

提供优质拉丝模具

PROVIDE HIGH-QUALITY WIRE DRAWING DIES

酷勒威拉丝模

COOLERVIE DIES

公司简介

提 供 优 质 拉 丝 模 具

COMPANY PROFILE

Provide High-Quality Wire Drawing Dies

安徽酷勒威拉丝模有限公司自2000年起专注于拉丝模具的研发与制造，并于2019年创立自主品牌。经过多年发展，公司已成为国内规模领先的拉丝模具制造企业之一。

公司主要产品包括聚晶金刚石拉丝模(PCD)、单晶金刚石拉丝模(SSCD)、天然钻石拉丝模(ND)、钨钢拉丝模(TC)等半成品模坯与成品模具，同时提供绞线模、聚晶涂漆模、镀锡模等配套模具和工具。产品广泛应用于电线电缆、漆包线、切割丝、金刚线、键合丝、医疗线等行业。

公司占地面积7500平方米，拥有固定资产人民币2000万元、生产设备500台套、生产员工100余人。公司已形成涵盖模壳生产、金刚石镶嵌、激光打孔、内孔抛光等环节的完整拉丝模具生产流程，并通过ISO9001:2015质量管理体系认证，具备进出口经营资质。

酷勒威始终致力于与客户建立长期、稳定的合作关系，以优质的产品和专业服务，为合作伙伴持续创造价值。

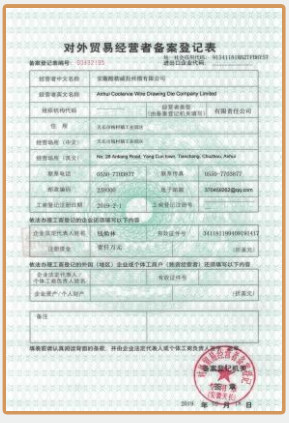
Anhui Coolervie Wire Drawing Dies Co., Ltd. has been engaged in the development and manufacture of wire drawing dies since 2000. In 2019, the company launched its own brand and has since grown into one of the leading wire drawing dies manufacturers in China.

Coolervie mainly provides polycrystalline diamond (PCD), synthetic single-crystal diamond (SSCD), natural diamond (ND), and tungsten carbide (TC) wire drawing dies, including semi-finished dies and finished dies, as well as stranding dies, PCD enameling dies, tinning dies, and other die tools. These products are widely used in wire and cable, enameled wire, cutting wire, diamond wire, bonded wire, medical wire, and other industries.

The company covers an area of 7,500 m^2 and has fixed assets of RMB 20 million. It operates 500+ sets of production equipment and employs more than 100 production staff. With a complete wire drawing die production process—from die case manufacturing and diamond mounting to laser drilling and inner-hole polishing—Coolervie is certified to ISO 9001:2015 and holds import and export rights.

Coolervie is committed to building long-term partnerships with customers and providing partners with high-quality wire drawing dies and dependable service.





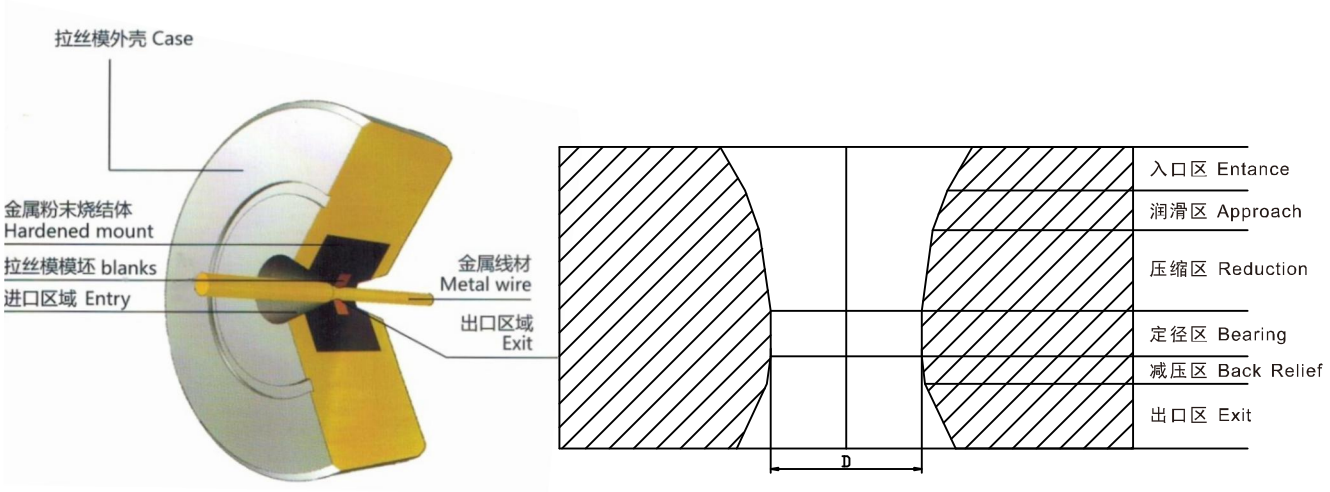




酷勒威
COOLERVIE



模具结构 Die Structure



1.入口区: 为润滑液提供入口，并引导线材进入下一区域。
Entrance: It provides access to lubricants and guides the wire to the next zone.

2.润滑区: 为润滑液充分接触核心区提供工作空间，线材由此区域进入模芯工作区。
Approach: It keeps space for lubricants and works as the first major part of die blanks.

3.压缩区: 线材的变形发生在该区域中，夹角称为压缩角度。压缩角度由减面率和拉伸材料确定。
Reduction: The deformation of wire takes place in this zone and the included angle is called reduction angle, which is determined by percentage area reduction and material being drawn.

4.定径区:它由直径等于，略小于或大于所需线径的平行部分组成。定径区长度一般在孔径的20%至80%之间。公差范围和定径长度依据线材的材质而定。
Bearing: It consists of a parallel portion of diameter equal to, little less or more than desired wire diameter. Bearing length is between 20% and 80% of the wire diameter. Diameter tolerance and Bearing length depend on material being drawing.

5.减压区: 这使得线材可以顺利地从定径区中离开，避免接触任何可能划伤线材的锋利边缘。
Back Relief：This allows the wire to exit freely from the bearing, avoiding contact with any sharp edge that could scratch the wire.

6.出口区: 线材通过出口区域从模具中离开，该区域有足够的高度为轴向机械应力提供支撑。
Exit：The wire exits the die through exit zone, which has enough height to provide support for the axial mechanical stress.

模具规格 Die Specifications

拉丝模典型压缩区角及定径长度
Reduction angle and Bearing length

减面率 Surface reduction rate	软质线 Soft wire products	硬质线 Hard wire products
5%-8%	12°± 2°	8°± 1°
8%-12%	14°± 2°	10°± 1°
12%-16%	16°± 2°	14°± 1°
16%-25%	20°± 2°	15°± 1°
25%-35%	23°± 1°	17°± 1°
定径长度 Bearing length	0. 2-0. 5d	0. 3-0. 8d

◎ 其它应线材需求有不同之标准形状
Standard configurtions for other wire types also available.

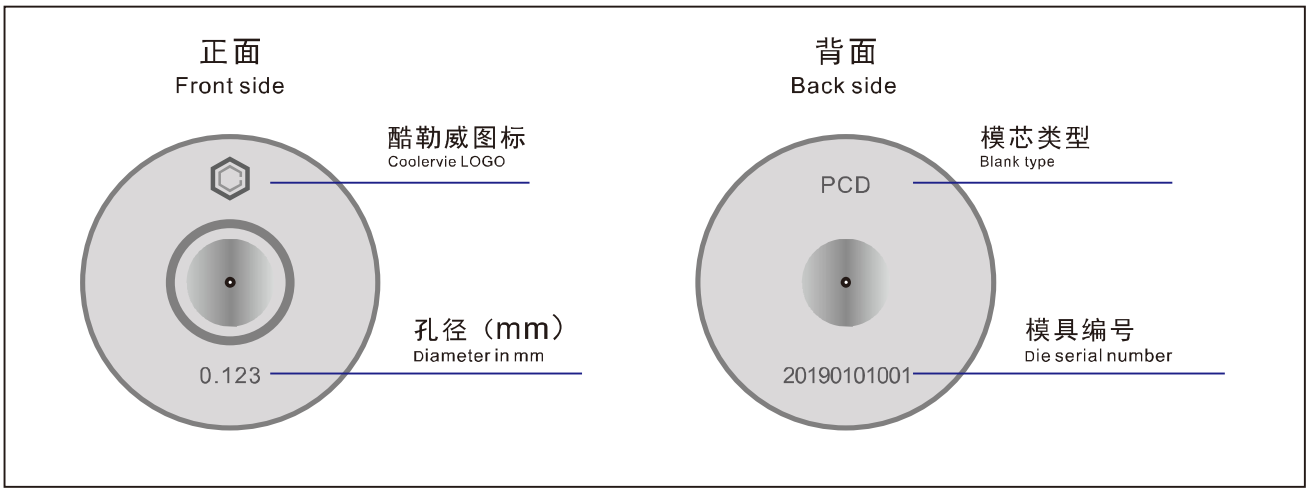
◎ 软质线. . . . . 铜线、铝线、金线、其它

◎ 硬质线. . . . . 不锈钢、镀铜铜线、合金钢线、镀铝线、钨丝线、其它

◎ Soft wire products.....
Copper wire,aluminum wire, brass wire ,gold wire,etc.

◎ Hard wire products.....
Stainless steel wire,copper plated steel wire,galvanizde steel wire,brass plated steel wire,tungsten wire,etc.

标准产品外观
Standard Product Coding



聚晶拉丝模具 PCD Wire Drawing Dies

聚晶金刚石模芯是由金刚石微粉在金属催化剂（钴）作用下烧结而成。主要分为三种类型：无加强环型，带硬质合金加强环型以及耐高温型。

根据线材表面质量要求，聚晶模芯的颗粒度可选择1至50微米。

酷勒威使用的聚晶模芯主要采用新亚、四方达等优秀国内供应商的人造钻石模芯以及日本住友Sumidia和美国康派丝Compax（原GE）等国际著名金刚石供应商的进口人造钻石模芯。



Polycrystalline diamond is sintered from micron-sized diamond particles and a binder (cobalt). Thre are three types: non-reinforced ring type, with reinforced ring type and heat stable type.

Blank grain sizes of 1 to 50 microns can be selected according to the surface quality requirements of the wire.

PCD die blanks selected by Coolervie mainly come from excellent Chinese diamond manufacturers like New Asia and SF Diamond, and famous global diamond manufacturers including Japanese Sumidia and American Compax(GE).



特点：	Features:
· 孔径范围0.05-8.0mm	· Diameter range 0.05-8.0mm
· 使用寿命长，适合长时间使用生产运行	· Long lasting tooling, ideal for long production runs
· 即使是重大磨损，生产的线材也可以保持圆形	· Wire remains round, even with significant wear
· 可靠的线材表面质量	· Reliable wire surface quality
· 适用于干拉,油拉和湿拉工艺	· Suitable for dry, oil and wet lubricant

适用线材：	Applicable wire:
· 铜线	· Copper wire
· 铝线	· Aluminum wire
· 钨丝	· Tungsten wire
· 钼丝	· Molybdenum wire
· 不锈钢丝	· Stainless steel wire
· 电镀钢丝	· Electroplated steel wire
· 特殊合金丝	· Special alloy wire



单晶拉丝模具 Mono Diamond Wire Drawing Dies

单晶金刚石，是一种在受控条件下人工合成的金刚石，它具有高纯净度，无杂质及无裂纹的特点。这些质量特性也使得拉丝模具的使用寿命比较稳定并具有可预测性。我司可提供优质中南单晶拉丝模和爱尔兰元素六进口单晶拉丝模



Mono /SSCD(Synthetic single crystal diamond) is a synthetic diamond under controlled conditions. It has high purity, no impurities and no cracks. These quality characteristics also make the life of the wire drawing die stable and predictable. Our company can provide domestic high quality single crystal drawing die and Irish Element Six imported single crystal drawing die.



特点：	Features:
· 孔径范围0.01-1.3mm	· Diameter range 0.01-1.3mm
· 采用111面人造单晶金刚石作为模芯，生产的模具定位精确，性能稳定	· 111-faced artificial single crystal diamond blank, accurate and stable
· 极高的硬度和抗磨损度确保了模具的使用寿命很长	· Extremely high hardness and wear resistance ensure long tool life
· 具有极好的散热性能，可用于高温加工工艺	· Excellent heat dissipation properties and can be used in high temperature environment
· 单晶金刚石为人工合成，其质量与一致性得到保证	· Single crystal diamond is synthetic and its quality and consistency are guaranteed
· 模孔表面光洁度极高，摩擦小	· Smooth surface and low friction coefficient

适用线材：	Applicable wire:
· 铜线	· Copper wire
· 铝线	· Aluminum wire
· 镀锡线材	· Tin-plated wire
· 不锈钢丝	· Stainless steel wire
· 切割线	· Saw wire
· 特殊合金丝	· Special alloy wire
· 贵金属线	· Precious metal wire



天然钻石拉丝模具 Natural Diamond Wire Drawing Dies

天然金刚石为世界上已知物质中最硬的材料，具有极高的硬度极好的导热性及光热性能。

Natural diamond is the hardest material among the world's known materials. It has extremely high hardness, good thermal conductivity and photothermal properties.





特点：	Features:
· 孔径范围0.01-1.3mm	· Diameter range 0.01-1.3mm
· 热导率高，可承受1700度高温	· High thermal conductivity, can withstand 1700 degrees high temperature
· 极高的硬度和抗磨损度确保了模具的使用寿命很长	· Extremely high hardness and wear resistance ensure long tool life
· 模孔表面光洁度极高，摩擦小	· Smooth surface and low friction coefficient

适用线材：	Applicable wire:
· 铜线	· Copper wire
· 铝线	· Aluminum wire
· 镀锡线材	· Tin-plated wire
· 不锈钢丝	· Stainless steel wire
· 切割线	· Saw wire
· 特殊合金丝	· Special alloy wire
· 贵金属线	· Precious metal wire



钨钢拉丝模具和纳米涂层模具 Tungsten Carbide and Nano Coated Wire Drawing Dies

碳化钨，也叫硬质合金，是由碳化钨颗粒和金属钴复合而成。碳化钨是一种非氧化性的硬质合金，即使在很高的温度下也能保持像刚玉或者宝石类似的硬度。碳化钨作为拉丝模具的模芯已有超过100年的历史，现在仍然在广泛应用。

金刚石涂层拉丝模以钨钢模为基体，经修模和特殊预处理后，再经超真空设备涂覆多层微米-纳米级别金刚石膜，明显提高模芯的耐磨能力和模具的使用寿命。

Tungsten carbide, also called cemented carbide, is a composite of tungsten carbide particles and metal cobalt. Tungsten carbide is a non-oxidizing hard alloy that maintains a similar hardness to corundum or gemstones even at very high temperatures. Tungsten carbide has been used as a core for wire drawing dies for more than 100 years and is still widely used.

The nano coated drawing die is made of tungsten carbide die, which is modified and specially pretreated, and then coated with multi-layer micron-nanometer diamond film by ultra-vacuum equipment, which obviously improves the wear resistance of the die core and the service life of the die.



适用线材：	Applicable wire:
· 铜线(管)	· Copper wire（Pipe）
· 铝线(管)	· Aluminum wire（Pipe）
· 不锈钢丝(管)	· Stainless steel wire（Pipe）
· 特殊合金丝(管)	· Special alloy wire（Pipe）
· 贵金属线(管)	· Precious metal wire（Pipe）

特点：	Features:
· 孔径范围0.05-35mm	· Diameter range 0.05-35mm
· 硬度高，导热性好，摩擦系数小	· High hardness, good thermal conductivity and low friction coefficient
· 成本较低，用在一些损耗很大，硬度很高的线材加工工艺中	· Low cost, used in some wire processing processes with high loss and high hardness
· 使用时均匀磨损	· Uniform wear and tear during use
· 碳化钨模芯可承受2800℃高温	· Can withstand 2800℃high temperature

半成品模具 Semi-finished Dies

酷勒威拉丝模有限公司也可为客户提供各类半成品拉丝模具。酷勒威严格挑选优质的模芯进行镶套，再通过成熟的激光技术，一次性钻孔成形。在保证定径区孔径达到要求的前提下，同时激光切割出内孔的形状和角度，大大降低了后期成品研磨的加工难度和成本。



Coolervie also provides customers with semi-finished wire drawing die. After strict selection of high-quality die blank for insertion, Coolervie then finishes one-time drilling forming with mature laser technology. Under the premise that the aperture of the reduction zone meets the requirement, the shape and angle of the inner hole are created by laser, greatly reducing the difficulty and cost of finishing grinding in the later stage.



涂漆模具 Enameling Dies

精选优质天然金刚石、聚晶金刚石、碳化钨为原材料，模具孔径控制精确，容易获得漆层均匀的线材表面。

广泛配套各种国产或进口漆包机器。





Select high-quality ND, PCD, TC as die blanks. The die aperture is precise, easy to obtain a uniform paint surface of the wire.

Can be used in a wide range of domestic or imported enamel machines.





钛合金镀锡模具 Tinning Dies

- 优质精选天然钻石，单晶金刚石，聚晶金刚石为原材料。
- 特点:精度高，镀层均匀，寿命长。使用钛合金外套，重量轻。
- 适用于各种镀锡设备。

- Select ND, Mono, PCD as die blank.
- Features: high precision, uniform coating and long life. Use titanium alloy casing, light weight.
- Suitable for all kinds of tin plating equipment.



绞线模具束线模具 Bunching and Stranding Dies

绞线模，束线模通常用于引导和压实电线，从而生产通常由几个导电线缆组成的电线。应用于包括高，中和低电压电缆和汽车电线。根据客户要求，我们可以提供聚晶和硬质合金两种材质的绞线模，束线模。

Bunching and stranding dies are commonly used to guide and compact wires to create cables that usually consist of several electrically conducting wires. Applications include high, medium and low voltage cables and automotive wires. According to customer requirements, we can provide stranding die and bunching die with PCD or tungsten carbide blank.



挤出模具 Extrusion Tips and Dies

挤出工具通常用于在实心或绞合线周围施加绝缘层。

精选优质聚晶金刚石、碳化钨为原材料。

Extrusion tools are commonly used to apply aninsulating layer around a solid or stranded wire.

Can use PCD and TC as die blank.

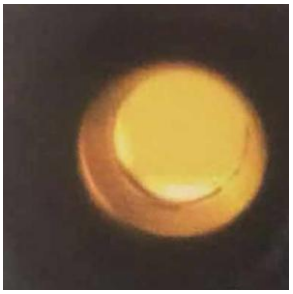


维修和保养 Repair & Maintenance

模具是拉拔过程中的一个重要部分，但值得注意的是，它是生产链的一部分，它的性能与机器的其他部分如润滑剂、原料等相联系。所以，应当确保所有这些元素以最佳的方式合作。然而，即使所有的拉拔条件都在控制之下，拉拔过程也必然会导致模具磨损;线材在金刚石表面留下痕迹，使得模具维修成为必要。压缩区环状磨损、定径区孔径增大以及生产的线材表面光洁度降低等问题最终可能会导致模芯破裂，模具报废。

酷勒威拉丝模有限公司为客户提供模具的维修和保养服务。严格按照新模具的标准对使用过的模具进行孔径修改和模芯内表面整形抛光，从而显著延长模具的使用寿命，降低客户的生产成本。





维修前
BEFORE



维修后
AFTER

The die is an important part of the drawing process, but it is important to understand that it is part of a chain and that its performance is linked to other parts like the machine, the lubricant, the raw material, etc. So, it is important to make sure that all these elements work together in the best way possible.

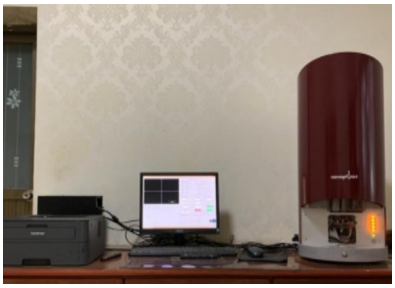
Nevertheless, even when all the drawing conditions are under control, the drawing process puts wear in the dies; the wire leaves marks on the diamond surface and die maintenance becomes necessary. Problems such as ring wear in the reduction zone, increase of the aperture in the bearing zone and decrease of the surface finish may eventually lead to blank rupture and die scrap.

Coolervie Wire Drawing Die Co., Ltd. provides customers with die repair and maintenance service. In strict accordance with the standards of new dies, the used dies are modified in aperture and the inner surface of the blank is reshaped and re-polished, thus significantly prolonging the service life of the dies and reducing the production cost for customers.

质量监控 Quality Control

安徽酷勒威拉丝模有限公司在二十多年的发展过程中，逐渐形成了完善的质量监控体系。

Anhui Coolervie Wire Drawing Die Co., Ltd. has gradually formed a complete quality control system in the development process of more than 20 years.



挪威Conoptica CU-11 激光测量
Norwegian Conoptica CU-11

本设备是模具质量监控的的最终测控系统，能够全方位的测量模具的内孔，提供包含孔径尺寸，内孔角度等全面的模具质量报告。

This equipment is the final measurement and control system for wire drawing die quality monitoring. It can measure the inner hole of the die in all directions and provide a comprehensive die quality report.



大能激光测孔仪 DALA 500S

国产激光3D测孔设备，全方位检测模具内孔，提供孔径、压缩区角度、定径区长度和椭圆度等核心数据。

Chinese laser 3D hole inspection equipment, providing comprehensive detection of dies internal holes and delivering key data including hole diameter, reduction angle, bearing length, and ovality.



法国线径测径仪
French CERSA-MCI Line
Diameter Measuring Instrument

在模具定径研磨后帮助测量模具所拉线材的实际直径以及真圆度，从而达到监控模具最终生产效用的目的。

Help to measure the actual diameter and circularity of the wire drawn from the die after the grinding process, so as to achieve the purpose of monitoring the final production efficiency of the die.

合作伙伴 Partners



拉丝设备 Drawing Machine



车间图集 Workshop Gallery



团队合照
Team Photo


模壳生产车间
Case Production


模壳抛光
Case Polishing

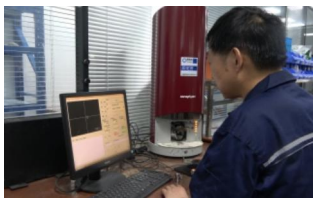

镶套车间
Sintered Inlays


自动化数控车间
Automated CNC


精工车间
Precision Machining

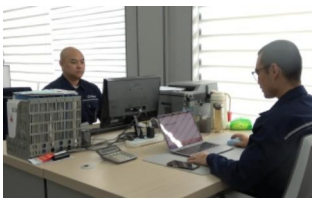

小孔径激光车间
Small Hole Laser


大孔径激光车间
Big Hole Laser


激光质检
Laser QC


成品抛光
Polishing

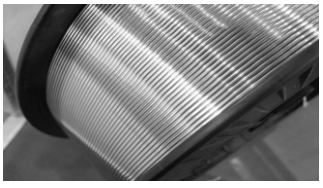

质检室 QC


办公区 Office

模具应用 Applications of Dies


铜线 Copper Wire

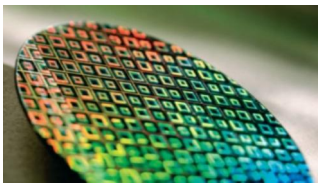

钢缆 Wire Rope

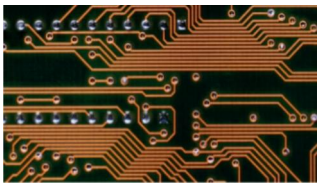

弹簧线 Spring Wire


医疗配件 Medical Parts


太阳能电板 Solar Cell


焊接 Welding Wire


硅晶片Silicon Wafer


键合线Bonding Wire

扫码
联系我们

地址：安徽省滁州市天长市

手机：+86 183 5503 8820

网址：http://www.coolervie.com

邮箱：sales@coolervie.com

更多信息请访问我们的官网或来电咨询。

Add：Tianchang City, Anhui Province

MB：+86 183 5503 8820

WhatsApp：+86 183 5503 8820

Web：http://www.coolervie.com/en/

Email：sales@coolervie.com

For more information, Please visit our web or contact us.