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解决方案提供商**

**INTELLIGENT INTEGRATED
SOLUTION
PROVIDER**

**A 全国统一服务热线
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**企业宣传册
CORPORATE
BROCHURE**

**让中国制造享誉世界
MAKE MADE IN CHINA BE FAMOUS IN THE WORLD**

公司简介

COMPANY PROFILE

格润智能装备(深圳)有限公司是一家专注于工业机器人、智能装备研发、生产、销售和服务的高新技术企业,可以为客户提供从关键耗材、核心组件、机器人到系统解决方案的整套服务,是行业领先的智能制造综合解决方案提供商。

格润智能装备(深圳)有限公司总部位于中国深圳,秉持创新驱动的发展理念,公司致力于自动化装联先进技术的前瞻性研究与关键耗材、核心组件的持续开发,拥有专业的机械、电子、工业自动化等技术研发团队。2018年与德国汉堡科学院、汉堡大学建立战略合作伙伴关系,凭借雄厚的技术实力,依靠严格的质量管理体系,在相关领域中不断开拓和发展,现已成为比亚迪、TCL、传音控股、创维、ATL新能源科技、FLEX(伟创力)、立讯精密、USI(环胜)、TP-LINK(普联)、欣旺达、TDK、国光电器、易事特、AOC(冠捷)、兆威等众多知名客户的首选供应商。

格润智能主打产品:智能激光锡焊机器人、AI锡焊机器人、自动点胶机器人、自动螺丝锁付机器人、智能制造生产线等。相继研发了机器视觉、MES生产信息管理系统、工艺专家系统、运动控制等软件系统,实现了先进的运动控制、视觉定位、视觉检测、传感检测、人机互联等。广泛服务于3C电子、新能源汽车、半导体5G、LED、家电、玩具、汽车电子、通讯电子、医疗电子、安防电子、军工、太阳能光伏、航空航天、智能家居等行业客户。

格润智能目前在上海、苏州、宁波、青岛、天津、重庆等地设有销售及售后服务中心办事处,产品远销世界90多个国家和地区,在欧美、东南亚、中东及一带一路沿线国家均设有销售及服务网点。

“助力智能制造、振兴民族品牌”是格润智能永恒的使命,每一款产品的研发、设计、和生产都将注重技

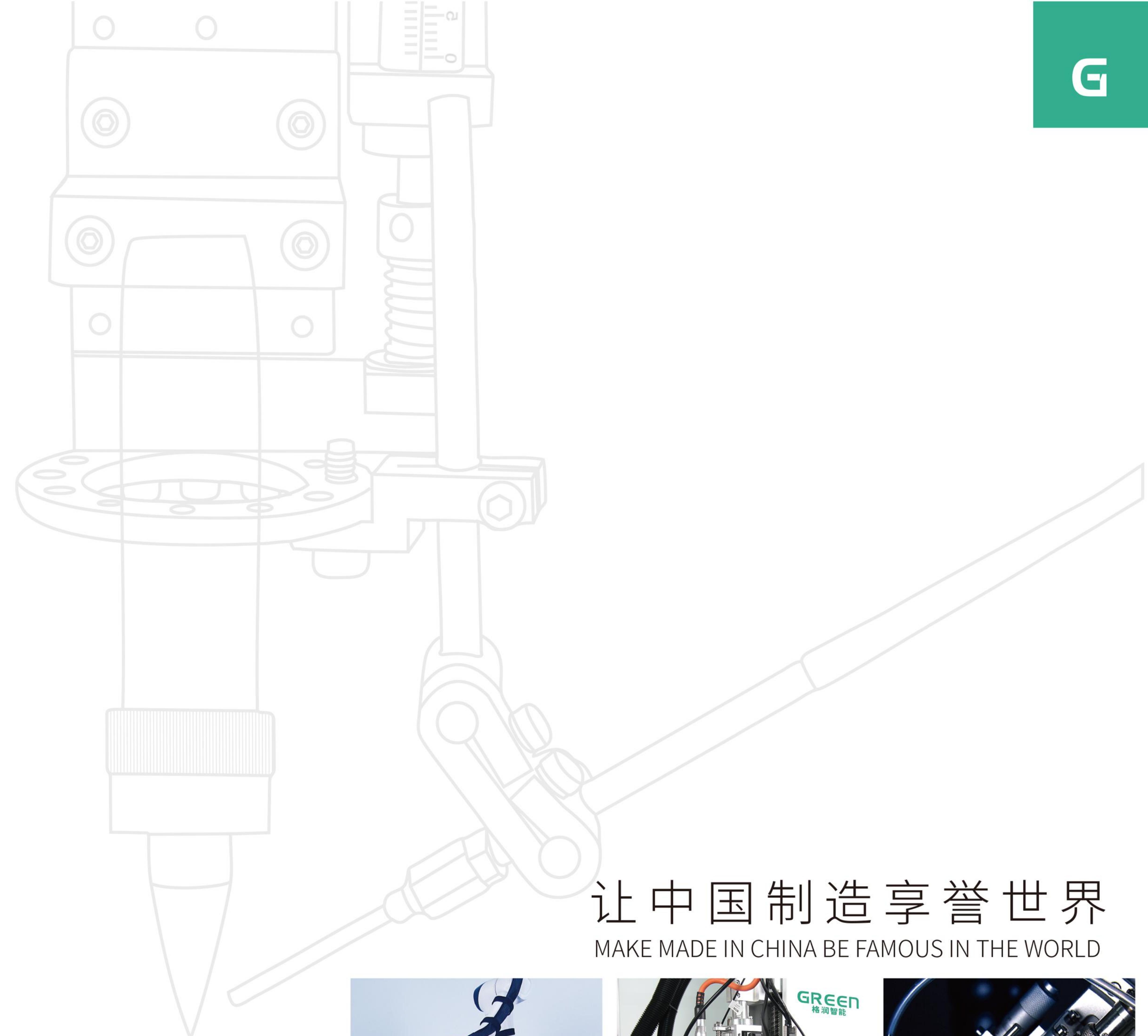
Green Intelligent Equipment (Shenzhen) Co., Ltd. is a high-tech enterprise focusing on the research and development, production, sales and service of industrial robots and intelligent equipment. It can provide customers with a complete set of services from key consumables, core components, robots to system solutions. It is a leading intelligent manufacturing integrated solution provider in the industry.

Headquarter of Green Intelligent is located in Shenzhen, China, adhere to the innovation-driven development concept and committed to the advanced technology of automatic forward-looking research and the continuous development of key consumables, core components, has a professional R&D team for machinery, electronics, industrial automation, etc. In 2018, the company established strategic partnership with the German Hamburg academy of sciences, university of Hamburg. Relying on strong technical strength and strict quality management system, continuous exploration and development in related areas, it has become the preferred supplier of many well-known customers such as BYD, TCL, Transsion, Skyworth, ATL New Energy Technology, FLEX, Luxshare, USI, TP-LINK, sunwoda, TDK, GGEC, East, AOC, Zhaowei, etc.

Main products: intelligent laser tin-welding robot, AI version - Soldering Robot, automatic gluing robot, automatic screw-locking robot, intelligent manufacturing production line, etc. We have successively developed software systems such as machine vision, MES Production Information Management System, process expert system, motion control, etc, and realized advanced motion control, visual positioning, visual inspection, sensor inspection, human-machine interconnection, and so on. Our products are widely used in 3C electronics, New energy vehicles, semiconductors, 5G, LED, home appliances, toys, automotive electronics, communication electronics, medical electronics, security electronics, military, solar photovoltaic, aerospace, smart home and other industries.

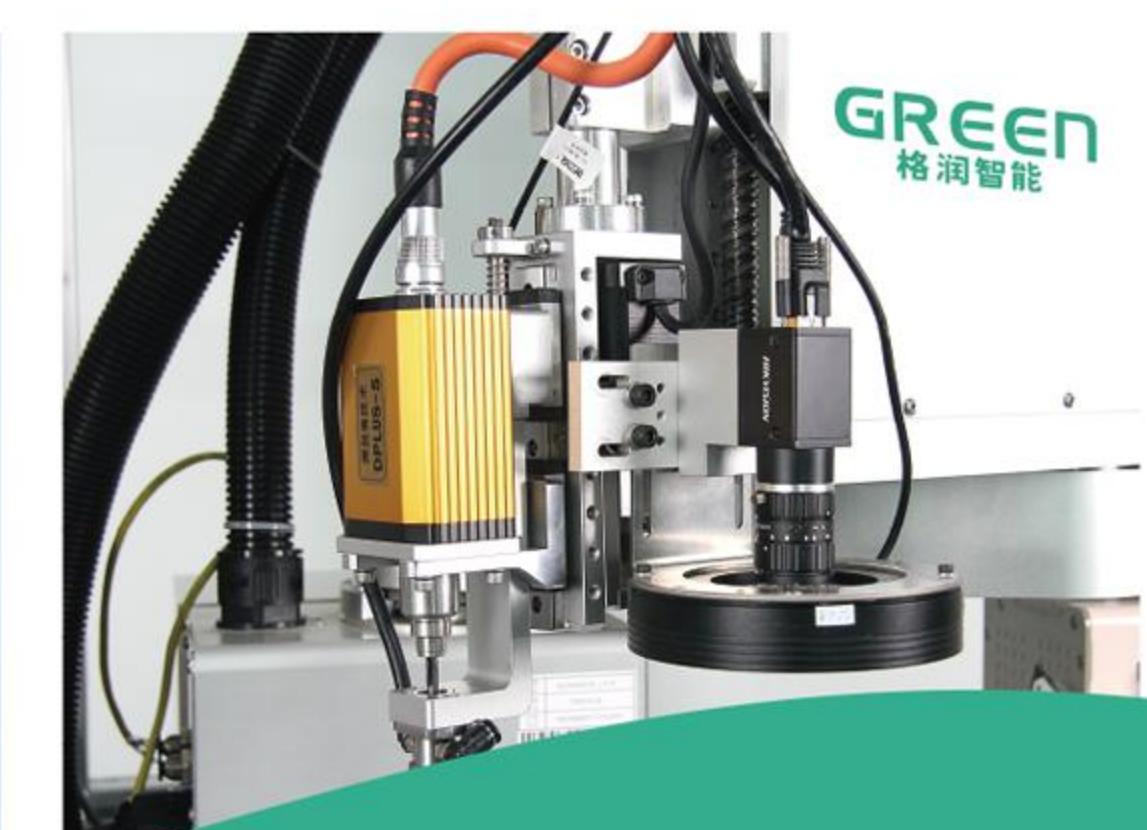
At present, Green Intelligent has set up sales and after-sales service centers in Shanghai, Suzhou, Ningbo, Qingdao, Tianjin, Chongqing and other places. Its products are exported to more than 90 countries and regions in the world, and it has set up sales and service outlets in the United States, Southeast Asia, the Middle East and One Belt And One Road countries along the route.

“Helping intelligent manufacturing and revitalizing national brands” is the eternal mission of Green Intelligence. The R&D, design, and production of each product will focus on technological innovation and strive for perfection. With continuous R&D and upgrade, Green Intelligent will provide more high-quality intelligent manufacturing solutions to more high-end users around the world.



让中国制造享誉世界

MAKE MADE IN CHINA BE FAMOUS IN THE WORLD



企业理念

客户第一、员工第二、股东第三

企业使命

助力智能制造、振兴民族品牌

企业愿景

让中国制造享誉世界

价值观念

主动、正面、利他、精进、担当、感恩

Enterprise Concept

Customer first, employees second, shareholders third

Enterprise Mission

Assist intelligent manufacturing, vitalize national brand

Enterprise Vision

Make Made In China be famous in the world

Values

Active, Positive, Altruistic, Progressive, Responsible, Grateful

爆品

高速在线式喷胶机

ON-LINE DISPENSING MACHINE

格润智能高速在线式喷胶机DP1010

Green on-line dispensing machine DP1010



技术参数 Technical Specification

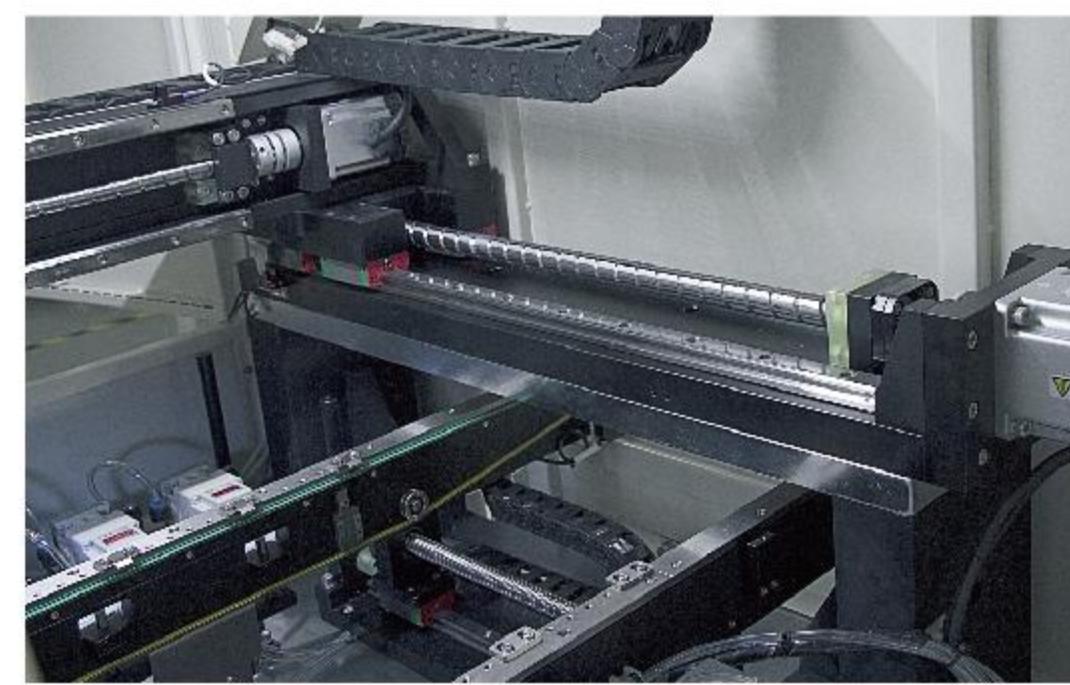
项目 Item	参数 Specification
型号 Model	DP1010
X轴 X axis	350mm
Y轴 Y axis	450mm
Z轴 X axis	50mm
XY重复精度 XY repeatability	±0.01mm
XY定位精度 XY positioning accuracy	±0.015mm
Z轴定位精度 Z axis positioning accuracy	±0.015mm
Z轴负载 Z axis load	8KG
XY轴最大移动速度 XY max. speed	1000mm/s
Z轴最大移动速度 Z max. speed	500mm/s
最大加速度 Max. acceleration	1.0g
轨道传输高度 Orbital transmission height	900±25mm
轨道调宽范围 Orbital widening range	50~300mm
轨道最大承重 Orbital maximum load	4KG
最大点胶范围 Maximum dispensing range	300*300mm
运动方向 Movement direction	左-右(右-左) left-right(right-left)
输入电源 Power supply	AC220V 10A 50-60HZ
输入气压 Input air pressure	0.5~0.7MPa
最大功率 Max. power	2.5KW
外形尺寸 Outer demension (L*W*H)	1020*815*1490 (mm)
设备重量 Weight	约500KG Around 500KG

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高速在线式喷胶机

ON-LINE DISPENSING MACHINE

- 细节展示 Details Show



- 应用范围 Application Range

指纹识别模组、手机边框粘接、摄像头粘接、底部填充、引脚包封、堆栈封装、围坝填充、SMT红胶制程
Fingerprint recognition module, mobile phone frame bonding, camera bonding, underfill, pin encapsulation, stack packaging, dam filling, SMT red glue process
适用胶水:UV胶、热熔胶、黑胶、红胶、银浆、锡膏。
Applicable glue: UV glue, hot melt glue, black glue, red glue, silver paste, solder paste.

- 应用领域 Application Field

通讯行业/光通讯行业/LED制造/电子工业
Communications industry /Optical communication industry / LED industry /Electronics industry

- 产品优势 Product Advantage

具备高性能条件下的高性价比,非接触式喷射阀,实现更小的点胶直径,以及更广的适用领域喷射阀
提高点胶可靠性、一致性,以及提升产能和材料利用率,最小溢胶宽度仅为0.2mm(与配置及胶水有关)
识别Mark点,对位更精准,身份识别,程序自动调用、防呆、数据统计等功能,实现制造智能化
High cost performance under high performance conditions, non-contact injection valve can achieve a smaller dispensing diameter (the smallest glue diameter is only 0.2mm) and a wider application field, also improves the reliability and consistency of dispensing, as well as the productivity and material utilization. It can recognize the mark point, can automatically recognize the products and set path; Identity recognition, automatic call program, foolproof function, data statistics and other functions can realize manufacturing intelligence.

技术参数 Technical Specification

标配 Standard Configuration	参数 Specification
CCD视觉识别系统 CCD visual recognition system	标配130W像素相机+三色同轴光源 130W pixel camera + tri-color coaxial light source
驱动方式 Drive method	伺服电机+研磨丝杆+精密导轨 Servo motor + grinding screw + precision guide rail
控制方式 Control method	工控机 Industrial PC
通讯协议 Protocol	SMEMA
顶升装置 Jack lifting device	
LED照明 LED lighting	

选配 Optional Configuration

选配 Optional Configuration	参数 Specification
阀体 Valve	气动喷射阀/压电阀/螺杆阀等 Pneumatic injection valve/valve/piezoelectric screw valve,etc
MES系统 MES system	
微量天平 Microbalance	0.1mg
激光测高 Laser height measurement	可自动调整调校Z轴高度差 Can automatically adjust the height of the Z axis to compensate for the difference
增压泵 Booster pump	
工业条码扫描仪 Industrial barcode scanner	
双阀结构 Dual-valve structure	
双轨运输 Dual-track transportation	
四方位倾斜 Four-way tilt	

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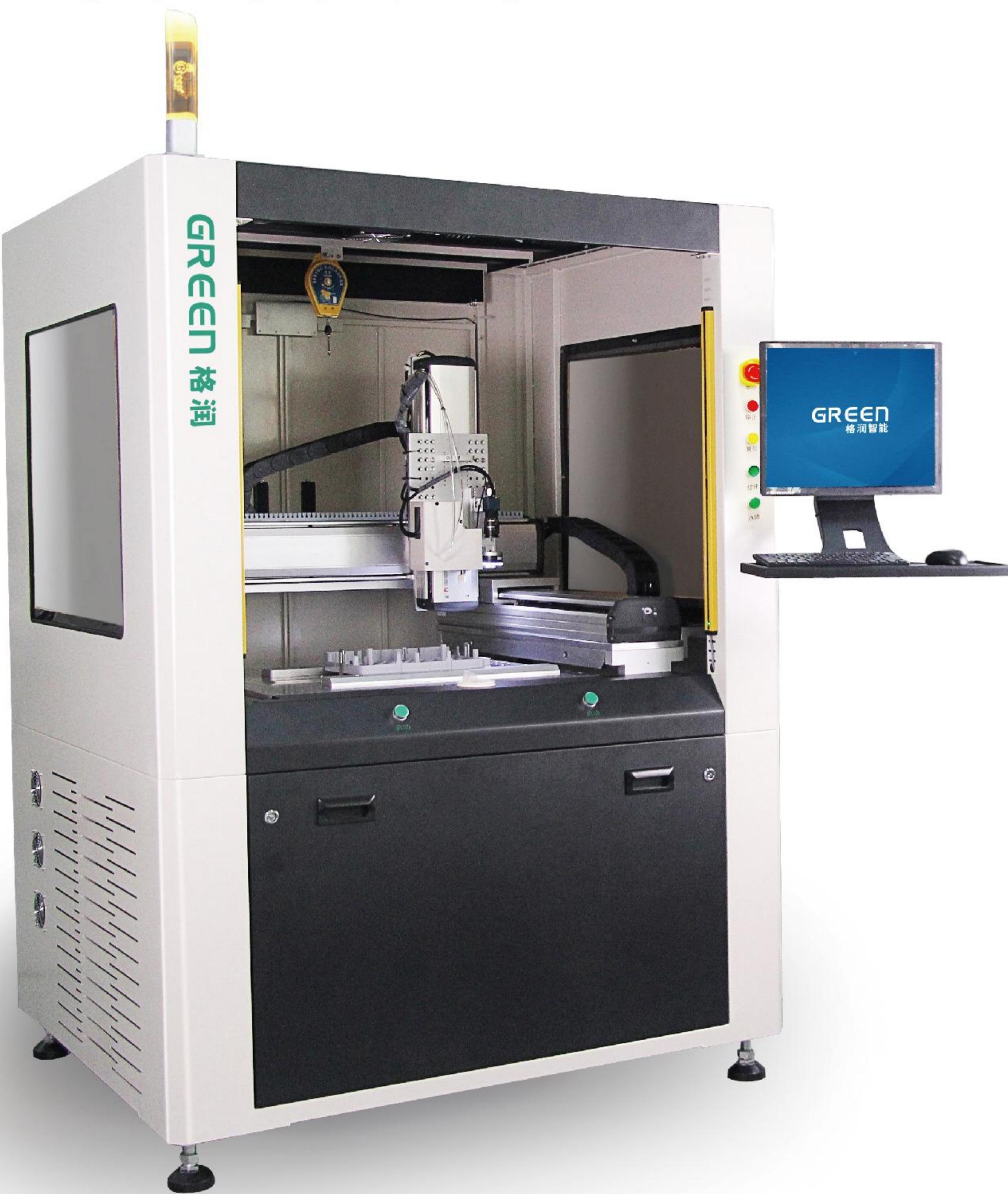
爆品

新能源电池点胶机

NEW ENERGY BATTERY DISPENSING MACHINE

格润智能高速龙门点胶机 DP2000S

Green high-speed gantry dispensing machine DP2000S



技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	DP2000S
X轴 X axis	600mm
Y轴 Y axis	600mm
Z轴 Z axis	150mm
U轴 U axis	360°
XYZ重复精度 XYZ repeatability	±0.02mm
XYZ定位精度 XYZ positioning accuracy	±0.02mm
Z轴负载 Z axis load	7Kg
XY轴最大移动速度 XY max. speed	1000mm/s
Z轴最大移动速度 Z max. speed	500mm/s
输入电源 Power supply	AC220V 10A 50-60HZ
输入气压 Input air pressure	0.5~0.7MPa
最大功率 Max. power	2KW
外形尺寸 Outer demension(L*W*H)	1160*1307*1854(mm)
设备重量 Weight	约270Kg Around 270kg

新能源电池点胶机

NEW ENERGY BATTERY DISPENSING MACHINE

● 细节展示 Details Show



● 应用范围 Application Range

PACK电池包电芯固定(18650,21700,26650,32650)以及方形动力电池、FPC原件器件粘贴、底部填充、智能手表表面贴装

PACK battery pack cell fixation (18650, 21700, 26650, 32650) and square power battery,FPC original device paste,underfill,smart watch surface mount

适用胶水:硅胶、UV胶、热熔胶、导电胶(注可根据客户实际需求定制阀)

Applicable glue: silica gel,UV glue,hot melt glue,conductive glue (valves can be customized according to the actual needs of customers)

● 应用领域 Application Field

新能源行业/5G行业/通讯行业/光通讯行业/LED行业/电子工业

New energy Industry/5G industry/Communications industry/Optical communication industry/LED industry/Electronics industry

● 产品优势 Product Advantage

1、速度:UV胶及部分浓度稀的硅胶可实现约1秒点18直径圆;

2、导图功能,节省调试时间;

3、CCD:识别Mark点,精准编辑点胶路径,精准对位;

4、通用性强,可满足PACK电芯固定90%产品

1. Speed:UV glue and some dilute silica gel can achieve a circle of 18 diameters in 1 second;

2. Map function,saving debugging time;

3. CCD:Recognize mark points,accurately edit the dispensing path,and accurately align

4. Strong versatility,which can satisfy 90% of fixed PACK batteries

技术参数 Technical Specification

标配 Standard Configuration	参数 Specification
CCD视觉识别系统 CCD visual recognition system	标配MV-CE050-30GM
驱动方式 Drive method	伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail
控制方式 Control method	工控机 Industrial PC
安全光栅 Safety grating	
选配 Optional Configuration	参数 Specification
阀体 Valve	气动喷射阀/压电阀/螺杆阀等 Pneumatic injection valve/valve/piezoelectric screw valve, etc
MES系统 MES system	
增压泵 Booster pump	
螺杆泵 Screw pump	
微量天平 Microbalance	
工业条码扫描仪 Industrial barcode scanner	
激光测高 Laser height measurement	

车载音响半自动点胶固化线

CAR AUDIO SEMI-AUTOMATIC DISPENSING CURING LINE

格润智能车载音响半自动点胶固化线AL-DPC02
Green Car audio semi-automatic dispensing curing line AL-DPC02



点胶机技术参数 Dispenser Technical specifications

项目 Item	参数 Specifications
型号 Model	AL-DPC02
X轴 X-axis	行程 working range 1100mm
	速度 speed 0~1000mm/s
	加速度 acceleration 0~3000mm/s ²
	重复定位精度 Repeatable positioning accuracy 0.02mm
Y轴 Y-axis	驱动方式 Drive mode 伺服电机+精密丝杆 Servo motor + precision screw
	行程 working range 650mm
	速度 speed 0~1000mm/s
	加速度 acceleration 0~3000mm/s ²
Z轴 Z-axis	重复定位精度 Repeatable positioning accuracy 0.02mm
	驱动方式 Drive mode 伺服电机+精密丝杆 Servo motor + precision screw
	行程 working range 100mm
	速度 speed 速度0~500mm/s
重复精度 Repeatability	加速度 acceleration 0~3000mm/s ²
	重复定位精度 Repeatable positioning accuracy 0.02mm
	驱动方式 Drive mode 伺服电机+精密丝杆 Servo motor + precision screw
	±0.02mm以内
供胶系统/阀体 Glue supply system/valve body	根据不同产品选择 Choose according to different products
工作离地高度 Working ground clearance	900±20mm
电压 voltage	AC220V
功率 power	3KW
尺寸 Size	1800*1050 *1900mm

车载音响半自动点胶固化线

CAR AUDIO SEMI-AUTOMATIC DISPENSING CURING LINE

● 细节展示 Details show



点胶机 Dispenser

固化炉 Curing oven

治具装夹区 Fixture clamping area

固化炉技术参数 Curing oven Technical specifications

项目 Item	参数 Specifications
型号 Model	AL-DPC02
类型 type	离线式 Offline
控制方式 Control mode	按键+欧姆龙温控表(可选配PLC+触摸屏)
工作离地高度 Working ground clearance	900±20mm
温差 Tempera ture	±8°C (根据不同的板有所偏差)
温度调节范围 Temperature regulation range	室温-120°C
电压 voltage	5线3相380V
正常工作时消耗功率 Power is consumed during normal operation	3KW
总功率 Total power	10KW
尺寸 size	1600 *1300 *1900mm

● 工作流程 Workflow

人工把产品装夹在治具上
Manually clamp the product on the fixture

↓
人工运送到点胶工位
Manual delivery to the dispensing station

↓
双手启动
Start with both hands

↓
自动点胶
Automated dispensing

↓
人工运送到固化炉工位
Manual transport to the curing oven station

↓
固化炉固化
Curing oven curing

↓
人工取走产品，并装夹新的产品
Manually remove the product and clamp the new product



● 应用范围 Application Range

新能源汽车、电脑、集成电路、平板、数码、汽车工业、电池组装、扬声器点胶
机械部件密封、喇叭、五金配件、芯片绑定、半导体封装、LED封装点胶、PCB板点胶 半导体微电子组装
New energy vehicles, computers, integrated circuits, tablets, digital, automotive industry,
battery assembly, speaker dispensing Mechanical parts sealing, speakers, hardware accessories,
chip binding, semiconductor packaging, LED package dispensing, PCB board dispensing semiconductor
microelectronics assembly

喷胶流水线

AUTOMATIC GLUE SPRAYING LINE

格润智能喷胶流水线案例AL-DPC01

Green automatic glue spraying line AL-DPC01



此线体为非标定制

技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	AL-DPC01
输送方式 Delivery method	上下皮带线 Upper and lower belt line
翻转 Flip	自动翻转 Auto flip
回流 Reflow	升降机上下回流 Elevator up and down return 300*300*100(mm)
点胶行程 Dispensing stroke(X*Y*Z)	高速气动喷射阀 High-speed pneumatic injection valve 800mm/s
点胶方式 Dispensing method	伺服电机+丝杠+导轨 servo motor+screw+precision guide rail
运动速度 Movement speed	1000组 1000 groups ±0.01 mm
驱动方式 Drive method	运动控制卡+PLC+触摸屏 Motion control card+PLC+touch screen 8KW
程序记录模式 Program recording mode	AC220V 32A 50HZ
重复精度 Repeatability	点、直线、圆弧、整圆、曲线、多段线、螺旋线、椭圆 Point, Line, Arc, Full Circle, Curve, Polyline, Helix, Ellipse
控制系统 Control system	12 In puts/12 Out puts
最大功率 max.power	LED教导盒和触摸屏 LED teaching box and touch screen
输入电源 Power supply	自动擦胶 Automatic wipe function
可运动图形 Motion graph	自动检测缺胶报警 Automatic detection of glue shortage alarm
I/O信号 I/O signal	视觉机构 visual agency
显示方式 Display method	5400*760*1550(mm)
清洗 Cleaning	
胶量检测 Glue quantity detection	
选配 Optional	
外形尺寸 Outer demension(L*W*H)	

喷胶流水线

AUTOMATIC GLUE SPRAYING LINE

- 细节展示 Details show



- 应用范围 Application Range

手机、电脑、集成电路、平板、数码产品、电池组装、扬声器
机械部件密封、芯片绑定、半导体封装、LED封装点胶
Mobile phone、computer、integrated circuit、tablet、digital products、battery assembly、speaker
Mechanical parts sealing、chip bonding、semiconductor packaging、LED packaging dispensing

- 产品优势 Product Advantage

1. 整线针对Type-C产品点胶自动线，通过输送线到达点胶工位，进行自动点胶，采用双层输送线进行治具回流，采用气动喷射阀点胶。
2. 设备精度高，设备重要标准件采用国际知名品牌，保证设备的精度和稳定性。
3. 设备采用嵌入式运动控制卡加PLC控制，可实现点/线/面/循环点胶作业。
4. 专用的操作软件，易懂易学。
5. 超高性价比，用最低的成本实现点胶智能化。
6. 程式文件可通过U盘上传/下载，方便资料管理及保存。
7. 此线体应用范围非常广泛，适合多种行业多种产品。
8. 点胶机线体设计采用自动翻转和升降机构组成，只需一人上下料作业，可大量节约作业时间和人工成本。
1. The whole line is the automatic dispensing line for Type-C products. It reaches the dispensing station and start dispensing. The double-layer conveyor line is used to reflow the fixture and dispensing with pneumatic jet valve.
2. The equipment has high precision, and the important standard parts of the equipment adopt international famous brands to ensure the precision and stability of the equipment.
3. The equipment adopts embedded motion control card plus PLC control system, which can realize point/line/surface/cycle dispensing operation.
4. With dedicated operating software which is easy to learn and use.
5. Super cost-effective, realize intelligent dispensing with the lowest cost.
6. Program files can be uploaded/downloaded through U disk, which is convenient for data management and storage.
7. It is suitable for products and requirements industries.
8. Automatic turning and lifting , only one person is required for loading and unloading operations, which can greatly save operation time and labor costs.

落地式点胶机

FLOOR TYPE DISPENSER

格润智能落地式点胶机GR-FD03

Green Floor type dispenser GR-FD03



技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	GR-FD03
工作模式 Operating mode	自动 automatic
上料方式 Feeding method	人工上料 Manual feeding
下料方式 Cutting method	人工下料 Manual cutting
X/Y/Z焊锡行程 Equipment stroke	500*500*100(mm)
运动速度 Movement speed	500mm/s(最大800mm/s)/(Up to 800mm/s)
电机类型 Motor type	伺服电机 Servo motor
点胶方式 Dispensing method	针筒 Syringe
重复精度 Repeatability	±0.02 mm
控制系统 Control system	运动控制卡+工控机鼠键 Motion control card + industrial computer mouse key
导轨 guide	台湾品牌 Taiwanese brand
丝杆 Screw	台湾品牌 Taiwanese brand
光电开关 Photoelectric switch	欧姆龙/台湾品牌 Omron/Taiwan brand
显示方式 Display method	显示器 monitor
可运动图形 Motionable graphics	点、直线、圆弧、整圆、曲线、多段线、螺旋线、椭圆 Point, Line, Arc, Full Circle, Curve, Polyline, Helix, Ellipse
驱动方式 Drive mode	伺服电机+精密丝杆+精密导轨 Servo motor + precision screw + precision guide
视觉系统 Vision system	映美精工业相机 Imaging Industrial Camera
功率 Power	3KW
电源 Power supply	AC220V/50HZ
尺寸 size(L*W*H)	980*1050*1720MM

落地式点胶机

FLOOR TYPE DISPENSER

- 细节展示 Details show



- 应用范围 Application Range

手机、电脑、集成电路、平板、数码、汽车工业、电池组装、扬声器点胶、机械部件密封、五金配件、芯片绑定
半导体封装、LED封装点胶、PCB板点胶

Mobile phone, computer, integrated circuit, tablet, digital, automotive industry, battery assembly speaker dispensing, mechanical parts sealing, hardware accessories, chip bonding semiconductor packaging, LED packaging dispensing, PCB board dispensing

- 产品优势 Product Advantage

- 1.设备针对圆形产品,人工上下料,视觉自动识别,精准计算自动校正点胶路径;
- 2.根据不同点胶需求,点胶速度/点胶量/点胶轨迹(空间点、线、圆弧等)可单独设置。
- 3.精密回吸控制器,进口电磁阀,带回吸功能,点胶轨迹精准,出胶均匀,断胶干脆,不拉丝,不滴胶。
- 4.多种点胶针头、针筒、点胶阀及控制器可选,满足不同要求,可调节气压控制胶量。
- 5.视觉识别Mark,精准计算,自动校正点胶路径;
- 6.驱动方式:伺服电机+精密丝杆+精密导轨传动,伺服电机+中空旋转台,有效提升运动定位精度和重复精度;
- 7.专用视觉点胶操作软件,将点胶最简化;
- 8.程式文件可通过U盘上传/下载,方便资料管理及保存。
- 1.The equipment is aimed at circular products, manual loading and unloading, automatic visual recognition, accurate calculation and automatic correction of the dispensing path;
- 2.According to different dispensing requirements, dispensing speed/dispensing amount/dispensing trajectory (spatial point, line, arc, etc.) can be set separately.
- 3.Precision back suction controller, imported solenoid valve, with back suction function, accurate dispensing trajectory, uniform glue discharge, crisp glue breakage, no wire drawing, no glue dripping.
- 4.A variety of dispensing needles, syringes, dispensing valves and controllers are available to meet different requirements, and the air pressure can be adjusted to control the amount of glue.
- 5.Visual recognition Mark, accurate calculation, automatic correction of dispensing path;
- 6.Drive mode: servo motor + precision screw + precision guide rail drive, servo motor + hollow rotary table, effectively improve the motion positioning accuracy and repeatability;
- 7.Special visual dispensing operation software simplifies dispensing;
- 8.Program files can be uploaded/downloaded through U disk, which is convenient for data management and storage.

全自动高速六头注油机

Fully automatic high-speed six-head oil injection machine

格润智能全自动高速六头注油机GR-OIL-331

Green Fully automatic high-speed six-head oil injection machine GR-331



技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	GR-OIL-331
控制系统:Control System	手持编程器+PLC+触摸屏 Handheld programmer + PLC + touch screen
X轴行程范围 X axis range of travel	300
y轴行程范围 Y axis range of travel	300
z轴行程范围 Z axis range of travel	100
重复定位精度 Repeatability	±0.01MM
驱动方式 Drive mode	伺服电机+丝杆+精密直线导轨 Servo motor + lead screw + precision linear guide
注油泵精度 Oil injection pump accuracy	±0.01ML
产能 Capacity	2-4秒/PCS 2-4 sec/PCS
电源 power supply	AC220V/50HZ
功率 power	1000W
气源 Gas source	0.4-0.7MPa
外形尺寸 Dimensions	660X670X1050MM
重量 weight	130KG

全自动高速六头注油机

Fully automatic high-speed six-head oil injection machine

● 细节展示 Details show



● 应用范围 Application Range

数码电子/LED/无线通信行业/家电行业/汽车行业/玩具行业
Digital Electronics/LED/Wireless Communication Industry/Home Appliance Industry/Automotive Industry/Toy Industry

● 功能简介 Function introduction

1. 手持盒采用320*240高分辨率彩屏、全中文操作界面，易学易用。
 2. 具有画点、直线、多段线、三维圆弧(空间圆弧)、圆、跑道、矩形、涂层、自动圆角、不规则三维样条曲线等图形元素；丰富的手工教导功能及图形预览功能。
 3. 具有四维联动功能，能对圆和圆弧进行径向跟踪。
 4. 具有条件跳转功能，和双MARK点旋转对针功能。
 5. 具有跳选功能，能同时选中不连续的多条指令。
 6. 具有指令移动功能，能将已编辑的指令移到目标位置。
 7. 具有断点执行功能，可以从指定点开始执行。
 8. 具有区域阵列复制，偏移操作，批量编辑，单步运行，I/O输入输出等功能。
 9. 具有自动执行、自动复位、产量设定、加工时间计时器等功能。
 10. 具有四种不同的拉丝工艺选择，可解决拉丝等工艺难题。
 11. 支持DXF和PLT文件导入，自动路径优化功能。
 12. 动作参数编辑完毕，通过串口将动作参数下载至控制器中，即可脱机独立运行。也可将动作参数保存到手持盒中，方便调用；并能进行设备间的图形拷贝及保存。
 13. 手持盒可存储数百个加工文件，每个文件可支持8000条指令，使用时调出即可。
 14. 硬件上具备4个枪通道控制、4路通用输出、8路输入、12路高速脉冲输出；控制注油时间精度1ms。
 15. 每条动作指令都有独立的开油延时、关油延时、退枪高度、独立的提前关油功能，灵活的批量修改功能可以提高编辑效率，也可解决堆油问题。
 16. 支持按类型分类批量修改参数。
1. The handheld box adopts 320*240 high-resolution color screen and full Chinese operation interface, which is easy to learn and use.
2. It has graphic elements such as drawing points, straight lines, polylines, three-dimensional arcs (space arcs), circles, runways, rectangles, coatings, automatic fillets, irregular three-dimensional splines, etc.; rich manual teaching functions and graphics Preview function.
3. With four-dimensional linkage function, it can radially track circles and arcs.
4. It has the function of conditional jump, and the function of rotating the needle with double MARK points.
5. It has the function of jump selection, which can select multiple discontinuous instructions at the same time.
6. It has the function of command movement, which can move the edited command to the target position.
7. With breakpoint execution function, it can start execution from a specified point.
8. It has the functions of area array copying, offset operation, batch editing, single-step operation, I/O input and output, etc.
9. With automatic execution, automatic reset, output setting, processing time timer and other functions.
10. There are four different wire drawing process options, which can solve technical problems such as wire drawing.
11. Support DXF and PLT file import, automatic path optimization function.
12. After editing the action parameters, download the action parameters to the controller through the serial port, and then it can run independently offline. Action parameters can also be saved in the handheld box for easy recall; and graphics can be copied and saved between devices.
13. The handheld box can store hundreds of processing files, and each file can support 8000 instructions, which can be called out when used.
14. The hardware has 4-gunchannel controls, 4 general outputs, 8 inputs, and 12 high-speed pulse outputs; the accuracy of oil injection time is 1ms.
15. Each action command has independent oil-on delay, oil-off delay, gun withdrawal height, and independent advance oil-off function. The flexible batch modification function can improve editing efficiency and solve the problem of oil accumulation.
16. Support batch modification of parameters by type.

5轴桌面式点胶机

5 AXIS ROTARY GLUE DISPENSING MACHINE

格润智能单平台5轴桌面式点胶机DP300RR

Green 5 Axis rotary glue dispensing machine DP300RR



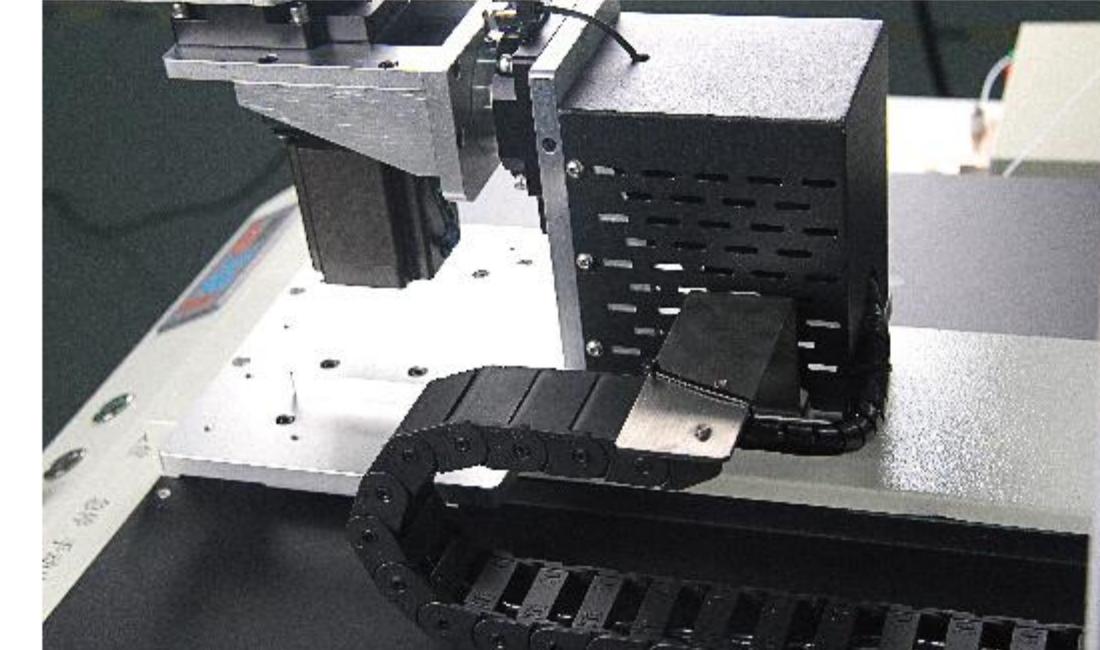
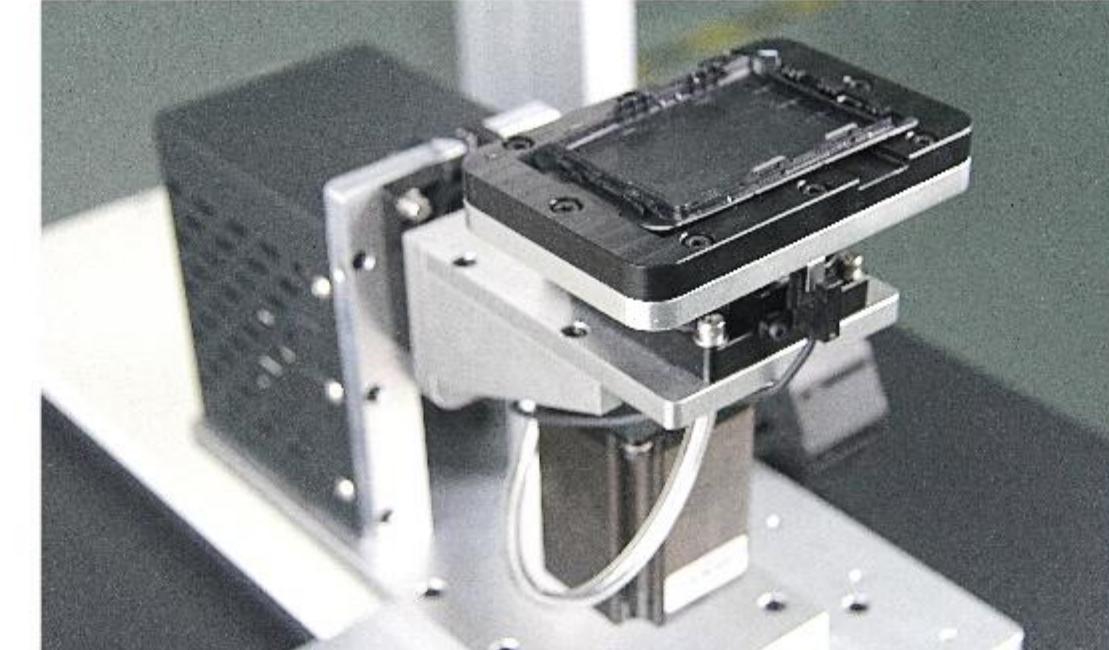
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	DP300RR
设备行程范围 Equipment working range	X轴 X axis 300mm
	Y轴 Y axis 300mm
	Z轴 Z axis 100mm
	R1 360旋转
	R2 360旋转
Y轴负载 Y Load	10kg
控制系统 Control System	运动控制卡+加手持控制盒 Motion control card + plus handheld control box
I/O信号 I/O signal	12 In puts/12 Out puts
移动速度 Movement speed	0~500 (mm/sec)
重复精度 Repeatability	± 0.02 mm/ Axis
程序记录模式 Program recording mode	150组 150 groups
显示方式 Display method	LED 教导盒 LED teaching box
程序文件容量 Program file capacity	100 (2600个点/程序文件) 100 (2600 points/program file)
输入电源 Power supply	AC220V 10A 50-60HZ
输入气压 Input air pressure	0.4-0.7MPa
最大功率 Max.power	
外形尺寸 Outer demension(L*W*H)	571*603*770(mm)
设备重量 weight	

5轴桌面式点胶机

5 AXIS ROTARY GLUE DISPENSING MACHINE

- 细节展示 Details show



- 应用范围 Application Range

手机、电脑、集成电路、平板、数码、汽车工业、电池组装、扬声器点胶、机械部件密封、喇叭、五金配件、芯片绑定、半导体封装、LED封装点胶、PCB板点胶、半导体微电子组装、摄像头模组 (Lens固定、VCM点胶等)
Mobile phones, computers, integrated circuits, tablets, digital, automotive industry, battery assembly, speaker dispensing, mechanical parts sealing, speakers, hardware accessories, Chip bonding, semiconductor packaging, LED packaging dispensing, PCB board dispensing, semiconductor microelectronics assembly, camera module (Lens fixing, VCM dispensing, etc.)

- 产品特性 Product Features

- 取代人工点胶不均匀作业,实现机械化生产。
- 高精度五轴机构,采用进口品牌,保证设备的精度和稳定性。
- 机采用嵌入式运动控制卡控制、可以选择单点/单次/循环点胶作业。
- 专用的操作软件,将点胶最简化。
- 超高性价比,用最低的成本实现点胶智能化。
- 傻瓜式的操作界面,易学易懂。
- 程式文件可通过U盘上传/下载,方便资料管理及保存。
- 适用于各种行业需要点胶的产品。
- 真空吸附机构,可实现圆弧曲面不同形状的产品吸附定位。
- Replace the uneven operation of manual dispensing and realize mechanical intelligent production.
- The high-precision five-axis mechanism adopts imported brands to ensure the accuracy and stability of the equipment.
- The machine is controlled by an embedded motion control card, and can choose single point/single/cycle dispensing industry.
- Dedicated operating software simplifies dispensing.
- Super cost-effective, realize intelligent dispensing with the lowest cost.
- Fool-style operation interface, easy to learn and understand.
- Program files can be uploaded/downloaded through U disk, which is convenient for data management and storage.
- It is suitable for products that need to be dispensed in various industries.
- The vacuum adsorption mechanism can realize the adsorption and positioning of products with different shapes of arc surfaces.

技术参数 Technical Specification

项目 Item	参数 Specification
电机类型 Motor type	步进电机/步进驱动器 Stepping Motor/Stepper Driver 伺服电机/伺服驱动器 Servo Motor/Servo Drive
导轨 Guide	台湾品牌 Taiwan brand
光电 Photoelectric	日本品牌 Japanese brand
皮带 Belt	日本品牌 Japanese brand
驱动方式 Drive mode	步进电机+皮带+导轨 Stepping Motor+synchronous belt+guide rail 伺服电机+丝杆加导轨 Servo Motor+Screw plus guide rail
运动控制卡+手持教导盒	Motion control card + handheld teaching box
选配 Optional	可选用电阀/气动阀 Piezo valve/pneumatic valve for optional

桌面式UV点胶机

DESKTOP TYPE UV DISPENSING MACHINE

格润智能桌面式UV点胶机GR-5551D

Green desktop type UV dispensing machine GR-5551D



技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	GR-5551D
适用产品治具尺寸 Applicable product fixture size	200*150mm
工作模式 Working mode	自动 Auto
上料方式 Feeding method	人工上料 Manual feeding
下料方式 Un loading method	人工下料 Manual unloading
X/Y/Z轴行程 X/Y/Z axis travel	500*500*100(mm)
运动速度 Speed of movement	500mm/s
点胶方式 Dispensing method	针筒 Needle
UV灯固化面积 UV lamp curing area	200*100mm
电机类型 Motor type	步进电机 Stepper motor
程序记录模式 Program recording mode	960组 960 groups
重复定位精度 Repeatability	±0.02 mm
控制系统 Control system	运动控制卡+手持编程器 Motion control card + handheld programmer
导轨 guide rail	台湾品牌 Taiwan brand
光电开关 Photoelectric switch	台湾品牌 Taiwan brand
I/O信号 I/O signal	16 In puts/8 Out puts
显示方式 Display mode	LED教导盒 LED teaching box
显示方式 Display mode	点、直线、圆弧、整圆、曲线、多段线、螺旋线、椭圆 Points, lines, arcs, circles, curves, polylines, spirals, ellipses
功率 Power	3KW
电源 Power supply	AC220V 50HZ
外形尺寸 Outer demension(L*W*H)	650mm*785mm*622(mm)

桌面式UV点胶机

DESKTOP TYPE UV DISPENSING MACHINE

● 细节展示 Details show



● 应用范围 Application Range

手机、电脑、集成电路、平板、数码、汽车工业、电池组装、扬声器点胶、机械部件密封、五金配件、芯片绑定、半导体封装、LED封装点胶、PCB板点胶

Mobile phones, computers, integrated circuits, tablets, digital, automotive industry, battery assembly, speaker dispensing, mechanical parts sealing, hardware accessories, chip binding, Semiconductor packaging, LED packaging dispensing, PCB board dispensing

● 产品优势 Product Advantage

1. 根据不同需求, 点胶速度/点胶量/点胶轨迹(空间点、线、圆弧等)可单独设置。
2. 精密回吸控制器, 点胶轨迹精准, 出胶均匀, 断胶干脆, 不拉丝, 不滴胶。
3. 多种点胶针头、针筒、点胶阀及控制器可选, 满足不同要求, 可调节气压控制胶量。
4. 设备精度高, 设备重要标准件采用国际知名品牌, 保证设备的精度和稳定性。
5. 手持式示教编程器, 简单易学, 专用的操作软件, 将点胶最简化。
6. 超高性价比, 用最低的成本实现点胶智能化。
7. 程式文件可通过U盘上传/下载, 方便资料管理及保存。
8. 自带双工位UV固化系统。
1. According to different needs, the dispensing speed / dispensing amount / dispensing trajectory (space point, line, arc, etc.) can be set separately.
2. Precision back-suction controller, accurate dispensing trajectory, uniform glue out, crisp off the glue, no drawing, no dripping glue.
3. A variety of dispensing needles, syringes, dispensing valves and controllers are optional to meet different requirements and adjust the air pressure to control the amount of glue.
4. The equipment has high precision, and the important standard parts of the equipment adopt internationally renowned brands to ensure the accuracy and stability of the equipment.
5. Handheld teach-in programmer, easy to learn, dedicated operation software, will be dispensing the most simplified.
6. Super cost-effective, with the lowest cost to achieve intelligent dispensing.
7. Program files can be uploaded/downloaded via USB stick to facilitate data management and storage.
8. Comes with a dual-station UV curing system.

桌面式高速点胶机

DESKTOP HIGH-SPEED DISPENSING MACHINE

格润智能第二代平台高速点胶机DP500DV

Green second generation platform high-speed dispensing machine DP500DV



注:图片仅展示DP500DV点胶机型

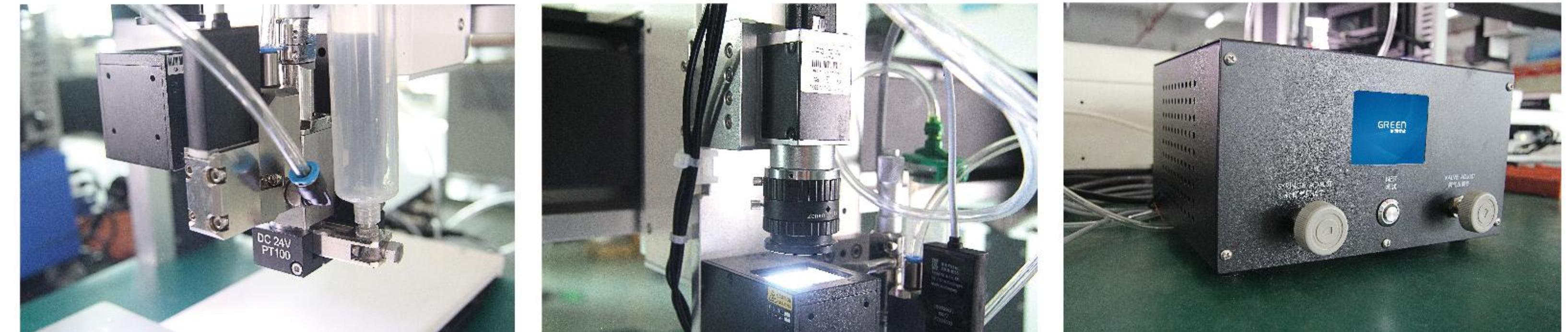
技术参数 Technical specifications

项目 Item	参数 Specifications				
型号 Model	DP300V	DP400V	DP500V	DP500DV	DP600DV
行程 Working range	300*300*100	400*400*100	500*500*100	500*300*300*100	600*400*400*100
Z轴负载 Z-axis load			6kg		
Y轴负载 Y-axis load			15Kg		
XY轴最大移动速度 Maximum movement speed of the XY axis			0~1000mm/sec		
Z轴最大移动速度 Maximum movement speed of the Z axis			0~500mm/sec		
重复定位精度 Repeatability			± 0.01 mm / Axis		
操作方式 Mode of operation	17寸显示器+键鼠组合 17 inch monitor + keyboard and mouse combination				
喷胶最小直径 Minimum diameter for spraying	0.2mm(依据胶水性能) (according to glue performance)				
最小线径 Minimum line diameter	0.3mm(依据胶水性能)(according to glue performance)				
相机 camera	130万像素/500万像素可选 1.3MP/5MP optional				
驱动方式 Drive mode	伺服电机+研磨丝杆+精密导轨 Servo motor + grinding screw + precision guide rail				
输入电源 Power supply	AC220V 10A 50-60HZ				
最大功率 Max.power	350W				
输入气压 Input air pressure	0.4-0.7Mpa				
外形尺寸 Outer demension (L*W*H)	603*517*630(mm)	703*617*630(mm)	803*717*630(mm)	603*717*630(mm)	703*817*630(mm)
设备重量 Weight					

桌面式高速点胶机

DESKTOP HIGH-SPEED DISPENSING MACHINE

- 细节展示 Details show



- 应用范围 Application Range

手机、电脑、集成电路、平板、数码 汽车工业 电池组装 扬声器点胶
机械部件密封 喇叭 五金配件 芯片绑定 半导体封装 LED封装点胶
PCB板点胶 半导体微电子组装 摄像头模组(Lens固定、VCM点胶等)
Mobile phones, computers, integrated circuits, tablets, digital Automotive industry Battery assembly
Speaker dispensing
Mechanical parts sealing horn hardware accessories chip binding semiconductor packaging LED
package dispensing
PCB board dispensing Semiconductor microelectronics assembly Camera module (Lens fixed, VCM
dispensing, etc.)

- 产品优势 Product Advantage

1. 具有点、线、面、弧、圆、不规则曲线等功能;
2. 具有胶量大小粗细、点胶速度、点胶时间、停胶时间皆可参数设定;
3. 具有可在产品平面进行快速打点、画线、画圈作业;
4. 具有区域阵列、平移、旋转运算等功能;
5. 支持CCD视觉定位, 包含Mark补正, 具备直线抓边和圆弧抓边功能, 可阵列可多个产品单独拍照识别定位;
6. 驱动方式: 伺服电机+研磨丝杆传动;
7. 点胶方式: 压电阀/气动阀、螺杆阀等;
8. 设备采用伺服电机加研磨丝杆控制, 保证了运动高速、高精度、高一致性;
9. 模块化的结构设计, 便于维护、保养;
1. With points, lines, surfaces, arcs, circles, irregular curves and other functions;
2. With the amount of glue size and thickness, dispensing speed, dispensing time, glue stopping time can be set by parameters;
3. It has the ability to quickly dot, draw lines and draw circles in the product plane;
4. With area array, translation, rotation operation and other functions;
5. Support CCD visual positioning, including Mark correction, with linear edge grasping and arc grasping function, can be arrayed multiple products can be taken alone to identify positioning;
6. Drive mode: servo motor + grinding screw transmission;
7. Dispensing mode: piezo valve/ pneumatic valve, screw valve, etc.;
8. The equipment adopts servo motor plus grinding screw control to ensure high speed, high precision and high consistency of movement;
9. Modular structure design, easy to maintain, maintenance;

平台点胶机

PLATFORM DISPENSING MACHINE

格润智能第二代热熔胶平台点胶机DP500D

Green second generation hot melt glue platform dispensing machine DP500D



注:图片仅展示DP500D热熔胶机型

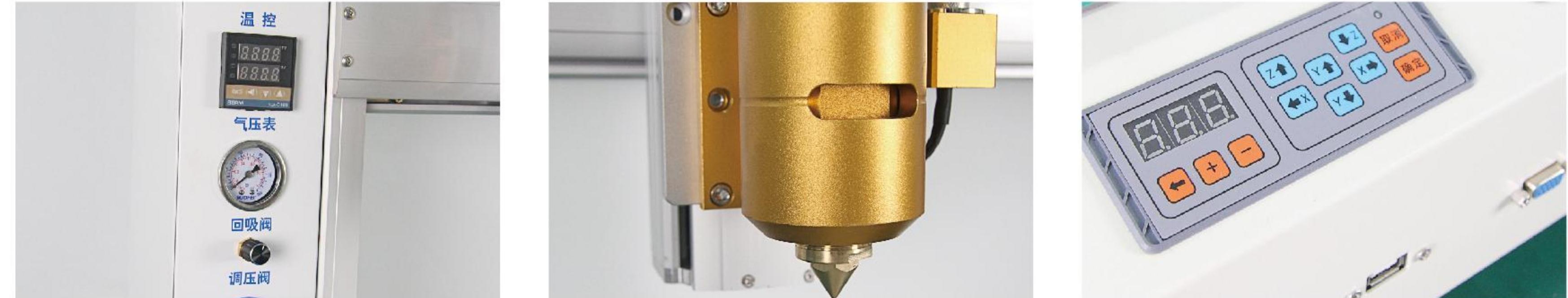
技术参数 Technical Specification

项目 Item	参数 Specification				
型号 Model	DP300	DP400	DP500	DP500D	DP600D
行程 Working range	300*300*100	400*400*100	500*500*100	500*300*300*100	600*400*400*100
Z轴负载 Z axis load			4kg		
XY轴最大移动速度 XY max. speed			500mm/s		
Z轴最大移动速度 Z max. speed			250mm/s		
重复定位精度 Repeatability			±0.02 mm		
程序文件容量 Program capacity	150(1900个点/程序文件) /150(1900 points/program file)				
控制方式 Control method	3维插补 3-dimensional interpolation				
设定坐标方式 Setting method	手持编程器 Handheld programmer				
输入气压 Input air pressure	0.4-0.7MPa				
输入电源 Power supply	AC220V 10A 50/60HZ				
最大功率 Max.power					
可划图形 Drawable graph	直线、圆、弧、连续划线、3D、不规则图线	Straight line, circle, arc, continuous dash, 3D, irregular graph			
外形尺寸 Outer demension (L*W*H)	603*517*643(mm)	703*617*643(mm)	803*717*643(mm)	603*717*643(mm)	703817*643(mm)
设备重量 Weight					

平台点胶机

PLATFORM DISPENSING MACHINE

● 细节展示 Details show



● 应用范围 Application Range

适用的产品主要有:手机按键、印花、开关、连接器、电脑、数码产品、数码相机、MP3、MP4、电子玩具、喇叭、蜂鸣器、电子元器件、集成电路、电路板、LCD液晶屏、继电器、扬声器、晶振元件、LED灯、机壳粘接、光学镜头、机械部件密封等; Applicable products :mobile phone buttons,printing,switches,connectors,computers,digital products,digital cameras,MP3,MP4,electronic toys,speakers,buzzers,electronic components,integrated circuits, circuit boards,LCD screens,Relays,speakers,crystal components,LED lights,chassis bonding,optical lenses,mechanical parts sealing,etc.;

适用胶水如:硅胶、EMI导电胶、UV胶、AB胶、快干胶、环氧胶、密封胶、热胶、润滑脂、银胶、红胶、锡膏、散热膏、防焊膏、透明漆、螺丝固定剂等;

Applicable glue :silica gel,EMI conductive glue,UV glue, AB glue,quick-drying glue,epoxy glue,sealant, hot glue,grease,silver glue,red glue,solder paste,thermal paste,solder paste,transparent lacquer,screw fixing agent,etc.

● 应用领域 Application Field

电声行业/玩具行业/电感行业/通讯行业/LED行业/电子行业

Electroacoustic industry/Toy industry/Inductance industry/Communications industry/LED industry
Electronics industry

● 产品优势 Product Advantage

高速运转无抖动,拆卸方便,维修简单,性价比高。

High-speed operation without jitter,convenient disassembly,simple maintenance, and cost-effective.

技术参数 Technical Specification

标配 Standard Configuration	参数 Specification
驱动方式 Drive method	步进电机 +同步带+精密导轨 Stepping motor + synchronous belt + precision guide rail
阀体 Valve	热熔胶阀 hot melt adhesive valve
运动控制卡+手持教导盒 Motion control card+handheld programmer	

选配 Optional Configuration	参数 Specification
驱动方式 Drive method	伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail
阀体 Valve	根据实际生产需求可选配不同阀体 Different valve bodies can be selected according to actual production needs
Z轴旋转功能 Z axis the rotation function	
CCD视觉识别系统 CCD visual recognition system	

平台喷胶机

PLATFORM DISPENSING MACHINE

格润智能第二代平台点胶机DP500D

Green second generation platform dispensing machine DP500D



注:图片仅展示DP500D喷胶机型

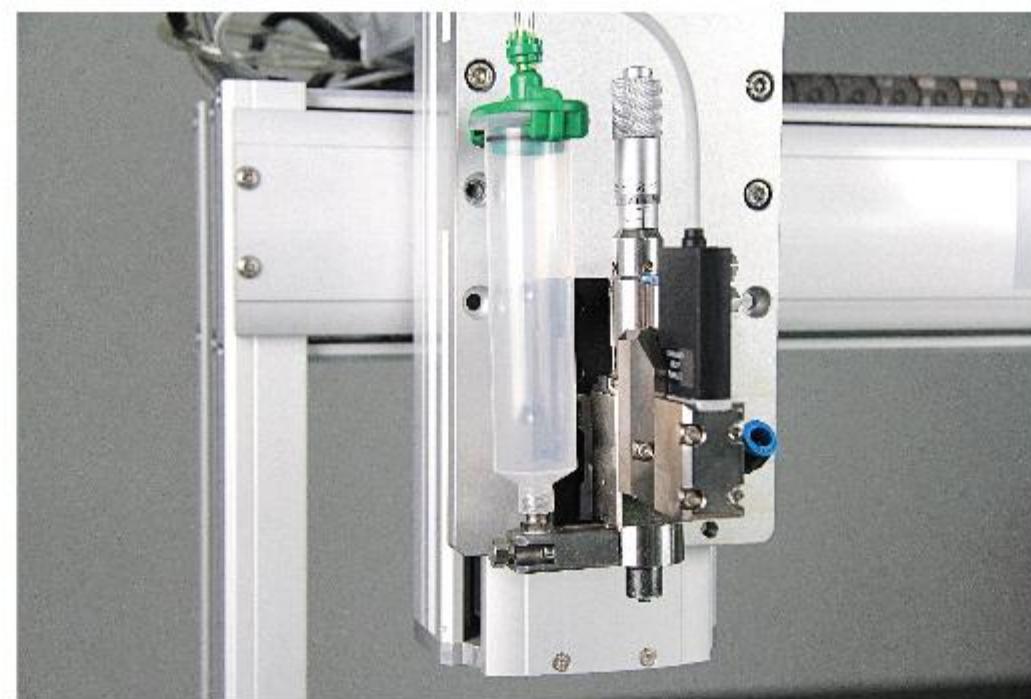
技术参数 Technical specifications

项目 Item	参数 Specifications				
型号 Model	DP300	DP400	DP500	DP500D	DP600D
行程 Working range	300*300*100	400*400*100	500*500*100	500*300*300*100	600*400*400*100
喷射速度 Spray speed	200点/秒 200 points/sec				
最小点径 Minimum point diameter	0.2 mm(取决于胶水)	0.2 mm (depending on glue)			
最佳粘度范围 Optimal viscosity range	5000 ~ 20000cps				
最小点胶量 Minimum dispensing volume	5nl				
最小驱动气压 Minimum drive air pressure	0.5MPa				
设定坐标方式 Setting method	手持编程器 Handheld programmer				
最大工作频率 Maximum operating frequency	250 cycles/s				
可划图形 Drawable graph	直线、圆、弧、连续划线、3D、不规则图线	Straight line, circle, arc, continuous dash, 3D, irregular graph			
程序文件容量 Program capacity	150(1900个点/程序文件) / 150(1900 points/program file)				
输入电源 Power supply	AC220V 10A 50-60HZ				
最大功率 Max.power	350W				
输入气压 Input air pressure	0.4-0.7Mpa				
外形尺寸 Outer demension (L*W*H)	603*517*643(mm)	703*617*643(mm)	803*717*643 (mm)	603*717*643 (mm)	703*817*643(mm)
设备重量 Weight					

平台喷胶机

PLATFORM DISPENSING MACHINE

● 细节展示 Details show



● 应用范围 Application Range

适用的产品主要有:手机按键、印花、开关、连接器、电脑、数码产品、数码相机、MP3、MP4、电子玩具、喇叭、蜂鸣器、电子元器件、集成电路、电路板、LCD液晶屏、继电器、扬声器、晶振元件、LED灯、机壳粘接、光学镜头、机械部件密封等; Applicable products :mobile phone buttons,printing,switches,connectors,computers,digital products,digital cameras,MP3,MP4,electronic toys,speakers,buzzers,electronic components,integrated circuits, circuit boards,LCD screens,Relays,speakers,crystal components,LED lights,chassis bonding,optical lenses,mechanical parts sealing,etc.;

适用胶水如:硅胶、EMI导电胶、UV胶、AB胶、快干胶、环氧胶、密封胶、热胶、润滑脂、银胶、红胶、锡膏、散热膏、防焊膏、透明漆、螺丝固定剂等;

Applicable glue:silica gel,EMI conductive glue,UV glue, AB glue,quick-drying glue,epoxy glue,sealant, hot glue,grease,silver glue,red glue,solder paste,thermal paste,solder paste,transparent lacquer,screw fixing agent,etc.

● 应用领域 Application Field

广泛应用于SMT、FPC&PCBA组装行业、LED封装行业、能源行业、电声行业、生命科学、光学、MEMS、RFID以及其它需要高精度、高效率、非接触及有空间限制的场合。

Widely used in SMT, FPC & PCBA assembly industry, LED packaging industry, energy industry, electroacoustic industry, life sciences, optics, MEMS, RFID and other occasions that require high precision, high efficiency, non-contact and space limitations.

● 产品优势 Product Advantage

高速运转无抖动, 拆卸方便, 维修简单, 性价比高。

High-speed operation without jitter,convenient disassembly,simple maintenance, and cost-effective.

技术参数 Technical specifications

标配 Standard configuration	参数 Specifications
驱动方式 Drive method	步进电机+同步带+精密导轨 Stepping motor + synchronous belt + precision guide rail
阀体 Valve	气动喷射阀 Pneumatic valve
运动控制卡+手持教导盒 Motion control card+handheld programmer	

选配 Optional configuration	参数 Specifications
驱动方式 Drive method	伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail
阀体 Valve	根据实际生产需求可选配不同阀体 Different valve bodies can be selected according to actual production needs
Z轴旋转功能 Z axis the rotation function	
CCD视觉识别系统 CCD visual recognition system	130W/500W像素 130W/500W pixel

落地式蓝光激光锡焊机

FLOOR-TYPE BLUE LIGHT LASER SOLDERING MACHINE

格润智能落地式蓝光激光焊锡机LAW501
Green floor-type blue light laser soldering machine LAW501



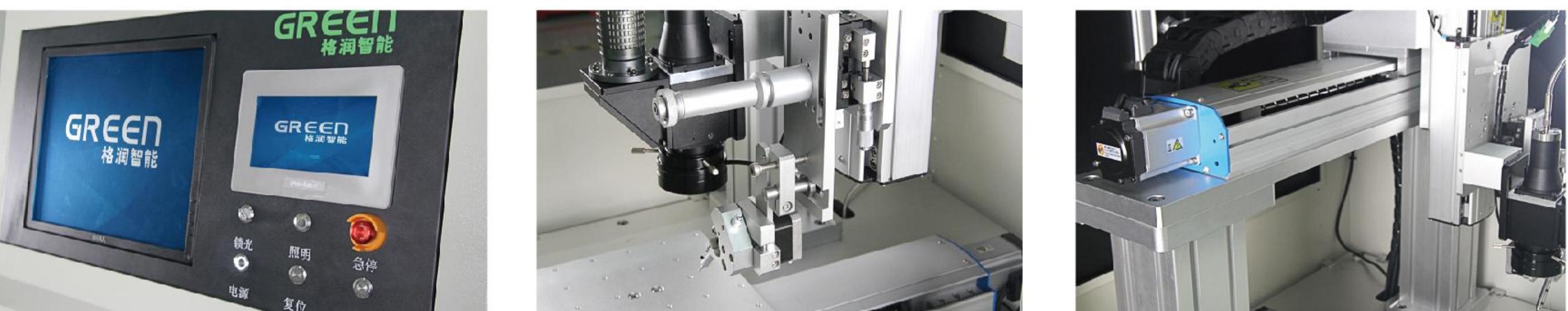
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	LAW501
平台行程 Platform itinerary	X=400、Y=400、Z=150mm
加工范围 Processing range	350*350mm
焊接类型 Weld type	激光锡丝 Laser tin wire
激光器类型 Laser type	蓝光半导体激光器 Blue light semiconductor laser
激光器波长 Laser wavelength	445nm
最大激光输出功率 Maximum laser output power	40W
光纤芯径 Fiber core diameter	400um
整机功率 The power of the whole machine	2.0KW
焊接实时监控 Real-time monitoring of welding	同轴相机监视 Coaxial camera monitoring
重复位置精度 Repeatability accuracy	±0.02mm
冷却方式 Cooling mode	风冷 Air-cooled
输入电源 Power supply	AC220V 10A 50-60HZ
最大功率 Max.power	2.0KW
外形尺寸 Outer demension (L*W*H)	1000*860*1820mm (不含报警灯Without alarm lights)
设备重量 Weight	

落地式蓝光激光锡焊机

FLOOR-TYPE BLUE LIGHT LASER SOLDERING MACHINE

● 细节展示 Details Show



● 应用范围 Application Range

1. 线材,电池连接器插头; 2. 软硬板;3. 车灯,LED灯;4. USB接头,电容电阻插件;5. 蓝牙耳机等
1. Wire,battery connector plug ; 2. Soft and hard board; 3. Car lights,LED lights;4. USB connector, capacitor resistor plug-in; 5. Bluetooth headsets, etc.

● 应用领域 Application Field

通讯行业/3C消费电子行业/汽车行业/新能源行业/LED行业/电子工业
Communications industry/3C consumer electronics industry/Automobile industry/
New energy industry/LED industry/Electronics industry

● 产品优势 Product Advantage

1. 精度较高:光斑可以达到微米级别,加工时间可以通过程序控制,使得精度远远高于传统焊锡工艺。
2. 非接触性加工:不用直接进行表面接触,就可以完成焊锡过程,所以不存在接触焊接导致的应力。
3. 工作空间要求小:细小的激光束替代烙铁头,在加工件表面有其他干涉物的时,也同样进行精密加工。
4. 工作影响区域小:局部加热,热影响区小。
5. 工作过程安全:加工过程无静电威胁。
6. 工作过程洁净、节约:激光加工耗品,加工过程无废料产生。
7. 操作维护简单:激光焊锡操作简单,激光头维护方便。
8. 使用寿命:镭射二极管至少可以使用10000小时,寿命长,性能稳定。
1. High precision: the light spot can reach the micron level, and the processing time can be controlled by the program, making the accuracy much higher than the traditional soldering process.
2. Non-contact processing: the soldering process can be completed without direct surface contact, so there is no stress caused by contact welding.
3. Small working space requirements: a small laser beam replaces the soldering iron tip, and precision processing is also performed when there are other interferences on the surface of the workpiece.
4. Small working area: local heating, the heat-affected zone is small.
5. The working process is safe: there is no electrostatic threat during the processing.
6. The working process is clean and economical: laser processing consumables, no waste is generated during the processing.
7. simple operation and maintenance: laser soldering operation is simple, laser head maintenance convenience.
8. Service life: The life of the laser can be used for at least 10,000 hours, with long life and stable performance.

主要配置 Main Configuration

标配 Standard Configuration	参数 Specification
蓝光半导体 激光器 Blue light semiconductor lasers	HLD40(最大激光输出功率 40W) HLD40 (max laser output 40W) 格润智能 GREEN
焊接头 Welding head	格润智能 GREEN
触摸屏 touch screen	7寸触摸屏 7 inch touch screen
工业相机 Industrial cameras	海康/Basler HIK VISION/Basler
工控机 Industrial computer	i5 处理器(国产) i5 Processor (Domestic)
显示器 display	17 寸戴尔/AOC 17 inches DELL/AOC
驱动方式 Drive method	伺服电机+丝杠+精密导轨 Servo motor+screw+precision guide rail

双工位激光锡球焊接机

DUPLEX LASER SOLDER BALL WELDING MACHINE

格润智能双工位激光锡球焊接机LAB201

Green duplex laser solder ball welding machine LAB201



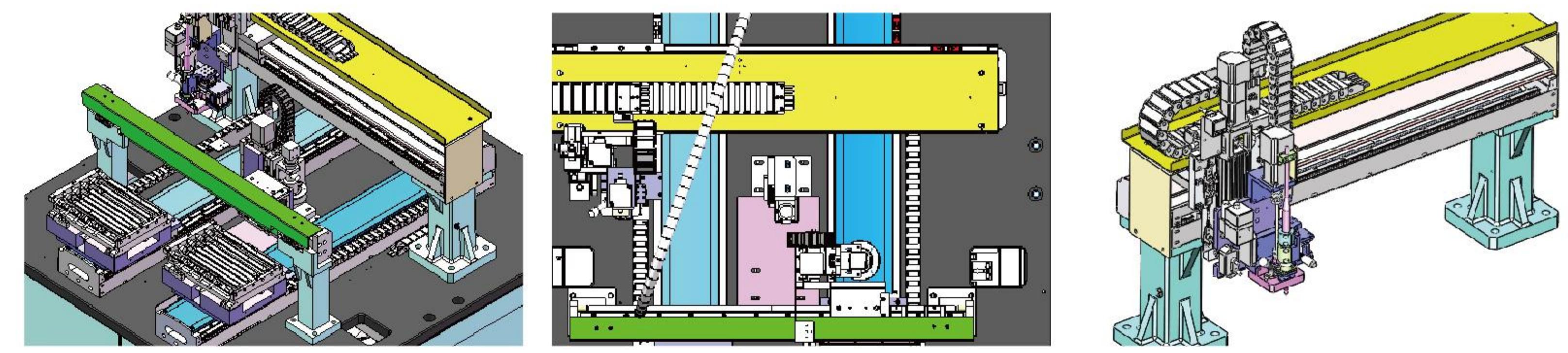
技术参数 Technical specifications

项目 Item	参数 Specifications	
型号 Model	LAB201	
激光参数 Laser parameters	功率 power	150W
	波长 wavelength	1064
锡球规格 Solder ball specifications	模式 mode	连续脉冲光纤激光器 Continuous pulse fiber lasers
视觉定位系统 Visual positioning system	0.15-0.25mm/0.3-0.76mm/0.9-2.0mm(可选配) (Optional)	
相机像素 Camera pixels	CCD, 解析 $\pm 5\mu\text{m}$	The resolution $\pm 5 \mu\text{m}$
控制方式 Control mode	500 万 5 million pixels	PLC+PC 控制 PLC+PC Control
机械重复定位精度 Mechanical repeatability accuracy	$\pm 0.02\text{mm}$	
加工范围 Processing range	200mm*150mm (可定制) (Customizable)	
使用功率 Use power	<2KW/H	
气源 Air source	压缩空气>0.5MPa 氮气>0.5MPa	Compressed air > 0.5 MPa nitrogen > 0.5 MPa
外形尺寸 Outer demension (L*W*H)	1000*1100*1650(mm)	
设备重量 Weight	500KG	

双工位激光锡球焊接机

DUPLEX LASER SOLDER BALL WELDING MACHINE

- 细节展示 Details show



- 应用范围 Application Range

激光喷锡球焊接实现精密类: PCB焊盘与金手指焊锡连接, FPC与PCB焊接, 线材与PCB焊接, 部分THT插装器件焊接。单边有PIN脚的产品和共两边PIN脚的对边产品, 和其他多种精密焊接。
Laser solder ball welding realizes precision class: PCB pad and gold finger solder connection, FPC and PCB welding, wire rod and PCB welding, partTHT plug-in device soldering. Products with PIN pins on one side and contralate products with PIN pins on both sides, and many other precision welding products.

- 应用领域 Application Field

CCM摄像头/模组、金手指/FPC类、线材类、通讯器件、光器件、保险管行业、半导体行业焊锡
CCM camera/module, gold finger/FPC, wire, communication device, optical device, fuse industry, semiconductor industry solder

- 产品优势 Product Advantage

- 1、加热、熔滴过程快速, 可在0.2s内完成 ;
 - 2、在焊嘴内完成锡球熔化, 无飞溅 ;
 - 3、不需助焊剂、无污染, 最大限度保证电子器件寿命 ;
 - 4、锡球直径最小0.15mm , 符合集成化、精密化发展趋势 ;
 - 5、可通过锡球大小的选择完成不同焊点的焊接 ;
 - 6、焊接质量稳定, 良品率高 ;
 - 7、配合CCD定位系统适合流水线大批量生产需求;
 - 8、UPH ≥ 8000 点, 良率 $\geq 99\%$ (根据不同的产品略有不同) ;
1. The heating and droplet process is fast and can be completed within 0.2s;
 2. Complete the melting of the solder ball in the solder nozzle without splashing;
 3. no flux, no pollution, to maximize the life of electronic devices;
 4. The minimum diameter of the solder ball is 0.15mm, which is in line with the development trend of integration and precision;
 5. Welding of different solder joints can be completed through the selection of solder ball size;
 6. Stable welding quality and high yield rate;
 7. Cooperate with CCD positioning system to meet the needs of assembly line mass production;
 8. UPH ≥ 8000 points, yield $\geq 99\%$ (different according to different product)

技术参数 Technical Specification

标配 Standard configuration	参数 Specification
供球机构 Ball supply agency	将锡球按单颗分离并送至焊接位 Separate the solder balls into individual pieces and send them to the solder position
激光器 laser	150W JDSUMAX光纤激光器 150W JDSUMAX fiber laser
伺服马达 Servo motor	为运动模组提供动力 Powering the motion module
气动系统 Pneumatic system	机械定位/限位 Mechanical positioning/limiting
PLC	软件控制 Software control
工控机 Industrial computer	IPC710
CCD	抓拍焊接点位 Capture welding points
触摸屏 Touch screen	焊接控制操作 Weld control operation
远心镜 Telecentric mirror	视觉抓取 Visual capture
光纤传感器 Fiber optic sensors	激光通断控制 Laser on-off control

激光锡膏焊锡机

LASER SOLDER PASTE SOLDERING MACHINE

格润智能双工位激光锡膏焊锡机LAP300

Green duplex laser solder paste soldering machine LAP300



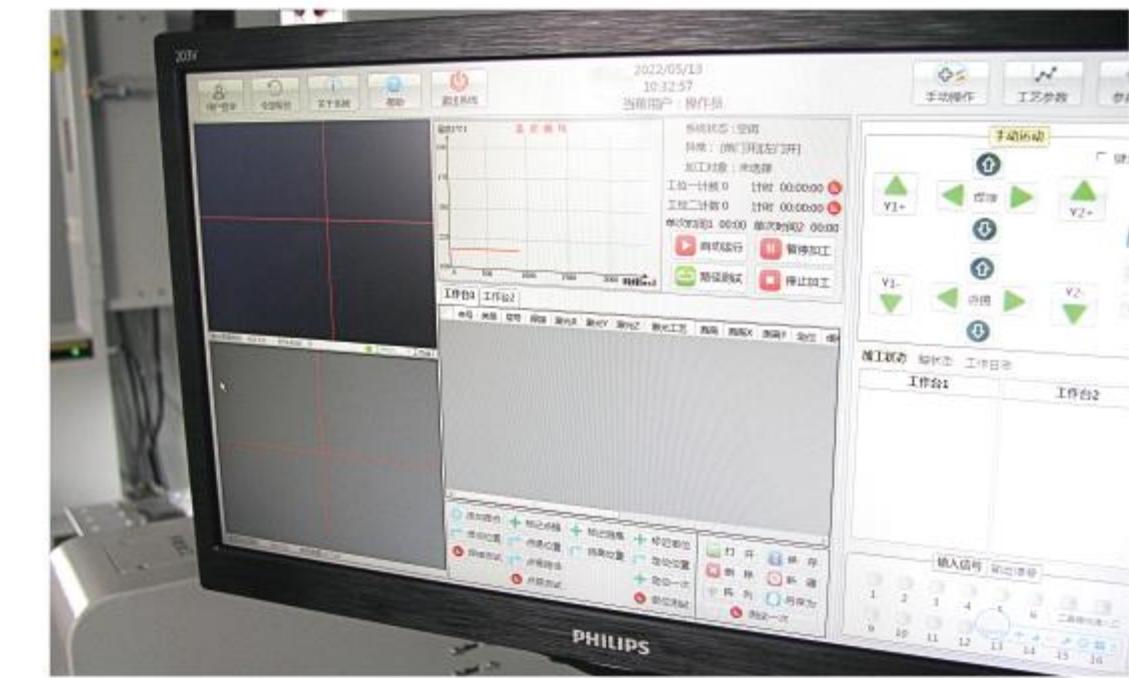
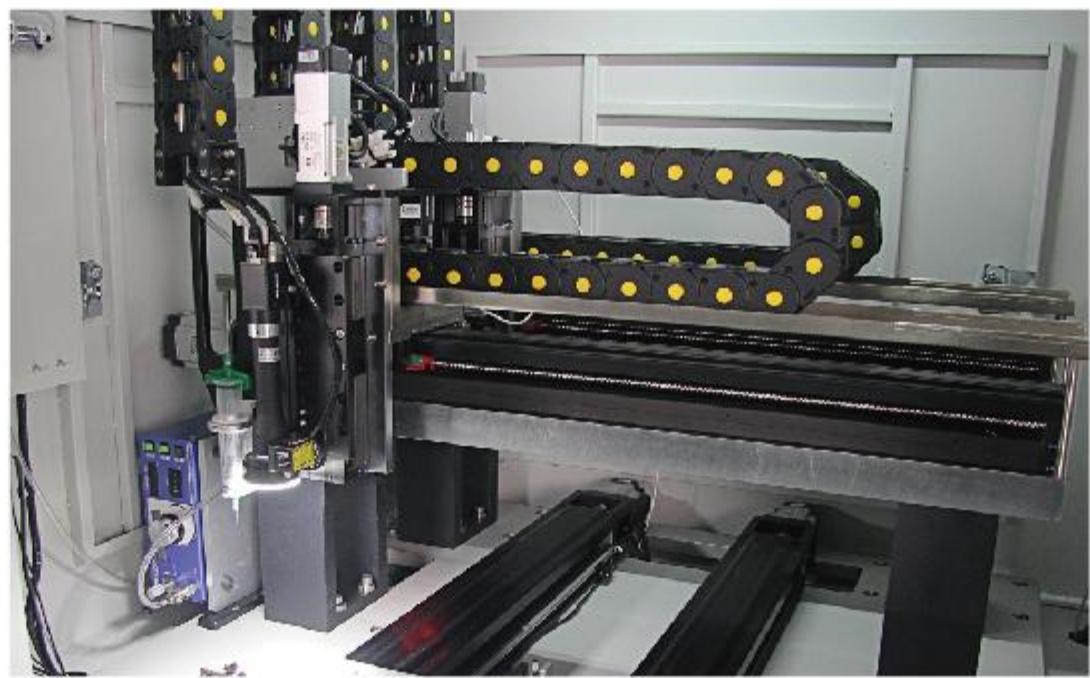
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	LAP300
激光功率 Laser power	200W
激光波长 Laser wavelength	915nm
控制方式 Control mode	微电脑+PC图像处理 Microcomputer + PC image processing
视觉定位系统 Visual positioning system	±0.01mm
加工范围 Processing range	300*300可加工≤0.15pitch 300*300Machinable ≤0.15pitch
上锡方式 Tin on the way	预制锡点锡膏, 可选 Prefabricated tin dot solder paste, optional
焊接类型 Weld typed	激光锡丝 Laser tin wire
输入电源 Power supply	AC220V 10A 50-60HZ
总功率 Total power	1.5KW
外形尺寸 Outer demension(L*W*H)	1200*1200*1700(mm)
设备重量 Weight	

激光锡膏焊锡机

LASER SOLDER PASTE SOLDERING MACHINE

● 细节展示 Details Show



● 产品介绍 Product Introduction

CCD自动拼图扫描追位后开始点锡膏,利用振镜或单聚焦光学系统进行一次性整板激光焊接;
运动系统:6轴水平关节机械手+平台的结构;
自动点锡膏系统:配武藏喷射锡膏阀(选配);
自动贴装预制焊片系统:贴片机构原理(选配);
CCD automatic puzzle scanning after the position chase, start to point solder paste, the use of galvanometer or single focus optical system for disposable whole plate laser welding;
Moving system: 6-axis horizontal joint manipulator + platform structure;
Automatic supply solder paste system: with musashi jet solder paste valve (optional);
Automatic mounting prefabricated soldering disc system: refer to SMT mechanism principle (optional);

● 应用领域 Application Field

通讯、军工、航天、汽车电子、医疗器械、手机等。
Communication, Military, Space flight., Automotive electronics, Medical devices, Mobile phones, etc.

● 产品优势 Product Advantage

1. 配备六轴焊料供给系统;
 2. 同轴测温系统,输出实时温度控制曲线;
 3. 针对FPC和PCB焊接,贴片不耐温元件,热敏元件焊;
 4. 优势突出,效率高,性能好;
1. Equipped with six-axis solder supply system;
2. Equipped with temperature measurement system, output real-time temperature curve
3. For the non temperature resistant patches in FPC and PCB welding, thermal element welding is adopted
4. Outstanding advantages, high efficiency, excellent performance;

技术参数 Technical Specification

标配 Standard Configuration	参数 Specification
驱动方式 Drive method	伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail
控制方式 Control method	工控机 Industrial PC
烟雾净化系统 Smoke purification system	
MES系统 MES system	

选配 Optional Configuration

- 驱动方式 Drive method
其它激光功率 Other Laser power
其它功率 Other power

参数 Specification

- 伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail
80-200W(可选) 80-200W(Optional)
0.6KW-1.5KW(根据配置选配) (Optional according to configuration)

激光锡膏焊接机

LASER SOLDER PASTE WELDING MACHINE

格润智能激光锡膏焊接机GR-FJ03

Green Laser solder paste welding machine GR-FJ03



技术参数 Technical Specification

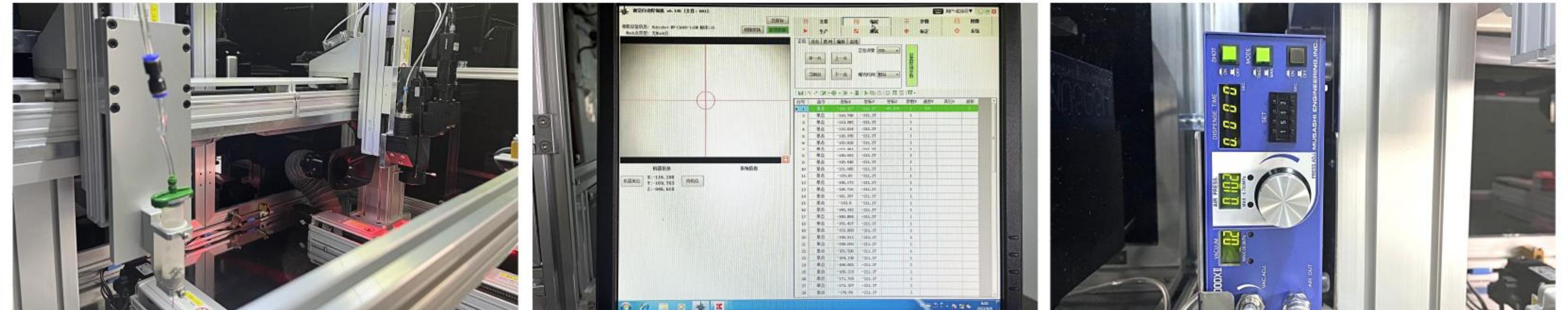
项目 Item	参数 Specification
型号 Model	GR-FJ03
工作模式 Operating mode	自动 automatic
上料方式 Feeding method	人工上料 Manual feeding
下料方式 Cutting method	人工下料 Manual cutting
设备行程 Equipment stroke	(X1/X2) 250* (Y1/Y2) 300* (Z1/Z2) 100(mm)
运动速度 Movement speed	500mm/s(最大800mm/s)/500mm/s (maximum 800mm/s)
电机类型 Motor type	伺服电机 Servo motor
重复精度 Repeatability	±0.02 mm
焊接类型 Welding type	激光锡膏焊接 Laser solder paste welding
点锡膏控制系统 Dot solder paste control system	运动控制卡+手持编程器 Motion control card + handheld programmer
激光焊接系统 Laser welding system	工控机+键鼠 Industrial computer + keyboard and mouse
激光器类型 Laser type	半导体激光器 A semiconductor laser
激光器波长 Laser wavelength	915nm
最大激光功率 Maximum laser power	100W
激光类型 Laser type	连续激光 Continuous laser
光纤芯径 Fiber Core Diameter	200/220um
焊接实时监控 Welding real-time monitoring	同轴相机监视 Coaxial camera monitoring
冷却方式 cooling method	风冷 air cooling
导轨 guide	台湾品牌 Taiwanese brand
丝杆 screw	台湾品牌 Taiwanese brand
光电开关 Photoelectric switches	欧姆龙/台湾品牌 Omron/Taiwan brand
显示方式 Display method	显示器 monitor
送锡丝机构 Tin wire feeding mechanism	选配 Optional
驱动方式 Drive mode	伺服电机+精密丝杆+精密导轨 Servo motor + precision screw + precision guide
功率 power	3KW
电源 power supply	AC220V/50HZ
尺寸 size	1350*890*1720MM

电话/Tel:0755-2993 3015 传真/Fax:0755-2993 3180 Web:www.greensoldering.com

激光锡膏焊接机

LASER SOLDER PASTE WELDING MACHINE

● 细节展示 Details show



● 应用范围 Application Range

传感器、电感、硬盘磁头、摄像头模组、vcm音圈马达、CCM、FPC、PCB电路板、光通讯元器件、连接器、天线、扬声器、喇叭、热敏元件、光敏元件、手机通讯、精密医疗器械

Sensors, inductors, hard disk heads, camera modules, vcm voice coil motors, CCM, FPC, PCB circuit boards, optical communication components, connectors, antennas, speakers, speakers, thermal components, photosensitive components, mobile communications, precision medical instrument

● 产品优势 Product Advantage

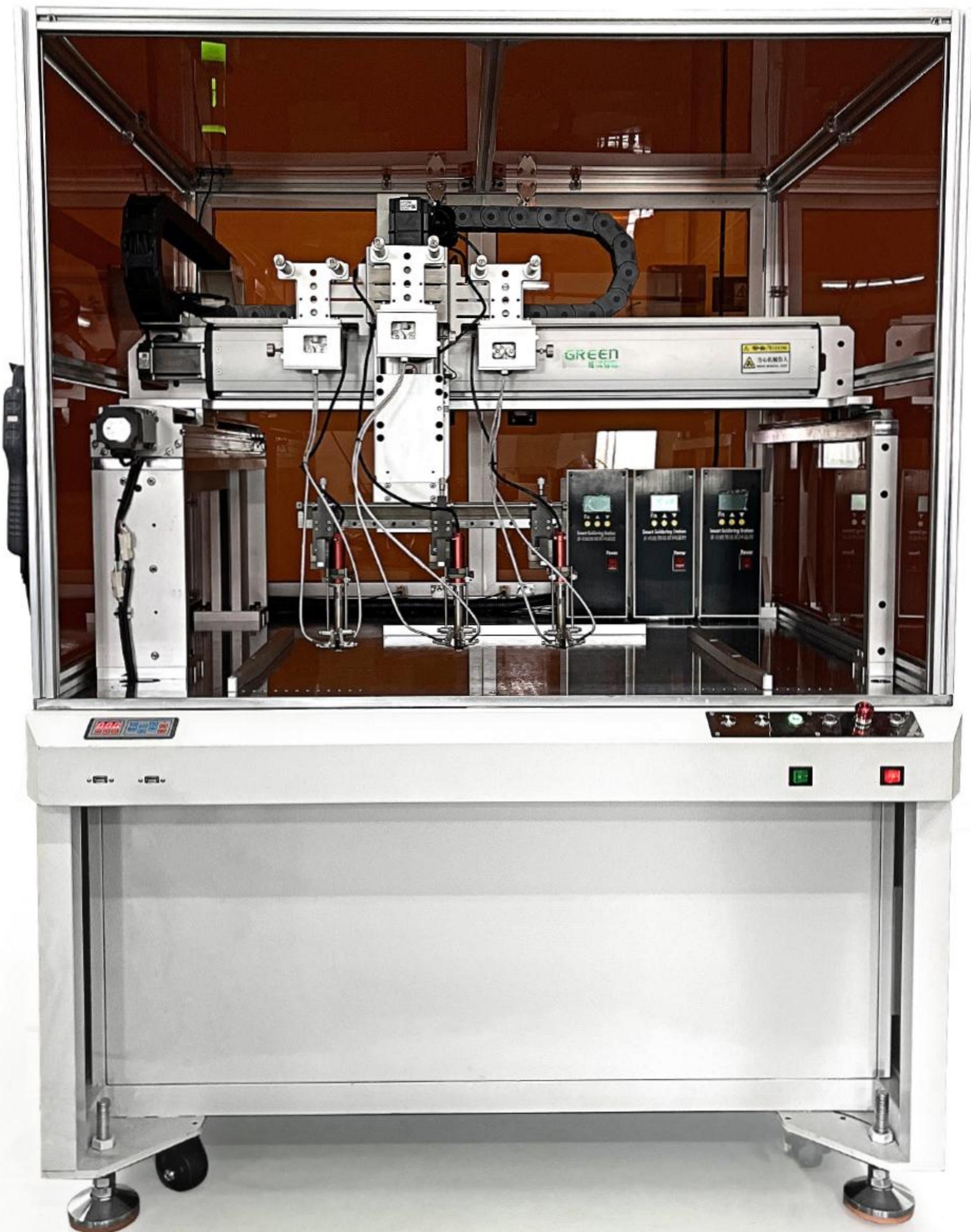
- 1.设备为肩并肩六轴机构,两台机器合并为一台使用,一边点锡膏,一边激光焊接;
 - 2.自动点锡膏系统配武藏精密点胶控制器控制点锡膏,可以精确控制锡量大小;
 - 3.激光锡膏焊接系统带温度反馈功能,可对焊接进行温度控制,可以对焊接区域进行温度监测;
 - 4.视觉监视系统采用图像自动检测焊接情况;
 - 5.激光锡膏焊接属于非接触焊接,没有烙铁接触焊锡时产生的应力,无静电产生;
 - 6.激光锡膏焊接只对焊点部位局部加热,对焊盘和元器件本体基本没有热影响;
 - 7.焊点快速加热至设定温度和局部加热后焊点冷却速度快,快速形成合金层,接头组织细密,可靠性高;
 - 8.温度反馈速度快,能精准地控制温度满足不同焊接的需求;
 - 9.激光加工精度高,激光光斑范围可控制在0.2-5mm,加工精度远高于传统电烙铁锡焊;
 - 10.无接触焊接,对应复杂焊点也能满足应用需求;
- 1.The equipment is a side-by-side six-axis mechanism, and two machines are combined into one for use, while soldering paste is applied and laser welding is performed at the same time;
- 2.The automatic solder paste dispensing system is equipped with the Musashi precision dispensing controller to control the solder paste, which can precisely control the amount of tin ;
- 3.laser solder paste welding system has a temperature feedback function, which can control the temperature of the welding and monitor the temperature of the welding area ;
- 4.visual monitoring system uses images to automatically detect welding conditions;
- 5.Laser solder paste welding is non-contact welding, there is no stress generated when the soldering iron contacts the solder, and no static electricity is generated ;
- 6.Laser solder paste welding only heats the solder joints locally, and has basically no thermal effect on the pads and component bodies ;
- 7.The solder joints are quickly heated to the set temperature and after local heating, the solder joints cool quickly, form an alloy layer quickly, the joint structure is fine, and the reliability is high ;
- 8.The temperature feedback speed is fast, and the temperature can be accurately controlled to meet the needs of different welding ;
- 9.The laser processing precision is high, the laser spot range can be controlled within 0.2-5mm, and the processing precision is much higher than that of the traditional electric soldering iron ;
- 10.Non-contact welding, corresponding to complex solder joints can also meet application requirements ;

三头焊锡机

THREE-HEAD SOLDERING MACHINE

格润智能三头焊锡机GR-FH02

Green Three-head soldering machine GR-FH02



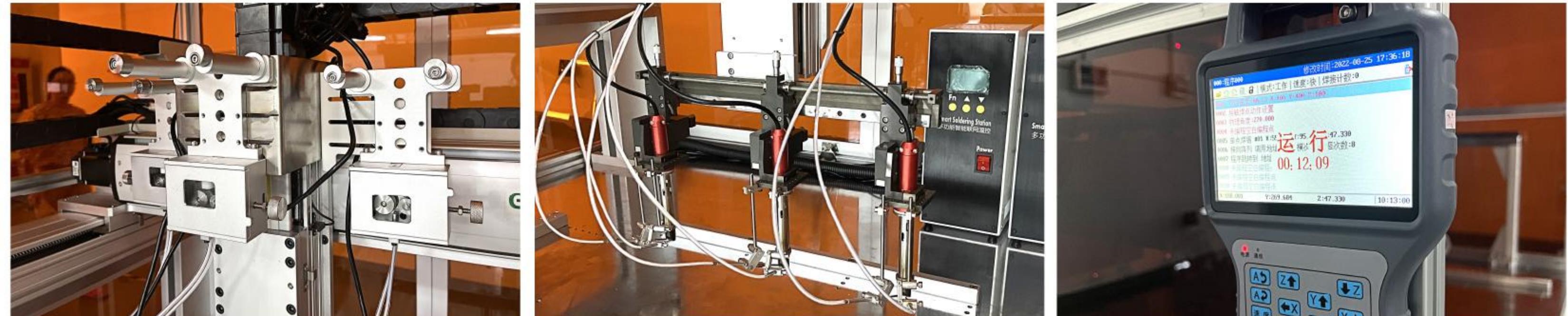
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	GR-FH02
工作模式 Operating mode	自动 automatic
上料方式 Feeding method	人工上料 Manual feeding
下料方式 Cutting method	人工下料 Manual cutting
X/Y/Z焊锡行程 Solder stroke	600*700*100(mm)
运动速度 Movement speed	500mm/s(最大800mm/s)/Up to 800mm/s)
电机类型 Motor type	伺服电机 Servo motor
程序记录模式 Program recording mode	99组/999组可选 99 groups/999 groups optional
重复精度 Repeatability	±0.02 mm
控制系统 Control system	运动控制卡+手持编程器 Motion control card + handheld programmer
导轨 guide	台湾品牌 Taiwanese brand
丝杆 Screw	台湾品牌 Taiwanese brand
光电开关 Photoelectric switch	欧姆龙/台湾品牌 Omron/Taiwan brand
I/O信号 I/O signal	24 In puts/12Out puts
显示方式 Display method	LED教导盒 LED teaching box
温度范围 Temperature range	0~450°C
可用锡丝直径 Usable Wire Diameter	Φ0.5~Φ2mm
驱动方式 Drive mode	伺服电机+精密丝杆+精密导轨 Servo motor + precision screw + precision rail
清洗 Cleaning	选配 Optional
功率 Power	3KW
电源 Power supply	AC220V/50HZ
尺寸 size(L*W*H)	1270*1190*1720MM

三头焊锡机

THREE-HEAD SOLDERING MACHINE

- 细节展示 Details show



- 应用范围 Application Range

3C消费电子行业、家电行业、5G行业、电子工业

3C consumer electronics industry, home appliance industry, 5G industry, electronics industry

- 产品优势 Product Advantage

- 1.设备针对大产品且焊接位置阵列均匀排布的板栅等产品,通过人工上下料,多头同步进行自动焊锡;
- 2.灵活多样的焊锡方式,具有点焊、拖焊(拉焊)等功能;
- 3.模块化的结构设计,便于维护、保养;
- 4.设备可存储99组操作程序,同一机器可对不同99款产品进行焊锡加工;
- 5.支持多送锡模组,可根据应用需要快速添加送锡模组,可以定制多焊头同时作业;
- 6.焊锡抖动功能,在焊接时打开此功能可以使焊接更迅速,对大焊点尤其有效;
- 7.设备编写工作程序可进行点到点、块到块的复制,缩短程序编写时间,且简单易学;
- 8.驱动方式:伺服电机+精密丝杆+精密导轨传动,有效提升运动定位精度和重复精度;
- 1.The equipment is aimed at large products and grids and other products with evenly arranged welding positions, through manual loading and unloading, multi-head synchronous automatic soldering;
- 2.Flexible and diverse soldering methods, with functions such as spot welding, drag welding (pull welding);
- 3.Modular structure design, easy to maintain and maintain;
- 4.The equipment can store 99 sets of operating procedures, and the same machine can process 99 different products;
- 5.Supports multiple tin feeding modules, can quickly add tin feeding modules according to application needs, and can customize multiple welding heads to work at the same time;
- 6.Solder jitter function, turning on this function during welding can make welding faster, especially effective for large solder joints;
- 7.The equipment programming work program can be copied from point to point and block to block, which shortens the programming time and is easy to learn;
- 8.Drive mode: servo motor + precision screw + precision guide rail drive, effectively improve the motion positioning accuracy and repeatability;

桌面式激光焊锡机

DESK TYPE LASER SOLDERING MACHINE

格润智能桌面式激光焊锡机LAW400V

Green desk type laser soldering machine LAW400V



注:图片仅展示LAW400V锡线激光焊类型

技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	LAW400V
X轴 X axis	400mm
Y轴 Y axis	400mm
Z轴 Z axis	100mm
焊接类型 Welding type	锡丝 Tin wire
光斑大小 Spot diameter range	0.2mm-5.0mm
适配锡丝直径 Suitable tin wire diameter	Φ0.5-Φ1.5mm
激光器寿命 Laser lifetime	100000h
功率稳定性 Power stability	<±1%
重复精度 Repeatability	±0.02mm
输入电源 Power supply	AC220V 10A 50~60HZ
最大功率 Max. power	1.5Kw
外形尺寸 Outer demension(L*W*H)	690*717*660(mm)
设备重量 Weight	约80KG Around80KG

桌面式激光焊锡机

DESK TYPE LASER SOLDERING MACHINE

● 细节展示 Details Show



● 应用范围 Application Range

- 1. 线材,电池连接器插头; 2. 软硬板; 3. 车灯,LED灯; 4. USB接头,电容电阻插件; 5. 蓝牙耳机等
- 1. Wire,battery connector plug; 2. Soft and hard board; 3. Car lights,LED lights;
- 4. USB connector,capacitor resistor plug-in; 5. Bluetooth headsets, etc.

● 应用领域 Application Field

通讯行业/3C消费电子行业/汽车行业/新能源行业/LED行业/电子工业
Communications industry/3C consumer/Electronics industry/Automobile industry/
New energy industry/LED industry/Electronics industry

● 产品优势 Product Advantage

- 1. 精度较高:光斑可以达到微米级别,加工时间可以通过程序控制,使得精度远远高于传统焊锡工艺;
- 2. 非接触性加工:不用直接进行表面接触,就可以完成焊锡过程,所以不存在接触焊接导致的应力;
- 3. 工作空间要求小:细小的激光束替代烙铁头,在加工件表面有其他干涉物的时,也同样进行精密加工;
- 4. 工作影响区域小:局部加热,热影响区小;
- 5. 工作过程安全:加工过程无静电威胁;
- 6. 工作过程洁净、节约激光加工耗品,加工过程无废料产生;
- 7. 操作维护简单:激光焊锡操作简单,激光头维护方便;
- 8. 使用寿命:镭射二极管至少可以使用100000小时,寿命长,性能稳定;
- 1. High precision: the light spot can reach the micron level, and the processing time can be controlled by the program, making the accuracy much higher than the traditional soldering process;
- 2. Non-contact processing: the soldering process can be completed without direct surface contact, so there is no stress caused by contact welding; 3. Small working space requirements: a small laser beam replaces the soldering iron tip, and precision processing is also performed when there are other interferences on the surface of the workpiece; 4. Small working area: local heating, the heat-affected zone is small; 5. The working process is safe: there is no electrostatic threat during the processing;
- 6. The working process is clean and economical: laser processing consumables,no waste is generated during the processing; 7. simple operation and maintenance: laser soldering operation is simple, laser head maintenance convenience; 8. Service life: The life of the laser can be used for at least 10,000 hours, with long life and stable performance;

技术参数 Technical Specification

标配 Standard Configuration	参数 Specification
激光器最大激光输出功率 (W) Maximum laser output power of laser (W)	30/60/120/200W (可选配) 30/60/120/200W (can be choosed)
光纤芯径 Fiber core diameter	105um/135um/200um
激光器波长 Laser wavelength	915nm
相机 Camera	同轴视觉定位 Coaxial vision positioning
冷却方式 Cooling method	风冷 Air-cooled device
驱动方式 Drive method	步进电机+皮带+精密导轨 Stepping motor + belt + precision guide rail
控制方式 Control method	工控机 Industrial PC

选配 Optional Configuration	参数 Specification
激光器最大激光输出功率 (W) Maximum laser output power of laser (W)	30/60/120/200W (可选配) 30/60/120/200W (can be choosed)
温度反馈 Temperature feedback	
驱动方式 Drive method	伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail

塑料激光焊接机

PLASTIC LASER WELDING MACHINE

格润智能塑料激光焊接机LAESJ220

Green plastic laser welding machine LAESJ220



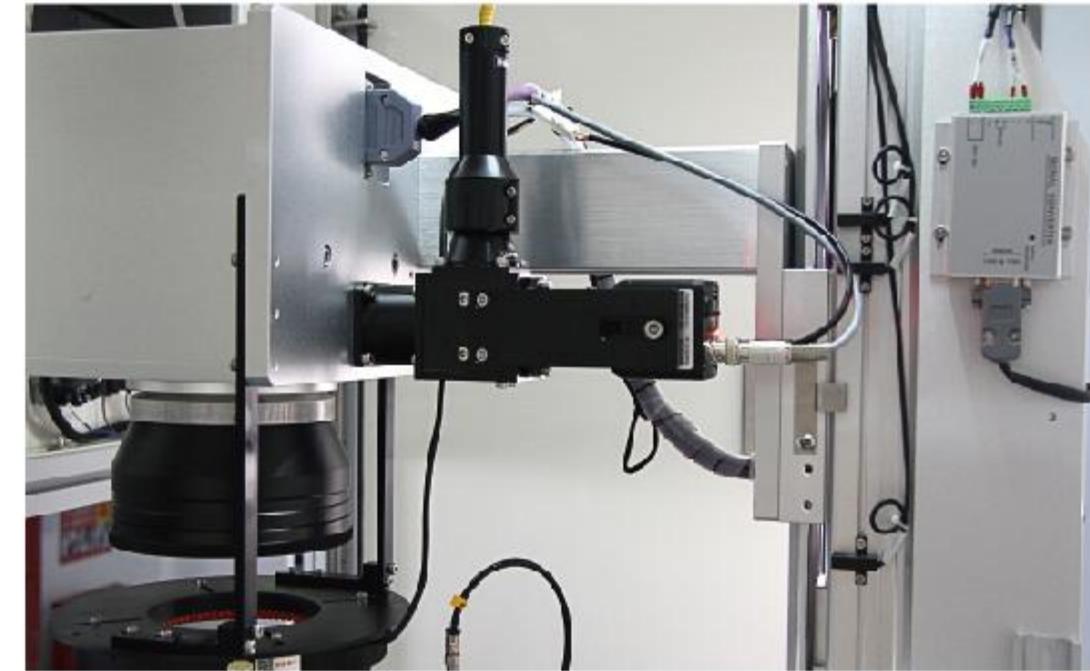
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	LAESJ220
激光功率 Laser power	200W
激光波长 Laser wavelength	1064mm
聚光腔反射体 Condenser cavity reflector	进口陶瓷聚光腔
激光频率 Laser frequency	1-20Hz
脉冲宽度 Laser wavelength	0.1-30Ms
电动光斑调节范围 Electric spot adjustable range	0.2-2mm
额定功率 Rated power	4KW
最大电流 Maximum current	10A
额定电压 Rated voltage	220V/1P
电力需求 Electricity demand	AC380V 40A 50HZ
三维承重工作台承重 Load-bearing	150kg
输入气压 Input air pressure	0.4-0.7MPa
外形尺寸 Outer demension (L*W*H)	
设备重量 Weight	

塑料激光焊接机

PLASTIC LASER WELDING MACHINE

- 细节展示 Details show



- 应用范围 Application Range

半导体/电容器/电机/相机/计算机/汽车/船舶/游戏机/LCD/医疗设备/FPC、PCB、FCP硬板等
Semiconductor/capacitor/motor/camera/computer/automobile/ship/game console/LCD/medical equipment/FPC, PCB, FCP hard board, etc.

- 应用领域 Application Field

汽车电子/光学产品/军工产品/数码电子
Automotive electronics /Optical products/ Military products /Digital electronics

- 产品优势 Product Advantage

- 1:激光功率密度高,无需焊剂焊料即可完成焊接
 - 2:焊斑牢固,热影响区域小
 - 3:专业的焊接控制系统,稳定性极高,液晶触摸屏操控,简单易学
 - 4:CCD可视化调整,方便,准确
- 1: High laser power density, welding can be completed without flux solder
2: Firm welding spot, small heat affected area
3: Professional welding control system, high stability, LCD touch screen control, easy to learn
4: CCD visual adjustment, convenient ,precise

技术参数 Technical Specification

标配 Standard Configuration	参数 Specification
激光器最大激光输出功率(W) Maximum laser output power of laser (W)	30/60/120/200W (可选配) 30/60/120/200W (can be choosed)
激光器波长 Laser wavelength	1064mm
相机 Camera	同轴视觉定位 Coaxial vision positioning
冷却方式 Cooling method	风冷 Air-cooled device
驱动方式 Drive method	步进电机+皮带+精密导轨 Stepping motor + belt + precision guide rail

选配 Optional Configuration	参数 Specification
激光器最大激光输出功率(W) Maximum laser output power of laser (W)	30/60/120/200W (可选配) 30/60/120/200W (can be choosed)
温度反馈 Temperature feedback	
驱动方式 Drive method	伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail

电脑版焊锡机

PC TYPE SOLDERING MACHINE

格润智能电脑版焊锡机SI10DR

Green PC type soldering machine SI10DR



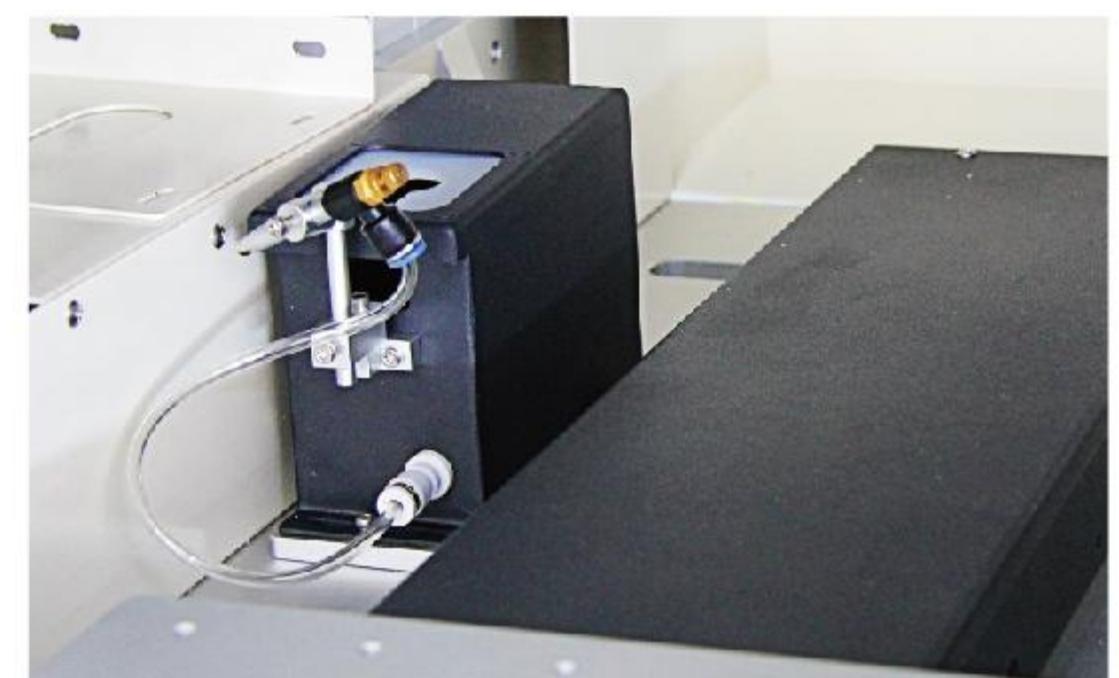
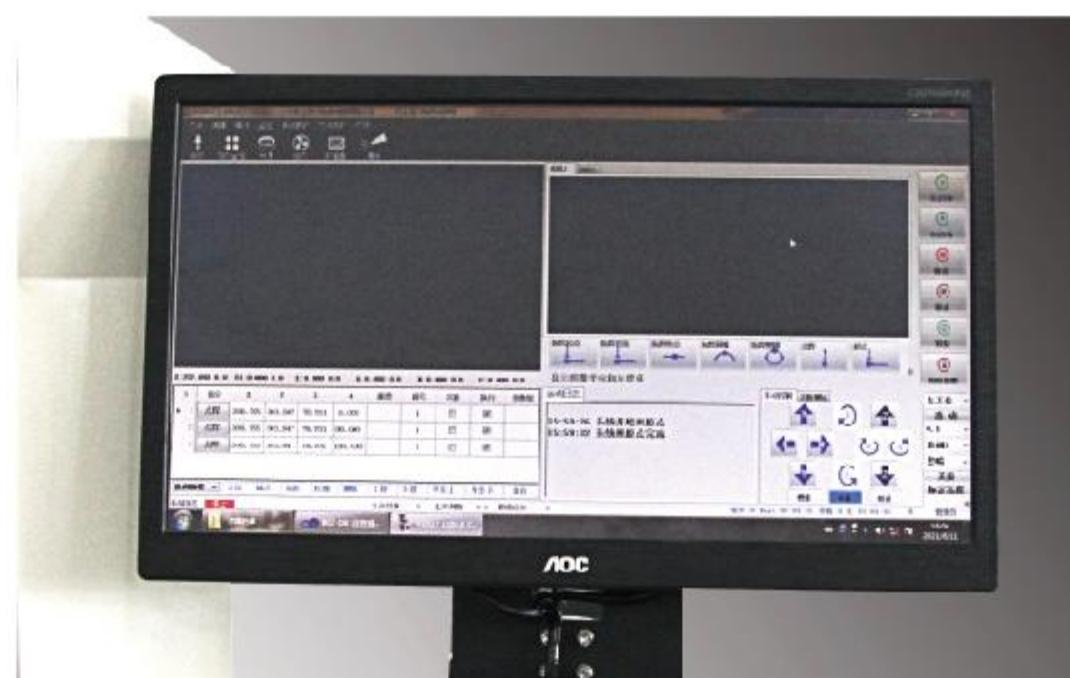
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	SI10DR
X轴 X axis	500mm
Y1轴 Y1 axis	300mm
Y2轴 Y2 axis	300mm
Z轴 Z axis	100mm
R轴 R axis	360°
XYZ重复精度 XYZ repeatability	±0.02mm
XYZ定位精度 XYZ positioning accuracy	±0.03mm
Z轴定位精度 Z axis positioning accuracy	±0.02mm
XY轴最大移动速度 XY max. speed	500mm/s
Z轴最大移动速度 Z max. speed	250mm/s
Z轴负载 Z axis load	3KG
编程模式 Programming mode	示教编程 Teaching programming
输入电源 Power supply	AC220V 10A 50-60HZ
最大功率 Max. power	1.5KW
外形尺寸 Outer demension(L*W*H)	800*860*1520(mm)
设备重量 Weight	约170KG Around170KG

电脑版焊锡机

PC TYPE SOLDERING MACHINE

- 细节展示 Details Show



- 应用范围 Application Range

1. LSI、IC、混合IC、CSP、BGA等半导体焊接；
2. 主板、小型开关、电容器、可变电阻器、水晶振荡器、LCD、磁头、继电器、连接器焊接；
3. DVD、音频设备、汽车导航系统、电视游戏机、电视机、收音机、洗衣机、吸尘器等
1. LSI, IC, hybrid IC, CSP, BGA and other semiconductor welding;
2. Motherboard, small switch, capacitor, variable resistor, crystal oscillator, LCD, magnetic head, relay, connector welding;
3. DVD, audio equipment, car navigation system, TV game console, TV, radio, washing machine, vacuum cleaner etc.

- 应用领域 Application Field

3C消费电子行业/家电行业/5G行业/电子工业
3C consumer/electronics industry/Appliance industry/5G industry/Electronics industry

- 产品优势 Product Advantage

1. 基于Windows操作系统开发的用户软件,更符合使用者的操作习惯；
2. 高清触摸屏,人机界面,运行轨迹实时焊接监控；
3. 具有缺锡与堵锡自动检测功能,直接保护焊接产品；
4. 可连接MES系统
1. The user software developed based on the Windows operating system is more in line with the user's operating habits;
2. High-definition touch screen, man-machine interface, real-time welding monitoring of running track;
3. With automatic detection function of tin shortage and blocking, directly protect the welding products;
4. Can be connected to MES system

技术参数 Technical Specification

标配 Standard Configuration	参数 Specification
驱动方式 Drive method	步进电机+皮带+精密导轨 Stepping motor + belt + precision guide rail
控制方式 Control method	工控机 Industrial PC
选配 Optional Configuration	参数 Specification
驱动方式 Drive method	伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail
烟雾净化系统 Smoke purification system	
MES系统 MES system	
其他功率温控 Other power temperature controller	

桌面式电脑版焊锡机

DESKTOP PC TYPE SOLDERING MACHINE

格润智能桌面式电脑版焊锡机SI10R-S4

Green desktop PC type soldering machine SI10R-S4



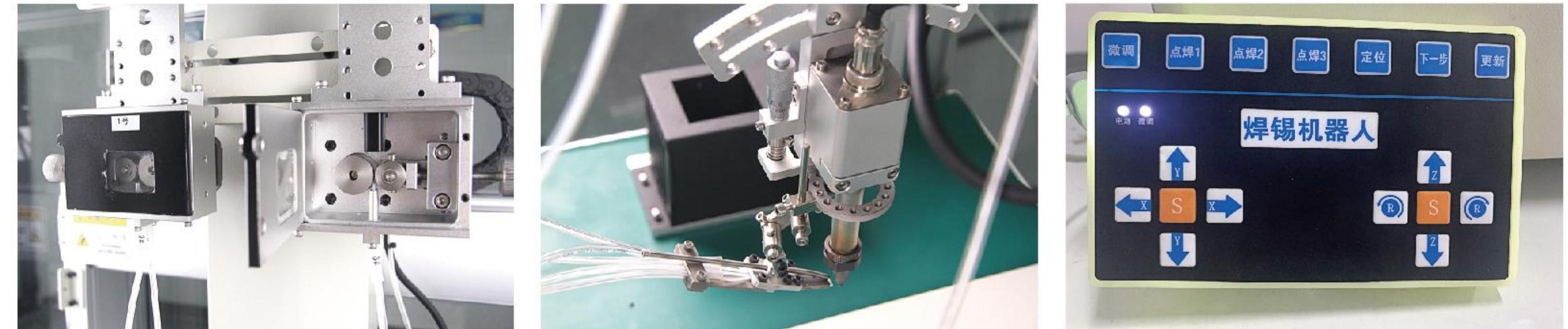
技术参数 Technical specifications

项目 Item	参数 Specifications
型号 Model	SI10R-S4
X轴 X-axis	400mm
Y轴 Y-axis	400mm
Z轴 Z-axis	100mm
R轴 R-axis	360°
Z轴负载 Z-axis load	4kg
Y轴负载 Y-axis load	10Kg
XY轴最大移动速度 Maximum movement speed of the XY axis	0~500mm/sec
Z轴最大移动速度 Maximum movement speed of the Z axis	0~250mm/sec
重复定位精度 Repeatability	± 0.02 mm / Axis
操作方式 Mode of operation	15寸触摸屏+运动控制卡+手持控制盒 15 inch touch screen + motion control card + handheld control box
程序记录模式 Program recording mode	100组 100 groups
温度范围 Temperature range	5~500°C
可用锡丝直径 Available tin wire diameter	Φ0.5~Φ2mm
驱动方式 Drive mode	步进电机+同步带+精密导轨 Stepping motor+synchronous belt+precision guide rail
输入电源 Power supply	AC220V 10A 50HZ
外形尺寸 Outer demension (L*W*H)	620*653*890(mm)

桌面式电脑版焊锡机

DESKTOP PC TYPE SOLDERING MACHINE

- 细节展示 Details show



- 应用范围 Application Range

3C消费电子行业、家电行业、5G行业、电子工业

3C consumer electronics industry, home appliance industry, 5G industry, electronics industry

- 产品优势 Product Advantage

1. 灵活多样的焊锡方式, 具有点焊、拖焊(拉焊)等功能;
 2. 模块化的结构设计, 便于维护、保养;
 3. 支持多送锡模组, 可根据应用需要快速添加送锡模组, 可以满足板上多个大小不同焊盘的一次性焊接工艺;
 4. 中心抽烟系统, 将助焊剂对空气及焊接模组的污染降到最低;
 5. 柔性编程系统, 满足多样化的客户需求;
 6. 设备具有自动清洗功能, 一定程度上稳定了焊锡加工质量与延长烙铁咀使用寿命;
 7. 自带温度实时监控系统;
 8. 该设备焊接模组带有自动缓冲功能, 避免在设备调试与运行期间损伤到焊接产品;
 9. 温控器可调节温度范围为5-500摄氏度之间, 精确到±5摄氏度, 恒温温控, 快速补温;
 10. 可连接MES系统(选配);
1. Flexible and diverse soldering methods, with spot welding, drag welding (pull welding) and other functions;
 2. Modular structure design, easy to maintain, maintenance;
 3. Support multi-tin delivery module, can be quickly added according to the needs of the application, can meet the plate multiple sizes of different size pads of the one-time welding process;
 4. The central smoking system minimizes the pollution of the flux to the air and welding module;
 5. Flexible programming system to meet diversified customer needs;
 6. The equipment has automatic cleaning function, which stabilizes the quality of solder processing and prolongs the service life of the soldering iron nozzle to a certain extent;
 7. Built-in temperature real-time monitoring system;
 8. The equipment welding module has an automatic buffer function to avoid damage to the welding product during the commissioning and operation of the equipment;
 9. The thermostat can adjust the temperature range between 5-500 °C, accurate to ± 5 °C constant temperature control, rapid temperature replenishment;
 10. Can be connected to MES system (optional);

上下料焊锡机

LOADING AND UNLOADING SOLDERING MACHINE

格润智能上下料焊锡机GR-DH02

Green loading and unloading soldering machine GR-DH02



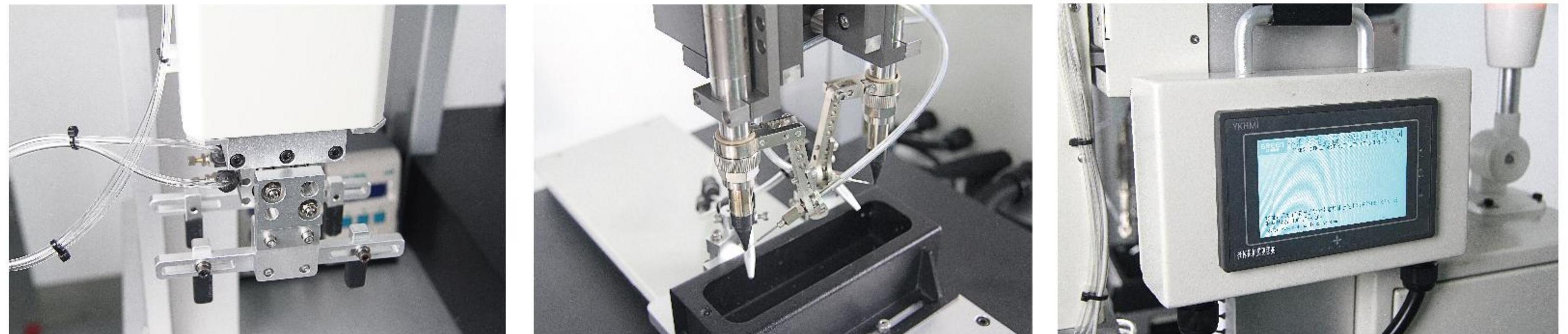
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	GR-DH02
适用产品治具尺寸 Applicable product fixture size	约150*150mm Approximately 150*150mm
工作模式 Working mode	自动焊锡 Automatic soldering
上料方式 Feeding method	自动上料 Automatic feeding
下料方式 Unloading method	自动下料且带翻功能Automatic unloading with flip function
X/Y/Z焊锡行程 Solder stroke	200*200*100(mm)
运动速度 Speed of movement	300mm/s(最大可订制800MM) 300mm/s (up to 800MM)
电机类型 Motor type	步进电机 Stepper motor
程序记录模式 Program recording mode	150组 150 groups
重复精度 Repeatability	±0.02 mm
控制系统 Control system	运动控制卡+PLC+触摸屏 Motion control card + PLC + touch screen
导轨 guide rail	台湾品牌 Taiwan brand
丝杆 Screw	台湾品牌 Taiwan brand
光电开关 Photoelectric switch	台湾品牌 Taiwan brand
I/O信号 I/O signal	24 In puts/16 Out puts
显示方式 Display mode	LED教导盒和触摸屏 LED teaching box and touch screen
可运动图形 Motionable graphics	单点焊、拖焊、圆弧脱焊 Single-spot welding, drag welding, circular arc desoldering
清洗 cleaning	自动 auto
功率 Power	1.2KW
电源 Power supply	AC220V 50HZ

上下料焊锡机

LOADING AND UNLOADING SOLDERING MACHINE

- 细节展示 Details show



- 应用范围 Application Range

手机、电脑、集成电路、平板、数码、汽车工业、电池组装、扬声器、PCB板、半导体微电子组装、摄像头模组焊锡
Mobile phones, computers, integrated circuits, tablets, digital, automotive industry, battery assembly, speakers, PCB boards, semiconductor microelectronics assembly, camera module soldering

- 产品优势 Product Advantage

- 1、灵活多样的焊锡方式,具有点焊、拖焊等功能。
 - 2、焊锡抖动功能,在焊接时打开此功能可以使焊接更迅速,对大焊点尤其有效。
 - 3、设备具备有上下料自动翻转功能,设备轻巧可依附在流水线上,方便移动,设备调试完成后,不需人工操作,进行自动焊锡。
 - 4、设备具有自动清洗功能,有效保障了焊锡加工质量与延长烙铁咀使用寿命。
 - 5、设备编写工作程序可进行点到点、块到块的复制,缩短程序编写时间,且简单易学。
 - 6、多轴联动机械手,全部采用精密步进马达驱动及先进运动控制算法,有效提升运动定位精度和重复精度。
1. Flexible and diverse soldering methods, with spot welding, drag welding and other functions.
 - 2, solder jitter function, open this function when welding can make soldering more rapid, especially effective for large solder joints.
 - 3, the equipment has a loading and unloading automatic flipping function, the equipment is lightweight can be attached to the assembly line, easy to move, after the completion of equipment debugging, no manual operation, automatic soldering.
 4. The equipment has automatic cleaning function, which effectively guarantees the quality of solder processing and prolongs the service life of the soldering iron nozzle.
 5. The equipment can write the working program can be copied from point to point and block to block, shortening the programming time and making it simple and easy to learn.
 6. Multi-axis linkage manipulator, all using precision stepper motor drive and advanced motion control algorithm, effectively improve motion positioning accuracy and repeatability.

平台焊锡机

PLATFORM SOLDERING MACHINE

格润智能第二代平台焊锡机SI500DR

Green second generation platform soldering machine SI500DR



注:图片仅展示SI500DR机型

技术参数 Technical Specification

项目 Item	参数 Specification				
型号 Model	SI300R	SI400R	SI500R	SI500DR	SI600DR
行程 Working range	300*300*100*360°	400*400*100*360°	500*500*100*360°	500*300*300*100*360°	600*400*400*100*360°
Z轴负载 Z axis load				4kg	
XY轴最大移动速度 XY max. speed				500mm/s	
Z轴最大移动速度 Z max. speed				250mm/s	
重复定位精度 Repeatability				±0.02 mm	
程序文件容量 Program capacity	150 (1500个点/程序文件)	150(1500 points/program file)			
控制方式 Control method	3维插补	3-dimensional interpolation			
设定坐标方式 Setting method	手持编程器	Handheld programmer			
温度范围 Temperature range	0~450°C				
报警温度范围 Alarm temperature range	±10°C				
加热时间 Heating time	0~9.9s				
可用锡丝直径 Available tin wire diameter	φ0.5~φ1.5mm				
焊锡嘴角度 Angle of soldering tip	60°~90°				
温度控制器 Temperature controller	格润工业机器人专用温控器	Green temperature controller			
输入电源 Power supply	AC220V 10A 50-60HZ				
最大功率 Max.power	800W				
外形尺寸 Outer demension(L*W*H)	603*517*846(mm)	703*617*846(mm)	803*717*846(mm)	603*717*846(mm)	703*817*846(mm)
设备重量 Weight					

平台焊锡机

PLATFORM SOLDERING MACHINE

● 细节展示 Details Show



● 应用范围 Application Range

1. LSI、IC、混合IC、CSP、BGA等半导体焊接；
 2. 主板、小型开关、电容器、可变电阻器、水晶振荡器、LCD、磁头、继电器、连接器焊接；
 3. DVD、音频设备、汽车导航系统、电视游戏机、电视机、收音机、洗衣机、吸尘器等
1. LSI, IC, hybrid IC, CSP, BGA and other semiconductor welding;
2. Motherboard, small switch, capacitor, variable resistor, crystal oscillator, LCD, magnetic head, relay, connector welding;
3. DVD, audio equipment, car navigation system, TV game console, TV, radio, washing machine, vacuum cleaner etc.

● 应用领域 Application Field

3C消费电子行业/家电行业/5G行业/电子工业
3C consumer electronics industry/Appliance industry/5G industry/Electronics industry

● 产品优势 Product Advantage

高速运转无抖动，拆卸方便，维修简单，性价比高。
High-speed operation without jitter, convenient disassembly, simple maintenance, and cost-effective.

技术参数 Technical Specification

标配 Standard configuration	参数 Specification
驱动方式 Drive method	步进电机+同步带+精密导轨 Stepping motor + synchronous belt + precision guide rail
温控150W Temperature controller150W	
运动控制卡+手持教导盒 Motion control card+handheld programmer	

选配 Optional configuration	参数 Specification
驱动方式 Drive method	伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail
其他功率温控 Other power temperature controller	400W

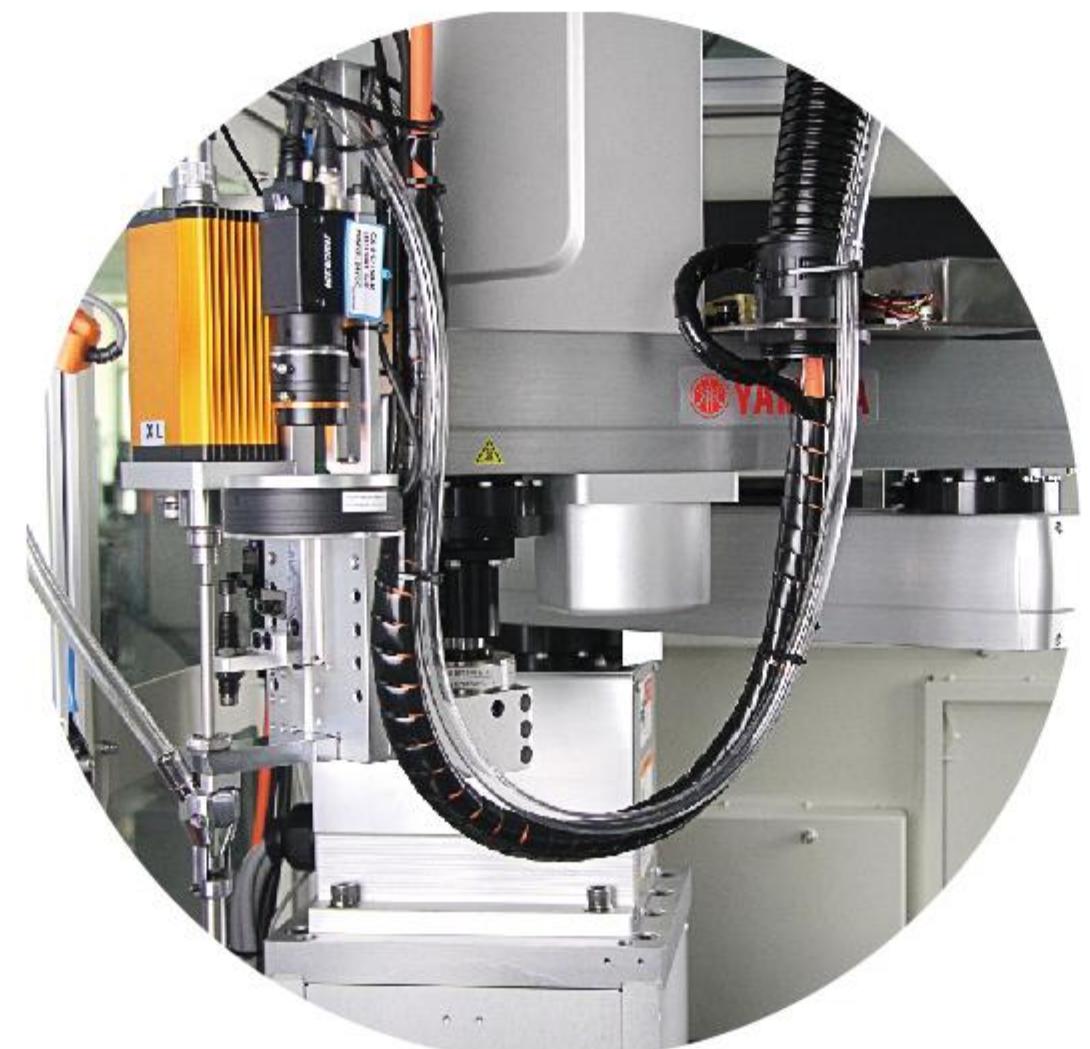
爆品

在线机器人螺丝机

ONLINE ROBOT SCREW MACHINE

格润智能在线机器人螺丝机MSL880

Green online robot screw machine MSL880



机械手内部构件

技术参数 Technical Specification

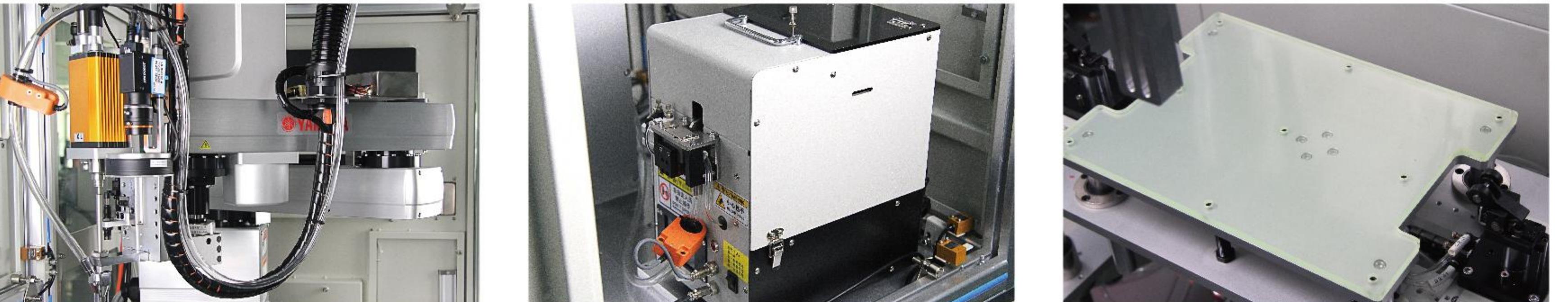
项目 Item		参数 Specification				
型号 Model		MSL880				
锁付范围 Laser power(L*W*H)		400*350*200(mm)				
机械手 Manipulator		雅马哈 YK600XG				
工作电压 Operating Voltage		AC220V 10A 50-60HZ				
功率 Power		2KW				
工作气压 Air pressure		0.5-0.7MPa				
外形尺寸 Outer demension (L*W*H)		1080*800*1800(mm)				
重复精度 Repeat accuracy		$\pm 0.02\text{mm}$				
智能电批扭力精度 Intelligent electric batch torque accuracy		$\pm 5\%$				
设备重量 Weight		400KG				
轴规格 Shaft size	机械臂长度 Arm length	X轴 X axis	Y轴 Y axis	Z轴 Z axis	R轴 Raxis	
	旋转范围 Rotation range	300mm $\pm 130^\circ$	300mm $\pm 145^\circ$	200mm —	300mm $\pm 360^\circ$	
马达输出 A Motor output AC	减速器 Reducer	谐波传动	谐波传动	滚珠丝杆	谐波传动	
	传导方式 马达~减速器 Motor ~ reducer Conduction mode Reducer~ output	直接连接	直接连接			
重复定位精度 Repeat positioning accuracy		$\pm 0.01\text{mm}$	$\pm 0.01\text{mm}$	$\pm 0.004^\circ$		
最高速度 Maximum speed		8.4m/sec	2.3m/sec	1.7m/sec	1700°/sec	
最大搬运重量 Maximum carrying weight		10kg(标准规格) 10kg (standard specification)				
标准周期时间:2kg可搬运时 Standard cycle time: When 2kg can be transported		0.46 sec				
R轴容许惯性力矩 R-axis allowable moment of inertia		0.30 kgm ²				

电话/Tel:0755-2993 3015 传真/Fax:0755-2993 3180 Web:www.greensoldering.com

在线机器人螺丝机

ONLINE ROBOT SCREW MACHINE

- 细节展示 Details Show



- 应用范围 Application Range

机械手智能螺丝机为解决笔记本、一体机、显示器、电视机、智能家电(扫地机器人、充电桩)、智能穿戴电子产品、新能源等行业的人工锁螺丝工作站而诞生，替代传统XYZ平台螺丝机。该设备适合混线生产，成功解决行业难点。拥有架上式、嵌入式工作模式，具备快速换线使用特点。

The manipulator smart screw machine was born to solve the manual lock screw station of notebooks, all-in-ones, monitors, TVs, smart home appliances (sweeping robots, charging piles), smart wearable electronic products, new energy and other industries. Green screw machines replace the traditional XYZ platform screw machine. Its suitable for mixed-line production, successfully solving industry difficulties. It has a rack-mounted and embedded working mode, and can be used for quick line change.

- 产品特点 Product Features

- A、快拆式工作站，安装拆卸8分钟内可以完成。
- B、离线式调试，调试完成，即可快速上线使用。
- C、进口Yamaha机器人+视觉系统+工业电脑，提高锁付精度。
- D、搭载智能电批、提高锁付精度，支持锁付数据管理。
- E、支持每颗螺丝锁付扭力单独设置。
- F、支持漏锁、滑牙、浮高、缺料、真空异常等报警。
- G、支持混线生产、自动切换程序。
- A. Quick disassembly workstation, installation and disassembly can be completed within 8 minutes.
- B. Offline debugging, after debugging is completed, it can be used quickly online.
- C. Imported Yamaha robot + vision system + industrial computer to improve lock and pay accuracy.
- D. Equipped with intelligent electric batch, improve the accuracy of lock payment, support lock payment data management.
- E. Support individual setting of locking and paying torque of each screw
- F. Supports alarms such as missing lock, slippery teeth, floating height, material shortage, vacuum abnormality, etc.
- G. Support mixed line production, automatic switching program

- 程序说明 Program Description

- 1、设备用途用于产品上螺丝紧固的锁付
- 2、产品特色稳定、高效、高精度、柔性强
- 3、产品流入→定位夹紧产品→CCD定位→锁付螺丝→定位、夹紧、机械手复位→产品流出到下一工位。
- 4、配备双供料系统，可实现两款螺丝锁付。
- 5、搭载智能电批，支持漏锁、滑牙、浮高报警。
- 6、机器人+CCD+工控机，提高锁付精度，智能编程。
- 1. The equipment is used to lock the screw fastening on the product
- 2. Product features stable, efficient, high-precision, and flexible
- 3. Product flow → positioning and clamping product → CCD positioning → locking screw → positioning, clamping, manipulator reset → product flow out to the next station.
- 4. Equipped with a double feeding system, which can realize two types of screw locking.
- 5. Equipped with smart electric batch, support leak lock, slip tooth, floating height alarm.
- 6. Robot + CCD + industrial computer, improve the accuracy of locking and intelligent programming.

地址:深圳市宝安区新桥街道黄埔社区上南东路128号2号厂房
Add: Building 2, NO.128 of East ShangNan Rd, HuangPu Community, XinQiao Street, Bao'an District, Shenzhen City, GuangDong Province, China.

在线机器人螺丝机

ONLINE ROBOT SCREW MACHINE

格润智能在线机器人螺丝机GR-OL-200L

Green Online robot screw machine GR-OL-200L



技术参数 Technical Specification

项目 Item	参数 Specification
锁付范围 Lock range	200*200*70mm (X*Y*Z)
型号 Model	GR-OL-200L
CCD定位精度 CCD positioning accuracy	±0.02mm
锁付效率 Lock-in efficiency	2.0~2.5S/颗, 视螺丝规格 2.0~2.5S/pcs, depending on the screw specification
编程方式 Programmatic	CCD 坐标示教 + CAD坐标导入 + 教导式 CCD coordinate teach-in + CAD coordinate import + tutorial
控制系统 Control system	IPC + 高精度工业CCD+高性能运动控制卡 IPC + high-precision industrial CCD+ high-performance motion control card
供料方式 Feeding method	吸取式 Suction
电批 Electric batch	智能电批1支 Smart electric batch 1
驱动方式 Drive mode	直线电机+伺服丝杆模组 Linear motor + servo screw module
操作系统 operating system	Windows 10
操作方式 Mode of operation	19寸显示器+键盘+鼠标19 inch monitor + keyboard + mouse
功率 power	1.5KW
电源 power supply	AC220V/50HZ
气源 Air source	0.5-0.8Mpa
尺寸 size	1000*645*1520MM, 不含两端接驳台轨道各150mm(Without both end dock tracks, each 150mm)

在线机器人螺丝机

ONLINE ROBOT SCREW MACHINE

● 细节展示 Details show



● 应用范围 Application Range

在线机器人螺丝机为解决手机、笔记本电脑、一体机、平板、数码、汽车工业、电池组装、扬声器、扫地机器人、智能家电(扫地机器人、充电桩)、智能穿戴电子产品，新能源等行业。

Online robot screw machine for mobile phones, laptops, all-in-one machines, tablets, digital, automotive industry, battery assembly, speakers, sweeping robots, Smart home appliances (sweeping robots, charging piles), smart wearable electronic products, new energy and other industries.

● 产品优势 Product Advantage

- 1、单机在线式结构, 轨道宽度可调, 手机长边平行于轨道流动, 覆盖5~7寸主流手机产品尺寸范围;
 - 2、PC运动控制系统, 可视化编程, 数据保存无限制;
 - 3、支持CAD点位坐标导入;
 - 4、CCD辅助示教螺丝坐标点, 消除人工目视定位误差;
 - 5、CCD视觉定位校正坐标点, 多组Mark点智能组合校正, 提升拍照直通率;
 - 6、图形化显示锁付点位及锁付结果, 自动标记OK/NG螺丝点位, 查找直观快捷;
 - 7、配置智能电批, 任意点位扭力、转速单独设置;
 - 8、配置螺丝浮高位移传感器, 自动检测并修复浮高不良螺丝;
 - 9、配置压力检测传感器, 自动检测并监控锁付时批头对产品的下压力;
 - 10、在线式扭力点检, 存储扭力点检结果并可查询;
 - 11、多用户、多级权限管理, 管理员可以新建账户并分配软件操作权限;
 - 12、具有生产统计及追溯功能, 每颗螺丝锁付数据自动保存并可查询或导出*.xls文件;
 - 13、具有MES连接功能, 自动上传生产数据至MES系统
1. Stand-alone online structure, adjustable track width, long side of mobile phone parallel to track flow, covering 5~7 inch mainstream mobile phone product size range;
2. PC motion control system, visual programming, unlimited data saving;
3. Support CAD point coordinate import;
4. CCD assists the teach-in screw coordinate point to eliminate the manual visual positioning error;
5. CCD visual positioning corrects coordinate points, and multiple groups of Mark points are intelligently combined to improve the photo pass-through rate;
6. Graphical display of lock points and lock results, automatic marking of OK/NG screw points, intuitive and fast search;
7. Configure intelligent electric batch, and set the torque and speed at any point separately;
8. Configure screw float height displacement sensor to automatically detect and repair screws with poor float height;
9. Equipped with pressure detection sensor, automatically detect and monitor the downforce of the batch head on the product when locking;
10. Online torque spot check, storage torque spot check results and query;
11. Multi-user, multi-level authority management, administrators can create new accounts and assign software operation permissions;
12. With production statistics and traceability functions, each screw lock data is automatically saved and can be queried or exported * .xls files;
13. With MES connection function, automatically upload production data to MES system

离线式智能双工站螺丝机

OFFLINE INTELLIGENT DUPLEX STATION SCREW MACHINE

格润智能离线式智能双工站螺丝机GR-FL05

Green Offline intelligent duplex station screw machine GR-FL05



技术参数 Technical Specifications

项目 Item	参数 Specifications
型号 Model	GR-FL05
锁付范围 Lock range	400*300*60mm (X*Y*Z)
驱动方式 Drive mode	X轴直线电机模组, Y/Z轴伺服丝杆模组 X-axis linear motor module, Y/Z-axis servo screw module
CCD定位精度 CCD positioning accuracy	±0.02mm
运动轴数 Number of axes of motion	6轴 (XYZ) 6-axis (XYZ)
供料器 Feeder	每站配备2个供料器 Each station is equipped with 2 feeders
操作系统 operating system	Windows 10
控制系统 Control system	两套IPC + 高精度工业CCD+高性能运动控制卡 Two sets of IPC + high-precision industrial CCD+ high-performance motion control cards
编程方式 Programmatic	CCD坐标示教 + CAD坐标导入 + 教导式 CCD coordinate teach-in + CAD coordinate import + tutorial
供料方法 Feeding method	吸取式 Suction
电批 Electric batch	进口阿特拉斯电批 Imported Atlas electric batch
锁付效率 Lock-in efficiency	2.0~3.0S/颗, 视螺丝规格 2.0~3.0S/pcs, depending on screw specifications
操作方式 Mode of operation	19寸显示器+键盘+鼠标 19 inch monitor + keyboard + mouse
电源 power supply	220VAC、50HZ
机器功率 Machine power	约2.5KW Approx. 2.5 kW
机器尺寸 Machine size	1700*1250*800mm

离线式智能双工站螺丝机

OFFLINE INTELLIGENT DUPLEX STATION SCREW MACHINE

- 细节展示 Details show



- 应用范围 Application Range

主要应用于汽车电子、汽车零部件、动力电池等汽车行业离线式锁付

Mainly used in automotive electronics, auto parts, power batteries and other automotive industry offline locking

- 产品优势 Product Advantage

1: 双机离线式结构, 左右工作站单独控制, 可适合两款产品同时锁付, 采用前放后取模式, 可人工/机械手放取产品, 应用灵活;

2: IPC运动控制系统, 可视化编程, 数据保存无限制;

3: 支持CAD点位坐标导入;

4: CCD辅助示教螺丝坐标点, 消除人工目视定位误差;

5: CCD视觉定位校正坐标点, 多组Mark点智能组合校正, 提升拍照直通率;

6: 图形化显示锁付点位及锁付结果, 自动标记OK/NG螺丝点位, 查找直观快捷;

7: 配置阿特拉斯电批, 任意点位扭力、转速单独设置;

8: 配置螺丝浮高位移传感器, 自动检测并修复浮高不良螺丝;

9: 离线式扭力点检, 存储扭力点检结果并可查询;

10: 多用户、多级权限管理, 管理员可以新建账户并分配软件操作权限;

11: 具有生产统计及追溯功能, 每颗螺丝锁付数据自动保存并可查询或导出文档;

12: 具有MES连接功能, 自动上传生产数据至MES系统。

1: Dual-machine offline structure, left and right work stations are controlled separately, which can be suitable for locking two products at the same time, using the front and rear pickup mode, and can be manually / manipulator to put products, flexible application;

2: IPC motion control system, visual programming, unlimited data saving;

3: Support CAD point coordinate import;

4: CCD assists the teach-in screw coordinate point to eliminate the manual visual positioning error;

5: CCD visual positioning correction coordinate points, multiple groups of Mark points intelligent combination correction, improve the photo pass-through rate;

6: Graphical display of lock points and lock results, automatic marking of OK/NG screw points, intuitive and fast search;

7: Configure Atlas electric batch, any point torque, speed set separately;

8: Configure screw float displacement sensor to automatically detect and repair screws with poor float height;

9: Offline torque spot check, storage torque spot check results and query;

10: Multi-user and multi-level authority management, administrators can create new accounts and assign software operation permissions;

11: With production statistics and traceability function, each screw lock data is automatically saved and can query or export documents;

12: With MES connection function, automatically upload production data to MES system.

四轴肩并肩精密螺丝机

FOUR-AXIS SHOULDER TO SHOULDER PRECISION SCREW MACHINE

格润智能四轴肩并肩精密螺丝机SL666

Green Four-axis shoulder to shoulder precision screw machine SL666



技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	SL666
备注 Remark	4轴 4 axis
X轴 X axis	250mm
Y轴 Y axis	450mm
Z 轴 Z axis	100mm
R轴 R axis	180°
重复精度 repeatability	±0.01mm
Y轴负载 Y axis load	10kg
Z轴负载 Z axis load	5Kg
锁付周期 Working efficiency	约1.2-2秒/PCS probably 1.2-2 seconds/PCS
锁附方式 Locking method	无刷电批 Brushless electric batch
输入电源 Power supply	AC220V 10A 50-60HZ
输入气压 Input air pressure	0.4-0.7MPa
最大功率 Max. power	约2KW Around 2KW
程序文件容量 Program capacity	100(900个点/程序文件) / 100(900 points/program file)
外形尺寸 Outer demension (L*W*H)	930*1150*1770(mm)
设备重量 Weight	约300KG Around 300KG

四轴肩并肩精密螺丝机

FOUR-AXIS SHOULDER TO SHOULDER PRECISION SCREW MACHINE

- 细节展示 Details Show



- 应用范围 Application Range

键盘、玩具、排插、灯饰、手机、电脑、电话机、计算器、机箱、充电器、各种小家电及小物件生产线等
Production lines for keyboards, toys, power strips, lighting, mobile phones, computers, telephones, calculators, cases, chargers, various small household appliances and small objects, etc.

- 应用领域 Application Field

手机行业/玩具行业/家电行业/电子行业
Mobile phone industry/Toy industry/Appliance industry/Electronics industry

- 产品优势 Product Advantage

1. 全研磨丝杆加日本松下电机驱动, 精度高
2. 10小时可打28000个螺丝, 高效高速
3. 高速运转无噪音
4. 液晶显示屏, 数据可视化
5. UPH良率可达99.7%
6. 格润特制批头, 比传统S2的寿命长2-3倍
1. Fully grinding screw and japanes panasonic motor drive, high precision
2. 10 hours can drive 28,000 screws, efficient and high speed
3. High-speed operation without noise
4. LCD display, data is visualized
5. UPH yield rate can reach 99.7%
6. Green OEM bit, the life span is 2-3 times longer than the traditional S2 type

技术参数 Technical Specification

标配 Standard Configuration	参数 Specification
驱动方式 Drive method	伺服电机+研磨丝杆+精密导轨 Servo motor + grinding screw + precision guide rail
电批 Electric batch	无刷电批 Brushless electric batch
运动控制卡+触摸屏 Motion control card + touch screen	
供料器 feeder	吹气式供料器 Blowing type feeder
选配 Optional Configuration	参数 Specification
伺服电批/智能电批 Servo electric batch/Smart electric batch	
供料器 feeder	震动盘供料器 Vibrating disk feeder 吹气式供料器 Blowing type feeder
CCD视觉识别系统 CCD visual recognition system	130W/500W像素 130W/500W pixel

桌面式下料机械手螺丝机

DESKTOP TYPE UNLOADING MANIPULATOR SCREW MACHINE

格润智能桌面式下料机械手螺丝机GR-DL03

Green desktop type unloading manipulator screw machine GR-DL03



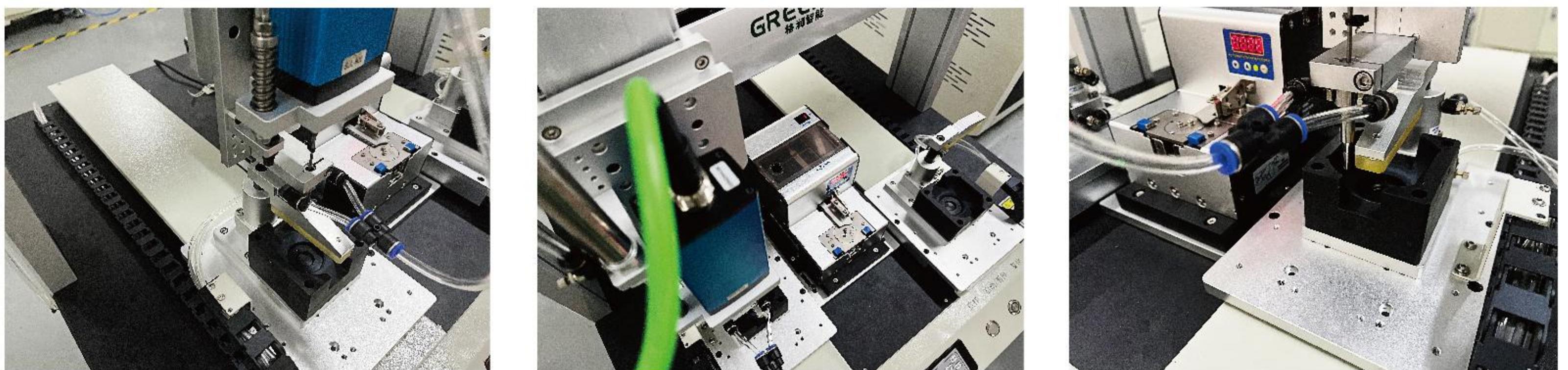
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	GR-DL03
适用产品治具尺寸 Applicable product fixture size	约150*250mm Approximately 150*250mm
工作模式 Working mode	自动锁螺丝 Automatic lock screws
上料方式 Feeding method	人工上料 Manual feeding
下料方式 Un loading method	自动下料 Automatic unloading
X/Y1/Y2/Z轴行程 X/Y1/Y2/Z axis travel	500*300*100(mm)
运动速度 Speed of movement	500mm/s
电机类型 Motor type	步进电机 Stepper motor
程序记录模式 Program recording mode	960组 960 groups
重复精度 Repeatability	±0.02 mm
控制系统 Control system	运动控制卡+触摸屏 Motion control card + touch screen
导轨 guide rail	台湾品牌 Taiwan brand
丝杆 Screw	台湾品牌 Taiwan brand
光电开关 Photoelectric switch	台湾品牌 Taiwan brand
I/O信号 I/O signal	24 In puts/16 Out puts
显示方式 Display mode	LED教导盒 LED teaching box
报警功能 Alarm function	浮锁, 滑牙, 漏锁 Floating locks, sliding teeth, leaky locks
适用螺丝 Apply screws	M1—M6.0
锁付一颗螺丝时间 Lock one screw for time	约1-1.5秒 About 1-1.5 seconds
功率 Power	1.2KW
电源 Power supply	AC220V 50HZ
外形尺寸 Outer demension(L*W*H)	1010*753*710(mm)

桌面式下料机械手螺丝机

DESKTOP TYPE UNLOADING MANIPULATOR SCREW MACHINE

- 细节展示 Details show



- 应用范围 Application Range

手机、电脑、集成电路、平板、数码、汽车工业、电池组装、扬声器、扫地机、智能锁PCB板、半导体微电子组装
摄像头模组

Mobile phones, computers, integrated circuits, tablets, digital, automotive industry, battery assembly, speakers, sweepers, smart lock PCB boards, semiconductor microelectronics assembly , Camera module

- 产品优势 Product Advantage

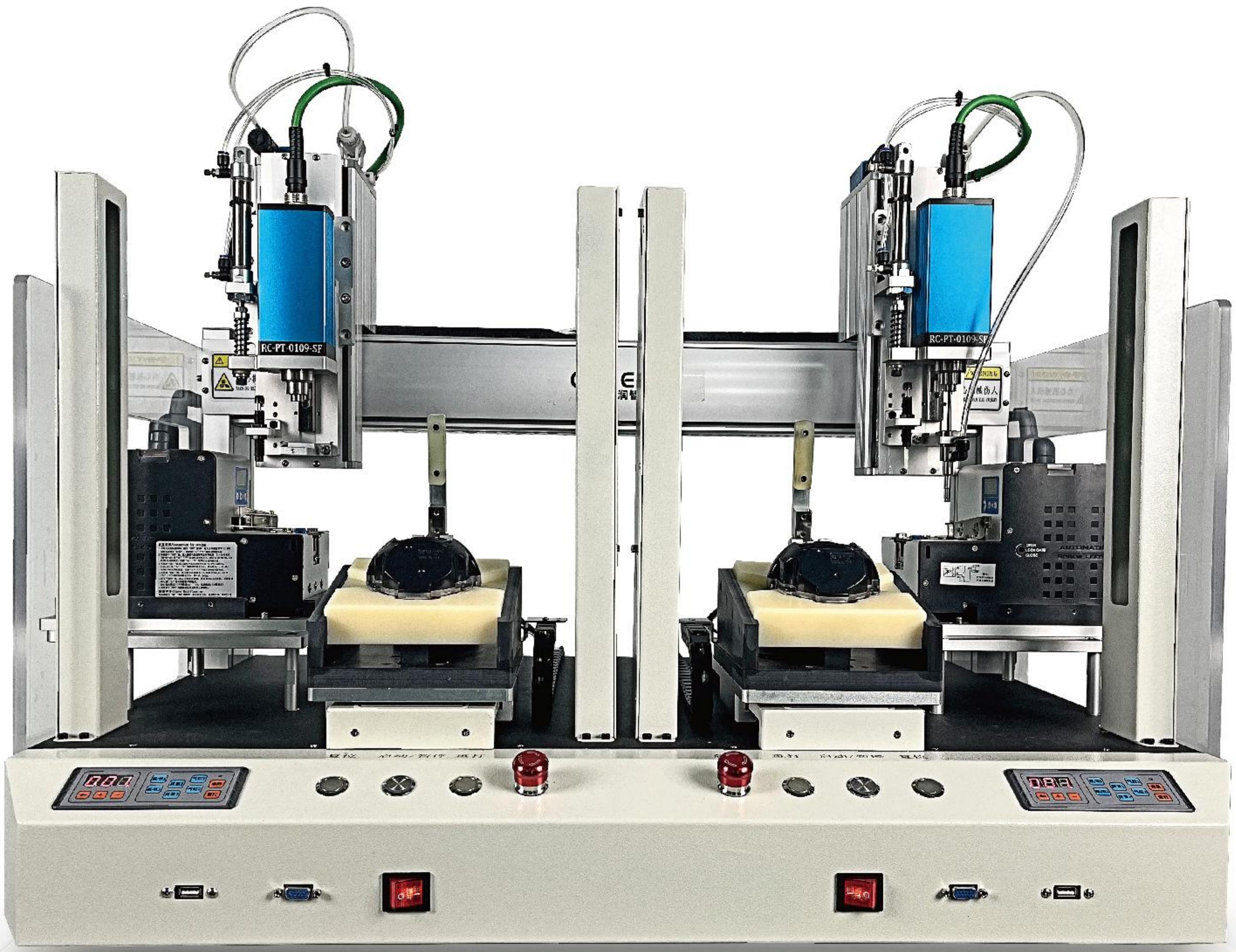
- 1、通用性强, 体积小, 可配合产线作业, 更换产品方便。
 - 2、自动化程度高, 操作简单。
 - 3、真空吸气式自动螺丝机, 非常适合于较小的螺丝。对螺丝的长径比没有要求。
 - 4、双Y轴平台交替锁付螺丝, 一边锁付螺丝, 一边上下料, 不需人工下料, 降低劳动强度、提高生产效率。
 - 5、设备编写工作程序可进行点到点、块到块的复制, 具有区域阵列复制, 平台复制, 批量编辑, 单步运行等功能, 缩短程序编写时间, 且简单易学。
 - 6、动作参数编辑完毕, 通过串口将动作参数下载到控制器, 即可脱机独立运行, 也可将动作参数保存到手持盒中, 方便调用。
 - 7、设备采用多轴联动机械手, 且具备自动下料功能, 可节约大量的下料时间, 提高生产效率, 设备全部采用精密步进马达驱动及先进的运动控制算法, 有效提升运动定位精度和重复精度。
 - 8、扭力调节方便, 保证锁紧质量。
 - 9、设备配备伺服电批, 伺服电批具有高精度扭力控制, 扭力精度达到±3%--±5%, 伺服电批支持多种拧紧任务, 每种任务支持多个拧紧步骤。
- 1, strong versatility, small size, can be used with the production line operation, easy to replace the product.
2. High degree of automation and simple operation.
3. Vacuum suction automatic screw machine, very suitable for smaller screws. There is no requirement for the length-to-diameter ratio of the screws.
4, double Y-axis platform alternately lock and pay screws, one side locks and pays the screws, the other side unloads, no need to manually unload, reduce labor intensity, improve production efficiency.
5. The equipment writing work program can be copied point-to-point and block-to-block, with regional array restoration, platform review, batch editing, and single-step operation Function, shorten the programming time, and easy to learn.
6. After the operation parameters are edited, the action parameters are downloaded to the controller through the serial port, which can be run offline independently, and the action parameters can also be saved to the handheld box. Easy to call.
7. The equipment adopts multi-axis linkage manipulator, and has the function of automatic unloading, which can save a lot of unloading time, improve production efficiency, and all equipment is mined Precision stepper motor drive and advanced motion control algorithm are used to effectively improve the accuracy of motion positioning and repeatability.
8. Torque adjustment is convenient to ensure the quality of locking.
9, the equipment is equipped with servo electric batch, servo electric batch with high-precision torque control, torque accuracy of ±3% - ±5%, servo electric batch support a variety of tightening tasks, Each task supports multiple tightening steps.

桌面式肩并肩螺丝机

TABLETOP SHOULDER-TO-SHOULDER SCREW MACHINE

格润智能桌面式肩并肩螺丝机GR-DL06

Green Tabletop shoulder-to-shoulder screw machine GR-DL06



技术参数 Technical Specification

项目 Item	参数 Specification
适用产品治具尺寸 Applicable product fixture size	约150*250 (mm)
型号 Model	GR-DL06
工作模式 Operating mode	自动锁螺丝 Auto-lock screws
上料方式 Feeding method	人工上料 Manual feeding
设备行程 Equipment stroke	(X1) 250 * (X2) 250 * (Y1) 300 * (Y2) 300 * (Z1) 100 * (Z2) 100(mm)
运动速度 Movement speed	500mm/s
电机类型 Motor type	步进电机 Stepper motor
程序记录模式 Program recording mode	99组 99 groups
重复精度 Repeatability	±0.02 mm
控制系统 Control system	运动控制卡+手持编程器 Motion control card + handheld programmer
导轨 guide rail	台湾品牌 Taiwanese brand
丝杆 Screw	台湾品牌 Taiwanese brand
光电开关 Photoelectric switch	台湾品牌 Taiwanese brand
I/O信号 I/O signals	12 In puts/12 Out puts
显示方式 Display mode	LED教导盒 LED teaching box
报警功能 Alarm function	浮锁, 滑牙, 漏锁 Floating locks, slippery teeth, leaky locks
适用螺丝 Applicable screws	M1—M6.0
锁付一颗螺丝时间 Lock one screw for time	约1-1.5秒 Approx. 1-1.5 sec
功率 power	1.2KW
电源 power supply	AC220V/50HZ
尺寸 size	860*603*710MM

桌面式肩并肩螺丝机

TABLETOP SHOULDER-TO-SHOULDER SCREW MACHINE

- 细节展示 Details show



- 应用范围 Application Range

手机、电脑、集成电路、平板、数码、汽车工业、电池组装、扬声器、扫地机、智能锁、PCB板、半导体微电子组装、摄像头模组

Mobile phones, computers, integrated circuits, tablets, digital, automotive industry, battery assembly, speakers, sweepers, smart locks, PCB board, semiconductor microelectronics assembly, camera module

- 产品优势 Product Advantage

1. 设备采用肩并肩双Z轴设计，一台能顶两台机，设备通用性强，体积小，可配合产线作业，更换产品方便。
 2. 设备可存储 99 个操作程序。
 3. 自动化程度高，操作简单。
 4. 真空吸气式自动螺丝机，非常适合于较小的螺丝。对螺丝的长径比没有要求。
 5. 设备采用双Y轴和双Z轴设计，设备可同时锁付两款相同产品的螺丝，降低劳动强度、提高生产效率。
 6. 设备支持出现故障时，选择重打或跳过模式。
 7. 设备编写工作程序可进行点到点、块到块的复制，具有区域阵列复制，平台复制，批量编辑，单步运行等功能，缩短程序编写时间，且简单易学。
 8. 动作参数编辑完毕，通过串口将动作参数下载到控制器，即可脱机独立运行，也可将动作参数保存到手持盒中，方便调用。
 9. 设备全部采用精密步进马达驱动及先进的运动控制算法，有效提升运动定位精度和重复精度。
 10. 扭力调节方便，保证锁紧质量。
 11. 设备配备伺服电批，伺服电批具有高精度扭力控制，扭力精度达到±3%--±5%，伺服电批支持多种拧紧任务，每种任务支持多个拧紧步骤。
 12. 设备配备安全防护光栅，有效保护操作人员的安全。
1. The equipment adopts shoulder-to-shoulder double Z-axis design, one can top two machines, the equipment has strong versatility, small size, can cooperate with production line operations, and is convenient to replace products.
2. The device can store 99 operating programs.
3. High degree of automation and simple operation.
4. Vacuum-suction automatic screw machine, very suitable for smaller screws. There is no requirement for the length-to-diameter ratio of the screw.
5. The equipment adopts double Y axis and double Z axis design, and the equipment can lock the screws of two identical products at the same time, reducing labor intensity and improving production efficiency.
6. When the device support fails, select the replay or skip mode.
7. The equipment writing work program can carry out point-to-point, block-to-block copying, with regional array copying, platform copying, batch editing, single-step operation, etc Features, shorten programming time, and easy to learn.
8. After the action parameters are edited, the action parameters are downloaded to the controller through the serial port, which can be run independently offline, or the action parameters can be saved to the handheld box. Easy to call.
9. The equipment adopts precision stepper motor drive and advanced motion control algorithm to effectively improve the accuracy of motion positioning and repeatability.
10. Easy torque adjustment to ensure locking quality.
11. The equipment is equipped with servo electric batch, servo electric batch has high-precision torque control, torque accuracy reaches ±3%--±5%, servo electric batch supports a variety of tightening tasks, Each task supports multiple tightening steps.
12. The equipment is equipped with safety protection grating to effectively protect the safety of operators.

桌面式螺丝机

DESKTOP SCREW MACHINE

格润智能桌面式螺丝机GR-DL04
Green Desktop screw machine GR-DL04



技术参数 Technical Specification

项目 Item	参数 Specification
适用产品治具尺寸 Applicable product fixture size	约300*450 (mm)
型号 Model	GR-DL04
工作模式 Operating mode	自动锁螺丝 Auto-lock screws
上料方式 Feeding method	人工上料 Manual feeding
下料方式 Cutting method	人工下料 Manual cutting
设备行程 Equipment stroke	(X) 700* (Y1) 500* (Y2) 500* (Z) 100(mm)
运动速度 Movement speed	500mm/s
电机类型 Motor type	步进电机 Stepper motor
程序记录模式 Program recording mode	99组 99 groups ±0.02 mm
重复精度 Repeatability	
控制系统 Control system	运动控制卡+触摸屏 Motion control card + touch screen
导轨 guide rail	台湾品牌 Taiwanese brand
丝杆 Screw	台湾品牌 Taiwanese brand
光电开关 Photoelectric switch	台湾品牌 Taiwanese brand
I/O信号 I/O signals	12 In puts/12 Out puts
显示方式 Display mode	LED教导盒 LED teaching box
报警功能 Alarm function	浮锁, 滑牙, 漏锁 Floating locks, slippery teeth, leaky locks
适用螺丝 Applicable screws	M1—M6.0
锁付一颗螺丝时间 Lock one screw for time	约1-1.5秒 Approx. 1-1.5 sec
功率 power	1.0KW
电源 power supply	AC220V/50HZ
尺寸 size	1010*753*710MM

桌面式螺丝机

DESKTOP SCREW MACHINE

- 细节展示 Details show



- 应用范围 Application Range

手机、电脑、集成电路、平板、数码、汽车工业、电池组装、扬声器、扫地机、智能锁、PCB板
半导体微电子组装、摄像头模组
Mobile phones, computers, integrated circuits, tablets, digital, automotive industry, battery assembly, speakers, sweepers, smart locks, PCB boards Semiconductor microelectronics assembly, camera module

- 产品优势 Product Advantage

- 1.通用性强,体积小,可配合产线作业,更换产品方便。
- 2.设备可存储 99 个操作程序。
- 3.自动化程度高,操作简单。
- 4.真空吸气式自动螺丝机,非常适合于较小的螺丝。对螺丝的长径比没有要求。
- 5.双Y轴平台交替锁付螺丝,降低劳动强度、提高生产效率。
- 6.设备支撑出现故障时,选择重打或跳过模式。
- 7.设备编写工作程序可进行点到点、块到块的复制,具有区域阵列复制,平台复制,批量编辑,单步运行等功能,缩短程序编写时间,且简单易学。
- 8.动作参数编辑完毕,通过串口将动作参数下载到控制器,即可脱机独立运行,也可将动作参数保存到触摸屏里,方便调用
- 9.设备配备触摸屏,直观易操作,设备配备调试手柄,方便对位调试。
- 10.设备全部采用精密步进马达驱动及先进的运动控制算法,有效提升运动定位精度和重复精度。
- 11.扭力调节方便,保证锁紧质量。
- 12.设备配备伺服电批,伺服电批具有高精度扭力控制,扭力精度达到±3%--±5%,伺服电批支持多种拧紧任务,每种任务支持多个拧紧步骤。
1. Strong versatility, small size, can cooperate with production line operation, easy to replace products.
2. The device can store 99 operating programs.
3. High degree of automation and simple operation.
4. Vacuum-suction automatic screw machine, very suitable for smaller screws. There is no requirement for the length-to-diameter ratio of the screw.
5. The double Y-axis platform alternately locks the screws to reduce labor intensity and improve production efficiency.
6. When the equipment support fails, select the heavy or skip mode.
7. The equipment writing work program can carry out point-to-point, block-to-block copying, with regional array copying, platform copying, batch editing, single-step operation, etc Features, shorten programming time, and easy to learn.
8. After the action parameters are edited, the action parameters are downloaded to the controller through the serial port, which can be run independently offline, and the action parameters can also be saved to the touch screen. Easy to call
9. Equipment configuration touch screen, intuitive and easy to operate, equipment equipped with debugging handle, then the position adjustment.
10. The equipment adopts precision stepper motor drive and advanced motion control algorithm to effectively improve the accuracy of motion positioning and repeatability.
11. Easy torque adjustment to ensure locking quality.
12. The equipment is equipped with servo electric batch, servo electric batch has high-precision torque control, torque accuracy reaches ±3%--±5%, servo electric batch supports a variety of tightening tasks, Each task supports multiple tightening steps.

吹送式平台螺丝机

BLOWING TYPE PLATFORM SCREW MACHINE

格润智能第二代吹送式平台螺丝机SL500D

Green second generation blowing type platform screw machine SL500D



注:图片仅展示SL500D机型

技术参数 Technical Specifications

项目 Item	参数 Specifications				
型号 Model	SL300	SL400	SL500	SL500D	SL600D
行程 Working range	300*300*100	400*400*100	500*500*100	500*300*300*100	600*400*400*100
Z轴负载 Z axis load	8kg	8kg	8kg	8kg	8kg
XY轴最大移动速度 XY max. speed			500mm/s		
Z轴最大移动速度 Z max. speed			250mm/s		
重复定位精度 Repeatability			±0.02 mm		
程序容量 Program capacity			1000点/file		
控制方式 Control method	3维插补 3-dimensional interpolation				
设定坐标方式 Setting method	手持编程器 Handheld programmer				
程序文件容量 Program capacity	150(1900个点/程序文件)/150(1900 points/program file)				
输入电源 Power supply	AC220V 10A 50-60HZ				
最大功率 Max.power	650W				
输入气压 Input air pressure	0.4-0.7MPa				
外形尺寸 Outer demension (L*W*H)	603*517*746(mm)	703*617*746(mm)	803*717*746(mm)	603*717*746(mm)	703*817*746(mm)
设备重量 Weight					

吹送式平台螺丝机

BLOWING TYPE PLATFORM SCREW MACHINE

● 细节展示 Details show



● 应用范围 Application Range

键盘、玩具、排插、灯饰、手机、电脑、电话机、计算器、机箱、充电器、各种小家电及小物件生产线等
Production lines for keyboards, toys, power strips, lighting, mobile phones, computers, telephones, calculators,cases,chargers, various small household appliances and small objects,etc.

● 应用领域 Application Field

手机行业/玩具行业/家电行业/电子行业
Mobile phone industry/Toy industry/Appliance industry/Electronic industry

● 产品优势 Product Advantage

高速运转无抖动，拆卸方便，维修简单，性价比高。
High-speed operation without jitter, convenient disassembly, simple maintenance, and cost-effective.

技术参数 Technical specifications

标配 Standard configuration	参数 Specifications
驱动方式 Drive method	步进电机+同步带+精密导轨 Stepper motor + synchronous belt + precision guide rail
供料器 feeder	吹气式供料器 Blowing type feeder
电批 Electric batch	无刷电批 Brushless electric batch
运动控制卡+手持教导盒 Motion control card+handheld programmer	
选配 Optional configuration	参数 Specifications
驱动方式 Drive method	伺服电机+丝杆+精密导轨 Servo motor + screw + precision guide rail
供料器 feeder	震动盘供料器 Vibrating disk feeder
电批 Electric batch	吹气式供料器 Blowing type feeder 伺服电批 Servo electric batch 智能电批 Smart electric batch

散热片自动组装线体

HEAT SINK AUTOMATIC ASSEMBLY LINE

格润智能散热片自动组装线体 AL-HL503C01

Green heat sink automatic assembly line AL-HL503C01



此线体为非标定制

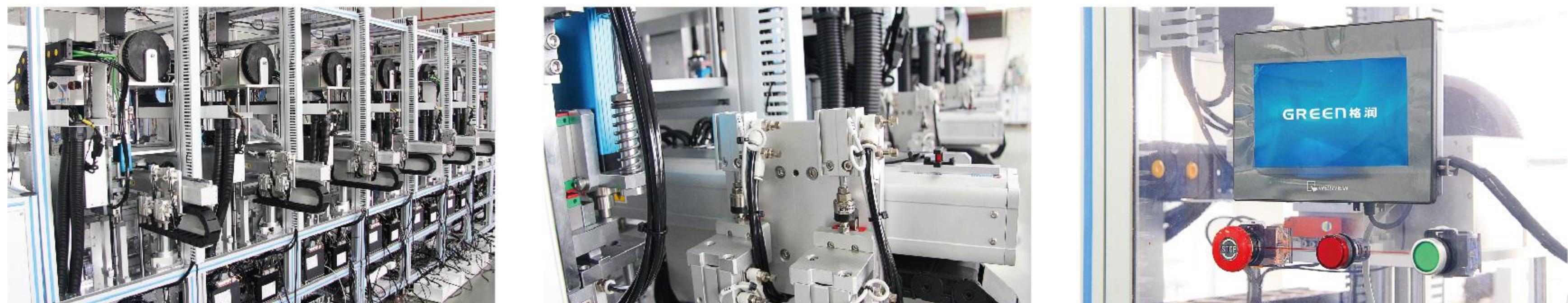
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	AL-HL503C01
输入电源 Power supply	AC220V 63A 50-60HZ
智能电批扭力精度 Intelligent electric batch torque accuracy	±5%
定位方式 Positioning	销柱精密定位 Pin column precision positioning
最大功率 Max.power	15KW
输入气压 Input air pressure	0.6-0.8MPa
外形尺寸 Outer demension(L*W*H)	7200*2000*2000(mm)

散热片自动组装线体

HEAT SINK AUTOMATIC ASSEMBLY LINE

- 细节展示 Details show



- 散热片打螺丝线体构成 Line Composition

前治具升降模块 Front fixture lifting module

放散热片模块 Placing heatsink module

印散热膏模块 Printing thermal paste module

放小陶瓷片模块 Placing a small ceramic sheet module

放大陶瓷片模块 Placing big the ceramic sheet module

锁附模块1 Lock Module 1

锁附模块2 Lock Module 2

锁附模块3 Lock Module 3

锁附模块4 Lock Module4

锁附模块A Lock Module A

锁附模块B Lock Module B

后治具升降模块 Rear fixture lifting module

- 应用范围 Application Range

驱动,适配器,PC电源,桥堆,MOS管等中的散热片

Heat sinks in drivers, adapters, PC power supplies, bridge stacks, MOS tubes, etc

- 应用领域 Application Field

电子行业/汽车行业/玩具行业/电器行业等

Electronics industry / automotive industry / toy industry / electrical industry, etc

- 产品优势 Product Advantage

1.PLC控制系统,操作接口采用简易人机触摸屏控制

2.送料/定位/成型/涂胶/锁螺钉组装全自动一次完成,只需3-4秒

3.自动检测,有料启动,无料停机

4.自动上料/收料,一条线体可省多个人工

5.自动计数,产量设定,稳定性高,高效率,散热片种类可兼容性广,软件功能可选:单晶体或多体,带螺母或无螺母直线式或多工位转盘方式;

1. PLC control system, and the operation interface adopts simple touch screen control

2. Feeding/positioning/forming/gluing/locking screw /assembly is completed automatically at one time, only 3-4 seconds

3. Automatic detection, if there has material,it will start;if not,it will stop

4. Automatic feeding/receiving products, one line body can save multiple labor

5. Automatic counting, output setting, high stability, high efficiency, wide compatibility of heat sink types, software functions optional: single crystal or multibody, with nut or nutless linear or multi-station turntable mode

AOI检测机

AOI DETECTOR

格润智能AOI检测机AOI-D500
Green AOI detector AOI-D500



产品参数 Product parameters

主要特点 Key features

- 1.人机界面友好，简单培训即可快速上手
 - 2.用户可自定义缺陷代码名称
 - 3.客户可根据需求自定义defect code
 - 4.可追踪的缺陷mapping数据, 支持多种通讯格式
 - 5.次品点墨标识模块
 - 6.TCP/IP通讯协议
 - 7.具备SPC统计和分析功能
 - 8.中央控制系统选项,远台对多台设备进行操作管理
 - 9.人工复检平台选型, 可设定多种检索条件对当前和历史检测结果进行精确查找
 - 10.SECS/GEM通讯协议选项
1. Friendly man-machine interface, simple training can be quickly started
 2. User can customize the defect code name
 3. Customers can customize the defect code according to their needs
 4. Traceable defect mapping data, support a variety of communication formats
 5. Defective ink identification module
 6. TCP/IP communication protocol
 7. With SPC statistics and analysis function
 8. Central control system option, remote operation management of multiple equipment
 9. Manual re-inspection platform selection, can set a variety of search conditions to accurately find current and historical test results
 10. SECS/GEM communication protocol options

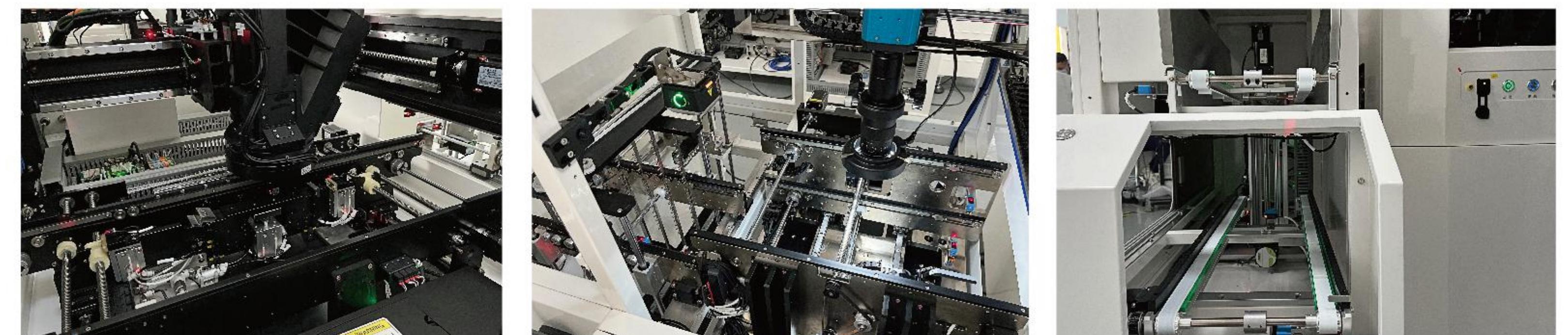
上下料模块 Loading and unloading module

支持自动线串线或自动上下料。自动上下料支持PCB、标准Jedec料盘、标准华夫料片等产品形式规格, 可根据产品或载具规格选型或部分定制
Support automatic line string or automatic loading and unloading. Automatic loading and unloading supports PCB, standard Jedec trays, standard waffle blanks and other product specifications, which can be selected or partially customized according to product or vehicle specifications

AOI检测机

AOI DETECTOR

● 细节展示 Details show



产品参数 Product parameters

视觉检测系统 Visual inspection system

- 1.高分辨率工业相机及相关量测模组固定在X、Y、Z运动平台上, 可实现X、Y、Z方向的运动。
 - 2.SI—表面缺陷检测模组 系统标定分辨率:6.6微米
 - 3.LS-BLT量测模组 测量标定精度:1微米
 - 4.MV—焊线弧高量测模组 测量标定精度:15微米
1. High-resolution industrial camera and related measurement module fixed on X, Y, Z motion platform, It can realize movement in the X, Y, and Z directions.
 - 2.SI—Surface defect detection module System calibration sub-rate: 6.6 microns
 - 3.LS-BLT measurement module Measurement calibration accuracy: 1 micron
 - 4.MV—Wire Bonding Arc High Measurement Module Measurement calibration accuracy: 15 microns

视觉算法 Vision algorithms

- 1.专业固晶&焊线视觉检测系统
 - 2.近百种固晶, 焊线, 框架, 胶水以及Die表面缺陷专用检测算法
 - 3.自适应瑕疵检测 4.针对铝线楔焊设计的检测应用算法
1. Professional solid-crystal & wire bonding visual inspection system
 2. Nearly 100 kinds of solid crystal, bonding wire, frame, glue and Die surface defect special detection algorithms
 3. Adaptive defect detection 4. Detection application algorithm for aluminum wire wedge welding design

软件 Software

- 1.采用PC Based操作系统, 人性化的操作界面, 用户可根据需要设定不同组别的访问权限 (组别数量无限制)
 - 2.具有详细的历史批次检测信息, 以及缺路分析与量测分析功能
 - 3.可提供缺陷的e mapping信息给后道工序, 格式有:csv文件, txt文本, Html文件, HTTP API请求, Excel文件, SQLite数据文件
 - 4.设备报警时界面清晰显示信息, 具有历史报警信息记录查询功能
1. Using PC Based operating system, user-friendly operation interface, users can set the access rights of different groups according to their needs (the number of groups is unlimited)
 2. It has detailed historical batch detection information, as well as missing circuit analysis and measurement analysis functions
 3. Can provide defective e mapping information to the post-process, the format is: csv file, txt text, html file,HTTP API requests, Excel files, SQLite data files
 4. When the device alarms, the interface clearly displays the information, and has the function of querying the historical alarm information record

数据管理 Data management

- 1.缺路分析工具(包括历史数据查询、良率分析、缺陷统计和Mapping缺陷分布)
- 2.UPH 3.GR&R
1. Missing circuit analysis tool (including historical data query, yield analysis, defect statistics and mapping defect distribution)
- 2.UPH 3.GR&R

次品标识(选配) Defective identification (optional)

点墨模块可以集成在现有设备上, 对于检查出来的不良品, 进行点墨标识处理
The ink point module can be integrated into the existing equipment to carry out the ink marking processing for the defective products that are inspected

扫描枪 Scan gun

文件内的批次信息条形码可由设备自带的手持扫码枪进行读取, 以方便快捷准确输入相关信息
The batch information barcode in the file can be read by the handheld code scanner that comes with the device to easily and accurately enter relevant information

智能读码器 Smart barcode reader

可高效读取载具和料片二维码, 实现与检测结果的Mapping对应
It can efficiently read the QR code of the vehicle and the blank, and realize the mapping of the inspection results

轨道传送 Orbital transfer

料盘或料片运行轨道宽度50~460mm可调
The width of the running track of the material tray or piece is adjustable from 50~460mm

料片轨道 Sheet tracks

料盘或料片在轨道中移动采用皮带传送, 电机驱动模式
The material reel or piece moves in the track using belt conveyor, motor drive mode

AOI检测机

AOI DETECTOR

格润智能AOI检测机AOI-D500-1

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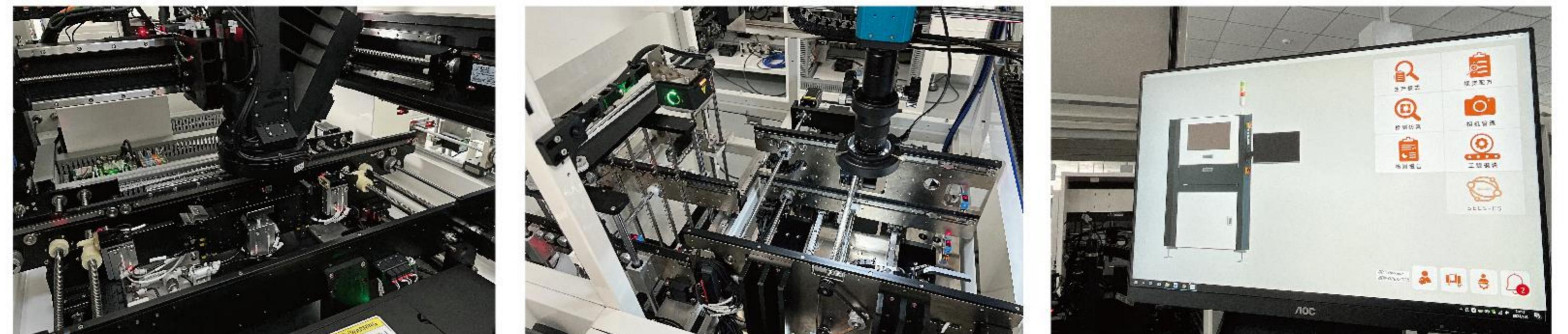
接驳台-上下料模块 Docking station-Loading and unloading module

支持自动线串线或自动上下料。自动上下料支持PCB、标准Jedec料盘、标准华夫料片等产品形式规格,可根据产品或载具规格选型或部分定制
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AOI检测机

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- 细节展示 Details show



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AOI检测仪

AUTOMATIC OPTICAL INSPECTION MACHINE

格润智能AOI检测仪AOI600

Green AOI machine AOI600



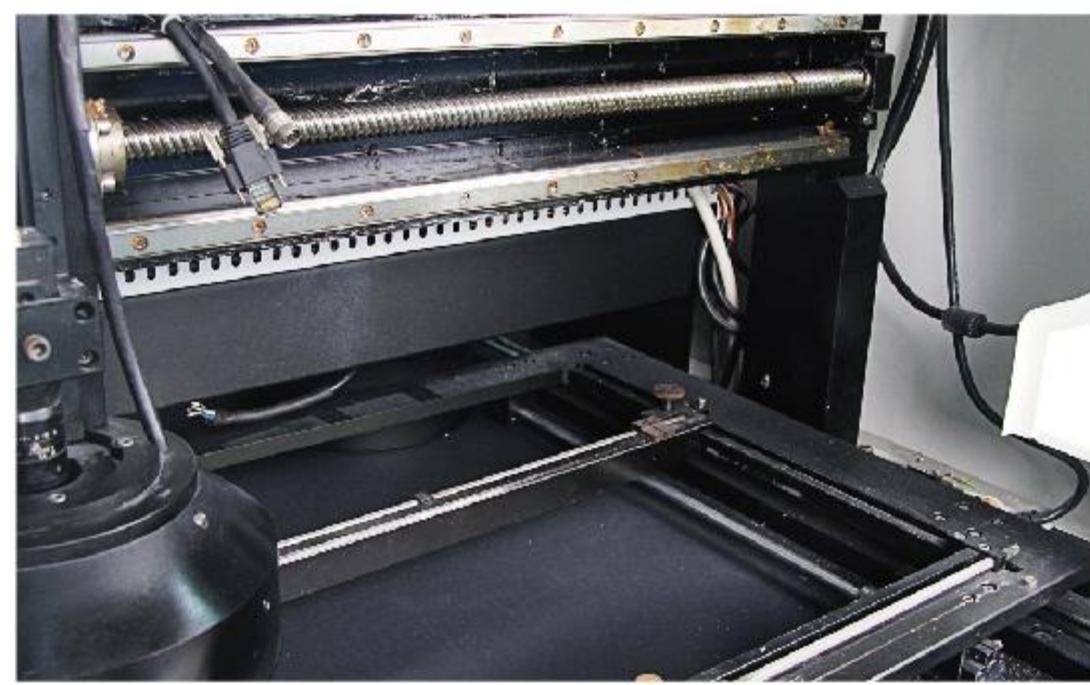
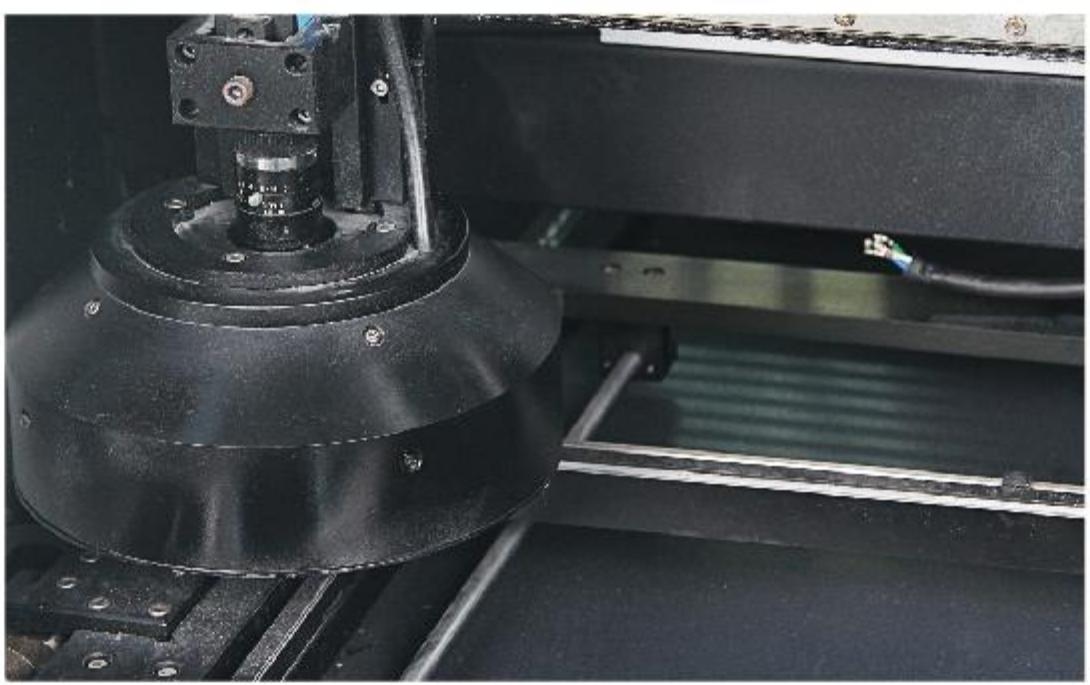
技术参数 Technical Specification

项目 Item	参数 Specification
型号 Model	AOI600
X/Y驱动系统 X/Y drive system	AC伺服马达驱动和丝杆 AC servo motor drive and screw
定位精度 Positioning accuracy	<10μm
摄像系统Image pickup system	彩色3CCD智能数字相机
分辨率Resolution	20μm, 15μm, 10μm
照明系统Illuminating system	环形塔状高亮度三色LED照明
编程方法Programming method	快速手动编程, CAD坐标自动收索元件库导入
最小元件测试Minimum component test	01005chip, 0.25pitchICOR (0603chip, 0.5pitchIC)
SPC统计系统SPC statistical system	记录测试数据进行统计分析, Excel输出格式查看生产品质情况
条码系统Barcode system	相机自动识别
操作系统Operating system	Windows XP, Windows 7
SPC统计系统SPC statistical system	
输入电源 Power supply	AC220V 10A 50-60HZ
最大功率 Max.power	1KW
外形尺寸 Outer demension(L*W*H)	1100×935×1380(mm)
设备重量 Weight	500KG

AOI检测仪

AUTOMATIC OPTICAL INSPECTION MACHINE

- 细节展示 Details show



- AOI检查项目 AOI Check Item

元件缺陷IC极性标识/元件缺陷IC脚弯/元件缺陷IC脚浮起/元件缺陷有件、缺件/元件缺陷极性标识
元件缺陷立牌/元件缺陷移位、歪斜/元件缺陷脚未插入/焊点缺陷有锡、无锡/焊点缺陷少锡/焊点缺陷多锡
焊点缺陷锡球/焊点缺陷桥接

Component defect IC polarity identification / Component defect IC foot bend / Component defect IC foot floating / Component defect with parts, missing parts / Component defect polarity identification Component defect stand-up/component defect displacement, skew/component defect foot not inserted solder joint defect with tin, no tin/solder joint defect less tin/solder joint defect more tin solder joint defect solder ball / solder joint defect bridge

- AIO检查特点 AOI Check Features

AOI采用自主研发的图像处理系统,独特的颜色提取及特征分析方法,可以应对有铅以及无铅制程,甚至对DIP段以及红胶制程都有很好的检测效果。

AOI adopts self-developed image processing system, unique color extraction and feature analysis methods, which can deal with lead and lead-free processes, and even for DIP.both the segment and the red glue process have good detection results.

- 产品优势 Product Advantage

- 1.精准快速的检测速度 2:智能高清晰数字CCD相机,图像质量稳定可靠
- 3.简便.灵活.快捷的编程及调试 4:自动识别A/B面MARK点
- 5.相机条码识别系统 6:CAD数据导入可自动搜寻元件库
- 7.自动定位系统,大大提高编程速度
- 8.多功能的SPC统计系统

1.Accurate and fast detection speed 2: Intelligent hd digital CCD camera, the image quality is stable and reliable

3.Easy.flexible.quick programming and debugging 4:Automatic recognition and A/B surface MARK point 5.Camera barcode identification system 6:CAD data import can automatically search component libraries 7.Automatic positioning system,which can greatly improving programming speed

技术参数 Technical Specification

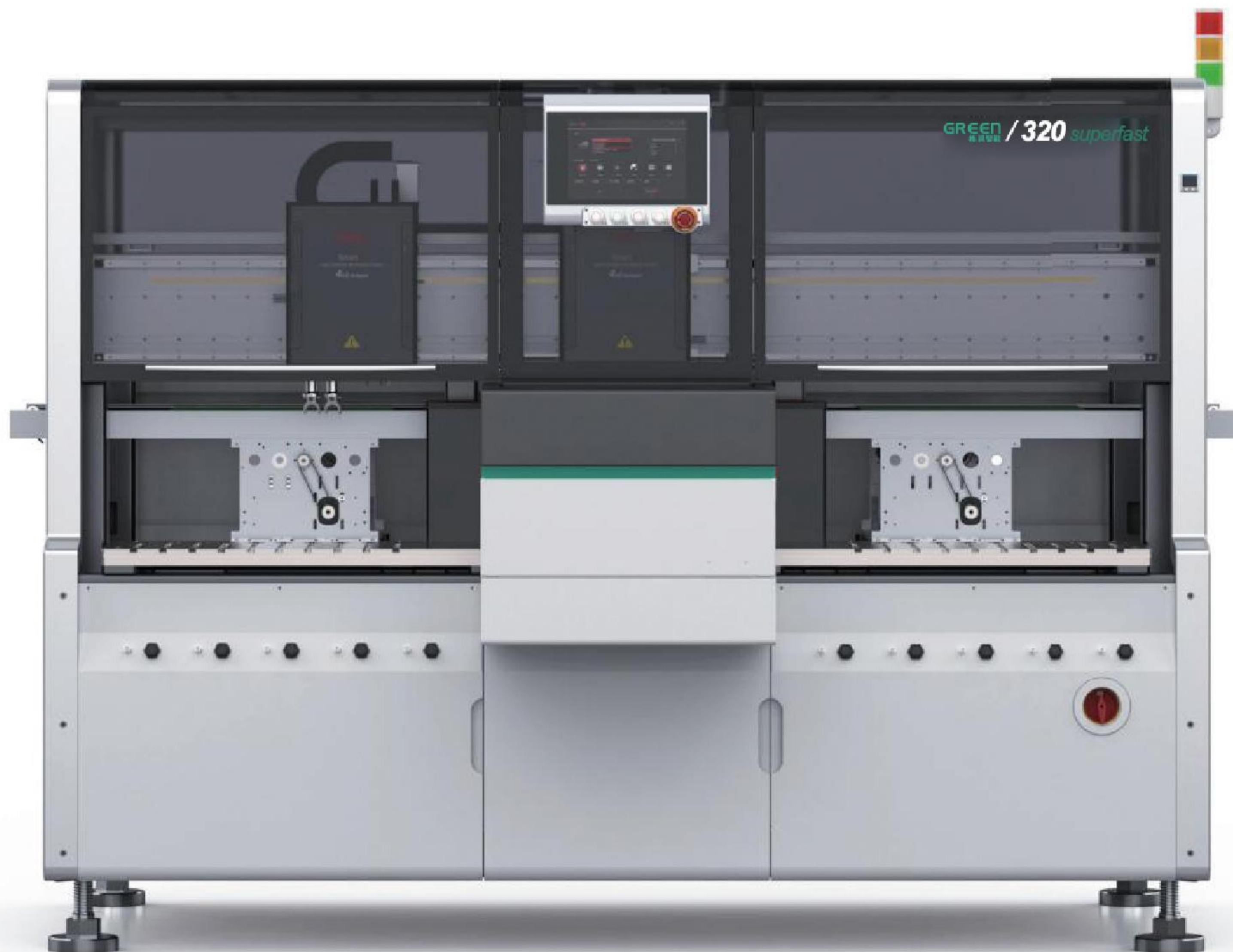
标配 Standard configuration	参数 Specification
适用PCB尺寸 PCB size	25×25mm~460×330mm 25×25mm~500×400mm
适用PCB厚度 PCB thickness	0.3~6mm
适用PCB弯曲度 PCB bending degree	<3mm
适用PCB上下净高 PCB height	上方≤40mm,下方≤100mm
环境温度 Environment temperature	10~40°C
环境湿度 Environment humidity	10~80%RH(无凝霜)

高速异形插件机

HIGH-SPEED SPECIAL-SHAPED PLUG-IN MACHINE

格润智能高速异形插件机GR-320

Green High-speed special-shaped plug-in machine GR-320



注:图片仅展示GR-320机型

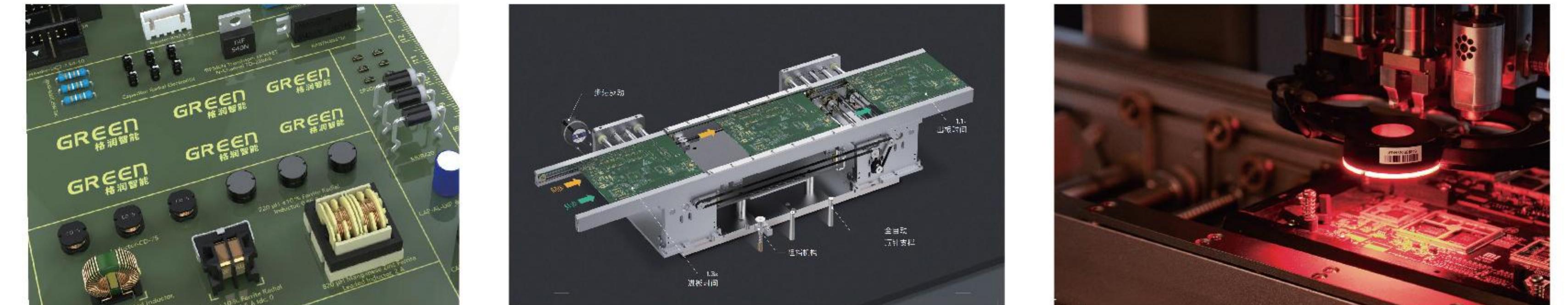
技术参数 Technical Specifications

项目 Item	参数 Specifications
型号 Model	GR-320
PCB板尺寸 PCB board size	400*400mm
PCB板厚度 PCB board thickness	0.8-5mm
PCB板重量 PCB board weight	Max.6kg
夹边宽度 Sandwich width	3mm/5mm
插件速度 Plug-in speed	11250cph
插件节拍 Plug-in beats	0.32sec/part
重复定位精度 Repeatable positioning accuracy	±0.01mm
取料方式 Extraction method	夹取/Pick-up/aspiration
工作头数量 Number of working heads	8
元件尺寸 Component size	30mm
元件高度 Element height	28mm
元件重量 Component weight	Max.300g
插入方向 Insertion orientation	0-360°
插件角度 Plug-in angle	平面 plane
工作电压 Operating voltage	220AV ±10%
机器功率 Machine power	2KVA
工作气压 Working air pressure	0-360°
联机接口 Online interface	SMEMA(欧式14针)
机器尺寸 Machine size	2000*1303*1502mm
机器重量 Machine weight	1900kg

高速异形插件机

HIGH-SPEED SPECIAL-SHAPED PLUG-IN MACHINE

- 细节展示 Details show



- 应用范围 Application Range

电脑主板常用端口、USB接口、RJ45接口、大型多针脚连接器、S端子模块、汽车电子连接器、电感器/扼流线圈
电解电容器、继电器/薄膜电容、变压器、集成电路、通讯行业连接器等

Common ports of computer motherboards, USB interface, RJ45 interface, large multi-pin connector,
S terminal module, automotive electronic connector, inductor/choke coil, Electrolytic capacitors,
relay/film capacitors, transformers, integrated circuits, communication industry connectors, etc

- 应用领域 Application Field

手机行业/玩具行业/家电行业/电子行业
Mobile phone industry/Toy industry/Appliance industry/Electronic industry

- 产品优势 Product Advantage

X轴采用高刚性的大理石横梁+直线电机双动子结构(双工作单元),配合双视觉系统,左右交换取料,实现连续
插件,大大提高了生产效率。
The X-axis adopts high rigidity marble beam + linear motor double movers structure (double working unit),
with dual vision system, left and right exchange of materials to achieve continuity Plug-ins, greatly improve
production efficiency.

技术参数 Technical specifications

传送系统 Conveyor system	参数 Specifications
传送结构 Transfer structure	三段式 Three-stage
传送方式 Delivery method	皮带 belt
传送模式 Transfer mode	同步/异步 Synchronous/asynchronous
传送速度 Transfer speed	Max.800m/s
传送方向 Transfer direction	L→R或R→L
宽度调整 Width adjustment	自动调宽 Automatic widening
固定边位置 Fixed edge position	前端 Front
宽度调整 Width adjustment	上45/下20 Up 45/Down 20

供料器数量 Number of feeders	参数 Specifications
立式编带 Vertical taping	20
卧式编带 Horizontal taping	16
管状供料 Tubular feeding	16
盘装供料 Tray feeding	/
震动盘供料 Vibrating plate feeding	16

安全保护 Security	参数 Specifications
机器认证 Machine certification	ISO9001、CE认证
安全门设计 Safety gate design	安全门开关(开门即停机)、安全光幕
压力失效报警 Pressure failure alarm	电子压力开关保护