Gas Turbine Nickel Alloy Seamless Pipe Inconel 601 With Fatigue Resistance

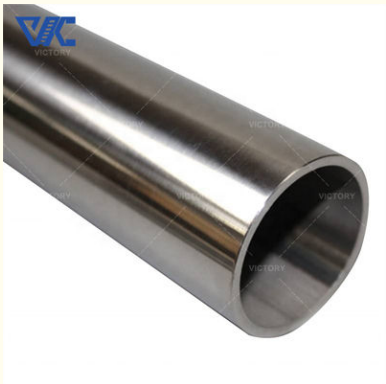
Our Product Introduction

Basic Information

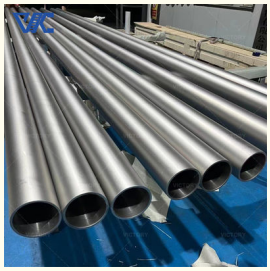
- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Inconel 601
- Minimum Order Quantity: 1 Kg
- Price: Negotiable
- Packaging Details: Packed as coil. Special packaging requirements can also be accommodated. OEM is also acceptabl
- Delivery Time: 7 to 20 Days
- Payment Terms: L/C, D/A, D/P, T/T, Western Union, MoneyGram
- Supply Ability: 500 Ton/Tons per Month

Product Specification

- Product Name: Inconel 601 Pipe
- Material: Ni Cr Fe
- Ni (Min): 58%
- Density: 8.11 G/cm3
- Melting Point: 1,370-1,415°C
- Tensile Strength: 550 MPa
- Yield Strength: 220 MPa
- Thermal Expansion Coefficient: 13.1×10^-6/°C
- Thermal Conductivity: 9.9 W/(m·K)
- Application: Combustion Chamber Components, Exhaust Ducts
- Surface: Bright,Oxidized
- Highlight: **corrosion resistant inconel alloy**, **high temperature resistant inconel alloy**



More Images



Product Description

Our Product Introduction

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Introduction:

Inconel 601 tube plays an important role in the gas turbine field. It is composed of materials such as nickel (Ni), chromium (Cr), iron (Fe) and aluminum (Al), with a minimum content of 58%, a density of 8.1 g/cubic centimeter, and a melting point of 1360 degrees Celsius. The pipe has a tensile strength of 650 MPa, an elongation of 30% and a yield strength of 300 MPa. The specific heat capacity is 477 Joules/kg-C.
Inconel 601 tubes are widely used in components such as gas turbines, combustion chambers and heat exchangers. Its excellent high temperature resistance and oxidation resistance enable it to withstand the extreme operating conditions in gas turbines, including high temperature, high pressure and strong oxidizing environment. Whether used as a gas turbine combustor component, heat exchanger ducting, or other critical component, Inconel 601 tubing provides reliable performance to ensure efficient operation and long-term stability of the gas turbine.
The excellent properties of this pipe make it one of the preferred materials in the gas turbine industry. In high-temperature combustion environments, Inconel 601 pipes have excellent corrosion resistance and heat resistance, and can maintain good mechanical strength and stability. It plays an important role in improving gas turbine efficiency, reducing combustion chamber wear and protecting key components, providing gas turbine manufacturers and operators with reliable solutions.

Characteristic:

High Temperature Stability: Inconel 601 pipe has excellent high temperature stability and is able to maintain good structural integrity and mechanical properties in extreme high temperature environments. This allows it to withstand corrosion and high temperature stress from high temperature combustion gases in gas turbines.
Oxidation resistance: Inconel 601 pipe has good antioxidant properties and can reduce the oxidation loss of materials in high-temperature oxidizing environments.
Corrosion resistance: The alloy has good corrosion resistance to many acidic and alkaline media and can resist the erosion of acidic combustion products produced in gas turbines.

Advantage:

High Temperature Strength: Inconel 601 pipe has excellent high temperature strength and is able to withstand the high temperatures and high stress environments found in gas turbines. This allows it to maintain structural stability and reliability under high temperature operating conditions.
Fatigue resistance: The alloy has good fatigue resistance and can work for a long time under cyclic loads without being prone to fatigue damage, which improves the life and reliability of the gas turbine.
Good workability: Inconel 601 pipe has good workability, making it easy to manufacture pipes and components of various shapes and sizes to meet gas turbine design and engineering requirements.

Application:

Combustion chamber components: Inconel 601 tube can be used to manufacture combustion chamber components of gas turbines, such as combustion chamber liners, burner nozzles, etc. Its high temperature stability and anti-corrosion properties allow it to withstand the erosion of high temperature combustion gases and acidic combustion products.
Exhaust piping: This alloy is suitable for the exhaust piping system of gas turbines. It can withstand high temperature and high pressure exhaust gas flow and corrosive media, ensuring the reliability and safety of the exhaust system.

Other relevant knowledge points:

Inconel 601 is a nickel-chromium-iron-based alloy that contains aluminum and other elements to improve its oxidation resistance and high-temperature strength.
The alloy also has certain resistance to hot corrosion and can resist sulfide corrosion and oxidation corrosion in the combustion environment of gas turbines.
In gas turbines, the selection and design of Inconel 601 pipes need to consider factors such as the temperature, pressure, composition of the combustion gas, and other process parameters to ensure that the performance of the pipes and components meets the requirements of the gas turbine.

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 5715 Bar	Inconel 601	Nickel	N06601	Bar

AMS Number	Alloy	Type	UNS	Misc./Shape
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

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

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