



Material - AS 301

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 - AS 301 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, Plate, Sheet and Strip

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-----------------|-------------------------|----------|
| Carbon | C % | 0.150 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 % | 16.000 - 18.000 | | |
| Molybdenum | Mo % | 0.350 max. | | |
| Nickel | Ni % | 6.000 - 8.000 | Mechanical Properties | |
| Copper | Cu % | 0.350 max. | Tensile Strength in Mpa | 520 min. |
| Nitrogen | N % | 0.100 max. | Yield Strength in Mpa | 205 min. |
| Iron | Fe % | Balance | Elongation in % | 8 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | - | Hardness in HB | 219 max. |
| - | - | - | Impact in Joule | - |

| Cross Reference Table | | | |
|-----------------------|----------|---------|-------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| A240 UNS S30100 | ASTM | USA | Steel, Plate, Sheet and Strip |
| 301 | AISI | USA | Steel, Sheet, Bar and Strip |
| 301 | SAE | USA | Steel |
| 301 S 21 | BS | British | Steel, Plate, Sheet and Strip |
| STS 301 | KS | Korea | Steel, Plate, Sheet and Strip |
| S30100 | UNS | USA | Steel |
| S30103 | UNS | USA | 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

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