

江苏华工蓝天智能科技有限公司

Jiangsu HG Bluesky Intelligent Technology Co., Ltd.

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# Company Introduction

### 江苏华工蓝天智能科技有限公司

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Jiangsu HG Bluesky Intelligent Technology Co., Ltd.

江苏华工蓝天智能科技有限公司是武汉华工激光(上市公司华工科 技全资子公司)的控股公司,位于江苏省宿迁市宿城区激光产业园内, 是园内首批入驻的龙头企业,是国家高新技术企业。依托"华工激光" 的国家光电实验室、激光加工国家工程研究中心、院士工作站、博士后 科研工作站等技术机构,公司一直致力于研究替代传统冲压的激光落料 技术,向全球提供技术领先的、高品质的开卷落料智能装备解决方案及 相关产品,公司开发的各类型开卷落料线已应用于国内几十家企业,产 品还出口到波兰、墨西哥、巴西、印度、尼日利亚、土耳其等多个国 家,赢得良好的声誉。

Jiangsu HG Bluesky Intelligent Technology Co., Ltd. is the holding company of Wuhan HGLaser(wholly-owned subsidiary of listed company HGTECH), located in the laser industry park in Sucheng District, Sugian City, Jiangsu Province. It is the first batch of enterprises settled in the park and a national high-tech enterprise. Relying on such technical organizations of "HGLaser" as National Photoelectric Laboratory, National Engineering Research Center for Laser Processing, Academician Workstation, Post-doctoral Scientific Research Workstation, etc., the company has been committed to studying the laser blanking technology that can replace traditional stamping, and providing the world with advanced and high-quality uncoiling and blanking intelligent equipment solutions and related products. Various types of uncoiling and blanking lines developed by the company have been applied to dozens of domestic enterprises, The products are also exported to Poland, Mexico, Brazil, India, Nigeria, Turkey and other countries, gaining good reputation.

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### 一站式加工、省工、省料、智能

One stop processing, Labor saving, Material saving, Intelligent

Self-developed/updated iterative

( HGTECH

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自主研发 更新迭代

自动分拣下料

质量稳定 性能突出

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HGTECH

- 配套高精密矫平机 Matching high-precision leveling machine
- 滚动平台 动态切割 Rolling Platform Dynamic Cutting
- Automatic sorting and unloading
- Stable quality outstanding performance



### 圆片开卷落料线 **Circle Blanking Line**

圆片冲压落片工序是各种器皿生产的最基本过程,需要耗费大量的人力物力,如何节约成本, 提升效率和品质,都是厂家关注的问题,我们的产品在纵向送料的同时具有横向摆动送料功 能,满足了圆片落料的自动化生产的需求,提高了材料利用率和工作效率。

The circle stamping and blanking process is the most basic process for the production of various vessels, which requires a lot of manpower and material resources for production. How to save costs, improve efficiency and quality is a matter of concern to the manufacturers. Our products have the horizontal swing feeding function while feeding longitudinally, meeting the automatic production requirements of the circle sheet blanking, and improving the material utilization rate and working efficiency.





技术优势 Technical Advantages 效率高 高品质 High efficiency Hiah auality 生产线连续地使用卷料进行圆片生产,代替 设备设计时充分考虑避免对材料表面的划 了卷材先切片及持有片料进行冲孔生产的工 伤,校平机采用六重式保证材料表面质量 艺;同时采用快速换模系统,产品规格转换 以及先进的自动码垛系统等。 迅速,非常适合中、小批量生产。 The production line continuously uses the coiled The equipment is designed with full consideration material to produce round sheet, which replaces to avoid scratching the surface of the material. the process of cutting the coiled material first and The leveling machine adopts a six-fold type to holding the sheet material for punching production. ensure the surface quality of the material, as well At the same time, the fast mold change system is as the advanced automatic palletizing system. adopted, and the product specification changeover is fast, which is very suitable for medium and small batch production. 减少废料 减少工序 Waste reduction 使用卷料进行连续生产,不会产生单片时料 头料尾的损耗。 和避免材料表面划伤。 Continuous production with coiled materials. without loss of head and tail materials when producing a single piece. afety and reliability 减少了人员,降低了工人劳动强度,充分保 护人员安全。 成本和调试难度。

Reduce personnel, reduce labor intensity and fully protect personnel safety.

Since a set of molds is used for stamping, the mold manufacturing cost and debugging difficulty are reduced



Industry Application

- / 我们提供全面圆片落料处理方案, 效率高, 圆片冲压次数达到40-60次/分; / 材料利用率高,达到80%-85%;
- / 产出的圆片没有划伤、油迹、毛刺等缺陷,可以满足高端用户的需求,最适合多 品种、小批量圆片产品的生产制造。

we provide comprehensive round sheet blanking processing solution with high efficiency, the number of round sheet stamping reaches 40-60 times/min;

high material utilization rate reaches 80%-85%; / the output round sheet is free of defects such as scratches, oil stains, burrs, etc., which can satisfy the needs of high-end users, and is most suitable for the manufacturing of multiple types and small batches of round sheet products.

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高精度 Hiah flexibility

送料系统采用高精度伺服驱动控制,可保证 圆片与圆片之间间距减到最小,减少了材料 损耗。

The feeding system adopts high-precision servo drive control, which can ensure the minimum distance between round sheets and reduce material loss.

Process reduction

生产线无需进行材料切片,减少了时间损耗

No material slicing is required for the production line, reducing time loss and avoiding material surface scratch.

慔具费用低 Low mold cost

由于用一套模具进行冲压,降低了模具制造



-liah output

The production speed can reach 40-60 pieces per minute.



节约原材料 Saving raw materials

设备可根据卷材宽度和圆片直径自动排样 选择最合适的冲料角度,使圆片与圆片之 间、圆片与材料边缘之间的间距减小,减少 了废料,节约了成本,材料利用率可达到 80%以上,远远优于传统圆片落料方式。

The equipment can automatically arrange samples according to the width of the coil and the diameter of the round sheet, select the most appropriate punching angle, reduce the distancebetween round sheets and the material edge, reduce the waste, save the cost, and the material utilization rate can reach over 80%, which is far better than the traditional way of round sheet blanking.

## 激光落料线 Laser Blanking Line

激光落料线将开卷落料线和激光切割的工作理念进行巧妙组合,解决连续的金属和非金属带 料的无模具快速下料问题,减少了下料设备的投资及模具消耗,"高效的优化排样软件及多 通道编程控制软件"使激光"无搭边切割技术"发挥到极致,有效提高了材料的利用率,为 客户实现智能制造提供了可靠的方案,填补了我国高端切割落料装备的空白,技术达到国内 领先、国际先进水平。

The laser blanking line combines the working concepts of uncoiling blanking line and the laser cutting ingeniously solves the rapid blanking problem of continuous metal and non-metal strip materials without mould, reduces the investment and mould consumption of the blanking equipment, and the "efficient optimization layout software and multi-channel programming control software"makes the laser cutting"no-lap cutting technology"play a full role, effectively improving the utilization rate of materials, provides a reliable solution for customers to realize intelligent manufacturing, fills the gap of China's high-end cutting and blanking equipment. The technology reaches the domestic leading and international advanced level.







与现有大型落料生产设备相比,激光切割落 料生产线设备质量小,能耗低,且无需复杂 的设备基础,大大降低了前期投资和后期维 护使用成本。

Compared with the existing large blanking production equipment the laser cutting blanking production line has small equipment weight, low energy consumption and no complex equipment foundation is required, greatly reducing the preliminary investment and the later maintenance and use costs.



### ligh product quality

采用高精度的校平机、高精度的送料及切割 系统、先进的自动码垛系统等,可适应各种 金属材料的零件坯料生产。

Adopt high-precision leveling machine, highprecision feeding and cutting system, advanced automatic palletizing system, etc., which can adapt to the production of parts blank of various



### Industry Application

- / 符合社会节能减排的发展规划:
- /提高毛坯质量,同时方便企业物料管理,减少物料损耗;
- / 不需要模具投入,设备柔性好,可最大化的满足用户的产品需求;
- / 该项目可提高材料利用率达5%~15%, 能够带来巨大的经济效益;
- / 采用自动化生产,可以大量降低人力,降低生产成本,并保证了劳动者的安全。
- / In line with the development plan of social energy saving and emission reduction; / Improve blank quality, facilitate enterprise material management and reduce material loss;
- / There is no need for mold input, and the equipment has good flexibility, which can meet the user's product requirements to the maximum extent;
- The project can improve the material utilization rate by 5% ~15%, which can bring huge economic benefits;



灵活性高

量产品生产。

production.

音。

environmental noise

无需制造模具,采用先进的排样软件及控制 系统,产品规格形状转换迅速,适合各种批

No need to manufacture mould, advanced lavout software and control system are adopted, and the product specification and shape are quickly switched, which is suitable for a variety of batch

> 使用成本低 l ow use cost

由于不需要模具进行冲压,降低了模具制造 和维护费用;同时设备没有使用大型压力 机,生产能耗大大降低,也降低了环境噪

Since no mold is needed for stamping, the mold manufacturing and maintenance costs are reduced; at the same time, the equipment does not use large presses, the production energy consumption is greatly reduced, so as the



维护成本低 Low maintenance cost

采用免维护的光纤激光切割器,性能可靠 同时激光切割速度快,不锈钢的切割速度可 达到每分钟50米/分钟以上(厚度1mm时), 可快速完成切割下料

Adopt maintenance-free fiber laser cutter. with reliable performance; At the same time, the laser cutting speed is high, and the cutting speed of stainless steel can reach more than 50 m/min (when the thickness is 1mm), which can quickly complete the cutting and blanking.



材料利用率高 ligh material utilization rate

因为使用卷料进行连续生产,不会产生单片 时料头料尾的损耗;同时设备采用优化排 样,将各种形状的零件组合进行无搭边切 割,减少了材料损耗,提高了材料利用率。

Because of the use of coils for continuous production, there will be no loss of material head and tail when single piece; at the same time, the equipment adopts optimized layout, and the combination of various shapes of parts is cut without overlap, which reduces the material loss and improves the material utilization.

The use of automatic production can greatly reduce manpower and production costs, and ensure the safety of workers.

## 行业应用 Industry application

#### 我们致力于为智能制造提供先进的落料解决方案,集约工序,提升生产效率和加工品质,产品广泛应用 于汽车制造、电机电器、五金厨具、建筑幕墙、设备配件、船舶行业、新能源等行业。

We are committed to providing advanced blanking solutions for intelligent manufacturing, intensive processes, improving production efficiency and processing quality, and the products are widely used in automobile manufacturing, electrical machinery, hardware and kitchenware, building curtain wall, equipment and accessories, shipbuilding industry, new energy, etc.













○ 电机电器 Electric Motor





○新能源 New Energy



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### 行业应用 Industry application

我们技术和产品的至高目标是提高用户的市场竞争力,使得用户的工作更简单、更具备效率、经济效益更好。截至 2023年,我们已经为国内外多家企业生产了50多台落料线,取得了良好效果。同时我们也在将该产品推广到汽车 零部件行业,向汽车钢制轮辐、离合器等,市场前景十分广阔。我们完善的服务体系,也会持续为客户创造价值, 期待与您的合作!

The highest goal of our technologies and products is to improve the market competitiveness of users, so that our users' work is simpler, more efficient, and with better economic benefits. By 2023, we have produced more than 50 blanking lines for many domestic and foreign enterprises achieve good results. At the same time, we are also promoting this product to the automobile parts industry, and the market prospect is very broad for automobile steel spokes and clutches. Our perfect service system will continue to create value for customers, and we are looking forward to cooperate with you.

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Laser Blanking line GR-3 5X1850 2-40

### 优质高效的服务与支持 Service and Support

#### /售后服务 After-sale Service

#### 合同规定的期限和维护范围内提供免费保修与维护,积极响应客户所提出的各种技术 支持及维修要求,确保设备正常使用。

We provide free warranty and maintenance within the contracted period and maintenance range, and actively respond to various technical support and maintenance requests from customers to ensure normal use of the equipment.

#### / 技术支持 Technical Support

#### 根据客户的需求和具体情况对项目工程作出可行性分析及建设方案,以减少不必要 的投资项目,并和用户共同建设稳定的应用环境。

We analyse the feasibility of the project according to the customer's needs and the specific situation, so as to reduce unnecessary investment projects and build a stable application environment together with the user.

#### |日常服务 Daily Service

#### 咨询服务、技术支持、项目评估、免费培训。全方位的服务管理体系和健全的服务 流程是保证优质服务的基础。

Consulting services, technical support, project evaluation and free training. A comprehensive service management system and a sound service process are the basis for quality service.

#### /工程服务 Engineering Service

#### 为客户提供现场安装、调试和试验、维护保修等服务,以实现在项目中系统运行 环境、操作安全和稳定应用的要求。

We provide customers with on-site installation, commissioning and testing, maintenance and warranty services to realise the requirements of system operating environment, operational safety and stable application in the project.





#### 华工激光致力于激光智能装备、自动化产线到智能工厂的整体解决方案,携手客户 价值。作为其子公司,华工蓝天专注落料解决方案和产线,为智能制造添彩。

HG Laser is committed to creating comprehensive solutions for laser intelligent equipment, automated production lines and smart factories, working together with customers to create value. As one of them, Huagong Blue Sky focuses on blanking solutions and production lines, adding value to intelligent manufacturing.











