



## Material - DIN X 7 CrNi 23-14

### Standard Specification for Heat Resisting Rolled and Forged Steels

Group - Ferrous Stainless Steel Alloys

Sub Group - DIN X 7 CrNi 23-14 Heat Resisting Rolled and Forged Steels

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Rolled and Forged Steel

| Chemical Composition |      |                 | Heat Treatment          |            |
|----------------------|------|-----------------|-------------------------|------------|
| Carbon               | C %  | 0.080 max.      | Solution Annealing      |            |
| Silicon              | Si % | 1.000 max.      |                         |            |
| Manganese            | Mn % | 2.000 max.      |                         |            |
| Phosphorus           | P %  | 0.045 max.      |                         |            |
| Sulphur              | S %  | 0.030 max.      |                         |            |
| Chromium             | Cr % | 21.000 - 23.000 |                         |            |
| Nickel               | Ni % | 12.000 - 15.000 |                         |            |
| Iron                 | Fe % | Balance         |                         |            |
| -                    | -    | -               | Mechanical Properties   |            |
| -                    | -    | -               | Tensile Strength in Mpa | 500 - 750  |
| -                    | -    | -               | Yield Strength in Mpa   | 210 min.   |
| -                    | -    | -               | Elongation in %         | 26 min.    |
| -                    | -    | -               | Reduction of Area in %  | -          |
| -                    | -    | -               | Hardness in BHN         | 192 J @ RT |
| -                    | -    | -               | Impact in Joule         | -          |

| Cross Reference Table |          |                |   |
|-----------------------|----------|----------------|---|
| Material              | Standard | Country        | Grade Belong to the Industry              |
| SA-351 Grade CH8      | ASME     | USA            | Casting                                   |
| 309S                  | AISI     | USA            | Bar, Wire, Strip, Plat, Sheet and Forging |
| X 12 CrNi 23-13       | EN       | European Union | Bar, Wire, Strip, Plat, Sheet and Forging |
| X 15 CrNi 24-13       | AFNOR NF | France         | Rolled Tubes for Pressure Service         |
| SUS 309S              | JIS      | Japan          | Wire, Rods for Wedding Material           |
| X 6 CrNi 23-14        | UNI      | Italy          | Plate, Sheet, Strip and Coil              |
| A351 CH8              | ASTM     | USA            | 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](mailto:marketing@gravitycastindia.com)**

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