

## Material - ASTM A995 27Cr7NiMoWN

Standard Specification for Castings, Austenitic-Ferritic (Duplex) Stainless Steel, for Pressure-Containing Parts

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - ASTM A995 / A995M Austenitic-Ferritic (Duplex) Stainless Steel, for Pressure-Containing Parts Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Casting

| Chemical Composition |             |                 | Heat Treatment                |          |
|----------------------|-------------|-----------------|-------------------------------|----------|
| Carbon               | C %         | 0.030 max.      |                               |          |
| Silicon              | Si %        | 1.000 max.      |                               |          |
| Manganese            | Mn %        | 1.000 - 3.000   | Solution Annealing            |          |
| Phosphorus           | P %         | 0.030 max.      |                               |          |
| Sulphur              | S %         | 0.020 max.      |                               |          |
| Chromium             | Cr %        | 26.000 - 28.000 |                               |          |
| Nickel               | Ni %        | 6.000 - 8.000   |                               |          |
| Molybdenum           | Mo %        | 2.000 - 3.500   |                               | •        |
| Copper               | Cu %        | 1.000 max.      | Mechanical Properties         |          |
| Tungsten             | W %         | 3.000 - 4.000   | Tensile Strength in Mpa       | 690 min. |
| Nitrogen             | N %         | 0.300 - 0.400   | Yield Strength in Mpa         | 515 min. |
| Boron                | Bo %        | 0.0010 - 0.0100 | Elongation in %               | 20 min.  |
| Barium               | Ba %        | 0.0002 - 0.0100 | Reduction of Area in %        | -        |
| Ce + La              | Ce % + La % | 0.005 - 0.030   | Hardness in BHN               | -        |
| Iron                 | Fe %        | Balance         | Impac <mark>t in Joule</mark> | -        |

| Cross Reference Table |          |         |                              |  |
|-----------------------|----------|---------|------------------------------|--|
| Material              | Standard | Country | Grade Belong to the Industry |  |
| A890 7A               | ASTM     | USA     | Casting                      |  |
| J93379                | UNS      | USA     | Casting                      |  |
| CD3MWN                | ASTM     | USA     | Casting                      |  |
| 7A                    | ASTM     | USA     | Casting                      |  |
| A890 CD3MWN           | ASTM     | USA     | Casting                      |  |
| A995 J93379           | ASTM     | USA     | Casting                      |  |
| A995 Grade 7A         | ASTM     | USA     | Casting                      |  |

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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