



## Chemical Processing Industry Nickel Alloy Wire Inconel 601 Wire With High Temperature 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: Inconel 601 wire
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Inconel 601 wire packed in Spool Carton box, Coil package with polybag, then in woodencase
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month



### Product Specification

- Product Name: Inconel 601 Wire
- Material: Ni Cr Fe
- Nickel(Min): 58%
- Application: Chemical Processing Industry
- Density: 8.11 G/cm3
- Tensile Strength: 550 MPa
- Yield Strength: 240 MPa
- Elongation (≥ %): 30%
- Melting Point: 1350 °C
- Thermal Expansion Coefficient: 13.2 X 10<sup>-6</sup>
- Sureface: Bright,Oxided
- Highlight: **corrosion resistant inconel alloy, high temperature resistant inconel alloy**



### More Images



### Product Description

## Introduction:

Inconel 601 alloy wire is a nickel-based alloy that has excellent high-temperature corrosion resistance and mechanical properties, making it widely used in the chemical processing industry.

The chemical processing industry involves various corrosive media, high temperature environments and chemical reactions. For these applications requiring high corrosion resistance and high temperature performance, Inconel 601 alloy wire provides an ideal solution. It can maintain stable performance at high temperatures, resist erosion from corrosive media, and has good mechanical properties.

## Characteristic:

**High temperature corrosion resistance:** Inconel 601 alloy wire performs well under high temperatures and corrosive media. It can resist the erosion of corrosive media such as sulfuric acid, nitric acid, alkali solutions, and chlorides, extending the service life of the equipment.

**Mechanical properties:** Inconel 601 alloy wire has good high temperature strength and resistance to stress corrosion cracking. It is able to withstand stress and thermal cycling in high temperature environments while maintaining high tensile strength and yield strength.

**Oxidation resistance:** Inconel 601 alloy wire forms a dense oxide film at high temperatures, providing effective anti-oxidation protection. This oxide film can prevent oxidation and corrosion of materials and maintain the stability and performance of the alloy wire.

## Advantage:

**High temperature performance:** Inconel 601 alloy wire can operate stably for a long time in high temperature environments and has excellent high temperature tolerance. It can withstand stress and thermal cycles at high temperatures and is not susceptible to oxidation, corrosion and high-temperature atmospheres.

**Corrosion resistance:** Inconel 601 alloy wire has good corrosion resistance to a variety of corrosive media, including strong acids, alkaline solutions and chlorides. This makes it an ideal material for chemical processing equipment handling corrosive media.

## Specific applications:

**Pickling equipment:** Inconel 601 alloy wire is often used in the manufacture of pickling equipment, such as pickling tanks and pickling pipes, to resist the erosion of strong acids.

**Corrosive gas treatment:** Inconel 601 alloy wire can be used to manufacture corrosive gas treatment equipment, such as reactors, pipes and valves, to handle corrosive gases such as hydrogen sulfide and chlorine.

**High temperature reactor:** Inconel 601 alloy wire can be used to manufacture high temperature reactors, such as high temperature reactor tube bundles and reactor linings. It can withstand stress and thermal cycles in high-temperature environments, maintaining the structural stability and performance of the reactor.

**Burners and gas nozzles:** Inconel 601 alloy wire can be used to manufacture burners and gas nozzles. It has good high-temperature corrosion resistance and oxidation resistance and is suitable for applications that handle high-temperature and corrosive gases.

**Petrochemical equipment:** Inconel 601 alloy wire can also be used to manufacture petrochemical equipment, such as furnace tubes, heat exchanger tube bundles, etc. It maintains stability and durability under high temperatures and corrosive media.

In summary, Inconel 601 alloy wire is an excellent material choice in the chemical processing industry. Its high temperature corrosion resistance, mechanical properties and corrosion resistance make it suitable for many applications such as pickling equipment, corrosive gas treatment, high temperature reactors, burners and gas nozzles. In these applications, Inconel 601 alloy wire provides the durability, reliability and safety required to meet the stringent material performance requirements of the chemical processing industry.

## Parameter:

### Chemical composition:

Alloy composition: Nickel (Ni) content is approximately 61%, Chromium (Cr) content is approximately 23%, Iron (Fe) content is approximately 8%, and Aluminum (Al) content is approximately 1.4%.

Density: approximately 8.1 g/cm<sup>3</sup>.

Melting point: approximately 1350 degrees Celsius.

Tensile strength: Minimum tensile strength is 550 MPa.

Yield strength: The minimum yield strength is 240 MPa.

Thermal expansion coefficient: The average linear expansion coefficient is  $13.2 \times 10^{-6}$  degrees Celsius<sup>-1</sup> (range 20-1000 degrees Celsius).

Item	C	Mn	Fe	P	S	Si	Cu	Ni	Co	Al	Ti	Cr	Nb+Ta	Mo	B
Inconel 601	≤0.1	≤1.5	rest	≤0.02	≤0.015	≤0.5	≤1	58-63	--	1-1.7	--	21-25	--	--	--

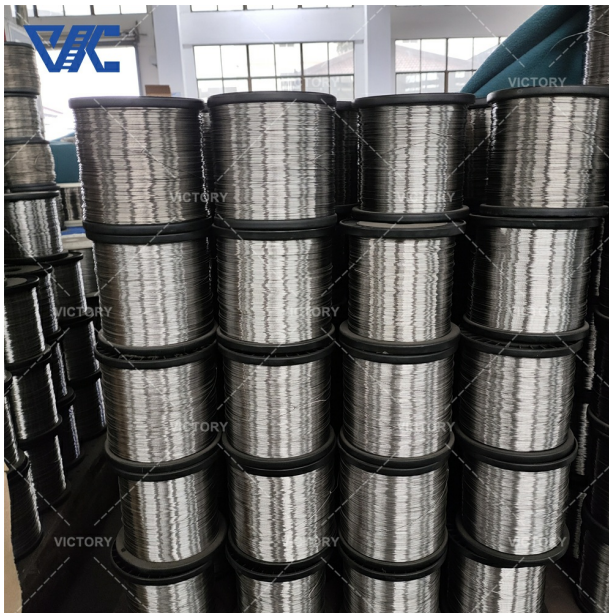
AMS Number	Alloy	Type	UNS	Cross Ref. Spec	Misc./Shape
AMS 5715	Inconel 601	Nickel	N06601		
AMS 5715 Bar	Inconel 601	Nickel	N06601	-	Bar
AMS 5715 Custom Tube	Inconel 601	Nickel	N06601	-	Custom Tube
AMS 5715 Forging	Inconel 601	Nickel	N06601	-	Forging
AMS 5715 Ring	Inconel 601	Nickel	N06601	-	Ring
AMS 5870	Inconel 601	Nickel	N06601		
AMS 5870 Plate	Inconel 601	Nickel	N06601	-	Plate
AMS 5870 Sheet	Inconel 601	Nickel	N06601	-	Sheet
AMS 5870 Strip	Inconel 601	Nickel	N06601	-	Strip



Size Range (mm)	
Wire	0.5-7.5
Rod/Bar	8.0-200
Strip	(0.50-2.5)*(5-180)
Tube	custom made
Plate	custom made

**contact us**  
**email: [victory@dlx-alloy.com](mailto:victory@dlx-alloy.com)**

Oem service:  
Welcome customized size  
We are experience factory for OEM&ODM service



#### Q&A:

Q: What is the typical lead time for delivery of Inconel 601 wire?

A: The lead time for Inconel 601 wire can vary depending on factors such as quantity, specifications, and availability, but the supplier strives to provide prompt delivery and meet customer timelines.

Q: Can expedited shipping or express delivery options be arranged for Inconel 601 wire?

A: Yes, expedited shipping or express delivery options can often be arranged for Inconel 601 wire upon request, ensuring faster delivery for urgent project requirements.





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