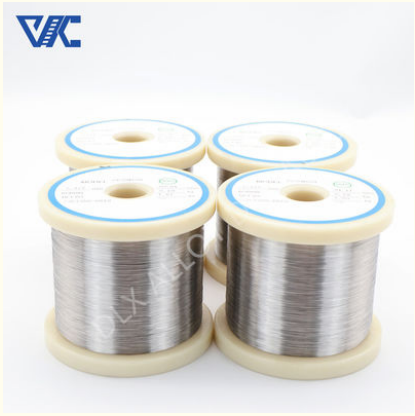
24 32 36 40 AWG Nichrome Alloy NiCr 80/20 Resistohm 80 Resistance Wire For Heating Elements

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO
- Model Number: Ni80Cr20
- Minimum Order Quantity: 3 KGS
- Price: 3 - 500 kgs $35-$42
- Packaging Details: Wooden Case
- Delivery Time: 21-36 working days
- Payment Terms: L/C, T/T, D/A
- Supply Ability: 10 Tons Per Month



Product Specification

- Material: Nickel, Chromium
- Surface: Bright/Acid White/Oxidized
- Density: 8.40 G/cm3
- Resistivity: 1.09±0.05
- Elongation At Rupture: ≥20%
- Max Working Temperature: 1200°C
- Melting Point: 1400°C
- Thermal Conductivity KJ/m.h °C: 60.3
- Magnetic Properities: Nonmagnetic
- MOQ: 2-5KGS
- Lead Time: 15-35 Days After Order Confirm
- Highlight: **40 AWG Nichrome Alloy**, **32 AWG Nichrome Alloy**, **24 AWG Nichrome Alloy**

More Images

Our Product Introduction

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Product Description

Factory Price 24 32 36 40 AWG Nichrome Alloy NiCr 80/20 Resistohm 80 Resistance Wire For Heating Elements

Cr20Ni80 is a premier nickel-chromium alloy wire that has established itself as a leading choice in industrial applications due to its exceptional corrosion resistance and outstanding mechanical properties. Comprising approximately 20% chromium and 80% nickel, this alloy composition grants it remarkable versatility, allowing it to excel in a wide range of demanding industrial environments.

The high chromium content in Cr20Ni80 provides unparalleled protection against corrosion, enabling the alloy to withstand exposure to aggressive media such as acids, alkalis, and saline solutions with ease. This makes the alloy an indispensable material for equipment and components used in the chemical, petrochemical, and marine industries, where reliable long-term performance is paramount.

Complementing its corrosion resistance, the Cr20Ni80 alloy also boasts exceptional mechanical strength, hardness, and wear resistance. These robust physical attributes allow it to maintain structural integrity and function reliably even under high-stress, high-temperature, or high-friction conditions. As a result, Cr20Ni80 is widely specified for critical parts and assemblies in a diverse array of industrial machinery and equipment.

What is the key features of nichrome wire?

1. Corrosion Resistance:
The high chromium content in the CR20NI80 alloy forms a protective oxide layer on the surface, providing excellent resistance to corrosion, even in harsh environments.
This characteristic ensures the longevity and reliability of components made from this alloy, minimizing the need for frequent replacements.

2. Mechanical Strength:
The CR20NI80 alloy exhibits impressive mechanical strength and tensile properties, making it suitable for applications that require high-performance and durable materials.
This strength is maintained even at elevated temperatures, making the alloy wire a reliable choice for use in high-temperature environments.

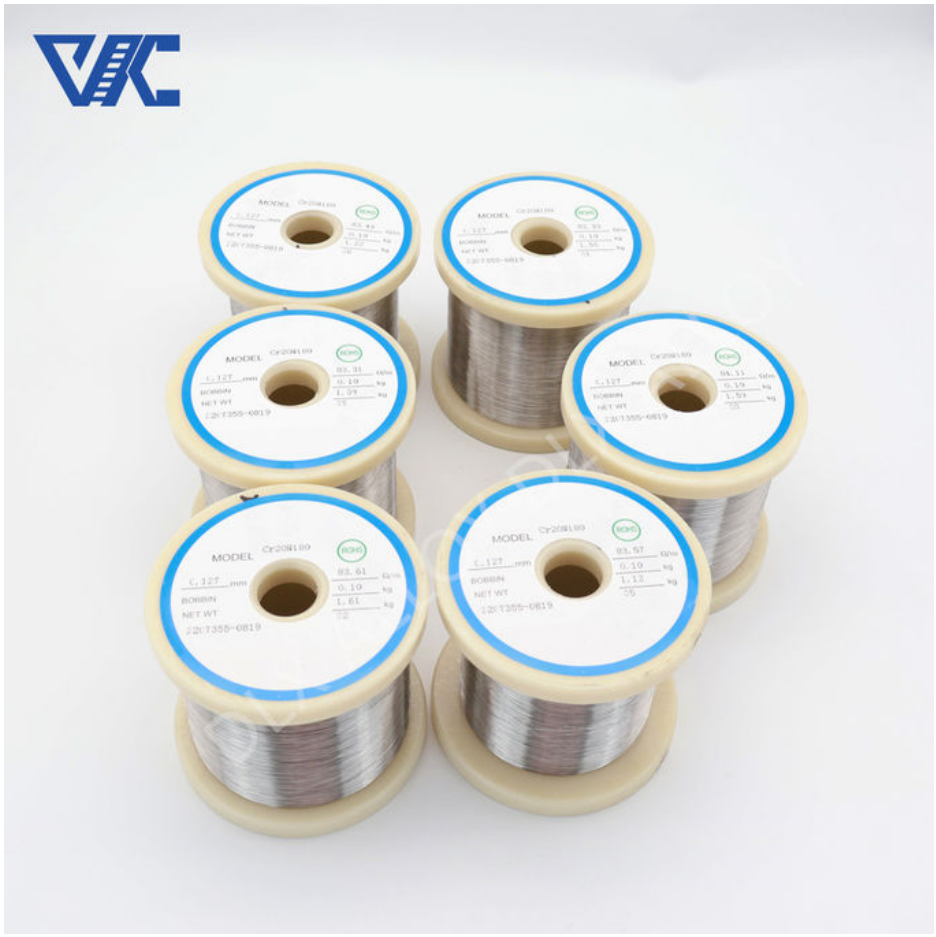
3. Thermal Stability:
The CR20NI80 alloy is capable of withstanding temperatures up to 1100°C (2012°F) without significant degradation of its properties.
This thermal stability ensures the reliability and consistent performance of components made from this alloy wire, even in demanding thermal applications.

4. Electrical Resistance:
The CR20NI80 alloy wire has a high electrical resistance, making it suitable for use as resistance heating elements in various electrical and electronic devices.
This property, combined with the alloy's thermal stability, allows for precise temperature control and efficient heat generation.

5. Versatility:
The CR20NI80 alloy wire can be manufactured in a wide range of diameters and configurations to meet the specific requirements of different applications.
This versatility makes the alloy wire a popular choice across various industries, including aerospace, chemical processing, and power generation.

Performance material		Cr10Ni90	Cr20Ni80	Cr30Ni70	Cr15Ni60	Cr20Ni35	Cr20Ni30
Composición	Ni	90	Rest	Rest	55.0 61.0	34.0 37.0	30.0 34.0
	Cr	10	20.0 23.0	28.0 31.0	15.0 18.0	18.0 21.0	18.0 21.0
	Fe		≤1.0	≤1.0	Rest	Rest	Rest
Max. temperature(°C)		1300	1200	1250	1150	1100	1100
Melting Point °C		1400	1400	1380	1390	1390	1390
Density(g/cm3)		8.7	8.4	8.1	8.2	7.9	7.9
Resistivity at 20ºC(μΩ@m)		0.76±0.05	1.09±0.05	1.18±0.05	1.12±0.05	1.00±0.05	1.04±0.05
Elongation at rupture(%)		≥20	≥20	≥20	≥20	≥20	≥20
Specific Heat J/g.°C			0.44	0.461	0.494	0.5	0.5
Thermal conductivity KJ/m.h°C			60.3	45.2	45.2	43.8	43.8
Coefficient of lines expansion a×10-6/(20 1000°C)			18	17	17	19	19

Micrographic structure		Austenite	Austenite	Austenite	Austenite	Austenite
Magnetic properties		Nonmagnetic	Nonmagnetic	Nonmagnetic	Weak magnetic	Weak magnetic



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