

## Material: UNS J15048

### Standard Specification for Alloy Steel Casting

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** UNS J15048 Alloy Steel Casting

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

**Grade Belongs to the Industry:** Casting

| Chemical Composition |          |                | Heat Treatment                                    |           |
|----------------------|----------|----------------|---------------------------------------------------|-----------|
| Carbon               | C %      | 0.450 - 0.550  | Annealing or Normalizing or Hardening + Tempering |           |
| Silicon              | Si %     | 0.200 - 0.800  |                                                   |           |
| Manganese            | Mn %     | 0.650 - 0.920  |                                                   |           |
| Phosphorus           | P %      | 0.040 max.     |                                                   |           |
| Sulphur              | S %      | 0.045 max.     |                                                   |           |
| Chromium             | Cr %     | 0.800 - 1.1000 |                                                   |           |
| Nickel               | Ni %     | 0.500 max.     |                                                   |           |
| Vanadium             | V %      | 0.150 min.     | Mechanical Properties                             |           |
| Tungsten             | W %      | 0.100 max.     |                                                   |           |
| Copper               | Cu %     | 0.500 max.     |                                                   |           |
| Mo + W               | Mo% + W% | 0.100 max.     |                                                   |           |
| Iron                 | Fe %     | Balance        |                                                   |           |
| -                    | -        | -              |                                                   |           |
| -                    | -        | -              |                                                   |           |
| -                    | -        | -              |                                                   |           |
|                      |          |                | Tensile Strength in Mpa                           | 1310 min. |
|                      |          |                | Yield Strength in Mpa                             | 1172 min. |
|                      |          |                | Elongation in %                                   | 4 min.    |
|                      |          |                | Reduction of Area in %                            | -         |
|                      |          |                | Hardness in BHN                                   | -         |
|                      |          |                | Impact in Joule                                   | -         |

| Cross Reference Table |          |         |                                     |
|-----------------------|----------|---------|-------------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry        |
| 6150.0000             | AISI     | USA     | Forging, Bar, Wire, and Shape       |
| 6150                  | SAE      | USA     | Bar, Tube, Sheet, Strip and Forging |
| 6150                  | AMS      | USA     | Bar and Forging                     |
| A732 12Q              | AISI     | USA     | Casting                             |
| -                     | -        | -       | -                                   |
| -                     | -        | -       | -                                   |
| -                     | -        | -       | -                                   |

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

**Customer Care:** +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)