



## Material - ASME SB-564 N08031

## **Standard Specification for Nickel Alloy Forgings**

**Group - Non-Ferrous Nickel Alloys** 

Sub Group - ASME SB-564 N08031 Nickel Alloy Forgings

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

**Grade Belongs to the Industry - Forging** 

| Chemical Composition |      |                 | Heat Treatment                       |          |
|----------------------|------|-----------------|--------------------------------------|----------|
| Carbon               | C %  | 0.015 max.      |                                      |          |
| Silicon              | Si % | 0.300 max.      |                                      |          |
| Manganese            | Mn % | 2.000 max.      | As-Cast or Annealing or Age Hardning |          |
| Chromium             | Cr % | 26.000 - 28.000 |                                      |          |
| Sulphur              | S %  | 0.010 max.      |                                      |          |
| Molybdenum           | Mo % | 6.000 - 7.000   |                                      |          |
| Phosphorus           | P %  | 0.020 max.      |                                      |          |
| Nitrogen             | N %  | 0.150 - 0.250   |                                      |          |
| Copper               | Cu % | 1.000 - 1.400   | Mechanical Properties                |          |
| Nickel               | Ni % | 30.000 - 32.000 | Tensile Strength in Mpa              | 650 min. |
| Iron                 | Fe % | Balance         | Yield Strength in Mpa                | 276 min. |
| -                    | -    | -               | Elongation in %                      | 40 min.  |
| -                    | -    | -               | Reduction of Area in %               | -        |
| -                    | -    | -               | Hardness in BHN                      | -        |
| -                    | -    | -               | Impac <mark>t in Joule</mark>        | -        |

| Cross Reference Table |          |         |   |  |
|-----------------------|----------|---------|---|--|
| Material              | Standard | Country | try Grade Belong to the Industry        |  |
| B 564 N08031          | ASTM     | USA     | Forging                                 |  |
| B 472 N08031          | ASTM     | USA     | Billets and Bars                        |  |
| B 649 N08031          | ASTM     | USA     | Bar and Wire                            |  |
| B 462 N08031          | ASTM     | USA     | Pipe Flanges, Forged Fittings and Valve |  |
| B 619 N08031          | ASTM     | USA     | Pipe                                    |  |
| B 622 N08031          | ASTM     | USA     | Pipe and Tube                           |  |
| B 626 N08031          | ASTM     | USA     | Tube                                    |  |

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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