GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A409 TP321

Standard Specification for Welded Large Diameter Austenitic Steel Pipe for Corrosive or High-Temperature Service

Group - Ferrous Stainless Steel Alloys

Sub Group - ASTM A409 TP321 Welded Large Diameter Austenitic Steel Pipe for Corrosive or High-Temperature Service

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

Grade Belongs to the Industry - Bars, Plate, Sheet, Strip, Pipe and Rods

Chemical Composition		
Carbon	C %	0.080 max.
Manganese	Mn %	2.000 max.
Phosphorus	P %	0.045 max.
Sulphur	S %	0.030 max.
Silicon	Si %	1.000 max.
Nickel	Ni %	9.000 - 12.000
Chromium	Cr %	17.000 - 20.000
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Solution Annealing

Mechanical Properties	
Tensile Strength in Mpa	515 min.
Yield Strength in Mpa	205 min.
Elongation in %	-
Reduction of Area in %	-
Hardness in HB	-
Impact in Joule	-

Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
SA-312 UNS S32654	ASME	USA	Steel and Pipe
A 167 S32654	ASTM	USA	Plate, Sheet and Strip
A 249 S32654	ASTM	USA	Steel and Tubing
A 269 S32654	ASTM	USA	Steel and Tubing
A 240 UNS S32654	ASTM	USA	Plate, Sheet and Strip
A 312 S32654	ASTM	USA	Steel and Pipe
A 959 S32654	ASTM	USA	Steel

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.