Electrical Equipment Nickel Copper Wire Monel400 Wire With High Strength

Our Product Introduction

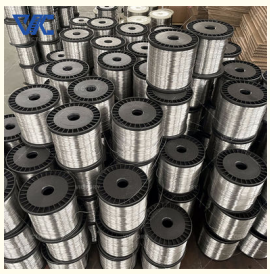
Basic Information

- 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
- Application: Electrical Equipment
- Melting Point: 1300-1350°C
- Thermal Conductivity: 21.8 Watts/meter Kelvin
- Linear Expansion Coefficient: 13.0 X 10^-6/degrees Celsius
- Yield Strength: 240 MPa
- Tensile Strength: 520 MPa
- Elongation (≥ %): 40%
- Sureface: Bright,Oxided
- Highlight: **Monel Nickel Alloy Wire**, **Nickel Based Monel Wire**, **Corrosion Resistant Monel Wire**

More Images



Product Description

Our Product Introduction

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

Introduction:

Monel 400 wire is an alloy material widely used in the field of electrical equipment. It is composed of nickel and copper and has excellent performance and characteristics, so it is widely used in the manufacture and use of electrical equipment.
Monel 400 wire has excellent corrosion resistance and can withstand acid, alkali, salt water and other chemical media. This corrosion resistance makes it ideal for use in electrical equipment, especially in harsh working environments. Whether exposed to moisture or chemicals, Monel 400 filament maintains its stable performance, extending the life of your equipment.
In addition, Monel 400 wire also has excellent electrical conductivity properties. It can effectively conduct electric current, allowing electrical equipment to operate normally. This conductive property is stable and reliable, meeting the requirements of a variety of electrical applications.
In addition to corrosion resistance and electrical conductivity, Monel 400 wire also has good mechanical properties. It has high strength and good plasticity and can withstand the stress and load in electrical equipment. This makes it widely used in the manufacture of critical components such as electrical connectors, insulator supports and conductors.

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/cm³
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/cm3	1300-1390℃	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

Characteristic:

Excellent electrical conductivity: Monel 400 alloy wire is composed of a high proportion of copper and has good electrical conductivity. It can be used for wires, connecting wires, windings and other components in electrical equipment.
Corrosion resistance: Monel 400 alloy wire has excellent corrosion resistance to acids, alkalis and salt solutions. It can resist corrosion from media such as seawater, sulfuric acid, hydrochloric acid and chloride, and is suitable for harsh working environments.
High strength and hardness: Monel 400 alloy wire has high strength and hardness, able to withstand high stress and mechanical loads, providing the durability and reliability required for electrical equipment.
High temperature resistance: Monel 400 alloy wire remains stable in high temperature environments and is suitable for high temperature electrical equipment and heat treatment applications.

Advantage:

Corrosion Resistance: Monel 400 alloy wire performs well in corrosive environments, extending the life of electrical equipment.
High conductivity: Due to the high content of copper, Monel 400 alloy wire has good conductivity, ensuring efficient and accurate signal transmission.
Processability: Monel 400 alloy wire is easy to process and form, and can meet the complex shape and size requirements of various electrical equipment.
Stability: Monel 400 alloy wire maintains stability in high temperature environments and has good mechanical and physical properties.

Application:

Wires and Cables: Monel 400 alloy wire can be used to manufacture high-performance wires and cables for power transmission, communications and data transmission.
Electronic components: Monel 400 alloy wire can be used to manufacture wires, windings and connectors for electronic components, ensuring stable current transmission and reliable connections.
Resistors and Heaters: Due to its excellent electrical conductivity and high temperature resistance, Monel 400 alloy wire can be used to manufacture resistors and heaters for electrical heating and control applications.
Electrical instrumentation: Monel 400 alloy wire can be used to manufacture sensors, measurement probes and cable shielding in electrical instrumentation, providing accurate and reliable measurement and monitoring functions.
In summary, Monel 400 alloy wire has a wide range of applications in the field of electrical equipment. Its high electrical conductivity, corrosion resistance, high strength, high temperature resistance, and good processability make it an ideal choice in the manufacturing of electrical equipment. Whether in the fields of power transmission, communications, data transmission or resistors, heaters, electrical instruments, etc., Monel 400 alloy wire can play an important role and provide stable and reliable performance.

contact us
email:victory@dlx-alloy.com
Oem service:
Welcome customized size
We are experience factory for OEM&ODM service

Q&A:

Q: How is the quality of Monel 400 wire tested?
A: The quality of Monel 400 wire is tested through various methods, including dimensional checks, mechanical testing, and corrosion testing. These tests ensure that the wire meets the required specifications for diameter, tensile strength, hardness, and corrosion resistance.

Q: What are the common corrosion testing methods for Monel 400 wire?
A: Common corrosion testing methods for Monel 400 wire include salt spray testing, immersion testing, and electrochemical testing.

Changzhou Victory Technology Co., Ltd

+8619906119641 victory@dlx-alloy.com victory-alloy.com

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