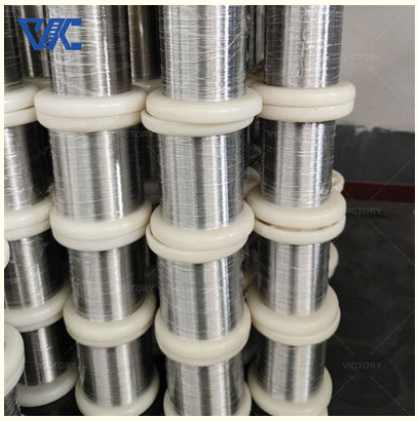
Bright Annealed Soft FeCrAl Alloy 0Cr21Al6 OhmAlloy142A Heating Resistance Round Wires

Our Product Introduction

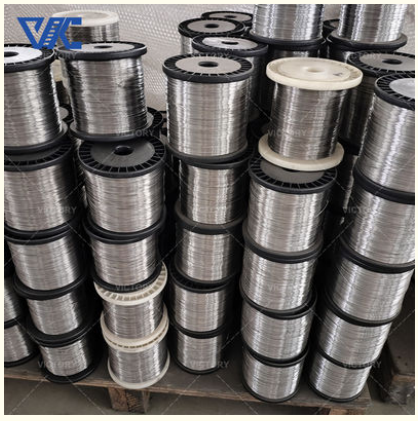
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO/ROHS
- Model Number: 0Cr21Al6
- Minimum Order Quantity: 3kgs
- Price: 3-500kgs $3.50-$5.20
- 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

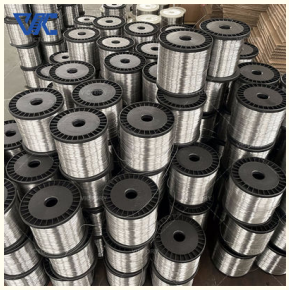


Product Specification

- Material: FeCrAl
- Surface: Bright, Acid White, Black/Oxidized
- Density: 7.16 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: **Soft FeCrAl Alloy**, **Round FeCrAl Alloy**, **Bright Annealed FeCrAl Alloy**



More Images



Our Product Introduction

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Product Description

Bright Annealed Soft FeCrAl Alloy 0Cr21Al6 OhmAlloy142A Heating Resistance Round Wires

General Introduction:

0Cr21Al6 is an iron-chromium-aluminum alloy wire commonly used in heating applications. The numbers in its name represent the approximate composition of the alloy, with 21% chromium and 6% aluminum. This alloy is known for its high-temperature performance, oxidation resistance, and mechanical properties.

0Cr21Al6 wire is utilized in various heating elements, industrial furnaces, electric ovens, and other applications where reliable heat generation is required. It offers good oxidation resistance due to its chromium content and can withstand high temperatures, making it suitable for environments where heat resistance is crucial.

With its composition of chromium and aluminum, 0Cr21Al6 provides adequate mechanical strength and stability for heating applications. It is valued for its durability, consistent performance, and versatility in different industrial processes requiring controlled heating.

What is the difference between 0Cr21Al6 and 0Cr25Al5?

Composition:
0Cr21Al6: This alloy consists of 21% chromium and 6% aluminum in its composition.
0Cr25Al5: In contrast, this alloy contains 25% chromium and 5% aluminum.

Alloy Ratio:
0Cr21Al6: Has a higher aluminum content (6%) compared to 0Cr25Al5.
0Cr25Al5: Contains a higher chromium content (25%) compared to 0Cr21Al6.

High-Temperature Performance:
0Cr21Al6: Provides good high-temperature performance and stability for heating applications.
0Cr25Al5: Known for its high-temperature resistance and oxidation resistance, making it suitable for use in environments with elevated temperatures.

Oxidation Resistance:
0Cr21Al6: Offers good oxidation resistance due to its chromium and aluminum content.
0Cr25Al5: Exhibits excellent oxidation resistance, making it highly suitable for applications where resistance to oxidation is crucial.

Mechanical Properties:
0Cr21Al6: Has specific mechanical properties based on its composition, providing adequate strength for heating applications.
0Cr25Al5: Known for its good mechanical properties and durability under high-temperature conditions.

Applications:
0Cr21Al6: Commonly used in various heating elements, industrial furnaces, and electric ovens.
0Cr25Al5: Widely utilized in industrial heating applications where high-temperature resistance and oxidation resistance are essential.

In summary, the main differences between 0Cr21Al6 and 0Cr25Al5 lie in their chromium and aluminum content, which affect their high-temperature performance, oxidation resistance, mechanical properties, and suitability for specific heating applications. Each alloy offers distinct advantages based on its composition and properties, catering to different requirements in 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.

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