

## Material - ASTM F 2281 660

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 - ASTM F 2281 660 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	
Carbon	C %	0.080 max.		
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.	As-Cast or Annealing or Age Hardning	
Chromium	Cr %	13.500 - 16.000		
Sulphur	S %	0.030 max.		
Molybdenum	Mo %	1.000 - 1.500		
Aluminium	Al %	0.350 max.		
Boron	B %	0.003 - 0.010		
Titanium	Ti %	1.900 - 2.300	Mechanical Properties	
Vanadium	V %	0.100 - 0.500	Tensile Strength in Mpa	896 min.
Nickel	Ni %	24.000 - 27.000	Yield Strength in Mpa	586 min.
Iron	Fe %	Balance	Elongation in %	15 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HRC	22 - 37
-	-	-	Impact in Joule	-

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
Incoloy A-286	Gravity	India	Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire		
A 959 Type 660	ASTM	USA	Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire		
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-	-	-	-		
-	-	-	-		
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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

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