

Gray or Grey Iron has graphite (carbon) in shapes of flakes – similar to *corn flakes*. The strength varies by chemistry and shape and density of these flakes. Cracks can propagate from one flake to another – microscopically- forming continuous jagged fissures.

Gray Iron Material Grades

The following is the material grade comparison table for gray cast iron in all countries.

Country	Standard	Equivalent Grades of Grey Iron (Gray Cast Iron)						
ISO	ISO 185	100	150	200	250	300	350	-
China	GB 9439	HT100	HT150	HT200	HT250	HT300	HT350	-
USA	ASTM A48	-	NO.20 NO.25	NO.30	NO.35	NO.40 NO.45	NO.50	NO.55 NO.60
Germany Austria	DIN 1691	GG10	GG15	GG20	GG25	GG30	GG35	GG40
European	EN 1561	EN-GJL- 100	EN-GJL- 150	EN-GJL- 200	EN-GJL- 250	EN-GJL- 300	EN-GJL- 350	
Japan	JIS G5501	FC100	FC150	FC200	FC250	FC300	FC350	-
Italy	UNI 5007	G10	G15	G20	G25	G30	G35	-
France	NF A32-101	-	FGL150	FGL200	FGL250	FGL300	FGL350	FGL400
UK	BS 1452	100	150	200	250	300	350	-
India	IS 210	-	FG150	FG200	FG260	FG300	FG350	FG400
Spain	UNF	-	FG15	FG20	FG25	FG30	FG35	-
Belgium	NBN 830-01	FGG10	FGG15	FGG20	FGG25	FGG30	FGG35	FGG40
Australia	AS 1830	-	T150	T220	T260	T300	T350	T400
Sweden	SS 14 01	O110	O115	O120	O125	O130	O135	O140
Norway	NS11 100	SJG100	SJG150	SJG200	SJG250	SJG300	SJG350	-
Min. Tensile Strength (Mpa)		100	150	200	250	300	350	-