

NEW

Type A - Finishing

V_c [m/min] | [SFM]
f_z [mm] | [IPT]

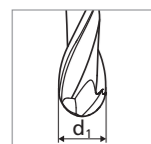
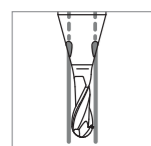
RECOMMENDATION FOR USE
● Excellent | ● Good | ○ Acceptable | ⊗ Not recommended



MILLING WITH INTEGRATED COOLING | CUTTING DATA OVERVIEW

Inclination 15°

 ■ a_p = 0.1 x d,
 ■ a_e = 0.05 - 0.1 x d,
 n_{max} = 60'000 rpm



Materials group	Material	Mat. no.	DIN	AISI/ASTM/UNS	1.0 mm .039"		1.2 mm .047"		1/16"		Ød1		3/32"		1/8"		5/32"		3/16"		7/32 - 1/4"					
					v _c	f _z	v _c	f _z	v _c	f _z	v _c	f _z	v _c	f _z	v _c	f _z	v _c	f _z	v _c	f _z	v _c	f _z	v _c	f _z		
P	Unalloyed carbon steel Rm < 800 N/mm²	1.0301	C10	AISI 1010																						
		1.0401	C15	AISI 1015																						
		1.1191	C45E/CK45	AISI 1045		140	0.015	140	0.017																	
		1.0044	S275JR	AISI 1020		459	.00059	459	.00067																	
		1.0715	11SMn30	AISI 1215																						
		1.5752	15NiCr13	ASTM 3415 / AISI 3310																						
	Low alloyed steel Rm > 900 N/mm²	1.7131	16MnCr5	AISI 5115																						
		1.3505	100Cr6	AISI 52100		140	0.014	140	0.016																	
		1.7225	42CrMo4	AISI 4140		459	.00055	459	.00063																	
		1.2842	90MnCrV8	AISI O2																						
		1.2379	X153CrMoV12	AISI D2																						
		1.2436	X210CrW12	AISI D4/D6		140	0.011	140	0.013																	
M	Stainless steel ferritic	1.4016	X6Cr17	AISI 430 / UNS S43000																						
		1.4105	X6CrMoS17	AISI 430F		140	0.016	140	0.018																	
		1.4034	X46Cr13	AISI 420C		459	.00063	459	.00071																	
	Stainless steel martensitic	1.4112	X90CrMoV18	AISI 440B		140	0.015	140	0.017																	
		1.4542	X5CrNiCuNb16-4	AISI 630 / ASTM 17-4 PH		459	.00059	459	.00067																	
		1.4545	X5CrNiCuNb15-5	ASTM 15-5 PH																						
	Stainless steel austenitic	1.4301	X5CrNi18-10	AISI 304		140	0.015	140	0.017																	
		1.4435	X2CrNiMo18-14-3	AISI 316L		459	.00059	459	.00067																	
		1.4441	X2CrNiMo18-15-3	AISI 316LM		140	0.012	140	0.014																	
		1.4539	X1NiCrMoCu25-20-5	AISI 904L		459	.00047	459	.00055																	
		1.4301	X5CrNi18-10	AISI 304																						
		1.4435	X2CrNiMo18-14-3	AISI 316L		140	0.012	140	0.014																	
K	Cast iron	0.6020	GG20	ASTM 30																						
		0.6030	GG30	ASTM 40B		120	0.011	120	0.022																	
		0.7040	GGG40	ASTM 60-40-18		394	.00043	394	.00087																	
		0.7060	GGG60	ASTM 80-60-03																						
N	Aluminium alloy wrought	3.2315	AlMgSi1	ASTM 6351																						
		3.4365	AlZnMgCu1.5	ASTM 7075		140	0.018	140	0.020																	
	Aluminium alloy cast	3.2163	GD-AlSi9Cu3	ASTM A380		140	0.018	140	0.020																	
		3.2381	GD-AlSi10Mg	UNS A03590		459	.00071	459	.00079																	
	Copper	2.0040	Cu-OF / CW008A	UNS C10100		140	0.020	140	0.022																	
		2.0065	Cu-ETP / CW004A	UNS C11000		459	.00079	459	.00087																	
	Brass lead free	2.0321	CuZn37 CW508L	UNS C27400		140	0.020	140	0.022																	
		2.0360	CuZn40 CW509L	UNS C28000		459	.00079	459	.00087																	
	Brass, Bronze Rm < 400 N/mm²	2.0401	CuZn39Pb3 / CW614N	UNS C38500		140	0.020	140	0.022																	
		2.1020	CuSn6	UNS C51900		459	.00079	459	.00087																	
	Bronze Rm < 600 N/mm²	2.0966	CuAl10Ni5Fe4	UNS C63000		140	0.018	140	0.020																	
		2.0960	CuAl9Mn2	UNS C63200		459	.00071	459	.00079																	
S ₁	Super alloys	2.4856		Inconel 625																						
		2.4668		Inconel 718		120	0.007	120	0.008																	
		2.4617	NiMo28	Hastelloy B-2		394	.00028	394	.00031																	
		2.4665	NiCr22Fe18Mo	Hastelloy X																						
S ₂	Titanium pure	3.7035	Gr.2	ASTM B348 / F67		120	0.016	120	0.018																	
		3.7065	Gr.4	ASTM B348 / F68		394	.00063	394	.00071																	
S ₃	Titanium alloys	3.7165	TiAl6V4	ASTM B348 / F136		120	0.016	120	0.018																	
		9.9367	TiAl6Nb7	ASTM F1295		394	.00063	394	.00071																	
H ₁	Hardened steel < 55 HRC	2.4964	CoCr20W15Ni	Haynes 25		140	0.007	140	0.008																	
			CrCoMo28	ASTM F1537		459	.00028	459	.00031																	
H ₂	Hardened steel ≥ 55 HRC	1.2510	100MnCrMoW4	AISI O1		100	0.010	100	0.012																	
		1.2379	X153CrMoV12	AISI D2		328	.00039	328	.00047																	