



## High Temperature Stability Of Cr15Ni60 NiCr Wire For Industrial Heating Equipment

Our Product Introduction

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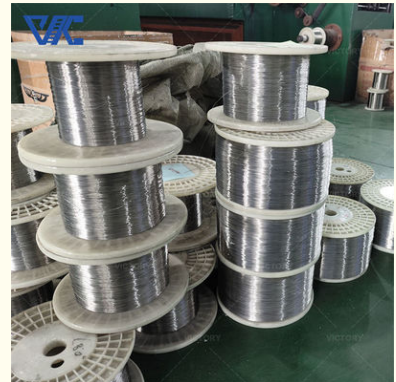
### Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Cr15Ni60
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Plastic film or waterproof woven bag inside, wire packed in spool put into carton,coil wire or strip wire put into wooden case
- Delivery Time: 7 to 20 Days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

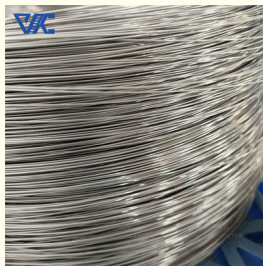


### Product Specification

- Product Name: Nichrome Alloy Wire
- Nickel(Min): 55%
- Material: Nickel, Chromium
- Elongation:  $\geq 20\%$
- Tensile Strength: 637MPA
- Resistivity:  $1.12 \pm 0.05$
- Surface: Bright, Oxided, Acide
- Condition: Hard / Soft
- Application: Industrial Ovens, Quenching Furnaces, Hot Air Fans, Drying Equipment, Chemical Evaporators, Etc
- Highlight: **High Temperature Stability NiCr Wire, Industrial Heating Equipment NiCr Wire, Cr15Ni60 NiCr Wire**



### More Images



### Product Description

## High Temperature Stability Of Cr15Ni60 NiCr Wire For Industrial Heating Equipment

### Product Description:

Cr15Ni60 nickel chromium alloy wire is an electric heating alloy material composed of nickel and chromium, exhibiting excellent electric heating performance with a nickel content of at least 55% and a resistivity of  $1.12 \pm 0.05$ . This alloy wire has a tensile strength of 637MPa and an elongation of at least 20%, ensuring its mechanical stability and processing flexibility in various industrial applications. It provides various surface treatment options such as brightness, oxidation, and pickling, and can provide hard or soft product forms according to requirements. Cr15Ni60 alloy wire is widely used in industrial furnaces, quenching furnaces, hot air fans, drying equipment, chemical evaporators, etc. It is an ideal choice for achieving efficient heating and precise temperature control.

The high resistivity and stable resistance characteristics of Cr15Ni60 nickel chromium alloy wire make it an indispensable material in the field of industrial heating equipment. Its good oxidation resistance and corrosion resistance at high temperatures ensure long-term reliability and durability. In addition, Cr15Ni60 alloy wire is easy to process into complex shapes to meet specific industrial application requirements. Whether used as a heating element or a resistance material, it can provide efficient and uniform thermal energy output. These characteristics make Cr15Ni60 nickel chromium alloy wire an ideal solution for multiple industrial heating applications, from chemical engineering to metal treatment.

### Size dimension range:

Wire: 0.01-10mm

Ribbons:  $0.05 \times 0.2$ - $2.0 \times 6.0$ mm

Strip:  $0.05 \times 5.0$ - $5.0 \times 250$ mm

NiCr series: Cr10Ni90, Cr20Ni80, Cr30Ni70, Cr15Ni60, Cr20Ni35, Cr20Ni30

### Technical Parameters:

Performance material		Cr15Ni60
Composition	Ni	55.0 61.0
	Cr	15.0 18.0
	Fe	Rest
Maximum temperature °C		1150
Melting point °C		1390
Density g/cm <sup>3</sup>		8.2
Resistivity $\mu\Omega \cdot m, 20^\circ C$		$1.12 \pm 0.05$
Elongation at rupture		$\geq 20$
Specific heat J/g.°C		0.494
Thermal conductivity KJ/m.h °C		45.2
Coefficient of lines expansion $\alpha \times 10^{-6}/$ (20 1000°C)		17
Micrographic structure		Austenite
Magnetic properties		Nonmagnetic

### Characteristics:

High resistivity: Cr15Ni60 alloy wire has high resistivity and can generate large currents at lower voltages, achieving rapid heating.

High temperature stability: Stable at temperatures up to 1150 °C, suitable for various high-temperature heating applications.

Antioxidant properties: It has good antioxidant properties at high temperatures, extending its service life.

Corrosion resistance: The addition of chromium improves the corrosion resistance of the alloy wire, making it suitable for use in harsh environments.

Good machinability: easy to machine into the desired shape, meeting the design needs of different industrial equipment.

### Application:

Cr15Ni60 nickel chromium alloy wire is an electric heating alloy material with high electrical resistivity, good oxidation resistance, and corrosion resistance, which is widely used in the field of industrial heating equipment. The following are the specific applications of Cr15Ni60 nickel chromium alloy wire in the field of industrial heating equipment:

Periodic heat treatment furnace: Cr15Ni60 alloy wire is widely used in the manufacturing of heating elements, especially in periodic heat treatment furnaces below 900 °C, due to its high temperature strength and electrical resistance stability.

Industrial electric furnace: As a heating element, Cr15Ni60 alloy wire can be used in industrial electric furnaces to provide stable heat, suitable for industries such as metallurgy and mechanical processing.

Resistor: Cr15Ni60 alloy wire is also used to manufacture high resistance alloys for wire wound resistors and has important applications in the electrical industry.

High end electric heating tube: Due to its excellent comprehensive characteristics, Cr15Ni60 alloy wire is suitable for manufacturing high-end electric heating tubes and electric heating wires for household electric heaters.

High quality resistance box: Cr15Ni60 alloy wire is also used as a resistance strip in high-quality resistance boxes, providing accurate resistance values.

High temperature sensing: In the field of high temperature sensing and control, Cr15Ni60 alloy wire is used in the manufacturing of high-temperature sensors and control systems due to its high temperature performance and oxidation resistance.

Furnace temperature control system: Cr15Ni60 alloy wire is also used in the furnace temperature control system to accurately control the temperature of industrial furnaces.

The applications of Cr15Ni60 nickel chromium alloy wire demonstrate its importance and versatility in the field of industrial heating equipment, providing efficient and stable heat sources for industrial production.

### Shipping:

The shipping method for NiCr Alloy depends on the customer's requirements.

Two options are mentioned: airmail and sea freight.

Airmail is a faster but relatively more expensive shipping option, suitable for customers who require quick delivery.

Sea freight is a cost-effective shipping option that is commonly used for transporting bulk quantities of goods over longer distances.

### FAQ :

Q1: What are the main advantages of Cr15Ni60 nickel chromium alloy wire in industrial heating equipment?

The main advantages of A1: Cr15Ni60 nickel chromium alloy wire are its high temperature stability and oxidation resistance, which enable it to maintain performance without degradation at extreme temperatures, while having high electrical resistivity for fast heating, making it very suitable for harsh working environments of industrial heating equipment.

Q2: What is the corrosion resistance of Cr15Ni60 alloy wire and in which industrial environments is it particularly useful?

A2: Cr15Ni60 alloy wire has excellent corrosion resistance, which makes it particularly useful in corrosive environments such as chemical industry and petroleum processing, ensuring the long-term stable operation of heating elements.

Q3: Do industrial heating equipment using Cr15Ni60 nickel chromium alloy wire require special maintenance?

A3: Due to the high stability and corrosion resistance of Cr15Ni60 alloy wire, industrial heating equipment using it usually does not require special maintenance. However, regular inspections and cleaning are still recommended practices to ensure the best performance and longest service life of the equipment.



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