



Material - IS 12549

Standard Specification for Iron Nickel Cobalt Sealing Alloys Castings

Group - Non-Ferrous Nickel Alloys

Sub Group - IS 12549 Iron Nickel Cobalt Sealing Alloys Castings

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.040 max.	As-Cast or Annealing or Age Hardning	
Silicon	Si %	0.200 max.		
Manganese	Mn %	0.500 max.		
Aluminium	Al %	0.100 max.		
Magnesium	Mg %	0.100 max.		
Zirconium	Zr %	0.100 max.		
Titanium	Ti %	0.100 max.		
Copper	Cu %	0.200 max.		
Chromium	Cr %	0.200 max.		
Molybdenum	Mo %	0.200 max.		
Cobalt	Co %	17.000 min.	Mechanical Properties Tensile Strength in Mpa 520 - 860 Yield Strength in Mpa 400 min. Elongation in % 27 min. Reduction of Area in % - Hardness in HV 149 min. Impact in Joule -	
Nickel	Ni %	29.000 min.		
Iron	Fe %	53.000 min.		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
K94610	UNS	USA	Casting
Kovar	SAE	USA	Casting
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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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