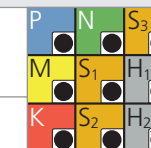


NEW

Type B - Semi-finishing

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

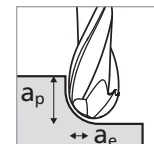
RECOMMENDATION FOR USE
● Excellent | ● Good | ○ Acceptable | ⊗ Not recommended



MILLING WITH INTEGRATED COOLING | CUTTING DATA OVERVIEW

Possibility 1

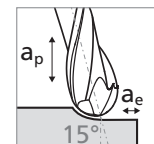
Inclination 0°



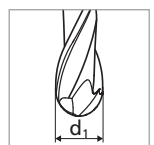
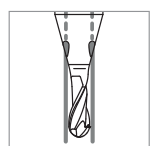
■ a_p = 1 x d₁
■ a_e = 0.2 x d₁

Possibility 2

Inclination 15°



■ a_p = 0.5 x d₁
■ a_e = 0.2 x d₁



Materials group	Material	Mat. no.	DIN	AISI/ASTM/UNS	1.0 mm .039"		1.2 mm .047"		1/16"		1.8 mm .071"		2.0 mm .079"		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		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	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	0.013	140	0.014	200	0.020	200	0.022	220	0.029	220	0.031	240	0.037	260	0.040	260	0.040	260	0.043	260	0.043
		1.0044	S275JR	AISI 1020	459	.00050	459	.00057	656	.00080	656	.00087	722	.00114	722	.00120	787	.00145	853	.00157	853	.00157	853	.00167	853	.00167
		1.0715	11SMn30	AISI 1215																						
		1.5752	15NiCr13	ASTM 3415 / AISI 3310																						
	Low alloyed steel Rm > 900 N/mm²	1.7131	16MnCr5	AISI 5115	140	0.012	140	0.014	200	0.019	200	0.020	220	0.027	220	0.029	240	0.035	260	0.038	260	0.038	260	0.041	260	0.041
		1.3505	100Cr6	AISI 52100	459	.00047	459	.00054	656	.00074	656	.00080	722	.00107	722	.00114	787	.00139	853	.00151	853	.00151	853	.00161	853	.00161
		1.7225	42CrMo4	AISI 4140																						
		1.2842	90MnCrV8	AISI O2																						
		1.2379	X153CrMoV12	AISI D2																						
		1.2436	X210CrW12	AISI D4/D6	140	0.009	140	0.011	200	0.017	200	0.019	220	0.026	220	0.027	240	0.032	260	0.034	260	0.034	260	0.036	260	0.036
M	Stainless steel ferritic	1.3343	HS6-5-2C	AISI M2 / UNS T11302	459	.00037	459	.00044	656	.00067	656	.00074	722	.00100	722	.00107	787	.00126	853	.00132	853	.00132	853	.00141	853	.00141
		1.3355	HS18-0-1	AISI T1 / UNS T12001																						
		1.4016	X6Cr17	AISI 430 / UNS S43000	140	0.014	140	0.015	200	0.020	200	0.022	220	0.029	220	0.031	240	0.035	260	0.038	260	0.038	260	0.041	260	0.041
		1.4105	X6CrMoS17	AISI 430F	459	.00054	459	.00060	656	.00080	656	.00087	722	.00114	722	.00120	787	.00139	853	.00151	853	.00151	853	.00161	853	.00161
	Stainless steel martensitic	1.4034	X46Cr13	AISI 420C	140	0.013	140	0.014	200	0.019	200	0.020	220	0.027	220	0.029	240	0.035	260	0.037	260	0.037	260	0.039	260	0.039
		1.4112	X90CrMoV18	AISI 440B	459	.00050	459	.00057	656	.00074	656	.00080	722	.00107	722	.00114	787	.00139	853	.00145	853	.00145	853	.00154	853	.00154
		1.4542	X5CrNiCuNb16-4	AISI 630 / ASTM 17-4 PH	140	0.013	140	0.014	200	0.019	200	0.020	220	0.027	220	0.029	240	0.035	260	0.037	260	0.037	260	0.039	260	0.039
		1.4545	X5CrNiCuNb15-5	ASTM 15-5 PH	459	.00050	459	.00057	656	.00074	656	.00080	722	.00107	722	.00114	787	.00139	853	.00145	853	.00145	853	.00154	853	.00154
	Stainless steel austenitic	1.4301	X5CrNi18-10	AISI 304																						
		1.4435	X2CrNiMo18-14-3	AISI 316L	140	0.010	140	0.012	200	0.014	200	0.015	220	0.026	220	0.027	240	0.032	260	0.035	260	0.035	260	0.037	260	0.037
		1.4441	X2CrNiMo18-15-3	AISI 316LM	459	.00040	459	.00047	656	.00054	656	.00060	722	.00100	722	.00107	787	.00126	853	.00139	853	.00139	853	.00147	853	.00147
		1.4539	X1NiCrMoCu25-20-5	AISI 904L																						
K	Cast iron	0.6020	GG20	ASTM 30	120	0.009	120	0.019	140	0.020	140	0.022	160	0.024	160	0.031	180	0.034	200	0.040	200	0.042	200	0.044	200	0.044
		0.6030	GG30	ASTM 40B	394	.00037	394	.00074	459	.00080	459	.00087	525	.00094	525	.00120	591	.00135	656	.00157	656	.00164	656	.00174	656	.00174
		0.7040	GGG40	ASTM 60-40-18																						
		0.7060	GGG60	ASTM 80-60-03																						
N	Aluminium alloy wrought	3.2315	AlMgSi1	ASTM 6351	140	0.015	140	0.017	200	0.022	200	0.024	220	0.031	220	0.034	240	0.046	260	0.048	260	0.048	260	0.051	260	0.051
		3.4365	AlZnMgCu1.5	ASTM 7075	459	.00060	459	.00067	656	.00087	656	.00094	722	.00120	722	.00134	787	.00183	853	.00189	853	.00189	853	.00201	853	.00201
	Aluminium alloy cast	3.2163	GD-AlSi9Cu3	ASTM A380	140	0.015	140	0.017	200	0.022	200	0.024	220	0.031	220	0.034	240	0.046	260	0.048	260	0.048	260	0.051	260	0.051
		3.2381	GD-AlSi10Mg	UNS A03590	459	.00060	459	.00067	656	.00087	656	.00094	722	.00120	722	.00134	787	.00183	853	.00189	853	.00189	853	.00201	853	.00201
	Copper	2.0040	Cu-OF / CW008A	UNS C10100	140	0.017	140	0.019	200	0.022	200	0.024	220	0.031	220	0.034	240	0.046	260	0.048	260	0.048	260	0.051	260	0.051
		2.0065	Cu-ETP / CW004A	UNS C11000	459	.00067	459	.00074	656	.00087	656	.00094	722	.00120	722	.00134	787	.00183	853	.00189	853	.00189	853	.00201	853	.00201
	Brass lead free	2.0321	CuZn37 CW508L	UNS C27400	140	0.017	140	0.019	200	0.022	200	0.024	220	0.031	220	0.034	240	0.046	260	0.048	260	0.048	260	0.051	260	0.051
		2.0360	CuZn40 CW509L	UNS C28000	459	.00067	459	.00074	656	.00087	656	.00094	722	.00120	722	.00134	787	.00183	853	.00189	853	.00189	853	.00201	853	.00201
	Brass, Bronze Rm < 400 N/mm²	2.0401	CuZn39Pb3 / CW614N	UNS C38500	140	0.017	140	0.019	200	0.022	200	0.024	220	0.031	220	0.034	240	0.046	260	0.048	260	0.048	260	0.051	260	0.051
		2.1020	CuSn6	UNS C51900	459	.00067	459	.00074	656	.00087	656	.00094	722	.00120	722	.00134	787	.00183	853	.00189	853	.00189	853	.00201	853	.00201
	Bronze Rm < 600 N/mm²	2.0966	CuAl10Ni5Fe4	UNS C63000	140	0.015	140	0.017	200	0.022	200	0.024	220	0.031	220	0.034	240	0.046	260	0.048	260	0.048	260	0.051	260	0.051
		2.0960	CuAl9Mn2	UNS C63200	459	.00060	459	.00067	656	.00087	656	.00094	722	.00120	722	.00134	787	.00183	853	.00189	853	.00189	853	.00201	853	.00201
S₁	Super alloys	2.4856		Inconel 625																						
		2.4668		Inconel 718	120	0.006	120	0.007	130	0.008	130	0.009	140	0.009	140	0.010	150	0.012	170	0.016	170	0.016	170	0.017	170	0.017
		2.4617	NiMo28	Hastelloy B-2	394	.00023	394	.00027	427	.00030	427	.00033	459	.00033	459	.00040	492	.00047	558	.00063	558	.00063	558	.00067	558	.00067
		2.4665	NiCr22Fe18Mo	Hastelloy X																						
S₂	Titanium pure	3.7035	Gr.2	ASTM B348 / F67	120	0.014	120	0.015	130	0.017	1															