Our Product Introduction



## Petrochemical Industry Inconel 601 Round Bar With Corrosion Resistance

### **Basic Information**

. Place of Origin: China . Brand Name: Victory ISO9001 · Certification: Inconel 601 Model Number: Minimum Order Quantity: 5 Kg • Price: Negotiable

• Packaging Details: Inconel 601 bar packed in Spool Carton box,

Coil package with polybag, then in

woodencase

• Delivery Time: 7-20 Days

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

. Supply Ability: 300 tons per month



## **Product Specification**

Inconel 601 Bar · Name: Material: Nickel Chromium Iron

• Ni (Min): 58% 8.11 G/cm3 . Density: . Melting Point: 1,370°C • Elongation (≥ %):

 Linear Expansion Coefficient:

13.2 X 10^-6/°C

Bright, Oxided Sureface:

. Application: Furnace Tubes And Ductwork, Burner

Components

220 MPa . Yield Strength: . Tensile Strength: 550 MPa

• Highlight: Inconel 601 Nickel Alloy Bar,

Inconel 601 Round Bar



## More Images









#### Introduction:

Inconel 601 rod is an excellent high-temperature alloy material, mainly composed of nickel, chromium and iron, with a nickel content of not less than 58%. It has a high density of 8.11 grams per cubic centimeter and a high melting point of 1,370°C. In addition, the material exhibits an elongation of over 30% and a linear expansion coefficient of 13.2 x 10^-6/°C.

Inconel 601 rod performs well in high temperature environments and is suitable for a variety of critical applications. It has good thermal conductivity and can be widely used in furnace tubes and air duct systems. During the high-temperature combustion process, it can withstand stress and load under extreme temperature conditions and maintain structural integrity and reliability. At the same time, Inconel 601 rods are also widely used in burner components, such as nozzles, flame tubes and atomizers. The material has excellent mechanical properties, with a yield strength of 550 MPa and a tensile strength of 750 MPa. This

The material has excellent mechanical properties, with a yield strength of 550 MPa and a tensile strength of 750 MPa. This allows Inconel 601 rods to withstand stress in high temperature environments, withstand high loads, and maintain stable performance over long periods of use.

Overall, Inconel 601 rod is an ideal choice for high temperature industrial applications due to its high temperature strength, good corrosion resistance and mechanical properties. In critical equipment such as furnace tubes, duct systems and burner components, it provides reliable solutions to ensure efficient operation under extreme conditions. Whether in the metallurgical, chemical, petrochemical or energy industries, Inconel 601 rods can meet stringent requirements and provide long-lasting and reliable support for industrial production.

#### **Characteristic:**

Corrosion resistance: Inconel 601 rod has excellent corrosion resistance and can withstand a variety of corrosive media in the petrochemical industry, including acidic media, oxidizing media and high-temperature atmospheres.

High-temperature stability: The alloy has excellent high-temperature stability and can maintain strength and structural stability in high-temperature environments, making it suitable for high-temperature applications in the petrochemical industry.

Oxidation resistance: Inconel 601 rods show good antioxidant properties and can remain stable in high temperatures and oxidizing environments, reducing the impact of oxidation on pipelines and equipment.

#### Advantage:

Corrosion Resistance: One of the main advantages of Inconel 601 rod in the petrochemical industry is its excellent corrosion resistance. It can withstand the corrosion and erosion of petrochemical media, extend the service life of equipment, and reduce the frequency of maintenance and replacement.

High-temperature stability: This alloy can maintain strength and structural stability in high-temperature environments, and is suitable for high-temperature equipment and pipes in the petrochemical industry, such as furnace tubes, heat exchangers, etc. Oxidation resistance: Inconel 601 rod has good antioxidant properties, which can reduce the impact of oxidation on pipelines and equipment and improve their service life and reliability.

#### **Application:**

Furnace Tubes and Piping Systems: Inconel 601 rods are used in the manufacture of high temperature furnace tubes and piping systems in the petrochemical industry. Its corrosion resistance and high temperature stability can meet the requirements of furnace tubes and piping systems in high temperature environments.

Heating elements: Alloy rods can be used to manufacture heating elements in the petrochemical industry, such as resistance heaters, heating coils, etc. Its high-temperature stability and anti-oxidation properties can meet the requirements of high-temperature heating environments.

Burner parts: Inconel 601 rods can be used to manufacture burner parts in the petrochemical industry, such as burner nozzles, flame rods, etc. Its corrosion resistance and high temperature stability meet the requirements of burner components.

#### Other relevant knowledge points:

Inconel 601 rods are also used in fields other than the petrochemical industry, such as aerospace, electric power and other fields.

In the petrochemical industry, when selecting and designing applications using Inconel 601 rod, specific process conditions, media properties and engineering requirements need to be considered to ensure optimal performance and reliability.

In practical applications, it is recommended to refer to the latest material specifications, engineering design requirements, and expertise related to the field to ensure compliance and safety in material selection and application design.

#### Parameter:

#### **Chemical Properties of Inconel 601**

Nickel	Chromiu m	Iron	Aluminu m	Carbon	Manganese	Sulfur	Silicon	Copper
58%- 63%	21%-25%	Remainde r	1%-1.7%	0.10% max	1% max	0.015% max	0.50% max	1% max

#### Type we could offer

AMS Number	Alloy	Type	U N S	Misc./Shape
AMS 5715	Inconel 601	Nickel	N 0 6 6 0 1	

AMS Number	Alloy	Туре	U N S	Misc./Shape
AMS 5715 Bar	Inconel 601	Nickel	N 0 6 6 0	Bar
AMS 5715 Custom Tube	Inconel 601	Nickel	N 0 6 6 0	Custom Tube
AMS 5715 Forging	Inconel 601	Nickel	N 0 6 6 0	Forging
AMS 5715 Ring	Inconel 601	Nickel	N 0 6 6 0	Ring
AMS 5870	Inconel 601	Nickel	N 0 6 6 0	
AMS 5870 Plate	Inconel 601	Nickel	N 0 6 6 0	Plate
AMS 5870 Sheet	Inconel 601	Nickel	N 0 6 6 0	Sheet
AMS 5870 Strip	Inconel 601	Nickel	N 0 6 6 0	Strip

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



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





# Q & A:

Q: What are the key applications of Inconel 601 bar?

A: Inconel 601 bar is commonly used in applications such as gas turbine components, heat treatment equipment, and furnace fixtures.

Q: What are the notable properties of Inconel 601 bar?

A: Inconel 601 bar exhibits excellent high-temperature strength and oxidation resistance, along with good resistance to aqueous corrosion and thermal fatigue.



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