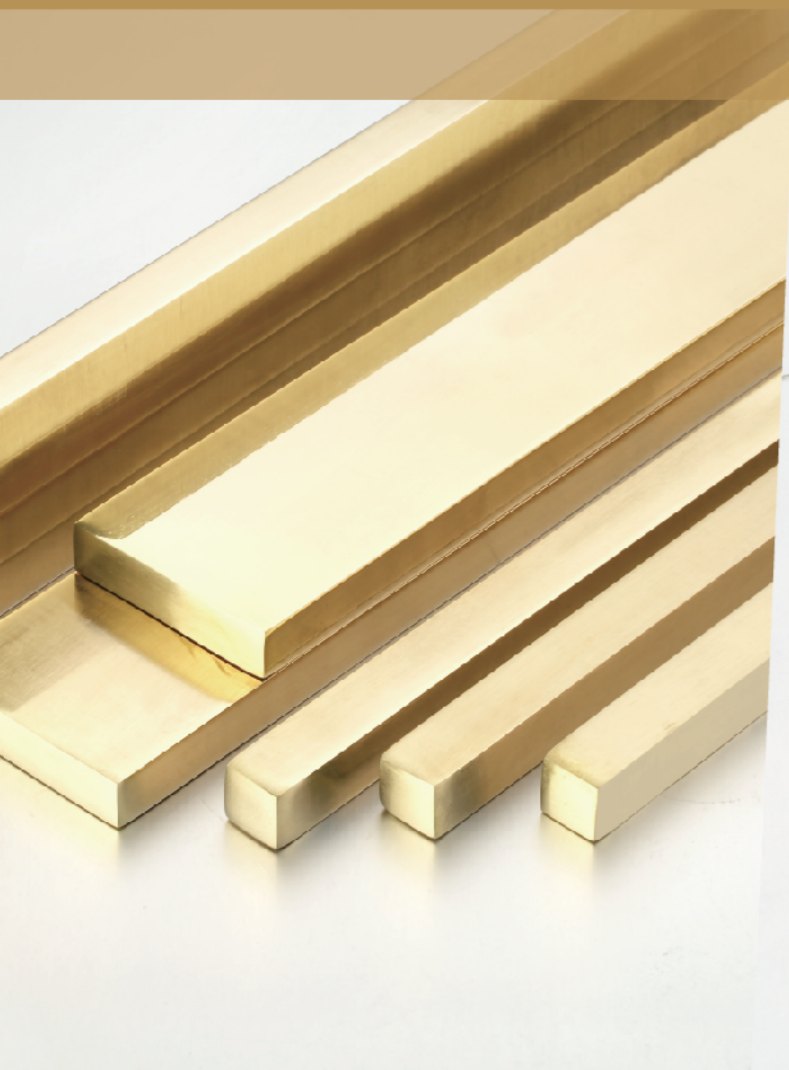




STOCK CODE
股票代码
601609

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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www.jtcopper.com



金田铜业官网

高品质优质铜棒、锭制造商
为卫浴锁体打造强劲铜芯

金田铜棒事业部
JINTIAN COPPER STRIP DIVISION

COMPANY PROFILE

公司简介 | 证券代码 601609

宁波金田铜业（集团）股份有限公司

（证券简称：金田铜业，证券代码：601609）始建于1986年，专注铜加工三十余年，是全球领先的铜及铜合金材料供应商，致力于为5G通讯、新能源汽车、轨道交通、电力物联网、智慧城市等战略性新兴产业发展提供铜材综合解决方案。

公司立足宁波，放眼世界，持续推进全球化布局，在宁波、江苏、广东、重庆、越南等建设六大生产基地，形成了产业链完整、规模优势显著、产品种类齐全的竞争优势；并在香港、美国、德国、日本等地设立子公司，建立全球供应链体系和销售网络，为国内外客户提供铜产品一站式的采购服务。

公司建立国家级企业技术中心、国家级博士后科

研工作站、院士工作站，与乌克兰国家科学院合作，聚焦重点应用领域关键材料与技术，研发高强、高导、高精度的新型高端铜合金新材料，目前已拥有授权发明专利100多项，主持、参与国家/行业标准制订近30项，获得国家级、省部级科技进步奖10余项。

公司坚持转型升级，不断推进数字化建设。引进ERP、CRM、SRM等管理系统，建立覆盖全业务领域的信息化管理平台；通过自动化升级和SCADA、MES、RFID、WMS等多系统融合应用，建设数字化工厂，推进智能制造。

Ningbo Jintian Copper (Group) Co., Ltd. (stock abbreviation: Jintian Copper, stock code: 601609) was founded in 1986 and has focused on copper processing for more than 30 years. It is the world's leading supplier of copper and copper alloy materials and is committed to providing comprehensive services for the development of strategic emerging industries such as 5G communications, new energy vehicles, rail transit, power Internet of Things, and smart cities.

The company is based in Ningbo, looks at the whole world, and continues to promote globalization. It has built six production bases in Ningbo, Jiangsu, Guangdong, Chongqing, Vietnam, etc., forming a competitive advantage with a complete industrial chain, significant scale advantages, and complete product categories; and in Hong Kong, The United States, Germany, Japan and other places, Jintian has set up subsidiaries to establish a global supply chain system and sales network to provide domestic and foreign customers with one-stop procurement services for copper products.

The company has established a national enterprise technology center, a national post-doctoral research workstation, and an

academic workstation. In cooperation with the National Academy of Sciences of Ukraine, it focuses on key materials and technologies in key application areas, develops new high-end copper alloy materials with high strength, high conductivity, and high precision. Jintian currently has more than 100 authorized invention patents, presided over and participated in the formulation of nearly 30 national / industry standards, and won more than 10 national, provincial and ministerial scientific and technological progress awards.

The company insists on transformation and upgrading, and continuously promotes digital construction. Bring in ERP, CRM, SRM and other management systems that are established to cover all business areas information management platform; through automated upgrades and multi-system integration applications such as SCADA, MES, RFID and WMS. Jintian has built a digital factory, and promoted intelligent manufacturing.





金田铜棒事业部成立于1986年

系宁波金田铜业（集团）股份有限公司铜棒材生产、经营主体

拥有生产车间约5万平方米，固定资产超过6000万元

经过30多年的发展与沉淀，公司已成为全球领先的铜加工制造基地，是国内最大的铜棒生产企业，拥有连铸、挤压、浇铸三大工艺技术，主要生产易切削铅黄铜、无铅环保铜、DZR耐脱锌黄铜、锡青铜和抛光铜锭等系列产品，涵盖国标、欧标、美标、日标、英标等40余种铜合金牌号。公司荣获了“浙江省名牌产品”等荣誉称号。公司产品符合德国PED产品认证标准，广泛应用于阀门锁具、空调部件机械五金和建筑水暖等行业，已与中国联塑集团、九牧厨卫、日丰企业集团等多家知名企业建立了良好的合作关系。

在“创造客户价值，打造百年公司，成为行业标杆，为中国工业强国做贡献”的使命愿景牵引下，公司秉承“天天求变、永不自满、勇于竞争、追求卓越”的企业精神，坚持走循环经济和新型工业化和谐发展道路，专注于铜加工先进技术的研究，自主开发的

“大吨位电炉熔炼—潜液转流—多流多头水平连铸技术和设备”，荣获“国家科技进步一等奖”。公司拥有一流的管理水平和人才队伍，全面通过了ISO9001:2015质量管理体系、ISO14001:2015环境体系及ISO 45001:2018职业健康安全管理体系认证，引进了日本、台湾、瑞士等国家先进的制造设备和检测仪器，建成多条现代化的水平连铸和挤压生产线，2019年公司铜棒线材产能总计20万吨。

面向未来，公司将坚持“依法经营、诚信经营、自主创新、科学发展”的经营理念，讲质量、守诚信、铸品牌，以市场为导向，以客户为中心，坚持科技兴企，加快转型升级，优化产品结构，提升产品品质，致力成为全球最大的铜棒供应商，为实现“世界500强”的金田梦而不懈奋斗！

After more than 30 years of development, the company has become the world's leading copper processing and manufacturing base. Jintian Copper Rod Company is the largest copper rod manufacturer in China. The three major processing technologies applied in the production are continuous casting, extrusion and casting. The company's main products include Free-cutting lead brass, lead-free environmental protection copper, DZR dezincification resistant brass, tin bronze and polished copper ingots, covering more than 40 types of copper alloy grades such as national standard, European standard, American standard, Japanese standard, British standard, etc. The products have received the honorary title of "Famous Brand Products of Zhejiang Province". The company's products meet the German PED product

certification standards, and are widely used in valve locks, air-conditioning components, mechanical hardware and plumbing. Jintian Copper Rod Company has established good cooperation with many famous enterprises such as Lesso Group, Jomoo and Rifeng Group.

Through the Jintian Group's mission of "Create customer value, Build a century-old company, Become a benchmark in the industry, and Contribute to China's industrial growth" and the enterprise spirit of "Seek change everyday, Never be self-satisfied, Dare to innovate, Pursue excellence", the company adheres to further develop circular economy and new industrialization. The company emphasizes the importance of research on advanced copper processing technology,

JINTIAN COPPER ROD DIVISION WAS ESTABLISHED IN 1986.

JINTIAN COPPER ROD IS THE BUSINESS ENTITY OF NINGBO JINTIAN COPPER (GROUP) CO., LTD FOR THE PRODUCTION OF COPPER ROD.

HAS A PRODUCTION WORKSHOP OF 50,000 SQUARE METERS AND FIXED ASSETS WORTH 60 MILLION CNY.

and the company's self-developed "large-tonnage electric smelting furnace - submersible- & multi-flow, multi-head horizontal continuous casting technology and equipment" won the "National Scientific and Technological Progress First Prize". The company has a first-class management team and talented personnel. The company has passed ISO9001:2015 Quality management system, ISO14001:2015 Environmental management system and OHSAS18001:2007 Occupational health and safety management system certifications. The company has imported advanced manufacturing equipment and testing instruments from Japan, Taiwan, Switzerland and other countries to build several modern horizontal continuous casting and extrusion lines. In 2018, the company's copper rod and wire production capacity totaled 200,000 tons.

In the future, the company continues to follow its business philosophy of "Operate according to law, Do business with integrity, Innovate independently, Contribute to scientific development". In addition, the company is committed to becoming the world's largest supplier of copper rods and work towards Jintian Group's dream of becoming one of Global 500 companies through quality, integrity, brand building, market-oriented & customer-centric attitude, relying on science and technology, accelerating transformation & upgrading, optimizing product structure and improving product quality.

ENTERPRISE'S HONOR

荣誉证书



营造国际品牌 构筑百年企业

Elevate an international brandname
Construct a centenary enterprise



PRODUCTION STRENGTH

生产实力



挤压机专用熔铸炉 EXTRUDER DEDICATED MELTING FURNACE

走精益生产之路 尽全力消除浪费
Process efficiently and precisely to eliminate waste



熔炼车间 MELTING WORKSHOP



联合拉拔机 JOINT PULLER

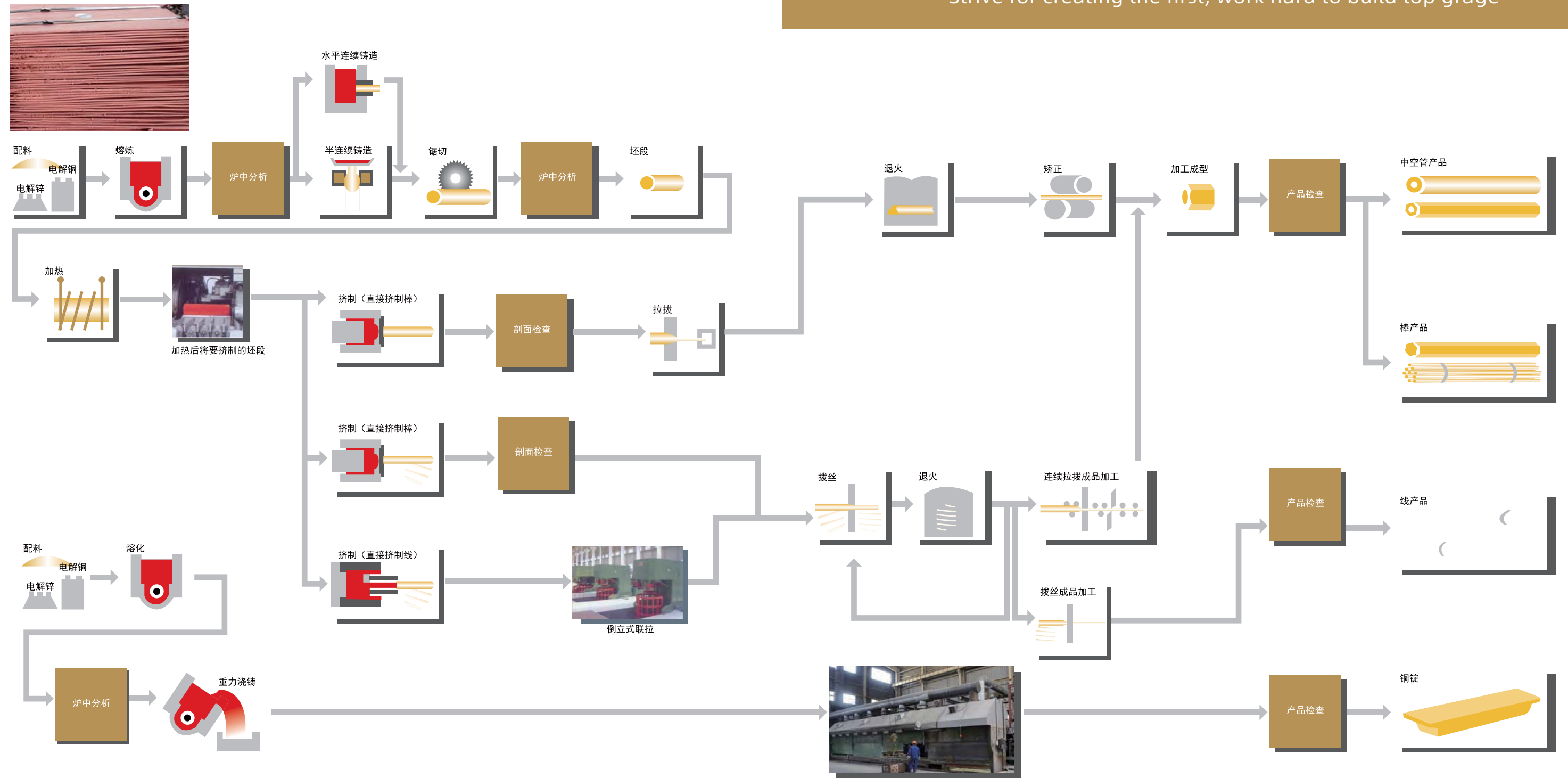


大吨位反向挤压机 LARGE TONNAGE REVERSE EXTRUDER

TECHNOLOGICAL PROCESS

工艺流程

努力创造第一 全新打造一流
Strive for creating the first, work hard to build top grade



QUALITY CONTROL & ASSURANCE

质量管理 & 品质保证

精益生产，品质为先。专门的质检机构，专业的检测中心，先进的测试设备，为金田铜业构建起了科学完善的质量控制体系。

金田铜业已通过ISO9001:2015质量认证和ISO14001:2015环境认证，并获得了UL、ASTM、EN、TUV等国际认证。

Keep meliorating in the production. Quality is above all. The specialized QC department, the professional test center, the advanced test equipment, etc. Have provided Jintian Copper with a scientific & perfect QC system.

Jintian Copper has been ISO9001:2015 certified for quality and ISO14001:2015 certified for environment protection, furthermore, has attained international approvals including UL, ASTM, EN, TUV certifications.



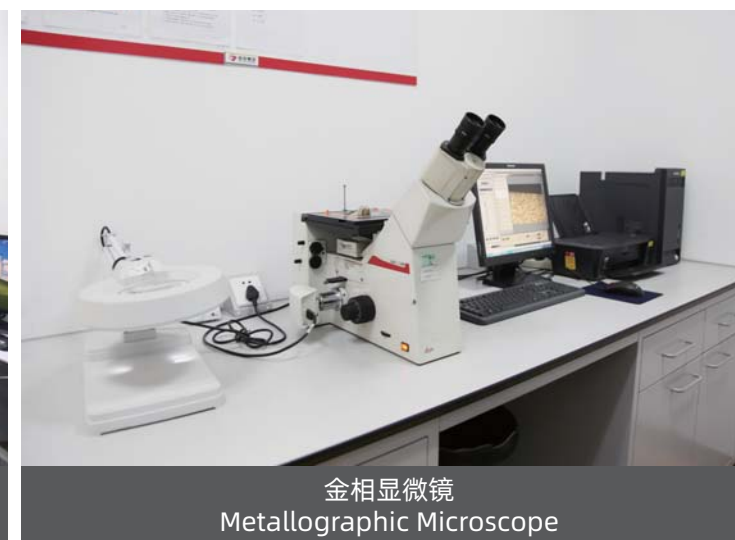
ARL3460直读光谱仪
ARL3460 Optical Emission Spectrometer



布、洛、维氏硬度计
Brinell-Rockwell-Vickers Sclerometer



电子万能试验机
Electronic universal testing machine



金相显微镜
Metallographic Microscope

ORDINARY BRASS ROD

普黄铜棒



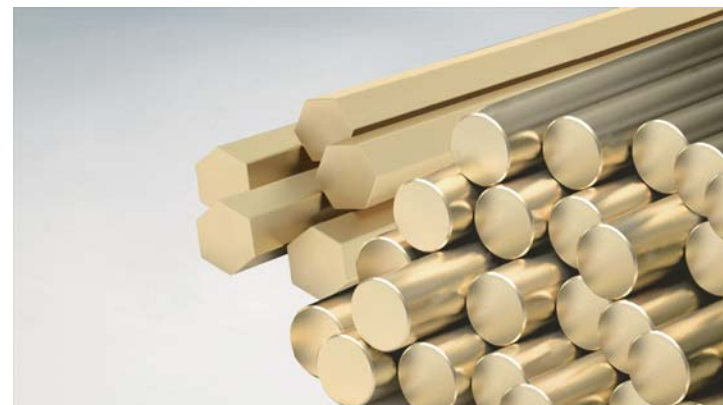
有良好的机械性能，热态下塑性好，冷态下塑性也可以，切削性好，易钎接和焊接，耐蚀，但易产生腐蚀破裂。

With excellent machinability, cold plasticity, hot plasticity, free cutting and resistance to corrosion, it is easy to joint and braze.

牌号 Grade	化学成份 % (单值为不大于) Chemistry componet % (No more than)									
	Cu	Pb	Fe	Ni	Sn	Al	Zn	Mn	其他杂质和	杂质总和
H59	57.0 ~ 60.0	0.5	0.3							1.0
H62	60.5 ~ 63.5	0.08	0.15							0.5
H63	62.0 ~ 65.0	0.08	0.15							0.5
H65	63.0 ~ 68.5	0.09	0.07							0.45
H68	67.0 ~ 70.0	0.03	0.1							0.3
典型应用 Mechanical properties	适用各种深引伸和弯折制造的受力零件，如销钉、铆钉、垫圈、螺帽、导管、散热器零件等。 Used in a lot of deep-drawability parts, such as hardware, radiator parts, springs, bolts, rivets and machine parts.									

我司生产圆形、方形、六角、异形普黄铜棒材、线材，规格范围Φ2mm-95mm，可根据客户要求定制不同力学性能产品。

Our company produces round, square, hexagonal and special-shaped brass rods and wires with specifications ranging from Φ2mm to 95mm, and products with different mechanical properties can be customized according to customer requirements.



FREE CUTTING BRASS ROD

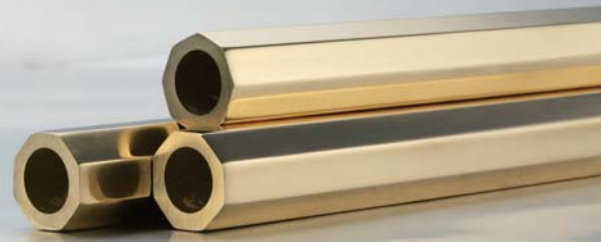
易切削黄铜棒



- 良好的切削性能和机械性能
- 能承受冷热压力加工
- 良好的可焊性
- 对一般腐蚀具有良好的稳定性
- Good cutting performance and mechanical properties
- Can withstand hot and cold pressure processing
- Good solderability
- Good stability to general corrosion

牌号 Grade	化学成份 %，不大于 (注明余量和范围值除外) Chemical composition %, not greater than (except for the remaining amount and range value)										
	Cu	Pb	Fe	Ni	Sn	Mn	P	Si	Zn	其他	杂质总和
HPb57-4	56.0 ~ 58.0	3.5 ~ 4.5	0.5		0.5				余量		1.2
HPb58-3	57.0 ~ 60.0	2.0 ~ 3.5	0.5						余量		1.0
HPb59-1	57.0 ~ 60.0	0.8 ~ 1.9	0.5						余量		1.0
HPb59-2	57.0 ~ 60.0	1.5 ~ 2.5	0.5		0.5				余量		1.0
HPb60-2	58.0 ~ 61.0	1.5 ~ 2.5							余量		0.65
HPb60-3	58.0 ~ 61.0	2.5 ~ 2.5							余量		0.85
HPb61-1	58.0 ~ 62.0	0.6 ~ 1.2							余量		0.55
HPb58-2A	56.0 ~ 60.0	2.0 ~ 3.2							余量		
HPb59-1B	57.0 ~ 60.0	1.0 ~ 2.2	0.6						余量		
HPb58-2C	54.0 ~ 58.0	2.0 ~ 5.0									
C3771	57.0 ~ 61.0	1.0 ~ 2.5							余量	Fe+Sn1.0	
C3601	59.0 ~ 63.0	1.8 ~ 3.7	0.3						余量	Fe+Sn0.5	
C3602	59.0 ~ 63.0	1.8 ~ 3.7	0.5						余量	Fe+Sn1.0	
C3603	57.0 ~ 61.0	1.8 ~ 3.7	0.35						余量	Fe+Sn0.6	
C3604	57.0 ~ 61.0	1.8 ~ 3.7	0.5						余量	Fe+Sn1.0	
典型应用 Mechanical properties	适用于以热冲和切削加工制作的各种结构零件，以及自动车床、数控车床加工产品，如五金件、电气接插件、连接件等。 Suitable for various structural parts made by hot punching and cutting, as well as automatic lathes and CNC lathes, such as hardware, electrical connectors, and connectors.										

LEAD-FREE ENVIRONMENTAL PROTECTION COPPER ROD 无铅环保铜棒



无铅环保 (Pb≤0.25%), 优秀的机械性能, 优秀的热加工性能, 良好的机加工性能, 优秀的抗应力腐蚀性能

Lead-free environmental protection (Pb≤0.25%), Excellent mechanical properties, Excellent thermal processing performance, Good machining performance, Excellent resistance to stress corrosion

牌号 Grade	化学成份 % Chemistry component %										
	Cu	Pb	Al	Fe	Ni	Sn	Si	Bi	P	Zn	其他杂质总和
C28500	57.0~59.0	≤0.25	≤0.10	≤0.10						余量	
C27450	61.0~64.0	≤0.25		≤0.35						余量	
C46400	59.0~62.0	≤0.20		≤0.10		0.50~1.0			≤0.20	余量	
H62	60.5~63.5	≤0.08		≤0.15						余量	≤0.5
H65	63.0~68.5	≤0.09		≤0.07						余量	≤0.45
HSn62-1	31.0~63.0	≤0.10		≤0.10		0.70~1.10				余量	≤0.30
HBi59-1	58.0~60.0	≤0.10		≤0.20		≤0.20		0.80~2.0		余量	≤0.50
HSi75-3	73.0~77.0	0.1		0.1	0.1	0.20	2.7~3.4		0.04~0.15	余量	0.6
典型应用 Mechanical properties	水暖五金、水表、各种阀门、管道接头、供水管配件等涉水器件。适用于自动车床、数控车床加工有生态环保和卫生安全要求等系列产品；如电子、电讯、电气接插件、联接件，五金、照相、家电、饮用水工程的零部件。 Water heating hardware, water meters, various valves, pipe joints, water supply pipe fittings and other wading devices. Applicable to automatic lathes, CNC lathe processing, eco-friendly and hygienic safety requirements; such as electronics, telecommunications, electrical connectors, connectors, hardware, photography, home appliances, drinking water engineering parts.										

RoHS是由欧盟立法制定的一项强制性标准，它的全称是《关于限制在电子电气设备中使用某些有害成分的指令》(Restriction of Hazardous Substances) 金属材料需测试四种有害金属元素，即Cd镉、Pb铅、Hg汞、Cr6+六价铬。要求镉小于100ppm、铅小于1000ppm、汞小于1000ppm、六价铬小于1000ppm。对于铜合金要求铅小于40000ppm即可。

RoHS is a mandatory standard enacted by EU legislation, and its full name is the Restriction of Hazardous Substances (Restriction of Hazardous Substances). Metal materials need to be tested for four harmful metal elements, namely Cd cadmium, Pb lead, Hg mercury, Cr6+ hexavalent chromium. It is required that cadmium is less than 100 ppm, lead is less than 1000 ppm, mercury is less than 1000 ppm, and hexavalent chromium is less than 1000 ppm. For copper alloys, lead should be less than 40,000 ppm.

REACH是欧盟法规《化学品的注册、评估、授权和限制》(REGULATION concerning the Registration, Evaluation, Authorization and Restriction of Chemicals)的简称，是欧盟建立的，并于2007年6月1日起实施的化学品监管体系。铜合金内一般不含REACH法规中关注物质，但需要关注包装物与标识用材料。

REACH is the abbreviation of the REGULATION concerning the Registration, Evaluation, Authorization and Restriction of Chemicals, which was established by the European Union and implemented on June 1, 2007. Product supervision system. Copper alloys generally do not contain substances of interest in the REACH regulation, but attention needs to be paid to packaging materials and marking materials.

LEAD-FREE ENVIRONMENTALLY FRIENDLY COPPER ROD 无铅环保铜锭



- A级抛光铜锭：表面杂质数量（单个面积小于等于0.08平方毫米）≤3
- DZR铜锭：抗脱锌深度要求 < 100微米
- Grade A polished copper ingots: the number of surface impurities (single area is less than or equal to 0.08 square mm) ≤3
- DZR copper ingot: De-zinc-resistant depth requirements <100 microns

特A级铜锭 COPPER BRASS INGOT RODS											
牌号 Grade	化学成份 % Chemistry component %										
	Cu	Pb	Al	Fe	Ni	Sn	Si	Bi	As	Zn	其他杂质总和
特A级铜锭	59.0~60.3	1.0~1.8	0.5~0.75	≤0.15	≤0.1	≤0.15	≤0.03	≤0.02	≤0.01	余量	≤0.2
典型应用 Mechanical properties	高端卫浴行业、工艺品行业。 They are widely used in high-end sanitary ware industry and handicraft industry.										

DZR铜锭 DZR COPPER INGOT											
牌号 Grade	化学成份 % Chemistry component %										
	Cu	Pb	Al	Fe	Ni	Sn	Si	Bi	As	Zn	其他杂质总和
DZR铜锭	61.0~64.0	0.8~2.5	0.5~0.8	≤0.5	≤1	≤1.0	≤0.05	≤0.05	0.04~0.25	余量	≤0.5
典型应用 Mechanical properties	高端卫浴行业、工艺品行业。 They are widely used in high-end sanitary ware industry and handicraft industry.										

无铅铜锭 LEAD-FREE COPPER INGOT											
牌号 Grade	化学成份 % Chemistry component %										
	Cu	Pb	Al	Fe	Ni	Sn	Si	Bi	As	Zn	其他杂质总和
铋无铅黄铜锭	61.0~63.0	≤0.2	0.5~0.8	≤0.3	≤0.3	≤0.4	≤0.05	0.40~1.0	≤0.02	余量	≤0.03
硅无铅黄铜锭	61.0~64.0	≤0.2	0.5~0.8	≤0.1	≤0.1	≤0.15	0.5~0.7	0.02	≤0.02	余量	≤0.03
典型应用 Mechanical properties	高端卫浴行业、工艺品行业。 They are widely used in high-end sanitary ware industry and handicraft industry.										

接受客户成分定制服务
Accept customer component customization services

ANTI-DEZINCIFICATION COPPER ROD 抗脱锌铜棒



优秀的抗脱锌性能，优秀的机械性能，优秀的热加工性能，良好的机加工性能，优秀的抗应力腐蚀性能

Excellent resistance to dezincification, Excellent mechanical properties, Excellent thermal processing performance, Good machining performance, Excellent resistance to stress corrosion

牌号 Grade	化学成份 % Chemistry componet %										
	Cu	Pb	Al	Fe	Ni	Sn	Mn	Bi	As	Zn	其他 杂质总和
C48600	59.0~62.0	1.0~2.50				0.30~1.50			0.02~0.25	余量	
C46500	59.0~62.0	≤0.20		≤0.10		0.50~1.0			0.02~0.06	余量	0.4
C35200	60.0~63.0	1.70~2.80	≤0.05	≤0.10	≤0.30	≤0.10	≤0.10		0.02~0.15	余量	0.02
CW511L	61.5~63.5	≤0.20	≤0.05	≤0.10	≤0.30	≤0.10			0.02~0.15	余量	0.02
CW602N	61.0~63.0	1.70~2.80	≤0.05	≤0.10	≤0.30	≤0.10	≤0.10		0.02~0.15	余量	0.02
CW625N	62.0~64.0	1.20~1.60	0.50~0.70	≤0.30	≤0.20	≤0.30	≤0.10		0.02~0.15	余量	
CZ132	余量	1.70~2.80		≤0.20		≤0.20				35~37	0.5

典型应用
Mechanical properties
水暖五金、水表、各种阀门、管道接头、供水管配件等涉水器件。适用于有生态环保和卫生安全要求等系列产品；如家电、饮用水工程的零部件。
Water heating hardware, water meters, various valves, pipe joints, water supply pipe fittings and other wading devices. Applicable to a series of products with ecological and environmental protection and health and safety requirements; such as household appliances, drinking water engineering parts.

黄铜脱锌是一种典型的成分选择性腐蚀，不仅在酸性较强的介质及碱性介质中发生，也能在中性的海水、河水、工业水中发生。这种腐蚀问题严重影响了设备寿命，因此抗脱锌黄铜应运而生。目前市场上采用的抗脱锌标准有欧洲标准EN 12165、澳大利亚标准AS 2345和国际通用标准ISO6059。国内常采用的测试条件依据GB/T 10119 黄铜耐脱锌腐蚀性能的测定。我司对于抗脱锌黄铜拥有丰富的生产经验和客户生产指导能力。

Dezincification of brass is a typical component selective corrosion, which occurs not only in acidic media and alkaline media, but also in neutral seawater, river water, and industrial water. This corrosion problem has seriously affected the life of the equipment, so antidezincification brass came into being. The anti-dezincification standards currently used on the market include the European standard EN 12165, the Australian standard AS 2345 and the international standard ISO 6059. The test conditions commonly used in China are based on the determination of the resistance to dezincification corrosion of GB/T 10119 brass. Our company has rich production experience and customer production guidance ability for dezincification-resistant brass.

材料在应力和腐蚀环境的共同作用下引起的破坏叫应力腐蚀。造成应力腐蚀破坏的静应力，远低于材料屈服强度，这个应力也可以是外加应力。铜合金耐应力腐蚀检验标准采用GB/T 10567.2铜及铜合金加工材残余应力检测方法，利用黄铜在氨气气氛中应力腐蚀破坏敏感性强的原理进行测试。我司通过加工工艺控制和去应力热处理工艺，材料能够通过24/72/96等各种测试实验。

The damage caused by the combination of stress and corrosive environment is called stress corrosion. The static stress causing stress corrosion damage is much lower than the material yield strength, and this stress can also be applied stress. The stress corrosion test standard for copper alloy adopts GB/T 10567.2 copper and copper alloy processed material residual stress detection method, and the principle of strong corrosion stress corrosion resistance of brass in ammonia atmosphere is tested. Through the process control and stress-relieving heat treatment process, our materials can pass various test experiments such as 24/72/96.

TIN ZINC LEAD BRONZE 锡锌铅青铜

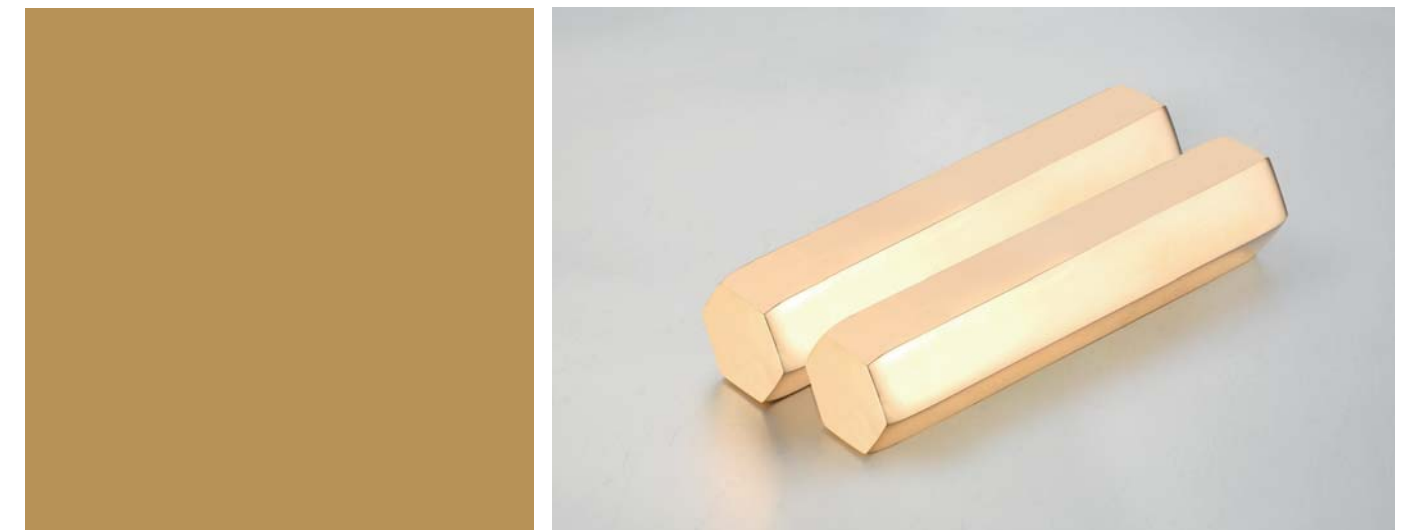


良好的机械性能，优秀的耐磨性能，优秀的机加工性能，优秀的耐腐蚀性能，优秀的铸造性能

Good mechanical properties, Excellent wear resistance, Excellent machining performance, Excellent corrosion resistance, Excellent casting west performance

牌号 Grade	化学成份 % Chemistry componet %										
	Cu	Pb	Sn	Zn	Fe	Ni	Al	Si	Sb	P	S
ZCuSn5Zn5Pb5 (C83600)	84.0~86.0	4.0~6.0	4.0~6.0	4.0~6.0	≤0.30	≤1.0	≤0.005	≤0.005	≤0.25	≤0.05	≤0.08
C84400	78.0~82.0	6.0~8.0	2.5~3.5	7.0~10.0	≤0.40	≤1.0	≤0.005	≤0.005	≤0.25	≤0.02	≤0.08
ZCuSn6Zn6Pb3	余量	2.0~4.0	5.0~7.0	5.0~7.0	≤0.40	≤1.0	≤0.05	≤0.05	≤0.30	≤0.05	≤0.08
ZCuSn5Zn5Pb2 (CC499K)	84.0~88.0	0.2~3.0	4.0~6.0	4.0~6.0	≤0.30	0.1~0.6	≤0.01	≤0.01	≤0.10	≤0.04	≤0.04
ZQSn7Pb7Zn3 (C93200)	81.0~85.0	6.0~8.0	6.3~7.5	2.0~4.0	≤0.20	≤1.0	≤0.005	≤0.005	≤0.35	≤0.15	≤0.08

典型应用
Mechanical properties
管道、阀门配件，耐海水零配件，制造轴套、轴承衬垫、活塞离合器，有汽车青铜之称。适用于重力铸造、数控车床加工有耐磨、耐腐蚀、弹性要求的用于汽车、拖拉机、航空、机械工业的管配件、化工机械、耐磨零件等。
Pipes, valve fittings, seawater resistant parts, bushings, bearing pads, piston clutches, and the name of automotive bronze. Applicable to gravity casting, CNC lathe processing, wear-resistant, corrosion-resistant, elastic requirements for automotive, tractor, aviation, machinery industry pipe fittings, chemical machinery, wear parts, etc.



PRECISION EXTRUSION ROD 精密挤压棒



- 优秀的综合机械性能
- 优秀的机加工性能
- 优秀的热加工性能
- 优秀的耐腐蚀性能
- 优秀的焊接性能

Excellent comprehensive mechanical properties, Excellent machining performance, Excellent hot workability, Excellent corrosion resistance, Excellent welding performance

SHAPED LOCK ROD 异形锁体棒



- 良好的机械性能
- 优秀的机加工性能
- 优秀的耐腐蚀性能

Good mechanical properties, Excellent machining performance, Excellent corrosion resistance

牌号 Grade	化学成份 %，不大于（注明余量和范围值除外） Chemical composition %，not greater than (except for the remaining amount and range value)												
	Cu	Pb	Fe	Ni	Sn	Mn	P	Si	Al	Zn	其他	其他总杂质	杂质总和
H59	57.0~60.0	0.5	0.3							余量			1.0
H62	60.5~63.5	0.08	0.15							余量			0.5
HPb59-1	57.0~60.0	0.8~1.9	0.5							余量			1.0
HPb58-3	57.0~60.0	2.0~3.5	0.5							余量			1.0
HPb60-3	58.0~61.0	2.5~2.5								余量			0.85
C3771	57.0~60.0	1.0~2.5								余量	Fe+Sn1.0		
C3603	57.0~60.0	1.8~3.7	0.35							余量	Fe+Sn0.6		
C3604	57.0~60.0	1.8~3.7	0.5							余量	Fe+Sn1.0		
C3602	59.0~63.0	1.8~3.7	0.5							余量	Fe+Sn1.0		
C36000	60.0~63.0	2.5~3.0	0.35							余量		0.5	
C37100	58.0~62.0	0.6~1.2	0.15							余量		0.4	
C37700	58.0~61.0	1.5~2.5	0.3							余量		0.5	
C46500	59.0~62.0	0.2	0.1		0.5~1.0						As0.02~0.06		
CW612N	59.0~60.0	1.6~2.5	0.3		0.3				0.05				0.2
CW614N	57.0~59.0	2.5~3.5	0.3	0.3					0.05				0.2
CW617N	57.0~59.0	1.6~2.5	0.3	0.3	0.3				0.05		As0.02~0.15		0.2
CW511L	61.5~63.5	0.2	0.1	0.3	0.01				0.05				
CW602N	61.0~63.0	1.7~2.8	0.1	0.3	0.01				0.05	余量	As0.02~0.15	0.2	Mn:0.1
QSi0.6-2.1	余量	≤0.02	≤0.2	1.6~2.5			≤0.1	0.4~0.8			≤0.3		
典型应用 Mechanical properties	可应用于自动车床、热冲等多方式加工的精密五金配件、特种高压阀体、阀杆、连接件、轨道交通等。 It can be applied to precision hardware accessories, special high-pressure valve bodies, valve stems, connectors, rail transit, etc. processed in multiple ways such as automatic lathes, hot punching, etc.												

牌号 Grade	化学成份 % Chemistry componet %													
	Cu	Pb	Fe	Ni	Sn	Mn	P	Si	Al	Zn	其他	其他总杂质	杂质总和	
CW614N	57.0~59.0	2.5~3.5	0.3	0.3					0.05			0.2		
C3604	57.0~61.0	1.8~3.7	0.5							余量	Fe+Sn1.0			
HPb58-2A	56.0~60.0	2.0~3.2								余量				
HPb58-2C	54.0~58.0	2.0~5.0												
HPb58-3	57.0~60.0	2.0~3.5	0.5							余量			1.0	
典型应用 Mechanical properties	因其良好的切削性能，广泛应用于挂锁、门锁、智能锁等。 Because of its good cutting performance, it is widely used in padlocks, door locks, smart locks, etc.													

我司生产的异形锁体棒材有扁方型、鼓型、葫芦形、各种空心异形等上千种规格形状，并可根据客户要求定制化生产。

The special-shaped lock body bar produced by our company has thousands of specifications such as flat square shape, drum shape, gourd shape, various hollow special shapes, etc., and can be customized production according to customer requirements.



CHEMISTRY COMPONENT STANDARD

产品化学成分 & 标准

成品名称 Product name	牌号 Grade	化学成份 % Chemistry componet %									
		Cu	Pb	Fe	Ni	Sn	Al	Zn	Mn	其他 总杂质	杂志总和
普通黄铜 Ordinary brass	H59	57.0 ~ 60.0	0.5	0.3				余量			1.0
	H62	60.5 ~ 63.5	0.08	0.15				余量			0.5
	H63	62.0 ~ 65.0	0.08	0.15				余量			0.5
	H65	63.0 ~ 68.5	0.09	0.07				余量			0.45
	H68	67.0 ~ 70.0	0.03	0.1				余量			0.3
铅黄铜 Lead brass (企标QB)	HPb58-2C	54.0 ~ 58.0	2.0 ~ 5.0					余量			
	HPb58-2A	56.0 ~ 60.0	2.0 ~ 3.2					余量			
	HPb59-1B	57.0 ~ 60.0	1.0 ~ 2.2	0.6				余量			1.0
铅黄铜 Lead brass (国标GB)	HPb59-1	57.0 ~ 60.0	0.8 ~ 1.9	0.5				余量			
	HPb59-2	57.0 ~ 60.0	1.5 ~ 2.5	0.5		0.5		余量			1
	HPb60-2	58.0 ~ 61.0	1.5 ~ 2.5	0.3				余量			0.8
	HPb60-3	58.0 ~ 61.0	2.5 ~ 3.5	0.3		0.3		余量			0.8
	HPb62-3	60.0 ~ 63.0	2.5 ~ 3.7	0.35				余量			0.85
铅黄铜 Lead brass (美标ASTM)	C37100	58.0 ~ 62.0	0.6 ~ 1.2	0.15				余量		0.4	
	C37700	58.0 ~ 61.0	1.5 ~ 2.5	0.3				余量		0.5	
	C37000	59.0 ~ 62.0	0.8 ~ 1.5	0.15				余量		0.4	
	C36000	60.0 ~ 63.0	2.5 ~ 3.0	0.35				余量		0.5	
铅黄铜 Lead brass (日标JIS)	C3601	59.0 ~ 63.0	1.8 ~ 3.7	0.3				余量	Fe+Sn0.5		
	C3602	59.0 ~ 63.0	1.8 ~ 3.7	0.5				余量	Fe+Sn1.0		
	C3603	57.0 ~ 61.0	1.8 ~ 3.7	0.35				余量	Fe+Sn0.6		
	C3604	57.0 ~ 61.0	1.8 ~ 3.7	0.5				余量	Fe+Sn1.0		
	C3771	57.0 ~ 61.0	1.0 ~ 2.5					余量	Fe+Sn1.0		
铅黄铜 Lead brass (欧标EN)	CW612N	59.0 ~ 60.0	1.6 ~ 2.5	0.3	0.3	0.3	0.05	余量		0.2	
	CW614N	57.0 ~ 59.0	2.5 ~ 3.5	0.3	0.3	0.3	0.05	余量		0.2	
	CW617N	57.0 ~ 59.0	1.6 ~ 2.5	0.3	0.3	0.3	0.05	余量		0.2	

COMMON COPPER ALLOY TRADE MARK COMPARE TABULATION

常用铜合金 牌号对照表

成品名称 Product name	化学成份 % Chemistry componet %							
	国标GB	国际标准ISO	美标ASTM	日标JIS	欧标EN	德标DIN	英标BS	法标NF
纯铜 Pure copper	T2	Cu-FRHC	C11000	C11000	CW004A	E-Cu58	C101	Cu-a1
	T3	Cu-FRTP	C12500	-	-	-	C104	-
磷脱氧铜 Phosphorous deoxidize copper	TP2	Cu-DHP	C12100	C1220	CW024A	SF-Cu	C106	Cu-b1
普通黄铜 Ordinary brass	H68	-	C26200	-	-	CuZn33	-	-
	H65	CuZn35	C27000	C2700	-	CuZn36	CZ107	CuZn33
	H63	CuZn37	C27200	C2720	CW509L	CuZn37	CZ108	CuZn37
	H62	CuZn40	C28000	C2800	CW508L	-	CZ109	CuZn40
铅黄铜 Lead brass	HPb63-3	-	C34500	C3560	-	CuZn36Pb3	CZ124	-
	HPb63-0.1	-	-	-	-	CuZn36Pb0.5	-	-
	HPb59-1	CuZn39Pb1	C37710	C3771	CW611N	CuZn40Pb2	CZ122	-
铅黄铜锭 Lead brass ingot	ZHD62	-	C85500	-	-	-	-	-
	ZHPbD59-1	-	-	-	-	-	PCB1	-
	ZHPbD60-2	GCuZn40Pb	-	-	-	G-CuZn37Pb	DCB3	CuZn40



PRODUCT APPLICATIONS

应用领域

高端卫浴

HIGH-END BATHROOM ACCESSORIES



环保厨卫

ENVIRONMENTAL KITCHEN & BATH EQUIPMENT



阀门

VALVE



管件

FITTINGS



COMPANY CULTURE

企业文化

**使命愿景：创造客户价值，打造百年公司
成为行业标杆，为中国工业强国做贡献**

MISSION & VISION: CREATE CUSTOMER VALUE TO BUILDING A CENTURY-OLD ENTERPRISE, BECOMING THE BENCHMARK OF THE INDUSTRY, CONTRIBUTING TO CHINA'S INDUSTRIAL POWER

企业精神：天天求变，永不自满，勇于竞争，追求卓越

CORPORATE SPIRIT: SEEK CHANGE EVERYDAY, NEVER BE SELF-SATISFIED, DARE TO INNOVATE, PURSUE EXCELLENCE

核心价值观：学习、团队、诚信、责任、开放

CORE VALUES: LEARNING, TEAM, INTEGRITY, RESPONSIBILITY, OPEN

企业哲学：大道至简，千锤百炼

CORPORATE PHILOSOPHY: SIMPLIFY COMPLEXITY REPETITION CREATES THE MASTER

质量观念：没有质量就没有一切

QUALITY CONCEPT: WITHOUT QUALITY, THERE'S NOTHING

企业与员工：相互尊重、互为伙伴、彼此成就

ENTERPRISE AND EMPLOYEES: MUTUAL RESPECT, MUTUAL PARTNERS, MUTUAL ACHIEVEMENT