

## Material - ASTM A890 CD4MCuN

**Standard Specification for Castings, Iron-Chromium-Nickel-Molybdenum Corrosion-Resistant, Duplex (Austenitic/Ferritic) for General Application**

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - ASTM A890 / A890M Iron-Chromium-Nickel-Molybdenum Corrosion-Resistant, Duplex (Austenitic/Ferritic) 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 %  | 0.040 max.      | Solution Annealing      |          |
| Silicon              | Si % | 1.000 max.      |                         |          |
| Manganese            | Mn % | 1.000 max.      |                         |          |
| Phosphorus           | P %  | 0.040 max.      |                         |          |
| Sulphur              | S %  | 0.040 max.      |                         |          |
| Chromium             | Cr % | 24.500 - 26.500 |                         |          |
| Nickel               | Ni % | 4.700 - 6.000   |                         |          |
| Molybdenum           | Mo % | 1.700 - 2.300   |                         |          |
| Copper               | Cu % | 2.700 - 3.300   | Mechanical Properties   |          |
| Nitrogen             | N %  | 0.100 - 0.250   | Tensile Strength in Mpa | 690 min. |
| Iron                 | Fe % | Balance         | Yield Strength in Mpa   | 485 min. |
| -                    | -    | -               | Elongation in %         | 16 min.  |
| -                    | -    | -               | Reduction of Area in %  | -        |
| -                    | -    | -               | Hardness in BHN         | -        |
| -                    | -    | -               | Impact in Joule         | -        |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| A995 1B               | ASTM     | USA     | Casting                      |
| J93372                | UNS      | USA     | Casting                      |
| A240 S32205           | ASTM     | USA     | Plate, Sheet and Strip       |
| A276 S32205           | ASTM     | USA     | Bar and Shape                |
| A988 S32205           | ASTM     | USA     | Casting                      |
| J92205                | UNS      | USA     | Casting                      |
| Z3CNUD26.5M           | AFNOR NF | France  | 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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