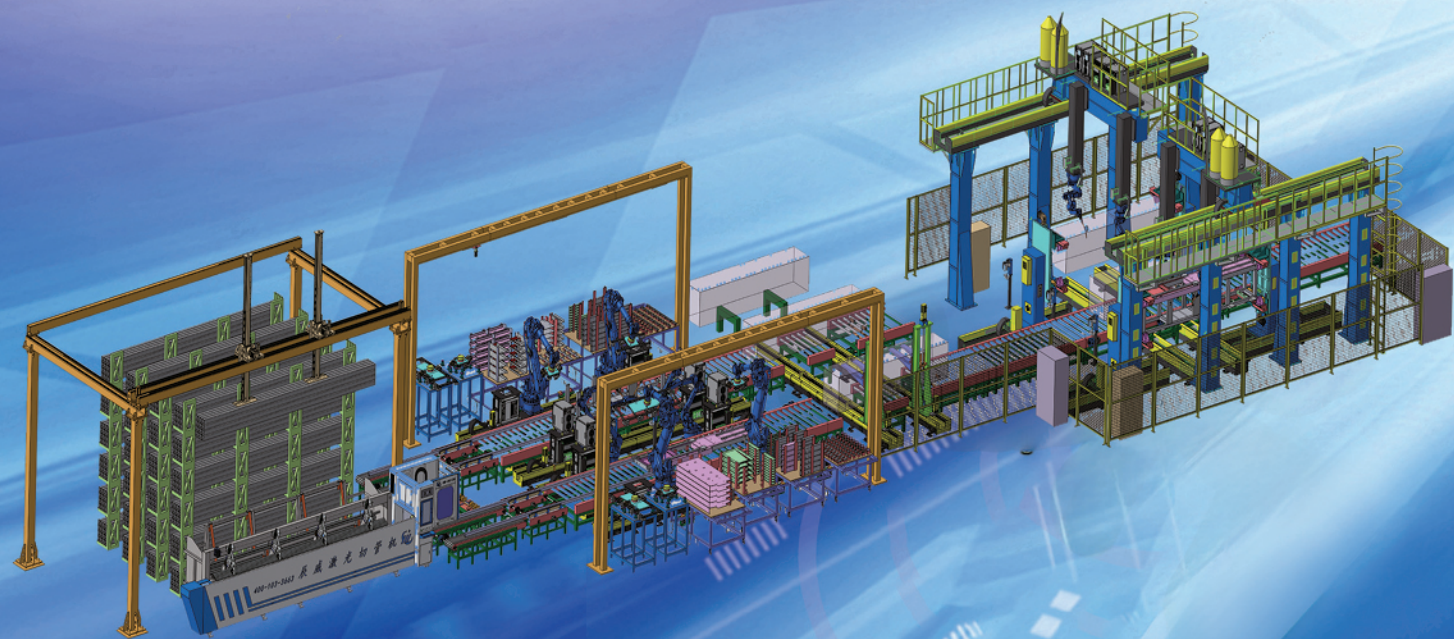


服务热线：400-103-3663



广东辰威

整体解决方案提供商



广东辰威机器人有限公司

Guangdong Chenwei Robotics Co., Ltd

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销售直线：13925398068 18825331618

电 话：0760-28205608 28205609

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地 址：广东中山小榄龙成路7号

GUANGDONG CHENWEI ROBOT CO., LTD

广东辰威机器人有限公司

2011

辰威公司成立于 2011 年
Chenwei Company was established in 2011

500

注册资本 500 万
Registered capital: 5 million yuan

20000 +

工厂占地面积 20000 平方米
The factory covers an area of 20,000 square meters

50 +

拥有权威、专利证书 50 多个
It owns more than 50 authoritative patents and certificates

20000 +

为全球提供超 20000 多台设备
It has provided more than 20,000 sets of equipment globally

100 +

服务全球 100 多个国家和地区
It serves more than 100 countries and regions around the world

INTRODUCTION

公司简介

广东辰威机器人有限公司成立于 2011 年，专注于工业智能装备的整体解决方案，已通过 ISO9001 质量管理体系认证，是国家高新技术企业、科技型中小企业、专精特新企业、创新型中小企业等，现拥有发明专利、实用新型专利、高新技术产品认证、软件著作权等近五十项证书。

依托多年来在自动化领域的深入研究和丰富的系统集成经验，产品已广泛服务于：汽车、摩托车、童车、金属家具、家用电器、医疗器械、健身器材、新能源、5G 等行业。

未来辰威将继续聚焦工业生产自动化的痛点，为工业 4.0 智慧工厂奉献全部力量，努力为用户提供有竞争力的解决方案，持续为社会创造价值。

Guangdong Chenwei Robot Co., Ltd. was established in 2011. It focuses on the overall solutions for industrial intelligent equipment and has passed the ISO9001 quality management system certification. It is a national high-tech enterprise, a small and medium-sized scientific and technological enterprise, a specialized, refined, distinctive and innovative enterprise, and an innovative small and medium-sized enterprise. Currently, it owns nearly fifty certificates, including invention patents, utility model patents, high-tech product certifications, and software copyrights.

Relying on in-depth research in the field of automation and rich experience in system integration over the years, its products have been widely used in industries such as automobiles, motorcycles, children's bicycles, metal furniture, household appliances, medical devices, fitness equipment, new energy, and 5G.

In the future, Chenwei will continue to focus on the pain points in industrial production automation, contribute all its efforts to the intelligent factories of Industry 4.0, strive to provide users with competitive solutions, and continuously create value for society.

愿景 | VISION

成为全球智能制造领域的引领者
Driving the future of smart manufacturing worldwide

使命 | MISSION

打造智能、高效、可持续的工业未来
To shape an intelligent, efficient, and sustainable industrial future

价值观 | VALUES

敢为人先 责任担当 精诚协作 智创未来
Embrace boldness, take responsibility, collaborate with integrity, and drive innovation for tomorrow

企业荣誉

ENTERPRISE HONOR

- 中国高新技术企业
- 中国科技型中小企业
- 中国连续十年守合同重信用企业
- 广东省专精特新企业
- 广东省高新产品认证企业
- 国际 ISO 9001 质量管理体系认证企业
- 南方数据研究院协同研发基地
- 华南理工大学研究院产学研基地
- 广东人社厅首批百企博创平台培育计划 20 家企业之一



辰威发展历程

DEVELOPMENT HISTORY OF THE COMPANY

一起细数走过的征程，以今日荣耀作序，再启美好新里程！

2011年
 成立于中国广东
 定位于为客户提供整体解决方案

2012~2013年
 开始将自动化产品应用于车辆、船舶、钢结构等行业
 数控龙门等离子切割机开始出货

2014年
 与安川凯尔达签约战略合作协议，开始工业机器人的集成应用
 引入超低飞溅焊接机器人概念

2015~2016年
 成功入库工业母机企业
 第一条机器人冲压联线交付成功，并事后申请发明专利

2017~2018年
 获评名优高新产品企业
 广东创新型中小企业

2019年
 获评国家高新技术企业
 国家科技型中小企业

2020年
 产值过亿
 激光焊、切类产品开始批量出货

2021~2022年
 入库协同创新智能制造供应商
 高速高精激光切管机研发成功并开始量产

2023年
 通过 ISO9001 质量体系认证
 获评广东省专精特新中小企业



G 系列机型 超高速高精精密激光切管机

ULTRA-HIGH-SPEED AND HIGH-PRECISION LASER PIPE CUTTING MACHINE



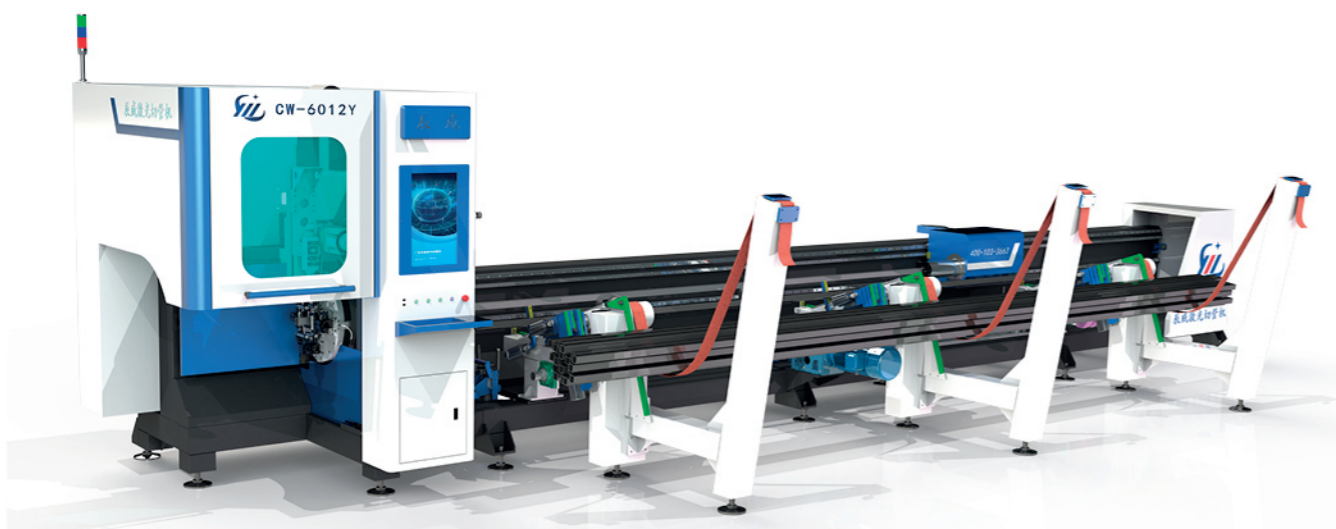
K 系列机型 超主流高精精密激光切管机

ULTRA-MAINSTREAM HIGH-PRECISION LASER TUBE CUTTING MACHINE



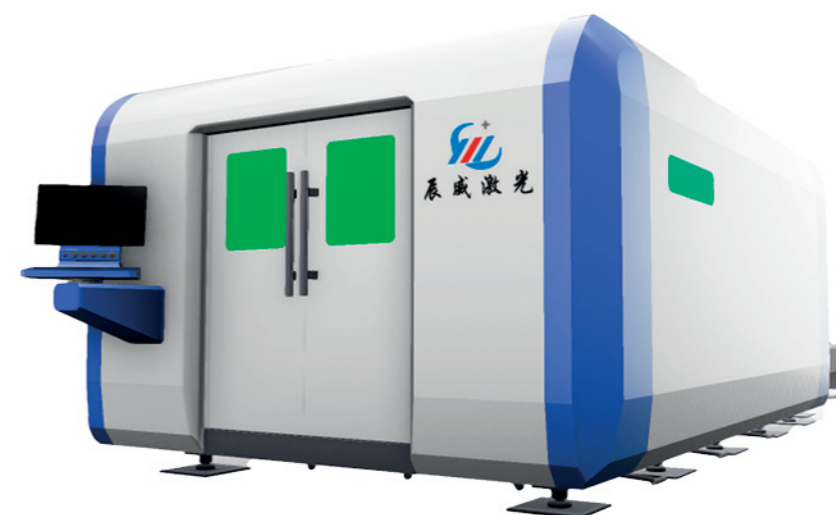
Y 系列机型 超性能高精精密激光切管机

SUPER PERFORMANCE HIGH-PRECISION LASER TUBE CUTTING MACHINE



切板机系列 中高功率激光切板机

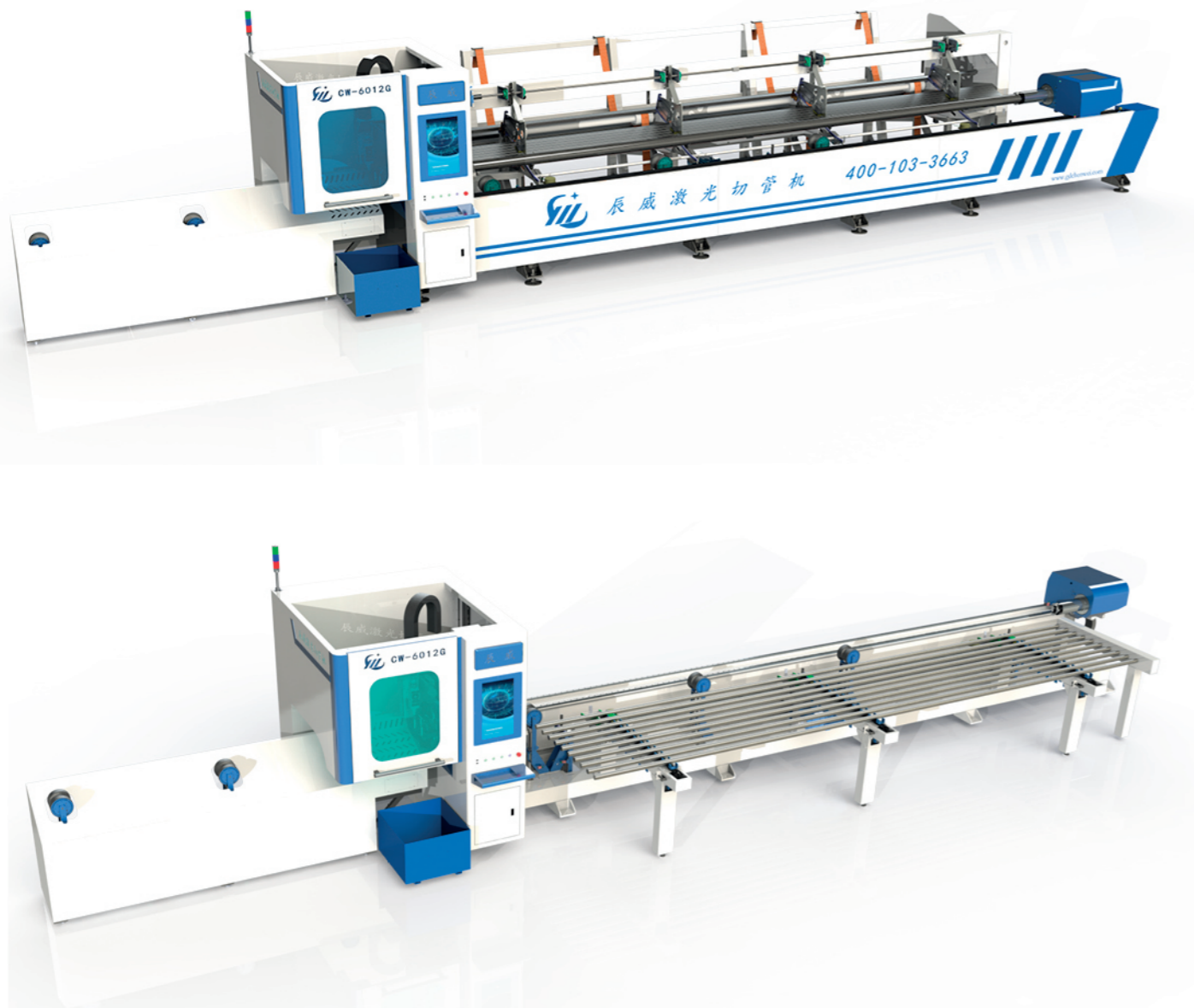
MEDIUM TO HIGH POWER LASER CUTTING MACHINE



G 系列机型

超高速高精激光切管机

ULTRA-HIGH-SPEED AND HIGH-PRECISION LASER PIPE CUTTING MACHINE

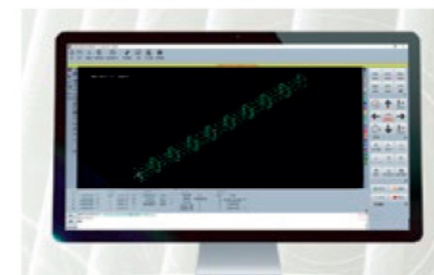


技术参数 Technical parameters

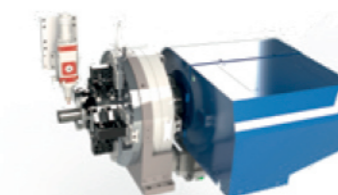
产品型号 Product Model	CW-6012G	CW-6016G	CW-6023G	CW-6028G	CW-6036G
管材大小范围 Pipe size range	8mm-120mm	10mm-165mm	15mm-240mm	20mm-280mm	25mm-360mm
功率范围 Power range	1500W-6000W		3000W-20000W		
管材长度范围 Pipe length range	≈ 6200mm	≈ 6500mm	≈ 6500mm	≈ 6500mm	≈ 6500mm
重复定位精度 Repetitive positioning accuracy	0.02mm				
卡盘转速 Chuck speed	200r/min	160r/min	120r/min	80r/min	60r/min
上料形式 Loading form	手动 / 半自动 / 全自动 Manual / Semi-automatic / Fully automatic				
机型尺寸 Model size	≈ 9.5*3*2.5m	≈ 9.5*3*2.5m	≈ 9.6*3*2.5m	≈ 10*3*2.5m	≈ 10*3*2.5m
切管类型 Cutting pipe type	圆管、方管、椭圆管、角钢、凹槽、H型钢、异型管等 Round pipes, square pipes, oval pipes, angle steel, grooves, H-section steel, special-shaped pipes.				
最大加速度 Maximum acceleration	2.0G	1.2G	1.0G	1.0G	0.8G
切管材质 Cutting tube material	不锈钢、碳钢、铝材、铜、铁等金属材料 Metal materials such as stainless steel, carbon steel, aluminum, copper, iron, etc				

产品特点 Product features

- 床身为搭载自动上料系统减小占地面积而设计优化，经两次高温退火处理保证床身的高刚性高稳定性。
The bed body is designed and optimized to reduce the floor area for the installation of the automatic feeding system. It has undergone two high-temperature annealing treatments to ensure high rigidity and high stability of the bed body.
- 后卡可穿越前卡设计，尾料最短可达 0~60mm
The rear chuck can pass through the front chuck in its design, and the remaining material at the tail can be as short as 0 - 60 mm.
- 配置合金精密款外夹爪自定心气动卡盘，精度更高，前后卡盘全密封设计可靠性更强
It is equipped with alloy precision external clamping jaws and self-centering pneumatic chucks, which have higher precision. The fully sealed design of the front and rear chucks makes it more reliable.
- 龙门式伺服控制上料架，有效防止管材上料过程中的翻转，堆叠，错位使上料更稳定，换产品上料调试更高效
The gantry-type servo-controlled feeding rack can effectively prevent pipes from turning over, stacking and misalignment during the feeding process, making the feeding more stable and the debugging for product change and feeding more efficient.
- 上料系统可选配全自动整捆上料及半自动排列式上料
The feeding system can be optionally equipped with fully automatic whole-bundle feeding and semi-automatic arranged feeding.
- 速度、精度处于行业先进水平，适合大多数行业精密切割
The speed and precision are at the advanced level in the industry. It is suitable for precision cutting in most industries.



智能管材切割系统
Intelligent pipe cutting system



后卡可穿越设计
Rear chuck pass-through design



高强度床身结构
High-strength bed structure

Y 系列机型

超性能高精度激光切管机

SUPER PERFORMANCE HIGH-PRECISION LASER TUBE CUTTING MACHINE

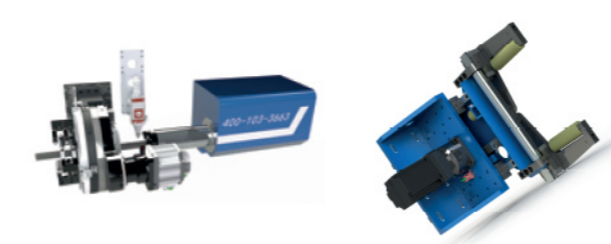


技术参数 Technical parameters

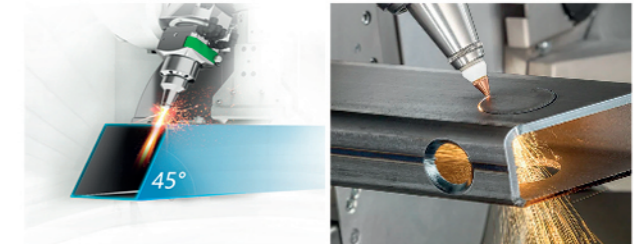
产品型号 Product Model	CW-6012Y	CW-6016Y	CW-6023Y	CW-6028Y	CW-6036Y
管材大小范围 Pipe size range	8mm-120mm	10mm-165mm	15mm-240mm	20mm-280mm	25mm-360mm
功率范围 Power range	1500W-6000W		3000W-20000W		
管材长度范围 Pipe length range	≈ 6500mm	≈ 6500mm	≈ 6500mm	≈ 6500mm	≈ 6500mm
重复定位精度 Repetitive positioning accuracy	0.02mm				
卡盘转速 Chuck speed	260r/min	180r/min	120r/min	80r/min	60r/min
上料形式 Loading form	手动 / 半自动 / 全自动 Manual / Semi-automatic / Fully automatic				
机型尺寸 Model size	≈ 9.5*3*2.5m	≈ 9.5*3*2.5m	≈ 9.6*3*2.5m	≈ 10*3*2.5m	≈ 10*3*2.5m
切管类型 Cutting pipe type	圆管、方管、椭圆管、角钢、凹槽、H型钢、异型管 Round pipes, square pipes, oval pipes, angle steel, grooves, H-section steel, special-shaped pipes.				
最大加速度 Maximum acceleration	2.2G	1.3G	1.2G	1.2G	1.0G
切管材质 Cutting tube material	不锈钢、碳钢、铝材、铜等金属材料 Metal materials such as stainless steel, carbon steel, aluminum, copper, etc				

产品特点 Product features

01 伺服越位切割、伺服随动加强托料支架
SERVO OFFSIDE CUTTING, SERVO FOLLOW-UP STRENGTHENING MATERIAL SUPPORT BRACKET.



02 可选配坡口切割功能
OPTIONAL BEVEL CUTTING FUNCTION.



应用案例 Application cases



电动车架
Electric frame



家具校具
Furniture and school equipment



户外用品
Outdoor products



医疗健身
Medical fitness



建筑建材
Building materials



电梯制造
Elevator manufacturing



五金配件
Hardware accessories



家用电器
Household Electric Appliances

K 系列机型 超主流高精精密激光切管机

ULTRA-MAINSTREAM HIGH-PRECISION LASER TUBE CUTTING MACHINE



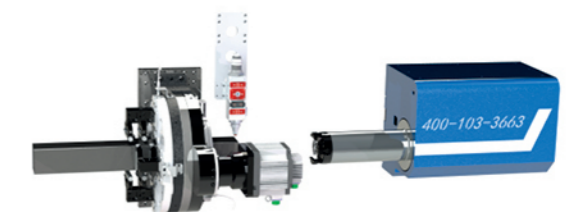
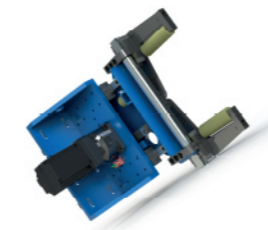
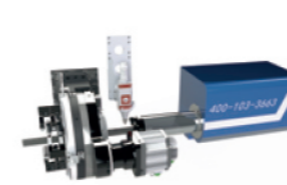
技术参数 Technical parameters

产品型号 Product Model	CW-K12max	CW-K16max	CW-K23max	CW-K28max	CW-K36max
管材大小范围 Pipe size range	8mm-120mm	10mm-160mm	15mm-240mm	20mm-280mm	25mm-360mm
功率范围 Power range	1500W-6000W		3000W-20000W		
管材长度范围 Pipe length range	≈ 6500mm	≈ 6500mm	≈ 6500mm	≈ 6500mm	≈ 6500mm
重复定位精度 Repetitive positioning accuracy	0.02mm				
卡盘转速 Chuck speed	200r/min	160r/min	120r/min	80r/min	60r/min
上料形式 Loading form	手动 / 半自动 / 全自动 Manual / Semi-automatic / Fully automatic				
机型尺寸 Model size	9.5*3*2.5m	9.5*3*2.5m	9.5*3*2.5m	9.8*3*2.5m	10*3*2.5m
切管类型 Cutting pipe type	圆管、方管、椭圆管、角钢、凹槽、H型钢、异型管等 Round pipes, square pipes, oval pipes, angle steel, grooves, H-section steel, special-shaped pipes.				
最大加速度 Maximum acceleration	2.0G	1.2G	1.0G	1.0G	0.8G
切管材质 Cutting tube material	不锈钢、碳钢、铝材、铜等金属材料 Metal materials such as stainless steel, carbon steel, aluminum, copper, etc				

产品特点 Product features

01 伺服越位切割、伺服随动加强托料支架
SERVO OFFSIDE CUTTING, SERVO FOLLOW-UP STRENGTHENING MATERIAL SUPPORT BRACKET.

02 可选配两卡零尾料功能
OPTIONAL TWO-CARD ZERO TAILING FUNCTION.

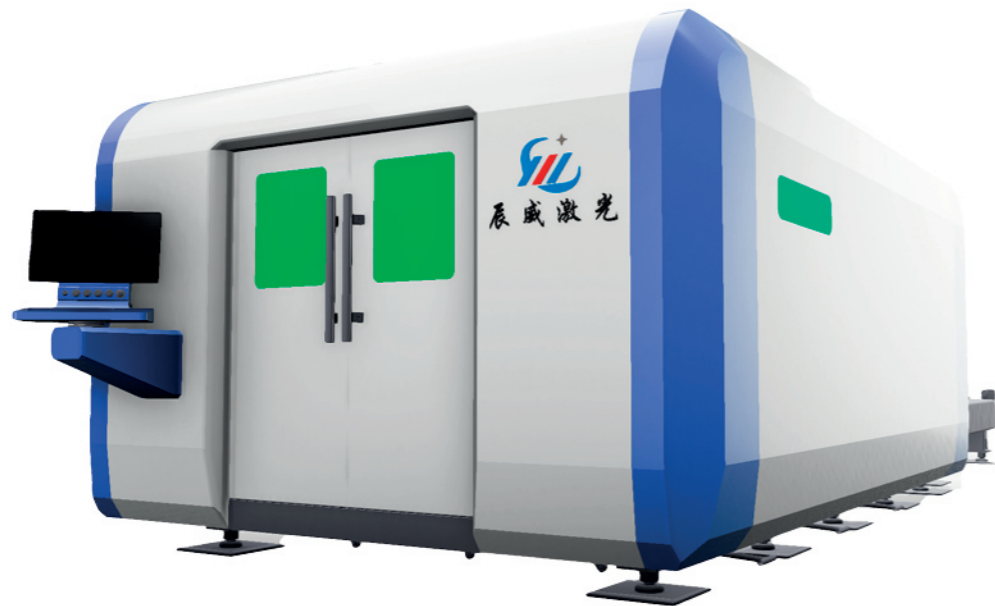
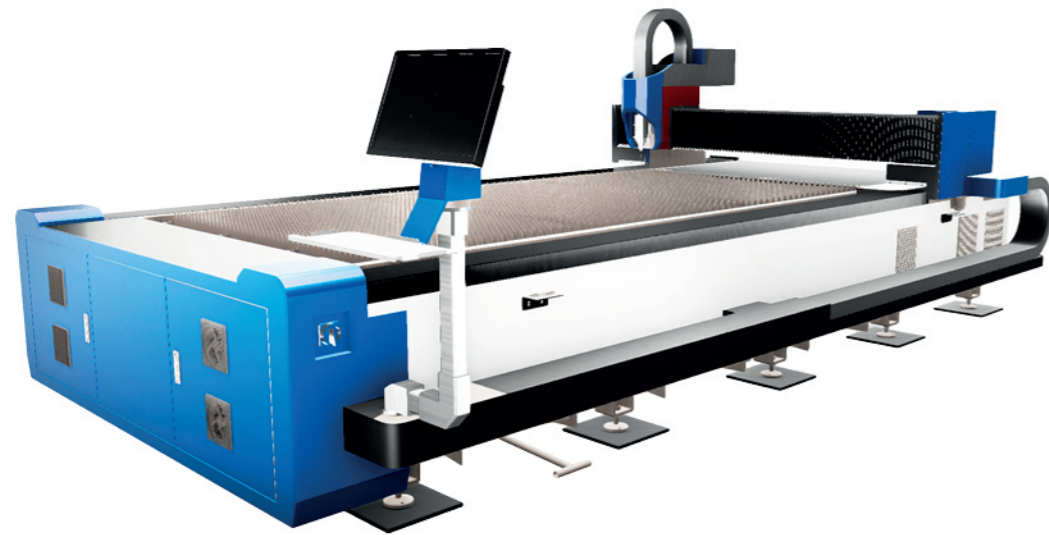


切割样品展示 Cutting sample display



切板机系列 中高功率激光切板机

MEDIUM TO HIGH POWER LASER CUTTING MACHINE



技术参数 Technical parameters

产品型号 Product Model	CW-3015	CW-4020	CW-6020	CW-6025	CW-12030
切割幅面 Cutting format	3000×1500mm	4000×2000mm	6000×2000mm	6000×2500mm	12000×3000mm
功率范围 Power range	1500W-60000W				
工作平台 Work platform	单平台 / 双平台 Single-platform/dual-platform				
重复定位精度 Repetitive positioning accuracy	0.02mm				
最大切割速度 Maximum cutting speed	单平台 140mm/min 双平台 160mm/min For single platform, 160mm/min for double platform				
最大加速度 Maximum acceleration	单平台 1.8G/ 双平台 2.0G Single-platform 1.8G/dual-platform 2.0G				
坡口选择 Bevel selection	可选配 Optional				
切割材质 Cut the material	不锈钢、碳钢、铝材、铜、铁等金属材料 Metal materials such as stainless steel, carbon steel, aluminum, copper, iron, etc				

产品特点 Product features

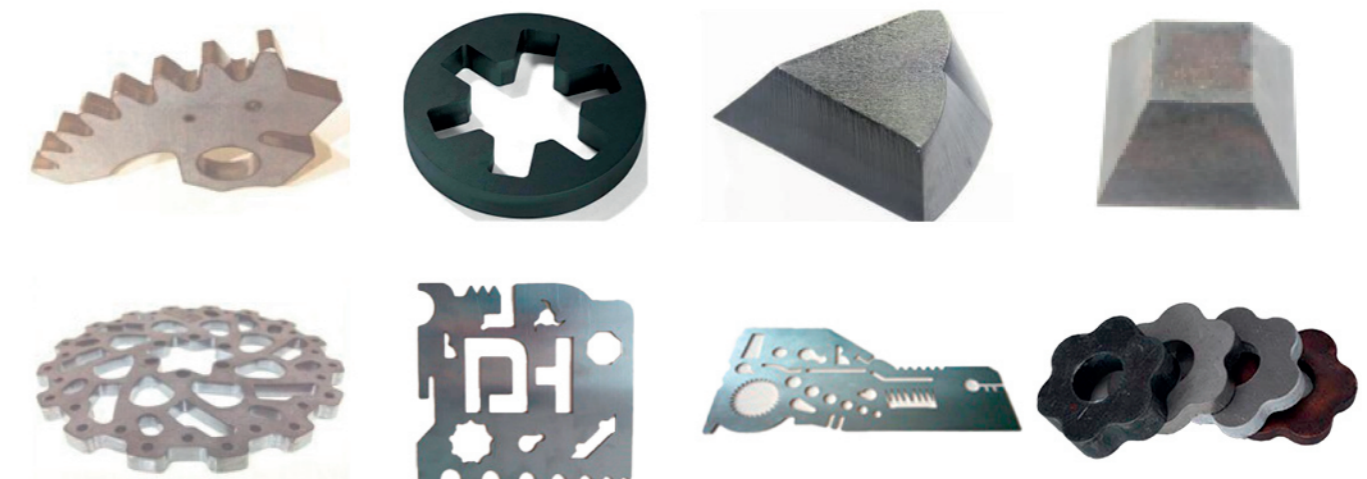
01 航空铝横梁
AVIATION ALUMINUM BEAM



02 专利机床高承载抗热变形
PATENTED MACHINE TOOL WITH HIGH LOAD CAPACITY AND THERMAL DEFORMATION RESISTANCE



切割样品展示 Cutting sample display



超低飞溅机器人焊接系统

ULTRA-LOW SPATTER ROBOTIC WELDING SYSTEM

超低飞溅、多功能、多种材料

Ultra-low spatter, multi-functional, multiple materials.



产品特点 Product features

01 超低飞溅 ULTRA-LOW SPATTER

从电弧引燃熔滴形成到液桥断开的整个周期进行精细控制，实现短路过渡的超低飞溅，飞溅量减少到原来的十分之一；

Fine control is carried out throughout the entire cycle from arc ignition and droplet formation to liquid bridge breaking, achieving ultra-low spatter in short-circuit transition, and reducing the spatter amount to one-tenth of the original.

03 弧长恒定控制 CONSTANT ARC LENGTH CONTROL

全数字高速逆变控制，快速调整电弧、电压实现焊接过程在较宽的弧压范围内达到稳定；

All-digital high-speed inverter control quickly adjusts arc and voltage to achieve stability in a wide arc voltage range during the welding process.

05 操作简单方便 SIMPLE AND CONVENIENT OPERATION

采用一元化调节，操作简单，电弧形态可自由调整，适应不同的焊接要求。

Adopting unified adjustment, the operation is simple. The arc shape can be freely adjusted to meet different welding requirements.

02 接触回抽起弧 CONTACT RETRACTION ARC IGNITION

新型接触回抽起弧，降低起弧飞溅，提高起弧成功率；

The new contact retraction arc ignition reduces arc ignition spatter and increases arc ignition success rate.

04 适合多种材料 SUITABLE FOR MULTIPLE MATERIALS

内置丰富的焊接专家数据库，可以实现碳钢、不锈钢、镀锌板、铝合金等材料的脉冲和短路焊接，特别适合家具、钣金、电动车等薄板领域；

With a rich built-in welding expert database, it can realize pulse and short-circuit welding of materials such as carbon steel, stainless steel, galvanized sheet, and aluminum alloy. It is especially suitable for thin-plate fields such as furniture, sheet metal, and electric vehicles.

技术参数 Technical parameters

序号 NO.	产品名称 Product name	规格 Specification	品牌 Brand	单位 Unit	数量 Quantity	特点 Features
1	机器人 Robot	AR1440/AR2010	安川 Yaskawa	台 Set	1	中空轴 Hollow shaft
2	防撞焊枪 Anti-collision welding torch	机器人专用 Specially for robots	安川 Yaskawa	把 Piece	1	内置，防碰撞 Built-in, anti-collision
3	焊接电源 Welding power source	D350S/D400L/D500S	安川 Yaskawa	台 Set	1	超低飞溅 Ultra-low spatter
4	送丝机 Wire feeder	350A/500A	安川 Yaskawa	台 Set	1	带编码器、双驱 With encoder, dual drive
5	焊接附件 Welding accessories	控制电缆、送丝套管、送丝架等 Control cables, wire feeding sleeves, wire feeding racks, etc.	安川 Yaskawa	套 Set	1	

应用行业 Application industry

汽车、摩托车、运动器材、医疗器械、电动车、自行车、日用五金、工具制品、童车、婴儿车、金属家具等行业。

Industries such as automobiles, motorcycles, sports equipment, medical devices, electric vehicles, bicycles, daily hardware, tool products, baby carriages, strollers, metal furniture, etc.

应用案例 Application cases



铝焊机器人焊接系统

ALUMINUM WELDING ROBOTIC WELDING SYSTEM

弧长稳定、送丝精确稳定

Stable arc length and accurate and stable wire feeding.



产品特点 Product features

01 单脉冲与双脉冲功能

SINGLE PULSE AND DOUBLE PULSE FUNCTIONS

具有单脉冲和双脉冲功能，适合不同板厚的铝合金焊接，成型美观；
It has single pulse and double pulse functions, suitable for aluminum alloy welding of different plate thicknesses with beautiful formation.

03 送丝精确稳定

ACCURATE AND STABLE WIRE FEEDING

全数字逆变电源配带编码器四轮双驱动送丝机，送丝平稳有力；选配推拉丝水冷焊枪，进一步保证焊接过程稳定；

The all-digital inverter power supply is equipped with an encoder four-wheel double-drive wire feeder, providing stable and powerful wire feeding. Optional push-pull wire water-cooled welding gun further ensures the stability of the welding process.

05 操作简单方便

SIMPLE AND CONVENIENT OPERATION

采用一元化调节，操作简单，电弧形态可自由调整，适应不同的焊接要求。

Adopting unified adjustment, the operation is simple. The arc shape can be freely adjusted to meet different welding requirements.

02 适合多种铝合金材料

SUITABLE FOR VARIOUS ALUMINUM ALLOY MATERIALS

内置丰富的铝合金焊接专家数据库，可实现铝镁、铝硅、铝硅等材料的高品质焊接；

With a rich built-in aluminum alloy welding expert database, it can realize high-quality welding of materials such as aluminum-magnesium, aluminum-silicon, and aluminum-silicon.

04 弧长恒定控制

SUITABLE FOR MULTIPLE MATERIALS

全数字高速逆变控制，快速调整电弧、电压实现焊接过程在较宽的弧压范围内达到稳定；

All-digital high-speed inverter control quickly adjusts arc and voltage to achieve stability in a wide arc voltage range during the welding process.

技术参数 Technical parameters

序号 NO.	产品名称 Product name	规格 Specification	品牌 Brand	单位 Unit	数量 Quantity	特点 Features
1	机器人 Robot	AR1440/AR2010	安川 Yaskawa	台 Set	1	中空轴 Hollow shaft
2	水冷焊枪 Water-cooled welding torch	伺服推拉式 Servo push-pull type	安川 Yaskawa	把 Piece	1	防碰撞 Anti-collision
3	焊接电源 Welding power source	X350SW/X500SW	安川 Yaskawa	台 Set	1	双脉冲 Dual pulse
4	送丝机 Wire feeder	350A/500A	安川 Yaskawa	台 Set	1	带编码器、双驱 With encoder, dual drive
5	焊接附件 Welding accessories	控制电缆、送丝套管、送丝架等 Control cables, wire feeding sleeves, wire feeding racks, etc.	安川 Yaskawa	套 Set	1	

应用行业 Application industry

新能源、5G、汽车、摩托车、自行车、运动器材、医疗器械、金属家具、童车、灯饰等行业。

Industries such as new energy, 5G, automobiles, motorcycles, bicycles, sports equipment, medical devices, metal furniture, baby carriages, lighting, etc.

应用案例 Application cases



光纤激光机器人三维焊接系统

FIBER LASER ROBOTIC THREE-DIMENSIONAL WELDING SYSTEM

焊接速度快、变形小、焊缝质量高、适用多种材料

Fast welding speed, small deformation, high weld quality, and applicable to a variety of materials.



产品特点 Product features

01 焊接宽度可调

THE WELDING WIDTH IS ADJUSTABLE

激光光斑摆动宽度最大可以调至 5mm, 有效的弥补了下料误差;
The maximum swing width of the laser spot can be adjusted up to 5mm, effectively compensating for the cutting error.

03 精确可控的送丝系统

PRECISELY CONTROLLABLE WIRE FEEDING SYSTEM

在传统激光焊接中精确控制送丝一直是行业难点。理想的焊接工艺要求起弧后工件形成熔池到一定状态后才能送丝, 否则起弧点成型效果、无法控制, 收弧时送丝量要逐渐减少, 并提前停止送丝, 否则不仅得不到良好的收弧成型效果, 还会增加粘丝的概率。通过我司自主研发的 LWS 系统, 即可控制焊接过程中是否送丝, 又可以精确的控制送丝速度, 完美的解决了激光焊接送丝的稳定性及精确控制的问题;

In traditional laser welding, precisely controlling wire feeding has always been a difficulty in the industry. The ideal welding process requires that wire feeding can only start after the workpiece forms a molten pool to a certain state after arc ignition. Otherwise, the forming effect at the arc starting point cannot be controlled. During arc extinguishing, the wire feeding amount should be gradually reduced and wire feeding should be stopped in advance. Otherwise, not only will a good arc extinguishing forming effect not be obtained, but the probability of wire adhesion will also increase. Through our independently developed LWS system, we can not only control whether wire feeding is performed during the welding process, but also precisely control the wire feeding speed, perfectly solving the problems of stability and precise control of wire feeding in laser welding.

02 通讯及激光焊接系统

COMMUNICATION AND LASER WELDING SYSTEM

通过我司自主开发的 Macro program, 可以实时调用、改变输出功率, 机器人、激光器、焊接枪头完美兼容, 实现双摆 9 轴同控, 从而满足复杂或要求较高的工艺需求;

Through our independently developed Macro program, the output power can be called and changed in real time. The robot, laser, and welding gun head are perfectly compatible, realizing simultaneous control of nine axes with double pendulums, thus meeting the process requirements that are complex or have high requirements.

04 粘丝报警 (选配)

WIRE ADHESION ALARM (OPTIONAL)

因设置不当等造成的粘丝, 会自动触发我司自主开发的 WSAS 系统, 整机立即停止工作, 以保护激光枪头及送丝装置;

In case of wire adhesion caused by improper settings, etc., our independently developed WSAS system will be automatically triggered, and the whole machine will immediately stop working to protect the laser gun head and wire feeding device.

05 激光焊优势

ADVANTAGES OF LASER WELDING

焊接速度快、变形小, 焊缝质量高, 可焊接碳钢、不锈钢、铝、铜、钛等金属材料, 焊接灵活度高, 可远距离非接触焊接。

Fast welding speed, small deformation, high weld quality. It can weld metal materials such as carbon steel, stainless steel, aluminum, copper, and titanium. High welding flexibility. It can perform long-distance non-contact welding.

技术参数 Technical parameters

型号 Model	1500W	2000W	3000W	6000w(激光电弧复合焊) (LAHW)
熔深 (不锈钢) Penetration depth (stainless steel)	3MM	4MM	6MM	8MM
熔深 (碳钢) Penetration depth (carbon steel)	3MM	4MM	6MM	8MM
熔深 (铝合金 1-3 系) Penetration depth (aluminum alloy series 1-3)	3MM	3MM	4MM	5MM
熔深 (铝合金 4-7 系) Penetration depth (aluminum alloy series 4-7)	2MM	2MM	3MM	4MM
自动加丝 Automatic wire feeding	0.8-1.6 焊丝 Welding wire	0.8-1.6 焊丝 Welding wire	0.8-1.6 焊丝 Welding wire	1.0-1.6 焊丝 Welding wire
整机耗电功率 Power consumption of the whole machine	≤ 4.5KW	≤ 6KW	≤ 7.5KW	≥ 10KW
冷却方式 Cooling method	恒温水冷 Constant temperature water cooling			
摆动方式 Oscillation method	单摆动 / 双摆动 (可选) Single oscillation / double oscillation (optional)			
机器人臂长选择 Selection of robot arm length	1440mm/1730mm/2010mm			

应用行业 Application industry

汽车零部件、摩托车零配件、运动器材、医疗器械、家用电器等行业。

Industries such as automotive parts, motorcycle spare parts, sports equipment, medical devices, household appliances, etc.

应用案例 Application cases



凯尔达焊接机器人系统

WELDING ROBOT SYSTEM

超低飞溅、多功能、多种材料

Ultra-low spatter, multi-functional, multiple materials.



产品特点 Product features

01 超低飞溅 ULTRA-LOW SPATTER

从电弧引燃熔滴形成到液桥断开的整个周期进行精密控制，实现短路过渡的超低飞溅，飞溅量减少至普通数字焊接电源的十分之一。

Precise control is carried out throughout the entire cycle from the formation of molten droplets after the arc is ignited to the disconnection of the liquid bridge, achieving ultra-low spatter in short-circuit transfer. The amount of spatter is reduced to one-tenth of that of ordinary digital welding power supplies.

03 操作简单方便 SIMPLE AND CONVENIENT OPERATION

采用一元化调节，操作简单，电弧形态可自由调整，适应不同的焊接要求数字通讯与机器人采用以太网数字通讯；

It adopts unified adjustment, making the operation simple. The arc shape can be freely adjusted to meet different welding requirements. Digital communication with robots adopts Ethernet digital communication.

05 接触回抽起弧 CONTACT RETRACTION ARC STARTING

新型接触回抽起弧，降低起弧飞溅，提高起弧成功率。The new type of contact retraction arc starting can reduce the arc starting spatter and improve the success rate of arc starting.

02 适合多种材料 SUITABLE FOR MULTIPLE MATERIALS

内置丰富的焊接专家数据库，可以实现碳钢、不锈钢、镀锌板、铝合金等材料的脉冲和短路焊接，特别适合家具、钣金、电动车等薄板领域。

It has a built-in rich welding expert database, which can realize pulse and short-circuit welding of materials such as carbon steel, stainless steel, galvanized sheets, and aluminum alloys. It is especially suitable for thin plate fields like furniture, sheet metal, and electric vehicles.

04 弧长恒定控制 CONSTANT ARC LENGTH CONTROL

全数字高速逆变控制，快速调整电弧、电压，实现焊接过程在较宽的弧压范围内稳定。

With fully digital high-speed inverter control, the arc and voltage can be adjusted rapidly to ensure stability during the welding process within a wide arc voltage range.

06 数字通讯 DIGITAL COMMUNICATION

与机器人采用以太网数字通讯。Ethernet digital communication is adopted with robots.

协作焊接机器人系统

COLLABORATIVE SERVO WELDING ROBOT SYSTEM

拖动焊接点位、无需代码编程

Drag the welding points without the need for code programming.

产品特点 Product features

01 使用便捷 CONVENIENT TO USE

协作机器人拖动焊接点位，焊枪上集成人机交互界面，无代码编程，直接设定焊缝数量，匹配焊接工艺，可选择摆动和多层多道功能。

The collaborative robot drags the welding points. The welding gun is integrated with a human-computer interaction interface. There is no-code programming. The number of welds can be directly set, the welding process can be matched, and the functions of oscillation and multi-layer and multi-pass can be selected.

02 智能应用 INTELLIGENT APPLICATION

协作机器人采用新运动控制算法，重复定位精度±0.02mm，最大工作速度2m/s；有效抑制抖动，适应性提高，动作更加柔顺。

The collaborative robot adopts a new motion control algorithm, with a repeat positioning accuracy of ±0.02mm and a maximum working speed of 2m/s. It can effectively suppress jitter, has improved adaptability and performs more smoothly.

04 脉冲过渡 LOW HEAT INPUT

脉冲波形精细控制，实现一脉一滴过渡，弧长短、挺度高，焊接融合好，降低气孔咬边等焊接不良。

With fine control of the pulse waveform, one droplet transfer per pulse can be achieved. The arc is short with high stiffness, resulting in good welding fusion and reducing welding defects such as porosity and undercut.

03 电弧跟踪 ALMOST ZERO SPATTER

可采集、处理电弧信号用以获取焊枪及坡口相对位置，及时纠正机器人规划路径偏差，保障焊接的精确性。It can collect and process arc signals to obtain the relative positions of the welding gun and the groove, correct the deviation of the robot's planned path in a timely manner, and ensure the accuracy of welding.

05 适合多种材料 SUITABLE FOR A VARIETY OF MATERIALS

内置丰富的焊接专家数据库，操作简单，电弧形态可自由调整，适应不同的焊接要求可以实现碳钢、不锈钢等材料的脉冲和短路焊接。

It has a built-in rich welding expert database, is easy to operate, and the arc shape can be freely adjusted to meet different welding requirements. It can realize pulse and short-circuit welding of materials such as carbon steel and stainless steel.



技术参数 Technical parameters

序号 NO.	产品名称 Product name	规格 Specification	品牌 Brand	单位 Unit	数量 Qty	特点 Features
1	协作机器人 Collaborative robot	KX950-3D/KX1300-8D/KX850-5Y	凯尔达 Kaierda	台 Set	1	拖动焊接点位、无需代码编程、重复定位精度 Drag the welding points, without the need for code programming. The repeated positioning accuracy is ±0.03mm.±0.03mm
2	焊枪 Welding torch	协作式机器人专用焊枪、伺服焊枪 (KX1300-8D)	凯尔达 Kaierda	把 Piece	1	集成人机交互界面 Integrate a human-machine interaction interface.
3	焊接电源 Welding power supply	X350L/X500/X350SW(KX1300-8D)	凯尔达 Kaierda	台 Set	1	较低热输入量更大程度的减少薄板变形量 With a relatively low heat input, it can reduce the deformation of thin plates to a greater extent.
4	送丝机 Wire feeder	标配 Standard configuration	凯尔达 Kaierda	台 Set	1	高速输送 High-speed conveying.
5	焊接配件 Welding accessories	焊接小车、电弧跟踪 Welding trolley, arc tracking	凯尔达 Kaierda	套 Set	1	

光纤激光机器人三维切割系统

FIBER LASER ROBOTIC THREE-DIMENSIONAL CUTTING SYSTEM

超低飞溅、多功能、多种材料

Ultra-low spatter, multi-functional, multiple materials.



产品特点 Product features

01 光纤激光器 FIBER LASER

光电转换效率高，节省能源，免运行维护，光束质量高；
High photoelectric conversion efficiency, energy saving, no operation and maintenance required, and high beam quality.

02 离线编程系统（选配） OFFLINE PROGRAMMING SYSTEM (OPTIONAL)

三维模型导入，提高编程效率，减少停机调试时间，
节省成本；
Importing three-dimensional models improves programming efficiency, reduces downtime for debugging, and saves costs.

03 适用多种材料 APPLICABLE TO A VARIETY OF MATERIALS

切割速度快，质量高，可切割铝、铜等高反射率材料。
Fast cutting speed and high quality. It can cut materials with high reflectivity such as aluminum and copper.

应用行业 Application industry

汽车零部件、摩托车零配件、运动器材、医疗器械、电动车、三轮车零配件、日用五金、工具制品、童车、婴儿车、金属家具、校具等行业。

Industries such as automotive parts, motorcycle spare parts, sports equipment, medical devices, electric vehicles, tricycle spare parts, daily hardware, tool products, baby carriages, strollers, metal furniture, school furniture, and more.

冲压机器人系统

Stamping robot system

冲压机器人代替重复、风险较高的普工。冲压线生产过程中可以在 LED 显示屏上直观的看到当前设备状态、产量、效率，在可根据实际需求设置生产数量，整条线上所有设备由总控实现联动：任一环节出现错误，冲压线会马上自动停止、保护、报警，并能显示具体设备及原因，方便排查解决。

Stamping robot replaces repetitive and higher-risk general labor. During the production process on the stamping line, the current equipment status, output, and efficiency can be intuitively viewed on the LED display. Production quantities can be set according to actual needs, and all equipment on the entire line is interconnected by a central control: if any link encounters an error, the stamping line will immediately stop automatically, protect, and alarm, displaying the specific equipment and reason, facilitating troubleshooting and resolution.



码垛机器人系统

Palletizing Robot System

码垛机器人是工业机器人的一种应用形式，它将机械技术与计算机程序有机融合，显著提升了现代生产的效率。该机器人运作灵活且精准，速度快、效率高，稳定性强，能大量节省劳动力，还可有效节约空间。

The palletizing robot is an application form of industrial robots. It organically integrates mechanical technology with computer programs, significantly enhancing the efficiency of modern production. This robot operates with flexibility and precision, featuring high speed, high efficiency, and strong stability. It can greatly save labor force and effectively save space as well.



喷涂机器人系统

Spray painting robot system

喷涂机器人由本体、周边设备和控制柜组成，能单机独立作业或多机型协同作业。通过与周边设备配合，可实现工件供给、开门辅助和驱动行走等操作，进而完成流水线式高品质喷涂。机器人具有多种设置方式，布局灵活；内压防爆构造能降低气体消耗，部分还可在非防爆环境接线，减少运行与维护成本。

A spray - painting robot consists of a robot body, peripheral equipment, and a control cabinet. It can operate independently as a single unit or collaborate with multiple models. By coordinating with the peripheral equipment, operations such as workpiece supply, door - opening assistance, and driving and moving can be achieved, thus completing high - quality pipeline - style spraying. The robot has various setting methods and a flexible layout. Its internal - pressure explosion - proof structure can reduce gas consumption, and some models can be wired in non - explosion - proof environments, reducing operation and maintenance costs.



打磨机器人系统

Grinding robot system

打磨机器人是一种自动化智能加工设备，包括工业机器人本体、控制系统、打磨工具模块以及高精度力矩传感系统。该设备通过预设的加工程序和运动轨迹，结合实时力矩反馈数据，能够动态调整打磨参数。系统可根据打磨工具的磨损状态，通过力矩传感器实时监测接触力，进行自适应补偿，从而实现各类工件表面的高精度、一致性打磨加工。

The grinding robot is an automated intelligent processing device, which includes an industrial robot body, a control system, a grinding tool module, and a high - precision torque sensing system. Through preset processing programs and motion trajectories, and combined with real - time torque feedback data, this device can dynamically adjust grinding parameters. The system can use the torque sensor to monitor the contact force in real - time according to the wear state of the grinding tool, and perform adaptive compensation. Thus, it can achieve high - precision and consistent grinding processing on the surfaces of various workpieces.



机器人系统选型

SELECTION OF ROBOT SYSTEMS



机器人型号 Robot model	GP4	GP7	GP8	GP12	GP25	GP50	GP110	GP180		GP215	GP600	PL80	PL190	PL320	PL500	PL800	MPX1150	MPX1950	MPX2600	
控制柜 Cabinet	YRC1000 YRC1000micro	YRC1000 YRC1000micro	YRC1000 YRC1000micro	YRC1000 YRC1000micro	YRC1000	YRC1000	YRC1000	YRC1000		YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	YRC1000	DX200 MPXAP(gas)	DX200 MPXAP(gas)	PL800	
构造 Structure	6 Axis	6 Axis	6 Axis	6 Axis	6 Axis	6 Axis	6 Axis	6 Axis		6 Axis	6 Axis	5 Axis	4 Axis	4 Axis	4 Axis	4 Axis	6 Axis	6 Axis	6 Axis	
负载 Load	手腕 Wrist	4 kg	7kg	8 kg	12 kg	25 kg	50 kg	110 kg	180 kg	215 kg	600 kg	80 kg	190 kg	320 kg	500 kg	800 kg	5 kg	7 kg	15 kg	
	U臂 U-arm	1 kg	1kg	1kg	10 kg	12 kg	10kg	10 kg	30 kg	50 kg	50 kg	10 kg					1 kg	3 kg	20 kg	
最大臂展 Maximum arm span	550 mm	927 mm	727 mm	1440 mm	1730 mm	2061 mm	2236 mm	2702 mm		2912 mm	2942 mm	2061 mm	3159 mm	3159 mm	3159 mm	3159 mm	727 mm	1450 mm	2000 mm	
重复定位精度 Accuracy	0.01 mm	0.01 mm	0.01 mm	0.02 mm	0.02 mm	0.03 mm	0.03 mm	0.05 mm		0.05 mm	0.1 mm	0.03 mm	0.05 mm	0.05 mm	0.05 mm	0.05 mm	0.02 mm	0.15 mm	0.2 mm	
动作范围 Range of motion	S Axis	-170° ~+170°	-170° ~+170°	-170° ~+170°	-170° ~+170°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-180° ~+180°	-170° ~+170°	-170° ~+170°	-150° ~+150°
	L Axis	-110° ~+130°	-65° ~+145°	-65° ~+145°	-90° ~+155°	-105° ~+155°	-90° ~+135°	-90° ~+155°	-60° ~+76°	-60° ~+76°	-55° ~+61°	-90° ~+135°	-45° ~+90°	-45° ~+90°	-45° ~+90°	-45° ~+90°	-45° ~+90°	-80° ~+120°	-100° ~+140°	-65° ~+130°
	U Axis	-65° ~+200°	-70° ~+190°	-70° ~+190°	-85° ~+150°	-86° ~+160°	-80° ~+206°	-80° ~+90°	-86° ~+90°	-77.8° ~+197°	-113° ~+18°	-160° ~+35°	-120° ~+15.5°	-120° ~+15.5°	-120° ~+15.5°	-120° ~+15.5°	-120° ~+15.5°	-70° ~+90°	-62° ~+235°	-65° ~+150°
	R Axis	-200° ~+200°	-190° ~+190°	-190° ~+190°	-200° ~+200°	-200° ~+200°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°						-190° ~+190°	-200° ~+200°	-720° ~+720°
	B Axis	-123° ~+123°	-135° ~+135°	-135° ~+135°	-150° ~+150°	-150° ~+150°	-125° ~+125°	-125° ~+125°	-130° ~+130°	-125° ~+125°	-115° ~+115°	-15° ~+15°						-135° ~+135°	-150° ~+150°	-720° ~+720°
	T Axis	-455° ~+455°	-360° ~+360°	-360° ~+360°	-455° ~+455°	-455° ~+455°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-360° ~+360°	-400° ~+400°	-720° ~+720°
最大速度 Maximum speed	S Axis	8.11 rad/s,465°/s	6.54 rad/s,375°/s	7.94 rad/s,455°/s	4.53 rad/s,260°/s	3.67 rad/s,210°/s	3.14 rad/s,180°/s	2.45 rad/s,140°/s	2.18 rad/s,125°/s		1.75 rad/s,100°/s	1.43 rad/s,82°/s	3.14 rad/s,180°/s	2.44 rad/s,140°/s	2.09 rad/s,120°/s	1.48 rad/s,85°/s	1.13 rad/s,65°/s	6.10 rad/s,350°/s	3.14 rad/s,180°/s	2.09 rad/s,120°/s
	L Axis	8.11 rad/s,465°/s	5.50 rad/s,315°/s	6.72 rad/s,385°/s	4.01 rad/s,230°/s	3.67 rad/s,210°/s	3.11 rad/s,178°/s	1.92 rad/s,110°/s	2.01 rad/s,115°/s		1.57 rad/s,90°/s	1.43 rad/s,82°/s	3.14 rad/s,180°/s	2.53 rad/s,145°/s	1.92 rad/s,110°/s	1.48 rad/s,85°/s	1.13 rad/s,65°/s	6.10 rad/s,350°/s	3.14 rad/s,180°/s	2.09 rad/s,120°/s
	U Axis	9.16 rad/s,525°/s	7.15 rad/s,410°/s	9.07 rad/s,520°/s	4.53 rad/s,260°/s	4.63 rad/s,265°/s	3.11 rad/s,178°/s	2.27 rad/s,130/s	2.18 rad/s,125°/s		1.69 rad/s,97°/s	1.43 rad/s,82°/s	3.14 rad/s,180°/s	2.53 rad/s,145°/s	1.92 rad/s,110°/s	1.48 rad/s,85°/s	1.13 rad/s,65°/s	6.98 rad/s,400°/s	3.14 rad/s,180°/s	2.18 rad/s,125°/s
	R Axis	9.86 rad/s,565°/s	9.59 rad/s,550°/s	9.59 rad/s,550°/s	8.20 rad/s,470°/s	7.33 rad/s,420°/s	4.36 rad/s,250°/s	3.05 rad/s,175/s	3.18 rad/s,182°/s		2.09 rad/s,120°/s	1.40 rad/s,80°/s						7.85 rad/s,450°/s	6.28 rad/s,360°/s	6.28 rad/s,360°/s
	B Axis	9.86 rad/s,565°/s	9.59 rad/s,550°/s	9.59 rad/s,550°/s	8.20 rad/s,470°/s	7.33 rad/s,420°/s	4.36 rad/s,250°/s	3.05 rad/s,175/s	3.05 rad/s,175°/s		2.09 rad/s,120°/s	1.40 rad/s,80°/s	3.14 rad/s,180°/s					7.85 rad/s,450°/s	6.98 rad/s,400°/s	6.28 rad/s,360°/s
	T Axis	17.45 rad/s,1000°/s	17.45 rad/s,1000°/s	17.45 rad/s,1000°/s	12.2 rad/s,700°/s	15.44 rad/s,885°/s	6.28 rad/s,360°/s	4.44 rad/s,255°/s	4.63 rad/s,265°/s		3.32 rad/s,190°/s	2.83 rad/s,162°/s	8.72 rad/s,500°/s	7.33 rad/s,420°/s	5.23 rad/s,300°/s	3.40 rad/s,195°/s	2.18 rad/s,125°/s	12.56 rad/s,720°/s	8.72 rad/s,500°/s	6.28 rad/s,360°/s
容需力矩 Allowable torque	R Axis	8.86 N·m	17 N·m	17 N·m	22 N·m	52 N·m	216 N·m	721 N·m	1000 N·m		1176 N·m	3430 N·m						12 N·m(1.22kgf·m)	19.6 N·m(2.0kgf·m)	93.2N·m(9.5kgf·m)
	B Axis	8.86 N·m	17 N·m	17 N·m	22 N·m	52 N·m	216 N·m	721 N·m	1000 N·m		1176 N·m	3430 N·m	78.4 N·m					12 N·m(1.22kgf·m)	19.6 N·m(2.0kgf·m)	58.8N·m(6.0kgf·m)
	T Axis	4.9 N·m	10 N·m	10 N·m	9.8 N·m	32 N·m	147 N·m	294 N·m	618 N·m		710 N·m	1764 N·m	20.5 N·m					7N·m(0.71kgf·m)	9.8 N·m(1.0kgf·m)	19.6N·m(2.0kgf·m)
容量惯性力矩 Moment of inertia	R Axis	0.2 kg·m ²	0.5 kg·m ²	0.5 kg·m ²	0.65kg·m ²	2.3 kg·m ²	28 kg·m ²	60 kg·m ²	90 kg·m ²		317 kg·m ²	520 kg·m ²						0.3 kg·m ²	0.6kg·m ²	3.75kg·m ²
	B Axis	0.2 kg·m ²	0.5 kg·m ²	0.5 kg·m ²	0.65 kg·m ²	2.3 kg·m ²	28 kg·m ²	60 kg·m ²	90 kg·m ²		317 kg·m ²	520 kg·m ²	48 kg·m ²					0.3 kg·m ²	0.6kg·m ²	2.225kg·m ²
	T Axis	0.07 kg·m ²	0.2 kg·m ²	0.2 kg·m ²	0.17 kg·m ²	1.2 kg·m ²	11 kg·m ²	33.7 kg·m ²	46.3 kg·m ²		200 kg·m ²	350 kg·m ²	25 kg·m ²	90 kg·m ²	160 kg·m ²	200 kg·m ²	550 kg·m ²	0.1 kg·m ²	0.16kg·m ²	0.2kg·m ²
本体质量 Body Mass	28 kg	37 kg	35kg	150 kg	250 kg	570 kg	660 kg	1020 kg		1340 kg	3035 kg	565 kg	1680 kg	1680 kg	2390 kg	2560 kg	57 kg	265 kg	485 kg	
保护等级 Protection level	IP67	IP67	IP67	本体: IP54 手腕: IP67	本体: IP54 手腕: IP67	本体: IP54 手腕: IP67	本体: IP54 手腕: IP67	本体: IP54 手腕: IP67		本体: IP54 手腕: IP67	本体: IP30 手腕: IP67	本体: IP54 手腕: IP67	本体: IP54 手腕: IP67	本体: IP54 手腕: IP67	IP54	IP54				
设置环境 Installation environment	温度 Temperature	0°C ~+45°C	0°C ~+45°C	0°C ~+45°C	0°C ~+45°C	0°C ~+45°C	0°C ~+45°C	0°C ~+45°C		0°C ~+45°C	0°C ~+45°C	0°C ~+45°C	0°C ~+45°C	0°C ~+45°C	0°C ~+45°C	0°C ~+45°C	0C~+40°C	0C~+40°C	0C~+40°C	
	湿度 Humidity	20%~80%RH(无结露)									20%~80%RH(无结露)									
	振动加速度 Vibration acceleration	4.9 m/s ² (0.5G) 以下									4.9 m/s ² (0.5G) 以下									
	标高 Elevation	1000 m 以下									1000 m 以下									
电源容量 Power Capacity	1.0 kVA	1.0 kVA	1.0 kVA	1.5 kVA	2.0 kVA	4.5kVA	5.0 kVA	5.0 kVA		5.0 kVA	7.0 kVA	4.5kVA	9.5kVA	9.5kVA	8.0 kVA	8.0 kVA	1.0 kVA	1.75 kVA 以下	3.0 kVA	
设置方式 Setup method	置地式、倒装式、壁挂式、倾斜式							置地式	置地式		置地式	置地式	置地式	置地式	置地式	置地式	置地式	置地式、倒挂式、壁挂式		

机器人行走轴

ROBOT TRAVELING AXIS

机器人行走轴又称机器人第七轴，机器人导轨等，用于扩大机器人作业半径，扩展机器人使用范围，主要应用于焊接、铸造、机械加工、智能仓储等行业。

The robot walking axis, also known as the robot's seventh axis, robot guide rail, etc., is used to expand the working radius of the robot and extend the application range of the robot. It is mainly applied in industries such as welding, casting, machining, and intelligent warehousing.



变位机

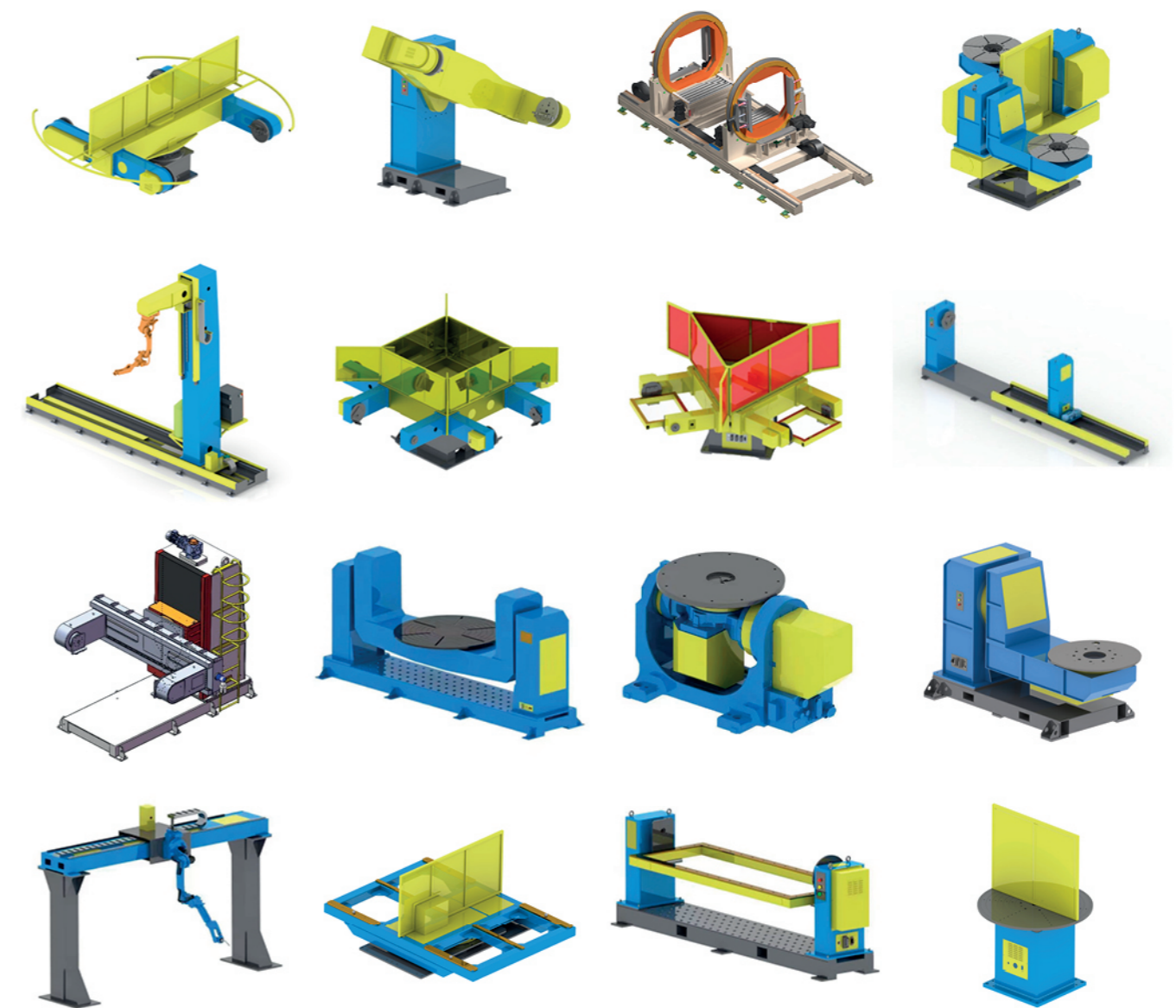
POSITIONER

变位机可以根据实际产品所需角度转动、停留，实现产品的一次装夹即可焊接完成，即减轻了工人的劳动强度，又减少焊接变形。

变位机可分为：头尾式变位机、原地回转变位机、双轴变位机、三轴变位机、U行变位机、L型变位机等。变位机的尺寸和负载可以根据产品定制。

The positioner can rotate and stop according to the angle required by the actual product, so that the welding can be completed with one clamping of the product, which not only reduces the labor intensity of the workers but also reduces the welding deformation.

Positioners can be divided into: head-tail positioners, in-situ rotation positioners, two-axis positioners, three-axis positioners, U-shaped positioners, L-shaped positioners, etc. The size and load of the positioner can be customized according to the product.

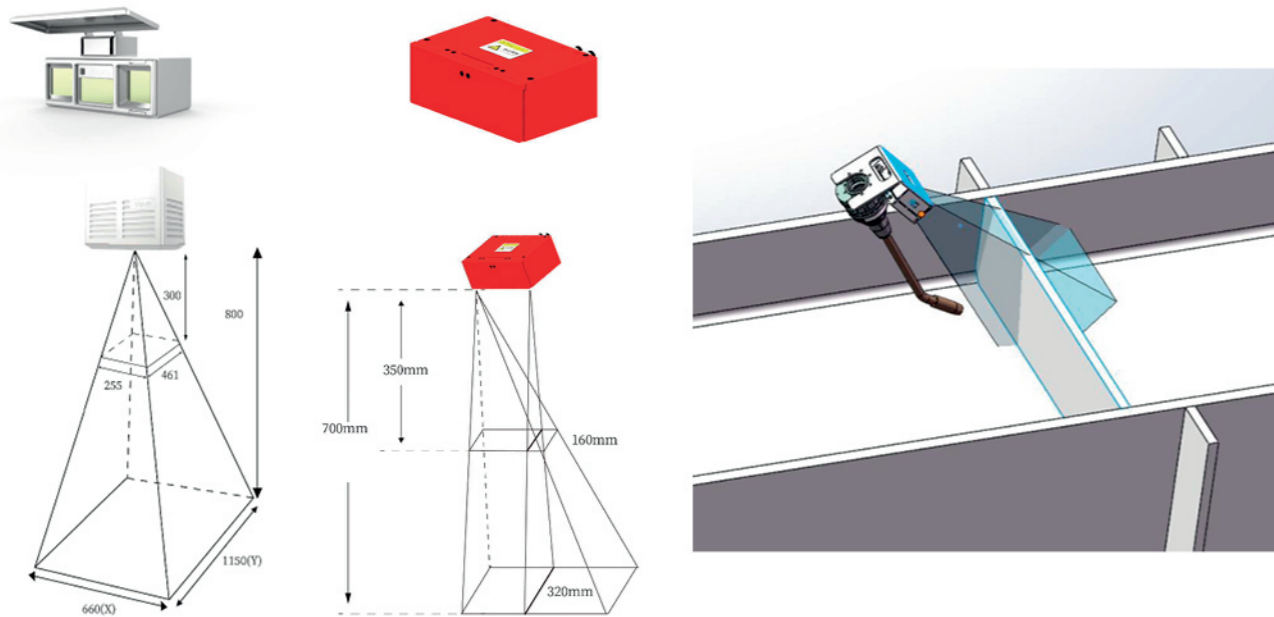


免示教焊接系统

TEACHING-FREE WELDING SYSTEM

智能免示教焊接，高效精准，自动生成轨迹

Intelligent teaching-free welding, efficient and precise, with automatic trajectory generation



产品特点 Product features

01 多源模型适配

MULTI-SOURCE MODEL COMPATIBILITY

支持 IFC、STEP、STP、IGS 等主流 3D 模型导入，快速实现焊缝规划与工艺匹配。
Supports importing mainstream 3D models like IFC, STEP, STP, and IGS for quick weld planning and process matching.

03 高精度智能定位

HIGH-PRECISION INTELLIGENT POSITIONING

集成三种定位模式，粗定位误差 $\leq 20\text{mm}$ ；结合高精度 3D 相机 (Z 向精度 $0.015\text{--}0.1\text{mm}$)，实现精准对齐。
Integrates three positioning modes with $\leq 20\text{mm}$ coarse error. Paired with a high-precision 3D camera (Z-axis accuracy $0.015\text{--}0.1\text{mm}$), ensures precise alignment.

05 开放式工艺库

OPEN PROCESS LIBRARY

兼容机器人工艺库，支持电流、电压等参数自定义，工艺可存档并跨设备调用。
Compatible with robot libraries, supports customizing current, voltage, and speed. Processes can be archived and shared across devices.

02 逆向建模功能

REVERSE MODELING FUNCTIONALITY

通过夹具定位、三点定位和点云定位，精准处理复杂或未知形状构件。
Uses fixture, three-point, and point cloud positioning to handle complex or unknown-shaped components with precision.

04 操作简单

USER-FRIENDLY OPERATION

直观界面简化模型导入与工艺管理，支持一键生成轨迹和自动推荐参数，减少人工干预。
Intuitive interface simplifies model import and process management, with one-click trajectory generation and automatic parameter recommendations, reducing manual input.

06 智能避障与验证

INTELLIGENT OBSTACLE AVOIDANCE AND VERIFICATION

实时检测焊缝可达性与碰撞风险，支持 300mm 退枪无碰撞验证，确保安全。
Real-time detection of weld accessibility and collision risks, with 300mm retraction verification for safety.

应用行业 Application industry

该焊接系统适用于钢结构制造、重型机械等行业，特别适合长直焊缝的焊接任务。

This welding system is suitable for industries such as steel structure manufacturing and heavy machinery, and is particularly well-suited for welding tasks involving long straight seams.

技术参数 Technical parameters

产品名称 Product Name	线面一体复合视觉传感器 Line-Surface Integrated Vision Sensor	DLP 3D 结构光相机 DLP 3D Structured Light Camera	MEMS 3D 结构光相机 MEMS 3D Structured Light Camera
光源 Light Source	Laser Class 3R	450mm	660mm
推荐工作距离 Recommended Working Distance	800mm-1500mm	350mm-700mm	350mm-600mm
近端视场 Near Field of View	920mm@800mm	225mm×160mm	180mm
远端视场 Far Field of View	1730mm@1500mm	510mm×320mm	300mm
Z 轴精度 Z-Axis Accuracy	$\pm 0.2\text{--}\pm 1\text{mm}$	0.04-0.1mm	0.06-0.20mm
分辨率 Resolution	-	1280×1024	点云分辨率 Point Cloud Resolution 0.05mm@350mm 0.15mm@600mm
采集帧率 Capture Frame Rate	300Hz	15-30Hz	100fps@350-600mm
扫描模式 Scanning Mode	-	单幅 / 连续扫描 Single/Continuous Scanning	单幅 / 连续扫描 Single/Continuous Scanning
触发方式 Trigger Method	-	软触发 Soft Trigger	软触发、硬触发 Soft Trigger, Hard Trigger
点云格式 Point Cloud Format	-	PCD、PLY、TXT	PCD、PLY、TXT
图像类型 Image Type	-	灰度图、深度图 Grayscale, Depth Map	-
数据接口 Data Interface	RS-232, USB 3.0	GigE	GigE
电源要求 Power Requirement	DC24V 1A	-	-
功耗 Power Consumption	4.4W	Avg. 8W@24V	Avg 4.5W@24V
重量 Weight	-	836g	468g
外形尺寸 Dimensions	720×150×100mm ³	140×95.5×56mm ³	119×55×46mm ³
工作温度 Operating Temperature	0-50° C	0-50° C	0-50° C

应用案例 Application cases

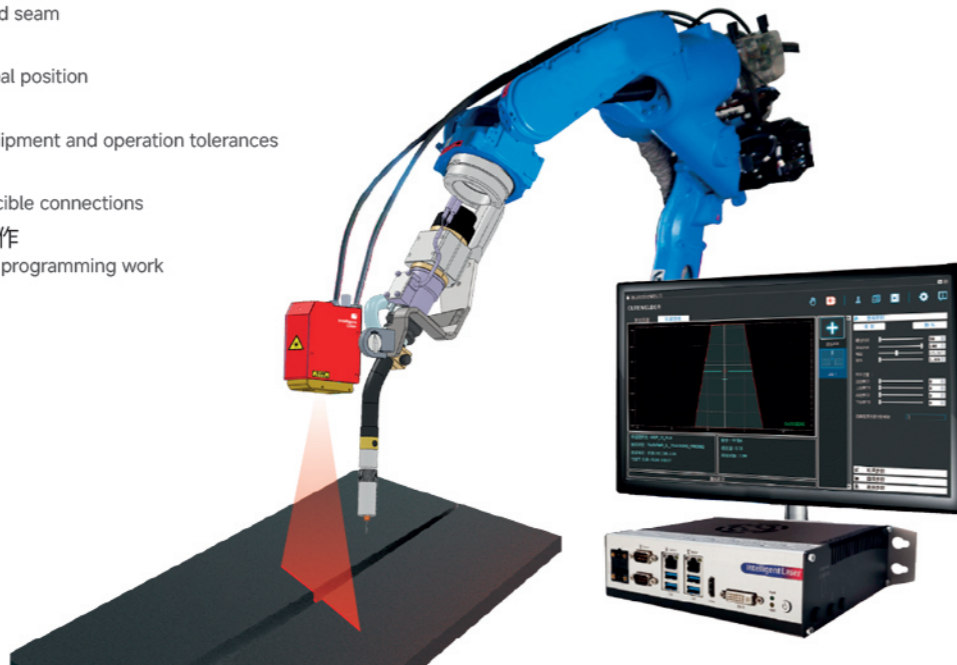


激光焊缝跟踪器

LASER WELD SEAM TRACKER

产品特点 Product features

- 非接触、永无磨损
Non-contact, never wear
- 降低热负荷
Reduce heat load
- 提高生产率
Increase productivity
- 确保安全焊接和完美焊缝
Ensure safe welding and perfect weld seam
- 可以使焊枪处于理想位置
Can keep the welding torch in an ideal position
- 可补偿生产、设备和操作公差
Can compensate for production, equipment and operation tolerances
- 可实现一致的和可复现连接
Can achieve consistent and reproducible connections
- 对于复杂的焊件可减少编程工作
For complex weldments, can reduce programming work



技术参数 Technical parameters

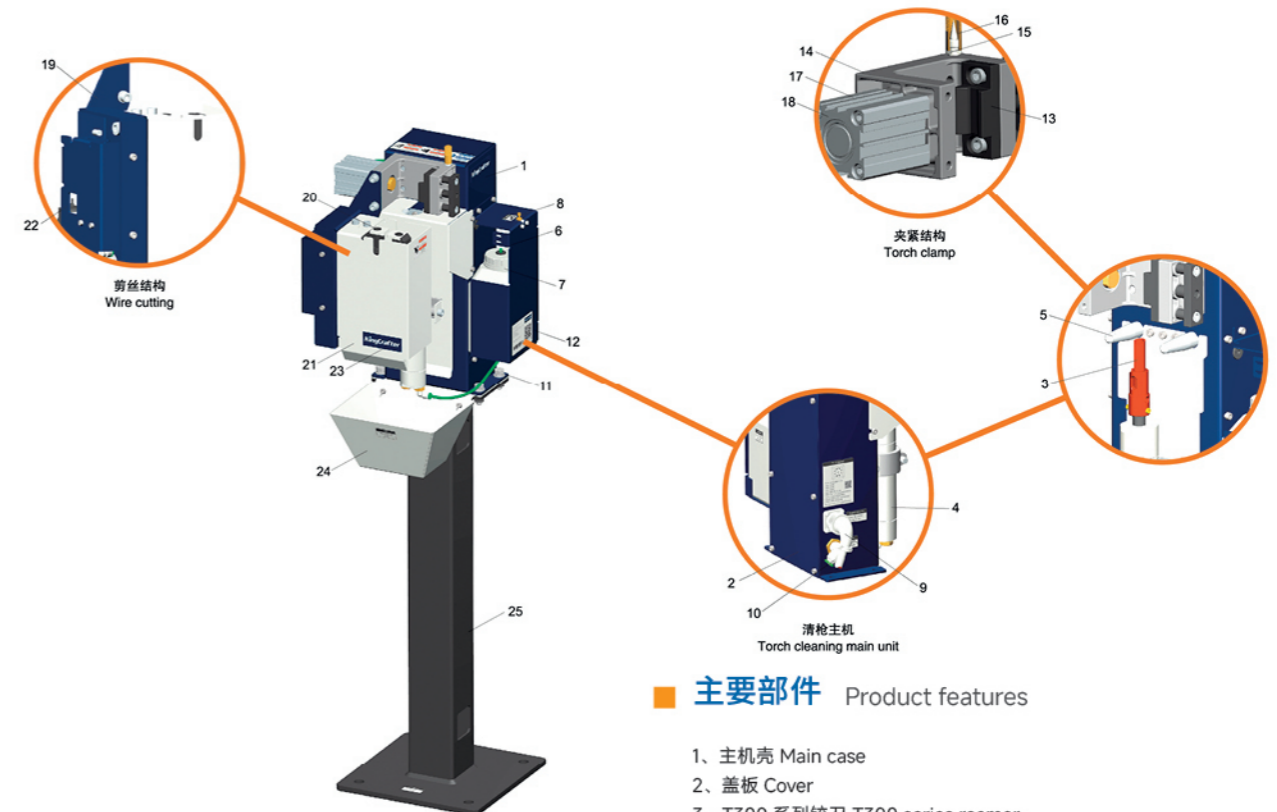
尺寸 Size	132*65*28mm
重量 Weight	390g
功率 Power	5W
检测范围 Detection range	18mm*30mm
安装高度 Installation height	80mm
检测精度 Detection precision	0.04mm
通讯接口 Communication protocol	以太网 Ethernet, RS485
通讯协议 Communication protocol	MODBUS TCP/RTU
焊接类型 Welding type	MIG,MAG,TIG
焊接适应性 Welding adaptability	抗弧光、抗飞溅、抗点焊、抗电磁干扰 Resistant to arc light, resistant to spatter, resistant to spot welding, and resistant to electromagnetic interference
焊缝形式 Weld form	直缝 / 环缝 / 曲线缝等; 拼接 / 搭接 / 角焊缝等 Straight seams / circumferential seams / curved seams, etc.; butt joints / lap joints / fillet welds, etc

产品组成 Product Composition

硬件 Hardware	软件 Software
激光焊缝跟踪器 Laser Weld Seam Tracker	焊缝跟踪器上位机调试软件 Debugging software for the host computer of the weld seam tracker
机器人专用电源控制一体盒 Integrated Box for Robot-specific Power Supply Control	安川机器人跟踪专用软件 Special tracking software for Yaskawa robots
安川机器人专用转接件 Special Adapter for Yaskawa Robots	安川机器人跟踪操作手册 Operation manual for Yaskawa robot tracking

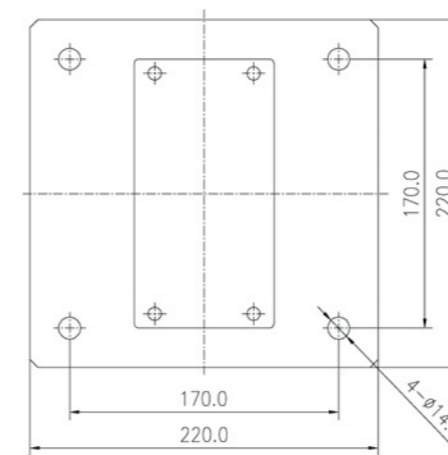
机器人焊枪自动清枪器

ROBOT WELDING TORCH AUTOMATIC GUN CLEANER



主要部件 Product features

- 1、主机壳 Main case
- 2、盖板 Cover
- 3、T300 系列铰刀 T300 series reamer
- 4、A2 系列微型减速气动马达
A2 series mini retarding pneumatic motor
- 5、喷雾喷枪 Spray gun
- 6、防飞溅液支架 Anti-spatter fluid bracket
- 7、500ML 塑料方瓶 500 ML plastic vase
- 8、调节阀 Control valve
- 9、外部系统接口 External system interface
- 10、气源接口 Air supply interface
- 11、连接螺栓 Connection bolt
- 12、铭牌 Nameplate
- 13、可调 V 形块 Tunable V block
- 14、C 形座 C-shape holder
- 15、校枪基准 Torch calibrating benchmark
- 16、校枪基准护罩 Torch calibrating benchmark shield
- 17、夹紧气缸 Clamping cylinder
- 18、气缸传感器 Cylinder transducer
- 19、连接板 Connecting board
- 20、剪丝刀片 Wire cutting blade
- 21、护罩 Shield
- 22、电磁阀 Solenoid valve
- 23、商标 Brand name
- 24、废料盒 Waste case
- 25、主机架 Pedestal



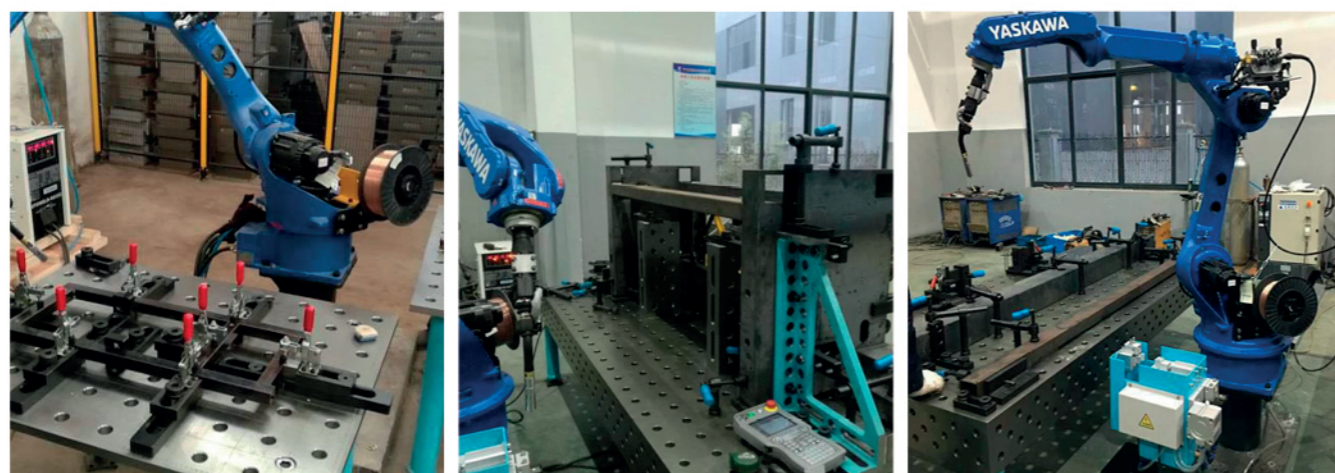
安装尺寸
Installation Size

柔性平台

FLEXIBLE PLATFORM

针对目前市场上一些小批量、多品种产品的组装和焊接，可通过柔性平台配合相应的夹紧装置实现高精度的装夹和焊接。柔性平台换模简易、快捷，让更换产品换模成本降至更低。

For the assembly and welding of some small-batch and multi-variety products in the current market, high-precision clamping and welding can be achieved by using the flexible platform in combination with the corresponding clamping devices. The flexible platform is simple and fast for die changing, which can reduce the die changing cost for product replacement to a lower level.



定制工装夹具

CUSTOMIZED WORKHOLDING FIXTURES

焊接工装夹具是焊接生产中的关键装备。它们能精准定位焊件，防止变形与位置偏差，通过减少装夹时间提高效率，并改善劳动条件。由定位元件、夹紧装置和夹具体构成，各部分协同高效运作。

Welding fixtures are crucial equipment in welding production. They accurately position workpieces, prevent deformation and misalignment, boost efficiency by reducing clamping time, and improve working conditions. Comprising positioning elements, clamping devices, and the fixture body, these parts work together effectively.

应用案例 Application cases



双机双工位行走变位机柔性焊接工作站

DUAL-MACHINE AND DUAL-STATION WALKING POSITIONER FLEXIBLE WELDING WORKSTATION

该工作站由2套焊接机器人、2套行走变位机、焊房及防护设备组成，共16轴联动。工作时，可人工或机器人上料，装料完成后行走变位机进入焊房内完成焊接工作。

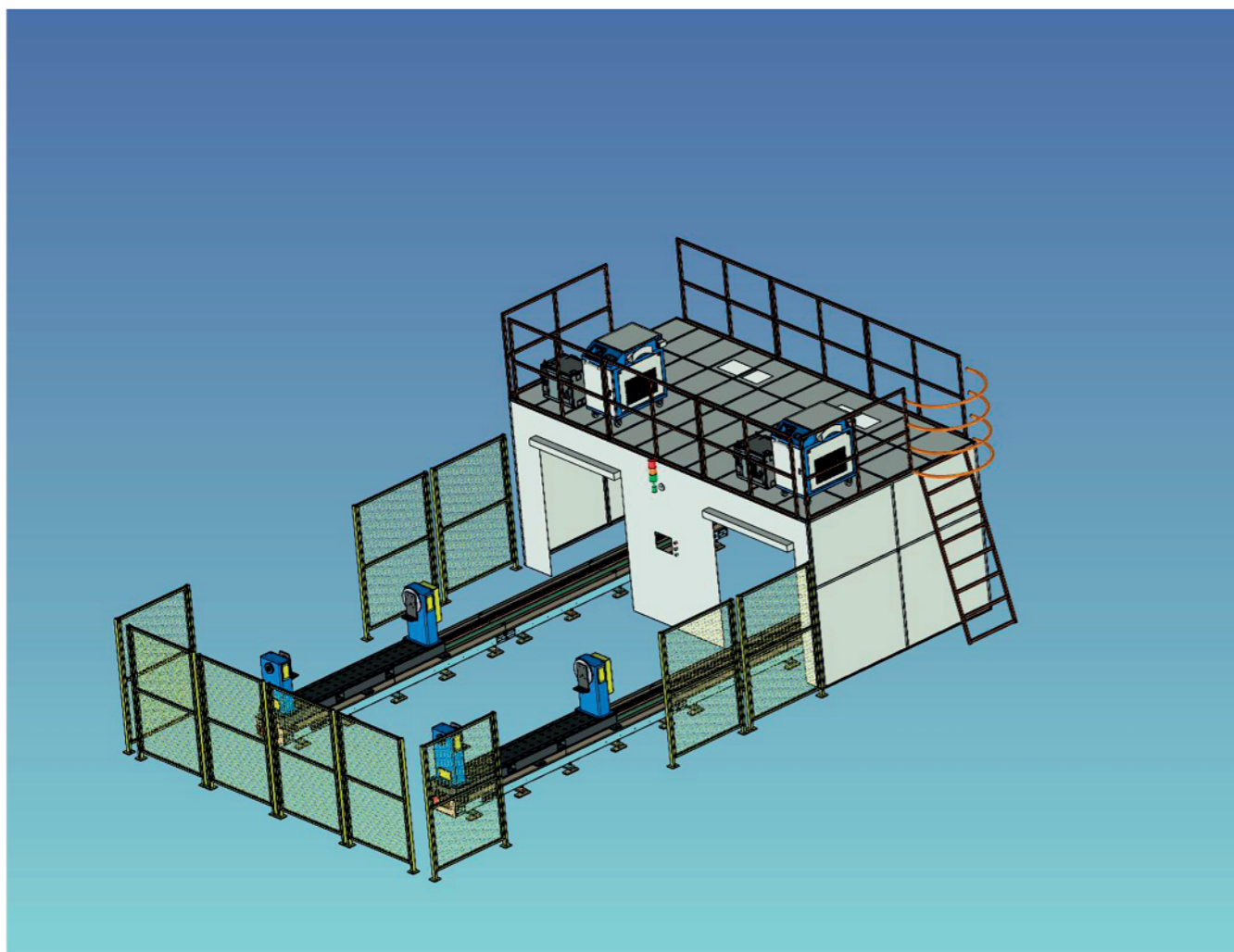
行走变位机可快速更换产品夹具，工作时可翻转变位及行走，2套行走变位机双工位工作，一台在装料时另外一台在焊接，交替往复进出焊房，保证机器人始终在工作状态，以提高生产效率。

焊房配备自动升降门，以隔断焊接弧光，焊房可加送风、吸尘设备，以处理烟尘等有害气体。配套使用护栏以增加安全性。工作站行走变位机长度及负载可定制，可选配人机交互系统，提高对设备的监管。

This workstation is composed of two sets of welding robots, two sets of walking positioners, a welding booth and protective equipment, with a total of 16 axes in linkage. When in operation, materials can be loaded manually or by robots. After loading is completed, the walking positioners enter the welding booth to complete the welding work.

The walking positioners can quickly replace product fixtures. During operation, they can be turned over, positioned and walked. The two sets of walking positioners work in a dual-station mode. When one is loading, the other is welding. They alternately enter and exit the welding booth to ensure that the robots are always in working state, thus improving production efficiency.

The welding booth is equipped with an automatic lifting door to block welding arc light. The welding booth can be equipped with air supply and dust removal equipment to handle harmful gases such as smoke and dust. Guardrails are used in conjunction to increase safety. The length and load of the walking positioners of the workstation can be customized. An optional human-machine interaction system can be selected to improve the supervision of the equipment.

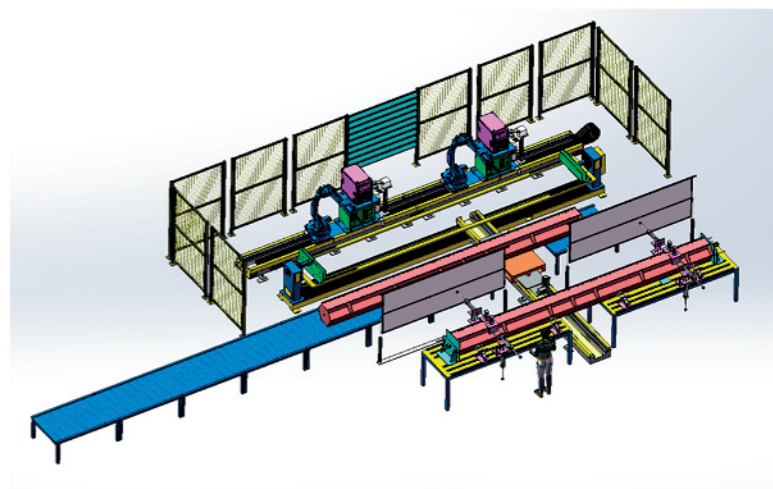


大型结构件焊接生产线

WELDING PRODUCTION LINE FOR LARGE STRUCTURAL PARTS

该产线由人工预点焊后，产品由移动顶升机构运送到机器人焊接区域，行走机器人、配合变位机及视觉跟踪完成整个焊接过程，焊接完成后由输送线运到下料区域。整线降低了工人的工作强度，改善了工作环境，自动化生产，使产品变得更加标准化，提高了整体产品质量和效率。

This production line is pre-spot welded manually. After that, the product is transported to the robot welding area by a mobile jacking mechanism. The walking robot, in cooperation with the positioner and visual tracking, completes the entire welding process. After welding is completed, the product is transported to the unloading area by the conveyor line. The entire line reduces the work intensity of workers, improves the working environment, realizes automated production, makes products more standardized, and improves the overall product quality and efficiency.

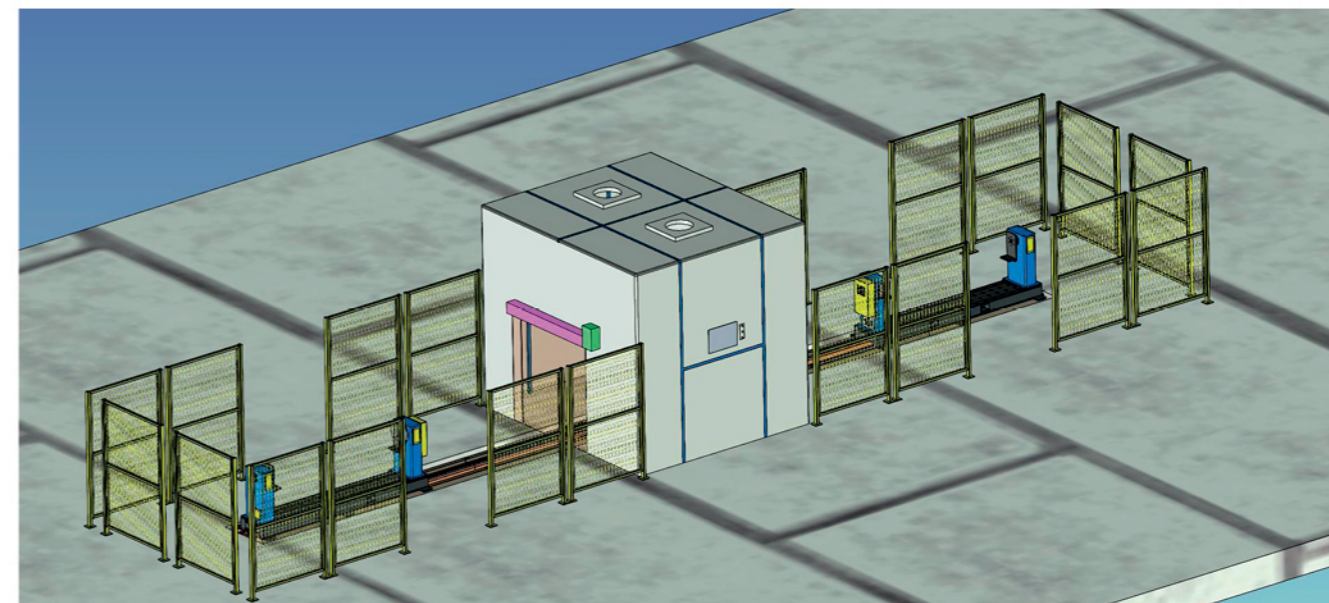


一字型行走机器人工作站

STRAIGHT-LINE WALKING ROBOT WORKSTATION

采用双机器人+双工位一字型行走的布局方式，适合于需要双工位焊接，但需要焊接不同产品时的选择。线体两端上下料，可以方便两种不同产品来料的分别存放和焊接完成后的转运。

Adopting a layout of double robots and double stations in a straight-line walking pattern is suitable for the choice when double stations are needed for welding but different products need to be welded. Loading and unloading at both ends of the line body can facilitate the separate storage of two different incoming products and the transfer after welding is completed.

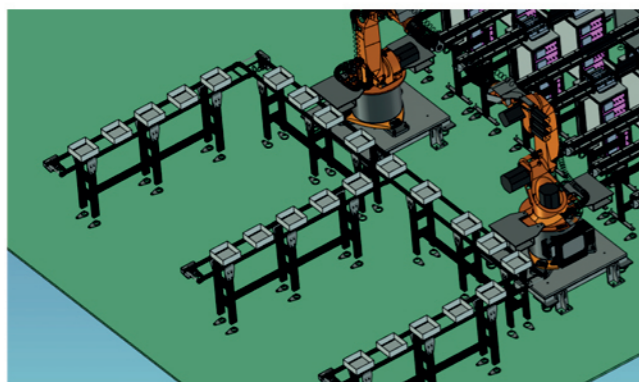
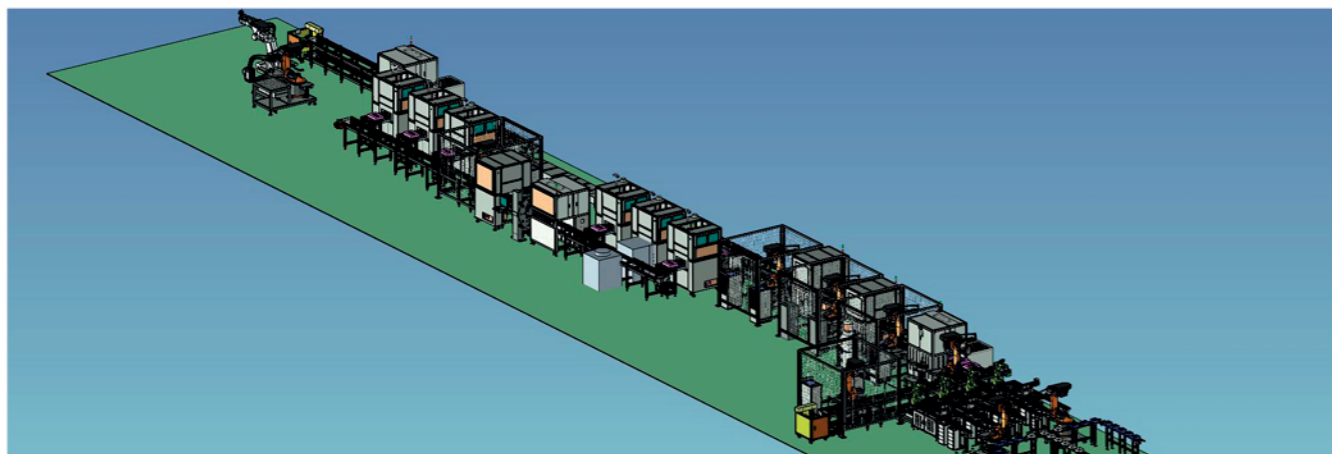


电池电芯自动化生产线

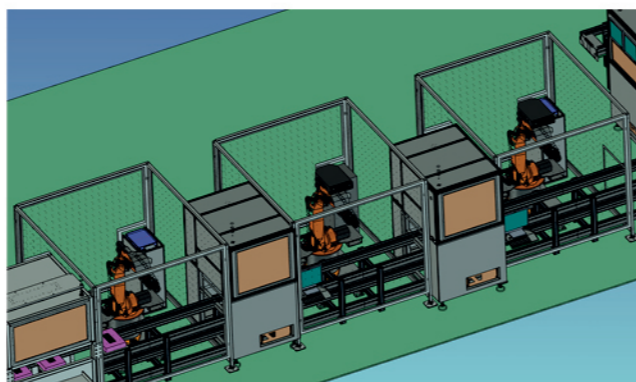
AUTOMATED PRODUCTION LINE FOR BATTERY CELLS

新能源电池外壳自动生产，从来料到成品，全自动生产，提升生产效率与产品质量。

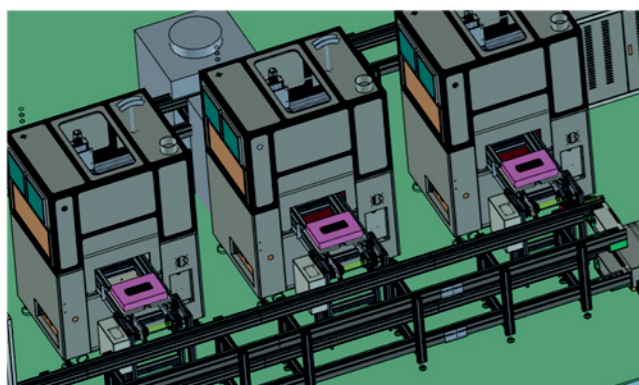
For the new-energy battery shell, it is automatically produced from incoming materials to finished products, with fully-automatic production, improving production efficiency and product quality.



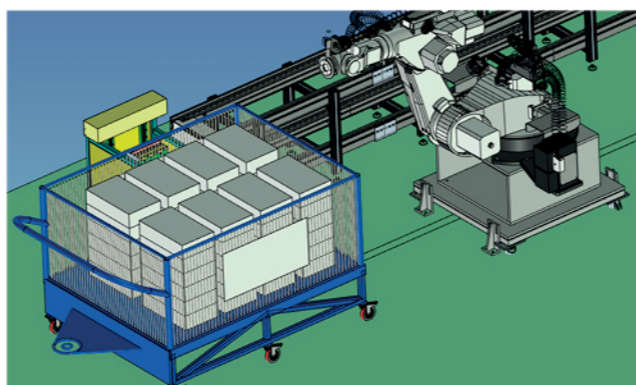
机器人自动上料
Robot automatic feeding



安装工序
Installation process



机器人焊接工序
Robot welding process



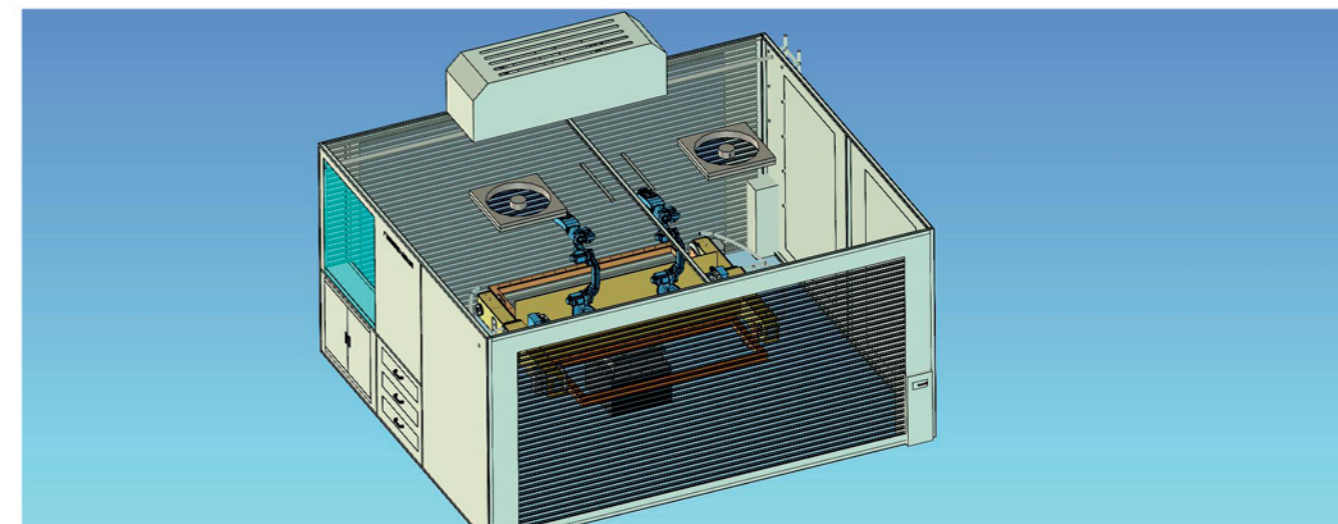
机器人码垛工序
Robot palletizing process

联动回转焊接工作站

LINKED ROTARY WELDING WORKSTATION

该站由两台 6 轴机器人配合三轴变位机，共 15 轴同步工作，两台机器人随变位机一起回转，三轴水平旋转双层一体化，整体降低工人的工作强度改善工作环境。

This workstation consists of two 6-axis robots cooperating with a three-axis positioner, with a total of 15 axes working synchronously. The two robots rotate together with the positioner. The three axes rotate horizontally and are integrated in two layers, which overall reduces the work intensity of workers and improves the working environment.

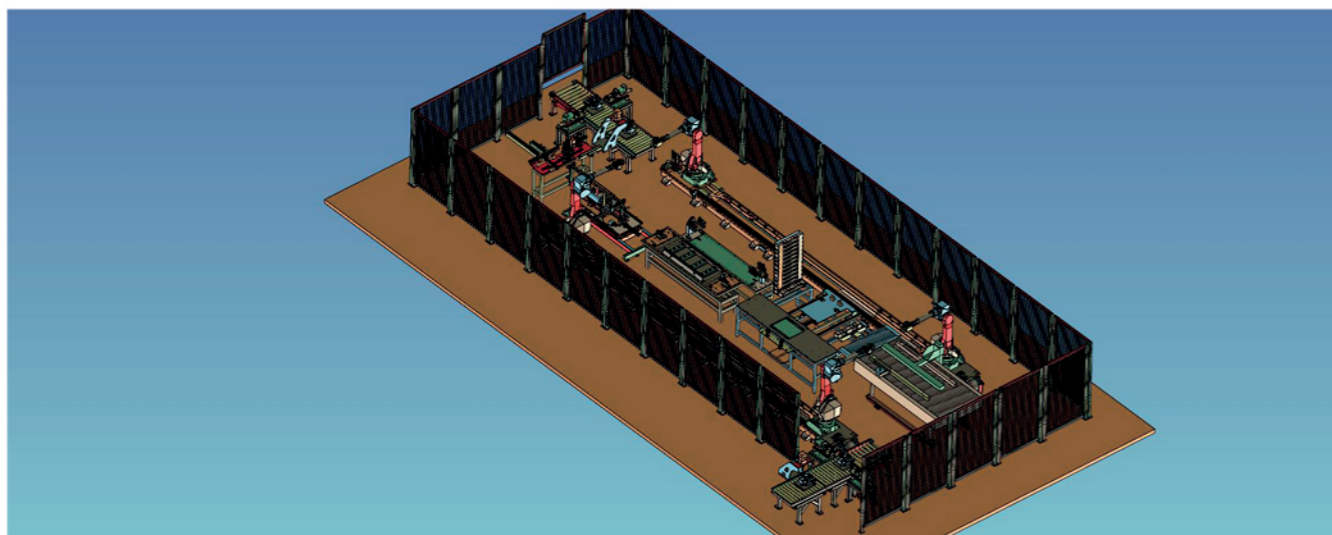


自动化装配生产线

AUTOMATED ASSEMBLY PRODUCTION LINE

该产线由工业机器人 + 地轨 + 输送线 + 工装平台 + 装配机械手组成，可实现多方位发动机缸体等汽车配件组装工作。

This production line is composed of industrial robots, ground rails, conveyor lines, tooling platforms, and assembly manipulators. It can realize multi-directional assembly work of automotive parts such as engine blocks.

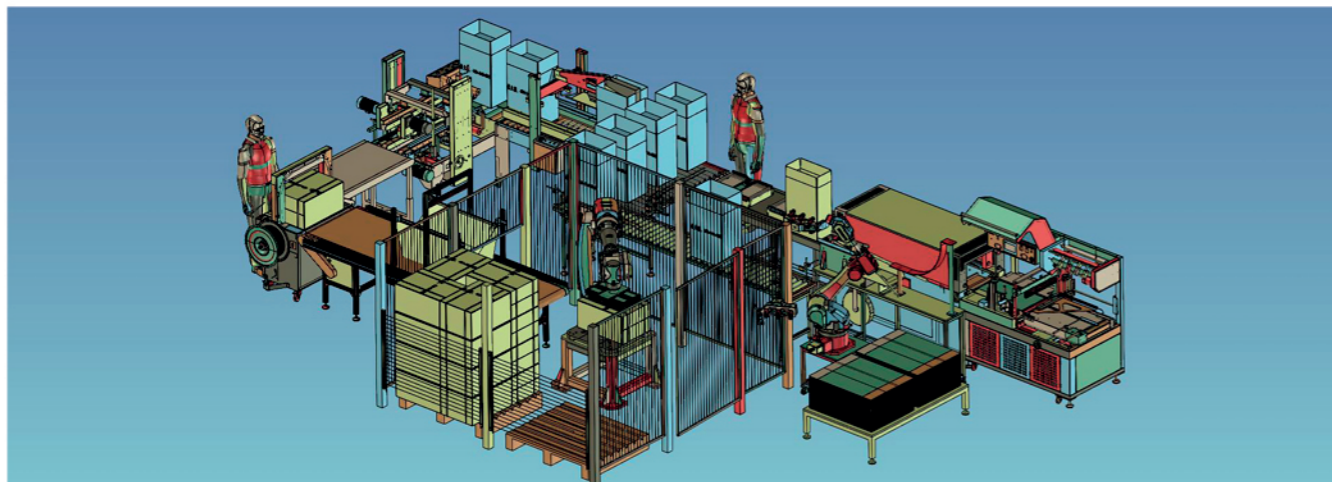


自动码垛生产线

AUTOMATIC PACKAGING AND PALLETIZING PRODUCTION LINE

产线从自动开箱开始，包含装箱工位，包装箱封口工序，自动捆扎工序，以及最后的自动码垛。该产线减少了人工劳动强度，增加了工作效率，提高了产品包装一致性。

The production line starts from automatic box opening and includes boxing stations, packaging box sealing processes, automatic strapping processes, and finally automatic palletizing. This production line reduces labor intensity, increases work efficiency, and improves product packaging consistency.



3D 视觉无序抓取配合机器人电阻自动焊

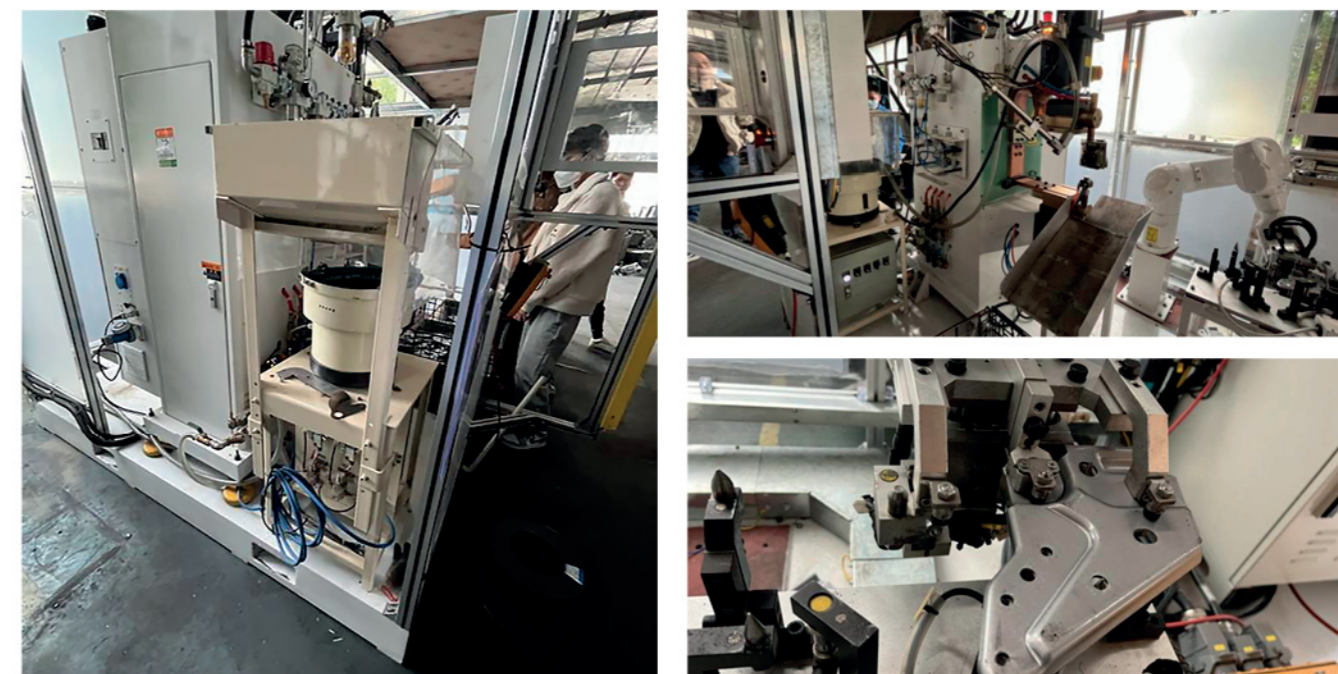
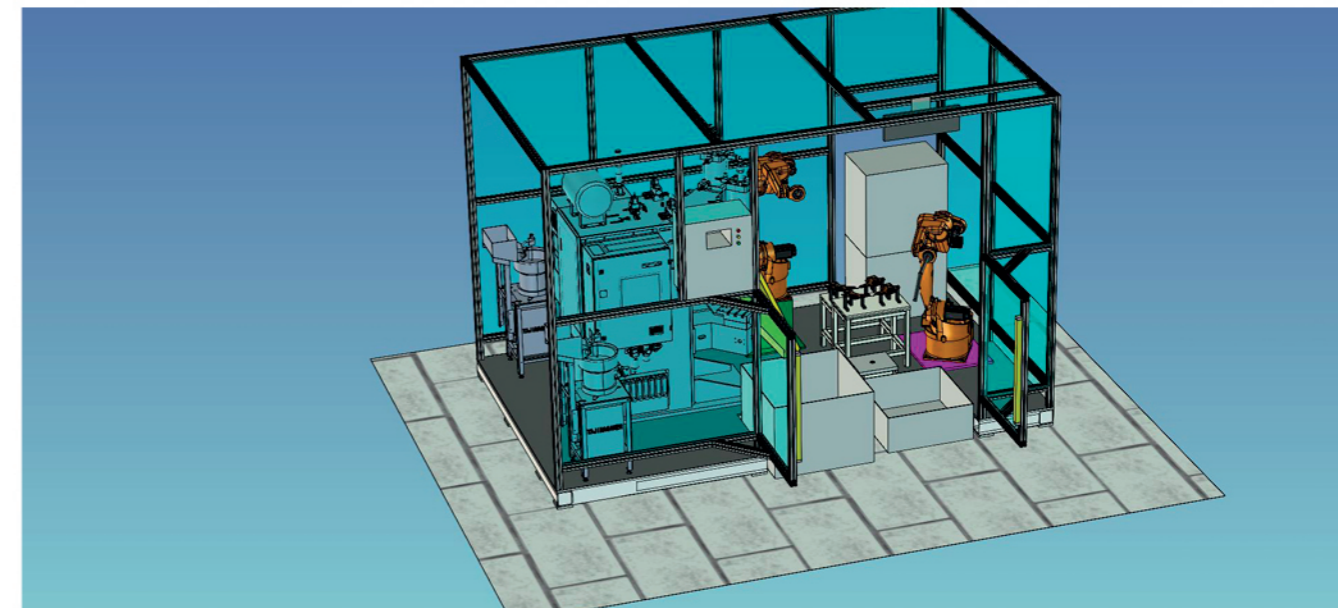
3D VISION DISORDERED GRASPING COMBINED WITH ROBOT RESISTANCE AUTOMATIC WELDING

该站由抓取机器人、搬运机器人、3D 视觉、电阻焊、自动上螺母系统、夹具、焊房、总控等组成。

该站产品来料为无序状态，机器人配合 3D 视觉系统，自动计算实现从料仓无序抓取工作。

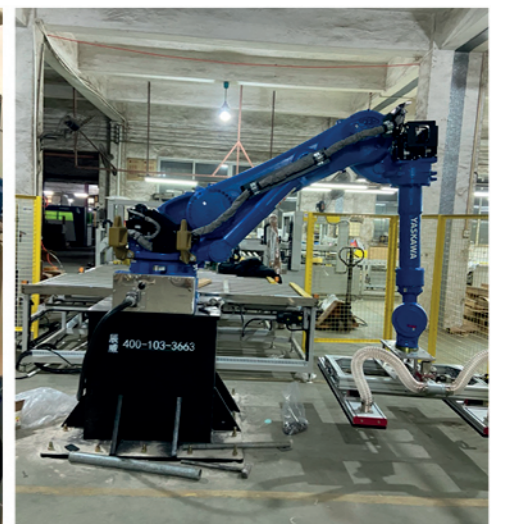
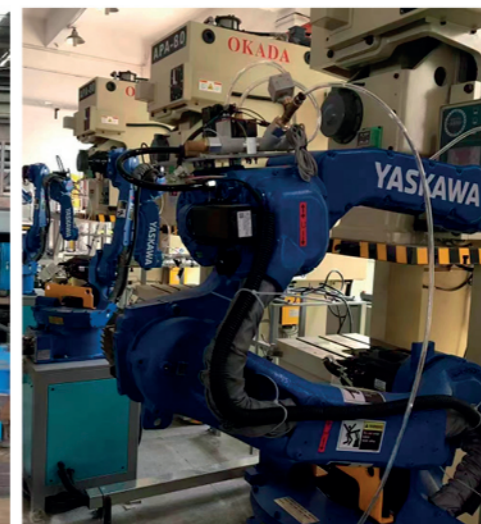
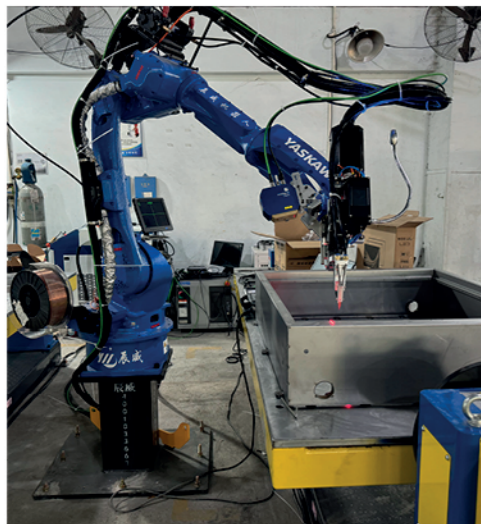
3D vision disordered grasping combined with robot resistance automatic welding. This station is composed of a grasping robot, a handling robot, 3D vision, resistance welding, an automatic nut loading system, fixtures, a welding booth, and a master control, etc.

The incoming products of this station are in a disordered state. The robot cooperates with the 3D vision system to automatically calculate and realize disordered grasping from the material bin.



客户案例

CUSTOMER CASES



合作客户

COLLABORATIVE CLIENTS



以客户为中心，躬身入局，
解决客户痛点，客户价值最大化

Putting customers at the center, immersing oneself in the situation,
Addressing customer pain points and maximizing customer value

销售网络

SALES NETWORK

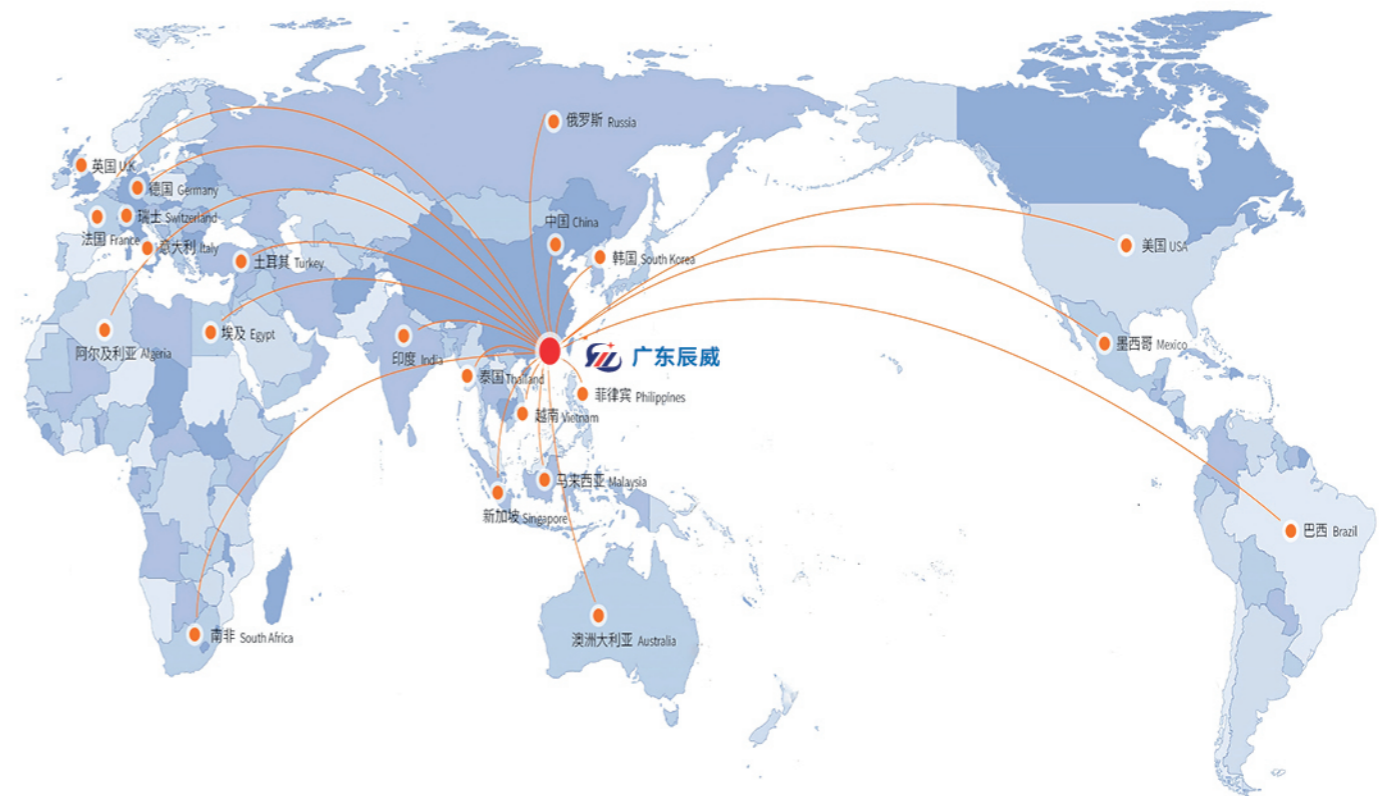
拓展国际市场

Expand International Markets

稳居国内市场，大步迈向国际市场。
已为全球提供超 20000 多台设备。

Stabilize in the domestic market and stride
towards the international market.
We have provided over 20000 devices worldwide.

立足中国·服务全球
BASED IN CHINA, SERVING THE WORLD



品质保障

QUALITY ASSURANCE

QMS 质量管理体系
QMS Quality Management System

ISO 9001 质量管理体系认证
ISO 9001 Quality Management System Certification

聚焦客户需求 + 提供竞争力产品和服务 = 为客户创造最大价值!
Focusing on customer needs+providing competitive products and services=creating maximum value for customers!



客户服务

CUSTOMER SERVICE

专业技术 | 解决行业难题 Professional Technology | Solving Industry Problems

售后服务 | 竭诚为您服务 After sales service | Dedicated to serving you

“客户的需求就是我们前进的方向，客户的信任就是我们奋斗的目标”的服务宗旨。以完善、周到的售后服务，彻底解决客户的后顾之忧。

The customer's needs are the direction we move forward, and the customer's trust is the goal we strive for. By providing comprehensive and thoughtful after-sales service, we can completely solve customers' worries.

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Your satisfaction is the direction of our efforts



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Professional Design Services

可通过电话方式咨询，我司拥有专人专项的设计团队为您服务。

You can consult by phone, and our company has a dedicated design team to serve you.



采购方案评估
Procurement Plan Evaluation

对客户情况进行充分而专业的评估，根据您的需求推荐最适合您的产品。

Conduct a thorough and professional evaluation of the customer's situation, and recommend the most suitable product for you based on your needs.



提供产品使用培训
Provide product usage training

提供产品的使用培训及维护保养等一条龙服务。

Provide one-stop services such as product usage training and maintenance.



注重售后服务
Pay attention to after-sales service

终身质保。

Lifetime warranty.