





Material

Steel  
< 850 N/mm<sup>2</sup>

d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>t</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>r</sub> [mm/min]
3.00	4	160	0.010	3.000	0.150	16975	680
4.00	4	160	0.010	4.000	0.200	12730	510
5.00	4	160	0.015	5.000	0.250	10185	610
6.00	6	160	0.015	6.000	0.300	8490	765
8.00	6	160	0.025	8.000	0.400	6365	955
10.00	6	160	0.030	10.000	0.500	5095	915

Steel  
850 - 1100 N/mm<sup>2</sup>

3.00	4	100	0.010	3.000	0.150	10610	425
4.00	4	100	0.010	4.000	0.200	7960	320
5.00	4	100	0.015	5.000	0.250	6365	380
6.00	6	100	0.015	6.000	0.300	5305	475
8.00	6	100	0.025	8.000	0.400	3980	595
10.00	6	100	0.030	10.000	0.500	3185	575

Steel  
1100 - 1300 N/mm<sup>2</sup>

3.00	4	75	0.010	3.000	0.150	7960	320
4.00	4	75	0.010	4.000	0.200	5970	240
5.00	4	75	0.015	5.000	0.250	4775	285
6.00	6	75	0.015	6.000	0.300	3980	360
8.00	6	75	0.025	8.000	0.400	2985	450
10.00	6	75	0.030	10.000	0.500	2385	430

Inox normal  
[Cr-Ni/1.4301]  
[Cr-Ni-Mo/1.4571]

3.00	4	90	0.010	3.000	0.150	9550	380
4.00	4	90	0.010	4.000	0.200	7160	285
5.00	4	90	0.015	5.000	0.250	5730	345
6.00	6	90	0.015	6.000	0.300	4775	430
8.00	6	90	0.025	8.000	0.400	3580	535
10.00	6	90	0.030	10.000	0.500	2865	515

Cast iron  
(lamellar / spheroidal)

3.00	4	120	0.010	3.000	0.150	12730	510
4.00	4	120	0.010	4.000	0.200	9550	380
5.00	4	120	0.015	5.000	0.250	7640	460
6.00	6	120	0.015	6.000	0.300	6365	575
8.00	6	120	0.025	8.000	0.400	4775	715
10.00	6	120	0.030	10.000	0.500	3820	690

Cold work tool steel  
(12% Cr),  
high alloyed  
[1.2379]

3.00	4	65	0.010	3.000	0.150	6895	275
4.00	4	65	0.010	4.000	0.200	5175	205
5.00	4	65	0.015	5.000	0.250	4140	250
6.00	6	65	0.015	6.000	0.300	3450	310
8.00	6	65	0.025	8.000	0.400	2585	390
10.00	6	65	0.030	10.000	0.500	2070	370

Titanium alloys  
up to 300 HB  
[Ti5Al2.5Sn]

3.00	4	95	0.010	3.000	0.150	10080	405
4.00	4	95	0.010	4.000	0.200	7560	300
5.00	4	95	0.015	5.000	0.250	6050	365
6.00	6	95	0.015	6.000	0.300	5040	455
8.00	6	95	0.025	8.000	0.400	3780	565
10.00	6	95	0.030	10.000	0.500	3025	545

Inox difficult  
[Cr-Ni-Mo+/1.4529]  
Heat resistant steel  
[1.4841]

3.00	4	50	0.010	3.000	0.150	5305	210
4.00	4	50	0.010	4.000	0.200	3980	160
5.00	4	50	0.015	5.000	0.250	3185	190
6.00	6	50	0.015	6.000	0.300	2655	240
8.00	6	50	0.025	8.000	0.400	1990	300
10.00	6	50	0.030	10.000	0.500	1590	285