



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A240 UNS S41045

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. | Annealing or Hardening + Tempering | |
| Silicon | Si % | 1.000 max. | | |
| Manganese | Mn % | 1.000 max. | | |
| Phosphorus | P % | 0.040 max. | | |
| Sulphur | S % | 0.030 max. | | |
| Chromium | Cr % | 12.000 - 13.000 | | |
| Nickel | Ni % | 0.500 max. | | |
| Nitrogen | N % | 0.030 max. | | |
| Niobium | Nb % | 0.005 - 0.008 max. | | |
| Iron | Fe % | Balance | | |
| - | - | - | Mechanical Properties Tensile Strength in Mpa 380 min. Yield Strength in Mpa 205 min. Elongation in % 22 min. Reduction of Area in % - Hardness in BHN - Impact in Joule - | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |

| Cross Reference Table | | | |
|-----------------------|----------|---------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| A217 CA 15 | ASTM | USA | Casting |
| A487 CA 15 | ASTM | USA | Casting |
| 5351 | AMS | USA | Casting |
| 410 | AISI | USA | Bar, Wire, Shape and Forging |
| 410 C 21 | BS | British | Casting |
| 15Ch13L | GOST | Russia | Casting |
| 385 G X 12 Cr 13 | SFS | Finland | 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

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.

ONE STOP SOLUTION FOR METAL PARTS