Nichrome Heating Wire Cr10ni90 In Aerospace Field

Our Product Introduction

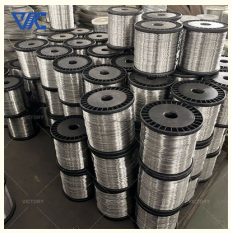
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE
- Model Number: Cr10Ni90
- 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: **Nichrome Heating Wire**, **Cr10ni90 Nichrome Heating Wire**, **Aerospace Field Nichrome Alloy**

More Images



Our Product Introduction

Product Description

Introduction:

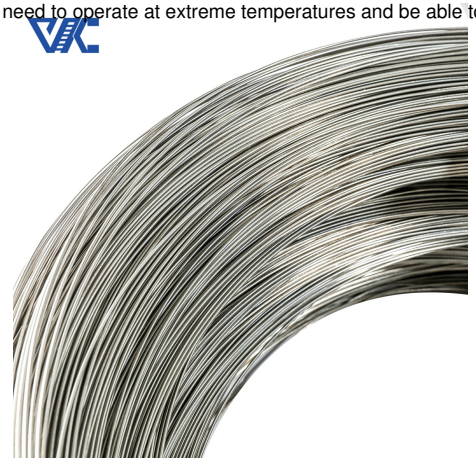
Cr10Ni90 alloy wire plays an important role in the aerospace field. Due to its high temperature stability and antioxidant properties, it is widely used in the manufacture of aerospace engine components, combustors and propulsion systems. This alloy wire is able to withstand extreme operating temperatures and harsh atmospheric conditions.

Application:

When it comes to the aerospace field, Cr10Ni90 alloy wire has the following outstanding characteristics, making it play an important role in this field:

1. High temperature stability: Cr10Ni90 alloy wire can maintain stable performance in extreme high temperature environments. This is critical for engine components and propulsion systems in aerospace applications, as they

need to operate at extreme temperatures and be able to withstand prolonged high-temperature exposure.



2. Anti-oxidation performance: Cr10Ni90 alloy wire has excellent anti-oxidation performance and can resist oxidation and corrosion in high-temperature environments. This is a crucial characteristic in aerospace applications, because aircraft engines and propulsion systems are often in high temperature, high pressure, and oxygen-rich environments, which require extremely high oxidation resistance of materials.

3. Strength and toughness: Cr10Ni90 alloy wire has good strength and toughness and can withstand high stress and impact loads in aerospace applications. This is critical for engine components and propulsion systems, which need to maintain structural integrity and reliability under harsh conditions such as high rotational speeds, high pressures and vibrations.

4. Lightweight advantages: Cr10Ni90 alloy wire is relatively light and has high strength and stiffness, so it can help reduce the weight of aerospace vehicles. In aerospace applications, weight is an important consideration because reducing spacecraft weight can increase fuel efficiency, increase payload, and improve overall performance.

5. Weldability and processability: Cr10Ni90 alloy wire has good weldability and processability, and can be easily manufactured and assembled. This is critical in the aerospace industry, where complex components and systems require precise machining and assembly, while also requiring materials that can be easily welded and joined.

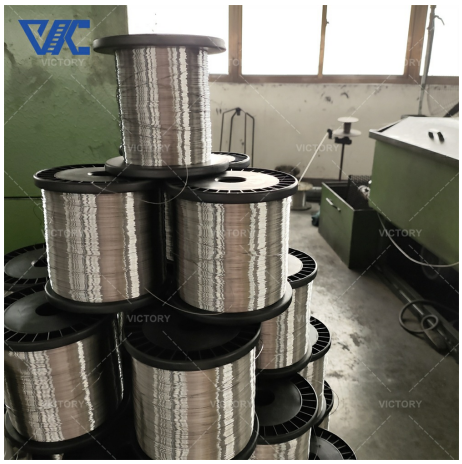
Technical Parameters:

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:

Our NiCr alloy heaters are designed to cater to your specific requirements. Whether it's the size, shape, or power parameters, we can customize the heaters to ensure optimum performance and effectiveness. We also provide comprehensive technical support and after-sales service to ensure your satisfaction and the long-term reliability of our products. When you choose our NiCr alloy heaters, you're choosing a solution that offers high efficiency, reliability, and flexibility to improve your production efficiency and reduce energy consumption.



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:
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 boxes are designed to provide protection to the contents during transportation.
A plastic wrap is used to seal the boxes, ensuring that the contents are shielded from dust and moisture.
The boxes are labeled with important information, including the product name, quantity, and destination.

Shipping:
The shipping method for NiCr Alloy depends on the customer's requirements.
Two options are mentioned: airmail and sea freight.
It's important to note that specific packaging and shipping processes may vary depending on the manufacturer or supplier. The information provided here offers a general understanding of how NiCr Alloy is typically packaged and shipped.

FAQ :

Is Cr10Ni90 alloy wire magnetic?
Cr10Ni90 alloy wire has certain magnetism at room temperature, but the magnetism will weaken or disappear at high temperatures.

What are the stress relaxation characteristics of Cr10Ni90 alloy wire?
Cr10Ni90 alloy wire has good stress relaxation characteristics and can maintain stable resistance performance at high temperatures for a long time.

Can Cr10Ni90 alloy wire be welded?
Cr10Ni90 alloy wire can be connected and fixed by common welding methods, such as resistance welding, argon arc welding, etc.

Changzhou Victory Technology Co., Ltd

+8619906119641 victory@dlx-alloy.com victory-alloy.com

NO.32 West Taihu Road, Xinbei District, Changzhou, Jiangsu