

# Marine Industry Nickel Alloy ASTM B805 Incoloy 925 Wire With High Strength

# Basic Information

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity:
- Price:

**Our Product Introduction** 

- Packaging Details:
- Delivery Time:
- Payment Terms:
- Supply Ability:

	Incoloy 925
<i>'</i> :	5 Kg
	Negotiable
	Plastic film or waterproof woven bag inside, wire packed in spool put into carton,coil wire or strip wire put into wooden case
	5-21 days
	L/C, T/T, Western Union, MoneyGram

- L/O, 1/1, Western Onion, Moneyora
- 300 tons per month

China

Victory

CE,ROHS,ISO 9001



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BLX

版之信码技有限公司

# **Product Specification**

• Name:	Incoloy 925 Wire
<ul> <li>Material:</li> </ul>	Ni Fe Cr Mo Ti Al
<ul> <li>Nickel(Min):</li> </ul>	42-46%
<ul> <li>Application:</li> </ul>	Marine Industry
<ul> <li>Tensile Strength:</li> </ul>	172 Mpa
• Yield Strength:	124 Mpa
<ul> <li>Density (g/m3):</li> </ul>	8.08 G/cm3
<ul> <li>Elongation (≥ %):</li> </ul>	27%
Condition:	Hard / Soft
• Surface:	Bright,Oxided
<ul> <li>Melting Point:</li> </ul>	1311-1366°C
• Hardness:	336 HV
<ul> <li>Highlight:</li> </ul>	1.4876 UNS N08810, Incoloy

1.4876 UNS N08810, Incoloy UNS N08810, Hard Oxidized iron chromium aluminum alloy



# More Images



# **Product Description**

#### Introduction:

Incoloy 925 alloy wire has a wide range of applications in the marine industry. The alloy wire is composed of elements such as nickel, iron, chromium, molybdenum, titanium and aluminum. It has excellent corrosion resistance and can resist corrosion in seawater and chloride ion erosion. It is widely used in various equipment and structures in the marine industry, such as offshore platforms, subsea pipelines, propellers, and marine mining equipment.

Incoloy 925 alloy wire has a tensile strength of 172 MPa and a yield strength of 124 MPa, capable of withstanding high stresses and loads in marine environments. At the same time, the alloy wire has excellent ductility and can maintain stability under stress and deformation. With a density of 8.08 g/cm3, it is relatively light and helps reduce the weight of marine structures.

The alloy wire is available in hard or soft condition, with a choice of bright or oxidized surface treatments. Its melting point ranges from 1311°C to 1366°C, making it stable in high-temperature marine environments. In addition, Incoloy 925 alloy wire has good corrosion resistance and wear resistance, and can cope with seawater erosion, particle abrasion and corrosion of marine organisms in the ocean.

In summary, Incoloy 925 alloy wire is an important material choice in the marine industry, which can meet the high corrosiveness, high temperature and high pressure requirements of the marine environment and ensure the safety and reliability of marine equipment and structures.

## **Parameter:**

# **Chemical Composition Requirement**

The Chemical Composition of Incoloy 925, %		
Nickel	42.0-46.0	
Chromium	19.5-22.5	
Iron	≥22.0	
Molybdenum	2.5-3.5	
Copper	1.5-3.0	
Titanium	1.9-2.4	
Alumium	0.1-0.5	
Manganese	≤1.00	
Silicon	≤0.50	
Niobium	≤0.50	
Carbon	≤0.03	
Sulfur	≤0.30	

#### **Mechanical Properties of Incoloy 925**

Tensile Strength, min.		Yield Strength, min.		Elongation, min.	Hardness, min.
Мра	ksi	Мра	ksi	%	HRC
1210	176	815	118	24	36.5

## **Physical Properties of Incoloy 925**

Density	Melting Range		Spec	ific Heat	Electrical Resistivity
g/cm3	°F	°C	J/kg.k	Btu/lb. °F	μΩ∙m
8.08	2392-2490	1311-1366	435	0.104	1166

#### Product Forms and Standards

Product Form	Standard
Rod, bar & Wire	ASTM B805
Plate, sheet & strip	ASTM B872
Seamless pipe and tube	ASTM B983
Forging	ASTM B637

# **Characteristic:**

Corrosion resistance: Incoloy 925 alloy wire shows excellent corrosion resistance in the marine environment. It can resist the erosion of equipment by salt, humidity and oxidizing media in seawater, extending the service life of equipment.

Resistance to marine corrosion: This alloy wire has good resistance to marine corrosion and can cope with corrosion in seawater and corrosion in marine climate conditions.

High strength and hardness: It has excellent mechanical strength and hardness and can withstand high stress and pressure in marine environments.

Resistance to stress corrosion cracking: Incoloy 925 alloy wire is resistant to stress corrosion cracking and is suitable for stress corrosion environments in the marine industry.

#### Advantage:

Corrosion resistance: Incoloy 925 alloy wire can resist corrosive media in the marine environment, reduce equipment corrosion damage and maintenance frequency, and improve equipment reliability and stability.

Resistance to marine corrosion: This alloy wire can resist corrosion in seawater and is suitable for applications in offshore equipment and marine structures, such as offshore platforms, ships and submarine pipelines.

Strength and hardness: It has good mechanical strength and hardness and can withstand high stress and pressure in the marine environment, improving the durability of the equipment.

Resistant to stress corrosion cracking: Incoloy 925 alloy wire exhibits resistance to stress corrosion cracking in marine

industrial environments, increasing the service life of equipment.

## **Specific applications:**

Marine structures: Incoloy 925 alloy wire can be used to manufacture structural components in the marine industry, such as offshore platforms, offshore wind power facilities and marine bridges.

Corrosive media treatment: Suitable for manufacturing equipment for processing corrosive media in the marine industry, such as seawater desalination equipment, ocean pumps and pipelines, etc.

Offshore oil development: It can be used in the manufacturing of key components in offshore oil development and drilling platforms, such as wellhead devices, pipes and valves, etc.

Marine ships: Suitable for the manufacturing of key components in marine ships, such as hull structures, propulsion systems and corrosive medium treatment equipment.

# Other relevant knowledge points:

Marine industry: Marine industry refers to the comprehensive industrial field that utilizes marine resources for development and utilization. It covers many aspects such as marine energy development, marine mineral resource mining, marine fisheries, marine transportation, and marine engineering construction.

Corrosive media: There are various corrosive media in the marine environment, such as salt, humidity, oxides and acidic substances in seawater, etc. These media are highly corrosive to metal equipment, so it is crucial to use materials with excellent corrosion resistance in the marine industry.

Stress corrosion cracking: Stress corrosion cracking refers to the phenomenon of crack propagation in metal materials in an environment where stress and corrosive media exist at the same time. In the marine industry, stress corrosion cracking may lead to equipment failure and accidents due to the combined action of high stress and corrosive media.

## contact us

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