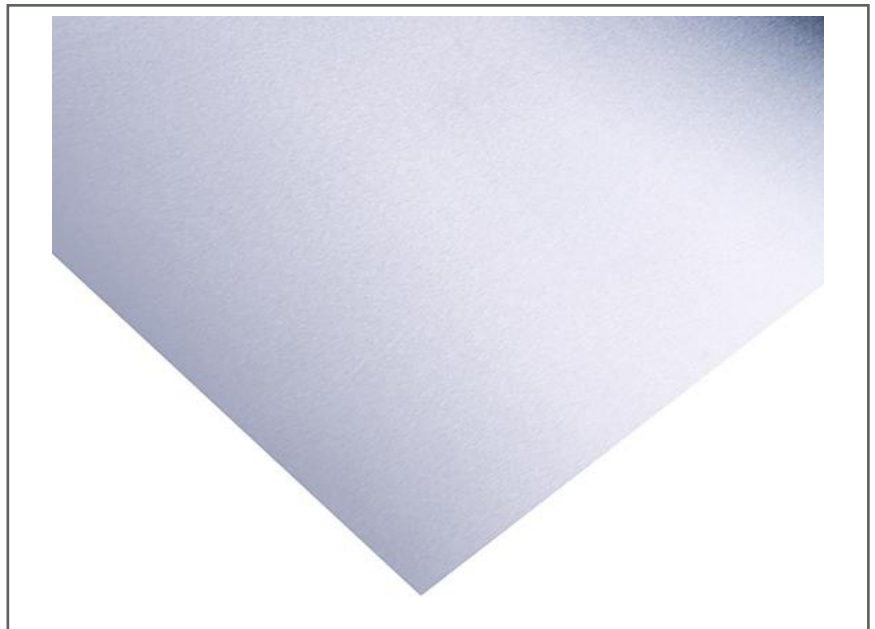


Features

- **Superior Corrosion Resistance:** The addition of 2–3% molybdenum significantly enhances resistance to general corrosion and aggressive media like sulphuric and phosphoric acids.
- **Chloride Pitting Protection:** Molybdenum also provides superior protection against pitting and crevice corrosion, particularly in chloride-rich environments like coastal areas or chemical plants.
- **"Marine Grade" Performance:** Widely regarded as standard marine-grade steel, it is the preferred choice for shipbuilding, offshore platforms, and coastal architectural facilities.
- **High Temperature Strength:** It offers higher creep, stress-to-rupture, and tensile strength at elevated temperatures compared to standard chromium-nickel grades like 304.

RS PRO 316 Stainless Steel Sheet L:500MM x W:300MM X H:10MM

RS Stock No: 0857815



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

RS Pro 316 Stainless Steel Sheet

The RS Pro 316 Stainless Steel Sheet is a high-performance, marine-grade solution engineered for environments where standard steel fails. Infused with molybdenum, it provides exceptional resistance to pitting and crevice corrosion, making it the definitive choice for chemical processing, food production, and coastal applications. Its robust austenitic structure ensures superior toughness and weldability, while the smooth mill finish offers a professional aesthetic that is both easy to sanitise and maintain. Whether you are fabricating laboratory equipment or heavy-duty marine fittings, this RS PRO sheet delivers the industrial-strength reliability and long-term durability required for critical hardware.

Key Features:

- **Excellent Oxidation Resistance:** These plates withstand oxidation in intermittent service up to 870°C and continuous service up to 925°C.
- **Cryogenic Toughness:** The austenitic structure ensures exceptional toughness and impact resistance even at extreme sub-zero or cryogenic temperatures.
- **Weldability and Formability:** It is easily welded and formed into complex shapes using all standard fusion and resistance methods.
- **Hygienic and Non-Toxic:** The non-reactive surface resists bacterial growth, making it ideal for food processing, pharmaceutical equipment, and medical implants.
- **Non-Magnetic Properties:** SS 316 is non-magnetic in its annealed condition, though it may become slightly magnetic after significant cold working.
- **Sustainability:** It is 100% recyclable, contributing to lower environmental impact and long-term sustainability in construction and industrial projects.

Applications:

- Marine Hardware and Fittings
- Chemical and Pharmaceutical Processing
- Food and Beverage Production
- Medical and Surgical Equipment
- Coastal Architectural Components

General Specifications

Form	Stainless Sheet
Grade	316
Length	500MM
Width	300MM
Height	10MM

Mechanical Specifications

Typical Tensile Strength	515 – 700 MPa
Yield Strength	205 – 290 MPa
Extension	35% – 60%
Hardness	150 – 190 HBW
Coefficient Of Thermal Expansion	$16.0 \times 10^{-6} /K$ (0–100°C)
Thermal Conductivity	16.3 W/m·K (at 100°C)

Similar Products

RS Code	Width & Height	Thickness	Grade
0857815	500MM X 300MM	3MM	316
0857816	500MM X 300MM	2MM	316
0857817	500MM X 300MM	1.5MM	316
0857818	500MM X 300MM	1.2MM	316
0857819	500MM X 300MM	1MM	316