Industrial NiCr Alloy Cr20Ni80 NiCr Wire For Stable And Long Term Heating Performance

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE
- Model Number: Cr20Ni80
- Minimum Order Quantity: 5
- 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

- Material: Nickel, Chromium
- Nickel(Min): 89%
- Tensile Strength: 637MPA
- Magnetic Permeability: 0.78+/-0.05
- Elongtation: ≥20%
- Application: Heating, Resistivity
- Condition: Hard / Soft
- Sureface: Bright, Oxided, Acide
- Delivery Time: 7-20 Days
- Name: NiCr Alloy Wire
- Highlight: **Cr20Ni80 NiCr Wire**, **Industrial NiCr Alloy**, **Industrial NiCr Alloy Wire**

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Our Product Introduction

Product Description

NiCr Alloy Cr20Ni80 NiCr Wire For Stable And Long-Term Heating Performance In Industrial Processes

Product Description:

Cr20Ni80 alloy wire is an alloy wire composed of elements such as chromium (Cr) and nickel (Ni). Its chemical composition is 20% chromium and 80% nickel. It is a common resistance alloy, also known as nickel-chromium

alloy (Nichrome).

1. Physical properties: Cr20Ni80 alloy wire has a high melting point, about 1400 degrees Celsius. Its density is about 8.4 g/cm3 and it has good mechanical properties and thermal conductivity.

2. Resistance properties: The resistance of Cr20Ni80 alloy wire is relatively stable with temperature changes and has a small temperature coefficient. This means that within a certain temperature range, its resistance value changes less, can provide reliable heating effect, and facilitate temperature control.

3. High temperature stability: Cr20Ni80 alloy wire shows good stability in high temperature environments and is not prone to deformation or oxidation. This makes it suitable for applications requiring high temperature heating, such as ovens, electric stoves, etc.

4. High resistivity: Cr20Ni80 alloy wire has a high resistivity and has a stronger resistance to current than other alloy wires. The high resistivity enables the Cr20Ni80 alloy wire to generate greater heat when passing current, achieving an effective resistance heating effect.

5. Corrosion resistance: Cr20Ni80 alloy wire has certain resistance to oxidation and corrosion, and can form a dense oxide surface layer in an oxidizing environment to prevent further oxidation and corrosion.

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°C		1300	1200	1250	1150	1100
Punto de fusion °C		1400	1400	1380	1390	1390
Densidad g/cm3		8.7	8.4	8.1	8.2	7.9
Resistividad μΩ·m,20°C		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.°C			0.44	0.461	0.494	0.5
Conductividad térmica KJ/m.h°C			60.3	45.2	45.2	43.8
Coeficiente de expansión de líneas a×10-6/(20 1000°C)			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 focus on providing comprehensive nickel-chromium alloy technical support and services to ensure that our customers' products are running normally. We have an experienced technical team who will provide customers with a variety of services such as installation, maintenance, troubleshooting, and answer any questions they have about the product. In addition, we also provide customized solutions to design and manufacture nickel-chromium alloy products according to customer needs. We are committed to ensuring our customers are satisfied with their purchases and provide timely support to build a great relationship.

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

Size dimension range:
Wire: 0.01-10mm
Ribbons: 0.05*0.2-2.0*6.0mm
Strip: 0.05*5.0-5.0*250mm
NiCr series: Cr20Ni80, Cr30Ni70, Cr15Ni60, Cr20Ni35, Cr20Ni30

Packing and Shipping:
Sturdy cardboard boxes are used for packaging NiCr Alloy.
Each box has dimensions of approximately 26 cm (length) x 26 cm (width) x 30 cm (height).
The shipping method for NiCr Alloy depends on the customer's requirements.

FAQ :
What is the thermal expansion coefficient of Cr20Ni80 alloy wire?
The thermal expansion coefficient of Cr20Ni80 alloy wire is about 12-14×10^-6 1/degrees Celsius.

What applications are Cr20Ni80 alloy wire commonly used in?
Cr20Ni80 alloy wire is commonly used in electric heating elements, heaters, ovens, electric furnaces, resistors, thermocouples and other fields.

What are the advantages of Cr20Ni80 alloy wire?
Cr20Ni80 alloy wire has high temperature stability, low resistivity, good corrosion resistance and mechanical strength, and is suitable for high temperature heating and resistance applications.

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