



Material - UNS N19903

Standard Specification for Seamless Nickel and Nickel Alloy Pipe, Tube, Sheet, Strip, Plate, Round Bar, Flat Bar, Forging Stock, Hexagon and Wire

Group - Non-Ferrous Nickel Alloys

Sub Group - UNS N19903 Seamless Nickel and Nickel Alloy Pipe, Tube, Sheet, Strip, Plate, Round Bar, Flat Bar, Forging Stock, Hexagon and Wire

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

Grade Belongs to the Industry - Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire

Chemical Composition			Heat Treatment	
Aluminium	Al %	0.300 - 1.150	As-Cast or Annealing or Age Hardning	
Cobalt	Co %	13.000 - 17.000		
Niobium	Nb %	2.400 - 3.500		
Titanium	Ti %	1.000 - 1.250		
Carbon	C %	0.030 max.		
Boron	B %	0.012 max.		
Chromium	Cr %	1.000 max.		
Copper	Cu %	0.500 max.		
Manganese	Mn %	1.000 max.		
Sulphur	S %	0.015 max.		
Silicon	Si %	0.600 - 1.000	Mechanical Properties	
Nickel	Ni %	36.000 - 40.000	Tensile Strength in Mpa	1310 - 1456.6
Iron	Fe %	Balance	Yield Strength in Mpa	1103 - 1193.8
-	-	-	Elongation in %	14 - 19.600
-	-	-	Reduction of Area in %	40 min.
			Hardness in BHN	-
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
Incoloy Alloy 903	Gravity	India	Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.