



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - ASTM A 789 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 - ASTM A 789 S32001 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 %	0.030 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		
Molybdenum	Ni %	0.600 max.		
Nickel	Ni %	1.000 - 3.000	Mechanical Properties	
Nitrogen	N %	0.050 - 0.170	Tensile Strength in Mpa	620 min.
Copper	Cu %	1.000 max.	Yield Strength in Mpa	450 min.
Iron	Fe %	Balance	Elongation in %	25 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	290 max.
-	-	-	Impact in Joule	-

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

**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)**

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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