



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - AISI 30309

**Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels and for General Applications**

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - AISI 30309 Chromium and Chromium-Nickel Stainless Steel for Pressure Vessels and for General Applications**

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

**Grade Belongs to the Industry - Steel, Bar, Wire and Forging**

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 max.	Solution Annealing	
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.045 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	22.000 - 24.000		
Nickel	Ni %	12.000 - 15.000		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
			Mechanical Properties	
-	-	-	Tensile Strength in Mpa	586.1 - 1896.1
-	-	-	Yield Strength in Mpa	241.3 - 1792.6
-	-	-	Elongation in %	1 - 55
-	-	-	Reduction of Area in %	65 min.
-	-	-	Hardness in HB	160 - 170
-	-	-	Impact in Joule	122 - 162.7 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S30908	ASTM	USA	Steel, Plate, Sheet and Strip
309	AMS	USA	Steel, Bar, Wire, Shape and Forging
309	SAE	USA	Steel, Bar, Wire, Shape and Forging
309 S 16	BS	British	Steel and Plates
STS 309S	KS	Korea	Steel, Plate, Sheet and Strip
SUH 309	JIS	Japan	Steel, Bar and Wire
A182 F 309H	ASTM	USA	Steel, Pipe and Forging

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto: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**