

## Material - IS 13505 Grade 14

Standard Specification for Centrifugally Cast High Alloy Steel and Nickel Base Tubing for Pressure Application at High Temperature

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - IS 13505 Centrifugally Cast High Alloy Steel and Nickel Base Tubing for Pressure Application at High Temperature

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.350 - 0.750	Solution Annealing	
Silicon	Si %	2.500 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.050 max.		
Sulphur	S %	0.050 max.		
Chromium	Cr %	17.000 - 21.000		
Nickel	Ni %	37.000 - 41.000		
Molybdenum	Mo %	0.500 max.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	450 min.
-	-	-	Yield Strength in Mpa	-
-	-		Elongation in %	4 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	,	Impact in Joule	-

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
N08004	UNS	USA	Casting	
N08050	UNS	USA	Casting	
A608 Grade HT 50	ASTM	USA	Casting	
G X 40 NiCrSiNb 38-18	DIN	Germany	Casting	
1.4849	DIN	Germany	Casting	
N08005	UNS	USA	Casting	
N08605	UNS	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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