

# Material: ASTM A240 UNS S20910

## 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 %	0.060 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		
Nickel	Ni %	11.500 - 13.500		
Molybdenum	Mo %	1.500 - 3.000		
Vanadium	V %	0.100 - 0.300		
Niobium	Nb %	0.100 - 0.300		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Tensile Strength in Mpa	725 min.
			Yield Strength in Mpa	415 min.
			Elongation in %	30 min.
			Reduction of Area in %	-
			Hardness in HB	241 max.
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
S20910	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
A182 F XM-19	ASTM	USA	Steel, Pipe and Forging
A314 XM-19	ASTM	USA	Steel, Rolling and Forging

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**Customer Care:** +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)