Austenitic Corrosion Resistant Cr20Ni80 Nickel Chromium Flat Wire For Laboratory Equipment

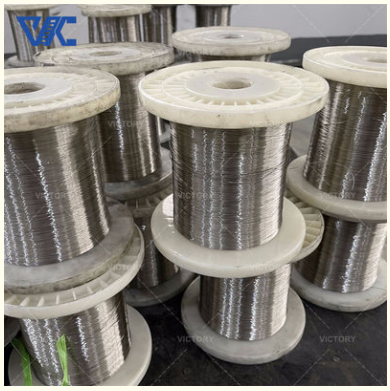
Our Product Introduction

Basic Information

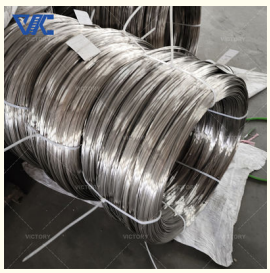
- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Cr20Ni80
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Spool package with Carton box, Coil package with polybag for Resistance wire
- Delivery Time: 7 to 20 Days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

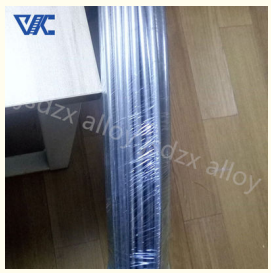
Product Specification

- Product Name: Nichrome Alloy Wire
- Material: Nickel, Chromium
- Nickel(Min): 77%
- Melting Point: 1400-1450°C
- Electrical Resistivity: 1.1-1.2 μΩm
- Resistivity: 1.09+/-0.05
- Tensile Strength: 637MPA
- Hardness: HV400-500
- Thermal Conductivity: 15-20 W/mK
- Elongtation: ≥20%
- Condition: Hard / Soft
- Sureface: Bright, Oxided, Acide
- Application: Laboratory Heater, Constant Temperature Equipment, Chemical Reaction Vessel
- Highlight: **Cr20Ni80 Flat Wire**,



More Images





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Product Description

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Product Description:

Cr20Ni80 nickel chromium flat wire has important applications in the field of laboratory equipment. Due to its material properties and performance advantages, it is widely used in laboratory heating equipment to meet the heating needs of laboratory research and experiments.
Its main components are nickel and chromium, with nickel content reaching 80% and chromium content reaching 20%. This alloy ratio endows the flat wire with good conductivity and corrosion resistance, enabling it to work stably for a long time in laboratory environments. Secondly, Cr20Ni80 nickel chromium flat wire has excellent thermal conductivity. In laboratory equipment, it is necessary to quickly and uniformly heat the sample or reagent to ensure the accuracy and reproducibility of experimental results. Due to the characteristics of nickel chromium alloy, this flat wire can quickly convert electrical energy into thermal energy and evenly transfer the heat to the object to be heated.

In addition, Cr20Ni80 nickel chromium flat wire also has good mechanical properties. It has high tensile strength, good ductility, can withstand various forces and pressures that may be applied in experiments, and is not easy to deform or fracture. This stable mechanical performance ensures the reliability and long-term stability of laboratory equipment.

Stability and durability are crucial in laboratory equipment. The excellent performance of Cr20Ni80 nickel chromium flat wire ensures the continuous and efficient operation of laboratory equipment, providing reliable support and guarantee for scientific research and experimentation. Therefore, it is widely used in various laboratory heating equipment, including ovens, thermostats, laboratory hot plates, etc., providing necessary tools and conditions for scientists and researchers, promoting the development of scientific research and technological innovation.

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 especifico J/g.°C		0.44
Conductividad térmica KJ/m.h°C		60.3
Coeficiente de expansión de líneas a×10-6/(20 1000°C)		18
Estructura micrográfica		Austenite
Propiedades magnéticas		Nonmagnetic

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

Cr20Ni80 characteristics:

High purity nickel content: 80% nickel content provides extremely high melting point and excellent oxidation resistance.
Corrosion resistance: The addition of chromium enhances the corrosion resistance of the material, making it suitable for use in various chemical laboratory environments.

Stable resistivity: Over a wide temperature range, The Cr20Ni80 alloy flat wire exhibits stable electrical resistivity, ensuring consistent performance of the heating element.
Good processing performance: Easy to process into various shapes and sizes, meeting the customization needs of laboratory equipment.
High temperature strength: It can maintain its strength and shape even at high temperatures, suitable for long-term high-temperature heating applications.

Application:

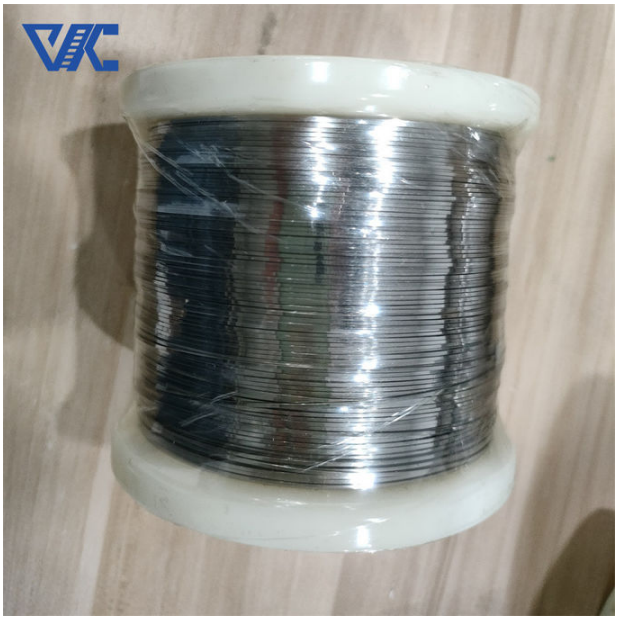
Laboratory heater: As a heating element, used for precise control of the heating process in the laboratory.
Constant temperature equipment: used to manufacture equipment such as constant temperature water bath and constant temperature oil bath to maintain temperature stability during the experimental process.
Chemical reaction container: As a heating element, it ensures that chemical reactions are carried out at the required precise temperature.
Analytical instrument: As a key heating component in analytical instruments such as gas chromatography and liquid chromatography.
Sample preparation: Used during the heating and preparation process of samples to ensure the uniformity and accuracy of sample processing.

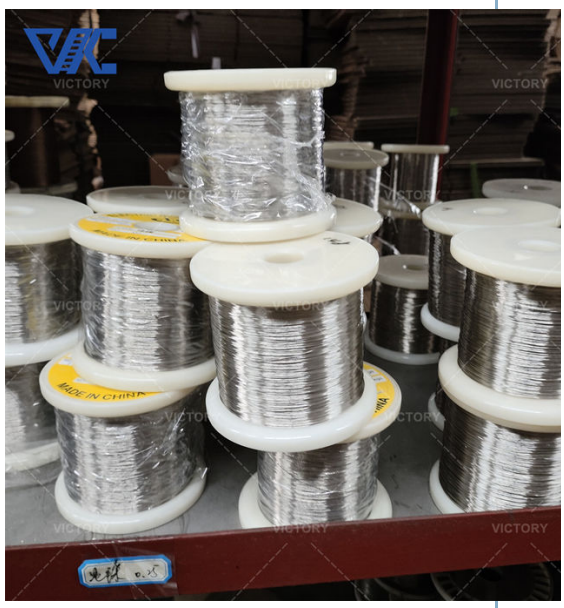
FAQ :

Q1: What are the main advantages of Cr20Ni80 nickel chromium flat wire in laboratory equipment?
The main advantages of Cr20Ni80 nickel chromium flat wire are its high temperature resistance and oxidation resistance brought by high-purity nickel, as well as stable electrical resistivity, which make it very suitable for laboratory environments that require precise temperature control.

Q2: What is the corrosion resistance of Cr20Ni80 alloy flat wire and what are its applications in chemical laboratories?
A2: Cr20Ni80 alloy flat wire has excellent corrosion resistance and can resist the erosion of common chemical substances such as acids and alkalis in the laboratory. Therefore, it is widely used in heaters, constant temperature equipment, and chemical reaction vessels in chemical laboratories.

Q3: Do laboratory equipment using Cr20Ni80 nickel chromium flat wire require special maintenance?
A3: Due to the high stability and corrosion resistance of Cr20Ni80 alloy flat wire, laboratory equipment using it usually does not require special maintenance.





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