



High Purity Nickel Wire 99.98% N4/N6/Ni200/Ni201 Russian Pure Nickel Wire

Our Product Introduction

for more products please visit us on victory-alloy.com

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Model Number: Ni200 Ni201
- Minimum Order Quantity: 5 Kg
- Price: 5 - 99 kilograms US\$45.00
- 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: 7 to 20 Days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month



Product Specification

- Standard: ASTM B164, DIN 17752, JIS NW2200
- Grade Type: N4, N6, Ni200, Ni201
- Material: Ni
- Ni(min): 99%
- Melting Point: 1435-1446°C
- Elongation (≥ %): 35%
- Shape: Wire
- Ultimate Strength (≥ MPa): 462
- Application: Battery Pack, Electric Apparatus, Computers
- Size: 0.025-10mm, Can Customized
- Technique: Cold Rolled, bending, cutting, decoiling
- Density(g/cm3): 8.9



More Images



Product Description

Product Description:

High-purity pure nickel wire is a wire-shaped product made of high-quality nickel material. Pure nickel wire has outstanding performance characteristics, including excellent corrosion resistance, high temperature stability, good electrical conductivity and mechanical strength.

It is available in a wide range of diameters and can be customized according to needs and can be used in electronics, electrical, heating, automotive, chemical and medical fields. Pure nickel wire is widely used in the manufacture of resistors, inductors, heaters, fuel nozzles, medical equipment and other products. It can also be used in chemical equipment, catalyst supports and electrolytic cells. Manufacturers can customize characteristics such as diameter, length, chemical composition and surface treatment of pure nickel wire according to customer requirements. In addition, pure nickel wire has excellent corrosion resistance and can remain stable in high temperatures and corrosive environments. It also has a low linear expansion coefficient and good resilience. Pure nickel wire meets the needs of high-

Our Product Introd

demand scenarios in various fields with its excellent quality and customization advantages.



Oxidation reaction:

Under high temperature and strong oxidizing conditions, pure nickel wire will undergo oxidation reactions. The specific oxidation reaction depends on the type of oxidant, temperature and the interaction between the oxidant and pure nickel.

Under common atmospheric conditions, pure nickel wire reacts with oxygen to form nickel oxide (NiO). This oxidation reaction usually occurs at high temperatures, especially to form an oxide layer on the surface of the nickel wire. The thin layer formed by nickel oxide can provide some corrosion resistance and oxidation protection, but under extreme conditions, such as high temperature and the presence of strong oxidants, the nickel oxide layer may thicken further.

When pure nickel wire is exposed to steam or the presence of water, a steam oxidation reaction occurs. This reaction results in the formation of a mixture of nickel hydroxide (Ni(OH)₂) and nickel oxide (NiO) on the surface of the nickel wire. This oxide layer is usually gray or green in color and has better corrosion resistance.

In some special oxidizing environments, such as gases containing sulfide or chloride, pure nickel wire may undergo oxidation reactions of sulfide or chloride. These reactions lead to the

formation of corresponding sulfide or chloride oxides on the surface of pure nickel wire.

It should be noted that oxidation reactions of pure nickel wire may negatively affect its performance and application. The formation of oxide layers can lead to increased resistance, reduced electrical conductivity, and changes in mechanical properties of the material. Therefore, the interaction of pure nickel wire with oxidants needs to be considered in specific applications, and appropriate protective measures or other materials must be selected to protect the pure nickel wire from the effects of oxidation.

Influence:

The oxide layer of pure nickel wire will affect its conductive properties. Normally, pure nickel is a good electrical conductor, but when an oxide layer forms on the surface of pure nickel, the conductive performance may be affected, mainly in the following aspects:

Increased resistance: The formation of an oxide layer increases the resistance of pure nickel wire. The oxide layer itself is an insulator and has a lower electrical conductivity than pure nickel. Therefore, when an oxide layer is present, the flow of electrical current in a pure nickel wire is impeded, resulting in increased resistance.

Reduced conductive paths: The oxide layer will form an insulating layer on the surface of the pure nickel wire, which will reduce the effective conductive path between the pure nickel wire and other conductors. The reduction of the conductive path will cause the flow of electric current in the pure nickel wire to be restricted, thereby reducing the conductive performance.

Increased interface resistance: There is usually a certain contact resistance at the interface between the oxide layer and pure nickel. Contact impedance is the resistance encountered when current flows across an interface and can cause difficulties in current transmission. Therefore, the presence of the oxide layer will increase the contact resistance between pure nickel wire and other conductors, further affecting the conductive performance.

It should be noted that the degree of influence of the oxide layer on the conductive properties of pure nickel wire depends on the thickness and quality of the oxide layer. A thin, uniform oxide layer has relatively little impact on conductive properties, while a thicker or uneven oxide layer may cause a larger increase in resistance and a decrease in conductive properties.

Technical Parameters:

Specifications	Values
Product name	Pure Nickel Wire
Ni(min)	99%
Grade	N4,N6,Ni200,Ni201
Size	0.025-10mm
Shape	Wire
Hardness	S,1/4H,1/2H,3/4H,H
Melting Point	1435-1446°C
Elongation (≥ %)	35%
Resistance (μΩ.m)	15
Application	Industry,Electronic

Grade	Ni+Co	Cu	Si	Mn	C	Mg	S	P	Fe
N4	99.8	0.015	0.03	0.002	0.01	0.01	0.001	0.001	0.04
N6	99.6	0.10	0.10	0.05	0.10	0.10	0.005	0.002	0.10
Ni201	≥99.0	≤0.25	≤0.35	≤0.35	≤0.02	/	≤0.01	/	≤0.40
Ni200	≥99.2	≤0.25	≤0.35	≤0.35	≤0.15	/	≤0.01	/	≤0.40

[For more details, pls directly contact us.](#)

Features:

Product Name: Nickel Wire

Material: Ni

Standard: ASTM B164, DIN 17752, JIS NW2200

Ultimate Strength (≥ MPa): 462

Product name: Pure Nickel Wire

Grade: N4,N6,Ni200,Ni201

Product Features:

Pure nickel wire with a material of Ni

Complies with ASTM B164, DIN 17752, JIS NW2200 standards

Ultimate strength of at least 462 MPa

Available in various grades: N4, N6, Ni200, Ni201

Diameter options: 0.025 mm, 0.05 mm, 0.1 mm

Packing and Shipping:

Packaging and Shipping of Nickel Wire

Our Nickel Wire is packaged and shipped with utmost care to ensure its safe and secure delivery to our customers.

Packaging:

The Nickel Wire is first wrapped in a protective layer, such as plastic or cardboard, to prevent any damage during transportation.

It is then placed in a sturdy and durable box, which is sealed to prevent any moisture or dust from entering.

The box is marked with clear and visible labels indicating the product name, size, and quantity.

For bulk orders, the Nickel Wire is packaged in large, secure containers that are suitable for transportation by land, sea, or air.

Shipping:

We offer various shipping options for our customers to choose from:

Domestic shipping within the United States is typically done through ground transportation, with estimated delivery times of 3-5 business days.

For international shipping, we work with trusted carriers to ensure timely and efficient delivery.

Customers can also opt for expedited shipping for urgent orders, with delivery times varying based on location and shipping method chosen.

All orders are tracked and customers will receive a tracking number once their order has been shipped.

We also offer the option for customers to arrange for their own shipping and pick-up from our warehouse.

At Nickel Wire, we strive to provide the best packaging and shipping services to ensure our customers receive their products in pristine condition and on time.

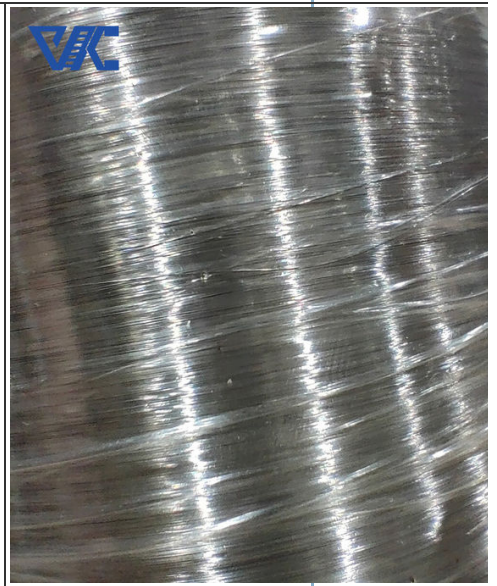
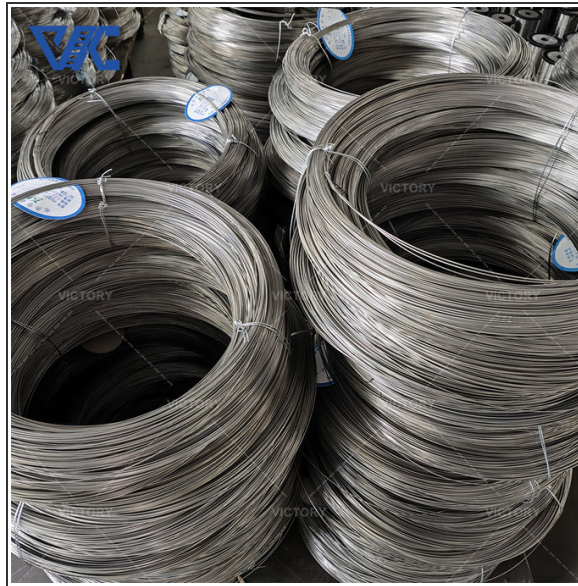
contact us

email:victory@dlx-alloy.com

Oem service:

Welcome customized size

We are experience factory for OEM&ODM service



FAQ:

What is the resistivity of pure nickel wire?

Pure nickel wire has a resistivity of approximately $6.84 \times 10^{-8} \Omega \cdot m$ and has good conductive properties in electronic and electrical applications.

How does pure nickel wire respond to temperature changes?

Pure nickel wire responds quickly to temperature changes and has a low temperature coefficient, making it suitable for applications requiring rapid heating or temperature control.

What is the surface finish of pure nickel wire?

Pure nickel wire is usually surface treated to have a high surface finish and smoothness.



Changzhou Victory Technology Co., Ltd



+8619906119641



victory@dlx-alloy.com



victory-alloy.com

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