



Material - UNI 1.4581

Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - UNI 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.				
Nb + Ta	Nb % + Ta %	1.000 max.				
Iron	Fe %	Balance	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	440 - 640		
-	-	-	Yield Strength in Mpa	185 min.		
-	-	-	Elongation in %	25 min.		
-	-	-	Reduction of Area in %	-		
-	-	-	Hardness in BHN	-		
-	-	-	Impact in Joule	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	PN	Poland	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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