



*JHGM/F*

CHEMICAL COMPOSITION %	MECHANICAL PROPERTIES	MICRO STRUCTURE
SG IRON AS PER IS : 1865 : 1991 GR-400/18	Tensile Strength (MPa)-400	Predominant constituent of matrix
CARBON : 3.4-3.8	Min. 0.2% Proof stress (MPa)-250	is Friite with min 80% of graphite
MANGANESE : 0.2-0.3	Min. Elongation%-18	nodules in the form of V or VI as
SILICON : 2.2-2.4	Brinell Hardness-130-180	specified in IS:7754:1975
SULPHUR : 0.03 MAX.		
PHOSPHORUS : 0.08 MAX.		
MAGNESIUM : 0.04-0.05		

**GENERAL PROPERTIES :-**

1. THE INSIDE SURFACE SHOULD BE CLEAN FROM MOLDING SAND, FREE FROM SEAMS, SAND DEPRESSIONS, PROJECTIONS, CRACKS, CAVITIES, COLD SHUT, SCRUFF MARKS, PITCHES, SCARFS, RAIL TAIL AND OTHER SIMILAR DEFECTS.
2. NO RECTIFICATION OF INSIDE DEFECTS OR CAVITIES BY WELDING IS PERMITTED, OUTSIDE SURFACE SHALL BE FREE FROM CRACKS, CAVITIES, PROJECTION, FINES AND BURNT SAND.
3. EASY STRIPPING OF INGOT TO BE GUARANTEED.
4. BOTTOM FACE OF INGOT MOLD SHOULD BE CAST TO MAKE IT PERPENDICULAR TO THE AXIS OF INGOT MOLD TOP AND BOTTOM SURFACE SHOULD BE MACHINED.
5. DEVIATIONS IN INGOT MOLD DIMENSIONS SHALL BE GOVERNED AS PER IS : 8850 : 1977
6. 02 Nos. CAST-ON TEST SAMPLE MUST BE PROVIDED AT SUITABLE POSITION.

23"X2100mm LONG INGOT MOLD.	AS MENTIONED	
R1	CHEMICAL COMPOSITION, MECHANICAL PROPERTIES, MICRO STRUCTURE & GENERAL PROPERTIES AMENDED. REF: MEMO NO. 8408/SIMR/12-13/MAT DT. 22-5-2012	
DESCRIPTION OF AMENDMENTS.		
C.I. MOLD 23" X 2100mm LONG		
MODIFIED		
METAL & STEEL FACTORY, ISHAPORE	DRG. NO. OH/1012/152	R1
SCALE	DRAWN	12.03.08
N.T.S.	TRACED	S DEB ROY
	CHECKED	
	JHM/DO	DGM/ITC