Heating Coil 0Cr25Al5 Spiral Heating Element Wire For Muffle Furnace Industrial Furnace

Our Product Introduction

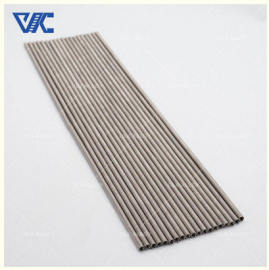
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO/ROHS
- Model Number: 0Cr25Al5
- Minimum Order Quantity: 3kgs
- Price: Negotiable
- Packaging Details: Put wire into cartons, then put cartons onto pallet
- Delivery Time: 10-25 days
- Payment Terms: L/C, T/T, Paypal, Western Union
- Supply Ability: 80 Tons Per Month

Product Specification

- Material: FeCrAl
- Chemical Composition: Fe Cr Al,Ferro Chrome Aluminium,Cr,Ni,Iron-chromium-aluminum
- Density: 7.1 G/cm3
- Melting Point: 1500°C
- Thermal Conductivity: 13.5 W/m Kelvin
- Tensile Strength: 690-930 MPa
- Yield Strength: 300-650 MPa
- Elongation: ≥20%
- Specification: 0.025-10mm
- Application: Resistive Heating Elements, Heaters And Electric Stoves
- Shape: Strip,wire,ribbon,plate,Wire Strip Round Ribbon
- Highlight: **Spiral Heating Element Wire**, **Industrial Furnace Heating Element Wire**, **0Cr25Al5 Heating Element Wire**

More Images



for more products please visit us on victory-alloy.com

Product Description

Our Product Introduction

for more products please visit us on victory-alloy.com

Introduction:

0Cr25Al5 is an iron-chromium-aluminum alloy heater wire mainly used in the manufacture of resistance heating elements. Its chemical composition includes iron, chromium, aluminum and other elements, and is also called iron-chromium-aluminum furnace wire or iron-chromium-aluminum heating wire. The density of the furnace bar is approximately 7.1 g/cm3 and the melting point is approximately 1500°C. It has good thermal conductivity, with a thermal conductivity of approximately 13.5 W/m·Kelvin.

0Cr25Al5 heater wire has high strength properties, with a tensile strength between 690-930 MPa, a yield strength between 300-650 MPa, and an elongation of at least 20%. Its specification range is 0.025-10 mm, and the available shapes include ribbon, line, ribbon wire, plate, etc.

This heater wire is mainly used in the manufacture of resistance heating elements, such as heaters, electric stoves and electric stoves. It can generate appropriate resistance and heat the surrounding medium through electric current. 0Cr25Al5 heater wire has good oxidation resistance and corrosion resistance, and can operate stably in high temperature environments. It is widely used in household appliances, industrial heating equipment, laboratory equipment and other fields.

Parameter:

Chemical composition:
Carbon (C) content: about 0.03-0.06%
Silicon (Si) content: ≤0.70%
Manganese (Mn) content: ≤0.70%
Phosphorus (P) content: ≤0.025%
Sulfur (S) content: ≤0.025%
Chromium (Cr) content: about 23.0-26.0%
Aluminum (Al) content: about 4.5-6.5%
Physical properties:
Density: about 7.10 g/cubic centimeter
Melting point: about 1500 degrees Celsius
Thermal Conductivity: Approximately 13.5 W/m Kelvin (at 20 degrees Celsius)
Mechanical behavior:
Tensile Strength: Approximately 690-930 MPa (Watts)
Yield Strength: Approximately 300-650 MPa (Watts)
Elongation: ≥20%

item	value
Place of Origin	Jiangsu,China
Type	Fe-Cr-Aluminum Ribbon
Application	Industry Furnace
Conductor Material	ferro alloy
Certificate	ISO9001
Thermal conductivity:	15 W/(m.K) (20ºC)
Executive standard	GB/T1234-2012
Dimensions	User's Demand
Size	0.56-5mm
shape	shaped strip
width	6-50mm
Packing	Pallet
highest temperature	1400ºC
melting point	1520ºC

Alloy Nomenclature Performance		1Cr13AL4	0Cr25Al5	0Cr21AL6	0Cr23Al5	0Cr21Al4	0Cr21Al6Nb	0Cr27Al7Mo2
Main Chemical composition	Cr	12.0-15.0	23.0-26.0	19.0-22.0	20.5-23.5	18.0-21.0	21.0-23.0	26.5-27.8
	Al	4.0-6.0	4.5-6.5	5.0-7.0	4.2-5.3	3.0-4.2	5.0-7.0	6.0-7.0
	Re	opportune	opportune	opportune	opportune	opportune	opportune	opportune
	Fe	Rest	Rest	Rest	Rest	Rest	Rest	Rest
							Nb0.5	Mo1.8-2.2
Max. continuous service temp. of element(°C)		950	1250	1250	1250	1100	1350	1400
Resistivity at 20ºC(μΩ·m)		1.25	1.42	1.42	1.35	1.23	1.45	1.53
Density(g/cm3)		7.4	7.1	7.16	7.25	7.35	7.1	7.1

Thermal conductivity(KJ/m·h·ºC)	52.7	46.1	63.2	60.2	46.9	46.1	--
Coefficient of lines expansion(α×10-6/ºC)	15.4	16	14.7	15	13.5	16	16
Melting point approx.(ºC)	1450	1500	1500	1500	1500	1510	1520
Tensile strength(N/mm2)	580-680	630-780	630-780	630-780	600-700	650-800	680-830
Elongation at rupture(%)	>16	>12	>12	>12	>12	>12	>10
Variation of area(%)	65-75	60-75	65-75	65-75	65-75	65-75	65-75
Repeat Bending frequency(F/R)	>5	>5	>5	>5	>5	>5	>5
Hardness(H.B.)	200-260	200-260	200-260	200-260	200-260	200-260	200-260
continuous service time(Hours/ ºC)	--	≥80/1300	≥80/1300	≥80/1300	≥80/1250	≥50/1350	≥50/1350
Micrographic structure	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Magnetic properties	Magnetic	Magnetic	Magnetic	Magnetic	Magnetic	Magnetic	Magnetic

Characteristic:

Excellent high temperature resistance: 0Cr25Al5 can maintain stability in high temperature environments and has high temperature strength and corrosion resistance.
Resistance heating characteristics: It has good resistance heating characteristics, can generate heat efficiently, and heats up quickly when powered on.
Antioxidant properties: It has good antioxidant properties and can resist oxidation and thermal stress in high temperature environments.

Advantage:

High temperature stability: 0Cr25Al5 can maintain stability and durability in high temperature environments and is suitable for high temperature heating equipment that operates for a long time.
Efficient heating performance: It has excellent resistance heating characteristics and can efficiently generate heat and transfer it to the heated object or environment.
Corrosion resistance: It shows good corrosion resistance and can be used for a long time in harsh environments without being easily damaged.

Specific applications:

Heat treatment equipment: used for heating and insulation during metal heating treatment, such as annealing furnaces, quenching furnaces, etc.
Electric furnaces and electric heaters: Electric furnaces and electric heating equipment used in the power industry, such as electric furnaces, electric heating tubes, etc.
Industrial furnaces and ovens: high-temperature heating equipment used in various industrial fields, such as furnaces, drying equipment, etc.

Q&A:

What are the main advantages of 0Cr25Al5 heater wire?
The main advantages of 0Cr25Al5 heater wire include high temperature stability, efficient heating performance and good corrosion resistance.

What application areas are 0Cr25Al5 heater wire suitable for?
0Cr25Al5 heater wire is suitable for applications such as heat treatment equipment, electric furnaces and electric heaters, as well as industrial furnaces and ovens.

What are the advantages of 0Cr25Al5 grate bar compared with other materials?
Compared with other materials, 0Cr25Al5 grate bar has better high-temperature stability, efficient heating performance and corrosion resistance, and is suitable for the requirements of various high-temperature heating equipment.

Changzhou Victory Technology Co., Ltd

+8619906119641 victory@dlx-alloy.com victory-alloy.com

NO.32 West Taihu Road, Xinbei District, Changzhou, Jiangsu