

## Material - ASTM A 959 Type 334

**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 959 Type 334 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**

| Chemical Composition |      |                 | Heat Treatment          |          |
|----------------------|------|-----------------|-------------------------|----------|
| Carbon               | C %  | 0.080 max.      | Solution Annealing      |          |
| Silicon              | Si % | 1.000 max.      |                         |          |
| Manganese            | Mn % | 1.000 max.      |                         |          |
| Phosphorus           | P %  | 0.030 max.      |                         |          |
| Sulphur              | S %  | 0.015 max.      |                         |          |
| Chromium             | Cr % | 18.000 - 20.000 |                         |          |
| Nickel               | Ni % | 19.000 - 21.000 |                         |          |
| Aluminium            | Al % | 0.150 - 0.600   |                         |          |
| Titanium             | Ti % | 0.150 - 0.600   | Mechanical Properties   |          |
| Iron                 | Fe % | Balance         | Tensile Strength in Mpa | 485 min. |
| -                    | -    | -               | Yield Strength in Mpa   | 170 min. |
| -                    | -    | -               | Elongation in %         | 30 min.  |
| -                    | -    | -               | Reduction of Area in %  | -        |
| -                    | -    | -               | Hardness in HRC         | 92 max.  |
| -                    | -    | -               | Impact in Joule         | -        |

| Cross Reference Table |          |                |                               |
|-----------------------|----------|----------------|-------------------------------|
| Material              | Standard | Country        | Grade Belong to the Industry  |
| A240 UNS S33400       | ASTM     | USA            | Steel, Plate, Sheet and Strip |
| S22400                | UNS      | USA            | Steel                         |
| X8CrNiAlTi20-20       | DIN      | Germany        | Steel                         |
| 1.4847                | DIN      | Germany        | Steel                         |
| 1.4847                | EN       | European Union | 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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