High-Temperature Stability & Mechanical Strength FeCrAl Alloy OhmAlloy145 0Cr27Al7Mo2 Heating Resistance Wire

Our Product Introduction

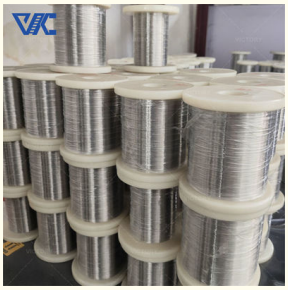
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO
- Model Number: 0Cr27Al7Mo2
- Minimum Order Quantity: 5kgs
- Price: 5-500kgs $6.00-$11.00
- 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: 35 Tons Per Month

Product Specification

- Material: FeCrAl
- Surface: Bright, Acid White, Black/Oxidized
- Density: 7.1 G/cm3
- Resistivity: 1.53 Ω/m
- Max Working Temperature: 1400°C
- Elongation At Rupture: 10%
- Hardness (H.B.)): 200-260
- Magnetic Properties: Magnetic
- MOQ: 5-20kgs
- Delivery Lead Time: 15-25 Days
- Melting Point Approx (°C): 1520°C
- Tensile Strength (N/mm2)): 680-830 N/mm2
- Application: Heating Elements, Industrial Furnaces, Electrical Appliances
- Packing: On Spool Or In Coils

More Images



Our Product Introduction

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Product Description

High-Temperature Stability & Mechanical Strength FeCrAl Alloy OhmAlloy145 0Cr27Al7Mo2 Heating Resistance Wire

General Introduction:

0Cr27Al7Mo2 is another type of electrical resistance heating alloy wire. It is an iron-chromium-aluminum alloy with the addition of molybdenum in its composition. The numbers in the name represent the approximate composition of the alloy (0% iron, 27% chromium, 7% aluminum, 2% molybdenum).

This alloy wire is known for its high-temperature resistance, oxidation resistance, and corrosion resistance, similar to other iron-chromium-aluminum alloys. The addition of molybdenum can enhance certain properties of the alloy, such as improved mechanical strength and stability at high temperatures.

0Cr27Al7Mo2 wire is commonly used in applications where high-temperature heating is required, such as industrial furnaces, electric ovens, and heating elements in various industrial processes. Its properties make it suitable for environments where the wire is exposed to heat and potentially corrosive elements, ensuring reliable performance and durability under demanding conditions.

What is the feature of 0Cr27Al7Mo2 wires against other FeCrAl type wire?

0Cr27Al7Mo2 wire, as compared to other FeCrAl type wires, offers some distinct features and advantages due to the addition of molybdenum in its composition. Here are some key features of 0Cr27Al7Mo2 wire compared to other FeCrAl type wires:

1. Improved High-Temperature Stability: The presence of molybdenum in 0Cr27Al7Mo2 wire can enhance its high-temperature stability and mechanical strength compared to traditional FeCrAl wires. This can result in improved performance and durability at elevated temperatures.

2. Enhanced Corrosion Resistance: The addition of molybdenum in 0Cr27Al7Mo2 wire can provide better corrosion resistance, especially in more aggressive environments. This can extend the lifespan of the wire and maintain its performance in corrosive conditions.

3. Increased Oxidation Resistance: The molybdenum content in 0Cr27Al7Mo2 wire may contribute to enhanced oxidation resistance, making it more resistant to oxidation at high temperatures compared to some other FeCrAl wires.

4. Mechanical Strength: The presence of molybdenum can improve the mechanical strength of 0Cr27Al7Mo2 wire, making it more robust and durable in applications where mechanical stress is a concern.

5. Potential Cost: Due to the additional alloying element molybdenum, 0Cr27Al7Mo2 wire may be slightly more expensive compared to traditional FeCrAl wires. However, the enhanced properties it offers may justify the cost in certain applications where superior performance is required.

Overall, 0Cr27Al7Mo2 wire stands out from other FeCrAl type wires due to its improved high-temperature stability, corrosion resistance, oxidation resistance, mechanical strength, and potential cost considerations. These features make it a suitable choice for applications that demand superior performance under challenging conditions.

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
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
	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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