



Material - UNS J93790

Standard Specification for Alloy Steel Casting

Group - Ferrous Stainless Steel Alloys

Sub Group - UNS J93790 Alloy Steel Casting

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.060 max.	Solution Annealing	
Silicon	Si %	1.000 max.		
Manganese	Mn %	4.000 - 6.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	20.500 - 23.500		
Nickel	Ni %	11.500 - 13.500		
Molybdenum	Mo %	1.500 - 3.000		
Vanadium	V %	0.100 - 0.300		
Niobium	Nb %	0.100 - 0.300		
Nitrogen	N %	0.200 - 0.400	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	585 min.
-	-	-	Yield Strength in Mpa	295 min.
-	-	-	Elongation in %	30 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
SA-351 Grade CG6MMN	ASME	USA	Casting
A 743 CG6MMN	ASTM	USA	Casting
A351 CG6MMN	ASTM	USA	Casting
1.3956	ISO	International	Casting
GX4CrNiMnN22-12-5	ISO	International	Casting
CG6MMN	KS	Korea	Casting
5764	SAE	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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