



24 30 32 36 42 AWG Nichrome 60 Alloy Cr15Ni60 Electric Resistance Wire For Heating Elements

Our Product Introduction

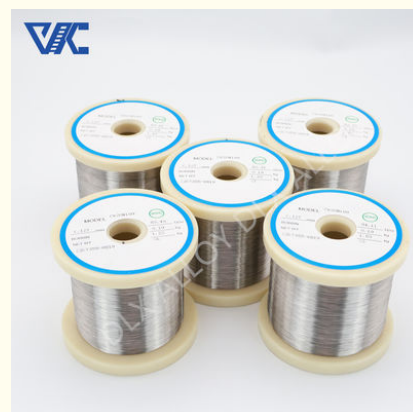
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO
- Model Number: Ni60Cr15
- Minimum Order Quantity: 3 KGS
- Price: 3 - 500 kgs \$22-\$30
- 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: 8.20 G/cm³
- Resistivity: 1.12±0.05
- Elongation At Rupture: ≥20%
- Max Working Temperature: 1150°C
- Melting Point: 1390°C
- Thermal Conductivity KJ/m.h °C: 45.2
- Magnetic Properties: Nonmagnetic
- MOQ: 2-5KGS
- Lead Time: 15-35 Days After Order Confirm
- Highlight: Heating Elements Nichrome 60 Alloy Wire, Cr15Ni60 Nichrome 60 Alloy Wire, 42 AWG Nichrome 60 Alloy Wire



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Product Description

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Cr15Ni60 is a type of Nichrome alloy wire. Nichrome is a family of nickel-chromium-based alloys that are commonly used in various heating and sensing applications.

Specifically, the Cr15Ni60 Nichrome alloy wire has the following key characteristics:

Composition:

Chromium (Cr): Approximately 15%

Nickel (Ni): Approximately 60%

Iron (Fe): Remaining balance, typically around 25%

Other minor alloying elements may be present in small amounts.

Properties Of Cr15Ni60 Nichrome Alloy Wire:

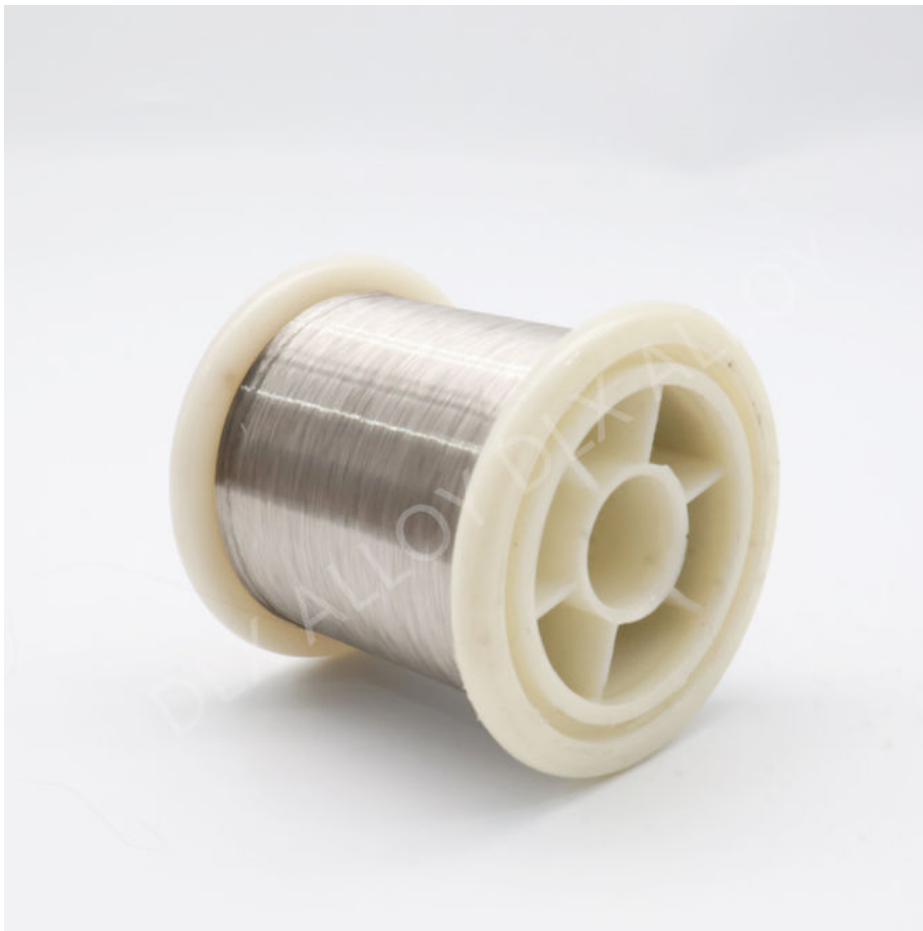
- Electrical Resistivity:** The Cr15Ni60 Nichrome alloy has a relatively high electrical resistivity, typically in the range of 1.00-1.10 ohm-mm²/m. This makes it suitable for use in heating and sensing applications where a high-resistance material is required.
- Oxidation Resistance:** The chromium content provides good oxidation resistance, allowing the Nichrome wire to operate at high temperatures without significant degradation.
- High-Temperature Strength:** The combination of chromium and nickel provides the alloy with excellent high-temperature strength and creep resistance, making it suitable for use in applications where sustained exposure to high temperatures is required.
- Corrosion Resistance:** The nickel content contributes to the alloy's corrosion resistance, making it suitable for use in environments with moderate to high corrosive conditions.
- Ductility:** The nickel-rich composition of the alloy provides a good balance of ductility and strength, allowing the Nichrome wire to be formed and shaped as needed.

Applications Of Cr15Ni60 Nichrome Alloy Wire:

- Heating elements for electric furnaces, ovens, and other high-temperature equipment
- Sensing elements for temperature measurement, such as in thermocouples and resistance temperature detectors (RTDs)
- Heating components in industrial and domestic appliances
- Resistor elements in electronic circuits and devices
- Catalytic converters in automotive exhaust systems

The Cr15Ni60 Nichrome alloy wire is a versatile and widely used material in industries where high-temperature, corrosion-resistant, and high-resistance heating or sensing applications are required.

Performance material		Cr10Ni90	Cr20Ni80	Cr30Ni70	Cr15Ni60	Cr20Ni35	Cr20Ni30
Composition	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 20°C(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 α×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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