



## Chemical Processing Industry Inconel 625 Rod Nichrome Nickel Alloy Bar With Antioxidant

Our Product Introduction

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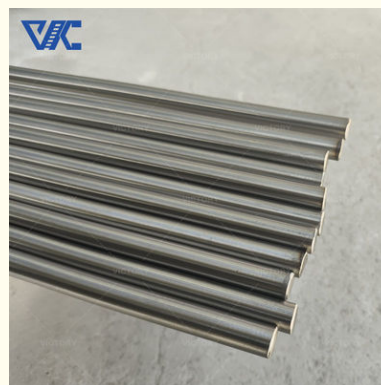
### Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO9001
- Model Number: Inconel 625
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Inconel 625 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

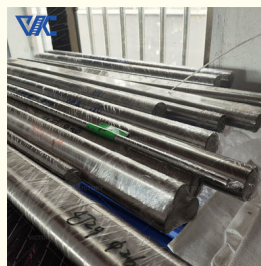


### Product Specification

- Name: Inconel 625 Bar
- Material: Ni Cr Fe
- Ni (Min): 58%
- Application: Chemical Reactors, Pipes And Valves, Distillation Units
- Density: 8.44 G/cm3
- Thermal Expansion Coefficient:  $12.8 \times 10^{-6} (^{\circ}\text{C})$
- Thermal Conductivity: 13.3 W/(m·K)
- Sureface: Bright, Oxided
- Melting Point: 1290-1350°C
- Modulus Of Elasticity: OEM/ODM
- Yield Strength: 275 MPa
- Tensile Strength: 620 MPa
- Highlight: Inconel 625 Rod, Inconel 625 Nichrome Nickel Alloy



### More Images



### Product Description

## Introduction:

Inconel 625 rod is widely used in the chemical processing industry, especially in corrosive environments and high temperature conditions. Composed of elements such as nickel, chromium and molybdenum, it has excellent corrosion resistance and high-temperature strength. Inconel 625 rod has a high density (8.44 grams per cubic centimeter) and a high melting point (approximately 1,345°C) while having a low coefficient of linear expansion ( $12.8 \times 10^{-6}/^{\circ}\text{C}$ ).

In the chemical processing industry, Inconel 625 rods are widely used in various key equipment and components, especially those working in corrosive gases, liquids and high-temperature media. It is used to manufacture reactors, heat exchangers, distillation columns, storage tanks and piping systems, etc. Due to its excellent corrosion resistance, Inconel 625 rods are able to withstand a variety of corrosive media, including acids, alkalis, salts and oxides, etc., maintaining equipment reliability and long life.

In addition, Inconel 625 rods are also commonly used in the manufacture of catalyst system components such as catalyst supports, catalyst baskets, catalyst tubes and catalyst reactors. It has excellent high-temperature strength and corrosion resistance, and can withstand high temperatures and corrosive environments during the catalyst reaction process.

Inconel 625 rod has excellent mechanical properties, including high yield strength (approximately 590 MPa) and tensile strength (approximately 760 MPa), allowing it to withstand the high loads and stresses found in the chemical processing industry.

Overall, Inconel 625 rod plays an important role in the chemical processing industry due to its excellent corrosion resistance, high temperature strength and mechanical properties. It is widely used in key equipment and components such as reactors, heat exchangers, storage tanks, piping systems and catalyst systems to ensure the safety and efficiency of chemical processing processes. The wide application range and excellent performance of Inconel 625 rod make it one of the indispensable materials in the chemical processing industry.

## Characteristic:

**Corrosion resistance:** Inconel 625 rod shows excellent corrosion resistance and has good resistance to acidic and alkaline media, chloride, nitric acid and sulfuric acid. It also resists oxidation and corrosion at high temperatures.

**High strength:** Inconel 625 rod has good strength and can maintain high mechanical properties even under high temperature conditions. This makes it suitable for equipment and components subjected to high pressures, temperatures and corrosive media in the chemical processing industry.

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

## Advantage:

**Corrosion Resistance Advantage:** A major advantage of Inconel 625 rod in the chemical processing industry is its excellent corrosion resistance. It is resistant to a wide range of corrosive media, including acidic, alkaline and oxidizing media, making it ideal for handling corrosive chemicals and waste fluids.

**High Temperature Performance:** Inconel 625 rod maintains strength and stability under high temperature conditions, making it suitable for applications such as high temperature chemical reactors, furnace tubes, heaters and burners.

**Resistance to stress corrosion cracking:** Inconel 625 rods have high resistance to stress corrosion cracking (SCC) and can operate stably for a long time under high temperature and high pressure conditions.

## Application:

**Chemical reactors:** Inconel 625 rods are suitable for the construction of chemical reactors and can maintain stability under high temperatures, pressures and corrosive environments, such as polymer synthesis reactors, oxidation reactors and water treatment reactors.

**Pipes and valves:** This alloy is commonly used in chemical pipes and valve systems and can withstand corrosion and high temperature and pressure conditions from acidic, alkaline and corrosive media.

**Distillation devices and heaters:** Inconel 625 rods can be used in chemical distillation devices and heaters, such as distillation towers, reflux condensers and heating furnaces.

## Other relevant knowledge points:

Inconel 625 rods are also commonly used in aerospace, energy and marine industries and have broad application prospects.

In actual applications, it is necessary to select appropriate materials according to specific process conditions and requirements, and conduct performance testing and engineering evaluation.

Inconel 625 bar can be formed and machined through processes such as machining, forging and heat treatment to meet the needs of different applications.

## Parameter:

Item	C	Mn	Fe	P	S	Si	Cu	Ni	Co	Al	Ti	Cr	Nb+Ta	Mo	B
Inconel 625	≤0.08	≤0.35	rest	--	≤0.015	≤0.35	≤0.3	50-55	≤10	≤0.8	≤1.15	17-21	4.75-5.5	2.8-3.3	--

AMS Number	Alloy	Type	UNS	Cross Ref. Spec	Misc./Shape
AMS 5581	Inconel 625	Nickel	N06625		
AMS 5581 Custom Tube	Inconel 625	Nickel	N06625	-	Custom Tube
AMS 5581 Tubing	Inconel 625	Nickel	N06625	-	Tubing
AMS 5599	Inconel 625	Nickel	N06625		
AMS 5599 Plate	Inconel 625	Nickel	N06625	-	Plate
AMS 5599 Sheet	Inconel 625	Nickel	N06625	-	Sheet
AMS 5599 Strip	Inconel 625	Nickel	N06625	-	Strip
AMS 5666	Inconel 625	Nickel	N06625		
AMS 5666 Bar	Inconel 625	Nickel	N06625	-	Bar
AMS 5666 Custom Tube	Inconel 625	Nickel	N06625	-	Custom Tube
AMS 5666 Forging	Inconel 625	Nickel	N06625	-	Forging
AMS 5666 Ring	Inconel 625	Nickel	N06625	-	Ring
AMS 5869	Inconel 625	Nickel	N06625		
AMS 5869 Plate	Inconel 625	Nickel	N06625	-	Plate
AMS 5869 Sheet	Inconel 625	Nickel	N06625	-	Sheet
AMS 5869 Strip	Inconel 625	Nickel	N06625	-	Strip

**contact us**

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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 industries commonly utilize Inconel 625 rod?

A: Inconel 625 rod is commonly used in industries such as aerospace, chemical processing, and marine engineering.

Q: What are the notable properties of Inconel 625 rod?

A: Inconel 625 rod exhibits exceptional corrosion resistance, high strength, and excellent performance in high-temperature and corrosive environments.



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