

CONTINUOUS CAST IRON SUMMARY OF GRADES

Grade Reference		Chemical Composition Limits Percent						Typical Mechanical Properties (Annealed Condition)					DESCRIPTION & TYPICAL APPLICATIONS
		C	Si	Mn	P	S	Mg ²	Size mm	Yield MPa	U.T.S MPa	Elong'n %	Hardness Brinell	
AS 1830-1986 T260	Min.	2.80	2.30	0.50	-	-	-	>25.4		275		197-285	Grey Iron with fully pearlitic structure that provides high mechanical properties, good surface finish and good hardenability.
								25.4-50.8		255		197-269	
								50.8-79.4		245		197-269	
								79.4-104.7		235		197-269	
	Max.	3.70	2.70	0.80	0.10	0.20	-	104.8-158.7		207		197-269	
								158.7-260.3		186		179-255	
								260.3-345		176		179-255	
								345-533.4		166		179-255	
AS 1831 400 - 250 - 12	Min.	3.30	2.40	-	-	-	0.03	25.4-50.8	310	450	12	143-217	Spheroidal shaped graphite structure that emphasises the strength, machinability and wear resistance.
	Max.	4.00	3.10	0.20	0.10	0.02	0.05	50.8-533.4	310	450	12	143-207	

AVAILABLE UPON REQUEST GLASS MOULD (GMI) – GREY CAST IRON

Originally developed for the production of glass mould for the glass industry. GMI presents extremely refined graphite providing an excellent surface finishing. It is also well known for its excellent machinability and good heat conductivity.

When submitted to repetitive heat cycles of heating/cooling, this grade of GMI shows good dimensional stability due to the small flake graphite size in a predominantly ferritic matrix.

Ultimate tensile strength (min) = 170 MPa

Hardness: BHN = 131 – 207

Heat Conductivity 212 to 752 F = 41 to 44