



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - IS 13505 Grade 6

**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 - 0.500	Solution Annealing	
Silicon	Si %	2.000 max.		
Manganese	Mn %	1.000 max.		
Phosphorus	P %	0.050 max.		
Sulphur	S %	0.050 max.		
Chromium	Cr %	26.000 - 30.000		
Nickel	Ni %	4.000 - 7.000		
Molybdenum	Mo %	0.500 max.		
Iron	Fe %	Balance		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa      515 min. Yield Strength in Mpa      240 min. Elongation in %      8 min. Reduction of Area in %      - Hardness in BHN      - Impact in Joule      -	
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J93005	UNS	USA	Casting
392 G X 30 CrNi 27-5	SFS	Finland	Casting
1.4823	DIN	Germany	Casting
G X 35 Cr 28	UNI	Italy	Casting
40 CrNiSi 25-4	MSZ	Hungary	Casting
G X 40 CrNiSi 27-4	DIN	Germany	Casting
A297 Grade HC	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](mailto:marketing@gravitycastindia.com)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.