China

Victory

0Cr25Al5

5-500kgs \$3.85-\$5.50

50 Tons Per Month

Put wire into cartons, then put cartons onto

L/C, T/T, Paypal, Western Union

ISO

pallet

10-25 days

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

Basic Information

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity: 3kgs
- Price:

Our Product Introduction

- Packaging Details:
- Delivery Time:
- Payment Terms:

- Supply Ability:



Product Specification

•	Material:	FeCrAl
•	Surface:	Bright, Acid White, Black/Oxidized
•	Density:	7.10 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:	3-10kgs
•	Delivery Lead Time:	15-25 Days
•	Melting Point Approx (°C):	1500°C
•	Tensile Strength (N/mm2)):	630-780 N/mm2

• Highlight:

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



More Images



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

General Introduction:

0Cr25Al5 FeCrAl wire is a specific type of electrical resistance wire that belongs to the family of iron-chromium-aluminum (FeCrAl) alloys. This particular alloy is composed of 20-23% chromium, 4.5-6.5% aluminum, and the rest being iron along with trace elements. The name 0Cr25Al5 indicates the composition of the alloy, with 0% nickel, 25% chromium, and 5% aluminum.

FeCrAl wires like 0Cr25Al5 are known for their excellent oxidation resistance, high electrical resistivity, and good mechanical properties at elevated temperatures. These wires are commonly used in various heating applications where high temperatures are required, such as in electric furnaces, ovens, kilns, and industrial heating processes.

Main Features:

1. High Electrical Resistance: 0Cr25Al5 wire has a high electrical resistance, making it suitable for heating applications where resistance to electricity flow is desired.

2. Good Oxidation Resistance: This wire exhibits good oxidation resistance at high temperatures, allowing it to maintain its properties and performance in demanding environments.

3. High Temperature Capability: 0Cr25Al5 wire can withstand high temperatures up to 1250°C (2282°F), making it ideal for applications requiring heat resistance.

4. Stable Performance: It offers stable performance over a wide temperature range due to its low temperature coefficient of resistance.

5. Durable and Reliable: The wire is durable and reliable, making it a popular choice for industrial and commercial heating applications.

6. Corrosion Resistance: It has good corrosion resistance, ensuring longevity and performance in various environments.

Applications:

1. Electric Furnaces: 0Cr25AI5 wire is widely used in electric furnaces for industrial heating processes.

2. Ovens: It is used in the heating elements of ovens, both industrial and domestic.

3. Kilns: 0Cr25Al5 wire is utilized in kilns for firing ceramics, pottery, and other materials.

4. Industrial Heating Processes: This wire is employed in various industrial heating processes where high temperatures are required.

5. Household Appliances: It can be found in household appliances like toasters, electric stoves, and space heaters.

6. Heat Treatment Furnaces: 0Cr25Al5 wire is used in heat treatment furnaces for metal processing.

7. Incubators: It is also used in medical and laboratory equipment such as incubators.

8. Sealing Applications: In some cases, this wire is used for sealing purposes due to its high-temperature resistance.

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	0Cr23AI 5	0Cr21Al4/ 0Cr19Al3	0Cr21Al6Nb	0Cr27AI7M o2
	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
	AI	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	opportun e	opportun e	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($\alpha \times 10^{-6/2}C$)	15.4	16	14.7	15	13.5	16	16
Melting point approx.(°C)	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	≥80/130 0	≥80/1250	≥50/1350	≥50/1350
Micrographic structure	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Magnetic properties	Magnetic	Magnetic	Magnetic	Magnetic	Magnetic	Magnetic	Magnetic





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