

## Material - ASTM A27 Grade 65-35

### Standard Specification for Steel Castings, Carbon for General Application

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A27 / A27M Steel Castings, Carbon 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 %  | 0.300 max. | Normalising or Annealing or Hardening + Tempering |          |
| Silicon              | Si % | 0.800 max. |                                                   |          |
| Manganese            | Mn % | 0.700 max. |                                                   |          |
| Phosphorus           | P %  | 0.035 max. |                                                   |          |
| Sulphur              | S %  | 0.035 max. |                                                   |          |
| Chromium             | Cr % | 0.500 max. |                                                   |          |
| Nickel               | Ni % | 0.500 max. |                                                   |          |
| Molybdenum           | Mo % | 0.250 max. |                                                   |          |
| Copper               | Cu % | 0.500 max. |                                                   |          |
| Iron                 | Fe % | Balance    | Mechanical Properties                             |          |
| -                    | -    | -          | Tensile Strength in Mpa                           | 450 min. |
| -                    | -    | -          | Yield Strength in Mpa                             | 240 min. |
| -                    | -    | -          | Elongation in %                                   | 24 min.  |
| -                    | -    | -          | Reduction of Area in %                            | 35 min.  |
| -                    | -    | -          | Hardness in BHN                                   | -        |
| -                    | -    | -          | Impact in Joule                                   | -        |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| J03001                | UNS      | USA     | Casting                      |
| A27 Grade N-1         | ASTM     | USA     | Casting                      |
| A27 Grade U-60-30     | ASTM     | USA     | Casting                      |
| A27 Grade 60-30       | ASTM     | USA     | Casting                      |
| A27 Grade N-2         | ASTM     | USA     | Casting                      |
| A27 Grade 70-36       | ASTM     | USA     | Casting                      |
| A27 Grade 70-40       | ASTM     | 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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