



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - Gravity Incoloy Alloy 825

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 825 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 %	0.050 max.	As-Cast or Annealing or Age Hardning			
Silicon	Si %	0.500 max.				
Manganese	Mn %	1.000 max.				
Chromium	Cr %	19.500 - 23.500				
Sulphur	S %	0.030 max.				
Molybdenum	Mo %	2.500 - 3.500				
Copper	Cu %	1.500 - 3.000				
Aluminium	Al %	0.200 max.				
Titanium	Ti %	0.600 - 1.200				
Nickel	Ni %	38.000 - 46.000				
Iron	Fe %	22.000 min.	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	586 - 1100		
-	-	-	Yield Strength in Mpa	324 - 889		
-	-	-	Elongation in %	15 - 45		
-	-	-	Reduction of Area in %	-		
-	-	-	Hardness in BHN	-		
-	-	-	Impact in Joule	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B 163 N08825	ASTM	USA	Tube
B 423 N08825	ASTM	USA	Pipe and Tube
B 564 N08825	ASTM	USA	Forging
B 704 N08825	ASTM	USA	Tube
B 705 N08825	ASTM	USA	Pipe
SB-163 N08825	ASME	USA	Tube
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Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email 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