

# Material: ASTM A731 TP XM-27

## Standard Specification for Castings, Seamless and Welded Ferritic Stainless Steel Pipe

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** ASTM A731 TP XM-27 Seamless and Welded Ferritic Stainless Steel Pipe

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries

**Grade Belongs to the Industry:** Pipe

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
Nitrogen	N %	0.015 max.
Niobium	Nb %	0.050 - 0.200
Copper	Cu %	0.200 max.
Ni+Cu	Ni% + Cu%	0.500 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
SA-731 TP XM-27	ASME	USA	Casting
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
SM-27	SAE	USA	Plate, Sheet and Strip
SA-276 XM-27	ASME	USA	Bar and Shape

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