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**新利得（天津）焊接材料有限公司**

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新利得（天津）焊接材料有限公司

NEWLAND (TIANJIN)WELDING MATERIAL CO., LTD.



## 公司简介

新利得(天津)焊接材料有限公司专业制造铜及铜合金焊接材料,采用 GB/T9460、BS EN14640、AWS A5.7、AWS A5.8、DIN1733、ISO24373 标准,生产紫铜、黄铜、青铜、白铜四大系列各种牌号 TIG/MIG 焊丝。同时,公司积极拓展镍及镍合金焊丝生产业务。产品畅销国内、欧美及亚洲地区,广泛应用于汽车、造船、工程机械、机车、石油、化工、冶金、电力、通讯、散热器、航空、航天等领域。

公司自创建以来,坚持以“聚集优秀人力资本,追求世界领先技术”为奋斗目标,在激烈的市场竞争中,不断增强企业核心竞争力,努力打造行业内最具竞争力的企业。

追求高品质产品永无止境,为客户服务善善尽美,新利得乐于为业界提供高品质铜基合金焊接材料,我们期待和您合作,共同发展。

## Company Introduction

Newland (Tianjin) Welding Material Co., Ltd. specialize in producing TIG and MIG welding wires and rods from copper, copper alloys to various other kinds of nonferrous metals according to regulations GB/T9460,BS EN 14640,AWS A5.7,AWS A5.8,DIN1733 and ISO24373. Meanwhile,we also actively expands into the manufacturing business of Nickel and Nickel alloy welding wire. Our supply chain reaches into the American, European and Asian markets; where our products are used in motor vehicle production, shipbuilding, locomotive, and many other industries.

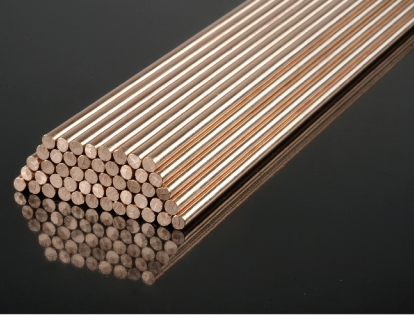
Our goal is to 'gather the best minds and pursue the lead in technological advances' in order to stay ahead in the competitive world. We strongly emphasize 'honesty, scientific progress, technological competitiveness, quality control, and customer satisfaction' from all of our employees to ensure the best quality in products as well as building a solid foundation with our business partners.



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# 铜 Copper



# 青铜 Bronze

# Products



## 银铜 Silver Copper

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Ag	As	Others total
ISO24373	Cu1897	CuAg1	bal.	0.01	0.05	0.2	0.3	0.01-0.05	0.01	0.1	0.8-1.2	0.05	0.2
GB/T9460	SCu1897	CuAg1	bal.	max 0.01	max 0.05	max 0.2	max 0.3	0.01-0.05	max 0.01	max 0.1	0.8-1.2	-	max 0.2
BS EN14640	Cu1897	CuAg1	bal.	0.01	0.05	0.2	0.3	0.01-0.05	0.01	0.1	0.8-1.2	0.05	-
DIN 1733	2.1211	SG-CuAg	bal.	max 0.01	max 0.05	max 0.2	max 0.3	0.01-0.05	max 0.01	max 0.1	0.8-1.2	0.05	max 0.1

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	1070°C	液相线 (Liquids-Temperature)	1080°C
密度 (Density)	8.9kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	200N/mm <sup>2</sup>
延伸率 (Elongation)	30%	布氏硬度 (Brinell Hardness)	60HB

### 应用范围 Introduction:

特别适合于车体工程上镀锌钢板的MIG焊接,也适用于焊接黄铜和低合金铜,以及非铁金属和低合金钢和铸铁。用于大焊件的焊接时建议预热,应用于制造车身非常理想。

Particularly desired for MIG welding of zinc-coated-steel in auto bodies. It is also recommended for brass, low-alloy copper, non-ferrous and low-metal steel and cast iron. An ideal material for making auto bodies.

## 紫铜 Deox Copper

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	As	Others total
ISO24373	Cu1898	CuSn1	min 98.0	0.01	-	0.50	-	0.15	0.02	0.5	1.0	-	0.50
GB/T9460	SCu1898	CuSn1	min 98.0	max 0.01	-	max 0.50	-	max 0.15	max 0.02	max 0.5	max 1.0	-	max 0.5
BS EN14640	Cu1898	CuSn1	bal.	0.01	0.05	0.1-0.5	0.3	0.02	0.02	0.5	0.5-1.0	0.05	0.1
AWS A5.7	C18980	ERCu	min 98.0	0.01	-	0.50	-	0.15	0.02	0.50	1.0	-	0.50
DIN 1733	2.1006	SG-CuSn	bal.	max 0.01	max 0.05	0.1-0.5	max 0.3	max 0.02	max 0.01	0.1-0.5	0.5-1.0	max 0.05	max 0.1

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	1020°C	液相线 (Liquids-Temperature)	1050°C
密度 (Density)	8.9kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	210~220N/mm <sup>2</sup>
延伸率 (Elongation)	30~40%	布氏硬度 (Brinell Hardness)	60HB

### 应用范围 Introduction:

用于紫铜的氩弧焊及壁厚>3mm的铜与钢、灰口铸铁、镍合金的焊接,特别适用于大厚度焊件。

Specifically recommended for the argon arc welding of copper and welding of copper with steel, cast iron and nickel alloys. Best for large components.

## 硅青铜 Silicon Bronze

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu6560	CuSi3Mn1	bal.	0.02	0.5	0.5-1.5	-	0.05	0.02	2.8-4.0	0.2	0.4	0.5
GB/T9460	SCu6560	CuSi3Mn	bal.	max 0.01	max 0.5	max 1.5	-	-	max 0.02	2.8-4.0	max 1.0	max 1.0	max 0.5
BS EN14640	Cu6560	CuSi3Mn1	bal.	0.01	0.5	0.5-1.5	-	0.02	0.02	2.8-4.0	0.2	0.2	0.4
AWS A5.7	C65600	ERCuSi-A	bal.	0.01	0.50	1.5	-	-	0.02	2.8-4.0	1.0	1.0	0.50
DIN 1733	2.1461	SG-CuSi3	bal.	max 0.01	max 0.3	0.5-1.5	-	max 0.02	max 0.02	2.8-4.0	max 0.2	max 0.2	max 0.4

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	910°C	液相线 (Liquids-Temperature)	1025°C
密度 (Density)	8.5kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	330~370N/mm <sup>2</sup>
延伸率 (Elongation)	40%	布氏硬度 (Brinell Hardness)	80~90HB

### 应用范围 Introduction:

适用于对黄铜的对接焊和堆焊,特别适合镀锌钢板的MIG焊接,用于大焊件的MIG堆焊时需预热。堆焊钢材时建议使用脉冲氩弧焊。

Best for butt and the hard facing of brass, especially for the MIG welding of zinc coated steel sheet. Pre-heat suggested when MIG hard facing for large size products and use pulsed argon arc welding while hard facing on steel.

## 锡青铜 Phosphor Bronze

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu5180	CuSn5P	bal.	0.01	-	-	-	0.1-0.4	0.02	-	4.0-6.0	-	0.5
GB/T9460	SCu5180	CuSn5P	bal.	max 0.01	-	-	-	0.1-0.4	max 0.02	-	4.0-6.0	-	max 0.5
ISO24373	Cu5180A	CuSn6P	bal.	0.01	0.1	-	-	0.1-0.4	0.02	-	4.0-7.0	0.1	0.2
GB/T9460	SCu5180A	CuSn6P	bal.	max 0.01	max 0.1	-	-	0.01-0.4	max 0.02	-	4.0-7.0	max 0.1	max 0.2
BS EN14640	Cu5180	CuSn6P	bal.	0.01	0.1	-	-	0.1-0.4	0.02	-	4.0-7.0	0.1	0.40
AWS A5.7	C51800	ERCuSn-A	bal.	0.01	-	-	-	0.10-0.35	0.02	-	4.0-6.0	-	0.50
DIN 1733	2.1022	SG-CuSn6	bal.	max 0.01	max 0.1	-	-	0.01-0.35	max 0.02	-	5.0-8.0	max 0.1	max 0.4

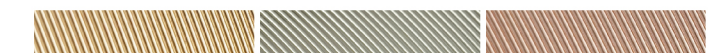
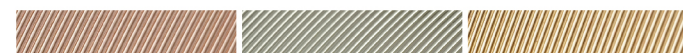
### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	910°C	液相线 (Liquids-Temperature)	1040°C
密度 (Density)	8.7kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	320~360N/mm <sup>2</sup>
延伸率 (Elongation)	20~25%	布氏硬度 (Brinell Hardness)	80~90HB

### 应用范围 Introduction:

适用于铜和锡青铜焊接,尤其适用于黄铜和钢的对接焊,也适用于修理铜合金铸件。建议大厚件焊接时需预热,在钢材多层堆焊时使用脉冲氩弧焊。

Particularly suitable for the welding of copper with Cu-Sn alloy, especially for the butt joining welding of brass with steel. Can also be used in repairing cast copper product. Pre-heat suggested for large size products, and pulsed argon arc welding is recommended for multilayer hard facing on steel.



# 青铜 Bronze



# 青铜 Bronze

# Products



## 锡青铜 Phosphor Bronze

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu5210	CuSn8P	bal.	-	0.1	-	0.2	0.01-0.4	0.02	-	7.5-8.5	0.2	0.2
GB/T9460	SCu5210	CuSn8P	bal.	-	max 0.1	-	max 0.2	0.01-0.4	max 0.02	-	7.5-8.5	max 0.2	max 0.2
BS EN14640	Cu5210	CuSn9P	bal.	-	0.1	-	-	0.01-0.4	0.02	-	7.0-9.0	0.2	0.5
AVSA5.7	C52100	ERCuSn-C	bal.	0.01	0.10	-	-	0.10-0.35	0.02	-	7.0-9.0	0.20	0.50

## 锡青铜 Phosphor Bronze

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu5410	CuSn12P	bal.	0.005	-	-	-	0.01-0.4	0.02	-	11.0-13.0	0.05	0.4
GB/T9460	SCu5410	CuSn12P	bal.	max 0.005	-	-	-	0.01-0.4	max 0.02	-	11.0-13.0	max 0.05	max 0.4
BS EN14640	Cu5410	CuSn12P	bal.	0.01	0.1	-	-	0.4	0.02	-	11.0-13.0	0.1	0.4
DIN 1733	2.0156	SG-CuSn12	bal.	max 0.01	max 0.1	-	-	0.01-0.35	max 0.02	-	11.0-13.0	max 0.1	max 0.4

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	875°C	液相线 (Liquids-Temperature)	1025°C
密度 (Density)	8.8kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	260N/mm <sup>2</sup>
延伸率 (Elongation)	20%	布氏硬度 (Brinell Hardness)	80HB

### 应用范围 Introduction:

适用于铜或铜合金的焊接，特别适用于黄铜和钢的对接焊。用于大厚度焊件时建议预热，建议在钢材堆焊时使用脉冲氩弧焊。Recommended for the welding of copper with Cu-Sn alloy. Best for the butt joining welding of brass with steel. Pre-heat suggested for the large size products, and pulsed argon arc welding is recommended for multilayer hard facing on steel.

## 锡青铜 Phosphor Bronze

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu5211	CuSn10MnSi	bal.	0.01	0.1	0.1-0.5	-	0.1	0.02	0.1-0.5	9.0-10.0	0.1	0.5
GB/T9460	SCu5211	CuSn10MnSi	bal.	max 0.01	max 0.1	0.1-0.5	-	max 0.1	max 0.02	0.1-0.5	9.0-10.0	max 0.1	max 0.5
BS EN14640	Cu5211	CuSn10	bal.	-	-	0.2-0.35	-	-	-	0.2-0.3	9.0-10.0	-	0.5

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	887°C	液相线 (Liquids-Temperature)	1020°C
密度 (Density)	8.7kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	290N/mm <sup>2</sup>
延伸率 (Elongation)	14%	布氏硬度 (Brinell Hardness)	115HB

### 应用范围 Introduction:

适用于铜合金的焊接，特别适用于黄铜和钢的对接焊。用于大厚度焊件时建议预热，在钢材堆焊时使用脉冲氩弧焊。Recommended for the welding of copper with Cu-Sn alloy. Best for the butt joining welding of brass with steel. Pre-heat suggested for the large size products, and pulsed argon arc welding is recommended for multilayer hard facing on steel.

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	825°C	液相线 (Liquids-Temperature)	990°C
密度 (Density)	8.6kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	320N/mm <sup>2</sup>
延伸率 (Elongation)	5%	布氏硬度 (Brinell Hardness)	120HB

### 应用范围 Introduction:

适合于黄铜和钢的对接焊，特别适合铜雕像修复焊接。在钢材多层堆焊时使用脉冲氩弧焊，焊大件时需预热。Has extremely high endurance and corrosion resistance. Suitable as mining cable for explosives in geological exploration.

## 铝青铜 Aluminum Bronze

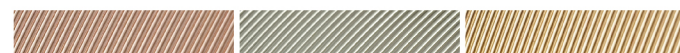
CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu6100	CuAl7	bal.	6.0-8.5	-	0.5	-	-	0.02	0.2	-	0.2	0.4
GB/T9460	SCu6100	CuAl7	bal.	6.0-8.5	-	max 0.5	-	-	-	max 0.1	-	max 0.2	max 0.5
GB/T9460	SCu6100A	CuAl8	bal.	7.0-9.0	max 0.5	max 0.5	max 0.5	-	max 0.02	max 0.2	max 0.1	max 0.2	max 0.2
BS EN14640	Cu6100	CuAl8	bal.	6.0-9.5	0.5	0.5	0.8	-	0.02	0.2	-	0.2	0.4
AVSA5.7	C61000	ERCuAl-A1	bal.	6.0-8.5	-	0.50	-	-	0.02	0.10	-	0.2	0.50
DIN 1733	2.0921	SG-CuAl8	bal.	7.5-9.5	max 0.5	max 1.0	max 0.8	-	max 0.02	max 0.2	-	max 0.2	max 0.4

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	1030°C	液相线 (Liquids-Temperature)	1040°C
密度 (Density)	7.7kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	380~450N/mm <sup>2</sup>
延伸率 (Elongation)	40~45%	布氏硬度 (Brinell Hardness)	100HB

### 应用范围 Introduction:

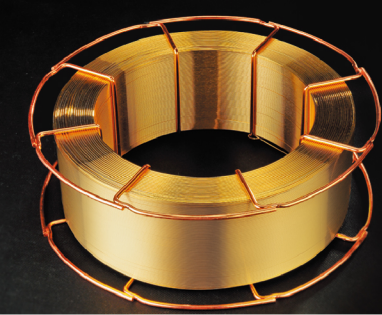
特别适用于碳钢、不锈钢的焊接。熔化金属的流动性好，焊缝成型美观，也适用于钢与铜的对接焊。应用于船舶制造，机械制造。在多层钢夹层焊时建议使用脉冲氩弧焊。Perfect for welding of pure and austenitic steel sheet. Maintains good temperament flow and creates seamless welding line. Suggested for the butt joining welding of copper with steel, particularly suitable for machinery and shipbuilding industry. Pulsed argon arc welding is recommended for multilayer hard facing on steel.



# 青铜 Bronze



# 青铜 Bronze



# Products

## 铝青铜 Aluminum Bronze

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu6180	CuAl10Fe	bal.	8.5-11.0	1.5	-	-	-	0.02	0.1	-	0.02	0.5
GB/T9460	SCu6180	CuAl10Fe	bal.	8.5-11.0	max 1.5	-	-	-	max 0.02	max 0.1	-	max 0.2	max 0.5
BS EN14640	Cu6180	CuAl10	bal.	8.5-11.0	0.5-1.5	1.0	1.0	-	0.02	0.1	-	0.02	0.4
AWS A5.7	C61800	ERCuAl-A2	bal.	8.5-11.0	0.5-1.5	-	-	-	0.02	0.10	-	0.02	0.50
DIN 1733	2.0937	SG-CuAl10Fe	bal.	9.0-11.0	0.5-1.5	max 1.0	max 1.0	-	max 0.02	max 0.1	-	max 0.02	max 0.4

## 镍铝青铜 Nickel-Aluminum Bronze

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu6327	CuAl8Ni2Fe2Mn2	bal.	7.0-9.5	0.5-2.5	0.5-2.5	0.5-3.0	-	0.02	0.2	-	0.2	0.4
GB/T9460	SCu6327	CuAl8Ni2Fe2Mn2	bal.	7.0-9.5	0.5-2.5	0.5-2.5	0.5-3.0	-	max 0.02	max 0.2	-	max 0.2	max 0.4
BS EN14640	Cu6327	CuAl8Ni2	bal.	7.0-9.5	0.5-2.5	0.5-2.5	0.5-3.0	-	0.02	0.2	-	0.2	0.4
DIN 1733	2.0922	SG-CuAl8Ni2	bal.	7.5-9.5	1.5-2.5	1.0-2.5	1.8-3.0	-	max 0.02	max 0.2	-	max 0.2	max 0.4

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	1030°C	液相线 (Liquids-Temperature)	1040~1090°C
密度 (Density)	7.6kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	390~500N/mm <sup>2</sup>
延伸率 (Elongation)	35%	布氏硬度 (Brinell Hardness)	140HB

### 应用范围 Introduction:

适用于铝青铜在钢上堆焊，耐磨、耐海水侵蚀，应用于船舶制造、机械制造、仪器和机泵制造。在多层堆焊时建议使用脉冲氩弧焊。Particularly suitable for the hard facing of aluminum bronze with steel. It has increased resistance to wear and abrasion, as well as superior corrosion resistance to seawater. Widely used for ship constructions, apparatus and plumbing. For multilayer hard facing on steel, pulsed argon arc welding is recommended.

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	1030°C	液相线 (Liquids-Temperature)	1054°C
密度 (Density)	7.5kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	430~540N/mm <sup>2</sup>
延伸率 (Elongation)	30%	布氏硬度 (Brinell Hardness)	130~150HB

### 应用范围 Introduction:

适用于青铜、镀铝钢及机械制造、化学工业和造船工业中的各种铸铁件的焊补、堆焊以及耐腐蚀的青铜或特殊黄铜管道焊接。Recommended for the welding and facing of copper-aluminum alloys, aluminum coated steel in machinery and chemical industry as well as for iron welding in shipbuilding. Also excellent for the welding of brass tube and copper-aluminum that requires resistance to erosion.

## 铝青铜 Aluminum Bronze

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu6240	CuAl11Fe3	bal.	10.0-11.5	2.0-4.5	-	-	-	0.02	0.1	-	0.1	0.5
GB/T9460	SCu6240	CuAl11Fe3	bal.	10.0-11.5	2.0-4.5	-	-	-	max 0.02	max 0.1	-	max 0.1	max 0.5
BS EN14640	Cu6240	CuAl11Fe	bal.	10.0-11.5	2.0-4.5	-	-	-	0.02	-	-	0.1	0.5
AWS A5.7	C62400	ERCuAl-A3	bal.	10.0-11.5	2.0-4.5	-	-	-	0.02	0.10	-	0.1	0.50

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	1030°C	液相线 (Liquids-Temperature)	1040°C
密度 (Density)	7.6kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	621N/mm <sup>2</sup>
延伸率 (Elongation)	20%	布氏硬度 (Brinell Hardness)	166HB

### 应用范围 Introduction:

适用于铝铜合金、镀铝钢板，灰铸铁的对接焊、堆焊，广泛应用于造船、机械制造、化工领域。适用于硬度要求高，耐磨损、耐腐蚀材料的堆焊。Particularly suitable for the butt joining and overly welding of copper-aluminum alloys, aluminum coated steel and cast iron. It has been widely used in shipbuilding, machinery, and the chemical industry. Best for the high hard facing requirement for hardness, resistance to wear, abrasion, and erosion.

## 高镍铝青铜 Nickel-Aluminum Bronze

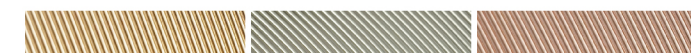
CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu6328	CuAl9Ni5Fe3Mn2	bal.	8.5-9.5	3.0-5.0	0.6-3.5	4.0-5.5	-	0.02	0.1	-	0.1	0.5
GB/T9460	SCu6328	CuAl9Ni5Fe3Mn2	bal.	8.5-9.5	3.0-5.0	0.6-3.5	4.0-5.5	-	max 0.02	max 0.1	-	max 0.1	max 0.5
BS EN14640	Cu6328	CuAl9Ni5	bal.	8.5-9.5	3.0-5.0	0.6-3.5	4.0-6.0	-	0.02	0.2	-	0.1	0.4
AWS A5.7	C63280	ERCuNiAl	bal.	8.50-9.50	3.0-5.0	0.60-3.50	4.0-5.5	-	0.02	0.10	-	0.10	0.50
DIN 1733	2.0923	SG-CuAl8Ni6	bal.	8.5-9.5	3.0-4.0	1.0-2.0	4.0-6.0	-	max 0.02	max 0.2	-	max 0.1	max 0.4

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

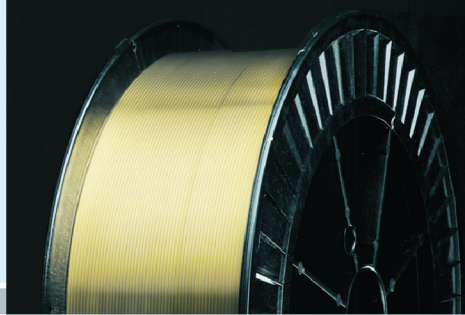
固相线 (Solids-Temperature)	1015°C	液相线 (Liquids-Temperature)	1045°C
密度 (Density)	7.5kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	450~560N/mm <sup>2</sup>
延伸率 (Elongation)	10%	布氏硬度 (Brinell Hardness)	150~170HB

### 应用范围 Introduction:

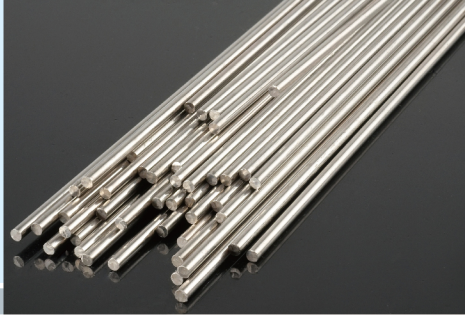
适用于青铜铸件和锻件的焊接。广泛应用于船舶螺旋桨、涡轮机部分、阀门、筛子、泵、管道系统。有特别强的抗海水侵蚀性能。Particularly suitable for welding casting and forging products of nickel-aluminum bronze such as propellers, bearing weights, valves, pumps and pipe systems. Very good corrosion resistance to seawater.



# 青铜 Bronze



# 白铜 Copper-Nickel



# Products

## 高锰铝青铜 Manganese-Nickel Aluminum Bronze

### CHEMICAL COMPOSITION 化学成分 (%)

Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu6338	CuMn13Al8Fe3Ni2	bal.	7.0-8.5	2.0-4.0	11.0-14.0	1.5-3.0	-	0.02	0.1	-	0.15	0.5
GB/T9460	SCu6338	CuMn13Al8Fe3Ni2	bal.	7.0-8.5	2.0-4.0	11.0-14.0	1.5-3.0	-	max 0.02	max 0.1	-	max 0.15	max 0.5
BS EN14640	Cu6338	CuMn13Al7	bal.	6.5-8.5	1.5-4.0	11.0-14.0	1.5-3.0	-	0.02	0.1	-	0.15	0.5
AWS A5.7	C63380	ERCuMnNiAl	bal.	7.0-8.5	2.0-4.0	11.0-14.0	1.5-3.0	-	0.02	0.10	-	0.15	0.50
DIN 1733	2.1367	SG-CuMn13Al7	bal.	6.5-8.5	1.5-3.0	11.0-14.0	1.5-3.0	-	max 0.02	max 0.1	-	max 0.15	max 0.4

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	945°C	液相线 (Liquids-Temperature)	985°C
密度 (Density)	7.4kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	800~900N/mm <sup>2</sup>
延伸率 (Elongation)	10%	布氏硬度 (Brinell Hardness)	180~240HB

### 应用范围 Introduction:

特别适用于耐腐蚀性要求较高的铸铁、低合金钢上的堆焊。

Best for the overlay welding of iron-casting and low-alloy steel that especially need corrosion resistance.

## 铝青铜 Aluminum Bronze

### CHEMICAL COMPOSITION 化学成分 (%)

Standard 执行标准	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
GB/T21652	QA19-2	bal.	8.0-10.0	0.5	1.5-2.5	0.5	0.01	0.03	0.1	0.1	1.0	1.7

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	1045°C	液相线 (Liquids-Temperature)	1061°C
密度 (Density)	7.6kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	441N/mm <sup>2</sup>
延伸率 (Elongation)	35%	布氏硬度 (Brinell Hardness)	80HB

### 应用范围 Introduction:

特别适合于低合金钢及不锈钢的焊接。流动性好，焊缝连接好，也适用于钢与铜的对焊接。应用于船舶制造，机械制造。在钢的多层堆焊时建议使用脉冲氩弧焊。

Perfect for welding of low alloy and stainless steel sheet. Suggested for the butt joining welding of copper with steel, particularly suitable for machinery and shipbuilding industry. Pulsed argon arc welding is recommended for multilayer hard facing on steel.

## 白铜 Copper-Nickel

### CHEMICAL COMPOSITION 化学成分 (%)

Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Fe	Mn	Ni	P	Pb	Si	C	Ti	S	Others total
ISO24373	Cu7061	CuNi10	bal.	0.5-2.0	0.5-1.5	9.0-11.0	0.02	0.02	0.2	0.05	0.1-0.5	0.02	0.4
GB/T9460	SCu7061	CuNi10	bal.	0.5-2.0	0.5-1.5	9.0-11.0	max 0.02	max 0.02	max 0.2	-	0.1-0.5	max 0.02	max 0.4
BS EN14640	Cu7061	CuNi10	bal.	0.5-2.0	0.5-1.5	9.0-11.0	0.02	0.02	0.2	0.05	0.1-0.5	0.02	0.4
DIN 1733	2.0873	SG-CuNi10Fe	bal.	1.0-2.0	0.5-1.5	9.0-11.0	max 0.02	max 0.02	max 0.2	max 0.05	0.2-0.5	max 0.015	max 0.4

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	1100°C	液相线 (Liquids-Temperature)	1145°C
密度 (Density)	8.9kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	300N/mm <sup>2</sup>
延伸率 (Elongation)	34%	布氏硬度 (Brinell Hardness)	80HB

### 应用范围 Introduction:

耐海水腐蚀性良好，用于铜镍合金的焊接和堆焊，如化工设备、海水淡化装置、海洋结构件、造船、石油精炼及食品工业。

Especially good for seawater corrosion resistance. Particularly suitable for the welding and hard facing copper nickel alloys such as machinery, desalting of seawater, ship-building, oil refinery and food processing industries.

## 白铜 Copper-Nickel

### CHEMICAL COMPOSITION 化学成分 (%)

Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Fe	Mn	Ni	P	Pb	Si	C	Ti	S	Others total
ISO24373	Cu7158	CuNi30Mn1FeTi	bal.	0.4-0.7	0.5-1.5	29.0-32.0	0.02	0.02	0.25	0.04	0.2-0.5	0.01	0.5
GB/T9460	SCu7158	CuNi30Mn1FeTi	bal.	0.4-0.7	0.5-1.5	29.0-32.0	max 0.02	max 0.02	max 0.25	-	0.2-0.5	max 0.01	max 0.5
BS EN14640	Cu7158	CuNi30	bal.	0.4-1.0	0.5-1.5	29.0-32.0	0.02	0.02	0.25	0.05	0.2-0.5	0.02	0.4
AWS A5.7	C71581	ERCuNi	bal.	0.40-0.75	1.0	29.0-32.0	0.02	0.02	0.25	-	0.20-0.50	-	0.50
DIN 1733	2.0837	SG-CuNi30Fe	bal.	0.4-1.0	0.5-1.5	29.0-32.0	max 0.02	max 0.02	max 0.2	max 0.05	0.2-0.5	max 0.015	max 0.4

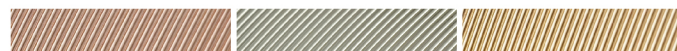
### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	1180°C	液相线 (Liquids-Temperature)	1240°C
密度 (Density)	8.9kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	420N/mm <sup>2</sup>
延伸率 (Elongation)	36%	布氏硬度 (Brinell Hardness)	115HB

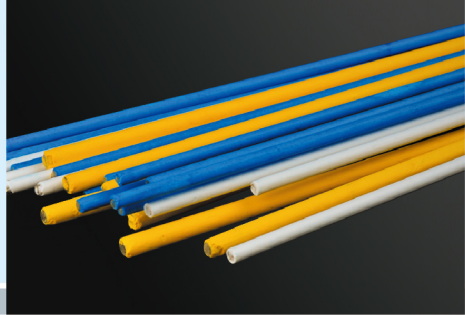
### 应用范围 Introduction:

耐海水腐蚀性好，适用于铜镍合金的焊接和堆焊，如化工设备、海水淡化装置、海洋结构件、造船、石油精炼、食品工业以及耐腐蚀装置和容器等。也可用于非铁合金的异种钢的焊接。

Especially good for seawater corrosion resistance. Particularly suitable for the welding and hard facing of copper nickel such as machinery, desalting of seawater, ship-building, oil refinery and food processing industries. Also suitable for welding of nonferrous alloys, dissimilar steel materials.

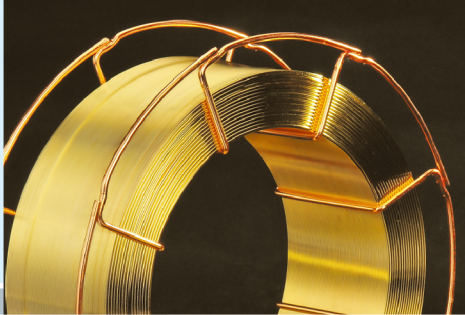


# 黄铜 Brass



# 黄铜 Brass

# Products



## 锡黄铜 Tin Brass

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu4700	CuZn40Sn	57.0-61.0	0.01	-	-	-	-	0.05	-	0.25-1.0	bal.	0.5
GB/T9460	SCu4700	CuZn40Sn	57.0-61.0	max 0.01	-	-	-	-	max 0.05	-	0.25-1.0	bal.	max 0.5
BS EN14640	Cu4700	CuZn40	57.0-61.0	0.01	-	-	-	-	0.05	-	0.25-1.0	bal.	0.5
AWSA5.8	C47000	RBCuZn-A	57.0-61.0	0.01	-	-	-	-	0.05	-	0.25-1.00	bal.	0.50

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	886°C	液相线 (Liquids-Temperature)	901°C
密度 (Density)	8.45kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	375N/mm <sup>2</sup>
延伸率 (Elongation)	35%	布氏硬度 (Brinell Hardness)	85HB

### 应用范围 Introduction:

黄铜氧-乙炔气焊及碳弧焊时用作填充材料。广泛用于钎焊铜、钢、铜镍合金、灰口铸铁以及镶嵌硬质合金刀具等。

Most popular for padding material of gas-welding and carbon arc welding in brass. Can also used in brazing of copper, steel, copper-nickel, cast iron and carbide cutting alloy tools incrustation.

## 锡黄铜 Tin Brass

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu4641	CuZn40SnSi	58.0-62.0	0.01	0.2	0.3	-	-	0.03	0.1-0.5	1.0	bal.	0.2
GB/T9460	SCu6810A	CuZn40SnSi	58.0-62.0	max 0.01	max 0.2	max 0.3	-	-	max 0.03	0.1-0.5	max 1.0	bal.	max 0.2
BS EN14640	Cu6810	CuZn40SnSi	58.0-62.0	0.01	0.2	0.3	-	-	0.03	0.1-0.5	1.0	bal.	0.2
DIN 1733	2.0366	SG-CuZn40Si	58.0-62.0	max 0.01	max 0.2	max 0.3	-	-	max 0.03	0.1-0.5	max 1.0	bal.	max 0.2

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	870-890°C	液相线 (Liquids-Temperature)	880-910°C
密度 (Density)	8.4kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	381N/mm <sup>2</sup>
延伸率 (Elongation)	30%	布氏硬度 (Brinell Hardness)	88HB

### 应用范围 Introduction:

黄铜氧-乙炔气焊及碳弧焊时用作填充材料。广泛用于钎焊铜、钢、铜镍合金、灰口铸铁以及镶嵌硬质合金刀具等。

Most popular for padding material of gas-welding and carbon arc welding in brass. Can also used in brazing of copper, steel, copper-nickel, cast iron and carbide cutting alloy tools incrustation.

## 镍黄铜 Low-Fuming Bronze-Nickel

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu6800	CuZn40Ni	56.0-60.0	0.01	0.25-1.20	0.01-0.50	0.2-0.8	-	0.05	0.04-0.20	0.8-1.1	bal.	0.5
GB/T9460	SCu6800	CuZn40Ni	56.0-60.0	max 0.01	0.25-1.20	0.01-0.50	0.2-0.8	-	max 0.05	0.04-0.15	0.8-1.1	bal.	max 0.5
BS EN14640	Cu6800	CuZn40Ni	56.0-60.0	0.01	0.2-1.2	0.5	0.2-0.8	-	0.03	0.2	0.8-1.1	bal.	0.2
AWSA5.8	C68000	RBCuZn-B	56.0-60.0	0.01	0.25-1.20	0.01-0.50	0.2-0.80	-	0.05	0.04-0.20	0.80-1.10	bal.	0.50

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	866°C	液相线 (Liquids-Temperature)	882°C
密度 (Density)	8.39kg/dm <sup>3</sup>		

### 应用范围 Introduction:

含有少量铁、硅、锰的黄铜焊丝。熔融金属流动性好，由于硅的存在，更加有效的抑制了锌的蒸发。可用于铜、钢，铜镍合金，灰口铸铁的熔化极气体保护氩弧焊，以及镶嵌硬质合金刀具。焊前需经400-500°C预热。

This braze welding rod are similar to RBCuZn-A rods but contain additions of iron and manganese which serve to increase the hardness and strength. In addition, a small amount of silicon serves to control the vaporization of the zinc, yielding the "low-fuming" property. The nickel addition assures uniform distribution of the iron in the deposit.

## 铁黄铜 Low-Fuming Bronze

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu6810	CuZn40Fe1Sn1	56.0-60.0	0.01	0.25-1.20	0.01-0.50	-	-	0.05	0.04-0.15	0.80-1.10	bal.	0.5
GB/T9460	SCu6810	CuZn40Fe1Sn1	56.0-60.0	max 0.01	0.25-1.20	0.01-0.50	-	-	max 0.05	0.04-0.25	0.8-1.1	bal.	max 0.5
AWSA5.8	C68100	RBCuZn-C	56.0-60.0	0.01	0.25-1.20	0.01-0.50	-	-	0.05	0.04-0.15	0.80-1.10	bal.	0.50

### 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	866°C	液相线 (Liquids-Temperature)	888°C
密度 (Density)	8.38kg/dm <sup>3</sup>		

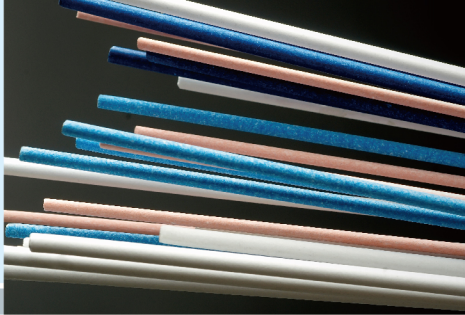
### 应用范围 Introduction:

黄铜氧-乙炔气焊及碳弧焊时用作填充材料。广泛用于钎焊铜、钢、铜镍合金、灰口铸铁以及镶嵌硬质合金刀具等。

Most popular for padding material of gas-welding and carbon arc welding in brass. Can also used in brazing of copper, steel, copper-nickel, cast iron and carbide cutting alloy tools incrustation.

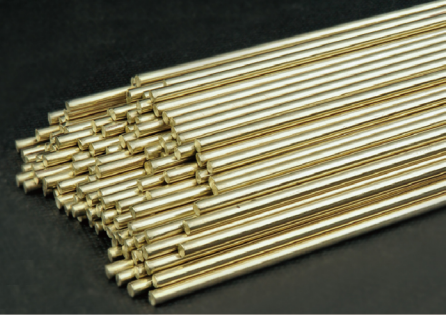


# 黄铜 Brass 镍合金 Nickel Alloy



# 镍合金 Nickel Alloy

# Products



## 锌白铜 Nickel Silver

CHEMICAL COMPOSITION 化学成分 (%)													
Standard 执行标准	Class 分类号	Alloy 合金号	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others total
ISO24373	Cu7730	CuZn40Ni10	46.0-50.0	0.01	-	-	9.0-11.0	0.25	0.05	0.04-0.25	-	bal.	0.5
GB/T9460	SCu7730	CuZn40Ni10	46.0-50.0	max 0.01	-	-	9.0-11.0	max 0.25	max 0.05	0.04-0.25	-	bal.	max 0.5
BS EN14640	Cu7730	CuZn40Ni10	46.0-50.0	-	-	-	9.0-11.0	-	0.03	0.2	0.8-1.1	bal.	0.5
AWSA5.8	C77300	RBCuZn-D	46.0-50.0	0.01	-	-	9.0-11.0	0.25	0.05	0.04-0.25	-	bal.	0.50

## 熔敷金属物理性能及机械性能 Physical Properties and Mechanical Properties:

固相线 (Solids-Temperature)	890°C	液相线 (Liquids-Temperature)	935°C
密度 (Density)	8.7kg/dm <sup>3</sup>	抗拉强度 (Tensile Strength)	385N/mm <sup>2</sup>
延伸率 (Elongation)	25%	布氏硬度 (Brinell Hardness)	120HB

## 应用范围 Introduction:

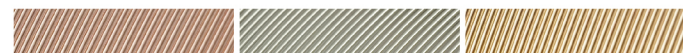
用于机械制造、自动化工业、钢制家具等行业，用作铸钢、灰铸铁、铜合金、镍合金件的表面防腐堆焊，也适用于灰铸铁的对接焊。  
Utilized in the joints and gears of machinery, automatic technological industries, and steel-furniture industries. It is suitable for surface corrosion resistance hard facing for cast steel, cast iron, copper-alloy and nickel-alloy, as well as the butt welding of cast iron.

## 镍及镍合金线、棒 Nickel And Nickel Alloy Wire And Rod

产品分类 Class	牌号 Alloy NO.	化学成分 (%) Chemical composition(%)	主要特性及用途 Properties and usage
纯镍线 Pure Nickel	N6	Ni ≥ 99.5	耐蚀，机械性能高，具铁磁性、磁伸缩型、高的电真空性能等。 广泛用于无线电、机械制造、化工和其它工业部门。 Anti-corrosion, high mechanical performance. There are ferromagnetism, magnetostriction property and high electric vacuum performance. Suitable for radio, machinery, chemical engineering and other industrial fields.
阳极镍 Anode Nickel	Ny1	Ni ≥ 99.7	主要用于电镀行业。 Be used for electroplating industry.
镍铜合金 Nickel-Copper Alloy	NCu40-2-1	Ni bal. Cu 38~42 Mn 1.25~2.25 Fe 0.2~1.0	主要用于电真空领域，用于制造具有高耐蚀性的元件等。 Be used for vacuum field, especially for the element which need high corrosion resistance.
	NCu28-2.5-1.5	Ni bal. Cu 27~29 Mn 1.2~1.8 Fe 2~3	
镍铬合金 Nickel-Chromium Alloy	Cr20Ni80	Ni bal. Cr20~23 Si 0.75~1.6	高电阻电热合金材料。 High resistance electric heating alloy materials.
	Cr30Ni70	Ni bal. Cr28~31 Si 0.75~1.6	

## 镍及镍合金焊丝 Nickel And Nickel Alloy Welding Wire

名称/UNS号 Name/Class	中国标准 GB/T15620	美国标准 AWS A5.14	国际标准 ISO 18274	化学成分 (%) Chemical composition(%)	主要特性及用途 Properties and usage
镍焊丝 Nickel Welding Wire N02061	SNi2061	ERNi-1	SNi2061	Ni ≥ 93 C 0.15 Fe 1 S 0.015 Cu 0.25 other 0.5 Ti 2~3.5 Mn 1 Si 0.75 Al 1.5 P 0.03	用于工业纯镍的锻件和铸件焊接，也可以用于焊接镍复合钢板和钢表面堆焊，以及异种金属焊接。 Be used for the welding of pure nickel forging piece and casting piece. Also suitable for welding nickel-base alloy clad steel plate, hard facing of steel surface and the welding of dissimilar steel.
镍铜焊丝 Nickel-Copper welding wire N04060	SNi4060	ERNiCu-7	SNi4060	Ni 62~69 Ti 1.5~3 Mn 4.0 P 0.02 Si 1.25 other 0.5 Cu bal. C 0.15 Fe 2.5 S 0.015 Al 1.25	用于镍铜合金的焊接，也可用于复合钢，镍铜复合钢的焊接，以及钢表面堆焊。具有优越的耐腐蚀性能。 Be used for welding nickel-copper alloy, nickel-base alloy clad steel plate, hard facing of steel surface. There are excellent corrosion resistance.
镍铬焊丝 Nickel-Chromium-Welding Wire N06082	SNi6082	ERNiCr-3	SNi6082	Ni ≥ 67 Mn 2.5~3.5 C 0.1 P 0.03 Si 0.5 Ti 0.75 Cr 18~22 Nb 2~3 Fe 3 S 0.015 Cu 0.5 other 0.5	用于镍基、铁基合金的焊接，也可用于异种钢之间的焊接。其具有良好的综合力学性能。亦可进行埋弧堆焊。 Be used for welding nickel alloy and iron alloy. Also be used for welding dissimilar steel. There are good comprehensive mechanical property. Also could for surfacing submerged arc welding.
镍铬钼焊丝 Nickel-Chromium-Molybdenum Welding Wire N01004	SNi1004	ERNiCrMo-3	SNi1004	Ni ≥ 58 Mo 8~10 C 0.1 Fe 5 S 0.015 Cu 0.5 Ti 0.4 Cr 20~23 Nb 3.15~4.15 Mn 0.5 P 0.02 Si 0.5 Al 0.4 other 0.5	具有优良的耐高温、耐腐蚀性能，用于镍基、铁基合金的焊接，也可用于9Ni钢和各类双相不锈钢的焊接。 Good thermostability and corrosion resistance. Be used for welding nickel alloy and iron alloy. Also be used for welding 9Ni steel and every kinds of duplex stainless steel.
镍铬铁焊丝 Nickel-Chromium-Iron Welding Wire N06062	SNi6062	ERNiCrFe-5	SNi6062	Ni ≥ 70 Nb 1.5~3 Mn 1 S 0.015 Cu 0.5 other 0.5 Cr 14~17 Fe 6~10 C 0.08 P 0.03 Si 0.35	用于镍铬铁合金和镍铬铁合金的焊接。 Be used for welding nickel-chromium-iron alloy and iron alloy.

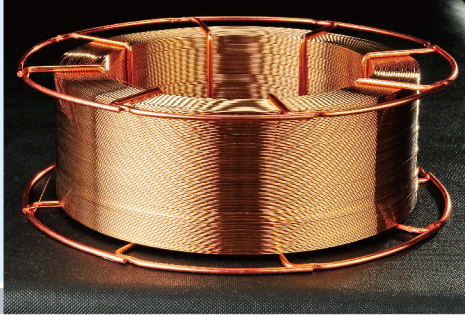


# 铜合金 Copper Alloy



# 铜合金 Copper Alloy

# Products

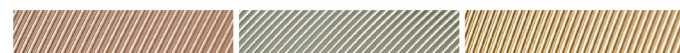


## 其它铜合金线、棒 Other Copper Alloy Wire And Rod

名称/UNS号 Name/Class	牌号 Alloy NO.	化学成分 (%) Chemical composition(%)	主要特性及用途 Properties and usage
黄铜 Brass	H62 C27400	Cu 60.5~63.5 Zn bal.	具有优良的冷、热压力加工性能, 易焊接耐蚀性好。可制作销钉、铆钉、螺帽、垫圈、弹簧等小五金件。 Good hot and cold pressure processing performance, easy to weld and high corrosion resistance. Best for making some small hardware, for example pin, rivet, nut, gasket and spring.
	H65 C27000	Cu 63.5~68 Zn bal.	
	H85 C23000	Cu 84~86 Zn bal.	有良好的机械性能和耐蚀性, 能极好的承受冷、热压力加工。 High mechanical performance and corrosion resistance performance. Especial good hot and cold pressure processing performance.
锡青铜 Phosphor Bronze	QSn6.5-0.1 C51900	Cu bal. Sn 6~7 P 0.1~0.25	具有高的强度、弹性和耐磨性, 易于焊接和钎焊, 在大气、淡水和海水中耐蚀性好。可用于制造导电弹性元件, 精密仪器中的抗磁元件等。 High strength elastic and abrasive resistance. Easy to weld and braze. Good corrosion resistance performance in air and water. Be used for making Conductive with elastic element, the diamagnetic components of precision instruments.
	QSn7-0.2	Cu bal. Sn 6~8 P 0.1~0.25	
	QSn8-0.3 C5210	Cu bal. Sn 7~9 P 0.03~0.35	
硅青铜 Silicon Bronze	QSi1-3	Cu bal. Si 0.6~1.1 Mn 0.1~0.4 Ni 2.4~3.4	具有高的强度, 塑性好, 在大气和海水中耐蚀性好, 切削性良好。用于制造各种在耐蚀条件下的零部件。 High strength, good plastic. and good corrosion resistance performance in air and water. Good machinability.
	QSi3-1 C65600	Cu bal. Si 2.7~3.5 Mn 1~1.5	Be used for making the element which in corrosion condition.
铝青铜 Aluminum Bronze	QA17 C61000	Cu bal. Al 6.5~8.5	具有高的强度和弹性, 耐蚀性高, 可电焊和气焊, 可制弹簧元件等。 High strength, elastic and corrosion resistance performance. Could electric welding and gas welding. Also be used for making the parts of spring.
	QA19-2	Cu bal. Al 8~10 Mn 1.5~2.5	具有高强度, 可电、气焊, 用于制高强度零件。 High strength. Could electric welding and gas welding. Be used for making the parts which have high strength.
	QA19-4	Cu bal. Al 8~10 Fe 2~4	具有高强, 高耐蚀, 良好的减磨性。用于制高强、耐磨零件。 High strength, corrosion resistance. Good antifriction erosion. Be used for making high strength and corrosion resistance parts.

## 其它铜合金线、棒 Other Copper Alloy Wire And Rod

产品分类 Class	牌号 Alloy NO.	化学成分 (%) Chemical composition(%)	主要特性及用途 Properties and usage
铝青铜 Aluminum Bronze	QA10-4-4	Al 9.5~11 Ni 3.5~5.5, Fe 3.5~5.5 Cu bal.	具有高的机械性能和耐蚀性能及良好的耐磨性。 High mechanical properties, corrosion resistance and abrasive resistance.
	QA10-5-5	Al 8~11 Ni 4~6 Fe 4~6 Mn 0.5~2.5 Cu bal.	用于制造高强度的耐磨零件和400℃以下工作的零件。 Be used for making the parts with high strength and corrosion properties. And the parts which condition below 400℃.
白铜 Copper Nickel	BFe10-1-1 C70600	Cu bal. Ni 9~11 Fe 1~1.5 Mn 0.5~1	具有良好的耐蚀性, 优良的机械性能, 焊接性能良好。广泛应用于造船、电力、化工及石油等工业部门中。主要用来制造冷凝器、蒸发器、热交换器和各种高强度耐蚀件, 供电器、仪表行业制造电热电阻元件等。 Good corrosion resistance, mechanical properties and welding property. It could be used for shipbuilding, electricity, chemical engineering, petroleum and some other industries field. Main be used for making condenser, evaporator, high strength and corrosion resistance parts, power supplier, the heating element and resistor element in Instrument manufacturing industry.
	BFe30-1-1 C71581	Cu bal. Ni 29~32 Fe 0.5~1 Mn 0.5~1.2	
	BMn3-12	Cu bal. Ni 2~3 Fe 0.2~0.5 Mn 11.5~13.5 Si 0.1~0.3	
	BMn40-1.5	Cu bal. Ni 39~41 Mn 1~2	
	BMn43-0.5	Cu bal. Ni 42~44 Mn 0.1~1.0	
	B19 C71000	Cu bal. Ni 18~20	
铜锰钴合金 Copper-Manganese-Cobalt alloy	CuMnCo31-10	Cu bal. Mn 30.5~32.5 Co 9.5~10.5	用于钎焊不锈钢等。 Be used for brazing stainless steel, etc.
锌白铜 Nickel Silver	BZn15-20 C75200	Cu 62~65 Ni 13.5~16.5 Zn bal.	可用于精密仪器、医疗器械和通讯工业、卫生工程中的各种零件、用品等。 Be used for precision machinery, medical equipment and communication industry.
	BZn18-26 C77000	Cu 53.5~56.5 Ni 16.5~19.5 Zn bal.	
铜锰镍合金 Copper-Manganese-Nickel Alloy	CuMnNi38.5-9	Cu bal. Mn 37.5~39.5 Ni 8.5~10	代替银基钎料, 焊接电子管用焊料。 Instead of silver braze material. Be used for welding electronic valve.
	CuNiMn20-20-0.5	Cu bal. Ni 18.5~21.5 Si 0.3~0.6 Mn 18.5~21.5	供石油行业钻井用钻头、钻具等的焊接。 Be used for welding drill or drilling tools.



# Products



## 焊丝供货标准 Packaging

MIG焊丝										
直径 (diameter)							包装 (packing)			重量 (weight)
公制 (Metric)	0.8mm	0.9mm	1.0mm	1.2mm	1.6mm	2.0mm	D100mm D200mm D300mm K300mm KS300mm			1kg/5kg/12.5kg 13.6kg/15kg
	英制 (British)	0.030"	0.035"	0.040"	0.045"	1/16"				5/64"
木轴/Wooden Spools							220kg~250kg 500lb			

TIG焊丝										
直径 (diameter)							长度 (length)		包装 (packing)	
公制 (Metric)	1.6mm	2.0mm	2.4mm	3.2mm	4.0mm	4.8mm	6.4mm	457mm / 914mm	5kg/盒 10kg/盒 25kg/套盒 10kg/塑封桶装	
	英制 (British)	1/16"	5/64"	3/32"	1/8"	5/32"				3/16"

## 产品标准、牌号对照表 Standard and Designation Comparison Table

类别 Class	ISO 24373:2008		GB/T 9460-2008		AWS A 5.7-2007 AWS A 5.8-2004		DIN 1733-1:1998		BS EN 14640-2005	
	分类号 Class Number	化学符号 Chemical symbol	分类号 Class Number	化学符号 Chemical symbol	分类号 Class Number	化学符号 Chemical symbol	分类号 Class Number	化学符号 Chemical symbol	分类号 Class Number	化学符号 Chemical symbol
铜低合金 Copper-Low Alloyed	Cu1897	CuAg1	SCu1897	CuAg1	-	-	2.1211	SG-CuAg	Cu1897	CuAg1
	Cu1898	CuSn1	SCu1898	CuSn1	C18980	ERCu	2.1006	SG-CuSn	Cu1898	CuSn1
硅青铜 Silicon Bronze	Cu6560	CuSi3Mn1	SCu6560	CuSi3Mn	C65600	ERCuSi-A	2.1461	SG-CuSi3	Cu6560	CuSi3Mn1
锡青铜 Phosphor Bronze	Cu5180	CuSn5P	SCu5180	CuSn5P	C51800	ERCuSn-A	2.1022	SG-CuSn6	-	-
	Cu5180A	CuSn6P	SCu5180A	CuSn6P	C51800	ERCuSn-A	2.1022	SG-CuSn6	Cu5180	CuSn6P
	Cu5210	CuSn8P	SCu5210	CuSn8P	C52100	ERCuSn-C	-	-	Cu5210	CuSn9P
	Cu5211	CuSn10MnSi	SCu5211	CuSn10MnSi	-	-	-	-	Cu5211	CuSn10
	Cu5410	CuSn12P	SCu5410	CuSn12P	-	-	2.1056	SG-CuSn12	Cu5410	CuSn12P
铝青铜 Aluminum Bronze	Cu6100	CuAl7	SCu6100	CuAl7	C61000	ERCuAl-A1	2.0921	SG-CuAl8	Cu6100	CuAl8
	Cu6180	CuAl10Fe1	SCu6180	CuAl10Fe	C61800	ERCuAl-A2	2.0937	SG-CuAl10Fe	Cu6180	CuAl10
	Cu6240	CuAl11Fe3	SCu6240	CuAl11Fe3	C62400	ERCuAl-A3	-	-	Cu6240	CuAl11Fe
	Cu6327	CuAl8Ni2Fe2Mn2	SCu6327	CuAl8Ni2Fe2Mn2	-	-	2.0922	SG-CuAl8Ni2	Cu6327	CuAl8Ni2
	Cu6328	CuAl9Ni5Fe3Mn2	SCu6328	CuAl9Ni5Fe3Mn2	C63280	ERCuNiAl	2.0923	SG-CuAl8Ni6	Cu6328	CuAl9Ni5
	Cu6338	CuMn13Al8Fe3Ni2	SCu6338	CuMn13Al8Fe3Ni2	C63380	ERCuMnNiAl	2.1367	SG-CuMn13Al7	Cu6338	CuMn13Al7
白铜 Copper-Nickel	Cu7061	CuNi10	SCu7061	CuNi10	-	-	2.0873	SG-CuNi10Fe	Cu7061	CuNi10
	Cu7158	CuNi30Mn1FeTi	SCu7158	CuNi30Mn1FeTi	C71581	ERCuNi	2.0837	SG-CuNi30Fe	Cu7158	CuNi30
黄铜 Brass	Cu4700	CuZn40Sn	SCu4700	CuZn40Sn	C47000	RBCuZn-A	-	-	Cu4700	CuZn40
	Cu6800	CuZn40Ni	SCu6800	CuZn40Ni	C68000	RBCuZn-B	-	-	Cu6800	CuZn40Ni
	Cu6810	CuZn40Fe1Sn1	SCu6810	CuZn40Fe1Sn1	C68100	RBCuZn-C	-	-	-	-
	Cu4641	CuZn40SnSi	SCu6810A	CuZn40SnSi	-	-	2.0366	SG-CuZn40Si	Cu6810	CuZn40SnSi
	Cu7730	CuZn40Ni10Sn1	SCu7730	CuZn40Ni10	C77300	RBCuZn-D	-	-	Cu7730	CuZn40Ni10

