

Titanium - 30 x d

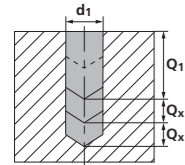
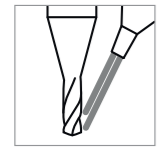
RECOMMENDATION FOR USE

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

P	N	S ₃
M	S ₁	H ₁
K	S ₂	H ₂

DRILLING WITH EXTERNAL COOLING | CUTTING DATA OVERVIEW

f [mm/rev] | [IPR]



Materials group	Material	Mat. no.	DIN	AISI/ASTM/UNS	v _c		Q _f	Q _s	f [mm/rev] [IPR]											
					[m/min] [SFM]				Ød1				Ød1				1.0-1.2 mm .039"-.047"			
					Ød1 ≤ 0.4 .016"	Ød1 > 0.4 .016"			0.1 mm .004"	0.2 mm .008"	0.3 mm .012"	0.4 mm .016"	0.6 mm .024"	0.8 mm .032"	f		Q _x			
P	Unalloyed carbon steel Rm < 800 N/mm²	1.0301	C10	AISI 1010					Recommended: CrazyDrill Flex Steel 30 x d1											
		1.0401	C15	AISI 1015																
		1.1191	C45E/CK45	AISI 1045																
		1.0044	S275JR	AISI 1020																
		1.0715	11SMn30	AISI 1215																
	Low alloyed steel Rm > 900 N/mm²	1.5752	15NiCr13	ASTM 3415 / AISI 3310					Recommended: CrazyDrill Flex Steel 30 x d1											
		1.7131	16MnCr5	AISI 5115																
		1.3505	100Cr6	AISI 52100																
		1.7225	42CrMo4	AISI 4140																
		1.2842	90MnCrV8	AISI O2																
	High alloyed tool steel Rm < 1200 N/mm²	1.2379	X153CrMoV12	AISI D2					Recommended: CrazyDrill Flex SST-Inox 30 x d1											
1.2436		X210CrW12	AISI D4/D6																	
1.3343		HS6-5-2C	AISI M2 / UNS T11302																	
1.3355		HS18-0-1	AISI T1 / UNS T12001																	
M	Stainless steel ferritic	1.4016	X6Cr17	AISI 430 / UNS S43000					Recommended: CrazyDrill Flex SST-Inox 30 x d1											
		1.4105	X6CrMoS17	AISI 430F																
	Stainless steel martensitic	1.4034	X46Cr13	AISI 420C																
		1.4112	X90CrMoV18	AISI 440B																
	Stainless steel martensitic - PH	1.4542	X5CrNiCuNb 16-4	AISI 630 / ASTM 17-4 PH																
		1.4545	X5CrNiCuNb 15-5	ASTM 15-5 PH																
	Stainless steel austenitic	1.4301	X5CrNi 18-10	AISI 304																
		1.4435	X2CrNiMo 18-14-3	AISI 316L																
1.4441		X2CrNiMo 18-15-3	AISI 316LM																	
K	Cast iron	0.6020	GG20	ASTM 30					Recommended: CrazyDrill Flex Steel 30 x d1											
		0.6030	GG30	ASTM 40B																
		0.7040	GGG40	ASTM 60-40-18																
		0.7060	GGG60	ASTM 80-60-03																
N	Aluminium alloy wrought	3.2315	AlMgSi1	ASTM 6351					Recommended: CrazyDrill Flex Steel 30 x d1											
		3.4365	AlZnMgCu1.5	ASTM 7075																
	Aluminium alloy cast	3.2163	GD-AISI9Cu3	ASTM A380					Recommended: CrazyDrill Flex SST-Inox 30 x d1											
		3.2381	GD-AISI10Mg	UNS A03590																
	Copper	2.004	Cu-OF / CW008A	UNS C10100	5 - 40 16 - 131	20 - 40 66 - 131	7xd1	0.005	0.020	0.040	0.060	0.120	0.180	0.200						
		2.0065	Cu-ETP / CW004A	UNS C11000				.00020	.0008	.0016	.0024	.0047	.0071	.0079						
	Brass lead free	2.0321	CuZn37 CW508L	UNS C27400					Recommended: CrazyDrill Flex SST-Inox 30 x d1											
		2.036	CuZn40 CW509L	UNS C28000																
	Brass, Bronze Rm < 400 N/mm²	2.0401	CuZn39Pb3 / CW614N	UNS C38500					Recommended: CrazyDrill Flex Steel 30 x d1											
	Bronze Rm < 600 N/mm²	2.102	CuSn6	UNS C51900																
S ₁	Super alloys	2.4856		Inconel 625					Recommended: CrazyDrill Flex SST-Inox 30 x d1											
		2.4668		Inconel 718																
		2.4617	NiMo28	Hastelloy B-2																
		2.4665	NiCr22Fe18Mo	Hastelloy X																
S ₂	Titanium pure	3.7035	Gr.2	ASTM B348 / F67	5 - 20 16 - 66	20 - 30 66 - 98	3xd1	0.002	0.004	0.006	0.008	0.012	0.016	0.024						
		3.7065	Gr.4	ASTM B348 / F68				.00008	.00016	.00024	.00031	.00047	.00063	.00094						
S ₃	Titanium alloys	3.7165	TiAl6V4	ASTM B348 / F136	5 - 20 16 - 66	20 - 40 66 - 131	3xd1	0.003	0.006	0.009	0.016	0.024	0.032	0.040						
		9.9367	TiAl6Nb7	ASTM F1295				.00012	.00024	.00035	.00063	.00094	.00126	.00157						
H ₁	Hardened steel < 55 HRC	2.4964	CoCr20W15Ni	Haynes 25					Recommended: CrazyDrill Flex SST-Inox 30 x d1											
			CrCoMo28	ASTM F1537																
H ₂	Hardened steel ≥ 55 HRC	1.2510	100MnCrMoW4	AISI O1					Recommended: CrazyDrill Flex SST-Inox 30 x d1											
		1.2379	X153CrMoV12	AISI D2																