



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - Gravity Incoloy Alloy 020

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 020 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 %	0.070 max.	As-Cast or Annealing or Age Hardning	
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.		
Chromium	Cr %	19.000 - 21.000		
Sulphur	S %	0.035 max.		
Molybdenum	Mo %	2.000 - 3.000		
Copper	Cu %	3.000 - 4.000		
Nb + Ta	Nb% + Ta%	1.000 max.		
Phosphorus	P %	0.045 max.	Mechanical Properties	
Nickel	Ni %	32.000 - 38.000	Tensile Strength in Mpa	620 - 1029
Iron	Fe %	Balance	Yield Strength in Mpa	300 - 965
-	-	-	Elongation in %	4 - 40
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HRC	23 - 83
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A 312 Alloy 20	ASTM	USA	Pipe
A 312 N08020	ASTM	USA	Pipe
A213 Alloy 20	ASTM	USA	Tube
AS-312 Alloy 20	ASME	USA	Pipe
SA 213 Alloy 20	ASME	USA	Tube
SA-312 Alloy 20	ASME	USA	Pipe
NCF020	JIS	Japan	Plate, Sheet and Strip

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.

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