



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - ASTM A 240 S31726

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 240 S31726 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 %  | 0.030 max.      | Solution Annealing   |  |
| Silicon              | Si % | 0.750 max.      |  |  |
| Manganese            | Mn % | 2.000 max.      |  |  |
| Phosphorus           | P %  | 0.045 max.      |  |  |
| Sulphur              | S %  | 0.030 max.      |  |  |
| Chromium             | Cr % | 17.000 - 20.000 |  |  |
| Molybdenum           | Mo % | 4.000 - 5.000   |  |  |
| Nickel               | Ni % | 13.500 - 17.500 |  |  |
| Nitrogen             | N %  | 0.100 - 0.200   |  |  |
| Iron                 | Fe % | Balance         |  |  |
| -                    | -    | -               | <b>Mechanical Properties</b><br>Tensile Strength in Mpa   550 min.<br>Yield Strength in Mpa   240 min.<br>Elongation in %   40 min.<br>Reduction of Area in %   -<br>Hardness in BHN   223 max.<br>Impact in Joule   - |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |
| -                    | -    | -               |  |  |

| Cross Reference Table |          |         |                               |
|-----------------------|----------|---------|-------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry  |
| A240 UNS S31725       | ASTM     | USA     | Steel, Plate, Sheet and Strip |
| A358 S31725           | ASTM     | USA     | Steel                         |
| A403 WP S31725        | ASTM     | USA     | Steel and Pipe                |
| A943 S31725           | ASTM     | USA     | Steel and Pipe                |
| SA-312 UNS S31725     | ASME     | USA     | Steel and Pipe                |
| SA-376                | ASME     | USA     | Steel and Pipe                |
| SA-409 UNS S31725     | ASME     | USA     | Steel and Pipe                |

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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