Heat Treatment Industry Inconel 601 Round Bar With High Temperature Resistance

Our Product Introduction

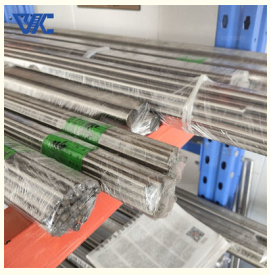
Basic Information

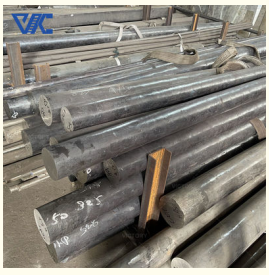
- Place of Origin: China
- Brand Name: Victory
- Certification: ISO9001
- Model Number: Inconel 601
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Inconel 601 bar packed in Spool Carton box, Coil package with polybag,then in woodencase
- Delivery Time: 7-20 Days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

Product Specification

- Name: Inconel 601 Bar
- Material: Nickel Chromium Iron
- Ni (Min): 58%
- Density: 8.11 G/cm3
- Melting Point: 1,370°C
- Elongation (≥ %): 30 %
- Linear Expansion Coefficient: 13.2 X 10^-6/°C
- Sureface: Bright,Oxided
- Application: Heating Coils, Stove Components, Fixtures
- Yield Strength: 220 MPa
- Tensile Strength: 550 MPa
- Highlight: **corrosion resistant inconel alloy**, **high temperature resistant inconel alloy**

More Images





Product Description

Our Product Introduction

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Introduction:

Inconel 601 rod is a highly regarded high temperature alloy material in the heat treatment industry. It is composed of elements such as nickel, chromium and iron, with a minimum content of 58% nickel. The material has a high density of 8.11 grams per cubic centimeter and has a high melting point of 1,370°C. Additionally, Inconel 601 rod has an elongation of over 30% and a linear expansion coefficient of 13.2 x 10^-6/°C.

In the heat treatment industry, Inconel 601 rods have performed well and are widely used in various key areas. Its excellent thermal conductivity makes it ideal for use in furnace tubes and heat treatment equipment. In high-temperature environments, it can withstand extreme thermal stress and temperature changes, ensuring the stability and efficiency of the heat treatment process. In addition, Inconel 601 rods are often used in the manufacture of burner components, such as nozzles and flame tubes of heat treatment furnaces.

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 large loads and stresses during high-temperature heat treatment, maintaining structural integrity and durability.

Overall, Inconel 601 rod has become one of the preferred materials in the heat treatment industry due to its excellent high temperature strength, corrosion resistance and mechanical properties. Whether in annealing, normalizing, quenching or other heat treatment processes, Inconel 601 rods can provide reliable solutions to ensure long-term stable operation of heat treatment equipment in high temperature environments. It has a wide range of applications in the heat treatment industry, providing excellent performance and reliability for heat treatment processes in various fields.

Characteristic:

High temperature resistance: Inconel 601 rods have excellent high temperature resistance, can maintain structural stability and strength in high temperature environments, and have low creep and thermal fatigue tendencies.

Oxidation resistance: The alloy exhibits excellent oxidation resistance and can remain stable in high-temperature oxidizing environments and reduce the impact of oxidation on the material.

Corrosion resistance: Inconel 601 rod has good corrosion resistance and shows excellent resistance to many corrosive media, acidic solutions and oxidizing media.

Advantage:

High-temperature stability: Inconel 601 rods can maintain strength and structural stability under high-temperature conditions and are not prone to deformation and damage. They are suitable for high-temperature processes in the heat treatment industry.

Oxidation resistance: The excellent oxidation resistance of this alloy enables it to withstand high-temperature oxidation environments during heat treatment, effectively reducing oxidation damage to materials.

Corrosion resistance: Inconel 601 rods have good corrosion resistance to common corrosive media and acidic solutions in the heat treatment industry, extending the service life of equipment.

Application:

Heating elements: Inconel 601 rods can be used to manufacture heating elements in the heat treatment industry, such as furnace tubes, furnace radiant tubes, heating coils, etc. Its high temperature resistance and anti-oxidation properties can meet the requirements of high-temperature heating environments.

Furnace components: Alloy rods can be used to manufacture furnace components in the heat treatment industry, such as furnace doors, furnace linings, etc. Its high temperature stability and corrosion resistance can meet the requirements of furnace components in high temperature and corrosive environments.

Heat treatment equipment accessories: Inconel 601 rods can be used to manufacture heat treatment equipment accessories, such as heat treatment fixtures, grates, etc. Its high temperature stability and corrosion resistance can meet the requirements of heat treatment equipment in high temperature and chemical media.

Other relevant knowledge points:

Inconel 601 rods also have applications in areas other than the heat treatment industry, such as aerospace, energy and other fields.

When selecting and designing heat treating applications using Inconel 601 rod stock, specific process conditions, temperature ranges 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 heat treatment industry to ensure compliance and safety in material selection and application design.

Parameter:

Chemical Properties of Inconel 601

Nickel	Chromium	Iron	Aluminum	Carbon	Manganese	Sulfur	Silicon	Copper
58%-63%	21%-25%	Remainder	1%-1.7%	0.10% max	1% max	0.015% max	0.50% max	1% max

Type we could offer

AMS Number	Alloy	Type	UNS	Misc./Shape
AMS 5715	Inconel 601	Nickel	N06601	

AMS Number	Alloy	Type	UNS	Misc./Shape
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

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

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

Q & A:

Q1: What are the key properties that make Inconel 601 bar stand out?
A1: Inconel 601 bar is renowned for its exceptional heat resistance, oxidation resistance, and high strength at elevated temperatures. It also offers excellent resistance to carburization, sulfur-bearing atmospheres, and oxidizing environments.

Q2: What industries commonly utilize Inconel 601 bar?
A2: Inconel 601 bar finds extensive application in industries such as aerospace, heat treatment, furnace components, chemical processing, and thermal processing due to its superior heat resistance, corrosion resistance, and mechanical properties at elevated temperatures.

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