



## Material - ASTM A 358 XM-19

**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 358 XM-19 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 and Pipe**

Chemical Composition			Heat Treatment	
Carbon	C %	0.060 max.	Solution Annealing	
Silicon	Si %	0.750 max.		
Manganese	Mn %	4.000 - 6.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	20.500 - 23.500		
Molybdenum	Mo %	1.500 - 3.000		
Nickel	Ni %	11.500 - 13.500	Mechanical Properties	
Vanadium	V %	0.100 - 0.300	Tensile Strength in Mpa	690 min.
Niobium	Nb %	0.100 - 0.300	Yield Strength in Mpa	380 min.
Nitrogen	N %	0.200 - 0.400	Elongation in %	35 min.
Iron	Fe %	Balance	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S20910	ASTM	USA	Steel, Plate, Sheet and Strip
20910	UNS	USA	Steel
5764	AMS	USA	Steel, Bar, Wire, Extrusion and Forging
XM-19	SAE	USA	Steel
A479 XM-19	ASTM	USA	Steel and Bar
A182 F XM-19	ASTM	USA	Steel, Pipe and Forging
A314 XM-19	ASTM	USA	Steel, Rolling 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)**

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