



## Stable Resistivity Nickel Chromium Alloy Cr20Ni80 X20H80 Heating Wire To Russia

Our Product Introduction

for more products please visit us on [victory-alloy.com](http://victory-alloy.com)

### Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE, ROHS, ISO 9001
- Model Number: Cr20Ni80
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Spool package with Carton box, Coil package with polybag for Resistance wire
- 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: Stable Resistivity Nickel Chromium Alloy Cr20Ni80 X20H80 Heating Wire To Russia
- Material: Nickel, Chromium
- Nickel(Min): 77%
- Tensile Strength: 630~780MPA
- Magnetic Permeability: 1.09+/-0.05
- Elongation: ≥20%
- Condition: Hard / Soft
- Surface: Bright, Oxided, Acide
- Application: Electric Heater, Industrial Heat Treatment Equipment, Laboratory Heating Device
- Melting Point: 1400C
- Highlight: Russia X20H80 heating wire, Stable resistivity X20H80 heating wire, Cr20Ni80 X20H80 heating wire



### More Images



### Product Description

## Stable resistivity nickel chromium alloy Cr20Ni80 X20H80 heating wire to Russia

### Product Description:

Nichrome cr20ni80 is a common electrical resistance wire material, mainly composed of 20% chromium (Cr) and 80% nickel (Ni).

Nichrome cr20ni80 is widely used in the manufacture of heating wires, heating tubes, heating coils, and other heating equipment. Its excellent high-temperature resistance and anti-oxidation properties ensure the reliability and service life of heating elements.

### 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:** Cr10Ni90, Cr20Ni80, Cr30Ni70, Cr15Ni60, Cr20Ni35, Cr20Ni30

### Technical Parameters:

Performance material		Cr20Ni80
Composición	Ni	Rest
	Cr	20.0~23.0
	Fe	≤1.0
Temperatura máxima °C		1200
Punto de fusion °C		1400
Densidad g/cm3		8.4
Resistividad μΩ·m, 20°C		1.09±0.05
Alargamiento a la ruptura		≥20
Calor específico J/g·°C		0.44
Conductividad térmica KJ/m.h°C		60.3
Coeficiente de expansión de líneas α×10 <sup>-6</sup> /(20 1000°C)		18
Estructura micrográfica		Austenite
Propiedades magnéticas		Non magnetic

Form	Specification	
Wire	Diameter=0.025mm~8mm	
Flat wire	Width=0.40~6.0mm	Thick=0.03~0.50mm
Strip	width=6~300mm	Thick=0.05~3.0mm
Bar	Diameter=8~100mm	Long=50~1000

### Cr20Ni80 characteristics:

**High electrical resistivity:** Nichrome cr20ni80 has a relatively high electrical resistivity, typically around 1.08-1.13 Ω·mm<sup>2</sup>/m, which makes it suitable for manufacturing heating elements.

**High-temperature endurance:** This alloy can be used for long-term operation at temperatures below 800°C, with good high-temperature performance.

**Oxidation resistance:** The high Cr content provides Nichrome cr20ni80 with good oxidation resistance. It can be used in air for an extended period without rapid oxidation.

**Good workability:** Nichrome cr20ni80 is soft and easy to process into various shapes of heating elements.

### Make heating elements with cr20ni80 wire:

Here are the general steps to use Nichrome Cr20Ni80 wire to make heating elements:

#### Determine the heating requirements:

Calculate the desired wattage, resistance, and operating voltage for the heating application. Select the appropriate Cr20Ni80 wire gauge and length based on the power and resistance needs.

#### Form the heating element shape:

Bend or coil the Cr20Ni80 wire into the desired shape, such as a spiral, zigzag, or straight configuration. Use jigs or fixtures to maintain the uniform spacing and shape of the wire.

#### Install insulation:

Wrap the formed Cr20Ni80 wire with high-temperature insulating materials, such as ceramic fiber, mica, or fiberglass. This insulation helps to electrically isolate the heating element and protect it from the environment.

**Secure the heating element:**

Mount the insulated Cr20Ni80 heating element onto a suitable frame or support structure. Use high-temperature adhesives, clamps, or fasteners to firmly hold the heating element in place.

**Provide electrical connections:**

Attach electrical lead wires to the ends of the Cr20Ni80 heating element. Ensure secure and reliable connections, often using crimping or welding techniques.

**Enclosure and housing:**

Enclose the heating element assembly within a protective housing or casing, if required by the application. This helps to shield the heating element and provide a safe, controlled environment.

**Testing and quality control:**

Carefully test the heating element for proper resistance, wattage output, and overall functionality. Inspect the assembly for any signs of damage or defects before final installation.



Changzhou Victory Technology Co., Ltd



+8619906119641



victory@dlx-alloy.com



victory-alloy.com

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