



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - BS 622

Standard Specification for Alloy Steel; Steels for Fired and Unfired Pressure Vessels: Sections and Bars

Group - Ferrous Mild Steel Alloys

Sub Group - BS 622 Cr-Mo Alloy Steel; Steels for Fired and Unfired Pressure Vessels: Sections and Bars

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

Grade Belongs to the Industry - Bar

Chemical Composition			Heat Treatment	
Carbon	C %	0.090 - 0.150	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.500 max.		
Manganese	Mn %	0.300 - 0.600		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.015 max.		
Chromium	Cr %	2.000 - 2.500		
Molybdenum	Mo %	0.900 - 1.100		
Nickel	Ni %	0.300 max.		
Iron	Fe %	Balance		
-	-	-		
			Mechanical Properties	
-	-	-	Tensile Strength in Mpa	490 - 690
-	-	-	Yield Strength in Mpa	275 min.
-	-	-	Elongation in %	16 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	156 - 235
-	-	-	Impact in Joule	25 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
SA-217 WC9	ASME	USA	Casting
10 CrMo 9-10	AFNOR NF	France	Steel
10 CrMo 9-10	DIN	Germany	Forging
10 CrMo 9-10	EN	European Union	Casting
10 CrMo 9-10	UNI	Italy	Casting
J21890	UNS	USA	Casting
A217 Grade WC9	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

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