

Material Group	Lamina Group	Material Example	Hardness	D.O.C.		Feed		Amax [mm <sup>2</sup> ]	Vc		Advised D.O.C. [mm]	Advised Feed [mm/t]	Advised Vc [m/min]
				min [mm]	max [mm]	min [mm/t]	max [mm/t]		min [m/mm]	max [m/mm]			
Non Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.50	5.0	0.21	0.48	1.94	180	330	3	0.41	240
			190 HB	0.50	5.0	0.21	0.48	1.94	180	280	3	0.38	220
			250 HB	0.50	5.0	0.21	0.43	1.62	180	250	3	0.36	200
Low Alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.50	5.0	0.21	0.43	1.3	120	280	3	0.35	200
			230 HB	0.50	4.0	0.21	0.43	1.3	120	250	3	0.35	180
			280 HB	0.50	4.0	0.18	0.38	1.3	120	210	3	0.32	150
			350 HB	0.50	3.5	0.18	0.38	1.08	120	180	2.7	0.32	130
High Alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.50	4.0	0.18	0.38	1.3	70	190	2.5	0.32	140
			280 HB	0.50	4.0	0.18	0.38	1.3	70	150	2.5	0.32	120
			320 HB	0.50	3.0	0.18	0.33	0.86	70	130	2.2	0.3	100
			350 HB	0.50	3.0	0.18	0.33	0.86	70	110	2.2	0.3	90
Austentic	4	304, 316, X5CrNi18-9	180 HB	0.50	5.0	0.2	0.38	1.3	170	270	3	0.27	190
			240 HB	0.50	5.0	0.2	0.38	1.08	160	220	3	0.24	170
Duplex	5	X2CrNiN23-4, S31500	290 HB	0.50	4.0	0.18	0.33	0.86	80	150	2.5	0.26	100
			310 HB	0.50	4.0	0.18	0.33	0.86	70	140	2.5	0.26	90
Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.50	5.0	0.18	0.38	0.76	170	250	2.5	0.22	190
			388 HB	0.50	4.0	0.18	0.38	0.76	120	190	2.2	0.22	130
Grey	7	GG20, GG40, EN-GJL-250, N030B	150 HB	0.50	5.0	0.15	0.57	2.16	170	250	3	0.38	200
			200 HB	0.50	5.0	0.15	0.57	1.94	160	230	3	0.38	180
			250 HB	0.50	5.0	0.15	0.52	1.94	150	210	3	0.38	160
Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.50	5.0	0.15	0.48	1.62	120	250	3	0.32	180
			200 HB	0.50	5.0	0.15	0.48	1.4	120	230	3	0.32	160
			250 HB	0.50	5.0	0.15	0.48	1.3	120	190	3	0.32	140
Fe, Ni & Co Based	9	Incoloy 800	240 HB	0.50	3.0	0.2	0.33	0.76	25	45	2	0.3	30
			250 HB	0.50	3.0	0.2	0.33	0.76	25	45	2	0.3	30
			350 HB	0.50	3.0	0.2	0.33	0.76	25	40	2	0.3	30
Steel Chilled Cast Iron White Cast Iron	11	X100CrMo13 .440C, GX260NiCr4 2	419 HB	0.50	2.5	0.11	0.29	0.65	50	100	2	0.27	80
			469 HB	0.50	2.0	0.11	0.24	0.43	40	90	1.5	0.22	70
			552 HB	0.50	1.5	0.11	0.19	0.32	40	80	1	0.19	60
			400 HB	0.50	2.0	0.11	0.24	0.43	40	60	1.5	0.19	50
			552 HB	0.50	1.5	0.11	0.19	0.32	30	50	1	0.16	40
Al (>8%Si)	12	AlSi12	130 HB	0.50	6.0	0.2	0.57	1.94	200	400	3	0.43	280



Steel



Stainless steel



Cast iron



High temp alloys



Hardened material



ALU