

## Material: ASTM A 479 Type S21800

### 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 479 Type S21800 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, Bar and Shapes

Chemical Composition			Heat Treatment	
Carbon	C %	0.100 max.	Solution Annealing	
Silicon	Si %	3.500 - 4.500		
Manganese	Mn %	7.000 - 9.000		
Phosphorus	P %	0.060 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	16.000 - 18.000		
Nickel	Ni %	8.000 - 9.000		
Nitrogen	N %	0.080 - 0.180		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	655 min.
-	-	-	Yield Strength in Mpa	345 min.
-	-	-	Elongation in %	35 min.
-	-	-	Reduction of Area in %	55 min.
-	-	-	Hardness in HB	241 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S21800	ASTM	USA	Steel, Plate, Sheet and Strip
S21800	UNS	USA	Steel
A276 S21800	ASTM	USA	Steel, Bar and Shapes
A580 S21800	ASTM	USA	Steel and Wire
A959 S21800	ASTM	USA	Steel
SA-276 S21800	ASME	USA	Steel, Bar and Shapes
SA-479 Type S21800	ASME	USA	Steel, Bar and Shapes

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