



## Material - DIN X 5 NiCrAlTi 31 20

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

Group - Ferrous Stainless Steel Alloys

Sub Group - DIN X 5 NiCrAlTi 31 20 Seamless Steel Tubes for Pressure Purposes

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

Grade Belongs to the Industry - Steel and Flat

Chemical Composition			Heat Treatment	
Carbon	C %	0.030 - 0.080	Solution Annealing	
Silicon	Si %	0.700 max.		
Manganese	Mn %	1.500 max.		
Phosphorus	P %	0.015 max.		
Sulphur	S %	0.010 max.		
Chromium	Cr %	19.000 - 22.000		
Nickel	Ni %	30.000 - 32.500		
Titanium	Ti %	0.200 - 0.500		
Niobium	Nb %	0.100 max.		
Ni + Co	Ni% + Co%	30.000 - 32.500		
Aluminium	Al %	0.200 - 0.500	Mechanical Properties	
Al + Ti	Al% + Ti%	0.700 max.	Tensile Strength in Mpa	500 - 750
Cobalt	Co %	0.500 max.	Yield Strength in Mpa	170 min.
Copper	Cu %	0.500 max.	Elongation in %	30 min.
Iron	Fe %	Balance	Reduction of Area in %	-
			Hardness in BHN	-
			Impact in Joule	80 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
10216-5 EN 1.4958(+RA)	BS	British	Tube
1.4958	DIN	Germany	Steel
1.4958	EN	European Union	Steel
X5NiCrAlTi31 20	EN	European Union	Steel and Flat
X5NiCrAlTi31 20	DIN	Germany	Steel and Flat
1.4959	EN	European Union	Steel
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**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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