GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-479 Type XM-18

Standard Specification for Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels

Group - Ferrous Stainless Steel Alloys

Sub Group - ASME SA-479 Type XM-18 Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels

Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries
Grade Belongs to the Industry - Bars and Shapes

Chemical Composition		
Carbon	C %	0.030 max.
Manganese	Mn %	7.500 - 9.000
Phosphorus	P %	0.045 max.
Sulphur	S %	0.030 max.
Silicon	Si %	1.000 max.
Chromium	Cr %	17.500 - 20.500
Nickel	Ni %	5.000 - 7.000
Nitrogen	N %	0.250 - 0.500
Molybdenum	Mo %	2.000 - 3.000
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Annealing

Mechanical Properties	
Tensile Strength in Mpa	620 min.
Yield Strength in Mpa	345 min.
Elongation in %	40 min.
Reduction of Area in %	50 min.
Hardness in BHN	212 max.
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
J 405 XM-18	SAE	USA	Steel
J 405 XM-17	SAE	USA	Steel
A 479 XM-18	ASTM	USA	Steel and Bars
A 492 Type XM-18	ASTM	USA	Steel and Wire
A 959 Type XM-17	ASTM	USA	Steel
A 240 S21603	ASTM	USA	Plate, Sheet and Strip
A 959 Type XM-18	ASTM	USA	Steel

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

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.