

## Material - ASTM A 789 S32001

**Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels and for General Applications**

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - ASTM A 789 S32001 Chromium and Chromium-Nickel Stainless Steel for Pressure Vessels and for General Applications**

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

**Grade Belongs to the Industry - Steel and Tube**

| Chemical Composition |      |                 | Heat Treatment          |          |
|----------------------|------|-----------------|-------------------------|----------|
| Carbon               | C %  | 0.030 max.      | Solution Annealing      |          |
| Silicon              | Si % | 1.000 max.      |                         |          |
| Manganese            | Mn % | 4.000 - 6.000   |                         |          |
| Phosphorus           | P %  | 0.040 max.      |                         |          |
| Sulphur              | S %  | 0.030 max.      |                         |          |
| Chromium             | Cr % | 19.500 - 21.500 |                         |          |
| Molybdenum           | Ni % | 0.600 max.      |                         |          |
| Nickel               | Ni % | 1.000 - 3.000   |                         |          |
| Nitrogen             | N %  | 0.050 - 0.170   | Mechanical Properties   |          |
| Copper               | Cu % | 1.000 max.      | Tensile Strength in Mpa | 620 min. |
| Iron                 | Fe % | Balance         | Yield Strength in Mpa   | 450 min. |
| -                    | -    | -               | Elongation in %         | 25 min.  |
| -                    | -    | -               | Reduction of Area in %  | -        |
| -                    | -    | -               | Hardness in HB          | 290 max. |
| -                    | -    | -               | Impact in Joule         | -        |

| Cross Reference Table |          |         |                               |
|-----------------------|----------|---------|-------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry  |
| A240 UNS S32001       | ASTM     | USA     | Steel, Plate, Sheet and Strip |
| S32001                | UNS      | USA     | Steel                         |
| A959 S32001           | ASTM     | USA     | Steel                         |
| -                     | -        | -       | -                             |
| -                     | -        | -       | -                             |
| -                     | -        | -       | -                             |
| -                     | -        | -       | -                             |

**For any further inquiries, please do not hesitate to contact us. You may visit our website at [AMTECH TECHNOCAST PVT. LTD.](http://AMTECH TECHNOCAST PVT. LTD.), call us at [+91 9879817994](tel:+919879817994), or email us at [manish@amtechtechnocast.com](mailto:manish@amtechtechnocast.com)**

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