



ZXQZ 全自动装箱机

FULLY AUTOMATIC
CASE PACKER

武汉人天包装自动化技术股份有限公司
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FOCUS
PROFESSION
PERSISTENCE
RESPONSIBILITY
HAPPINESS



专注 · 专业

坚持 · 责任 · 快乐



自 1997 年创立至今, 人天包装坚持“做包装技术的思考者和探索者”。我们专注于研发、生产及销售全自动装箱(盒、袋)机、工业机械手、智能输送机三大系列主导产品, 矢志不渝提供自动包装生产线集成解决方案。

我们致力于服务世界各地的客户, 帮助客户提高生产效率, 增强稳定性和可靠性, 同时降低安全风险。基于不同行业不同客户的需求, 我们寻求高效和独特的优化方案, 以严苛的技术标准, 实现对品质的追求。

Since the company was established in 1997, we have insisted on "to be a thinker and seeker of packaging technology". We focus on R&D, production and sales of three series of leading products, namely, fully automatic packers for cases, boxes and bags, industry manipulators and intelligent conveyors, and persist in providing integrated solutions for automatic packaging production lines.

We are dedicated to serving customers all over the world, helping them improve production efficiency, stability and reliability, and reducing safety risks. Based on the demands of customers in different industries, we seek efficient and distinctive optimized solutions to achieve the expected quality with strict technical standards.

ZXQZ

系列全自动装箱机

FULLY AUTOMATIC CASE PACKER ZXQZ

ZXQZ 系列全自动装箱机是为专业客户设计的全新一代自动装箱设备。本机采用独特的原理和结构设计，对软袋、条状、盒装物料的排列和装箱具有灵活且卓越的表现力。全面的风险评估让设备在长期使用中，始终保持安全、稳定、高效。

The series of ZXQZ case packer is the latest design of fully automatic case packing equipment. With unique design principle and structure, the case packer enjoyed high performance and flexibility for collating and loading the flexible bags, sticks and cartons. Fully risk assessment insure the equipment to be safe, stable and highly efficient in the long term of running.

MORE VALUE

更多价值

安全 Safety

零介入 Zero access
上锁挂牌 Lock-out & Tag-out
固定式防护、可移动防护、带联锁防护
Fixed guard, movable guard, interlocked guard
全面的风险源评估和预防
Operations with risk sources are prohibited
CE 标准 CE approved



全面绩效管理 TPM

预防性、计划性维护
Preventive maintenance
预测性维护
Predictive maintenance
自动 OEE 统计分析
Automatic OEE statistical analysis
能耗统计
Energy consumption statistics
教育和培训支持体系
Education & Training supporting system
持续改善
Continuous improvement



卫生 Hygiene

污染源控制
Pollution source control
防积灰设计
Dust prevention design
可清洁设计
Cleanable design
可视化设计
Visual design

CASE PACKER ZXQZ-150K

ZXQZ-150K 装箱机



快速装箱, 可达 150 件 / 分钟
Rapid packing speed, up to 150 pieces/min



内部集成开箱, 节省空间
Internal integrated case erector for saving space



双环链预排列, 装箱效果好
Double trackers for pre-arrangement for good packing effect



伺服控制及机器人抓填, 实现精准高速装箱
Servo control and manipulators for accurate and fast packing



更换规格快, 适应柔性化生产
Fast change-over for flexible production



表面减少缝隙和死角设计, 便于清洁
Design to minimize the gaps and dead corners for easy clean



FEATURE & CONFIGURATION

ZXQZ-150K 特性和配置

| | ZXQZ-150K |
|--------------------------------------|---|
| 纸箱形式 Case Type | ● RSC ○ HSC |
| 纸箱规格 Case Size | L (300-450) mm X W (200-300) mm X (170-230) mm 注 ¹ |
| 成箱速度 Case Erecting Speed | 最大 10 箱 / 分 Up to 10 cases/min |
| 产品形式 Product Type | ● 枕形袋 Pillow bag ○ 圆底自立袋 Doypack with round bottom ○ 盒 / 箱 Case/Box ○ 瓶 / 罐 Bottle/Can |
| 整列方式 Collating Mode | ● 环链排列 Race Tracker ○ 阻挡器和缓冲台 Stopper and buffer platform |
| 整列速度 Collating Speed | 最大 150 件 / 分 Up to 150 pieces/min |
| 移载方式 Transferring Mode | ● 真空夹具 Vacuum Jig ○ 机械夹具 Mechanical jig |
| 堆叠方式 Stacking Mode | ● 伺服叠层, 层数、行数可组态 Servo stacking; layer and row can be configured ○ 伺服叠层, 层数、行数、旋转角度可组态 Servo stacking; layer, row and rotation angle can be configured |
| 同时装箱数量 Simultaneous Loading Quantity | ○ 1 箱 case ● 2 箱 cases ○ 3 箱 cases |
| 叠层速度 Stacking Speed | 最大 20 次 / 分 Up to 20 times/min |
| 交流异步电机 / 减速机 AC Motor / Reducer | SEW |
| 控制系统 Control System | ● 西门子 Siemens ○ AB |
| 气动系统 Pneumatic System | ● SMC ○ Festo |
| 安全标准 Safety Standard | CE (PLd) |
| 软件标准 Software Standard | PackML (ISA-88) |
| 设备占地 Space Occupation | L3250mm X W3000mm X H2500mm 注 ² |
| 设备自重 Gross Weight | 3500kg 注 ² |

注 1: 可定制为其他尺寸 Other dimensions can be customized
注 2: 标准配置下 Based on standard specification

● 标准配置 Standard configuration
○ 选项配置 Optional configuration

PACKAGING PROCESS

ZXQZ-150K 物料装箱流程



CASE PACKER ZXQZD-200K

ZXQZD-200K 装箱机



双机器人视觉引导进行分拣, 速度可达 200 件 / 分
2 Robots collating with vision guided system, speed up to 200 bags/min



灵活处理无序的来料
Flexible to handle the disordered products



实现多种复杂排列
Applicable for various and complicated configuration



内部集成开箱, 节省空间
Internal integrated case erector for saving space



更换规格快, 适应柔性化生产
Quick change of specifications for flexible production



表面减少缝隙和死角设计, 便于清洁
Design to minimize the gaps and dead corners for easy clean



FEATURE & CONFIGURATION

ZXQZD-200K 特性和配置

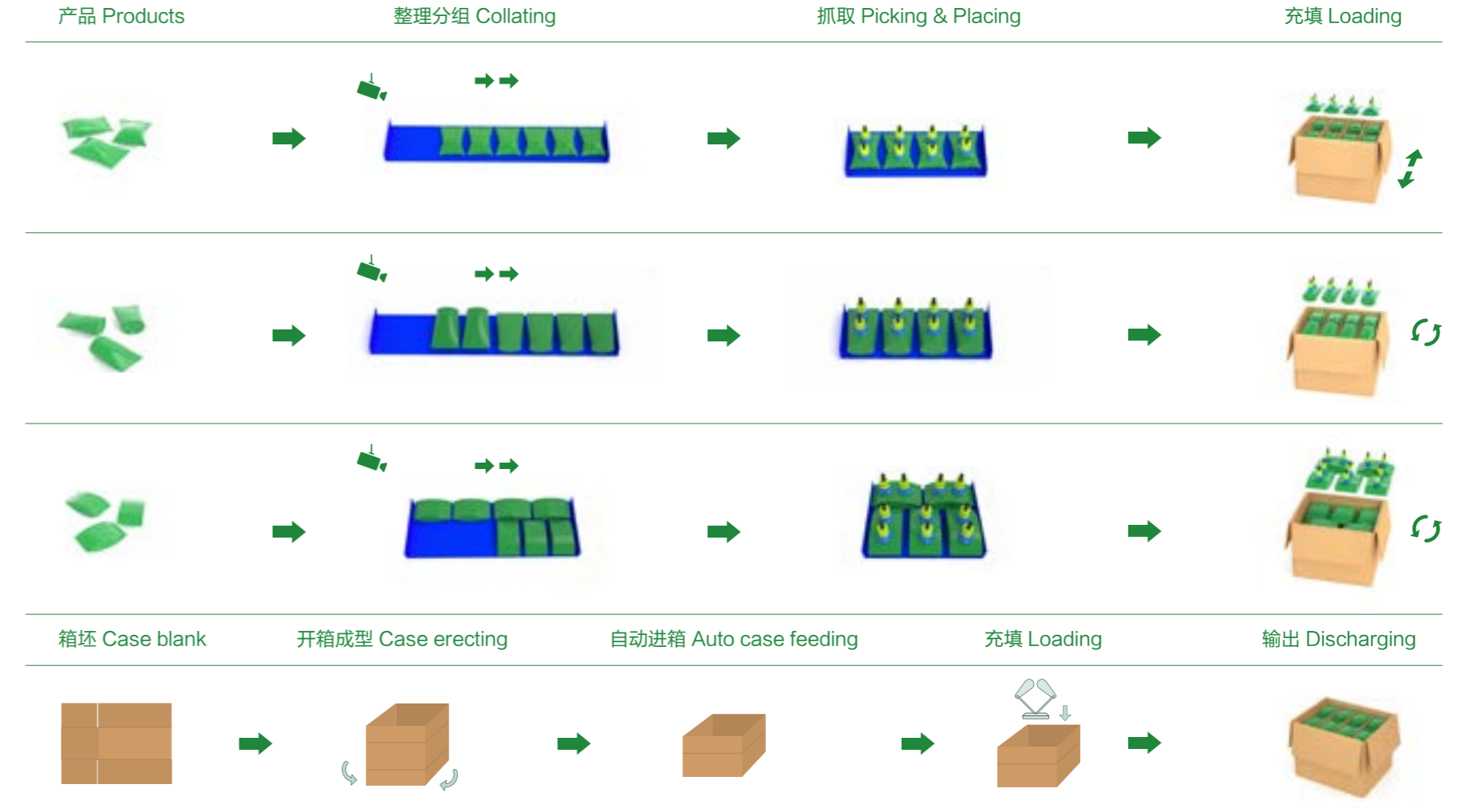
| ZXQZD-200K | |
|--------------------------------------|--|
| 纸箱形式 Case Type | ● RSC ○ HSC |
| 纸箱规格 Case Size | L(300-450)mmXW(200-300)mmX(170-230)mm ^{注1} |
| 成箱速度 Case Erecting Speed | 最大 10 箱 / 分 Up to 10 cases/min |
| 产品形式 Product Type | ●四面封 4-sides sealed bag |
| | ○枕形袋 Pillow bag |
| | ○圆底自立袋 Doypack with round bottom |
| 整列方式 Collating Mode | 视觉导向的 Delta3 机器人 Delta3 robot with vision guide |
| 整列速度 Collating Speed | 最大 200 件 / 分 Max Up to 200 pieces/min |
| 移载方式 Transferring Mode | 真空夹具 Vacuum Jig |
| 堆叠方式 Stacking Mode | 水平堆叠, 形式可组态 Flat stacking and the format can be configured |
| 同时装箱数量 Simultaneous loading quantity | ○ 1 箱 case ● 2 箱 cases ○ 3 箱 cases ^{注2} |
| 叠层速度 Stacking Speed | 最大 20 次 / 分 Up to 20 times/min |
| 交流异步电机 / 减速机 AC Motor / Reducer | SEW |
| 控制系统 Control System | ●西门子 Siemens ○ AB |
| 气动系统 Pneumatic System | ● SMC ○ Festo |
| 安全标准 Safety Standard | CE (PLd) |
| 软件标准 Software Standard | PackML(ISA-88) |
| 设备占地 Space Occupation | L5700mmX W3000mmXH2500mm ^{注2} |
| 设备自重 Weight | 4500kg |

注 1: 可定制为其他尺寸 Other dimensions can be customized
 注 2: 标准配置下 Based on standard specification

●标准配置 Standard configuration
 ○选项配置 Optional configuration

PACKAGING PROCESS

ZXQZD-200K 物料装箱流程



FUNCTIONAL COMPARISON BETWEEN SERIES OF ZXQZ AND ZXQZD

ZXQZ 和 ZXQZD 系列功能对比表

| 型号 Model | ZXQZ 系列 | | | ZXQZD 系列 | | | |
|--|---|-------------------|--|---|-------------------|-------------------|-------------------|
| | ZXQZ-150 | ZXQZ-150K | ZXQZ-450 | ZXQZD-100 | ZXQZD-100K | ZXQZD-200 | ZXQZD-200K |
| 产品形式 Product Type | <ul style="list-style-type: none"> ● 枕形袋 Pillow bag ○ 圆底自立袋 Doypack with round bottom ○ 盒 / 箱 Case/Box ○ 瓶 / 罐 Bottle/Can | | | <ul style="list-style-type: none"> ● 四面封 4-sides sealed bag ○ 枕形袋 Pillow bag ○ 圆底自立袋 Doypack with round bottom | | | |
| 产品整理方式 Product collation pattern | 环链或机械整理机 Race tracker/Mechanical device | | | 视觉导向的机器人 Robot with vision guide | | | |
| 产品整理通道 Product feeder numbers | 1 | 1 | 3 | 1 | 1 | 2 ^{注1} | 2 ^{注1} |
| 产品排列形式 Collation configuration | 按行、列有序排列 Ordered arranged in rows and columns | | | 复杂平铺排列 Ordered arranged in needed orientation | | | |
| 产品姿态要求 Product attitude requirement | 有序等距 Ordered equidistant | | | 平铺无变形，允许位置偏移和旋转 Disordered | | | |
| 整理最大处理能力 Handling Speed(Bag/min) | 150 ^{注2} | 150 ^{注2} | 450 ^{注2} | 100 ^{注2} | 100 ^{注2} | 200 ^{注2} | 200 ^{注2} |
| 抓取方式 Pick method | 真空夹具、机械夹具 Vacuum jig /Machnical jig | | | 真空夹具 Vacuum jig | | | |
| 充填叠层方式 Loading method | Delta2 顶部装载 Delta2 manipulator top loading | | 直角坐标顶部装载 Regutangular coordinate top loading | Delta2 顶部装载 Delta2 manipulator top loading | | | |
| 充填叠层最大处理能力 (层/分) Stacking speed(layer/min) | 20 ^{注2} | | 15 ^{注2} | 20 ^{注2} | | | |
| 纸箱形式 Case type | RSC, HSC | | | | | | |
| 是否集成开箱 Integrated case erecting | 否 No | 是 Yes | 否 No | 否 No | 是 Yes | 否 No | 是 Yes |
| 开箱能力 Case erecting speed(Case/min) | 不适用 N/A | 10 ^{注3} | 不适用 N/A | 不适用 N/A | 10 ^{注3} | 不适用 N/A | 10 ^{注3} |

注 1 双机器人串联。Equipped with 2 robots

注 2 最大设计速度。具体物料和产品特性与排列方式有关。The handling speed will be defined according to the product specific features and configuration

注 3 最大设计速度。具体和纸箱尺寸和材料有关。The case erecting speed will be defined according to the case size and material

APPLICATIONS

产品应用行业

为满足不同领域的客户需求，人天包装 ZXQZ 全自动装箱机可提供各项专业的解决方案，包括饮料、乳品、食品及调味品等行业应用。此外，我们将不断在其他行业应用中探索新的可能。

Our fully automatic case packer ZXQZ can apply to various professional industries to satisfy their different demands, such as beverages, dairy, food and condiments. In addition, we will continue to explore new possibilities in other industries.



乳品 Dairy



调味品 Condiments



食品 Food



饮料 Beverages