Cr15Ni60 Nichrome Alloy

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: CE
- Model Number: Cr15Ni60
- Minimum Order Quantity: 5
- Packaging Details: Spool package with Carton box, Coil package with polybag for Resistance wire
- Delivery Time: 5-21 days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

Product Specification

- Max. Continuous Service Temp. Of Element(ºC): 1300
- Melting Point: 1400
- Resistivity: --
- Density(g/cm3): 8.7
- Elongation At Rupture: ≥20
- T.S.(MPa): --
- Highlight: **Cr15Ni60 Nichrome Alloy**, **Nichrome Alloy wire**, **nichrome resistor wire**

Our Product Introduction

Product Description

NiCr Series

The text describes the properties of a material known as Cr15Ni60. This material is considered to be ideal due to its good ductility, workability, and weldability, especially under high temperatures and seismic strength. Additionally, it is a nickel-chromium alloy that has high and stable resistance, corrosion resistance, and surface oxidation resistance. It also possesses excellent coil-forming ability, making it a versatile material for various applications. Overall, Cr15Ni60 is a highly desirable material due to its combination of mechanical and chemical properties.

The properties of nichrome wire make it an ideal material for use in heating elements. It has the ability to withstand long-term use and cooling down without becoming brittle, which is crucial for its durability. Additionally, it has a high resistance to oxidation, which is a common problem for most metals when heated in air. This is due to the formation of an outer layer of chromium oxide when heated to red-hot temperatures, which is stable in air

and protects the wire from further oxidation.

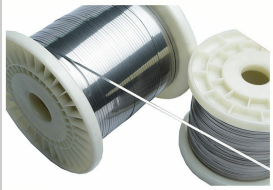
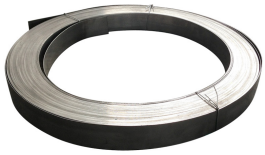
Another advantage of nichrome wire is its good ductility, meaning it can be stretched and bent without breaking. This property remains even after long-term usage, making it a reliable option for heating elements. Furthermore, nichrome wire has excellent weldability, allowing it to be easily joined with other materials. Overall, the unique combination of properties exhibited by nichrome wire make it a highly desirable material for heating elements in various applications. Its durability, resistance to oxidation, ductility, and weldability make it a versatile and reliable choice.

Size dimension range:
Wire: 0.01-10mm
Ribbons: 0.05*0.2-2.0*6.0mm
Strip: 0.05*5.0-5.0*250mm
NiCr series: Cr20Ni80, Cr30Ni70, Cr15Ni60, Cr20Ni35, Cr20Ni30

Performance material		Cr10Ni90	Cr20Ni80	Cr30Ni70	Cr15Ni60	Cr20Ni35	C
Composition	Ni	90	Rest	Rest	55.0~61.0	34.0~37.0	3(
	Cr	10	20.0~23.0	28.0~31.0	15.0~18.0	18.0~21.0	1{
	Fe		≤1.0	≤1.0	Rest	Rest	R
Maximum temperature℃		1300	1200	1250	1150	1100	1
Meltiing point ℃		1400	1400	1380	1390	1390	1
Density g/cm3		8.7	8.4	8.1	8.2	7.9	7.
Resistivity at 20℃((μΩ·m)			1.09±0.05	1.18±0.05	1.12±0.05	1.00±0.05	1.
Elongation at rupture		≥20	≥20	≥20	≥20	≥20	≥
Specific heat J/g.℃			0.44	0.461	0.494	0.5	0.
Thermal conductivity KJ/m.h℃			60.3	45.2	45.2	43.8	4
Coefficient of lines expansion a×10-6/ (20~1000℃)			18	17	17	19	1
Micrographic structure			Austenite	Austenite	Austenite	Austenite	A
Magnetic properties			Non-magnetic	Non-magnetic	Non-magnetic	Weak magnetic	W
Micrographic structure		Ferrite	Ferrite	Ferrite	Ferrite	Ferrite	F
Magnetic properties		Magnetic	Magnetic	Magnetic	Magnetic	Magnetic	M

Form	Specification	
Wire	Diameter=0.025mm~8mm	
Flat wire	Width=0.40~6.0mm	Thick=0.03~0.50mm
Strip	width=8~250mm	Thick=0.05~3.0mm
Bar	Diameter=8~100mm	Long=50~1000

Size Range	

Wire	dia 0.03-7.5mm	
	dia 8.0-12.0mm	
Ribbon	(0.05-0.35)*(0.5-6.0)mm	
Strip	(0.50-2.5)*(5-180)mm	
Rod	8-50mm	

NiCr 80/20 is suitable for heating elements used for temperatures upto 1200°C. This is used for electrical cooking equipment, precison resistors. Oxidized wires of these alloys display better insulation properties.

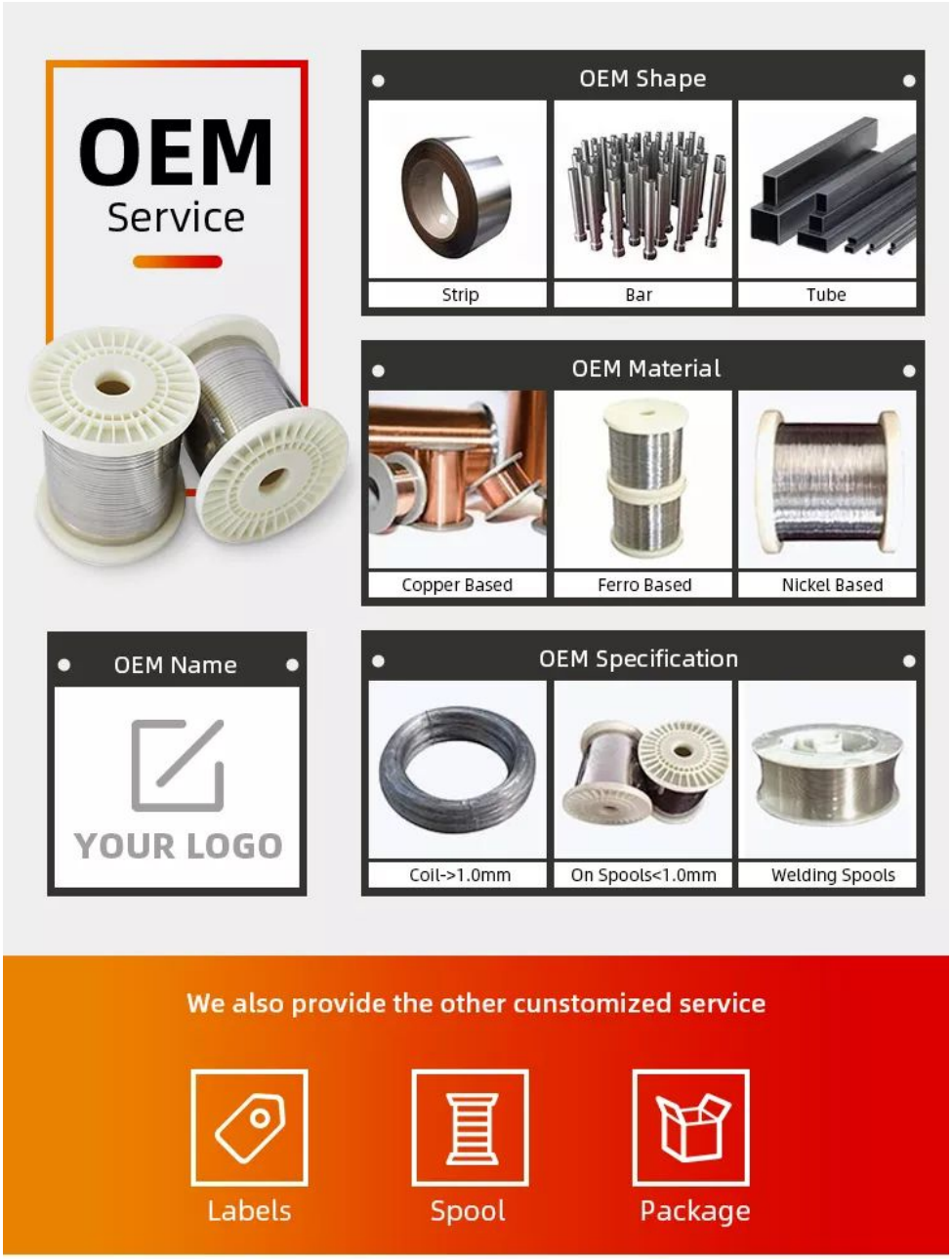
NiCr 70/30 is suitable for heating elements used for temperatures upto 1230°C for industrial furnaces which have alternating oxidizing, or reducing atmosphere. This alloy has excellent corrosion resistance and long life in air and controlled atmospheres.

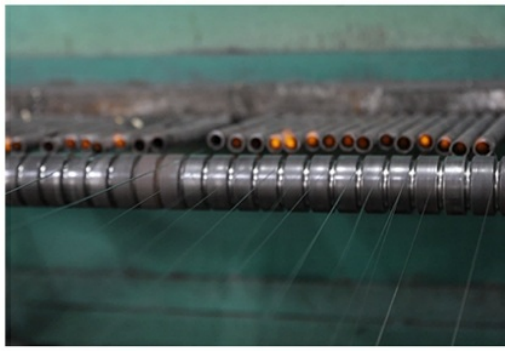
NiCr 60/15 is suitable for heating elements used for temperatures upto 1150°C. This is used for electrically heated equipment, high resistance and potientiometer resistors.

NiCr 30/20 is suitable for heating elements used for temperatures upto 1050°C. Inspite of relatively high Fe content, these alloys are resistant to oxidation and chemical corrosion. They are used for making heating elements of cooking equipment, heating cords and cables.


APPLICATION
Industrial Heating Equipments
Domestic Heating Appliances


1
Raw material
2
Smelting
3
Drawing
4
Rolling
5
Annealing
6
Finished product
7
Detection
8
Packing
9
Shipping


OEM
Service
OEM Shape
Strip
Bar
Tube
OEM Material
Copper Based
Ferro Based
Nickel Based
OEM Name
YOUR LOGO
OEM Specification
Coil->1.0mm
On Spools<1.0mm
Welding Spools
We also provide the other cunstomized service
Labels
Spool
Package



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