Aerospace Industry Nickel UNS N06625 W.NR.2.4856 Inconel 625 Bar With Excellent Toughness

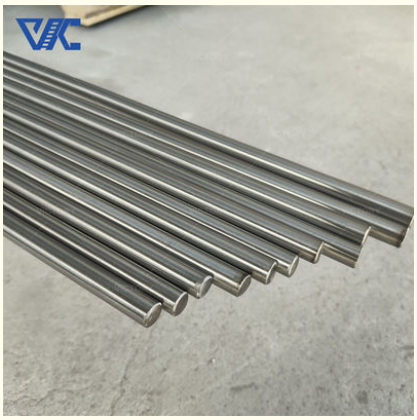
Our Product Introduction

Basic Information

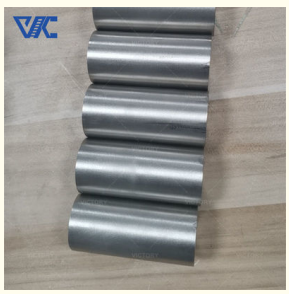
- Place of Origin: China
- Brand Name: Victory
- Certification: ISO9001
- Model Number: Inconel 625
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Inconel 625 bar packed in Spool Carton box, Coil package with polybag,then in woodencase
- Delivery Time: 7-20 Days
- Payment Terms: 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: Construction, IndustryCombustion Chambers And Nozzles, Gas Turbine Blades
- Density (g/m3): 8.44 G/cm3
- Thermal Expansion Coefficient: 12.8 X 10^(-6)/°C
- Thermal Conductivity: 13.3 W/(m·K)
- Sureface: Bright,Oxided
- Elongation (≥ %): 45%
- Melting Point: 1290-1350°C
- Yield Strength: 275 MPa
- Tensile Strength: 620 MPa
- Highlight: **W.NR.2.4856 Nickel Alloy**, **Nickel Alloy Inconel 625 Bar**,



More Images



Our Product Introduction

for more products please visit us on victory-alloy.com

Product Description

Introduction:

Inconel 625 rod is a commonly used high temperature alloy material in the aerospace industry. Composed of elements such as nickel, chromium and molybdenum, it has excellent high-temperature strength and corrosion resistance. 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 x 10^-6/°C).

In the aerospace industry, Inconel 625 rod is widely used in a variety of critical components and systems, especially in high temperatures and corrosive environments. It is used to manufacture high-temperature components such as combustion chambers, turbine blades, and burner nozzles of aircraft engines. Due to its excellent high temperature strength and corrosion resistance, Inconel 625 rod is able to withstand the challenges of high temperature, pressure and corrosion in extreme working conditions.

In addition, Inconel 625 rods are widely used in other key components in the aerospace industry, such as liquid rocket propulsion systems, fuel nozzles, liquid oxygen and liquid hydrogen pipelines, etc. It is able to withstand extreme temperatures and pressures during spacecraft launches and space missions, ensuring spacecraft reliability and performance.

Inconel 625 rod has excellent mechanical properties, including high yield strength (approximately 590 MPa) and tensile strength (approximately 760 MPa). This allows it to withstand high loads and stresses in the aerospace industry, maintaining structural integrity and stability.

Overall, Inconel 625 rod plays an important role in the aerospace industry due to its excellent high temperature strength, corrosion resistance and mechanical properties. It is widely used in aerospace engines, spacecraft and other key components to ensure the safe and reliable operation of aerospace systems. The wide application range and excellent performance of Inconel 625 rod make it one of the indispensable materials in the aerospace industry.

Characteristic:

High Temperature Performance: Inconel 625 rod maintains its strength and stability at extremely high temperatures. It has excellent anti-oxidation and anti-corrosion properties and can withstand the requirements of high-temperature environments such as aerospace engines.

Strength and Toughness: Inconel 625 rod has excellent strength and toughness, allowing it to withstand the high stress and impact loads found in the aerospace industry.

Corrosion resistance: This alloy has excellent corrosion resistance and is highly resistant to corrosion from the marine environment and chemicals.

Advantage:

Lightweight and high strength: Inconel 625 rod is a lightweight and high-strength alloy with excellent specific strength. In the aerospace industry, weight and strength are key factors, making Inconel 625 rod an ideal material choice.

Fatigue resistance: The alloy has good fatigue resistance and can maintain strength and stability under long-term cyclic loads. It is suitable for high stress and vibration environments in the aerospace field.

High-temperature corrosion resistance: Inconel 625 rods are capable of stable operation in high-temperature and corrosive environments for long periods of time, which is critical for the needs of high-temperature components such as aerospace engines and propulsion systems.

Application:

Combustion Chambers and Nozzles: Inconel 625 rod stock is widely used in aerospace engine combustion chambers, nozzles and turbine components. Its high temperature strength and corrosion resistance enable it to withstand the erosion of high temperature and high pressure airflow and combustion gases.

Gas turbine blades: This alloy also has important applications in the manufacture of blades for gas turbine engines. The high temperature performance and oxidation resistance of Inconel 625 rod enable it to withstand the challenges of high-speed rotation and high-temperature airflow.

Aerospace structural parts: Inconel 625 bar is also used to manufacture structural parts in the aerospace field, such as connectors, fasteners and supports. Its high strength, corrosion resistance and fatigue resistance enable it to meet the requirements of aerospace applications.

Other relevant knowledge points:

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

In the aerospace industry, there are strict requirements for high-temperature performance, strength, lightweight and corrosion resistance of materials. Therefore, choosing the right materials is critical to the success of aerospace applications.

Parameter:

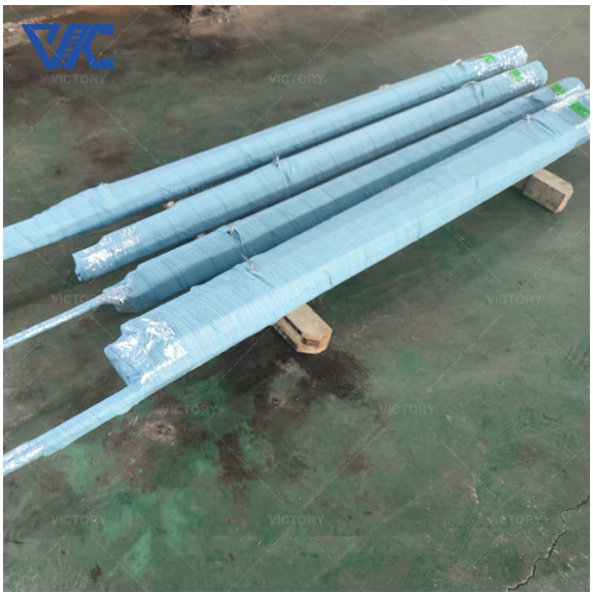
Item	C	Mn	Fe	P	S	Si	Cu	Ni	Co	Al	Ti	Cr	Nb+Ta	Mo	B
Inconel 625	≤0.08	≤0.35	rest	--	≤0.015	≤0.35	≤0.3	50-55	≤10	≤0.8	≤1.15	17-21	4.75-5.5	2.8-3.3	--

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 Number	Alloy	Type	UNS	Cross Ref. Spec	Misc./Shape
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
email:victory@dlx-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: Does Inconel 625 bar come with quality certifications?
A: Yes, Inconel 625 bar is often accompanied by quality certifications such as material test reports (MTRs) or mill certificates, ensuring compliance with industry standards and providing traceability of the material's properties.

Q: Can the supplier provide third-party inspection for Inconel 625 bar?
A: Yes, the supplier can arrange third-party inspection services upon request to ensure the quality and conformity of Inconel

625 bar, giving customers added confidence in the product's reliability.

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