GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-312 TP321H

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

Group - Ferrous Stainless Steel Alloys

Sub Group - ASME SA-312 TP321H Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes

Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries
Grade Belongs to the Industry - Steel and Pipe

Chemical Composition		
Carbon	C %	0.040 - 0.100
Manganese	Mn %	2.000 max.
Phosphorus	P %	0.045 max.
Sulphur	S %	0.030 max.
Silicon	Si %	1.000 max.
Chromium	Cr %	17.000 - 19.000
Nickel	Ni %	9.000 - 12.000
Titanium	Ti %	0.008 - 0.700
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	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
S32109	UNS	USA	Steel
A 943 TP321H	ASTM	USA	Steel and Pipe
A 479 321H	ASTM	USA	Steel
A 813 Grade TP 321H	ASTM	USA	Steel and Pipe
A 213 TP321H	ASTM	USA	Steel and Tubing
A 376 TP321H	ASTM	USA	Steel and Pipe
A 312 TP321H	ASTM	USA	Steel and 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

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.