



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

## Material - ASTM A743 CN3MN

**Standard Specification for Castings, Iron-Chromium-Nickel, Corrosion Resistant, for General Application**

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - ASTM A743 / A743M Casting, Iron-Chromium-Nickel, corrosion Resistant Casting, for General Application**

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

**Grade Belongs to the Industry - Casting**

Chemical Composition			Heat Treatment			
Carbon	C %	0.030 max.	Solution Annealing			
Silicon	Si %	1.000 max.				
Manganese	Mn %	2.000 max.				
Phosphorus	P %	0.040 max.				
Sulphur	S %	0.010 max.				
Chromium	Cr %	20.000 - 22.000				
Nickel	Ni %	23.500 - 25.500				
Molybdenum	Mo %	6.000 - 7.000				
Copper	Cu %	0.750 max.				
Nitrogen	N %	0.180 -0.260				
Iron	Fe %	Balance	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	550 min.		
-	-	-	Yield Strength in Mpa	260 min.		
-	-	-	Elongation in %	35 min.		
-	-	-	Reduction of Area in %	-		
-	-	-	Hardness in BHN	-		
-	-	-	Impact in Joule	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
SA-351 CN3MN	ASME	USA	Casting
1.4585	DIN	Germany	Casting
J94651	UNS	USA	Casting
Ao X 10 CrNiMoCuNb 18-18	MSZ	Hungary	Casting
G X 7 CrNiMoCuNb 18-18	DIN	Germany	Casting
A351 CN3MN	ASTM	USA	Casting
1.4588	ISO	International	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.

**ONE STOP SOLUTION FOR METAL PARTS**