

# Material: AMS 316

## 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:** AMS 316 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, Wire, Shape and Forging

Chemical Composition		
Carbon	C %	0.080 max.
Silicon	Si %	1.000 max.
Manganese	Mn %	2.000 max.
Phosphorus	P %	0.040 max.
Sulphur	S %	0.030 max.
Chromium	Cr %	16.000 - 18.000
Molybdenum	Mo %	1.750 - 3.000
Nickel	Ni %	10.000 - 14.000
Copper	Cu %	0.500 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Solution Annealing

Mechanical Properties	
Tensile Strength in Mpa	586 min.
Yield Strength in Mpa	276 min.
Elongation in %	15 min.
Reduction of Area in %	-
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
A182 F316H	ASTM	USA	Steel, Pipe and Forging
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

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

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