



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A744 Grade CN3MN

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

Group - Ferrous Stainless Steel Alloys

Sub Group - ASTM A744 Grade CN3MN 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 % | 0.030 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. | Mechanical Properties | |
| Nitrogen | N % | 0.180 - 0.260 | Tensile Strength in Mpa | 550 min. |
| Iron | Fe % | Balance | 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 |
| A743 CN3MN | ASTM | 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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