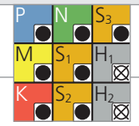
CRAZYMILL™ by Mikron Tool Cool Micro

NEW Type C - Z4 - Side milling - Finishing

v_c [m/min]
f_z [mm]

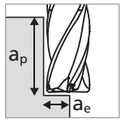
RECOMMENDATION FOR USE
● Excellent | ◐ Good | ○ Acceptable | ⊠ Not recommended



MILLING WITH INTEGRATED COOLING | CUTTING DATA OVERVIEW

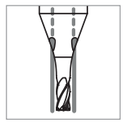
Side milling

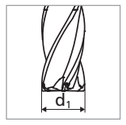
Finishing



- $a_p = 1.5 \times d_1$
- $a_e = 0.02 \times d_1$

Note:
In case of helical interpolation milling see α_{max} on page 35





Materials group	Material	Mat. no.	DIN	AISI/ASTM/UNS	Cutting edge geometry		Ød1 0.4 mm 1/64" vc	0.4 mm 1/64" fz	0.5 mm vc	0.5 mm fz	0.6 mm vc	0.6 mm fz	0.7 mm vc	0.7 mm fz	0.8 mm 1/32" vc	0.8 mm 1/32" fz	0.9 - 1.0 mm vc	0.9 - 1.0 mm fz
P	Unalloyed carbon steel Rm < 800 N/mm²	1.0301	C10	AISI 1010	GEOMETRY S		45 - 75	0.007	55 - 95	0.008	65 - 115	0.010	75 - 130	0.012	90 - 150	0.014	100 - 170	0.016
		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			45 - 75	0.007	55 - 95	0.008	65 - 115	0.010	75 - 130	0.012	90 - 150	0.014	100 - 170	0.016
		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			45 - 75	0.004	55 - 95	0.006	65 - 115	0.008	75 - 130	0.009	90 - 150	0.011	100 - 170	0.012
		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	GEOMETRY S		45 - 75	0.006	55 - 95	0.008	65 - 115	0.010	75 - 130	0.012	90 - 150	0.014	100 - 170	0.016
		1.4105	X6CrMoS17	AISI 430F														
	Stainless steel martensitic	1.4034	X46Cr13	AISI 420C			45 - 75	0.006	55 - 95	0.008	65 - 115	0.010	75 - 130	0.012	90 - 150	0.014	100 - 170	0.016
		1.4112	X90CrMoV18	AISI 440B														
	Stainless steel martensitic – PH	1.4542	X5CrNiCuNb16-4	AISI 630 / ASTM 17-4 PH			45 - 75	0.006	55 - 95	0.008	65 - 115	0.010	75 - 130	0.012	90 - 150	0.014	100 - 170	0.016
		1.4545	X5CrNiCuNb15-5	ASTM 15-5 PH														
	Stainless steel austenitic	1.4301	X5CrNi18-10	AISI 304			45 - 75	0.004	55 - 95	0.006	65 - 115	0.008	75 - 130	0.009	90 - 150	0.011	100 - 170	0.012
		1.4435	X2CrNiMo18-14-3	AISI 316L														
		1.4441	X2CrNiMo18-15-3	AISI 316LM														
		1.4539	X1NiCrMoCu25-20-5	AISI 904L														
K	Cast iron	0.6020	GG20	ASTM 30	GEOMETRY S		45 - 75	0.007	55 - 95	0.008	65 - 115	0.010	75 - 130	0.012	90 - 150	0.014	100 - 170	0.016
		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	GEOMETRY S		45 - 75	0.008	55 - 95	0.008	65 - 115	0.010	75 - 130	0.011	90 - 150	0.012	100 - 170	0.012
		3.4365	AlZnMgCu1.5	ASTM 7075														
	Aluminium alloy cast	3.2163	GD-AlSi9Cu3	ASTM A380			45 - 75	0.008	55 - 95	0.008	65 - 115	0.010	75 - 130	0.011	90 - 150	0.012	100 - 170	0.012
		3.2381	GD-AlSi10Mg	UNS A03590														
	Copper	2.0040	Cu-OF / CW008A	UNS C10100			45 - 75	0.008	55 - 95	0.008	65 - 115	0.010	75 - 130	0.011	90 - 150	0.012	100 - 170	0.012
		2.0065	Cu-ETP / CW004A	UNS C11000														
	Brass lead free	2.0321	CuZn37 CW508L	UNS C27400			45 - 75	0.008	55 - 95	0.008	65 - 115	0.010	75 - 130	0.011	90 - 150	0.012	100 - 170	0.012
		2.0360	CuZn40 CW509L	UNS C28000														
	Brass, Bronze Rm < 400 N/mm²	2.0401	CuZn39Pb3 / CW614N	UNS C38500			45 - 75	0.008	55 - 95	0.008	65 - 115	0.010	75 - 130	0.011	90 - 150	0.012	100 - 170	0.012
		2.1020	CuSn6	UNS C51900														
	Bronze Rm < 600 N/mm²	2.0966	CuAl10Ni5Fe4	UNS C63000			45 - 75	0.008	55 - 95	0.008	65 - 115	0.010	75 - 130	0.011	90 - 150	0.012	100 - 170	0.012
		2.0960	CuAl9Mn2	UNS C63200														
S_1	Super alloys	2.4856		Inconel 625	GEOMETRY SX		45 - 75	0.002	55 - 95	0.004	65 - 115	0.004	75 - 130	0.005	90 - 150	0.006	100 - 170	0.007
		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	GEOMETRY S		45 - 75	0.004	55 - 95	0.006	65 - 115	0.008	75 - 130	0.009	90 - 150	0.011	100 - 170	0.012
		3.7065	Gr.4	ASTM B348 / F68														
	Titanium alloys	3.7165	TiAl6V4	ASTM B348 / F136	GEOMETRY S		45 - 75	0.004	55 - 95	0.006	65 - 115	0.008	75 - 130	0.009	90 - 150	0.011	100 - 170	0.012
		9.9367	TiAl6Nb7	ASTM F1295														
S_3	CoCr alloys	2.4964	CoCr20W15Ni	Haynes 25	GEOMETRY SX		45 - 75	0.002	55 - 95	0.004	65 - 115	0.004	75 - 130	0.005	90 - 150	0.006	100 - 170	0.007
			CrCoMo28	ASTM F1537														
H_1	Hardened steel < 55 HRC	1.2510	100MnCrMoW4	AISI O1														
H_2	Hardened steel ≥ 55 HRC	1.2379	X153CrMoV12	AISI D2														