GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-351 Grade CG6MMnN

Standard Specification for Castings, Austenitic, for Pressure-Containing Parts

Group - Ferrous Stainless Steel Alloys

Sub Group - ASME SA-351 Grade CG6MMnN Castings, Austenitic, for Pressure-Containing Parts

Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries

Grade Belongs to the Industry - Castings

Chemical Composition		
Carbon	C %	0.060 max.
Manganese	Mn %	4.000 - 6.000
Phosphorus	P %	0.040 max.
Sulphur	S %	0.030 max.
Silicon	Si %	1.000 max.
Chromium	Cr %	20.500 - 23.500
Nickel	Ni %	11.500 - 13.500
Molybdenum	Mo %	1.500 - 3.000
Niobium	Nb %	0.100 - 0.300
Vanadium	V %	0.100 - 0.300
Nitrogen	N %	0.200 - 0.400
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-

Heat Treatment
Solution Annealing

Mechanical Properties	
Tensile Strength in Mpa	585 min.
Yield Strength in Mpa	295 min.
Elongation in %	30 min.
Reduction of Area in %	-
Hardness in HB	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
J93790	UNS	USA	Steel
A 351 Grade CG6MMnN	ASTM	USA	Steel
A 959 Type XM-19	ASTM	USA	Steel
A 269 TPXM-19	ASTM	USA	Steel and Tubing
A 813 Grade TP XM-19	ASTM	USA	Steel and Pipe
A 479 XM-19	ASTM	USA	Steel and Bars
A 743 Grade CG6MMN	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.