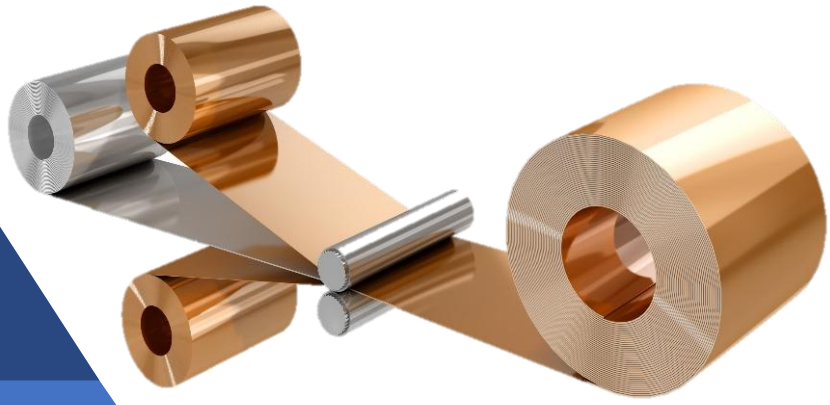
SLXCL

申龙新材料
Shenlong New Material

众志成城 勇于创新
United we innovate

登峰造极 共铸辉煌
Together we excel



冷轧复合金属功能性材料
Cold-Rolled Composite Metallic Functional Materials

中国 · 江苏
China · Jiangsu

苏州申龙新材料科技有限公司
Suzhou Shenlong New Material Technology Co., LTD

国际层状金属复合材料领先者

World Leader In Layered Metal Composites

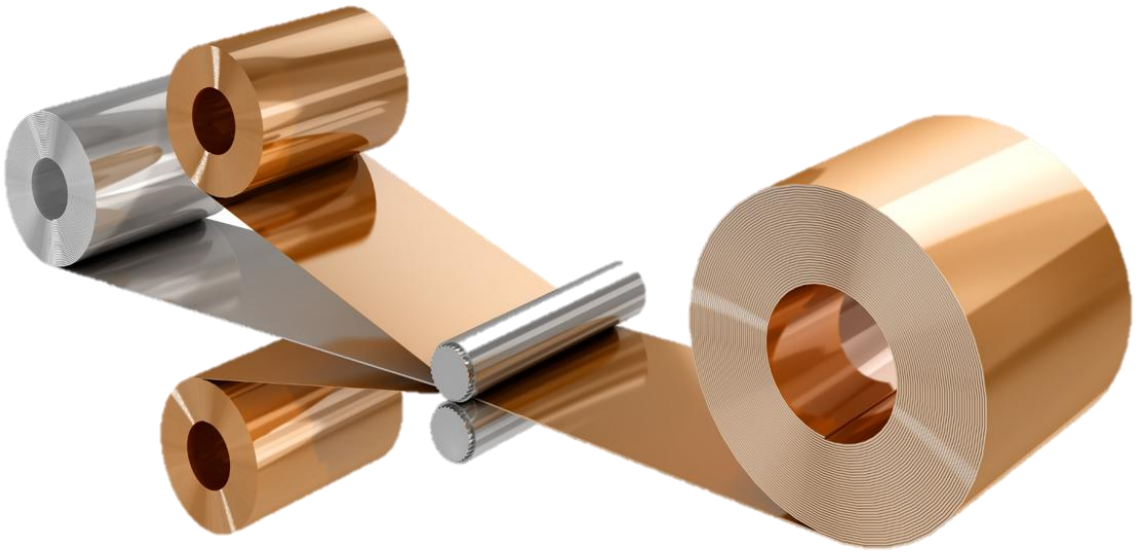
苏州申龙新材料科技有限公司（简称“申龙新材料”），位于江苏省国家级长三角经济一体化示范区，是江苏省苏州市经济核心腹地著名企业，一期投资2.5亿元，厂房面积2.5万平方米。经过多年的持续发展，目前已发展成为多种新型有色金属复合材料研发、生产、销售、技术咨询、技术转让、技术服务等智能制造产业于一体的综合性高新科技企业。

公司设立生产、技术、研发中心和成品检测中心，不断提升产品质量；通过ISO9001质量管理体系认证、14000环境管理体系认证、执行6S管理，不懈提升公司管理水平；申龙新材料坚持以高新技术为主导，以质量管理为中心；以顾客需求为指针，做大做强公司品牌，与国内外同仁携手共赢，共创美好未来。

Suzhou Shenlong New Materials Technology Co., LTD. (referred to as "Shenlong New Materials") is located in the National Yangtze River Delta Economic Integration Demonstration Zone of Jiangsu Province. It is a well-known enterprise in the economic core area of Suzhou City, Jiangsu Province. The first phase of investment is 250 million yuan, and the factory area is 25,000 square meters. After years of continuous development, it has now grown into a comprehensive high-tech enterprise integrating the research and development, production, sales, technical consultation, technology transfer and technical services of various new types of non-ferrous metal composite materials in the intelligent manufacturing industry.

The company has established production, technology, research and development centers and finished product testing centers to continuously improve product quality. Passed the ISO9001 quality Management system certification, 14000 environmental management system certification, implemented 6S management, and continuously improved the company's management level.

冷轧层状金属复合板/卷
Cold-rolled layered metal composite sheet/coil



产品介绍
Product Introduction

层状金属复合新材料是我公司历经多年攻关，投入巨资精心研发的一种新型金属复合材料。该材料既有基材相媲美的机械力学性能，亦有覆材优异的耐腐蚀性能和光洁美感，可广泛应用于军工、制冷机械、航空航天、交通运输、建筑装饰、石油、化工、电力、冶金、制碱、机械制造等行业。

The layered metal composite new material is a new type of metal composite material that our company has meticulously developed after years of research and development and with huge investment. It can be widely applied in industries such as military, refrigeration machinery, aerospace, transportation, architectural decoration, petroleum, chemical engineering, power, metallurgy, alkali production, and mechanical manufacturing.

申龙新材料设备先进，技术雄厚，金属层状复合新材料的推出，将引领有色金属材料技术创新和产业创新的革命。该材料通过自动化冷轧制设备，由申龙新材料独有的具有自主知识产权的制造工艺生产，单纯材料成本较传统的T2紫铜或H65黄铜有很大程度上节能降本，为广大T2紫铜或H65黄铜用户降低成本带来了福音。

Shenlong New Materials is equipped with advanced facilities and has strong technical capabilities. The launch of metal layered composite new materials will lead a revolution in technological and industrial innovation of non-ferrous metal materials. Compared with traditional T2 copper or H65 brass, the material cost alone is significantly more energy-efficient and cost-effective, bringing good news for cost reduction to a large number of T2 red copper or H65 brass users.

金属层状复合新材料通过特殊的轧制工艺，在高温高压下，通过多种材料晶体复合结构成为牢不可分、在结合面通过晶体结构间原子交换，实现不同材质间晶体的重组和融合，达到物理意义上的材质复合。复合后的板材即使弯曲断裂，三层复合材料间也不会分层开裂。

Metal layered composite new materials are formed through a special rolling process under high temperature and high pressure. Through the crystal composite structure of multiple materials, they become inseparable. Even if the composite board bends and breaks, there will be no delamination or cracking among the three layers of composite materials.

黄铜+钢冷轧复合带/材
Cold-Rolled Brass Clad Steel Composite Strip

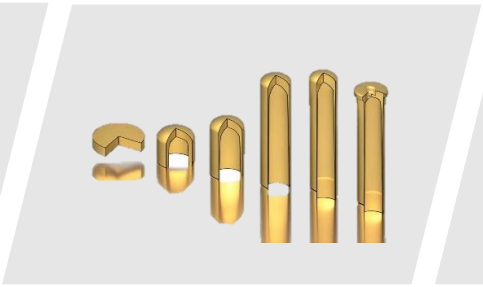
军工材料战略合作伙伴
Strategic Partner Of Military Materials

在军工领域，黄铜+钢冷轧复合技术是国际金属复合带材领域新兴的一项新技术，除具有复合材料所共有的强度高、耐热性好、热稳定性好、塑性好、耐腐蚀性等特点外，在军用子弹制造领域，还有成品率高、尺寸精度高的优点，有利于提高弹体质量。

In the military industry, brass+steel cold rolling composite technology is an emerging new technology in the international metal composite strip field. In the field of military bullet manufacturing, it has the advantages of high strength, good heat resistance, good thermal stability, good plasticity, corrosion resistance, high yield rate, and high dimensional accuracy, which is conducive to improving the quality of the bullet body.

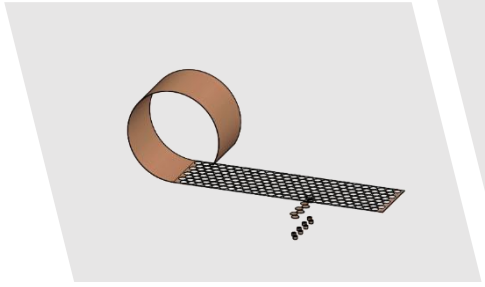
应用案例
Application Case

子弹壳
Bullet Case

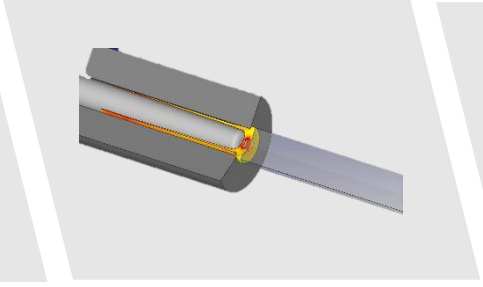


子弹半成品
Semi-Finished Bullet

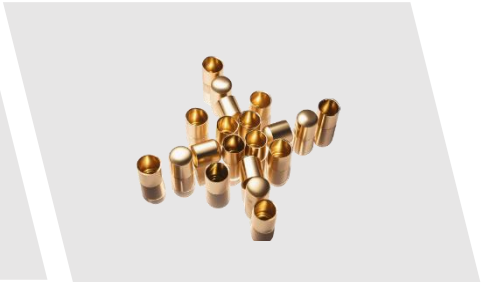
子弹成品
Finished Bullets



冲压材料
Stamping Material



冲压成型
Stamping Forming



盂子
Bullet Cups

组成及规格尺寸:
Composition And Specification Dimensions:

产品 Product	F11双面覆黄铜 Brass Clad F11 Steel	F18双面覆黄铜 Brass Clad F18 Steel
覆层材料 Coating Material	H90	H90
基层材料 Base Materials	F11	F18
材料厚度 Material Thickness（mm）	0.35-1.37	2.0-4.0
宽度 Width（mm）	45-600	45-600

产品性能:
Product Performance:

产品 Product	抗拉强度 Tensile Strength(Mpa)	屈服强度 Yield Strength(Mpa)	延伸率 Elongation Rate(%)	珠光体(等级) Pearlite (Grade)	晶粒(等级) Grain Size (Grade)
F11双面覆黄铜 Brass Clad F11 Steel	265-365	200-290	43	1-5	7-10
F18双面覆黄铜 Brass Clad F18 Steel	305-395	200-290	37	2-6	7-10

特性优点 Characteristics And Advantages:

性能方面： 良好的导热性、良好的耐腐蚀性，延伸率较好，易于冲压成型。

资源方面： 比全铜弹壳，覆铜钢弹壳减少了铜的使用量，钢材成本较低，覆铜钢弹壳在保持性能的同时，降低了生产成本。

In terms of performance: Good thermal conductivity, good corrosion resistance, relatively good elongation, and easy to be formed by stamping.

In terms of resources: Compared with all-copper casings, copper-clad steel casings reduce the Amount of copper used and have a lower steel cost.

国内电子材料合作伙伴
Domestic Electronic Materials Partner

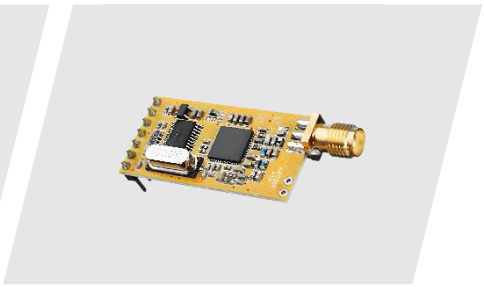
单、双面紫铜复合板带作为现代工业中的重要材料，凭借其独特的性能和广泛的应用范围，成为了各个行业不可或缺的关键材料。紫铜复合板带结合了紫铜优良的导电、导热性和其他材料的特定性能，通过先进的复合技术制成，不仅保留了紫铜本身的优秀特性，还增加了材料的多功能性和适应性。

Single and double-sided red copper composite sheet and strip, as important materials in modern industry, have become indispensable key materials in various industries due to their unique properties and wide application range. Copper composite sheet and strip combine the excellent electrical and thermal conductivity of copper with the specific properties of other materials, and are made through advanced composite technology.

应用案例
Application Case

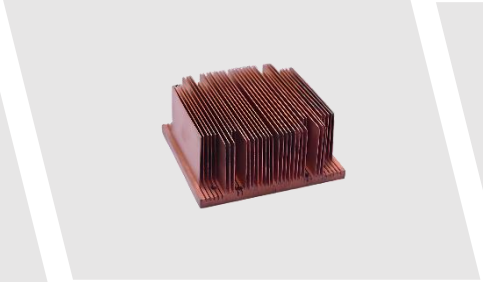
芯片载体
Chip Carrier

HDMI接头
HDMI Connector



串口接头
Serial Port Connector

手机中板
Mid-frame



散热片
Heat Sink

模块接口
Module Interface

组成及规格尺寸:
Composition and specification dimensions:

产品 Product	201双面覆紫铜 Copper Clad 201 Stainless Steel	304双面覆紫铜 Copper Clad 304 Stainless Steel	316单面覆紫铜 Single Side Copper Clad 316 Stainless Steel
覆层材料 Coating Material	T2	T2	T2
基层材料 Base Materials	201	304	316L
材料厚度 Material Thickness(mm)	0.1-1.0	0.03-1.0	0.03-1.0
宽度 Width(mm)	10-600	10-600	10-600
铜层占比 Proportion of copper layer(%)	双面8-20（可定制） Double-Sided 8-20 （Customizable）	双面8-20（可定制） Double-Sided 8-20 （Customizable）	（可定制） （Customizable）

产品性能:
Product performance:

产品 Product	延伸率 Elongation rate(%)	硬度 Hardness(HV)	备注 Remarks
201双面覆紫铜 Copper Clad 201 Stainless Steel	42	≤245	软态 Soft state
304双面覆紫铜 Copper Clad 304 Stainless Steel	42	≤190	
316单面覆紫铜 Single Side Copper Clad 316 Stainless Steel	20	≤170	

特性优点 Characteristics And Advantages:

性能优势： 良好的导电性，优异的导热性，高强度和良好的机械性能。

制造优势： 易于加工，可根据需求加工成各种形状和尺寸，适应不同电子设备的设计要求。

应用优势： 多功能性，兼具紫铜的导热、导电性和不锈钢的强度，适用于制造电子电路基板、散热器、连接器和插座等关键部件。

Performance Advantages: Good electrical conductivity, excellent thermal conductivity.

Manufacturing Advantages: Easy to process, can be processed into various shapes and sizes according to requirements.

Application Advantages: Multi-functionality, combining the thermal and electrical conductivity of red copper with the strength of stainless steel.

单、双面铜复合板带
Single and double-sided copper composite sheet and strip

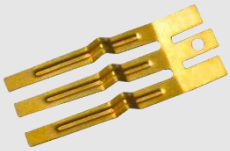
国内电器材料领先者
A Leading Domestic Electrical Materials Provider

单、双面铜复合板带在电器行业中的广泛应用得益于其高导电性、高机械强度、耐磨性和耐腐蚀性。这些特性使得铜复合板带成为制造高性能电器元件的关键材料，不仅提高了电器的整体性能和使用寿命，还降低了维护成本。未来，随着电器行业对高性能材料需求的不断增加，单、双面铜复合板带的应用前景将更加广阔。通过不断的技术创新和工艺改进，铜复合板带将在电器行业中发挥更大的作用，推动行业向更高效、更可靠的方向发展。

The wide application of single and double-sided copper composite sheet and strip in the electrical industry is attributed to their high electrical conductivity, high mechanical strength, wear resistance and corrosion resistance. These characteristics make copper composite sheet and strip a key material for manufacturing high-performance electrical components, not only enhancing the overall performance and service life of the appliances, but also reducing maintenance costs. In the future, with the continuous increase in the demand for high performance materials in the electrical industry, the application prospects of single and double-sided copper composite sheet and strip will be even broader.

应用案例
Application Case

铜夹子
Copper Clamp



端子
Terminal

面板
Panel

断路器
Circuit Breaker

基座
Base

台灯
Desk Lamp

组成及规格尺寸:
Composition and specification dimensions:

产品 Product	SPHC双面覆紫铜 Copper Clad SPHC Steel	IF双面覆黄铜 Brass Clad IF Steel
覆层材料 Coating material	T2	H65
基层材料 Base materials	SPHC	IF
材料厚度 Material thickness(mm)	0.05-2.5	0.05-3.1
宽度 Width(mm)	10-600	10-600
铜层占比 Proportion of copper layer(%)	双面6-20（可定制） Double-Sided 6-20 （Customizable）	双面6-10（可定制） Double-Sided 6-10 （Customizable）

产品性能:
Product performance:

产品 Product	延伸率 Elongation rate(%)			硬度 Hardness(HV)		
状态 Status	软态 Soft state	半硬 Semi-hard	硬态 hard state	软态 Soft state	半硬 Semi-hard	硬态 hard state
SPHC双面覆紫铜 Copper Clad SPHC Steel	≥30	≥20	＜10	100-120	120-160	>160
IF双面覆黄铜 Brass Clad IF Steel	≥30	≥20	＜10	90-110	110-160	>160

特性优点 Characteristics And Advantages:

性能优势： 良好的导电性，高强度和韧性，良好的可塑性和焊接性。

经济优势： 成本效益相比纯铜材料，钢覆紫铜复合材料成本更低，同时保持了紫铜的导电性能，具有更高的性价比。

应用优势： 多功能性，这种复合材料适用于制造电器中的导电部件、结构件等，兼具导电性和机械强度。

Performance advantages: Good electrical conductivity, high strength and toughness, good plasticity and weldability.

Economic advantages: Copper clad steel composite materials have lower costs while maintaining the conductivity of copper, resulting in higher cost-effectiveness.

Application advantages: Versatility. This composite material is suitable for manufacturing conductive components and structural parts in electrical appliances.

单、双面铜复合管
Single And Double-Sided Copper Composite Tubes

革新制冷技术：新一代高导热铜管材料
Innovative Refrigeration Technology: New Generation
Of High Thermal Conductivity Copper Tube Materials

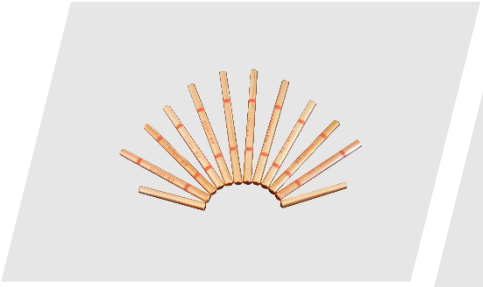
在追求绿色节能的全球趋势下，制冷行业正面临能效升级的关键转型。我公司（申龙新材料）研发的第三代制冷专用铜管，通过材料科学与工艺创新，重新定义了制冷系统的热交换效率标准。

新一代高导热铜管材料以其卓越的导热性能、环保特性和广泛的应用前景，为制冷技术带来了革命性的变革。它不仅是制冷行业技术进步的重要体现，更是推动全球可持续发展目标实现的关键力量。随着这一材料的推广普及，制冷行业将迎来一个全新的高效、环保时代。

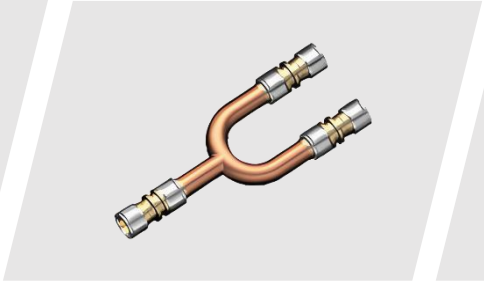
材料100%可回收，生产过程中采用氢能退火工艺，碳足迹较传统工艺降低32%。目前已通过UL/CE/GB-T18001全体系认证，成为国内外大型制冷企业坐上宾。

Under the global trend of pursuing green energy conservation, the refrigeration industry is undergoing a crucial transformation towards energy efficiency upgrades. The third-generation copper tubes specifically designed for refrigeration developed by our company (Shenlong New Materials) have redefined the heat exchange efficiency standards of refrigeration systems through material science and technological innovation. The new generation of high thermal conductivity copper tube materials, with their outstanding thermal conductivity, environmental friendliness and broad application prospects, have brought revolutionary changes to refrigeration technology.

应用案例
Application Case



铜合金雷管
Copper Alloy Detonator



分歧管
Splitter Tube

铜管
Copper Tube

制冷配件
Refrigeration Accessories

盘管
Coil Pipe

压缩机
Compressor

组成及规格尺寸:
Composition and specification dimensions:

产品 Product	IF双面覆紫铜 Copper Clad IF Steel
覆层材料 Coating material	T2
基层材料 Base materials	IF
材料厚度 Material thickness(mm)	0.05-3.1
宽度 Width(mm)	10-600
铜层占比 Proportion of copper layer(%)	双面6-8（可定制） Double-Sided 6-8 （Customizable）

产品性能:
Product performance:

产品 Product	延伸率 Elongation rate(%)			硬度 Hardness(HV)		
状态 Status	软态 Soft state	半硬 Semi-hard	硬态 hard state	软态 Soft state	半硬 Semi-hard	硬态 hard state
IF双面覆紫铜 IF both sides are covered with purple copper	≥30	≥20	＜10	90-110	110-160	≥160

特性优点 Characteristics and advantages:

性能优势： 良好的导热性、优异的耐腐蚀性，强度和塑性兼具。

制造优势： 易于加工，复合材料可根据需求加工成各种形状和尺寸的制冷管，适应不同空调系统的设计要求。连接方便、易于安装、安全可靠。

Performance advantages: Good thermal conductivity, excellent corrosion resistance, and a combination of strength and plasticity.

Manufacturing advantages: Easy to process. Composite materials can be processed into various shapes and sizes of refrigeration tubes as required, meeting the design requirements of different air conditioning systems.

SLXCL

中文官网
Chinese official website

英文官网
English official website

鸿蒙商城
Harmonyos Mall

苏州申龙新材料科技有限公司
Suzhou Shenlong New Material Technology Co., LTD

江苏省苏州市吴江区汾湖经济开发区黎里镇
临沪大道2899号
No. 2899, Linhu Avenue, Lili Town, Fenhu Economic Development Zone, Wujiang District, Suzhou City, Jiangsu Province

0512-88983889-8038

英文网址：www.slxcl.com.cn

中文网址：cn.slxcl.com.cn