



## Material - ASTM A240 UNS S20161

**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 A240 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, Plate, Sheet and Strip**

Chemical Composition			Heat Treatment	
Carbon	C %	0.150 max.	Solution Annealing	
Silicon	Si %	3.000 - 4.000		
Manganese	Mn %	4.000 - 6.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	15.000 - 18.000		
Nickel	Ni %	4.000 - 6000		
Nitrogen	N %	0.080 - 0.200		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	860 min.
-	-	-	Yield Strength in Mpa	345 min.
-	-	-	Elongation in %	40 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	255 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
S10161	UNS	USA	Steel
A276 S20161	ASTM	USA	Steel, Bar and Shape
A479 S20161	ASTM	USA	Steel and Bar
A959 S20161	ASTM	USA	Steel
SA-240 UNS S20161	ASME	USA	Steel
SA-276 S20161	ASME	USA	Steel, Bar and Shape
SA-479 UNS S20161	ASME	USA	Steel and Bar

**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.