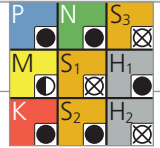


CrazyDrill Pilot - 2 x d - 90° coutersink

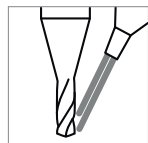
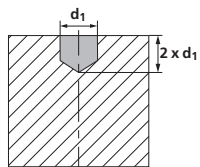
RECOMMENDATION FOR USE

● Excellent | ● Good | ○ Acceptable | ⊗ Not recommended



DRILLING WITH EXTERNAL COOLING | CUTTING DATA OVERVIEW

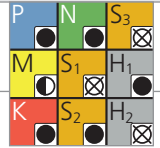
Materials group	Material	Mat. no.	DIN	v _c [m/min]	f [mm/rev]									
					Ød1	Ød1	Ød1	Ød1	Ød1	Ød1	Ød1	Ød1	Ød1	Ød1
					0.4 mm f	0.8 mm f	1.0 mm f	1.5 mm f	2.0 mm f	2.5 mm f	3.0 mm f	4.0 mm f	5.0 mm f	6.0 mm f
P	Unalloyed carbon steel Rm < 800 N/mm²	1.0301	C10	32 – 64	0.008	0.044	0.064	0.112	0.144	0.168	0.192	0.224	0.248	0.272
		1.0401	C15											
		1.1191	C45E/CK45											
		1.0044	S275JR											
		1.0715	11SMn30											
	Low alloyed steel Rm > 900 N/mm²	1.5752	15NiCr13	32 – 64	0.008	0.044	0.064	0.096	0.120	0.136	0.152	0.176	0.192	0.208
		1.7131	16MnCr5											
		1.3505	100Cr6											
		1.7225	42CrMo4											
		1.2842	90MnCrV8											
	High alloyed tool steel Rm < 1200 N/mm²	1.2379	X153CrMoV12	24 – 48	0.008	0.016	0.040	0.064	0.088	0.104	0.120	0.144	0.160	0.176
		1.2436	X210CrW12											
1.3343		HS6-5-2C												
1.3355		HS18-0-1												
M	Stainless steel ferritic	1.4016	X6Cr17	20 – 40	0.008	0.009	0.024	0.048	0.064	0.072	0.080	0.096	0.104	0.112
		1.4105	X6CrMoS17											
	Stainless steel martensitic	1.4034	X46Cr13	24 – 48	0.008	0.016	0.040	0.064	0.088	0.104	0.120	0.144	0.160	0.176
		1.4112	X90CrMoV18											
	Stainless steel martensitic – PH	1.4542	X5CrNiCuNb 16-4	16 – 32	0.008	0.009	0.016	0.040	0.056	0.064	0.072	0.088	0.096	0.104
		1.4545	X5CrNiCuNb 15-5											
	Stainless steel austenitic	1.4301	X5CrNi 18-10	16 – 32	0.008	0.009	0.016	0.040	0.056	0.064	0.072	0.088	0.096	0.104
		1.4435	X2CrNiMo 18-14-3											
		1.4441	X2CrNiMo 18-15-3											
		1.4539	X1NiCrMoCu 25-20-5											
K	Cast iron	0.6020	GG20	40 – 80	0.008	0.040	0.064	0.096	0.120	0.120	0.120	0.160	0.160	0.160
		0.6030	GG30											
		0.7040	GGG40											
		0.7060	GGG60											



CrazyDrill Pilot - 2 x d - 90° coutersink

RECOMMENDATION FOR USE

● Excellent | ● Good | ○ Acceptable | ☒ Not recommended



DRILLING WITH EXTERNAL COOLING | CUTTING DATA OVERVIEW

Materials group	Material	Mat. no.	DIN	v _c [m/min]	f [mm/rev]									
					Ød1 0.4 mm	Ød1 0.8 mm	Ød1 1.0 mm	Ød1 1.5 mm	Ød1 2.0 mm	Ød1 2.5 mm	Ød1 3.0 mm	Ød1 4.0 mm	Ød1 5.0 mm	Ød1 6.0 mm
					f	f	f	f	f	f	f	f	f	f
N	Aluminium alloy wrought	3.2315	AlMgSi1	80 – 160	0.008	0.040	0.080	0.096	0.120	0.160	0.160	0.200	0.200	0.200
		3.4365	AlZnMgCu1.5											
	Aluminium alloy cast	3.2163	GD-ALSi9Cu3	64 – 120	0.012	0.064	0.088	0.128	0.160	0.200	0.200	0.224	0.224	0.224
		3.2381	GD-ALSi10Mg											
	Copper	2.004	Cu-OF / CW008A	40 – 80	0.012	0.024	0.048	0.064	0.080	0.112	0.128	0.144	0.160	0.176
		2.0065	Cu-ETP / CW004A											
	Brass lead free	2.0321	CuZn37 CW508L	40 – 80	0.016	0.032	0.064	0.080	0.096	0.128	0.144	0.160	0.176	0.192
		2.036	CuZn40 CW509L											
Brass, Bronze Rm < 400 N/mm²	2.0401	CuZn39Pb3 / CW614N	56 – 120	0.012	0.048	0.080	0.096	0.120	0.160	0.160	0.200	0.200	0.200	
	2.102	CuSn6												
Bronze Rm < 600 N/mm²	2.0966	CuAl10Ni5Fe4	32 – 56	0.008	0.040	0.064	0.080	0.096	0.120	0.120	0.160	0.160	0.160	
	2.096	CuAl9Mn2												
S ₁	Super alloys	2.4856												
		2.4668												
		2.4617	NiMo28											
		2.4665	NiCr22Fe18Mo											
S ₂	Titanium pure	3.7035	Gr.2	10 – 32	0.008	0.024	0.032	0.048	0.056	0.064	0.064	0.080	0.080	0.096
		3.7065	Gr.4											
S ₂	Titanium alloys	3.7165	TiAl6V4	10 – 44	0.008	0.064	0.072	0.088	0.096	0.100	0.104	0.112	0.120	0.120
		9.9367	TiAl6Nb7											
S ₃	CrCo alloys	2.4964	CoCr20W15Ni											
			CrCoMo28											
H ₁ H ₂	Hardened steel ≥ 55 HRC	1.2510	100MnCrMoW4	16 – 32	0.008	0.006	0.008	0.012	0.016	0.020	0.024	0.032	0.040	0.048
		1.2379	X153CrMoV12											

