



## **Material - EN 1.4550**

## Standard Specification for Seemless Steel Tubes for Pressure Purposes

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - EN 1.4550 Seemless Steel Tubes for Pressure Purposes

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

**Grade Belongs to the Industry - Steel** 

Chemical Composition			Heat Treatment	
Carbon	C %	0.080 max.		
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.	Solution Annealing	
Phosphorus	Р%	0.045 max.		
Sulphur	S %	0.015 max.		
Chromium	Cr %	17.000 - 19.000		
Nickel	Ni %	9.000 - 12.000		
Niobium	Nb %	1.000 max.		_
Iron	Fe %	Balance	Mechanical Properties	
-	-		Tensile Strength in Mpa	500 - 1053.3
-	-	-	Yield Strength in Mpa	200 min.
-	-	-	Elongation in %	4.1 - 64.9
-	-	-	Reduction of Area in %	69.3 - 76.257
-	-	-	Hardness in HB	230 max.
-	-	-	Impac <mark>t in Joule</mark>	55 J @ RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
1.4550	EN	European Union	Tube	
1.455	DIN	Germany	Steel	
X6CrNiNb18 10	DIN	Germany	Steel and Tube	
X6CrNiNb18 10	ISO	International	Steel, Forging and Bar	
X6CrNiNb18 10S	ONORM	Australia	Steel	
X6CrNiNb18 10	AFNOR NF	France	Steel, Bar and Rods	
Z8CNNb18-10	AFNOR NF	France	Steel	

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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