



Material - JIS 230 - 450 W

Standard Specification for Cast Carbon Steels for General Engineering Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - JIS 230 - 450 W Cast Carbon Steels for General Engineering Purposes

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.250 max.		
Silicon	Si %	0.600 max.	Annealing or Normalising or Hardening + Tempering	
Manganese	Mn %	1.200 max.		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.035 max.		
Chromium	Cr %	0.350 max.		
Nickel	Ni %	0.400 max.		
Molybdenum	Mo %	0.150 max.		
Copper	Cu %	0.400 max.	Mechanical Properties	
Vanadium	V %	0.050 max.	Tensile Strength in Mpa	450 - 600
Iron	Fe %	Balance	Yield Strength in Mpa	230 min.
-	-	-	Elongation in %	22 min.
-	-	-	Reduction of Area in %	31 min.
-	-	-	Hardness in HB	
-	-	-	Impact in Joule	45 J @ RT

Cross Reference Table					
Material	Standard	Country	Gr <mark>ade Belong</mark> to the Industry		
1.0457	EN	European Union	Pipes		
1.0484	DIN	Germany	Pipes		
13030	CSN	Czech Republic	Steel		
20MB5	AFNOR NF	France	Cold Rolled, Strip		
J13005	UNS	USA	Casting		
3	AS	Australia	Hot Rolled Bar		
A487 2A	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

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