



Biological Engineering Incoloy Alloy 825 Wire With Excellent Mechanical Properties

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE, ROHS, ISO 9001
- Model Number: Incoloy 825
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Plastic film or waterproof woven bag inside, wire packed in spool put into carton, coil wire or strip wire put into wooden case
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

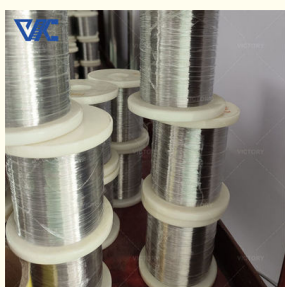


Product Specification

- Product Name: Incoloy 825 Wire
- Material: Ni Fe Cr Mo
- Nickel (Min): 38-46%
- Application: Culture Tanks, Centrifuges, Biosensors
- Coefficient Of Expansion: $14.0 \mu\text{m/m } ^\circ\text{C}$ (20 – 100°C)
- Modulus Of Rigidity: 75.9 KN/mm²
- Density (g/m³): 8.14 G/cm³
- Modulus Of Elasticity: 196 KN/mm²
- Elongation (\geq %): 30%
- Melting Point: 1400°C
- Tensile Strength: 550 MPa
- Yield Strength: 220 MPa
- Condition: Hard / Soft
- Surface: Bright, Oxided
- Highlight: Incoloy Alloy 625, Incoloy 825 Wire



More Images



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Product Description

Introduction:

Incoloy 825 Wire is an alloy wire composed of elements such as nickel, iron, chromium and molybdenum. This alloy wire is suitable for applications such as culture tanks, centrifuges and biosensors.

Key parameters include a nickel content between 38-46% and a density of 8.14 g/cm³. Its linear expansion coefficient is 14.0 μm/m·C (in the range of 20-100 °C), its stiffness modulus is 75.9 kN/mm², and its elastic modulus is 196 kN/mm². In addition, the alloy wire has an elongation of more than 30%, a tensile strength of 550 MPa, and a yield strength of 220 MPa.

Incoloy 825 Wire is widely used in applications such as culture tanks, centrifuges and biosensors. It has excellent corrosion resistance and high temperature stability, and can withstand chemical environments and high temperature conditions. The alloy wire can be used to manufacture corrosion-resistant containers, centrifuge parts, electrodes and connecting wires for biosensors, etc., providing reliable material solutions for the fields of bioprocessing and life sciences.

To sum up, Incoloy 825 Wire is an alloy wire widely used in culture tanks, centrifuges, biosensors and other fields. With its excellent physical and mechanical properties, as well as corrosion resistance and high temperature stability, it can meet the needs of bioprocessing and life science fields and provide reliable material support for related applications.

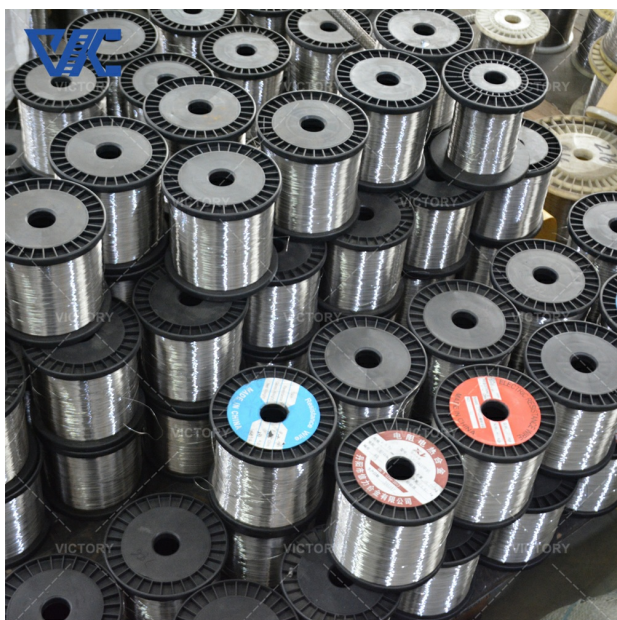
Parameter:

Chemical Composition (%)									
C	Si	Mn	S	Mo	Ti	Cr	Ni	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	≥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

Mechanical Properties				
Status	Tensile Strength (Rm N/mm ²)	Yield strength (RP0.2N/mm ²)	Elongation(A5%)	HB
Solution treatment	550	220	30	≤200

Incoloy 825 (NS142) similar trademark			
UNS	Trademark	JIS	W.Nr
N08825	Incoloy825	NCF825	2.4858



Shape	Size(mm)
Wire	0.5-7.5
Rod/Bar	8.0-200
Strip	(0.5-2.5)*(5-180)
Tube	custom made
Plate	custom made

Characteristic:

Corrosion resistance: Incoloy 825 alloy wire exhibits excellent corrosion resistance and can resist corrosion of biological fluids, chemicals and oxidizing media on bioengineering equipment.

Biocompatibility: This alloy wire has good biocompatibility, is non-toxic and non-irritating to biological tissues, and will not cause allergies or rejection reactions.

Temperature stability: Incoloy 825 alloy wire has good high-temperature stability and can withstand the stress and pressure in high-temperature environments during bioengineering processes.

Strength and hardness: Incoloy 825 alloy wire has high strength and hardness and is suitable for manufacturing mechanical components in bioengineering equipment.

Advantage:

Corrosion resistance: Incoloy 825 alloy wire has excellent corrosion resistance in bioengineering, which can extend the service life of equipment and improve its stability and reliability.

Biocompatibility: This alloy wire has good biocompatibility, which can reduce adverse effects on organisms and make bioengineering equipment safer and more reliable.

Temperature adaptability: Incoloy 825 alloy wire is able to maintain its performance over a wide temperature range and is suitable for different temperature conditions in bioengineering processes.

Excellent mechanical properties: Incoloy 825 alloy wire has good strength and hardness and can withstand the mechanical stress and pressure in bioengineering equipment, improving the reliability of the equipment.

Specific applications:

Bioreactors and culture tanks: Incoloy 825 alloy wire can be used to manufacture equipment such as bioreactors and culture tanks to resist corrosion of equipment by biological fluids and chemicals, and ensure the stability and controllability of the bioengineering process.

Mass Transfer Equipment: Suitable for manufacturing mass transfer equipment such as membrane separators and centrifuges to provide corrosion resistance and temperature stability.

Biosensors and Probes: Can be used to manufacture biosensors and probes for the detection and monitoring of biomolecules and chemicals in bioengineering processes.

Other relevant knowledge points:

Cleaning and Disinfection: In bioengineering equipment manufactured with Incoloy 825 alloy wire, proper cleaning and disinfection procedures are crucial to ensure their hygiene and safety.

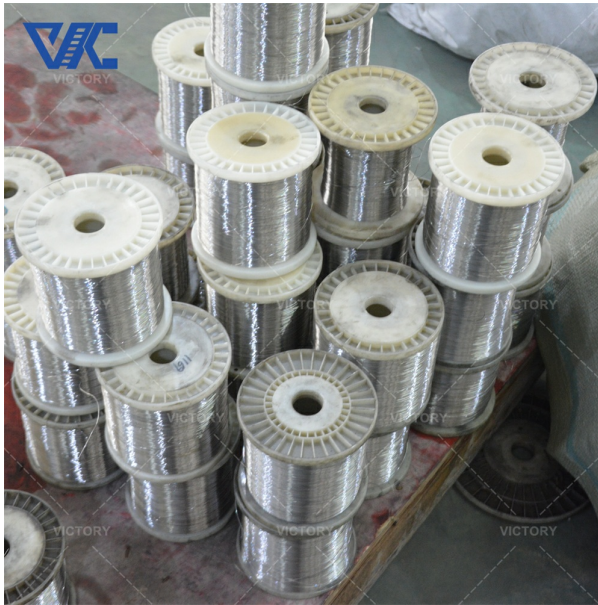
Standards and specifications: During the manufacturing process of bioengineering equipment, follow applicable standards and specifications, such as cGMP (Good Manufacturing Practice), etc., to ensure product quality and compliance.

contact us
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Oem service:

Welcome customized size

We are experience factory for OEM&ODM service



Q & A:

Q: Can Incoloy 825 Wire be customized to specific requirements?

A: Yes, Incoloy 825 Wire can be customized to meet specific requirements. This includes customization of wire diameter, length, surface finish, and even the production of custom wire profiles or shapes to suit the unique needs of different applications.

Q: What is the lead time for customizing Incoloy 825 Wire?

A: The lead time for customizing Incoloy 825 Wire may vary depending on the specific customization requirements and the order volume. It is recommended to contact the manufacturer or supplier to discuss the customization details and obtain an accurate estimate of the lead time.



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