

# Material: ASTM A 182 F 316H

## 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 182 F 316H 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, Pipe and Forging

Chemical Composition		
Carbon	C %	0.040 - 0.100
Silicon	Si %	1.000 max.
Manganese	Mn %	2.000 max.
Phosphorus	P %	0.045 max.
Sulphur	S %	0.030 max.
Chromium	Cr %	16.000 - 18.000
Molybdenum	Mo %	2.000 - 3.000
Nickel	Ni %	10.000 - 14.000
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment	
Solution Annealing	

Mechanical Properties	
Tensile Strength in Mpa	485 min.
Yield Strength in Mpa	205 min.
Elongation in %	30 min.
Reduction of Area in %	50 min.
Hardness in BHN	-
Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S31609	ASTM	USA	Steel, Plate, Sheet and Strip
316H	SAE	USA	Steel
STS 316 HTP	KS	Korea	Steel and Pipe
SUS F316H	JIS	Japan	Steel and Forging
316	AISI	USA	Steel, Sheet, Strip and Plate
316	SAE	USA	Steel, Bar, Wire, Shape and Forging
316	AMS	USA	Steel, Bar, Wire, Shape and Forging

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