



## Material - DIN G X 7 CrNiMoCuNb 18-18

### Standard Specification for Stainless Steels Castings

Group - Ferrous Stainless Steel Alloys

Sub Group - DIN G X 7 CrNiMoCuNb 18-18 Stainless Steels Castings

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment			
Carbon	C %	0.080 max.	Solution Annealing			
Silicon	Si %	1.500 max.				
Manganese	Mn %	2.000 max.				
Phosphorus	P %	0.045 max.				
Sulphur	S %	0.030 max.				
Chromium	Cr %	16.500 - 18.500				
Nickel	Ni %	19.000 - 21.000				
Molybdenum	Mo %	2.000 - 2.500				
Copper	Cu %	1.800 - 2.400				
Niobium	Nb %	> 8 x %C				
Iron	Fe %	Balance	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	441.3 - 637.4		
-	-	-	Yield Strength in Mpa	176.5 min.		
-	-	-	Elongation in %	15 min.		
-	-	-	Reduction of Area in %	-		
-	-	-	Hardness in HB	130-180		
-	-	-	Impact in Joule	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.4585	DIN	Germany	Casting
J94651	UNS	USA	Casting
Ao X 10 CrNiMoCuNb 18-18	MSZ	Hungary	Casting
SA-351 CN3MN	ASME	USA	Casting
A351 CN3MN	ASTM	USA	Casting
A743 CN3MN	ASTM	USA	Casting
A744 CN3MN	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](mailto:marketing@gravitycastindia.com)**

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