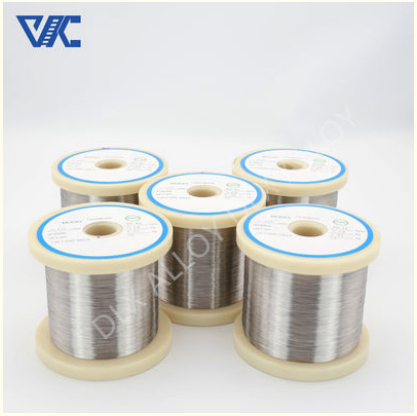
Bright Soft Nichrome Alloy Cr20Ni80 Cr15Ni60 Electric Resistance Wire For Furnace Heating

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: **Cr20Ni80 Nichrome Alloy**, **Furnace Heating Nichrome Alloy**, **Cr15Ni60 Nichrome Alloy**

More Images

Our Product Introduction

Product Description

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Cr20Ni80 is a high-performance nickel-chromium alloy wire known for its exceptional corrosion resistance and excellent mechanical properties.
The alloy composition of approximately 20% chromium and 80% nickel makes it highly resistant to a wide range of corrosive environments, including acids, alkalis, and saline solutions.

Cr20Ni80 also exhibits outstanding strength, hardness, and wear resistance, allowing it to maintain structural integrity and function reliably even under high-stress, high-temperature, or high-friction conditions.

This versatile alloy wire is widely used in industries such as chemical processing, petrochemical, marine, and aerospace, where corrosion resistance and mechanical durability are critical.

Cr15Ni60 is another nickel-chromium alloy wire with a slightly different composition compared to Cr20Ni80.

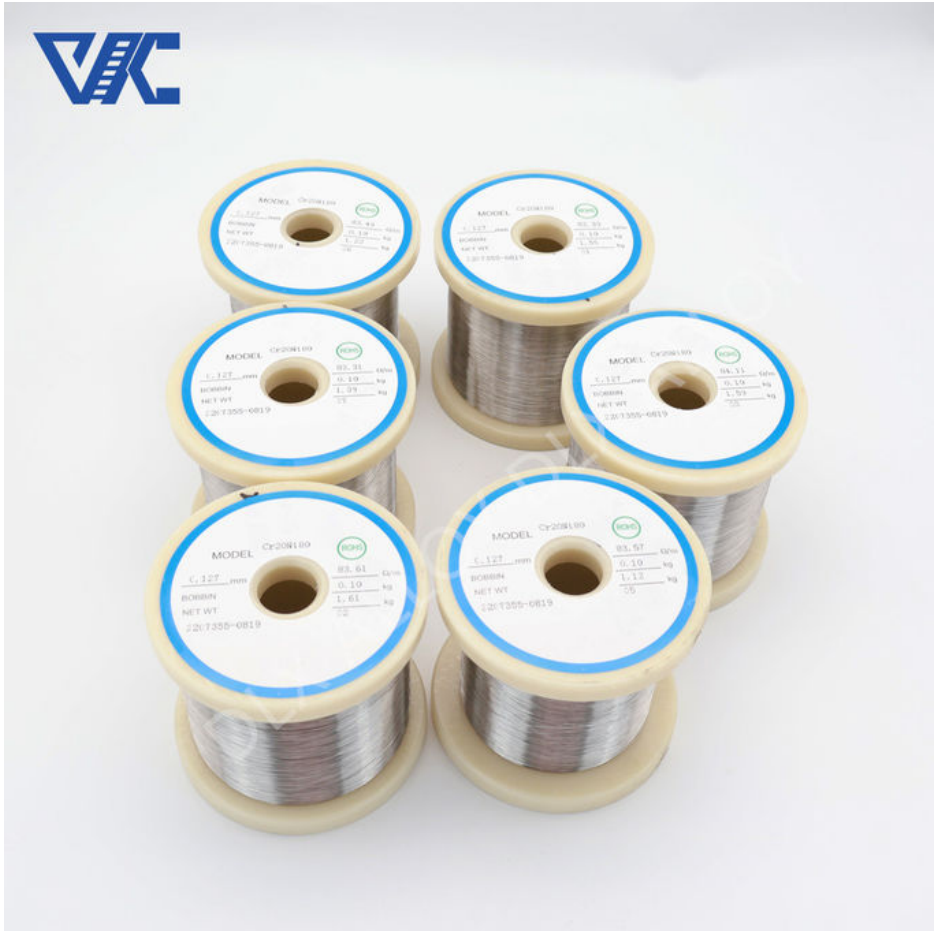
The alloy contains around 15% chromium and 60% nickel, which provides good corrosion resistance and mechanical properties, albeit not at the same level as the Cr20Ni80 alloy.

Cr15Ni60 is often used in applications where the requirements for corrosion resistance and mechanical performance are not as demanding as those for Cr20Ni80.

This alloy wire may be more cost-effective than Cr20Ni80 in certain applications and is commonly used in heating elements, furnace parts, and other industrial equipment.

Both Cr20Ni80 and Cr15Ni60 nickel-chromium alloy wires offer valuable properties for a wide range of industrial applications, with the specific choice depending on the required level of corrosion resistance, mechanical strength, and cost considerations.

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 ℃		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.℃			0.44	0.461	0.494	0.5	0.5
Thermal conductivity KJ/m.h℃			60.3	45.2	45.2	43.8	43.8
Coefficient of lines expansion a×10-6/(20 1000℃)			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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