

WBS-PC系列
WBS-PC Series

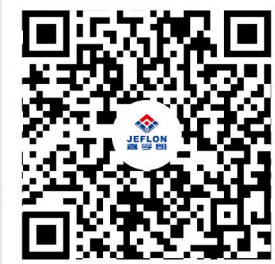


台式电脑版四轴锁螺丝机

Desktop computer version four-axis screw locking machine



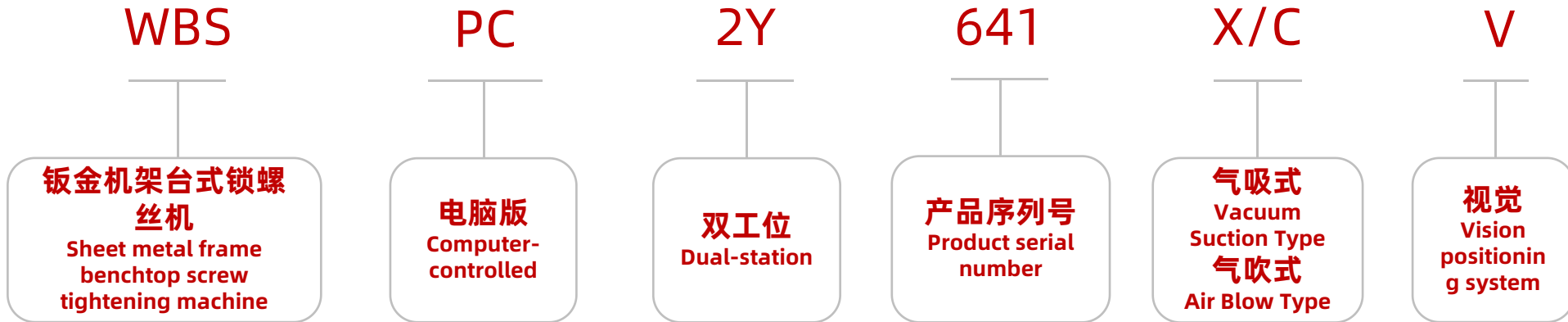
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扫码查看视频号

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产品选型 Product selection	送钉方式 Screw feeding method	锁付范围 Screw tightening range
WBS-PC-2Y-641X	气吸式 Vacuum Suction Type	250*250*70mm (X*Y*Z)
WBS-PC-2Y-641X-V (配置视觉定位功能) Vision positioning system	气吸式 Vacuum Suction Type	250*250*70mm (X*Y*Z)
WBS-PC-2Y-641C	气吹式 Air Blow Type	250*250*70mm (X*Y*Z)
WBS-PC-2Y-641C-V (配置视觉定位功能) Vision positioning system	气吹式 Air Blow Type	250*250*70mm (X*Y*Z)

02 气吸式锁螺丝机/Vacuum Suction Screw Fastening Machine



- ◇ IPC运动控制系统，可视化编程，数据保存无限制；
- ◇ IPC motion control system, visual programming, unlimited data storage.
- ◇ 具有图形化显示不良点螺丝位置；便易找到，返修快捷；
- ◇ Graphical display of screw positions with defects (e.g., poor fastening points) – easy to locate and quick to rework.
- ◇ 具有智能检测功能，可检测漏锁、浮锁、滑牙等；
- ◇ Intelligent detection functions: detects missed screws, floating screws, stripped threads, etc.
- ◇ 具有自动读取产品CAD的XY坐标点，或者直接读取Gerber资料获得XY坐标点，针对螺丝数量多的产品；
- ◇ Automatically reads XY coordinate points from product CAD files, or directly from Gerber data – ideal for products with a large number of screws.
- ◇ 支持扫码锁付：锁螺丝数据自动绑定产品条形码或2D码；
- ◇ Supports barcode/QR code screwing: screw driving data automatically linked to product barcode or 2D code.
- ◇ 支持位移传感器：学习标定，检测浮高，自动反转并修复；
- ◇ Supports displacement sensor: learn/calibration mode, detects floating height, automatically reverses and repairs.
- ◇ 支持真空负压表：检测吸嘴里螺丝是否掉落；
- ◇ Supports vacuum negative pressure gauge: detects whether a screw has fallen out of the suction nozzle.
- ◇ 安全防护支持人体误入自动急停，并另配置急停装置。
- ◇ Safety protection: automatic emergency stop when a person intrudes by mistake, plus an additional emergency stop device.
- ◇ 可选配视觉定位、扫码功能、位移传感器、真空负压表、双Y合并单Y。
- ◇ Optional features: vision positioning, barcode/QR code scanning, displacement sensor, vacuum negative pressure gauge, dual-Y merged into single-Y configuration.

气吸式供料器/Vacuum suction feeder

供料器名称：气吸式螺丝供料器
型 号： KL-S30
外形尺寸： W125*H138*D200mm
适用螺钉规格： M1.0-M5.0
出钉速度： 2 S/颗
卡钉率： 1‰
供料器容积： 200 ml
依据当前使用螺丝计算容量： 850颗（
示例： M3x6mm的螺丝约可放850颗）。
依据当前设备节拍计算补料间隔时长：
1.7小时

Product Name: Vacuum suction feeder
Model No: KL-S30
Dimensions: W125*H138*D200mm
Applicable Screw Specifications: M1.0-M5.0
Screw Feeding Speed: 2 S/pcs
Screw Jam Rate: 1‰
Feeder Capacity: 200 ml
Capacity based on current screw type:
850 screws (e.g., approximately 850 pcs of M3×6mm screws).
Material replenishment interval based on current equipment cycle time: 1.7 hours.



吸式锁付

Vacuum suction tightening

单边行程 Single-
sidestroke:

210*350*90mm

如产品尺寸大，双Y可合并为单Y滑台
"If the product size is large, the dual Y axes can be
combined into a single Y sliding table."

03 气吹式锁螺丝机/Blow-Feeding Screw Fastening Machine

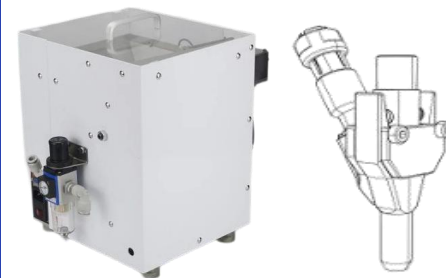


- ✧ IPC运动控制系统，可视化编程，数据保存无限制；
- ✧ IPC motion control system, visual programming, unlimited data storage.
- ✧ 具有图形化显示不良点螺丝位置；便易找到，返修快捷；
- ✧ Graphical display of screw positions with defects (e.g., poor fastening points) – easy to locate and quick to rework.
- ✧ 具有智能检测功能，可检测漏锁、浮锁、滑牙等；
- ✧ Intelligent detection functions: detects missed screws, floating screws, stripped threads, etc.
- ✧ 具有自动读取产品CAD的XY坐标点，或者直接读取Gerber资料获得XY坐标点，针对螺丝数量多的产品；
- ✧ Automatically reads XY coordinate points from product CAD files, or directly from Gerber data – ideal for products with a large number of screws.
- ✧ 支持扫码锁付：锁螺丝数据自动绑定产品条形码或2D码；
- ✧ Supports barcode/QR code screwing: screw driving data automatically linked to product barcode or 2D code.
- ✧ 支持位移传感器：学习标定，检测浮高，自动反转并修复；
- ✧ Supports displacement sensor: learn/calibration mode, detects floating height, automatically reverses and repairs.
- ✧ 支持真空负压表：检测吸嘴里螺丝是否掉落；
- ✧ Supports vacuum negative pressure gauge: detects whether a screw has fallen out of the suction nozzle.
- ✧ 安全防护支持人体误入自动急停，并另配置急停装置。
- ✧ Safety protection: automatic emergency stop when a person intrudes by mistake, plus an additional emergency stop device.
- ✧ 可选配视觉定位、扫码功能、位移传感器、真空负压表、双Y合并单Y。
- ✧ Optional features: vision positioning, barcode/QR code scanning, displacement sensor, vacuum negative pressure gauge, dual-Y merged into single-Y configuration.

气吹式供料器/Blow-Feeding Screw Feeder

供料器名称：气吸式螺丝供料器
型 号：KL-S631
外形尺寸：W264*H346*348mm
适用螺钉规格：M1.7-M6 牙长≤42mm
出钉速度：2 S/颗
卡钉率：1‰
供料器容积：3L
依据当前使用螺丝计算容量：13641颗，
(示例：M3.0x8mm, 冒头直径5.3mm, 厚度3mm)
依据当前设备节拍计算补料间隔时长：
1.7小时

Product Name: Blow-Feeding Screw Feeder
Model No: KL-S631
Dimensions: W264*H346*348mm
Applicable Screw Specifications: M1.7-M6.0, Screw thread length ≤42 mm
Screw Feeding Speed: 2 S/pcs
Screw Jam Rate: 1‰
Feeder Capacity: 3L
Capacity based on current screw type: 13,641 screws (e.g., M3.0×8mm screw, head diameter 5.3mm, head thickness 3mm).
Material replenishment interval based on current equipment cycle time: 1.7 hours.



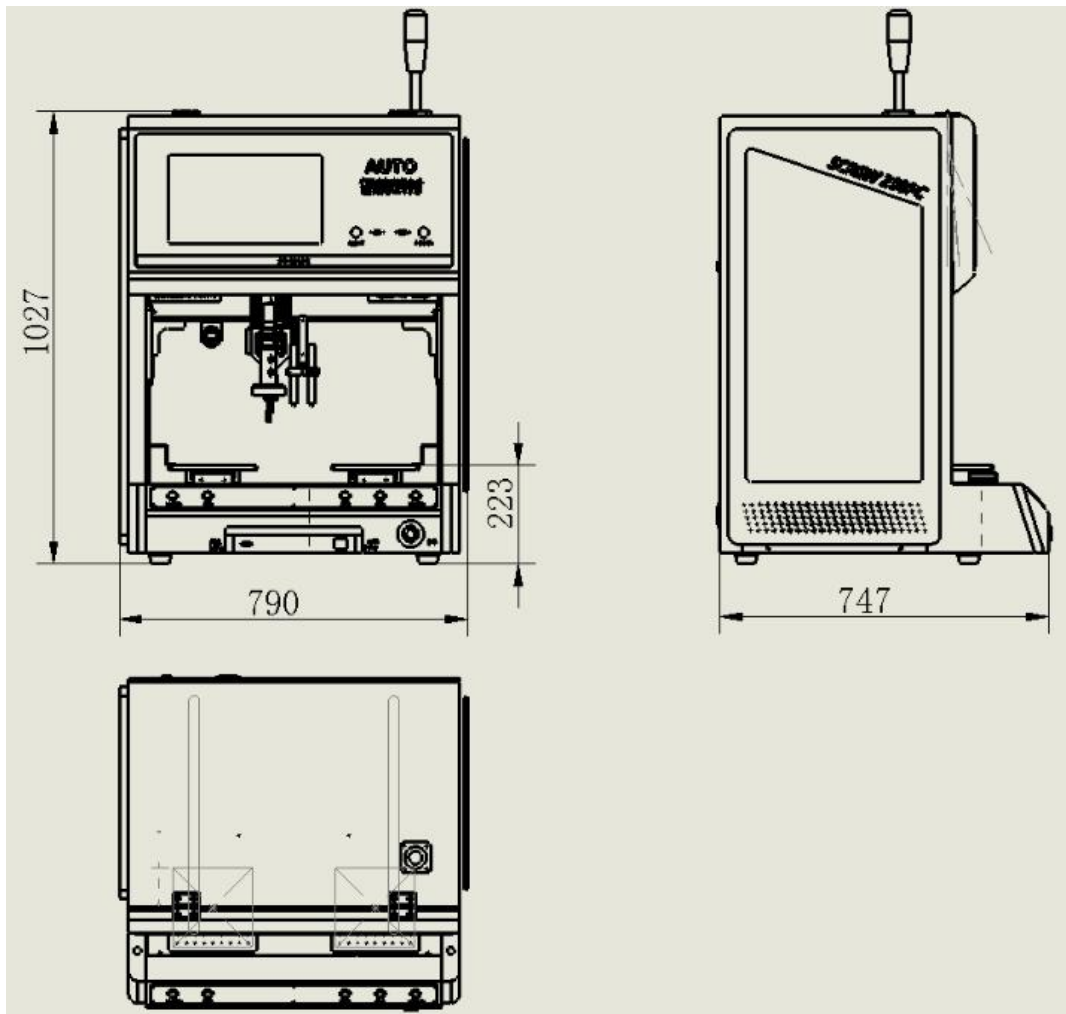
吹式锁付
Blow-type tightening

单边行程 Single-
sidestroke:

210*350*90mm

如产品尺寸大，双Y可合并为单Y滑台
"If the product size is large, the dual Y axes can be combined into a single Y sliding table."

04 产品外形尺寸及参数/Product dimensions and parameters



设备基本功能参数 Basic equipment function parameters	
产品名称/Product Name	台式电脑版锁螺丝机 Benchtop computer-controlled screw tightening machine
产品型号/Product model	WBS-PC-2Y-641
机器尺寸/Machine dimensions	790*747*1027mm (W*D*H)
单边行程/Single-stroke	210*350*90mm
重复精度/Repeatability accuracy	±0.02mm
拧紧系统/Tightening system	伺服电动螺丝刀, 扭矩重复精度: ±5% Servo electric screwdriver, torque repeatability accuracy: ±5%
扭力范围/Torque range	1-10kgf.cm
锁付节拍/Locking rhythm	≤2s/pcs
控制系统/Control System	IPC + 高性能锁螺丝控制系统; 程序容量: ≥100组 IPC + High-performance Screw Locking Control System; Program Capacity: ≥ 100 groups
驱动方式/Drive method	X/Y/Z轴皮带传动, 闭环步进伺服驱动 Belt drive along X/Y/Z axes, closed-loop stepper servo drive;
编程方式/Programming method	CAD坐标导入+教导式 CAD coordinate import + instructional mode
工控电脑/Industrial Control Computer	15.6寸1920*1080P高清电容触摸显示屏, Win10系统 15.6-inch 1920*1080P high-definition capacitive touch screen, Windows 10 system
电 源/Power Supply	220VAC 50HZ; 设备功率: ≤1.5KW 220VAC 50HZ; Equipment power: ≤1.5KW
Y轴负载/Y-axis load	≤20kg
设备重量/Equipment weight	≈252kg
气 源/Air source	0.4~0.7Mpa



软件系统功能/Software system:

1. 点位分布图及不良信息，便易查找；
1. Point distribution map and defect information – easy to locate.
2. 产量及良率图形化统计；
2. Graphical statistics of production yield and pass rate.
3. 产品良率和螺丝良率图形化显示；
3. Graphical display of product pass rate and screw pass rate.
4. 产能监控；按分钟统计生产数量；
4. Production monitoring – production count per minute.
5. 锁紧结果及曲线显示；
5. Tightening results and torque curve display.
6. 螺丝数据本地存储，便于MES抓取；
6. Tightening results and torque curve display.
7. CAD导图，方便快捷；
7. CAD import – fast and convenient.
8. 设备运行信息，步骤日志；
8. Equipment operation information and step log.
9. 可选配位移传感器浮高检测示教学习；
9. Optional: displacement sensor for floating height detection – teachable with learning.
10. 可选配视觉定位；
10. Optional: vision positioning.
11. 可选配视觉扫码；
11. Optional: vision barcode/QR code scanning.
12. 可选配视觉引导示教编程。
12. Optional: vision-guided teach programming.

备注：部分功能需要选型支持

Note: Some functions require selection support.



采用高精度智能电批，扭力参数精度高

"Uses a high-precision intelligent electric screwdriver with high torque parameter accuracy."

- 标准型扭力范围：0.1-320kgf.cm，需要更换智能电批
- Standard torque range: 0.1 - 320 kgf.cm. Replacement of the intelligent electric drill is required.
- 可支持更大扭力非标定制
- Supports larger torque and can be customized according to specific requirements.

精度±5%

Accuracy ± 5%

扭力、转速可调
Adjustable
torque and
rotational speed

扭矩反馈

Torque feedback

可扩展性强
Strong
scalability

数据存储

Data storage

免人工维护
No need for
manual
maintenance

感谢支持

Thanks for the support



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