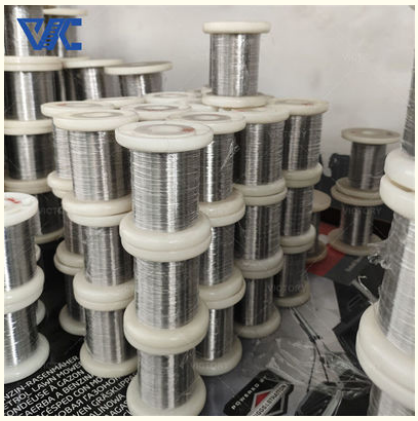
FeCrAl Alloy 0Cr25Al5 OhmAlloy142B Heating Resistance Wire For Furnace Heating Elements

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO
- Model Number: 0Cr25Al5
- Minimum Order Quantity: 3kgs
- Price: 3-500kgs $3.60-$5.00
- 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: 50 Tons Per Month



Product Specification

- Material: FeCrAl
- Surface: Bright, Acid White, Black/Oxidized
- Density: 7.1 G/cm3
- Resistivity: 1.42 Ω/m
- Max Working Temperature: 1250°C
- Elongation At Rupture: 12%
- Hardness (H.B.)): 200-260
- Magnetic Properties: Magnetic
- MOQ: 3-20kgs
- Delivery Lead Time: 15-25 Days
- Melting Point Approx (°C): 1500°C
- Tensile Strength (N/mm2)): 630-780 N/mm2
- Highlight: **FeCrAl Alloy 0Cr25Al5**, **Furnace Heating Elements FeCrAl Alloy**, **OhmAlloy142B Heating Resistance Wire**

More Images

Product Description

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General Introduction:

The 0Cr25Al5 wire is a type of heating element wire that is commonly used in industrial heating applications. It is made of an iron-chromium-aluminum alloy, where the numbers in the name represent the approximate composition of the alloy (0% iron, 25% chromium, 5% aluminum).

This type of wire is known for its high resistance to oxidation and corrosion at high temperatures, making it suitable for use in environments where the wire is exposed to heat and potentially corrosive elements. The 0Cr25Al5 wire has good mechanical properties and can withstand high temperatures up to around 1250°C (2282°F).

It is often used in applications such as electric ovens, industrial furnaces, and heating elements in various industrial processes where high temperatures are required. The 0Cr25Al5 wire is valued for its reliability, durability, and consistent performance under high-temperature conditions.

Main Features:

1. High Temperature Resistance: The 0Cr25Al5 wire can withstand high temperatures up to approximately 1250°C (2282°F) without significant degradation, making it suitable for use in high-temperature environments.

2. Oxidation and Corrosion Resistance: This wire has excellent resistance to oxidation and corrosion, even at elevated temperatures. This property helps extend the lifespan of the wire and ensures consistent performance over time.

3. Good Mechanical Properties: The 0Cr25Al5 wire exhibits good mechanical strength and ductility, allowing it to be easily formed into various shapes for different heating element configurations.

4. Reliability: Due to its stable electrical and thermal properties, this wire is known for its reliability and consistent performance in industrial heating applications.

5. Versatility: The 0Cr25Al5 wire is versatile and can be used in a wide range of heating applications, including electric ovens, industrial furnaces, and heating elements in various industrial processes.

What role does 0Cr25Al5 resistance wire play in industrial heating furnaces?

The 0Cr25Al5 resistance wire plays a crucial role in industrial heating furnaces due to its unique properties and characteristics. Here are some key roles it plays in industrial heating furnaces:

1. Heating Element: The 0Cr25Al5 wire is commonly used as a heating element in industrial furnaces. When an electric current passes through the wire, it generates heat due to its high electrical resistance. This heat is then used to raise the temperature inside the furnace for various industrial processes.

2. High Temperature Performance: The 0Cr25Al5 wire can withstand high temperatures up to approximately 1250°C (2282°F) without significant degradation. This high-temperature resistance makes it ideal for use in industrial furnaces where extreme heat is required.

3. Oxidation and Corrosion Resistance: Industrial heating furnaces are often exposed to harsh environments with high temperatures and potentially corrosive elements. The 0Cr25Al5 wire's excellent oxidation and corrosion resistance ensure that it can maintain its performance and longevity in such demanding conditions.

4. Reliability and Consistency: The 0Cr25Al5 wire is known for its reliability and consistent performance over time. In industrial heating furnaces where continuous operation is essential, the stability of the heating element is crucial for maintaining optimal working conditions.

5. Energy Efficiency: By efficiently converting electrical energy into heat, the 0Cr25Al5 wire helps industrial heating furnaces operate with energy efficiency, reducing energy costs and improving overall productivity.

Overall, the 0Cr25Al5 resistance wire plays a vital role in industrial heating furnaces by serving as a reliable, high-temperature heating element that provides efficient heat generation, durability, and consistent performance in demanding industrial environments.

Shape	Size (mm)
Wire	0.025-8.00mm
Rod	8.00-50.00mm
Robbin	(0.05-0.35)*(0.5-6.0)mm
Strip	(0.50-2.50)*(5.00-180.00)mm

Alloy Nomenclature Performance		1Cr13Al4	0Cr25Al5	0Cr21Al6	0Cr23Al5	0Cr21Al4/ 0Cr19Al3	0Cr21Al6Nb	0Cr27Al7Mo2
	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

Main chemical composition	**Rest**	opportune	opportune	opportune	opportune	opportune	opportune	opportune
	Fe	Rest	Rest	Rest	Rest	Rest	Rest	Rest
	Others	--	--	--	--	--	Nb 0.5	Mo 1.8-2.2
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	
Line expansion coefficient(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 break(%)		>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

Are you a Manufacturer or Trader?
We are a Manufacturer.

Do you provide free samples?
Yes, we can provide a free sample for testing,buyer should bear all the shipping costs.

What is your payment terms?
T/T,L/C,D/A,D/P,Western Union,MoneyGram,Paypal.

What is the lead time?
Usually sample lead time is 7 days after payment has been confirmed.

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