

## Material - SAE 316

## **Standard Specification for Seemless Steel Tubes for Pressure Purposes**

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - SAE 316 Seemless Steel Tubes for Pressure Purposes

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Steel, Wire, Bar, Shape and Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.080 max.		
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	Р%	0.040 max.	Solution Annealing	
Sulphur	S %	0.030 max.		
Chromium	Cr %	16.000 - 18.000		
Nickel	Ni %	10.500 - 13.000		
Molybdenum	Mo %	2.000 - 3.000		
Copper	Cu %	0.750 max.	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	517 - 965
-	-	-	Yield Strength in Mpa	206 min.
-	-	-	Elongation in %	15 min.
-	-	-	Reduction of Area in %	45 min.
-	-	-	Hardn <mark>ess in H</mark> B	80 min.
-	-	-	Impac <mark>t in Joule</mark>	49.8 J @ RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
10216-5 EN 1.4436	BS	British	Tube	
1.4436	DIN	Germany	Steel	
1.4436	EN	European Union	Steel	
X3CrNiMo17 13 3	UNI	Italy	Steel, Sheet, Plate and Strip	
X3CrNiMo17 13 3	AFNOR NF	France	Steel	
X3CrNiMo17 13 3	DIN	Germany	Sheet, Plate and Strip	
X2CrNiMo17 12 3	EN	European Union	Steel, Rod, Bar and Extrusion	

## Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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