



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - IS 13505 Grade 11

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 %	0.200 - 0.600	Solution Annealing	
Silicon	Si %	2.500 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.050 max.		
Sulphur	S %	0.050 max.		
Chromium	Cr %	28.000 - 32.000		
Nickel	Ni %	18.000 - 22.000		
Molybdenum	Mo %	0.500 max.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	450 min.
-	-	-	Yield Strength in Mpa	240 min.
-	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
N08604	UNS	USA	Casting
SCH 23	JIS	Japan	Casting
A608 Grade HL 30	ASTM	USA	Casting
A608 Grade HL 40	ASTM	USA	Casting
N08613	UNS	USA	Casting
N08614	UNS	USA	Casting
A297 Grade HL	ASTM	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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