



## Material - ASTM A487 7(A)

## **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 - 0.200 | 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 % | 0.400 - 0.800 |   |          |
| Nickel               | Ni % | 0.700 - 1.000 |   |          |
| Molybdenum           | Mo % | 0.400 - 0.600 |   |          |
| Copper               | Cu % | 0.150 - 0.500 | Mechanical Properties                             |          |
| Vanadium             | V %  | 0.030 - 0.100 | Tensile Strength in Mpa                           | 795 min. |
| Tungsten             | W %  | 0.100 max.    | Yield Strength in Mpa                             | 690 min. |
| Boron                | В %  | 0.002 - 0.006 | Elongation in %                                   | 15 min.  |
| Other                | Ot % | 0.600 max.    | Reduction of Area in %                            | 30 min.  |
| Iron                 | Fe % | Balance       | Hardness in BHN                                   | -        |
| -                    | -    | -             | Impac <mark>t in Joule</mark>                     | -        |

| Cross Reference Table |          |                |                              |  |
|-----------------------|----------|----------------|------------------------------|--|
| Material              | Standard | Country        | Grade Belong to the Industry |  |
| J12084                | UNS      | USA            | Casting                      |  |
| 1.8719                | DIN      | Germany        | Steel                        |  |
| 1.892                 | EN       | European Union | Steel                        |  |
| 6380 Type 12          | AMS      | USA            | Steel                        |  |
| K11576                | UNS      | USA            | Casting                      |  |
| SA-487 7A             | ASME     | USA            | Casting                      |  |
| SA-592 Grade F        | ASME     | USA            | Forging                      |  |

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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