



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - BS 245

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - BS 245 Steel Castings for Pressure Purposes

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 max.	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.200 - 0.600		
Manganese	Mn %	0.500 - 1.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	0.250 max.		
Nickel	Ni %	0.400 max.		
Molybdenum	Mo %	0.450 - 0.650		
Copper	Cu %	0.300 max.		
Other	Ot %	0.800 max.		
Iron	Fe %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa      460 min. Yield Strength in Mpa      260 min. Elongation in %      18 min. Reduction of Area in %      - Hardness in BHN      - Impact in Joule      20 J @ RT	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.8872	DIN	Germany	Steel
16 Mo 5	STAS	Romania	Plate
J12523	UNS	USA	Casting
C 1	MSZ	Hungary	Steel
FS 12 MD 4	AFNOR NF	France	Wire, Rod and Coil
G18Mo5	UNI	Italy	Casting
A356 2	ASTM	USA	Casting

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

**ONE STOP SOLUTION FOR METAL PARTS**