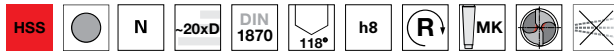




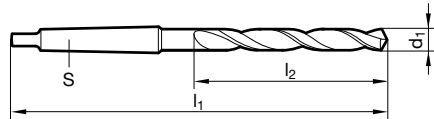
Extra length twist drills, series 2

Article no. **267**Web thinning $\geq \varnothing 7.700$ • relieved cone • for extremely deep holes

Cutting data page 466



HSS/HSCO drills



Article no.

267

d1 mm	inch	S	l1 mm	l2 mm	Order no.
8.000		MK-1	330.0	210.0	267 8.000
8.500		MK-1	330.0	210.0	267 8.500
9.000		MK-1	345.0	220.0	267 9.000
10.000		MK-1	360.0	235.0	267 10.000
10.200		MK-1	360.0	235.0	267 10.200
10.500		MK-1	360.0	235.0	267 10.500
11.000		MK-1	375.0	250.0	267 11.000
11.500		MK-1	375.0	250.0	267 11.500
11.750		MK-1	375.0	250.0	267 11.750
11.800		MK-1	375.0	250.0	267 11.800
12.000		MK-1	395.0	260.0	267 12.000
13.000		MK-1	395.0	260.0	267 13.000
13.500		MK-1	410.0	275.0	267 13.500
14.000		MK-1	410.0	275.0	267 14.000
14.500		MK-2	425.0	275.0	267 14.500
15.000		MK-2	425.0	275.0	267 15.000
15.480	39/64	MK-2	445.0	295.0	267 15.480
15.500		MK-2	445.0	295.0	267 15.500
16.000		MK-2	445.0	295.0	267 16.000
16.500		MK-2	445.0	295.0	267 16.500
17.000		MK-2	445.0	295.0	267 17.000
17.070	43/64	MK-2	465.0	310.0	267 17.070
17.500		MK-2	465.0	310.0	267 17.500
18.000		MK-2	465.0	310.0	267 18.000
18.500		MK-2	465.0	310.0	267 18.500
19.000		MK-2	465.0	310.0	267 19.000
19.500		MK-2	490.0	325.0	267 19.500
20.000		MK-2	490.0	325.0	267 20.000
20.640	13/16	MK-2	490.0	325.0	267 20.640
21.000		MK-2	490.0	325.0	267 21.000

Article no.

267

d1 mm	inch	S	l1 mm	l2 mm	Order no.
21.430	27/32	MK-2	515.0	345.0	267 21.430
21.500		MK-2	515.0	345.0	267 21.500
21.830	55/64	MK-2	515.0	345.0	267 21.830
22.000		MK-2	515.0	345.0	267 22.000
22.800		MK-2	515.0	345.0	267 22.800
23.000		MK-2	515.0	345.0	267 23.000
23.020	29/32	MK-2	515.0	345.0	267 23.020
23.750		MK-3	555.0	365.0	267 23.750
23.810	15/16	MK-3	555.0	365.0	267 23.810
24.000		MK-3	555.0	365.0	267 24.000
24.500		MK-3	555.0	365.0	267 24.500
25.000	63/64	MK-3	555.0	365.0	267 25.000
26.000		MK-3	555.0	365.0	267 26.000
28.000		MK-3	580.0	385.0	267 28.000
29.500		MK-3	580.0	385.0	267 29.500
30.000		MK-3	580.0	385.0	267 30.000
31.000		MK-3	610.0	410.0	267 31.000
32.000		MK-4	635.0	410.0	267 32.000
34.000		MK-4	665.0	430.0	267 34.000
40.000		MK-4	695.0	460.0	267 40.000
45.000		MK-4	735.0	490.0	267 45.000

Material group	Hardness		SFM	Feed Rate - IPR									
	HRc	Bhn		1/16 in. 1.590 mm	1/8 in. 3.170 mm	1/4 in. 6.350 mm	3/8 in. 9.520 mm	1/2 in. 12.700 mm	5/8 in. 15.870 mm	3/4 in. 19.050 mm	1 in. 25.400 mm	1 1/4 in. 31.750 mm	1 1/2 in. 38.100 mm
Common structural steels	- ≤ 32	≤ 150 ≤ 301	90 70				0.0100 0.0080	0.0125 0.0100	0.0125 0.0100	0.014 0.011	0.0160 0.0125	0.0200 0.0160	0.0245 0.0200
Free-cutting steels	≤ 25 ≤ 32	≤ 255 ≤ 301	90 70				0.0100 0.0080	0.0125 0.0100	0.0125 0.0100	0.014 0.011	0.0160 0.0125	0.0200 0.0160	0.0245 0.0200
Unalloyed heat-treatable steels	≤ 20 ≤ 25 ≤ 32	≤ 220 ≤ 255 ≤ 301	90 70				0.0080 0.0080	0.0100 0.0100	0.0100 0.0100	0.011 0.011	0.0125 0.0125	0.0160 0.0160	0.0200 0.0200
Alloyed heat-treatable steels	≤ 32 ≤ 43	≤ 301 ≤ 402											
Unalloyed case hardened steels	≤ 25	≤ 255	90				0.0100	0.0125	0.0125	0.0140	0.0160	0.0200	0.0245
Alloyed case hardened steels	≤ 32 ≤ 43	≤ 301 ≤ 402											
Nitriding steels	≤ 32 ≤ 43	≤ 301 ≤ 402											
Tool steels	≤ 25 ≤ 43	≤ 255 ≤ 402	45				0.0065	0.0080	0.0080	0.0090	0.0100	0.0125	0.0160
High speed steels	≤ 43	≤ 402											
Spring steels	≤ 38	≤ 354											
Hardened steels	≤ 48 ≤ 66	≤ 460 -											
Stainless steels, sulphured austenitic martensitic	≤ 28 ≤ 36 ≤ 46	≤ 273 ≤ 337 ≤ 435											
Cast iron	≤ 23 ≤ 38	≤ 242 ≤ 354	90 70				0.0100 0.0100	0.0125 0.0125	0.0125 0.0125	0.0140 0.0140	0.0160 0.0160	0.0200 0.0200	0.0245 0.0245
Spheroidal graphite iron and malleable cast iron	≤ 23 ≤ 38	≤ 242 ≤ 354	70 55				0.0100 0.0100	0.0125 0.0125	0.0125 0.0125	0.0140 0.0140	0.0160 0.0160	0.0200 0.0200	0.0245 0.0245
Chilled cast iron	≤ 38	≤ 354											
New cast materials GGV	≤ 20 ≤ 32	≤ 220 ≤ 301											
New cast materials ADI	≤ 32 ≤ 43	≤ 301 ≤ 402											
Special alloys	≤ 54	≤ 549											
Ti and Ti-alloys	≤ 25 ≤ 43	≤ 255 ≤ 402											
Aluminium and Al-alloys	-	≤ 120											
Al wrought alloys	-	≤ 200											
Al cast alloys ≤ 10 % Si ≤ 24 % Si	- -	≤ 180 ≤ 180	180 145				0.0125 0.0100	0.0160 0.0125	0.0160 0.0125	0.0180 0.0140	0.0200 0.0160	0.0245 0.0200	0.0290 0.0245
Magnesium alloys	-	≤ 120	225				0.0100	0.0125	0.0125	0.0140	0.0160	0.0200	0.0245
Copper, low-alloyed	-	≤ 150	90				0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200
Brass, short-chipping long-chipping	- -	≤ 180 ≤ 180	110				0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	0.0200
Bronze, short-chipping	-	≤ 180	90				0.0065	0.0080	0.0080	0.0090	0.0100	0.0125	0.0160
Bronze, long-chipping	≤ 25 ≤ 32	≤ 255 ≤ 301	70				0.0065	0.0080	0.0080	0.0090	0.0100	0.0125	0.0160
Duroplastics Thermoplastics Reinforced plastics - Kevlar Reinforced plastics - GFK / CFK			45 70				0.0065 0.0080	0.0080 0.0100	0.0080 0.0100	0.0090 0.0110	0.0100 0.0125	0.0125 0.0160	0.0160 0.0200

Material group	Hardness		SFM	Feed Rate - IPR									
	HRc	Bhn		1/16 in. 1.590 mm	1/8 in. 3.170 mm	1/4 in. 6.350 mm	3/8 in. 9.520 mm	1/2 in. 12.700 mm	5/8 in. 15.870 mm	3/4 in. 19.050 mm	1 in. 25.400 mm	1 1/4 in. 31.750 mm	1 1/2 in. 38.100 mm
Common structural steels	- ≤ 32	≤ 150 ≤ 301	70 55				0.0080 0.0065	0.0100 0.0080	0.0100 0.0080	0.0110 0.0090	0.0125 0.0100	0.0160 0.0125	
Free-cutting steels	≤ 25 ≤ 32	≤ 255 ≤ 301	70 55				0.0080 0.0065	0.0100 0.0080	0.0100 0.0080	0.0110 0.0090	0.0125 0.0100	0.0160 0.0125	
Unalloyed heat-treatable steels	≤ 20 ≤ 25 ≤ 32	≤ 220 ≤ 255 ≤ 301	70 55				0.0065 0.0065	0.0080 0.0080	0.0080 0.0080	0.0090 0.0090	0.0100 0.0100	0.0125 0.0125	
Alloyed heat-treatable steels	≤ 32 ≤ 43	≤ 301 ≤ 402	35				0.0050	0.0065	0.0065	0.0070	0.0080	0.0100	
Unalloyed case hardened steels	≤ 25	≤ 255	70				0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	
Alloyed case hardened steels	≤ 32 ≤ 43	≤ 301 ≤ 402	30				0.0050	0.0065	0.0065	0.0070	0.0080	0.0100	
Nitriding steels	≤ 32 ≤ 43	≤ 301 ≤ 402	25				0.0050	0.0065	0.0065	0.0070	0.0080	0.0100	
Tool steels	≤ 25 ≤ 43	≤ 255 ≤ 402	35 15				0.0050 0.0040	0.0065 0.0050	0.0065 0.0050	0.0070 0.0055	0.0080 0.0065	0.0100 0.0080	
High speed steels	≤ 43	≤ 402	15				0.0040	0.0050	0.0050	0.0055	0.0065	0.0080	
Spring steels	≤ 38	≤ 354											
Hardened steels	≤ 48 ≤ 66	≤ 460 -											
Stainless steels, sulphured austenitic martensitic	≤ 28 ≤ 36 ≤ 46	≤ 273 ≤ 337 ≤ 435	25				0.0050	0.0065	0.0065	0.0070	0.0080	0.010	
Cast iron	≤ 23 ≤ 38	≤ 242 ≤ 354	70 55				0.0080 0.0080	0.0100 0.0100	0.0100 0.0100	0.0110 0.0110	0.0125 0.0125	0.0160 0.0160	
Spheroidal graphite iron and malleable cast iron	≤ 23 ≤ 38	≤ 242 ≤ 354	65 45				0.0080 0.0080	0.0100 0.0100	0.0100 0.0100	0.0110 0.0110	0.0125 0.0125	0.0160 0.0160	
Chilled cast iron	≤ 38	≤ 354											
New cast materials GGV	≤ 20 ≤ 32	≤ 220 ≤ 301											
New cast materials ADI	≤ 32 ≤ 43	≤ 301 ≤ 402											
Special alloys	≤ 54	≤ 549											
Ti and Ti-alloys	≤ 25 ≤ 43	≤ 255 ≤ 402											
Aluminium and Al-alloys	-	≤ 120											
Al wrought alloys	-	≤ 200											
Al cast alloys ≤ 10 % Si ≤ 24 % Si	- -	≤ 180 ≤ 180	145 115				0.0100 0.0080	0.0125 0.0100	0.0125 0.0100	0.0140 0.0110	0.0160 0.0125	0.0200 0.0160	
Magnesium alloys	-	≤ 120	180				0.0080	0.0100	0.0100	0.0110	0.0125	0.0160	
Copper, low-alloyed	-	≤ 150	70				0.0065	0.0080	0.0080	0.0090	0.0100	0.0125	
Brass, short-chipping long-chipping	- -	≤ 180 ≤ 180	145 90				0.0065 0.0065	0.0080 0.0080	0.0080 0.0080	0.0090 0.0090	0.0100 0.0100	0.0125 0.0125	
Bronze, short-chipping	-	≤ 180	70				0.0050	0.0065	0.0065	0.0070	0.0080	0.0100	
Bronze, long-chipping	≤ 25 ≤ 32	≤ 255 ≤ 301	65 45				0.0050 0.0050	0.0065 0.0065	0.0065 0.0065	0.0070 0.0070	0.0080 0.0080	0.0100 0.0100	
Duroplastics Thermoplastics Reinforced plastics - Kevlar Reinforced plastics - GFK / CFK			35 55				0.0050 0.0065	0.0065 0.0080	0.0065 0.0080	0.0070 0.0090	0.0080 0.0100	0.0100 0.0125	