



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

## Material - UNS S44626

**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 - UNS 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 %	0.060 max.	Annealing or Hardening + Tempering	
Silicon	Si %	0.750 max.		
Manganese	Mn %	0.750 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	25.000 - 27.000		
Nickel	Ni %	0.500 max.		
Molybdenum	Mo %	0.750 - 1.500		
Nitrogen	N %	0.040 max.		
Copper	Cu %	0.200 max.		
Titanium	Ti %	0.200 - 1.000	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	470 min.
-	-	-	Yield Strength in Mpa	310 min.
-	-	-	Elongation in %	20 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	217 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S44626	ASTM	USA	Steel, Plate, Sheet and Strip
XM-33	SAE	USA	Steel
A176 Type XM-33	ASTM	USA	Steel, Sheet, Plate and Strip
A268 TP XM-33	ASTM	USA	Steel and Tube
A959 Type XM-33	ASTM	USA	Steel
A731 Grade TP XM-33	ASTM	USA	Steel and Pipe
A791 Grade TP XM-33	ASTM	USA	Steel and Tube

**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**