



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A959 S32050

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 A959 UNS S32050 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. | Solution Annealing | | | |
| Silicon | Si % | 1.000 max. | | | | |
| Manganese | Mn % | 1.500 max. | | | | |
| Phosphorus | P % | 0.035 max. | | | | |
| Sulphur | S % | 0.020 max. | | | | |
| Chromium | Cr % | 22.000 - 24.000 | | | | |
| Nickel | Ni % | 20.000 - 23.000 | | | | |
| Molybdenum | Mo % | 6.000 - 6.800 | | | | |
| Nitrogen | N % | 0.210 - 0.320 | | | | |
| Copper | Cu % | 0.400 max. | | | | |
| Iron | Fe % | Balance | <th colspan="2">Mechanical Properties</th> | | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 675 min. | | |
| - | - | - | Yield Strength in Mpa | 330 min. | | |
| - | - | - | Elongation in % | 40 min. | | |
| - | - | - | Reduction of Area in % | - | | |
| - | - | - | Hardness in BHN | 256 max. | | |
| - | - | - | Impact in Joule | - | | |

| Cross Reference Table | | | |
|-----------------------|----------|---------|---|
| Material | Standard | Country | Grade Belong to the Industry |
| A240 UNS S32050 | ASTM | USA | Steel, Plate, Sheet and Strip |
| A240 S32050 | ASTM | USA | Plate, Sheet and Strip |
| A213 S32050 | ASTM | USA | Tubes for Superheaters and Heat Exchanges |
| A358 S32050 | ASTM | USA | Pipes |
| A249 S32050 | ASTM | USA | Tubes for Superheaters and Heat Exchanges |
| S32050 | UNS | USA | Plate, Sheet and Strip |
| - | - | - | - |

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

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