Oil And Gas Industry Nickel Chromium Alloy Inconel 617 Wire High Temperature Resistance

Our Product Introduction

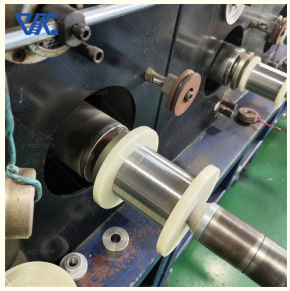
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Inconel 617 wire
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Inconel 617 wire packed in Spool Carton box, Coil package with polybag,then in woodencase
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

Product Specification

- Product Name: Inconel 617 Wire
- Material: Ni Cr Fe
- Nickel(Min): 44.5%
- Application: Oil And Gas Industry
- Elongation (≥ %): 30%
- Density: 8.36 G/cm3
- Melting Point: 1350 °C
- Tensile Strength: 690 MPa
- Yield Strength: 310 MPa
- Thermal Expansion Coefficient: 12.7 X 10 ^ -6/°C
- Thermal Conductivity: 10.8 W/m · K
- Sureface: Bright,Oxided
- Highlight: **corrosion resistant inconel alloy**, **high temperature resistant inconel alloy**

More Images



Our Product Introduction

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Product Description

Introduction:

Inconel 617 alloy wire is a high-temperature alloy material widely used in the oil and gas industry. The alloy has excellent high temperature resistance and corrosion resistance, making it suitable for equipment and components used in extreme conditions. Its chemical composition mainly includes elements such as nickel, chromium, molybdenum and aluminum, which can maintain mechanical properties and corrosion resistance for a long time in high temperature environments. Inconel 617 alloy wire is widely used in the manufacture of key components such as high-temperature furnaces, heat exchangers, burners, refinery units and chemical equipment. It can withstand the erosion of high temperature, high pressure and corrosive media, ensuring reliable operation of equipment under harsh working conditions. . The excellent performance and reliability of this alloy wire make it one of the indispensable materials in the oil and gas industry.

Parameter:

Chemical composition: The main components of Inconel 617 alloy wire are nickel (Ni), chromium (Cr), molybdenum (Mo) and aluminum (Al), of which the nickel content is approximately 44.5%.
Density: The density of Inconel 617 alloy wire is approximately 8.36 g/cm3.
Melting point: The melting point of Inconel 617 alloy wire is approximately 1,350°C.
Tensile strength (room temperature): approximately 690 MPa (100,000 psi).
Yield strength (room temperature): approximately 310 MPa (45,000 psi).
Thermal expansion coefficient: approximately 12.7 x 10^-6/℃ (in the range of 20-1000℃).
Thermal conductivity: approximately 10.8 W/m·K (100℃).
Special application temperature range: Inconel 617 alloy wire usually shows good performance in high temperature environments of 800-1,200°C.

Item	C	Mn	Fe	P	S	Si	Cu	Ni	Co	Al	Ti	Cr	Nb+Ta	Mo	B
Inconel 617	0.05-0.15	≤0.5	≤3	≤0.015	≤0.015	≤0.5	--	≥44.5	10-15	0.8-1.5	≤0.6	20-24	--	8-10	≤0.006

AMS Number	Alloy	Type	UNS	Cross Ref. Spec	Misc./Shape
AMS 5887	Inconel 617	Nickel	N06617		
AMS 5887 Bar	Inconel 617	Nickel	N06617	-	Bar
AMS 5887 Custom Tube	Inconel 617	Nickel	N06617	-	Custom Tube
AMS 5887 Forging	Inconel 617	Nickel	N06617	-	Forging
AMS 5887 Ring	Inconel 617	Nickel	N06617	-	Ring
AMS 5888	Inconel 617	Nickel	N06617	-	Plate
AMS 5889	Inconel 617	Nickel	N06617		
AMS 5889 Sheet	Inconel 617	Nickel	N06617	-	Sheet
AMS 5889 Strip	Inconel 617	Nickel	N06617	-	Strip

Feature:

High temperature resistance: Inconel 617 alloy wire performs well in high temperature environments and can work at temperatures above 1000°C for a long time without losing its mechanical properties.
Oxidation resistance: Inconel 617 alloy wire has good anti-oxidation properties and can resist erosion by corrosive media such as oxidation, sulfurization and carbonization at high temperatures.
Corrosion resistance: Inconel 617 alloy wire has good corrosion resistance to a variety of acidic and alkaline media, including sulfuric acid, hydrochloric acid, hydrofluoric acid, etc.
Excellent mechanical properties: Inconel 617 alloy wire has excellent strength, toughness and plasticity, making it suitable for complex engineering applications.

Advantage:

High-temperature applications: Inconel 617 alloy wire has excellent performance in high-temperature environments and is therefore widely used in equipment such as high-temperature furnaces, heat exchangers, burners and refining units in the oil and gas industry.
Corrosion resistance: Inconel 617 alloy wire has good corrosion resistance to a variety of corrosive media and can be used to handle oil and natural gas fluids containing acidic or alkaline components.
Long life: Due to its high temperature resistance and corrosion resistance, Inconel 617 alloy wire is able to operate for long periods of time in harsh conditions, extending the life of your equipment.

Specific applications:

High-temperature furnaces and heat exchangers: Inconel 617 alloy wire is often used to manufacture heating elements and pipes of high-temperature furnaces and heat exchangers to withstand the corrosion of high-temperature gases and liquids and the stress in high-temperature environments.
Burners and refining units: Inconel 617 alloy wire can be used in nozzles and flame ducts for oil and natural gas burners, as well as high-temperature reactors and catalyst ducts in refining units.
Chemical equipment: Inconel 617 alloy wire is suitable for manufacturing chemical equipment, such as distillation towers, reactors and storage tanks, to resist erosion by high temperatures and corrosive media.
Oil and Gas Pipelines: Inconel 617 alloy wire can be used to make welding wires and consumables for oil and gas pipelines to provide high temperature resistance and corrosion resistance.
In summary, Inconel 617 alloy wire is a high-temperature alloy material widely used in the oil and gas industry. It has excellent properties such as high temperature resistance, oxidation resistance, and corrosion resistance, and is suitable for the manufacturing and application of high-temperature furnaces, heat exchangers, burners, refining units, chemical equipment and other fields.

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email:victory@dlx-alloy.com
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Q & A:

Q1: What are the key properties that make Inconel 617 wire suitable for high-temperature applications?
A1: Inconel 617 wire is suitable for high-temperature applications due to its exceptional strength, creep resistance, and resistance to oxidation and carburization.

Q2: What industries commonly utilize Inconel 617 wire?
A2: Inconel 617 wire is commonly used in industries such as aerospace, petrochemical, and power generation for applications that require materials capable of withstanding extreme temperatures and corrosive environments.

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