GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

# Material - ASTM A312 TP309Cb

## Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - ASTM A312 TP309Cb Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes**

**Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries**
**Grade Belongs to the Industry - Steel and Pipe**

| Chemical Composition | | |
|---|---|---|
| Carbon | C % | 0.080 max. |
| Manganese | Mn % | 2.000 max. |
| Phosphorus | P % | 0.045 max. |
| Sulphur | S % | 0.030 max. |
| Silicon | Si % | 1.000 max. |
| Chromium | Cr % | 22.000 - 24.000 |
| Nickel | Ni % | 12.000 - 16.000 |
| Molybdenum | Mo % | 0.750 max. |
| Niobium | Nb % | 0.010 - 1.100 |
| Iron | Fe % | Balance |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |

| Heat Treatment |
|---|
| Solution Annealing |

| Mechanical Properties | |
|---|---|
| Tensile Strength in Mpa | 515 min. |
| Yield Strength in Mpa | 205 min. |
| Elongation in % | - |
| Reduction of Area in % | - |
| Hardness in HB | - |
| Impact in Joule | - |

| Cross Reference Table | | | |
|---|---|---|---|
| **Material** | **Standard** | **Country** | **Grade Belong to the Industry** |
| S30940 | UNS | USA | Steel and Pipe |
| A 814 Grade TP 309Cb | ASTM | USA | Steel and Pipe |
| A 943 TP309Cb | ASTM | USA | Steel and Pipe |
| A 276 309Cb | ASTM | USA | Steel, Bars and Shape |
| A 213 309Cb | ASTM | USA | Steel and Tubing |
| A 358 309Cb | ASTM | USA | Steel and Pipe |
| A 249 TP 309Cb | ASTM | USA | Steel and Tubing |

**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.