



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

## Material - ASTM A 789 S32304

**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 S32304 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 %	2.500 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	21.500 - 24.500		
Nickel	Ni %	3.000 - 5.500		
Molybdenum	Mo %	0.050 - 0.600		
Nitrogen	N %	0.050 - 0.200		
Copper	Cu %	0.050 - 0.600		
Iron	Fe %	Balance	<b>Mechanical Properties</b>	
-	-	-	Tensile Strength in Mpa	600 min.
-	-	-	Yield Strength in Mpa	400 min.
-	-	-	Elongation in %	25 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	290 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S32304	ASTM	USA	Steel, Plate, Sheet and Strip
S32304	UNS	USA	Steel
A276 S32304	ASTM	USA	Steel, Bar and Shapes
A790 S32304	ASTM	USA	Steel and Tube
A928 S32304	ASTM	USA	Steel and Pipe
S32304	AS	Australia	Steel, Sheet, Plate and Strip
SA-276 S32304	ASME	USA	Steel, Bar and Shapes

**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.

**ONE STOP SOLUTION FOR METAL PARTS**