



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A 182 F 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 182 F 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, Pipe and Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.060 max.	Solution Annealing	
Silicon	Si %	1.000 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
A358 XM-19	ASTM	USA	Steel and Pipe
A479 XM-19	ASTM	USA	Steel and Bar
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

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