

Material - ASTM A240 UNS S44627

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 %	0.010 max.	Annealing or Hardening + Tempering	
Silicon	Si %	0.400 max.		
Manganese	Mn %	0.400 max.		
Phosphorus	P %	0.020 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	25.000 - 27.500		
Nickel	Ni %	0.500 max.		
Molybdenum	Mo %	0.750 - 1.500		
Nitrogen	N %	0.015 max.	Mechanical Properties	
Copper	Cu %	0.200 max.	Tensile Strength in Mpa	450 min.
Niobium	Nb %	0.050 - 0.200	Yield Strength in Mpa	275 min.
Ni + Cu	Ni % + Cu %	0.500 max.	Elongation in %	22 min.
Iron	Fe %	Balance	Reduction of Area in %	-
-	-	-	Hardness in BHN	187 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
S44627	UNS	USA	Steel
XM-27	SAE	USA	Steel
STS XM-27	KS	Korea	Steel, Sheet, Plate and Strip
SUS SM-27	JIS	Japan	Steel and Bar
A276 XM-27	ASTM	USA	Steel, Bar and Shape
A314 XM-27	ASTM	USA	Steel, Bar, Rolling and Forging
A182 F XM-27Cb	ASTM	USA	Steel, Pipe and Forging

For any further inquiries, please do not hesitate to contact us. You may visit our website at AMTECH TECHNOCAST PVT. LTD., call us at [+91 9879817994](tel:+919879817994), or email us at manish@amtechtechnocast.com

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