Nuclear Energy N08800 Incoloy 800 Wire Incoloy Alloy Wire With High Temperature Resistance

Our Product Introduction

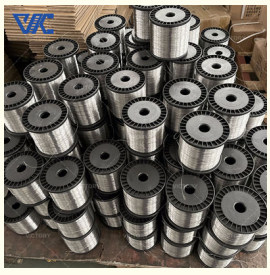
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Incoloy 800
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Plastic film or waterproof woven bag inside, wire packed in spool put into carton,coil wire or strip wire put into wooden case
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

Product Specification

- Product Name: Incoloy 800 Wire
- Material: Ni Cr Fe
- Nickel(Min): 30%
- Application: Nuclear Energy
- Density (g/m3): 7.94 G/cm3
- Melting Point: 1,370°C
- Yield Strength: 205-240 MPa
- Tensile Strength: 520-690 MPa
- Elongation (≥ %): 30%
- Surface: Bright Color, Acid White, Oxidized Color
- Processing Service: Decoiling,Cutting,Bending
- Highlight: **High Temperature Resistance Incoloy 800 Wire**, **Nuclear Energy Incoloy 800 Wire**, **N08800 Incoloy 800 Wire**

More Images



Product Description

Our Product Introduction

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Introduction:

Incoloy 800 alloy wire is a high-temperature alloy material that is widely used in the nuclear energy industry. It is composed of various elements such as nickel, iron and chromium. It has excellent heat resistance, corrosion resistance and high strength. It is suitable for key components of nuclear energy equipment and the thermal environment of nuclear reactors.

In the field of nuclear energy, the heat resistance of Incoloy 800 alloy wire is one of its distinctive features. There are extreme high-temperature environments in nuclear reactors. The heat generated by nuclear fuel and high-temperature coolant place stringent requirements on materials. Incoloy 800 alloy wire can work stably for a long time under high temperature conditions and has good high temperature strength and thermal stability to ensure the safe operation of nuclear energy equipment.

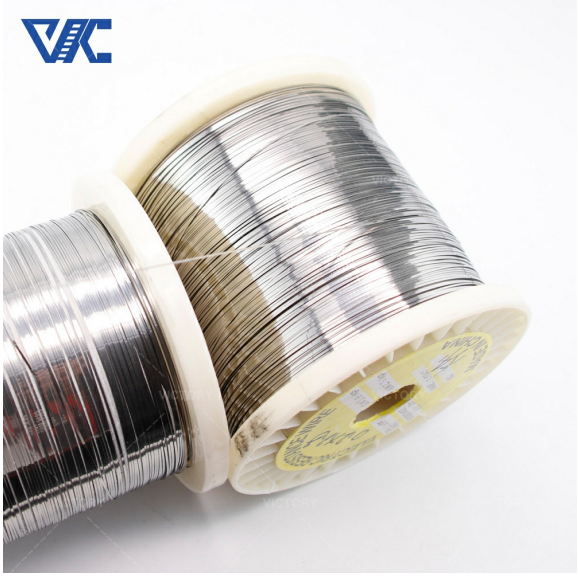
Incoloy 800 alloy wire plays an important role in the field of nuclear energy and is widely used in key components of nuclear reactors, nuclear power plants and other nuclear energy equipment. Its heat resistance, corrosion resistance and high strength ensure the efficient operation and safety of nuclear energy equipment and make important contributions to the development of the nuclear energy industry.

Parameter:

Main ingredients: nickel (30-35%), iron (39.5% minimum content), chromium (19-23%), copper (0.75% maximum content), aluminum (0.15-0.60%), carbon (0.1% maximum content)
Density: 7.94 g/cm3
Melting point: 1350-1400 degrees Celsius
Yield strength: ≥240 MPa
Tensile strength: ≥600 MPa
Thermal expansion coefficient: 13.9 x 10^-6/degrees Celsius (range 20-100 degrees Celsius)

Incoloy	Ni	Cr	Fe	C	Mn	S	Si	Cu	Al	Ti
800	30.0-35.0	19.0-23.0	39.5min	0.10max.	1.50max.	0.015max.	1.0max.	0.75max.	0.15-0.60	0.15-0.60

AMS Number	Alloy	Type	UNS	Cross Ref. Spec	Misc./Shape
AMS 5766 Bar	Incoloy 800	Nickel	N08800	-	Bar
AMS 5766 Custom Tube	Incoloy 800	Nickel	N08800	-	Custom Tube
AMS 5871 Plate	Incoloy 800	Nickel	N08800	-	Plate
AMS 5871 Sheet	Incoloy 800	Nickel	N08800	-	Sheet
AMS 5871 Strip	Incoloy 800	Nickel	N08800	-	Strip



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

Characteristic:

Corrosion resistance: Incoloy 800 alloy wire shows excellent corrosion resistance in the nuclear energy field and can resist the erosion of acidic, alkaline and oxidizing media, extending the service life of equipment.
High temperature stability: This alloy wire has excellent high temperature stability and oxidation resistance, and can maintain the stability and strength of its structure under high temperature and irradiation conditions.
Radiation Resistance: Incoloy 800 alloy wire has good resistance to radiation and can withstand the challenges of radiation environments in nuclear energy equipment.

Advantage:

Nuclear energy applications: Incoloy 800 alloy wire is often used in nuclear reactors in the nuclear energy field to manufacture fuel elements, heat exchangers and other nuclear equipment. It can ensure the safe operation of equipment in high temperature, corrosion and radiation environments.
Anti-oxidation properties: This alloy wire contains a high proportion of nickel and chromium, which gives it good anti-oxidation properties and can resist high-temperature oxidation reactions and protect equipment from oxidative damage.
High strength characteristics: Incoloy 800 alloy wire has high yield strength and tensile strength, and can withstand extreme working conditions such as high temperature, high pressure and radiation in nuclear energy equipment.

Specific applications:

Fuel elements: Incoloy 800 alloy wire is widely used in the manufacture of fuel elements for nuclear reactors to wrap and protect nuclear fuel. It also has good corrosion resistance and radiation resistance.
Heat exchanger: This alloy wire is often used in the manufacture of nuclear energy heat exchangers to transfer heat and maintain the stability of the equipment. It has the characteristics of high temperature resistance, corrosion resistance and radiation resistance.

Related knowledge points:

Incoloy 800 alloy wire has good weldability and can be connected to other materials through different welding methods.
The application of this alloy wire in the nuclear energy field requires compliance with strict standards and specifications to ensure the safety and reliability of the equipment.
The use of Incoloy 800 alloy wire in nuclear energy equipment requires consideration of the impact of the radiation environment on material properties, as well as radiation protection measures during the design and manufacturing process.

Q & A:

Q: Does Incoloy 800 Wire meet industry quality standards?
A: Yes, Incoloy 800 Wire is manufactured to meet rigorous industry quality standards. It undergoes strict quality control measures throughout the production process to ensure consistency, performance, and adherence to specifications.

Q: What are the quality assurance measures for Incoloy 800 Wire?
A: Incoloy 800 Wire often tested for factors such as chemical composition, tensile strength, corrosion resistance, and dimensional accuracy to ensure high-quality and reliable performance.

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