



## Nickel Chrome Alloy Wire Cr20Ni80 Thermal Spray Wire For Heat Treatment Field

Our Product Introduction

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### 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
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

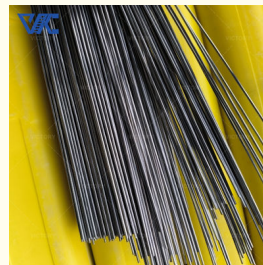
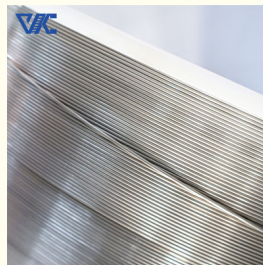


### Product Specification

- Product Name: Thermal Spray Wire
- Grade: Cr20Ni80
- Material: Ni Cr
- Bonding Strength: 48.26 N/mm2
- Deposit Rate: 10 Lbs/hr/100A
- Coating Hardness: HRC 30-35
- Density: 8.4 G/cm3
- Melting Point: 1,350°C
- Highlight: Chromium Titanium Nickel Spray Wire, 45CT Nickel Spray Wire, 1.6mm thermal spray wires



### More Images



### Product Description

## Introduction:

Cr20Ni80 thermal spray wire, also known as Nichrome 80/20 thermal spray wire, is a commonly used nickel-chromium alloy wire. It is composed of approximately 80% nickel (Ni) and approximately 20% chromium (Cr) and has excellent properties.

Cr20Ni80 thermal spray wire has good oxidation resistance and chemical stability, and can work stably in high temperature environments. It resists oxidation, corrosion and high-temperature atmospheres, making it suitable for applications requiring high-temperature stability.

In addition, Cr20Ni80 thermal spray wire has high resistivity and is suitable for electric heating and thermal spray applications. It plays an important role in electric heaters, thermal spray coatings and other heat treatment equipment.

## Thermal spray wire

Item	Inconel 625	Ni95Al5	45CT	Monel 400	HC-276	Cr20Ni80	K500
C	≤0.05	≤0.02	0.01-0.1	≤0.04	≤0.02	≤0.08	≤0.25
Mn	≤0.4	≤0.2	≤0.2	2.5-3.5	≤1.0	≤0.06	≤1.5
P	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01	≤0.02	≤0.01
S	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01
Si	≤0.15	≤0.2	≤0.2	≤0.15	≤0.08	0.75-1.6	≤0.5
Cr	21.5-23	≤0.2	42-46	-	14.5-16	20-23	-
Ni	Rest	Rest	Rest	65-67	Rest	Rest	Rest
Cu	-	-	-	Rest	-	-	27-33
Mo	8.5-10	-	-	-	15-17	-	-
Ti	≤0.4	0.4-1	0.3-1.0	2.0-3.0	-	-	0.35-0.85
Al	≤0.4	4-5	-	≤0.5	-	-	2.3-3.15
Fe	≤1.0	-	≤0.5	≤1.0	4.0-7.0	-	≤1.0
Nb	3.5-4.15	-	-	-	-	≤1.0	-
Co	-	-	-	-	-	-	-
V	-	-	-	-	≤0.35	-	-
W	-	-	-	-	3.0-4.5	-	-
Impurities	≤0.50	≤0.50	≤0.50	≤0.50	≤0.50	≤0.50	≤0.50

## Feature:

**High temperature stability:** Cr20Ni80 alloy can maintain stable performance in high temperature environments and has good oxidation resistance and corrosion resistance.

**Fast Heating Response:** The alloy has high resistivity and low heat capacity, enabling fast heating and cooling reactions.

**Wear resistance:** Cr20Ni80 thermal spray wire has certain wear resistance and can withstand mechanical stress and friction during heat treatment.

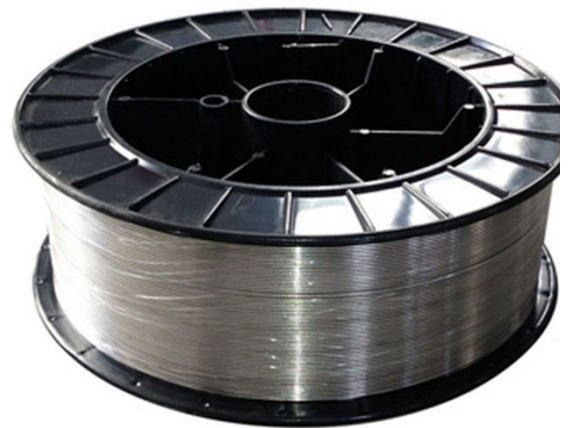
## Application:

**Heat treatment furnace:** Cr20Ni80 thermal spray wire can be used to manufacture heating elements of heat treatment furnaces and is used in heat treatment processes such as annealing, quenching and tempering of metal materials.

**High-temperature furnace cavity:** This alloy thermal spray wire is suitable for lining high-temperature furnace cavities to provide high-temperature resistance, corrosion resistance and wear-resistance protection. It is commonly found in furnaces, pipes and insulation layers.

**Heat treatment tools:** Cr20Ni80 thermal spray wire can be used to manufacture heat treatment tools, such as fixtures, molds and heating plates. It provides uniform heating distribution and stable temperature control.

## Size range Wire: 0.12 to 8.0 mm.



## Q&A:

What are the application advantages of Cr20Ni80 thermal spray wire in heat treatment furnaces?

Cr20Ni80 thermal spray wire is suitable for heating elements in heat treatment furnaces. It has the characteristics of high temperature stability and fast heating response, and can achieve an efficient heat treatment process.

What is the role of Cr20Ni80 thermal spray wire in high temperature furnace cavity lining?

Using Cr20Ni80 thermal spray wire for the lining of high-temperature furnace chambers can provide high-temperature, corrosion-resistant and wear-resistant protection, extending the service life of the furnace chamber.

What are the advantages of Cr20Ni80 thermal spray wire in heat treatment tools?

Cr20Ni80 thermal spray wire can be used to manufacture heat treatment tools, with uniform heating distribution and stable temperature control, helping to achieve precise heat treatment processes.



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