

## Material - ASTM A 743 N08007

### Standard Specification for Steel Castings for General Engineering Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - ASTM A 743 N08007 Steel Castings for General Engineering Purposes

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

Grade Belongs to the Industry - Casting

| Chemical Composition |      |                 | Heat Treatment                                                                                                                                                                                      |  |
|----------------------|------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Carbon               | C %  | 0.070 max.      | As Cast or Annealing or Normalizing or Hardening and Tempering                                                                                                                                      |  |
| Silicon              | Si % | 1.500 max.      |                                                                                                                                                                                                     |  |
| Manganese            | Mn % | 1.500 max.      |                                                                                                                                                                                                     |  |
| Phosphorus           | P %  | 0.040 max.      |                                                                                                                                                                                                     |  |
| Sulphur              | S %  | 0.040 max.      |                                                                                                                                                                                                     |  |
| Chromium             | Cr % | 19.000 - 22.000 |                                                                                                                                                                                                     |  |
| Molybdenum           | Mo % | 2.000 - 3.000   |                                                                                                                                                                                                     |  |
| Nickel               | Ni % | 27.500 - 30.500 |                                                                                                                                                                                                     |  |
| Copper               | Cu % | 3.000 - 4.000   |                                                                                                                                                                                                     |  |
| Iron                 | Fe % | Balance         |                                                                                                                                                                                                     |  |
| -                    | -    | -               | <b>Mechanical Properties</b><br>Tensile Strength in Mpa 425 min.<br>Yield Strength in Mpa 170 min.<br>Elongation in % 35 min.<br>Reduction of Area in % -<br>Hardness in BHN -<br>Impact in Joule - |  |
| -                    | -    | -               |                                                                                                                                                                                                     |  |
| -                    | -    | -               |                                                                                                                                                                                                     |  |
| -                    | -    | -               |                                                                                                                                                                                                     |  |
| -                    | -    | -               |                                                                                                                                                                                                     |  |
| -                    | -    | -               |                                                                                                                                                                                                     |  |

| Cross Reference Table |          |           |                              |
|-----------------------|----------|-----------|------------------------------|
| Material              | Standard | Country   | Grade Belong to the Industry |
| 332C11                | BS       | British   | Casting                      |
| Z 2 NCDU 25.20.04 M   | AFNOR NF | France    | Casting                      |
| 2074/H9A              | AS       | Australia | Casting                      |
| A 351 Grade CN7M      | ASTM     | USA       | Casting                      |
| A 743 Grade CN-7M     | ASTM     | USA       | Casting                      |
| A 744 Grade CN-7M     | ASTM     | USA       | Casting                      |
| SA-351 Grade CN7M     | ASME     | 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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