GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

# Material - ASTM A479 Type 321

## Standard Specification for Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - ASTM A479 Type 321 Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels**

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

| 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 % | 17.000 - 19.000 |
| Nickel | Ni % | 9.000 - 12.000 |
| Titanium | Ti % | 0.010 - 0.700 |
| Iron | Fe % | Balance |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |

| Heat Treatment |
|---|
| Annealing or Strain-Hardening |

| Mechanical Properties | |
|---|---|
| Tensile Strength in Mpa | 515 min. |
| Yield Strength in Mpa | 205 min. |
| Elongation in % | 30 min. |
| Reduction of Area in % | 40 min. |
| Hardness in HB | - |
| Impact in Joule | - |

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| Cross Reference Table | | | |
|---|---|---|---|
| **Material** | **Standard** | **Country** | **Grade Belong to the Industry** |
| S32100 | UNS | USA | Bars, Wire, Shapes and Forging |
| D 3698 STS 321 | KS | Korea | Plate, Sheet and Strip |
| G 4312 SUS 321 | JIS | Japan | Plate and Sheet |
| J 2515 321 | SAE | USA | Steel |
| A 213 TP321 | ASTM | USA | Steel and Tubing |
| A 312 TP321 | ASTM | USA | Steel and Pipe |
| A 313 Type 321 | ASTM | USA | Steel and Wire |

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

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