



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A 959 S20161

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 959 S20161 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 % | 0.150 max. | Solution Annealing | |
| Silicon | Si % | 3.000 - 4.000 | | |
| Manganese | Mn % | 4.000 - 6.000 | | |
| Phosphorus | P % | 0.045 max. | | |
| Sulphur | S % | 0.030 max. | | |
| Chromium | Cr % | 15.000 - 18.000 | | |
| Nickel | Ni % | 4.000 - 6.000 | | |
| Nitrogen | N % | 0.080 - 0.200 | | |
| Iron | Fe % | Balance | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 860 min. |
| - | - | - | Yield Strength in Mpa | 345 min. |
| - | - | - | Elongation in % | 40 min. |
| - | - | - | Reduction of Area in % | 40 min. |
| - | - | - | Hardness in HB | 311 max. |
| - | - | - | Impact in Joule | - |

| Cross Reference Table | | | |
|-----------------------|----------|---------|-------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| A240 UNS S20161 | ASTM | USA | Steel, Plate, Sheet and Strip |
| S20161 | UNS | USA | Steel |
| A276 S20161 | ASTM | USA | Steel, Bar and Shapes |
| A479 S20161 | ASTM | USA | Steel and Bar |
| SA-240 UNS S20161 | ASME | USA | Steel |
| SA-276 S20161 | ASME | USA | Steel, Bar and Shapes |
| SA-479 UNS S20161 | ASME | USA | Steel and Bar |

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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