Electric Spring Resistance Heater Wire Cr20Ni80 Furnace Spiral Wire In Home Appliance Field

Our Product Introduction

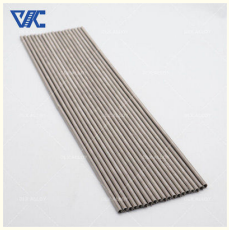
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Cr20Ni80
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Spool package with Carton box, Coil package with polybag for Resistance wire
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

Product Specification

- Name: NiCr Heating Wire
- Material: Nickel, Chromium
- Nickel(Min): 80%
- Resistivity: 1.09-1.13 μΩ·m
- Operating Temperature: 1100-1200
- Density: 8.2 G/cm³
- Coefficient Of Linear Expansion: 13-15×10^-6/
- Tensile Strength: 700-900 Mpa
- Yield Strength: 300-600 Mpa
- Elongation: 20-30%
- Application: Electric Water Heaters, Electric Stoves, Electric Heating Tubes, Dryers And Heaters
- Highlight: **Cr20Ni80 Furnace Spiral Wire**, **Electric Spring Resistance Heater Wire**, **Furnace Spiral Resistance Heater Wire**

More Images



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Our Product Introduction

Product Description

Product Description:

Cr20Ni80 heating wire is a commonly used nickel-chromium alloy heating element, which is widely used in the field of home appliances. This heating wire is made of about 20% chromium (Cr) and 80% nickel (Ni) as its main components, and has excellent resistance characteristics and high temperature stability.

Cr20Ni80 heating wire has reliable performance and excellent durability, and is suitable for the heating needs of various home appliances. It is widely used in household appliances such as electric water heaters, ovens, and dryers. This heating wire can quickly generate high temperatures and maintain a stable heating effect over a long period of use.

This heating wire has a high melting point and a high maximum use temperature, which can reach about 1100-1200 degrees Celsius. It has moderate resistivity and can produce appropriate resistive heating effect, quickly converting electrical energy into heat energy. In addition, Cr20Ni80 heating wire also has a low linear expansion coefficient and excellent mechanical strength, which can maintain stability and reliability in high temperature and mechanical stress environments.

Basic performance:

Composition: Cr20Ni80 heating wire is composed of approximately 20% chromium (Cr) and 80% nickel (Ni) by weight. This alloy composition provides good electrical resistance and high-temperature stability.
Resistivity: The resistivity of Cr20Ni80 heating wire is typically around 1.09-1.13 μΩ·m. This property determines the wire's electrical resistance and its ability to generate heat when an electric current passes through it.
Maximum Operating Temperature: Cr20Ni80 heating wire has a high melting point and can withstand temperatures up to approximately 1100-1200 degrees Celsius (2012-2192 degrees Fahrenheit). It is suitable for applications requiring high-temperature heating.
Density: The density of Cr20Ni80 heating wire is approximately 8.4 g/cm³.
Coefficient of Linear Expansion: The wire has a coefficient of linear expansion of about 13-15×10^-6/°C, which means it expands or contracts slightly when subjected to temperature changes.
Mechanical Strength: Cr20Ni80 heating wire has good mechanical strength, including tensile strength and yield strength. The tensile strength is typically in the range of 700-900 megapascals (MPa), and the yield strength is around 300-600 MPa. These properties allow the wire to withstand mechanical stress during operation.
Elongation: The elongation of Cr20Ni80 heating wire is typically around 20-30%, indicating its ability to stretch slightly without breaking.

Technical Parameters:

Performance material		Cr10Ni90	Cr20Ni80	Cr30Ni70	Cr15Ni60	Cr20Ni35
Composición	**Ni**	90	Rest	Rest	55.0 61.0	34.0 37.0
	Cr	10	20.0 23.0	28.0 31.0	15.0 18.0	18.0 21.0
	Fe		≤1.0	≤1.0	Rest	Rest
Temperatura máxima		1300	1200	1250	1150	1100
Punto de fusion		1400	1400	1380	1390	1390
Densidad g/cm3		8.7	8.4	8.1	8.2	7.9
Resistividad μΩ·m,20		0.76±0.05	1.09±0.05	1.18±0.05	1.12±0.05	1.00±0.05
Alargamiento a la ruptura		≥20	≥20	≥20	≥20	≥20
Calor especifico J/g.			0.44	0.461	0.494	0.5
Conductividad térmica KJ/m.h			60.3	45.2	45.2	43.8
Coeficiente de expansión de líneas a×10-6/(20 1000)			18	17	17	19
Estructura micrográfica			Austenite	Austenite	Austenite	Austenite
Propiedades magnéticas			Nonmagnetic	Nonmagnetic	Nonmagnetic	Weak magnetic

Form	**Specification**	
Wire	Diameter=0.025mm~8mm	
Flat wire	Width=0.40~6.0mm	Thick=0.03~0.50mm
Strip	width=8~250mm	Thick=0.05~3.0mm
Bar	Diameter=8~100mm	Long=50~1000

Service:

We provide comprehensive nickel-chromium alloy technical support and services to ensure the normal operation of our customers' products. Our experienced technical team will provide customers with various services such as installation, maintenance, troubleshooting, and answer any questions they may have about the product. We also provide customized solutions, designing and manufacturing nickel-chromium alloy products according to customer needs.

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Main feature:

High resistance characteristics: Cr20Ni80 heating wire has a high resistivity and can provide appropriate resistance value to achieve the required heating power. This makes it one of the commonly used heating elements in home appliances.
High temperature stability: This heating wire can maintain stable performance in high temperature environments. It has good high temperature resistance and can withstand high operating temperatures to ensure the normal operation of heating equipment.
Fast heating response: Due to its high resistance characteristics, Cr20Ni80 heating wire has low thermal capacitance and can respond quickly to heating needs. It heats up quickly, providing fast and efficient heating.
Corrosion resistance: Cr20Ni80 heating wire has good corrosion resistance. It can resist some common corrosive media, such as water, acid and alkali, etc., extending the service life of the heating wire.
Uniform heating effect: Cr20Ni80 heating wire can provide uniform heating effect, ensuring uniform temperature distribution of the heated object. This helps achieve high-quality cooking, drying and heating results.
Plasticity: Cr20Ni80 heating wire has good plasticity and can be made into heating elements of different shapes and sizes to adapt to the design requirements of various home appliances.

Application:

Electric water heater: Cr20Ni80 heating wire is used as the heating element of the electric water heater, responsible for heating the water in the water tank. It can quickly heat up and provide hot water supply to meet the hot water needs of the family.
Electric stove: Cr20Ni80 heating wire is used in the heating device of electric stoves for cooking, baking, oven and other operations. It can heat food or items evenly and provide efficient heating effect.
Electric heating tube: Electric heating tubes made of Cr20Ni80 heating wire are used in various household appliances, such as coffee machines, electric kettles, electric heating cups, etc. It heats liquids quickly, providing convenient and comfortable use at home.
Dryer: Cr20Ni80 heating wire is used in household dryers to heat and dry clothes. It can provide stable heating effect, quickly dry wet clothes, and improve the convenience of family life.
Heater: Cr20Ni80 heating wire is used in various heaters, such as air heaters, electric heaters, etc. It heats up quickly and dissipates heat, providing a warm and comfortable indoor environment for the home.

In short, Cr20Ni80 heating wire is a reliable and efficient heating element in the field of home appliances. Its excellent performance and stability make it an ideal choice for electric heating equipment, providing efficient and reliable heating solutions for home appliances.

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