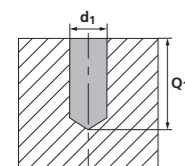
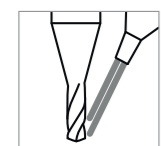


CrazyDrill Alu 5 x d

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



Materials group	Material	Mat. no.	DIN	AISI/ASTM/UNS	v _c [m/min]	Q ₁	f [mm/rev]						
							Ød1						
							0.5 mm f	1.0 mm f	1.5 mm f	2.0 mm f	2.5 mm f	3.0 mm f	
P	Unalloyed carbon steel Rm < 800 N/mm ²	1.0301	C10	AISI 1010									
		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/mm ²	1.5752	15NiCr13	ASTM 3415 / AISI 3310									
		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/mm ²	1.2379	X153CrMoV12	AISI D2									
		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									
		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										
1.4539	X1NiCrMoCu 25-20-5	AISI 904L											
K	Cast iron	0.6020	GG20	ASTM 30									
		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	300	5xd1	0.03	0.05	0.10	0.20	0.25	0.30	
		3.4365	AlZnMgCu1.5	ASTM 7075									
	Aluminium alloy cast	3.2163	GD-AlSi9Cu3	ASTM A380	200	5xd1	0.10	0.20	0.25	0.30	0.40	0.50	
		3.2381	GD-AlSi10Mg	UNS A03590									
	Copper	2.004	Cu-OF / CW008A	UNS C10100									
		2.0065	Cu-ETP / CW004A	UNS C11000									
	Brass lead free	2.0321	CuZn37 CW508L	UNS C27400									
		2.036	CuZn40 CW509L	UNS C28000									
	Brass, Bronze Rm < 400 N/mm ²	2.0401	CuZn39Pb3 / CW614N	UNS C38500									
		2.102	CuSn6	UNS C51900									
Bronze Rm < 600 N/mm ²	2.0966	CuAl10Ni5Fe4	UNS C63000										
	2.096	CuAl9Mn2	UNS C63200										
S ₁	Super alloys	2.4856		Inconel 625									
		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									
		3.7065	Gr.4	ASTM B348 / F68									
S ₃	Titanium alloys	3.7165	TiAl6V4	ASTM B348 / F136									
		9.9367	TiAl6Nb7	ASTM F1295									
H ₁	Hardened steel < 55 HRC	2.4964	CoCr20W15Ni	Haynes 25									
			CrCoMo28	ASTM F1537									
H ₂	Hardened steel ≥ 55 HRC	1.2510	100MnCrMoW4	AISI O1									
		1.2379	X153CrMoV12	AISI D2									