



Nuclear Industry N04400 Monel 400 Wire With Corrosion Resistance

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): 67%
- Density: 8.83 G/cm3
- Melting Point: 1300-1350°C
- Thermal Conductivity: 21.8 Watts/meter Kelvin
- Linear Expansion Coefficient: 13.0×10^{-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 filament has a wide range of applications in the nuclear industry. As a high-performance nickel-copper alloy wire, it has excellent corrosion resistance and radiation resistance, and can meet the strict requirements of the nuclear industry for material strength, corrosion resistance and reliability.

In the nuclear industry, materials need to be able to withstand extreme environmental conditions, including high temperatures, high pressures, highly corrosive media and radiation. Monel 400 wire has excellent corrosion resistance and can withstand the erosion of acidic, alkaline and salty media, including nuclear fuel, coolants and other chemicals. This makes it a key component in manufacturing nuclear reactors, such as nuclear fuel cladding, coolant pipes and valves.

Monel 400 silk also has good radiation resistance. In the nuclear industry, the radiation environment has a great impact on the performance of materials, and Monel 400 wire can maintain stable mechanical properties and durability in the radiation environment. Its radiation resistance makes it suitable for use in critical components in and around nuclear reactors, such as fuel elements, control rods and reactor pressure vessels.

Monel 400 wire also has good high temperature performance and mechanical properties. It can maintain stable mechanical properties and durability in high-temperature environments, providing reliable solutions for high-temperature applications in the nuclear industry.

Parameter:

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 ³	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

AMS Number	Alloy	Type	UNS	Cross Ref. Spec	Misc./Shape
AMS 4544 Plate	Monel 400	Nickel Copper	N04400	QQ-N-281	Plate
AMS 4544 Sheet	Monel 400	Nickel Copper	N04400	QQ-N-281	Sheet
AMS 4544 Strip	Monel 400	Nickel Copper	N04400	QQ-N-281	Strip
AMS 4574	Monel 400	Nickel Copper	N04400	-	Tubing
AMS 4675 Bar	Monel 400	Nickel Copper	N04400	ASTM B 164	Bar
AMS 4730	Monel 400	Nickel Copper	N04400	QQ-N-281	Wire
AMS 4731 Ribbon	Monel 400	Nickel Copper	N04400	-	Ribbon
AMS 4731 Wire	Monel 400	Nickel Copper	N04400	-	Wire



Shape	Size(mm)
Wire	0.15-7.5
Rod/Bar	8.0-200
Strip	(0.5-2.5)*(5-180)
Plate	custom made

Characteristic:

Corrosion resistance: Monel 400 alloy wire has excellent corrosion resistance in the nuclear industry and can resist corrosion in acidic media, seawater and high temperature and high pressure environments.

Resistance to stress corrosion cracking: Monel 400 alloy wire has high resistance to stress corrosion cracking and is suitable for stress corrosion environments in the nuclear industry.

High strength: With high tensile strength and yield strength, it can provide the structural strength and reliability required by the nuclear industry.

Good mechanical properties: Monel 400 alloy wire has good plasticity and processability, making it easy to manufacture complex-shaped nuclear industry components.

Advantage:

Corrosion resistance: The corrosion resistance of Monel 400 alloy wire in the nuclear industry enables it to operate stably for a long time in acidic and seawater environments, reducing equipment corrosion losses.

Resistance to stress corrosion cracking: Monel 400 alloy wire has high resistance to stress corrosion cracking and can be used in stress corrosion environments to improve the safety and reliability of equipment.

High temperature performance: Monel 400 alloy wire can maintain good strength and corrosion resistance in high temperature environments and is suitable for high temperature applications in the nuclear industry.

Long Life: Due to its corrosion resistance and high strength properties, Monel 400 alloy wire can provide long life and reliability for nuclear industry equipment.

Application:

Nuclear reactor components: Monel 400 alloy wire can be used to manufacture corrosion-resistant components in nuclear reactors, such as nuclear fuel cladding, nuclear fuel sensors, and pipes and valves in coolant circulation systems.

Nuclear fuel processing: Suitable for equipment and pipelines in the nuclear fuel processing process, such as corrosion-resistant components in uranium enrichment production and nuclear fuel reprocessing processes.

Nuclear waste treatment: It can be used in nuclear waste treatment equipment and pipelines, such as nuclear waste storage tanks and components of nuclear waste treatment systems.

Overall, Monel 400 alloy wire has excellent corrosion resistance, resistance to stress corrosion cracking, high strength and good mechanical properties in the nuclear industry. This makes it suitable for nuclear industry applications such as nuclear reactor components, nuclear fuel processing and nuclear waste disposal.

Monel 400 alloy wire can operate stably in harsh environments such as acid, seawater, high temperature and pressure, and provides the structural strength and durability required for equipment. It offers long life, resistance to corrosion, stress corrosion cracking and high temperature performance to improve the safety, reliability and performance of nuclear industry equipment.

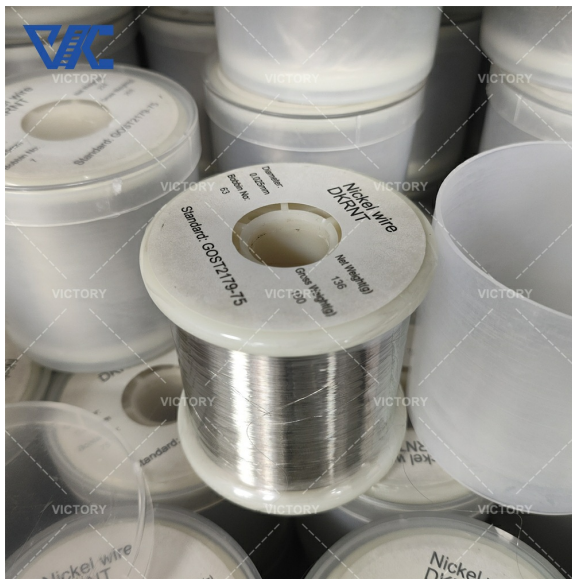
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Q & A:

Q: What is the quality of Monel 400 wire?

A: Monel 400 wire is of excellent quality, undergoing strict quality control measures to ensure compliance with industry standards.

Q: How reliable is Monel 400 wire in terms of quality?

A: Monel 400 wire is highly reliable, manufactured with precision and adherence to stringent quality standards, ensuring consistent performance and durability.



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