



## Material - ASME SA-312 UNS S35315

**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 - ASME SA-312 UNS S35315 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 Pipe**

| Chemical Composition |      |                 | Heat Treatment  |  |
|----------------------|------|-----------------|---|--|
| Carbon               | C %  | 0.040 - 0.080   | Solution Annealing  |  |
| Silicon              | Si % | 0.750 max.      |   |  |
| Manganese            | Mn % | 2.000 - 4.000   |   |  |
| Phosphorus           | P %  | 0.045 max.      |   |  |
| Sulphur              | S %  | 0.030 max.      |   |  |
| Chromium             | Cr % | 24.000 - 26.000 |   |  |
| Nickel               | Ni % | 34.000 - 36.000 |   |  |
| Nitrogen             | N %  | 0.120 - 0.180   |   |  |
| Cerium               | Ce % | 0.030 - 0.080   |   |  |
| Iron                 | Fe % | Balance         |   |  |
| -                    | -    | -               | <b>Mechanical Properties</b><br>Tensile Strength in Mpa      650 min.<br>Yield Strength in Mpa      270 min.<br>Elongation in %      25 min.<br>Reduction of Area in %      -<br>Hardness in BHN      -<br>Impact in Joule      - |  |
| -                    | -    | -               |   |  |
| -                    | -    | -               |   |  |
| -                    | -    | -               |   |  |
| -                    | -    | -               |   |  |
| -                    | -    | -               |   |  |
| -                    | -    | -               |   |  |

| Cross Reference Table |          |                |                               |
|-----------------------|----------|----------------|-------------------------------|
| Material              | Standard | Country        | Grade Belong to the Industry  |
| A240 UNS S35315       | ASTM     | USA            | Steel, Plate, Sheet and Strip |
| S35315                | UNS      | USA            | Steel                         |
| A167 S35315           | ASTM     | USA            | Steel, Sheet, Plate and Strip |
| A312 S35315           | ASTM     | USA            | Steel and Pipe                |
| A959 S35315           | ASTM     | USA            | Steel                         |
| SA-240 UNS S35135     | ASME     | USA            | Steel                         |
| X 6 NiCrSiNcE 35 25   | EN       | European Union | Steel                         |

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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