

## Material: ASTM A240 UNS S31635

### 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 %	0.080 max.	Solution Annealing			
Silicon	Si %	0.750 max.				
Manganese	Mn %	2.000 max.				
Phosphorus	P %	0.045 max.				
Sulphur	S %	0.030 max.				
Chromium	Cr %	16.000 - 18.000				
Nickel	Ni %	10.000 - 14.000				
Molybdenum	Mo %	2.000 - 3.000				
Nitrogen	N %	0.100 max.				
Titanium	Ti %	5 (C+N)min -				
Iron	Fe %	Balance	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	515 min.		
-	-	-	Yield Strength in Mpa	205 min.		
-	-	-	Elongation in %	40 min.		
-	-	-	Reduction of Area in %	-		
-	-	-	Hardness in BHN	217 max.		
-	-	-	Impact in Joule	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
316 Ti	AS	Australia	Steel, Sheet, Plate and Strip
316 Ti	SAE	USA	Steel
STS 316 Ti	KS	Korea	Steel, Sheet, Plate and Strip
SUS 316 Ti	JIS	Japan	Steel, Wire and Rod
A276 316 Ti	ASTM	USA	Steel, Bar and Shape
A314 316 Ti	ASTM	USA	Steel, Bar, Rolling and Forging
A479 316 Ti	ASTM	USA	Steel and Bar

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