



## Material - AISI 316

**Standard Specification for Iron-Chromium-Nickel, Bar Wire, Strip, Plate, Sheet, and Forging Group - Ferrous Stainless Steel Alloys**

**Sub Group - AISI 316 Iron-Chromium-Nickel, Bar Wire, Strip, Plate, Sheet, and Forging**

**Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries**

**Grade Belongs to the Industry - Bar Wire, Strip, Plate, Sheet, and Forging**

Chemical Composition			Heat Treatment	
Carbon	C %	0.080 max.	Solution Annealing	
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		
Nickel	Ni %	10.000 - 14.000		
Molybdenum	Mo %	2.000 - 3.000		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	485 - 1895
-	-	-	Yield Strength in Mpa	205 min.
-	-	-	Elongation in %	6 min.
-	-	-	Reduction of Area in %	35 min.
-	-	-	Hardness in HB	217 max.
-	-	-	Impact in Joule	49.8 @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.4409	DIN	Germany	Casting
1.4409	EN	European Union	Casting
316 S17	BS	British	Wire
SUS 316	JIS	Japan	Bar
03CH17N14M3	GOST	Russia	Pipes, Fittings, Bar, Sheet and Forging
A743 CF8M	ASTM	USA	Casting
A351 CF8M	ASTM	USA	Casting

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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