



## Corrosion Resistant NiCr Alloy Cr20Ni80 Heat Wire For Long Term And Stable Heating Performance

Our Product Introduction

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### Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE
- Model Number: Cr20Ni80
- Minimum Order Quantity: 5
- Packaging Details: Spool package with Carton box, Coil package with polybag for Resistance wire
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month



### Product Specification

- Material: Nickel, Chromium
- Nickel(Min): 89%
- Tensile Strength: 637MPA
- Magnetic Permeability: 0.78+/-0.05
- Elongation: ≥20%
- Application: Heating, Resistivity
- Condition: Hard / Soft
- Surface: Bright, Oxided, Acide
- Delivery Time: 7-20 Days
- Name: NiCr Alloy Wire
- Highlight: Corrosion Resistant NiCr Alloy, Cr20Ni80 Heat Wire, NiCr Alloy Cr20Ni80



### More Images



### Product Description

#### Product Description:

Cr20Ni80 alloy wire is a nickel-chromium alloy wire, which is composed of 20% chromium and 80% nickel. This alloy wire has excellent oxidation resistance and corrosion resistance, and is suitable for electric furnace heating, heating wire, resistance welding and other applications in high temperature environments.

#### Corrosion resistance:

Cr20Ni80 alloy wire has good corrosion resistance under normal circumstances and can resist corrosion by various acids and alkali. However, in some special corrosive media, Cr20Ni80 alloy wire may need to be used with caution. The following are some special corrosive media that may require attention:  
Oxidizing acids: Strong oxidizing acids such as concentrated nitric acid, concentrated sulfuric acid and concentrated hydrofluoric acid are highly corrosive to Cr20Ni80 alloy wire. These acidic media can cause passive film damage on the alloy surface, thereby accelerating the corrosion process.

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Hydrochloric acid: At high concentration and high temperature, hydrochloric acid can corrode Cr20Ni80 alloy wire. Particularly in the presence of chloride ions, corrosion rates may increase.

Ammonia: Ammonia solution with higher concentration can corrode Cr20Ni80 alloy wire. Ammonia gas in ammonia water can form ammonia alloy compounds, leading to corrosion of the alloy surface.

Fluoride: Solutions containing fluoride may corrode Cr20Ni80 alloy wire under certain conditions. In particular, strong fluorides such as hydrogen fluoride and ammonium fluoride are highly corrosive to alloys.



#### Technical Parameters:

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×10-6/(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

#### 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.



**contact us**  
**email: [victory@dlx-alloy.com](mailto:victory@dlx-alloy.com)**

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

**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.

**FAQ :**

**What testing services do we provide for Cr20Ni80 alloy wire?**

We provide chemical composition analysis, resistivity measurement, tensile strength testing and other testing services for Cr20Ni80 alloy wire to ensure that product quality meets standard requirements.

**How is Cr20Ni80 alloy wire packaged?**

Cr20Ni80 alloy wire is usually packed in sturdy cartons to ensure product protection during transportation.

**What logistics options do we offer to ship Cr20Ni80 alloy wire?**

We offer multiple logistics options such as air and sea freight to meet our customers' needs. Air freight is faster and suitable for urgent deliveries, while sea freight is suitable for high-volume products and long-distance transportation.



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