

## Material: ASTM A 580 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 A 580 S44800 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 Wire

Chemical Composition			Heat Treatment	
Carbon	C %	0.010 max.	Annealing or Hardening + Tempering	
Silicon	Si %	0.200 max.		
Manganese	Mn %	0.300 max.		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	28.000 - 30.000		
Molybdenum	Mo %	3.500 - 4.200		
Nickel	Ni %	2.000 - 2.500		
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	485 min.
-	-	-	Yield Strength in Mpa	380 min.
-	-	-	Elongation in %	15 min.
-	-	-	Reduction of Area in %	30 min.
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S44800	ASTM	USA	Steel, Plate, Sheet and Strip
S44800	UNS	USA	Steel
A176 S44800	ASTM	USA	Steel, Sheet, Plate and Strip
A276 S44800	ASTM	USA	Steel, Bar and Shapes
A479 S44800	ASTM	USA	Steel
A493 S44800	ASTM	USA	Steel, Wire, Rod and Forging
SA-276 S44800	ASME	USA	Steel, Bar and Shapes

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