



Material - JIS SUS 309 STB

Standard Specification for Steel Boiler and Heat Exchanger Tubes

Group - Ferrous Stainless Steel Alloys

Sub Group - JIS SUS 309 STB Steel Boiler and Heat Exchanger Tubes

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Superheater, Tubes of Boiler and Heat Exchangers

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-----------------|-------------------------|----------|
| Carbon | C % | 0.080 max. | Solution Annealing | |
| Silicon | Si % | 1.000 max. | | |
| Manganese | Mn % | 2.000 max. | | |
| Phosphorus | P % | 0.040 max. | | |
| Sulphur | S % | 0.030 max. | | |
| Chromium | Cr % | 22.000 - 24.000 | | |
| Nickel | Ni % | 12.000 - 15.000 | | |
| Iron | Fe % | Balance | | |
| - | - | - | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 520 min. |
| - | - | - | Yield Strength in Mpa | 205 min. |
| - | - | - | Elongation in % | 26 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | - | Hardness in BHN | 90 max. |
| - | - | - | Impact in Joule | - |

| Cross Reference Table | | | |
|-----------------------|----------|----------------|---|
| Material | Standard | Country | Grade Belong to the Industry |
| SA-351 Grade CH10 | ASME | USA | Casting |
| 1.4950 | EN | European Union | Flat Products Made of Steels for Pressure Purpose |
| 309S | AISI | USA | Bar, Wire, Strip, Plat, Sheet and Forging |
| J93401 | UNS | USA | Casting |
| X 6 CrNi 23-14 | UNI | Italy | Plate, Sheets, Strip and Coil |
| A743 CH10 | ASTM | USA | Casting |
| A351 CH10 | ASTM | USA | Casting |

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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