



## Material - ASTM A240 UNS S32109

**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 - ASTM A240 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, Plate, Sheet and Strip**

Chemical Composition			Heat Treatment	
Carbon	C %	0.040 - 0.100	Solution Annealing	
Silicon	Si %	0.750 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.045 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	17.000 - 19.000		
Nickel	Ni %	9.000 - 12.000		
Titanium	Ti %	0.700 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
			Tensile Strength in Mpa	515 min.
			Yield Strength in Mpa	205 min.
			Elongation in %	40 min.
			Reduction of Area in %	-
			Hardness in BHN	217 max.
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
321	AISI	USA	Steel and Tube
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](mailto:marketing@gravitycastindia.com)**

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