

## Material - ASTM A732 4Q

**Standard Specification for Castings, Investment, Carbon and Low Alloy Steel for General Application, and Cobalt Alloy for High Strength at Elevated Temperatures**

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A732 / A7323M Casting, Investment, Carbon and Low Alloy Steel 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 %  | 0.450 - 0.550 | Annealing or Normalising or Hardening + Tempering                                                                                                                                                  |  |
| Silicon              | Si % | 0.200 - 1.000 |                                                                                                                                                                                                    |  |
| Manganese            | Mn % | 0.700 - 1.000 |                                                                                                                                                                                                    |  |
| Phosphorus           | P %  | 0.040 max.    |                                                                                                                                                                                                    |  |
| Sulphur              | S %  | 0.045 max.    |                                                                                                                                                                                                    |  |
| Copper               | Cu % | 0.500 max.    |                                                                                                                                                                                                    |  |
| Tungsten             | W %  | 0.100 max.    |                                                                                                                                                                                                    |  |
| Other                | Ot % | 0.600 max.    | <b>Mechanical Properties</b><br>Tensile Strength in Mpa 862 min.<br>Yield Strength in Mpa 689 min.<br>Elongation in % 5 min.<br>Reduction of Area in % -<br>Hardness in BHN -<br>Impact in Joule - |  |
| Iron                 | Fe % | Balance       |                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                    |  |

| Cross Reference Table |          |         |                               |
|-----------------------|----------|---------|-------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry  |
| 1050                  | AISI     | USA     | Forging, Bar, Wire, and Shape |
| 1606                  | SS       | Sweden  | Casting                       |
| 50 CD 4 M             | AFNOR NF | France  | Casting                       |
| 5152                  | SAE      | USA     | Steel                         |
| 735 A51               | BS       | British | Hot Formed Spring             |
| C3                    | MSZ      | Hungary | Steel                         |
| C48GW-N-A             | JIS      | Japan   | Forging                       |

**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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