



## Corrosion Resistance Of Nickel Chrome Flat Wire Ni80Cr20/NiCr8020 Heating Resistance Wire

Our Product Introduction

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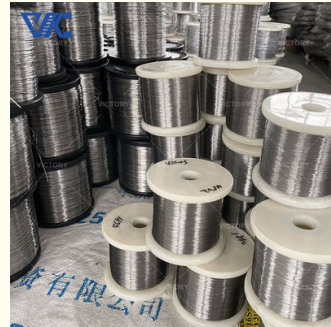
### Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO9001
- Model Number: Cr20Ni80
- Minimum Order Quantity: 3.5
- Price: 5-100kg, \$20-\$30
- Packaging Details: Spool package with Carton box, Coil package with polybag for Resistance wire
- Delivery Time: 5-20 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month



### Product Specification

- Applications: Heating Elements, Furnaces, Electrical Components
- Nickel(Min): 77%
- Elongation:  $\geq 20\%$
- Melting Point: 1400-1450°C
- Electrical Resistivity: 1.1-1.2  $\mu\Omega\text{m}$
- Resistivity: 1.09+/-0.05
- Tensile Strength: 637MPa
- Hardness: HV400-500
- Thermal Conductivity: 15-20 W/mK
- Name: NiCr Alloy
- Highlight: NiCr8020 Heating Resistance Wire, Ni80Cr20 Heating Resistance Wire, Ni80Cr20 Nickel Chrome Flat Wir



### More Images



Our Product Introduction

### Product Description

#### 5. corrosion resistance of nickel chrome flat wire Ni80Cr20/NiCr8020 heating resistance wire Introduction:

1. Nichrome flat wire is a type of heating element wire that is commonly used in various applications such as in heaters, ovens, toasters, and other electrical appliances. It is made of an alloy of nickel and chromium, which provides high resistance to electrical current and excellent heat resistance. The flat shape of the wire allows for efficient heat transfer and distribution. Nichrome flat wire is known for its durability, stability at high temperatures, and consistent performance, making it a popular choice in the heating industry.

2. mechanical properties of Nichrome flat wire:

Tensile Strength: Typically ranges from 600 to 900 MPa.  
Yield Strength: Around 275 to 550 MPa.  
Elongation: Generally between 20% to 35%.

Hardness: Varies depending on the specific alloy composition.

These properties can vary based on the specific grade and manufacturer of the Nichrome flat wire.

3. Corrosion Resistance: Nichrome wire is resistant to oxidation and corrosion, ensuring a longer lifespan in various heating applications.

4. Fast Heating: Due to its high resistance, Nichrome wire heats up quickly, providing rapid heat generation in heating devices.

5. Durable: Nichrome wire is durable and can withstand repeated heating cycles without significant degradation in performance.

Performance material		Cr10Ni90	Cr20Ni80	Cr30Ni70	Cr15Ni60	Cr20Ni35
Composición	Ni	90	Rest	Rest	55.0 61.0	34.0 37.0
	Cr	10	20.0 23.0	28.0 31.0	15.0 18.0	18.0 21.0
	Fe		≤1.0	≤1.0	Rest	Rest
Temperatura máxima °C		1300	1200	1250	1150	1100
Punto de fusion °C		1400	1400	1380	1390	1390
Densidad g/cm3		8.7	8.4	8.1	8.2	7.9
Resistividad μΩ·m, 20°C		0.76±0.05	1.09±0.05	1.18±0.05	1.12±0.05	1.00±0.05
Alargamiento a la ruptura		≥20	≥20	≥20	≥20	≥20
Calor específico J/g.°C			0.44	0.461	0.494	0.5
Conductividad térmica KJ/m.h°C			60.3	45.2	45.2	43.8
Coeficiente de expansión de líneas α×10 <sup>-6</sup> /(20 1000°C)			18	17	17	19
Estructura micrográfica			Austenite	Austenite	Austenite	Austenite
Propiedades magnéticas			Nonmagnetic	Nonmagnetic	Nonmagnetic	Weak magnetic

Form	Specification	
Wire	Diameter=0.025mm~8mm	
Flat wire	Width=0.40~6.0mm	Thick=0.03~0.50mm
Strip	width=8~250mm	Thick=0.05~3.0mm
Bar	Diameter=8~100mm	Long=50~1000

#### Application fields:

Due to its high temperature performance and corrosion resistance, Cr20Ni80 alloy wire is widely used in industrial heaters, electric furnace heating elements, hot blast furnaces, resistance heaters, heat treatment equipment and other fields. It is also used to make electric heating elements such as resistance wires, heating wires, and electric heaters.

#### Service:

We provide comprehensive nickel-chromium alloy technical support and services to ensure the normal operation of our customers' products. Our experienced technical team will provide customers with various services such as installation, maintenance, troubleshooting, and answer any questions they may have about the product. We also provide customized solutions, designing and manufacturing nickel-chromium alloy products according to customer needs. We are committed to ensuring customers are satisfied with their purchases, providing timely support and building great relationships.



**contact us**  
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Oem service:  
 Welcome customized size  
 We are experience factory for OEM&ODM service

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

#### FAQ:

##### Are you a manufactuer?

Yes, we are the factory and mailny produce heating resistance alloy wire, like Fecral/Nichrome material.

##### What is the chemical composition of Cr20Ni80 alloy wire?

The chemical composition of Cr20Ni80 alloy wire is approximately 20% chromium (Cr) and 80% nickel (Ni).

##### What is the diameter range of Cr20Ni80 alloy wire?

The diameter range of Cr20Ni80 alloy wire can be customized according to needs, usually ranging from a few microns to a few millimeters.



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