



## Material - DIN 1.4581

## **Standard Specification for Steel Castings for Pressure Purposes**

Group - Ferrous Stainless Steel Alloys

Sub Group - DIN 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.		
Silicon	Si %	1.500 max.	Solution Annealing	
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		•
Nb + Ta	Nb % + Ta %	1.000 max.	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	440 - 650
-	-	-	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	
1.4581	EN	European Union	Casting	
1.4581	DIN	Germany	Casting	
GX5CrNiMoNb19-11-2	DIN	Germany	Casting	
GX5CrNiMoNb19-11-2	AFNOR NF	France	Casting	
GX5CrNiMoNb19-11-2	EN	European Union	Casting	
GX5CrNiMoNb19-11-2	UNI	Italy	Casting	
G X 6 CrNiMoNb 20 11	UNI	Italy	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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