



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

## Material - Gravity Incoloy Alloy 803

Standard Specification for Seamless Nickel and Nickel Alloy Pipe, Tube, Sheet, Strip, Plate, Round Bar, Flat Bar, Forging Stock, Hexagon and Wire

Group - Non-Ferrous Nickel Alloys

Sub Group - Gravity Incoloy Alloy 803 Seamless Nickel and Nickel Alloy Pipe, Tube, Sheet, Strip, Plate, Round Bar, Flat Bar, Forging Stock, Hexagon and Wire

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

Grade Belongs to the Industry - Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire

Chemical Composition			Heat Treatment	
Carbon	C %	0.060 - 0.100	As-Cast or Annealing or Age Hardning	
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.500 max.		
Chromium	Cr %	25.000 - 29.000		
Sulphur	S %	0.015 max.		
Copper	Cu %	0.750 max.		
Aluminium	Al %	0.150 - 0.600		
Titanium	Ti %	0.150 - 0.600	Mechanical Properties	
Nickel	Ni %	32.000 - 37.000	Tensile Strength in Mpa	552 - 627
Iron	Fe %	Balance	Yield Strength in Mpa	207 - 331
-	-	-	Elongation in %	40 - 50
-	-	-	Reduction of Area in %	67 min.
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A 312 S35045	ASTM	USA	Pipe
SA-312 S35045	ASME	USA	Pipe
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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**