

Material - ASTM A240 UNS S40977

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 A240 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 % | 0.030 max. | | |
| Silicon | Si % | 1.000 max. | | |
| Manganese | Mn % | 1.500 max. | | |
| Phosphorus | P % | 0.040 max. | | |
| Sulphur | S % | 0.015 max. | | |
| Chromium | Cr % | 10.500 - 12.500 | | |
| Nickel | Ni % | 0.300 - 1.000 | | |
| Nitrogen | N % | 0.030 max. | | |
| Iron | Fe % | Balance | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| | | | Annealing or Hardening + Tempering | |
| Mechanical Properties | | | | |
| | Tensile Strength in Mpa | | 450 min. | |
| | Yield Strength in Mpa | | 280 min. | |
| | Elongation in % | | 18 min. | |
| | Reduction of Area in % | | - | |
| | Hardness in BHN | | 180 max. | |
| | Impact in Joule | | - | |

| Cross Reference Table | | | |
|-----------------------|----------|---------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| S40910 | UNS | USA | Steel |
| S40920 | UNS | USA | Steel |
| S40930 | UNS | USA | Steel |
| S40945 | UNS | USA | Steel |
| S40975 | UNS | USA | Steel |
| S40977 | UNS | USA | Steel |
| A959 S40975 | 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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