

## Material: UNS S32001

### 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:** UNS 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

Chemical Composition			Heat Treatment	
Carbon	C %	0.030 max.	Solution Annealing	
Silicon	Si %	1.000 max.		
Manganese	Mn %	4.000 - 6.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	19.500 - 21.500		
Nickel	Ni %	1.000 - 3.000		
Molybdenum	Mo %	0.600 max.		
Nitrogen	N %	0.050 - 0.170		
Copper	Cu %	0.200 - 0.500		
Iron	Fe %	Balance	<b>Mechanical Properties</b>	
-	-	-	Tensile Strength in Mpa	620 min.
-	-	-	Yield Strength in Mpa	450 min.
-	-	-	Elongation in %	25 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S32001	ASTM	USA	Steel, Plate, Sheet and Strip
A789 S32001	ASTM	USA	Steel and Tube
A959 S32001	ASTM	USA	Steel
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

**Customer Care:** +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)