



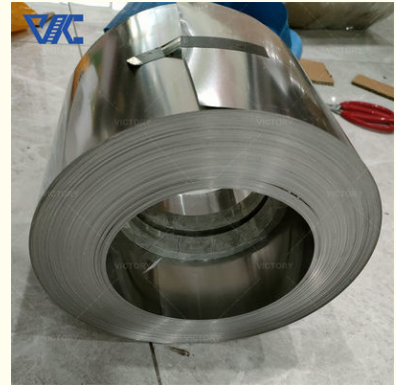
## Nuclear Energy Industry Nickel Inconel Alloy Strip Inconel 825 Strip With Corrosion Resistance

Our Product Introduction

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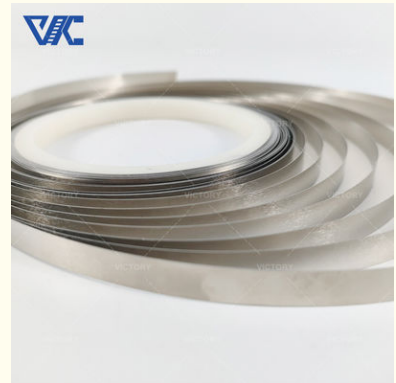
### Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Inconel 825
- Minimum Order Quantity: 1 Kg
- Price: Negotiable
- Packaging Details: 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
- Supply Ability: 100 Ton/Tons per Month



### Product Specification

- Product Name: Inconel 825 Strip
- Material: Ni Fe Cr Mo
- Ni (Min): 38-46%
- Application: Nuclear Reactor Components, Nuclear Waste Processing Equipment
- Coefficient Of Expansion: 14.0  $\mu\text{m/m } ^\circ\text{C}$  (20 – 100 $^\circ\text{C}$ )
- Modulus Of Rigidity: 75.9 KN/mm<sup>2</sup>
- Density (g/m3): 8.14 G/cm3
- Modulus Of Elasticity: 196 KN/mm<sup>2</sup>
- Melting Point: 1400 $^\circ\text{C}$
- Tensile Strength: 550 MPa
- Yield Strength: 220 MPa
- Highlight: Nickel Inconel Alloy Strip, Inconel Alloy Strip



### More Images



### Product Description

### Introduction:

Inconel 825 tape is a high-performance alloy material widely used in the nuclear energy industry. Made of the elements nickel, iron, chromium and molybdenum, Inconel 825 tape offers excellent corrosion resistance and high temperature stability. Its chemical composition includes nickel (38-46%), iron (minimum 22%), chromium (19.5-23.5%) and molybdenum (2.5-3.5%). The tape has a density of 8.14 g/cm<sup>3</sup> and a thermal expansion coefficient of 14.0  $\mu\text{m/m}\cdot^\circ\text{C}$  (20-100 $^\circ\text{C}$ ). In addition, it has excellent mechanical properties, such as tensile strength as low as 550 MPa and yield strength as low as 220 MPa.

In the nuclear energy industry, Inconel 825 tape is widely used in key components in nuclear reactors, such as fuel elements, fuel casings, and reactor pressure vessels. It maintains excellent corrosion resistance in high temperature and radiation environments and maintains the strength and stability of the material. Inconel 825 tape also has excellent oxidation resistance and mechanical strength, allowing it to withstand the operating conditions and stress requirements of nuclear reactors.

Due to its excellent corrosion resistance, high temperature stability and excellent mechanical properties, Inconel 825 tape has become one of the materials of choice in the nuclear energy industry. Whether it is used in nuclear reactor construction, fuel element manufacturing or other nuclear energy equipment, Inconel 825 belts can provide reliable material solutions to ensure the safe operation and long-term stability of nuclear energy industry equipment.

### Product Features:

**Corrosion resistance:** Inconel 825 belt has excellent corrosion resistance and has good resistance to corrosion in acid, alkali, salt solutions and high temperature and high pressure environments.

**Antioxidant properties:** It has excellent antioxidant properties and can maintain stable performance under high temperatures and oxidizing environments.

**High Temperature Strength:** Inconel 825 tape has good strength and toughness at high temperatures and is able to withstand the high temperature and high pressure environments found in the nuclear energy industry.

### Advantage:

**Corrosion resistance:** Inconel 825 belt has excellent corrosion resistance in the nuclear energy industry. It can resist the erosion of acids, alkalis and corrosive media and extend the service life of equipment.

**High-temperature oxidation resistance:** In the nuclear energy industry, Inconel 825 tape exhibits excellent high-temperature oxidation resistance, which can maintain the stability of the material and avoid material failure due to high-temperature oxidation.

**High temperature strength:** Inconel 825 belt has good high temperature strength and toughness, is suitable for high temperature environments in the nuclear energy industry, and can withstand stress and load under high pressure and high temperature conditions.

### Specific applications:

**Nuclear reactor components:** Inconel 825 tape can be used in components such as fuel elements, heat exchangers, pipes and vessels in nuclear reactors to ensure their reliability and durability in high temperature, high pressure and corrosive environments.

**Nuclear fuel processing:** Applicable to the field of nuclear fuel processing, such as leaching equipment, concentrators and corrosive medium treatment devices, to cope with the requirements of corrosive media and high temperature environments.

**Nuclear waste treatment:** Inconel 825 belt can also be used in nuclear waste treatment equipment, such as nuclear waste storage containers, processing equipment and anti-corrosion facilities, etc., to ensure the stability and safety of materials in corrosive media and high temperature conditions.

### Other relevant knowledge:

**Composition of Inconel 825 alloy:** Inconel 825 alloy is mainly composed of alloy elements such as nickel, chromium, copper and iron. The reasonable ratio of these elements gives the alloy excellent corrosion resistance and high temperature strength.

**Heat Treatment and Processing:** Inconel 825 tape typically requires heat treatment to improve its mechanical properties and corrosion resistance. In addition, the alloy can be formed and processed through processes such as cold working and welding to meet the needs of the nuclear energy industry.

**Safety and environmental protection:** The use of Inconel 825 belts can improve the safety and reliability of nuclear energy industry equipment and reduce the risk of leakage and environmental pollution.

### Parameter:

Chemical Composition (%)										
C	Si	Mn	S	Mo	Ti	Cr	Ni	Al	Fe	Cu
≤0.05	≤0.50	≤1.00	≤0.03	≤2.5~3.5	≤0.6~1.2	19.5~23.5	38.0~46.0	≤0.2	≥22.0	1.5~3.0

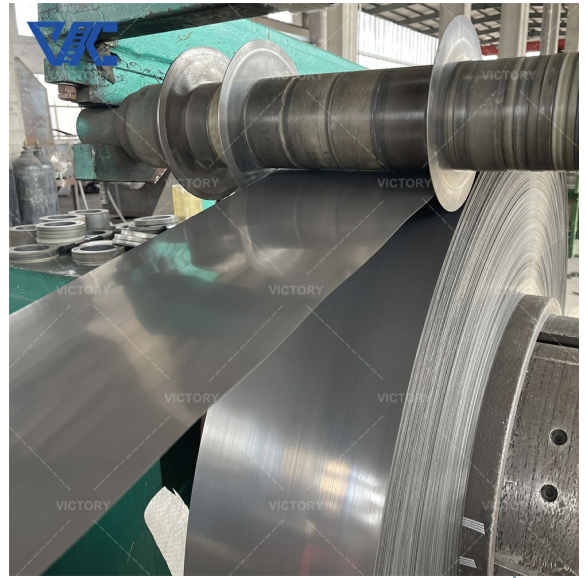
Standard			
Sheet/Plate	Round bar/Wire	Pipe	Tube
ASME SB-424 ASME SB-906	ASME SB-425	ASME SB-423 ASME SB-829 ASME SB-163 ASME SB-751 ASME SB-775	ASME SB-704 ASME SB-705 ASME SB-751 ASME SB-775

**contact us**  
**email:victory@dlx-alloy.com**

Oem service:

Welcome customized size

We are experience factory for OEM&ODM service



#### Q&A:

Q: Can Inconel 825 strip be customized to specific requirements?

A: Yes, Inconel 825 strip can be customized in terms of dimensions, thickness, and surface finish to meet specific application needs.

Q: How does the customization of Inconel 825 strip benefit customers?

A: The customization of Inconel 825 strip allows customers to obtain tailored solutions that precisely meet their requirements for corrosion resistance, mechanical properties, and dimensional specifications, ensuring optimal performance in their specific applications.



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