



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			Heat Treatment	
Carbon	C %	0.010 max.	Normalising or 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		
Molybdenum	Mo %	0.750 - 1.500		
Nickel	Ni %	0.500 max.	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 -	
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		
-	-	-		
-	-	-		

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

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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