



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - AISI 321

Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications

Group - Ferrous Stainless Steel Alloys

Sub Group - AISI 321 Chromium and Chromium-Nickel Stainless Steel for Pressure Vessels and for General Applications

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

Grade Belongs to the Industry - Steel and Tube

Chemical Composition			Heat Treatment	
Carbon	C %	0.080 max.	Solution Annealing	
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	17.000 - 20.000		
Molybdenum	Mo %	0.750 max.		
Nickel	Ni %	9.000 - 12.000		
Titanium	Ti %	0.700 max.		
Copper	Cu %	0.750 max.		
Nitrogen	N %	0.100 max.	Mechanical Properties Tensile Strength in Mpa 480 - 1895 Yield Strength in Mpa 240 min. Elongation in % 20 min. Reduction of Area in % 40 min. Hardness in BHN 217 max. Impact in Joule -	
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S32100	ASTM	USA	Steel, Plate, Sheet and Strip
321	AMS	USA	Sheet, Bar, Wire, Shape and Forging
321	AS	Australia	Steel, Sheet, Plate and Strip
321	SAE	USA	Steel
STS 316	KS	Korea	Steel, Sheet, Plate and Strip
SUS 321	JIS	Japan	Steel, Sheet, Plate and Strip
A182 F321	ASTM	USA	Steel, Pipe and Forging

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.

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