



J&L Precison Castings

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Properties of Common Ferrous Cast Alloys

Alloy Category	Cast Alloy Designation	Wrought Alloy	ASTM Spec	Chemical Composition					Minimum Mechanical Properties			
				C	Cr	Ni	Mo	Other	Tensile (ksi)	Yield (ksi)	Elong (%)	Hardness (Brinell)
Hardenable Stainless Steels	CA15	410	A487/A217	0.1	12	...	...	...	90	65	18	225
	CA40	420	A743	0.3	12	...	...	...	100	70	15	260
	CA6NM	F-6NM	A487/A743	0.06	12	4	0.5	...	110	80	15	269
Precipitation Hardening	CB7Cu-1	17-4PH	A747	0.07	17	4	...	3 Cu	150	140	9	325
	CB7Cu-2	15-5PH	A747	0.05	15	5	...	3Cu	150	140	9	325
Non Hardenable Stainless Steels	CF3	304L	A351/A743	0.03	19	9	...	...	70	30	35	134-196
	CF8	304	A351/A743	0.08	19	9	...	...	70	30	35	134-196
	CF8C	347	A351/A743	0.08	19	10	...	0.8 Cb	70	30	30	175
	CF20	302	A743	0.2	19	9	...	...	70	30	30	175
	CF3M	316L	A351/A743	0.03	19	10	2.5	...	70	30	30	136-202
	CF8M	316	A351/A743	0.08	19	10	2.5	...	70	30	30	146-212
	CG8M	317	A351/A743	0.08	19	10	3.5	...	75	35	25	162-220
	CH20	309	A351/A743	0.2	25	13	...	...	70	30	30	190
CK20	310	A351/A743	0.2	25	20	...	...	65	28	30	144	
Heat Resistant Steels	HD	327	A297	0.35	28	6	...	...	85	48	16	190
	HK40	310	A297/A351	0.4	26	20	...	...	75	50	17	170
	HT	330	A297/A351	0.5	17	35	...	...	70	40	40	180
Carbon and Low Alloy Steels	8620	8620	A732/A915	0.2	0.5	0.5	0.2	...	100	80	20	160-240
	4130	4130	A732/A915	0.3	0.9	...	0.2	...	130	100	20	212-330
	WCB	1025	A352	0.25	...	...	...	...	70	36	22	137
	LCB	1025	A352	0.25	...	...	...	...	65	35	24	137
Abrasion Resistant Irons	CI II Type B	15-3	A532	3.2	15	0.5	3	...	...	...	...	650
	CI II Type D	20 Cr	A532	3	20	0.5	0.5	...	...	...	...	650
	CI III Type A	25 Cr	A532	2.8	25	0.5	0.5	...	...	...	...	600