



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

## Material - IS 4131 NiCu31Mn1Si1Fe

### Standard Specification for Nickel Copper Alloy Castings

Group - Non-Ferrous Nickel Alloys

Sub Group - IS 4131 NiCu31Mn1Si1Fe Nickel Copper Alloy Castings

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.300 max.	As-Cast or Annealing or Age Hardning	
Silicon	Si %	0.500 - 1.200		
Manganese	Mn %	0.500 - 1.500		
Sulphur	S %	0.060 max.		
Iron	Fe %	3.000 max.		
Lead	Pb %	0.005 max.		
Other	Ot %	0.500 max.		
Ni + Co	Ni% + Co%	63.000 - 68.000		
Copper	Cu %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	358 min.
-	-	-	Yield Strength in Mpa	172 min.
-	-	-	Elongation in %	16 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HV	105 - 155
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

**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.

**ONE STOP SOLUTION FOR METAL PARTS**