



Material - DIN 1.4988

Standard Specification for Seamless Steel Tubes for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - DIN 1.4988 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 %	0.040 - 0.100	Solution Annealing	
Silicon	Si %	0.300 - 0.600		
Manganese	Mn %	1.500 max.		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.015 max.		
Chromium	Cr %	15.500 - 17.500		
Molybdenum	Mo %	1.100 - 1.500		
Nickel	Ni %	12.500 - 14.500		
Vanadium	V %	0.600 - 0.850		
Niobium	Nb %	1.200 max.		
Nitrogen	N %	0.060 - 0.140	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	539.4 - 740
-	-	-	Yield Strength in Mpa	255 min.
-	-	-	Elongation in %	20 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	145 - 190
-	-	-	Impact in Joule	40 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
10216-5 EN 1.4988	BS	British	Tube
1.4988	EN	European Union	Steel
X8CrNiMoVNb16-13	EN	European Union	Steel and Flat
X8CrNiMoVNb16 13	DIN	Germany	Steel and Tube
-	-	-	-
-	-	-	-
-	-	-	-

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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