

## Material - ASTM A 567 Grade 1

Standard Specification for Castings, Investment, Carbon and Low Alloy Steel for General Application and Cobalt alloy for High Strength at Elevated Temperatures

## **Group - Non-Ferrous Nickel Alloys**

Sub Group - ASTM A 567 Grade 1 Castings, Investment, Carbon and Low Alloy Steel for General Application and Cobalt alloy for High Strength at Elevated Temperatures

Application - Intended for Valve, Pump, General Engineering, Automotive, Medical and other Industries Grade Belongs to the Industry - Casting

| Chemical Composition |      |                 | Heat Treatment                       |          |
|----------------------|------|-----------------|--------------------------------------|----------|
| Carbon               | C %  | 0.200 - 0.300   |                                      |          |
| Silicon              | Si % | 1.000 max.      |                                      |          |
| Manganese            | Mn % | 1.000 max.      |                                      |          |
| Chromium             | Cr % | 25.000 - 29.000 | As-Cast or Annealing or Age Hardning |          |
| Sulphur              | S %  | 0.040 max.      |                                      |          |
| Molybdenum           | Mo % | 5.000 - 6.000   |                                      |          |
| Phosphorus           | P %  | 0.040 max.      |                                      |          |
| Boron                | B %  | 0.007 max.      |                                      |          |
| Iron                 | Fe % | 3.000 max.      | Mechanical Properties                |          |
| Nickel               | Ni % | 1.750 - 3.750   | Tensile Strength in Mpa              | 360 min. |
| Cobalt               | Co % | Balance         | Yield Strength in Mpa                | -        |
| -                    | -    | -               | Elongation in %                      | 10 min.  |
| -                    | -    | -               | Reduction of Area in %               | -        |
| -                    | -    | -               | Hardness in BHN                      | -        |
| -                    | -    | -               | Impac <mark>t in Joule</mark>        | -        |
|                      |      |                 |                                      |          |

| Cross Reference Table |          |         |                              |  |
|-----------------------|----------|---------|------------------------------|--|
| Material              | Standard | Country | Grade Belong to the Industry |  |
| A 732 Grade 21        | ASTM     | USA     | Casting                      |  |
| 5385                  | SAE      | USA     | Casting                      |  |
| -                     | -        | 1       | -                            |  |
| -                     | -        | -       | -                            |  |
| -                     | -        | -       | -                            |  |
| -                     | -        | -       | -                            |  |
| -                     | -        | -       | -                            |  |

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