

Material - UNS J94651

Standard Specification for Austenitic Chromium Nickel Molybdenum Nitrogen Stainless Steel Casting

Group - Ferrous Stainless Steel Alloys

Sub Group - UNS J94651 Austenitic Chromium Nickel Molybdenum Nitrogen Stainless Steel Casting Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.030 max.		
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.	Solution Annealing	
Phosphorus	Р%	0.040 max.		
Sulphur	S %	0.010 max.		
Chromium	Cr %	20.000 - 22.000		
Nickel	Ni %	23.500 - 25.500		
Molybdenum	Mo %	6.000 - 7.000		
Copper	Cu %	0.750 max.	Mechanical Properties	
Nitrogen	N %	0.180 - 0.260	Tensile Strength in Mpa	550 min.
Iron	Fe %	Balance	Yield Strength in Mpa	260 min.
-	-	-	Elongation in %	35 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardne <mark>ss in BHN</mark>	-
-	-	-	Impa <mark>ct in Joule</mark>	-

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
1.4585	DIN	Germany	Casting	
SA-351 CN3MN	ASME	USA	Casting	
Ao X 10 CrNiMoCuNb 18-18	MSZ	Hungary	Casting	
G X 7 CrNiMoCuNb 18-18	DIN	Germany	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

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

ONE STOP SOLUTION FOR METAL PARTS