



## Material - IS 12390

### Standard Specification for Iron-Nickel Alloy for Ceramic Sealing

Group - Non-Ferrous Nickel Alloys

Sub Group - IS 12390 Iron-Nickel Alloy for Ceramic Sealing

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

Grade Belongs to the Industry - Wire, Round Bar and Strip

Chemical Composition			Heat Treatment	
Carbon	C %	0.030 max.	As-Cast or Annealing or Age Hardning	
Silicon	Si %	0.200 max.		
Manganese	Mn %	0.350 max.		
Chromium	Cr %	0.250 max.		
Phosphorus	P %	0.025 max.		
Cobalt	Co %	0.500 max.		
Aluminium	Al %	0.100 max.		
Sulphur	S %	0.025 max.		
Nickel	Ni %	36.000 min.		
Iron	Fe %	Balance		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa      490 min. Yield Strength in Mpa      380 min. Elongation in %      36 min. Reduction of Area in %      - Hardness in HV      135 - 165 Impact in Joule      -	
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
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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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