



Material - PN 1.4581

Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys Sub Group - PN 1.4581 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 %	0.070 max.	Normalizing or Quenching or Solution Annealing	
Silicon	Si %	1.500 max.		
Manganese	Mn %	1.500 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	18.000 - 20.000		
Molybdenum	Mo %	2.000 - 2.500		
Nickel	Ni %	9.000 - 12.000		•
Copper	Cu %	0.500 max.	Mechanical Properties	
Nb + Ta	Nb % + Ta %	1.000 max.	Tensile Strength in Mpa	440 - 640
Iron	Fe %	Balance	Yield Strength in Mpa	185 min.
-	-	-	Elongation in %	25 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
	-	-	Impac <mark>t in Joule</mark>	40 J @ RT

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
GX5CrNiMo19-11-2	BS	British	Plate, Tubes and Forging		
1.4581	ISO	International	Casting		
1.4581	UNI	Italy	Casting		
1.4581	UNE	Spain	Casting		
1.4581	SS	Sweden	Casting		
1.4581	BDS	Bulgaria	Casting		
1.4581	MSZ	Hungary	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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