

# AMS 4911 - Titanium 6AL4V Sheets

## *Typical Applications*

Medical Implants

Turbine Blades

Fasteners

Motor Racing applications

Aircraft Structural Components



*6AL4V Sheet and Plate (AMS 4911) is a high-performance titanium alloy product form that adheres to the rigorous standards set forth in the Aerospace Material Specification (AMS) 4911.*

Manufactured in sheet and plate forms, 6AL4V (AMS 4911) retains the exceptional attributes that have made this alloy a preferred choice across multiple industries. The combination of impressive strength relative to its weight, corrosion resistance, and biocompatibility positions 6AL4V as a material well-suited for structural and component applications across multiple industries.

The sheet and plate products are particularly advantageous in scenarios where dimensional accuracy, flatness, and uniform thickness are essential, this allows precise manufacturing techniques, such as machining, forming, and fabrication, allowing for the creation of intricate, complex components that adhere to stringent tolerance requirements.

In the aerospace sector, 6AL4V (AMS 4911) sheets and plates find applications in the construction of aircraft structures, engine components, and other critical parts subject to extreme loads and harsh environments.

Beyond aerospace, the biocompatibility of 6AL4V (AMS 4911) sheets and plates makes them suitable for the manufacturing of medical implants, surgical instruments, and other healthcare-related products.

## **Related Products**

**6246**

**6AL4V Bar**

**6AL4V Sheet**

**Grade 1 Sheet Plate**

**Grade 2 Bar**

**Grade 2 Sheet Plate**

**Grade 2 Tube Welded**

**Grade 3 Sheet Plate**

**Grade 4 Bar**

**Grade 4 Sheet Plate**

**Grade 9 Tube**

## **Technical specification**

### *Related Specifications*

**AMS 4911**

**Mil T 9046**

**ASTM B265**

**TA10**

**TA56**

**TA59**

**UNS R56400**

**MSRR 8633**

## Specific Gravity

4.484 g/cm<sup>3</sup>

## Chemical Composition (WT %)

	Min	Max
<b>C</b>	-	0.08
<b>Al</b>	5.5	6.5
<b>N</b>	-	0.05
<b>O</b>	-	0.2
<b>Ti</b>	-	Bal
<b>V</b>	3.50	4.50
<b>Fe</b>	-	0.25
<b>H</b>	-	0.01
<b>Y</b>	-	0.005

## Typical Mechanical Properties in the Annealed condition

<b>0.2% Proof Stress</b>	MPA	Min	830
<b>Tensile Strength</b>	MPA	Min	900
<b>Elongation</b>	%	Min	8
<b>Reduction of Area</b>	%	Min	20

