

## 316 / 316L

Stainless Steel | UNS: S31600 / S31603 | EN: 1.4401 / 1.4404 | JIS: SUS316 / SUS316L

Molybdenum-bearing austenitic stainless steel. The 2-3% Mo addition transforms pitting resistance in chloride-bearing media, making 316L the baseline grade for marine and chemical service in the Gulf.

### Available Forms & Sizes

| Form                   | Size Range                                 |
|------------------------|--------------------------------------------|
| Plates                 | 1.5 - 100 mm thk, up to 2500 mm wide       |
| Sheets & Coils         | 0.4 - 6 mm thk, 1000 / 1219 / 1500 mm wide |
| Seamless Pipes & Tubes | 1/2" - 24" NB, SCH 5S - SCH 160            |
| Round Bars             | 6 - 500 mm dia                             |
| Flanges                | 1/2" - 48", 150# - 2500#                   |
| Fittings               | 1/2" - 48", SCH 10S - SCH 160              |

### Chemical Composition (%)

| Element | Min  | Max          |
|---------|------|--------------|
| C       | -    | 0.08 / 0.030 |
| Cr      | 16.0 | 18.0         |
| Ni      | 10.0 | 14.0         |
| Mo      | 2.00 | 3.00         |
| Mn      | -    | 2.00         |

### Mechanical Properties

| Property              | Value   | Unit |
|-----------------------|---------|------|
| Yield Strength (0.2%) | 205 min | MPa  |
| Tensile Strength      | 515 min | MPa  |
| Elongation            | 40 min  | %    |
| Hardness              | 217 max | HBW  |

### Physical Properties

| Property                | Value | Unit  |
|-------------------------|-------|-------|
| Density                 | 7.98  | g/cm3 |
| Max Service Temperature | 870   | C     |
| PREN                    | 25    | -     |

### Standards



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ASTM A240, ASTM A312, ASTM A182, EN 10088-2

## Equivalent Grades

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1.4401, 1.4404, SUS316L, X2CrNiMo17-12-2

## Typical Applications

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- Marine and coastal structures
- Chemical process piping
- Desalination pre-treatment
- Pharmaceutical clean systems

## Industries Served

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Oil & Gas, Marine, Chemical Processing, Desalination