

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	Ck 15 9SMnPb28	150	0.5	3.0	0.23	0.58	190	350
			180		2.5		0.52		300
			210		2.0		0.45		260
Alloy Steel	2	42 CrMo 4 100 Cr 6 32 NiCrMo 14.5	180	0.5	3.0	0.21	0.52	150	240
			230		2.5		0.47		210
			280	0.5	2.0	0.20	0.43	130	190
			320		2.0		0.40		170
High Alloy Steel	3	X38 CrMoV 5 X210 CrW 12 X90 CrMoV 8	220	0.5	2.5	0.17	0.47	90	150
			280		2.5		0.43		130
			320	0.5	2.0	0.17	0.40	60	110
			350		2.0		0.38		90
Austenitic Stainless Steel	4	303 / 304 304 L	210 to 250	0.5	3.0	0.17	0.38	170	250
	5	316 / 316 L	230 to 270	0.5	2.5	0.15	0.35	160	210
	6	316 Ti 630 (F16PH)	-----	0.5	2.0	0.13	0.32	70	150
Ferritic Stainless Steel	7	430 / 439 / 444	Annealed	0.5	2.5	0.15	0.35	150	210
Martensitic Stainless Steel	8	410 / 420	Annealed	0.5	2.5	0.15	0.35	150	230
			Treated	0.5	2.5	0.15	0.35	90	170
Grey Cast Iron	9	EN - GJL 200	140 to 230	0.5	3.0	0.18	0.60	170	300
		EN - GJL 250							250
		EN - GJL 300							210
Nodular Cast Iron	10	EN - GJS 400	210	0.5	2.5	0.18	0.50	120	210
		EN - GJS 600	260						170
		EN - GJS 800	310						150
Nickel Based Alloys	11	Inconel 625	-----	0.5	2.0	0.15	0.32	25	35
		Inconel 718						28	40
		Hastelloy C						40	60
Titanium Based Alloys	12	TiAl 6 V4	-----	0.5	2.0	0.17	0.35	35	60
		T40					0.27	28	40

\*For all material types and standards, see pages 240 to 245.