



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

## Material - ASTM A240 UNS S44800

**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 %	0.010 max.	Annealing or Hardening + Tempering	
Silicon	Si %	0.020 max.		
Manganese	Mn %	0.300 max.		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	28.000 - 30.000		
Nickel	Ni %	2.000 - 2.500		
Molybdenum	Mo %	3.500 - 4.200		
Nitrogen	N %	0.020 max.		
Copper	Cu %	0.150 max.		
C + N	C % + N %	0.025 max.	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	550 min.
-	-	-	Yield Strength in Mpa	415 min.
-	-	-	Elongation in %	20 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	223 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
S44800	UNS	USA	Steel
A176 S44800	ASTM	USA	Steel, Sheet, Plate and Strip
A276 S44800	ASTM	USA	Steel, Bar and Shape
A479 S44800	ASTM	USA	Steel
A493 S44800	ASTM	USA	Steel, Wire, Rod and Forging
A580 S44800	ASTM	USA	Steel and Wire
SA-276 S44800	ASME	USA	Steel, Bar and Shape

**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**