# Oil And Gas Industry Nickel Alloy Wire Monel 400 Wire With Resistant To Cracking

## **Basic Information**

. Place of Origin: China . Brand Name: Victory

CE,ROHS,ISO 9001 Certification:

Monel 400 Model Number: Minimum Order Quantity: 5 Kg • Price: Negotiable

• Packaging Details: Special packaging requirements can also be

accommodated. OEM is also acceptable.

• Delivery Time:

• Payment Terms: L/C, T/T, Western Union, MoneyGram

300 tons per month Supply Ability:



# **Product Specification**

• Product Name: Monel 400 Wire Nickel Base Alloy Material:

• Nickel(Min): 67% . Density: 8.83 G/cm3 Melting Point: 1300-1350°C

• Thermal Conductivity: 21.8 Watts/meter Kelvin Linear Expansion 13.0 X 10^-6/degrees Celsius

Coefficient:

• 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



#### Introduction:

Monel 400 wire has a wide range of applications in the oil and gas industry. As a high-performance nickel-copper alloy wire, it has excellent corrosion resistance, high temperature resistance and pressure resistance, and can meet the stringent requirements of the oil and gas industry for material strength, corrosion resistance and reliability.

In the oil and gas industry, materials need to be able to withstand extreme environmental conditions, including high temperatures, high pressures and highly corrosive media. Monel 400 wire has excellent corrosion resistance and can resist the erosion of acidic, alkaline and salty media, including acidic oil well fluids, high salinity water and hydrogen sulfide. This makes it ideal for manufacturing critical components such as oil and gas extraction equipment, pipes, valves and well casings.

In addition, Monel 400 wire also has good high temperature resistance. In the oil and gas industry, temperatures are often high, and Monel 400 wire maintains stable mechanical properties and durability in high-temperature environments. Its high melting point and thermal stability make it suitable for manufacturing key equipment such as high-temperature furnace tubes, heat exchangers and reactors.

#### Parameter:

Item	Ni	Cu	Fe	Mn	С	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	НВ
Monel 400	8.83 g/cm3	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 oil and gas industry and can resist corrosive substances such as acidic media, salt water, sulfides and acid gases.

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

High temperature performance: It has good high temperature strength and oxidation resistance, and can maintain stability and reliability in high temperature environments.

Good mechanical properties: Monel 400 alloy wire has good plasticity and processability, making it easy to manufacture various shapes of oil and gas industry components.

### Advantage:

Corrosion resistance: The corrosion resistance of Monel 400 alloy wire in the oil and gas industry enables long-term stable operation, reduces corrosion losses of equipment, and extends the service life of equipment.

Resistance to stress corrosion cracking. Monel 400 alloy wire has high resistance to stress corrosion cracking, ensuring the safe operation of equipment in high-stress environments.

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 oil and gas industry.

Good processability: Monel 400 alloy wire is easy to process and shape, and can be used to manufacture oil and gas industry parts of various shapes and sizes.

Oil extraction equipment: Monel 400 alloy wire can be used to manufacture corrosion-resistant parts in oil extraction equipment, such as oil well casings, pump rods and valves.

Petrochemical equipment: Suitable for corrosion-resistant medium transmission pipes, furnace tubes, heat exchangers and storage tanks in petrochemical equipment.

Natural gas processing equipment: It can be used in corrosive medium transmission pipelines, compressor components and valves in natural gas processing equipment.

Offshore oil and gas development: Suitable for submarine pipelines, drilling platforms, offshore platform equipment and seawater treatment systems in offshore oil and gas development.

Overall, Monel 400 alloy wire has excellent corrosion resistance, stress corrosion cracking resistance and high temperature performance in the oil and gas industry. It is resistant to corrosive substances such as acidic media, salt water, corrosive gases, etc., and is suitable for various applications in oil and gas extraction, processing and transportation.

Monel 400 alloy wire can be used to manufacture various parts and pipelines in oil extraction equipment, petrochemical equipment, natural gas processing equipment, and offshore oil and gas development. Its excellent corrosion resistance, stress corrosion cracking resistance and high temperature performance make it an important material choice in the oil and gas industry, providing equipment reliability, durability and performance.

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Q: What are the applications of Monel 400 wire?

A: Monel 400 wire finds applications in marine, chemical, and offshore industries for components, fasteners, and electrical

Q: What are the advantages of using Monel 400 wire in these applications?

A: Monel 400 wire offers excellent corrosion resistance, high strength, and good ductility, making it ideal for demanding environments where resistance to seawater, acids, and alkalis is required.



Changzhou Victory Technology Co., Ltd



