154500
5	8	25	70	EA105500	EA125500	EA155500
5	8	25	100	EA106500	EA126500	EA156500
5	8	35	80	EA107500	EA127500	EA157500
5	8	40	100	EA108500	EA128500	EA158500
5	8	40	120	EA109500	EA129500	EA159500
6	8	14	60	EA100600	EA120600	EA150600
6	8	14	100	EA101600	EA121600	EA151600
6	8	25	70	EA102600	EA122600	EA152600
6	8	40	100	EA103600	EA123600	EA153600
7	8	14	60	EA100700	EA120700	EA150700

Single Flute End Mills

Dia. (mm)	Shank Dia.(mm)	Length of Cut(mm)	OAL (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
7	8	14	80	EA101700	EA121700	EA151700
8	8	14	80	EA100800	EA120800	EA150800
8	8	14	80	EA101800	EA121800	EA151800
8	8	14	100	EA102800	EA122800	EA152800
8	8	14	120	EA103800	EA123800	EA153800
8	8	25	80	EA104800	EA124800	EA154800
8	8	40	100	EA105800	EA125800	EA155800
9	8	14	80	EA100900	EA120900	EA150900
10	8	14	80	EA1001000	EA1201000	EA1501000
10	8	14	100	EA1011000	EA1211000	EA1511000
10	8	14	120	EA1021000	EA1221000	EA1521000
10	10	14	80	EA1031000	EA1231000	EA1531000
10	10	14	120	EA1041000	EA1241000	EA1541000
12	8	14	80	EA1001200	EA1201200	EA1501200
12	10	14	80	EA1011200	EA1211200	EA1511200

- Redued throat for feed clearance

Dia. (mm)	Shank Dia. (mm)	l1 (mm)	l3 (mm)	l2 (mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
4	8	16	45	90	EA200400	EA220400	EA250400
5	8	14	25	120	EA200500	EA220500	EA250500
5	8	16	45	90	EA201500	EA221500	EA251500
5	8	18	35	80	EA202500	EA222500	EA252500
5	8	18	35	100	EA203500	EA223500	EA253500
6	8	14	35	80	EA200600	EA220600	EA250600
6	8	16	45	90	EA201600	EA221600	EA251600
8	8	14	54	80	EA200800	EA220800	EA250800
8	8	14	68	100	EA201800	EA221800	EA251800
8	8	30	70	100	EA202800	EA222800	EA252800
10	10	14	65	85	EA2001000	EA2201000	EA2501000
10	10	14	75	96	EA2011000	EA2211000	EA2511000
10	10	14	95	120	EA2021000	EA2221000	EA2521000
10	10	30	70	100	EA2031000	EA2231000	EA2531000

20 PC. Single End Mill Sets-Center Cutting

- Includes One Each In 2 and 4 Flute
- High Speed Steel

Description(in.)	No. of Flute	HSS Order No.	Tin Coated Order No.
3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	2	EU200120	EU210120
3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	4		

Metric 20 PC. Single End Mill Sets-Center Cutting

- Includes One Each In 2 and 4 Flute
- High Speed Steel

Description(mm)	No. of Flute	HSS Order No.	Tin Coated Order No.
3,4,5,6,8,10,12,14,18,20	2	EU220120	EU230120
3,4,5,6,8,10,12,14,18,20	4		

2 & 4 Flute End Mills

- Standard: JIS B4211

Size (mm)	Shank Dia. (mm)	Length of Cut(mm)	Overall Length (mm)	2-Flute			4-Flute		
				HSS Order No.	Tin Coated Order No.	Cobalt Order No.	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1.5	6	6	50	EJ10150	EJ12150	EJ15150	EJ20150	EJ22150	EJ25150
2	6	6	50	EJ10200	EJ12200	EJ15200	EJ20200	EJ22200	EJ25200
3	6	10	55	EJ10300	EJ12300	EJ15300	EJ20300	EJ22300	EJ25300
4	6	12	55	EJ10400	EJ12400	EJ15400	EJ20400	EJ22400	EJ25400
5	6	15	60	EJ10500	EJ12500	EJ15500	EJ20500	EJ22500	EJ25500
6	6	15	60	EJ10600	EJ12600	EJ15600	EJ20600	EJ22600	EJ25600
7	8	20	70	EJ10700	EJ12700	EJ15700	EJ20700	EJ22700	EJ25700
8	8	20	70	EJ10800	EJ12800	EJ15800	EJ20800	EJ22800	EJ25800
9	10	25	80	EJ10900	EJ12900	EJ15900	EJ20900	EJ22900	EJ25900
10	10	25	80	EJ101000	EJ121000	EJ151000	EJ201000	EJ221000	EJ251000
11	12	30	90	EJ101100	EJ121100	EJ151100	EJ201100	EJ221100	EJ251100
12	12	30	90	EJ101200	EJ121200	EJ151200	EJ201200	EJ221200	EJ251200
13	12	35	100	EJ101300	EJ121300	EJ151300	EJ201300	EJ221300	EJ251300
14	12	35	100	EJ101400	EJ121400	EJ151400	EJ201400	EJ221400	EJ251400
15	16	40	105	EJ101500	EJ121500	EJ151500	EJ201500	EJ221500	EJ251500
16	16	40	105	EJ101600	EJ121600	EJ151600	EJ201600	EJ221600	EJ251600
17	16	40	105	EJ101700	EJ121700	EJ151700	EJ201700	EJ221700	EJ251700
18	16	40	105	EJ101800	EJ121800	EJ151800	EJ201800	EJ221800	EJ251800
19	20	45	115	EJ101900	EJ121900	EJ151900	EJ201900	EJ221900	EJ251900
20	20	45	115	EJ102000	EJ122000	EJ152000	EJ202000	EJ222000	EJ252000
22	20	45	115	EJ102200	EJ122200	EJ152200	EJ202200	EJ222200	EJ252200
24	25	50	125	EJ102400	EJ122400	EJ152400	EJ202400	EJ222400	EJ252400
25	25	50	125	EJ102500	EJ122500	EJ152500	EJ202500	EJ222500	EJ252500
28	25	55	125	EJ102800	EJ122800	EJ152800	EJ202800	EJ222800	EJ252800
30	25	55	125	EJ103000	EJ123000	EJ153000	EJ203000	EJ223000	EJ253000
32	32	60	145	EJ103200	EJ123200	EJ153200	EJ203200	EJ223200	EJ253200

2 & 4 Flute Long Length End Mills

- Standard: JIS B4211

Size (mm)	Shank Dia. (mm)	Length of Cut(mm)	Overall Length(mm)	2-Flute			4-Flute		
				HSS Order No.	Tin Coated Order No.	Cobalt Order No.	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1.5	6	12	60	EJ30150	EJ32150	EJ35150	EJ40150	EJ42150	EJ45150
2	6	12	60	EJ30200	EJ32200	EJ35200	EJ40200	EJ42200	EJ45200
3	6	15	65	EJ30300	EJ32300	EJ35300	EJ40300	EJ42300	EJ45300
4	6	25	75	EJ30400	EJ32400	EJ35400	EJ40400	EJ42400	EJ45400
5	6	25	75	EJ30500	EJ32500	EJ35500	EJ40500	EJ42500	EJ45500
6	6	25	75	EJ30600	EJ32600	EJ35600	EJ40600	EJ42600	EJ45600
7	8	35	85	EJ30700	EJ32700	EJ35700	EJ40700	EJ42700	EJ45700
9	10	45	100	EJ30900	EJ32900	EJ35900	EJ40900	EJ42900	EJ45900
10	10	45	100	EJ301000	EJ321000	EJ351000	EJ401000	EJ421000	EJ451000
11	12	50	115	EJ301100	EJ321100	EJ351100	EJ401100	EJ421100	EJ451100
12	12	50	115	EJ301200	EJ321200	EJ351200	EJ401200	EJ421200	EJ451200
13	12	55	120	EJ301300	EJ321300	EJ351300	EJ401300	EJ421300	EJ451300
14	12	55	120	EJ301400	EJ321400	EJ351400	EJ401400	EJ421400	EJ451400
15	16	65	130	EJ301500	EJ321500	EJ351500	EJ401500	EJ421500	EJ451500
16	16	65	130	EJ301600	EJ321600	EJ351600	EJ401600	EJ421600	EJ451600
17	16	65	130	EJ301700	EJ321700	EJ351700	EJ401700	EJ421700	EJ451700
19	20	75	145	EJ301900	EJ321900	EJ351900	EJ401900	EJ421900	EJ451900
20	20	75	145	EJ302000	EJ322000	EJ352000	EJ402000	EJ422000	EJ452000
22	20	75	145	EJ302200	EJ322200	EJ352200	EJ402200	EJ422200	EJ452200
24	25	90	165	EJ302400	EJ322400	EJ352400	EJ402400	EJ422400	EJ452400
25	25	90	165	EJ302500	EJ322500	EJ352500	EJ402500	EJ422500	EJ452500

2 & 4 Flute Ball Nose End Mills

- Standard: JIS B4211

Size (mm)	Shank Dia. (mm)	Length of Cut(mm)	Overall Length(mm)	2-Flute			4-Flute		
				HSS Order No.	Tin Coated Order No.	Cobalt Order No.	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
1.5	6	6	50	EJ70150	EJ72150	EJ75150	EJ80150	EJ82150	EJ85150
2	6	6	50	EJ70200	EJ72200	EJ75200	EJ80200	EJ82200	EJ85200
3	6	10	55	EJ70300	EJ72300	EJ75300	EJ80300	EJ82300	EJ85300
4	6	12	55	EJ70400	EJ72400	EJ75400	EJ80400	EJ82400	EJ85400
5	6	15	60	EJ70500	EJ72500	EJ75500	EJ80500	EJ82500	EJ85500
6	6	15	60	EJ70600	EJ72600	EJ75600	EJ80600	EJ82600	EJ85600
8	8	20	70	EJ70800	EJ72800	EJ75800	EJ80800	EJ82800	EJ85800
10	10	25	80	EJ701000	EJ721000	EJ751000	EJ801000	EJ821000	EJ851000
12	12	30	90	EJ701200	EJ721200	EJ751200	EJ801200	EJ821200	EJ851200
14	12	35	100	EJ701400	EJ721400	EJ751400	EJ801400	EJ821400	EJ851400
16	16	40	105	EJ701600	EJ721600	EJ751600	EJ801600	EJ821600	EJ851600
18	16	40	105	EJ701800	EJ721800	EJ751800	EJ801800	EJ821800	EJ851800
20	20	45	115	EJ702000	EJ722000	EJ752000	EJ802000	EJ822000	EJ852000
22	20	45	115	EJ702200	EJ722200	EJ752200	EJ802200	EJ822200	EJ852200
24	25	50	125	EJ702400	EJ722400	EJ752400	EJ802400	EJ822400	EJ852400
25	25	50	125	EJ702500	EJ722500	EJ752500	EJ802500	EJ822500	EJ852500

4 Flute Roughing End Mills

- Standard: JIS B4211

Size (mm)	Shank Dia. (mm)	Length of Cut (mm)	Overall Length(mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
6	6	15	60	EJ50600	EJ52600	EJ55600
7	8	20	70	EJ50700	EJ52700	EJ55700
8	8	20	70	EJ50800	EJ52800	EJ55800
9	10	25	80	EJ50900	EJ52900	EJ55900
10	10	25	80	EJ501000	EJ521000	EJ551000
11	12	30	90	EJ501100	EJ521100	EJ551100
12	12	30	90	EJ501200	EJ521200	EJ551200
13	12	35	100	EJ501300	EJ521300	EJ551300
14	12	35	100	EJ501400	EJ521400	EJ551400
15	16	40	105	EJ501500	EJ521500	EJ551500
16	16	40	105	EJ501600	EJ521600	EJ551600
17	16	40	105	EJ501700	EJ521700	EJ551700
18	16	40	105	EJ501800	EJ521800	EJ551800
19	20	45	115	EJ501900	EJ521900	EJ551900
20	20	45	115	EJ502000	EJ522000	EJ552000
22	20	45	115	EJ502200	EJ522200	EJ552200
24	25	50	125	EJ502400	EJ522400	EJ552400
25	25	50	125	EJ502500	EJ522500	EJ552500
28	25	55	125	EJ502800	EJ522800	EJ552800
30	25	55	125	EJ503000	EJ523000	EJ553000
32	32	60	145	EJ503200	EJ523200	EJ553200

4 Flute Long Length Roughing End Mills

- Standard: JIS B4211

Size (mm)	Shank Dia. (mm)	Length of Cut(mm)	Overall Length(mm)	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
6	6	25	75	EJ60600	EJ62600	EJ65600
7	8	35	85	EJ60700	EJ62700	EJ65700
8	8	35	85	EJ60800	EJ62800	EJ65800
9	10	45	100	EJ60900	EJ62900	EJ65900
10	10	45	100	EJ601000	EJ621000	EJ651000
11	12	50	115	EJ601100	EJ621100	EJ651100
12	12	50	115	EJ601200	EJ621200	EJ651200
13	12	55	120	EJ601300	EJ621300	EJ651300
14	12	55	120	EJ601400	EJ621400	EJ651400
15	16	65	130	EJ601500	EJ621500	EJ651500
16	16	65	130	EJ601600	EJ621600	EJ651600
17	16	65	130	EJ601700	EJ621700	EJ651700
18	16	65	130	EJ601800	EJ621800	EJ651800
19	20	75	145	EJ601900	EJ621900	EJ651900
20	20	75	145	EJ602000	EJ622000	EJ652000
22	20	75	145	EJ602200	EJ622200	EJ652200
24	25	90	165	EJ602400	EJ622400	EJ652400
25	25	90	165	EJ602500	EJ622500	EJ652500

Carbide Tipped End Mills

- For High Strength and Hardened Steels
- 6° Left Hand Helix – Right Hand Cut

Dia. (in.)	Dec. Equiv. (in.)	Shank Dia. (in.)	Length of Carbide of Tip (in.)	OAL (in.)	No. of Flutes	Order No.
1/4	0.25	3/8	1/2	2-1/2	2	EC10016
5/16	0.3125	3/8	5/8	2-1/2	2	EC10020
3/8	0.375	3/8	5/8	2-1/2	2	EC10024
7/16	0.4375	3/8	1"	2-11/16	2	EC10028
1/2	0.5	1/2	1"	3"	4	EC10032
9/16	0.5625	1/2	1"	3-3/8	4	EC10036
5/8	0.625	1/2	1"	3-3/8	4	EC10040
3/4	0.75	5/8	1"	3-5/8	4	EC10048
7/8	0.875	5/8	1-1/4	4"	4	EC10056
1"	1	7/8	1-1/4	4"	6	EC10100
1-1/8	1.125	1"	1-1/4	4-1/4	6	EC10108
1-1/4	1.25	1"	1-1/4	4-1/4	6	EC10116
1-1/2	1.5	1-1/4	1-1/2	4-1/2	6	EC10132
1-3/4	1.75	1-1/4	1-1/2	4-1/2	8	EC10148
2"	2	1-1/4	1-1/2	4-1/2	8	EC10200

Carbide Tipped Straight Flute End Mills

- For Cast Iron or Steel
- 2-Flute for Low to Medium Strength Steels
- 4-Flute for Cast Iron and Short Chipping
- Non-Ferrous Materials

Dia. (in.)	Dec. Equiv.	Shank Dia. (in.)	Length of Carbide of Tip (in.)	OAL (in.)	2-Flute Order No.	4-Flute Order No.
1/4	0.2500	3/8	1/2	2-1/2	EC20016	EC40016
5/16	0.3125	3/8	5/8	2-1/2	EC20020	EC40020
3/8	0.3750	3/8	5/8	2-1/2	EC20024	EC40024
7/16	0.4375	3/8	1"	2-11/16	EC20028	EC40028
1/2	0.5	1/2	1"	3-1/4	EC20032	EC40032
9/16	0.5625	1/2	1"	3-3/8	EC20036	EC40036

Carbide Tipped Straight Flute End Mills

- For Cast Iron or Steel
- 2-Flute for Low to Medium Strength Steels
- 4-Flute for Cast Iron and Short Chipping
- Non-Ferrous Materials

Dia. (in.)	Dec. Equiv.	Shank Dia. (in.)	Length of Carbide of Tip (in.)	OAL (in.)	2-Flute Order No.	4-Flute Order No.
5/8	0.625	1/2	1"	3-3/8	EC20040	EC40040
3/4	0.75	5/8	1"	3-3/8	EC20048	EC40048
7/8	0.875	5/8	1-1/4	4"	EC20056	EC40056
1"	1	7/8	1-1/4	4"	EC20100	EC40100
1-1/8	1.125	1"	1-1/4	4-1/4	EC20108	EC40108
1-1/4	1.25	1"	1-1/4	4-1/4	EC20116	EC40116
1-1/2	1.5000	1-1/4	1-1/2	4-1/2	EC20132	EC40132
1-3/4	1.7500	1-1/4	1-1/2	4-1/2	EC20148	EC40148
2"	2.0000	1-1/4	1-1/2	4-1/2	EC20200	EC40200

Carbide Tipped Shear Cut End Mills

- For Non-Ferrous Materials
- 25° Right Hand Helix —Center Cutting 2-Flutes

Dia. (in.)	Dec. Equiv.	Shank Dia.(in.)	Length of C-Tip(in.)	OAL (in.)	Order No.
1/2	0.5000	1/2	1"	3"	EC50032
5/8	0.6250	5/8	1-1/4	3-3/8	EC50040
3/4	0.7500	3/4	1-1/4	3-3/8	EC50048

Dia. (in.)	Dec. Equiv.	Shank Dia.(in.)	Length of C-Tip(in.)	OAL (in.)	Order No.
7/8	0.875	7/8	1-1/2	3-3/4	EC50056
1"	1.0000	1"	1-1/2	4"	EC50100
1-1/4	1.2500	1-1/4	1-3/4	4-1/4	EC50116
1-1/2	1.5000	1-1/2	2"	4-3/4	EC50132

M-2 High Speed Steel Roughing End Mills

- For Extremely Rapid Stock Removal
- These Mills Can Remove Material Up To Three Times The Rate Of.Regular Steel Or Premium Steel Conventional Mills

Regular length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	Order No.
1/4	3/8	5/8	2-7/16	4	ER100016
5/16	3/8	3/4	2-1/2	4	ER100020
3/8	3/8	3/4	2-1/2	4	ER100024
7/16	3/8	1"	2-11/16	4	ER100028
1/2	1/2	1-1/4	3-1/4	4	ER100032
9/16	1/2	1-3/8	3-3/8	4	ER100036
5/8	5/8	1-5/8	3-3/4	4	ER100040
11/16	5/8	1-5/8	3-3/4	4	ER100044
3/4	5/8	1-5/8	3-3/4	4	ER100048
3/4	3/4	1-5/8	3-3/4	4	ER101048
13/16	3/4	1-7/8	4-1/8	4	ER100052
7/8	3/4	1-5/8	4-1/8	4	ER100056
7/8	7/8	1-7/8	4-1/8	4	ER101056
15/16	3/4	1-7/8	4-1/8	4	ER100060
1"	3/4	2"	4-1/2	6	ER100100
1"	1"	2"	4-1/2	6	ER101100

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	Order No.
1-1/8	3/4	2"	4-1/2	6	ER100108
1-1/8	1"	2"	4-1/2	6	ER101108
1-1/4	1"	2"	4-1/2	5	ER100116
1-1/4	3/4	2"	4-1/4	6	ER101116
1-1/4	1-1/4	2"	4-1/2	6	ER102116
1-3/8	3/4	2"	4-1/4	6	ER100124
1-1/2	3/4	2"	4-1/2	6	ER100132
1-1/2	1-1/4	2"	4-1/2	6	ER101132
1-3/4	3/4	2"	4-1/4	6	ER100148
1-3/4	1-1/4	2"	4-1/2	6	ER101148
2"	3/4	2"	4-1/4	6	ER100200
2"	1-1/4	2"	4-1/2	8	ER101200
2"	2"	2"	5-3/4	8	ER102200
2"	2"	3"	6-3/4	6	ER103200
2"	2"	4"	7-3/4	8	ER104200

Medium Length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	Order No.
1"	1"	3"	5-1/2	5	ER200100
1-1/4	1-1/4	3"	5-1/2	6	ER200116
1-1/2	1-1/4	3"	5-1/2	6	ER200132

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	Order No.
2"	2"	5"	8-3/4	8	ER200200
2"	2"	6"	9-3/4	8	ER201200
2-1/2	2-1/2	6"	9-3/4	8	ER200232

Long Length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	Order No.
1/2	1/2	2"	4"	4	ER300032
5/8	5/8	2-1/2	4-5/8	4	ER300040
3/4	5/8	3	5-1/8	4	ER300048
3/4	3/4	3	5-1/4	4	ER301048
7/8	3/4	3-1/2	5-5/8	4	ER300056
7/8	7/8	3-1/2	5-3/4	4	ER301056
1"	1"	4"	6-1/2	6	ER300100
1"	1"	6"	8-1/2	6	ER301100
1-1/4	3/4	4"	6-1/4	6	ER300116
1-1/4	1-1/4	4"	6-1/2	6	ER301116

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	Order No.
1-1/4	1-1/4	6"	8-1/2	6	ER302116
1-1/2	3/4	4"	6-1/4	6	ER300132
1-1/2	1-1/4	4"	6-1/2	6	ER301132
1-1/2	1-1/4	6"	8-1/2	6	ER302132
1-3/4	1-1/4	4"	6-1/2	6	ER300148
2"	1-1/4	4"	6-1/2	8	ER300200
2"	2"	8"	11-3/4	8	ER301200
2"	2"	10"	13-3/4	8	ER302200
2"	2"	12"	15-3/4	8	ER303200
2-1/2	2-1/2	8"	11-3/4	8	ER300232

HSS Roughing End Mills

- Manufacturing Process: Fully Ground
- Spiral Angle: Helix 30
- Flutes: 4 or 6 or 8

Dia. (mm)	Shank Dia.(mm)	Flute Length (mm)	OAL (mm)	Flute No.	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
6	6	13	57	4	ER40600	ER42600	ER45600
8	10	19	69	4	ER40800	ER42800	ER45800
10	10	22	72	4	ER401000	ER421000	ER451000
11	12	22	79	4	ER401100	ER421100	ER451100
12	12	26	83	4	ER401200	ER421200	ER451200
14	12	26	83	4	ER401400	ER421400	ER451400
16	16	32	92	4	ER401600	ER421600	ER451600
18	16	32	92	4	ER401800	ER421800	ER451800
20	20	38	104	4	ER402000	ER422000	ER452000
22	20	38	104	4	ER402200	ER422200	ER452200
25	25	45	121	4	ER402500	ER422500	ER452500
28	25	45	121	5	ER402800	ER422800	ER452800
30	25	45	121	5	ER403000	ER423000	ER453000
32	32	53	133	5	ER403200	ER423200	ER453200
35	32	53	133	5	ER403500	ER423500	ER453500
40	40	63	155	6	ER404000	ER424000	ER454000
45	40	63	155	6	ER404500	ER424500	ER454500
50	50	75	177	6	ER405000	ER425000	ER455000
55	50	75	177	6	ER405500	ER425500	ER455500
63	63	90	202	6	ER406300	ER426300	ER456300
71	63	90	202	6	ER407100	ER427100	ER457100

HSS Roughing End Mills - Long Series

Dia. (mm)	Shank Dia.(mm)	Flute Length (mm)	OAL (mm)	Flute No.	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
6	6	24	68	4	ER50600	ER52600	ER55600
8	10	38	88	4	ER50800	ER52800	ER55800
10	10	45	95	4	ER501000	ER521000	ER551000
11	12	45	102	4	ER501100	ER521100	ER551100
12	12	53	110	4	ER501200	ER521200	ER551200
14	12	53	110	4	ER501400	ER521400	ER551400
16	16	63	123	4	ER501600	ER521600	ER551600
18	16	63	123	4	ER501800	ER521800	ER551800
20	20	75	141	4	ER502000	ER522000	ER552000
22	20	75	141	4	ER502200	ER522200	ER552200
25	25	90	166	4	ER502500	ER522500	ER552500
28	25	90	166	5	ER502800	ER522800	ER552800
30	25	90	166	5	ER503000	ER523000	ER553000
32	32	106	186	5	ER503200	ER523200	ER553200
35	32	106	186	5	ER503500	ER523500	ER553500
40	40	125	217	6	ER504000	ER524000	ER554000
45	40	125	217	6	ER504500	ER524500	ER554500
50	50	150	252	6	ER505000	ER525000	ER555000
55	50	150	252	6	ER505500	ER525500	ER555500
63	63	180	292	6	ER506300	ER526300	ER556300
71	63	180	292	6	ER507100	ER527100	ER557100

HSS Roughing Ball Nose End Mills

- Manufacturing Process: Fully Ground
- Spiral Angle: Helix 30
- Flutes: 4 or 6
- Type: Ball Nose

Dia. (mm)	Shank Dia.(mm)	Flute Length (mm)	OAL (mm)	Flute No.	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
6	6	13	57	4	ER60600	ER62600	ER65600
7	10	16	66	4	ER60700	ER62700	ER65700
8	10	19	69	4	ER60800	ER62800	ER65800
9	10	19	69	4	ER60900	ER62900	ER65900
10	10	22	72	4	ER601000	ER621000	ER651000
11	12	22	79	4	ER601100	ER621100	ER651100
12	12	26	83	4	ER601200	ER621200	ER651200
14	12	26	83	4	ER601400	ER621400	ER651400
16	16	32	92	4	ER601600	ER621600	ER651600
18	16	32	92	4	ER601800	ER621800	ER651800
20	20	38	104	4	ER602000	ER622000	ER652000
22	20	38	104	4	ER602200	ER622200	ER652200
24	25	45	121	4	ER602400	ER622400	ER652400
25	25	45	121	4	ER602500	ER622500	ER652500
26	25	45	121	4	ER602600	ER622600	ER652600
28	25	45	121	6	ER602800	ER622800	ER652800
30	25	45	121	6	ER603000	ER623000	ER653000
32	32	53	133	6	ER603200	ER623200	ER653200
36	32	53	133	6	ER603600	ER623600	ER653600
40	40	63	155	6	ER604000	ER624000	ER654000
45	40	63	155	6	ER604500	ER624500	ER654500
50	50	75	177	6	ER605000	ER625000	ER655000

HSS Roughing Ball Nose End Mills - Long Series

Dia. (mm)	Shank Dia.(mm)	Flute Length (mm)	OAL (mm)	Flute No.	HSS Order No.	Tin Coated Order No.	Cobalt Order No.
6	6	24	68	4	ER70600	ER72600	ER75600
7	10	30	80	4	ER70700	ER72700	ER75700
8	10	38	88	4	ER70800	ER72800	ER75800
9	10	38	88	4	ER70900	ER72900	ER75900
10	10	45	95	4	ER701000	ER721000	ER751000
11	12	45	102	4	ER701100	ER721100	ER751100
12	12	53	110	4	ER701200	ER721200	ER751200
14	12	53	110	4	ER701400	ER721400	ER751400
16	16	63	123	4	ER701600	ER721600	ER751600
18	16	63	123	4	ER701800	ER721800	ER751800
20	20	75	141	4	ER702000	ER722000	ER752000
22	20	75	141	4	ER702200	ER722200	ER752200
24	25	90	166	4	ER702400	ER722400	ER752400
25	25	90	166	4	ER702500	ER722500	ER752500
26	25	90	166	4	ER702600	ER722600	ER752600
28	25	90	166	6	ER702800	ER722800	ER752800
30	25	90	166	6	ER703000	ER723000	ER753000
32	32	106	186	6	ER703200	ER723200	ER753200
36	32	106	186	6	ER703600	ER723600	ER753600
40	40	125	217	6	ER704000	ER724000	ER754000
45	40	125	217	6	ER704500	ER724500	ER754500
50	50	150	252	6	ER705000	ER725000	ER755000

M-42 Cobalt - Coarse Tooth Ball End Roughing End Mills

- For general purpose milling of soft to medium hard materials
- Suitable for heavier feed rates
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult cut materials

Regular Length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No.of Flutes	M42 Order No.	Tin Coated Order No.
1/4	3/8	5/8	2-7/16	3	EG100016	EG110016
5/16	3/8	3/4	2-1/2	3	EG100020	EG110020
3/8	3/8	3/4	2-1/2	4	EG100024	EG110024
1/2	1/2	1-1/4	3-1/4	4	EG100032	EG110032
5/8	5/8	1-5/8	3-3/4	4	EG100040	EG110040
3/4	3/4	1-3/4	4	4	EG100048	EG110048
1"	3/4	2"	4-1/2	5	EG100100	EG110100
1"	1"	2"	4-1/2	5	EG101100	EG111100
1-1/4	3/4	2"	4-1/2	6	EG100116	EG110116
1-1/4	1-1/4	2"	4-1/2	6	EG101116	EG111116
1-1/2	3/4	2"	4-1/2	6	EG100132	EG110132
1-1/2	1-1/4	2"	4-1/2	6	EG101132	EG111132

Long Length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL(in.)	No.of Flutes	M42 Order No.	Tin Coated Order No.
1/2	1/2	2-1/2	4-1/2	4	EG12032	EG13032
5/8	5/8	2-1/2	4-5/8	4	EG12040	EG13040
3/4	3/4	3"	5-1/4	4	EG12048	EG13048
1"	1"	4"	6-1/2	5	EG12100	EG13100
1-1/4	1-1/4	4"	6-1/2	6	EG12116	EG13116
1-1/2	1-1/4	4"	6-1/2	6	EG12132	EG13132

M-42 Cobalt - Coarse Tooth Center Cutting Roughing End Mills

- For general purpose milling of soft to medium hard materials
- Suitable for heavier feed rates
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials

Regular Length

Dia0. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1/2	1/2	1-1/4	3-1/4	4	EG20032	EG21032
5/8	5/8	1-5/8	3-3/4	4	EG20040	EG21040
3/4	3/4	1-5/8	3-7/8	4	EG20048	EG21048
1"	1"	2"	4-1/2	5	EG20100	EG21100
1-1/4	1-1/4	2"	4-1/2	6	EG20116	EG21116
1-1/2	1-1/4	2"	4-1/2	6	EG20132	EG21132

M-42 Cobalt - Coarse Tooth Center Cutting Roughing End Mills

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- TiN coating improves tool life and allows elevated feeds and speeds
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Long Length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1/2	1/2	2"	4"	4	EG22032	EG23032
5/8	5/8	2-1/2	4-5/8	4	EG22040	EG23040
3/4	3/4	3"	5-1/4	4	EG22048	EG23048
1"	1"	4"	6-1/2	5	EG22100	EG23100
1-1/4	1-1/4	4"	6-1/2	6	EG22116	EG23116
1-1/2	1-1/4	4"	6-1/2	6	EG22132	EG23132

M-42 Cobalt - Coarse Tooth Roughing End Mills

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Standard Length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1/4	3/8	5/8	2-7/16	3	EG300016	EG310016
5/16	3/8	3/4	2-1/2	3	EG300020	EG310020
3/8	3/8	3/4	2-1/2	4	EG300024	EG310024
7/16	3/8	1"	2-11/16	4	EG300028	EG310028
1/2	1/2	1-1/4	3-1/4	4	EG300032	EG310032
9/16	1/2	1-3/8	3-3/8	4	EG300036	EG310036
5/8	5/8	1-5/8	3-3/4	4	EG300040	EG310040
11/16	5/8	1-5/8	3-3/4	4	EG300044	EG310044
3/4	5/8	1-5/8	3-3/4	4	EG300048	EG310048
3/4	3/4	1-5/8	3-3/4	4	EG301048	EG311048
13/16	3/4	1-7/8	4-1/8	4	EG300052	EG310052
7/8	3/4	1-5/8	4-1/8	5	EG300056	EG310056
7/8	7/8	1-7/8	4-1/8	5	EG301056	EG311056
15/16	3/4	1-7/8	4-1/8	4	EG300060	EG310060
1"	3/4	2"	4-1/2	5	EG300100	EG310100
1"	1"	2"	4-1/2	5	EG301100	EG311100
1-1/8	3/4	2"	4-1/2	6	EG300108	EG310108
1-1/8	1"	2"	4-1/2	6	EG301108	EG311108
1-1/4	1"	2"	4-1/2	5	EG300116	EG310116
1-1/4	3/4	2"	4-1/4	6	EG301116	EG311116
1-1/4	1-1/4	2"	4-1/2	6	EG302116	EG312116
1-3/8	3/4	2"	4-1/4	6	EG300124	EG310124
1-1/2	3/4	2"	4-1/4	6	EG300132	EG310132
1-1/2	1-1/4	2"	4-1/2	6	EG301132	EG311132
1-3/4	3/4	2"	4-1/4	6	EG300148	EG310148
1-3/4	1-1/4	2"	4-1/2	6	EG301148	EG311148
2"	3/4	2"	4-1/4	6	EG300200	EG310200
2"	1-1/4	2"	4-1/2	8	EG301200	EG311200
2"	2"	2"	5-3/4	8	EG302200	EG312200
2"	2"	3"	6-3/4	8	EG303200	EG313200
2"	2"	4"	7-3/4	8	EG304200	EG314200

Medium Length

Dia.(in.)	Shank Dia.(in.)	Flute Length(in.)	OAL(in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1"	1"	3"	5-1/2	5	EG320100	EG330100
1-1/4	1-1/4	3"	5-1/2	6	EG320116	EG330116
1-1/2	1-1/4	3"	5-1/2	6	EG320132	EG330132
2"	2"	5"	8-3/4	8	EG320200	EG330200
2"	2"	6"	9-3/4	8	EG320200	EG330200

Long Length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1/2	1/2	2"	4"	4	EG340032	EG350032
5/8	5/8	2-1/2	4-5/8	4	EG340040	EG350040
3/4	5/8	3"	5-1/8	4	EG340048	EG350048
3/4	3/4	3"	5-1/4	4	EG341048	EG351048
7/8	3/4	3-1/2	5-5/8	4	EG340056	EG350056
7/8	7/8	3-1/2	5-3/4	4	EG341056	EG351056
1"	3/4	4"	6-1/4	5	EG340100	EG350100
1"	1"	4"	6-1/2	6	EG341100	EG351100
1-1/4	3/4	4"	6-1/4	6	EG340116	EG350116
1-1/4	1-1/4	4"	6-1/2	6	EG341116	EG351116
1-1/2	1-1/4	4"	6-1/2	6	EG340132	EG350132
1-1/2	3/4	4"	6-1/4	6	EG341132	EG351132
1-3/4	1-1/4	4"	6-1/2	8	EG340148	EG350148
2"	1-1/4	4"	6-1/2	8	EG340200	EG350200
2"	2"	7"	10-3/4	8	EG341200	EG351200
2"	2"	8"	11-3/4	8	EG342200	EG352200
2"	2"	10"	13-3/4	8	EG343200	EG353200
2"	2"	12"	15-3/4	8	EG344200	EG354200

M-42 Cobalt - Fine Tooth Roughing End Mills

- For high production milling in difficult to machine materials such as iconel, hastalloy, titanium alloys and other materials up to 40 HRC
- The pressure of the cut is distributed over many teeth
- Less friction
- Breakage and cracks are eliminated
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials

Stub Length

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1/4	3/8	1/4	2-1/16	3	EG400016	EG410016
3/8	3/8	3/8	2-5/32	3	EG400024	EG410024
1/2	1/2	1/2	2-1/2	3	EG400032	EG410032
5/8	5/8	5/8	2-3/4	3	EG400040	EG410040
3/4	3/4	3/4	2-7/8	3	EG400048	EG410048
7/8	3/4	7/8	3-1/8	3	EG400056	EG410056
1"	3/4	1"	3-1/2	3	EG400100	EG410100
1"	1"	1"	3-1/2	3	EG401100	EG411100

Regular Length

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1/4	3/8	5/8	2-7/16	3	EG420016	EG430016
5/16	3/8	3/4	2-1/2	3	EG420020	EG430020
3/8	3/8	3/4	2-1/2	4	EG420024	EG430024
7/16	3/8	1"	2-11/16	4	EG420028	EG430028
1/2	1/2	1-1/4	3-1/4	4	EG420032	EG430032
9/16	1/2	1-3/8	3-3/8	4	EG420036	EG430036
5/8	5/8	1-5/8	3-3/4	4	EG420040	EG430040
3/4	5/8	1-5/8	3-3/4	4	EG420048	EG430048
3/4	3/4	1-5/8	3-7/8	4	EG421048	EG431048
7/8	3/4	1-7/8	4-1/8	5	EG420056	EG430056
7/8	7/8	1-7/8	4-1/8	5	EG421056	EG431056
1"	3/4	2"	4-1/4	5	EG420100	EG430100
1"	1"	2"	4-1/2	5	EG421100	EG431100
1-1/8	3/4	2"	4-1/2	6	EG420108	EG430108
1-1/8	1	2"	4-1/2	6	EG421108	EG431108
1-1/4	3/4	2"	4-1/4	6	EG420116	EG430116
1-1/4	1-1/4	2"	4-1/2	6	EG421116	EG431116
1-3/8	3/4	2"	4-1/4	6	EG420124	EG430124

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- Less friction
- Breakage and cracks are eliminated
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials

Regular Length

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1-1/2	3/4	2"	4-1/4	6	EG420132	EG430132
1-1/2	1-1/4	2"	4-1/2	6	EG421132	EG431132
1-3/4	1-1/4	2"	4-1/2	6	EG420148	EG430148
2"	3/4	2"	4-1/4	6	EG420200	EG430200
2"	1-1/4	2"	4-1/2	6	EG421200	EG431200

Medium Length

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1"	1"	3"	5-1/2	5	EG440100	EG450100
1-1/4	1-1/4	3"	5-1/2	6	EG440116	EG450116
1-1/2	1-1/4	3"	5-1/2	6	EG440132	EG450132

Long Length

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	M42 Order No.	Tin Coated Order No.
1/2	1/2	2"	4"	4	EG460032	EG470032
5/8	5/8	2-1/2	4-5/8	4	EG460040	EG470040
3/4	5/8	3"	5-1/8	4	EG460048	EG470048
3/4	3/4	3"	5-1/4	4	EG461048	EG471048
7/8	7/8	3-1/2	5-3/4	5	EG460056	EG470056
7/8	3/4	3-1/2	5-5/8	5	EG461056	EG471056
1"	1"	4"	6-1/2	5	EG460100	EG470100
1-1/4	1-1/4	4"	6-1/2	6	EG460116	EG470116
1-1/2	3/4	4"	6-1/4	6	EG460132	EG470132
1-1/2	1-1/4	4"	6-1/2	6	EG461132	EG471132
1-3/4	1-1/4	4"	6-1/2	6	EG460148	EG470148
2"	1-1/4	4"	6-1/2	6	EG460200	EG470200

3-Flute M-42 Cobalt Roughing End Mills For Aluminum

- For rapid stock removal in aluminum and other alloys
- The three flute design improves chip flow and prevents flutes from loading up
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials

Stub Length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	M42 Order No.	Tin Coated Order No.
1/4	3/8	5/8	2-7/16	EG500016	EG510016
5/16	3/8	3/4	2-1/2	EG500020	EG510020
3/8	3/8	3/4	2-1/2	EG500024	EG510024
1/2	1/2	1-1/4	3-1/4	EG500032	EG510032
5/8	5/8	1-5/8	3-3/4	EG500040	EG510040
3/4	3/4	1-5/8	3-7/8	EG500048	EG510048

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	M42 Order No.	Tin Coated Order No.
7/8	3/4	1-7/8	4-1/8	EG500056	EG510056
1"	3/4	2"	4-1/4	EG500100	EG510100
1"	1"	2"	4-1/2	EG501100	EG511100
1-1/4	1-1/4	2"	4-1/2	EG500116	EG510116
1-1/2	1-1/4	2"	4-1/2	EG500132	EG510132

Long Length

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	M42 Order No.	Tin Coated Order No.
1/2	1/2	2"	4"	EG520032	EG530032
5/8	5/8	2-1/2	4-5/8	EG520040	EG530040
3/4	3/4	3"	5-1/4	EG520048	EG530048

Dia. (in.)	Shank Dia.(in.)	Flute Length(in.)	OAL (in.)	M42 Order No.	Tin Coated Order No.
1"	1"	4"	6-1/2	EG520100	EG530100
1-1/4	1-1/4	4"	6-1/2	EG520116	EG530116
1-1/2	1-1/4	4"	6-1/2	EG520132	EG530132

Taper Shank End Mills

- Standard:DIN845

Short Type

Size (mm)	Flute Length(mm)	OAL (mm)	Order No.
10	22	92	EP101000
12	26	96	EP101200
14	26	111	EP101400
16	32	117	EP101600
18	32	117	EP101800
20	38	123	EP102000
22	38	123	EP102200
24	45	147	EP102400
25	45	147	EP102500

Size (mm)	Flute Length(mm)	OAL (mm)	Order No.
28	45	147	EP102800
30	53	155	EP103000
32	53	178	EP103200
36	53	178	EP103600
40	63	188	EP104000
45	63	188	EP104500
50	75	233	EP105000
56	75	233	EP105600
63	90	248	EP106300

Long Type

Size (mm)	Flute Length(mm)	OAL (mm)	Order No.
10	45	115	EP201000
12	53	123	EP201200
14	53	138	EP201400
16	63	148	EP201600
18	63	148	EP201800
20	75	160	EP202000
22	75	160	EP202200
24	90	192	EP202400
25	90	192	EP202500

Size (mm)	Flute Length(mm)	OAL (mm)	Order No.
28	90	192	EP202800
30	106	208	EP203000
32	106	231	EP203200
36	106	231	EP203600
40	125	250	EP204000
45	125	250	EP204500
50	150	308	EP205000
56	150	308	EP205600
63	180	336	EP206300

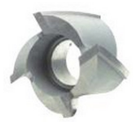
Heavy Duty Shell End Mill

- High Speed Steel

Size (in.)	Hole Dia. (in.)	Length of Cut (in.)	No. of Flutes	Right Hand Order No.	Left Hand Order No.
1-1/4	1/2	1"	8	EL10116	EL20116
1-1/2	1/2	1-1/8	8	EL10132	EL20132
1-3/4	3/4	1-1/4	8	EL10148	EL20148
2"	3/4	1-3/8	10	EL10200	EL20200
2-1/4	1"	1-1/2	10	EL10216	EL20216
2-1/2	1"	1-5/8	10	EL10232	EL20232
2-3/4	1"	1-5/8	10	EL10248	EL20248
3"	1-1/4	1-3/4	12	EL10300	EL20300
3-1/2	1-1/4	1-7/8	12	EL10332	EL20332
4"	1-1/2	2-1/4	14	EL10400	EL20400
4-1/2	1-1/2	2-1/4	14	EL10432	EL20432
5"	1-1/2	2-1/4	16	EL10500	EL20500
5-1/2	2"	2-1/4	16	EL10532	EL20532
6"	2"	2-1/4	16	EL10600	EL20600

Shell End Mill for Aluminum

- High Speed Steel
- Right Hand
- 25°Helix



Size (in.)	Hole Dia. (in.)	Length of Cut (in.)	No. of Flutes	Order No.
1-1/4	1/2	1"	4	EL30116
1-1/2	1/2	1-1/8	4	EL30132
1-3/4	3/4	1-1/4	4	EL30148
2"	3/4	1-3/8	4	EL30200
2-1/4	1"	1-1/2	4	EL30216
2-1/2	1"	1-5/8	4	EL30232

Size (in.)	Hole Dia. (in.)	Length of Cut (in.)	No. of Flutes	Order No.
2-3/4	1"	1-5/8	6	EL30248
3"	1-1/4	1-3/4	6	EL30300
3-1/2	1-1/4	1-7/8	6	EL30332
4"	1-1/2	2-1/4	6	EL30400
5"	1-1/2	2-1/4	8	EL30500

High Speed Steel Corner Rounding Milling Cutters

- Standard: ANSI B94.19-1985

Rad. Of Circle(in.)	Dia. Of Cutter(in.)	Hole Size(in.)	Face Width(in.)	Order No.
1/8	2"	7/8	1/4	CR100008
1/8	2-1/2	1"	1/4	CR101008
3/16	2-1/2	1"	5/16	CR100012
1/4	2-1/4	7/8	13/32	CR100016
1/4	3"	1"	13/32	CR101016
5/16	2-3/4	1	1/2	CR100020
5/16	3"	1"	1/2	CR101020
3/8	3"	1"	9/16	CR100024

Rad. Of Circle(in.)	Dia. Of Cutter(in.)	Hole Size(in.)	Face Width(in.)	Order No.
3/8	3-3/4	1-1/4	9/16	CR101024
7/16	3-1/4	1"	3/4	CR100028
1/2	3-1/4	1"	3/4	CR100032
1/2	4-1/4	1-1/4	3/4	CR101032
9/16	3-1/2	1"	13/16	CR100036
5/8	3-1/2	1"	15/16	CR100040
5/8	4-1/4	1-1/4	15/16	CR101040
3/4	3-3/4	1"	1-1/8	CR100048

Corner Rounding End Mills

- 4 Flute High Speed Steel Or Cobalt
- Standard: ANSI B94.19-1985

Radius (in.)	Shank Dia. (in.)	Largest Dia. (in.)	HSS Order No.	Cobalt Order No.
1/32	3/8	3/8	CR400002	CR450002
1/16	3/8	7/16	CR400004	CR450004
3/32	3/8	1/2	CR400006	CR450006
1/8	1/2	5/8	CR400008	CR450008
5/32	1/2	3/4	CR400010	CR450010
3/16	1/2	7/8	CR400012	CR450012
3/16	3/4	7/8	CR401012	CR451012
1/4	1/2	1"	CR400016	CR450016
1/4	3/4	1"	CR401016	CR451016
5/16	1/2	1-1/8	CR400020	CR450020
5/16	5/8	1-1/8	CR401020	CR451020
5/16	3/4	1-1/8	CR402020	CR452020
5/16	7/8	1-1/8	CR403020	CR453020

Radius (in.)	Shank Dia. (in.)	Largest Dia. (in.)	HSS Order No.	Cobalt Order No.
3/8	1/2	1-1/4	CR400024	CR450024
3/8	3/4	1-1/4	CR401024	CR451024
3/8	7/8	1-1/4	CR402024	CR452024
7/16	3/4	1-3/8	CR400028	CR450028
7/16	1"	1-3/8	CR401028	CR451028
1/2	3/4	1-1/2	CR400032	CR450032
1/2	1"	1-1/2	CR401032	CR451032
5/8	3/4	1-15/16	CR400040	CR450040
5/8	1"	1-15/16	CR401040	CR451040
3/4	3/4	2-1/4	CR400048	CR450048
3/4	1"	2-1/4	CR401048	CR451048
7/8	3/4	2-1/2	CR400056	CR450056
1"	3/4	2-5/8	CR400100	CR450100

Corner Rounding End Mill Sets

- High Speed Steel
- 8-PC, Corner Rounding Set 1/16 Thru 3/8R

Description	Order No.
1/16Rx3/8, 3/32Rx3/8, 1/8Rx1/2, 5/32Rx1/2, 3/16Rx1/2, 1/4Rx1/2, 5/16Rx1/2, 3/8Rx1/2	CRU0108

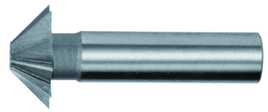
High Speed Steel Single Angle Milling Cutters

- Right Hand and Left Hand· 45º and 60º Angle
- Standard: ANSI B94.19-1985

Dia (in.)	Wildth of Face(in.)	Hole Size(in.)	Angle	Teeth Per Cutter	Right Hand Order No.	Left Hand Order No.
2-1/2	1/2	7/8	45°	18	CA100232	CA200232
2-1/2	1/2	7/8	60°	18	CA101232	CA201232
2-3/4	1/2	1"	45°	18	CA100248	CA200248
2-3/4	1/2	1"	60°	18	CA101248	CA201248
3"	1/2	1-1/4	45°	22	CA100300	CA200300
3"	1/2	1-1/4	60°	22	CA101300	CA201300
3"	5/8	1"	45°	22	CA102300	CA202300
3"	5/8	1"	60°	22	CA103300	CA203300

Dia (in.)	Wildth of Face(in.)	Hole Size(in.)	Angle	Teeth Per Cutter	Right Hand Order No.	Left Hand Order No.
3"	5/8	1-1/4	45°	22	CA104300	CA204300
3"	5/8	1-1/4	60°	22	CA105300	CA205300
3"	3/4	1"	45°	22	CA106300	CA206300
3"	3/4	1"	60°	22	CA107300	CA207300
3"	3/4	1-1/4	60°	22	CA108300	CA208300
4"	1/2	1"	45°	26	CA100400	CA200400
4"	1/2	1"	60°	26	CA101400	CA201400
4"	1/2	1-1/4	45°	26	CA102400	CA202400
4"	1/2	1-1/4	60°	26	CA103400	CA203400
4"	3/4	1"	45°	26	CA104400	CA204400
4"	3/4	1"	60°	26	CA105400	CA205400
4"	3/4	1-1/4	45°	26	CA106400	CA206400
4"	3/4	1-1/4	60°	26	CA107400	CA207400
4"	1"	1-1/4	45°	26	CA108400	CA208400
4"	1"	1-1/4	60°	26	CA109400	CA209400
5"	3/4	1-1/4	45°	28	CA100500	CA200500
5"	3/4	1-1/4	60°	28	CA101500	CA201500
5"	1"	1-1/4	45°	28	CA102500	CA202500
5"	1"	1-1/4	60°	28	CA103500	CA203500
6"	3/4	1-1/4	45°	30	CA100600	CA200600
6"	3/4	1-1/4	60°	30	CA102600	CA202600
6"	1"	1-1/4	45°	30	CA103600	CA203600
6"	1"	1-1/4	60°	30	CA104600	CA204600

High Speed Steel Single Angle Chamfering Cutters



- Standard: ANSI B94.19-1985

Angle	Cutter Dia.(in.)	Cutter Width(in.)	Shank Dia.(in.)	OAL (in.)	Order No.
45º	1/2	1/8	3/8	2-1/8	CA3045032
45º	3/4	3/16	3/8	2-1/8	CA3045048
45º	1"	5/16	1/2	2-1/2	CA3045100
45º	1-1/2	1/2	3/4	2-3/4	CA3045132

Angle	Cutter Dia.(in.)	Cutter Width(in.)	Shank Dia.(in.)	OAL (in.)	Order No.
60º	1/2	7/32	3/8	2-1/8	CA3060032
60º	3/4	5/16	3/8	2-1/8	CA3060048
60º	1"	7/16	1/2	2-1/2	CA3060100
60º	1-1/2	5/8	3/4	2-3/4	CA3060132

High Speed Steel Double Angle Milling Cutters

- Standard:ANSI B94.19-1985

Dia. (in.)	Width Of Face(in.)	Hole Dia.(in.)	Angle	Teeth Per Cutter	Order No.
2-3/4	1/2	1"	45°	18	CD10248
2-3/4	1/2	1"	60°	18	CD11248
2-3/4	1/2	1"	90°	18	CD12248
3"	5/8	1"	45°	22	CD10300
3"	5/8	1"	60°	22	CD11300
3"	5/8	1"	90°	22	CD12300
3"	3/4	1"	60°	22	CD13300
3"	3/4	1"	90°	22	CD14300
4"	1/2	1-1/4	45°	26	CD10400
4"	1/2	1-1/4	60°	26	CD11400
4"	1/2	1-1/4	90°	26	CD12400
4"	3/4	1"	45°	26	CD13400
4"	3/4	1"	60°	26	CD14400
4"	3/4	1"	90°	26	CD15400
4"	3/4	1-1/4	45°	26	CD16400
4"	3/4	1-1/4	60°	26	CD17400
4"	3/4	1-1/4	90°	26	CD18400

Dia. (in.)	Width Of Face(in.)	Hole Dia.(in.)	Angle	Teeth Per Cutter	Order No.
4"	1"	1-1/4	60°	26	CD19400
4"	1"	1-1/4	90°	26	CD110400
5"	3/4	1-1/4	45°	28	CD10500
5"	3/4	1-1/4	60°	28	CD11500
5"	3/4	1-1/4	90°	28	CD12500
5"	1"	1-1/4	45°	28	CD13500
5"	1"	1-1/4	60°	28	CD14500
5"	1"	1-1/4	90°	28	CD15500
6"	3/4	1-1/4	45°	30	CD10600
6"	3/4	1-1/4	60°	30	CD11600
6"	3/4	1-1/4	90°	30	CD12600
6"	1"	1-1/4	45°	30	CD13600
6"	1"	1-1/4	60°	30	CD14600
6"	1"	1-1/4	90°	30	CD15600
6"	1-1/2	1-1/4	45°	30	CD16600
6"	1-1/2	1-1/4	60°	30	CD17600
6"	1-1/2	1-1/4	90°	30	CD18600

High Speed Steel Double Angle Shank Type Cutters

Angle	Cutter Dia.(in.)	Shank Dia.(in.)	OAL (in.)	Cutter Thickness(in.)	Order No.
60º	3/4	3/8	2-3/8	3/16	CD260048
60º	1"	1/2	2-27/32	5/16	CD260100
60º	1-3/8	5/8	3-7/32	7/16	CD260124
60º	1-1/2	5/8	3-3/8	1/2	CD260132
60º	1-7/8	3/4	3-25/32	5/8	CD260156
60º	2-1/4	7/8	4-5/32	3/4	CD260216
60º	2-1/4	3/4	3-1/8	1/2	CD261216

Angle	Cutter Dia.(in.)	Shank Dia.(in.)	OAL (in.)	Cutter Thickness(in.)	Order No.
90º	3/4	3/8	2-7/16	1/4	CD290048
90º	1"	1/2	2-29/32	3/8	CD290100
90º	1-3/8	5/8	3-9/32	1/2	CD290124
90º	1-1/2	5/8	3-7/16	9/16	CD290132
90º	1-7/8	3/4	3-25/32	5/8	CD290156
90º	2-1/4	7/8	4-5/32	3/4	CD290216
90º	2-1/4	3/4	3-1/8	1/2	CD291216

High Speed Steel Concave Milling Cutters

- Standard:ANSI B94.19-1985

Dia. Of Circle(in.)	Dia. Of Cutter(in.)	Hole (in.)	Order No.
1/16	2-1/4	1"	CM10004
3/32	2-1/4	1"	CM10006
1/8	2-1/4	1"	CM10008
5/32	2-1/4	1"	CM10010
3/16	2-1/4	1"	CM10012
7/32	2-1/4	1"	CM10014
1/4	2-1/2	1"	CM10016
9/32	2-1/2	1"	CM10018
5/16	2-3/4	1"	CM10020
11/32	2-3/4	1"	CM10022
3/8	2-3/4	1"	CM10024
13/32	2-3/4	1"	CM10026
7/16	3"	1"	CM10028
1/2	2-1/4	7/8	CM10032
1/2	3"	1"	CM11032
9/16	3"	1"	CM10036
5/8	2-3/4	1"	CM10040
5/8	3"	1"	CM11040
5/8	3-1/2	1-1/4	CM12040

Dia. Of Circle(in.)	Dia. Of Cutter(in.)	Hole (in.)	Order No.
11/16	3"	1"	CM10044
3/4	3"	1"	CM10048
3/4	3-3/4	1-1/4	CM11048
13/16	3-1/4	1"	CM10052
13/16	3-1/4	1-1/4	CM11052
7/8	3-1/4	1"	CM10056
7/8	4"	1-1/4	CM11056
15/16	3-1/2	1"	CM10060
1"	3-1/4	1"	CM10100
1"	4-1/4	1-1/4	CM11100
1-1/16	4"	1-1/4	CM10104
1-1/8	4"	1-1/4	CM10108
1-3/16	3-1/4	1"	CM10112
1-1/4	4"	1-1/4	CM10116
1-3/8	4-1/4	1-1/4	CM10124
1-1/2	4-1/4	1-1/4	CM10132
1-5/8	5-1/2	1-1/4	CM10140
1-3/4	5-1/2	1-1/4	CM10148
1-7/8	6"	1-1/2	CM10156
2"	6"	1-1/2	CM10200

High Speed Steel Convex Milling Cutters

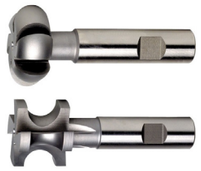
- Standard:ANSI B94.19-1985

Dia. Of Circle(in.)	Dia. Of Cutter(in.)	Hole (in.)	Order No.
1/16	2-1/4	1"	CM20004
3/32	2-1/4	1"	CM20006
1/8	2"	7/8	CM20008
1/8	2-1/4	1"	CM21008
5/32	2-1/4	1"	CM20010
3/16	2"	7/8	CM20012
3/16	2-1/4	1"	CM21012
7/32	2-1/4	1"	CM20014
1/4	2"	7/8	CM20016
1/4	2-1/4	1"	CM21016
1/4	2-1/2	1"	CM22016
9/32	2-1/2	1"	CM20018
5/16	2-3/4	1"	CM20020
11/32	2-3/4	1"	CM20022

Dia. Of Circle(in.)	Dia. Of Cutter(in.)	Hole (in.)	Order No.
3/8	2-1/4	7/8	CM20024
3/8	2-3/4	1"	CM21024
13/32	2-3/4	1"	CM20026
7/16	3"	1"	CM20028
1/2	2-1/4	7/8	CM20032
1/2	3"	1"	CM21032
9/16	2-3/4	1"	CM20036
9/16	3"	1"	CM21036
5/8	2-3/4	1"	CM20040
5/8	3"	1"	CM21040
5/8	3-1/2	1-1/4	CM22040
11/16	3"	1"	CM20044
3/4	3"	1"	CM20048
3/4	3-3/4	1-1/4	CM21048

Dia. Of Circle(in.)	Dia. Of Cutter(in.)	Hole (in.)	Order No.
13/16	3-1/4	1"	CM20052
7/8	3-1/4	1"	CM20056
7/8	4"	1-1/4	CM21056
15/16	3-1/2	1"	CM20060
1"	3-1/4	1"	CM20100
1"	4-1/4	1-1/4	CM21100
1-1/8	4"	1-1/4	CM20108
1-1/4	4"	1-1/4	CM20116
1-3/8	4-1/4	1-1/4	CM20124
1-1/2	4-1/4	1-1/4	CM20132
1-5/8	5-1/2	1-1/4	CM20140
1-3/4	5-1/2	1-1/4	CM20148
1-7/8	6"	1-1/2	CM20156
2"	6"	1-1/2	CM20200

High Speed Steel Concave and Convex Shank Type Cutters



- Standard:ANSI B94.19-1985

Radius (in.)	Shank Dia.(in.)	OAL. (in.)	Convex Cutters		Concave Cutters	
			Cutter Dia.	Order No.	Cutter Dia.	Order No.
1/32	1/2	3"	3/4	CM30002	3/4	CM40002
1/16	1/2	3"	3/4	CM30004	3/4	CM40004
3/32	1/2	3"	7/8	CM30006	3/4	CM40006
1/8	3/4	3-1/2	1-1/4	CM30008	1"	CM40008
5/32	3/4	3-1/2	1-5/16	CM30010	1"	CM40010
3/16	3/4	3-1/2	1-3/8	CM30012	1"	CM40012
1/4	3/4	4"	1-1/2	CM30016	1-1/4	CM40016
5/16	3/4	4"	1-5/8	CM30020	1-1/4	CM40020
3/8	3/4	4"	1-3/4	CM30024	1-1/2	CM40024

Dovetail Angular Cutters

- High Speed Steel and Cobalt

Dia. (in.)	Width (in.)	Angle	Shank Dia.(in.)	OAL (in.)	Order No.
3/8"	3/16"	60°	3/8"	2-1/8"	CV60024
1/2"	1/4"	60°	3/8"	2-1/8"	CV60032
3/4"	5/16"	60°	3/8"	2-1/8"	CV60048
1-3/8"	9/16"	60°	5/8"	2-7/8"	CV60124
1-7/8"	13/16"	60°	7/8"	3-1/4"	CV60156
2-1/4"	1-1/16"	60°	1"	3-3/4"	CV60216

Dia. (in.)	Width (in.)	Angle	Shank Dia.(in.)	OAL (in.)	Order No.
3/8"	1/8"	45°	3/8"	2-1/8"	CV45024
1/2"	5/32"	45°	3/8"	2-1/8"	CV45032
3/4"	1/4"	45°	3/8"	2-1/8"	CV45048
1-3/8"	7/16"	45°	5/8"	2-7/8"	CV45124
1-7/8"	9/16"	45°	7/8"	3-1/4"	CV45156
2-1/4"	5/8"	45°	1"	3-3/4"	CV45216

High Speed Steel 5 Pc Sets Dovetail Cutters

- Cutter Angle : 45º and 60º
- 5-Pc. Set : 1/2, 3/4, 1-3/8, 1-7/8 & 2-1/4"

CutterAngle	Order No.
45º	CVU014505
60º	CVU016005

Metric Dovetail Angular Cutters

- High Speed Steel and Cobalt

HeadDia. (mm)	Angle	CutWidth (mm)	OAL (mm)	Shank Dia.(mm)	Order No.
16	45°	4	60	12	CV45M16
20	45°	5	63	12	CV45M20
25	45°	6.3	67	12	CV45M25
32	45°	8	71	16	CV45M32
16	50°	5	60	12	CV50M16
20	50°	6.3	63	12	CV50M20
25	50°	8	67	12	CV50M25
32	50°	10	71	16	CV50M32

HeadDia. (mm)	Angle	CutWidth (mm)	OAL (mm)	Shank Dia.(mm)	Order No.
16	55°	6.3	60	12	CV55M16
20	55°	8	63	12	CV55M20
25	55°	10	67	12	CV55M25
32	55°	12.5	71	16	CV55M32
16	60°	6.3	60	12	CV60M16
20	60°	8	63	12	CV60M20
25	60°	10	67	12	CV60M25
32	60°	12.5	71	16	CV60M32

High Speed Steel T-Slot Milling Cutters

Bolt Size(in.)	Cutter Dia.(in.)	Cutter Width(in.)	Neck Dia.(in.)	Shank Dia.(in.)	OAL (in.)	Order No.
1/4	9/16	15/64	17/64	1/2	2-19/32	CT10016
5/16	21/32	17/64	21/64	1/2	2-11/16	CT10020
3/8	25/32	21/64	13/32	3/4	3-1/4	CT10024
1/2	31/32	25/64	17/32	3/4	3-7/16	CT10032
5/8	1-1/4	31/64	21/32	1"	3-15/16	CT10040
3/4	1-15/32	5/8	25/32	1"	4-7/16	CT10048
1"	1-27/32	53/64	1-1/32	1-1/4	4-13/16	CT10100
1-1/4	2-7/32	1-3/32	1-9/32	1-1/4	5-3/8	CT10116
1-1/2	2-21/32	1-11/32	1-11/32	1-1/4	5-29/32	CT10132

High Speed Steel 7 Pc Sets T-Slot Milling Cutters Set

Set Consists of 1 Piece Each Size	Order No.
1/4 5/16 3/8 1/2 5/8 3/4 1"	CTU0107

High Speed Steel Woodruff Keyseat Cutters

- Straight Tooth
- Staggered Tooth
- Standard: ANSI B94.19-1985

American Standard No.	Cutter Dia. (in.)	Width (in.)	OAL (in.)	Straight Tooth Order No.	Staggered Tooth Order No.
202	1/4	1/16	2-1/16	CW10202	CW20202
202-1/2	5/16	1/16	2-1/16	CW1020232	CW2020232
302-1/2	5/16	3/32	2-3/32	CW1030232	CW2030232
203	3/8	1/16	2-1/16	CW10203	CW20203
303	3/8	3/32	2-3/32	CW10303	CW20303
403	3/8	1/8	2-1/8	CW10403	CW20403
204	1/2	1/16	2-1/16	CW10204	CW20204
304	1/2	3/32	2-3/32	CW10304	CW20304
404	1/2	1/8	2-1/8	CW10404	CW20404
305	5/8	3/32	2-3/32	CW10305	CW20305
405	5/8	1/8	2-1/8	CW10405	CW20405
505	5/8	5/32	2-5/32	CW10505	CW20505
605	5/8	3/16	2-3/16	CW10605	CW20605
406	3/4	1/8	2-1/8	CW10406	CW20406
506	3/4	5/32	2-5/32	CW10506	CW20506
606	3/4	3/16	2-3/16	CW10606	CW20606
806	3/4	1/4	2-1/4	CW10806	CW20806
507	7/8	5/32	2-5/32	CW10507	CW20507
607	7/8	3/16	2-3/16	CW10607	CW20607
707	7/8	7/32	2-7/32	CW10707	CW20707

American Standard No.	Cutter Dia. (in.)	Width (in.)	OAL (in.)	Straight Tooth Order No.	Staggered Tooth Order No.
807	7/8	1/4	2-1/4	CW10807	CW20807
608	1"	3/16	2-3/16	CW10608	CW20608
708	1"	7/32	2-7/32	CW10708	CW20708
808	1"	1/4	2-1/4	CW10808	CW20808
1008	1"	5/16	2-5/16	CW101008	CW201008
1208	1"	3/8	2-3/8	CW101208	CW201208
609	1-1/8	3/16	2-3/16	CW10609	CW20609
709	1-1/8	7/32	2-7/32	CW10709	CW20709
809	1-1/8	1/4	2-1/4	CW10809	CW20809
1009	1-1/8	5/16	2-5/16	CW101009	CW201009
610	1-1/4	3/16	2-3/16	CW10610	CW20610
710	1-1/4	7/32	2-7/32	CW10710	CW20710
810	1-1/4	1/4	2-1/4	CW10810	CW20810
1010	1-1/4	5/16	2-5/16	CW101010	CW201010
1210	1-1/4	3/8	2-3/8	CW101210	CW201210
811	1-3/8	1/4	2-1/4	CW10811	CW20811
1011	1-3/8	5/16	2-5/16	CW101011	CW201011
1211	1-3/8	3/8	2-3/8	CW101211	CW201211
812	1-1/2	1/4	2-1/4	CW10812	CW20812
1012	1-1/2	5/16	2-5/16	CW101012	CW201012
1212	1-1/2	3/8	2-3/8	CW101212	CW201212

10-Pc. Woodruff Keyseat Cutter Sets

- Straight Tooth and Staggered Tooth
- Set consists of 1 each of the following sizes:
- 403, 204, 404,305, 505, 406, 606, 806, 608, 808

Straight Tooth Order No.
CWU0110

Staggered Tooth Order No.
CWU0210

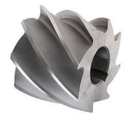
41-Pc. Woodruff Keyseat Cutter Sets

- Straight Tooth and Staggered Tooth

Straight Tooth Order No.
CWU0341

Staggered Tooth Order No.
CWU0441

High Speed Steel Heavy Duty Plain Milling Cutters



- Standard: ANSI B94.19-1985

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
2-1/2	2"	1"	CH100232
2-1/2	4"	1"	CH101232
3"	2"	1-1/4	CH100300
3"	2-1/2	1-1/4	CH101300

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
3"	3"	1-1/4	CH102300
3"	4"	1-1/4	CH103300
3"	6"	1-1/4	CH104300
4"	2"	1-1/2	CH100400

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
4"	3"	1-1/2	CH101400
4"	4"	1-1/2	CH102400
4"	6"	1-1/2	CH103400
4-1/2	6"	2"	CH100432
4-1/2	12"	2"	CH101432

High Speed Steel Helical Plain Milling Cutters

- Can be run at high speeds and will produce a smooth finish.
- Will not "hog" in when entering or leaving a cut. Well suited for milling thin pieces of steel, or other pieces of metal which cannot be held securely.
- Standard: ANSI B94.19-1985

Dia. (in.)	FaceWidth (in.)	HoleSize (in.)	Order No.
3"	4"	1-1/4	CH200300
3"	6"	1-1/4	CH201300

Dia. (in.)	FaceWidth (in.)	HoleSize (in.)	Order No.
4"	4"	1-1/2	CH200400
4"	6"	1-1/2	CH201400
4"	8"	1-1/2	CH202400

High Speed Steel Light Duty Plain Milling Cutters

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
2-1/4	1/2	7/8	CL28032
2-1/4	1"	7/8	CL28100
2-1/2	3/16	1"	CL21012
2-1/2	1/4	1"	CL21016
2-1/2	5/16	1"	CL21020
2-1/2	3/8	1"	CL21024
2-1/2	7/16	1"	CL21028
2-1/2	1/2	1"	CL21032
2-1/2	5/8	1"	CL21040
2-1/2	3/4	1"	CL21048
2-1/2	1"	1"	CL21100
2-1/2	1-1/2	1"	CL21132
2-1/2	2"	1"	CL21200
2-1/2	2-1/2	1"	CL21232
2-1/2	3"	1"	CL21300

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
3"	3/16	1"	CL31012
3"	1/4	1"	CL31016
3"	5/16	1"	CL31020
3"	3/8	1"	CL31024
3"	3/8	1-1/4	CL34024
3"	7/16	1-1/4	CL34028
3"	1/2	1-1/4	CL34032
3"	5/8	1-1/4	CL34040
3"	3/4	1-1/4	CL34048
3"	7/8	1-1/4	CL34300
3"	1"	1-1/4	CL34300
3"	1-1/4	1-1/4	CL34300
3"	1-1/2	1-1/4	CL34132
3"	2"	1-1/4	CL34200
3"	3"	1-1/4	CL34300

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
4"	1/4	1"	CL41016
4"	1/4	1-1/4	CL44016
4"	5/16	1"	CL41020
4"	5/16	1-1/4	CL44020
4"	3/8	1"	CL41024
4"	3/8	1-1/4	CL44024
4"	1/2	1-1/4	CL44032
4"	5/8	1-1/4	CL44040
4"	3/4	1-1/4	CL44048
4"	1"	1-1/4	CL44100
4"	1-1/2	1-1/4	CL44132
4"	2"	1-1/4	CL44200
4"	3"	1-1/4	CL44300
4"	4"	1-1/4	CL44400

Keyway Broaches

- High Speed Steel
- Supplied with Shims

Size Broach	Broach Dia.	No.of Shims	Order No.
1/16-A	1/8×5	0	CK10004A
3/32-A	1/8×5	0	CK10006A
1/8-A	1/8×5	1	CK10008A
3/32-B	3/16×6-3/4	0	CK10006B
1/8-B	3/16×6-3/4	1	CK10008B
5/32-B	3/16×6-3/4	1	CK10010B
3/16-B	3/16×6-3/4	1	CK10012B
3/16-C	3/8×11-3/4	1	CK10012C
1/4-C	3/8×11-3/4	1	CK10016C
5/16-C	3/8×11-3/4	2	CK10020C

Size Broach	Broach Dia.	No.of Shims	Order No.
3/8-C	3/8×11-3/4	2	CK10024C
5/16-D	9/16×13-7/8	2	CK10020D
3/8-D	9/16×13-7/8	2	CK10024D
7/16-D	9/16×13-7/8	3	CK10028D
1/2-D	9/16×13-7/8	3	CK10032D
5/8-E	3/4×15-1/2	4	CK10040E
3/4-E	3/4×15-1/2	5	CK10048E
7/8-F	1×20-1/4	6	CK10056F
1-F	1×20-1/4	7	CK10100F

High Speed Steel Plain Tooth Side Milling Cutters

- Standard: ANSI B94.19-1985

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
2"	3/16	1/2	CP120101
2"	1/4	1/2	CP120102
2"	3/8	1/2	CP120103
2"	3/16	5/8	CP120501
2"	1/4	5/8	CP120502
2"	3/8	5/8	CP120503
2"	1/4	7/8	CP120701
2"	5/16	7/8	CP120702
2"	3/8	7/8	CP120703
2"	7/16	7/8	CP120704
2-1/2"	3/16	7/8	CP125701
2-1/2"	1/4	7/8	CP125702
2-1/2"	5/16	7/8	CP125703
2-1/2"	3/8	7/8	CP125704
2-1/2"	7/16	7/8	CP125705
2-1/2"	1/2	7/8	CP125706
2-1/2"	3/16	1"	CP125101
2-1/2"	1/4	1"	CP125102
2-1/2"	5/16	1"	CP125103
2-1/2"	3/8	1"	CP125104
2-1/2"	7/16	1"	CP125105
2-1/2"	1/2	1"	CP125106
2-1/2"	5/8	1"	CP125107
3"	3/16	1"	CP130101
3"	1/4	1"	CP130102
3"	9/32	1"	CP130103
3"	5/16	1"	CP130104
3"	11/32	1"	CP130105
3"	3/8	1"	CP130106
3"	13/32	1"	CP130107
3"	7/16	1"	CP130108
3"	1/2	1"	CP130109
3"	9/16	1"	CP130110
3"	5/8	1"	CP130111
3"	11/16	1"	CP130112
3"	3/4	1"	CP130113
3"	13/16	1"	CP130114
3"	7/8	1"	CP130115
3"	15/16	1"	CP130116
3"	1"	1"	CP130117
3"	1/4	1-1/4	CP130401
3"	5/16	1-1/4	CP130402
3"	3/8	1-1/4	CP130403
3"	7/16	1-1/4	CP130404
3"	1/2	1-1/4	CP130405
3"	5/8	1-1/4	CP130406
3"	3/4	1-1/4	CP130407
3"	7/8	1-1/4	CP130408
3"	1"	1-1/4	CP130409
3-1/2"	3/16	1"	CP135101
3-1/2"	1/4	1"	CP135102

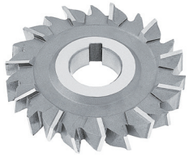
Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
3-1/2"	5/16	1"	CP135103
3-1/2"	3/8	1"	CP135104
3-1/2"	7/16	1"	CP135105
3-1/2"	1/2	1"	CP135106
3-1/2"	5/8	1"	CP135107
3-1/2"	7/16	1-1/4	CP135401
3-1/2"	1/2	1-1/4	CP135402
4"	3/16	1"	CP140101
4"	7/32	1"	CP140102
4"	1/4	1"	CP140103
4"	9/32	1"	CP140104
4"	5/16	1"	CP140105
4"	11/32	1"	CP140106
4"	3/8	1"	CP140107
4"	13/32	1"	CP140108
4"	7/16	1"	CP140109
4"	1/2	1"	CP140110
4"	9/16	1"	CP140111
4"	5/8	1"	CP140112
4"	11/16	1"	CP140113
4"	3/4	1"	CP140114
4"	13/16	1"	CP140115
4"	7/8	1"	CP140116
4"	15/16	1"	CP140117
4"	1"	1"	CP140118
4"	7/32	1-1/4	CP140401
4"	1/4	1-1/4	CP140402
4"	9/32	1-1/4	CP140403
4"	5/16	1-1/4	CP140404
4"	11/32	1-1/4	CP140405
4"	3/8	1-1/4	CP140406
4"	13/32	1-1/4	CP140407
4"	7/16	1-1/4	CP140408
4"	1/2	1-1/4	CP140409
4"	9/16	1-1/4	CP140410
4"	5/8	1-1/4	CP140411
4"	11/16	1-1/4	CP140412
4"	3/4	1-1/4	CP140413
4"	13/16	1-1/4	CP140414
4"	7/8	1-1/4	CP140415
4"	15/16	1-1/4	CP140416
4"	1"	1-1/4	CP140417
4"	1-1/8	1-1/4	CP140418
4"	1-1/4	1-1/4	CP140419
4"	1-1/2	1-1/4	CP140420
4-1/2"	3/8	1-1/4	CP145401
4-1/2"	1/2	1-1/4	CP145402
5"	1/4	1"	CP150101
5"	9/32	1"	CP150102
5"	5/16	1"	CP150103
5"	11/32	1"	CP150104

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
5"	3/8	1"	CP150105
5"	13/32	1"	CP150106
5"	7/16	1"	CP150107
5"	1/2	1"	CP150108
5"	9/16	1"	CP150109
5"	5/8	1"	CP150110
5"	11/16	1"	CP150111
5"	3/4	1"	CP150112
5"	13/16	1"	CP150113
5"	7/8	1"	CP150114
5"	15/16	1"	CP150115
5"	1"	1"	CP150116
5"	1/4	1-1/4	CP150401
5"	5/16	1-1/4	CP150402
5"	11/32	1-1/4	CP150403
5"	3/8	1-1/4	CP150404
5"	13/32	1-1/4	CP150405
5"	7/16	1-1/4	CP150406
5"	1/2	1-1/4	CP150407
5"	9/16	1-1/4	CP150408
5"	5/8	1-1/4	CP150409
5"	11/16	1-1/4	CP150410
5"	3/4	1-1/4	CP150411
5"	13/16	1-1/4	CP150412
5"	7/8	1-1/4	CP150413
5"	15/16	1-1/4	CP150414
5"	1"	1-1/4	CP150415
5"	1-1/4	1-1/4	CP150416
6"	1/4	1"	CP160101
6"	5/16	1"	CP160102
6"	3/8	1"	CP160103
6"	7/16	1"	CP160104
6"	1/2	1"	CP160105
6"	9/16	1"	CP160106
6"	5/8	1"	CP160107
6"	11/16	1"	CP160108
6"	3/4	1"	CP160109
6"	13/16	1"	CP160110
6"	7/8	1"	CP160111
6"	15/16	1"	CP160112
6"	1"	1"	CP160113
6"	1-1/4	1"	CP160114
6"	1/4	1-1/4	CP160401
6"	9/32	1-1/4	CP160402
6"	5/16	1-1/4	CP160403
6"	11/32	1-1/4	CP160404
6"	3/8	1-1/4	CP160405
6"	13/32	1-1/4	CP160406
6"	7/16	1-1/4	CP160407
6"	1/2	1-1/4	CP160408
6"	9/16	1-1/4	CP160409
6"	5/8	1-1/4	CP160410
6"	11/16	1-1/4	CP160411
6"	3/4	1-1/4	CP160412
6"	13/16	1-1/4	CP160413
6"	7/8	1-1/4	CP160414
6"	15/16	1-1/4	CP160415

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
6"	1"	1-1/4	CP160416
6"	1-1/8	1-1/4	CP160417
6"	1-1/4	1-1/4	CP160418
7"	1/4	1-1/4	CP170401
7"	5/16	1-1/4	CP170402
7"	3/8	1-1/4	CP170403
7"	7/16	1-1/4	CP170404
7"	1/2	1-1/4	CP170405
7"	9/16	1-1/4	CP170406
7"	5/8	1-1/4	CP170407
7"	11/16	1-1/4	CP170408
7"	3/4	1-1/4	CP170409
7"	13/16	1-1/4	CP170410
7"	7/8	1-1/4	CP170411
7"	15/16	1-1/4	CP170412
7"	1"	1-1/4	CP170413
8"	1/4	1"	CP180101
8"	5/16	1"	CP180102
8"	3/8	1"	CP180103
8"	7/16	1"	CP180104
8"	1/2	1"	CP180105
8"	1/4	1-1/4	CP180401
8"	5/16	1-1/4	CP180402
8"	3/8	1-1/4	CP180403
8"	7/16	1-1/4	CP180404
8"	1/2	1-1/4	CP180405
8"	9/16	1-1/4	CP180406
8"	5/8	1-1/4	CP180407
8"	11/16	1-1/4	CP180408
8"	3/4	1-1/4	CP180409
8"	13/16	1-1/4	CP180410
8"	7/8	1-1/4	CP180411
8"	15/16	1-1/4	CP180412
8"	1"	1-1/4	CP180413
8"	1/4	1-1/2"	CP180201
9"	1/4	1-1/4	CP190401
9"	3/8	1-1/4	CP190402
9"	1/2	1-1/4	CP190403
9"	5/8	1-1/4	CP190404
9"	3/4	1-1/4	CP190405
9"	1"	1-1/4	CP190406
10"	5/8	1-1/4	CP110401
10"	3/4	1-1/4	CP110402
10"	1/4	1-1/2"	CP110201
10"	5/16	1-1/2"	CP110202
10"	3/8	1-1/2"	CP110203
10"	7/16	1-1/2"	CP110204
10"	1/2	1-1/2"	CP110205
10"	9/16	1-1/2"	CP110206
10"	5/8	1-1/2"	CP110207
10"	11/16	1-1/2"	CP110208
10"	3/4	1-1/2"	CP110209
10"	13/16	1-1/2"	CP110210
10"	7/8	1-1/2"	CP110211
10"	15/16	1-1/2"	CP110212
10"	1"	1-1/2"	CP110213
10"	1-1/4	1-1/2"	CP110214
10"	1-1/2	1-1/2"	CP110215

High Speed Steel Staggered Tooth Side Milling Cutters

- Standard: ANSI B94.19-1985



Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
2-1/2"	3/16	7/8	CP225701
2-1/2"	1/4	7/8	CP225702
2-1/2"	5/16	7/8	CP225703
2-1/2"	3/8	7/8	CP225704
2-1/2"	7/16	7/8	CP225705
2-1/2"	1/2	7/8	CP225706
2-1/2"	1/4	1"	CP225101
2-1/2"	7/16	1"	CP225102
2-1/2"	1/2	1"	CP225103
3"	3/16	1"	CP230101
3"	7/32	1"	CP230102
3"	1/4	1"	CP230103
3"	9/32	1"	CP230104
3"	5/16	1"	CP230105
3"	3/8	1"	CP230106
3"	7/16	1"	CP230107
3"	1/2	1"	CP230108
3"	9/16	1"	CP230109
3"	5/8	1"	CP230110
3"	11/16	1"	CP230111
3"	3/4	1"	CP230112
3"	13/16	1"	CP230113
3"	7/8	1"	CP230114
3"	15/16	1"	CP230115
3"	1"	1"	CP230116
3"	3/16	1-1/4	CP230401
3"	1/4	1-1/4	CP230402
3"	5/16	1-1/4	CP230403
3"	3/8	1-1/4	CP230404
3"	7/16	1-1/4	CP230405
3"	1/2	1-1/4	CP230406
3"	9/16	1-1/4	CP230407
3"	5/8	1-1/4	CP230408
3"	11/16	1-1/4	CP230409
3"	3/4	1-1/4	CP230410
3"	13/16	1-1/4	CP230411
3"	7/8	1-1/4	CP230412
3"	15/16	1-1/4	CP230413
3"	1"	1-1/4	CP230414
3-1/2"	1/4	1"	CP235101
3-1/2"	3/8	1"	CP235102
3-1/2"	1/2	1"	CP235103
3-1/2"	5/8	1"	CP235104
3-1/2"	11/16	1"	CP235105
4"	3/16	1"	CP240101
4"	7/32	1"	CP240102
4"	1/4	1"	CP240103
4"	9/32	1"	CP240104
4"	5/16	1"	CP240105
4"	11/32	1"	CP240106
4"	3/8	1"	CP240107

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
4"	7/16	1"	CP240108
4"	1/2	1"	CP240109
4"	9/16	1"	CP240110
4"	5/8	1"	CP240111
4"	11/16	1"	CP240112
4"	3/4	1"	CP240113
4"	13/16	1"	CP240114
4"	7/8	1"	CP240115
4"	15/16	1"	CP240116
4"	1"	1"	CP240117
4"	3/16	1-1/4	CP240401
4"	7/32	1-1/4	CP240402
4"	1/4	1-1/4	CP240403
4"	9/32	1-1/4	CP240404
4"	5/16	1-1/4	CP240405
4"	11/32	1-1/4	CP240406
4"	3/8	1-1/4	CP240407
4"	7/16	1-1/4	CP240408
4"	1/2	1-1/4	CP240409
4"	9/16	1-1/4	CP240410
4"	5/8	1-1/4	CP240411
4"	11/16	1-1/4	CP240412
4"	3/4	1-1/4	CP240413
4"	13/16	1-1/4	CP240414
4"	7/8	1-1/4	CP240415
4"	15/16	1-1/4	CP240416
4"	1"	1-1/4	CP240417
4"	1-1/8	1-1/4	CP240418
4"	1-3/16	1-1/4	CP240419
4"	1-1/4	1-1/4	CP240420
4"	1-1/2	1-1/4	CP240421
4-1/2"	1/2	1"	CP245101
4-1/2"	1/2	1-1/4	CP245401
5"	1/4	1"	CP250101
5"	5/16	1"	CP250102
5"	3/8	1"	CP250103
5"	7/16	1"	CP250104
5"	1/2	1"	CP250105
5"	9/16	1"	CP250106
5"	5/8	1"	CP250107
5"	11/16	1"	CP250108
5"	3/4	1"	CP250109
5"	13/16	1"	CP250110
5"	7/8	1"	CP250111
5"	1/4	1-1/4	CP250401
5"	5/16	1-1/4	CP250402
5"	3/8	1-1/4	CP250403
5"	7/16	1-1/4	CP250404
5"	1/2	1-1/4	CP250405
5"	9/16	1-1/4	CP250406
5"	5/8	1-1/4	CP250407

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
5"	11/16	1-1/4	CP250408
5"	3/4	1-1/4	CP250409
5"	13/16	1-1/4	CP250410
5"	7/8	1-1/4	CP250411
5"	15/16	1-1/4	CP250412
5"	1"	1-1/4	CP250413
6"	1/4	1"	CP260101
6"	5/16	1"	CP260102
6"	3/8	1"	CP260103
6"	7/16	1"	CP260104
6"	1/2	1"	CP260105
6"	5/8	1"	CP260106
6"	11/16	1"	CP260107
6"	3/4	1"	CP260108
6"	13/16	1"	CP260109
6"	7/8	1"	CP260110
6"	1"	1"	CP260111
6"	1/4	1-1/4	CP260401
6"	9/32	1-1/4	CP260402
6"	5/16	1-1/4	CP260403
6"	3/8	1-1/4	CP260404
6"	7/16	1-1/4	CP260405
6"	1/2	1-1/4	CP260406
6"	9/16	1-1/4	CP260407
6"	5/8	1-1/4	CP260408
6"	11/16	1-1/4	CP260409
6"	3/4	1-1/4	CP260410
6"	13/16	1-1/4	CP260411
6"	7/8	1-1/4	CP260412
6"	15/16	1-1/4	CP260413
6"	1"	1-1/4	CP260414
6"	1-1/8	1-1/4	CP260415
6"	1-3/16	1-1/4	CP260416
6"	1-1/4	1-1/4	CP260417
6"	1-1/2	1-1/4	CP260418
6"	1"	1-1/2	CP260201
7"	1/4	1-1/4	CP270401
7"	5/16	1-1/4	CP270402
7"	3/8	1-1/4	CP270403
7"	7/16	1-1/4	CP270404
7"	1/2	1-1/4	CP270405
7"	9/16	1-1/4	CP270406
7"	5/8	1-1/4	CP270407
7"	11/16	1-1/4	CP270408
7"	3/4	1-1/4	CP270409
7"	13/16	1-1/4	CP270410
7"	7/8	1-1/4	CP270411
7"	15/16	1-1/4	CP270412
7"	1"	1-1/4	CP270413
7"	3/8	1-1/2	CP270201
7"	7/16	1-1/2	CP270202
7"	1/2	1-1/2	CP270203
7"	5/8	1-1/2	CP270204
7"	3/4	1-1/2	CP270205
7"	7/8	1-1/2	CP270206
7"	1"	1-1/2	CP270207
8"	1/4	1"	CP280101
8"	3/8	1"	CP280102

Dia. (in.)	Face Width(in.)	Hole Size(in.)	Order No.
8"	1/2	1"	CP280103
8"	1/4	1-1/4	CP280401
8"	5/16	1-1/4	CP280402
8"	3/8	1-1/4	CP280403
8"	7/16	1-1/4	CP280404
8"	1/2	1-1/4	CP280405
8"	9/16	1-1/4	CP280406
8"	5/8	1-1/4	CP280407
8"	11/16	1-1/4	CP280408
8"	3/4	1-1/4	CP280409
8"	13/16	1-1/4	CP280410
8"	7/8	1-1/4	CP280411
8"	15/16	1-1/4	CP280412
8"	1"	1-1/4	CP280413
8"	1/4	1-1/2	CP280201
8"	5/16	1-1/2	CP280202
8"	3/8	1-1/2	CP280203
8"	7/16	1-1/2	CP280204
8"	1/2	1-1/2	CP280205
8"	9/16	1-1/2	CP280206
8"	5/8	1-1/2	CP280207
8"	11/16	1-1/2	CP280208
8"	3/4	1-1/2	CP280209
8"	13/16	1-1/2	CP280210
8"	7/8	1-1/2	CP280211
8"	15/16	1-1/2	CP280212
8"	1"	1-1/2	CP280213
8"	1-1/8	1-1/2	CP280214
8"	1-1/4	1-1/2	CP280215
8"	1-1/2	1-1/2	CP280216
9"	3/8	1-1/4	CP290401
9"	1/2	1-1/4	CP290402
9"	5/8	1-1/4	CP290403
9"	3/4	1-1/4	CP290404
9"	1"	1-1/4	CP290405
9"	1/4	1-1/2	CP290201
9"	3/8	1-1/2	CP290202
9"	1/2	1-1/2	CP290203
9"	5/8	1-1/2	CP290204
9"	3/4	1-1/2	CP290205
9"	1"	1-1/2	CP290206
10"	3/8	1-1/4	CP210401
10"	13/16	1-1/4	CP210402
10"	1/4	1-1/2	CP210201
10"	5/16	1-1/2	CP210202
10"	3/8	1-1/2	CP210203
10"	7/16	1-1/2	CP210204
10"	1/2	1-1/2	CP210205
10"	9/16	1-1/2	CP210206
10"	5/8	1-1/2	CP210207
10"	11/16	1-1/2	CP210208
10"	3/4	1-1/2	CP210209
10"	13/16	1-1/2	CP210210
10"	7/8	1-1/2	CP210211
10"	15/16	1-1/2	CP210212
10"	1"	1-1/2	CP210213
10"	1-1/8	1-1/2	CP210214
10"	1-1/4	1-1/2	CP210215
10"	1-1/2	1-1/2	CP210216

Metal Slitting Saws

- With Side Chip Clearance
- Standard: ANSI B94.19-1985

Straight Tooth

Dia. (in.)	Thickness (in.)	Hole Size (in.)	Order No.
2"	3/32	5/8	CP32006
2"	1/8	5/8	CP32008
2"	5/32	5/8	CP32010
2-1/2	1/16	7/8	CP32004
2-1/2	3/32	7/8	CP32106
2-1/2	1/8	7/8	CP32108
2-1/2	1/8	1"	CP32118
3"	1/16	1"	CP33004
3"	5/64	1"	CP33005
3"	3/32	1"	CP33006
3"	1/8	1"	CP33008
3"	5/32	1"	CP33010
3"	3/16	1"	CP33012
3"	1/4	1"	CP33016
4"	1/16	1"	CP34004
4"	5/64	1"	CP34005
4"	3/32	1"	CP34006
4"	3/32	1-1/4	CP34106
4"	1/8	1"	CP34008
4"	1/8	1-1/4	CP34108
4"	5/32	1"	CP34010
4"	3/16	1"	CP34012

Dia. (in.)	Thickness (in.)	Hole Size (in.)	Order No.
4"	3/16	1-1/4	CP34112
4"	1/4	1"	CP34016
5"	3/32	1"	CP35006
5"	3/32	1-1/4	CP35106
5"	1/8	1"	CP35008
5"	1/8	1-1/4	CP35108
5"	5/32	1"	CP35010
5"	5/32	1-1/4	CP35110
5"	3/16	1"	CP35012
5"	3/16	1-1/4	CP35112
6"	1/16	1"	CP36004
6"	3/32	1"	CP36006
6"	1/8	1"	CP36008
6"	1/8	1-1/4	CP36108
6"	3/16	1"	CP36012
6"	3/16	1-1/4	CP36112
8"	1/8	1"	CP38008
8"	1/8	1-1/4	CP38108
8"	3/16	1-1/4	CP38012
8"	1/4	1-1/4	CP38016
10"	3/16	1-1/4	CP31012

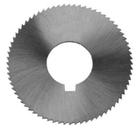
Staggered Tooth

Dia. (in.)	Thickness (in.)	Hole Size (in.)	Order No.
3"	1/8	1"	CP43008
3"	5/32	1"	CP43010
3"	3/16	1"	CP43012
3"	1/4	1"	CP43016
4"	1/8	1"	CP44008
4"	1/8	1-1/4	CP44108
4"	5/32	1"	CP44010
4"	5/32	1-1/4	CP44110
4"	3/16	1"	CP44012
4"	1/4	1"	CP44016
4"	1/4	1-1/4	CP44116
5"	1/8	1-1/4	CP45008
5"	5/32	1"	CP45010
5"	3/16	1"	CP45012

Dia. (in.)	Thickness (in.)	Hole Size (in.)	Order No.
5"	3/16	1-1/4	CP45112
5"	1/4	1"	CP45016
6"	1/8	1"	CP46008
6"	1/8	1-1/4	CP46108
6"	5/32	1-1/4	CP46010
6"	3/16	1"	CP46012
6"	3/16	1-1/4	CP46112
6"	1/4	1"	CP46016
6"	1/4	1-1/4	CP46116
8"	3/16	1-1/4	CP48012
8"	1/4	1-1/4	CP48016
10"	3/16	1-1/4	CP41012
10"	1/4	1-1/4	CP41016

Screw Slotting Saws

- High Speed Steel
- Standard: ANSI B94.19-1985



Dia.(in.)	Thickness	Hole Size	Order No.
2-3/4	0.144	1"	CX13144
2-3/4	0.128	1"	CX13128
2-3/4	0.114	1"	CX13114
2-3/4	0.102	1"	CX13102
2-3/4	0.091	1"	CX13091
2-3/4	0.081	1"	CX13081
2-3/4	0.072	1"	CX13072
2-3/4	0.064	1"	CX13064
2-3/4	0.057	1"	CX13057
2-3/4	0.051	1"	CX13051
2-3/4	0.045	1"	CX13045
2-3/4	0.04	1"	CX13040
2-3/4	0.036	1"	CX13036
2-3/4	0.032	1"	CX13032
2-3/4	0.028	1"	CX13028
2-3/4	0.025	1"	CX13025
2-3/4	0.023	1"	CX13023
2-3/4	0.02	1"	CX13020
2-1/4	0.064	5/8	CX11064
2-1/4	0.057	5/8	CX11057

Dia.(in.)	Thickness	Hole Size	Order No.
2-1/4	0.051	5/8	CX11051
2-1/4	0.045	5/8	CX11045
2-1/4	0.04	5/8	CX11040
2-1/4	0.036	5/8	CX11036
2-1/4	0.032	5/8	CX11032
2-1/4	0.028	5/8	CX11028
2-1/4	0.025	5/8	CX11025
2-1/4	0.023	5/8	CX11023
2-1/4	0.02	5/8	CX11020
1-3/4	0.064	5/8	CX10064
1-3/4	0.057	5/8	CX10057
1-3/4	0.051	5/8	CX10051
1-3/4	0.045	5/8	CX10045
1-3/4	0.04	5/8	CX10040
1-3/4	0.036	5/8	CX10036
1-3/4	0.032	5/8	CX10032
1-3/4	0.028	5/8	CX10028
1-3/4	0.025	5/8	CX10025
1-3/4	0.023	5/8	CX10023
1-3/4	0.02	5/8	CX10020

Plain Metal Slitting Saws

- High Speed Steel

Dia.(in.)	Thickness(in.)	Hole Size(in.)	Order No.
2-1/2	1/32	7/8	CX22132
2-1/2	3/64	7/8	CX22364
2-1/2	1/16	7/8	CX22116
2-1/2	3/32	7/8	CX22332
2-1/2	1/8	7/8	CX22018
2-1/2	1/16	1"	CX22016
3"	1/32	1"	CX23132
3"	3/64	1"	CX23364
3"	1/16	1"	CX23116
3"	5/64	1"	CX23564
3"	3/32	1"	CX23332
3"	1/8	1"	CX23018
3"	5/32	1"	CX23532
3"	3/16	1"	CX23316
4"	1/32	1"	CX24132
4"	3/64	1"	CX24364
4"	1/16	1"	CX24116
4"	5/64	1"	CX24564
4"	3/32	1"	CX24332
4"	1/8	1"	CX24018
4"	5/32	1"	CX24532
4"	3/16	1"	CX24316
5"	1/16	1"	CX25161
5"	1/16	1-1/4	CX25164
5"	3/32	1"	CX25321

Dia.(in.)	Thickness(in.)	Hole Size(in.)	Order No.
5"	3/32	1-1/4	CX25324
5"	1/8	1"	CX25081
5"	1/8	1-1/4	CX25084
5"	5/32	1"	CX25501
5"	5/32	1-1/4	CX25504
5"	3/16	1"	CX25301
5"	3/16	1-1/4	CX25304
6"	1/16	1"	CX26161
6"	1/16	1-1/4	CX26164
6"	3/32	1"	CX26321
6"	3/32	1-1/4	CX26324
6"	1/8	1"	CX26081
6"	1/8	1-1/4	CX26084
6"	5/32	1"	CX26501
6"	5/32	1-1/4	CX26504
6"	3/16	1"	CX26301
6"	3/16	1-1/4	CX26304
8"	3/32	1-1/4	CX28332
8"	1/8	1"	CX28181
8"	1/8	1-1/4	CX28184
8"	3/16	1"	CX28161
8"	3/16	1-1/4	CX28164
10"	3/32	1-1/4	CX21032
10"	1/8	1-1/4	CX21008
10"	3/16	1-1/4	CX21016
10"	1/4	1-1/4	CX21004

Slitting Saws Blade

- High Speed Steel
- Standard: DIN1837

Dia.(mm)	Thickness	Hole Size	Order No.
63	0.5	16	CX36305
63	0.8	16	CX36308
63	1.0	16	CX36310
63	1.2	16	CX36312
63	1.6	16	CX36316
63	2.0	16	CX36320
63	2.5	16	CX36325
80	1.2	22	CX38012
80	1.6	22	CX38016
80	2.0	22	CX38020
80	2.5	22	CX38025
80	3.0	22	CX38030
100	1.6	27	CX310016
100	2.0	27	CX310020
100	2.5	27	CX310025
100	3.0	27	CX310030

Dia.(mm)	Thickness	Hole Size	Order No.
100	3.5	27	CX310035
125	2.0	27	CX312520
125	2.5	27	CX312525
125	3.0	27	CX312530
125	3.5	27	CX312535
125	4.0	27	CX312540
160	2.5	32	CX316025
160	3.0	32	CX316030
160	3.5	32	CX316035
160	4.0	32	CX316040
160	4.5	32	CX316045
200	3.0	32	CX320030
200	3.5	32	CX320035
200	4.0	32	CX320040
200	4.5	32	CX320045
200	5.0	32	CX320050

Carbide Tipped Side Milling Cutters

- For Cast Iron & Non-Ferrous Materials
- Standard: ANSI B94.19-1985

Dia. (in.)	Width (in.)	Arbor Hole(in.)	For Non-Ferrous Materials		For Cast Iron	
			No. of Teeth	Order No.	No. of Teeth	Order No.
3"	1/4	1"	4	CC34016	6	CC36016
3"	5/16	1"	4	CC34020	—	—
3"	3/8	1"	4	CC34024	6	CC36024
3"	1/2	1"	4	CC34032	6	CC36032
4"	1/4	1"	4	CC44016	8	CC48016
4"	5/16	1"	4	CC44020	8	CC48020
4"	3/8	1"	4	CC44024	8	CC48024
4"	3/8	1-1/4	4	CC44124	8	CC48124
4"	1/2	1"	—	—	8	CC48032
4"	1/2	1-1/4	4	CC44032	—	—
4"	5/8	1"	4	CC44040	8	CC48040
4"	5/8	1-1/4	4	CC44140	8	CC48140
4"	3/4	1"	4	CC44048	8	CC48048
4"	3/4	1-1/4	4	CC44148	8	CC48148
5"	1/2	1"	6	CC56032	10	CC510032
5"	1/2	1-1/4	6	CC56132	10	CC510132
5"	5/8	1-1/4	6	CC56040	10	CC510040
5"	3/4	1-1/4	—	—	10	CC510048
6"	1/2	1"	6	CC66032	12	CC612032
6"	1/2	1-1/4	6	CC66132	12	CC612132
6"	5/8	1-1/4	6	CC66040	12	CC612040
6"	3/4	1-1/4	6	CC66048	12	CC612048
8"	3/4	1-1/2	8	CC88048	—	—

Straight Flute Hand Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: ANSI B94.9

Tap Size	No.of Flutes	H Limit	Thread Length(in.)	OAL(in.)	Order No.			
					Taper	Plug	Bottoming	3Pc. Set
0-80NF	2	H1	5/16	1-5/8	TA100801	TA200801	TA300801	TAU100801
0-80NF	2	H2	5/16	1-5/8	TA100802	TA200802	TA300802	TAU100802
1-64NC	2	H1	3/8	1-11/16	TA101641	TA201641	TA301641	TAU101641
1-64NC	2	H2	3/8	1-11/16	TA101642	TA201642	TA301642	TAU101642
1-72NF	2	H1	3/8	1-11/16	TA101721	TA201721	TA301721	TAU101721
1-72NF	2	H2	3/8	1-11/16	TA101722	TA201722	TA301722	TAU101722
2-56NC	3	H1	7/16	1-3/4	TA102561	TA202561	TA302561	TAU102561
2-56NC	3	H2	7/16	1-3/4	TA102562	TA202562	TA302562	TAU102562
2-64NF	3	H1	7/16	1-3/4	TA102641	TA202641	TA302641	TAU102641
2-64NF	3	H2	7/16	1-3/4	TA102642	TA202642	TA302642	TAU102642
3-48NC	3	H1	1/2	1-3/4	TA103481	TA203481	TA303481	TAU103481
3-48NC	3	H2	1/2	1-3/4	TA103482	TA203482	TA303482	TAU103482
3-56NF	3	H1	1/2	1-3/4	TA103561	TA203561	TA303561	TAU103561
3-56NF	3	H2	1/2	1-3/4	TA103562	TA203562	TA303562	TAU103562
4-40NC	3	H1	9/16	1-7/8	TA104401	TA204401	TA304401	TAU104401
4-40NC	3	H2	9/16	1-7/8	TA104402	TA204402	TA304402	TAU104402
4-36NF	3	H1	1/2	1-13/16	TA104361	TA204361	TA304361	TAU104361
4-36NF	3	H2	1/2	1-13/16	TA104362	TA204362	TA304362	TAU104362
4-48NF	3	H1	9/16	1-7/8	TA104481	TA204481	TA304481	TAU104481
4-48NF	3	H2	9/16	1-7/8	TA104482	TA204482	TA304482	TAU104482
4-48NF	3	H3	9/16	1-7/8	TA104483	TA204483	TA304483	TAU104483
5-40NC	3	H1	5/8	1-15/16	TA105401	TA205401	TA305401	TAU105401
5-40NC	3	H2	5/8	1-15/16	TA105402	TA205402	TA305402	TAU105402
5-44NF	3	H1	5/8	1-15/16	TA105441	TA205441	TA305441	TAU105441
5-44NF	3	H2	5/8	1-15/16	TA105442	TA205442	TA305442	TAU105442
6-32NC	3	H1	11/16	2"	TA106321	TA206321	TA306321	TAU106321
6-32NC	3	H2	11/16	2"	TA106322	TA206322	TA306322	TAU106322
6-32NC	3	H3	11/16	2"	TA106323	TA206323	TA306323	TAU106323
6-40NF	3	H1	11/16	2"	TA106401	TA206401	TA306401	TAU106401
6-40NF	3	H2	11/16	2"	TA106402	TA206402	TA306402	TAU106402
6-40NF	3	H3	11/16	2"	TA106403	TA206403	TA306403	TAU106403
8-32NC	4	H1	3/4	2-1/8	TA108321	TA208321	TA308321	TAU108321
8-32NC	4	H2	3/4	2-1/8	TA108322	TA208322	TA308322	TAU108322
8-32NC	4	H3	3/4	2-1/8	TA108323	TA208323	TA308323	TAU108323
8-36NF	4	H1	3/4	2-1/8	TA108361	TA208361	TA308361	TAU108361
8-36NF	4	H2	3/4	2-1/8	TA108362	TA208362	TA308362	TAU108362
8-36NF	4	H3	3/4	2-1/8	TA108363	TA208363	TA308363	TAU108363
10-24NC	4	H1	7/8	2-3/8	TA110241	TA210241	TA310241	TAU110241
10-24NC	4	H2	7/8	2-3/8	TA110242	TA210242	TA310242	TAU110242
10-24NC	4	H3	7/8	2-3/8	TA110243	TA210243	TA310243	TAU110243
10-32NF	4	H1	7/8	2-3/8	TA110321	TA210321	TA310321	TAU110321
10-32NF	4	H2	7/8	2-3/8	TA110322	TA210322	TA310322	TAU110322
10-32NF	4	H3	7/8	2-3/8	TA110323	TA210323	TA310323	TAU110323
12-24NC	4	H1	15/16	2-3/8	TA112241	TA212241	TA312241	TAU112241
12-24NC	4	H2	15/16	2-3/8	TA112242	TA212242	TA312242	TAU112242
12-24NC	4	H3	15/16	2-3/8	TA112243	TA212243	TA312243	TAU112243
12-28NF	4	H1	15/16	2-3/8	TA112281	TA212281	TA312281	TAU112281
12-28NF	4	H2	15/16	2-3/8	TA112282	TA212282	TA312282	TAU112282
12-28NF	4	H3	15/16	2-3/8	TA112283	TA212283	TA312283	TAU112283
1/4-20NC	4	H1	1"	2-1/2	TA14201	TA24201	TA34201	TAU14201
1/4-20NC	4	H2	1"	2-1/2	TA14202	TA24202	TA34202	TAU14202
1/4-20NC	4	H3	1"	2-1/2	TA14203	TA24203	TA34203	TAU14203
1/4-28NF	4	H1	1"	2-1/2	TA14281	TA24281	TA34281	TAU14281
1/4-28NF	4	H2	1"	2-1/2	TA14282	TA24282	TA34282	TAU14282
1/4-28NF	4	H3	1"	2-1/2	TA14283	TA24283	TA34283	TAU14283
1/4-28NF	4	H4	1"	2-1/2	TA14284	TA24284	TA34284	TAU14284
5/16-18NC	4	H1	1-1/8	2-23/32	TA15181	TA25181	TA35181	TAU15181

Straight Flute Hand Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: ANSI B94.9

Tap Size	No.of Flutes	H Limit	Thread Length(in.)	OAL(in.)	Order No.			
					Taper	Plug	Bottoming	3Pc. Set
5/16-18NC	4	H2	1-1/8	2-23/32	TA15182	TA25182	TA35182	TAU15182
5/16-18NC	4	H3	1-1/8	2-23/32	TA15183	TA25183	TA35183	TAU15183
5/16-18NC	4	H4	1-1/8	2-23/32	TA15184	TA25184	TA35184	TAU15184
5/16-18NC	4	H5	1-1/8	2-23/32	TA15185	TA25185	TA35185	TAU15185
5/16-24NF	4	H1	1-1/8	2-23/32	TA15241	TA25241	TA35241	TAU15241
5/16-24NF	4	H2	1-1/8	2-23/32	TA15242	TA25242	TA35242	TAU15242
5/16-24NF	4	H3	1-1/8	2-23/32	TA15243	TA25243	TA35243	TAU15243
5/16-24NF	4	H4	1-1/8	2-23/32	TA15244	TA25244	TA35244	TAU15244
5/16-24NF	4	H5	1-1/8	2-23/32	TA15245	TA25245	TA35245	TAU15245
3/8-16NC	4	H1	1-1/4	2-15/16	TA16161	TA26161	TA36161	TAU16161
3/8-16NC	4	H2	1-1/4	2-15/16	TA16162	TA26162	TA36162	TAU16162
3/8-16NC	4	H3	1-1/4	2-15/16	TA16163	TA26163	TA36163	TAU16163
3/8-16NC	4	H4	1-1/4	2-15/16	TA16164	TA26164	TA36164	TAU16164
3/8-16NC	4	H5	1-1/4	2-15/16	TA16165	TA26165	TA36165	TAU16165
3/8-24NF	4	H1	1-1/4	2-15/16	TA16241	TA26241	TA36241	TAU16241
3/8-24NF	4	H2	1-1/4	2-15/16	TA16242	TA26242	TA36242	TAU16242
3/8-24NF	4	H3	1-1/4	2-15/16	TA16243	TA26243	TA36243	TAU16243
3/8-24NF	4	H4	1-1/4	2-15/16	TA16244	TA26244	TA36244	TAU16244
7/16-14NC	4	H1	1-7/16	3-5/32	TA17161	TA27161	TA37161	TAU17161
7/16-14NC	4	H2	1-7/16	3-5/32	TA17162	TA27162	TA37162	TAU17162
7/16-14NC	4	H3	1-7/16	3-5/32	TA17163	TA27163	TA37163	TAU17163
7/16-14NC	4	H5	1-7/16	3-5/32	TA17165	TA27165	TA37165	TAU17165
7/16-20NF	4	H1	1-7/16	3-5/32	TA17201	TA27201	TA37201	TAU17201
7/16-20NF	4	H2	1-7/16	3-5/32	TA17202	TA27202	TA37202	TAU17202
7/16-20NF	4	H3	1-7/16	3-5/32	TA17203	TA27203	TA37203	TAU17203
7/16-20NF	4	H5	1-7/16	3-5/32	TA17205	TA27205	TA37205	TAU17205
1/2-13NC	4	H2	1-21/32	3-3/8	TA18132	TA28132	TA38132	TAU18132
1/2-13NC	4	H3	1-21/32	3-3/8	TA18133	TA28133	TA38133	TAU18133
1/2-13NC	4	H5	1-21/32	3-3/8	TA18135	TA28135	TA38135	TAU18135
1/2-20NF	4	H1	1-21/32	3-3/8	TA18201	TA28201	TA38201	TAU18201
1/2-20NF	4	H2	1-21/32	3-3/8	TA18202	TA28202	TA38202	TAU18202
1/2-20NF	4	H3	1-21/32	3-3/8	TA18203	TA28203	TA38203	TAU18203
1/2-20NF	4	H5	1-21/32	3-3/8	TA18205	TA28205	TA38205	TAU18205
9/16-12NC	4	H2	1-21/32	3-19/32	TA19122	TA29122	TA39122	TAU19122
9/16-12NC	4	H3	1-21/32	3-19/32	TA19123	TA29123	TA39123	TAU19123
9/16-12NC	4	H5	1-21/32	3-19/32	TA19125	TA29125	TA39125	TAU19125
9/16-18NF	4	H1	1-21/32	3-19/32	TA19181	TA29181	TA39181	TAU19181
9/16-18NF	4	H2	1-21/32	3-19/32	TA19182	TA29182	TA39182	TAU19182
9/16-18NF	4	H3	1-21/32	3-19/32	TA19183	TA29183	TA39183	TAU19183
9/16-18NF	4	H5	1-21/32	3-19/32	TA19185	TA29185	TA39185	TAU19185
5/8-11NC	4	H1	1-13/16	3-13/16	TA110111	TA210111	TA310111	TAU110111
5/8-11NC	4	H2	1-13/16	3-13/16	TA110112	TA210112	TA310112	TAU110112
5/8-11NC	4	H3	1-13/16	3-13/16	TA110113	TA210113	TA310113	TAU110113
5/8-18NF	4	H1	1-13/16	3-13/16	TA110181	TA210181	TA310181	TAU110181
5/8-18NF	4	H2	1-13/16	3-13/16	TA110182	TA210182	TA310182	TAU110182
5/8-18NF	4	H3	1-13/16	3-13/16	TA110183	TA210183	TA310183	TAU110183
5/8-18NF	4	H5	1-13/16	3-13/16	TA110185	TA210185	TA310185	TAU110185
11/16-11NC	4	H3	1-13/16	4-1/32	TA111113	TA211113	TA311113	TAU111113
11/16-16NF	4	H3	1-13/16	4-1/32	TA111163	TA211163	TA311163	TAU111163
3/4-10NC	4	H1	2"	4-1/4	TA112101	TA212101	TA312101	TAU112101
3/4-10NC	4	H3	2"	4-1/4	TA112103	TA212103	TA312103	TAU112103
3/4-10NC	4	H5	2"	4-1/4	TA112105	TA212105	TA312105	TAU112105
3/4-16NF	4	H1	2"	4-1/4	TA112161	TA212161	TA312161	TAU112161
3/4-16NF	4	H2	2"	4-1/4	TA112162	TA212162	TA312162	TAU112162
3/4-16NF	4	H3	2"	4-1/4	TA112163	TA212163	TA312163	TAU112163
3/4-16NF	4	H4	2"	4-1/4	TA112164	TA212164	TA312164	TAU112164
3/4-16NF	4	H5	2"	4-1/4	TA112165	TA212165	TA312165	TAU112165
7/8-9NC	4	H1	2-7/32	4-11/16	TA114091	TA214091	TA314091	TAU114091

Tap Size	No.of Flutes	H Limit	Thread Length(in.)	OAL(in.)	Order No.			
					Taper	Plug	Bottoming	3Pc. Set
7/8-9NC	4	H2	2-7/32	4-11/16	TA114092	TA214092	TA314092	TAU114092
7/8-9NC	4	H3	2-7/32	4-11/16	TA114093	TA214093	TA314093	TAU114093
7/8-9NC	4	H4	2-7/32	4-11/16	TA114094	TA214094	TA314094	TAU114094
7/8-14NF	4	H2	2-7/32	4-11/16	TA114142	TA214142	TA314142	TAU114142
7/8-14NF	4	H3	2-7/32	4-11/16	TA114143	TA214143	TA314143	TAU114143
7/8-14NF	4	H4	2-7/32	4-11/16	TA114144	TA214144	TA314144	TAU114144
1-8NC	4	H4	2-1/2	5-1/8	TA116084	TA216084	TA316084	TAU116084
1-12NF	4	H3	2-1/2	5-1/8	TA116123	TA216123	TA316123	TAU116123
1-14NS	4	H4	2-1/2	5-1/8	TA116144	TA216144	TA316144	TAU116144
1-1/8-7NC	4	H4	2-9/16	5-7/16	TA118144	TA218144	TA318144	TAU118144
1-1/8-12NF	4	H4	2-9/16	5-7/16	TA118124	TA218124	TA318124	TAU118124
1-1/4-7NC	4	H4	2-9/16	5-3/4	TA120074	TA220074	TA320074	TAU120074
1-1/4-12NF	6	H4	2-9/16	5-3/4	TA120124	TA220124	TA320124	TAU120124
1-3/8-6NC	4	H4	3"	6-1/16	TA122064	TA222064	TA322064	TAU122064
1-3/8-12NF	6	H4	3"	6-1/16	TA122124	TA222124	TA322124	TAU122124
1-1/2-6NC	4	H4	3"	6-3/8	TA124064	TA224064	TA324064	TAU124064
1-1/2-12NF	6	H4	3"	6-3/8	TA124124	TA224124	TA324124	TAU124124

Spiral Flute Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: ANSI B94.9

Size	H Limit	OAL (in.)	Thread Length (in.)	Order No.
4-40NC	H2	1-7/8	9/16	TA40440
4-48NF	H2	1-7/8	9/16	TA40448
5-40NC	H2	1-15/16	5/8	TA40540
5-44NF	H2	1-15/16	5/8	TA40544
6-32NC	H3	2"	11/16	TA40632
6-40NF	H2	2"	11/16	TA40640
8-32NC	H3	2-1/8	3/4	TA40832
8-36NF	H2	2-1/8	3/4	TA40836
10-24NC	H3	2-3/8	7/8	TA41024
10-32NF	H3	2-3/8	7/8	TA41032
12-24NC	H3	2-3/8	15/16	TA41224
12-28NF	H3	2-3/8	15/16	TA41228
1/4-20NC	H3	2-1/2	1"	TA4420
1/4-28NF	H3	2-1/2	1"	TA4428
5/16-18NC	H3	2-23/32	1-1/8	TA4518
5/16-24NF	H3	2-23/32	1-1/8	TA4524
3/8-16NC	H3	2-15/16	1-1/4	TA4616
3/8-24NF	H3	2-15/16	1-1/4	TA4624
7/16-14NC	H3	3-5/32	1-7/16	TA4714
7/16-20NF	H3	3-5/32	1-7/16	TA4720
1/2-13NC	H3	3-3/8	1-21/32	TA4813
1/2-20NF	H3	3-3/8	1-21/32	TA4820

Size	H Limit	OAL (in.)	Thread Length (in.)	Order No.
9/16-12NC	H3	3-19/32	1-21/32	TA4912
9/16-18NF	H3	3-19/32	1-21/32	TA4918
5/8-11NC	H3	3-13/16	1-13/16	TA41011
5/8-18NF	H3	3-13/16	1-13/16	TA41018
11/16-11UN	H3	4-1/32	1-13/16	TA41111
11/16-16UN	H3	4-1/32	1-13/16	TA41116
3/4-10NC	H3	4-1/4	2"	TA41210
3/4-16NF	H3	4-1/4	2"	TA41216
7/8-9NC	H4	4-11/16	2-7/32	TA41409
7/8-14NF	H4	4-11/16	2-7/32	TA41414
1-8NC	H4	5-1/8	2-1/2	TA41608
1-12NF	H4	5-1/8	2-1/2	TA41612
1-14NS	H4	5-1/8	2-1/2	TA41614
1-1/8-7NC	H4	5-7/16	2-9/16	TA41807
1-1/8-12NF	H4	5-7/16	2-9/16	TA41812
1-1/4-7NC	H4	5-3/4	2-9/16	TA42007
1-1/4-12NF	H4	5-3/4	2-9/16	TA42012
1-3/8-6NC	H4	6-1/16	3"	TA42206
1-3/8-12NF	H4	6-1/16	3"	TA42212
1-1/2-6NC	H4	6-3/8	3"	TA42406
1-1/2-12NF	H4	6-3/8	3"	TA42412

Spiral Point Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: ANSI B94.9

Size	H Limit	OAL (in.)	Thread Length (in.)	Order No.
0-80NF	H1	1-5/8	5/16	TA500801
0-80NF	H2	1-5/8	5/16	TA500802
1-64NC	H1	1-11/16	3/8	TA501641
1-72NC	H1	1-11/16	3/8	TA501721
2-56NC	H2	1-3/4	7/16	TA502562
2-64NF	H2	1-3/4	7/16	TA502642

Size	H Limit	OAL (in.)	Thread Length (in.)	Order No.
3-48NC	H2	1-13/16	1/2	TA503482
3-56NF	H2	1-13/16	1/2	TA503562
4-36NS	H2	1-7/8	9/16	TA504362
4-40NC	H2	1-7/8	9/16	TA504402
4-48NF	H2	1-7/8	9/16	TA504482
5-40NC	H2	1-15/16	5/8	TA505402

Spiral Point Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: ANSI B94.9

Size	H Limit	OAL (in.)	Thread Length (in.)	Order No.
5-44NF	H2	1-15/16	5/8	TA505442
6-32NC	H3	2"	11/16	TA506323
6-40NF	H2	2"	11/16	TA506402
6-48NS	H2	2"	11/16	TA506482
8-32NC	H3	2-1/8	3/4	TA508323
8-36NF	H2	2-1/8	3/4	TA508362
8-40VN	H2	2-1/8	3/4	TA508402
10-24NC	H3	2-3/8	7/8	TA510243
10-32NF	H3	2-3/8	7/8	TA510323
10-40NS	H2	2-3/8	7/8	TA510402
12-24NC	H3	2-3/8	15/16	TA512243
12-28NF	H3	2-3/8	15/16	TA512283
12-32NEF	H3	2-3/8	15/16	TA512323
1/4-20NC	H3	2-1/2	1"	TA54203
1/4-24NS	H3	2-1/2	1"	TA54243
1/4-28NF	H3	2-1/2	1"	TA54283
1/4-40NS	H2	2-1/2	1"	TA54402
5/16-18NC	H3	2-23/32	1-1/8	TA55183
5/16-24NF	H3	2-23/32	1-1/8	TA55243
5/16-32NEF	H3	2-23/32	1-1/8	TA55323
3/8-16NC	H3	2-15/16	1-1/4	TA56163
3/8-24NF	H3	2-15/16	1-1/4	TA56243
3/8-32NEF	H3	2-15/16	1-1/4	TA56323
7/16-14NC	H3	3-5/32	1-7/16	TA57143
7/16-20NF	H3	3-5/32	1-7/16	TA57203

Size	H Limit	OAL (in.)	Thread Length (in.)	Order No.
1/2-13NC	H3	3-3/8	1-21/32	TA58133
1/2-20NF	H3	3-3/8	1-21/32	TA58203
1/2-24NS	H3	3-3/8	1-21/32	TA58243
1/2-28NEF	H3	3-3/8	1-21/32	TA58283
9/16-12NC	H3	3-19/32	1-21/32	TA59123
9/16-18NF	H3	3-19/32	1-21/32	TA59183
5/8-11NC	H3	3-13/16	1-13/16	TA510113
5/8-18NF	H3	3-13/16	1-13/16	TA510183
11/16-11VN	H3	4-1/32	1-13/16	TA511113
11/16-16VN	H3	4-1/32	1-13/16	TA511163
3/4-10NC	H3	4-1/4	2"	TA512103
3/4-16NF	H3	4-1/4	2"	TA512163
3/4-18NS	H3	4-1/4	2"	TA512183
7/8-9NC	H4	4-11/16	2-7/32	TA514094
7/8-14NF	H4	4-11/16	2-7/32	TA514144
1-8NC	H4	5-1/8	2-1/2	TA516084
1-12NF	H4	5-1/8	2-1/2	TA516124
1-14NS	H4	5-1/8	2-1/2	TA516144
1-1/8-7NC	H4	5-7/16	2-9/16	TA518074
1-1/8-12NF	H4	5-7/16	2-9/16	TA518124
1-1/4-7NC	H4	5-3/4	2-9/16	TA520074
1-1/4-12NF	H4	5-3/4	2-9/16	TA520124
1-3/8-6NC	H4	6-1/16	3"	TA522064
1-3/8-12NF	H4	6-1/16	3"	TA522124
1-1/2-6NC	H4	6-3/8	3"	TA524064
1-1/2-12NF	H4	6-3/8	3"	TA524124

Metric Hand Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: ANSI B94.9

Size& Pitch (mm)	Pitch Dia. Limit	No.of Flutes	Thread Length (in.)	OAL (in.)	Order No.
M1.6x0.35	D3	2	5/16	1-5/8	TA60160
M1.8x0.35	D3	2	3/8	1-11/16	TA60180
M2x0.4	D3	3	7/16	1-3/4	TA60200
M2x0.45	D3	3	7/16	1-3/4	TA60201
M2.2x0.45	D3	3	7/16	1-3/4	TA60220
M2.5x0.45	D3	3	1/2	1-13/16	TA60250
M2.6x0.45	D3	3	7/16	1-3/4	TA60260
M3 x0.35	D3	3	5/8	1-15/16	TA60300
M3x0.5	D3	3	5/8	1-15/16	TA60301
M3.5x0.35	D4	4	11/16	2"	TA60350
M3.5x0.6	D3	3	11/16	2"	TA60351
M4x0.35	D4	4	3/4	2-1/8	TA60400
M4x0.5	D4	4	3/4	2-1/8	TA60401
M4x0.7	D4	4	3/4	2-1/8	TA60402
M4.5x0.75	D4	4	7/8	2-3/8	TA60450
M5x0.5	D4	4	7/8	2-3/8	TA60500
M5x0.8	D4	4	7/8	2-3/8	TA60501
M5x0.9	D4	4	7/8	2-3/8	TA60502
M5.5x0.9	D4	4	7/8	2-3/8	TA60550
M6x0.75	D4	4	1"	2-1/2	TA60600
M6x0.5	D4	4	1"	2-1/2	TA60601

Size& Pitch (mm)	Pitch Dia. Limit	No.of Flutes	Thread Length (in.)	OAL (in.)	Order No.
M6x1	D5	4	1"	2-1/2	TA60602
M7x1	D5	4	1-1/8	2-23/32	TA60700
M8x0.75	D5	4	1-1/8	2-23/32	TA60800
M8x1	D5	4	1-1/8	2-23/32	TA60801
M8x1.25	D5	4	1-1/8	2-23/32	TA60802
M9x1.25	D5	4	1-1/4	2-15/16	TA60900
M9x1	D5	4	1-1/4	2-15/16	TA60901
M9x0.75	D5	4	1-1/4	2-15/16	TA60902
M10x0.75	D5	4	1-1/4	2-15/16	TA61000
M10x1	D5	4	1-1/4	2-15/16	TA61001
M10x1.25	D5	4	1-1/4	2-15/16	TA61002
M10x1.5	D6	4	1-1/4	2-15/16	TA61003
M11x1.5	D6	4	1-7/16	3-5/32	TA61100
M11x1	D5	4	1-7/16	3-5/32	TA61101
M12x1	D5	4	1-21/32	3-3/8	TA61200
M12x1.25	D5	4	1-21/32	3-3/8	TA61201
M12x1.5	D6	4	1-21/32	3-3/8	TA61202
M12x1.75	D6	4	1-21/32	3-3/8	TA61203
M14x1	D6	4	1-21/32	3-19/32	TA61400
M14x1.25	D6	4	1-21/32	3-19/32	TA61401
M14x1.5	D6	4	1-21/32	3-19/32	TA61402

Size& Pitch (mm)	Pitch Dia. Limit	No.of Flutes	Thread Length (in.)	OAL (in.)	Order No.
M14x2	D7	4	1-21/32	3-19/32	TA61403
M16x1	D6	4	1-13/16	3-13/16	TA61600
M16x1.25	D5	4	1-13/16	3-13/16	TA61601
M16x1.5	D6	4	1-13/16	3-13/16	TA61602
M16x2	D7	4	1-13/16	3-13/16	TA61603
M18x1	D6	4	1-13/16	4-1/32	TA61800
M18x1.5	D6	4	1-13/16	4-1/32	TA61801
M18x2	D6	4	1-13/16	4-1/32	TA61802
M18x2.5	D7	4	1-13/16	4-1/32	TA61803
M20x2	D6	4	2"	4-15/32	TA62000
M20x1	D7	4	2"	4-15/32	TA62001
M20x1.5	D6	4	2"	4-15/32	TA62002
M20x2.5	D7	4	2"	4-15/32	TA62003
M22x1.5	D6	4	2-7/32	4-11/16	TA62200
M22x2	D6	4	2-7/32	4-11/16	TA62201
M22x2.5	D7	4	2-7/32	4-11/16	TA62202
M24x1	D7	4	2-7/32	4-29/32	TA62400
M24x2	D7	4	2-7/32	4-29/32	TA62401

Size& Pitch (mm)	Pitch Dia. Limit	No.of Flutes	Thread Length (in.)	OAL (in.)	Order No.
M24x3	D8	4	2-7/32	4-29/32	TA62402
M27x1.5	D7	4	2-1/2	5-1/8	TA62700
M27x2	D7	4	2-1/2	5-1/8	TA62701
M27x3	D8	4	2-1/2	5-1/8	TA62702
M28x2	D7	4	2-9/16	5-7/16	TA62800
M30x2	D7	4	2-9/16	5-7/16	TA63000
M30x3.5	D9	4	2-9/16	5-7/16	TA63001
M33x2	D7	6	2-9/16	5-3/4	TA63300
M33x3.5	D9	4	2-9/16	5-3/4	TA63301
M36x3	D8	4	3"	6-1/16	TA63600
M36x4	D9	4	3"	6-1/16	TA63601
M39x3	D8	6	3-3/16	6-11/16	TA63900
M39x4	D9	6	3-3/16	6-11/16	TA63901
M42x4.5	10	6	3-3/16	6-11/16	TA64200
M45x4.5	10	6	3-3/16	7"	TA64500
M48x5	10	6	3-3/16	7-5/16	TA64800
M52x5	10	6	3-5/8	7-5/8	TA65200

Metric Spiral Point Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: ANSI B94.9

Size (mm)	Pitch	Thread Length(in.)	OAL (in.)	Order No.
1.6	0.35	3/8	1-11/16	TA70160
1.8	0.35	7/16	1-3/4	TA70180
2.0	0.4	7/16	1-3/4	TA70200
2.2	0.45	7/16	1-3/4	TA70220
2.5	0.45	7/16	1-3/4	TA70250
3.0	0.5	5/8	1-15/16	TA70300
3.5	0.6	11/16	2"	TA70350
4.0	0.7	3/4	2-1/8	TA70400
4.5	0.75	3/4	2-1/8	TA70450
5.0	0.8	7/8	2-3/8	TA70500
6.0	1	1"	2-1/2	TA70600
7.0	1	1-1/8	2-23/32	TA70700

Size (mm)	Pitch	Thread Length(in.)	OAL (in.)	Order No.
8.0	1.25	1-1/8	2-23/32	TA70800
8.0	1	1-1/8	2-23/32	TA70801
10.0	1.5	1-1/4	2-15/16	TA71000
10.0	1.25	1-1/4	2-15/16	TA71001
12.0	1.75	1-21/32	3-3/8	TA71200
12.0	1.25	1-21/32	3-3/8	TA71201
14.0	2	1-21/32	3-19/32	TA71400
14.0	1.5	1-21/32	3-19/32	TA71401
16.0	2	1-13/16	3-13/16	TA71600
16.0	1.5	1-13/16	3-13/16	TA71601
18.0	2.5	1-13/16	4-1/32	TA71800
20.0	2.5	2"	4-15/32	TA72000

3 Piece Set Straight Flute Hand Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: DIN352

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M1×0.25	32	5.5	TDU10010
M1.1×0.25	32	5.5	TDU10011
M1.2×0.25	32	5.5	TDU10012
M1.4×0.3	32	7	TDU10014
M1.6×0.35	32	8	TDU10016
M1.7×0.35	32	8	TDU10017
M1.8×0.35	32	8	TDU10018
M2×0.4	36	8	TDU10020
M2.2×0.45	36	9	TDU10022
M2.3×0.4	36	9	TDU10023
M2.5×0.45	40	9	TDU10025
M2.6×0.45	40	9	TDU10026
M3×0.5	40	11	TDU10030
M3.5×0.6	45	13	TDU10035

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M4×0.7	45	13	TDU10040
M4.5×0.75	50	16	TDU10045
M5×0.8	50	16	TDU10050
M6×1	50	19	TDU10060
M7×1	50	19	TDU10070
M8×1.25	50	22	TDU10080
M9×1.25	63	22	TDU10090
M10×1.5	70	24	TDU10100
M11×1.5	70	24	TDU10110
M12×1.75	75	29	TDU10120
M14×2	80	30	TDU10140
M16×2	80	32	TDU10160
M18×2.5	95	40	TDU10180
M20×2.5	95	40	TDU10200

3 Piece Set Straight Flute Hand Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: DIN352

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M22×2.5	100	40	TDU10220
M24×3	110	50	TDU10240
M27×3	110	50	TDU10270
M30×3.5	125	56	TDU10300
M33×3.5	125	56	TDU10330
M36×4	150	63	TDU10360
M39×4	150	63	TDU10390
M42×4.5	150	63	TDU10420

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M45×4.5	160	70	TDU10450
M48×5	180	75	TDU10480
M52×5	180	75	TDU10520
M56×5.5	200	85	TDU10560
M60×5.5	200	85	TDU10600
M64×6	220	90	TDU10640
M68×6	220	90	TDU10680

Spiral Flute Hand Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: DIN352

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M3×0.5	40	11	TD20030
M3.5×0.6	45	13	TD20035
M4×0.7	45	13	TD20040
M4.5×0.75	50	16	TD20045
M5×0.8	50	16	TD20050
M6×1	50	19	TD20060
M7×1	50	19	TD20070
M8×1.25	50	22	TD20080
M9×1.25	63	22	TD20090
M10×1.5	70	24	TD20100
M11×1.5	70	24	TD20110

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M12×1.75	75	29	TD20120
M14×2	80	30	TD20140
M16×2	80	32	TD20160
M18×2.5	95	40	TD20180
M20×2.5	95	40	TD20200
M22×2.5	100	40	TD20220
M24×3	110	50	TD20240
M27×3	110	50	TD20270
M30×3.5	125	56	TD20300
M33×3.5	125	56	TD20330
M36×4	150	63	TD20360

Straight Fluted Machine Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: DIN374

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M3×0.35	56	10	TD303030
M3.5×0.35	56	10	TD303035
M4×0.35	63	10	TD303040
M4×0.5	63	10	TD305040
M5×0.5	70	12	TD305050
M6×0.5	80	14	TD305060
M6×0.75	80	14	TD307060
M7×0.75	80	14	TD307070
M8×0.5	80	19	TD305080
M8×0.75	80	19	TD307080
M8×1	80	22	TD300080
M9×1	90	22	TD300090
M10×0.5	90	20	TD305100
M10×0.75	90	20	TD307100
M10×1	90	20	TD300100
M10×1.25	100	24	TD302100
M11×1	90	20	TD300110
M11×1.5	90	20	TD305110

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M12×0.75	100	22	TD307120
M12×1	100	22	TD300120
M12×1.25	100	22	TD302120
M12×1.5	100	22	TD305120
M13×1	100	22	TD300130
M13×1.5	100	22	TD305130
M14×0.75	100	22	TD307140
M14×1	100	22	TD300140
M14×1.25	100	22	TD302140
M14×1.5	100	22	TD305140
M16×1	100	22	TD300160
M16×1.25	100	22	TD302160
M16×1.5	100	22	TD305160
M18×1	110	25	TD300180
M18×1.5	110	25	TD305180
M18×2	125	34	TD302180
M20×1	125	25	TD300200
M20×1.5	125	25	TD305200

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M20×2	140	34	TD302200
M22×1	125	25	TD300220
M22×1.5	125	25	TD305220
M22×2	140	34	TD302220
M24×1	140	28	TD300240
M24×1.5	140	28	TD305240
M24×2	140	28	TD302240
M26×1.5	140	28	TD305260
M27×2	140	28	TD300270
M28×1.5	140	28	TD305280
M30×1.5	150	28	TD305300

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M30×2	150	28	TD300300
M32×1.5	150	28	TD305320
M35×1.5	170	30	TD305350
M36×1.5	170	30	TD305360
M38×1.5	170	30	TD305380
M40×1.5	170	30	TD305400
M42×1.5	170	30	TD305420
M45×1.5	180	32	TD305450
M48×1.5	**190**	**32**	**TD305480**
M50×1.5	**190**	**32**	**TD305500**
M52×1.5	**190**	**32**	**TD305520**

Spiral Flute Hand Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: DIN374

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M3×0.35	56	10	TD403030
M3.5×0.35	56	10	TD403035
M4×0.35	63	10	TD403040
M4×0.5	63	10	TD405040
M5×0.5	70	12	TD405050
M6×0.5	80	14	TD405060
M6×0.75	80	14	TD407060
M7×0.75	80	14	TD407070
M8×0.5	80	19	TD405080
M8×0.75	80	19	TD407080
M8×1	90	22	TD400080
M9×1	90	22	TD400090
M10×0.5	90	20	TD405100
M10×0.75	90	20	TD407100
M10×1	90	20	TD400100
M10×1.25	100	24	TD402100
M11×1	90	20	TD400110
M11×1.25	90	20	TD402110
M12×0.75	100	22	TD407120
M12×1	100	22	TD400120
M12×1.25	100	22	TD402120
M12×1.5	100	22	TD405120
M13×1	100	22	TD400130
M13×1.5	100	22	TD405130
M14×0.75	100	22	TD407140
M14×1	100	22	TD400140
M14×1.25	100	22	TD402140
M14×1.5	100	22	TD405140
M16×1	100	22	TD400160

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M16×1.25	100	22	TD402160
M16×1.5	100	22	TD405160
M18×1	110	25	TD400180
M18×1.5	110	25	TD405180
M18×2	125	34	TD402180
M20×1	125	25	TD400200
M20×1.5	125	25	TD405200
M20×2	140	34	TD402200
M22×1	125	25	TD400220
M22×1.5	125	25	TD405220
M22×2	140	34	TD402220
M24×1	140	28	TD400240
M24×1.5	140	28	TD405240
M24×2	140	28	TD402240
M26×1.5	140	28	TD405260
M27×2	140	28	TD400270
M28×1.5	140	28	TD405280
M30×1.5	150	28	TD405300
M30×2	150	28	TD400300
M32×1.5	150	28	TD405320
M35×1.5	170	30	TD405350
M36×1.5	170	30	TD405360
M38×1.5	170	30	TD405380
M40×1.5	170	30	TD405400
M42×1.5	170	30	TD405420
M45×1.5	180	32	TD405450
M48×1.5	190	32	TD405480
M50×1.5	190	32	TD405500
M52×1.5	190	32	TD405520

Spiral Pointed Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: DIN374

Size (mm)	OAL (mm)	Thread Length (mm)	Order No.
M3×0.35	56	10	TD503030
M3.5×0.35	56	10	TD503350
M4×0.35	63	10	TD503040
M4×0.5	63	10	TD505040
M5×0.5	70	12	TD505050

Size (mm)	OAL (mm)	Thread Length (mm)	Order No.
M6×0.5	80	14	TD505060
M6×0.75	80	14	TD507060
M7×0.75	80	14	TD507070
M8×0.5	80	19	TD505080
M8×0.75	80	19	TD507080

Spiral Pointed Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: DIN374

Size (mm)	OAL (mm)	Thread Length (mm)	Order No.
M8×1	80	22	TD500080
M9×1	90	22	TD500090
M10×0.5	90	22	TD505100
M10×0.75	90	20	TD507100
M10×1	90	20	TD500100
M10×1.25	90	24	TD502100
M11×1	100	20	TD500110
M11×1.5	90	20	TD505110
M12×0.75	90	22	TD507120
M12×1	100	22	TD500120
M12×1.25	100	22	TD502120
M12×1.5	100	22	TD505120
M13×1	100	22	TD500130
M13×1.5	100	22	TD505130
M14×0.75	100	22	TD507140
M14×1	100	22	TD500140
M14×1.25	100	22	TD502140
M14×1.5	100	22	TD505140
M16×1	100	22	TD500160
M16×1.25	100	22	TD502160
M16×1.5	100	22	TD505160
M18×1	110	25	TD500180
M18×1.5	110	25	TD505180
M18×2	125	34	TD502180

Size (mm)	OAL (mm)	Thread Length (mm)	Order No.
M20×1	125	25	TD500200
M20×1.5	125	25	TD505200
M20×2	140	34	TD502200
M22×1	125	25	TD500220
M22×1.5	125	25	TD505220
M22×2	140	34	TD502220
M24×1	140	28	TD500240
M24×1.5	140	28	TD505240
M24×2	140	28	TD502240
M26×1.5	140	28	TD505260
M27×2	140	28	TD500270
M28×1.5	140	28	TD505280
M30×1.5	150	28	TD505300
M30×2	150	28	TD500300
M32×1.5	150	28	TD505320
M35×1.5	170	30	TD505350
M36×1.5	170	30	TD505360
M38×1.5	170	30	TD505380
M40×1.5	170	30	TD505400
M42×1.5	170	30	TD505420
M45×1.5	180	32	TD505450
M48×1.5	190	32	TD505480
M50×1.5	190	32	TD505500
M52×1.5	190	32	TD505520

Straight Flute Machine Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard:DIN371/M

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M1.4×0.3	40	7	TD61014
M1.6×0.35	40	8	TD61016
M1.7×0.35	40	8	TD61017
M1.8×0.35	40	8	TD61018
M2×0.4	45	8	TD61020
M2.2×0.45	45	9	TD61022
M2.3×0.4	45	9	TD61023
M2.5×0.45	50	9	TD61025
M2.6×0.45	50	9	TD61026

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M3×0.5	56	11	TD61030
M3.5×0.6	56	13	TD61035
M4×0.7	63	13	TD61040
M5×0.8	70	16	TD61050
M6×1	80	19	TD61060
M7×1	80	19	TD61070
M8×1.25	90	22	TD61080
M9×1.25	90	22	TD61090
M10×1.5	100	24	TD61100

Spiral Fluted Machine Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard:DIN371/M

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M2×0.4	45	8	TD62002
M2.2×0.45	45	9	TD62022
M2.5×0.45	50	9	TD62025
M3×0.5	56	11	TD62003
M3.5×0.6	56	13	TD62035
M4×0.7	63	13	TD62004

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M5×0.8	70	16	TD62005
M6×1	80	19	TD62006
M7×1	80	19	TD62007
M8×1.25	90	22	TD62008
M9×1.25	90	22	TD62009
M10×1.5	100	24	TD62010

Taps Series

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard: DIN376

Size (mm)	OAL (mm)	Thread Length (mm)	Straight Fluted Order No.	Spiral Fluted Order No.	Spiral Point Order No.
M3x0.5	56	11	TD71030	TD72030	TD73030
M4x0.7	63	13	TD71040	TD72040	TD73040
M5x0.8	70	16	TD71050	TD72050	TD73050
M6x1	80	19	TD71060	TD72060	TD73060
M7x1	80	19	TD71070	TD72070	TD73070
M8x1.25	90	22	TD71080	TD72080	TD73080
M9x1.25	90	22	TD71090	TD72090	TD73090
M10x1.5	100	24	TD71100	TD72100	TD73100
M11x1.5	100	24	TD71110	TD72110	TD73110
M12x1.75	110	29	TD71120	TD72120	TD73120
M14x2	110	30	TD71140	TD72140	TD73140
M16x2	110	32	TD71160	TD72160	TD73160
M18x2.5	125	34	TD71180	TD72180	TD73180

Size (mm)	OAL (mm)	Thread Length (mm)	Straight Fluted Order No.	Spiral Fluted Order No.	Spiral Point Order No.
M20x2.5	140	34	TD71200	TD72200	TD73200
M22x2.5	140	34	TD71220	TD72220	TD73220
M24x3	160	38	TD71240	TD72240	TD73240
M27x3	160	38	TD71270	TD72270	TD73270
M30x3.5	180	45	TD71300	TD72300	TD73300
M33x3.5	180	50	TD71330	TD72330	TD73330
M36x4	200	56	TD71360	TD72360	TD73360
M39x4	200	60	TD71390	TD72390	TD73390
M42x4.5	200	60	TD71420	TD72420	TD73420
M45x4.5	220	65	TD71450	TD72450	TD73450
M48x5	250	70	TD71480	TD72480	TD73480
M52x5	250	70	TD71520	TD72520	TD73520

Straight Fluted Machine Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard:ГОСТ

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M2×0.4	41	8	TR04020
M2.2×0.45	44.5	9.5	TR04022
M2.5×0.45	44.5	9.5	TR04025
M3×0.5	48	11	TR05030
M3.5×0.6	50	13	TR06035
M4×0.7	53	13	TR07040
M4×0.5	53	13	TR05040
M4.5×0.75	53	13	TR07045
M4.5×0.5	53	13	TR05045
M5×0.8	58	16	TR08050
M5×0.5	58	16	TR05050
M5.5×0.5	62	17	TR05055
M6×1	66	19	TR10060
M6×0.75	66	19	TR07060
M6×0.5	66	19	TR05060
M7×1	66	19	TR10070
M7×0.75	66	19	TR05070
M7×0.5	66	19	TR12080
M8×1.25	72	22	TR10080
M8×1	72	22	TR07080
M8×0.75	66	19	TR12090
M9×1.25	72	22	TR12090
M9×1	72	22	TR10090
M9×0.75	66	19	TR07090
M10×1.5	80	24	TR15100
M10×1.25	80	24	TR12100
M10×1	80	24	TR10100
M10×0.75	69	19	TR07100
M11×1.5	85	25	TR15110
M11×1	80	24	TR10110
M12×1.75	89	29	TR17120
M12×1.5	89	29	TR15120
M12×1.25	89	29	TR12120

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M12×1	84	24	TR10120
M14×2	95	30	TR20140
M14×1.5	95	30	TR15140
M14×1.25	95	30	TR12140
M15×1.5	95	30	TR15150
M16×2	102	32	TR20160
M16×1.5	102	32	TR15160
M16×1	90	29	TR10160
M18×2.5	112	37	TR25180
M18×2	112	37	TR20180
M18×1.5	112	37	TR15180
M20×2.5	112	37	TR25200
M20×2	112	37	TR20200
M20×1.5	112	37	TR15200
M22×2.5	118	38	TR25220
M22×2	118	38	TR20220
M22×1.5	118	38	TR15220
M24×3	130	45	TR30240
M24×2	130	45	TR20240
M24×1.5	130	45	TR15240
M27×3	135	45	TR30270
M27×2	127	37	TR20270
M27×1.5	127	37	TR15270
M30×3.5	138	48	TR35300
M30×3	138	48	TR30300
M30×2	127	37	TR20300
M30×1.5	127	37	TR15300
M33×3.5	151	51	TR35330
M33×2	137	37	TR20330
M33×1.5	137	37	TR15330
M36×4	162	57	TR40360
M36×3	162	57	TR30360
M36×2	144	39	TR20360

Straight Fluted Machine Taps

- Ground Thread
- Material:Alloy Steel,HSS,HSS-E
- Bright Finish,TiN Coated
- Standard:ГОСТ

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M36×1.5	144	39	TR15360
M39×4	170	60	TR40390
M39×3	170	60	TR30390
M39×2	149	39	TR20390
M39×1.5	149	39	TR15390
M40×3	170	60	TR30400
M40×2	149	39	TR20400
M40×1.5	149	39	TR15400
M42×4.5	170	60	TR45420
M42×3	170	60	TR30420
M42×2	149	39	TR20420
M42×1.5	149	39	TR15420
M45×4.5	187	67	TR45450
M45×3	187	67	TR30450
M45×2	165	45	TR20450

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M45×1.5	165	45	TR15450
M48×5	187	67	TR50480
M48×4	187	67	TR40480
M48×3	187	67	TR30480
M48×2	165	45	TR20480
M48×1.5	165	45	TR15480
M50×3	187	67	TR30500
M50×2	165	45	TR20500
M50×1.5	165	45	TR15500
M52×5	200	70	TR50520
M52×4	200	70	TR40520
M52×3	200	70	TR30520
M52×2	175	45	TR20520
M52×1.5	175	45	TR15520

JIS Taps Series

- High Speed Steel
- Standard:JIS B 4430 JIS B 4436

Size (mm)	OAL (mm)	Thread Length(mm)	Straight Fluted Order No.	Spiral Fluted Order No.	Spiral Pointed Order No.
M1×0.25	30	8	TJ12010	—	—
M1.1×0.25	32	9	TJ12011	—	—
M1.2×0.25	32	9	TJ12012	—	—
M1.4×0.3	34	11	TJ13014	—	—
M1.6×0.35	36	13	TJ13016	—	—
M1.7×0.35	36	13	TJ13017	—	—
M1.8×0.35	36	13	TJ13018	—	—
M1.8×0.2	36	6	TJ12018	—	—
M2×0.4	40	15	TJ14020	TJ24020	TJ34020
M2×0.25	40	8	TJ12020	TJ22020	TJ32020
M2.2×0.45	42	15	TJ14022	TJ24022	TJ34022
M2.3×0.4	42	15	TJ14023	TJ24023	TJ34023
M2.5×0.45	44	16	TJ14025	TJ24025	TJ34025
M2.5×0.35	44	10	TJ13025	TJ23025	TJ33025
M2.6×0.45	44	16	TJ14026	TJ24026	TJ34026
M3×0.6	46	18	TJ16030	TJ26030	TJ36030
M3×0.5	46	18	TJ15030	TJ25030	TJ35030
M3×0.35	46	10	TJ13030	TJ23030	TJ33030
M3.5×0.6	48	18	TJ16035	TJ26035	TJ36035
M3.5×0.35	48	10	—	—	TJ33035
M4×0.7	52	20	TJ17040	TJ27040	TJ37040
M4×0.5	52	15	TJ15040	TJ25040	TJ35040
M4.5×0.75	55	20	TJ17045	TJ27045	—
M4.5×0.5	52	15	TJ15045	TJ25045	—
M5×0.8	60	22	TJ18050	TJ28050	TJ38050
M5×0.5	52	15	TJ15050	TJ25050	TJ35050
M5.5×0.5	52	15	TJ15055	TJ25055	TJ35055
M6×1	62	24	TJ10060	TJ20060	TJ30060
M6×0.75	62	20	TJ17060	TJ27060	TJ37060
M6×0.5	55	15	TJ15060	TJ25060	TJ35060
M7×1	65	26	TJ10070	TJ20070	TJ30070
M7×0.75	62	20	TJ17070	TJ27070	TJ37070
M7×0.5	55	15	TJ15070	TJ25070	TJ35070

Size (mm)	OAL (mm)	Thread Length(mm)	Straight Fluted Order No.	Spiral Fluted Order No.	Spiral Pointed Order No.
M8×1.25	70	30	TJ12080	TJ22080	TJ32080
M8×1	70	30	TJ10080	TJ20080	TJ30080
M8×0.75	62	20	TJ17080	TJ27080	TJ37080
M8×0.5	55	15	TJ15080	—	—
M9×1.25	72	30	—	TJ22090	—
M9×1	70	30	—	TJ20090	—
M9×0.75	62	20	—	TJ27090	—
M10×1.5	75	32	TJ11100	TJ21100	TJ31100
M10×1.25	75	32	TJ12100	TJ22100	TJ32100
M10×1	70	30	TJ10100	TJ20100	TJ30100
M10×0.75	62	20	TJ17100	TJ27100	TJ37100
M10×0.5	55	15	TJ15100	TJ25100	TJ35100
M11×1.5	80	38	TJ15110	TJ25110	TJ35110
M11×1.25	80	38	TJ12110	TJ22110	TJ32110
M11×1	70	30	TJ10110	TJ20110	TJ30110
M12×1.75	82	38	TJ17120	TJ27120	TJ37120
M12×1.5	82	38	TJ15120	TJ25120	TJ35120
M12×1.25	80	38	TJ12120	TJ22120	TJ32120
M12×1	70	30	TJ10120	TJ20120	TJ30120
M14×2	88	42	TJ10140	TJ20140	TJ30140
M14×1.5	88	42	TJ15140	TJ25140	TJ35140
M14×1.25	88	42	TJ12140	TJ22140	TJ32140
M14×1	70	30	TJ11140	TJ21140	TJ31140
M15×1.5	90	42	TJ15150	TJ25150	TJ35150
M15×1	70	30	TJ10150	TJ20150	TJ30150
M16×2	95	45	TJ10160	TJ20160	TJ30160
M16×1.75	95	45	TJ17160	TJ27160	TJ37160
M16×1.5	95	45	TJ15160	TJ25160	TJ35160
M16×1	70	30	TJ11160	TJ21160	TJ31160
M17×1.5	95	45	TJ15170	TJ25170	TJ35170
M17×1	80	30	TJ10170	TJ20170	TJ30170
M18×2.5	100	48	TJ12180	TJ22180	TJ32180
M18×2	95	45	TJ10180	TJ20180	TJ30180
M18×1.5	95	45	TJ15180	TJ25180	TJ35180
M18×1	80	30	TJ11180	TJ21180	TJ31180
M20×2.5	105	50	TJ12200	TJ22200	TJ32200
M20×2	95	45	TJ10200	TJ20200	TJ30200
M20×1.5	95	45	TJ15200	TJ25200	TJ35200
M20×1	80	30	TJ11200	TJ21200	TJ31200
M22×2.5	115	55	TJ12220	TJ22220	TJ32220
M22×2	95	45	TJ10220	TJ20220	TJ30220
M22×1.5	95	45	TJ15220	TJ25220	TJ35220
M22×1	85	30	TJ11220	TJ21220	TJ31220
M24×3	120	58	TJ13240	TJ23240	TJ33240
M24×2	95	45	TJ12240	TJ22240	TJ32240
M24×1.5	95	45	TJ15240	TJ25240	TJ35240
M24×1	90	30	TJ11240	TJ21240	TJ31240
M25×2	95	45	TJ10250	TJ20250	TJ30250
M25×1.5	95	45	TJ15250	TJ25250	TJ35250
M25×1	95	30	TJ11250	TJ21250	TJ31250
M26×1.5	95	45	TJ15260	TJ25260	TJ35260
M27×3	130	62	TJ13270	TJ23270	TJ33270
M27×2	95	45	TJ12270	TJ22270	TJ32270
M27×1.5	95	45	TJ15270	TJ25270	TJ35270
M27×1	95	30	TJ11270	TJ21270	TJ31270
M28×2	105	45	TJ10280	TJ20280	TJ30280
M28×1.5	105	45	TJ15280	TJ25280	TJ35280
M28×1	105	30	TJ11280	TJ21280	TJ31280
M30×3.5	135	65	TJ13300	TJ23300	TJ33300
M30×3	135	65	TJ10300	TJ20300	TJ30300
M30×2	105	45	TJ12300	TJ22300	TJ32300
M30×1.5	105	45	TJ15300	TJ25300	TJ35300
M30×1	105	30	TJ11300	TJ21300	TJ31300
M32×3.5	145	70	TJ13320	TJ23320	TJ33320
M32×2	105	45	TJ12320	TJ22320	TJ32320

JIS Taps Series

- High Speed Steel
- Standard:JIS B 4430 JIS B 4436

Size (mm)	OAL (mm)	Thread Length(mm)	Straight Fluted Order No.	Spiral Fluted Order No.	Spiral Pointed Order No.
M32×1.5	105	45	TJ15320	TJ25320	TJ35320
M33×3.5	145	70	TJ13330	TJ23330	TJ33330
M33×3	145	70	TJ10330	TJ20330	TJ30330
M33×2	110	45	TJ12330	TJ22330	TJ32330
M33×1.5	110	45	TJ15330	TJ25330	TJ35330
M35×1.5	110	45	TJ15350	TJ25350	TJ35350
M36×4	155	75	TJ14360	TJ24360	TJ34360
M36×3	155	75	TJ13360	TJ23360	TJ33360
M36×2	110	45	TJ12360	TJ22360	TJ32360
M36×1.5	110	45	TJ15360	TJ25360	TJ35360
M38×1.5	115	45	TJ15380	TJ25380	—
M39×4	165	80	TJ14390	TJ24390	—
M39×3	165	80	TJ13390	TJ23390	—
M39×2	115	45	TJ12390	TJ22390	—
M39×1.5	115	45	TJ15390	TJ25390	—
M40×3	165	80	TJ13400	TJ23400	—
M40×2	115	45	TJ12400	TJ22400	—
M40×1.5	115	45	TJ15400	TJ25400	—
M42×4.5	175	85	TJ15420	TJ25420	—
M42×4	175	80	TJ14420	TJ24420	—
M42×3	175	80	TJ13420	TJ23420	—
M42×2	120	45	TJ12420	TJ22420	—
M42×1.5	120	45	TJ11420	TJ21420	—
M45×4.5	180	85	TJ15450	TJ25450	—
M45×4	180	80	TJ14450	TJ24450	—
M45×3	180	80	TJ13450	TJ23450	—
M45×2	120	45	TJ12450	TJ22450	—
M45×1.5	120	45	TJ11450	TJ21450	—
M48×5	185	90	TJ15480	TJ25480	—
M48×4	180	80	TJ14480	TJ24480	—
M48×3	180	80	TJ13480	TJ23480	—
M48×2	125	45	TJ12480	TJ22480	—
M48×1.5	125	45	TJ11480	TJ21480	—
M50×3	180	80	TJ13500	TJ23500	—
M50×2	130	45	TJ12500	TJ22500	—
M50×1.5	130	45	TJ15500	TJ25500	—

Straight Fluted Machine Taps

- High Speed Steel
- Standard: ISO 529

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M2x0.25	41	8	TG10020
M2x0.4	41	8	TG11020
M2.2x0.25	44.5	9.5	TG10022
M2.2x0.45	44.5	9.5	TG11022
M2.3x0.45	44.5	9.5	TG10023
M2.5x0.45	44.5	9.5	TG10025
M2.5x0.35	44.5	9.5	TG11025
M2.6x0.45	44.5	9.5	TG10026
M3x0.35	48	11	TG10030
M3x0.5	48	11	TG11030
M3.5x0.35	50	13	TG10035
M3.5x0.6	50	13	TG11035
M4x0.5	53	13	TG10040
M4x0.7	53	13	TG11040

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M4.5x0.5	53	13	TG10045
M4.5x0.75	53	13	TG11045
M5x0.5	58	16	TG10050
M5x0.8	58	16	TG11050
M5.5x0.5	62	17	TG10055
M6x0.5	66	19	TG10060
M6x0.75	66	19	TG11060
M6x1	66	19	TG12060
M7x0.5	66	19	TG10070
M7x0.75	66	19	TG11070
M7x1	66	19	TG12070
M8x0.5	66	19	TG10080
M8x0.75	66	19	TG11080
M8x1	72	22	TG12080

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M8x1.25	72	22	TG13080
M9x0.5	66	19	TG10090
M9x0.75	66	19	TG11090
M9x1	72	22	TG12090
M9x1.25	72	22	TG13090
M10x0.5	73	20	TG10100
M10x0.75	73	20	TG11100
M10x1	80	24	TG12100
M10x1.25	80	24	TG13100
M10x1.5	80	24	TG14100
M11x0.5	80	22	TG10110
M11x0.75	80	22	TG11110
M11x1	80	22	TG12110
M11x1.25	80	24	TG13110
M11x1.5	85	25	TG14110
M12x0.5	80	22	TG10120
M12x0.75	80	22	TG11120
M12x1	80	22	TG13120
M12x1.25	89	29	TG14120
M12x1.5	89	29	TG15120
M12x1.75	89	29	TG16120
M13x1	80	22	TG10130
M13x1.25	89	29	TG11130
M13x1.5	89	29	TG12130
M14x1	87	22	TG10140
M14x1.25	95	30	TG11140
M14x1.5	95	30	TG12140
M14x1.75	95	30	TG13140
M14x2	95	30	TG14140
M15x1	87	22	TG10150
M15x1.5	95	30	TG11150
M16x1	92	22	TG10160
M16x1.25	102	32	TG11160
M16x1.5	102	32	TG12160
M16x1.75	102	32	TG13160
M16x2	102	32	TG14160
M17x1.5	102	32	TG10170
M18x1	97	22	TG10180
M18x1.5	112	37	TG11180
M18x1.75	112	37	TG12180
M18x2	112	37	TG13180
M18x2.5	112	37	TG14180
M19x1.5	112	37	TG10190
M20x1	102	22	TG10200
M20x1.5	112	37	TG11200
M20x2	112	37	TG12200
M20x2.5	112	37	TG13200
M22x1	109	24	TG10220
M22x1.5	118	38	TG11220
M22x2	118	38	TG12220
M22x2.5	118	38	TG13220
M24x1	114	24	TG10240
M24x1.5	130	45	TG11240
M24x2	130	45	TG12240
M24x2.5	130	45	TG13240
M24x3	130	45	TG14240
M25x1.5	130	45	TG10250
M25x2	130	45	TG11250
M26x1	114	24	TG10260
M26x1.5	120	35	TG11260
M27x1	120	25	TG10270
M27x1.5	127	37	TG11270
M27x2	127	37	TG12270
M27x3	135	45	TG13270
M28x1	120	25	TG10280

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M28x1.5	127	37	TG11280
M28x2	127	37	TG12280
M30x1	120	25	TG10300
M30x1.5	127	37	TG11300
M30x2	127	37	TG12300
M30x3	138	48	TG13300
M30x3.5	138	48	TG14300
M32x1.5	137	37	TG10320
M32x2	137	37	TG11320
M33x1.5	137	37	TG12330
M33x2	137	37	TG13330
M33x3	151	51	TG14330
M33x3.5	151	51	TG15330
M35x1.5	144	39	TG10350
M36x1.5	162	57	TG10360
M36x2	144	39	TG11360
M36x3	162	57	TG12360
M36x4	162	57	TG13360
M38x1.5	149	39	TG10380
M39x1.5	149	39	TG10390
M39x2	149	39	TG11390
M39x3	170	60	TG12390
M39x4	170	60	TG13390
M40x1.5	149	39	TG10400
M40x2	149	39	TG11400
M40x3	149	39	TG12400
M42x1.5	149	39	TG10420
M42x2	149	39	TG11420
M42x3	170	60	TG12420
M42x4	170	60	TG13420
M42x4.5	170	60	TG14420
M45x1.5	165	45	TG10450
M45x2	165	45	TG11450
M45x3	187	67	TG12450
M45x4	187	67	TG13450
M45x4.5	187	67	TG14450
M48x1.5	165	45	TG10480
M48x2	165	45	TG11480
M48x3	187	67	TG12480
M48x4	187	67	TG13480
M48x5	187	67	TG14480
M50x1.5	165	45	TG10500
M50x2	165	45	TG11500
M50x3	187	67	TG12500
M52x1.5	175	45	TG10520
M52x2	175	45	TG11520
M52x3	200	70	TG12520
M52x4	200	70	TG13520
M52x5	200	70	TG14520
M55x1.5	175	45	TG10550
M55x2	175	45	TG11550
M55x3	200	70	TG12550
M55x4	200	70	TG13550
M56x1.5	175	45	TG10560
M56x2	175	45	TG11560
M56x3	200	70	TG12560
M56x4	200	70	TG13560
M56x5.5	200	70	TG14560
M58x1.5	193	76	TG10580
M58x2	193	76	TG11580
M58x3	209	76	TG12580
M58x4	209	76	TG13580
M60x1.5	193	76	TG10600
M60x2	193	76	TG11600
M60x3	209	76	TG12600

Straight Fluted Machine Taps

- High Speed Steel
- Standard: ISO 529

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M60x4	209	76	TG13600
M60x5.5	221	76	TG14600
M62x1.5	193	76	TG10620
M62x2	193	76	TG11620
M62x3	209	76	TG12620
M62x4	209	76	TG13620
M64x1.5	193	79	TG10640
M64x2	193	79	TG11640
M64x3	209	79	TG12640
M64x4	209	79	TG13640
M64x6	224	79	TG14640
M65x1.5	193	79	TG10650
M65x2	193	79	TG11650
M65x3	209	79	TG12650
M65x4	209	79	TG13650
M68x1.5	203	79	TG10680
M68x2	203	79	TG11680
M68x3	219	79	TG12680
M68x4	219	79	TG13680
M68x6	234	79	TG14680
M70x1.5	203	79	TG10700
M70x2	203	79	TG11700
M70x3	219	79	TG12700
M70x4	219	79	TG13700
M70x6	234	79	TG14700
M72x1.5	203	79	TG10720
M72x2	203	79	TG11720
M72x3	219	79	TG12720
M72x4	219	79	TG13720
M72x6	234	79	TG14720
M75x1.5	203	79	TG10750

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M75x2	203	79	TG11750
M75x3	219	79	TG12750
M75x4	219	79	TG13750
M75x6	234	79	TG14750
M76x1.5	226	83	TG10760
M76x2	226	83	TG11760
M76x3	242	83	TG12760
M76x4	242	83	TG13760
M76x6	258	83	TG14760
M80x1.5	226	83	TG10800
M80x2	226	83	TG11800
M80x3	242	83	TG12800
M80x4	242	83	TG13800
M80x6	258	83	TG14800
M82x2	226	86	TG10820
M85x2	226	86	TG10850
M85x3	242	86	TG11850
M85x4	242	86	TG12850
M85x6	261	86	TG13850
M90x2	226	86	TG10900
M90x3	242	86	TG11900
M90x4	242	86	TG12900
M90x6	261	86	TG13900
M95x2	244	89	TG10950
M95x3	260	89	TG11950
M95x4	260	89	TG12950
M95x6	279	89	TG13950
M100x2	244	89	TG101000
M100x3	260	89	TG111000
M100x4	260	89	TG121000
M100x6	279	89	TG131000

Spiral Fluted Machine Taps

- High Speed Steel
- Standard: ISO 529

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M3x0.35	48	11	TG20030
M3x0.5	48	11	TG21030
M3.5x0.35	50	13	TG20035
M3.5x0.6	50	13	TG21035
M4x0.35	53	13	TG20040
M4x0.5	53	13	TG21040
M4x0.7	53	13	TG22040
M5x0.5	58	16	TG20050
M5x0.8	58	16	TG21050
M5.5x0.5	62	17	TG20055
M6x0.5	66	19	TG20060
M6x0.75	66	19	TG21060
M6x1	66	19	TG22060
M7x0.5	66	19	TG20070
M7x0.75	66	19	TG21070
M7x1	66	19	TG22070
M8x0.5	66	19	TG20080
M8x0.75	66	19	TG21080
M8x1	69	19	TG22080
M8x1.25	72	22	TG23080

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M9x0.5	66	19	TG20090
M9x0.75	66	19	TG21090
M9x1	66	19	TG22090
M9x1.25	72	22	TG23090
M10x0.5	73	20	TG20100
M10x0.75	73	20	TG21100
M10x1	76	20	TG22100
M10x1.25	76	20	TG23100
M10x1.5	80	24	TG24100
M11x0.5	80	22	TG20110
M11x0.75	80	22	TG21110
M11x1	80	22	TG22110
M11x1.25	80	22	TG23110
M11x1.5	85	25	TG24110
M12x0.5	80	22	TG20120
M12x0.75	80	22	TG21120
M12x1	80	22	TG23120
M12x1.25	84	24	TG24120
M12x1.5	89	29	TG25120
M12x1.75	89	29	TG26120

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M13x1	80	22	TG20130
M13x1.25	84	24	TG21130
M13x1.5	89	29	TG22130
M14x1	87	22	TG20140
M14x1.25	90	25	TG21140
M14x1.75	95	30	TG22140
M14x1.5	95	30	TG23140
M14x2	95	30	TG24140
M15x1	87	22	TG20150
M15x1.5	95	30	TG21150
M16x1	92	22	TG20160
M16x1.25	95	25	TG21160
M16x1.5	102	32	TG22160
M16x1.75	102	32	TG23160
M16x2	102	32	TG24160
M17x1.5	102	32	TG20170
M18x1	97	22	TG20180
M18x1.5	104	29	TG21180
M18x2	112	37	TG22180
M18x2.5	112	37	TG23180
M20x1	102	22	TG20200
M20x1.5	104	29	TG21200
M20x2	112	37	TG22200
M20x2.5	112	37	TG23200
M22x1	109	24	TG20220
M22x1.5	113	33	TG21220
M22x2	118	38	TG22220
M22x2.5	118	38	TG23220
M24x1	114	24	TG20240
M24x1.5	120	35	TG21240
M24x2	120	35	TG22240
M24x3	130	45	TG23240
M25x1.5	120	35	TG20250
M25x2	120	35	TG21250
M26x1	114	24	TG20260
M26x1.5	120	35	TG21260
M27x1	120	25	TG20270
M27x1.5	127	37	TG21270
M27x2	127	37	TG22270
M27x3	135	45	TG23270
M28x1	120	25	TG20280
M28x1.5	127	37	TG21280
M28x2	127	37	TG22280
M30x1	120	25	TG20300
M30x1.5	127	37	TG21300

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M30x2	127	37	TG22300
M30x3	138	48	TG23300
M30x3.5	138	48	TG24300
M32x1.5	137	37	TG20320
M32x2	137	37	TG21320
M33x1.5	137	37	TG22330
M33x2	137	37	TG23330
M33x3	151	51	TG24330
M33x3.5	151	51	TG25330
M35x1.5	144	39	TG20350
M36x1.5	144	39	TG20360
M36x2	144	39	TG21360
M36x3	162	57	TG22360
M36x4	162	57	TG23360
M38x1.5	149	39	TG20380
M39x1.5	149	39	TG20390
M39x2	149	39	TG21390
M39x3	170	60	TG22390
M39x4	170	60	TG23390
M40x1.5	149	39	TG20400
M40x2	149	39	TG21400
M40x3	170	60	TG22400
M42x1.5	149	39	TG20420
M42x2	149	39	TG21420
M42x3	170	60	TG22420
M42x4	170	60	TG23420
M42x4.5	170	60	TG24420
M45x1.5	165	45	TG20450
M45x2	165	45	TG21450
M45x3	187	67	TG22450
M45x4	187	67	TG23450
M45x4.5	187	67	TG24450
M48x1.5	165	45	TG20480
M48x2	165	45	TG21480
M48x3	187	67	TG22480
M48x4	187	67	TG23480
M48x5	187	67	TG24480
M50x1.5	165	45	TG20500
M50x2	165	45	TG21500
M50x3	187	67	TG22500
M52x1.5	175	45	TG20520
M52x2	175	45	TG21520
M52x3	200	70	TG22520
M52x4	200	70	TG23520
M52x5	200	70	TG24520

Spiral Pointed Machine Taps

- High Speed Steel
- Standard: ISO 529

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M3x0.35	48	11	TG30030
M3x0.5	48	11	TG31030
M3.5x0.35	50	13	TG30035
M3.5x0.6	50	13	TG31035
M4x0.5	53	13	TG30040
M4x0.7	53	13	TG31040
M4.5x0.5	53	13	TG30045
M4.5x0.75	53	13	TG31045
M5x0.5	58	16	TG30050
M5x0.8	58	16	TG31050
M5.5x0.5	62	17	TG30055

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M6x0.5	66	19	TG30060
M6x0.75	66	19	TG31060
M6x1	66	19	TG32060
M7x0.5	66	19	TG30070
M7x0.75	66	19	TG31070
M7x1	66	19	TG32070
M8x0.5	66	19	TG30080
M8x0.75	66	19	TG31080
M8x1	69	19	TG32080
M8x1.25	72	22	TG33080
M9x0.5	66	19	TG30090

Spiral Pointed Machine Taps

- High Speed Steel
- Standard: ISO 529

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M9x0.75	66	19	TG31090
M9x1	69	19	TG32090
M9x1.25	72	22	TG33090
M10x0.5	73	20	TG30100
M10x0.75	73	20	TG31100
M10x1	76	20	TG32100
M10x1.25	76	20	TG33100
M10x1.5	80	24	TG34100
M11x0.5	80	22	TG30110
M11x0.75	80	22	TG31110
M11x1	80	22	TG32110
M11x1.25	80	22	TG33110
M11x1.5	85	25	TG34110
M12x0.5	80	22	TG30120
M12x0.75	80	22	TG31120
M12x1	80	22	TG33120
M12x1.25	84	24	TG34120
M12x1.5	89	29	TG35120
M12x1.75	89	29	TG36120
M13x1	80	22	TG30130
M13x1.25	84	24	TG31130
M13x1.5	89	29	TG32130
M14x1	87	22	TG30140
M14x1.25	90	25	TG31140
M14x1.75	95	30	TG32140
M14x1.5	95	30	TG33140
M14x2	95	30	TG34140
M15x1	87	22	TG30150
M15x1.5	95	30	TG31150
M16x1	92	22	TG30160
M16x1.25	92	22	TG31160
M16x1.5	102	32	TG32160
M16x1.75	102	32	TG33160
M16x2	102	32	TG34160
M17x1.5	102	32	TG30170
M18x1	97	22	TG30180
M18x1.5	104	29	TG31180

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M18x2	112	37	TG32180
M18x2.5	112	37	TG33180
M20x1	102	22	TG30200
M20x1.5	104	29	TG31200
M20x2	112	37	TG32200
M20x2.5	112	37	TG33200
M22x1	109	24	TG30220
M22x1.5	113	33	TG31220
M22x2	118	38	TG32220
M22x2.5	118	38	TG33220
M24x1	114	24	TG30240
M24x1.5	120	35	TG31240
M24x2	120	35	TG32240
M24x3	130	45	TG33240
M25x1.5	120	35	TG30250
M25x2	120	35	TG31250
M26x1	114	24	TG30260
M26x1.5	120	35	TG31260
M27x1	120	25	TG30270
M27x1.5	127	37	TG31270
M27x2	127	37	TG32270
M27x3	135	45	TG33270
M28x1	120	25	TG30280
M28x1.5	127	37	TG31280
M28x2	127	37	TG32280
M30x1	120	25	TG30300
M30x1.5	127	37	TG31300
M30x2	127	37	TG32300
M30x3	138	48	TG33300
M30x3.5	138	48	TG34300
M32x1.5	137	37	TG30320
M32x2	137	37	TG31320
M33x1.5	137	37	TG32330
M33x2	137	37	TG33330
M33x3	151	51	TG34330
M33x3.5	151	51	TG35330

Straight Fluted Machine Taps-3pcs/Set

- High Speed Steel
- Standard: ISO 529

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M2x0.25	41	8	TGU0020
M2x0.4	41	8	TGU1020
M2.2x0.25	44.5	9.5	TGU0022
M2.2x0.45	44.5	9.5	TGU1022
M2.3x0.45	44.5	9.5	TGU0023
M2.5x0.45	44.5	9.5	TGU0025
M2.5x0.35	44.5	9.5	TGU1025
M2.6x0.45	44.5	9.5	TGU0026
M3x0.35	48	11	TGU0030
M3x0.5	48	11	TGU1030
M3.5x0.35	50	13	TGU0035
M3.5x0.6	50	13	TGU1035
M4x0.35	53	13	TGU0040
M4x0.5	53	13	TGU1040
M4x0.7	53	13	TGU2040
M5x0.5	58	16	TGU0050

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M5x0.8	58	16	TGU1050
M5.5x0.5	62	17	TGU0055
M6x0.5	66	19	TGU0060
M6x0.75	66	19	TGU1060
M6x1	66	19	TGU2060
M7x0.5	66	19	TGU0070
M7x0.75	66	19	TGU1070
M7x1	66	19	TGU2070
M8x0.5	66	19	TGU0080
M8x0.75	66	19	TGU1080
M8x1	72	22	TGU2080
M8x1.25	72	22	TGU3080
M9x0.5	66	19	TGU0090
M9x0.75	66	19	TGU1090
M9x1	72	22	TGU2090
M9x1.25	72	22	TGU3090

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M10x0.5	73	20	TGU0100
M10x0.75	73	20	TGU1100
M10x1	80	24	TGU2100
M10x1.25	80	24	TGU3100
M10x1.5	80	24	TGU4100
M11x0.5	80	22	TGU0110
M11x0.75	80	22	TGU1110
M11x1	80	22	TGU2110
M11x1.25	80	24	TGU3110
M11x1.5	85	25	TGU4110
M12x0.5	80	22	TGU0120
M12x0.75	80	22	TGU1120
M12x1	80	22	TGU3120
M12x1.25	89	29	TGU4120
M12x1.5	89	29	TGU5120
M12x1.75	89	29	TGU6120
M13x1	80	22	TGU0130
M13x1.25	89	29	TGU1130
M13x1.5	89	29	TGU2130
M14x1	87	22	TGU0140
M14x1.25	95	30	TGU1140
M14x1.5	95	30	TGU2140
M14x1.75	95	30	TGU3140
M14x2	95	30	TGU4140
M15x1	87	22	TGU0150

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M15x1.5	95	30	TGU1150
M16x1	92	22	TGU0160
M16x1.25	102	32	TGU1160
M16x1.5	102	32	TGU2160
M16x1.75	102	32	TGU3160
M16x2	102	32	TGU4160
M17x1.5	102	32	TGU0170
M18x1	97	22	TGU0180
M18x1.5	112	37	TGU1180
M18x1.75	112	37	TGU2180
M18x2	112	37	TGU3180
M18x2.5	112	37	TGU4180
M19x1.5	112	37	TGU0190
M20x1	102	22	TGU0200
M20x1.5	112	37	TGU1200
M20x2	112	37	TGU2200
M20x2.5	112	37	TGU3200
M22x1	109	24	TGU0220
M22x1.5	118	38	TGU1220
M22x2	118	38	TGU2220
M22x2.5	118	38	TGU3220
M24x1	114	24	TGU0240
M24x1.5	130	45	TGU1240
M24x2	130	45	TGU2240
M24x3	130	45	TGU3240

Taper Pipe Taps(NPT/NPTF)

- High-Speed Steel-Ground Thread
- Standard: ANSI B94.9

Size	OAL (mm)	Thread Length(mm)	NPT Order No.	NPTF Order No.
1/16-27	2-1/8	11/16	TP1127	TP2127
1/8-27(Lg.Sk.)	2-1/8	3/4	TP1227	TP2227
1/8-27(Sm.Sk.)	2-1/8	3/4	TP1227S	TP2227S
1/4-18	2-7/16	1-1/16	TP1418	TP2418
3/8-18	2-9/16	1-1/16	TP1618	TP2618
1/2-14	3-1/8	1-3/8	TP1814	TP2814
3/4-14	3-1/4	1-3/8	TP11214	TP21214
1-11-1/2	3-3/4	1-3/4	TP11611	TP21611

Size	OAL (mm)	Thread Length(mm)	NPT Order No.	NPTF Order No.
1-1/4-11-1/2	4"	1-3/4	TP12011	TP22011
1-1/2-11-1/2	4-1/4	1-3/4	TP12411	TP22411
2-11-1/2	4-1/2	1-3/4	TP13211	TP23211
2-1/2-8	5-1/2	2-9/16	TP14008	TP24008
3-8	6"	2-5/8	TP14808	TP24808
3-1/2-8	6-1/2	2-11/16	TP15608	TP25608
4-8	6-3/4	2-3/4	TP16408	TP26408

Straight Pipe Taps(NPS/NPSF)

- High-Speed Steel-Ground Thread
- Standard: ANSI B94.9

Size	OAL (in.)	Thread Length(in.)	NPS Order No.	NPSF Order No.
1/16-27	2-1/8	11/16	TP3127	TP4127
1/8-27(Lg.Sk.)	2-1/8	3/4	TP3227	TP4227
1/8-27(Sm.Sk.)	2-1/8	3/4	TP3227S	TP4227S
1/4-18	2-7/16	1-1/16	TP3418	TP4418
3/8-18	2-9/16	1-1/16	TP3618	TP4618
1/2-14	3-1/8	1-3/8	TP3814	TP4814
3/4-14	3-1/4	1-3/8	TP31214	TP41214
1-11-1/2	3-3/4	1-3/4	TP31611	TP41611

Size	OAL (in.)	Thread Length(in.)	NPS Order No.	NPSF Order No.
1-1/4-11-1/2	4"	1-3/4	TP32011	TP42011
1-1/2-11-1/2	4-1/4	1-3/4	TP32411	TP42411
2-11-1/2	4-1/2	1-3/4	TP33211	TP43211
2-1/2-8	5-1/2	2-9/16	TP34008	TP44008
3-8	6"	2-5/8	TP34808	TP44808
3-1/2-8	6-1/2	2-11/16	TP35608	TP45608
4-8	6-3/4	2-3/4	TP36408	TP46408

Taper Pipe Taps Interrupted Thread(NPT/NPTF)

- High-Speed Steel-Ground Thread
- Standard: ANSI B94.9

Size	OAL (in.)	Thread Length(in.)	NPT Order No.	NPTF Order No.
1/8-27(Lg.Sk.)	2-1/8	3/4	TP5227	TP6227
1/8-27(Sm.Sk.)	2-1/8	3/4	TP5227S	TP6227S
1/4-18	2-7/16	1-1/16	TP5418	TP6418
3/8-18	2-9/16	1-1/16	TP5618	TP6618
1/2-14	3-1/8	1-3/8	TP5814	TP6814

Size	OAL (in.)	Thread Length(in.)	NPT Order No.	NPTF Order No.
3/4-14	3-1/4	1-3/8	TP51214	TP61214
1-11-1/2	3-3/4	1-3/4	TP51611	TP61611
1-1/4-11-1/2	4"	1-3/4	TP52011	TP62011
1-1/2-11-1/2	4-1/4	1-3/4	TP52411	TP62411
2-11-1/2	4-1/2	1-3/4	TP53211	TP63211

Straight Pipe Taps Interrupted Thread(NPS)

- High-Speed Steel-Ground Thread
- Standard: ANSI

Size	OAL (in.)	Thread Length (in.)	NPS Order No.
1/8-27(Lg.Sk.)	2-1/8	3/4	TP7227
1/8-27(Sm.Sk.)	2-1/8	3/4	TP7227S
1/4-18	2-7/16	1-1/16	TP7418
3/8-18	2-9/16	1-1/16	TP7618

Size	OAL (in.)	Thread Length (in.)	NPS Order No.
1/2-14	3-1/8	1-3/8	TP7814
3/4-14	3-1/4	1-3/8	TP71214
1"-11-1/2	3-3/4	1-3/4	TP71611

Combination Drills & Taps

- High-Speed Steel-Ground Thread

Metric Sizes

Size (mm)	OAL (in.)	Thread Length (in.)	Drill Length (in.)	Drill Size (in.)	Order No.
M3×0.5	1-15/16	13/32	9/32	0.1015	TC15030
M3.5×0.6	2"	7/16	5/16	0.118	TC16035
M4×0.7	2-1/8	1/2	3/8	0.134	TC17040
M4.5×0.75	2-3/8	5/8	13/32	0.152	TC17045
M5×0.8	2-3/8	5/8	13/32	0.17	TC18050

Size (mm)	OAL (in.)	Thread Length (in.)	Drill Length (in.)	Drill Size (in.)	Order No.
M6×1	2-1/2	25/32	17/32	0.203	TC10060
M7×1	2-27/32	15/16	11/16	0.242	TC10070
M8×1.25	2-27/32	15/16	11/16	0.2735	TC12080
M10×1.5	3-3/8	1-1/16	13/16	0.344	TC15100
M12×1.75	4-1/16	1-3/8	1-1/8	0.414	TC17120

Fractional Sizes

Size	OAL (in.)	Thread Length (in.)	Drill Length (in.)	Drill Size	Order No.
4-40NC	1-7/8	9/16	1/4	0.089	TC20440
4-48NF	1-7/8	9/16	1/4	0.093	TC20448
5-40NC	1-15/16	5/8	9/32	0.1015	TC20540
5-44NF	1-15/16	5/8	9/32	0.104	TC20544
6-32NC	2"	11/16	5/16	0.1095	TC20632
6-40NF	2"	11/16	5/16	0.115	TC20640
8-32NC	2-1/8	3/4	3/8	0.136	TC20832
8-36NF	2-1/8	3/4	3/8	0.1385	TC20836
10-24NC	2-3/8	7/8	13/32	0.152	TC21024
10-32NF	2-3/8	7/8	13/32	0.161	TC21032
12-24NC	2-3/8	7/8	15/32	0.177	TC21224

Size	OAL (in.)	Thread Length (in.)	Drill Length (in.)	Drill Size	Order No.
12-28NF	2-3/8	7/8	15/32	0.1835	TC21228
1/4-20NC	2-1/2	15/16	17/32	0.201	TC2420
1/4-28NF	2-1/2	15/16	17/32	0.2175	TC2428
5/16-18NC	3"	1-1/8	11/16	0.257	TC2518
5/16-24NF	3"	1-1/8	11/16	0.272	TC2524
3/8-16NC	3-1/2	1-1/4	13/16	0.3125	TC2616
3/8-24NF	3-1/2	1-1/4	13/16	0.3345	TC2624
7/16-14NC	3-7/8	1-7/16	1"	0.368	TC2714
7/16-20NF	3-7/8	1-7/16	1"	0.389	TC2720
1/2-13NC	4-1/4	1-21/32	1-1/8	0.425	TC2813
1/2-20NF	4-1/4	1-21/32	1-1/8	0.451	TC2820

Acme Tandem Taps

- High Speed Steel
- Ground Thread
- Standard: ANSI

Size (in.)	OAL (in.)	Thread Length(in.)	Max.Depth of Nut Bronze& Steel(in.)	Max.Depth of Nut Brass&Cast Iron(in.)	Order No.
1/2-10	5"	2-9/16	1"	1-1/2	TT0810
5/8-8	6-1/4	3-3/16	1-1/4	1-7/8	TT1008
3/4-6	7-15/16	4-5/16	1-1/2	2-1/4	TT1206
7/8-6	8-5/8	4-3/8	1-3/4	2-5/8	TT1406

Size (in.)	OAL (in.)	Thread Length(in.)	Max.Depth of Nut Bronze& Steel(in.)	Max.Depth of Nut Brass&Cast Iron(in.)	Order No.
1-1/8-5	10-3/4	5-1/4	2-1/4	3-3/8	TT1805
1-1/4-5	11-1/8	5-1/4	2-1/2	3-3/4	TT2005
1-3/8-4	12-1/4	5-7/8	2-3/4	4-1/8	TT2204
1-1/2-4	12-5/8	5-7/8	3"	4-1/2	TT2404

Nut Taps

- High-Speed Steel-Ground Thread
- Standard: ANSI

Size	H Limit	OAL (in.)	Thread Length(in.)	Order No.
1/4-20NC	H3	5"	1-5/8	TN30420
1/4-28NF	H3	5"	1-1/4	TN30428
5/16-18NC	H3	5-1/2	1-13/16	TN30518
5/16-24NF	H3	5-1/2	1-3/8	TN30524
3/8-16NC	H3	6"	2"	TN30616
3/8-24NF	H3	6"	1-1/2	TN30624
7/16-14NC	H3	6-1/2	2-3/8	TN30714
7/16-20NF	H3	6-1/2	1-3/4	TN30720
1/2-13NC	H3	7"	2-1/2	TN30813
1/2-20NF	H3	7"	1-7/8	TN30820
9/16-12NC	H3	7-1/2	2-3/4	TN30912
9/16-18NF	H3	7-1/2	2"	TN30918
5/8-11NC	H3	8"	3"	TN31011
5/8-18NF	H3	8"	2-1/4	TN31018
11/16-11NC	H3	8-1/2	3"	TN31111

Size	H Limit	OAL (in.)	Thread Length(in.)	Order No.
11/16-16NF	H3	8-1/2	2-1/4	TN31116
3/4-10NC	H3	9"	3-1/4	TN31210
3/4-16NF	H3	9"	2-1/2	TN31216
7/8-9NC	H4	10"	3-5/8	TN41409
7/8-14NF	H4	10"	2-3/4	TN41414
1/8NC	H4	11"	4"	TN41608
1-12NF	H4	11"	3-1/2	TN41612
1-14NS	H4	11"	3"	TN41614
1-1/8-7NC	H4	11-1/2	4-3/4	TN41807
1-1/8-12NF	H4	11-1/2	3-1/2	TN41812
1-1/4-7NC	H4	12"	4-3/4	TN42007
1-1/4-12NF	H4	12"	3-1/2	TN42012
1-3/8-6NC	H4	12-1/2	5-3/8	TN42206
1-3/8-12NF	H4	12-1/2	4"	TN42212
1-1/2-6NC	H4	13"	5-3/8	TN42406
1-1/2-12NF	H4	13"	4"	TN42412

High Speed Steel Pulley Taps Plug Style

- Standard: ANSI B94.9

Size	Thread Lengt(in.)	No. of Flutes	6" OAL Order No.	8" OAL Order No.	10" OAL Order No.	12" OAL Order No.
6-32	11/16	4	TL060632	TL080632	—	—
6-40	11/16	4	TL060640	—	—	—
8-32	13/16	4	TL060832	TL080832	—	—
8-36	13/16	4	TL060836	—	—	—
10-24	15/16	4	TL061024	TL081024	—	—
10-32	15/16	4	TL061032	—	—	—
1/4-20	1"	4	TL06420	TL08420	—	—
1/4-28	1"	4	TL06428	TL08428	—	—
5/16-18	1-1/8	4	TL06518	TL08518	—	—
5/16-24	1-1/8	4	TL06524	TL08524	TL10524	—
3/8-16	1-1/4	4	TL06616	TL08616	TL10616	—
3/8-24	1-1/4	4	TL06624	TL08624	TL10624	—
7/16-14	1-7/16	4	TL06714	TL08714	TL10714	—
7/16-20	1-7/16	4	TL06720	TL08720	TL10720	—
1/2-13	1-21/32	4	TL06813	TL08813	TL10813	TL12813
1/2-20	1-21/32	4	TL06820	TL08820	TL10820	—
5/8-11	1-13/16	4	TL061011	TL081011	TL101011	TL121011
5/8-18	1-13/16	4	TL061018	TL081018	TL101018	TL121018
3/4-10	2"	4	—	TL081210	TL101210	TL121210
3/4-16	2"	4	—	TL081216	TL101216	—
7/8-9	2-1/4	4	—	TL081409	TL101409	TL121409
1-8	2-9/16	4	—	TL081608	TL101608	—

Thread Forming Taps

- High Speed Steel
- Standard:ANSI B 94.9

Size	H Limit	OAL (in.)	Thread Length(in.)	Order No.
5-44NF	H2	1-15/16	5/8	TF020544
5-40NC	H2	1-15/16	5/8	TF020540
6-48NS	H2	1-15/16	5/8	TF020648
6-48NS	H3	2"	11/16	TF030648
6-40UF	H2	2"	11/16	TF020640
6-36UN	H2	2"	11/16	TF020636
6-32NC	H3	2"	11/16	TF030632
7-48UN	H2	2-1/8	3/4	TF020748
7-32UN	H3	2-1/8	3/4	TF030732
8-48UN	H2	2-1/8	3/4	TF020848
8-40UN	H2	2-1/8	3/4	TF020840
8-36NF	H2	2-1/8	3/4	TF020836
8-36NF	H3	2-1/8	3/4	TF030836
8-32NC	H3	2-1/8	3/4	TF030832
8-24UN	H3	2-1/8	3/4	TF030824
10-56NS	H2	2-3/8	7/8	TF021056
10-48NS	H2	2-3/8	7/8	TF021048
10-48NS	H3	2-3/8	7/8	TF031048
10-40NS	H3	2-3/8	7/8	TF031040
10-36NS	H2	2-3/8	7/8	TF021036
10-32NF	H3	2-3/8	7/8	TF031032
10-28NS	H3	2-3/8	7/8	TF031028
10-24NC	H3	2-3/8	7/8	TF031024
12-48NS	H2	2-3/8	15/16	TF021248
12-40NS	H2	2-3/8	15/16	TF021240
12-36NS	H3	2-3/8	15/16	TF031236
12-32NEF	H3	2-3/8	15/16	TF031232
12-28NF	H3	2-3/8	15/16	TF031228
12-24NC	H3	2-3/8	15/16	TF031224
1/4-80UN	H2	2-1/2	1"	TF02480
1/4-48NS	H2	2-1/2	1"	TF02448
1/4-40NS	H2	2-1/2	1"	TF02440
1/4-40NS	H3	2-1/2	1"	TF03440
1/4-36NS	H2	2-1/2	1"	TF02436
1/4-32NEF	H3	2-1/2	1"	TF03432
1/4-28NF	H3	2-1/2	1"	TF03428
1/4-27NS	H3	2-1/2	1"	TF03427
1/4-26UN	H3	2-1/2	1"	TF03426
1/4-24NS	H3	2-1/2	1"	TF03424
1/4-20NC	H3	2-1/2	1"	TF03420
5/16-56UN	H2	2-23/32	1-1/8	TF02556
5/16-36NS	H2	2-23/32	1-1/8	TF02536

Size	H Limit	OAL (in.)	Thread Length(in.)	Order No.
5/16-36NS	H3	2-23/32	1-1/8	TF03536
5/16-32NEF	H2	2-23/32	1-1/8	TF02532
5/16-32NEF	H3	2-23/32	1-1/8	TF03532
5/16-30UN	H3	2-23/32	1-1/8	TF03530
5/16-28UN	H3	2-23/32	1-1/8	TF03528
5/16-27NS	H3	2-23/32	1-1/8	TF03527
5/16-24NF	H3	2-23/32	1-1/8	TF03524
5/16-22UN	H3	2-23/32	1-1/8	TF03522
5/16-20UN	H3	2-23/32	1-1/8	TF03520
5/16-18NC	H3	2-23/32	1-1/8	TF03518
3/8-48UN	H2	2-15/16	1-1/4	TF02648
3/8-40NS	H3	2-15/16	1-1/4	TF03640
3/8-32NEF	H3	2-15/16	1-1/4	TF03632
3/8-28UN	H3	2-15/16	1-1/4	TF03628
3/8-27NS	H3	2-15/16	1-1/4	TF03627
3/8-26UN	H3	2-15/16	1-1/4	TF03626
3/8-24NF	H3	2-15/16	1-1/4	TF03624
3/8-20UN	H3	2-15/16	1-1/4	TF03620
3/8-18NS	H3	2-15/16	1-1/4	TF03618
3/8-16NC	H3	2-15/16	1-1/4	TF03616
3/8-14UN	H3	2-15/16	1-1/4	TF03614
7/16-40NS	H3	3-5/32	1-7/16	TF03740
7/16-32UN	H3	3-5/32	1-7/16	TF03732
7/16-28NEF	H3	3-5/32	1-7/16	TF03728
7/16-27NS	H3	3-5/32	1-7/16	TF03727
7/16-24NS	H3	3-5/32	1-7/16	TF03724
7/16-20NF	H3	3-5/32	1-7/16	TF03720
7/16-18NS	H3	3-5/32	1-7/16	TF03718
7/16-16UN	H3	3-5/32	1-7/16	TF03716
7/16-14NC	H3	3-5/32	1-7/16	TF03714
1/2-56UN	H2	3-3/8	1-21/32	TF02856
1/2-40NS	H3	3-3/8	1-21/32	TF03840
1/2-32UN	H3	3-3/8	1-21/32	TF03832
1/2-28NEF	H3	3-3/8	1-21/32	TF03828
1/2-27NS	H3	3-3/8	1-21/32	TF03827
1/2-24NS	H3	3-3/8	1-21/32	TF03824
1/2-20NF	H3	3-3/8	1-21/32	TF03820
1/2-18NS	H3	3-3/8	1-21/32	TF03818
1/2-16UN	H3	3-3/8	1-21/32	TF03816
1/2-14NS	H3	3-3/8	1-21/32	TF03814
1/2-13NC	H3	3-3/8	1-21/32	TF03813
1/2-13NS	H3	3-3/8	1-21/32	TF03813S

Metric Thread Forming Taps

- High Speed Steel
- Standard：ANSI B 94.9

Size (mm)	OAL (in.)	Thread Length(in.)	Order No.
M3×0.6	1-15/16	5/8	TF10030
M3×0.5	1-15/16	5/8	TF11030
M3×0.35	1-15/16	5/8	TF12030
M3.5×0.6	2"	11/16	TF10035
M3.5×0.35	2"	11/16	TF11035
M4×0.75	2-1/8	3/4	TF10040
M4×0.7	2-1/8	3/4	TF11040
M4×0.5	2-1/8	3/4	TF12040
M4×0.35	2-1/8	3/4	TF13040
M4.5×0.75	2-3/8	7/8	TF10045
M4.5×0.75	2-3/8	7/8	TF11045
M4.5×0.5	2-3/8	7/8	TF12045
M5×1	2-3/8	7/8	TF10050
M5×0.9	2-3/8	7/8	TF11050
M5×0.8	2-3/8	7/8	TF12050
M5×0.75	2-3/8	7/8	TF13050
M5×0.5	2-3/8	7/8	TF14050
M5.5×0.9	2-3/8	15/16	TF10055
M5.5×0.5	2-3/8	15/16	TF11055
M6×1.25	2-1/2	1"	TF10060
M6×1	2-1/2	1"	TF11060
M6×0.75	2-1/2	1"	TF12060
M6×0.5	2-1/2	1"	TF13060
M6.3×1	2-1/2	1"	TF14060
M7×1.25	2-23/32	1-1/8	TF10070
M7×1	2-23/32	1-1/8	TF11070
M7×0.75	2-23/32	1-1/8	TF12070

Size (mm)	OAL (in.)	Thread Length(in.)	Order No.
M7×0.5	2-23/32	1-1/8	TF13070
M8×1.5	2-23/32	1-1/8	TF10080
M8×1.25	2-23/32	1-1/8	TF11080
M8×1	2-23/32	1-1/8	TF12080
M8×0.75	2-23/32	1-1/8	TF13080
M8×0.5	2-23/32	1-1/8	TF14080
M9×1.25	2-15/16	1-1/4	TF10090
M9×1	2-15/16	1-1/4	TF11090
M9×0.75	2-15/16	1-1/4	TF12090
M9×0.5	2-15/16	1-1/4	TF13090
M10×1.5	2-15/16	1-1/4	TF10100
M10×1.25	2-15/16	1-1/4	TF11100
M10×1	2-15/16	1-1/4	TF12100
M10×0.75	2-15/16	1-1/4	TF13100
M10×0.5	2-15/16	1-1/4	TF14100
M11×1.75	3-5/32	1-1/4	TF10110
M11×1.5	3-5/32	1-1/4	TF11110
M11×1.25	3-5/32	1-1/4	TF12110
M11×1	3-5/32	1-1/4	TF13110
M11×0.75	3-5/32	1-1/4	TF14110
M11×0.5	3-5/32	1-1/4	TF15110
M12×1.75	3-3/8	1-21/32	TF10120
M12×1.5	3-3/8	1-21/32	TF11120
M12×1.25	3-3/8	1-21/32	TF12120
M12×1	3-3/8	1-21/32	TF13120
M12×0.75	3-3/8	1-21/32	TF14120
M12×0.5	3-3/8	1-21/32	TF15120

Thread Forming Taps

- High Speed Steel
- Standard：DIN371

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M2×0.4	45	8	TF24020
M2.2×0.45	45	9	TF24022
M2.3×0.4	45	9	TF24023
M2.5×0.45	50	9	TF24025
M2.6×0.45	50	9	TF24026
M3×0.5	56	11	TF25030
M3.5×0.6	56	13	TF26035

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M4×0.7	63	13	TF27040
M5×0.8	70	16	TF28050
M6×1	80	19	TF20060
M7×1	80	19	TF20070
M8×1.25	90	22	TF22080
M9×1.25	90	22	TF22090
M10×1.5	100	24	TF25100

Thread Forming Taps

- High Speed Steel
- Standard：DIN376

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M3×0.5	56	11	TF35030
M4×0.7	63	13	TF37040
M5×0.8	70	16	TF38050
M6×1	80	19	TF30060
M7×1	80	19	TF30070

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M8×1.25	90	22	TF32080
M9×1.25	90	22	TF32090
M10×1.5	100	24	TF35100
M11×1.5	100	24	TF35110
M12×1.75	110	29	TF37120

Thread Forming Taps

- High Speed Steel
- Standard：JIS

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M2×0.4	40	15	TF44020
M2×0.25	40	8	TF42020
M2.2×0.45	42	15	TF44022
M2.3×0.4	42	15	TF44023
M2.5×0.45	44	16	TF44025
M2.5×0.35	44	10	TF43025
M2.6×0.45	44	16	TF44026
M3×0.6	46	18	TF46030
M3×0.5	46	18	TF45030
M3×0.35	46	10	TF43030
M3.5×0.6	48	18	TF46035
M4×0.7	52	20	TF47040
M4×0.5	52	15	TF45040
M4.5×0.75	55	20	TF47045
M4.5×0.5	52	15	TF45045
M5×0.8	60	22	TF48050
M5×0.5	52	15	TF45050
M5.5×0.5	52	15	TF45055
M6×1	62	24	TF40060
M6×0.75	62	20	TF47060
M6×0.5	55	15	TF45060

Size (mm)	OAL (mm)	Thread Length(mm)	Order No.
M7×1	65	26	TF40070
M7×0.75	62	20	TF47070
M7×0.5	55	15	TF45070
M8×1.25	70	30	TF42080
M8×1	70	30	TF40080
M8×0.75	62	20	TF47080
M9×1.25	72	30	TF42090
M9×1	70	30	TF40090
M9×0.75	62	20	TF47090
M10×1.5	75	32	TF45100
M10×1.25	75	32	TF42100
M10×1	70	30	TF40100
M10×0.75	62	20	TF47100
M10×0.5	55	15	TF45100
M11×1.5	80	38	TF45110
M11×1.25	80	38	TF42110
M11×1	70	30	TF40110
M12×1.75	82	38	TF47120
M12×1.5	82	38	TF45120
M12×1.25	80	38	TF42120
M12×1	70	30	TF40120

Screw Thread Inserts (STI) Taps

- High Speed Steel
- Standard：ANSI B 94.9

Size	H Limit	Order No.
1-64NC	H1	TS010164
2-64NF	H1	TS010264
2-56NC	H1	TS010256
3-56NF	H1	TS010356
3-48NC	H1	TS010348
4-48NF	H1	TS010448
4-40NC	H1	TS010440
5-40NC	H1	TS010540
6-40NF	H1	TS010640
6-32NC	H2	TS020632
8-36NF	H1	TS010836
8-32NC	H2	TS020832
10-32NF	H2	TS021032
10-24NC	H2	TS021024
12-24NC	H2	TS021224
1/4-28NF	H2	TS02428
1/4-20NC	H2	TS02420
5/16-24NF	H2	TS02524
5/16-18NC	H3	TS03518
3/8-24NF	H2	TS02624
3/8-16NC	H3	TS03616
7/16-20NF	H3	TS03720

Size	H Limit	Order No.
7/16-14NC	H3	TS03714
1/2-20NF	H3	TS03820
1/2-13NC	H3	TS03813
9/16-18NF	H3	TS03918
9/16-12NC	H3	TS03912
5/8-18NF	H3	TS031018
5/8-11NC	H3	TS031011
3/4-16NF	H3	TS031216
3/4-10NC	H3	TS031210
7/8-14NF	H3	TS031414
7/8-9NC	H3	TS031409
1-14NS	H4	TS041614
1-12NF	H4	TS041612
1-8NC	H4	TS041608
1.1/8-12NF	H4	TS041812
1.1/8-7NC	H4	TS041807
1.1/4-12NF	H4	TS042012
1.1/4-7NC	H4	TS042007
1.3/8-12NF	H4	TS042212
1.3/8-6NC	H6	TS062206
1.1/2-12NF	H4	TS042412
1.1/2-6NC	H6	TS062406

39 PC.Taps & Dies Set

- Standard: ANSI

Description	CS Order No.	HSS Order No.
Taps 4-40,6-32,8-32,10-24,10-32,12-24, 1/4-20,1/4-28,5/16-18,5/16-24,3/8-16, 3/8-24,7/16-14,7/16-20,1/2-13,1/2-20, 1/8-27NPT	TU1039	TU1139
Round Dies 4-40,6-32,8-32,10-24,10-32,12-24, 1/4-20,1/4-28,5/16-18,5/16-24,3/8-16, 3/8-24,7/16-14,7/16-20,1/2-13,1/2-20, 1/8-27NPT		
Tap Wrench No.2(M3-M12)		
Die Handle 1"		
Thread Pitch Gauge		
Screw Driver		

Plastic Case

Metric 21 PC.Taps Set

- Standard: DIN
- DIN352 3pcs/Set Taps
- High Speed Steel

Description	Order No.
M3,M4,M5,M6,M8,M10,M12	TU2021

Plastic Case

Metric 32 PC.Taps & Dies Set

- Standard: DIN
- High Speed Steel

Description(mm)	Order No.
DIN352 3pcs/Set Taps M3,M4,M5,M6,M8,M10,M12	TU3032
DIN223 Round Dies M3,M4,M5,M6,M8,M10,M12	
DIN1814 Tap Wrench No.1.1/2	
DIN225 Die Handle 25×9	
Metric Thread Pitch Gauge	
Screw Driver	

Adjustable Round Dies No.751

- High Speed Steel & Alloy Tool Steel
- Standard: ANSI

Size	O.D.(in.)	HSS Order No.	CS Order No.
0-80	13/16"	BR00080	BR00080C
0-80	1"	BR10080	BR10080C
1-64	13/16"	BR00164	BR00164C
1-64	1"	BR10164	BR10164C
1-72	13/16"	BR00172	BR00172C
1-72	1"	BR10172	BR10172C
2-56	13/16"	BR00256	BR00256C
2-56	1"	BR10256	BR10256C
2-64	13/16"	BR00264	BR00264C
2-64	1"	BR10264	BR10264C
3-48	13/16"	BR00348	BR00348C
3-48	1"	BR10348	BR10348C
3-56	13/16"	BR00356	BR00356C
3-56	1"	BR10356	BR10356C
4-40	13/16"	BR00440	BR00440C
4-40	1"	BR10440	BR10440C
4-48	13/16"	BR00448	BR00448C
4-48	1"	BR10448	BR10448C
5-40	13/16"	BR00540	BR00540C
5-40	1"	BR10540	BR10540C
5-44	13/16"	BR00544	BR00544C
5-44	1"	BR10544	BR10544C
6-32	13/16"	BR00632	BR00632C
6-32	1"	BR10632	BR10632C
6-40	13/16"	BR00640	BR00640C
6-40	1"	BR10640	BR10640C
8-32	13/16"	BR00832	BR00832C
8-32	1"	BR10832	BR10832C
8-36	13/16"	BR00836	BR00836C
8-36	1"	BR10836	BR10836C
10-24	13/16"	BR01024	BR01024C
10-24	1"	BR11024	BR11024C
10-32	13/16"	BR01032	BR01032C
10-32	1"	BR11032	BR11032C
12-24	13/16"	BR01224	BR01224C
12-24	1"	BR11224	BR11224C
12-28	13/16"	BR01228	BR01228C
12-28	1"	BR11228	BR11228C
1/4-20	13/16"	BR01620	BR01620C
1/4-20	1"	BR11620	BR11620C
1/4-20	1-1/2"	BR21620	BR21620C
1/4-20	2"	BR31620	BR31620C
1/4-28	13/16"	BR01628	BR01628C
1/4-28	1"	BR11628	BR11628C
1/4-28	1-1/2"	BR21628	BR21628C
1/4-28	2"	BR31628	BR31628C
5/16-18	13/16"	BR02018	BR02018C
5/16-18	1"	BR12018	BR12018C
5/16-18	1-1/2"	BR22018	BR22018C
5/16-18	2"	BR32018	BR32018C
5/16-24	13/16"	BR02024	BR02024C
5/16-24	1"	BR12024	BR12024C
5/16-24	1-1/2"	BR22024	BR22024C
5/16-24	2"	BR32024	BR32024C
3/8-16	1"	BR12416	BR12416C
3/8-16	1-1/2"	BR22416	BR22416C
3/8-16	2"	BR32416	BR32416C
3/8-24	1"	BR12424	BR12424C

Size	O.D.(in.)	HSS Order No.	CS Order No.
3/8-24	1-1/2"	BR22424	BR22424C
3/8-24	2"	BR32424	BR32424C
7/16-14	1"	BR12814	BR12814C
7/16-14	1-1/2"	BR22814	BR22814C
7/16-14	2"	BR32814	BR32814C
7/16-20	1"	BR12820	BR12820C
7/16-20	1-1/2"	BR22820	BR22820C
7/16-20	2"	BR32820	BR32820C
1/2-13	1"	BR13213	BR13213C
1/2-13	1-1/2"	BR23213	BR23213C
1/2-13	2"	BR33213	BR33213C
1/2-20	1"	BR13220	BR13220C
1/2-20	1-1/2"	BR23220	BR23220C
1/2-20	2"	BR33220	BR33220C
9/16-12	1-1/2"	BR23612	BR23612C
9/16-12	2"	BR33612	BR33612C
9/16-18	1-1/2"	BR23618	BR23618C
9/16-18	2"	BR33618	BR33618C
5/8-11	1-1/2"	BR24011	BR24011C
5/8-11	2"	BR34011	BR34011C
5/8-18	1-1/2"	BR24018	BR24018C
5/8-18	2"	BR34018	BR34018C
11/16-11	1-1/2"	BR24411	BR24411C
11/16-11	2"	BR34411	BR34411C
11/16-16	1-1/2"	BR24416	BR24416C
11/16-16	2"	BR34416	BR34416C
3/4-10	1-1/2"	BR24810	BR24810C
3/4-10	2"	BR34810	BR34810C
3/4-16	1-1/2"	BR24816	BR24816C
3/4-16	2"	BR34816	BR34816C
7/8-9	2"	BR35609	BR35609C
7/8-14	2"	BR35614	BR35614C
1"-8	2"	BR310008	BR310008C
1"-8	2-1/2"	BR410008	BR410008C
1"-8	3"	BR510008	BR510008C
1"-12	2"	BR310012	BR310012C
1"-12	2-1/2"	BR410012	BR410012C
1"-12	3"	BR510012	BR510012C
1-1/8-7	2-1/2"	BR410807	BR410807C
1-1/8-7	3"	BR510807	BR510807C
1-1/8-12	2-1/2"	BR410812	BR410812C
1-1/8-12	3"	BR510812	BR510812C
1-1/4-7	2-1/2"	BR411607	BR411607C
1-1/4-7	3"	BR51607	BR51607C
1-1/4-12	2-1/2"	BR411612	BR411612C
1-1/4-12	3"	BR51612	BR51612C
1-3/8-6	2-1/2"	BR412406	BR412406C
1-3/8-6	3"	BR512406	BR512406C
1-3/8-12	2-1/2"	BR412412	BR412412C
1-3/8-12	3"	BR512412	BR512412C
1-1/2-6	2-1/2"	BR413206	BR413206C
1-1/2-6	3"	BR513206	BR513206C
1-1/2-12	2-1/2"	BR413212	BR413212C
1-1/2-12	3"	BR513212	BR513212C
1-3/4-5	3"	BR514805	BR514805C
1-3/4-12	3"	BR514812	BR514812C
2"- 4-1/2	3"	BR520004	BR520004C
2" -12	3"	BR520012	BR520012C

Adjustable Round Dies No.753

- High Speed Steel or Alloy Tool Steel
- Standard: ANSI

Size (mm)	O.D. (in.)	HSS Order No.	CS Order No.
M1.6×0.35	13/16"	BD016035	BD016035C
M1.6×0.35	1"	BD116035	BD116035C
M1.8×0.35	13/16"	BD018035	BD018035C
M1.8×0.35	1"	BD118035	BD118035C
M2×0.4	13/16"	BD020040	BD020040C
M2×0.4	1"	BD120040	BD120040C
M2.2×0.45	13/16"	BD022045	BD022045C
M2.2×0.45	1"	BD122045	BD122045C
M2.3×0.4	13/16"	BD023040	BD023040C
M2.3×0.4	1"	BD123040	BD123040C
M2.5×0.45	13/16"	BD025045	BD025045C
M2.5×0.45	1"	BD125045	BD125045C
M2.6×0.45	13/16"	BD026045	BD026045C
M2.6×0.45	1"	BD126045	BD126045C
M3×0.5	13/16"	BD030050	BD030050C
M3×0.5	1"	BD130050	BD130050C
M3×0.6	13/16"	BD030060	BD030060C
M3×0.6	1"	BD130060	BD130060C
M3.5×0.6	13/16"	BD035060	BD035060C
M3.5×0.6	1"	BD135060	BD135060C
M4×0.5	13/16"	BD040050	BD040050C
M4×0.5	1"	BD140050	BD140050C
M4×0.7	13/16"	BD040070	BD040070C
M4×0.7	1"	BD140070	BD140070C
M4×0.75	13/16"	BD040075	BD040075C
M4×0.75	1"	BD140075	BD140075C
M4.5×0.5	13/16"	BD045050	BD045050C
M4.5×0.5	1"	BD145050	BD145050C
M4.5×0.75	13/16"	BD045075	BD045075C
M4.5×0.75	1"	BD145075	BD145075C
M5×0.5	13/16"	BD050050	BD050050C
M5×0.5	1"	BD150050	BD150050C
M5×0.8	13/16"	BD050080	BD050080C
M5×0.8	1"	BD150080	BD150080C
M5×0.9	13/16"	BD050090	BD050090C
M5×0.9	1"	BD150090	BD150090C
M6×0.5	13/16"	BD060050	BD060050C
M6×0.5	1"	BD160050	BD160050C
M6×0.75	13/16"	BD060075	BD060075C
M6×0.75	1"	BD160075	BD160075C
M6×1	1"	BD060100	BD060100C
M6×1	1"	BD160100	BD160100C
M6.3×1.0	1"	BD063100	BD063100C
M7×0.75	1"	BD070075	BD070075C
M7×1	1"	BD070100	BD070100C
M8×0.75	1"	BD080075	BD080075C
M8×1	1"	BD080100	BD080100C
M8×1.25	1"	BD080125	BD080125C
M9×1	1"	BD090100	BD090100C
M9×1	1-1/2"	BD190100	BD190100C
M9×1.25	1"	BD090125	BD090125C
M9×1.25	1-1/2"	BD190125	BD190125C
M10×0.75	1"	BD010075	BD010075C
M10×0.75	1-1/2"	BD110075	BD110075C
M10×1	1"	BD010100	BD010100C
M10×1	1-1/2"	BD110100	BD110100C
M10×1.25	1"	BD010125	BD010125C
M10×1.25	1-1/2"	BD110125	BD110125C

Size (mm)	O.D. (in.)	HSS Order No.	CS Order No.
M11×1	1"	BD011100	BD011100C
M11×1	1-1/2"	BD111100	BD111100C
M11×1.5	1"	BD011150	BD011150C
M11×1.5	1-1/2"	BD111150	BD111150C
M12×1	1"	BD012100	BD012100C
M12×1	1-1/2"	BD112100	BD112100C
M12×1.25	1"	BD012125	BD012125C
M12×1.25	1-1/2"	BD112125	BD112125C
M12×1.5	1-1/2"	BD012150	BD012150C
M12×1.75	1-1/2"	BD112175	BD112175C
M14×1	1-1/2"	BD014100	BD014100C
M14×1.25	1-1/2"	BD014125	BD014125C
M14×1.5	1-1/2"	BD014150	BD014150C
M14×2	1-1/2"	BD014200	BD014200C
M15×1.5	1-1/2"	BD015150	BD015150C
M15×1.5	2"	BD115150	BD115150C
M16×1	1-1/2"	BD016100	BD016100C
M16×1	2"	BD116100	BD116100C
M16×1.5	1-1/2"	BD016150	BD016150C
M16×1.5	2"	BD116150	BD116150C
M16×2	1-1/2"	BD016200	BD016200C
M16×2	2"	BD116200	BD116200C
M17×1.5	1-1/2"	BD017150	BD017150C
M17×1.5	2"	BD117150	BD117150C
M18×1.5	1-1/2"	BD018150	BD018150C
M18×1.5	2"	BD118150	BD118150C
M18×2	1-1/2"	BD018200	BD018200C
M18×2	2"	BD118200	BD118200C
M18×2.5	1-1/2"	BD018250	BD018250C
M18×2.5	2"	BD118250	BD118250C
M20×1.5	1-1/2"	BD020150	BD020150C
M20×1.5	2"	BD120150	BD120150C
M20×2	1-1/2"	BD020200	BD020200C
M20×2	2"	BD120200	BD120200C
M20×2.5	1-1/2"	BD020250	BD020250C
M20×2.5	2"	BD120250	BD120250C
M22×1	2"	BD022100	BD022100C
M22×1.5	2"	BD022150	BD022150C
M22×2	2"	BD022200	BD022200C
M22×2.5	2"	BD022250	BD022250C
M24×1.5	2"	BD024150	BD024150C
M24×1.5	2-1/2"	BD124150	BD124150C
M24×2	2"	BD024200	BD024200C
M24×2	2-1/2"	BD124200	BD124200C
M24×3	2-1/2"	BD024300	BD024300C
M27×2	2-1/2"	BD027200	BD027200C
M27×3	2-1/2"	BD027300	BD027300C
M28×2	2-1/2"	BD028200	BD028200C
M30×1.5	2-1/2"	BD030150	BD030150C
M30×2	2-1/2"	BD030200	BD030200C
M30×3	2-1/2"	BD030300	BD030300C
M30×3.5	2-1/2"	BD030350	BD030350C
M33×3	2-1/2"	BD033300	BD033300C
M33×3.5	2-1/2"	BD033350	BD033350C
M36×3	2-1/2"	BD036300	BD036300C
M36×4	3"	BD036400	BD036400C
M39×3	3"	BD039300	BD039300C
M39×4	3"	BD039400	BD039400C

Left Hand Round Adjustable Dies

- High Speed Steel

Size	O.D.	NC-National Course		NF-National Fine	
		TPI	Order No.	TPI	Order No.
2	13/16	56	BLC0256	64	BLF0264
3	13/16	48	BLC0348	56	BLF0356
4	13/16	40	BLC0440	48	BLF0448
5	13/16	40	BLC0540	44	BLF0544
6	13/16	32	BLC0632	40	BLF0640
8	13/16	32	BLC0832	36	BLF0836
10	13/16	24	BLC01024	32	BLF01032
6	1"	32	BLC1632	40	BLF1640
8	1"	32	BLC1832	36	BLF1836
10	1"	24	BLC11024	32	BLF11032
1/4	1"	20	BLC11620	28	BLF11628
5/16	1"	18	BLC12018	24	BLF12024
3/8	1"	16	BLC12416	24	BLF12424
7/16	1"	14	BLC12814	20	BLF12820

Size	O.D.	NC-National Course		NF-National Fine	
		TPI	Order No.	TPI	Order No.
5/16	1-1/2	18	BLC22018	24	BLF22024
3/8	1-1/2	16	BLC22416	24	BLF22424
7/16	1-1/2	14	BLC22814	20	BLF22820
1/2	1-1/2	13	BLC23213	20	BLF23220
5/8	1-1/2	11	BLC24011	18	BLF24018
3/4	1-1/2	10	BLC24810	16	BLF24816
5/8	2"	11	BLC34011	18	BLF34018
3/4	2"	10	BLC34810	16	BLF34816
7/8	2"	9	BLC35609	14	BLF35614
1"	2"	8	BLC310008	12	BLF310012
1-1/8	2-1/2	7	BLC410807	12	BLF410812
1-1/4	2-1/2	7	BLC411607	12	BLF411612
1-3/8	2-1/2	6	BLC412406	12	BLF412412
1-1/2	2-1/2	6	BLC413206	12	BLF413212

Metric Round Adjustable Dies

- High Speed Steel
- Coarse Pitch · Fine Pitch
- Standard: ANSI

Size (mm)	O.D(in.)	Coarse		Fine	
		Pitch	Order No.	Pitch	Order No.
2	1	0.4	BMC02040	0.2	BMF02020
2	1	0.45	BMC02045	0.25	BMF02025
2.2	1	0.45	BMC02245	—	—
2.5	1	0.45	BMC02545	—	—
3	1	0.5	BMC03050	0.35	BMF03035
3.5	1	0.6	BMC03560	0.35	BMF03535
4	1	0.7	BMC04070	0.35	BMF04035
4	1	—	—	0.5	BMF04050
4.5	1	0.75	BMC04575	—	—
5	1	0.8	BMC05080	0.5	BMF05050
5.5	1	0.9	BMC05590	—	—
6	1	1	BMC06010	0.5	BMF06050
6	1	—	—	0.75	BMF06075
7	1	1	BMC07010	0.75	BMF07075

Size (mm)	O.D(in.)	Coarse		Fine	
		Pitch	Order No.	Pitch	Order No.
8	1	1.25	BMC08025	1	BMF08000
9	1	1.25	BMC09025	1	BMF09000
10	1-1/2	1.5	BMC10050	1.25	BMF10025
11	1-1/2	1.5	BMC11050	1	BMF11000
12	1-1/2	1.75	BMC12075	1.5	BMF12050
12	1-1/2	—	—	1.25	BMF12025
14	1-1/2	2	BMC14000	1.5	BMF14050
16	1-1/2	2	BMC16000	1.5	BMF16050
18	1-1/2	2.5	BMC18050	2	BMF18000
18	1-1/2	—	—	1.5	BMF18050
20	2	2.5	BMC20050	2	BMF20000
22	2	2.5	BMC22050	2	BMF22000
24	2	3	BMC24000	2	BMF24000
28	2-1/2	—	—	2	BMF28000

Metric Special Pitch Round Adjustable Dies

- High Speed Steel

Size (mm)	Metric Pitch	O.D. (in.)	Order No.
1.6	0.35	1"	BP01635
1.8	0.35	1"	BP01835
3	0.6	1"	BP03060
3.5	0.5	1"	BP03550
4.5	0.5	1"	BP04550
5	1	1"	BP05000
5	0.9	1"	BP05090
6.3	1	1"	BP06310
10	0.75	1"	BP10075
10	1.5	1"	BP10050
10	1	1"	BP10000
10	1	1-1/2"	BP10001
12	1	1-1/2"	BP12000
12	0.75	1-1/2"	BP12075
13	1.75	1-1/2"	BP13075
13	1.5	1-1/2"	BP13050

Size (mm)	Metric Pitch	O.D. (in.)	Order No.
13	1.25	1-1/2"	BP13125
13	1	1-1/2"	BP13000
14	1	1-1/2"	BP14000
15	1.5	1-1/2"	BP15050
15	1	1-1/2"	BP15000
15	0.75	1-1/2"	BP15075
16	1	1-1/2"	BP16000
17	1.5	1-1/2"	BP17050
22	1	2"	BP22000
25	2	2"	BP25200
27	3	2-1/2"	BP27000
27	2	2-1/2"	BP27000
30	3	2-1/2"	BP30000
32	2	2-1/2"	BP32000
34	3.5	2-1/2"	BP34050
36	2	2-1/2"	BP36000
38	4	2-1/2"	BP38000

NPT Round Adjustable Pipe Dies

- High Speed Steel and Carbon Steel
- Standard: ANSI

Size & Pitch	O.D.(in.)	High Speed Steel Order No.	Carbon Steel Order No.
1/16-27	1"	BA00427	BA00427C
1/8-27	1"	BA00827	BA00827C
1/8-27	1-1/2	BA10827	BA10827C
1/4-18	1-1/2	BA11618	BA11618C

Size & Pitch	O.D.(in.)	High Speed Steel Order No.	Carbon Steel Order No.
3/8-18	1-1/2	BA12418	BA12418C
1/2-14	2"	BA23214	BA23214C
3/4-14	2"	BA24814	BA24814C
1-11-1/2	2-1/2	BA310011	BA310011C

Special Pitch Round Adjustable Dies

- High Speed Steel Right Hand
- Standard: ANSI

Size	Threads Per inch	O.D.(in.)	Order No.
0	80	13/16	BS00080
1	72	13/16	BS00172
2	56	13/16	BS00256
2	64	13/16	BS00264
2	64	1"	BS10264
2	72	13/16	BS00272
3	48	13/16	BS00348
3	56	13/16	BS00356
3	64	13/16	BS00364
3	72	13/16	BS00372
3	80	13/16	BS00380
4	32	13/16	BS00432
4	32	1"	BS10432
4	36	13/16	BS00436
4	36	1"	BS10436
4	40	13/16	BS00440
4	40	1"	BS10440
4	48	13/16	BS00448
4	48	1"	BS10448
4	60	13/16	BS00460
4	64	13/16	BS00464
4	72	13/16	BS00472
5	32	13/16	BS00532
5	36	13/16	BS00536
5	40	1"	BS10540
5	44	1"	BS10544
5	48	13/16	BS00548
5	60	13/16	BS00560
5	64	13/16	BS00564
5	72	13/16	BS00572
6	36	13/16	BS00636
6	48	13/16	BS00648
6	48	1"	BS10648
6	56	13/16	BS00656
6	60	13/16	BS00660
6	64	13/16	BS00664
6	72	13/16	BS00672
8	24	13/16	BS00824
8	24	1"	BS10824
8	30	13/16	BS00830
8	40	13/16	BS00840
8	48	13/16	BS00848
8	48	1"	BS10848
8	56	13/16	BS00856
8	56	1"	BS10856
8	60	13/16	BS00860

Size	Threads Per inch	O.D.(in.)	Order No.
8	64	13/16	BS00864
8	72	13/16	BS00872
8	80	13/16	BS00880
10	27	1"	BS11027
10	28	13/16	BS01028
10	30	13/16	BS01030
10	30	1"	BS11030
10	36	13/16	BS01036
10	36	1"	BS11036
10	40	13/16	BS01040
10	48	13/16	BS01048
10	48	1"	BS11048
10	56	13/16	BS01056
10	56	1"	BS11056
10	58	13/16	BS01058
10	60	13/16	BS01060
10	64	13/16	BS01064
12	30	13/16	BS01230
12	32	13/16	BS01232
12	30	1"	BS11230
12	48	13/16	BS01248
12	64	13/16	BS01264
1/4	14	1"	BS11614
1/4	16	1"	BS11616
1/4	18	1"	BS11618
1/4	24	1"	BS11624
1/4	26	1"	BS11626
1/4	27	1"	BS11627
1/4	30	1"	BS11630
1/4	32	1"	BS11632
1/4	36	1"	BS11636
1/4	40	1"	BS11640
1/4	48	1"	BS11648
1/4	56	1"	BS11656
1/4	60	1"	BS11660
1/4	64	1"	BS11664
1/4	72	1"	BS11672
5/16	16	1"	BS12016
5/16	20	1"	BS12020
5/16	27	1"	BS12027
5/16	28	1"	BS12028
5/16	30	1"	BS12030
5/16	32	1"	BS12032
5/16	36	1"	BS12036
5/16	40	1"	BS12040
5/16	48	1"	BS12048

Special Pitch Round Adjustable Dies

- High Speed Steel Right Hand
- Standard: ANSI

Size	Threads Per inch	O.D.(in.)	Order No.
5/16	56	1"	BS12056
5/16	64	1"	BS12064
5/16	72	1"	BS12072
5/16	80	1"	BS12080
3/8	14	1"	BS12414
3/8	18	1"	BS12418
3/8	20	1"	BS12420
3/8	22	1"	BS12422
3/8	27	1"	BS12418
3/8	28	1"	BS12428
3/8	30	1"	BS12430
3/8	32	1"	BS12432
3/8	36	1"	BS12436
3/8	40	1"	BS12440
3/8	48	1"	BS12448
3/8	56	1"	BS12456
3/8	60	1"	BS12460
3/8	64	1"	BS12464
3/8	72	1"	BS12472
3/8	80	1"	BS12480
13/32	32	1"	BS12632
7/16	12	1"	BS12812
7/16	16	1"	BS12816
7/16	18	1"	BS12818
7/16	24	1"	BS12824
7/16	27	1"	BS12827
7/16	28	1"	BS12828
7/16	30	1"	BS12830
7/16	32	1"	BS12832
7/16	36	1"	BS12836
7/16	40	1"	BS12840
7/16	48	1"	BS12848
1/2	12	1"	BS13212
1/2	14	1"	BS13214
1/2	18	1"	BS13218
1/2	24	1"	BS13224
1/2	27	1"	BS13227
1/2	28	1"	BS13228
1/2	30	1"	BS13230
1/2	36	1"	BS13236
1/2	40	1"	BS13240
1/2	48	1"	BS13248
1/2	56	1"	BS13256
1/2	60	1"	BS13260
1/2	64	1"	BS13264
1/2	80	1"	BS13280
1/4	32	1-1/2	BS21632
1/4	48	1-1/2	BS21648
5/16	16	1-1/2	BS22016
5/16	20	1-1/2	BS22020
5/16	27	1-1/2	BS22027
5/16	28	1-1/2	BS22028
5/16	30	1-1/2	BS22030
5/16	32	1-1/2	BS22032
5/16	36	1-1/2	BS22036
5/16	40	1-1/2	BS22040
5/16	48	1-1/2	BS22048
3/8	14	1-1/2	BS22414
3/8	27	1-1/2	BS22427

Size	Threads Per inch	O.D.(in.)	Order No.
3/8	30	1-1/2	BS22430
3/8	32	1-1/2	BS22432
3/8	36	1-1/2	BS22436
7/16	36	1-1/2	BS22836
7/16	40	1-1/2	BS22840
15/32	40	1-1/2	BS23040
1/2	12	1-1/2	BS23212
1/2	14	1-1/2	BS23214
1/2	16	1-1/2	BS23216
1/2	24	1-1/2	BS23224
1/2	27	1-1/2	BS23227
1/2	28	1-1/2	BS23228
1/2	30	1-1/2	BS23230
1/2	32	1-1/2	BS23232
1/2	36	1-1/2	BS23236
1/2	40	1-1/2	BS23240
1/2	48	1-1/2	BS23248
1/2	56	1-1/2	BS23256
1/2	64	1-1/2	BS23264
1/2	72	1-1/2	BS23272
1/2	80	1-1/2	BS23280
9/16	14	1-1/2	BS23614
9/16	16	1-1/2	BS23616
9/16	20	1-1/2	BS23620
9/16	24	1-1/2	BS23624
9/16	27	1-1/2	BS23627
9/16	32	1-1/2	BS23632
9/16	36	1-1/2	BS23636
9/16	48	1-1/2	BS23648
5/8	10	1-1/2	BS24010
5/8	12	1-1/2	BS24012
5/8	14	1-1/2	BS24014
5/8	16	1-1/2	BS24016
5/8	20	1-1/2	BS24020
5/8	22	1-1/2	BS24022
5/8	24	1-1/2	BS24024
5/8	27	1-1/2	BS24027
5/8	28	1-1/2	BS24028
5/8	30	1-1/2	BS24030
5/8	32	1-1/2	BS24032
5/8	36	1-1/2	BS24036
5/8	40	1-1/2	BS24040
5/8	48	1-1/2	BS24048
5/8	56	1-1/2	BS24056
5/8	64	1-1/2	BS24064
11/16	12	1-1/2	BS24412
11/16	14	1-1/2	BS24414
11/16	18	1-1/2	BS24418
11/16	20	1-1/2	BS24420
11/16	24	1-1/2	BS24424
11/16	26	1-1/2	BS24426
11/16	27	1-1/2	BS24427
11/16	32	1-1/2	BS24432
11/16	36	1-1/2	BS24436
11/16	40	1-1/2	BS24440
3/4	11-1/2	1-1/2	BS24811
3/4	12	1-1/2	BS24812
3/4	14	1-1/2	BS24814
3/4	18	1-1/2	BS24818

Size	Threads Per inch	O.D.(in.)	Order No.
3/4	20	1-1/2	BS24820
3/4	24	1-1/2	BS24824
3/4	30	1-1/2	BS24830
3/4	32	1-1/2	BS24832
3/4	36	1-1/2	BS24836
3/4	40	1-1/2	BS24840
3/4	48	1-1/2	BS24848
3/4	56	1-1/2	BS24856
3/4	64	1-1/2	BS24864
13/16	24	1-1/2	BS25224
9/16	32	2"	BS33632
11/16	11	2"	BS34411
11/16	27	2"	BS34427
11/16	32	2"	BS34432
3/4	24	2"	BS34824
3/4	32	2"	BS34832
13/16	10	2"	BS35210
13/16	12	2"	BS35212
13/16	16	2"	BS35216
13/16	20	2"	BS35220
13/16	24	2"	BS35224
7/8	10	2"	BS35610
7/8	18	2"	BS35618
7/8	20	2"	BS35620
7/8	24	2"	BS35624
7/8	32	2"	BS35632
7/8	36	2"	BS35615
7/8	40	2"	BS35640
7/8	48	2"	BS35648
7/8	56	2"	BS35656
7/8	64	2"	BS35664
15/16	12	2"	BS36012
15/16	16	2"	BS36016
15/16	20	2"	BS36020
15/16	27	2"	BS36027
15/16	32	2"	BS36032
1"	10	2"	BS310010
1"	16	2"	BS310016
1"	18	2"	BS310018
1"	20	2"	BS310020
1"	24	2"	BS310024
1"	27	2"	BS310027
1"	28	2"	BS310028
1"	32	2"	BS310032
1"	36	2"	BS310036
1"	40	2"	BS310040
1"	48	2"	BS310048
1"	56	2"	BS310056
1"	64	2"	BS310064
1-1/16	8	2-1/2	BS410408
1-1/16	12	2-1/2	BS410412
1-1/16	14	2-1/2	BS410414
1-1/16	16	2-1/2	BS410416
1-1/16	18	2-1/2	BS410418
1-1/16	20	2-1/2	BS410420
1-1/16	24	2-1/2	BS410424
1-1/16	27	2-1/2	BS410427
1-1/16	32	2-1/2	BS410432
1-1/8	8	2-1/2	BS410808
1-1/8	14	2-1/2	BS410814
1-1/8	16	2-1/2	BS410816
1-1/8	18	2-1/2	BS410818
1-1/8	20	2-1/2	BS410820
1-1/8	32	2-1/2	BS410832
1-3/16	8	2-1/2	BS411208

Size	Threads Per inch	O.D.(in.)	Order No.
1-3/16	12	2-1/2	BS411212
1-3/16	16	2-1/2	BS411216
1-3/16	18	2-1/2	BS411218
1-3/16	24	2-1/2	BS411224
1-3/16	32	2-1/2	BS411232
1-1/4	8	2-1/2	BS411608
1-1/4	14	2-1/2	BS411614
1-1/4	16	2-1/2	BS411616
1-1/4	18	2-1/2	BS411618
1-1/4	20	2-1/2	BS411620
1-1/4	27	2-1/2	BS411627
1-1/4	28	2-1/2	BS411628
1-1/4	32	2-1/2	BS411632
1-5/16	8	2-1/2	BS412008
1-5/16	10	2-1/2	BS412010
1-5/16	12	2-1/2	BS412012
1-5/16	14	2-1/2	BS412014
1-5/16	16	2-1/2	BS412016
1-5/16	18	2-1/2	BS412018
1-5/16	32	2-1/2	BS412032
1-3/8	7	2-1/2	BS412407
1-3/8	8	2-1/2	BS412408
1-3/8	10	2-1/2	BS412410
1-3/8	16	2-1/2	BS412416
1-3/8	18	2-1/2	BS412418
1-3/8	20	2-1/2	BS412420
1-3/8	32	2-1/2	BS412432
1-7/16	6	2-1/2	BS412806
1-7/16	8	2-1/2	BS412808
1-7/16	12	2-1/2	BS412812
1-7/16	14	2-1/2	BS412814
1-7/16	16	2-1/2	BS412816
1-7/16	18	2-1/2	BS412818
1-1/2	7	2-1/2	BS413207
1-1/2	8	2-1/2	BS413208
1-1/2	10	2-1/2	BS413210
1-1/2	16	2-1/2	BS413216
1-1/2	18	2-1/2	BS413218
1-1/2	20	2-1/2	BS413220
1-1/2	24	2-1/2	BS413224
1-1/2	28	2-1/2	BS413228
1-1/2	32	2-1/2	BS413232
1-1/2	40	2-1/2	BS413240
1-1/8	20	3"	BS510820
1-3/8	8	3"	BS512408
1-7/16	18	3"	BS512818
1-9/16	10	3"	BS513610
1-9/16	14	3"	BS513614
1-9/16	18	3"	BS513618
1-9/16	20	3"	BS513620
1-9/16	24	3"	BS513624
1-5/8	12	3"	BS514012
1-5/8	16	3"	BS514016
1-5/8	18	3"	BS514018
1-5/8	20	3"	BS514020
1-5/8	24	3"	BS514024
1-11/16	6	3"	BS514406
1-11/16	14	3"	BS514414
1-11/16	24	3"	BS514424
1-3/4	5	3"	BS514805
1-3/4	8	3"	BS514808
1-3/4	12	3"	BS514812
1-3/4	16	3"	BS514816
1-3/4	18	3"	BS514818
1-3/4	20	3"	BS514820

Special Pitch Round Adjustable Dies

- High Speed Steel Right Hand
- Standard: ANSI

Size	Threads Per inch	O.D.(in.)	Order No.
1-3/4	32	3"	BS514832
1-7/8	5	3"	BS515605
1-7/8	8	3"	BS515608
1-7/8	10	3"	BS515610
1-7/8	12	3"	BS515612
1-7/8	16	3"	BS515616
1-7/8	18	3"	BS515618
1-7/8	20	3"	BS515620
1-15/16	18	3"	BS516018
2"	4-1/2	3"	BS520004
2"	6	3"	BS520006
2"	8	3"	BS520008
2"	12	3"	BS520012
2"	16	3"	BS520016
2"	20	3"	BS520020
2"	24	3"	BS520024
2"	32	3"	BS520032
2-1/16	14	3-1/2	BS620414

Size	Threads Per inch	O.D.(in.)	Order No.
2-1/8	10	3-1/2	BS620810
2-1/8	14	3-1/2	BS620814
2-1/8	18	4"	BS720818
2-1/4	12	4"	BS721612
2-3/8	8	4"	BS722408
2-3/8	12	4"	BS722412
2-1/2	8	4"	BS723208
2-1/2	12	4"	BS723212
2-1/2	14	4"	BS723214
2-1/2	16	4"	BS723216
2-1/2	18	4"	BS723218
2-1/2	20	4"	BS723220
2-5/8	12	5"	BS824012
2-3/4	8	5"	BS824808
2-3/4	12	5"	BS824812
2-3/4	18	5"	BS824818
2-7/8	10	5"	BS825610

Hexagon Rethreading Dies

- High Speed Steel and Carbon Steel

Size	Threads Per Inch	HSS Order No.	CS Order No.
4	40NC	BH0440	BH0440C
4	48NF	BH0448	BH0448C
5	40NC	BH0540	BH0540C
5	44NF	BH0544	BH0544C
6	32NC	BH0632	BH0632C
8	32NC	BH0832	BH0832C
8	36NF	BH0836	BH0836C
10	24NC	BH1024	BH1024C
10	32NF	BH1032	BH1032C
12	24NC	BH1224	BH1224C
12	28NF	BH1228	BH1228C
1/4	20NC	BH0420	BH0420C
1/4	28NF	BH0428	BH0428C
5/16	18NC	BH2018	BH2018C
5/16	24NF	BH2024	BH2024C
3/8	16NC	BH2416	BH2416C
3/8	24NF	BH2424	BH2424C
7/16	14NC	BH2814	BH2814C
7/16	20NF	BH2820	BH2820C
1/2	13NC	BH3213	BH3213C
1/2	20NF	BH3220	BH3220C

Size	Threads Per Inch	HSS Order No.	CS Order No.
9/16	12NC	BH3612	BH3612C
9/16	18NF	BH3618	BH3618C
5/8	11NC	BH4011	BH4011C
5/8	18NF	BH4018	BH4018C
11/16	11NS	BH4411	BH4411C
11/16	16NS	BH4416	BH4416C
3/4	10NC	BH4810	BH4810C
3/4	16NF	BH4816	BH4816C
7/8	9NC	BH5609	BH5609C
7/8	14NF	BH5614	BH5614C
1"	8NC	BH10008	BH10008C
1"	12NF	BH10012	BH10012C
1"	14NS	BH10014	BH10014C
1-1/8	7NC	BH10807	BH10807C
1-1/8	12NF	BH10812	BH10812C
1-1/4	7NC	BH11607	BH11607C
1-1/4	12NF	BH11612	BH11612C
1-3/8	6NC	BH12406	BH12406C
1-3/8	12NF	BH12412	BH12412C
1-1/2	6NC	BH13206	BH13206C
1-1/2	12NF	BH13212	BH13212C

Hexagon Rethreading Die Sets

- Case not included

Size	Thread Type	Set includes:	HSS Order No.
1/4"—1/2"5 pcs	NC	1/4"-20",5/16"-18,3/8"-16,7/16"-14,1/2"-13	BHU0105
1/4"—1/2"5 pcs	NF	1/4"-28,5/16"-24,3/8"-34,7/16"-20,1/2"-20	BHU0205
1/4"—1"10 pcs	NC	1/4"-20,5/16"-18,3/8"-16,7/16"-14,1/2"-13, 9/16"-12,5/8"-11,3/4"-10,7/8"-9,1"-8	BHU0310
1/4"—1"10 pcs	NF	1/4"-28,5/16"-24,3/8"-24,7/8"-20,1/2"-20,9/16"-18, 5/8"-18,3/4"-16,7/8"-14,1"-12	BHU0410

Left Hand Hexagon Rethreading Dies

- Carbon Steel

Size (in.)	Threads Per Inch	Order No.
1/4	20NC	BX1620
1/4	28NF	BX1628
5/16	18NC	BX2018
5/16	24NF	BX2024
3/8	16NC	BX2416
3/8	24NF	BX2424

Size (in.)	Threads Per Inch	Order No.
7/16	14NC	BX2814
7/16	20NF	BX2820
1/2	13NC	BX3213
1/2	20NF	BX3220
5/8	11NC	BX4011
5/8	18NF	BX4018
3/4	10NC	BX4810

Size (in.)	Threads Per Inch	Order No.
3/4	16NF	BX4816
7/8	9NC	BX5609
7/8	14NF	BX5614
1"	8NC	BX10008
1"	12NF	BX10012
1"	14NS	BX10014

Metric Hexagon Rethreading Dies

- Carbon Steel

Size (mm)	Threads Pitch	Order No.
3	0.5	BB0350
3	0.6	BB0360
4	0.7	BB0470
4	0.75	BB0475
5	0.8	BB0580
5	0.9	BB0590
6	1	BB0600
6.3	1	BB6300
7	1	BB0700
8	1	BB0800
8	1.25	BB0825

Size (mm)	Threads Pitch	Order No.
9	0.75	BB0975
9	1	BB0900
9	1.25	BB0925
10	1	BB1000
10	1.25	BB1025
10	1.5	BB1050
11	1.5	BB1150
12	1.25	BB1225
12	1.5	BB1250
12	1.75	BB1275
14	1.25	BB1425

Size (mm)	Threads Pitch	Order No.
14	1.5	BB1450
14	2	BB1400
16	1.5	BB1650
16	2	BB1600
18	1	BB1800
18	1.5	BB1850
18	2.5	BB1825
20	2.5	BB2050
22	1.5	BB2250
24	1.5	BB2450
30	1.5	BB3050

Left Hand Hexagon Rethreading Dies

- Carbon Steel

Size (in.)	Threads Per Inch	Order No.
1/4	20NC	BC0420
1/4	28NF	BC0428
5/16	18NC	BC0518
5/16	24NF	BC0524
3/8	16NC	BC0616
3/8	24NF	BC0624

Size (in.)	Threads Per Inch	Order No.
7/16	14NC	BC0714
7/16	20NF	BC0720
1/2	13NC	BC0813
1/2	20NF	BC0820
5/8	11NC	BC1011
5/8	18NF	BC1018

Size (in.)	Threads Per Inch	Order No.
3/4	10NC	BC1210
3/4	16NF	BC1216
7/8	9NC	BC1409
7/8	14NF	BC1414
1"	8NC	BC1608
1"	12NF	BC1612
1"	14NS	BC1614

NPT Hexagon Rethreading Dies

- Carbon Steel

Size (in.)	Threads Per Inch	Order No.
1/8	27NPT	BN0827
1/4	18NPT	BN1618
3/8	18NPT	BN2418

Size (in.)	Threads Per Inch	Order No.
1/2	14NPT	BN3214
3/4	14NPT	BN4814
1"	11-1/2NPT	BN10011

Size (in.)	Threads Per Inch	Order No.
1-1/4	11-1/2NPT	BN11611
1-1/2	11-1/2NPT	BN13211

Special Thread Hexagon Rethreading Dies

- Carbon Steel
- Standard: ANSI

Size (in.)	Thread Per inch	Order No.
1-1/8	8	BT10808
1-1/8	16	BT10816
1-1/8	18	BT10818
1-1/4	8	BT11608
1-1/4	16	BT11616
1-1/4	18	BT11618
1-3/8	8	BT12408
1-3/8	16	BT12416
1-3/8	18	BT12418
1-1/2	8	BT13208
1-1/2	14	BT13214
1-1/2	16	BT13216
1-1/2	18	BT13218
1-1/2	20	BT13220
1-5/8	5-1/2	BT14005
1-5/8	8	BT14008
1-5/8	12	BT14012
1-5/8	16	BT14016
1-5/8	18	BT14018
1-5/8	5	BT14005
1-3/4	5	BT14805

Size (in.)	Thread Per inch	Order No.
1-3/4	6	BT14806
1-3/4	8	BT14808
1-3/4	12	BT14812
1-3/4	18	BT14818
1-7/8	5	BT15605
1-7/8	8	BT15608
1-7/8	12	BT15612
1-7/8	16	BT15616
1-7/8	18	BT15618
2"	4-1/2	BT20004
2"	8	BT20008
2"	12	BT20012
2"	18	BT20018
2-1/8	8	BT20808
2-1/8	12	BT20812
2-1/4	4-1/2	BT21604
2-1/4	8	BT21608
2-1/4	12	BT21612
2-1/4	16	BT21616
2-1/4	18	BT21618
2-3/8	8	BT22408

Size (in.)	Thread Per inch	Order No.
2-3/8	12	BT22412
2-1/2	4	BT23204
2-1/2	6	BT23206
2-1/2	8	BT23208
2-1/2	12	BT23212
2-5/8	8	BT24008
2-5/8	12	BT24012
2-3/4	8	BT24808
2-3/4	12	BT24812
2-7/8	8	BT25608
2-7/8	12	BT25612
3"	8	BT30008
3"	12	BT30012
3-1/4	4	BT31604
3-1/4	8	BT31608
3-1/4	12	BT31612
3-1/2	4	BT33204
3-1/2	8	BT33208
3-1/2	12	BT33212
4"	8	BT40008
4"	12	BT40012

Rectangular Tool Bits

- Ground Finish

Width (in.)	Height (in.)	Length (in.)	M2 Order No.	M35 Order No.	M42 Order No.	T42 Order No.
1/8	1/2	4"	TB010008	TB020008	TB030008	TB040008
1/4	3/8	4"	TB010016	TB020016	TB030016	TB040016
1/4	3/8	6"	TB011016	TB021016	TB031016	TB041016
1/4	1/2	4"	TB012016	TB022016	TB032016	TB042016
1/4	1/2	6"	TB013016	TB023016	TB033016	TB043016
1/4	3/4	4"	TB014016	TB024016	TB034016	TB044016
1/4	3/4	5"	TB015016	TB025016	TB035016	TB045016
1/4	3/4	6"	TB016016	TB026016	TB036016	TB046016
1/4	1"	6"	TB017016	TB027016	TB037016	TB047016
5/16	3/8	4"	TB010020	TB020020	TB030020	TB040020
5/16	7/16	3"	TB011020	TB021020	TB031020	TB041020
5/16	1/2	4"	TB012020	TB022020	TB032020	TB042020
5/16	3/4	4"	TB013020	TB023020	TB033020	TB043020
5/16	1"	6"	TB014020	TB024020	TB034020	TB044020
3/8	1/2	4"	TB010024	TB020024	TB030024	TB040024
3/8	5/8	4"	TB011024	TB021024	TB031024	TB041024
3/8	5/8	5"	TB012024	TB022024	TB032024	TB042024
3/8	5/8	6"	TB013024	TB023024	TB033024	TB043024
3/8	3/4	4"	TB014024	TB024024	TB034024	TB044024
3/8	3/4	6"	TB015024	TB025024	TB035024	TB045024
3/8	1"	6"	TB016024	TB026024	TB036024	TB046024
1/2	3/4	4"	TB010032	TB020032	TB030032	TB040032
1/2	3/4	6"	TB011032	TB021032	TB031032	TB041032
1/2	1"	7"	TB012032	TB022032	TB032032	TB042032
1/2	1-1/4	7"	TB013032	TB023032	TB033032	TB043032
1/2	1-1/2	7"	TB014032	TB024032	TB034032	TB044032
5/8	3/4	5"	TB010040	TB020040	TB030040	TB040040
5/8	7/8	6"	TB011040	TB021040	TB031040	TB041040
5/8	1"	6"	TB012040	TB022040	TB032040	TB042040
5/8	1"	7"	TB013040	TB023040	TB033040	TB043040
5/8	1-1/4	6"	TB015040	TB025040	TB035040	TB045040
5/8	1-1/4	7"	TB016040	TB026040	TB036040	TB046040
5/8	1-1/2	7"	TB017040	TB027040	TB037040	TB047040
3/4	1"	7"	TB010048	TB020048	TB030048	TB040048
3/4	1-1/4	6"	TB011048	TB021048	TB031048	TB041048
3/4	1-1/4	7"	TB012048	TB022048	TB032048	TB042048
3/4	1-1/2	7"	TB013048	TB023048	TB033048	TB043048
1"	1-1/4	7"	TB010100	TB020100	TB030100	TB040100
1"	1-1/2	7"	TB011100	TB021100	TB031100	TB041100

Metric Rectangular Tool Bits

Size (mm)	OAL (mm)	M2 Order No.	M35 Order No.	M42 Order No.	T42 Order No.
2×6	200	TB050206	TB060206	TB070206	TB080206
2×8	200	TB050208	TB060208	TB070208	TB080208
2×10	200	TB050210	TB060210	TB070210	TB080210
2×12	200	TB050212	TB060212	TB070212	TB080212
2×14	200	TB050214	TB060214	TB070214	TB080214
2×16	200	TB050216	TB060216	TB070216	TB080216
2×18	200	TB050218	TB060218	TB070218	TB080218
2×20	200	TB050220	TB060220	TB070220	TB080220
2×25	200	TB050225	TB060225	TB070225	TB080225
3×6	200	TB050306	TB060306	TB070306	TB080306
3×8	200	TB050308	TB060308	TB070308	TB080308
3×10	200	TB050310	TB060310	TB070310	TB080310
3×12	200	TB050312	TB060312	TB070312	TB080312
3×14	200	TB050314	TB060314	TB070314	TB080314
3×16	200	TB050316	TB060316	TB070316	TB080316

Metric Rectangular Tool Bits

Size (mm)	OAL (mm)	M2 Order No.	M35 Order No.	M42 Order No.	T42 Order No.
3×18	200	TB050318	TB060318	TB070318	TB080318
3×20	200	TB050320	TB060320	TB070320	TB080320
3×25	200	TB050325	TB060325	TB070325	TB080325
3×30	200	TB050330	TB060330	TB070330	TB080330
3×40	200	TB050340	TB060340	TB070340	TB080340
3×50	200	TB050350	TB060350	TB070350	TB080350
3×60	200	TB050360	TB060360	TB070360	TB080360
4×6	200	TB050406	TB060406	TB070406	TB080406
4×8	200	TB050408	TB060408	TB070408	TB080408
4×10	200	TB050410	TB060410	TB070410	TB080410
4×12	200	TB050412	TB060412	TB070412	TB080412
4×14	200	TB050414	TB060414	TB070414	TB080414
4×16	200	TB050416	TB060416	TB070416	TB080416
4×18	200	TB050418	TB060418	TB070418	TB080418
4×20	200	TB050420	TB060420	TB070420	TB080420
4×25	200	TB050425	TB060425	TB070425	TB080425
4×30	200	TB050430	TB060430	TB070430	TB080430
4×40	200	TB050440	TB060440	TB070440	TB080440
4×50	200	TB050450	TB060450	TB070450	TB080450
4×60	200	TB050460	TB060460	TB070460	TB080460
5×8	200	TB050508	TB060508	TB070508	TB080508
5×10	200	TB050510	TB060510	TB070510	TB080510
5×12	200	TB050512	TB060512	TB070512	TB080512
5×14	200	TB050514	TB060514	TB070514	TB080514
5×16	200	TB050516	TB060516	TB070516	TB080516
5×18	200	TB050518	TB060518	TB070518	TB080518
5×20	200	TB050520	TB060520	TB070520	TB080520
5×25	200	TB050525	TB060525	TB070525	TB080525
5×30	200	TB050530	TB060530	TB070530	TB080530
5×40	200	TB050540	TB060540	TB070540	TB080540
5×50	200	TB050550	TB060550	TB070550	TB080550
5×60	200	TB050560	TB060560	TB070560	TB080560
6×8	200	TB050608	TB060608	TB070608	TB080608
6×10	200	TB050610	TB060610	TB070610	TB080610
6×12	200	TB050612	TB060612	TB070612	TB080612
6×14	200	TB050614	TB060614	TB070614	TB080614
6×16	200	TB050616	TB060616	TB070616	TB080616
6×18	200	TB050618	TB060618	TB070618	TB080618
6×20	200	TB050620	TB060620	TB070620	TB080620
6×25	200	TB050625	TB060625	TB070625	TB080625
6×30	200	TB050630	TB060630	TB070630	TB080630
6×40	200	TB050640	TB060640	TB070640	TB080640
6×50	200	TB050650	TB060650	TB070650	TB080650
6×60	200	TB050660	TB060660	TB070660	TB080660
8×10	200	TB050810	TB060810	TB070810	TB080810
8×12	200	TB050812	TB060812	TB070812	TB080812
8×14	200	TB050814	TB060814	TB070814	TB080814
8×16	200	TB050816	TB060816	TB070816	TB080816
8×18	200	TB050818	TB060818	TB070818	TB080818
8×20	200	TB050820	TB060820	TB070820	TB080820
8×25	200	TB050825	TB060825	TB070825	TB080825
8×30	200	TB050830	TB060830	TB070830	TB080830
8×40	200	TB050840	TB060840	TB070840	TB080840
8×50	200	TB050850	TB060850	TB070850	TB080850
8×60	200	TB050860	TB060860	TB070860	TB080860
10×12	200	TB051012	TB061012	TB071012	TB081012
10×14	200	TB051014	TB061014	TB071014	TB081014
10×16	200	TB051016	TB061016	TB071016	TB081016
10×18	200	TB051018	TB061018	TB071018	TB081018
10×20	200	TB051020	TB061020	TB071020	TB081020
10×25	200	TB051025	TB061025	TB071025	TB081025
10×30	200	TB051030	TB061030	TB071030	TB081030
10×40	200	TB051040	TB061040	TB071040	TB081040
10×50	200	TB051050	TB061050	TB071050	TB081050
10×60	200	TB051060	TB061060	TB071060	TB081060
12×14	200	TB051214	TB061214	TB071214	TB081214
12×16	200	TB051216	TB061216	TB071216	TB081216
12×18	200	TB051218	TB061218	TB071218	TB081218
12×20	200	TB051220	TB061220	TB071220	TB081220
12×25	200	TB051225	TB061225	TB071225	TB081225
12×30	200	TB051230	TB061230	TB071230	TB081230
12×40	200	TB051240	TB061240	TB071240	TB081240
12×50	200	TB051250	TB061250	TB071250	TB081250
12×60	200	TB051260	TB061260	TB071260	TB081260
15×20	200	TB051520	TB061520	TB071520	TB081520
15×25	200	TB051525	TB061525	TB071525	TB081525
15×30	200	TB051530	TB061530	TB071530	TB081530
15×40	200	TB051540	TB061540	TB071540	TB081540
15×50	200	TB051550	TB061550	TB071550	TB081550
15×60	200	TB051560	TB061560	TB071560	TB081560

Square Tool Bits

● Ground Finish

Size (in.)	OAL (in.)	M2 Order No.	M35 Order No.	M42 Order No.	T42 Order No.
1/8	2-1/2	TB09008	TB10008	TB11008	TB12008
3/16	2-1/2	TB09012	TB10012	TB11012	TB12012
1/4	2-1/2	TB09016	TB10016	TB11016	TB12016
5/16	2-1/2	TB09020	TB10020	TB11020	TB12020
3/8	3"	TB09024	TB10024	TB11024	TB12024
7/16	3-1/2	TB09028	TB10028	TB11028	TB12028
1/2	4"	TB09032	TB10032	TB11032	TB12032
5/8	4-1/2	TB09040	TB10040	TB11040	TB12040
3/4	5"	TB09048	TB10048	TB11048	TB12048
7/8	6"	TB09056	TB10056	TB11056	TB12056
1"	7"	TB09100	TB10100	TB11100	TB12100
1-1/8	8"	TB09108	TB10108	TB11108	TB12108
1-1/4	9"	TB09116	TB10116	TB11116	TB12116
1-1/2	10"	TB09132	TB10132	TB11132	TB12132

Extra Long Square Tool Bits

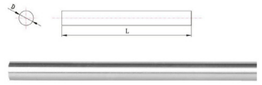
● Ground Finish

Size (in.)	OAL (in.)	M2 Order No.	M35 Order No.	M42 Order No.	T42 Order No.
1/4	4"	TB134016	TB144016	TB154016	TB164016
1/4	6"	TB136016	TB146016	TB156016	TB166016
1/4	8"	TB138016	TB148016	TB158016	TB168016
5/16	4"	TB134020	TB144020	TB154020	TB164020
5/16	6"	TB136020	TB146020	TB156020	TB166020
5/16	8"	TB138020	TB148020	TB158020	TB168020
3/8	4"	TB134024	TB144024	TB154024	TB164024
3/8	6"	TB136024	TB146024	TB156024	TB166024
3/8	8"	TB138024	TB148024	TB158024	TB168024
7/16	6"	TB136028	TB146028	TB156028	TB166028
1/2	6"	TB136032	TB146032	TB156032	TB166032
1/2	8"	TB138032	TB148032	TB158032	TB168032
5/8	6"	TB136040	TB146040	TB156040	TB166040
5/8	8"	TB138040	TB148040	TB158040	TB168040
3/4	6"	TB136048	TB146048	TB156048	TB166048
3/4	8"	TB138048	TB148048	TB158048	TB168048
1"	8"	TB138100	TB148100	TB158100	TB168100

Metric Square Tool Bits

Size (mm)	OAL (mm)	M2 Order No.	M35 Order No.	M42 Order No.	T42 Order No.
3	100	TB170310	TB180310	TB190310	TB200310
3	150	TB170315	TB180315	TB190315	TB200315
3	200	TB170320	TB180320	TB190320	TB200320
4	63	TB170463	TB180463	TB190463	TB200463
4	100	TB170410	TB180410	TB190410	TB200410
4	150	TB170415	TB180415	TB190415	TB200415
4	200	TB170420	TB180420	TB190420	TB200420
5	63	TB170563	TB180563	TB190563	TB200563
5	100	TB170510	TB180510	TB190510	TB200510
5	150	TB170515	TB180515	TB190515	TB200515
5	160	TB170516	TB180516	TB190516	TB200516
5	200	TB170520	TB180520	TB190520	TB200520
6	63	TB170663	TB180663	TB190663	TB200663
6	80	TB170680	TB180680	TB190680	TB200680
6	100	TB170610	TB180610	TB190610	TB200610
6	150	TB170615	TB180615	TB190615	TB200615
6	160	TB170616	TB180616	TB190616	TB200616
6	200	TB170620	TB180620	TB190620	TB200620
7	100	TB170710	TB180710	TB190710	TB200710
7	150	TB170715	TB180715	TB190715	TB200715
7	200	TB170720	TB180720	TB190720	TB200720
8	63	TB170863	TB180863	TB190863	TB200863
8	80	TB170880	TB180880	TB190880	TB200880
8	100	TB170810	TB180810	TB190810	TB200810
8	150	TB170815	TB180815	TB190815	TB200815
8	160	TB170816	TB180816	TB190816	TB200816
8	200	TB170820	TB180820	TB190820	TB200820
9	200	TB170920	TB180920	TB190920	TB200920
10	63	TB171063	TB181063	TB191063	TB201063
10	80	TB171080	TB181080	TB191080	TB201080
10	100	TB171010	TB181010	TB191010	TB201010
10	150	TB171015	TB181015	TB191015	TB201015
10	160	TB171016	TB181016	TB191016	TB201016
10	200	TB171020	TB181020	TB191020	TB201020
12	63	TB171263	TB181263	TB191263	TB201263
12	80	TB171280	TB181280	TB191280	TB201280
12	100	TB171210	TB181210	TB191210	TB201210
12	150	TB171215	TB181215	TB191215	TB201215
12	160	TB171216	TB181216	TB191216	TB201216
12	200	TB171220	TB181220	TB191220	TB201220
14	150	TB171415	TB181415	TB191415	TB201415
14	200	TB171420	TB181420	TB191420	TB201420
16	100	TB171610	TB181610	TB191610	TB201610
16	150	TB171615	TB181615	TB191615	TB201615
16	160	TB171616	TB181616	TB191616	TB201616
16	200	TB171620	TB181620	TB191620	TB201620
18	150	TB171815	TB181815	TB191815	TB201815
18	200	TB171820	TB181820	TB191820	TB201820
20	100	TB172010	TB182010	TB192010	TB202010
20	150	TB172015	TB182015	TB192015	TB202015
20	160	TB172016	TB182016	TB192016	TB202016
20	200	TB172020	TB182020	TB192020	TB202020
22	200	TB172220	TB182220	TB192220	TB202220
24	200	TB172420	TB182420	TB192420	TB202420
25	150	TB172515	TB182515	TB192515	TB202515
25	200	TB172520	TB182520	TB192520	TB202520
26	200	TB172620	TB182620	TB192620	TB202620
28	200	TB172820	TB182820	TB192820	TB202820
30	200	TB173020	TB183020	TB193020	TB203020
32	200	TB173220	TB183220	TB193220	TB203220
34	200	TB173420	TB183420	TB193420	TB203420
38	200	TB173820	TB183820	TB193820	TB203820
40	300	TB174030	TB184030	TB194030	TB204030

Round Tool Bits



Size (in.)	OAL (in.)	M2 Order No.	M35 Order No.	M42 Order No.	T42 Order No.
1/8	2-1/2	TB212008	TB222008	TB232008	TB242008
1/8	4"	TB214008	TB224008	TB234008	TB244008
1/8	6"	TB216008	TB226008	TB236008	TB246008
5/32	2-1/2	TB212010	TB222010	TB232010	TB242010
5/32	4"	TB214010	TB224010	TB234010	TB244010
3/16	2-1/2	TB212012	TB222012	TB232012	TB242012
3/16	3"	TB213012	TB223012	TB233012	TB243012
3/16	4"	TB214012	TB224012	TB234012	TB244012
3/16	6"	TB216012	TB226012	TB236012	TB246012
3/16	8"	TB218012	TB228012	TB238012	TB248012
1/4	2-1/2	TB212016	TB222016	TB232016	TB242016
1/4	3"	TB213016	TB223016	TB233016	TB243016
1/4	4"	TB214016	TB224016	TB234016	TB244016
1/4	6"	TB216016	TB226016	TB236016	TB246016
1/4	8"	TB218016	TB228016	TB238016	TB248016
5/16	2-1/2	TB212020	TB222020	TB232020	TB242020
5/16	3"	TB213020	TB223020	TB233020	TB243020
5/16	4"	TB214020	TB224020	TB234020	TB244020
5/16	6"	TB216020	TB226020	TB236020	TB246020
5/16	8"	TB218020	TB228020	TB238020	TB248020
3/8	3"	TB213024	TB223024	TB233024	TB243024
3/8	4"	TB214024	TB224024	TB234024	TB244024
3/8	6"	TB216024	TB226024	TB236024	TB246024
3/8	8"	TB218024	TB228024	TB238024	TB248024
7/16	4"	TB214028	TB224028	TB234028	TB244028
7/16	6"	TB216028	TB226028	TB236028	TB246028
1/2	4"	TB214032	TB224032	TB234032	TB244032
1/2	6"	TB216032	TB226032	TB236032	TB246032
1/2	8"	TB218032	TB228032	TB238032	TB248032
9/16	6"	TB216036	TB226036	TB236036	TB246036
9/16	8"	TB218036	TB228036	TB238036	TB248036
5/8	4"	TB214040	TB224040	TB234040	TB244040
5/8	6"	TB216040	TB226040	TB236040	TB246040
5/8	8"	TB218040	TB228040	TB238040	TB248040
3/4	4"	TB214048	TB224048	TB234048	TB244048
3/4	6"	TB216048	TB226048	TB236048	TB246048
3/4	8"	TB218048	TB228048	TB238048	TB248048
7/8	6"	TB216056	TB226056	TB236056	TB246056
7/8	8"	TB218056	TB228056	TB238056	TB248056
1"	6"	TB216100	TB226100	TB236100	TB246100
1"	8"	TB218100	TB228100	TB238100	TB248100

Metric Round Tool Bits

Size (mm)	OAL (mm)	M2 Order No.	M35 Order No.	M42 Order No.	T42 Order No.
3	100	TB250310	TB260310	TB270310	TB280310
3	160	TB250316	TB260316	TB270316	TB280316
3	200	TB250320	TB260320	TB270320	TB280320
4	100	TB250410	TB260410	TB270410	TB280410
4	160	TB250416	TB260416	TB270416	TB280416
4	200	TB250420	TB260420	TB270420	TB280420
5	100	TB250510	TB260510	TB270510	TB280510
5	160	TB250516	TB260516	TB270516	TB280516
5	200	TB250520	TB260520	TB270520	TB280520
6	100	TB250610	TB260610	TB270610	TB280610
6	160	TB250616	TB260616	TB270616	TB280616
6	200	TB250620	TB260620	TB270620	TB280620
7	100	TB250710	TB260710	TB270710	TB280710
7	200	TB250720	TB260720	TB270720	TB280720
8	100	TB250810	TB260810	TB270810	TB280810

Metric Round Tool Bits

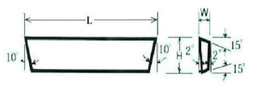
Size (mm)	OAL (mm)	M2 Order No.	M35 Order No.	M42 Order No.	T42 Order No.
8	160	TB250816	TB260816	TB270816	TB280816
8	200	TB250820	TB260820	TB270820	TB280820
9	100	TB250910	TB260910	TB270910	TB280910
9	200	TB250920	TB260920	TB270920	TB280920
10	100	TB251010	TB261010	TB271010	TB281010
10	160	TB251016	TB261016	TB271016	TB281016
10	200	TB251020	TB261020	TB271020	TB281020
11	100	TB251110	TB261110	TB271110	TB281110
11	200	TB251120	TB261120	TB271120	TB281120
12	100	TB251210	TB261210	TB271210	TB281210
12	160	TB251216	TB261216	TB271216	TB281216
12	200	TB251220	TB261220	TB271220	TB281220
13	100	TB251310	TB261310	TB271310	TB281310
13	200	TB251320	TB261320	TB271320	TB281320
14	100	TB251410	TB261410	TB271410	TB281410
14	200	TB251420	TB261420	TB271420	TB281420
16	100	TB251610	TB261610	TB271610	TB281610
16	200	TB251620	TB261620	TB271620	TB281620
18	200	TB251820	TB261820	TB271820	TB281820
20	200	TB252020	TB262020	TB272020	TB282020
22	200	TB252220	TB262220	TB272220	TB282220
24	200	TB252420	TB262420	TB272420	TB282420
25	200	TB252520	TB262520	TB272520	TB282520
26	200	TB252620	TB262620	TB272620	TB282620

"P" Type Cut-Off Blades

- T-Shape Parallel Style
- High Speed Steel· Cobalt

Style	Dimensions(in.)			M2 Order No.	M35 Order No.
	Width	Height	Length		
P1N	0.04	1/2	3-1/2	TB29P1N	TB30P1N
P1	1/16	1/2	4-1/2	TB29P1	TB30P1
P2N	5/64	1/2	4-1/2	TB29P2N	TB30P2N
P2	3/32	1/2	4-1/2	TB29P2	TB30P2
P3S	1/8	1/2	4-1/2	TB29P3S	TB30P3S
P3N	3/32	11/16	5"	TB29P3N	TB30P3N
P3	1/8	11/16	5"	TB29P3	TB30P3
P4	5/32	11/16	5"	TB29P4	TB30P4
P5S	3/16	11/16	5"	TB29P5S	TB30P5S
P3W	1/8	3/4	5"	TB29P3W	TB30P3W
P4W	5/32	3/4	5"	TB29P4W	TB30P4W
P5W	3/16	3/4	5"	TB29P5W	TB30P5W
P5X	1/8	7/8	6"	TB29P5X	TB30P5X
P5N	5/32	7/8	6"	TB29P5N	TB30P5N
P5	3/16	7/8	6"	TB29P5	TB30P5
P6	1/4	7/8	6"	TB29P6	TB30P6
P8X	1/8	1-1/8	6-1/2	TB29P8X	TB30P8X
P8N	5/32	1-1/8	6-1/2	TB29P8N	TB30P8N
P8	3/16	1-1/8	6-1/2	TB29P8	TB30P8
P9	1/4	1-1/8	6-1/2	TB29P9	TB30P9

Tapered Cut-Off Blades



- Ground And Cleared

Dimensions(in.)			M2 Order No.	M35 Order No.
Width	Height	Length		
1/16	1/2	4-1/2	TB310004	TB320004
1/16	11/16	5"	TB311004	TB321004
5/64	1/2	4-1/2	TB311005	TB320005
3/32	3/16	6"	TB310006	TB320006
3/32	1/2	4-1/2	TB311006	TB321006

Dimensions(in.)			M2 Order No.	M35 Order No.
Width	Height	Length		
3/32	5/8	5"	TB312006	TB322006
3/32	13/16	6"	TB313006	TB323006
3/32	1"	6-1/2	TB314006	TB324006
1/8	1/2	4-1/2	TB310008	TB320008
1/8	3/4	5"	TB311008	TB321008

Dimensions(in.)			M2 Order No.	M35 Order No.
Width	Height	Length		
1/8	13/16	6"	TB312008	TB322008
1/8	7/8	6"	TB313008	TB323008
1/8	1"	6-1/2	TB314008	TB324008
5/32	13/16	6"	TB310010	TB320010
3/16	3/4	6"	TB310012	TB320012
3/16	1"	6-1/2	TB311012	TB321012

Dimensions(in.)			M2 Order No.	M35 Order No.
Width	Height	Length		
3/16	3-1/8	7"	TB312012	TB322012
1/4	13/16	6"	TB310016	TB320016
1/4	1-1/8	7"	TB311016	TB321016
1/4	1-1/4	7"	TB312016	TB322016
1/4	1-3/8	7"	TB313016	TB323016

Carbide Tipped Brazed Tool Bits

- Style AR & AL 0° Turning Tools

Styles	Shank Dimensions(in.)			Left Order No.	Right Order No.
AR4 / AL4	1/4	1/4	1-3/4	TB50AL4	TB50AR4
AR5 / AL5	5/16	5/16	2-1/4	TB50AL5	TB50AR5
AR6 / AL6	3/8	3/8	2-1/2	TB50AL6	TB50AR6
AR7 / AL7	7/16	7/16	3"	TB50AL7	TB50AR7
AR8 / AL8	1/2	1/2	3-1/2	TB50AL8	TB50AR8
AR10 / AL10	5/8	5/8	4"	TB50AL10	TB50AR10
AR12 / AL12	3/4	3/4	4-1/2	TB50AL12	TB50AR12
AR16 / AL16	1"	1"	7"	TB50AL16	TB50AR16
AL20	1-1/4	1-1/4	8"	TB50AL20	—
AR44	1/2	1"	7"	—	TB50AR44
AR54 / AL54	5/8	1"	6"	TB50AL54	TB50AR54
AR55 / AL55	5/8	1-1/4	8"	TB50AL55	TB50AR55
AL64	3/4	1"	6"	TB50AL64	—
AR66 / AL66	3/4	1-1/2	8"	TB50AL66	TB50AR66
AL86	1"	1-1/2	8"	TB50AL86	—

- Style BR & BL 15° Lead Angle Turning Tools
- BR - Right Hand 15° Angle
- BL - Left Hand 15° Angle

Styles	Shank Dimensions(in.)			Left Order No.	Right Order No.
BR4 / BL4	1/4	1/4	1-1/2	TB50BL4	TB50BR4
BR5 / BL5	5/16	5/16	2-1/4	TB50BL5	TB50BR5
BR6 / BL6	3/8	3/8	2-1/2	TB50BL6	TB50BR6
BR7 / BL7	7/16	7/16	3"	TB50BL7	TB50BR7
BR8 / BL8	1/2	1/2	3-1/2	TB50BL8	TB50BR8
BR10 / BL10	5/8	5/8	4"	TB50BL10	TB50BR10
BR12 / BL12	3/4	3/4	4-1/2	TB50BL12	TB50BR12
BR16 / BL16	1"	1"	7"	TB50BL16	TB50BR16
BR20 / BL20	1-1/4	1-1/4	8"	TB50BL20	TB50BR20
BR24 / BL24	1-1/2	1-1/2	8"	TB50BL24	TB50BR24
BR44 / BL44	1/2	1"	7"	TB50BL44	TB50BR44
BR54 / BL54	5/8	1"	6"	TB50BL54	TB50BR54
BL55	5/8	1-1/4	8"	TB50BL55	—
BR64	3/4	1"	6"	—	TB50BR64
BR66 / BL66	3/4	1-1/2	8"	TB50BL66	TB50BR66
BL85	1"	1-1/4	8"	TB50BL85	—
BL86	1"	1-1/2	8"	TB50BL86	—

- Style C Square Nose Tools

Styles	Shank Dimensions(in.)			Order No.
C4	1/4	1/4	1-1/2	TB50C4
C5	5/16	5/16	2-1/4	TB50C5
C6	3/8	3/8	2-1/2	TB50C6
C7	7/16	7/16	3"	TB50C7
C8	1/2	1/2	3-1/2	TB50C8
C10	5/8	5/8	4"	TB50C10
C12	3/4	3/4	4-1/2	TB50C12
C16	1"	1"	7"	TB50C16
C66	3/4	1-1/2	8"	TB50C66

Carbide Tipped Brazed Tool Bits

- Style D 80° Included Angle Tools

Styles	Shank Dimensions(in.)			Order No.
	A	B	C	
D4	1/4	1/4	1-1/2	TB50D4
D5	5/16	5/16	2-1/4	TB50D5
D6	3/8	3/8	2-1/2	TB50D6
D7	7/16	7/16	3"	TB50D7
D8	1/2	1/2	3-1/2	TB50D8
D10	5/8	5/8	4"	TB50D10
D12	3/4	3/4	4-1/2	TB50D12
D16	1"	1"	7"	TB50D16

- Style E 60° Included Angle Threading Tools

Styles	Shank Dimensions(in.)			Order No.
	A	B	C	
E4	1/4	1/4	1-1/2	TB50E4
E5	5/16	5/16	2-1/4	TB50E5
E6	3/8	3/8	2-1/2	TB50E6
E7	7/16	7/16	3"	TB50E7
E8	1/2	1/2	3-1/2	TB50E8
E10	5/8	5/8	4"	TB50E10
E12	3/4	3/4	4-1/2	TB50E12
E16	1"	1"	7"	TB50E16

- Style CTR and CTL Cut-off

Styles	Width(in.)	Heigth(in.)	Tip(in.)	Left Order No.	Right Order No.
CTR-11/CTL-11	1/2	1"	1/8	TB50CTL11	TB50CTR11
CTR-22/CTL-22	1/2	1"	3/16	TB50CTL22	TB50CTR22
CTR-33/CTL-33	1/2	1"	1/4	TB50CTL33	TB50CTR33
CTR-44/CTL-44	7/16	1"	5/16	TB50CTL44	TB50CTR44
CTR-55/CTL-55	5/8	1-1/4	3/8	TB50CTL55	TB50CTR55

- Style GR/GL Side Cutting Offset Tools

Styles	Shank Dimensions(in.)			Left Order No.	Right Order No.
GR8/GL8	1/2	1/2	3-1/2	TB50GL8	TB50GR8
GR10/GL10	5/8	5/8	4"	TB50GL10	TB50GR10
GR12/GL12	3/4	3/4	4-1/2	TB50GL12	TB50GR12
GR16/GL16	1"	1"	7"	TB50GL16	TB50GR16
GR20/GL20	1-1/4	1-1/4	8"	TB50GL20	TB50GR20
GR24/GL24	1-1/2	1-1/2	8"	TB50GL24	TB50GR24
GR85/GL85	1"	1-1/4	8"	TB50GL85	TB50GR85
GR86	1"	1-1/2	8"	—	TB50GR86

- Style FR/FL End Cutting Offset Tools

Styles	Shank Dimensions(in.)			Left Order No.	Right Order No.
FR8/FL8	1/2	1/2	3-1/2	TB50FL8	TB50FR8
FR10/FL10	5/8	5/8	4"	TB50FL10	TB50FR10
FR12/FL12	3/4	3/4	4-1/2	TB50FL12	TB50FR12
FR16/FL16	1"	1"	7"	TB50FL16	TB50FR16
FR20/FL20	1-1/4	1-1/4	8"	TB50FL20	TB50FR20
FR24/FL24	1-1/2	1-1/2	8"	TB50FL24	TB50FR24
FR44	1/2	1"	6"	—	TB50FR44
FR55/FL55	5/8	1-1/4	7"	TB50FL55	TB50FR55
FL64	3/4	1"	6"	TB50FL64	—
FL85	1"	1-1/4"	8	TB50FL85	—

- Style ER/EL End Cutting Offset Tools

Styles	Shank Dimensions(in.)			Left Order No.	Right Order No.
ER5/EL5	5/16	5/16	2-1/4	TB50EL5	TB50ER5
ER6/EL6	3/8	3/8	2-1/2	TB50EL6	TB50ER6
ER8/EL8	1/2	1/2	3-1/2	TB50EL8	TB50ER8
ER10/EL10	5/8	5/8	4"	TB50EL10	TB50ER10
ER12/EL12	3/4	3/4	4-1/2	TB50EL12	TB50ER12

- TSA-For boring to a square shoulder in 90° bars

Styles	Shank Dimensions(in.)			Order No.
TSA5	5/16	5/16	1-1/2	TB50TSA5
TSA6	3/8	3/8	1-3/4	TB50TSA6
TSA8	1/2	1/2	2-1/2	TB50TSA8
TSA10	5/8	5/8	3"	TB50TSA10
TSA12	3/4	3/4	3-1/2	TB50TSA12

- TSC- For boring to a square shoulder in 30° bars

Styles	Shank Dimensions(in.)			Order No.
TSC5	5/16	5/16	1-1/2	TB50TSC5
TSC6	3/8	3/8	1-3/4	TB50TSC6
TSC8	1/2	1/2	2-1/2	TB50TSC8
TSC10	5/8	5/8	3"	TB50TSC10
TSC12	3/4	3/4	3-1/2	TB50TSC12

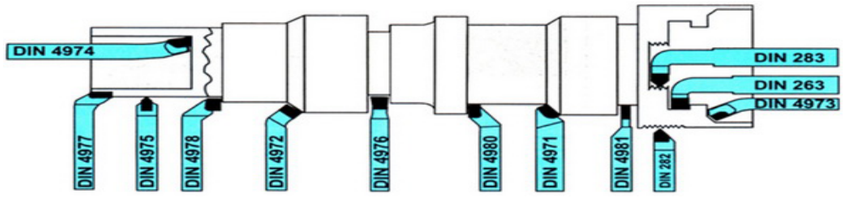
- TSE- For boring to a square shoulder in 45° bars or for recessing

Styles	Shank Dimensions(in.)			Order No.
TSE5	5/16	5/16	1-1/2	TB50TSE5
TSE6	3/8	3/8	1-3/4	TB50TSE6
TSE8	1/2	1/2	2-1/2	TB50TSE8
TSE10	5/8	5/8	3"	TB50TSE10
TSE12	3/4	3/4	3-1/2	TB50TSE12

- TRC- For boring to a square shoulder in 30° bars
- TRE- For boring to a square shoulder in 45° bars

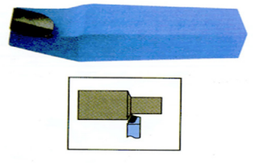
Styles	Dia.(in.)	Length(in.)	Order No.
TRC5	5/16	1-1/2	TB50TRC5
TRC6	3/8	1-3/4	TB50TRC6
TRC8	1/2	2-1/2	TB50TRC8
TRE5	5/16	1-1/2	TB50TRE5
TRE6	3/8	1-3/4	TB50TRE6
TRE8	1/2	2-1/2	TB50TRE8

Carbide Tipped Brazed Tool Bits -- DIN & ISO



Standard: DIN4971-ISO1

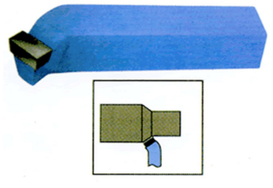
- Right and Left



Shank size (mm)	Left Order No.	Right Order No.
10×10×90	TBD01L10	TBD01R10
12×12×100	TBD01L12	TBD01R12
16×16×110	TBD01L16	TBD01R16
20×20×125	TBD01L20	TBD01R20
25×25×140	TBD01L25	TBD01R25
32×32×170	TBD01L32	TBD01R32

Standard: DIN4972-ISO2

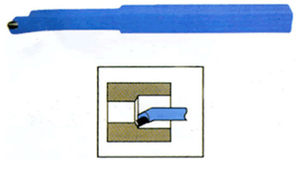
- Right and Left



Shank size (mm)	Left Order No.	Right Order No.
10×10×90	TBD02L10	TBD02R10
12×12×100	TBD02L12	TBD02R12
16×16×110	TBD02L16	TBD02R16
20×20×125	TBD02L20	TBD02R20
25×25×140	TBD02L25	TBD02R25
32×32×170	TBD02L32	TBD02R32

Standard: DIN4973-ISO8

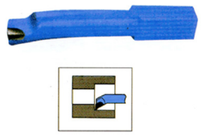
- Right and Left



Shank size (mm)	Min. Boring Dia(mm)	Left Order No.	Right Order No.
8×8×125	14	TBD08L08	TBD08R08
10×10×150	18	TBD08L10	TBD08R10
12×12×180	21	TBD08L12	TBD08R12
16×16×210	27	TBD08L16	TBD08R16
20×20×250	34	TBD08L20	TBD08R20
25×25×300	43	TBD08L25	TBD08R25
32×32×355	52	TBD08L32	TBD08R32

Standard: DIN4974-ISO9

● Right and Left



Shank size (mm)	Min. Boring Dia (mm)	Left Order No.	Right Order No.
8×8×125	14	TBD09L08	TBD09R08
10×10×150	18	TBD09L10	TBD09R10
12×12×180	21	TBD09L12	TBD09R12
16×16×210	27	TBD09L16	TBD09R16
20×20×250	34	TBD09L20	TBD09R20
25×25×300	43	TBD09L25	TBD09R25
32×32×355	52	TBD09L32	TBD09R32

Standard: DIN4975-ISO10

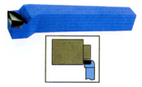
Shank size (mm)	Order No.
16×10×110	TBD10N16
20×12×125	TBD10N20
25×16×140	TBD10N25
32×20×170	TBD10N32

Standard: DIN4976-ISO4

Shank size (mm)	Order No.
10×10×90	TBD04N10
12×12×100	TBD04N12
16×16×110	TBD04N16
20×20×125	TBD04N20
25×25×140	TBD04N25
32×32×170	TBD04N32

Standard: DIN4977-ISO5

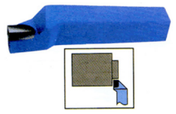
● Right and Left



Shank size (mm)	Left Order No.	Right Order No.
16×16×110	TBD05L16	TBD05R16
20×20×125	TBD05L20	TBD05R20
25×25×140	TBD05L25	TBD05R25
32×32×170	TBD05L32	TBD05R32

Standard: DIN4978-ISO3

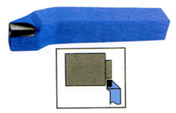
● Right and Left



Shank size (mm)	Left Order No.	Right Order No.
16×16×110	TBD03L16	TBD03R16
20×12×125	TBD03L20	TBD03R20
25×16×140	TBD03L25	TBD03R25
32×32×170	TBD03L32	TBD03R32

Standard: DIN4980-ISO6

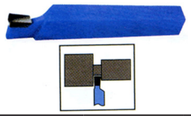
● Right and Left



Shank size (mm)	Left Order No.	Right Order No.
10×10×90	TBD06L10	TBD06R10
12×12×100	TBD06L12	TBD06R12
16×16×110	TBD06L16	TBD06R16
20×20×125	TBD06L20	TBD06R20
25×25×140	TBD06L25	TBD06R25
32×32×170	TBD06L32	TBD06R32

Standard: DIN4981-ISO7

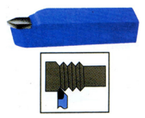
● Right and Left



Size (mm)	Left Order No.	Right Order No.
12×8×100×3	TBD07L12	TBD07R12
16×10×110×4	TBD07L16	TBD07R16
20×12×125×5	TBD07L20	TBD07R20
25×16×140×6	TBD07L25	TBD07R25
32×20×170×8	TBD07L32	TBD07R32
32×32×170	TBD06L32	TBD06R32

Standard: DIN282-60° - ISO12

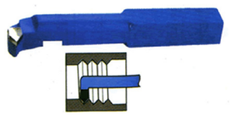
● Right and Left



Size (mm)	Left Order No.	Right Order No.
10×10×100	TBD12L10	TBD12R10
12×12×110	TBD12L12	TBD12R12
16×16×125	TBD12L16	TBD12R16
20×20×140	TBD12L20	TBD12R20
25×25×160	TBD12L25	TBD12R25
32×32×180	TBD12L32	TBD12R32

Standard: DIN283-60° - ISO13

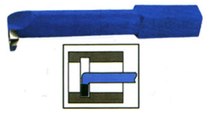
● Right and Left



Shank size (mm)	Min. Boring Dia(mm)	Left Order No.	Right Order No.
10×10×140	24	TBD13L10	TBD13R10
12×12×150	30	TBD13L12	TBD13R12
16×16×180	36	TBD13L16	TBD13R16
20×20×210	45	TBD13L20	TBD13R20
25×25×250	55	TBD13L25	TBD13R25
32×32×300	70	TBD13L32	TBD13R32

Standard: DIN263 - ISO11

● Right and Left



Shank size (mm)	Min. Boring Dia(mm)	Left Order No.	Right Order No.
10×10×140	25	TBD11L10	TBD11R10
12×12×150	30	TBD11L12	TBD11R12
16×16×180	40	TBD11L16	TBD11R16
20×20×210	50	TBD11L20	TBD11R20
25×25×250	60	TBD11L25	TBD11R25
32×32×300	85	TBD11L32	TBD11R32

Hight Speed Steel BI-Metal Hole Saws

Diameter mm	Diameter inch	MM Order No.	Inch Order No.
13	1/2	HB10013	HB20032
14	9/16	HB10014	HB20036
15	19/32	HB10015	HB20038
16	5/8	HB10016	HB20040
17	11/16	HB10017	HB20044
19	3/4	HB10019	HB20048
20	25/32	HB10020	HB20050
21	13/16	HB10021	HB20052
22	7/8	HB10022	HB20056
23	29/32	HB10023	HB20058
24	15/16	HB10024	HB20060
25	1"	HB10025	HB20100
26	1-1/32	HB10026	HB20102
27	1-1/16	HB10027	HB20104
28	1-3/32	HB10028	HB20106
29	1-1/8	HB10029	HB20108
30	1-3/16	HB10030	HB20112
31	1-7/32	HB10031	HB20114
32	1-1/4	HB10032	HB20116
33	1-5/16	HB10033	HB20120
34	1-11/32	HB10034	HB20122
35	1-3/8	HB10035	HB20124
36	1-27/64	HB10036	HB20127
37	1-7/16	HB10037	HB20128
38	1-1/2	HB10038	HB20132
39	1-17/32	HB10039	HB20134
40	1-9/16	HB10040	HB20136
41	1-5/8	HB10041	HB20140
42	1-21/32	HB10042	HB20142
43	1-11/16	HB10043	HB20144
44	1-3/4	HB10044	HB20148
45	1-49/64	HB10045	HB20149
46	1-13/16	HB10046	HB20152
47	1-27/32	HB10047	HB20154
48	1-7/8	HB10048	HB20156
49	1-15/16	HB10049	HB20160
50	1-31/32	HB10050	HB20162
51	2"	HB10051	HB20200
52	2-1/16	HB10052	HB20204
53	2-3/32	HB10053	HB20206
54	2-1/8	HB10054	HB20208
55	2-11/64	HB10055	HB20211
56	2-13/64	HB10056	HB20213
57	2-1/4	HB10057	HB20216
58	2-9/32	HB10058	HB20218
59	2-5/16	HB10059	HB20220
60	2-3/8	HB10060	HB20224
61	2-13/32	HB10061	HB20226
62	2-7/16	HB10062	HB20228
63	2-31/64	HB10063	HB20231
64	2-1/2	HB10064	HB20232
65	2-9/16	HB10065	HB20236
66	2-19/32	HB10066	HB20238
67	2-5/8	HB10067	HB20240
68	2-11/16	HB10068	HB20244
69	2-23/32	HB10069	HB20246
70	2-3/4	HB10070	HB20248

Diameter mm	Diameter inch	MM Order No.	Inch Order No.
71	2-51/64	HB10071	HB20251
72	2-53/64	HB10072	HB20253
73	2-7/8	HB10073	HB20256
74	2-58/64	HB10074	HB20258
75	2-61/64	HB10075	HB20261
76	3"	HB10076	HB20300
77	3-1/32	HB10077	HB20302
78	3-5/64	HB10078	HB20305
79	3-1/8	HB10079	HB20308
80	3-5/32	HB10080	HB20310
83	3-1/4	HB10083	HB20316
85	3-11/32	HB10085	HB20322
86	3-3/8	HB10086	HB20324
87	3-27/64	HB10087	HB20327
89	3-1/2	HB10089	HB20332
90	3-35/64	HB10090	HB20335
92	3-5/8	HB10092	HB20340
95	3-3/4	HB10095	HB20348
98	3-7/8	HB10098	HB20356
100	3-15/16	HB10100	HB20360
102	4"	HB10102	HB20400
105	4-1/8	HB10105	HB20408
108	4-1/4	HB10108	HB20416
111	4-3/8	HB10111	HB20424
114	4-1/2	HB10114	HB20432
117	4-39/64	HB10117	HB20439
121	4-3/4	HB10121	HB20448
124	4-7/8	HB10124	HB20456
127	5"	HB10127	HB20500
130	5-1/8	HB10130	HB20508
133	5-1/4	HB10133	HB20516
138	5-7/16	HB10138	HB20528
140	5-1/2	HB10140	HB20532
145	5-45/64	HB10145	HB20545
146	5-3/4	HB10146	HB20548
148	5-53/64	HB10148	HB20553
151	5-15/16	HB10151	HB20560
152	6"	HB10152	HB20600
160	6-19/64	HB10160	HB20619
165	6-1/2	HB10165	HB20632
168	6-5/8	HB10168	HB20640
172	6-49/64	HB10172	HB20649
175	6-57/64	HB10175	HB20657
176	6-59/64	HB10176	HB20659
177	6-31/32	HB10177	HB20662
178	7"	HB10178	HB20700
180	7-3/32	HB10180	HB20706
185	7-9/32	HB10185	HB20718
188	7-13/32	HB10188	HB20726
190	7-31/64	HB10190	HB20731
200	7-7/8	HB10200	HB20756
210	8-17/64	HB10210	HB20800
215	8-15/32	HB10215	HB20830
220	8-21/32	HB10220	HB20842
225	8-55/64	HB10225	HB20855
230	9-1/16	HB10230	HB20904

HSS 4341 Hole Saws

- APPLICATIONS:
  For tough drilling on 1.6mm thick iron plates.
- FEATURES:
  (A)Sharper teeth tip for easier cutting.
  (B)Longer product lift,teeth stay sharp longer.
  (C)Betterchip clearance.
  (D)For precision hole drilling.
- USES:
  (A)Electric work:
  1、Electric control box' s push-button hole.
  2、Refrigeration machines.
  (B)Iron work:
  1、Sheet metal work.
  2、Drill hole installation.

Dia. (mm)	Effective Length(mm)	Shank Dia(mm)	OAL (mm)	Center Drill Size(mm)	Nickel Finish Order No.	Amber Finish Order No.	Metal Finish Order No.
12	8	7.65	72.3	5	HS01012	HS02012	HS03012
13	8	7.65	72.3	5	HS01013	HS02013	HS03013
14	8	7.65	72.3	5	HS01014	HS02014	HS03014
15	8	8	72.3	5	HS01015	HS02015	HS03015
16	8	8	72.3	6	HS01016	HS02016	HS03016
17	8	8	72.3	6	HS01017	HS02017	HS03017
18	8	8	72.3	6	HS01018	HS02018	HS03018
19	8	8	72.3	6	HS01019	HS02019	HS03019
20	8	8	72.3	6	HS01020	HS02020	HS03020
21	8	8	72.3	6	HS01021	HS02021	HS03021
22	8	8	72.3	6	HS01022	HS02022	HS03022
23	8	8	72.3	6	HS01023	HS02023	HS03023
24	8	8	72.3	6	HS01024	HS02024	HS03024
25	8	9	72.3	6	HS01025	HS02025	HS03025
26	8	9	72.3	6	HS01026	HS02026	HS03026
27	8	9	72.3	6	HS01027	HS02027	HS03027
28	8	9	72.3	6	HS01028	HS02028	HS03028
29	8	9	72.3	6	HS01029	HS02029	HS03029
30	8	9	72.3	6	HS01030	HS02030	HS03030
31	8	9	72.3	6	HS01031	HS02031	HS03031
32	8	9	72.3	6	HS01032	HS02032	HS03032
33	8	9	72.3	6	HS01033	HS02033	HS03033
34	8	9	72.3	6	HS01034	HS02034	HS03034
35	8	9	72.3	6	HS01035	HS02035	HS03035
36	8	9	72.3	6	HS01036	HS02036	HS03036
37	8	10	72.3	6	HS01037	HS02037	HS03037
38	8	10	72.3	6	HS01038	HS02038	HS03038
39	8	10	72.3	6	HS01039	HS02039	HS03039
40	8	10	72.3	6	HS01040	HS02040	HS03040
41	8	10	72.3	6	HS01041	HS02041	HS03041
42	8	10	72.3	6	HS01042	HS02042	HS03042
43	8	10	72.3	6	HS01043	HS02043	HS03043
44	8	10	72.3	6	HS01044	HS02044	HS03044
45	8	10	72.3	6	HS01045	HS02045	HS03045
46	8	10	72.3	6	HS01046	HS02046	HS03046
47	8	10	72.3	6	HS01047	HS02047	HS03047
48	8	10	72.3	6	HS01048	HS02048	HS03048
49	8	10	72.3	6	HS01049	HS02049	HS03049
50	8	10	72.3	6	HS01050	HS02050	HS03050
51	8	10	72.3	6	HS01051	HS02051	HS03051
52	8	10	72.3	6	HS01052	HS02052	HS03052
53	8	10	72.3	6	HS01053	HS02053	HS03053
54	8	10	72.3	6	HS01054	HS02054	HS03054
55	8	10	72.3	6	HS01055	HS02055	HS03055
56	8	10	72.3	6	HS01056	HS02056	HS03056
57	8	10	72.3	6	HS01057	HS02057	HS03057
58	8	10	72.3	6	HS01058	HS02058	HS03058
59	8	10	72.3	6	HS01059	HS02059	HS03059
60	8	10	72.3	6	HS01060	HS02060	HS03060
61	8	10	72.3	6	HS01061	HS02061	HS03061
62	8	10	72.3	6	HS01062	HS02062	HS03062
63	8	10	72.3	6	HS01063	HS02063	HS03063
64	8	10	72.3	6	HS01064	HS02064	HS03064
65	8	10	72.3	6	HS01065	HS02065	HS03065
66	8	10	72.3	6	HS01066	HS02066	HS03066
69	8	10	72.3	6	HS01069	HS02069	HS03069
70	8	10	72.3	6	HS01070	HS02070	HS03070
75	8	10	72.3	6	HS01075	HS02075	HS03075
80	8	10	72.3	6	HS01080	HS02080	HS03080
85	8	10	72.3	6	HS01085	HS02085	HS03085
90	8	10	72.3	6	HS01090	HS02090	HS03090
95	8	10	72.3	6	HS01095	HS02095	HS03095
100	8	10	72.3	6	HS01100	HS02100	HS03100

HSS 9341 Hole Saw

- APPLICATIONS:
  For tough drilling on 3mm thick iron plates.
- FUNCTION:
  For drill operation on stainless
  steel sheet or square wares,cast irons.
  Iron plates and F,R,P Formed products.
- APPLICABLE MACHINERY:
  1.Electrical drills. 2.Drilling presses. 3.Magnetic drill presses.
- USES:
  1.Stainless steel conversions,doors & windows,stair rails,railings,screen doors,locks.
  2.Manufacture of aluminum doors & windows.
  3.Plumbing woeks,building A/C works.
  4.Opening in machines,electrical control boxes.
  5.Yacht building ,ship-building industry,F,R,P.

Dia. (mm)	Effective Length(mm)	Shank Dia(mm)	OAL (mm)	Center Drill Size(mm)	Metal Finish Order No.	Amber Finish Order No.	Black Oxide Order No.
12	8	7.65	72.3	5	HM01012	HM02012	HM03012
13	8	7.65	72.3	5	HM01013	HM02013	HM03013
14	8	7.65	72.3	5	HM01014	HM02014	HM03014
15	8	8	72.3	5	HM01015	HM02015	HM03015
16	8	8	72.3	6	HM01016	HM02016	HM03016
17	8	8	72.3	6	HM01017	HM02017	HM03017
18	8	8	72.3	6	HM01018	HM02018	HM03018
19	8	8	72.3	6	HM01019	HM02019	HM03019
20	8	8	72.3	6	HM01020	HM02020	HM03020
21	8	8	72.3	6	HM01021	HM02021	HM03021
22	8	8	72.3	6	HM01022	HM02022	HM03022
23	8	8	72.3	6	HM01023	HM02023	HM03023
24	8	8	72.3	6	HM01024	HM02024	HM03024
25	8	9	72.3	6	HM01025	HM02025	HM03025
26	8	9	72.3	6	HM01026	HM02026	HM03026
27	8	9	72.3	6	HM01027	HM02027	HM03027
28	8	9	72.3	6	HM01028	HM02028	HM03028
29	8	9	72.3	6	HM01029	HM02029	HM03029
30	8	9	72.3	6	HM01030	HM02030	HM03030

HSS 9341 Hole Saw

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  3.Plumbing woeks,building A/C works.
  4.Opening in machines,electrical control boxes.
  5.Yacht building ,ship-building industry,F,R,P.

Dia. (mm)	Effective Length(mm)	Shank Dia(mm)	OAL (mm)	Center Drill Size(mm)	Metal Finish Order No.	Amber Finish Order No.	Black Oxide Order No.
31	8	9	72.3	6	HM01031	HM02031	HM03031
32	8	9	72.3	6	HM01032	HM02032	HM03032
33	8	9	72.3	6	HM01033	HM02033	HM03033
34	8	9	72.3	6	HM01034	HM02034	HM03034
35	8	9	72.3	6	HM01035	HM02035	HM03035
36	8	9	72.3	6	HM01036	HM02036	HM03036
37	8	10	72.3	6	HM01037	HM02037	HM03037
38	8	10	72.3	6	HM01038	HM02038	HM03038
39	8	10	72.3	6	HM01039	HM02039	HM03039
40	8	10	72.3	6	HM01040	HM02040	HM03040
41	8	10	72.3	6	HM01041	HM02041	HM03041
42	8	10	72.3	6	HM01042	HM02042	HM03042
43	8	10	72.3	6	HM01043	HM02043	HM03043
44	8	10	72.3	6	HM01044	HM02044	HM03044
45	8	10	72.3	6	HM01045	HM02045	HM03045
46	8	10	72.3	6	HM01046	HM02046	HM03046
47	8	10	72.3	6	HM01047	HM02047	HM03047
48	8	10	72.3	6	HM01048	HM02048	HM03048
49	8	10	72.3	6	HM01049	HM02049	HM03049
50	8	10	72.3	6	HM01050	HM02050	HM03050

HSS 4341 TCT Hole Saw

- Material: 45# Carbon Steel
- Carbide Tip YG10
- FEATURES:
  For tough drilling on 5mm thick stainless steel.sheet.Low wear-off.
- FUNCTION:
  For drill operation on stainless steel sheet or square wares,cast irons.
  Iron plates and F,R,P Formed products.
- APPLICABLE MACHINERY:
  1.Electrical drills.2.Drilling presses.3.Magnetic drill presses.
- USES:
  1.Stainless steel conversions,doors & windows,stair rails,railings,screen doors,locks.
  2.Manufacture of aluminum doors & windows.
  3.Plumbing woeks,building A/C works.
  4.Opening in machines,electrical control boxes.
  5.Yacht building ,ship-building industry,F,R,P.

Dia. (mm)	Effective Length (mm)	Shank Dia(mm)	OAL (mm)	Center Drill Size(mm)	Order No.
13	23.5	10	85	6	HT10013
14	23.5	10	85	6	HT10014
15	23.5	10	85	6	HT10015

Dia. (mm)	Effective Length (mm)	Shank Dia(mm)	OAL (mm)	Center Drill Size(mm)	Order No.
16	23.5	10	85	6	HT10016
17	23.5	10	85	6	HT10017
18	23.5	10	85	6	HT10018

Dia. (mm)	Effective Length (mm)	Shank Dia(mm)	OAL (mm)	Center Drill Size(mm)	Order No.
19	23.5	10	85	6	HT10019
20	23.5	10	85	6	HT10020
21	23.5	10	85	6	HT10021
22	23.5	10	85	6	HT10022
23	23.5	10	85	6	HT10023
24	23.5	10	85	6	HT10024
25	23.5	10	85	6	HT10025
26	23.5	10	85	6	HT10026
27	23.5	10	85	6	HT10027
28	23.5	10	85	6	HT10028
29	23.5	10	85	6	HT10029
30	23.5	10	85	6	HT10030
31	23.5	10	85	6	HT10031
32	23.5	10	85	6	HT10032
33	23.5	10	85	6	HT10033
34	23.5	10	85	6	HT10034
35	23.5	10	85	6	HT10035
36	23.5	10	85	6	HT10036
37	23.5	10	85	6	HT10037
38	23.5	10	85	6	HT10038
39	23.5	10	85	6	HT10039
40	23.5	10	85	6	HT10040
41	23.5	10	85	6	HT10041
42	23.5	10	85	6	HT10042

Dia. (mm)	Effective Length (mm)	Shank Dia(mm)	OAL (mm)	Center Drill Size(mm)	Order No.
43	23.5	10	85	6	HT10043
44	23.5	10	85	6	HT10044
45	23.5	10	85	6	HT10045
46	23.5	10	85	6	HT10046
47	23.5	10	85	6	HT10047
48	23.5	10	85	6	HT10048
49	23.5	10	85	6	HT10049
50	23.5	10	85	6	HT10050
51	23.5	10	85	6	HT10051
52	23.5	10	85	6	HT10052
53	23.5	10	85	6	HT10053
54	23.5	10	85	6	HT10054
55	23.5	10	85	6	HT10055
58	23.5	10	85	6	HT10058
60	23.5	10	85	6	HT10060
63	23.5	10	85	6	HT10063
65	23.5	10	85	6	HT10065
68	23.5	10	85	6	HT10068
70	23.5	10	85	6	HT10070
75	23.5	10	85	6	HT10075
80	23.5	10	85	6	HT10080
85	23.5	10	85	6	HT10085
90	23.5	10	85	6	HT10090
95	23.5	10	85	6	HT10095
100	23.5	10	85	6	HT10100

HSS 9341 UNIKA TCT Hole Saw

- Material: 45# Carbon Steel
- K10 Carbide Tip
- FEATURES:
  For tough drilling on 5mm thick stainless steel.sheet.Low wear-off.
- FUNCTION:
  For drill operation on stainless steel sheet or square wares,cast irons.
  Iron plates and F,R,P Formed products.
- APPLICABLE MACHINERY:
  1.Electrical drills.
  2.Drilling presses.
  3.Magnetic drill presses.
- USES:
  1.Stainless steel conversions,doors & windows,stair rails,railings,screen doors,locks.
  2.Manufacture of aluminum doors & windows.
  3.Plumbing woeks,building A/C works.
  4.Opening in machines,electrical control boxes.
  5.Yacht building ,ship-building industry,F,R,P.

Dia. (mm)	Effective Length (mm)	Shank Dia (mm)	OAL (mm)	Center DrillSize (mm)	Order No.
15	26.5	9.8	91.5	6	HK10015
16	26.5	9.8	91.5	6	HK10016
17	26.5	9.8	91.5	6	HK10017
18	26.5	9.8	91.5	6	HK10018
19	26.5	9.8	91.5	6	HK10019
20	26.5	9.8	91.5	6	HK10020
21	26.5	9.8	91.5	6	HK10021
22	26.5	9.8	91.5	6	HK10022
23	26.5	9.8	91.5	6	HK10023
24	26.5	9.8	91.5	6	HK10024
25	26.5	9.8	91.5	6	HK10025
26	26.5	9.8	91.5	6	HK10026
27	26.5	9.8	91.5	6	HK10027
28	26.5	9.8	91.5	6	HK10028
29	26.5	9.8	91.5	6	HK10029
30	26.5	9.8	91.5	6	HK10030
31	26.5	9.8	91.5	6	HK10031

Dia. (mm)	Effective Length (mm)	Shank Dia (mm)	OAL (mm)	Center DrillSize (mm)	Order No.
32	26.5	9.8	91.5	6	HK10032
33	26.5	9.8	91.5	6	HK10033
34	26.5	9.8	91.5	6	HK10034
35	26.5	9.8	91.5	6	HK10035
36	26.5	9.8	91.5	6	HK10036
37	26.5	9.8	91.5	6	HK10037
38	26.5	9.8	91.5	6	HK10038
39	26.5	9.8	91.5	6	HK10039
40	26.5	9.8	91.5	6	HK10040
41	26.5	9.8	91.5	6	HK10041
42	26.5	9.8	91.5	6	HK10042
43	26.5	9.8	91.5	6	HK10043
44	26.5	9.8	91.5	6	HK10044
45	26.5	9.8	91.5	6	HK10045
46	26.5	9.8	91.5	6	HK10046
47	26.5	9.8	91.5	6	HK10047
48	26.5	9.8	91.5	6	HK10048

HSS 9341 UNIKA TCT Hole Saw

- Material: 45# Carbon Steel
- K10 Carbide Tip

- FEATURES:
  For tough drilling on 5mm thick stainless steel.sheet.Low wear-off.
- FUNCTION:
  For drill operation on stainless steel sheet or square wares,cast irons. Iron plates and F,R,P Formed products.

- APPLICABLE MACHINERY:
  1.Electrical drills.
  2.Drilling presses.
  3.Magnetic drill presses.
- USES:
  1.Stainless steel conversions,doors & windows,stair rails,railings,screen doors,locks.
  2.Manufacture of aluminum doors & windows.
  3.Plumbing woeks,building A/C works.
  4.Opening in machines,electrical control boxes.
  5.Yacht building ,ship-building industry,F,R,P.

Dia. (mm)	Effective Length (mm)	Shank Dia (mm)	OAL (mm)	Center DrillSize (mm)	Order No.
49	26.5	9.8	91.5	6	HK10049
50	26.5	9.8	91.5	6	HK10050
51	26.5	9.8	91.5	6	HK10051
52	26.5	9.8	91.5	6	HK10052
53	26.5	9.8	91.5	6	HK10053
54	26.5	9.8	91.5	6	HK10054
55	26.5	9.8	91.5	6	HK10055
56	26.5	9.8	91.5	6	HK10056
57	26.5	9.8	91.5	6	HK10057
58	26.5	9.8	91.5	6	HK10058
59	26.5	9.8	91.5	6	HK10059
60	26.5	9.8	91.5	6	HK10060
61	26.5	9.8	91.5	6	HK10061
62	26.5	9.8	91.5	6	HK10062
63	26.5	9.8	91.5	6	HK10063
64	26.5	9.8	91.5	6	HK10064
65	26.5	9.8	91.5	6	HK10065
66	26.5	9.8	91.5	6	HK10066
67	26.5	9.8	91.5	6	HK10067

Dia. (mm)	Effective Length (mm)	Shank Dia (mm)	OAL (mm)	Center DrillSize (mm)	Order No.
68	26.5	9.8	91.5	6	HK10068
69	26.5	9.8	91.5	6	HK10069
70	26.5	9.8	91.5	6	HK10070
71	26.5	9.8	91.5	6	HK10071
72	26.5	9.8	91.5	6	HK10072
73	26.5	9.8	91.5	6	HK10073
74	26.5	9.8	91.5	6	HK10074
75	26.5	9.8	91.5	6	HK10075
76	26.5	9.8	91.5	6	HK10076
77	26.5	9.8	91.5	6	HK10077
78	26.5	9.8	91.5	6	HK10078
79	26.5	9.8	91.5	6	HK10079
80	26.5	9.8	91.5	6	HK10080
85	26.5	9.8	91.5	6	HK10085
90	26.5	9.8	91.5	6	HK10090
95	26.5	9.8	91.5	6	HK10095
100	26.5	9.8	91.5	6	HK10100
102	26.5	9.8	91.5	6	HK10102

Power Hacksaw Blades

- High Speed Steel

Size(in.) Length × Width × Thickness	Teeth Per Inch	Order No.
12 × 1 × .050	10	HP12105
12 × 1 × .050	14	HP12145
14 × 1 × .050	10	HP14105
14 × 1 × .050	14	HP14145
14 × 1-1/4 × .062	6	HP14066
14 × 1-1/4 × .062	10	HP14106
14 × 1-1/2 × .075	4	HP14047
14 × 1-1/2 × .075	6	HP14067
17 × 1 × .050	10	HP17105
17 × 1 × .050	14	HP17145
17 × 1-1/4 × .062	4	HP17046
17 × 1-1/4 × .062	6	HP17066

Size(in.) Length × Width × Thickness	Teeth Per Inch	Order No.
17 × 1-1/4 × .062	10	HP17106
18 × 1-1/4 × .062	6	HP18066
18 × 1-1/4 × .062	10	HP18106
18 × 1-1/2 × .075	4	HP18047
18 × 1-1/2 × .075	6	HP18067
18 × 1-3/4 × .088	4	HP18048
18 × 1-3/4 × .088	6	HP18068
21 × 1-3/4 × .088	4	HP21048
21 × 1-3/4 × .088	6	HP21068
24 × 1-3/4 × .088	4	HP24048
24 × 1-3/4 × .088	6	HP24068
24 × 2 × .100	3	HP24030
24 × 2 × .100	4	HP24040

Metric Masonry Drills

- Carbide Tipped
- For drilling in consrete, rock,stone, masonry and freeze blocks.
- Standard:DIN8039

Size (mm)	Overall Length (mm)	Order No.
3	60	MM03060
4	75	MM04075
5	85	MM05085
5.5	85	MM05585
6	100	MM06100
6	150	MM06150
6	200	MM06200
6	300	MM06300
6	400	MM06400
6.5	100	MM065100
7	100	MM07100
8	120	MM08120
8	150	MM08150
8	200	MM08200
8	300	MM08300
8	400	MM08400
8	600	MM08600
9	120	MM09120
10	120	MM10120
10	150	MM10150
10	200	MM10200

Size (mm)	Overall Length (mm)	Order No.
10	300	MM10300
10	400	MM10400
10	600	MM10600
11	150	MM11150
12	150	MM12150
12	200	MM12200
12	300	MM12300
12	400	MM12400
12	600	MM12600
13	150	MM13150
13	200	MM13200
13	300	MM13300
13	400	MM13400
13	600	MM13600
14	150	MM14150
14	200	MM14200
14	300	MM14300
14	400	MM14400
14	600	MM14600
15	150	MM15150
16	150	MM16150

Size (mm)	Overall Length (mm)	Order No.
16	200	MM16200
16	300	MM16300
16	400	MM16400
16	600	MM16600
17	160	MM17160
18	160	MM18160
18	200	MM18200
18	300	MM18300
18	400	MM18400
18	600	MM18600
19	160	MM19160
19	200	MM19200
19	300	MM19300
19	400	MM19400
19	600	MM19600
20	160	MM20160
20	200	MM20200
20	300	MM20300
20	400	MM20400
20	600	MM20600
21	600	MM21600

Size (mm)	Overall Length (mm)	Order No.
22	160	MM22160
22	200	MM22200
22	300	MM22300
22	400	MM22400
22	600	MM22600
23	160	MM23160
24	160	MM24160
24	200	MM24200
24	300	MM24300
24	400	MM24400
24	600	MM24600
25	160	MM25160
25	200	MM25200
25	300	MM25300
25	400	MM25400
25	600	MM25600
26	160	MM26160
26	200	MM26200
26	300	MM26300
26	400	MM26400
26	600	MM26600

Inch Masonry Drills

- Carbide Tipped
- Standard:DIN8039

Size (in.)	Overall Length (in.)	Order No.
1/8	2.5"	MM40008
5/32	3"	MM40010
3/16	3.5"	MM40012
3/16	6"	MM41012
7/32	3.5	MM40014
1/4	4"	MM40016
1/4	6"	MM41016
1/4	8"	MM42016
1/4	12"	MM43016
1/4	16"	MM44016
17/64	4"	MM40017
9/32	4"	MM40018
5/16	5"	MM40020
5/16	6"	MM41020
5/16	8"	MM42020
5/16	12"	MM43020
5/16	16"	MM44020
5/16	18"	MM45020
11/32	5"	MM40022
3/8	5"	MM40024
3/8	6"	MM41024

Size (in.)	Overall Length (in.)	Order No.
3/8	8"	MM42024
3/8	12"	MM43024
3/8	16"	MM44024
3/8	18"	MM45024
7/16	6"	MM40028
15/32	6"	MM40030
15/32	8"	MM41030
15/32	12"	MM42030
15/32	16"	MM43030
15/32	18"	MM44030
1/2	6"	MM40032
1/2	8"	MM41032
1/2	12"	MM42032
1/2	16"	MM43032
1/2	18"	MM44032
9/16	6"	MM40036
9/16	8"	MM41036
9/16	12"	MM42036
9/16	16"	MM43036
9/16	18"	MM44036
19/32	6"	MM40038

Size (in.)	Overall Length (in.)	Order No.
5/8	6"	MM40040
5/8	8"	MM41040
5/8	12"	MM42040
5/8	16"	MM43040
5/8	18"	MM44040
21/32	6"	MM40042
23/32	6"	MM40046
23/32	8"	MM40046
23/32	12"	MM41046
23/32	16"	MM42046
23/32	18"	MM43046
3/4	6"	MM40048
3/4	8"	MM41048
3/4	12"	MM42048
3/4	16"	MM43048
3/4	18"	MM44048
25/32	6"	MM40050
25/32	8"	MM41050
25/32	12"	MM42050
25/32	16"	MM43050
25/32	18"	MM44050

Size (in.)	Overall Length (in.)	Order No.
27/32	6"	MM40054
7/8	6"	MM40056
7/8	16"	MM41056
7/8	18"	MM42056
29/32	6"	MM40058
15/16	6"	MM40060
15/16	8"	MM41060
15/16	12"	MM42060
15/16	16"	MM43060
15/16	18"	MM44060
1"	6"	MM40100
1"	8"	MM41100
1"	12"	MM42100
1"	16"	MM43100
1"	18"	MM44100
1-1/32	6"	MM40102
1-1/32	8"	MM41102
1-1/32	12"	MM42102
1-1/32	16"	MM43102
1-1/32	18"	MM40102

Carbide Tipped Glass and Tile Drills

- Spear point reduces cutting pressure for cleaner holes.
- Cuts a perfectly round hole without chipping or breaking.
- Best result with lower rpm and good cooling with water,vinegar and turpentine.
- For use with rotary drills only.
- For drilling glass,tile,mirrors and ceramics.

Size (mm)	OAL (mm)	Single Order No.	Single Hex Shank Order No.	Cross Order No.	Cross Hex Shank Order No.
3	60	MG10003	MG16003	MG20003	MG26003
4	60	MG10004	MG16004	MG20004	MG26004
5	60	MG10005	MG16005	MG20005	MG26005
6	60	MG10006	MG16006	MG20006	MG26006
7	80	MG10007	MG16007	MG20007	MG26007
8	80	MG10008	MG16008	MG20008	MG26008
10	100	MG10010	MG16010	MG20010	MG26010
12	100	MG10012	MG16012	MG20012	MG26012
14	100	MG10014	MG16014	MG20014	MG26014
16	100	MG10016	MG16016	MG20016	MG26016

Size (in.)	OAL (in.)	Single Order No.	Single Hex Shank Order No.	Cross Order No.	Cross Hex Shank Order No.
1/8	2-1/2	MG30008	MG36008	MG40008	MG46008
5/32	2-1/2	MG30010	MG36010	MG40010	MG46010
3/16	2-1/2	MG30012	MG36012	MG40012	MG46012
1/4	2-1/2	MG30016	MG36016	MG40016	MG46016
5/16	2-3/4	MG30020	MG36020	MG40020	MG46020
3/8	2-3/4	MG30024	MG36024	MG40024	MG46024
1/2	3"	MG30032	MG36032	MG40032	MG46032

SDS-PLUS Hammer Drills

- With Cylindrical Shank and 4 Shank Grooves
- Standard: DIN 8035
- Fit into all hammers with the SDS-plus system.
- Extremely robust and wear resistant.
- Small land and wide flute design for less heatbuild up and maximum dual removal.
- Suitable for drilling in hard materials like concrete,granite, brick and other similar building materials.

Size (mm)	OAL (mm)	Order No.
3	85	MS10030
4	110	MS10040
4	160	MS11040
5	110	MS10050
5	210	MS11050
5.5	110	MS10055
5.5	160	MS11055
5.5	210	MS12055
6	110	MS10060
6	160	MS11060

Size (mm)	OAL (mm)	Order No.
6	210	MS12060
6.5	110	MS10065
6.5	160	MS11065
6.5	210	MS12065
7	110	MS10070
7	160	MS11070
7	210	MS12070
8	110	MS10080
8	160	MS11080
8	210	MS12080

Size (mm)	OAL (mm)	Order No.
8	350	MS13080
8	450	MS14080
9	110	MS10090
9	160	MS11090
9	210	MS12090
10	110	MS10100
10	160	MS11100
10	210	MS12100
10	260	MS13100
10	350	MS14100

Size (mm)	OAL (mm)	Order No.
10	400	MS15100
10	450	MS16100
10	600	MS17100
10	1000	MS18100
10	1200	MS19100
11	110	MS10110
11	160	MS11110
11	210	MS12110
11	260	MS13110
11	310	MS14110
11	350	MS15110
11	400	MS16110
11	450	MS17110
11	1000	MS18110
11	1200	MS19110
12	110	MS10120
12	160	MS11120
12	210	MS12120
12	260	MS13120
12	310	MS14120
12	350	MS15120
12	400	MS16120
12	450	MS17120
12	600	MS18120
12	1000	MS19120
12	1200	MS110120
13	110	MS10130
13	160	MS11130
13	210	MS12130
13	260	MS13130
13	310	MS14130
13	350	MS15130
13	400	MS16130
13	450	MS17130
13	1000	MS18130
13	1200	MS19130
14	110	MS10140
14	160	MS11140
14	210	MS12140
14	260	MS13140
14	310	MS14140
14	350	MS15140
14	400	MS16140
14	450	MS17140
14	600	MS18140
14	1000	MS19140
14	1200	MS110140
15	160	MS10150
15	210	MS11150
15	260	MS12150
15	310	MS13150
15	1000	MS14150
15	1200	MS15150
16	160	MS10160
16	210	MS11160
16	260	MS12160
16	310	MS13160

Size (mm)	OAL (mm)	Order No.
16	350	MS14160
16	400	MS15160
16	450	MS16160
16	500	MS17160
16	600	MS18160
16	1000	MS19160
16	1200	MS110160
17	200	MS10170
17	1000	MS11170
17	1200	MS12170
18	200	MS10180
18	210	MS11180
18	260	MS12180
18	300	MS13180
18	310	MS14180
18	350	MS15180
18	400	MS16180
18	450	MS17180
18	500	MS18180
18	600	MS19180
18	1000	MS110180
18	1200	MS111180
19	210	MS10190
19	260	MS11190
19	300	MS12190
19	1000	MS13190
19	1200	MS14190
20	200	MS10200
20	210	MS11200
20	260	MS12200
20	260	MS13200
20	300	MS14200
20	310	MS15200
20	350	MS16200
20	400	MS17200
20	450	MS18200
20	500	MS19200
20	550	MS110200
20	600	MS111200
20	1000	MS112200
20	1200	MS113200
22	200	MS10220
22	210	MS11220
22	250	MS12220
22	260	MS13220
22	260	MS14220
22	310	MS15220
22	350	MS16220
22	400	MS17220
22	450	MS18220
22	500	MS19220
22	550	MS110220
22	600	MS111220
22	800	MS112220
23	200	MS10230
23	210	MS11230
23	260	MS12230
23	260	MS13230
23	350	MS14230
23	400	MS15230
23	450	MS16230

Size (mm)	OAL (mm)	Order No.
23	500	MS17230
23	600	MS18230
23	800	MS19230
23	1000	MS110230
23	1200	MS111230
24	200	MS10240
24	210	MS11240
24	250	MS12240
24	260	MS13240
24	310	MS14240
24	350	MS15240
24	400	MS16120
24	450	MS17240
24	500	MS18240
24	600	MS19240
24	800	MS110240
24	1000	MS111240
24	1200	MS112240
25	200	MS10250
25	210	MS11250
25	250	MS12250
25	260	MS13250
25	310	MS14250
25	350	MS15250
25	400	MS16250
25	450	MS17250
25	500	MS18250
25	600	MS19250
25	800	MS110250
25	1000	MS111250
25	1200	MS112250
26	200	MS10260
26	210	MS11260
26	260	MS12260
26	310	MS13260
26	350	MS14260
26	400	MS15260
26	450	MS16260
26	500	MS17260
26	600	MS18260
26	800	MS19260
26	1000	MS110260
26	1200	MS111260
27	800	MS10270
27	1000	MS11270
27	1200	MS12270
28	350	MS10280
28	400	MS11280
28	450	MS12280
28	500	MS13280
28	600	MS14280
28	800	MS15280
28	1000	MS16280
28	1200	MS17280
29	800	MS10290
29	1000	MS11290
29	1200	MS12290
30	400	MS10300
30	800	MS11300
30	1000	MS12300
30	1200	MS13300

SDS-PLUS Hammer Drills

- With Cylindrical Shank and 4 Shank Grooves
- Standard: DIN 8035
- Fit into all hammers with the SDS-plus system.
- Extremely robust and wear resistant.
- Small land and wide flute design for less heatbuild up and maximum dual removal.
- Suitable for drilling in hard materials like concrete,granite, brick and other similar building materials.

Size (in.)	OAL (in.)	Order No.
1/8	3-3/8	MS20008
5/32	4-3/8	MS20010
5/32	6-3/8	MS21010
3/16	4-3/8	MS20012
3/16	6-3/8	MS21012
3/16	8-3/8	MS22012
7/32	4-3/8	MS20014
7/32	6-3/8	MS21014
7/32	8-3/8	MS22014
15/64	4-3/8	MS20015
15/64	6-3/8	MS21015
15/64	8-3/8	MS22015
15/64	10-3/8	MS23015
1/4	4-3/8	MS20016
1/4	6-3/8	MS21016
1/4	8-3/8	MS22016
9/32	4-3/8	MS20018
9/32	6-3/8	MS21018
5/16	4-3/8	MS20020
5/16	6-3/8	MS21020
5/16	8-3/8	MS22020
5/16	10-3/8	MS23020
5/16	14	MS24020

Size (in.)	OAL (in.)	Order No.
5/16	18	MS25020
11/32	4-3/8	MS20022
11/32	6-3/8	MS21022
11/32	8-3/8	MS22022
11/32	10-3/8	MS23022
3/8	4-3/8	MS20024
3/8	6-3/8	MS21024
3/8	8-3/8	MS22024
3/8	10-3/8	MS23024
3/8	12-3/8	MS24024
3/8	14	MS25024
3/8	16	MS26024
3/8	18	MS27024
3/8	24	MS28024
7/16	4-3/8	MS20028
7/16	6-3/8	MS21028
7/16	8-3/8	MS22028
7/16	10-3/8	MS23028
7/16	12-3/8	MS24028
7/16	14	MS25028
7/16	16	MS26028

Size (in.)	OAL (in.)	Order No.
7/16	18	MS27028
15/32	4-3/8	MS20030
15/32	6-3/8	MS21030
15/32	8-3/8	MS22030
15/32	10-3/8	MS23030
15/32	12-3/8	MS24030
15/32	14	MS25030
15/32	16	MS26030
15/32	18	MS27030
15/32	24	MS28030
1/2	4-3/8	MS20032
1/2	6-3/8	MS21032
1/2	8-3/8	MS22032
1/2	10-3/8	MS23032
1/2	12-3/8	MS24032
1/2	14	MS25032
1/2	16	MS26032
1/2	18	MS27032
1/2	24	MS28032
9/16	4-3/8	MS20036
9/16	6-3/8	MS21036
9/16	8-3/8	MS22036

Size (in.)	OAL (in.)	Order No.
9/16	10-3/8	MS23036
9/16	12-3/8	MS24036
9/16	14	MS25036
9/16	16	MS26036
9/16	18	MS27036
9/16	24	MS28036
19/32	6-3/8	MS20038
19/32	8-3/8	MS21038
19/32	10-3/8	MS22038
5/8	4-3/8	MS23038
5/8	6-3/8	MS21040
5/8	8-3/8	MS22040
5/8	10-3/8	MS23040
5/8	12-3/8	MS24040
5/8	14	MS25040
5/8	18	MS26040
5/8	20	MS27040
5/8	24	MS28040
43/64	8	MS20043
23/32	8-3/8	MS20046
23/32	10-3/8	MS21046

Size (in.)	OAL (in.)	Order No.
23/32	12	MS22046
23/32	14	MS23046
23/32	16	MS24046
23/32	18	MS25046
3/4	8-3/8	MS20048
3/4	10-3/8	MS21048
3/4	12	MS22048
51/64	8	MS20051
51/64	8-3/8	MS21051
51/64	10-3/8	MS22051
51/64	12	MS23051
51/64	12-3/8	MS24051
51/64	14	MS25051
51/64	16	MS26051

Size (in.)	OAL (in.)	Order No.
51/64	18	MS27051
51/64	20	MS28051
51/64	22	MS29051
51/64	24	MS210051
7/8	6-3/8	MS20056
7/8	8-3/8	MS21056
7/8	10	MS22056
7/8	10-3/8	MS23056
7/8	12-3/8	MS24056
7/8	14	MS25056
7/8	16	MS26056
7/8	18	MS27056
7/8	20	MS28056
7/8	22	MS29056
7/8	24	MS21056

Size (in.)	OAL (in.)	Order No.
7/8	32	MS211056
29/32	6-3/8	MS20058
29/32	8-3/8	MS21058
29/32	10-3/8	MS22058
29/32	14	MS23058
29/32	16	MS24058
29/32	18	MS25058
29/32	20	MS26058
29/32	24	MS27058
15/16	6-3/8	MS20060
15/16	8-3/8	MS21060
15/16	10	MS22060
15/16	10-3/8	MS23060
15/16	12-3/8	MS24060

Size (in.)	OAL (in.)	Order No.
15/16	14	MS25060
15/16	16	MS27060
15/16	18	MS28060
15/16	20	MS29060
15/16	24	MS210060
1	6-3/8	MS20100
1	8-3/8	MS21100
1	10	MS22100
1	10-3/8	MS23100
1	12-3/8	MS24100
1	14	MS25100
1	16	MS26100
1	18	MS27100
1	20	MS28100
1	24	MS29100

3 PCS SDS Drill Bits Sets

Size(mm)	Order No.
5,6,8×110	MU10103
5,6,8×160	MU10203
5,6×110,8×160	MU10303

4 PCS SDS Drill Bits Sets

Size(mm)	Order No.
5,6,8,10×110	MU11104
6,8,10×110,6×160	MU11204
5,6,8,10×160	MU11304

Woodworking Drills

Metric Size

Dia. (mm)	OAL (mm)	Shank Dia.(mm)	Order No.
3	60	3	KW10030
4	75	4	KW10040
5	85	5	KW10050
6	90	6	KW10060
7	105	7	KW10070
8	115	8	KW10080
9	120	9	KW10090
10	120	10	KW10100
11	150	10	KW10110
12	150	10	KW10120
13	150	10	KW10130
14	150	10	KW10140

Dia. (mm)	OAL (mm)	Shank Dia.(mm)	Order No.
15	150	10	KW10150
16	160	10	KW10160
17	160	13	KW10170
18	160	13	KW10180
19	160	13	KW10190
20	160	13	KW10200
21	160	13	KW10210
22	160	13	KW10220
23	160	13	KW10230
24	160	13	KW10240
25	160	13	KW10250
26	160	13	KW10260

Inch Size

Dia. (in.)	OAL (in.)	Shank Dia.(in.)	Order No.
1/8	2-3/8	1/8	KW20008
9/64	2-7/8	9/64	KW20009
5/32	3-1/16	5/32	KW20010
11/64	3-1/8	11/64	KW20011
3/16	3-1/2	3/16	KW20012
13/64	3-11/16	13/64	KW20013
7/32	3-23/32	7/32	KW20014
15/64	3-27/32	15/64	KW20015
1/4	3-31/32	1/4	KW20016
17/64	4-1/8	17/64	KW20017
9/32	4-3/16	9/32	KW20018
19/64	4-11/32	19/64	KW20019

Dia. (in.)	OAL (in.)	Shank Dia.(in.)	Order No.
5/16	4-7/16	5/16	KW20020
21/64	4-23/32	21/64	KW20021
11/32	4-25/32	11/32	KW20022
23/64	4-25/32	23/64	KW20023
3/8	5"	3/8	KW20024
25/64	5-1/32	3/8	KW20025
27/64	5-11/32	3/8	KW20027
29/64	5-5/8	3/8	KW20029
31/64	5-3/4	3/8	KW20031
9/16	6"	3/8	KW20036
3/4	7-3/4	3/8	KW20048
7/8	8-1/4	3/8	KW20056

	Size	Order No.
	5pcs brad point wood drill bits 4, 5, 6, 8, 10mm with plastic box	KWU10105

	Size	Order No.
	5pcs brad point wood drill bits 4, 5, 6, 8, 10mm with plastic box	KWU10205

	Size	Order No.
	7pcs brad point wood drill bits 4, 5, 6, 7, 8, 10, 12mm	KWU20107

	Size	Order No.
	7pcs brad point wood drill bits 5/32, 3/16, 1/4, 9/32, 5/16, 3/8, 1/2"	KWU20107

	Size	Order No.
	8pcs brad point wood drill bits 3, 4, 5, 6, 7, 8, 9, 10mm	KWU30108

	Size	Order No.
	8pcs brad point wood drill bits 3, 4, 5, 6, 7, 8, 9, 10mm	KWU30208

	Size	Order No.
	5pcs brad point wood drill bits 5/32, 3/16, 1/4, 5/16, 3/8 with plastic bag	KWU40105

	Size	Order No.
	7pcs brad point wood drill bits (12") 1/8, 3/16, 1/4, 5/16, 3/8, 7/16,1/2	KWU50107

Size	Order No.
25pcs brad point wood drill bits1/8, 9/64, 5/32, 11/64, 3/16, 13/64, 7/32,15/64, 1/4, 17/64, 9/32, 19/64, 5/16, 21/64 11/32, 23/64, 3/8, 25/64, 13/32, 27/64, 7/16,29/64,15/32,31/64,1/2	KWU60125

Auger Bits

● Metric Size

Dia. (mm)	200mm OAL Order No.	230mm OAL Order No.	460mm OAL Order No.
6	KA120006	KA123006	KA146006
8	KA120008	KA123008	KA146008
10	KA120010	KA123010	KA146010
12	KA120012	KA123012	KA146012
13	KA120013	KA123013	KA146013
14	KA120014	KA123014	KA146014
16	KA120016	KA123016	KA146016
18	KA120018	KA123018	KA146018
19	KA120019	KA123019	KA146019
20	KA120020	KA123020	KA146020
22	KA120022	KA123022	KA146022

Dia. (mm)	200mm OAL Order No.	230mm OAL Order No.	460mm OAL Order No.
24	KA120024	KA123024	KA146024
25	KA120025	KA123025	KA146025
26	KA120026	KA123026	KA146026
28	KA120028	KA123028	KA146028
30	KA120030	KA123030	KA146030
32	KA120032	KA123032	KA146032
34	KA120034	KA123034	KA146034
35	KA120035	KA123035	KA146035
36	KA120036	KA123036	KA146036
38	KA120038	KA123038	KA146038
40	KA120040	KA123040	KA146040

● Inch Size

Dia. (in.)	8" OAL Order No.	9" OAL Order No.	18" OAL Order No.
1/4	KA28016	KA29016	KA218016
5/16	KA28020	KA29020	KA218020
3/8	KA28024	KA29024	KA218024
7/16	KA28028	KA29028	KA218028
1/2	KA28032	KA29032	KA218032
9/16	KA28036	KA29036	KA218036
5/8	KA28040	KA29040	KA218040
11/16	KA28044	KA29044	KA218044

Dia. (in.)	8" OAL Order No.	9" OAL Order No.	18" OAL Order No.
3/4	KA28048	KA29048	KA218048
13/16	KA28052	KA29052	KA218052
7/8	KA28056	KA29056	KA218056
15/16	KA28060	KA29060	KA218060
1"	KA28100	KA29100	KA218100
1-1/8	KA28108	KA29108	KA218108
1-1/4	KA28116	KA29116	KA218116
1-3/8	KA28124	KA29124	KA218124
1-1/2	KA28132	KA29132	KA218132

Woodworking Spade Bits (Flat Bits)

MM Diameter	Inch Diameter	Length (mm)	MM Order No.	Inch Order No.
6	1/4"	152	KS10060	KS20016
8	5/16"	152	KS10080	KS20020
10	3/8"	152	KS10100	KS20024
11	7/16"	152	KS10110	KS20028
12	15/32"	152	KS10120	KS20030
13	1/2"	152	KS10130	KS20032
14	9/16"	152	KS10140	KS20036
15	19/32"	152	KS10150	KS20038
16	5/8"	152	KS10160	KS20040
17	21/32"	152	KS10170	KS20042
18	11/16"	152	KS10180	KS20044
19	3/4"	152	KS10190	KS20048

MM Diameter	Inch Diameter	Length (mm)	MM Order No.	Inch Order No.
20	25/32"	152	KS10200	KS20050
22	7/8"	152	KS10220	KS20056
24	15/16"	152	KS10240	KS20060
25	1"	152	KS10250	KS20100
26	1-1/32"	152	KS10260	KS20102
28	1-1/8"	152	KS10280	KS20108
30	1-3/16"	152	KS10300	KS20112
32	1-1/4"	152	KS10320	KS20116
35	1-3/8"	152	KS10350	KS20124
38	1-1/2"	152	KS10380	KS20132
40	1-9/16"	152	KS10400	KS20136

● Flat Bits Set

6pcs Flat Bits Set	Order No.
10, 13, 16, 19, 22,25mm	KSU00106
Inch size: (3/8", 1/2", 5/8", 3/4", 7/8", 1")	KSU00206

6pcs Flat Bits Set	Order No.
10, 13, 16, 19, 22, 25mm	KSU00306
Inch size: (3/8", 1/2", 5/8", 3/4", 7/8", 1")	KSU00406

6pcs Flat Bits Set	Order No.
10, 13, 16, 19, 22, 25mm	KSU00506
Inch size: (3/8", 1/2", 5/8", 3/4", 7/8", 1")	KSU00606

6pcs Flat Bits Set	Order No.
10, 13, 16, 19, 22, 25mm	KSU00706
Inch size: (3/8", 1/2", 5/8", 3/4", 7/8", 1")	KSU00806

● Flat Bits Set

6pcs Flat Bits Set	Order No.
10, 13, 16, 19, 22, 25mm	KSU00906
Inch size: (3/8", 1/2", 5/8", 3/4", 7/8", 1") Allover Length: 16" (400mm)	KSU01006

10pcs Flat Bits Set	Order No.
6, 10, 13, 16, 19, 22, 25, 32mm	KSU10110
Inch size: 1/4", 3/8", 1/2", 5/8", 3/4", 7/8"1", 1-1/4" hex key 300mm extension bar	KSU10210

13pcs Flat Bits Set	Order No.
6, 8, 10, 12, 13, 14, 16, 18, 19 21, 22, 24, 25mm	KSU20113
Inch size: (1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16"7/8", 15/16", 1")	KSU20213

13pcs Flat Bits Set	Order No.
6, 8, 10, 12, 13, 14, 16, 18, 19 21, 22, 24, 25mm	KSU20313
Inch size: (1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16",7/8", 15/16", 1")	KSU20413

13pcs Flat Bits Set	Order No.
18, 19, 20, 22, 24, 25, 26, 28 30, 32, 34, 35, 38mm	KSU30113
Inch size: (11/16", 3/4", 13/16", 7/8", 15/16"1", 1-1/16", 1-1/8", 1-3/16", 1-1/4"1-11/32", 1-3/8", 1-1/2")	KSU30213

13pcs Flat Bits Set	Order No.
6, 8, 10, 12, 13, 14, 16, 18, 19 21, 22, 24, 25mm	KSU40113
Inch size: (1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16",7/8", 15/16", 1")	KSU40213

13pcs Flat Bits Set	Order No.
6, 8, 10, 12, 13, 14, 16, 18, 19 21, 22, 24, 25mm	KSU40313
Inch size: (1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16"7/8", 15/16", 1")	KSU40413

14pcs Flat Bits Set	Order No.
10, 13, 16, 18, 19, 22, 24, 25, 2832, 35, 38mm	KSU50114
Inch size: (3/8", 1/2", 5/8", 11/16", 3/4"7/8", 15/16", 1", 1-1/8", 1-1/4"1-3/8", 1-1/2") 150mm extension bar	KSU50214

14pcs Flat Bits Set	Order No.
8, 10, 12, 13, 14, 16, 18, 19,20, 22, 24, 25mm	KSU60114
Inch size: 5/16", 3/8", 7/16", 1/2", 9/16", 5/8",11/16", 3/4", 13/16", 7/8", 15/16", 1" Hex key 150mm extension bar	KSU60214

16pcs Flat Bits Set	Order No.
6, 8, 10, 12, 14, 16, 18, 20, 2224, 26, 28, 30, 35, 38mm	KSU70116
Inch size: (1/4", 5/16", 3/8", 7/16", 9/16", 5/8"11/16", 25/32", 7/8", 15/16", 1-1/32"1-1/8",1-3/16", 1-3/8", 1-1/2")	KSU70216

Forstner Wood Bit

● Metric Size

Size(mm)	Order No.
6	KF10060
10	KF10100
13	KF10130
15	KF10150
20	KF10200
22	KF10220
25	KF10250

● Inch Size

Size(in.)	Order No.
1/4	KF20016
3/8	KF20024
1/2	KF20032
5/8	KF20040
3/4	KF20048
7/8	KF20056
1"	KF20100

HSS Fully Ground Saw Drills 135° split point

- High Speed Steel
- Multi-function bit drills, saws, and reams brass, alumium, wood and plastics.
- Sharp ground flutes for fast, non clog cutting.
- Cuts own starting holes and any shape in any direction when tool is moved.

Straight Flute

Size (mm)	Flute Length (mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.
2.0	26	50	KD10020	KD12020
2.5	31	55	KD10025	KD12025
3.0	38	60	KD10030	KD12030
4.0	51	75	KD10040	KD12040

Size (mm)	Flute Length (mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.
5.0	61	86	KD10050	KD12050
6.0	67	90	KD10060	KD12060
6.5	67	90	KD10065	KD12065
8.0	69	95	KD10080	KD12080
10.0	77	105	KD10100	KD12100

Spiral Flute

Size (in.)	Flute Length (mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.
3/32	26	50	KD20006	KD20006
7/64	31	55	KD20007	KD20007
1/8	38	61	KD20008	KD20008
5/32	47	70	KD20010	KD20010

Size (in.)	Flute Length (mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.
3/16	56	80	KD20012	KD20012
1/4	69	90	KD20016	KD20016
9/32	69	90	KD20018	KD20018
5/16	69	95	KD20020	KD20020
3/8	71	98	KD20024	KD20024

HSS Fully Ground Saw Drill 135° Split Point Hex Shank

Size (mm)	Flute Length (mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.
3.0	38	81	KD30030	KD32030
4.0	50	95	KD30040	KD32040
5.0	61	106	KD30050	KD32050
6.0	67	110	KD30060	KD32060
6.5	67	110	KD30065	KD32065
8.0	69	127	KD30080	KD32080

Size (in.)	Flute Length (mm)	OAL (mm)	HSS Order No.	TiN-Coated Order No.
1/8	38	81	KD40008	KD42008
5/32	47	90	KD40010	KD42010
3/16	56	100	KD40012	KD42012
7/32	62	106	KD40014	KD42014
1/4	69	110	KD40016	KD42016
5/16	69	112	KD40020	KD42020

Sets	HSS Order No.	TiN-Coated Order No.
3Pcs/Set (4,6.5,8)	KDU0103	KDU0103TN
4Pcs/Set (3,5,6.5,8)	KDU0204	KDU0204TN
5Pcs/Set (2,2.3,2.6,3,3.2)	KDU0305	KDU0305TN
6Pcs/Set (3,4,5,6,6.5,8)	KDU0406	KDU0406TN
6Pcs/Set (1/8,5/32,5/32,3/16,1/4, 7/32,5/16)	KDU0506	KDU0506TN
Hex Shank:		
7Pcs/Set (7/64,1/8,5/32,3/16,1/4, 7/32,5/16)	KDU0607	KDU0607TN
7Pcs/Set (3,3.5,4,5,6.6.5,8)	KDU0707	KDU0707TN

HSS Taper Drills

- High Speed Steel

Size(in.)	Flute Length(mm)	OAL(mm)	Order No.
1/8	41	71	KT10008
9/64	44	74	KT10009
5/32	50	79	KT10010
11/64	54	83	KT10011
3/16	59	89	KT10012
13/64	62	92	KT10013
7/32	64	95	KT10014
1/4	70	101	KT10016

Size(mm)	Flute Length(mm)	OAL(mm)	Order No.
2.0	24	49	KT20020
2.5	30	57	KT20025
3.0	33	61	KT20030
4.0	43	75	KT20040
5.0	52	86	KT20050
5.5	57	93	KT20055
6.0	57	93	KT20060
6.5	63	101	KT20065

Hex Shank HSS Taper Drills

Size(in.)	Flute Length(mm)	OAL(mm)	Order No.
1/8	41	91	KT30008
9/64	44	94	KT30009
11/64	54	103	KT30011
3/16	59	119	KT30012
13/64	62	112	KT30013
7/32	64	115	KT30014
1/4	70	121	KT30016

Japanese Type

Size(mm)	Flute Length(mm)	OAL(mm)	Order No.
2.5	40	105	KT40025
3.0	60	125	KT40030
3.5	60	130	KT40035
4.0	70	135	KT40040
4.5	70	140	KT40045
5.0	75	145	KT40050

HSS Taper Drills With Countersink

Size(in.)	Flute Length(mm)	OAL(mm)	Order No.
1/8	41	71	KT50008
9/64	44	74	KT50009
5/32	50	79	KT50010
11/64	54	83	KT50011
3/16	59	89	KT50012
13/64	62	92	KT50013
7/32	64	95	KT50014
1/4	70	101	KT50016

Size(mm)	Flute Length(mm)	OAL(mm)	Order No.
2.0	24	49	KT60020
2.5	30	57	KT60025
3.0	33	61	KT60030
4.0	43	75	KT60040
5.0	52	86	KT60050
5.5	57	93	KT60055
6.0	57	93	KT60060
6.5	63	101	KT60065

Size(in.)	Order No.
7Pcs/Set (1/8,9/64,5/32,11/64,3/16,13/64,7/32)	KTU0107

Size(mm)	Order No.
4Pcs/Set (3,4,5,6)	KTU0204

HSS Hex Shank Screw Pilot Drills

Size Available:	Order No.
2.0mm Drill/For #4 Screws 2.4mm Drill/For #6 Screws 2.8mm Drill/For #8 Screws 3.2mm Drill/For #10 Screws 3.6mm Drill/For #12 Screws 5Pcs/Set	KTU0305

Burr--Cylinder Shape SA

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.	Nonferrous Cut No.
SA-41	1/16	1/4	1/8	A1001	A2001	
SA-41L2	1/16	1/4	1/8	A1002	A2002	
SA-41L3	1/16	1/4	1/8	A1003	A2003	
SA-61	1/16	1/4	3/32	A1004	A2004	
SA-63	3/32	3/8	3/32	A1005	A2005	
SA-42	3/32	7/16	1/8	A1006	A2006	
SA-42L2	3/32	7/16	1/8	A1007	A2007	
SA-42L3	3/32	7/16	1/8	A1008	A2008	
SA-11	1/8	1/2	1/4	A1009	A2009	
SA-43	1/8	9/16	1/8	A1010	A2010	
SA-43L2	1/8	9/16	1/8	A1011	A2011	
SA-43L3	1/8	9/16	1/8	A1012	A2012	
SA-12	1/8	5/8	1/4	A1013	A2013	
SA-52	5/32	1/2	1/8	A1014	A2014	
SA-13	5/32	5/8	1/4	A1015	A2015	
SA-81	3/16	1/2	3/16	A1016	A2016	
SA-53	3/16	1/2	1/8	A1017	A2017	
SA-14	3/16	5/8	1/4	A1018	A2018	
SA-51	1/4	1/2	1/8	A1019	A2019	
SA-1	1/4	5/8	1/4	A1020	A2020	
SA-1L	1/4	1"	1/4	A1021	A2021	
SA-1L6	1/4	5/8	1/4	A1022	A2022	
SA-1NF	1/4	3/4	1/4	-	-	A3023
SA-2	5/16	3/4	1/4	A1023	A2023	
SA-3	3/8	3/4	1/4	A1024	A2024	
SA-3L	3/8	1"	1/4	A1025	A2025	
SA-3L6	3/8	3/4	1/4	A1026	A2026	
SA-3NF	3/8	3/4	1/4	-	-	A3027
SA-3X	3/8	1-1/2	1/4	A1027	A2027	
SA-4	7/16	1"	1/4	A1028	A2028	
SA-5	1/2	1"	1/4	A1029	A2029	
SA-5L6	1/2	1"	1/4	A1030	A2030	
SA-5NF	1/2	1"	1/4	-	-	A3030
SA-6	5/8	1"	1/4	A1031	A2031	
SA-6NF	5/8	1"	1/4	-	-	A3031
SA-15	3/4	1/2	1/4	A1032	A2032	
SA-16	3/4	3/4	3/8	A1033	A2033	
SA-7	3/4	1"	3/8	A1034	A2034	
SA-7NF	3/4	1"	3/8	-	-	A3034
SA-7NF3/8	3/4	1"	3/8	-	-	A3035
SA-8	7/8	1"	3/8	A1035	A2035	
SA-9	1"	1"	3/8	A1036	A2036	

Burr--Cylinder Shape with End Cut SB

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.	Nonferrous Cut No.
SB-41	1/16	1/4	1/8	B1001	B2001	
SB-41L2	1/16	1/4	1/8	B1002	B2002	
SB-41L3	1/16	1/4	1/8	B1003	B2003	
SB-42	3/32	7/16	1/8	B1004	B2004	
SB-42L2	3/32	7/16	1/8	B1005	B2005	
SB-42L3	3/32	7/16	1/8	B1006	B2006	
SB-ECO	1/8	-	1/8	-	B2007	
SB-11	1/8	1/2	1/4	B1008	B2008	
SBA-12	1/8	1/2	1/4	B1009	B2009	
SB-43	1/8	9/16	1/8	B1010	B2010	
SB-43L2	1/8	9/16	1/8	B1011	B2011	
SB-43L3	1/8	9/16	1/8	B1012	B2012	
SB-13	5/32	5/8	1/4	B1013	B2013	
SB-14	3/16	5/8	1/4	B1014	B2014	
SB-51	1/4	3/16	1/8	B1015	B2015	
SB-1	1/4	5/8	1/4	B1016	B2016	
SB-1L	1/4	1"	1/4	B1017	B2017	B3017
SB-1NF	1/4	3/4	1/4	-	-	
SB-2	5/16	3/4	1/4	B1019	B2019	
SB-3	3/8	3/4	1/4	B1020	B2020	
SB-3L	3/8	1"	1/4	B1021	B2021	
SB-3NF	3/8	3/4	1/4	-	-	B3021
SB-3X	3/8	1-1/2	1/4	B1022	B2022	
SB-4	7/16	1"	1/4	B1023	B2023	
SB-5	1/2	1"	1/4	B1024	B2024	
SB-5NF	1/2	1"	1/4	-	-	B3024
SB-6	5/8	1"	1/4	B1025	B2026	
SB-6NF	5/8	1"	1/4	-	-	B3025
SB-15	3/4	1/2	1/4	B1026	B2026	
SB-16	3/4	3/4	1/4	B1027	B2027	
SB-7	3/4	1"	1/4	B1028	B2028	
SB-7NF	3/4	1"	1/4	-	-	B3028
SB-7NF3/8	3/4	1"	3/8	-	-	B3029
SB-8	7/8	1"	3/8	B1031	B2031	
SB-9	1"	1"	3/8	B1032	B2302	

Burr--Cylinder Shape with Radius End SC

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.	Nonferrous Cut No.
SC-61	3/32	3/8	3/32	C1001	C2001	
SC-41	3/32	7/16	1/8	C1002	C2002	
SC-11	1/8	1/2	1/4	C1003	C2003	
SC-42	1/8	9/16	1/8	C1004	C2004	
SC-42L2	1/8	9/16	1/8	C1005	C2005	
SC-42L3	1/8	9/16	1/8	C1006	C2006	
SC-12	1/8	5/8	1/8	C1007	C2007	
SC-52	5/32	1/2	1/4	C1008	C2008	
SC-13	5/32	5/8	1/8	C1009	C2009	
SC-81	3/16	1/2	3/16	C1010	C2010	
SC-53	3/16	1/2	1/8	C1011	C2011	
SC-14	3/16	5/8	1/4	C1012	C2012	
SC-51	1/4	1/2	1/8	C1013	C2013	
SC-1	1/4	5/8	1/4	C1014	C2014	
SC-1L	1/4	1"	1/4	C1015	C2015	
SC-1L6	1/4	5/8	1/4	C1016	C2016	
SC-1NF	1/4	3/4	1/4	-	-	C3017
SC-2	5/16	3/4	1/4	C1018	C2018	
SC-3	3/8	3/4	1/4	C1019	C2019	
SC-3L	3/8	1"	1/4	C1020	C2020	
SC-3L6	3/8	3/4	1/4	C1021	C2021	
SC-3NF	3/8	3/4	1/4	-	-	C3021
SC-3X	3/8	1-1/2	1/4	C1022	C2022	
SC-4	7/16	1"	1/4	C1023	C2023	
SC-5	1/2	1"	1/4	C1024	C2024	
SC-5L6	1/2	1"	1/4	C1025	C2025	
SC-5NF	1/2	1"	1/4	-	-	C3025
SC-6	5/8	1"	1/4	C1026	C2026	C3026
SC-6NF	5/8	1"	1/4	-	-	
SC-15	3/4	1/2	1/4	C1027	C2027	
SC-16	3/4	3/4	1/4	C1028	C2028	
SC-7	3/4	1"	1/4	C1030	C2030	
SC-7NF	3/4	1"	1/4	-	-	C3030
SC-7NF3/8	3/4	1"	3/8	-	-	C3031
SC-9	1"	1"	3/8	C1032	C2032	

Burr--Ball Shape SD

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.	Nonferrous Cut No.
SD-41	3/32	3/32	1/8	D1001	D2001	
SD-61	3/32	3/32	3/32	D1002	D2002	
SD-11	1/8	1/8	1/4	D1003	D2003	
SD-42	1/8	1/8	1/8	D1004	D2004	
SD-42L2	1/8	1/8	1/8	D1005	D2005	
SD-42L3	1/8	1/8	1/8	D1006	D2006	
SD-52	5/32	5/32	1/8	D1007	D2007	
SD-14	3/16	1/8	1/4	D1008	D2008	
SD-81	3/16	5/32	3/16	D1009	D2009	
SD-53	3/16	5/32	1/8	D1010	D2010	
SD-1	1/4	7/32	1/4	D1011	D2011	
SD-1L6	1/4	7/32	1/4	D1012	D2012	
SD-1NF	1/4	7/32	1/4	-	-	D3013
SD-51	1/4	7/32	1/8	D1014	D2014	
SD-2	5/16	1/4	1/4	D1015	D2015	
SD-3	3/8	5/16	1/4	D1016	D2016	
SD-3L6	3/8	5/16	1/4	D1017	D2017	
SD-3NF	3/8	5/16	1/4	-	-	D3018
SD-4	7/16	3/8	1/4	D1019	D2019	
SD-5	1/2	7/16	1/4	D1020	D2020	
SD-5L6	1/2	7/16	1/4	D1021	D2021	
SD-5NF	1/2	7/16	1/4	-	-	D3021
SD-6	5/8	9/16	1/4	D1022	D2022	
SD-6NF	5/8	9/16	1/4	-	-	D3023
SD-7	3/4	11/16	1/4	D1024	D2024	
SD-7NF	3/4	11/16	1/4	-	-	D3025
SD-7NF3/8	3/4	11/16	3/8	-	-	D3026
SD-9	1"	15/16	3/8	D1026	D2026	

Burr--Oval Shape SE

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.	Nonferrous Cut No.
SE-61	3/32	1/8	3/32	E1001	E2001	
SE-41	1/8	7/32	1/8	E1002	E2002	
SE-41L2	1/8	7/32	1/8	E1003	E2003	
SE-41L3	1/8	7/32	1/8	E1004	E2004	
SE-81	3/16	9/32	3/16	E1005	E2005	
SE-53	3/16	9/32	1/8	E1006	E2006	
SE-11	3/16	5/16	1/4	E1007	E2007	
SE-1	1/4	5/16	1/4	E1008	E2008	
SE-1L6	1/4	3/8	1/4	E1009	E2009	
SE-51	1/4	3/8	1/8	E1010	E2010	
SE-3	3/8	5/8	1/4	E1011	E2011	
SE-3L6	3/8	5/8	1/4	E1012	E2012	
SE-3NF	3/8	5/8	1/4	-	-	E3013
SE-5	1/2	7/8	1/4	E1014	E2014	
SE-5L6	1/2	7/8	1/4	E1015	E2015	
SE-5NF	1/2	7/8	1/4	-	-	E3016
SE-6	5/8	1"	1/4	E1017	E2017	
SE-6NF	5/8	1"	1/4	-	-	E3018
SE-7	3/4	1"	1/4	E1019	E2019	
SE-7NF	3/4	1"	1/4	-	-	E3021
SE-7NF3/8	3/4	1"	3/8	-	-	E3022

Burr--Tree Shape Radius End SF

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.	Nonferrous Cut No.
SF-61	3/32	1/4	3/32	F1001	F2001	
SF-41	1/8	1/4	1/8	F1002	F2002	
SF-11	1/8	1/2	1/4	F1003	F2003	
SF-42	1/8	1/2	1/8	F1004	F2004	
SF-42L2	1/8	1/2	1/8	F1005	F2005	
SF-42L3	1/8	1/2	1/8	F1006	F2006	
SF-81	3/16	1/2	3/16	F1007	F2007	
SF-53	3/16	1/2	1/8	F1008	F2008	
SF-51	1/4	1/2	1/8	F1009	F2009	
SF-1	1/4	3/4	1/4	F1010	F2010	
SF-1L6	1/4	1/2	1/4	F1011	F2011	
SF-1NF	1/4	3/4	1/4	-	-	F3012
SF-3	3/8	3/4	1/4	F1013	F2013	
SF-3L6	3/8	3/4	1/4	F1014	F2014	
SF-3NF	3/8	3/4	1/4	-	-	F3015
SF-4	7/16	1"	1/4	F1016	F2016	
SF-13	1/2	3/4	1/4	F1017	F2017	
SF-5	1/2	1"	1/4	F1018	F2018	
SF-5L6	1/2	1"	1/4	F1019	F2019	
SF-5NF	1/2	1"	1/4	-	-	F3020
SF-6	5/8	1"	1/4	F1021	F2021	
SF-6NF	5/8	1"	1/4	-	-	F3022
SF-7	3/4	1"	1/4	F1022	F2022	
SF-14	3/4	1-1/4	1/4	F1023	F2023	
SF-14NF	3/4	1-1/4	1/4	-	-	F3024
SF-14NF3/8	3/4	1-1/4	3/8	-	F2025	
SF-15	3/4	1-1/2	1/4	F1026	F2026	

Burr--Tree Shape Pointed End SG

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.
SG-61	3/32	1/4	3/32	G1001	G2001
SG-41	1/8	1/4	1/8	G1002	G2002
SG-42	1/8	5/16	1/8	G1003	G2003
SG-43	1/8	3/8	1/8	G1004	G2004
SG-44	1/8	1/2	1/8	G1005	G2005
SG-44L2	1/8	1/2	1/8	G1006	G2006
SG-44L3	1/8	1/2	1/8	G1007	G2007
SG-81	3/16	1/2	3/16	G1008	G2008
SG-53	3/16	1/2	1/8	G1009	G2009
SG-1	1/4	5/8	1/4	G1010	G2010
SG-1L6	1/4	1/2	1/4	G1011	G2011
SG-51	1/4	1/2	1/8	G1012	G2012
SG-2	5/16	3/4	1/4	G1013	G2013
SG-3	3/8	3/4	1/4	G1014	G2014
SG-3L6	3/8	3/4	1/4	G1015	G2015
SG-13	1/2	3/4	1/4	G1016	G2016
SG-5	1/2	1"	1/4	G1017	G2017
SG-5L6	1/2	1"	1/4	G1018	G2018
SG-6	5/8	1"	1/4	G1019	G2019
SG-7	3/4	1"	1/4	G1020	G2020
SG-15	3/4	1-1/2	1/4	G1021	G2021

Burr--Flame Shape SH

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.
SH-41	1/8	1/4	1/8	H1001	H2001
SH-41L2	1/8	1/4	1/8	H1002	H2002
SH-41L3	1/8	1/4	1/8	H1003	H2003
SH-53	3/16	3/8	1/8	H1004	H2004
SH-1	1/4	5/8	1/4	H1005	H2005
SH-2	5/16	3/4	1/4	H1006	H2006
SH-2L6	5/16	3/4	1/4	H1007	H2007
SH-5	1/2	1-1/4	1/4	H1008	H2008
SH-5L6	1/2	1-1/4	1/4	H1009	H2009
SH-6	5/8	1-7/16	1/4	H1010	H2010
SH-7	3/4	1-5/8	1/4	H1011	H2011

Burr--Cone Shape--60° SJ

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.
SJ-42	1/8	3/32	1/8	J1001	J2001
SJ-1	1/4	3/16	1/4	J1002	J2002
SJ-3	3/8	5/16	1/4	J1003	J2003
SJ-5	1/2	7/16	1/4	J1004	J2004
SJ-6	5/8	9/16	1/4	J1005	J2005
SJ-7	3/4	11/16	1/4	J1006	J2006
SJ9	1"	15/16	1/4	J1007	J2007

Burr--Cone Shape--90°SK

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Double Cut No.	Single Cut No.
SK-42	1/8	1/16	1/8	K1001	K2001
SK-1	1/4	1/8	1/4	K1002	K2002
SK-3	3/8	3/16	1/4	K1003	K2003
SK-5	1/2	1/4	1/4	K1004	K2004
SK-6	5/8	5/16	1/4	K1005	K2005
SK-7	3/4	3/8	1/4	K1006	K2006
SK-9	1"	1/2	1/4	K1007	K2007

Burr--Taper Shap-Radius SL

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Included angle	Double Cut No.	Single Cut No.	Nonferrous Cut No.
SL-41	1/8	3/8	1/8	8	L1001	L2001	
SL-42	1/8	1/2	1/8	8	L1002	L2002	
SL-42L2	1/8	1/2	1/8	8	L1003	L2003	
SL-42L3	1/8	1/2	1/8	8	L1004	L2004	
SL-81	3/16	7/16	3/16	14	L1005	L2005	
SL-53	3/16	1/2	1/8	14	L1006	L2006	
SL-1	1/4	5/8	1/4	14	L1007	L2007	
SL-1L6	1/4	5/8	1/4	14	L1008	L2008	
SL-2	5/16	7/8	1/4	14	L1009	L2009	
SL-3	3/8	1-1/16	1/4	14	L1010	L2010	
SL-3L6	3/8	1-1/16	1/4	14	L1011	L2011	
SL-3NF	3/8	1-1/16	1/4	14	-	-	L3012
SL-4	1/2	1-1/8	1/4	14	L1013	L2013	
SL-4L6	1/2	1-1/8	1/4	14	L1014	L2014	
SL-4NF	1/2	1-1/8	1/4	14	-	-	L3015
SL-5	5/8	1-3/16	1/4	14	L1016	L2016	
SL-5NF	5/8	1-3/16	1/4	14	-	-	L3017
SL-6	5/8	1-3/16	1/4	14	L1018	L2018	
SL-6NF	5/8	1-5/16	1/4	14	-	-	L3020
SL-7	3/4	1-1/2	1/4	14	L1020	L2020	
SL-7NF	3/4	1-1/2	1/4	14	-	-	L3022
SL-7NF3/8	3/4	1-1/2	3/8	14	-	-	L3023

Burr--Cone Shape SM

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Included angle	Double Cut No.	Single Cut No.
SM-61	3/32	1/4	3/32	10	M1001	M2001
SM-41	1/8	11/32	1/8	12	M1002	M2002
SM-42	1/8	7/16	1/8	14	M1003	M2003
SM-42I2	1/8	7/16	1/8	14	M1004	M2004
SM-42I3	1/8	7/16	1/8	14	M1005	M2005
SM-43	1/8	5/8	1/8	7	M1006	M2006
SM-53	3/16	1/2	1/8	16	M1007	M2007
SM-1	1/4	1/2	1/4	22	M1008	M2008
SM-51	1/4	1/2	1/8	22	M1009	M2009
SM-2	1/4	3/4	1/4	14	M1010	M2010
SM-3	1/4	1"	1/4	10	M1011	M2011
SM-4	3/8	5/8	1/4	28	M1012	M2012
SM-5	1/2	7/8	1/4	28	M1013	M2013
SM-6	5/8	1"	1/4	31	M1014	M2014

Burr--Investde Cone Shape SN

Tool No.	Cutter Diameter	Length of Cut	Shank Diameter	Included angle	Double Cut No.	Single Cut No.
SN-41	3/32	1/8	1/8	10	N1001	N2001
SN-61	3/32	1/8	3/32	10	N1002	N2002
SN-42	1/8	3/16	1/8	10	N1003	N2003
SN-81	3/16	1/4	3/16	10	N1004	N2004
SN-53	3/16	1/4	1/8	10	N1005	N2005
SN-51	1/4	1/4	1/8	10	N1006	N2006
SN-1	1/4	5/16	1/4	10	N1007	N2007
SN-2	3/8	3/8	1/4	13	N1008	N2008
SN-4	1/2	1/2	1/4	28	N1009	N2009
SN-6	5/8	3/4	1/4	18	N1010	N2010
SN-7	3/4	5/8	1/4	30	N1011	N2011

Cylinder(shape A)/ZYA

Order No.				Size(mm)			
Single cut	Double cut	Fine cut	Alu Cut	Cut dia.	Cut lenth	Total length	Shank dia
A0211M03	A0211X03	A0211F03		2	11	38	3
A0315M03	A0315X03	A0315F03		3	15	38	3
A0413M03	A0413X03	A0413F03		4	13	48	3
A0513M03	A0513X03	A0513F03		5	13	48	3
A0613M03	A0616X03	A0613F03		6	13	48	3
A0210M06				2	10	55	6
A0314M06				3	14	55	6
A0414M06				4	14	55	6
A0616M06	A0616X06	A0616F06	A0616C06	6	16	65	6
A0820M06	A0820X06	A0820F06	A0820C06	8	20	65	6
A1020M06	A1020X06	A1020F06	A1020C06	10	20	65	6
A1225M06	A1225X06	A1225F06	A1225C06	12	25	65	6
A1625M06	A1625X06	A1625F06	A2025C06	16	25	65	6

Cylinder With End Cut (shape B)/ZYAS

Order No.				Size(mm)			
Single cut	Double cut	Fine cut	Alu Cut	Cut dia.	Cut lenth	Total length	Shank dia
B0211M03	B0211X03	B0211F03		2	11	38	3
B0315M03	B0315X03	B0315F03		3	15	38	3
B0413M03	B0413X03	B0413F03		4	13	48	3
B0513M03	B0513X03	B0513F03		5	13	48	3
B0613M03	B0613X03	B0613F03		6	13	48	3
B0210M06				2	10	55	6
B0314M06				3	14	55	6
B0414M06				4	14	55	6
B0616M06	B0616X06	B0616F06	B0616C06	6	16	65	6
B0820M06	B0820X06	B0820F06	B0820C06	8	20	65	6
B1020M06	B1020X06	B1020F06	B1020C06	10	20	65	6
B1225M06	B1225X06	B1225F06	B1225C06	12	25	65	6
B1625M06	B1625X06	B1625F06	B1625C06	16	25	65	6

Cylinder With Radius End(shape C)/WRC

Order No.				Size(mm)			
Single cut	Double cut	Fine cut	Alu Cut	Cut dia.	Cut lenth	Total length	Shank dia
C0211M03	C0211X03	C0211F03		2	11	38	3
C0315M03	C0315X03	C0315F03		3	15	38	3
C0413M03	C0413X03	C0413F03		4	13	48	3
C0513M03	C0513X03	C0513F03		5	13	48	3
C0613M03	C0613X03	C0613F03		6	13	48	3
C0210M06				2	10	55	6
C0314M06				3	14	55	6
C0414M06				4	14	55	6
C0616M06	C0616X06	C0616F06	C0616C06	6	16	65	6
C0820M06	C0820X06	C0820F06	C0820C06	8	20	65	6
C1020M06	C1020X06	C1020F06	C1020C06	10	20	65	6
C1225M06	C1225X06	C1225F06	C1225C06	12	25	65	6
C1625M06	C1625X06	C1625F06	C1625C06	16	25	65	6

Ball(shape D)/KUD

Order No.				Size(mm)			
Single cut	Double cut	Fine cut	Alu Cut	Cut dia.	Cut lenth	Total length	Shank dia
D0202M03	D0202X03	D0202F03		2	2	38	3
D0303M03	D0303X03	D0303F03		3	3	38	3
D0404M03	D0404X03	D0404F03		4	3	48	3
D0504M03	D0504X03	D0504F03		5	4	48	3
D0605M03	D0605X03	D0605F03		6	5	48	3
D0202M06				2	1.8	55	6
D0303M06				3	2.7	55	6
D0403M06				4	3	55	6
D0605M06	D0605X06	D0605F06	D0605C06	6	5	65	6
D0807M06	D0807X06	D0807F06	D0807C06	8	7	65	6
D1009M06	D1009X06	D1009F06	D1009C06	10	9	65	6
D1210M06	D1210X06	D1210F06	D1210C06	12	10	65	6
D1614M06	D1614X06	D1614F06	D1614C06	16	14	65	6

Oval Shape(shape E)/TRE

Order No.				Size(mm)			
Single cut	Double cut	Fine cut	Alu Cut	Cut dia.	Cut lenth	Total length	Shank dia
E0306M03	E0306X03	E0306F03		3	6	38	3
E0407M03	E0407X03	E0407F03		4	7	48	3
E0508M03	E0508X03	E0508F03		5	8	48	3
E0610M03	E0610X03	E0610F03		6	10	48	3
E0307M06				3	7	55	6
E0610M06	E0610X06	E0610F06	E0610C06	6	10	65	6
E0813M06	E0813X06	E0813F06	E0813C06	8	13	65	6
E1016M06	E1016X06	E1016F06	E1016C06	10	16	65	6
E1220M06	E1220X06	E1220F06	E1220C06	12	20	65	6
E1625M06	E1625X06	E1625F06	E1625C06	16	25	65	6

Tree Shape Radius End(shape F)/RBF

Order No.				Size(mm)			
Single cut	Double cut	Fine cut	Alu Cut	Cut dia.	Cut lenth	Total length	Shank dia
F0315M03	F0315X03	F0315F03		3	15	38	3
F0413M03	F0413X03	F0413F03		4	13	48	3
F0513M03	F0513X03	F0513F03		5	13	48	3
F0613M03	F0613X03	F0613F03		6	13	48	3
F0313M06				3	13	55	6
F0618M06	F0618X06	F0618F06	F0618C06	6	18	65	6
F0820M06	F0820X06	F0820F06	F0820C06	8	20	65	6
F1020M06	F1020X06	F1020F06	F1020C06	10	20	65	6
F1225M06	F1225X06	F1225F06	F1225C06	12	25	65	6
F1625M06	F1625X06	F1625F06	F1625C06	16	25	65	6

Tree Shape Pointed End (shape G)/SPG

Order No.			Size(mm)			
Single cut	Double cut	Fine cut	Cut dia.	Cut lenth	Total length	Shank dia
G0315M03	G0315X03	G0315F03	3	15	38	3
G0413M03	G0413X03	G0413F03	4	13	48	3
G0513M03	G0513X03	G0513F03	5	13	48	3
G0613M03	G0613X03	G0613F03	6	13	48	3
G0313M06			3	13	55	6
G0618M06	G0618X06	G0618F06	6	18	65	6
G0618M06			6	18	65	6
G0820M06	G0820X06	G0820F06	8	20	65	6
G1020M06	G1020X06	G1020F06	10	20	65	6
G1225M06	G1225X06	G1225F06	12	25	65	6
G1625M06	G1625X06	G1625F06	16	25	65	6

Tirch Cylinder(shape H)/Flame shape HMB

Order No.				Size(mm)			
Single cut	Double cut	Fine cut	Alu Cut	Cut dia.	Cut lenth	Total length	Shank dia
H0307M03	H0307X03	H0307F03		3	7	38	3
H0410M03	H0410X03	H0410F03		4	10	48	3
H0510M03	H0510X03	H0510F03		5	10	48	3
H0610M03	H0610X03	H0610F03		6	10	48	3
H0313M06				3	13	55	6
H0618M06	H0618X06	H0618F06	H0618C06	6	18	65	6
H0820M06	H0820X06	H0820F06	H0820C06	8	20	65	6
H1025M06	H1025X06	H1025F06	H1025C06	10	25	65	6
H1232M06	H1232X06	H1232F06	H1232C06	12	32	80	6
H1636M06	H1636X06	H1636F06	H1636C06	16	36	80	6

Taper with Ball Top(shape L)/KEL

Order No.				Size(mm)			
Single cut	Double cut	Fine cut	Alu Cut	Cut dia.	Cut lenth	Total length	Shank dia
L0315M03	L0315X03	L0315F03		3	15	38	3
L0413M03	L0413X03	L0413F03		4	13	48	3
L0513M03	L0513X03	L0513F03		5	13	48	3
L0613M03	L0613X03	L0613F03		6	13	48	3
L0313M06				3	13	55	6
L0616M06	L0616X06	L0616F06	L0616C06	6	16	65	6
L0822M06	L0822X06	L0822F06	L0822C06	8	22	65	6
L1025M06	L1025X06	L1025F06	L1025C08	10	25	65	6
L1228M06	L1228X06	L1228F06	L1228C06	12	28	80	6
L1636M06	L1636X06	L1636F06	L1633C06	16	33	80	6

Taper (shape M)/SKM

Order No.			Size(mm)			
Single cut	Double cut	Fine cut	Cut dia.	Cut lenth	Total length	Shank dia
M0315M03	M0315X03	M0315F03	3	15	38	3
M0413M03	M0413X03	M0413F03	4	13	48	3
M0513M03	M0513X03	M0513F03	5	13	48	3
M0613M03	M0613X03	M0613F03	6	13	48	3
M0311M06			3	11	55	6
M0618M06	M0618X06	M0618F06	6	18	65	6
M0820M06	M0820X06	M0820F06	8	20	65	6
M1020M06	M1020X06	M1020F06	10	20	65	6
M1225M06	M1225X06	M1225F06	12	25	65	6
M1625M06	M1625X06	M1625F06	16	25	65	6

Inverded Cone(shape N)/WKN

Order No.		Size(mm)			
Single cut	Double cut	Cut dia.	Cut lenth	Total length	Shank dia
N0304M03	N0304X03	3	4	38	3
N0406M03	N0406X03	4	6	48	3
N0507M03	N0507X03	5	7	48	3
N0607M03	N0607X03	6	7	48	3
N0304M06		3	4	55	6
N0607M06	N0607X06	6	7	65	6
N0810M06	N0810X06	8	10	65	6
N1010M06	N1010X06	10	10	65	6
N1213M06	N1213X06	12	13	65	6
N1616M06	N1616X06	16	16	65	6

Taper 60°(Shape J)/KSJ

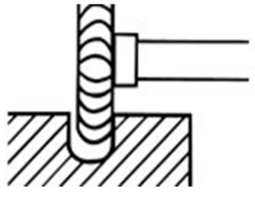
Order No.	Size(mm)			
Single cut	Cut dia.	Cut lenth	Total length	Shank dia
J0302M03	3	2	38	3
J0605M03	6	5	48	3
J0303M06	3	2.6	55	6
J0605M06	6	5	65	6
J0807M06	8	7	65	6
J1009M06	10	9	65	6
J1210M06	12	10	65	6
J1614M06	16	14	65	6

Taper90°(Shape K)/KSK

Order No.	Size(mm)			
Single cut	Cut dia.	Cut lenth	Total length	Shank dia
K0302M03	3	2	38	3
K0603M03	6	3	48	3
K0302M06	3	2	55	6
K0603M06	6	3	55	6
K0804M06	8	4	55	6
K1005M03	10	5	55	6
K1206M06	12	6	55	6
K1608M06	16	8	55	8

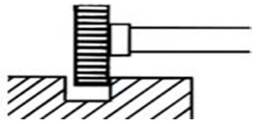
Disc Type

Order No.	Size(mm)			
Single cut	Cut dia.	Cut lenth	Total length	Shank dia
W2504M06	25	4	45	6
W1603M06	16	3	45	6



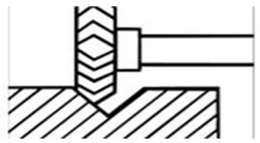
Disc Type With Arc Edge

Order No.	Size(mm)			
Single cut	Cut dia.	Cut lenth	Total length	Shank dia
X1202M06	12	2	45	6
X1602M06	16	2	45	6
X2505M06	25	5	45	6



Disc Type With 90 Degree Angle Edge

Order No.	Size(mm)			
Single cut	Cut dia.	Cut lenth	Total length	Shank dia
Y2505M06	25	5	45	6
Y1603M06	16	3	45	6



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