

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	0.30	4.0	0.11	0.26	0.72	180	330	2.5	0.18	300
			190 HB	0.30	3.3	0.11	0.25	0.62	180	280	2.5	0.18	260
			250 HB	0.30	3.3	0.11	0.23	0.58	180	250	2.5	0.18	240
Low Alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.30	3.3	0.1	0.23	0.6	120	280	2.5	0.14	260
			230 HB	0.30	3.3	0.1	0.23	0.58	120	250	2.5	0.14	240
			280 HB	0.30	2.7	0.1	0.21	0.48	120	210	2.5	0.13	200
			350 HB	0.30	2.7	0.1	0.21	0.43	120	180	2.5	0.13	180
High Alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.30	3.3	0.09	0.21	0.48	70	190	2.1	0.1	180
			280 HB	0.30	3.3	0.09	0.18	0.48	70	150	2.1	0.1	140
			320 HB	0.30	2.7	0.09	0.16	0.38	70	130	2.1	0.1	120
			350 HB	0.30	2.7	0.09	0.16	0.31	70	110	2.1	0.1	110
Austentic	4	304, 316, X5CrNi18-9	180 HB	0.30	3.3	0.08	0.21	0.38	170	270	2.5	0.09	260
			240 HB	0.30	3.3	0.08	0.21	0.31	160	220	2.5	0.08	210
Duplex	5	X2CrNiN23-4, S31500	290 HB	0.30	2.7	0.08	0.16	0.24	80	150	2.1	0.08	140
			310 HB	0.30	2.7	0.08	0.16	0.24	70	140	2.1	0.08	140
Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.30	3.3	0.08	0.21	0.38	170	250	2.1	0.09	240
			388 HB	0.30	2.7	0.08	0.18	0.31	120	190	1.9	0.08	180
Grey	7	GG20, GG40, EN-GJL-250, N030B	150 HB	0.30	4.0	0.08	0.23	0.77	170	250	2.5	0.18	240
			200 HB	0.30	4.0	0.08	0.23	0.72	160	230	2.5	0.18	220
			250 HB	0.30	4.0	0.08	0.23	0.72	150	210	2.5	0.18	200
Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.30	3.3	0.08	0.21	0.58	120	250	2.5	0.13	240
			200 HB	0.30	3.3	0.08	0.21	0.48	120	230	2.5	0.13	220
			250 HB	0.30	3.3	0.08	0.21	0.48	120	190	2.5	0.13	180
Fe, Ni & Co Based	9	Incoloy 800	240 HB	0.30	2.7	0.09	0.17	0.31	25	50	1.6	0.1	40
			250 HB	0.30	2.7	0.09	0.17	0.31	25	50	1.6	0.1	40
			350 HB	0.30	2.7	0.09	0.17	0.31	23	45	1.6	0.1	35
Steel Chilled Cast Iron White Cast Iron	11	X100CrMo13 .440C, GX260NiCr4 2	419 HB	0.30	2.4	0.05	0.14	0.24	50	100	1.8	0.1	90
			469 HB	0.30	2.0	0.05	0.12	0.2	40	90	1.4	0.08	80
			552 HB	0.30	1.9	0.05	0.1	0.16	40	80	1.1	0.06	70
			400 HB	0.30	2.1	0.05	0.14	0.2	40	60	1.4	0.1	50
			552 HB	0.30	1.9	0.05	0.1	0.16	30	50	1.1	0.06	40
Al (>8%Si)	12	AlSi12	130 HB	0.30	5.3	0.1	0.35	0.84	200	400	2.5	0.23	350



Steel



Stainless steel



Cast iron



High temp alloys



Hardened material



ALU