



## Cr20Ni70 Nichrome Wire Heating Coil

| Basic Information                 |          |  |  |  |  |
|-----------------------------------|----------|--|--|--|--|
| Place of Origin:                  | China    |  |  |  |  |
| Brand Name:                       | Victory  |  |  |  |  |
| Certification:                    | CE       |  |  |  |  |
| <ul> <li>Model Number:</li> </ul> | Cr20Ni70 |  |  |  |  |
| • Minimum Order Quantity:         | 5        |  |  |  |  |
|                                   |          |  |  |  |  |

- Packaging Details:
- Delivery Time:
- Payment Terms:
- Supply Ability:
- Spool package with Carton box, Coil package with polybag for Resistance wire
- 5-21 days
  - L/C, T/T, Western Union, MoneyGram
- y: 300 tons per month



## **Product Specification**

| <ul> <li>Max. Continuous Service<br/>Temp. Of Element(<sup>o</sup>C):</li> </ul> | 1100   |
|--|--|
| <ul> <li>Melting Point:</li> </ul>   | 1390   |
| <ul> <li>Resistivity:</li> </ul>   | 1.04±0.05  |
| <ul> <li>Density(g/cm3):</li> </ul>  | 7.9  |
| <ul> <li>Thermal Conductivity<br/>(KJ/m·h.ºC):</li> </ul>                        | 43.8   |
| <ul> <li>Coefficient Of Lines<br/>Expansion(α×10-6/<sup>o</sup>C):</li> </ul>    | 19   |
| <ul> <li>Melting Point Approx.( <sup>o</sup>C):</li> </ul>                       | 1390   |
| <ul> <li>Elongation At Rupture(%):</li> </ul>                                    | >20  |
| • Highlight:   | Cr20Ni70 nichrome wire heating coil,<br>nichrome wire heating coil,<br>Cr20Ni70 nickel chrome wire heating |

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#### **Product Description**

Cr20Ni70 Heating Nichrome Wire Strip Ribbon Resistance Wire Coil

### NiCr Series

Cr20Ni70 is an exceptional material that offers a range of desirable properties, making it an ideal choice for various applications. It is known for its excellent ductility, workability, and weldability, even under high temperatures and seismic stress. This material is particularly useful in situations where high strength and durability are crucial.

One of the key features of Cr20Ni70 is its high and stable resistance to corrosion. This makes it an excellent choice for applications where the material will be exposed to harsh environments or corrosive substances. Additionally, the material has outstanding surface oxidation resistance, making it suitable for use in high-temperature settings.



Another advantage of Cr20Ni70 is its exceptional coil-forming ability. This property makes it easy to shape and mold the material into various forms and shapes, making it highly versatile and useful in a wide range of applications.

Overall, Cr20Ni70 is a highly desirable material that offers a range of properties that make it an excellent choice for various industrial and commercial applications. Its high strength, durability, and resistance to corrosion and oxidation make it an ideal choice for use in harsh environments, while its excellent coil-forming ability makes it easy to work with and shape to meet specific needs.

Т

Thick=0.05~3.0mm

Long=50~1000

Strip

Bar

| Performance m                  | aterial       | Cr10Ni           | 90             | Cr20Ni80     | Cr30Ni70     | Cr15Ni60          | Cr20Ni35      | С  |
|--------------------------------|---------------|------------------|----------------|--------------|--------------|-------------------|---------------|----|
|                                | Ni            | 90               |                | Rest         | Rest         | 55.0~61.0         | 34.0~37.0     | 3( |
| Composition                    | Cr            | 10               |                | 20.0~23.0    | 28.0~31.0    | 15.0~18.0         | 18.0~21.0     | 11 |
|                                | Fe            |                  |                | ≤1.0         | ≤1.0         | Rest              | Rest          | R  |
| Maximum temp                   | erature°C     | 1300             |                | 1200         | 1250         | 1150              | 1100          | 1  |
| Meltiing point °C              |               | 1400             |                | 1400         | 1380         | 1390              | 1390          | 1; |
| Density g/cm3                  |               | 8.7              |                | 8.4          | 8.1          | 8.2               | 7.9           | 7. |
| Resistivity at 20°C((μΩ·m)     |               |                  |                | 1.09±0.05    | 1.18±0.05    | 1.12±0.05         | 1.00±0.05     | 1. |
| Elongation at ru               | pture         | ≥20              |                | ≥20          | ≥20          | ≥20               | ≥20           | ≥; |
| Specific heat                  |               |                  |                | 0.44         | 0.461        | 0.494             | 0.5           | 0. |
| J/g.°C                         |               |                  |                |              |              |                   |               |    |
| Thermal conduc                 | ctivity       |                  |                | 60.3         | 45.2         | 45.2              | 43.8          | 4; |
| KJ/m.h°C                       |               |                  |                | 00.5         | 45.2         | +3.2              | 45.0          |    |
| Coefficient of lir             | nes expansion |                  |                |              |              |                   |               | T  |
| a×10-6/                        |               |                  |                | 18           | 17           | 17                | 19            | 1! |
| (20~1000°C)                    |               |                  |                |              |              |                   |               |    |
| Micrographic st                | ructure       |                  |                | Austenite    | Austenite    | Austenite         | Austenite     | A  |
| Magnetic prope                 | rties         |                  |                | Non-magnetic | Non-magnetic | Non-magnetic      | Weak magnetic | w  |
| Micrographic structure Ferrite |               | Ferrite          |                | Ferrite      | Ferrite      | Ferrite           | Ferrite       | F  |
| Magnetic properties Mag        |               | Magnet           | ic             | Magnetic     | Magnetic     | Magnetic          | Magnetic      | Μ  |
| Form                           |               |                  | Specific       | cation       |              |                   |               |    |
| Wire Diameter                  |               |                  | er=0.025mm~8mm | 1            |              |                   |               |    |
| Flat wire                      |               | Width=0.40~6.0mm |                |              | Thick=0.03~  | Thick=0.03~0.50mm |               |    |
|                                |               |                  |                |              |              |                   |               |    |

| Size Range |                |  |
|------------|----------------|--|
| Wire       | dia 0.03-7.5mm |  |
|            | dia 8.0-12.0mm |  |
|            |                |  |

width=8~250mm

Diameter=8~100mm

| Ribbon | (0.05-0.35)*(0.5-6.0)mm |  |
|--------|-------------------------|--|
| Strip  | (0.50-2.5)*(5-180)mm    |  |
| Rod    | 8-50mm                  |  |

NiCr 80/20 is suitable for heating elements used for temperatures upto 1200°C. This is used for electrical cooking equipment, precison resistors. Oxidized wires of these alloys display better insulation properties.

NiCr 70/30 is suitable for heating elements used for temperatures upto 1230°C for industrial furnaces which have alternating oxidizing, or reducing atmosphere. This alloy has excellent corrosion resistance and long life in air and controlled atmospheres.

NiCr 60/15 is suitable for heating elements used for temperatures upto 1150°C. This is used for electrically heated equipment, high resistance and potientiometer resistors.

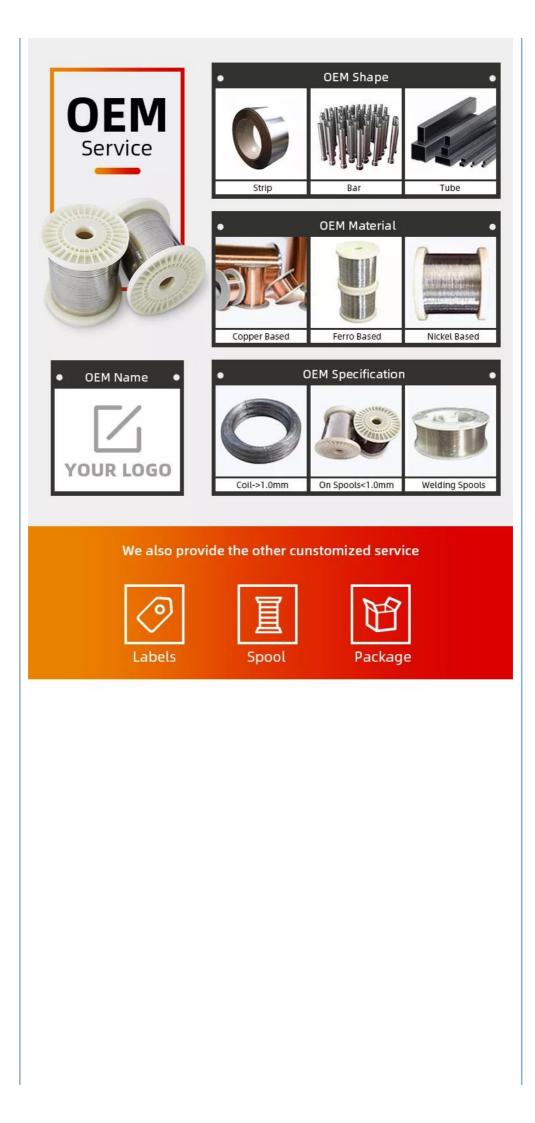
NiCr 30/20 is suitable for heating elements used for temperatures upto 1050°C. Inspite of relatively high Fe content, these alloys are resistant to oxidation and chemical corrosion. They are used for making heating elements of cooking equipment, heating cords and cables.

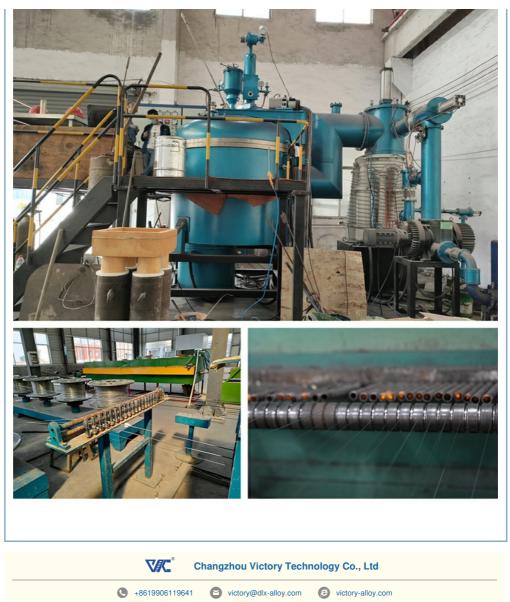
# APPLICATION

Industrial Heating Equipments Domestic Heating Appliances









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