Nickel 200 Pure Nickel Strip / Nickel 201 Plated Strip

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Model Number: Ni200 Ni201
- Minimum Order Quantity: 2 Kg
- Price: 1 - 49 kilograms US$35.00
- 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

- Type: Pure Nickel Strip
- Density (g/cm3): 8.9 G/cm3
- Melting Point(°C): 1435-1446 °C
- Condition: Bright,soft
- Surface: Bright
- Material: Nickel
- Material Purity: >99.9%
- Conductor: Pure Nickel Connector
- Metal: Nickel
- Ni(min): 99.5%
- Application: Chemical Industry Battery Assembly
- Highlight: **Nickel 200 Pure Nickel Strip**, **Pure Nickel Strip**, **Nickel 201 Plated Strip**

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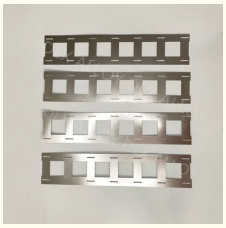

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Our Product Introd

Product Description

Product Description:

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Pure nickel belt is a belt-shaped material with relatively high purity nickel as its main component. It has excellent physical and chemical properties and is one of the important materials widely used in many industries. Pure nickel strips are usually prepared by cold rolling or hot rolling processes to obtain different performance and size requirements.
Pure nickel ribbon has a variety of applications in electronics, aerospace, chemical industry, energy and other fields. In the electronics field, pure nickel strips are often used to make resistors, wires, contact materials, etc. Its high electrical conductivity and excellent corrosion resistance make it one of the ideal materials for electronic components.
In the aerospace field, pure nickel strips are widely used to manufacture high-temperature components, such as turbine blades, combustion chamber wall panels, etc. Because pure nickel belts have good high-temperature strength and oxidation resistance, they can maintain stable performance in extreme high-temperature environments, ensuring the safe and reliable operation of aerospace equipment.
In the chemical industry, pure nickel strips are often used to manufacture corrosion-resistant components for chemical equipment. Its excellent corrosion resistance enables it to withstand the erosion of various corrosive media, such as acids, alkalis, salt solutions, etc. The application of pure nickel belts in chemical equipment can extend the service life of the equipment and reduce maintenance costs.
In the energy field, pure nickel ribbons are often used to make electrode materials for fuel cells. Its high electrical conductivity and excellent catalytic properties make it an important component of fuel cells, helping to improve fuel cell efficiency and performance.

Preparation process of pure nickel strip:

Cold rolling process: Cold rolling is a strip material made from hot-rolled plates through multiple passes of cold rolling. First, pure nickel is heated to an appropriate temperature for hot rolling, and then through a series of cold rolling processes, the sheet is gradually thinned and elongated into a strip. The cold rolling process can produce pure nickel strips with high purity, fine surface finish and excellent mechanical properties.
Hot rolling process: Hot rolling is a strip material formed by processing pure nickel materials heated to high temperatures through a series of rolling processes. During the hot rolling process, pure nickel materials are fed into the hot rolling mill, and after continuous rolling and stretching, strip materials are finally obtained. The hot rolling process can improve the strength and plasticity of pure nickel strips and is suitable for applications such as manufacturing high-temperature components and process equipment in corrosive environments.
Electrolysis process: The electrolysis process is to deposit pure nickel on the substrate through electrolysis to form a pure nickel strip. First, prepare a pure nickel solution and use it as the anode, while the substrate serves as the cathode. Pure nickel is deposited on the substrate through electrolysis to form a pure nickel strip. The electrolysis process can control the thickness and uniformity of pure nickel strips and is suitable for preparing thinner pure nickel strips.
Welding process: Pure nickel plates are welded into strips by welding method. Common welding methods include resistance welding, laser welding, arc welding, etc. The welding process can connect multiple pure nickel plates together to form strip materials, which is suitable for preparing wider or longer pure nickel strips.

These preparation processes can be used alone or in combination, and the appropriate process can be selected according to different needs and application scenarios. Parameter control and process optimization during the preparation process play an important role in the performance and quality of the final pure nickel strip.

Electrolysis process:

In the preparation process of pure nickel strips, the electrolysis process is one of the methods to obtain the highest purity. Through an electrolysis process, nickel ions can be deposited on the substrate from a pure nickel solution to form a pure nickel ribbon. This method can achieve higher purity because the selective deposition of ions can be controlled during the electrolysis process, thereby reducing the presence of impurities.
The purity of the electrolysis process is affected by many factors, such as the composition of the electrolyte, temperature, current density, etc. Selecting appropriate electrolytes and optimizing process parameters can improve the purity of pure nickel strips. In addition, the electrolytic process also enables the preparation of thinner pure nickel strips because the thickness and uniformity of deposition can be controlled.
It should be noted that different preparation processes may have different requirements and limitations in practical applications. Therefore, when selecting a preparation process, factors such as purity, cost, production efficiency, and product requirements need to be comprehensively considered to determine the most appropriate method.

Effect of electrolyte on purity:

The composition of the electrolyte has an important influence on the purity in the pure nickel strip preparation process. Here are some of the main aspects of how electrolyte composition affects purity:
Ion concentration: The concentration of nickel ions in the electrolyte has a direct impact on purity. Higher nickel ion concentrations promote more nickel deposition on the substrate, thereby improving purity. Therefore, a higher nickel ion concentration helps to obtain a higher purity pure nickel ribbon.
Impurity ions: There may be other metals or impurity ions in the electrolyte, such as iron, copper, zinc, etc. These impurity ions may compete with nickel ions to be deposited on the substrate, resulting in the presence of impurities and reducing purity. Therefore, controlling the concentration of impurity ions in the electrolyte and taking appropriate methods to remove or reduce the impact of impurity ions can improve purity.
pH value: The pH value of the electrolyte also affects the purity. Different pH values may result in different deposition rates and deposition mechanisms, thus affecting purity. Generally speaking, higher pH values help to obtain higher purity pure nickel ribbons.
Additives: Some specific additives, such as complexing agents, surfactants, etc., can be added to the electrolyte to improve the deposition process and control purity. These additives can help improve purity by affecting deposition rate, deposition mechanism, and impurity control.
In summary, the composition of the electrolyte has an important impact on the purity of pure nickel strips. By selecting the appropriate electrolyte composition and performing process optimization and control, higher purity requirements can be achieved. In practical applications, appropriate electrolyte composition and process parameters need to be selected based on specific preparation requirements and purity standards.

Technical Parameters:

Attribute	Value
Application	Chemical Industry, Battery Assembly
Conductor	Pure Nickel Connector
Melting Point(℃)	1435-1446 ℃
Ultimate Strength (≥ MPa)	462
Power Or Not	Not
Type	Pure Nickel Strip

Material Purity	>99.9%
Purity	99.5%Min/ 99.9%Min(customized)
Elongation (≥ %)	45
Resistance (μΩ.m)	1.5

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

Material	18650/21700/26650/32650 nickel strip
Dimension	1P to 9P
Available Space	18.5mm,19mm, 19.5mm, 20.2mm
Usage	Use for 18650 battery pack
Package	Nickel strip in roll pack into carton
Physical properties	High temperature resistant, corrosion resistance,
Technical support	With imported stamping machine, Japanese Sodick, complete mold (more than 2000 sets of battery industry hardware mold), and can open mold independently.
Functions	Products are widely used in energy storage battery, new energy vehicles, electric bicycles, solar street lights, power tools and other energy products
Advantage	All materials are degreased and adopt the dry -punching technology to ensure that the product is clean.

H shape nickel strip: 1P, 2P 3P, 4P, 5P, 6P, 7P, 8P, 9P

Model	Thickness	Distance of two welding centers: 18.5mm (used for battery pack without battery spacer)	Distance of two welding centers: 19mm	Distance of two welding centers: 19.5mm	Distance of two welding centers: 20/20.25mm
		Width(mm)	Width(mm)	Width(mm)	Width(mm)
1P	0.15/0.2mm	8	8	8	8
2P		25.5/27	26.5/27	26.5/27	27
3P		44	46	46	47
4P		62.5	65.5	65.5	67
5P		81	85	85	87
6P		99.5	104.5	104.5	107
7P		118	124	124	127
8P		136.5	143.5	143.5	147
9P		155	163	163	167

H shape nickel strip

Model	Thickness	Width	Distance of two welding centers
1P	0.15/0.2mm	8	18.5mm
2P		23	
3P		39	
4P		55	
5P		71	

Type	Dimension(mm)	Cell spacing(mm)	Width	Dimension of the Square hole (mm)	Nickel Plated steel strip	Pure Nickel	Type of battery pack	
					Length for per Kg(m)		with holder	without holder
1P 18650 Nickel strip	0.15*7*18.4	18.4	7	-	128.3	112.6		√
	0.15*7*19	19		-	127.9	112.1	√	
	0.15*7*19.5	19.5		-			√	
	0.15*7*20.25	20.25		-	127.6	111.9	√	
2P 18650 Nickel strip	0.15*26*19(13.5*13.5)	19	26	12*12	47.2	41.4	√	
	0.15*27*19.5(12*14.5)	19.5	27	12*14.5	48.9	42.9	√	
	0.15*27*19.75(12.5*12.5)	19.75		12.5*12.5	47	41.2	√	
	0.15*27*20.25(13.5*13.5)	20.25		13.5*13.5	48.9	42.9	√	
2P 18650 Nickel strip	0.15*25.5*18.4(11*12.5)	18.4	25.5	11*12.5	48.9	42.9		√
Dislocation 2P 18650 Nickel strip	0.15*25.5*18.4(8*9.5)	18.4		8*9.5	41.1	36.1		√
Dislocation 2P 18650 Nickel strip	0.15*25.5*19.5(8*9.5)	19.5		8*9.5	38.6	33.8	√	
3P 18650 Nickel strip	0.15*44.5*18.4（11*12.5)	18.4	44.5	11*12.5	27.4	24		√
	0.15*45*19（12*12)	19	45	12*12	29.1	25.5	√	
	0.15*47.5*20.15（12.65*12.65)	20.15	47.5	12.65*12.65	27.4	24	√	
	0.15*47.5*20.25（13.5*13.5)	20.25		13.5*13.5	29.4	25.7	√	
4P 18650 Nickel strip	0.15*63*18.5（11*12.5)	18.5	63	11*12.5	21.6	18.9		√
	0.15*64*19（12*12)	19	64	12*12	21	18.4	√	
	0.15*67.95*20.15（12.65*12.65)	20.15	67.95	12.65*12.65	19.6	17.2	√	
	0.15*67.7*20.25（13.5*13.5)	20.25	67	13.5*13.5	21.3	18.7	√	
5P 18650 Nickel strip	0.15*83*19（12*12)	19	83	12*12	16.4	14.4	√	
	0.15*88.1*20.15（12.65*12.65)	20.15	88.1	12.65*12.65	19.7	17.3	√	
	0.15*87.9*20.25（13.5*13.5)	20.25	87.9	13.5*13.5	16.7	14.6	√	
6P 18650 Nickel strip	0.15*102*19（12*12)	19	102	12*12	13.5	11.9	√	
	0.15*108.25*20.15	20.15	108.25	12.65*12.65	12.6	11	√	
	0.15*108.1*20.25（13.5*13.5)	20.25	108.1	13.5*13.5	13.7	12	√	
7P 18650 Nickel strip	0.15*121*19（12*12)	19	121	12*12	11.5	10	√	
	0.15*128.4*20.15（12.65*12.65)	20.15	128.4	12.65*12.65	10.7	9.4	√	
	0.15*128.3*20.25（13.5*13.5)	20.25	128.3	13.5*13.5	11.6	10.2	√	
8P 18650 Nickel strip	0.15*140*19（12*12)	19	140	12*12	10	8.7	√	

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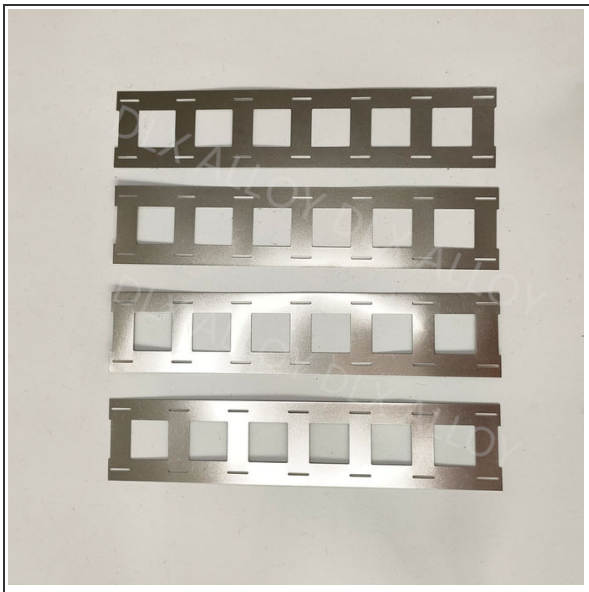

FAQ:

Can pure nickel belts be customized?
Yes, we provide customization services for pure nickel strips, custom production according to customers' specific requirements, including size, thickness, width and surface treatment.

How ductile is pure nickel tape?
Pure nickel strip has good ductility, can be cold and hot worked, and is suitable for various forming and processing processes.

What are the applications of pure nickel belts in the aerospace field?
Pure nickel strips are commonly used in the aerospace field to make components such as blades, combustion chambers and nozzles of gas turbine engines, as well as structural materials for satellites and spacecraft.

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