

CrazyDrill Flex Steel 30 x d - coated

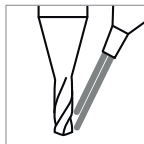
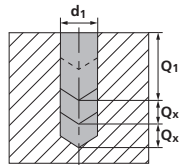
RECOMMENDATION FOR USE

● 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	AISI/ASTM/UNS	v _c		Q ₁	Q _x	f [mm/rev] [IPR]					
			[m/min] [SFM]				Ød1	Ød1	Ød1	Ød1	Ød1	Ød1
			Ød1 ≤ 0.4 .016"	Ød1 > 0.4 .016"			0.2 mm .008"	0.3 mm .012"	0.4 mm .016"	0.6 mm .024"	0.8 mm .032"	1.0-1.2 mm .039"- .047"
						f	f	f	f	f	f	
P	Unalloyed carbon steel Rm < 800 N/mm ²	AISI 1010	5 - 40 16 - 131	40 - 60 131 - 197	7xd1	0.5xd1	0.005	0.010	0.015	0.030	0.040	0.060
		AISI 1015					.0002	.0004	.0006	.0012	.0016	.0024
		AISI 1045										
		AISI 1020										
	Low alloyed steel Rm > 900 N/mm ²	ASTM 3415 / AISI 3310	5 - 25 16 - 82	25 - 50 82 - 164	7xd1	0.5xd1	0.003 - 0.005	0.008 - 0.010	0.012 - 0.015	0.020 - 0.025	0.035	0.050
		AISI 5115					.00012 - .00020	.0003 - .0004	.0005 - .0006	.0008 - .0010	.0014	.0020
		AISI 52100										
		AISI 4140										
	High alloyed tool steel Rm < 1200 N/mm ²	AISI D2	5 - 20 16 - 66	20 - 35 66 - 115	7xd1	1xd1	0.004	0.008	0.010	0.015	0.025	0.040
AISI D4/D6		.00016					.0003	.0004	.0006	.0010	.0016	
AISI M2 / UNS T11302												
	AISI T1 / UNS T12001											
M	Stainless steel ferritic	AISI 430 / UNS S43000					Recommended: CrazyDrill Flex SST-Inox 30 x d1					
		AISI 430F										
	Stainless steel martensitic	AISI 420C										
		AISI 440B										
	Stainless steel martensitic - PH	AISI 630 / ASTM 17-4 PH										
		ASTM 15-5 PH										
	Stainless steel austenitic	AISI 304										
	AISI 316L											
	AISI 316LM											
	AISI 904L											
K	Cast iron	ASTM 30	5 - 40 16 - 131	50 - 100 164 - 328	7xd1	1xd1	0.005	0.010	0.015	0.020	0.035	0.050
		ASTM 40B					.0002	.0004	.0006	.0008	.0014	.0020
		ASTM 60-40-18	40 - 80 131 - 262									
		ASTM 80-60-03										



CrazyDrill Flex Steel 30 x d - coated

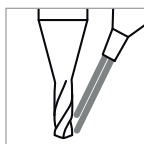
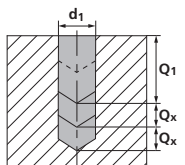
RECOMMENDATION FOR USE

● 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	AISI/ASTM/UNS	v _c		Q ₁	Q _x	f [mm/rev] [IPR]					
			[m/min] [SFM]				Ød1	Ød1	Ød1	Ød1	Ød1	Ød1
			Ød1 ≤ 0.4 .016"	Ød1 > 0.4 .016"			0.2 mm .008"	0.3 mm .012"	0.4 mm .016"	0.6 mm .024"	0.8 mm .032"	1.0–1.2 mm .039"–.047"
						f	f	f	f	f	f	
N	Aluminium alloy wrought	ASTM 6351 ASTM 7075	5–40 16–131	60–120 197–394	7xd1	1xd1	0.015 .0006	0.040 .0016	0.050 .0020	0.080 .0031	0.100 .0039	0.120 .0047
	Aluminium alloy cast	ASTM A380 UNS A03590	5–40 16–131	50–80 164–262	7xd1	1xd1	0.015 .0006	0.040 .0016	0.050 .0020	0.080 .0031	0.100 .0039	0.120 .0047
	Copper	UNS C10100 UNS C11000					Recommended: CrazyDrill Flex Titanium 30 x d1					
	Brass lead free	UNS C27400 UNS C28000					Recommended: CrazyDrill Flex SST-Inox 30 x d1					
	Brass, Bronze Rm < 400 N/mm ²	UNS C38500 UNS C51900	5–40 16–131	60–100 197–328 40–60 131–197	7xd1	1xd1	0.010 .0004	0.030 .0012	0.040 .0016	0.060 .0024	0.080 .0031	0.100 .0039
	Bronze Rm < 600 N/mm ²	UNS C63000 UNS C63200	5–20 16–66	20–40 66–131	2.5xd1	0.5xd1	0.004 .00016	0.006 .0002	0.010 .0004	0.015 .0006	0.025 .0010	0.040 .0016
S ₁	Super alloys	Inconel 625					Recommended: CrazyDrill Flex SST-Inox 30 x d1					
		Inconel 718										
		Hastelloy B-2										
		Hastelloy X										
S ₂	Titanium pure	ASTM B348 / F67					Recommended: CrazyDrill Flex Titanium 30 x d1					
		ASTM B348 / F68										
S ₃	Titanium alloys	ASTM B348 / F136					Recommended: CrazyDrill Flex Titanium 30 x d1					
		ASTM F1295										
H ₁	Hardened steel < 55 HRC	AISI O1					Recommended: CrazyDrill Flex SST-Inox 30 x d1					
		ASTM F1537										
H ₂	Hardened steel ≥ 55 HRC	AISI D2										



Headquarter and Production
MIKRON TOOL SA AGNO
Phone +41 91 610 40 00
Fax. +41 91 610 40 10
mto@mikron.com

Production and Regrinding
MIKRON GMBH ROTTWEIL
Phone +49 741 5380 450
Fax. +49 741 5380 480
info.mtr@mikron.com

North and South America Sales
MIKRON CORP. MONROE
Phone +1 203 261 3100
Fax. +1 203 268 4752
mmo@mikron.com

China Sales
MIKRON TOOL SHANGHAI
Phone +86 21 2076 5671
Fax. +86 21 2076 5562