

# Aerospace Industry Ams 5596 Inconel 718 Strip With Higher Strength And Rigidity

# **Basic Information**

<ul> <li>Place of Origin:</li> </ul>	China
Brand Name:	Victory
Certification:	CE,ROHS,ISO 9001
Model Number:	Inconel 718
Minimum Order Quantity:	1 Kg
Price:	Negotiable
<ul> <li>Packaging Details:</li> </ul>	Packed as coil. Special packaging requirements can also be accommodated. OEM is also acceptabl
Delivery Time:	7 to 20 Days
• Payment Terms:	L/C, D/A, D/P, T/T, Western Union, MoneyGram
<ul> <li>Supply Ability:</li> </ul>	100 Ton/Tons per Month



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# **Product Specification**

- Product Name:
- Material:Ni (Min):
- Application:
- Density (g/m3):
- Melting Point:
- Tensile Strength:
- Yield Strength:
- Thermal Conductivity:
- Highlight:
- Inconel 718 Strip Ni Cr Fe 50% Turbine Blades, Combustion Chamber Components, Aircraft Structures, Spacecraft Components 8.2 G/cm3 1,330°C 965 MPa 550 MPa 6.4 W/m·K

Nickel Inconel Alloy Strip, Inconel Alloy Strip



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# Introduction:

Inconel 718 Strip is a high-performance alloy material composed of nickel (minimum content 50%), chromium and iron. It has excellent high temperature resistance, excellent mechanical properties and corrosion resistance. The material is commonly used in turbine blades, combustion chamber components, aircraft structures and spacecraft components, among other applications. Inconel 718 Strip has a density of 8.2 g/cm3 and a melting point of 1,330°C. It has high tensile strength (965 MPa) and yield strength (550 MPa), as well as good thermal conductivity (6.4 W/m·K). This makes it ideal for applications requiring high strength, heat resistance and corrosion resistance under extreme environmental conditions.

## **Characteristic:**

High temperature resistance: Inconel 718 belt has excellent high temperature resistance and can maintain high strength and corrosion resistance in high temperature environments. The working temperature can reach more than 650 degrees Celsius. Excellent Mechanical Properties: Inconel 718 tape has excellent mechanical properties, including high strength, high toughness and good fatigue life, making it excellent in complex aerospace applications.

Good corrosion resistance: Inconel 718 belt has good corrosion resistance to many corrosive media, including acidic, alkaline and oxidizing media, and can maintain stable performance in harsh working environments.

#### Advantage:

High strength and lightweight: Inconel 718 straps have high strength and rigidity while being relatively lightweight, helping to reduce the weight of aerospace equipment and improve overall performance.

High temperature resistance and anti-oxidation: Inconel 718 belt can work in high temperature environment for a long time and has good anti-oxidation properties, which can effectively resist corrosion and oxidation in high temperature atmosphere.

Excellent workability: Inconel 718 tape has good workability and can be formed and processed through heat treatment, cold working and welding processes to meet the needs of different aerospace applications.

## **Specific applications:**

Aero-engine components: Inconel 718 tape is widely used in high-temperature components in aero-engines, such as turbine blades, combustion chamber components, gas turbines and gas bearings.

Aerospace Structural Parts: Inconel 718 tape can be used in the manufacture of aerospace structural parts such as aircraft structures, engine casings, gas turbine nozzles, etc. to provide strength and corrosion resistance.

Spacecraft components: Inconel 718 tape is also suitable for the manufacture of spacecraft components, such as rocket engine thrust structures, liquid fuel storage tanks and thruster components.

## Other relevant knowledge:

Composition of Inconel 718 alloy: Inconel 718 alloy is mainly composed of nickel, chromium, iron and other alloying elements, such as molybdenum, aluminum, titanium and niobium. The reasonable ratio of these elements gives the alloy excellent properties.

Heat Treatment and Processing: Inconel 718 tape typically requires heat treatment to improve its mechanical properties and corrosion resistance. In addition, alloys can be formed and processed through processes such as cold working and welding. Corrosion resistance: Inconel 718 belt has good corrosion resistance under high temperature conditions and can resist the erosion of corrosive media such as oxidation, sulfurization and chlorination.

#### **Parameter:**

#### **Chemical Properties of Inconel 718**

Item	С	Mn	Fe	Р	S	Si	Cu	Ni	Со	Al	Ti	Cr	Nb+Ta	Мо	В
Inconel 718	≤0.08	≤0.35	rest		≤0.01	≤0.35	≤0.3	50- 55	≤1	0.2- 0.8		17-21	4.75-5.5	2.8-3.3	

## Type we could offer

AMS Number	Alloy	Туре	U N S	Cross Ref. Spec	Misc./Shape
AMS 5590	Inconel 718	Nickel	N 0 7 7 1 8	-	Tubing
AMS 5596 Foil	Inconel 718	Nickel	N 0 7 7 1 8	-	Foil
AMS 5596 Plate	Inconel 718	Nickel	N 0 7 1 8	-	Plate
AMS 5596 Sheet	Inconel 718	Nickel	N 0 7 7 1 8	-	Sheet

AMS Number	Alloy	Туре	U N S	Cross Ref. Spec	Misc./Shape
AMS 5596 Strip	Inconel 718	Nickel	N 0 7 1 8	-	Strip
AMS 5597 Plate	Inconel 718	Nickel	N 0 7 1 8		Plate
AMS 5597 Sheet	Inconel 718	Nickel	N 0 7 1 8	-	Sheet
AMS 5597 Strip	Inconel 718	Nickel	N 0 7 1 8	-	Strip
AMS 5662 Bar	Inconel 718	Nickel	N 0 7 1 8	-	Bar
AMS 5662 Custom Tube	Inconel 718	Nickel	N 0 7 1 8		Custom Tube
AMS 5662 Ring	Inconel 718	Nickel	N 0 7 1 8		Ring
AMS 5663 Bar	Inconel 718	Nickel	N 0 7 1 8		Bar
AMS 5663 Custom Tube	Inconel 718	Nickel	N 0 7 1 8	-	Custom Tube
AMS 5663 Ring	Inconel 718	Nickel	N 0 7 1 8	-	Ring
AMS 5664 Bar	Inconel 718	Nickel	N 0 7 1 8	-	Bar
AMS 5664 Custom Tube	Inconel 718	Nickel	N 0 7 1 8	-	Custom Tube

AMS Number	Alloy	Туре	U N S	Cross Ref. Spec	Misc./Shape
AMS 5664 Ring	Inconel 718	Nickel	N 0 7 7 1 8	-	Ring
AMS 5832	Inconel 718	Nickel	N 0 7 1 8		Wire
AMS 5962 Bar	Inconel 718	Nickel	N 0 7 1 8	-	Bar
AMS 5962 Wire	Inconel 718	Nickel	N 0 7 1 8	-	Wire



Size Range						
Wire	0.05-8.0mm					
Rod/Bar	8.0-200mm					
Strip	(0.05-0.5)*(5-200)mm					
Plate	custom made					
Tube	custom made					

contact us email:victory@dlx-alloy.com Oem service: Welcome customized size We are experience factory for OEM&ODM service





# **Q&A:**

Q:What are the advantages of Inconel 718 tape compared to other materials? A: Excellent high temperature performance, excellent mechanical properties, strong corrosion resistance

Q: What is the quality assurance for Inconel 718 strip?

A: Inconel 718 strip undergoes rigorous quality control measures, including chemical composition analysis, mechanical testing, and inspection of dimensions and surface quality,.

Q: How does the quality of Inconel 718 strip contribute to its applications? A: The high-quality of Inconel 718 strip ensures consistent mechanical properties, corrosion resistance, and dimensional

accuracy.

Q:What is the heat treatment and processing process of Inconel 718 tape?

A: Inconel 718 tape typically requires heat treatment to improve its mechanical properties and corrosion resistance. Commonly used heat treatment processes include aging and solutionizing. In addition, alloys can also be formed and processed through processes such as cold working (cold rolling, cold drawing, etc.) and welding. These processes can improve the physical and chemical properties of alloys to meet the requirements of specific applications.

