



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - ASTM A487 2(B)

**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 %  | 0.300 max.    | Annealing or Normalising or Hardening + Tempering  |  |
| Silicon              | Si % | 0.800 max.    |  |  |
| Manganese            | Mn % | 1.000 - 1.400 |  |  |
| Phosphorus           | P %  | 0.035 max.    |  |  |
| Sulphur              | S %  | 0.035 max.    |  |  |
| Chromium             | Cr % | 0.350 max.    |  |  |
| Nickel               | Ni % | 0.500 max.    |  |  |
| Molybdenum           | Mo % | 0.100 - 0.300 |  |  |
| Copper               | Cu % | 0.500 max.    |  |  |
| Vanadium             | V %  | 0.030 max.    |  |  |
| Tungsten             | W %  | 0.100 max.    | <b>Mechanical Properties</b><br>Tensile Strength in Mpa      620 - 795<br>Yield Strength in Mpa      450 min.<br>Elongation in %      22 min.<br>Reduction of Area in %      40 min.<br>Hardness in BHN      -<br>Impact in Joule      - |  |
| Other                | Ot % | 1.000 max.    |  |  |
| Iron                 | Fe % | Balance       |  |  |
| -                    | -    | -             |  |  |
| -                    | -    | -             |  |  |

| Cross Reference Table |          |                |                              |
|-----------------------|----------|----------------|------------------------------|
| Material              | Standard | Country        | Grade Belong to the Industry |
| J13005                | UNS      | USA            | Casting                      |
| 1.0457                | EN       | European Union | Pipes                        |
| 1.0484                | DIN      | Germany        | Pipes                        |
| 13030                 | CSN      | Czech Republic | Steel                        |
| 20 MB5                | AFNOR NF | France         | Cold Rolled and Strips       |
| 230 - 45000           | JIS      | Japan          | Casting                      |
| 3                     | AS       | Australia      | Hot Rolled Bar               |

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

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

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