

# Material: ASME SA-351 Grade CG8M

## Standard Specification for Austenitic and Austenitic-Ferritic Steel Castings for Valves, Flanges, Fittings, and Other Pressure-Containing Parts

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** ASME SA-351 Grade CG8M Austenitic and Austenitic-Ferritic Steel Castings for Valves, Flanges, Fittings, and Other Pressure-Containing Parts

**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	515 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
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
A743 CG8M	ASTM	USA	Casting
A744 CG8M	ASTM	USA	Casting
A351 CG6M	ASTM	USA	Casting

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