



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

## Material - ASTM A743 CG12

**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 %	0.120 max.	Solution Annealing	
Silicon	Si %	2.000 max.		
Manganese	Mn %	1.500 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	20.000 - 23.000		
Nickel	Ni %	10.000 - 13.000		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	485 min.
-	-	-	Yield Strength in Mpa	195 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
J93001	UNS	USA	Casting
G X 5 CrNi 22-10	DIN	Germany	Casting
1.4947	DIN	Germany	Casting
3444 Grade 2	IS	India	Casting
A743 J93001	ASTM	USA	Casting
CG-12	NBR	Brazil	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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