

## Features

- **Excellent corrosion resistance**, the sheet forms a protective oxide film, making it highly resistant to general corrosion, seawater, and chloride solutions
- **Excellent Weldability** can be readily welded using standard procedures like MIG and TIG, though inert gas shielding is crucial.
- **Good to Excellent formability**, has high ductility and can be readily cold formed
- **Highly Biocompatible**, this is suitable for use in medical and surgical applications.
- **Excellent strength-to-weight ratio**, Lightweight yet strong 45% lighter than Steel, making it ideal for aerospace and other weight-sensitive applications.

## RS PRO Titanium Grade 2 Sheet, L: 500mm X W: 300mm X T: 5.0mm

RS Stock No: 0727045



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 Titanium Grade 2 sheet**

*RS PRO Titanium Grade 2 sheet provides an exceptional balance of moderate strength, good to excellent ductility, and superior corrosion resistance, making it the "workhorse" of commercially pure titanium grades. Designed to meet demanding industrial standards, this versatile material is an ideal choice for a wide array of high-performance applications across various industries, from aerospace to medical devices.*

### **Features and Benefits**

- *Excellent corrosion resistance: The sheet forms a protective oxide film, making it highly resistant to general corrosion, seawater, and chloride solutions.*
- *Excellent weldability: Can be readily welded using standard procedures like MIG and TIG, though inert gas shielding is crucial.*
- *Excellent formability: Has good ductility and can be easily cold formed.*
- *Biocompatible: Highly suitable for use in medical and surgical applications.*
- *High strength-to-weight ratio: Lightweight yet strong, making it ideal for aerospace and other weight-sensitive applications.*

### **Applications**

- *Aerospace components*
- *Chemical processing equipment*
- *Marine applications (rigging, piping)*
- *Medical implants and devices*
- *Heat exchangers*
- *General industrial and fabrication projects*

## General Specifications

<b>Material</b>	Titanium
<b>Form</b>	Sheet
<b>Applications</b>	<ul style="list-style-type: none"> <li>• Aerospace components</li> <li>• Chemical processing equipment</li> <li>• Marine applications (rigging, piping)</li> <li>• Medical implants and devices</li> <li>• Heat exchangers</li> <li>• General industrial and fabrication projects</li> </ul>
<b>Grade</b>	Grade 2
<b>Density</b>	4.51 g/cm <sup>3</sup>

## Mechanical Properties

<b>Length</b>	500MM
<b>Width</b>	300MM
<b>Thickness</b>	5.0MM
<b>Tensile Strength</b>	344 - 485 MPa
<b>Yield Strength (0.2% Offset)</b>	275 MPa (min)
<b>Elongation at Break</b>	20% - 28%
<b>Melting Point</b>	1660°C to 1670°C
<b>Modulus of Elasticity</b>	103 to 105 GPa
<b>Electrical Resistivity</b>	0.53 $\mu\Omega/m$
<b>Magnetic Permeability</b>	Non-magnetic

## Similar Products

<b>RS Code</b>	<b>Form</b>	<b>Dimensions</b>
0727039	Sheet	Titanium Grade 2 500MMx300MMx0.5MM
0727040	Sheet	Titanium Grade 2 500MMx300MMx1.0MM
0727041	Sheet	Titanium Grade 2 500MMx300MMx1.5MM
0727043	Sheet	Titanium Grade 2 500MMx300MMx2.0MM
0727044	Sheet	Titanium Grade 2 500MMx300MMx3.0MM
0727046	Sheet	Titanium Grade 5 500MMx300MMx0.5MM
0727047	Sheet	Titanium Grade 5 500MMx300MMx1.0MM
0727048	Sheet	Titanium Grade 5 500MMx300MMx1.6MM
0727049	Sheet	Titanium Grade 5 500MMx300MMx2.0MM
0727050	Sheet	Titanium Grade 5 500MMx300MMx3.0MM
0727051	Sheet	Titanium Grade 5 500MMx300MMx5.0MM