



## **Material - DIN 1.4859**

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

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - DIN 1.4859 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 %	0.050 - 0.150		
Silicon	Si %	0.500 - 1.500	Normalizing or Quenching or Solution Annealing	
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	19.000 - 21.000		
Molybdenum	Mo %	0.500 max.		
Nickel	Ni %	31.000 - 33.000		
Copper	Cu %	0.500 max.	Mechanical Properties	
Niobium	Nb %	0.050 - 1.500	Tensile Strength in Mpa	400 - 640
Iron	Fe %	Balance	Yield Strength in Mpa	170 min.
-	-	-	Elongation in %	20 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impac <mark>t in Joule</mark>	27 J @ RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
GX10NiCrSiNb32-20	BS	British	Plate, Tubes and Forging	
GX10NiCrSiNb32-20	ISO	International	Casting	
1.4859	ISO	International	Casting	
GX10NiCrSiNb32-20	DIN	Germany	Casting	
GX10NiCrSiNb32-20	UNI	Italy	Casting	
1.4859	UNI	Italy	Casting	
GX10NiCrSiNb32-20	PN	Poland	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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