



## Material - UNS S40930

**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 - UNS 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 %         | 0.030 max.                   | Annealing or Hardening + Tempering |          |
| Silicon              | Si %        | 1.000 max.                   |                                    |          |
| Manganese            | Mn %        | 1.000 max.                   |                                    |          |
| Phosphorus           | P %         | 0.040 max.                   |                                    |          |
| Sulphur              | S %         | 0.020 max.                   |                                    |          |
| Chromium             | Cr %        | 10.500 - 11.700              |                                    |          |
| Nickel               | Ni %        | 0.500 max.                   |                                    |          |
| Nitrogen             | N %         | 0.030 max.                   |                                    |          |
| Titanium             | Ti %        | 0.050 min.                   |                                    |          |
| Ti + Cb              | Ti % + Cb % | (0.080+8) (CFN) - 0.750 max. |                                    |          |
| Iron                 | Fe %        | Balance                      | Tensile Strength in Mpa            | 380 min. |
| -                    | -           | -                            | Yield Strength in Mpa              | 170 min. |
| -                    | -           | -                            | Elongation in %                    | 20 min.  |
| -                    | -           | -                            | Reduction of Area in %             | -        |
| -                    | -           | -                            | Hardness in BHN                    | 179 max. |
| -                    | -           | -                            | Impact in Joule                    | -        |

| Cross Reference Table |          |         |                               |
|-----------------------|----------|---------|-------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry  |
| A240 UNS S40910       | ASTM     | USA     | Steel, Plate, Sheet and Strip |
| S40910                | UNS      | USA     | Steel                         |
| S40920                | 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](mailto:marketing@gravitycastindia.com)**

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