



## **Copper Based Manganin Alloy Strip Wire** 6J11

Basic Information	
• Place of Origin:	China
<ul> <li>Brand Name:</li> </ul>	Victory
<ul> <li>Model Number:</li> </ul>	6J11
Minimum Order Quantity:	5
<ul> <li>Packaging Details:</li> </ul>	Spool package with Carton box, Coil package with polybag
<ul> <li>Delivery Time:</li> </ul>	5-21 days
<ul> <li>Payment Terms:</li> </ul>	L/C, T/T, Western Union, MoneyGram
<ul> <li>Supply Ability:</li> </ul>	300 tons per month



### **Product Specification**

• Highlight:

Copper Based Manganin Alloy, Manganin Alloy Strip, 6J11 nickel copper

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**Product Description** 

Copper Based Manganin Alloy Strip / Wire 6J11

Manganin is an alloy of copper, manganese, and nickel. It was created by Edward Weston in 1892 as an improvement to his previous alloy, Constantan. Manganin has moderate resistivity and a low temperature coefficient. It is commonly used to manufacture resistors, particularly ammeter shunts, due to its stable resistance value and virtually zero temperature coefficient. Manganin wire is also used as an electrical conductor in cryogenic systems to minimize heat transfer. It served as the legal standard for the ohm in the United States from 1901 to 1990.

Manganin foil and wire are highly sought after materials in the production of resistors, especially ammeter shunts. This is due to their exceptional properties of virtually zero temperature coefficient of resistance value and long-term stability. These materials are essential components in the manufacturing of electrical products.

Copper-based low resistance heating alloy is another widely used material in the low-voltage electrical industry. It is a key component in the production of low-voltage circuit breakers, thermal overload relays, and other similar electrical products. Our company produces high-quality materials that exhibit excellent resistance consistency and superior stability. We offer a wide range of round wire, flat, and sheet materials to cater to the diverse needs of our customers.

Our manganin foil and wire are highly reliable and durable, making them ideal for use in various electrical applications. They have been extensively tested and proven to perform exceptionally well under various conditions. Similarly, our copper-based low resistance heating alloy has been designed to meet the highest industry standards. Our materials are renowned for their excellent performance, reliability, and durability.

In conclusion, our company is committed to providing high-quality materials that meet the needs of our customers in the electrical industry. We strive to maintain the highest standards of quality, consistency, and reliability in all our products. Whether you require manganin foil and wire or copper-based low resistance heating alloy, we have got you covered. Contact us today to learn more about our products and services.

### Product Description

Cu-Ni Alloy: CuNi1, CuNi2, CuNi6, CuNi8, CuNi10, CuNi14, CuNi19, CuNi23, CuNi30, CuNi34, CuNi44

NC003, NC005, NC010, NC012, NC015, NC020, NC025, NC030, NC035, NC040, NC050

We can supply type of : wire, ribbon, strip, customized furnace spring wire/strip

Cold Drawing Wire: DIA 0.03m-8.0mm

Hot Rolled Rod / Bar: DIA 8.0mm-50.0mm

Cold Rolled Ribbon/Strip: (0.05mm-0.35mm) \*(0.5-6.0)mm

Hot Rolled Strip: (0.5mm-2.5mm) \*(5-180.0)mm

Properties/ Material	Resistivity (200C μΩ.m)	Max. Working Temperature(C)	Tensile Strength (Mpa)	Melting Point	C
NC003(CuNi1)	0.03	200	210	1085	8
NC005(CuNi2)	0.05	200	220	1090	8
NC010(CuNi6)	0.1	220	250	1095	8
NC012(CuNi8)	0.12	250	270	1097	8
NC015(CuNi10)	0.15	250	290	1100	8
NC020(CuNi14)	0.2	300	310	1115	8
NC025(CuNi19)	0.25	300	340	1135	8
NC030(CuNi23)	0.3	300	350	1150	8
NC035(CuNi30)	0.35	350	400	1170	8
NC040(CuNi34)	0.4	350	400	1180	8
NC050(CuNi44)	0.5	400	420	1200	8

Shape	Size(mm)
Wire	0.08-7.5
Bar	8.0-50
Ribbon	(0.05-0.35)*(0.5-6.0)
Strip	(0.5-2.5)*(5-180)

### Characteristic

Pure copper plus nickel can significantly improve strength, corrosion resistance, hardness, electrical resistance and pyroelectricity, and reduce the temperature coefficient of resistivity. Therefore, the mechanical and physical properties of white copper are exceptionally better than other copper alloys.

Good ductility, high hardness, beautiful color, corrosion resistance and deep drawing performance, are widely used in shipbuilding, petrochemical, electrical appliances, instruments, medical machinery, daily necessities, handicrafts and other fields, and are also important resistance and thermocouple alloys. The disadvantage of cupronickel is the main added element - nickel is a scarce strategic material, and the price is relatively expensive.

### Copper Nickel alloy performance tables

Properties/ Material	Resistivity	Max.working temperature	Tensile stre	ngth Melting point	Density		EI
							ц) 0)
NC003 (CuNi1)	0.03	200	210	1085	8.9	<100	-8
NC005 (CuNi2)	0.05	200	220	1090	8.9	<120	-1:

NC010 (CuNi6)	0.1	220	250	1095	8.9	<60	-1)
NC012 (CuNi8)	0.12	250	270	1097	8.9	<57	-2:
NC015 (CuNi10)	0.15	250	290	1100	8.9	<50	-2
NC020 (CuNi14)	0.2	300	310	1115	8.9	<30	-2
NC025 (CuNi19)	0.25	300	340	1135	8.9	<25	-3:
NC030 (CuNi23)	0.3	300	350	1150	8.9	<16	-3
NC035 (CuNi30)	0.35	350	400	1170	8.9	<10	-3
NC040 (CuNi34) NC050 (CuNi44)	0.4	350	400	1180	8.9	0	-3!
	0.5	400	420	1200	8.9	<-6	-4:

# The Form we could offer Index Solar Hange Index Solar Hange Index Idia 0.03-7.5mm Index Idia 0.012.0mm Index Idia 0.05-0.35)\*(0.5-6.0)mm Index I

Changzhou DLX Alloy Co., Ltd was established in 2002 and has got ISO9001 International Quality Management System Certificate and SGS Certificate. Our factory is becoming a high-tech company, We are professional in researching and producing special alloy material. The production process includes melting, drawing, heat treatment, finishing, and testing.

We offer super alloy, welding wire, corrosion resistance alloy, precision alloy, FeCrAl alloy, NiCr alloy, CuNi alloy, in the form of wire, strip, ribbon, bar, tube, plate and etc.

The administrative principle of our company is "intensifying inner supervision, complying with technical process and quality control, continuously adopting new technology to ensure the product quality".



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