



## Marine Engineering Incoloy 825 Wire Nickel Alloy With Higher Intensity

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: Offshore Platforms, Subsea Pipelines, Valves, Ocean Heat Exchangers
- Coefficient Of Expansion:  $14.0 \mu\text{m/m } ^\circ\text{C}$  (20 – 100°C)
- Modulus Of Rigidity: 75.9 KN/mm<sup>2</sup>
- Density (g/cm<sup>3</sup>): 8.14
- Modulus Of Elasticity: 196 KN/mm<sup>2</sup>
- Elongation ( $\geq$  %): 30%
- Melting Point: 1400°C
- Tensile Strength: 550 MPa
- Yield Strength: 220 MPa
- Condition: Hard / Soft
- Surface: Bright, Oxided



### More Images



for more products please visit us on [victory-alloy.com](http://victory-alloy.com)

## Product Description

### Introduction:

Incoloy 825 Wire is an alloy wire composed of elements such as nickel, iron, chromium and molybdenum. This alloy wire has excellent performance characteristics and is suitable for a variety of applications in the field of marine engineering.

Key parameters for the alloy wire include a nickel content between 38-46% and a density of 8.14 g/cm<sup>3</sup>. Its linear expansion coefficient is 14.0  $\mu\text{m/m}\cdot\text{C}$  (in the range of 20-100  $^{\circ}\text{C}$ ), its stiffness modulus is 75.9 kN/mm<sup>2</sup>, and its elastic modulus is 196 kN/mm<sup>2</sup>.

Incoloy 825 Wire has a wide range of applications in the field of marine engineering. It is used in critical equipment such as offshore platforms, subsea pipelines, valves and marine heat exchangers. The alloy wire has excellent corrosion resistance and can resist corrosion and oxidation in the marine environment, while also possessing good mechanical properties. It has an elongation of over 30%, a tensile strength of 550 MPa, and a yield strength of 220 MPa, allowing it to withstand high stresses and pressures while maintaining material integrity and reliability.

To sum up, Incoloy 825 Wire is an alloy wire widely used in the field of marine engineering. It has excellent corrosion resistance, excellent mechanical properties and suitable physical parameters, making it an ideal choice for critical equipment such as offshore platforms, subsea pipelines, valves and marine heat exchangers.

### 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 <sup>2</sup> )	Yield strength (RP0.2N/mm <sup>2</sup> )	Elongation(A5%)	HB
Solution treatment	550	220	30	≤200

Incoloy 825 (NS142) similiaer 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 is able to resist corrosion in seawater, salt spray and other marine environments.

**Resistance to marine corrosion:** This alloy wire has the characteristics of resistance to marine corrosion and can be used stably for a long time in marine engineering.

**High temperature stability:** Incoloy 825 alloy wire can maintain stable performance in high temperature marine environments and has excellent high temperature strength and durability.

### Advantage:

**Corrosion resistance:** Incoloy 825 alloy wire has excellent resistance to corrosion in marine environments such as seawater and salt spray, extending the service life of marine engineering equipment.

**Marine corrosion resistance:** This alloy wire can be used stably for a long time in harsh marine environments, reducing maintenance and replacement costs.

**High strength and durability:** Incoloy 825 alloy wire has excellent high-temperature strength and durability, able to cope with various stresses and challenges in marine engineering.

### Specific applications:

**Offshore platform:** Used to manufacture structures and components of offshore platforms, such as support structures, pipes and valves of offshore platforms, to resist corrosion and high temperature effects of the marine environment.

**Offshore oil and gas extraction:** Suitable for the manufacture of offshore oil and gas extraction equipment, such as subsea pipelines, valves and wellhead equipment, to provide reliable corrosion resistance.

**Marine heat exchangers and condensers:** Used to manufacture marine heat exchangers and condensers to achieve efficient heat transfer and cooling in marine environments.

### Other relevant knowledge points:

**Material selection:** In marine engineering, selecting the right materials is critical to the performance and longevity of the equipment. Incoloy 825 alloy wire is an ideal choice due to its excellent corrosion resistance and adaptability to marine environments.

**Equipment maintenance:** Regularly inspect and maintain marine engineering equipment and its components, including Incoloy 825 alloy wire, to ensure its performance and longevity and prevent potential failures.

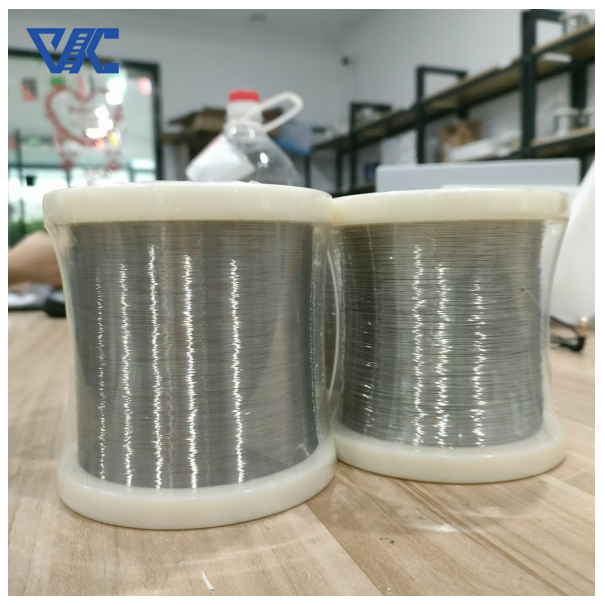
### contact us

**email:**[victory@dlx-alloy.com](mailto:victory@dlx-alloy.com)

Oem service:

Welcome customized size

We are experience factory for OEM&ODM service



**Changzhou Victory Technology Co., Ltd**



+8619906119641



victory@dlx-alloy.com



victory-alloy.com

NO.32 West Taihu Road, Xinbei District, Changzhou, Jiangsu