Material: SAE SM-27

Standard Specification for Chemical Compositions of SAE Wrought Stainless Steel

Group: *Ferrous Stainless Steel Alloys*
Sub Group: *SAE SM-27 Chemical Compositions of SAE Wrought Stainless Steel*
Application: *Intended for Valve, Pump, General Engineering, Automotive and Other Industries*
Grade Belongs to the Industry: *Plate, Sheet and Strip*

Chemical Composition		
Carbon	C %	0.010 max.
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
Molybdenum	Mo %	0.750 - 1.500
Nickel	Ni %	0.500 max.
Niobium	Nb %	0.050 - 0.200
Nitrogen	N %	0.015 max.
Ni+Cu	Ni% + Cu%	0.500 max.
Copper	Cu %	0.200 max.
Iron	Fe %	Balance
-	-	-
-	-	-

Heat Treatment
Normalizing or Annealing or Hardening + Tempering

Mechanical Properties	
Tensile Strength in Mpa	450 min.
Yield Strength in Mpa	275 min.
Elongation in %	20 min.
Reduction of Area in %	45 min.
Hardness in BHN	-
Impact in Joule	-

Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
A176 Type XM-27	ASTM	USA	Plate, Sheet and Strip
A240 Type XM-27	ASTM	USA	Plate, Sheet and Strip
A276 XM-27	ASTM	USA	Bar and Shapes
S44627	UNS	USA	Plate, Sheet and Strip
SA-731 TPXM-27	ASME	USA	Casting
SA-276 XM-27	ASME	USA	Bar and Shapes
A731 TP XM-27	ASTM	USA	Casting

Customer Care: +91-99090 45075 Email: info@icastllp.com