



Material - ASTM A 312 N08020

Standard Specification for Seamless and Heavily Cold Worked Austenitic Stainless Steel Pipes

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM A 312 N08020 Seamless and Heavily Cold Worked Austenitic Stainless Steel Pipes Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries Grade Belongs to the Industry - Pipe

Chemical Composition			Heat Treatment	
Carbon	C %	0.070 max.		
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.		
Chromium	Cr %	19.000 - 21.000	As-Cast or Annealing or Age Hardning	
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	550 min.
Iron	Fe %	Balance	Yield Strength in Mpa	240 min.
-	-	-	Elongation in %	30 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
Incoloy Alloy 020	Gravity	India	Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire		
A 312 Alloy 20	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.