

## Material - ASTM A743 CG8M

**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 %  | 0.080 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 |
| A351 CG8M                | ASTM     | USA     | Casting                      |
| A744 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                      |

**For any further inquiries, please do not hesitate to contact us. You may visit our website at [AMTECH TECHNOCAST PVT. LTD.](http://AMTECH TECHNOCAST PVT. LTD.), call us at [+91 9879817994](tel:+919879817994), or email us at [manish@amtechtechnocast.com](mailto:manish@amtechtechnocast.com)**

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