



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A 959 S44500

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 - ASTM A 959 S44500 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

Chemical Composition			Heat Treatment			
Carbon	C %	0.020 max.	Annealing or Hardening + Tempering			
Silicon	Si %	1.000 max.				
Manganese	Mn %	1.000 max.				
Phosphorus	P %	0.040 max.				
Sulphur	S %	0.012 max.				
Chromium	Cr %	19.000 - 21.000				
Nickel	Ni %	0.600 max.				
Nitrogen	N %	0.030 max.				
Copper	Cu %	0.300 - 0.600				
Niobium	Nb %	0.800 max.				
Iron	Fe %	Balance	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	427 min.		
-	-	-	Yield Strength in Mpa	205 min.		
-	-	-	Elongation in %	22 min.		
-	-	-	Reduction of Area in %	-		
-	-	-	Hardness in BHN	-		
-	-	-	Impact in Joule	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S44500	ASTM	USA	Steel, Plate, Sheet and Strip
S44500	UNS	USA	Steel
SA-240 UNS S44500	ASME	USA	Steel, Sheet, Plate and Strip
-	-	-	-
-	-	-	-
-	-	-	-
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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.

ONE STOP SOLUTION FOR METAL PARTS