

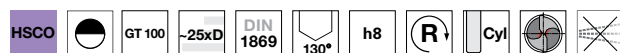


HSS/HSCO drills with straight shank

HSS/HSCO drills

Extra length twist drills, series 3

Article no. 571



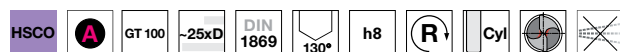
Web thinning $\geq \varnothing 2.500$ • relieved cone • wide flutes • for extremely deep holes • in case of poor chip evacuation • Co-alloyed high speed steel • increased wear resistance

Cutting data page 468-469

P	M	K	N	S	H
●	●	●	●	○	○

Extra length twist drills, series 3

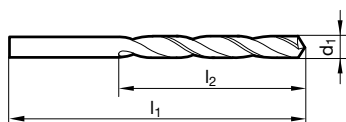
Article no. 9672



Web thinning $\geq \varnothing 2.500$ • relieved cone • wide flutes • for extremely deep holes • in case of poor chip evacuation • tip coating • maximum performance • for universal application • 5% cobalt-alloyed HSCO high speed steel for maximum tool life, high thermal resistance and hardness

Cutting data page 468-469

P	M	K	N	S	H
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Article no.

571 9672

d1 mm	inch	l1 mm	l2 mm	Order no.	
2.500		225.0	150.0	571 2.500	9672 2.500
3.000		240.0	160.0	571 3.000	9672 3.000
3.100		250.0	170.0	571 3.100	
3.170	1/8	250.0	170.0	571 3.170	9672 3.170
3.200		250.0	170.0	571 3.200	9672 3.200
3.300		250.0	170.0	571 3.300	9672 3.300
3.400		265.0	180.0	571 3.400	
3.500		265.0	180.0	571 3.500	9672 3.500
3.700		265.0	180.0	571 3.700	
3.800		280.0	190.0	571 3.800	
3.900		280.0	190.0	571 3.900	
3.970	5/32	280.0	190.0	571 3.970	
4.000		280.0	190.0	571 4.000	9672 4.000
4.100		280.0	190.0	571 4.100	
4.200		280.0	190.0	571 4.200	9672 4.200
4.300		295.0	200.0	571 4.300	
4.500		295.0	200.0	571 4.500	9672 4.500
4.600		295.0	200.0	571 4.600	
4.760	3/16	315.0	210.0	571 4.760	9672 4.760
4.800		315.0	210.0	571 4.800	
4.900		315.0	210.0	571 4.900	
5.000		315.0	210.0	571 5.000	9672 5.000
5.100		315.0	210.0	571 5.100	
5.200		315.0	210.0	571 5.200	
5.500		330.0	225.0	571 5.500	9672 5.500
5.560	7/32	330.0	225.0	571 5.560	
5.800		330.0	225.0	571 5.800	
5.950	15/64	330.0	225.0	571 5.950	
6.000		330.0	225.0	571 6.000	9672 6.000
6.100		350.0	235.0	571 6.100	
6.200		350.0	235.0	571 6.200	
6.300		350.0	235.0	571 6.300	
6.350	1/4	350.0	235.0	571 6.350	9672 6.350
6.400		350.0	235.0	571 6.400	
6.500		350.0	235.0	571 6.500	9672 6.500
6.700		350.0	235.0	571 6.700	

Article no.

571 9672

d1 mm	inch	l1 mm	l2 mm	Order no.	
6.750	17/64	370.0	250.0	571 6.750	
6.800		370.0	250.0	571 6.800	
7.000		370.0	250.0	571 7.000	9672 7.000
7.140	9/32	370.0	250.0	571 7.140	
7.200		370.0	250.0	571 7.200	
7.500		370.0	250.0	571 7.500	
7.750		390.0	265.0	571 7.750	
7.800		390.0	265.0	571 7.800	
7.940	5/16	390.0	265.0	571 7.940	
8.000		390.0	265.0	571 8.000	9672 8.000
8.200		390.0	265.0	571 8.200	
8.500		390.0	265.0	571 8.500	
8.600		410.0	280.0	571 8.600	
8.730	11/32	410.0	280.0	571 8.730	
8.800		410.0	280.0	571 8.800	
9.000		410.0	280.0	571 9.000	9672 9.000
9.500		410.0	280.0	571 9.500	
9.520	3/8	430.0	295.0	571 9.520	
10.000		430.0	295.0	571 10.000	9672 10.000
10.320	13/32	430.0	295.0	571 10.320	
10.500		430.0	295.0	571 10.500	
10.720	27/64	455.0	310.0	571 10.720	
11.000		455.0	310.0	571 11.000	
11.110	7/16	455.0	310.0	571 11.110	
11.500		455.0	310.0	571 11.500	
12.000		480.0	330.0	571 12.000	
12.200		480.0	330.0	571 12.200	
12.500		480.0	330.0	571 12.500	
13.000		480.0	330.0	571 13.000	



Extra length twist drills, GT 100, TiAlN



Cutting data

Machining group	HSCo	f (mm/rev) with nom. Ø									
											
	v _c (m/min)	2	3	4	5	6	8	10	12	13	
P1.1.1 Unalloyed steel, annealed, 0.15 % C, Rm 420 N/mm ² , 125 HB	28	0.051	0.077	0.096	0.115	0.130	0.160	0.190	0.220	0.235	
P1.1.2 Unalloyed steel, heat-treated, 0.15 % C, Rm 420 N/mm ² , 125 HB	24	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
P1.1.3 Unalloyed steel, annealed, 0.45 % C, Rm 640 N/mm ² , 190 HB	24	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
P1.1.4 Unalloyed steel, heat-treated, 0.45 % C, Rm 640 N/mm ² , 190 HB	24	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
P1.1.5 Unalloyed steel, heat-treated, 0.45 % C, Rm 850 N/mm ² , 250 HB	21	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
P1.1.6 Unalloyed steel, annealed, 0.75 % C, Rm 915 N/mm ² , 270 HB	19	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
P1.1.7 Unalloyed steel, heat-treated, 0.75 % C, Rm 1020 N/mm ² , 300 HB	17	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
P2.1.1 Low-alloy steel, annealed, Rm 610 N/mm ² , 180 HB	17	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
P2.1.2 Low-alloy steel, heat-treated, Rm 930 N/mm ² , 275 HB	12	0.033	0.049	0.061	0.070	0.085	0.105	0.125	0.140	0.150	
P2.1.3 Low-alloy steel, heat-treated, Rm 1020 N/mm ² , 300 HB	10	0.033	0.049	0.061	0.070	0.085	0.105	0.125	0.140	0.150	
P2.1.4 Low-alloy steel, heat-treated, Rm 1190 N/mm ² , 350 HB	9	0.026	0.039	0.048	0.055	0.065	0.080	0.095	0.110	0.120	
P3.1.1 High-alloy steel and tool steel, annealed, Rm 680 N/mm ² , 200 HB	13	0.033	0.049	0.061	0.070	0.085	0.105	0.125	0.140	0.150	
P3.1.2 High-alloy steel and tool steel, hardened and tempered, Rm 1100 N/mm ² , 325 HB	10	0.026	0.039	0.049	0.060	0.065	0.085	0.100	0.115	0.120	
M1.1.1 Stainless steel, ferritic/martensitic, with machining additives	10	0.026	0.039	0.048	0.055	0.065	0.080	0.095	0.110	0.120	
M1.1.2 Stainless steel, ferritic/martensitic, annealed, Rm 680 N/mm ² , 200 HB	9	0.026	0.039	0.048	0.055	0.065	0.080	0.095	0.110	0.120	
M1.1.3 Stainless steel, ferritic/martensitic, heat-treated, Rm 810 N/mm ² , 240 HB	8	0.021	0.031	0.039	0.045	0.050	0.065	0.075	0.090	0.095	
M2.1.1 Stainless steel, austenitic, quenched, 180 HB	8	0.026	0.039	0.048	0.055	0.065	0.080	0.095	0.110	0.120	
M2.2.1 Duplex steel, high-strength stainless steels											
K1.1.1 Grey cast iron, pearlitic/ferritic, 180 HB	30	0.051	0.077	0.096	0.115	0.130	0.160	0.190	0.220	0.235	
K1.1.2 Grey cast iron, pearlitic/martensitic, 260 HB	24	0.051	0.077	0.096	0.115	0.130	0.160	0.190	0.220	0.235	
K1.2.1 Cast iron with spheroidal graphite, ferritic, 160 HB	25	0.051	0.077	0.096	0.115	0.130	0.160	0.190	0.220	0.235	
K1.2.2 Cast iron with spheroidal graphite, pearlitic, 250 HB	19	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
K1.3.1 Malleable cast iron, ferritic, 130 HB	25	0.051	0.077	0.096	0.115	0.130	0.160	0.190	0.220	0.235	
K1.3.2 Malleable cast iron, pearlitic, 230 HB	19	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
K2.1.1 Vermicular graphite cast iron (GJV)	25	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
K2.2.1 Austenitic-ferritic spheroidal graphite cast iron (ADI)	12	0.020	0.031	0.038	0.045	0.050	0.065	0.075	0.090	0.095	
N1.1.1 Wrought aluminium alloys, non-hardened, 60 HB											
N1.1.2 Wrought aluminium alloys, hardened, 100 HB											
N2.1.1 Aluminium casting alloys, non-hardened, ≤ 12 % Si, 75 HB	50	0.051	0.077	0.096	0.115	0.130	0.160	0.190	0.220	0.235	
N2.1.2 Aluminium casting alloys, hardened, ≤ 12 % Si, 90 HB	40	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
N2.1.3 Aluminium casting alloys, non-hardened, > 12 % Si, 130 HB	35	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
N3.1.1 Copper and copper alloys: Free-machining alloy, Pb > 1 %	60	0.041	0.061	0.076	0.090	0.105	0.130	0.155	0.175	0.185	
N3.1.2 Copper and copper alloys: CuZn, CuSnZn	36	0.033	0.049	0.061	0.070	0.085	0.105	0.125	0.140	0.150	
N3.1.3 Copper and copper alloys: CuSn, lead-free copper and copper electrolyte	48	0.033	0.049	0.061	0.070	0.085	0.105	0.125	0.140	0.150	
N4.1.1 Non-metallic materials: Duroplastics, fibre-reinforced plastics	20	0.033	0.049	0.061	0.070	0.085	0.105	0.125	0.140	0.150	
N4.1.2 Non-metallic materials: Hard rubber, wood, etc.	20	0.033	0.049	0.061	0.070	0.085	0.105	0.125	0.140	0.150	
N4.1.3 Non-metallic materials: Graphite											
S1.1.1 Heat-resistant alloys, Fe-based, annealed, 200 HB	6	0.020	0.031	0.038	0.045	0.050	0.065	0.075	0.090	0.095	
S1.1.2 Heat-resistant alloys, Fe-based, hardened, 280 HB	5	0.016	0.025	0.031	0.035	0.040	0.050	0.060	0.070	0.075	
S1.1.3 Heat-resistant alloys, Ni- or Co-based, annealed, 250 HB	5	0.020	0.031	0.038	0.045	0.050	0.065	0.075	0.090	0.095	
S1.1.4 Heat-resistant alloys, Ni- or Co-based, hardened, 350 HB	3	0.016	0.025	0.031	0.035	0.040	0.050	0.060	0.070	0.075	
S1.1.5 Heat-resistant alloys, Ni- or Co-based, cast, 320 HB	4	0.016	0.025	0.031	0.035	0.040	0.050	0.060	0.070	0.075	
S2.1.1 Titanium alloys, pure titanium, Rm 400 N/mm ²	5	0.020	0.031	0.038	0.045	0.050	0.065	0.075	0.090	0.095	
S2.1.2 Titanium alloys, Alpha and Beta alloys, hardened, Rm 1050 N/mm ²	3	0.016	0.025	0.031	0.035	0.040	0.050	0.060	0.070	0.075	
H1.1.1 Hardened steel, hardened and tempered, < 55 HRC	4	0.016	0.025	0.031	0.035	0.040	0.050	0.060	0.070	0.075	
H1.1.2 Hardened steel, hardened and tempered, < 60 HRC											
H1.1.3 Hardened steel, hardened and tempered, > 60 HRC											
H2.1.1 Chilled cast iron, 400 HB	8	0.026	0.039	0.048	0.055	0.065	0.080	0.095	0.110	0.120	
H2.1.2 Chilled cast iron, hardened and tempered, < 55 HRC											