



High Temperature Resistant Cr20Ni35 Nichrome Alloy Wire In Industrial Furnaces And Heaters

Our Product Introduction

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Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE,ROHS,ISO 9001
- Model Number: Cr20Ni35
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Plastic film or waterproof woven bag inside, wire packed in spool put into carton,coil wire or strip wire put into wooden case
- Delivery Time: 7 to 20 Days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

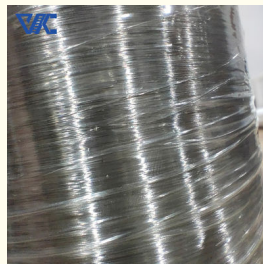
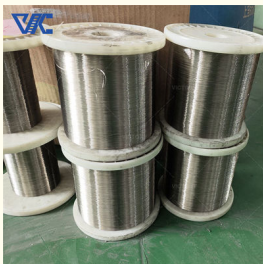


Product Specification

- Product Name: Resistance Heating Wire
- Material: Nickel, Chromium
- Nickel(Min): 32%
- Resistivity: 1.00+/-0.05
- Tensile Strength: 637MPA
- Elongation: ≥20%
- Condition: Hard / Soft
- Surface: Bright, Oxided, Acide
- Application: Industrial Heat Treatment Furnace, Industrial Smelting Furnace, Industrial Drying Equipment
- Highlight: Industrial Furnaces Nichrome Alloy Wire, Heat Resistant Nichrome Alloy Wire



More Images



Product Description

High Temperature Resistant Cr20Ni35 Nichrome Alloy Wire In Industrial Furnaces And Heaters

Product Description:

Cr20Ni35 resistance heating wire is a highly respected high-performance heating material, consisting of nickel and chromium, with a nickel content of no less than 32%. This wire material has excellent electrical properties, with a stable resistivity of 1.00 \pm 0.05, allowing you to precisely control the heating process. And its excellent mechanical performance is also unparalleled, with a tensile strength of up to 637MPa and an elongation rate of over 20%, providing stable support for your heating equipment.

Not only that, but also, The Cr20Ni35 resistance heating wire also offers two optional states of hard and soft, and can be surface treated according to needs, including bright, oxidized, or acidic treatment, to meet the needs of different application scenarios. From industrial heat treatment furnaces to industrial smelting furnaces, to industrial drying equipment, this wire material is capable of handling heating tasks in various high-temperature environments, providing reliable heating support and temperature control for your production line. Choose Cr20Ni35 resistance heating wire and choose an efficient, stable, and reliable heating solution.

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		Cr20Ni35
Composición	Ni	34.0 37.0
	Cr	18.0 21.0
	Fe	Rest
Temperatura máxima °C		1100
Punto de fusion °C		1390
Densidad g/cm3		7.9
Resistividad $\mu\Omega\cdot m, 20^{\circ}C$		1.00 \pm 0.05
Alargamiento a la ruptura		≥ 20
Calor específico J/g. °C		0.5
Conductividad térmica KJ/m.h °C		43.8
Coeficiente de expansión de líneas $\alpha \times 10^{-6}/(20\ 1000^{\circ}C)$		19
Estructura micrográfica		Austenite
Propiedades magnéticas		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

General Introduction

Cr20Ni35 nickel chromium alloy wire is a high-performance electric heating alloy material designed specifically for extreme heating environments. It contains at least 20% chromium and 35% nickel, a unique combination of ingredients that endows it with excellent high-temperature resistance and corrosion resistance. Cr20Ni35 alloy wire plays a crucial role in industrial furnaces and heaters due to its stable electrical resistivity and good mechanical properties, providing efficient and reliable heating solutions for modern industrial production.

Characteristic advantages

High electrical resistivity: Cr20Ni35 alloy wire has high electrical resistivity and can generate large currents at lower voltages, achieving rapid heating.

High temperature resistance: capable of stable operation at temperatures up to 1200 °C, suitable for various high-temperature heating applications.

Corrosion resistance: The high chromium content enhances the corrosion resistance of the alloy wire, making it suitable for

use in corrosive environments.

Mechanical strength: It has high tensile strength and elongation, ensuring stability during mechanical processing and use.

Antioxidant properties: It has good antioxidant properties at high temperatures, extending its service life.

Applications in industrial furnaces and heaters

Industrial heat treatment furnace: In the metal heating treatment process, Cr20Ni35 alloy wire is often used as a heating element in heat treatment furnaces. These furnaces can be used for quenching, annealing, aging treatment and other processes to achieve precise heating and temperature control of metal materials by controlling the current flux of Cr20Ni35 alloy wire.

Industrial smelting furnace: In the process of metal smelting and smelting, Cr20Ni35 alloy wire is widely used in industrial smelting furnaces, such as aluminum smelting furnaces, zinc smelting furnaces, etc. It can withstand high temperature and heat environments, quickly converting electrical energy into thermal energy, thereby melting or heating metal materials to the desired temperature.

Chemical equipment heaters: In the chemical production process, Cr20Ni35 alloy wire can be used as a heating element for heaters in chemical equipment, such as chemical reaction kettles, heating tanks, etc. Its corrosion resistance and high temperature resistance enable it to operate stably in challenging chemical environments, providing necessary heating support for chemical reactions.

Industrial drying equipment: In industrial drying equipment, such as drying ovens, drying rooms, etc, Cr20Ni35 alloy wire is often used as a heating element. Its excellent resistance characteristics and high temperature resistance can quickly convert electrical energy into thermal energy, providing an efficient and stable heating solution for the drying process in industrial production.

Q&A

Q1: What are the main advantages of Cr20Ni35 nickel chromium alloy wire in industrial furnaces and heaters?

The main advantages of Cr20Ni35 nickel chromium alloy wire are its high electrical resistivity and high temperature resistance, which enables it to work stably in high temperature environments while providing fast and uniform heating effects.

Q2: What is the corrosion resistance of Cr20Ni35 alloy wire and in which industrial environments is it particularly useful?

A2: Cr20Ni35 alloy wire has excellent corrosion resistance, which makes it particularly useful in corrosive environments such as chemical industry and petroleum processing, ensuring the long-term stable operation of heating elements.

Q3: Do industrial furnaces and heaters using Cr20Ni35 nickel chromium alloy wire require special maintenance?

A3: Due to the high stability and corrosion resistance of Cr20Ni35 alloy wire, industrial furnaces and heaters using it usually do not require special maintenance. However, regular inspections and cleaning are still recommended practices to ensure the best performance and longest service life of the equipment.



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