

## Material - ASTM A487 9(E)

### Standard Specification for Steel Castings Suitable for Pressure Service

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A487 / AA87M Steel Castings Suitable for Pressure Service

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

Grade Belongs to the Industry - Casting

| Chemical Composition |      |               | Heat Treatment                                    |          |
|----------------------|------|---------------|---------------------------------------------------|----------|
| Carbon               | C %  | 0.050 - 0.330 | Annealing or Normalising or Hardening + Tempering |          |
| Silicon              | Si % | 0.800 max.    |                                                   |          |
| Manganese            | Mn % | 0.600 - 1.000 |                                                   |          |
| Phosphorus           | P %  | 0.035 max.    |                                                   |          |
| Sulphur              | S %  | 0.035 max.    |                                                   |          |
| Chromium             | Cr % | 0.750 - 1.100 |                                                   |          |
| Nickel               | Ni % | 0.500 max.    |                                                   |          |
| Molybdenum           | Mo % | 0.150 - 0.300 |                                                   |          |
| Tungsten             | W %  | 0.100 max.    |                                                   |          |
|                      |      |               | Mechanical Properties                             |          |
| Vanadium             | V %  | 0.030 max.    | Tensile Strength in Mpa                           | 795 min. |
| Copper               | Cu % | 0.500 max.    | Yield Strength in Mpa                             | 655 min. |
| Other                | Ot % | 1.000 max.    | Elongation in %                                   | 15 min.  |
| Iron                 | Fe % | Balance       | Reduction of Area in %                            | 35 min.  |
| -                    | -    | -             | Hardness in BHN                                   | -        |
| -                    | -    | -             | Impact in Joule                                   | -        |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| J13345                | UNS      | USA     | Casting                      |
| A487 9A               | ASTM     | USA     | Casting                      |
| A487 9B               | ASTM     | USA     | Casting                      |
| A487 9C               | ASTM     | USA     | Casting                      |
| A487 9D               | ASTM     | USA     | Casting                      |
| SA-487 9A             | ASME     | USA     | Casting                      |
| SA-487 9B             | 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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