

山东沃能德数控机械有限公司
SHANDONG WONDEC CNC MACHINERY CO.,LTD.

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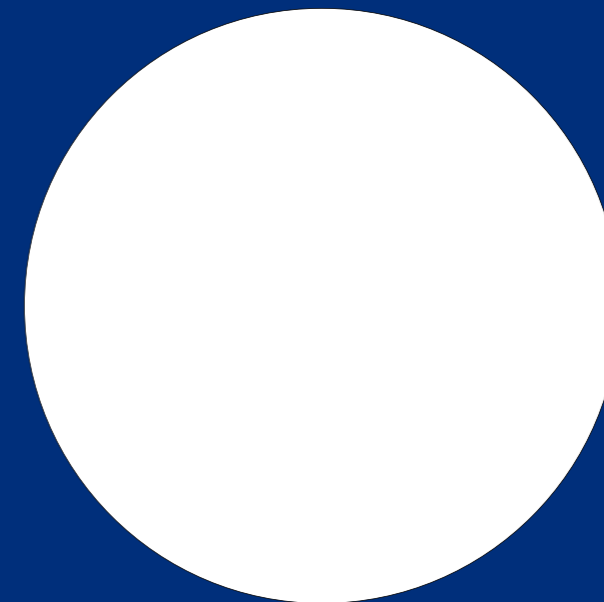
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WONDEC
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沃能德

WONDEC®

care for your glass

Insulating Glass Processing Equipment
for World User Services

中空玻璃智能加工设备

Brief Introduction

关于沃能德

WONDEC:

WONDEC CNC Machinery Co., Ltd. is located in beautiful spring city Jinan, is specialized in high-quality insulating glass machines and nanometer glass machines research and development, production, sales and technical services of modern high-tech enterprises.

INNOVATION:

WONDEC adhering to the tradition and constant innovation, adhere to the introduction of the world's most advanced technology and independent research and development of both R & D ideas to guide the trend of technology to create.

SERVICE:

WONDEC CNC Machinery provide 24-hour telephone and online service to ensure efficient, fast, timely and convenient full-service. WONDEC will take concrete actions to express our attitude towards the service.

DEVELOPMENT:

WONDEC has exported equipment to more than 50 countries and regions around the world, the company will be intelligent equipment to automation as the direction of development, to better meet the needs of the system of windows and doors and a variety of insulating glass production needs, do not forget the beginning, efforts forward.

山东沃能德数控机械有限公司座落在美丽泉城济南，是专业从事高质量中空玻璃设备，纳米玻璃设备研发、生产、销售与技术服务的现代化高新技术型企业。

创新：公司秉承传统，不断创新，坚持引进世界最先进技术与自主研发并举的研发思路，以技术引导潮流，以质量打造品牌，使沃能德数控机械与国际需求接轨。

服务：山东沃能德数控机械在全国大部分地区和全球 50 多个国家地区设有售服务网络，并提供 24 小时电话和网络售后服务，保证高效、快捷、及时、方便的全方位服务，沃能德数控机械会以实际行动来表达我们对服务的态度。



WONDEC—Leading Glass, Focus Glass, Virtuous World

沃能德 -- 沃享科技 · 能聚玻璃 · 德行天下

WONDEC[®]
care for your glass



WONDEC as the leading global supplier of intelligent processing equipment for insulating glass, has made use of the industry accumulation in recent ten years, has undertaken the equipment planning and construction work in many countries of the world, established long-term cooperative relationship with users, and established a sales service network all over the world.

沃能德作为行业领先的中空玻璃智能加工设备全球供应商，利用近十年的行业积累，承担了全球多个国家地区的设备规划建设，与用户建立了长期的合作关系，并在主要地区建立了销售服务网络。

WONDEC[®]
care for your glass

掌握玻璃加工的核心技术 Master the core technology of glass processing

多棱风干技术 Multi-edge air drying technology	传送承重技术 Transmission load-bearing technology	柔性测厚技术 Flexible thickness measurement	理片仓储技术 Glass sorting and storage technology
超厚板清洗技术 Ultra thick glass washing technology	铝条粘框技术 Spacer sticking technology	位矩控压技术 Torque press control technology	TPSS 连线升级技术 TPSS Connection Upgrade Technology
离子风刀技术 Ionizing air knife technology	间控合片技术 Space control assembly technology	多板升级技术 Multi-press upgrade technology	智能连线技术 Intelligent connection technology

中空玻璃智能制造 · 高效解决方案

Intelligent Manufacturing and Efficient Solutions for Insulating Glass

深度改善中空玻璃制造成本结构，达到中空玻璃制造数据零失误、省人工、高效率
沃能德 —— 开启智能制造新时代

Deeply improve the manufacturing cost structure of insulating glass, and achieve zero error, labor saving and high efficiency in manufacturing data of insulating glass
WONDEC - Opening a New Era of Intelligent Manufacturing

3300*9000



60%

节省人工成本

中空玻璃传统工厂加工部分
10人
智能工厂只需3-4人
年节省成本40万

There are 10 people working in the traditional factory of Insulating Glass
Smart factories only need 3-4 people
Annual cost savings of 400,000

100%

产品合格率

智能化加工，精确高效
标准生产方式
软件与设备联机，无纸化下单，杜绝人为因素误差

Intelligent processing, accurate and efficient
Standard mode of production
Software and equipment online, paperless order, eliminate human error

70%

生产效率提高

中间产品程序化输送，优化物流路径，独有智能控制软件，无需人工干预
提高效率，投资回报率高

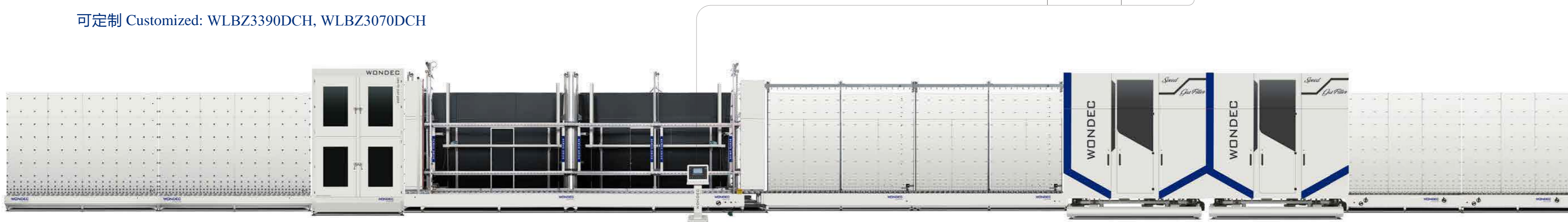
Programmed transportation of intermediate products, optimized logistics path, unique intelligent control software, no manual intervention
Improve efficiency and high return on investment

WLBZ3370DCH / WLBZ3060DCH

Automatic Insulating Glass Double Press Gas Filling Production Line 全自动中空玻璃双板压充气生产线

可定制 Customized: WLBZ3390DCH, WLBZ3070DCH

数字化输入控制系统
Numerical Control System



Equipment Advantages 设备优势

- PLC control, conveying speed controlled by frequency converter, touch screen operation.
- Integrated screen display, dynamic display of equipment operation and failure.
- Automatic Low-E glass detection, unique All-Low-E brushes design.
- Beam type automatic lifting and conveying glass, servo motor precise control, overcome the friction trace of back wheel when conveying jumbo glass.
- Jumbo glass aluminum frame positioning system, can solve technical problems and improve glass quality. (Optional)
- Double IGU/triple IGU/quadruple IGU can be produced by outer assembly of IG line.
- Inside assembly IG line can produce stepped IGU. (optional)
- The IG line is fully digitalized, and equipped with unique flexible thickness measurement technology for both glass and spacer.
- Both IGU assembly and panel press are controlled by servo system, accurate and reliable.
- Online argon inflation in panel press, high inflation speed and high concentration, and the inflation concentration is displayed on the screen in real time.
- Glass washing section can automatically adapt for jumbo size glass and super-thick glass processing.
- With double station mode, two pieces of glass with the same size can be processed at the same time.
- Openable panel press, which is convenient for maintenance.

- 全自动PLC控制，全变频器控制调速，触摸屏操作。
- 集成式屏显，动态显示设备运转及故障情况。
- 自动识别Low-e玻璃，特有的全Low-e毛刷设计。
- 横梁式自动升降传送玻璃，伺服电机精准控制，克服大板玻璃传送时背靠轮摩擦痕迹。
- 超大板玻璃铝框定位系统，解决工艺难题，提高玻璃品质。（选装）
- 中空玻璃生产线板外合片，可生产双玻/三玻/四玻。
- 全自动中空玻璃双板压充气生产线，可生产不等片玻璃。（选装）
- 中空玻璃生产线全数字化运行，特有的玻璃/铝条测厚功能。
- 中空玻璃的压合及铝框段均采用伺服电机控制，操作精准可靠。
- 板内充惰性气体，充气速度快、浓度高，充气浓度屏幕实时显示。
- 超大超厚玻璃，清洗毛刷及风刀具有开合功能，承重传送自动运行。
- 具有双工位模式，可同时加工两块同尺寸玻璃。
- 板压可张开，方便设备维护保养。

Technical Parameter	技术参数	WLBZ3370DCH	WLBZ3060DCH
Total power	总功率	79kW(含风加热 Heating with wind)	77kW(含风加热 Heating with wind)
Max. glass size	玻璃最大尺寸	3300×7000mm	3000×6000mm
Min. glass size	玻璃最小尺寸	280×450mm	280×450mm
Single glass thickness	原片玻璃厚度	3~30mm	3~30mm
Max I.G. unit thickness	中空玻璃厚度	12~80mm	12~80mm
Glass washing speed	玻璃清洗速度	3~12m/min	3~12m/min
Working speed	工作速度	2~48m/min	2~48m/min
Air flow (air source)	气源	0.8m ³ /min	0.8m ³ /min
Water electrical conductivity	水电导率	≤ 20μs/cm	≤ 20μs/cm
Overall dimension	外形尺寸	41800×3200×4400mm	36500×3200×4100mm

WLBZ3060CH / WLBZ2860CH / WLBZ2850CH

Automatic Insulating Glass Crossbeam Gas Filling Production Line 全自动中空玻璃横梁式充气生产线

数字化输入控制系统
Numerical Control System



Equipment Advantages 设备优势

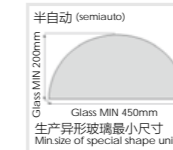
- Automatic PLC control, full frequency converter control speed regulation, touch screen operation.
 - Integrated screen display, dynamic display of equipment operation and failure.
 - Automatic identification of Low-e glass, unique all-Low-e brush design.
 - Beam-type automatic lifting conveying glass, servo motor precise control, overcome the friction trace of back wheel when conveying large plate glass.
 - Double-glass/triple-glass/quadruple-glass can be produced by outer assembly of IGU production line.
 - Inside assembling of insulating glass production line can produce step unit of insulating glass. (optional)
 - The insulating glass production line is fully digitalized and has the unique function of measuring the thickness of glass/aluminum strips.
 - Servo motors are used to control the pressing of insulating glass and the aluminum frame section, so the operation is accurate and reliable.
 - The Panel press is filled with inert gas, which has high inflation speed and high concentration, and the inflation concentration is displayed on the screen in real time.
 - Super-large and super-thick glass, cleaning brush and air knife have opening and closing functions, and the load-bearing transmission runs automatically.
 - Panel press can be opened, which is convenient for equipment maintenance.
- 全自动PLC控制，全变频器控制调速，触摸屏操作。
 - 集成式屏显，动态显示设备运转及故障情况。
 - 自动识别Low-e玻璃，特有的全Low-e毛刷设计。
 - 横梁式自动升降传送玻璃，伺服电机精准控制，克服大板玻璃传送时背靠轮摩擦痕迹。
 - 中空玻璃生产线板外合片，可生产双玻/三玻/四玻。
 - 中空玻璃生产线板内合片，可生产不等片玻璃，（选装）
 - 中空玻璃生产线全数字化运行，特有的玻璃/铝条测厚功能。
 - 中空玻璃的压合及铝框段均采用伺服电机控制，操作精准可靠。
 - 板内充惰性气体，充气速度快、浓度高，充气浓度屏幕实时显示。
 - 超大超厚玻璃，清洗毛刷及风刀具有开合功能，承重传送自动运行。
 - 板压可张开，方便设备维护保养。

Technical Parameter	技术参数	WLBZ3060CH	WLBZ2860CH	WLBZ2850CH
Total power	总功率	71kW(含风加热 Heating with wind)	71kW(含风加热 Heating with wind)	66kW(含风加热 Heating with wind)
Max. glass size	玻璃最大尺寸	3000×6000mm	2800×6000mm	2800×5000mm
Min. glass size	玻璃最小尺寸	280×450mm	280×450mm	280×450mm
Single glass thickness	原片玻璃厚度	3~30mm	3~30mm	3~30mm
Max I.G. unit thickness	中空玻璃厚度	12~80mm	12~80mm	12~80mm
Glass washing speed	玻璃清洗速度	3~12m/min	3~12m/min	3~12m/min
Working speed	工作速度	2~48m/min	2~48m/min	2~48m/min
Air flow (air source)	气源	0.8m ³ /min	0.8m ³ /min	0.8m ³ /min
Water electrical conductivity	水电导率	≤ 20μs/cm	≤ 20μs/cm	≤ 20μs/cm
Overall dimension	外形尺寸	34000×3200×4100mm	34000×3200×3900mm	30500×3200×3900mm

WLBZ2850C

Automatic Insulating Glass Double Station Gas Filling Production Line 全自动中空玻璃双工位充气生产线

数字化输入控制系统
Numerical Control System



Equipment Advantages 设备优势

- Automatic PLC control, full frequency converter control speed regulation, touch screen operation.
- Integrated screen display, dynamic display of equipment operation and failure.
- Automatic identification of Low-e glass, unique all-Low-e brush design.
- Double-glass/triple-glass/quadruple-glass can be produced by outer assembly of IGU production line.
- Inside assembling of insulating glass production line can produce step unit of insulating glass. (optional)
- The insulating glass production line is fully digitalized and has the unique function of measuring the thickness of glass/aluminum strips.
- Servo motors are used to control the pressing of insulating glass and the aluminum frame section, so the operation is accurate and reliable.
- The panel press is filled with inert gas, which has high inflation speed and high concentration, and the inflation concentration is displayed on the screen in real time.
- When cleaning glass, the air knife can automatically adjust the distance according to the glass thickness. (optional)
- With double-station mode, two pieces of glass with the same size can be processed at the same time.
- Panel press can be opened, which is convenient for equipment maintenance.

- 全自动PLC控制，全变频器控制调速，触摸屏操作。
- 集成式屏显，动态显示设备运转及故障情况。
- 自动识别Low-e玻璃，特有的全Low-e毛刷设计。
- 中空玻璃生产线板外合片，可生产双玻/三玻/四玻。
- 中空玻璃生产线板内合片，可生产不等片玻璃，（选装）
- 中空玻璃生产线全数字化运行，特有的玻璃/铝条测厚功能。
- 中空玻璃的压合及铝框段均采用伺服电机控制，操作精准可靠。
- 板内充惰性气体，充气速度快、浓度高，充气浓度屏幕实时显示。
- 玻璃清洗时风刀可根据玻璃厚度自动调整距离。（选装）
- 具有双工位模式，可同时加工两块同尺寸玻璃。
- 板压可张开，方便设备维护保养。

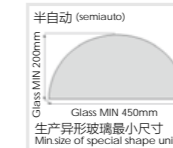
Technical Parameter	技术参数	WLBZ2850C
Total power	总功率	60kW(含风加热 Heating with wind)
Max. glass size	玻璃最大尺寸	2800×5000mm
Min. glass size	玻璃最小尺寸	280×450mm
Single glass thickness	原片玻璃厚度	3~30mm
Max I.G. unit thickness	中空玻璃厚度	12~80mm
Glass washing speed	玻璃清洗速度	3~12m/min
Working speed	工作速度	2~48m/min
Air flow (air source)	气源	0.8m ³ /min
Water electrical conductivity	水电导率	≤ 20μs/cm
Overall dimension	外形尺寸	31000×3200×3900mm

WLBZ2540CB

Automatic Insulating Glass Gas Filling Production Line 全自动中空玻璃充气生产线

可定制 Customized: WLBZ2550CB

数字化输入控制系统
Numerical Control System



Equipment Advantages 设备优势

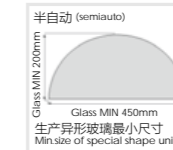
- Automatic PLC control, full frequency converter control speed regulation, touch screen operation.
 - Integrated screen display, dynamic display of equipment operation and trouble shooting.
 - Automatic identification of Low- e glass, unique all-Low- e brush design.
 - Double-glass/triple-glass/quadruple-glass can be produced by the insulating glass production line.
 - Inside assembling of insulating glass production line can produce step unit of insulating glass. (optional)
 - The insulating glass production line is fully digitalized and has the unique function of measuring the thickness of glass/aluminum frame.
 - The panel press is filled with inert gas, which has high inflation speed and high concentration, and the inflation concentration is displayed on the screen in real time.
 - Servo motors are used to control the pressing of insulating glass and the aluminum frame section, so the operation is accurate and reliable.
 - Panel press can be opened, which is convenient for equipment maintenance.
- 全自动PLC控制，全变频器控制调速，触摸屏操作。
 - 集成式屏显，动态显示设备运转及故障情况。
 - 自动识别Low-e玻璃，特有的全Low-e毛刷设计。
 - 中空玻璃生产线板外合片，可生产双玻/三玻/四玻。
 - 中空玻璃生产线板内合片，可生产不等片中空玻璃。（选装）
 - 中空玻璃生产线全数字化运行，特有的玻璃/铝条测厚功能。
 - 板内充惰性气体，充气速度快、浓度高，充气浓度屏幕实时显示。
 - 中空玻璃的压合及铝框段均采用伺服电机控制，操作精准可靠。
 - 板压可张开，方便设备维护保养。

Technical Parameter	技术参数	WLBZ2540CB
Total power	总功率	55kW(含风加热 Heating with wind)
Max. glass size	玻璃最大尺寸	2500×4000mm
Min. glass size	玻璃最小尺寸	280×450mm
Single glass thickness	原片玻璃厚度	3~30mm
Max I.G. unit thickness	中空玻璃厚度	12~80mm
Glass washing speed	玻璃清洗速度	3~12m/min
Working speed	工作速度	2~48m/min
Air flow (air source)	气源	0.8m ³ /min
Water electrical conductivity	水电导率	≤ 20μs/cm
Overall dimension	外形尺寸	2750×3200×3600mm

WLBZ2540C / WLBZ2030C

Automatic Insulating Glass Gas Filling Production Line 全自动中空玻璃充气生产线

数字化输入控制系统
Numerical Control System



Equipment Advantages 设备优势

- Automatic PLC control, full frequency converter control speed regulation, touch screen operation.
- Integrated screen display, dynamic display of equipment operation and trouble shooting.
- Automatic identification of Low- e glass, unique all-Low- e brush design.
- Double-glass/triple-glass/quadruple-glass can be produced by the insulating glass production line.
- Inside assembling of insulating glass production line can produce step unit of insulating glass. (optional)
- The insulating glass production line is fully digitalized and has the unique function of measuring the thickness of glass/aluminum frame.
- Servo motors are used to control the pressing of insulating glass and the aluminum frame section, so the operation is accurate and reliable.
- The panel press is filled with inert gas, which has high inflation speed and high concentration, and the inflation concentration is displayed on the screen in real time.
- When cleaning glass, the air knife can automatically adjust the distance according to the glass thickness. (optional)
- Customized production line in super-large glass composite sheet. (optional)
- Production efficiency: about 800 pieces can be produced in 8 hours per shift.

- 全自动PLC控制，全变频器控制调速，触摸屏操作。
- 集成式屏显，动态显示设备运转及故障情况。
- 自动识别Low-e玻璃，特有的全Low-e毛刷设计。
- 中空玻璃生产线板外合片，可生产双玻/三玻/四玻。
- 中空玻璃生产线板内合片，可生产不等片中空玻璃。（选装）
- 中空玻璃生产线全数字化运行，特有的玻璃/铝条测厚功能。
- 中空玻璃的压合及铝框段均采用伺服电机控制，操作精准可靠。
- 板内充惰性气体，充气速度快、浓度高，充气浓度屏幕实时显示。
- 板压可张开，方便设备维护保养。
- 玻璃清洗时风刀可根据玻璃厚度自动调整距离。（选装）
- 可定制超大版面玻璃合片中空线（选装）
- 生产效率：单班8小时可生产800块左右。

Technical Parameter	技术参数	WLBZ2540C	WLBZ2030C
Total power	总功率	51kW(含风加热 Heating with wind)	35kW(含风加热 Heating with wind)
Max. glass size	玻璃最大尺寸	2500×4000mm	2000×3000mm
Min. glass size	玻璃最小尺寸	280×450mm	280×450mm
Single glass thickness	原片玻璃厚度	3~30mm	3~30mm
Max I.G. unit thickness	中空玻璃厚度	12~80mm	12~80mm
Glass washing speed	玻璃清洗速度	3~12m/min	3~12m/min
Working speed	工作速度	2~48m/min	2~48m/min
Air flow (air source)	气源	0.8m ³ /min	0.8m ³ /min
Water electrical conductivity	水电导率	≤ 20μs/cm	≤ 20μs/cm
Overall dimension	外形尺寸	27000×3200×3600mm	22500×3200×3100mm

WLBZ2030CF

Super Spacer Insulating Glass Gas Filling Production Line 全自动中空玻璃超级间隔条充气生产线

数字化输入控制系统
Numerical Control System



Equipment Advantages 设备优势

- Automatic PLC control, full frequency converter control speed regulation, touch screen operation.
- Integrated screen display, dynamic display of equipment operation and failure.
- Automatic identification of Low- e glass, unique all-Low-e brush design.
- Double-glass/triple-glass/quadruple-glass can be produced by outer assembly of IGU production line.
- Super spacer bar assembly platform can realize the functions of bar laying and glass conveying.
- Super spacer and aluminum bar glass processing can be switched freely, and the operation is simple.
- The insulating glass production line is fully digitalized and has the unique function of measuring the thickness of glass/aluminum strips.
- Servo motors are used to control the pressing of insulating glass and the aluminum frame section, so the operation is accurate and reliable.
- The panel press is filled with inert gas, which has high inflation speed and high concentration, and the inflation concentration is displayed on the screen in real time.
- Panel press can be opened, which is convenient for equipment maintenance.

- 全自动PLC控制，全变频器控制调速，触摸屏操作。
- 集成式屏显，动态显示设备运转及故障情况。
- 自动识别Low-e玻璃，特有的全Low-e毛刷设计。
- 超级间隔条装配平台，可实现铺条、玻璃传送功能。
- 超级间隔条、铝条式玻璃加工可自由切换，操作简单。
- 中空玻璃生产线板外合片，可生产双玻/三玻/四玻。
- 中空玻璃生产线全数字化运行，特有的玻璃/铝条测厚功能。
- 中空玻璃的压合及铝框段均采用伺服电机控制，操作精准可靠。
- 板内充惰性气体，充气速度快、浓度高，充气浓度屏幕实时显示。
- 板压可张开，方便设备维护保养。

Technical Parameter

技术参数

WLBZ2030CF

Total power	总功率	29kW(含风加热 Heating with wind)
Max. glass size	玻璃最大尺寸	2000×3000mm
Min. glass size	玻璃最小尺寸	280×450mm
Single glass thickness	原片玻璃厚度	3~12mm
Max I.G. unit thickness	中空玻璃厚度	12~80mm
Glass washing speed	玻璃清洗速度	3~12m/min
Working speed	工作速度	2~48m/min
Air flow (air source)	气源	0.8m ³ /min
Water electrical conductivity	水电导率	≤ 20μs/cm
Overall dimension	外形尺寸	21500×3000×3100mm

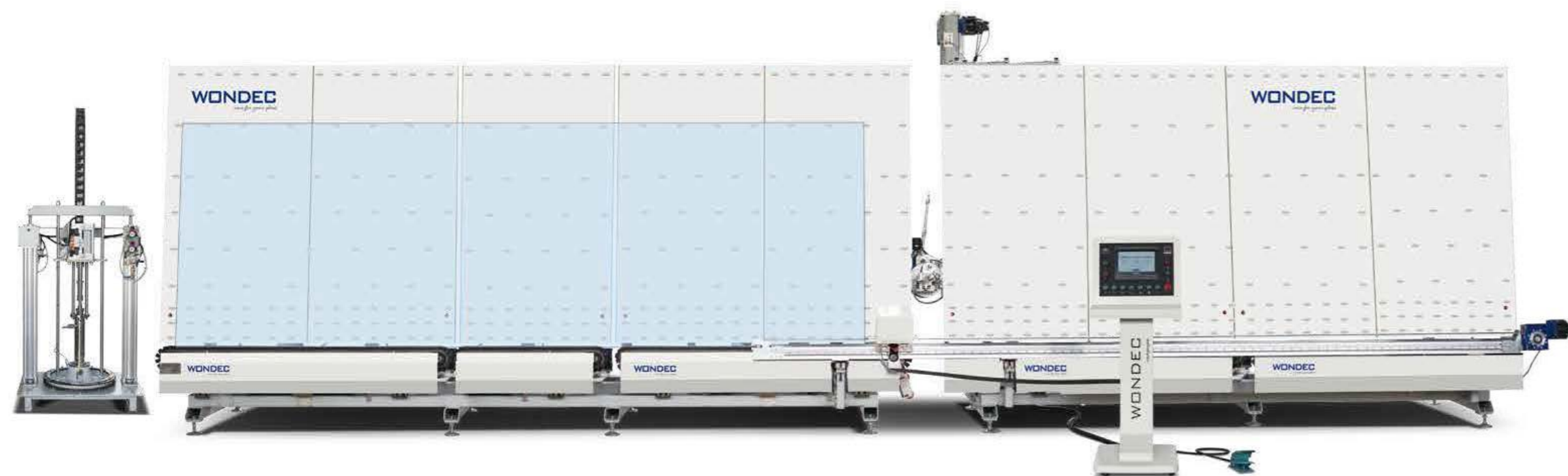
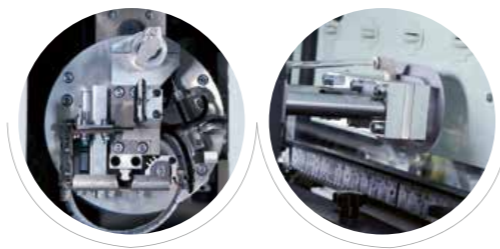
Cohesion Master Brand, Intellectually Making Chinese Quality
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WASR3370 / WASR3060

Insulating Glass Automatic Sealing Robot 中空玻璃全自动密封胶线

可定制 Customized: WASR3390, WASR3070

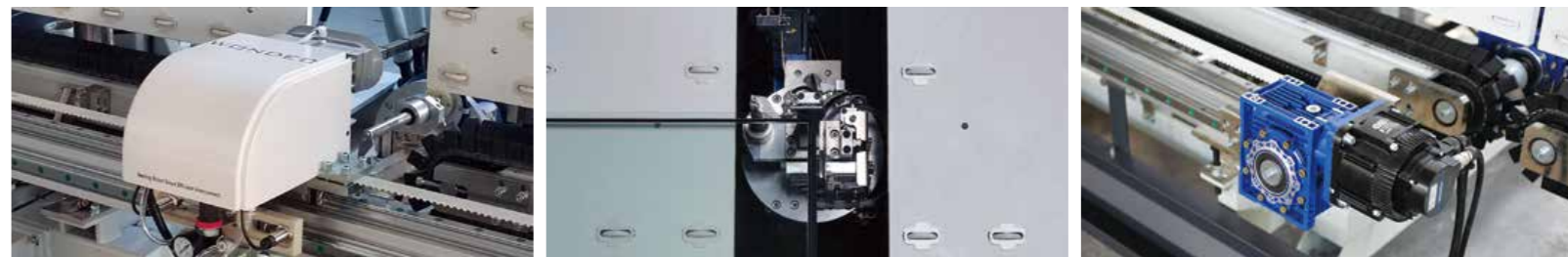


Equipment Advantages 设备优势

- The electric control system and servo system adopt Japanese YASKAWA control system, which has fast operation speed and high stability.
 - Using touch screen interface, manual operation and fault diagnosis can be realized.
 - Automatic sealant discharging function to avoid pipeline blockage caused by human factors.
 - The program has memory function, and different types of glass parameters can be called with one key.
 - Equipped with high-speed positioning function, the glass can be accurately positioned during high-speed transmission.
 - Glass adopts tank chain transmission structure, with high load-bearing and durability.
 - The glass can be placed in the center to prevent the glass from being dislocated when the large plate glass is loaded.
 - Glue supply heating system. (optional)
 - Unique intelligent connection, digital reading of IG production line data automatically adjusts the sealant distance.
 - Support rectangular double-glass and triple-glass sealant coating.
- 电控、伺服系统均采用日本安川控制系统，运算速度快，稳定性高。
 - 采用触摸屏界面，可实现手动操作和故障诊断。
 - 自动排胶功能，避免人为因素造成管道堵塞。
 - 程序带有记忆功能，不同型号的玻璃参数一键调用。
 - 装有高速定位功能，玻璃高速传送时能精确定位。
 - 玻璃采用坦克链传送结构，承重高、经久耐用。
 - 供胶加热系统。（选配）
 - 玻璃居中下片功能，配合下片机下片，防止大板玻璃下片时玻璃错位。
 - 特有智能连线，数字读取中空线数据自动调整打胶间距。
 - 支持矩形双玻、三玻两腔玻璃涂胶。
 - 支持四玻及不等片玻璃涂胶。（选配）

Technical Parameter 技术参数

		WASR3370	WASR3060
Max. glass size	玻璃最大尺寸	3300×7000mm	3000×6000mm
Min. glass size	玻璃最小尺寸	280×350mm	280×350mm
Glass thickness	中空玻璃厚度	12~60mm(12~80mm)	12~60mm(12~80mm)
Coating depth	涂胶深度	3~18mm	3~18mm
Aluminum frame width	铝框宽度	6~27mm	6~27mm
Coating speed	涂胶速度	5~40m/min	5~40m/min
Transmission speed	传输速度	5~50m/min	5~50m/min
Hydraulic pressure	液压压力	< 100kgf/cm ²	< 100kgf/cm ²
Air pressure	气源	0.6~0.8Mpa	0.6~0.8Mpa
Total power	总功率	15kW	15kW
Overall dimension	外形尺寸	15300×2500×4200mm	13300×2500×3900mm



WASR2860 / WASR2850

Insulating Glass Automatic Sealing Robot

中空玻璃全自动密封胶线



Equipment Advantages 设备优势

- Two large sections and four small sections can minimize the overall dimensions of the equipment and save the operating space.
 - The electric control system and servo system adopt Japanese YASKAWA control system, which has fast operation speed and high stability.
 - Using touch screen interface, manual operation and fault diagnosis can be realized.
 - Automatic sealant discharging function to avoid pipeline blockage caused by human factors.
 - The program has memory function, and different types of glass parameters can be called with one key.
 - Equipped with high-speed positioning function, the glass can be accurately positioned during high-speed transmission.
 - Chain-type V-shaped block conveying makes the glass conveying stable and accurate.
 - Unique intelligent connection, digital reading of IG production line data automatically adjusts the sealant distance.
 - Support rectangular double-glass and triple-glass sealant coating.
- 两大段，四小段，最大限度缩小设备外形尺寸，节省操作空间。
 - 电控、伺服系统均采用日本安川控制系统，运算速度快，稳定性高。
 - 采用触摸屏界面，可实现手动操作和故障诊断。
 - 自动排胶功能，避免人为因素造成管道堵塞。
 - 程序带有记忆功能，不同型号的玻璃参数一键调用。
 - 装有高速定位功能，玻璃高速传送时能精确定位。
 - 链条式V形块传送，使玻璃传送平稳定位准确。
 - 特有智能连线，数字读取中空线数据自动调整打胶间距。
 - 支持矩形双玻、三玻两腔玻璃涂胶。
 - 支持四玻及不等片玻璃涂胶。（选装）

Technical Parameter 技术参数

Max. glass size	玻璃最大尺寸	WASR2860	2800×6000mm	WASR2850	2800×5000mm
Min. glass size	玻璃最小尺寸		280×350mm		280×350mm
Glass thickness	中空玻璃厚度		12~60mm(12~80mm)		12~60mm(12~80mm)
Coating depth	涂胶深度		3~18mm		3~18mm
Aluminum frame width	铝框宽度		6~27mm		6~27mm
Coating speed	涂胶速度		5~40m/min		5~40m/min
Transmission speed	传输速度		5~50m/min		5~50m/min
Hydraulic pressure	液压压力		< 100kgf/cm ²		< 100kgf/cm ²
Air pressure	气源		0.6~0.8Mpa		0.6~0.8Mpa
Total power	总功率		15kW		13kW
Overall dimension	外形尺寸		12300×2500×3700mm		10300×2500×3700mm



WASR3370D / WASR3060D /WASR2860D WASR2850D / WASR2540D

Insulating Glass Automatic Sealing Robot 中空玻璃全自动密封胶线



Equipment Advantages 设备优势

- The electric control system and servo system adopt Japanese YASKAWA control system, which has fast operation speed and high stability.
 - Using touch screen interface, manual operation and fault diagnosis can be realized.
 - Automatic sealant discharging function to avoid pipeline blockage caused by human factors.
 - The program has memory function, and different types of glass parameters can be called with one key.
 - Equipped with high-speed positioning function, the glass can be accurately positioned during high-speed transmission.
 - Glass adopts tank chain transmission structure, with high load-bearing and durability.
 - Front-mounted gluing machine head can glue large and small pieces of glass.
 - Glue supply heating system. (optional)
 - Unique intelligent connection, digital reading of IG production line data automatically adjusts the sealant distance.
 - Support rectangular double-glass and triple-glass sealant coating.
- 电控、伺服系统均采用日本安川控制系统，运算速度快，稳定性高。
 - 采用触摸屏界面，可实现手动操作和故障诊断。
 - 自动排胶功能，避免人为因素造成管道堵塞。
 - 程序带有记忆功能，不同型号的玻璃参数一键调用。
 - 装有高速定位功能，玻璃高速传送时能精确定位。
 - 玻璃采用坦克链传送结构，承重高、经久耐用。
 - 供胶加热系统。（选配）
 - 前置型打胶机头，可实现大小片玻璃打胶。
 - 特有智能连线，数字读取中空线数据自动调整打胶间距。
 - 支持矩形双玻、三玻两腔玻璃涂胶。

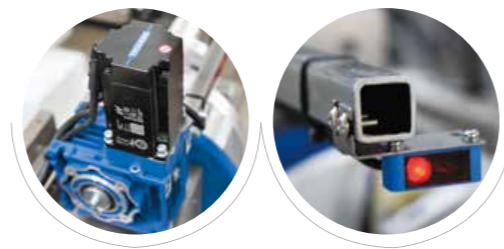
Technical Parameter 技术参数

		WASR3370D	WASR3060D
Max. glass size	玻璃最大尺寸	3300×7000mm	3000×6000mm
Min. glass size	玻璃最小尺寸	300×500mm	300×500mm
Glass thickness	中空玻璃厚度	12~60mm(12~80mm)	12~60mm(12~80mm)
Coating depth	涂胶深度	3~18mm	3~18mm
Aluminum frame width	铝框宽度	6~27mm	6~27mm
Coating speed	涂胶速度	5~40m/min	5~40m/min
Transmission speed	传输速度	5~50m/min	5~50m/min
Hydraulic pressure	液压压力	< 100kgf/cm ²	< 100kgf/cm ²
Air pressure	气源	0.6~0.8Mpa	0.6~0.8Mpa
Total power	总功率	15kW	15kW
Overall dimension	外形尺寸	15300×2500×4200mm	13300×2500×3900mm



WASR2030/2540

Insulating Glass Automatic Sealing Robot 中空玻璃全自动封胶线



Equipment Advantages 设备优势

- Integrated rack design minimizes the overall size of equipment and saves operating space.
 - The electric control system and servo system adopt Japanese YASKAWA control system, which has fast operation speed and high stability.
 - Using touch screen interface, manual operation and fault diagnosis can be realized.
 - Automatic sealant discharging function to avoid pipeline blockage caused by human factors.
 - The program has memory function, and different types of glass parameters can be called with one key.
 - Equipped with high-speed positioning function, the glass can be accurately positioned during high-speed transmission.
 - Chain-type V-shaped block conveying makes the glass conveying stable and accurate.
 - Unique intelligent connection, digital reading of IG production line data automatically adjusts the sealant distance.
 - Support rectangular double-glass and triple-glass sealant coating.
 - Support sealant coating of quadruple glasses and step unit of insulating glass. (optional)
- 整体式机架设计，最大限度缩小设备外形尺寸，节省操作空间。
 - 电控、伺服系统均采用日本安川控制系统，运算速度快，稳定性高。
 - 采用触摸屏界面，可实现手动操作和故障诊断。
 - 自动排胶功能，避免人为因素造成管道堵塞。
 - 程序带有记忆功能，不同型号的玻璃参数一键调用。
 - 装有高速定位功能，玻璃高速传送时能精确定位。
 - 链条式V形块传送，使玻璃传送平稳定位准确。
 - 特有智能连线，数字读取中空线数据自动调整打胶间距。
 - 支持矩形双玻、三玻两腔玻璃涂胶。
 - 支持四玻及不等片玻璃涂胶。（选装）

Technical Parameter 技术参数

		WASR2030	WASR2540
Max. glass size	玻璃最大尺寸	2000×3000mm	2500×4000mm
Min. glass size	玻璃最小尺寸	280×350mm	280×350mm
Glass thickness	中空玻璃厚度	12~60mm(12~80mm)	12~60mm(12~80mm)
Coating depth	涂胶深度	3~18mm	3~18mm
Aluminum frame width	铝框宽度	6~27mm	6~27mm
Coating speed	涂胶速度	5~40m/min	5~40m/min
Transmission speed	传输速度	5~50m/min	5~50m/min
Hydraulic pressure	液压压力	< 100kgf/cm ²	< 100kgf/cm ²
Air pressure	气源	0.6~0.8Mpa	0.6~0.8Mpa
Total power	总功率	10kW	11kW
Overall dimension	外形尺寸	7300×2500×2900mm	8300×2500×3400mm



WASR2030H

Insulating Glass Automatic Hot Melt Sealing Robot 中空玻璃全自动热熔胶封胶线



Equipment Advantages 设备优势

- The electric control system and servo system adopt Japanese YASKAWA control system, which has fast operation speed and high stability.
 - Using touch screen interface, manual operation and fault diagnosis can be realized.
 - Automatic sealant discharging function to avoid pipeline blockage caused by human factors.
 - The program has memory function, and different types of glass parameters can be called with one key.
 - Equipped with high-speed positioning function, the glass can be accurately positioned during high-speed transmission.
 - Glass adopts tank chain transmission structure, with high load-bearing and durability.
 - Special gluing equipment for hot melt adhesive can realize automatic coating of hot melt adhesive on glass.
 - Unique intelligent connection, digital reading of IG production line data automatically adjusts the sealant distance.
 - Support rectangular double-glass and triple-glass sealant coating.
- 电控、伺服系统均采用日本安川控制系统，运算速度快，稳定性高。
 - 采用触摸屏界面，可实现手动操作和故障诊断。
 - 自动排胶功能，避免人为因素造成管道堵塞。
 - 程序带有记忆功能，不同型号的玻璃参数一键调用。
 - 装有高速定位功能，玻璃高速传送时能精确定位。
 - 玻璃采用坦克链传送结构，承重高、经久耐用。
 - 热熔胶专用涂胶设备，可实现玻璃自动涂热熔胶。
 - 特有智能连线，数字读取中空线数据自动调整打胶间距。
 - 支持矩形双玻、三玻两腔玻璃涂胶。

Technical Parameter 技术参数

		WASR2030H
Max. glass size	玻璃最大尺寸	2000×3000mm
Min. glass size	玻璃最小尺寸	280×350mm
Glass thickness	中空玻璃厚度	12~60mm(12~80mm)
Coating depth	涂胶深度	3~18mm
Aluminum frame width	铝框宽度	6~27mm
Coating speed	涂胶速度	5~40m/min
Transmission speed	传输速度	5~50m/min
Hydraulic pressure	液压压力	< 100kgf/cm ²
Air pressure	气源	0.6~0.8Mpa
Total power	总功率	50kW
Overall dimension	外形尺寸	7300×2500×2900mm



SKY2542B

Vertical Glass Drilling and Milling Machining Center 立式钻铣加工中心

可定制 Customized



Equipment Advantages 设备优势

- Drill by two opposite spindles, mill, grind, polish, drill in the clamp interference area, process irregular orders, and accurately position addressing by the measuring head.
 - Front and rear spindles milling and grinding same time + optimized tool change + Y/V axis fast moving speed + processing program optimization = faster processing speed.
 - Irregular graphics such as stair glass steps milling and baluster in parallelogram shape external edges grinding and polishing.
 - Clamps in telescopic structure as optional function.
 - It can be connected with vertical drilling machine, vertical edge grinding machine and vertical washing machine. Drilling+milling+grinding+polishing+countersinking+washing can be processed in one time.
- 前后双主轴对钻钻孔、铣型、磨内边和周边、倒安全角、周边和内边抛光、夹钳干涉区域打孔，不规则图形加工、测头精确寻边定位。
 - 前后双主轴同铣同磨+优化换刀+Y/V轴快移速度+加工程序优化=加工速度更快。
 - 不规则的图形，如铣楼梯玻璃台阶和周边磨边+抛光。
 - 可选配带伸缩功能的机械手。
 - 可与立式钻孔机、立式磨边机和立式清洗机组成连线，加工、磨四周边清洗一次完成。

Technical Parameter 技术参数

Max. glass size	玻璃最大尺寸	SKY2542B
Min. glass size	玻璃最小尺寸	2500×4200mm
Electric spindle power	电主轴功率	300×500mm
Max. spindle speed	主轴最大转速	7.5kW+7.5kW
Tool shank	刀柄规格	12000rpm
Tool magazine	刀库	BT30
Machining accuracy	加工精度	YES
Tools center cooling	刀具中心出水	±0.15mm
Function parts total power	功能部件总功率	YES
		10kW

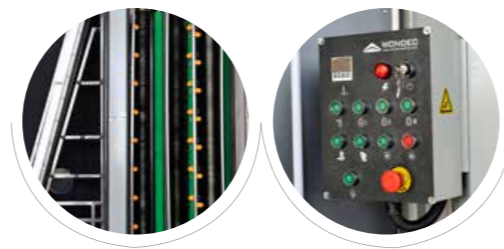


VGM2000/VGM2500

Vertical Glass Washing Machine

立式玻璃清洗机

可定制 Customized: VGM1600, VGM2800, VGM3000, VGM3300

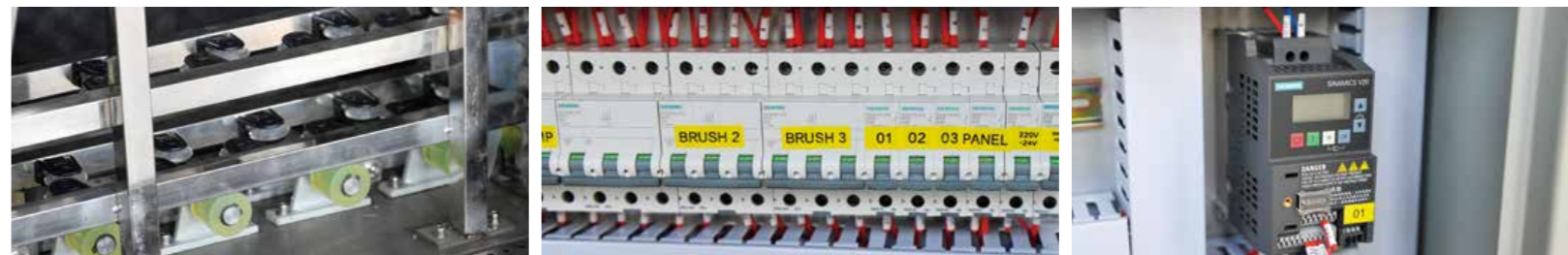


Equipment Advantages 设备优势

- Carbon fiber conductive brushes are used for coating detection of section 01, which can be used for different Low-E glass, and can be used according to different manufacturers.
- The film depth of Low-E glass can be changed at any time.
- Section 02 cleaning section is made of stainless steel, and all bearing bases are made of stainless steel.
- 02 end brush bearing is self-aligning bearing with long service life and high precision.
- The front three brushes of section 02 are with 0.1mm diameter brush hair, which can easily wash Low-E glass. And the back three brushes are with 0.2mm diameter brush hair.
- The power of three groups of brushes is driven by three groups of motors. The connection mode is coupling. The brush motor is directly connected with the brush to avoid idling of the brush. This is the improvement of brush belt transmission, reducing the probability of problems.
- The three groups of brushes are controlled by three groups of circuits respectively. The problems of one group of brush circuits will not affect the other two groups of brush circuits.
- 01段镀膜检测使用碳纤维毛刷，可适用于不同的LOW-E 玻璃，可根据不同厂家的。
- LOW-E玻璃的膜层深浅可随时更改数据。
- 02段清洗段整体材质为不锈钢，所有轴承底座不锈钢。
- 02端毛刷轴承为自动调心轴承，使用寿命长，精度高。
- 02段前面三个毛刷为软毛材质（刷毛直径0.1mm可清洗LOW-E玻璃，后面三个是硬毛材质（刷毛直径0.2mm））。
- 三组毛刷动力为三组电机带动，连接方式为联轴器，毛刷电机和毛刷直连，避免毛刷空转，此款为毛刷皮带传送的改进，减少出问题的几率。
- 三组毛刷为三组电路分别控制，一组毛刷电路出问题不会影响其他两组毛刷电路。

Technical Parameter 技术参数

		VGM2000	VGM2500
Max. glass size	玻璃最大尺寸	2000×3000mm	2500×4000mm
Min. glass size	玻璃最小尺寸	200×400mm	200×400mm
Glass thickness	玻璃厚度	3~16mm	3~16mm
Transmission speed	传输速度	2~50m/min	2~50m/min
Air pressure	气源	0.6~0.8Mpa	0.6~0.8Mpa
Total power	总功率	23kW	31kW
Overall dimension	外形尺寸	8000×1900×2900mm	9300×2300×3400mm



ABM02

Automatic Spacer Bending Machine 自动铝条折弯机



Equipment Advantages 设备优势

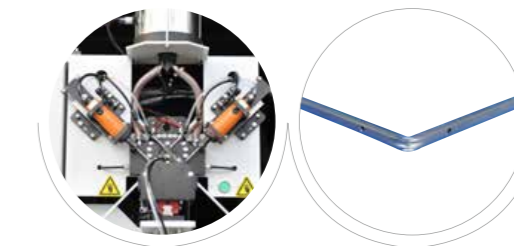
- PLC control, touch screen simple operation.
- Feeding system adopts CNC servo motor, bending angle uses CNC control system.
- Four material storage slots for four different specifications of spacers.
- Bending and cutting automatically avoid the spacer connection, the roundness, automatically cut after bending.
- With manual operation model, easy to debug and repair.
- It can make triangle, rectangle, regular pentagon, regular hexagon, roundness shape and so on.
- PLC控制系统，触摸屏人机界面，设备操作简单方便。
- 采用数控伺服电机进料系统，数控折弯角度控制系统。
- 四个储料槽，可以分别存放4种不同规格的铝条。
- 折弯和切割时自动避让铝条之间连接处，圆弧处，折弯后自动切割。
- 手动操作功能，便于设备的调试和检修。
- 可以折三角、矩形、正五方型、正六边型、圆弧等形状。

Technical Parameter 技术参数

		ABM02
Power supply	工作电压	380V/ 50Hz
Air pressure	气压	0.7Mpa
Aluminum bar specification	铝条规格	6~27mm
Aluminium frame size	加工铝框尺寸	Min. 200×250mm Max. 2500×2500mm
Bending angle error	折弯角度误差	±0.3°
Total power	总功率	4kW
Feeding speed	送料速度	0~90m/min
Data base	加工数据库	sametime set 4 specification×8 size 同时设定4组规格×8种尺寸
Overall dimension	外形尺寸	10000×2200×2600mm

FGJ05

Automatic Desiccant Filling Machine 分子筛全自动灌装机



Equipment Advantages 设备优势

- PLC control, desiccant filling in closed condition, improving efficiency and IG service life .
- Aluminum spacer back side drilling, filling and automatic sealing.
- Suitable for bendable aluminum spacer and aluminum spacer with connector.
- Filling height adjustable according to the size of aluminum frame.
- Special filling device with automatic desiccant feeding.
- 针对折弯铝框设计由PLC控制，在密闭条件下灌装，解决了干燥剂吸水汽失效，提高效率及中空玻璃寿命。是折弯式中空玻璃生产中的必备设备。
- 铝条背面打孔、灌装、自动封胶。
- 可灌装自动折弯成形铝框和普通直插角铝框。
- 灌装高度可根据铝框大小调节。
- 独特的先进上料装置，可自动补料。

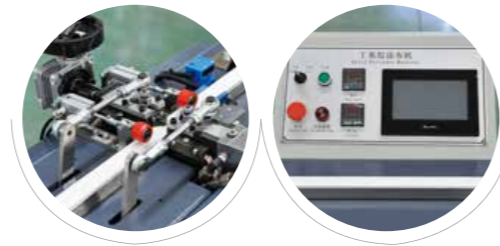
Technical Parameter 技术参数

		FGJ05
Working pressure	工作压力	0.5~0.8Mpa
Working power	工作电压	220V
Filling speed	灌装速度	8~12s/piece(1m×1m 9a)
Aluminum spacer min.	铝条最小	200×250mm
Aluminum spacer max.	铝条最大	2500×2500mm
Overall dimension	外形尺寸	1000×820×2900mm



BEM01/BEM02

Automatic Butyl Extruder 丁基胶涂布机



Equipment Advantages 设备优势

- Import gas-liquid pressure boost system makes sure the stable pressure and energy saving.
- PLC control, touch screen simple operation.
- Stepless speed regulation of frequency converter.
- Spray nozzle space automatic-adjusting according to the spacer width.
- Preheat available.
- Non butyl automatic alarm system.
- 采用国产/进口的气液增压系统，使设备压力更加稳定且节能。
- 采用PLC控制系统，人机操作界面。
- 变频器无级调速。
- 胶嘴间距根据铝框宽度自动调节。
- 设备具有预加热功能。
- 无胶自动报警系统。

Technical Parameter 技术参数

		BEM01/BEM02
Input power	电功率	4.0kW
Power supply	电源	380V/ 50Hz
Conveying speed	输送速度	35m/min
Extruding temperature	打胶温度	110~160℃
Air pressure	气动压力	0.5~0.8Mpa
Extruding pressure	挤胶压力	10~15Mpa
Adjustable range of extruding nozzle	胶头可调范围	6~30mm
Overall dimension	外形尺寸	3000×650×1000mm

BEM03

Automatic Butyl Extruder 丁基胶涂布机



Equipment Advantages 设备优势

- Suitable for double-coated spacer with thermoplastic sealant.
- With sealant preheating timer and weekly work schedule.
- PLC control, touch screen simple operation.
- Special down roller device is used for semi-circular spacer bars.
- Servo motor speed regulation.
- Spray nozzle space automatic-adjusting according to the spacer width.
- Preheat available.
- Non butyl automatic alarm system.
- 适用于带热塑性密封胶的双面镀膜的间隔条。
- 带密封胶预热计时器和每周工作程序安排。
- 采用PLC控制系统，人机操作界面。
- 特殊的下压滚轮装置用于半弧形间隔条。
- 伺服电机调速。
- 胶嘴间距根据铝框宽度自动调节。
- 设备具有预加热功能。
- 无胶自动报警系统。

Technical Parameter 技术参数

		BEM03
Input power	电功率	5.5kW
Power supply	电源	380V/ 50Hz
Conveying speed	输送速度	5~50m/min
Extruding temperature	打胶温度	120~140℃
Air pressure	气动压力	0.5~0.8Mpa
Extruding pressure	挤胶压力	10~15Mpa
Adjustable range of extruding nozzle	胶头可调范围	5.5~24mm
Overall dimension	外形尺寸	2870×750×1100mm

WAFR2540

Automatic Low-E Film Removing Machine

LOW-E 玻璃除膜机

可定制 Customized: WAFR2850, WAFR3060



Equipment Advantages 设备优势

- The toughened low-E glass film and double silver film can be removed.
- Processing large and small pieces of glass at one time and removing film many times.
- The grinding dust is equipped with suction device to reduce dust pollution.
- Upper and outgoing segments can run asynchronously to improve production efficiency.
- The grinding wheel can be mechanically repaired to make grinding cleaner.
- The speed of membrane removal can be adjusted according to the type of membrane and the effect of membrane removal.
- The whole machine is controlled by servo motor, and the dimension can be adjusted linearly to ensure the accuracy.
- Servo motor control, linear adjustable size to ensure accuracy.
- Special-shaped and point-type curtain wall glass with holes can be grinded according to the drawing library.
- 本产品可以去除可钢化LOW-E玻璃以及双银膜层。
- 加工大小片玻璃一次完成，并可多次去膜，使去膜效果更好。
- 加工大小片时叠边宽度可调，使其中间无残留膜层。
- 磨轮电机转速可以在0-3000无极调整。
- 设备配置有手动操作模式，在手动模式下工人可以方便的调试或检修。
- 磨层粉尘配置有吸取装置以减少粉尘污染。
- 上片段和出片段可异步运行，提高生产效率。
- 磨轮可进行机械修整，使磨削更干净。
- 输入和输出均为同步带，传送平稳、快速、耐磨。
- 除膜速度可调，根据膜层类型和除膜的效果进行调整。
- 伺服电机控制，尺寸线性可调保证精度。
- 自动与生产线同步连接，节省时间和劳动力。

Technical Parameter 技术参数

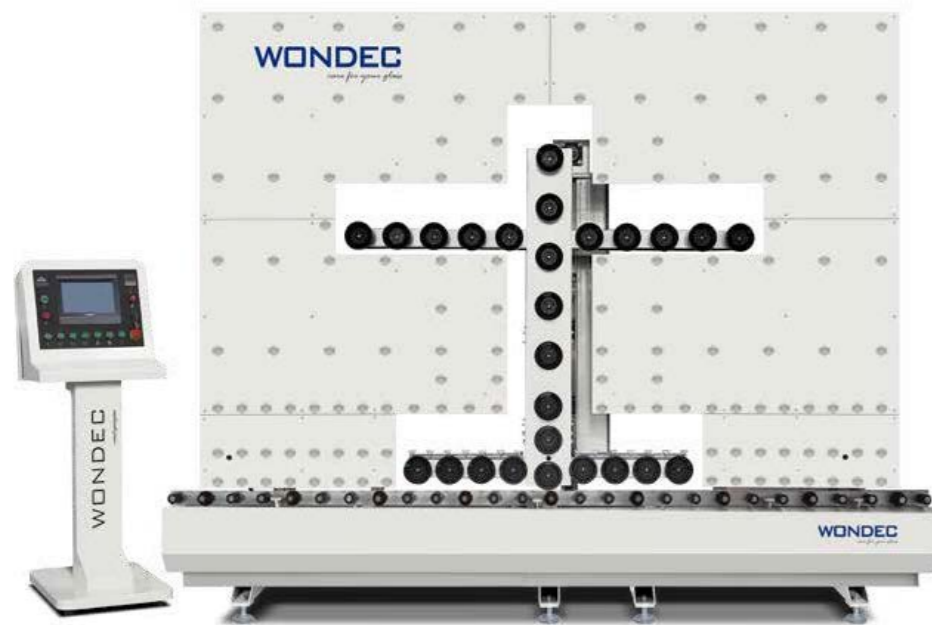
Power consumption	电源功耗	WAFR2540
Air source	气源	AC380V 50/60HZ 8KW
Grinding wheel speed	磨轮转速	0.6Mpa
Min. glass size	最小玻璃尺寸	0~3000r/min
Max. glass size	最大玻璃尺寸	300×300mm
Film removing width	除膜宽度	2500×4000mm
Overall dimension	外形尺寸	8~300mm
		7700×1800×3600mm



WAL2540/2850/3060

Automatic Glass Loading Machine

全自动玻璃上片机



Equipment Advantages 设备优势

- This machine is suitable for glass loading in insulating glass equipment, cleaning machine, edging machine and other equipment.
- Servo motor control, simple operation, safety and reliability.
- The operation is controlled by touch screen, and the picture is easy to understand.
- It can meet the loading depth within 850mm, and can be loaded directly from the glass frame.
- The machine has the functions of automatic alarm for material shortage, under-voltage waiting of sucker, power failure protection and so on, and the safety factor is extremely high.
- High-quality vacuum sucker is used, with high negative pressure and sufficient suction, and the glass is firmly adsorbed and does not fall off.
- The equipment has a unique lifting program device, which can effectively prevent glass damage caused by glass.
- Can be customized according to customer needs.

- 本机适用于中空玻璃设备，清洗机、磨边机等设备的玻璃上片取料。
- 采用伺服电机控制，操作简单、安全可靠。
- 操作采用触摸屏控制，画面简单易懂。
- 可满足 850mm 以内的上片深度，可直接从玻璃架进行上片作业。
- 该机设有缺料自动报警，吸盘欠压等待，停电保护等功能，安全系数极高。
- 采用优质真空吸盘，负压值高，吸力足，玻璃吸附牢稳不脱落。
- 设备具有独特的提升程序装置，可有效的预防玻璃连带造成的玻璃破损现象。
- 可根据客户需求定制尺寸加长加高。

Technical Parameter 技术参数

		WAL2540	WAL3060
Power supply	电源电压	AC220V 50HZ	AC220V 50HZ
Total power	总功率	5.5kW	11kW
Operating pressure	工作气压	0.6~0.8MPa	0.6~0.8MPa
Thickness of single glass	单片玻璃厚度	3~12mm	3~12mm
Max. grab glass size	最大抓取玻璃尺寸	2500×4000mm	3000×6000mm
Min. grab glass size	最小抓取玻璃尺寸	300×500mm	300×500mm
Transfer speed	传送速度	2~48mm	2~48mm
Overall dimensions	外形尺寸	4000×2800×3050mm	6200×2800×3550mm

WAUL2540/2850/3060

Automatic Glass Unloading Machine

全自动玻璃下片机



Equipment Advantages 设备优势

- This machine is suitable for taking glass sheet of insulating glass equipment, washing machine, edging machine and other equipment.
- Servo motor control, simple operation, safety and reliability.
- The operation is controlled by touch screen, is easy to understand.
- It can meet the cutting depth within 850mm, and can directly carry out the glass from the glass frame.
- The machine has the functions of automatic alarm for material shortage, under-voltage waiting of sucker, power failure protection and so on, and the safety factor is extremely high.
- High-quality vacuum sucker is used, with high negative pressure and sufficient suction, and the glass is firmly adsorbed and does not fall off.
- When the glass is unloaded, the unloading machine prevents the single piece of glass from falling after the insulating glass is laminated, and is equipped with an air cylinder lifting mechanism.
- Can be customized according to customer needs.

- 本机适用于中空玻璃设备，清洗机、磨边机等设备的玻璃下片取料。
- 采用伺服电机控制，操作简单、安全可靠。
- 操作采用触摸屏控制，画面简单易懂。
- 可满足 850mm 以内的下片深度，可直接从玻璃架进行下片作业。
- 该机设有缺料自动报警，吸盘欠压等待，停电保护等功能，安全系数极高。
- 采用优质真空吸盘，负压值高，吸力足，玻璃吸附牢稳不脱落。
- 下片机在玻璃下片时，防止中空玻璃合片后单片玻璃错片下坠，装有气缸托起机构。
- 可根据客户需求定制尺寸加长加高。

Technical Parameter 技术参数

		WAUL2540	WAUL3060
Power supply	电源电压	AC220V 50HZ	AC220V 50HZ
Total power	总功率	7.0kW	14kW
Operating pressure	工作气压	0.6~0.8MPa	0.6~0.8MPa
Thickness of glass	玻璃厚度	≤60mm	≤60mm
Max. grab glass size	最大抓取玻璃尺寸	2500×4000mm	3000×6000mm
Min. grab glass size	最小抓取玻璃尺寸	300×500mm	300×500mm
Transfer speed	传送速度	2~48mm	2~48mm
Overall dimensions	外形尺寸	4000×2800×3050mm	6200×2800×3550mm

TCE02

Two-component Extruder
双组份涂胶机



TCE03

Two-component Extruder
双组份涂胶机



WBE80

Double Wet Belt Edging Machine
淋水式双带砂带磨边机



LTD300

Glass Unloading Machine
吊臂



SKJ01

Spacer Moving Machine
铝间隔框输送机



XZT01

Rotating Table
旋转涂胶台



ABM01

Spacer Bending Machine
半自动铝条折弯机



WFL1600

Protective Film Laminating Machine
中空玻璃保护膜覆膜机



LJS02

Hydraulic Lifting Table
液压升降台



ZCJ02

Gas Filling Machine
充气机



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