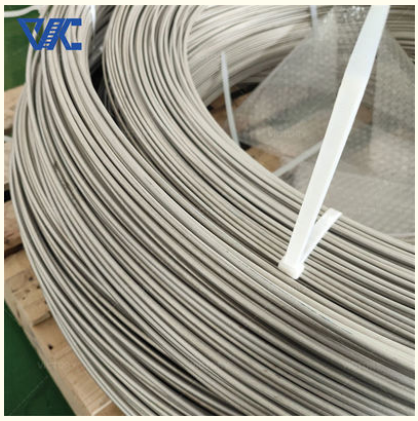
Bright / Acid White Surface FeCrAl Alloy 0Cr19Al3 Electric Resistance Round Wire For Furnace Heating

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO/ROHS
- Model Number: 0Cr19Al3
- Minimum Order Quantity: 3kgs
- Price: 3-500kgs $2.58-$3.50
- 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
- Surface: Bright, Acid White, Black/Oxidized
- Density: 7.35 G/cm3
- Resistivity: 1.23 Ω/m
- Max Working Temperature: 1100℃
- Elongation At Rupture: 16%
- Hardness (H.B.)): 200-260
- Magnetic Properties: Magnetic
- MOQ: 3-20kgs
- Delivery Lead Time: 15-25 Days
- Melting Point Approx (℃): 1500℃
- Tensile Strength (N/mm2)): 600-700 N/mm2
- Highlight: **Acid White Surface FeCrAl Alloy**, **Furnace Heating FeCrAl Alloy**, **Bright Surface FeCrAl Alloy**

More Images

Our Product Introduction

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Product Description

14 20 24 AWG 16SWG FeCrAl Alloy 0Cr13Al4 Electric Resistance Wire For Oven Heating

What is 0Cr19Al3 wire?

0Cr19Al3 wire is a type of iron-chromium-aluminum (FeCrAl) alloy wire with a specific composition. The composition of 0Cr19Al3 wire typically includes:

19% Chromium (Cr)
3% Aluminum (Al)
Iron (Fe) and trace amounts of other elements.

This alloy is known for its high resistance to oxidation and corrosion at elevated temperatures, making it suitable for various applications where heat resistance is required. 0Cr19Al3 wire is commonly used in heating elements, industrial furnaces, and electrical applications due to its excellent properties.

What is the difference between 0cr19al3 and 0cr21al4?

The main difference between 0Cr19Al3 and 0Cr21Al4 lies in their composition, specifically in the percentage of Chromium (Cr) and Aluminum (Al) present in the alloy. Here are the key distinctions:

Composition:
0Cr19Al3: Contains 19% Chromium and 3% Aluminum.
0Cr21Al4: Contains 21% Chromium and 4% Aluminum.

Properties:
The higher Chromium content in 0Cr21Al4 provides better oxidation resistance compared to 0Cr19Al3.
0Cr21Al4 may offer slightly higher temperature resistance due to its composition.

Popularity in the Indian Market:
These FeCrAl alloys are popular in the Indian market due to their excellent properties such as high temperature resistance, oxidation resistance, and good mechanical strength.

They are commonly used in various applications including heating elements for industrial furnaces, ovens, electric heaters, and appliances.
The alloys are cost-effective compared to some other high-temperature alloys, making them a preferred choice in the Indian market for heating applications.

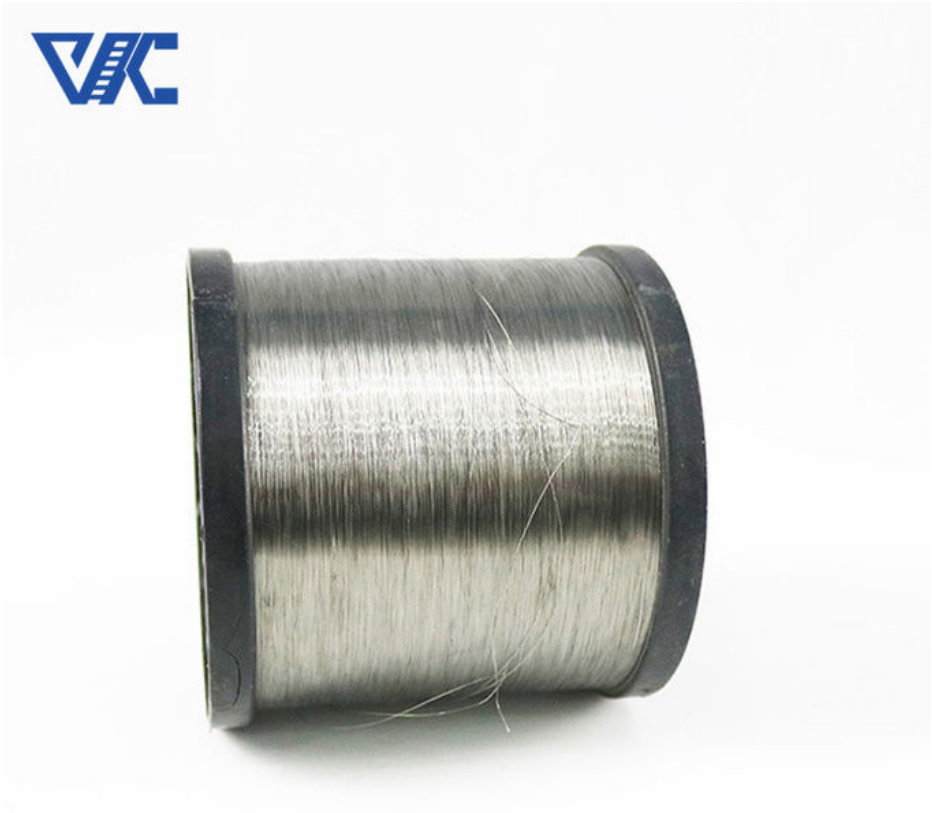
The alloys are readily available, easy to work with, and exhibit good performance in high-temperature environments, which contributes to their popularity in India.

Overall, the slight differences in composition between 0Cr19Al3 and 0Cr21Al4 result in variations in their properties, with both alloys being popular in the Indian market due to their reliability, cost-effectiveness, and suitability for a wide range of heating applications.

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.

Changzhou Victory Technology Co., Ltd

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

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