



## **Material - IS S-Ni6**

## Standard Specification for Specification for Nickel and Nickel Alloy Bar Solid Rods and Electrodes

**Group - Non-Ferrous Nickel Alloys** 

Sub Group - IS S-Ni6 Specification for Nickel and Nickel Alloy Bar Solid Rods and Electrodes Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries Grade Belongs to the Industry - Bar and Rod

Chemical Composition			Heat Treatment	
Carbon	C %	0.070 max.		
Silicon	Si %	0.500 max.		
Manganese	Mn %	0.500 max.		
Chromium	Cr %	16.000 - 20.000	As-Cast or Annealing or Age Hardning	or Age Hardning
Sulphur	S %	0.015 max.		
Molybdenum	Mo %	5.000 - 9.000		
Aluminium	Al %	1.700 - 2.500		
Boron	B %	0.005 max.		
Copper	Cu %	0.200 max.	Mechanical Properties	
Cobalt	Co %	12.000 - 16.000	Tensile Strength in Mpa	942 - 1181
Titanium	Ti %	1.500 - 3.000	Yield Strength in Mpa	448 - 780
Zirconium	Zr %	0.060 max.	Elongation in %	29.8 - 51
Iron	Fe %	1.000 max.	Reduction of Area in %	41 min.
Nickel	Ni %	Balance	Hardness in HV	250 max.
-	-	-	Impact in Joule	-

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
Nimonic Alloy PK33	Gravity	India	Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire	
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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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