



Material - JIS SMn 21

Standard Specification for Seemless Steel Tubes for Pressure Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - JIS SMn 21 Seemless Steel Tubes for Pressure Purposes

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

Grade Belongs to the Industry - Forging and Rolling

Chemical Composition			Heat Treatment	
Carbon	C %	0.170 - 0.230		
Silicon	Si %	0.150 - 0.350		
Manganese	Mn %	1.200 - 1.500	Normalising Forming	
Phosphorus	Р%	0.030 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	0.350 max.		
Nickel	Ni %	0.250 max.		
Copper	Cu %	0.300 max.		_
Iron	Fe %	Balance	Mechanical Properties	
-	/ -		Tensile Strength in Mpa	510 - 850
-	-	-	Yield Strength in Mpa	295 min.
-	-	-	Elongation in %	12 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	146 - 255
-	-	-	Impac <mark>t in Joule</mark>	35 J @ RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
1.0471	EN	European Union	Steel and Tube	
1.0471	DIN	Germany	Steel and Tube	
1.0471	DIN	Germany	Steel and Tube	
1522	AISI	USA	Forging, Rolling, Bar and Tube	
150M19	BS	British	Steel and Tube	
G15220	UNS	USA	Forging, Rolling, Bar and Tube	
21MnSi5	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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