



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - ASTM A744 Grade CG8M

**Standard Specification for Castings, Iron-Chromium-Nickel, Corrosion Resistant for Severe Service**

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - ASTM A744 Grade CG8M Iron-Chromium-Nickel, Corrosion Resistant for Severe Service**

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

**Grade Belongs to the Industry - Casting**

Chemical Composition			Heat Treatment	
Carbon	C %	0.080 max.	Solution Annealing	
Silicon	Si %	1.500 max.		
Manganese	Mn %	1.500 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	18.000 - 21.000		
Nickel	Ni %	9.000 - 13.000		
Molybdenum	Mo %	3.000 - 4.000		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	520 min.
-	-	-	Yield Strength in Mpa	240 min.
-	-	-	Elongation in %	25 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A743 CG8M	ASTM	USA	Casting
A351 CG8M	ASTM	USA	Casting
SA-351 Grade CG8M	ASME	USA	Casting
317 C 16	BS	British	Casting
1.4448	DIN	Germany	Casting
389 G X 8 CrNiMo 19-11-4	SFS	Finland	Casting
J93000	UNS	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](mailto: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.

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