



Material - EN 1.4903

Standard Specification for Seamless Steel Tubes for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - EN 1.4903 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 - 0.120	Normalising + Tempering	
Silicon	Si %	0.200 - 0.500		
Manganese	Mn %	0.300 - 0.600		
Phosphorus	P %	0.020 max.		
Sulphur	S %	0.005 max.		
Chromium	Cr %	8.000 - 9.500		
Molybdenum	Mo %	0.850 - 1.050		
Nickel	Ni %	0.400 max.		
Vanadium	V %	0.180 - 0.250		
Aluminium	Al %	0.040 max.		
Nitrogen	N %	0.030 - 0.070	Mechanical Properties	
Niobium	Nb %	0.060 - 0.100	Tensile Strength in Mpa	520 - 850
Iron	Fe %	Balance	Yield Strength in Mpa	435 min.
-	-	-	Elongation in %	17 min.
-	-	-	Reduction of Area in %	68 - 73
			Hardness in BHN	-
			Impact in Joule	27 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J84090	UNS	USA	Casting
A234 Grade WP91	ASTM	USA	Pipe
A336 Grade F91	ASTM	USA	Forging
TUZ 10 CDVNb 09-01	AFNOR NF	France	Tube
X 10 CrMoVNb 9-1	DIN	Germany	Steel
J80490	UNS	USA	Casting
A217 Grade C12A	ASTM	USA	Casting

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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