



## Electronics Industry Monel 400 Wire Nickel Alloy Wire With Good Electrical Conductivity

Our Product Introduction

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### Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Monel 400
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Special packaging requirements can also be accommodated. OEM is also acceptable.
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month



### Product Specification

- Product Name: Monel 400 Wire
- Material: Nickel Base Alloy
- Nickel(Min): 63%
- Density: 8.83 G/cm3
- Melting Point: 1300-1350°C
- Application: Electronics Industry
- Thermal Conductivity: 21.8 Watts/meter Kelvin
- Linear Expansion Coefficient:  $13.0 \times 10^{-6}$ /degrees Celsius
- Yield Strength: 240 MPa
- Tensile Strength: 520 MPa
- Elongation ( $\geq$  %): 40%
- Sureface: Bright,Oxided
- Highlight: **Monel Nickel Alloy Wire,  
Nickel Based Monel Wire,  
Corrosion Resistant Monel Wire**



### More Images



### Product Description

## Introduction:

Monel 400 wire is an alloy material widely used in the electronics industry. Composed of nickel and copper, it has excellent corrosion resistance and mechanical properties, so it is widely used in the manufacture of various electronic devices and components.

Monel 400 wire has excellent corrosion resistance and high resistance to a variety of corrosive media. It is resistant to acids, alkalis, salt water and other chemicals, making it excellent in electronic equipment with harsh operating environments. It is also resistant to corrosion under high temperature and pressure conditions, making it a reliable choice.

In addition, Monel 400 wire also has excellent mechanical properties. It has high strength and good plasticity, allowing it to maintain stable performance under various stress conditions. This makes it widely used in the electronics industry, including electronic components, connectors, wires and cables, etc.

Monel 400 wire also has good electrical and thermal conductivity, making it effective in conducting current and dissipating heat in electronic equipment. Its conductive properties are stable and can ensure the normal operation of electronic equipment.

## Parameter:

### Chemical composition:

Nickel (Ni): about 67%  
Copper (Cu): about 30%  
Iron (Fe): maximum 1.0%  
Manganese (Mn): 2.0% maximum  
Silicon (Si): maximum 0.5%

### Physical properties:

Density: 8.80 g/cm<sup>3</sup>  
Melting point: about 1300-1350°C  
Thermal conductivity: 21.8 W/(m·K)  
Thermal expansion coefficient: 13.9 μm/m·°C (in the range of 20-100°C)

### Mechanical behavior:

Yield strength (0.2% deviation): ≥ 240 MPa  
Tensile strength: ≥ 550 MPa  
Elongation: ≥ 40%

Item	Ni	Cu	Fe	Mn	C	Si	S
Monel 400	≥63	28-34	≤2.5	≤2	≤0.3	≤0.5	≤0.025

Item	Density	Melting point	Tensile Strength	Yield Strength	Elongation	HB
Monel 400	8.83 g/cm <sup>3</sup>	1300-1390°C	480	170	35%	≥331

Monel 400	Bar/Rod	Forging	Pipe	Sheet/Strip	Welding Wire
Standard	ASTM B164	ASTM B564	ASTM B165	ASTM B127	ErNiCu-7

## Advantage:

Corrosion resistance: Monel 400 has excellent corrosion resistance and has good corrosion resistance to many acid, alkali and salt solutions. It can resist corrosion from seawater, sulfuric acid, hydrochloric acid, chloride and other media, so it is very suitable for use in corrosive environments.

High strength: Monel 400 alloy wire has high strength and hardness, and can withstand high stress and mechanical load, giving it good durability in electronic devices.

Good electrical conductivity: Since the Monel 400 alloy contains a high proportion of copper, it has excellent electrical conductivity and can be used for components such as wires and connectors in electronic circuits.

Good processability: Monel 400 alloy wire is easy to process and shape, and can be processed into products of various shapes and sizes through cold working, hot working and welding processes.

Stability and high temperature resistance: Monel 400 has excellent stability in high temperature environments, maintaining its physical and chemical properties for a long time. It can function in high-temperature electronics and thermal processing applications.

## Application:

Monel 400 alloy wire has a wide range of applications in the electronics industry, including but not limited to the following:

Electronic circuits: Monel 400 alloy wire can be used to manufacture electronic circuit components such as wires, connecting wires and contacts. Its high conductivity and corrosion resistance make it an ideal choice.

Cable shielding: Due to its good conductivity and corrosion resistance, Monel 400 alloy wire can be used in cable shielding to reduce electromagnetic interference and improve cable performance.

Temperature sensor: Monel 400 alloy wire remains stable in high temperature environments, so it can be used to manufacture equipment such as temperature sensors and thermocouples for measuring and monitoring temperature.

Vacuum tubes: The high strength and corrosion resistance of Monel 400 alloy wire make it an ideal material for vacuum tubes, which are used in the manufacture of electronic vacuum equipment.

### contact us

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Oem service:

Welcome customized size

We are experience factory for OEM&ODM service



#### Q&A:

Q: Can Monel 400 wire be customized according to specific requirements?

A: Yes, Monel 400 wire can be customized to meet specific needs, including variations in diameter, length, surface finish, and packaging options.

Q: What are the typical customization options available for Monel 400 wire?

A: Typical customization options for Monel 400 wire include variations in diameter, temper, and surface finish. This allows the wire to be tailored for specific applications, ensuring optimal performance and compatibility with different manufacturing processes.



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