



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

## Material - ASTM A 176 S44635

**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 176 S44635 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, Sheet, Plate and Strip**

Chemical Composition			Heat Treatment			
Carbon	C %	0.025 max.	Annealing or Hardening + Tempering			
Silicon	Si %	0.750 max.				
Manganese	Mn %	1.000 max.				
Phosphorus	P %	0.040 max.				
Sulphur	S %	0.030 max.				
Chromium	Cr %	24.500 - 26.000				
Molybdenum	Mo %	3.500 - 4.500				
Nickel	Ni %	3.500 - 4.500				
Nitrogen	N %	0.035 max.				
Titanium	Ti %	0.800 max.				
Iron	Fe %	Balance	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	620 min.		
-	-	-	Yield Strength in Mpa	515 min.		
-	-	-	Elongation in %	20 min.		
-	-	-	Reduction of Area in %	-		
-	-	-	Hardness in HB	270 max.		
-	-	-	Impact in Joule	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S44635	ASTM	USA	Steel, Plate, Sheet and Strip
S11635	UNS	USA	Steel
SA-240 UNS S44635	ASME	USA	Steel
A268 25-4-4	ASTM	USA	Steel and Tube
A791 Grade 25-4-4	ASTM	USA	Steel and Tube
A803 Grade 25-4-4	ASTM	USA	Steel and Tube
A959 Type 25-4-4	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](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**