



## Material - EN X 2 CrNiMo 17 12 3

### Standard Specification for Seamless Steel Tubes for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - EN X 2 CrNiMo 17 12 3 Seamless Steel Tubes for Pressure Purposes

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

Grade Belongs to the Industry - Steel, Rod, Bar and Extrusion

Chemical Composition			Heat Treatment			
Carbon	C %	0.030 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 %	16.500 - 18.500				
Nickel	Ni %	10.500 - 13.000				
Molybdenum	Mo %	2.500 - 3.000				
Nitrogen	N %	0.110 max.				
Iron	Fe %	Balance	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	490 - 2100		
-	-	-	Yield Strength in Mpa	190 min.		
-	-	-	Elongation in %	20 min.		
-	-	-	Reduction of Area in %	63 min.		
-	-	-	Hardness in HB	215 max.		
-	-	-	Impact in Joule	60 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
316	SAE	USA	Steel, Wire, Bar, Shape and Forging

**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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