

708: Solid carbide drill with internal coolant hole 8xD



Material	708 [inch] sfm [feet/min]	0,03937 - 0,074803 f [inch/rev]	0,07874 - 0,11417 f [inch/rev]	0,118110 - 0,19291 f [inch/rev]	0,19685 - 0,35039 f [inch/rev]	0,35433 - 0,46850 f [inch/rev]	0,47244 - 0,62598 f [inch/rev]	0,62992 - 0,78740 f [inch/rev]
General steels <500 N/mm ² (<150 HB)	328	0.00236	0.00315	0.00472	0.00630	0.00827	0.01063	0.01063
General steels <700 N/mm ² (<205 HB)	312	0.00236	0.00315	0.00472	0.00630	0.00827	0.01063	0.01063
Tempering steel <850 N/mm ² (<25 HRC)	230	0.00157	0.00236	0.00335	0.00433	0.00591	0.00748	0.00748
Tempering steel <1000 N/mm ² (<32 HRC)	197	0.00157	0.00236	0.00335	0.00433	0.00591	0.00748	0.00748
Tempering steel <1400 N/mm ² (<44 HRC)	115	0.00079	0.00118	0.00177	0.00236	0.00354	0.00512	0.00512
Hardened steel 45-55 HRC (1400-2000 N/mm ²)	82	0.00079	0.00118	0.00177	0.00236	0.00354	0.00512	0.00512
Hardened steel 55-60 HRC (>2000 N/mm ²)								
Hardened steel 60-65 HRC								
Cast iron <180HB	279	0.00236	0.00315	0.00472	0.00630	0.00827	0.01063	0.01063
Malleable cast iron	246	0.00236	0.00315	0.00472	0.00630	0.00827	0.01063	0.01063
Cast iron with nodular graphite	246	0.00236	0.00315	0.00472	0.00630	0.00827	0.01063	0.01063
Plastics - duroplast	131	0.00157	0.00236	0.00335	0.00433	0.00591	0.00748	0.00748
Graphite								
Aluminium long-chipping	574	0.00236	0.00315	0.00472	0.00630	0.00827	0.01063	0.01063
Aluminium short-chipping	541	0.00236	0.00315	0.00472	0.00630	0.00827	0.01063	0.01063
Aluminium alloyed over >8% S	410	0.00236	0.00315	0.00472	0.00630	0.00827	0.01063	0.01063
Copper, brass, bronze, red brass	361	0.00236	0.00315	0.00472	0.00630	0.00827	0.01063	0.01063
Plastics - thermoplast	148	0.00157	0.00236	0.00335	0.00433	0.00591	0.00748	0.00748
GFK/CFK (fibreglass/carbon fibre plastics)								
Rust and acid constant steels <700 N/mm ² (<205 HB)	148	0.00157	0.00236	0.00335	0.00433	0.00591	0.00748	0.00748
Rust and acid constant steels >700 N/mm ² (>205 HB)	98	0.00118	0.00177	0.00236	0.00354	0.00512	0.00669	0.00669
Titanium	148	0.00118	0.00177	0.00236	0.00354	0.00512	0.00669	0.00669
Inconel, Hastelloy, Nimonic, Monel	115	0.00118	0.00177	0.00236	0.00354	0.00512	0.00669	0.00669
					Dia 3-5	Dia 5-8	Dia 8-12	Dia 12-20
Recommended internal coolant pressure [PSI]:					797	507	363	290
** if oil is used as the cooling medium, we recommend increasing the pressure by an additional 10%								



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Material	708 [mm] vc [m/min]	1 - 1,9 f [mm/rev]	2 - 2,9 f [mm/rev]	3 - 4,9 f [mm/rev]	5 - 8,9 f [mm/rev]	9 - 11,9 f [mm/rev]	12 - 15,9 f [mm/rev]	16 - 20 f [mm/rev]
General steels <500 N/mm ² (<150 HB)	100	0.060	0.080	0.120	0.160	0.210	0.270	0.270
General steels <700 N/mm ² (<205 HB)	95	0.060	0.080	0.120	0.160	0.210	0.270	0.270
Tempering steel <850 N/mm ² (<25 HRC)	70	0.040	0.060	0.085	0.110	0.150	0.190	0.190
Tempering steel <1000 N/mm ² (<32 HRC)	60	0.040	0.060	0.085	0.110	0.150	0.190	0.190
Tempering steel <1400 N/mm ² (<44 HRC)	35	0.020	0.030	0.045	0.060	0.090	0.130	0.130
Hardened steel 45-55 HRC (1400-2000 N/mm ²)	25	0.020	0.030	0.045	0.060	0.090	0.130	0.130
Hardened steel 55-60 HRC (>2000 N/mm ²)								
Hardened steel 60-65 HRC								
Cast iron <180HB	85	0.060	0.080	0.120	0.160	0.210	0.270	0.270
Malleable cast iron	75	0.060	0.080	0.120	0.160	0.210	0.270	0.270
Cast iron with nodular graphite	75	0.060	0.080	0.120	0.160	0.210	0.270	0.270
Plastics - duroplast	40	0.040	0.060	0.085	0.110	0.150	0.190	0.190
Graphite								
Aluminium long-chipping	175	0.060	0.080	0.120	0.160	0.210	0.270	0.270
Aluminium short-chipping	165	0.060	0.080	0.120	0.160	0.210	0.270	0.270
Aluminium alloyed over >8% S	125	0.060	0.080	0.120	0.160	0.210	0.270	0.270
Copper, brass, bronze, red brass	110	0.060	0.080	0.120	0.160	0.210	0.270	0.270
Plastics - thermoplast	45	0.040	0.060	0.085	0.110	0.150	0.190	0.190
GFK/CFK (fibreglass/carbon fibre plastics)								
Rust and acid constant steels <700 N/mm ² (<205 HB)	45	0.040	0.060	0.085	0.110	0.150	0.190	0.190
Rust and acid constant steels >700 N/mm ² (>205 HB)	30	0.030	0.045	0.060	0.090	0.130	0.170	0.170
Titanium	45	0.030	0.045	0.060	0.090	0.130	0.170	0.170
Inconel, Hastelloy, Nimonic, Monel	35	0.030	0.045	0.060	0.090	0.130	0.170	0.170
					Dia 3-5	Dia 5-8	Dia 8-12	Dia 12-20
Recommended internal coolant pressure [bar]:					55	35	25	20
** if oil is used as the cooling medium, we recommend increasing the pressure by an additional 10%								

