

## Material - IS 13505 Grade 1

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 %	0.080 max.		
Silicon	Si %	2.000 max.		
Manganese	Mn %	1.500 max.	Solution Annealing	
Phosphorus	Р%	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	18.000 - 21.000		
Nickel	Ni %	8.000 - 11.000		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-		Tensile Strength in Mpa	480 min.
-	-		Yield Strength in Mpa	205 min.
-	-	-	Elongation in %	35 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-		Impact in Joule	-

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
A743 CF8	ASTM	USA	Casting		
304	AISI	USA	Bar, Wire, Strip, Plate, Sheet and Forging		
1.4308	DIN	Germany	Casting		
1.4301	EN	European Union	Forging		
304 S 11	BS	British	Bright Bars, Hot Rolled and Cold Rolled Coil		
SUS 304	JIS	Japan	Hot Rolled Equal Leg Angles		
08CH18N10	GOST	Russia	Pipes, Fittings, Bar, Sheet and Forging		

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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