Aerospace Industry Nickel Alloy Inconel 600 Wire With High Temperature Resistance

Our Product Introduction

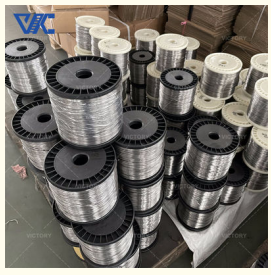
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Inconel 600
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Inconel 600 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 600 Wire
- Material: Ni Cr Fe
- Nickel(Min): 72%
- Density: 8.47 G/cm3
- Melting Point: 1,370-1,410°C
- Tensile Strength: 550 MPa
- Yield Strength: 240 MPa
- Elongation: 30%
- Application: Aerospace Industry
- Sureface: Bright,Oxided
- Condition: Hard / Soft
- Highlight: **corrosion resistant inconel alloy**, **high temperature resistant inconel alloy**

More Images



Product Description

Our Product Introduction

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Product Description:

Inconel 600 Wire

Inconel 600 alloy wire is an important high-performance alloy material in the aerospace field. The alloy is composed of nickel, chromium and other alloying elements and has excellent high-temperature strength, corrosion resistance and heat resistance.
In aerospace applications, the importance of Inconel 600 alloy wire is self-evident. It is widely used to manufacture key components such as aerospace engine components, jet propulsion systems, combustion chambers, thermal protection systems and spacecraft structures.

Characteristic:

High temperature strength: Inconel 600 alloy wire has excellent high temperature strength and can maintain its mechanical properties in high temperature environments.
Corrosion resistance: It shows good corrosion resistance and can resist a variety of corrosive media, including acidic and alkaline solutions, chloride ions and oxidizing media, etc.
Oxidation resistance: Inconel 600 alloy wire has good oxidation resistance at high temperatures and can resist oxidation and hot corrosion.
Heat resistance: It can withstand long-term use in high temperature environments and has good heat resistance and thermal stability.
Low Magnetism: Inconel 600 alloy wire has low magnetism and is suitable for applications that are sensitive to magnetic requirements.

Advantage:

Lightweight design: Inconel 600 alloy wire has a lower density, which can achieve lightweight design in the aerospace field and improve the fuel efficiency and performance of aircraft.
High-temperature environment applications: Its high-temperature strength and heat-resistant properties make it very suitable for applications in high-temperature environments such as engine components, jet propulsion systems, and combustion chambers.
Corrosion resistance: The excellent corrosion resistance of Inconel 600 alloy wire enables it to resist corrosive media in the aerospace field and protect the integrity and reliability of key components.
Long Service Life: Due to its resistance to oxidation and corrosion, Inconel 600 alloy wire has a long service life in aerospace applications.

Specific applications:

When it comes to more applications in the aerospace field, here are some specific aspects:
Engine components: Inconel 600 alloy wire is widely used in key components of aerospace engines, such as turbine blades, combustion chambers and nozzles. These components need to have excellent heat resistance and corrosion resistance in high-temperature and high-pressure working environments. Inconel 600 alloy wire is able to withstand these extreme conditions and maintain its mechanical properties and dimensional stability.
Jet propulsion systems: Applications of Inconel 600 alloy wire in jet propulsion systems include gas turbines and jet nozzles. These components need to withstand the erosion and corrosion of high-temperature and high-pressure airflow, while possessing high strength and fatigue resistance. Inconel 600 alloy wire is able to meet these requirements and provide reliable performance in jet propulsion systems.
Combustion chamber: The combustion chamber is the area in an aero engine that is subject to high temperature and high pressure combustion gases. Inconel 600 alloy wire is used in combustion chamber linings and combustion chamber wall materials to protect the structure from erosion and corrosion from high-temperature combustion gases.
Thermal protection systems: Inconel 600 alloy wire is used to manufacture thermal protection systems in the aerospace field. These systems are designed to protect the aircraft's structure from the effects of high-temperature environments. The heat-resistant properties of Inconel 600 alloy wire make it an ideal choice for thermal protection materials.
Spacecraft structures: Inconel 600 alloy wire can also be used to manufacture structural components of spacecraft, such as support structures, connectors and frames. These components need to be high-strength, lightweight and corrosion-resistant to ensure the reliability and safety of spacecraft in extreme environments.
In general, Inconel 600 alloy wire is widely used in the aerospace field and can meet the stringent material requirements of the aerospace industry due to its high-temperature strength, corrosion resistance, heat resistance and mechanical properties. Inconel 600 alloy wire provides reliable performance and advantages in engine components, jet propulsion systems, combustion chambers, thermal protection systems and spacecraft structures.

Parameter:

Chemical composition: Contains about 72% nickel and 14-17% chromium, with a small amount of iron, copper, carbon, titanium and other alloying elements.
Density: approximately 8.4 g/cm3.
Melting point: approximately 1,371 degrees Celsius.
Tensile strength: typical value is 550 MPa.
Yield strength: typical value is 240 MPa.
Elongation: typical value is 30%.

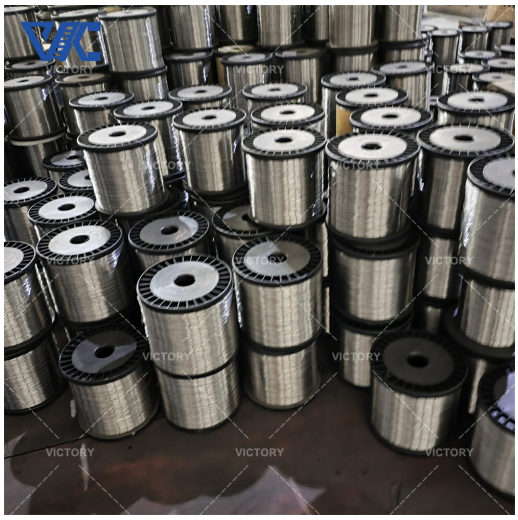
Item	C	Mn	Fe	P	S	Si	Cu	Ni	Co	Al	Ti	Cr	Nb+Ta	Mo	B
Inconel 600	≤0.15	≤1	6-10	≤0.015	≤0.015	≤0.5	≤0.5	≥72	--	--	--	14-17	--	--	--

Element	Percent
Nickel (plus Cobalt) (Min)	72

Chromium	14-17
Iron	6-10
Carbon (Max)	.15
Manganese (Max)	1
Sulfur (Max)	.015
Silicon (Max)	.5
Copper (Max)	.5

Size Range (mm)	
Wire	0.5-7.5
Rod/Bar	8.0-200
Strip	(0.50-2.5)*(5-180)
Tube	custom made
Plate	custom made

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



FAQ:

Q1: What is INCONEL 600 wire?
A1: INCONEL 600 wire is a type of nickel-based alloy wire composed primarily of nickel, chromium, and iron. It is known for its excellent resistance to corrosion and heat, making it suitable for demanding applications in various industries.

Q2: What are the key features and benefits of INCONEL 600 wire?
A2: INCONEL 600 wire offers exceptional corrosion resistance against a wide range of corrosive environments, including acids, alkaline solutions, and high-temperature oxidizing atmospheres. It exhibits high strength, good workability, and retains its mechanical properties at elevated temperatures. Additionally, it has excellent resistance to chloride-ion stress-corrosion cracking.

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