使命愿景 MISSION & VISION

创造客户价值，打造百年企业，

成为行业标杆，为现代工业文明做贡献。

CREATE CUSTOMER VALUE

BUILD A CENTURY-OLD COMPANY

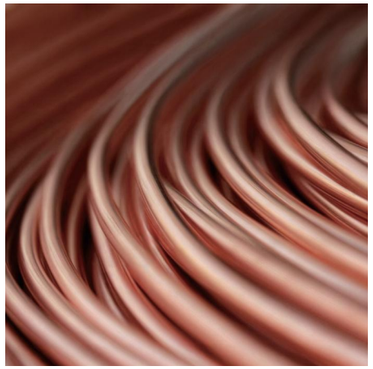
BECOME THE INDUSTRY BENCHMARK

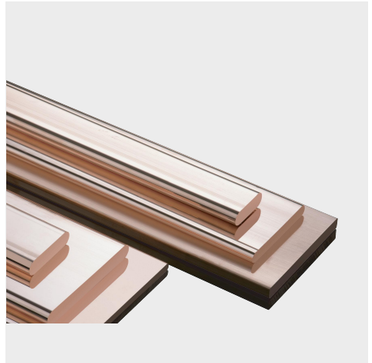
CONTRIBUTE TO MODERN INDUSTRIAL CIVILIZATION

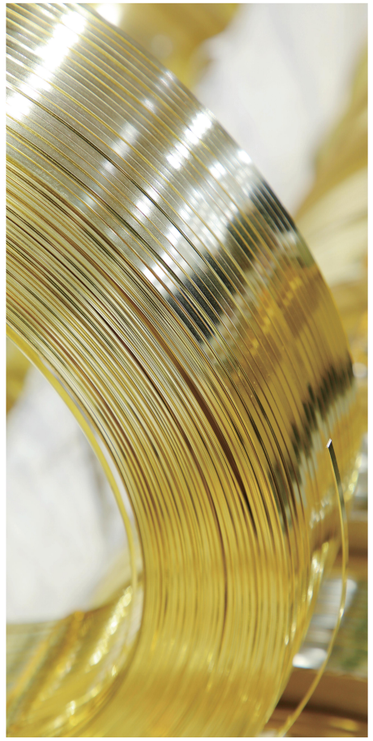
STOCK CODE
股票代码
601609

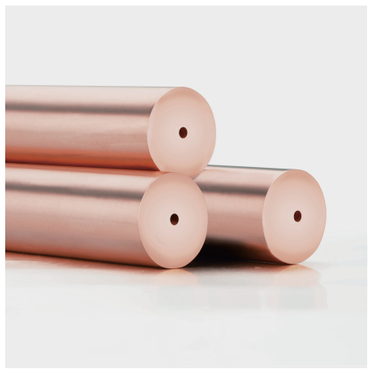
JINTIAN
金田铜业

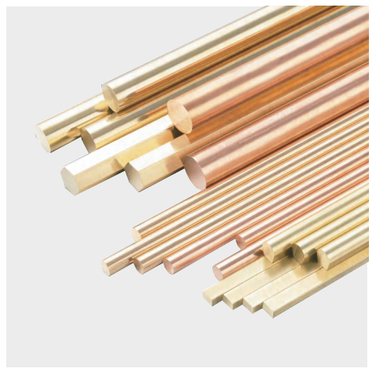
HIGH-PRECISION ROD AND WIRE SAMPLE CATALOG
高精度棒线样册











CATALOG 2026

JINTIAN
金田铜业

宁波金田铜业(集团)股份有限公司
NINGBO JINTIAN COPPER(GROUP) CO.,LTD
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金田铜业官微
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All information and data as of March 2026

宁波金田铜业(集团)股份有限公司

NINGBO JINTIAN COPPER(GROUP) CO.,LTD.

股票代码 **601609**

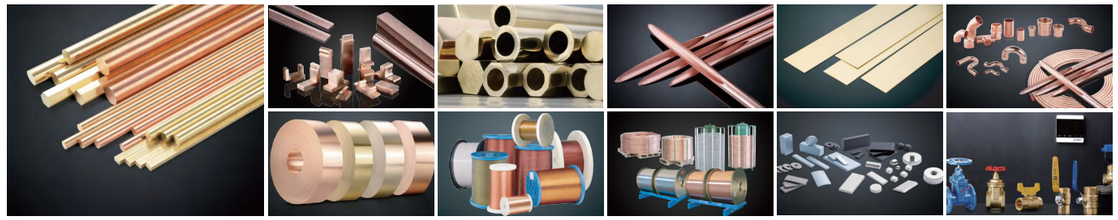
1986	88	USD 21+ billion	1.9+million tons	8000+	8大	800+	400+
始建于 Founded in	中国制造业第88位 China's Manufacturing Industry	年销售额 Turnover	年产销量 Production Capacity	企业员工 Employees	生产基地 Production Bases	科研人员 Scientific Researchers	专利认证 Patent

公司创建于1986年,专注铜加工产业,是全球领先的铜合金及先进材料制造企业。主要产品有铜管、棒、线、板、带、排、电磁线、阀门磁性材料及黄铜、青铜、紫铜、白铜等高端合金。致力于为新能源汽车、风力发电、光伏能源、电力电气、轨道交通、消费电子等产业发展提供全球一流的产品和服务。

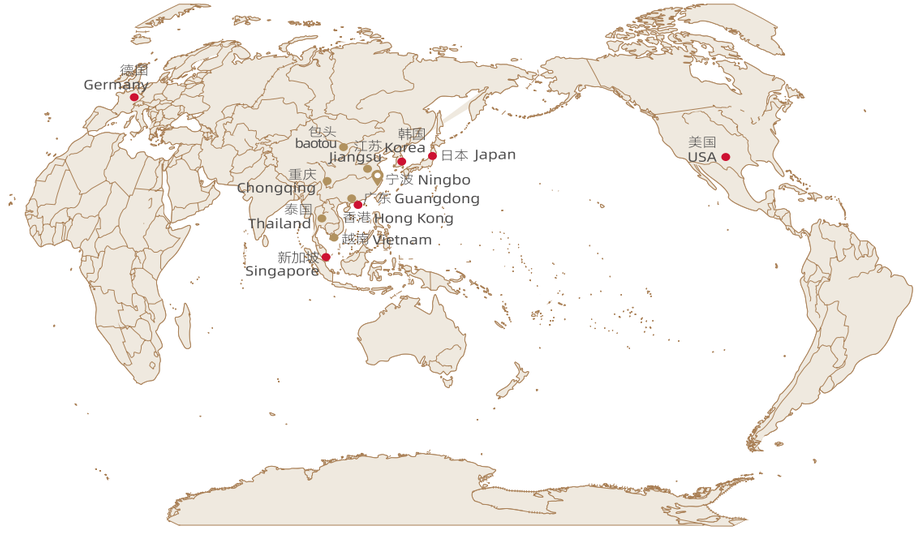
公司立足宁波，放眼世界，在全球有八大生产基地，8000余名员工。在美国、德国、泰国、日本、韩国等地设立分支机构，业务遍及100多个国家和地区，是众多世界知名企业的长期合作伙伴。

Jintian founded in 1986 and focus on copper processing industry , which is a global leader in the manufacturing of copper alloys andadvanced materials, Our main products include coppertube, rod, wire, plate, strip, busbar, electromagnetic wire, valve,magnetic materials andhighend alloys such as brass, bronze, copper and nickel silver. We are commited to providing global firstclass products and services for the development of new energy vehicles, wind power generation, photovoltaic energy, electric power, rai transit, consumer electronics and other industries.

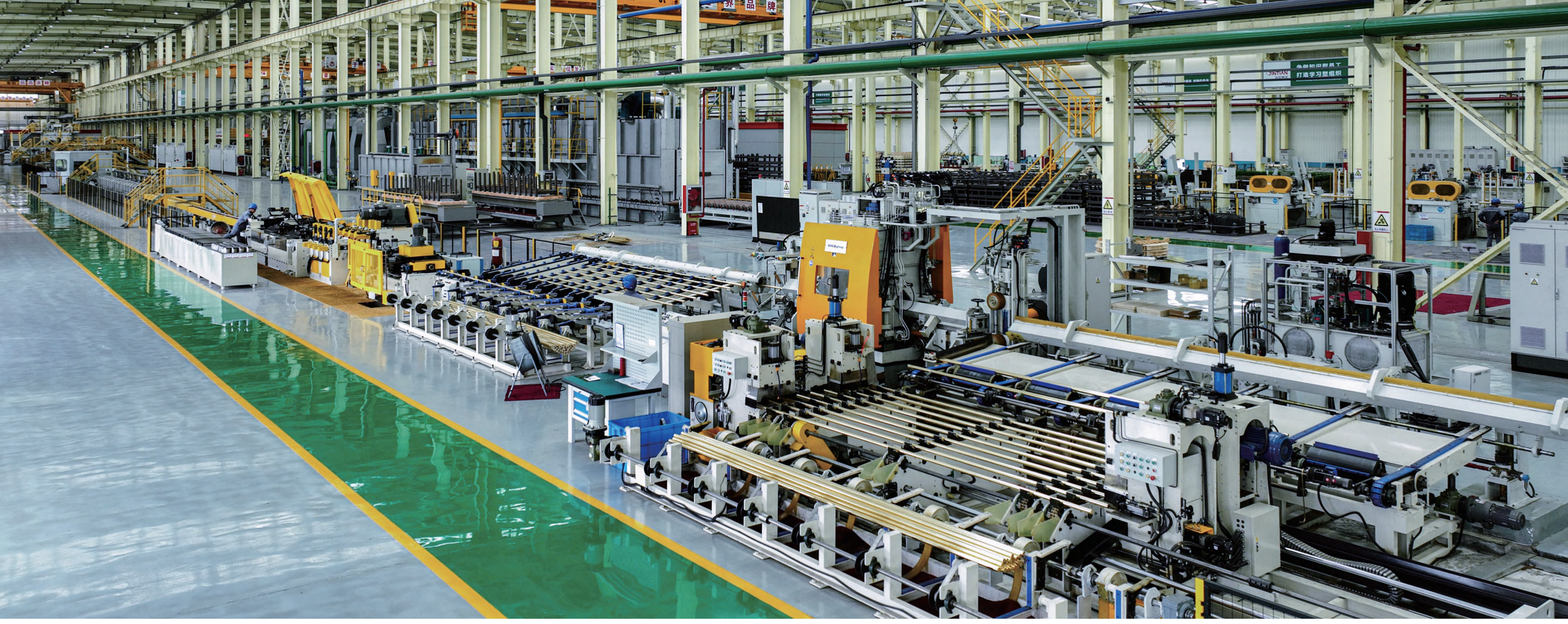
Jintian based in Ningbo, has eight production bases. and more than 8.000 emplovees in the world.We have set up subsidiares in USA, Germany, Thailand, Japan, Korea,etc. Our business covers more than 100 counties and regions, and we are the long-term partner bfmanyworld famous enterprises.



全球布局 GLOBAL LAYOUT



● 生产基地/ Production base　● 分支机构/ branches



高精度棒线公司

高精度棒线公司是金田集团旗下一家专注于生产高精密铜合金棒线的公司，公司成立于2007年，经过多年的发展，现已成为国内外铜合金棒线材料的知名企业，公司现有员工约600人，年产能12万吨，主要产品有铅黄铜、普黄铜、无铅易切削黄铜、铬锆铜、铝青铜、碲铜、锡青铜、铁青铜、铜镍硅以及其他复杂铜合金，产品主要应用于汽车制造、航空航天、工程机械、智能焊接、轨道交通、电子通讯、民用五金等领域。与A.0.SMITH、Panasonic、PHOENIXCONTACT等全球众多知名企业建立良好合作关系，为客户提供铜合金材料解决方案。

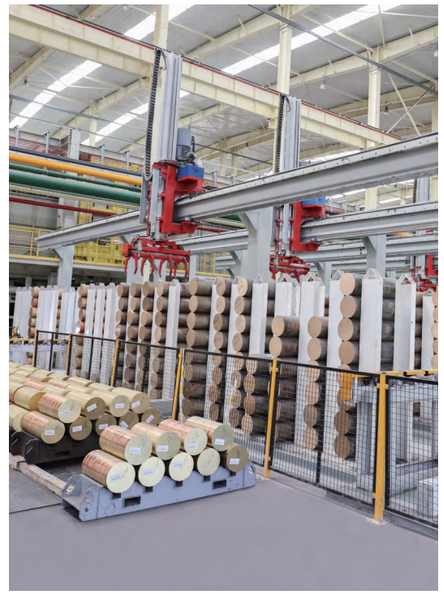
在“创造客户价值，打造百年企业，成为行业标杆，为现代工业文明做贡献”的使命愿景下，公司一方面坚持科技创新，不断研发新产品，为客户提供合金解决方法;一方面坚持走新型工业发展道路，通过打造一流人才队伍，引进国际先进装备，推行行业体系认证不断提升内部管理水平。公司先后引进多名国际材料专家，引进德国SMS2800吨挤压机、EJP拉拔机、舒玛格两辊矫直机等国际先进设备，通过1S09001:2015质量管理体系，IS014001:2015环境体系，IS045001:2018职业健康安全管理体系以及IATF16949汽车行业管理体系并逐步推行JIS(日本)、CE(欧洲)产品认证以及AS9100D国际航空航天质量管理体系认证。

High-Precision Copper Rod & Wire Company

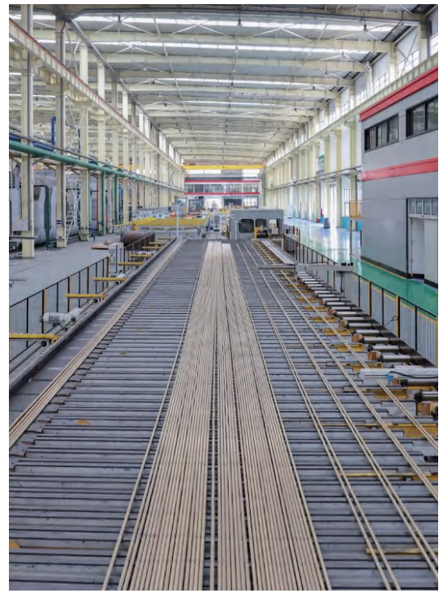
High-Precision Copper Rod & Wire Company is a subsidiary of Jintian Copper Group, specializing in the production of high-precision copper alloy rod and wire. Founded in 2007, after many years of development, it has become a well-known enterprise in the global copper alloy wire and rod materials industry. The company has about 600 employees and an annual production capacity of 120,000 tons. Its main products include leaded brass, ordinary brass, lead-free free-machining brass, chromium zirconium copper, aluminum bronze, tellurium copper, tin bronze, iron bronze, copper-nickel-silicon, and other complex copper alloys. These products are mainly used in automotive manufacturing, aerospace, engineering machinery, intelligent welding, rail transportation, electronic communications, and consumer hardware. The company has established strong cooperative relationships with many globally renowned companies such as A.O. Smith, Panasonic, and Phoenix Contact, providing customers with copper alloy solutions.

Under the mission and vision of "create customer value, build a century-old enterprise, become an industry benchmark, and contribute to modern industrial civilization," the company adheres to technological innovation, continuously developing new products and providing alloy solutions for customers. Simultaneously, it persists in following a new path of industrial development, continuously improving its internal management level by building a first-class talent team, introducing internationally advanced equipment, and implementing industry system certifications. The company has successively introduced numerous international materials experts and internationally advanced equipment, such as the German SMS 28MN indirect extrusion press, EJP drawing machine, and Schumag two-roll straightener. It has obtained ISO9001:2015 quality management system, ISO14001:2015 environmental management system, ISO45001:2018 occupational health and safety management system, and IATF16949 automotive industry management system certifications. Furthermore, it is gradually implementing JIS (Japan), CE (Europe) product certifications, and AS9100D international aerospace quality management system certification.

西马克铜及铜合金2800吨反向挤压生产线 28MN Indirect Extrusion Press Line for Copper and Copper Alloys



铜锭智能库 Intelligent billet warehouse



30米冷床 30m cooling bed

铬锆铜系列合金棒线材
Chromium zirconium copper series alloy rod and wire

企标	UNS	EN	JIS	GB
JT106	C18150	CuCr1Zr	/	TCr1-0.15
JT108	C18200	CW105C/CuCr1	/	TCr1
JT109	C15000	CW120C/CuZr	/	T2r0.15

具体成分/Specific components

牌号Grade	Cu%	Cr%	Zr%	Fe%	Si%	Pb%	Cu+所有元素 CU+listed Elements
JT106	余量Rem	0.5-1.2	0.03-0.3	<0.08	<0.1	/	≥99.8
JT108	余量Rem	0.6-1.2	/	<0.1	<0.1	<0.05	≥99.5
JT109	余量Rem	/	0.10-0.20	/	/	/	≥99.9

物理性能/Physical Properties

牌号 Grade	JT106	JT108	JT109
密度 g/cm³ Density g/cm³	8.88	8.9	8.94
熔点 ℃ Melting point ℃	1080	1075	1080
导电率 %IACS Conductivity %IACS	80	75	90
热导率 W/(m·k) Thermal conductivity W/(m·k)	324	324	360
热膨胀系类 10^{-6}/k Coefficient of thermal expansion 10^{-6}/k	17.3	17	17.6
弹性模数 GPa Elastic modulus GPa	114	117	115

加工性能/Machinability

牌号 Grade	JT106	JT108	JT109
冷加工 Cold working	好 Good	好 Good	好 Good
切削 Cutting	较差 Poor	较差 Poor	较差 Poor
热加工 Hot working	好 Good	好 Good	好 Good
耐磨/减磨性 Wearresistanre/wear reduction	好 Good	好 Good	好 Good
钎焊性 Brazing property	好 Good	好 Good	好 Good
耐高温软化性 High temperature softening resistance	优秀 Excellent	好 Good	好 Good

产品特征/Product features

铬锆铜系列合金通过冷加工、热处理和析出强化获得优良的综合性能，具有优异的导电与导热性、高硬度与高强度、出色的高温性能与抗软化性、良好的耐腐蚀性，可加工性。

The chromium zirconium copper series alloys obtain excelent comprehensive properties through cold processing, heat treatment, and precipitation strengthening, with excellent electrical and thermal conductivity, high hardness and strength, outstanding high-temperature performance and softening resistance, good corrosion resistance, and processability.

应用领域/Application field

1.电阻焊接:电极帽、电极臂、导电嘴、电极握杆、焊接凸点等。
2.电力电气:高压开关触头、真空开关触头、触指、导电端子、大电流导体。
3.模具制造:压铸模具、注塑具、连铸结晶器内衬、热锻具镶块。

1. Resistance welding: electrode cap, electrode arm, conductive nozzle, electrodegrip, welding protrusion, etc.
2. Power and Electrical: High voltage switch contacts, vacuum switch contacts,contact fingers, conductive terminals, high current conductors.
3. Mold manufacturing: die-casting molds, injection molding tools, continuous casting crystallizer liners, hot forging tool inserts.




供货规格/Supply specifications

JT106

状态Status	规格 ϕmm Specification ϕmm	抗拉强度(Mpa) Tensile strength (Mpa)	屈服强度(Mpa) Yield strength (Mpa)	断后伸长率A% Post fracture elongation A%	HBW	导电率 %IACS Conductivity %IACS
R370	50-80	370	250	16	/	80
H120	3-80	/	/	/	120-160	80
R430	30-50	430	350	/	10	80
H135	30-50	/	/	/	135-175	80
R470	3-30	470	420	8	/	80
H150	3-30	/	/	/	150-180	80

JT108

规格 ϕmm Specification ϕmm	抗拉强度(Mpa) Tensile strength (Mpa)	屈服强度(Mpa) Yield strength (Mpa)	断后伸长率A% Post fracture elongation A%	HBW	导电率%IACS Conductivity%IACS	软化温度℃ Softening temperature(℃)
3-25	≥ 450	≥ 380	9	≥ 75	75	475
> 25-50	≥ 410	≥ 345		≥ 70		
> 50-76	≥ 380	≥ 310		≥ 65		
> 76-89	≥ 330	≥ 290		≥ 65		

JT109

状态Status	规格 ϕmm Specification ϕmm	抗拉强度 (Mpa) Tensile strength (Mpa)	屈服强度 (Mpa) Yield strength (Mpa)	断后伸长率A% Post fracture elongation A%	HBW	导电率%IACS Conductivity%IACS
R250	50-80	250	170	20	75-115	90
R280	25-50	280	210	15	90-130	90
R350	4-25	350	210	12	120-160	90

备注:其它规格尺寸及异型材请咨询。
Note: For other specifications, sizes, and profiles, please consult.

碲/铅铜系列合金棒线材
Tellurium/Lead Copper Alloy Rod and Wire

企标	UNS	EN	JIS	GB
JT103	C14500	CW118C	/	TTe0.5
JT110	/	/	/	QTe0.3
JT111	C18700	CW113C	/	Tpb1

具体成分/Specific components

牌号Grade	Te	Pb	P	Cu
JT103	0.4-0.7	/	0.004-0.012	余量Rem
JT110	0.2-0.7	/	氧含量<20ppm Oxygen content < 20ppm	余量Rem
JT111	/	0.7-1.5	0.003-0.012	余量Rem

物理性能/Physical Properties

牌号 Grade	JT103	JT110	JT111
密度 g/cm³ Density g/cm³	8.94	8.95	8.9
熔点 ℃ Melting point ℃	1080	1080	1078
导电率 %IACS Conductivity %IACS	86-93	90-97	86-95
热导率 W/(m·k) Thermal conductivity W/(m·k)	354.8	365.7	370
热膨胀系类 10^{-6}/k Coefficient of thermal expansion 10^{-6}/k	17.1	17.5	17
弹性模数 GPa Elastic modulus GPa	117	116.5	118

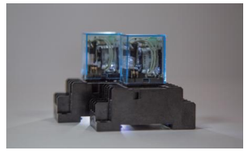
加工性能/Machinability

牌号 Grade	JT103	JT110	JT111
冷加工 Cold working	好 Good	好 Good	好 Good
热加工 Hot working	好 Good	好 Good	好 Good
钎焊性 Brazing property	好 Good	好 Good	一般 Fair
电阻焊 Resistance welding	一般 Fair	一般 Fair	一般 Fair
可热加工性相对于 %C37700 Hot workability relative to % C37700	65%	60%	80%
可机加工性相对于 %C36000 Hot workability relative to % C36000	85%	80%	90%

应用领域/Application Fields

1.新能源汽车:连接器端子、充电桩、继电器。
2.等离子切割:焊割喷嘴。
3.通讯基站:电源模块零部件。

1.New Energy Vehicles: Connector Terminals, Charging Piles, Relays.
2.Plasma cutting:welding and cutting nozzle.
3.Communication base station: Power module components.



产品特征/Product features

该系列合金是在纯铜基础上添加适量的碲/铅元素，碲/铅不固溶于铜，在切削过程中形成断屑点，提高材料的切削性能。该系列合金材料兼顾了较好的易切削性能和优良的导电、导热性能，蹄铜同时具备抗腐蚀和抗电烧蚀性能。

This series of alloys is made by adding an appropriate amount of tellurium/lead elements on the basis of pure copper. tellurium/lead does not dissolve in copper and forms chip breaking points during the cutting process, improving the cutting performance of the material. This series of alloy materials combines good machinability with excellent electrical and thermal conductivity, while tellurium copper has both corrosion resistance and electrical erosion resistance.

供货规格/Supply specifications

JT103

状态 Status	规格 ϕmm Specification ϕmm	抗拉强度 (Mpa) Tensile strength (Mpa)	屈服强度 (MPa) Yield strength (MPa)	延伸率 A% Elongation A%	导电率 %IACS Conductivity %IACS
H02	3-6.5	260	205	8	≥ 86
	6.5-76	260	205	12	≥ 86
H04	3-6.5	330	275	4	≥ 86
	6.5-32	305	260	8	≥ 86
	32-76	275	240	8	≥ 86

JT110

状态 Status	规格 ϕmm Specification ϕmm	抗拉强度(Mpa) Tensile strength (Mpa)	屈服强度(Mpa) Yield strength (Mpa)	延伸率A% Elongation A%	导电率%IACS Conductivity%IACS
H02	3-6.5	240	165	8	≥ 90
	6.5-76	240	165	12	≥ 90
H04	3-6.5	310	235	4	≥ 90
	6.5-32	285	220	8	≥ 90
	32-76	255	200	10	≥ 90

JT111

状态 Status	规格 ϕmm Specification ϕmm	Rm/Mpa	Rp0.2/Mpa	A%	HBW	IACS%
R250	3-80	250	180	7	80-110	≥ 86
R300	3-20	300	240	5	95-130	≥ 86
R360	3-10	360	300	/	120	≥ 86

备注:其它规格尺寸及异型材请咨询。
Note: For other specifications, sizes, and profiles, please consult.

铝青铜系列合金棒线材
Aluminum Bronze Alloy Rod and Wire

企标	UNS	EN	JIS	GB
JT623	C62300	CuAl9Fe3	/	QAl9-4
JT630	C63000	CW307G	/	QAl10-4-4
JT903	/	/	/	QAl10-5-5
JT904	/	CW306G	/	QAl10-3-1.5

具体成分/Specific components

牌号Grade	Cu%	Al%	Fe%	Ni%	Mn%	Zn%	Cu+所有元素 CU+listed Elements
JT623	Rem	8-10	2 - 4	/	≤ 0.5	≤ 1	≥ 98.3
JT630	Rem	9.5-11	3.5 - 5.5	3.5 - 5.5	≤ 0.3	≤ 0.5	≥ 99
JT903	Rem	8-11	4 - 6	4 - 6	0.5 - 2.5	≤ 0.5	≥ 98.8
JT904	Rem	8.5-10	2 - 4	/	1 - 2	≤ 0.5	≥ 99.3

物理性能/Physical Properties

牌号 Grade	JT623	JT904	JT603	JT903
密度 g/cm³ Density g/cm³	7.67	7.6	7.6	7.58
熔点 °C Melting point °C	1046	1046	1054	1060
导电率 %IACS Conductivity %IACS	12	9.1	7	7
热导率 W/(m·k) Thermal conductivity W/(m·k)	54	58.6	39.1	39.2
热膨胀系类 10^{-6}/k Coefficient of thermal expansion 10^{-6}/k	15.6	20	15.6	17
弹性模数 GPa Elastic modulus GPa	117	102	121	125

加工性能/Machinability

牌号Grade	JT623	JT904	JT603	JT903
冷加工 Cold working	好 Good	较差 Poor	较差 Poor	较差 Poor
热加工 Hot working	好 Good	好 Good	好 Good	好 Good
钎焊性 Brazing property	一般 Fair	一般 Fair	好 Good	好 Good
电阻焊 Resistance welding	好 Good	好 Good	好 Good	好 Good
车削性能 %C36000 Turning performance% C36000	50	30	30	30
热锻性能 %C37700 Hot forging performance %C37700	70	75	75	70

产品特征/Product Features

该系列合金通过铝元素的固溶强化有较高的强度和耐磨性，同时由于铝元素在产品表面能形成致密的氧化铝保护层，合金具有较好的高温耐蚀性和抗氧化性，在大气淡水和海水中抗蚀性很好。合金属于高强度耐热青铜，高温（400°C）下力学性能稳定，有良好的减摩性，热加工件良好高强、兼具耐磨抗爆，抗裂件，易加工，耐腐蚀，抗蠕变等特性。

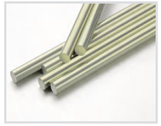
This series of alloys exhibits high strength and wear resistance through solid solution strengthening with aluminum. Additionally, the aluminum element forms a dense aluminum oxide protective layer on the product surface, providing excellent high-temperature corrosion resistance and oxidation resistance. The alloy demonstrates superior corrosion resistance in atmospheric fresh water and seawater. As a high-strength heat-resistant bronze,it maintains stable mechanical properties at elevated temperatures (400°C), offering good anti-friction performance, as well as high strength,wear resistance, explosion resistance, crack resistance, ease of machining, corrosion resistance, and creep resistance.

应用领域/Application Fields

1.高铁接触网:高铁接触线线夹。
2.航空航天、工程机械:轴承、轴套、阀杆、销轴、齿轮、法兰盘等耐磨、耐蚀零部件。

1.High speed rail contact network: high-speed rail contact wire clamp.
2.Aerospace Construction machinery: wear-resistant and corrosion-resistant components such as bearings, shaft sleeves, valve stems, pin shafts, gears ,flanges, etc.





供货规格/Supply specifications

JT623

状态 Status	规格 ϕmm Specification ϕmm	抗拉强度 (Mpa) Tensile strength (Mpa)	屈服强度 (Mpa) Yield strength (Mpa)	断后伸长率A% Post fracture elongation A%	HBW
M30(R)	7-90	≥ 540	/	≥ 17	110-190
H04(Y)	7-80	550	/	≥ 11	

JT904

状态 Status	规格 ϕmm Specification ϕmm	抗拉强度 (Mpa) Tensile strength (Mpa)	屈服强度 (Mpa) Yield strength (Mpa)	断后伸长率A% Post fracture elongation A%	HBW
M30(R)	7-90	≥ 590	/	≥ 15	130-190
H04(Y)	7-80	≥ 630	/	≥ 15	

JT630

状态 Status	规格 ϕmm Specification ϕmm	抗拉强度 (Mpa) Tensile strength (Mpa)	屈服强度 (Mpa) Yield strength (Mpa)	断后伸长率A% Post fracture elongation A%	HBW
R680	10-90	≥ 680	≥ 320	≥ 10	170-210
R740	10-90	≥ 740	≥ 400	≥ 8	≥ 200

JT903

状态 Status	规格 ϕmm Specification ϕmm	抗拉强度 (Mpa) Tensile strength (Mpa)	屈服强度 (Mpa) Yield strength (Mpa)	断后伸长率A% Post fracture elongation A%	HBW
M30	10-29	≥ 690	/	≥ 5	170-260
	29-90	≥ 635	/	≥ 6	170-260

备注:其它规格尺寸及异型材请咨询。
Note: For other specifications, sizes, and profiles, please consult.

铜镍硅系列合金棒线材
Copper nickel silicon series alloy rod and wire

企标	UNS	EN	JIS	GB
JT703	C64700	CW111C/CuNi2Si	/	QSi0.6-2
JT706	C70250	CuNi3SiMg	C7025	/
JT113	C18000	/	/	TNi2.4-0.6-0.5

具体成分/Specific components

牌号Grade	Cu	Ni	Si	Cr	Mg	Zn	Fe	Mn
JT703	余量Rem	1.6-2.5	0.4-0.8	/	/	/	/	/
JT706	余量Rem	2.2-4.2	0.25-1.2	/	0.05-0.3	<1.0	<0.2	<0.1
JT113	余量Rem	1.8-3.0	0.4-0.8	0.1-0.8	/	/	/	/

物理性能/Physical Properties

牌号 Grade	JT703	JT706	JT113
密度 g/cm³ Density g/cm³	8.88	8.8	8.78
熔点 °C Melting point °C	1080	1083	1040
导电率 %IACS Conductivity %IACS	45	45	42
热导率 W/(m·k) Thermal conductivity W/(m·k)	180	190	160
热膨胀系类 10^{-6}/k Coefficient of thermal expansion 10^{-6}/k	17.3	17.6	18.2
弹性模数 GPa Elastic modulus GPa	114	130	114

加工性能/Machinability

牌号 Grade	JT703	JT706	JT113
冷加工 Cold working	好 Good	好 Good	好 Good
切削 Cutting	较差 Poor	较差 Poor	差 Bad
热加工 Hot working	好 Good	好 Good	好 Good
耐磨/减磨性 Wear resistance/Wear reduction	好 Good	好 Good	好 Good
钎焊性 Brazing property	好 Good	一般 Fair	好 Good
耐高温软化性 High temperature softening resistance	优秀 Excellent	好 Good	优秀 Excellent

产品特征/Product Features

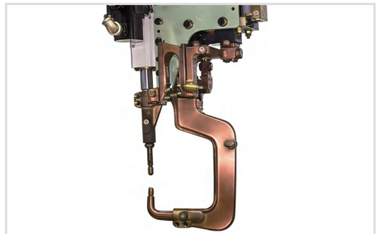
铜-镍-硅系合金，其中镍-硅能够形成强化相(Ni，Si)，通过固溶+时效热处理，合金的硬度、强度、导电性和导热性均显著提高;产品易于焊接，有较好的耐磨性和减磨性，适合热锻加工。

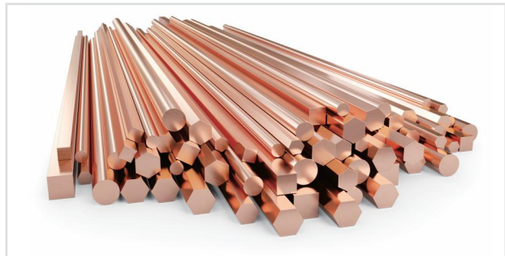
Copper nickel silicon alloys, in which nickel silicon can form strengthening phases (Ni, Si), have significantly improved hardness, strength, conductivity, and thermal conductivity through solid solution and aging heat treatment; The product is easy to weld, has good wear resistance and wear reduction, and is suitable for hot forging processing.

应用领域/Application Fields

1.焊接领域：电阻焊电极焊臂、埋弧焊机导电嘴。
2.其他领域：模具材料、电机整流子等需要高强、中导的零件。

1.Welding field: Resistance welding electrode arms, submerged arc welding machine conductive nozzles.
2.Other fields: Mold materials, motor rectifiers, and other parts that require high strength and intermediate conductivity.





供货规格/Supply specifications

JT703

状态 Status	规格 ϕmm Specification ϕmm	抗拉强度(MPa) Tensile strength (MPa)	屈服强度(MPa) Yield strength (MPa)	延伸率A% Elongation A%	HBW	导电率 %IACS Conductivity %IACS
R550	20-80	550	430	15	/	42
H150	20-80	/	/	/	150 - 190	42
R600	20-50	600	520	10	/	42
H165	20-50	/	/	/	165 - 210	42
R640	3-30	640	590	10	/	42
H180	3-30	/	/	/	180 - 230	42

备注：JT113和JT706为客户协议，其它尺寸规格产品请咨询。
Note: JT113 and JT706 are customer agreements, please consult for other size specifications of products.

硅青铜系列合金棒线材
Silicon bronze series alloy rod and wire

企标	UNS	EN	JIS	GB
JT651	C65100	/	/	/
JT655	C65500	CuSi3Mn1	/	QSi3-1

具体成分/Specific components

牌号Grade	Cu(%)	Fe(%)	Ni(%)	Mn(%)	Zn(%)	Sn(%)	Si(%)	Cu+所有元素 Cu+listed Elements
JT651	余量Rem	≤ 0.8	/	≤ 0.7	≤ 1.5	/	0.8-2.0	/
JT655	余量Rem	≤ 0.3	≤ 0.2	1.0-1.5	≤ 0.5	≤ 0.25	2.7-3.5	98.9

物理性能/Physical Properties

牌号 Grade	JT651	JT655
密度 g/cm³ Density g/cm³	8.75	8.4
熔点 °C Melting point °C	1060	1026
导电率% IACS Conductivity% IACS	17.1	18
热导率 W/(m·k) Thermal conductivity W/(m·k)	57	37.68
热膨胀系类 10^{-6}/k Coefficient of thermal expansion 10^{-6}/k	12	10
弹性模数 GPa Elastic modulus GPa	117	115

加工性能/Machinability

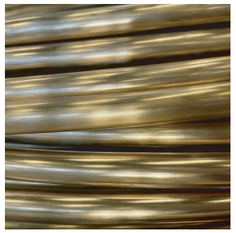
牌号 Grade	JT651	JT655
热加工 Hot working	好 Good	好 Good
机加工性能 C36000 Machining performance C36000	30%	60%
对焊 Butt welding	好 Good	好 Good
钎焊性 Brazing property	好 Good	好 Good
点焊 Spot welding	好 Good	好 Good
冷加工 Cold working	好 Good	较好 Better

产品特征/Product Features

Cu-Si-Mn系列产品，通过添加Si、Mn两种元素提高材料抗拉、耐磨、耐蚀等性能，材料冷、热加工性均极好，冲压，冷镦加工性优良。

The Cu-Si-Mn series products improve the material's tensile, wear,and corrosion resistance properties by adding two elements, Si and Mn. The material has excellent cold and hot workability, as well as excellent stamping and cold heading processability.



应用领域/Application Fields

JT651: 地脚螺栓、螺钉、螺母、舰船构件、架空线附件、U型螺栓等。
JT655: 用于制作在腐蚀介质中工作的各种零件，弹簧和弹簧零件，以及蜗杆、蜗轮齿轮、轴套、制动销和杆类耐磨零件，也可用于制作焊接结构中的零件。

JT651: Anchor bolts, screws, nuts, ship components, overhead line.
JT655: Used for manufacturing various parts working in corrosive media, springs and spring components, as well as worm gears, worm wheels, bushings, brake pins, and wear resistant rod components. It is also suitable for producing parts in welded structures.

供货规格/Supply specifications

牌号 Grade	状态 Status	规格 ϕmm Specification ϕmm	Rm/MPa	Rp0.2/MPa	A%
JT651	O60	3-85	275	85	30
	H02	3-12	380	140	11
		12-50	380	140	12
	H04	≤12	450	240	8
		12-50	450	240	10
	H06	≤12	585	380	6
		12-50	515	310	8
		25-38	515	275	8
JT655	H04	4-12	490	/	13
		12-40	470	/	19

锡磷青铜系列合金棒线材
Tin phosphorus bronze series alloy rod and wire

企标	UNS	EN	JIS	GB
JT521	C52100	CuSn8	C5212	QSn8-0.3
JT519	C51900	CuSn6	C5191	QSn6.5-0.1
JT510	C51000	CuSn5	/	QSn5-0.2
JT544	C54400	CuSn4Zn4Pb4	C5441	QSn4-4-4

具体成分/Specific components

牌号Grade	Cu(%)	Pb(%)	Fe(%)	Al(%)	Sn(%)	P(%)	杂质总和(%) Total impurities (%)	Zn(%)
JT521	余量Rem	0.05	0.10	/	7-9	0.03-0.35	0.85	0.20
JT519	余量Rem	0.02	0.05	0.002	6-7	/	0.4	0.3
JT510	余量Rem	0.05	0.1	/	4.2-5.8	0.03-0.35	/	0.3
JT544	余量Rem	3.0-4.0	0.10	/	3.5-4.5	0.01-0.50	/	1.5-4.5

物理性能/Physical Properties

牌号 Grade	JT521	JT519	JT510	JT544
密度 g/cm³ Density g/cm³	8.8	8.84	8.86	8.89
熔点 °C Melting point °C	1027	1038	1049	999
导电率% IACS Conductivity% IACS	13	14.5	15	19.5
热导率 W/(m·k) Thermal conductivity W/(m·k)	62	66	69.3	86.3
热膨胀系类 10^{-6}/k Coefficient of thermal expansion 10^{-6}/k	17.5	17.2	17.1	16.8
弹性模数 GPa Elastic modulus GPa	110	109	110.3	103

加工性能/Machinability

牌号 Grade	JT512	JT519	JT510	JT544
冷加工 Cold working	好 Good	好 Good	好 Good	好 Good
热加工 Hot working	较差 Poor	较差 Poor	较差 Poor	较差 Poor
钎焊性 Brazing property	优秀 Excellent	好 Good	优秀 Excellent	好 Good
电阻焊 Resistance welding	好 Good	好 Good	好 Good	好 Good
车削性能 %C36000 Turning performance %C36000	20%	20%	20%	80%

产品特征/Product Features

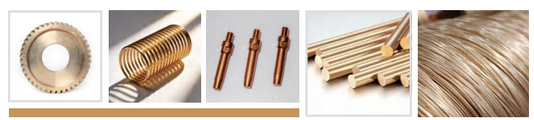
锡青铜系列合金通过添加Sn和P等元素，使材料具有较好的弹性、延展性、抗疲劳性、抗腐蚀等性能。C54400额外添加Pb和Zn元素，材料还具有较好的车削性能。

The tin bronze series alloys, by adding elements such as Sn and P, exhibit superior elasticity, ductility, fatigue resistance, and corrosion resistance. The C54400 alloy further incorporates Pb and Zn, enhancing its machining performance.

应用领域/Application Fields

1.耐磨元件: 齿轮、滑动轴承、连接器等。
2.弹性元件: 弹簧、开关零件。

1.Wear-resistant components: gears, sliding bearings, connectors, etc.
2.Elastic components: springs, switch components.



供货规格/Supply specifications

JT521

状态 Status	规格 ϕmm Specification ϕmm	Rm/MPa	Rp0.2/MPa	A%	HBW
R390	0.5-60	≥ 390	≥ 280	≥ 45	85-125
R450	0.5-50	≥ 450	≥ 280	≥ 26	135-165
R550	0.5-12	≥ 550	≥ 400	≥ 15	160-190

JT519

状态 Status	规格 ϕmm Specification ϕmm	Rm/MPa	Rp0.2/MPa	A%	HBW
R340	0.5-60	340	≤ 270	45	80-110
R420	0.5-40	420	≥ 220	30	120-155
R520	0.5-8	520	≥ 400	/	150-180
R700	0.5-4	700	≥ 600	/	180-215

JT510

状态 Status	规格 ϕmm Specification ϕmm	Rm/MPa	Rp0.2/MPa	A%
060	0.5-10	350 - 420	/	≥ 25
H02	0.5-10	400 - 505	/	≥ 20
H04	0.5-7	525 - 625	/	≥ 12
H06	0.5-6	606 - 710	/	≥ 5
H08	0.5-5	655 - 760	/	≥ 3
H10	0.5-3	690 - 790	/	≥ 2

JT544

状态 Status	规格 ϕmm Specification ϕmm	Rm/MPa	Rp0.2/MPa	A%	HBW
H04	0.5-6	450	/	8	80-110
	6-12	415	/	10	120-155
	12-25	380	/	12	150-180
	> 25	345	/	15	180-215

备注:其它规格尺寸及异型材请咨询。
Note: For other specifications, sizes, and profiles, please consult.

复杂黄铜系列合金棒线材
Complex brass series alloy rod and wire

企标	UNS	EN	GB
JT693	C69300	CW724R/CuZn21Si3P	HSi75-3
JT674	C67400	CW713R/CuZn37Mn3Al2PbSi	HMn57-2-1.7-0.5
JT570	/	/	HMn57-2-2-1

具体成分/Specific components

牌号Grade	Cu	Pb	Fe	Sn	Si	P	Al	Ni	M	Zn	其他总计 Others total
JT693	75-77	≤ 0.1	≤ 0.3	≤ 0.3	2.7-3.5	0.02-0 .1	≤ 0.05	≤ 0.2	≤ 0.05	余量Rem	≤ 0.2
JT674	75-77	0.2-0.8	≤ 1	≤ 0.4	0.3-1.3	/	1.3-2.3	≤ 1	1.5-3	余量Rem	≤ 0.3
JT570	75-77	0.2-0.8	≤ 0.5	≤ 0.25	0.5-1.5	/	≤ 0.5	1.5 - 3.0	1-2.5	余量Rem	≤ 0.3

物理性能/Physical Properties

牌号 Grade	JT693	JT674	JT570
密度 g/cm³ Density g/cm³	8.3	8.1	8.2
线性膨胀系数 10⁻⁶/k Linear expansion coefficient 10⁻⁶/k	18	19.1	19
导热系数 W/(m·k) Thermal conductivity W/(m·k)	35	100	88
导电率 %IACS Conductivity %IACS	7.8	23	17.5
弹性模数 GPa Elastic modulus GPa	100	110	96

加工性能/Machinability

牌号 Grade	JT693	JT674	JT570
热加工 Hot working	好 Good	好 Good	好 Good
机加工性能 Machining performance	较好 Better	好 Good	较好 Better
可锻性能 Malleable performance	较好 Better	好 Good	较好 Better
钎焊性 Brazing property	好 Good	好 Good	好 Good
电阻焊 Resistance welding	好 Good	好 Good	好 Good
冷加工 Cold working	好 Good	差 Bad	差 Bad

产品特征/Product Features

JT693合金通过添加Si和P元素使材料具有较好车削性能，其中Si元素在车削过程中起到断屑的作用，P元素能够细化晶粒，二者还提高材料的强度、耐磨等特性。
JT674合金通过硅和锰的加入提高了合金的强度和耐磨性，铝的加入增加了合金的屈服强度，铅的加入增强了其耐磨性和切削性，产品以β相为基体，Mn-Si化合物为耐磨相的高强耐磨铜合金。
JT570合金通过硅、锰、镍的加入形成了镍硅相和锰硅相，提高了合金的强度和耐磨性，铅的加入增强了其耐磨性和切削性，产品以β相为基体，Mn/Ni-Si化合物为耐磨相的高强耐磨铜合金。

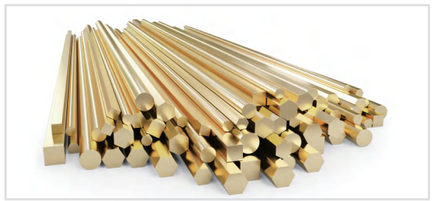
JT693 alloy has good turning performance by adding Si and P elements. Si element plays a role in chip breaking during the turning process, while P element can refine the grain size. Both elements also improve the strength, wear resistance, and other characteristics of the material.
The addition of silicon and manganese improves the strength and wear resistance of JT674 alloy, aluminum increases the yield strength of the alloy, and lead enhances its wear resistance and machinability. The product is a high-strength and wear-resistant copper alloy with β phase as the matrix and Mn Si compound as the wear-resistant phase.
JT570 alloy forms nickel silicon phase and manganese silicon phase through the addition of silicon, manganese, and nickel, which improves the strength and wear resistance of the alloy. The addition of lead enhances its wear resistance and machinability. The product is a high-strength and wear-resistant copper alloy with β phase as the matrix and Mn/Ni Si compound as the wear-resistant phase.

应用领域/Application Fields

1.汽车行业(JT693): 螺杆、螺母等耐磨零件。
2.汽车行业(JT674): 气门导管、浮动轴承、止推轴承、同步器齿环等。
3.液压行业(JT674/570): 滑靴、配油盘、球铰、缸体、衬套等。

1. Automotive industry (JT693): Wear resistant parts such as screws and nuts.
2. Automotive industry (JT674): valve guides, floating bearings, thrust bearings, synchronizer rings, etc.
3. Hydraulic industry (JT674/570): slide shoes, oil distribution plates, ball joints, cylinder bodies, bushings, etc.





供货规格/Supply specifications

牌号 Grade	状态 Status	规格 ϕmm Specification ϕmm	Rm/MPa	Rp0.2/MPa	A%	HBW
JT693	R500	8-90	500	≤ 450	15	130-180
	R600	8-90	600	≥ 300	12	150-220
	R670	8-88	670	≥ 400	10	≥ 170
JT674	R540	8-90	540	280	15	145
	R590	8-90	590	370	10	160
JT570	R450	8-90	450	220	10	≥ 120

易切削合金棒材
Free cutting alloy rod

企标	JIS	UNS	EN	GB
C3601	C3601	C36000	CuZn36Pb3	/
C3602	C3602	/	CuZn38Pb2	/
C3604	C3604	C38500	CuZn39Pb3	HPb58-3
C3771	C3771	C37700	CuZn40Pb2	HPb58-3

具体成分/Specific components

企标	Cu	Pb	Fe	Fe+Sn	As	Ni	Zn
C3601	59-63	1.8-3.7	≤0.3	<0.5	/	/	余量Rem
C3602	59-63	1.8-3.7	≤0.5	<0.8	/	/	余量Rem
C3604	57-61	1.8-3.7	≤0.5	<0.8	/	/	余量Rem
C3771	57-61	1.0-2.5	/	<1	<0.02	<0.02	余量Rem

物理性能/Physical Properties

密度 g/cm³ Density g/cm³	8.3-8.6
线性膨胀系数 10⁻⁶/k Linear expansion coefficient 10⁻⁶/k	17-19
熔点 °C Melting point °C	870-960
导电率 %IACS Conductivity %IACS	10-25
弹性模数 GPa Elastic modulus GPa	90-110

加工性能/Machinability

热加工 Hot working	一般 Fair
机加工性能 Machinability performance	好 Good
热锻性能 Hot forging performance	好 Good
钎焊性 Brazing property	好 Good
电阻焊 Resistance welding	一般 Fair
冷加工 Cold working	一般 Fair

产品特征/Product Features

该系产品是Cu-Zn-Pb三元系(a+β)两项黄铜，元素Pb几乎不固溶于铜，以游离质点存在于晶界上，车削加工时充当断屑点，因此可以极大提高材料的车削性能。此类合金具有较高的强度、耐蚀性以及一定的耐磨性能。

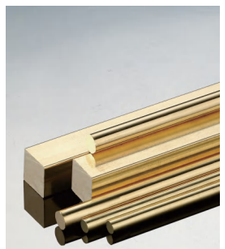
This series of products is a Cu Zn Pb ternary system (α+β) consisting of two brass elements. The element Pb is almost insoluble in copper and exists as free particles at the grain boundaries. It acts as a chip breaking point during turning processing, thus greatly improving the turning performance of the material. This type of alloy has high strength, corrosion resistance, and certain wear resistance.

应用领域/Application Fields

1.制动系统: 刹车泵活塞等，要求良好的密封性和耐磨性。
2.通用部件: 轮胎气门嘴是铅黄铜的经典应用，要求气密性好、易于加工。
3.管件与阀门: 球阀、闸阀、角阀、管接头等。
4.仪表零件: 水表、煤气表中的齿轮、壳体等结构件。
5.接插件: 用于电脑、手机、汽车、工业设备等的接线端子、插孔、插针。

1.Braking system: brake pump piston, etc., requiring good sealing and wear resistance.
2.General components: The tire valve is a classic application of lead brass, requiring good air tightness and easy processing.
3.Pipe fittings and valves: ball valves, gate valves, angle valves, pipe fittings, etc.
4.Instrument parts: structural components such as gears and housings in water andgas meters.
5.Connectors: Wiring terminals, sockets, and pins used for cornputers, mobile phones, automobiles, industrial equipment, etc.




供货规格/Supply specifications

产品种类 Product Category	格中 ϕmm Specification ϕmm	抗拉强度 MPa Tensile strength MPa	A%	HV5
铅黄铜 Leaded brass	2-80	≥295	≥5	≥75

备注:其它规格尺寸及异型材请咨询。
Note: For other specifications, sizes, and profiles, please consult.

无铅易切削合金棒材
Lead free and easy to cut alloy rod

企标	UNS	EN	JS	GB
JT492	C49250	/	C6801	HBI59-1
JT493	/	/	C6802	HBI59-1
JT285	C28500	CuZn42	/	H58

具体成分/Specific components

牌号Grade	Cu	Pb	Fe	Cd/ppm	Sn	Al	Ni	P	Bi	Zn
JT492	57-64	0.1	0.5	75	0.1-2.5	/	/	0.200	0.5 -4	余量Rem
JT493	57-64	0.9	0.7	75	0.1-3	/	/	0.200	0.5-4	余量Rem
JT285	57-59	0.2	0.3	/	/	0.5	0.3	/	/	余量Rem

物理性能/Physical Properties

牌号Grade	JT492	JT493	JT285
密度 g/cm³ Density g/cm³	8.41	8.4	8.5
熔点 °C Melting point °C	896	900	910
导电率 %IACS Conductivity %IACS	24	23	27
热导率 W/(m·k) Thermal conductivity W/(m·k)	96	95	121
热膨胀系数 10^{-6}/k Coefficient of thermal expansion 10^{-6}/k	18.9	19	20.4
弹性模数 GPa Elastic modulus GPa	100	101	121

加工性能/Machinability

牌号Grade	JT492	JT493	JT285
冷加工 Cold working	一般 Fair	一般 Fair	一般 Fair
热加工 Hot working	一般 Fair	一般 Fair	好 Good
钎焊性 Brazing property	好 Good	好 Good	好 Good
电阻焊 Resistance welding	不推荐 Not Recommended	不推荐 Not Recommended	好 Good
车削性能%C36000 Turning performance% C36000	95	97	60
热锻性能 Hot forging performance	好 Good	好 Good	好 Good

产品特征/Product Features

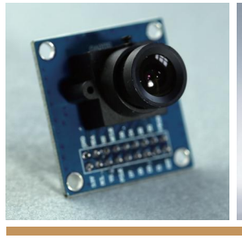
该系产品是Cu-Zn二元系(α+β) 两项黄铜，另外添加Bi元素，Bi几乎不固溶于铜，以游离质点存在于晶界上，车削加工时充当断屑点，因此可以极大提高材料的车削性能。此类合金具有较高的强度、耐蚀性以及一定的耐磨性能。

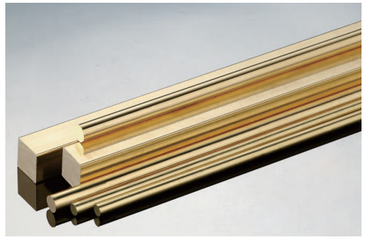
This series of products consists of Cu Zn binary system (α+β) brass, with the addition of Bi element. Bi is almost insoluble in copper and exists as free particles at grain boundaries, serving as a chip breaking point during turning processing,thus greatly improving the turning performance of the material. This type of alloy has high strength, corrosion resistance, and certain wear resistance.

应用领域/Application Fields

1.电子电气与通讯:高精度接插件、接线端子、线圈骨架、电器屏蔽罩。
2.水暖卫浴与管道:水龙头阀芯、管接头、水表齿轮。
3.汽车工业:传感器外壳、线束端子、电气连接器。
4.医疗器械:手术器械、医用导管、人工关节。
5.精密机械与消费品:钟表齿轮、眼镜框铰链、笔芯、手机镜头垫片。

1. Electronics, electrical and communication: high-precision connectors, wiring terminals, coil skeletons, electrical shielding covers.
2. Water heating bathroom and pipelines: faucet valve core, pipe joint, water meter gear.
3. Automotive industry: sensor housings, wire harness terminals, electrical connectors.
4. Medical equipment: surgical instruments, medical catheters, artificial joints.
5. Precision machinery and consumer goods: clock gears, eyeglass frame hinges, pen refills, mobile phone lens pads.



供货规格/Supply specifications

产品种类 Product Category	格中 ϕ mm Specification ϕ mm	抗拉强度 MPa Tensile strength MPa	A%	HV5
无铅易切削黄铜 Free cutting brass	3-80	≥315	≥5	≥75

备注:其它规格尺寸及异型材请咨询。
Note: For other specifications, sizes, and profiles, please consult.

黄铜系列合金棒线材
Brass series alloy rod and wire

企标	国标	日标	美标	欧标
H62	H62	C2745	C27450	CuZn38
H63	H63	C2720	C27200	CuZn37
H65	H65	C2700	C27000	CuZn35
H70	H70	C2600	C26000	CuZn30
H85	H85	C2300	C23000	CuZn15

具体成分/Specific components

企标	Cu%	Zn%	Pb%	Fe%	杂质总和 Total impurities
H62	60.5-63.5	余量Rem	≤0.08	≤0.15	≤0.5
H63	62-65	余量Rem	≤0.08	≤0.15	≤0.5
H65	63-68.5	余量Rem	≤0.09	≤0.07	≤0.45
H70	68.5-71.5	余量Rem	≤0.03	≤0.1	≤0.3
H85	84-86	余量Rem	≤0.05	≤0.05	≤0.2

物理性能/Physical Properties

密度 g/cm³ Density g/cm³	8.4-8.84
线性膨胀系数 10^{-6}/k Linear expansion coefficient 10^{-6}/k	17-20
熔点 ℃ Melting point ℃	900-1030
导电率 %IACS Conductivity %IACS	25-46
弹性模数 GPa Elastic modulus GPa	100-120

加工性能/Machinability

热加工 Hot working	好 Good
机加工性能 Machining performance	20-40%C3600
热锻性能 Hot forging performance	好 Good
钎焊性 Brazing property	好 Good
冷加工 Cold working	好 Good

产品特征/Product Features

黄铜（H62、H63、H65）是Cu-Zn合金，主要由α+β相组成。该产品具备良好的塑性，一定的抗拉强度，主要适用于冷镦加工。
黄铜（H70、H85）是Cu-Zn合金，主要由α相组成。该系列产品塑性、耐蚀、导热以及加工成型性能较好，适合冷镦、热锻等加工方式。

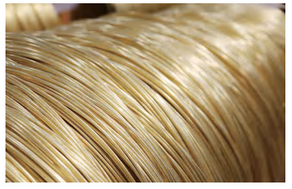
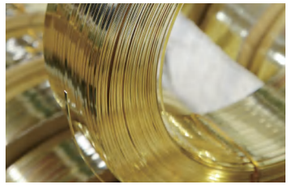
Brass(H62, H63, H65)is a Cu-Zn alloy primarily composed of α+β phases. This product exhibits excellent plasticity and certain tensile strength, making it primarily suitable for cold heading processes.
Bras (H70, H85) is a Cu-Zn alloy primarily composed of the α phase, This series exhibits excellent plasticity, corrosion resistance,thermal conductivity,and formability, making it suitable for processing methods such as cold heading and hot forging.

应用领域/Application Fields

H62：广泛应用于五金、阀体、卫浴等行业，例如螺钉螺母、导管、散热器等零件。
H63：广泛应用于电子电气、五金、机械、建筑装饰等行业，例如散热器、水龙头、阀门、扶手、合页等。
H65：广泛应用于电子电气、五金、机械与汽车等领域，例如接线端子、接插件、水龙头、垫圈、弹簧等。
H70：广泛应用于电子电气、五金、机械制造等领域，例如接插件、散热器外壳、弹壳、热交换器等零件。
H85：广泛应用于机械制造、电子电气、汽车工业、建筑、热交换与冷却、医疗食品等领域，例如垫圈、电气接线端子、制动系统零部件、冷却系统连接件等。

H62: Widely used in industries such as hardware, valve bodies, and sanitary ware, such as screws and nuts, pipes, radiators, and other parts.
H63: Widely used in industries such as electronics and electrical, hardware, machinery, and building decoration, such as radiators, faucets, valves, handrails, hinges, etc.
H65: Widely used in electronic and electrical, hardware, mechanical, and automotive fields, such as terminal blocks, connectors, faucets, washers, springs, etc.
H70: Widely used in electronic and electrical, hardware, mechanical manufacturing and other fields, such as connectors, radiator shells, shell casings, heat exchangers and other parts.
H85: Widely used in mechanical manufacturing, electronics and electrical engineering, automotive industry, construction, heat exchange and coolingmedical food and other fields, such as gaskets, electrical wiring terminals, brake system components, cooling system connectors, etc.



供货规格/Supply specifications

牌号 Grade	扁线(Ymm) Flat wire (Ymm)	圆线(ϕmm) Circle line(ϕmm)	直棒(ϕmm) Straight rod(ϕmm)	抗拉(MPa) Tensile (MPa)	A%	HBW
H62	厚度0.6-2.5, 宽度3-10 Thickness 0.6 - 2.5, width 3 - 10	2 - 18	2 - 65	≥335	≥12	≥30
H63				≥320	≥15	≥30
H65				≥295	≥10	≥28
H70				≥350	≥23	≥40
H85				≥275	≥15	/

备注:其它规格尺寸及异型材请咨询。
Note: For other specifications, sizes, and profiles, please consult.

铝青铜焊丝
Aluminum bronze welding wire

企标	UNS	EN	JIS	GB
JT214	ERCUAL - A1	CuAl8	/	SCu6100A

具体成分/Specific components

企标	Cu	Al	Fe	Mn	Ni+Co	Pb	Si	Sn	Zn	其他
JT214	余量Rem	7.0-9.0	0.5	0.5	0.5	0.02	0.2	0.1	0.2	0.2

物理性能/Physical Properties

密度 g/cm³ Density g/cm³	7.7
线性膨胀系数 10^{-6}/k Linear expansion coefficient 10^{-6}/k	17
熔点 °C Melting point °C	1035
导电率 %IACS Conductivity %IACS	13
热导率 W/(m·k) Thermal conductivity W/(m·k)	65

产品特征/Product Features

JT214是一种无铁的铝青铜焊丝，能抗轻载荷的磨损，耐海水、微咸水以及常用酸类的腐蚀。

JT214 is an iron free aluminum bronze welding wire that can resist wear under light loads, as well as corrosion from seawater, brackish water, and commonly used acids.

应用领域/Application Fields

JT214铝青铜焊丝主要用于船舶制造、机械制造、化工行业等场景，具有抗磨损、抗腐蚀和高强度特性，适用于船用螺旋桨、滑轨的堆焊，由于其及良好的抗磨损、抗冲击性能常用于如轴套、齿轮、球形座、轴承、缸体等的堆焊，以及铝青铜或特殊黄铜管道的氩弧焊。

JT214 aluminum bronze welding wire is mainly used in shipbuilding, machinery manufacturing, chemical industry and other scenarios. It has the characteristics of wear resistance, corrosion resistance and high strength, and is suitable for surfacing of ship propellers and sliding rails. Due to its good wear resistance and impact resistance, it is commonly used for surfacing such as shaft sleeves, gears, spherical seats, bearings, cylinder bodies, as well as argon arc welding of aluminum bronze or special brass pipelines.

供货规格/Supply specifications

状态 Status	规格mm Specification mm	熔覆金属Rnn/MPa Fused metalRm/MPa	A%	HBW	包装形式 Packaging form
H04	0.8 - 1.6	≥ 295	≥ 5	100	桶装(200kg/桶) Bucket packaging (200kg/bucket)
H04	0.8 - 1.6				轴装(8-12.5kg/轴) Shaft installation (8 - 12.5kg/shaft)

备注:其它规格尺寸及异型材请咨询。
Note: For other specifications, sizes, and profiles, please consult.




注意事项/Precautions

1.焊接前对母材表面进行清理，避免油污、氧化物影响焊接质量；
2.氩弧焊时建议用大流量、低流速的气流，以保证焊接熔池得到良好的保护；
3.不推荐此焊丝用于气焊，因为在焊接熔池中会有氧化铝存在，影响焊缝质量；
4.焊丝最佳保存条件:相对湿度在70%以下，温度为室温(5-40°C)；
5.焊丝应存放在干燥通风的储藏室内，不得存放在露天或含有腐蚀介质的环境中。

1. Clean the surface of the base metal before welding to avoid oil stains and oxides affecting the welding quality;
2. It is recommended to use a high flow rate and low flow rate airflow during argon arc welding to ensure good protec tion of the welding pool;
3. This welding wire is not recommended for gas welding because there will be aluminum oxide present in the welding pool, which will affect the quality of the weld seam;
4. Optimal storage conditions for welding wire: relative humidity below 70%, temperature at room temperature(5-40°C)
5. Welding wire should be stored in a dry and ventilated storage room, and should not be stored outdoors or in environments containing corrosive media.

硅青铜焊丝
Silicon bronze welding wire

企标	UNS	EN	JIS	GB
JT211	ERCuSi -A	CuSi3Mn1	/	SCu6560

具体成分/Specific components

牌号Grade	Cu	Al	Fe	Mn	Pb	Si	Sn	Zn	其他Other
JT211	余量Rem	0.01	0.5	0.5-1.5	0.02	2.8-4.0	1.0	1.0	0.5

物理性能/Physical Properties

密度 g/cm³ Density g/cm³	8.5
线性膨胀系数 10^{-6}/k Linear expansion coefficient 10^{-6}/k	18.1
熔点 °C Melting point °C	965
导电率 %IACS Conductivity %IACS	6.5
热导率 W/(m·k) Thermal conductivity W/(m·k)	35

产品特征/Product Features

JT211是一种含有少量锰的硅青铜焊丝，焊后具有良好的耐蚀性、耐磨性及机械性能，焊接工艺性能好。

JT211 is a silicon bronze welding wire containing a small amount of manganese, which has good corrosion resistance, wear resistance, and mechanical properties afte welding, and good welding process performance.

应用领域/Application Fields

JT211硅青铜焊丝，用于硅青铜、紫铜、黄铜以及铜于钢的氩弧焊，也可用于钢和铸铁的堆焊，如重型机械及机车车辆部件摩擦面。更常用于氩弧焊、激光焊镀锌钢板，在汽车门框、车顶、油管、摩托车零部件上广泛应用。

JT211 silicon bronze welding wire is used for argon arc welding of silicon bronze, purple copper, brass, and copper to steel. It can also be used for welding of steel and cast iron, such as friction surfaces of heavy machinery and locomotive components. More commonly used for argon arc welding and laser welding of galvanized steel plates, it is widely used in automotive door frames, roofs, oil pipes, and motorcycle parts.

供货规格/Supply specifications

状态 Status	规格mm Specification mm	熔覆金属Rnn/MPa Fused metalRm/MPa	A%	HBW	包装形式 Packaging form
H04	0.8 - 1.6	≥ 295	≥ 5	100	桶装(200kg/桶) Bucket packaging (200kg/bucket)
H04	0.8 - 1.6				轴装(8-12.5kg/轴) Shaft installation (8 - 12.5kg/shaft)




注意事项/Precautions

1. 焊接前对母材表面进行清理，避免油污、氧化物影响焊接质量；
2. 对于熔化极氩弧焊，推荐采用小熔池的施焊方法，层间温度低于65°C，以减少热裂纹；
3. 焊丝最佳保存条件:相对湿度在70%以下，温度为室温(5-40°C)；
4. 焊丝应存放在干燥通风的储藏室内，不得存放在露天或含有腐蚀介质的环境中。

1. Clean the surface of the base metal before welding to avoid oil stains and oxides affecting the welding quality;
2. For melting electrode argon arc welding, it is recommended to use a small pool welding method with an interlayer temperature below 65 °C to reduce hot cracks;
3. Optimal storage conditions for welding wire: relative hurnidity below 70%, temperature at room temperature (5-40°C);
4. Welding wire should be stored in a dry and ventilated storage room, and should not be stored outdoors or in environments containing corrosive media.

黄铜焊丝
Brass welding wire

企标	UNS	EN	JIS	GB
JT221	/	/	/	BCu60ZnSnSi

具体成分/Specific components

牌号Grade	Cu	Zn	Sn	Si	其他Other
JT221	59 - 61	余量Rem	0.8 - 1.4	0.15 - 0.35	0.2

物理性能/Physical Properties

密度 g/cm³ Density g/cm³	8.4
线性膨胀系数 10^{-6}/k Linear expansion coefficient 10^{-6}/k	/
熔点 °C Melting point °C	900
导电率 %IACS Conductivity %IACS	24
热导率 W/(m·k) Thermal conductivity W/(m·k)	120

产品特征/Product Features

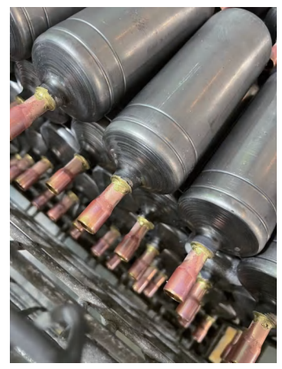
JT221是含少量锡和硅的特殊黄铜焊丝，锡能提高焊丝的流动性，BCu60ZnSn-R相对于其他黄铜焊丝锡含量更高，锡含量的提高能有效增强钎焊时的焊接流动性、润湿性，而硅可有效的控制锌的蒸发，消除气孔，从而得到良好的焊缝。

JT221 is a special brass welding wire containng a small amount of tin and silicon. Tin can improve the fluidity of the welding wire, while BCu60ZnSn-R has a higher tin content compared to other brass welding wires. The increase in tin content can effectively enhance the welding fuidity and wettability during brazing, while silicon can effectively control the evaporation of zinc, eliminate pores, and thus obtain good welds.

应用领域/Application Fields

适用于黄铜、紫铜气焊时作为填充材料，主要用来钎焊紫铜与碳钢装配间隙小的工件，广泛应用于制冷行业中的储液罐、分离器钎焊，还可用作低压阀门密封面、轻负荷耐磨表面的堆焊材料。

Suitable as a filling material for brass and copper gas welding, it is mainly used for brazing workpieces with small assembly gaps between copper and carbon steel. It is widely used for brazing storage tanks and separators in the refrigeration industry, and can also be used as a welding material for low-pressure valve sealing surfaces and light load wear-resistant surfaces.



供货规格/Supply specifications

状态 Status	熔覆金属 Rnn/MPa Fused metal Rm/MPa	A%	HBW	规格 mm Specification mm	包装形式 Packaging form
H04	400	25	100	1.6 - 6.0	直条(20kg/盒) Straight strips (20kg/box)
H04				0.8 - 1.6	轴装(8-12.5kg/轴) Shaft installation (8 - 12.5kg/shaft)

注意事项/Precautions

1. 焊前一般需预热到温度400-500°C后施焊。焊时可配合铜气焊溶剂或气体溶剂使用；
2. 焊接前对母材表面进行清理，避免油污、氧化物影响焊接质量；
3. 焊丝最佳保存条件:相对湿度在70%以下，温度为室温(5-40°C)；
4. 焊丝应存放在干燥通风的储藏室内，不得存放在露天或含有腐蚀介质的环境中。

1. Generally, preheating to a temperature of 400-500 °C isrequired before welding. Can be used in conjunction with copper gas welding solvents or gas solvents during welding;
2. Clean the surface of the base metal before welding to avoid oil stains and oxides affecting the welding quality;
3. Optimal storage conditions for welding wire: relative humidity below 70%, temperature at room temperature(5-40°C);
4. Welding wire should be stored in a dry and ventilated storage room, and should not be stored outdoors or in environments containing corrosive media.

铅白铜合金棒线材
Lead white copper alloy rod and wire

企标	UNS	EN	JIS	GB
JT798	C79860	CuNi12Zn38Mn5Pb2	/	BZn12-37-1.5

具体成分/Specific components

牌号Grade	Cu	Ni + Co	Pb	Mn	Zn
JT798	42.3 - 43.7	11.8-12.7	1.3-1.8	5.0	余量Rem

物理性能/Physical Properties

密度 g/cm³ Density g/cm³	8.35
线性膨胀系数 10⁻⁶/k Linear expansion coefficient 10⁻⁶/k	18.3
熔点 ℃ Melting point ℃	880
导电率 %IACS Conductivity %IACS	4.8
热导率 W/(m·k) Thermal conductivity W/(m·k)	30
弹性模数 GPa Elastic modulus GPa	115

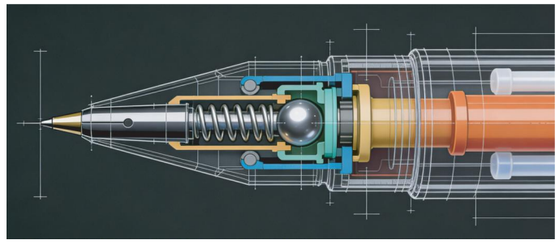
加工性能/Machinability

冷加工 Cold working	不推荐 Not Recommended
热加工 Hot working	好 Good
钎焊性 Brazing property	差 Bad
对焊 Butt welding	差 Bad
机加工性能%C36000 Machining performance%C36000	90

产品特征/Product Features

优秀的易切削加工性能，较好的热加工性能，高强高弹和较好的耐腐蚀性能。

Excellent machinability, good thermal processing performance,high strength and elasticity, and good corrosion resistance.



应用领域/Application Fields

主要应用于制笔行业，如笔头当中的球座体。电子电器行业主要应用于接线端子、插头等。

Mainly used in the pen making industry, such as the ball seat body in the pen tip. The electronic and electrical industry is mainly used in terminal blocks, plugs, etc.

供货规格/Supply specifications

状态 Status	规格mm Specification mm	熔覆金属 Rnn/MPa Fused metal Rm/MPa	Rp0.2	A%	HBW
R600	1 - 6	600	400	8	150
R650	6 - 60	650	450	5	170

铅锡青铜棒线材
Lead tin bronze rod and wire

企标	UNS	EN	JIS	GB
JT932	C93200	CuSn7Zn4Pb7	/	ZQSn7-7-3
JT937	C93700	CuSn10Pb10	/	ZCuPb10Sn10

具体成分/Specific components

牌号Grade	Cu	Pb	Sn	Zn	P	Ni	Fe
JT932	81-85	6-8	6.3-7.5	1-4	≤ 0.15	≤ 1	≤ 0.2
JT937	78-82	8-10	9-11	≤ 0.8	≤ 0.1	≤ 0.5	≤ 0.7

物理性能/Physical Properties

牌号Grade	JT932	JT937
密度 g/cm³ Density g/cm³	8.9	8.85
线性膨胀系数 10^{-6}/k Linear expansion coefficient 10^{-6}/k	17.4	17.8
熔点 ℃ Melting point ℃	980	930
导电率 %IACS Conductivity %IACS	12	10
热导率 W/(m·k) Thermal conductivity W/(m·k)	58	47
弹性模数 GPa Elastic modulus GPa	100	75.8

加工性能/Machinability

牌号Grade	JT932	JT937
冷加工 Cold working	好 Good	好 Good
热加工 Hot working	差 Bad	差 Bad
钎焊性 Brazing property	好 Good	好 Good
电阻焊 Resistance welding	不推荐 Not Recommended	不推荐 Not Recommended
机加工性能%C36000 Machining performance%C36000	70	80

产品特征/Product Features

JT932为Cu-Sn-Zn-Pb为主的四元合金，Zn可以改善合金的流动性，铅可以改善合金的耐磨和切削加工性能。

JT937为Cu-Sn-Pb为主的三元合金，铅可以改善合金的耐磨和切削加工性能。

JT932 is a quaternary alloy mainly composed of Cu Sn Zn Pb. Zn can improve the fluidity of the alloy, while lead can improve the wear resistance and cutting performance of the alloy.

JT937 is a ternary alloy mainly composed of Cu Sn Pb, and lead can improve the wear resistance and cutting performance of the alloy.

应用领域/Application Fields

JT932主要应用于轴承、衬套、垫圈等零件。
JT937主要应用于发动机中的轴瓦和摩擦片，以及滑动轴承等。

JT932 is mainly used for components such as bearings, bushings, washers, etc.
JT937 is mainly used in engine bearings, friction plates, and sliding bearings.

供货规格/Supply specifications

牌号 Grade	规格mm Specification mm	熔覆金属 Rnn/MPa Fused metal Rm/MPa	Rp0.2	A%
JT932	12-60	241	138	10
JT937	12-60	241	138	6

铁青铜线材
Lron bronze wire

企标	UNS	EN	JIS	GB
JT194	C19400	CuFe2P	C1940	TFe2.5
JT192	C19210	CuFe0.1P	C1921	TFe0.1

具体成分/Specific components

牌号Grade	Cu	Pb	Zn	P	Fe
JT194	97	0.03	0.05-0.02	0.015-0.15	2.1-2.6
JT192	余量Rem	/	/	0.025-0.04	0.05-0.15

物理性能/Physical Properties

牌号 Grade	JT194	JT192
密度 g/cm³ Density g/cm³	8.8	8.9
线性膨胀系数 10^{-6}/k Linear expansion coefficient 10^{-6}/k	17.6	17
导电率% IACS Conductivity% IACS	70	86
热导率 W/(m·k) Thermal conductivity W/(m·k)	280	350
弹性模数 GPa Elastic modulus GPa	121	125

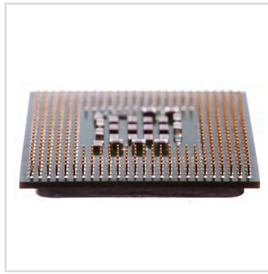
加工性能/Machinability

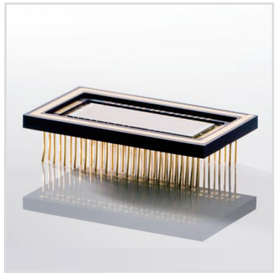
牌号Grade	JT932	JT937
冷加工 Cold working	好 Good	好 Good
电镀 Electroplating	好 Good	好 Good
电阻焊 Resistance welding	好 Good	好 Good
机加工性能 Machining performance	不推荐 Not Recommended	一般 Fair

产品特征/Product Features

该系列合金属于CuFeP系，通过冷加工+固溶时效强化获得较强化获得好的综合性能，导电和导热性能较好，适合冷镦加工。

This series of alloys belongs to the CuFeP system and has achieved good comprehensive properties through cold processing and solid solution aging strengthening. It has good electrical and thermal conductivity and is suitable for cold heading processing.





应用领域/Application Fields

该系列产品主要应用于插针引脚、屏蔽线、连接器和弹簧等。

This series of products is mainly used for pins, shielded wires, connectors, and springs.

供货规格/Supply specifications

牌号 Grade	状态 Status	规格 ϕmm Specification ϕmm	抗拉强度 MPa Tensile strength MPa	硬度 HV Hardness HV	延伸率 % Elongation %
JT194	O60	1.0-4	≤ 360	≤ 100	≥ 15
	H02	1.0-4	> 400	≥ 110	≥ 5
	H04	0.4-2	≥ 460	≥ 120	≥ 3
	H06	0.4-2	≥ 500	≥ 130	≥ 2
	H08	0.4-1	≥ 560	≥ 140	≥ 1
JT192	O60	0.1-4	220 - 300	≥ 50	≥ 30
	H02	0.1-4	280 - 350	≥ 70	≥ 10
	H04	0.1-4	≥ 350	≥ 100	≥ 2
	H08	0.1-4	≥ 440	≥ 120	≥ 1

OTHER EQUIPMENT

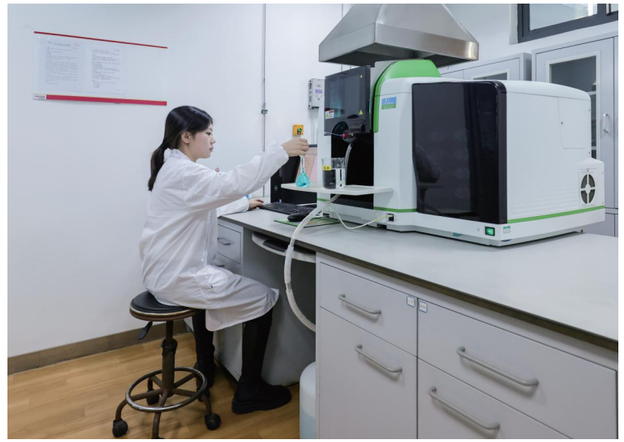
其余设备

铜及铜合金8吨EJP联合拉拔机

8t EJP Drawing Machine Line for Copper and Copper Alloys

劳同美德上引连续铸造机　Rautomead Upwards Vertical Continuous Casting Macheine

铜及铜合金2.5吨EJP联合拉拔机生产线　2.5T EJP Drawing Machine Line for Copper and Copper Alloys



技术研发 TECHNOLOGY RESEARCHAND DEVELOPMENT

- 公司拥有国家认定企业技术中心、国家级博士后科研工作站、国家认可实验室。
- 现有研发技术人员近800人,其中博士、硕士及高级工程师40余名。
- 国家发明专利167项、承担国家科技支撑和火炬计划项目15项。
- 主持(参与)国家/行业标准制定39项、获得省级以上科技进步奖12项。

- The company has a nationally recognized enterprise technology center, a national postdoctoral research workstation, and a nationally recognized laboratory.
- There are nearly 800 R&D technicians, including more than 40 doctors, masters and senior engineers.
- There are 167 national invention patents, and 15 national-science and technology support and torch plan projects.
- Presided over (participated) in the formulation of 39nation.ai/industry standards and won 12 scientific and technological progress awards at or above the provincial level.

RELATED CERTIFICATIONS 相关认证

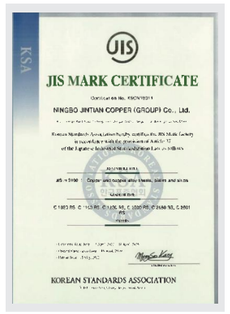
ISO 9001

ISO 14001

ISO 45001

IATF 16949

UL



JIS

EN

CNAS

CMS

GRS

SCS

GREEN JINTIAN 绿色金田

一站式全闭环低碳再生铜材料供应商

One-stop & Closed Loop Low-carbon Recycled Copper Supplier

1 再生原料保障
Recycled Raw Material Guarantee

- 4大海外直采基地
  4 overseas sourcing bases
- 30*余年国际采购经验
  30* years of international sourcing
- 40余万吨再生铜年采购量
  400,000 tons of procurement volume
- 100余家全球战略合作伙伴
  More than 100 long-term suppliers

2 再生原料提纯
Refinement of Recycled Raw Material

- 30余年再生铜提纯经验
  over 30 years of experince in purifying recycled copper
- 10万余吨高纯再生铜年产量
  100,000 tons of recycled copper production
- 99.99%以上铜纯度
  99.99% above copper purity
- SCS100%再生认证
  SCS 100% recycled certification

3 再生认证体系
Recycled Certification System

Global Recycled Standard

4 绿色能源比例
Proportion of Green Energy

- 光伏总面积超50万m²
  The total photovoltaic area exceeds 500,000 square meters.
- 光伏电站装机容量约50MW
  The installed capacity of the photovoltaic power is approximately 50 MW.
- 年光伏发电量超过5000万kWh
  The annual photovoltaic power generation exceeds 50 million kWh

部分战略合作伙伴　HONOR PARTNER

比亚迪汽车　MITSUBISHI ELECTRIC　CATL 宁德时代

HUAWEI　SAMSUNG　LG Life's Good　Panasonic 松下电器

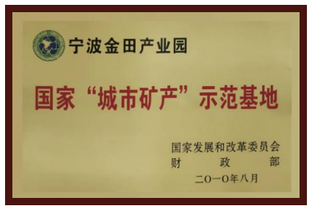
ABB　Schneider Electric　EATON　中国铁建

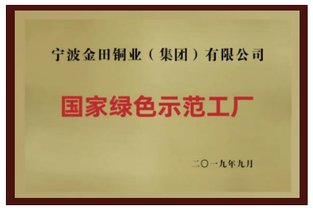
TE connectivity　PHOENIX CONTACT 菲尼克斯电气　GEM TERMINALS　VOSS 福士汽车零部件（济南）有限公司

DAIKIN　A.O.SMITH 史密斯　Rinnai 林内　TOTO

BOLLHOFF　KDL科达利　舜宇集团 SUNNY GROUP　BULL公牛

ENTERPRISE'S HONOR　荣誉证书





营造国际品牌　构筑百年企业

Create an international brand
Construct a centenary enterprise