

Milling Machining conditions **APLX 1003 PDTR & APLX 100308 PDTR**

Material Group	Group No	Material Examples*	Brinell hardness	d.o.c [mm]		feed [mm/tooth]		V <sub>c</sub> [m/min]	
				min	max	min	max	min	max
Low Carbon Steel	1	Ck15, Ck45 1020, 1045	150	0.5	9.0	0.10	0.38	180	300
			180		9.0		0.25		260
			210		9.0		0.23		220
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.5	9.0	0.08	0.22	130	200
			230		9.0		0.22		180
			280	0.5	9.0	0.08	0.18	100	160
			320		9.0		0.18		140
High Alloy Steel	3	X40 CrMoV 5 1 H 13 40 NiCrMo 6 4340 S 2-10-1-8 HSS M42	220	0.5	7.0	0.08	0.18	90	130
			280		7.0		0.18		110
			320	0.5	7.0	0.08	0.16	60	100
			350		7.0		0.16		90
			400	0.5	4.0	0.10	0.16	40	80
			480		2.0		0.15		70
			550		1.0		0.14		60
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.5	9.0	0.10	0.22	190	250
	5	X2 CrNiMo 17 2 2 316	230 to 270	0.5	9.0	0.10	0.20	160	210
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----	0.5	9.0	0.08	0.18	70	120
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.5	9.0	0.08	0.20	150	230
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed	0.5	9.0	0.08	0.20	130	210
			Treated	0.5	9.0	0.08	0.20	90	150
Grey Cast Iron	9	GG 20	140 to 230	0.5	9.0	0.10	0.25	150	240
		GG 25							220
		GG 30							190
Nodular Cast Iron	10	GGG 40	210	0.5	9.0	0.10	0.22	100	200
		GGG 50	260						160
		GGG 70	310	0.5	3.0	0.10	0.14	30	130
		G-X260NiCr42	450						60
Nickel Based Alloys	11	Inconel 625	-----	0.5	5.0	0.08	0.15	25	35
		Inconel 718						28	38
		Hastelloy C						40	65
Titanium Based Alloys	12	TiAl 6 V4	-----	0.5	5.0	0.08	0.18	35	60
		T40					0.15	28	40

