



Material - AS 321

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 321 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, Sheet, Plate and Strip

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-----------------|--|--|
| Carbon | C % | 0.080 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 - 19.000 | | |
| Molybdenum | Mo % | 0.350 max. | | |
| Nickel | Ni % | 9.000 - 12.000 | | |
| Titanium | Ti % | 0.700 max. | | |
| Copper | Cu % | 0.350 max. | | |
| Nitrogen | N % | 0.100 max. | Mechanical Properties Tensile Strength in Mpa 520 min. Yield Strength in Mpa 205 min. Elongation in % 40 min. Reduction of Area in % - Hardness in BHN 217 max. Impact in Joule - | |
| Iron | Fe % | Balance | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |

| Cross Reference Table | | | |
|-----------------------|----------|---------|-------------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| A240 UNS S32100 | ASTM | USA | Steel, Plate, Sheet and Strip |
| 321 | AISI | USA | Steel and Tube |
| 321 | AMS | USA | Sheet, Bar, Wire, Shape and Forging |
| 321 | SAE | USA | Steel |
| STS 316 | KS | Korea | Steel, Sheet, Plate and Strip |
| SUS 321 | JIS | Japan | Steel, Sheet, Plate and Strip |
| A182 F321 | ASTM | USA | Steel, Pipe and Forging |

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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