



# High Purity UNS N02200 Pure Nickel Wire 0.025-10mm Customized

'e

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
<ul> <li>Supply Ability:</li> </ul>	300 tons per month



### **Product Specification**

Rasic Information

Standard:	ASTM B164, DIN 17752, JIS NW2200
Grade Type:	N4, N6, Ni200, Ni201
Material:	Ni
• Ni(min):	99%
Melting Point:	1435-1446°C
<ul> <li>Elongation (≥ %):</li> </ul>	35%
Shape:	Wire
<ul> <li>Ultimate Strength (≥ MPa):</li> </ul>	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:

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

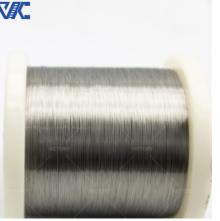
Pure nickel wire is available in a wide range of diameters and can be customized according to customer needs. It is widely used in electronics, electrical, heating, automotive, chemical and medical fields. Pure nickel wire can be used to manufacture resistors, inductors, heaters, fuel nozzles, medical equipment and other products, as well as 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 good 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, with its

#### **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.

#### Advantages:

Pure nickel wire has certain characteristics compared with other metals in terms of electrical conductivity. Here are some comparisons to some common metals:

Electrical conductivity: The electrical conductivity of pure nickel wire is relatively high, but slightly lower than that of silver, copper and other metals. Silver is the best conductive metal and has the highest electrical conductivity. Copper is also an excellent conductive material, its conductivity is second only to silver. The electrical conductivity of pure nickel is slightly lower than that of copper and silver, but it is still at a relatively high level among metals.

Temperature coefficient: The resistivity of pure nickel wire changes with temperature. For some applications, the temperature dependence of resistivity is an important factor. Pure nickel has a higher temperature coefficient than silver and copper, which means its resistivity changes faster when the temperature changes.

Corrosion resistance: Pure nickel wire has good corrosion resistance, especially in strong acid and alkaline environments. This makes pure nickel wire advantageous in some special electronic, chemical and medical applications.

Magnetism: Pure nickel is a ferromagnetic material with high magnetic permeability. This gives pure nickel wire unique advantages in certain magnetic applications, such as motors, sensors, etc.

#### **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	С	Mg	S	Р	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	1	≤0.40

#### For more details, pls directly contact us.

#### Corrosion resistance:

Pure nickel wire has good corrosion resistance, which makes it very valuable in some special applications. Here are some important points about the corrosion resistance of pure nickel wire:

Acid resistance: Pure nickel wire shows good corrosion resistance in strong acid environments. It can resist many acidic media, such as sulfuric acid, hydrochloric acid, phosphoric acid, etc. This makes pure nickel wire widely used in the chemical industry and laboratory applications.

Alkali resistance: Pure nickel wire also has good alkali resistance. It can withstand the corrosion of strong alkaline media such as sodium hydroxide and potassium hydroxide. This makes pure nickel wire advantageous in preparing alkaline solutions, batteries, and other related applications.

Oxidation resistance: Pure nickel wire has good oxidation resistance at high temperatures. It resists oxidation, corrosion and erosion in high-temperature gas environments. This makes pure nickel wire widely used in high temperature applications, such as high temperature furnaces, heat treatment equipment, etc.

Salt corrosion resistance: Pure nickel wire has a certain resistance to salt corrosion. It can resist corrosion from seawater, chloride solutions and other salt-containing media, which makes pure nickel wire widely used in fields such as marine engineering, chemical processing and seawater desalination.

It should be noted that although pure nickel wire has good corrosion resistance, its corrosion resistance may be limited in some special corrosive environments, such as strongly oxidizing acids, fluoride solutions, etc.

### 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 are the applications of pure nickel wire in the medical field? Pure nickel wire is commonly used in the medical field to manufacture implantable medical devices, surgical instruments and medical wires, etc. It has biocompatibility and corrosion resistance

How is pure nickel wire transported?

Pure nickel wire can be transported by land, sea or air transport, the specific choice depends on factors such as distance, speed and safety.

How strong and ductile is pure nickel wire?

Pure nickel wire has high strength and good ductility, and can adapt to various processing and forming requirements.

