



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

## Material - ISO 5832-12 Alloy 2

### Standard Specification for Cobalt-Based alloy

Group - Non-Ferrous Cobalt Alloys

Sub Group - ISO 5832-12 Alloy 2 Cobalt-Based alloy

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.150 - 0.350	As-Cast or Annealing	
Chromium	Cr %	26.000 - 30.000		
Molybdenum	Mo %	5.000 - 7.000		
Nickel	Ni %	1.000 max.		
Iron	Fe %	0.750 max.		
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.000 max.		
Nitrogen	N %	0.250 max.		
Cobalt	Co %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	897 min.
-	-	-	Yield Strength in Mpa	517 min.
-	-	-	Elongation in %	12 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
R31538	UNS	USA	Casting
F1537 Alloy 2	ASTM	USA	Casting
F799 Alloy 2	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.

**ONE STOP SOLUTION FOR METAL PARTS**