

## Material: EN 1.4550

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

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** EN 1.4550 Seamless 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.	Solution Annealing	
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	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.
-	-	-	Impact in Joule	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

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