广东晟一 整厂规划解决方案
印刷后道智能装备的领航品牌

SUNYI, the leading supplier for whole plant automation solution and after printing process intelligent equipments



广东晟一智能科技有限公司
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中国·佛山

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关于我们

广东晟一智能科技有限公司，位于广东省佛山市三水区，是一家集研发、生产、销售、服务于一体的智能包装设备生产厂家，专业从事瓦楞纸包装智能化改造和整厂自动化设备解决方案，公司秉承先进的工业设计理念，经公司研发团队针对纸箱行业特性的产品研发与产品更新换代，现推出PE全伺服双道全自动打包机、全智能纸箱码垛物流输送线、全智能片包/机包码垛物流输送线，经行业内多家上市公司验证与回复，设备稳定性高，已远超国内与国外多家品牌。本公司并配有全类型塑料托盘与全自动缠绕膜机、全自动加压式穿剑打包机，致力于为广大用户提供更方便、更便捷、与更完善的服务宗旨。

广东晟一严格遵循欧盟高端机械的制造工艺标准，将其贯穿于设计、制造、检测、销售和服务整个流程，确保每一台设备在出厂前都能达到欧盟标准。

广东晟一以全新的技术、精湛的制造工艺、优良的售后服务。诚信的经营理念、以在包装行业作为风向标，引领包装行业机械手码垛工序。

公司秉承勤奋、进取、发展、专业与真诚的努力下，必将得到更多的客户信赖与支持，为纸箱行业的发展献出一份绵薄之力。







Guangdong SUNYI Intelligent Technology Co., Ltd located in Sanshui District, Foshan city Guangdong Province, is an intelligent packaging equipment manufacturer that integrates research and development, production, sales, and service. It specializes in the intelligent transformation of corrugated paper packaging and factory automation equipment solutions. The company adheres to advanced industrial design concepts, and through the R&D team' product research and development, product updates targeting the characteristics of the corrugated packaging industry, We are now launching PE full servo dual channel automatic bundle strapping machine, full intelligent automatic carton robot palletizing systems, and full intelligent cardboard robot palletizing systems. After verification and response from multiple in the industry, the equipment has high stability, far surpassing multiple listed companies of domestic brands. Our company also has full automatic rotary pallet wrapping machine and pallet strapping machine, committed to providing customers with more convenient, comprehensive service.

Guangdong SUNYI strictly adheres to the manufacturing process standards of high-end machinery for European Union, integrating them throughout the entire process of design manufacturing,testing, sales, and service, ensuring that each equipment can meet customer's requirements.

Guangdong SUNYI with its new technology,exquisite manufacturing processes, and excellent after-sales service, faithful business philosophy, acts as a benchmark and leads the robotic palletizing process in the packaging industry.

With the efforts of diligence, progress, development, professionalism, and sincerity, the company will surely gain more customers' trust and support, and contribute its modest efforts to the development of the corrugated boxes packaging industry.

公司概况&车间概况
Company introduction

■ 标准化流程管理、精湛的制造工艺、优良的售后服务、诚信的经营理念。
Standard process management, excellent manufacturing technology, good sales service and faithful managing idea.



■ 产品设计均以自主研发、机械零部件、电控系统，性能稳定，市场占有率最高
The product design is based on independent research and development. The stable performance of our mechanical parts and electronic control system lead to the highest market share in domestic market.



■ 主要生产制造全自动机械手码垛输送线，技术领先，性能稳定，质量可靠
Mainly produce automatic robot palletizer system, with advanced technique,stable performance, and reliable quality.

发展历程&品牌证书
Development & brand certificate

2015年
Pe打包机、机械手码垛研发阶段
At researching stage of PE bundle strapping machine and robot palletizing system

2017年
广东晟一工商注册，正式投产并量产机械手码垛设备
SUNYI Registered and established,officially put into production for robotic palletizing equipments.

2019年
国内首款自住研发，纸箱定位器并获得国家发明专利证及30多项实用专利证
The first independent research and developed carton locator in domestic market,got the national patents and over 30 practical patent certificates.

2020年
荣获欧洲CE证书、高新技术企业、佛山市专精特新企业、此年全国晟一机械手分布180余套
Got CE Certificates, High and New Tech Enterprise,Foshan specialized and new tech enterprise,and install over 180 sets of robot palletizer system in domestic market.

2021年
全国首套片包、机包全自动机械手码垛输送线研发成功并在同年量产与全国多家上市公司签订战略合作伙伴
The first RDC robot palletizer system in China market sucessfully developed and produced,signed strategic partner contract with many listed companies.

2023年
全国首款四面拍齐整理机，采用框架式组合井字拍齐结构（实用发明专利）。同年上半年已在国内外销售60余套设备。并与俄罗斯、西班牙、阿根廷、泰国等相继签订合作。
The world's first 4side squaring machine use of a frame type combination well shaped flush structrue (practical invention patent),Sold more than 60sets in domestic market within the first half year,and sold to Russia,Thailand,Spain, Agentina,etc.

2025年
整体搬迁至10000平米现代智能化工厂
Move to10,000SQM Modern and Intelligent New Factory

■ 质量管理证书及川崎授权书


CFL CERTIFICATION CENTER
CERTIFICATION OF QUALITY MANAGEMENT SYSTEM
Guangdong SUNYI Intelligent Technology Co., Ltd
IAF CNAS


Kawasaki Robotics
Certificate
OF AUTHORIZATION
代理授权书
广东晟一智能科技有限公司

■ CE,UL&CSA Certificate


CEPROM ® S.A.
CERTIFICATE OF CONFORMITY
ROBOT PALLETIZER SYSTEM
CE


SGS
CERTIFICATE OF COMPLIANCE

■ 高新技术企业证书
High-tec Enterprise Certificate


高新技术企业
证书
企业名称：广东晟一智能科技有限公司
证书编号：GR202344009662
发证日期：2023年12月28日
有 效 期：三年
批准机关：

■ 佛山市专精特新企业证书
Specializing in specialty new technology enterprises of Foshan


佛山市专精特新企业
证 书
企业名称：广东晟一智能科技有限公司
证书编号：2021328
有 效 期：三年
佛山市工业和信息化局
2021年5月17日

■ 部分发明、实用新型专利证书 Patents


发明专利证书
实用新型专利证书

➤ 系统特点 System Feature



全自动机械手码垛速度：23-38 捆/分
Automatic robot palletizing speed: 23-38bundles/min

全智能纸箱码垛物流输送线，主要用于打捆后纸箱的码垛工序，用机械替代原有的人工码垛，减少企业对于人工的依赖与提高前道设备满负荷生产的效益，避免高强度重复性工种带来的人员流失与企业生产人员的不可控性，本公司产品具有高效运转、动作精准、码垛整齐，全智能化便捷式操作系统，更减少企业对人工的依赖。

The full intelligent robotic palletizing system is mainly used for the stacking process of bundled carton boxes, replacing the original manual stacking with machines, reducing the dependence of enterprises on labor and improving the efficiency of full load production of front-end equipment, avoiding personnel loss caused by high-strength repetitive work and uncontrollability of enterprise production personnel. Our company's products have efficient operation, precise action, neat stacking, and full intelligent and convenient operating system, Reduce the dependence of enterprises on labor force.

全智能纸箱码垛物流输送线包含：滚筒式轻载物流（可选提供履带式轻载物流）---快速定位装置---川崎机械臂--纸箱伺服专用夹具---纸箱机械臂专用底座---重载物流（可选提供履带式重载物流）---多点式防护栈板库---全纸品类吸垫纸系统---全球首款框架拉伸式四面拍齐等设备，可适用于全世界各类纸箱产品结构，现已在行业内占据领导地位。



The full intelligent carton robotic palletizing system includes: bundle feeding auto roller conveyors (optional plasticbelt feeding conveyors) - quick position and stacking device - Kawasaki robotic arm - special fixture for carton, robot base - pallet sending conveyors (optional heavy load plastic belt conveyors) - pallet magazine -Tie sheet - 4 side squaring device, it can be applied to various types of cartons and has now occupied a leading position in the industry.

全自动机械手码垛系统
Robot Palletizer System

系统性能列表及分析 Technical Parameters & Analysis

最大纸箱尺寸 Max. Carton Size	1200W*1400L*250 H mm 1400W*1400L*250 H mm
最小纸箱尺寸 Min. Carton Size	200W*300L*50H mm
最大捆包重量 Max. Bundle Weight	30 KG
捆包数量 Box quantity/bundle	5~20 PCS/Bundle捆

机械手臂堆叠能力 Robot Arm Palletizing Capacity

高速单包最快堆栈速度 High Speed Single Bundle Max. Stacking speed	23± 1bundles/Min	最小抓取高度 Min. Grabbing height	50mm
高速双包最快堆栈速度 High Speed Double Bundle Max. Stacking speed	38± 2bundles/Min	最大抓取宽度 Max. Grabbing width	1400W
堆叠位置精确度 Stacking Position Precision	±3mm	最小抓取宽度 Min. Grabbing width	1400W
最大抓取负载 Max. Grabbing weight	180 KG（含夹具重量 Including gripper weight）	最大堆栈面积 Max. Stacking area	1650W*1650L mm 1750W*1750L mm
最大抓取高度 Max. Grabbing height	400mm	最大堆栈高度 Max. Stacking Height	H2000mm (Exclude pallet)

栈板 Pallet

栈板最大规格 Pallet Max. Size	1400W*1400L*150H mm
栈板最小规格 Pallet Min. Size	800W*1000L*150H mm
栈板交换时间 Pallets Change time	8～10S
栈板储存高度 Pallet store Height	2000 mm
栈板定位精度 Pallet Position Precision	10 mm
最大输送负载 Max. Conveying load	1000 KG/m2

垫纸动作 Padding paper action

垫纸取放时间 Paper Pick and Place time	3S
垫纸尺寸 Padding paper size	最大与栈板尺寸相同 Max , size same as the pallet
垫纸要求 Padding paper requirement	尺寸工整固定 size neat and fixed

拍齐动作 Squaring Movement

最大夹齐尺寸 Max. Squaring Size	S40:1650W*1650L	S20:1750W*1750L
最小夹齐尺寸 Min. Squaring Size	S40:600W*750L	S20:600W*850L
循环时间 Circulation time	2-3 秒/2-3 Seconds	

➤ 机械手码垛系统分部配置

1、全自动码垛系统机械臂 Automatic robot arm



Kawasaki CP180L
最大负载(Max. load):180kg
最大臂展(Max. armspan):3150mm
速度(speed)：18~24次/分钟
（高速联动线）
(18~24times/min)
(high speed FFG)



ABB IRB 660
最大负载(Max. load):180kg
最大臂展(Max. armspan): 3150mm
速度(speed)：16-20次/分钟
（中高速联动线）
(16~20times/min)
(medium speed FFG)

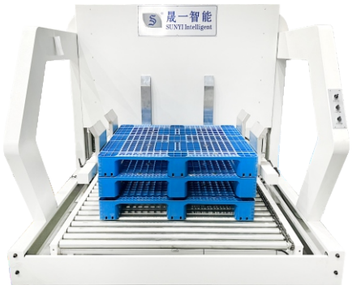


Gripper A

1、夹板选用厚度为:16mm,高强度6061航空铝合金材料，经表面氧化处理。
2、夹具采用定位夹取方式+选择性定位夹取方式两种功能，并配有防掉包光电感应。
3、采用西门子伺服驱动系统，具备自适应扭力检测功能与纸箱夹取方向外形尺寸自检测功能。

1.Made of super strong 6061 alumlnum alloy,the surface is oxidized;
2.Two functions are adopted: positioning gripping method and selective positioning gripping method, and equipped with anti drop photoelectric induction;
3.The gripper uses Siemens servo driver system,with adaptive torque ranging function.

2、自动栈板库 Automatic pallet magazine

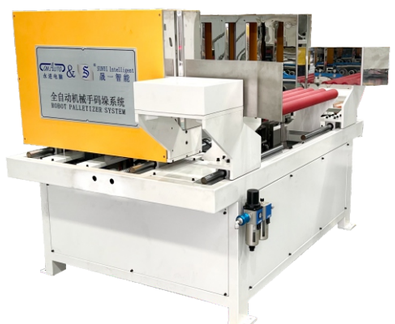


自动栈板库可自动抬升、可分离输送真空吹塑九脚托盘、川字、田字塑料和木质托盘功能。拥有多方位检测与多点控制系统，通过PLC控制完成托盘分离功能。
拥有自动及手动两种模式，内部设计防压托盘保护装置。

The automatic pallet magazine can automatically lift,separate,send plastic & wooden pallets.Plastic pallets are including blow molding nine feet pallets,injection molding pallet and square base pallet.Equipped with a multi-directional detection and multi-point control system,the pallet separation function is completed through PLC control.

It has two modes:automatic and manual,and is internally designed with an anti pressure pallet protection device.

3、快速定位器 Quick position and stacking device

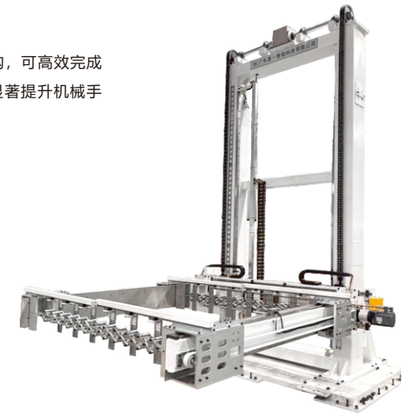


1、快速定位器内部采用墙板框架式结构，直线轨道与滚珠丝杠配合西门子伺服驱动系统，完成单包或双包的输送顶升定位功能（发明专利）。
2、送纸胶辊采用无缝钢管同步轮结构，表面包裹优力胶材质摩擦系数高，耐磨。
3、送纸胶辊固定方式采用卡夹式结构，维护保养更加便捷。

1.The internal structure of the quick locator adopts a wall panel frame structure, with linear tracks and ball screws in conjunction with Siemens servo drive system to achieve single or double package conveying and lifting positioning functions (invention patent).
2.The bundle feeding rubber roller adopts a seamless steel pipe synchronous wheel structure, with a high friction coefficient and wear resistance of the surface wrapped with superior adhesive material.
3.The fixing method of the paper feeding rubber roller adopts a clamp type structure, making maintenance more convenient.

设备概述：

S-20四面拍齐整理机是一款专为纸箱码垛设计的自动化拍齐设备，采用环形井字型拍齐框架和加厚拍臂结构，可高效完成单捆、双捆纸箱的四面拍齐整理。其专利设计特别适用于周长方向捆扎产品及阵列码垛跺型的精准拍齐，显著提升机械手码垛产品的工整性与稳定性。

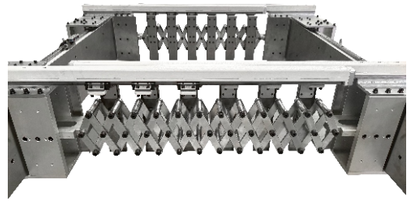


核心功能与设计亮点：

■ 环形井字同步拍齐技术（专利号：CN 22225388 U）
采用伺服电机驱动，配合同步皮带或高精度正时链条传动，实现四面同步无死角拍齐。
自动伸缩挡板同步移动，适应不同尺寸纸箱，确保常规跺型与复杂阵列跺型的对齐效果。

■ 高效升降系统
伺服电气驱动配合直线轨道提升结构，升降主梁内置1:1比重配重块，平衡负载并提升升降速度。
两侧配置自动防坠装置，符合CE安全认证标准，保障设备运行安全。

■ 高负载与宽尺寸适应能力
最大拍齐尺寸：1750mm（宽）×1750mm（长）。
最小拍齐尺寸：600mm（宽）×850mm（长）。
负载能力：1200kg/m²，满足高强度工作需求。



Description:

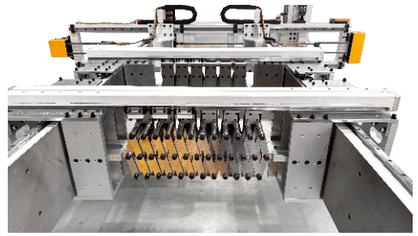
The S-20 four-sided squaring machine is an automatic squaring equipment specially designed for carton palletizing, which adopts an circular "#" pattern squaring frame and a thickened lapping arm structure, which can efficiently complete the four-sided squaring of single-bundle and double-bundle cartons. Its patented design is especially suitable for the precise squaring of bundled products in the perimeter direction and array palletizing pattern, which significantly improves the neatness and stability of the robotic palletizing products.

Main Functions & Design Highlights:

■ Circular "#"type Synchronous Squaring Technology (Patent No.: CN 22225388 U)
Driven by servo motor, with synchronous belt or high-precision chain drive, it can achieve synchronization on all sides seemlessly.
The automatic telescopic baffle moves synchronously to adapt to different sizes of cartons, ensuring the alignment effect of conventional pattern and complex array pattern.

■ Efficient lifting system
The servo electrical drive cooperates with the linear track lifting structure, and the lifting beam has a built-in 1:1 specific gravity counterweight to balance the load and increase the lifting speed.
Both sides are equipped with automatic anti-fall devices, which meet the CE safety certification standards to ensure the safety of equipment operation.

■ High load and wide size adaptability
Maximum size: 1750mm (width) × 1750mm (length).
Minimum size: 600mm (width) × 850mm (length).
Load capacity: 1200kg/m², to meet the needs of high-intensity work.



技术参数 Technical Parameters

专利号 Patent No.	CN202422752043.7
适用范围 Scope of application	单捆/双捆纸箱、周长捆扎纸箱、花垛、阵列码垛产品 single/double bundle cartons, perimeter strapping cartons, special pattern, array palletizing products
驱动方式 Drive	伺服电机+直线轨道 Servo motor + linear track
最大拍齐尺寸（W×L） Maximum squaring Size (W×L)	1750mm×1750mm
最小拍齐尺寸（W×L） Minimum squaring Size (W×L)	650W×750L×300Hmm
负载能力 Load capacity	1200kg/m²
安全认证 Safety Certifications	CE认证（含防坠装置） CE certification (including fall arrest device)

适用场景

■ 标准化纸箱码垛对齐，提升托盘空间利用率。
■ 自动化产线末端码垛整理，减少人工干预。
■ 特殊跺型处理：针对周长捆扎或复杂阵列跺型的高精度拍齐需求。

Application

■ Standardized carton palletizing and squaring to improve pallets space utilization.
■ Automatic palletizing and alignment at the end of the production line to reduce manual intervention.
■ Special stamping treatment: high-precision squaring requirements for perimeter strapping or complex array stacking pattern.

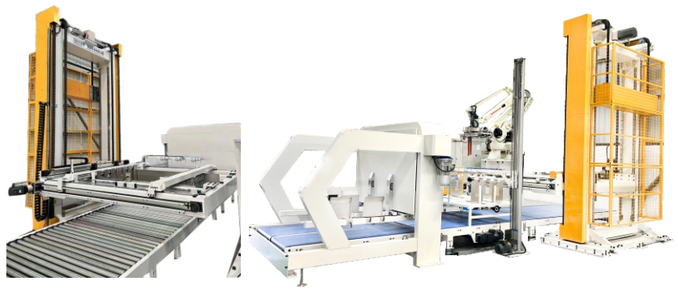
优势总结

■ 高精度：伺服驱动+正时链条/皮带传动，拍齐误差≤±2mm。
■ 高安全性：CE认证防坠装置+配重平衡系统，保障长期稳定运行。
■ 强适应性：宽尺寸范围覆盖，兼容多种工业码垛场景。
该设备适用于追求高效、安全、工整输出的现代化全自动码垛生产线。

Summary of benefits

■ High precision: servo drive + chain/belt drive, the alignment error is ≤±2mm.
■ High safety: CE certified anti-fall device + counterweight balance system to ensure long-term stable operation.
■ Strong adaptability: wide range of size coverage, compatible with a variety of industrial carton palletizing scenarios.
The equipment is suitable for modern automatic palletizing production lines which pursue efficient, safe and neat output.

4、S-40四面拍齐整理机 S-40 Four side squaring machine



1、全球首款四面拍齐整理机，采用框架式组合井字拍齐结构(实用发明专利)，框架采用整体焊接加工，内置XY轴采用同步连轴器，有效提高设备运行精度及稳定性。
2、框架井字拍齐可实现四面无死角拍齐，有效解决单双带捆扎或周长方向捆扎纸包整齐度。
3、重型双链条设计，框架与配重块采用等重量设计，安全防护等级更高，设备运转更加安全、稳定。

1.The world's first 4side squaring machine use of a frame type combination well shaped flush structure (practical invention patent), the frame adopts overall welding processing, and the built-in XY axis adopts a synchronous coupling, effectively improving the equipment's operating accuracy and stability.
2.The frame well shaped alignment can achieve no dead corners on all sides, effectively solving the problem of single and double belt bundling or perimeter direction bundling for neatness.
3.The heavy-duty double chain design features an equal weight design for the frame and counterweight block, resulting in a higher level of safety protection and safer and more stable equipment operation.

5、吸垫纸储存器 Tie-sheet unit



1、垫纸系统可自动推荐或人工选择两种方式垫纸方式，通过夹具夹取中隔垫纸，可满足托盘面垫底纸，同时也可满足纸箱单层与多层垫中隔纸功能，有效提高纸箱在码垛与成品运转时的稳定性。
2、垫纸储存器采用前端90°直角定位并具有定中功能，可满足大小垫纸规格，吸纸架采用伺服升降系统可根据码垛高度跟踪垫纸，吸纸器具备自动旋转功能配合夹具夹取中隔垫纸。

1.The tie sheet system have 2 types operation: automatically recommend or manually select. By clamping the middle spacing paper with the gripper, it can meet the requirements of baseboard padding and also meet the function of middle layers padding, effectively improving the stability of the paper stacks during palletizing and finished product operation.
2.The paper pad storage device adopts a front 90 °positioning and has a centering function, which can meet the size of the pad paper specifications. The paper suction rack adopts a servo lifting system to track the pad paper according to the stacking height. The paper suction device has an automatic rotation function, can combine with the gripper to clamp the intermediate pad paper.

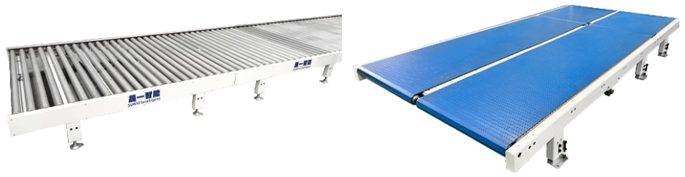
6、轻载自动输送物流 Auto bundle feeding conveyor



轻载自动滚筒皮带输送物流主梁采用激光切割折弯及矩形管焊接结构，主梁侧封板设计，螺丝不外露、侧面美光整机结实耐用，皮带输送台驱动轴采用双导向防跑偏设计，PVC皮带采用整体焊接工艺，运行更加稳定。

The bundle feeding conveyors adopt laser cutting bending and rectangular pipe welding structure. The side sealing plate design of the main beam is not exposed, and the sides are looking good, sturdy and durable. The driven axle of the belt conveyors adopts dual guide anti deviation design, and the PVC belt adopts an overall welding process, making operation more stable.

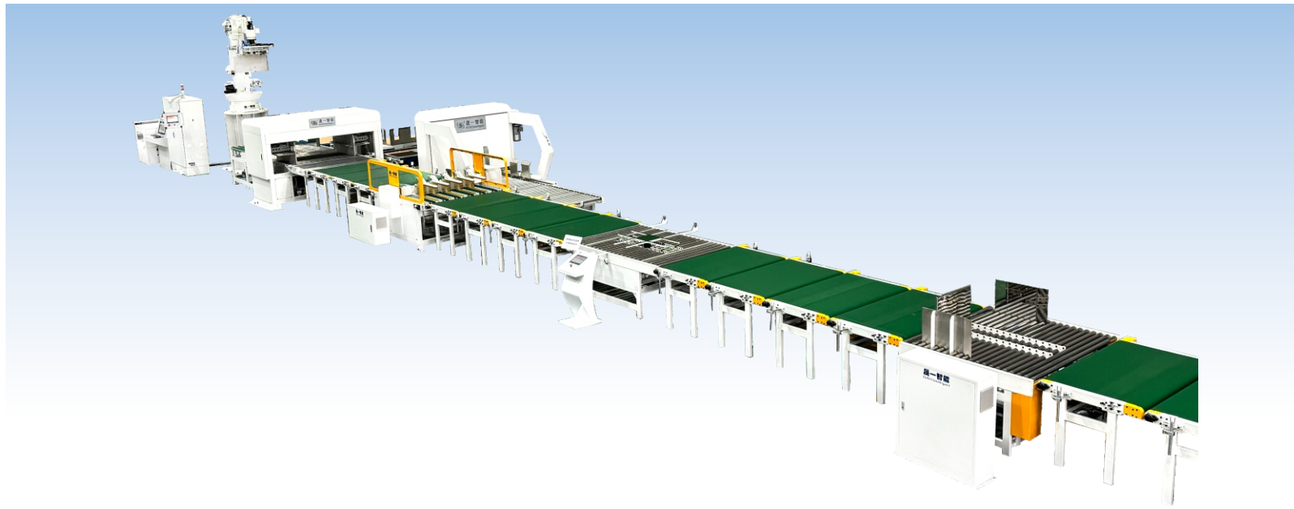
7、重载自动输送物流 Heavy load auto conveyor



重载自动滚筒、履带输送物流主梁采用激光切割折弯结构，码垛工作区重载物流，采用整体框架结构，具备双向自动对中定位功能，可适应多种规格托盘居中定位功能。

The pallet transfering auto roller conveyors adopt laser cutting and bending structure, and the stacking area for heavy-duty conveyors use an overall frame structure with two-way automatic centering and positioning function, which can adapt to the centering and positioning function of various specifications of pallets.

➤ 片包箱机械手:A款整线效果图 RDC robot palletizer system





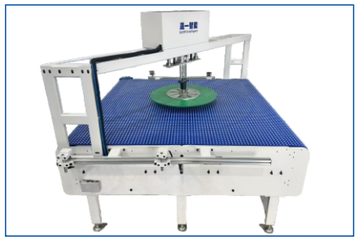
XY移载机
XY conveyor



四面整理机（B型）
4-side squaring machine B



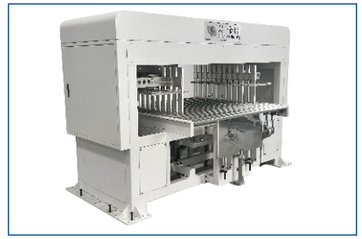
自动顶升旋转机
Rotating table



360°履带旋转机
360° Rotating Device



自动翻转机
Flipper



自动叠包机
Doubler



定位器
Locator



片包机械手夹具
Gripper B



吸垫板
Tie sheet

➤ 系统特点 System Feature

穿剑式打包机针对栈板打包设计，大型栈板重物的自动捆包设备，开放式弓架活动的穿带能将货物牢固地捆在一起，栈板打包机推动灵活，操作简单，适合于在线无人化打包，一般用于机械手码垛后面。穿剑式打包机的功用是使塑料带能紧贴于被捆扎包件表面，保证包件在运输、贮存中不因捆扎不牢而散落，同时还因捆扎整齐美观。

Pallet strapper, also called "Pallet press machine", is designed for pallet packing.It is an automatic baling equipment for large pallets and heavy objects. The open movable strapping belt can firmly tie the goods together. The pallet strapper is flexible to move, simple to operate, and suitable for inline unmanned packaging and generally used behind robot palletizing. Its function is to make the plastic belt close to the surface of the bundled package, so as to ensure that the package will not be scattered due to poor binding during transportation and storage, and at the same time, the bundle is neat and beautiful.



货物规格 Goods Specification	
L	500-2100mm
W	500-2100mm
H	500-2500mm
打包机头技术指标 Strapping Head specification	
驱动 Drive	电动 electro motor
送带速度 Strap feeding speed	约 3.1m/s approx.3.1m/s
接头类型 Type of joint	热焊接头 Friction-weld 200-2500N
张力 Tension force	最大限度 1800N 可调 max.1800N adjustable
宽度 PET Width	12 or 16mm
厚度 PET Thickness	0.6-1.0mm
连接点宽度 Connecting Point Width	25mm

➤ 整机规格参数 General Specification

动力需求 Power Requirement	
电压 Voltage	400～380 Volts AC
防护等级 Protection class	IP 55
频率 Frequency	50 Hz
环境要求 Environment Requirement	环境要求
环境温度 Ambient temperature	-20℃-45℃
空气污染程度 Degree of air pollution	标准 normal
地板平整度 Floor flatness	+/-10mm
最大湿度 Humidity max.	＜50% at 40°C or ＜90% at 20°C
气动 Pneumatic	5-6 bar flow pressure （5-6bar 流动压力）
打包框架尺寸（以实际设计为准） Strapping frame Size (Based on actual customer's specification)	
可通过的高度 Max.Height	2000mm
可通过的宽度 Max.Width	2000mm
压板长度 Pressing Plate Length	1000mm
电源规格 Power Specification	
操作电压 Voltage	3/N/PE
联结载荷 Connected Load	380V,50Hz
控制电压 Control Voltage	24V,DC
总功率 Total Power	3.0KVA
工作能力 Working Ability	
最大加压 Max pressure	500-2000KG
捆孔效率 Stringing Speed	13-18s/捆 13-18s/string
可运行的程序数量 Program quantity	不少于8个 Not less than 8
打包带类型 Strapping Type	
打包带 String	PET
打包带宽度 Strapping Width	12mm
带筒直径 Diameter of string core	406mm
带筒宽度 String Core Width	150mm
打包位置偏离度 Strapping Position Deviation Range	±25mm

全自动缠绕机
Automatic Rotary-arm Pallet Stretch Wrapper

- 本设备是将拉伸膜自动缠绕到托盘货物上的专用设备。对货物起到防尘、防潮、防散货的包装作用，从而起到了对产品的保护、节约包装成本、降低工人劳动强度、提高包装效果的专用设备。

- 托盘货物放到输送线上到包装机工位，按照设定好的包装参数、自动启动包装机，自动上膜，实现连续包装过程，缠绕完毕，自动断膜，自动焊接。自动输出包装工位，下一个货物包装循环开始。

- 本设备由：摇臂驱动部件、膜架升降部件、机架部件、安全防护装置、膜架部件、自动上断膜机构（国家专利）、摇臂缠绕机自动控制系统：1、安全连锁机构；2、电器及控制统。

- This is the Special-purpose equipment for using the stretching film automatically wropping the goods on the pallet for anti-dust,anti-wet and anti-bulk.It can protect the goods,save the packaging cost,reduce workers labor intensity,and increase the packaging effect.

- Goods in pallet put on the conveying line to the wrapping section,according to the setting wrapping parameters,wrapper will be automatically started and filming to achieve the wrapping process continuously,after finishing,film automatically be cut and welding.And goods automatically conveyed to the next section.Next goods start the circulating wrapping.

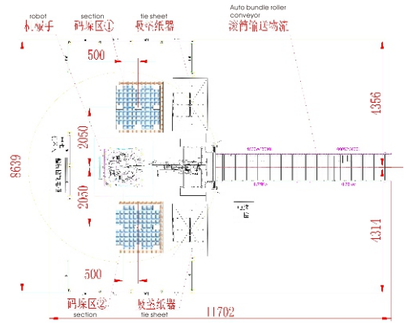
- The machine is composed of Rotary arm driving section,Film rack lifting section,Mechanism rack,Safty device,Film rack,automatically filming and break section(National patent),Rotary arm wrapper pneumatic control system.Safety locks and Electrical control system.



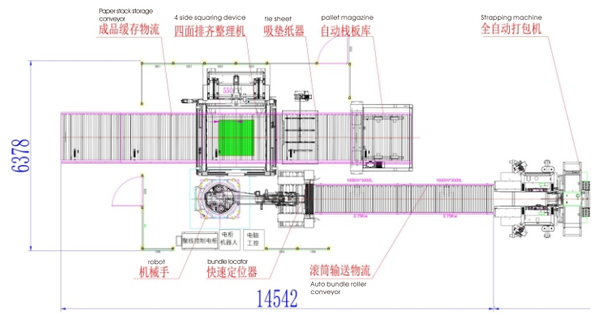
技术参数 Techinical Parameters	
I.裹包对象 Wrapping Object Spec.	
包装物规格 WrappingObject Spec	L(1000-1600)*W(1000-1600)*H(500-2200)mm incl.pallet
货物重量 Object Weight	MAX1500kg
托盘尺寸 Pallet size	客户提供为准 Customized
II.机器参数 Machine Technical Parameters	
机器承重 Load Weight	1500Kg（max）
包装效率 Wrapping Speed	15rpm,30pallets/hour 25rpm,45-50pallets/hour
输送线速度 Conveying Speed	206mm/s
输送面标高 Conveying Platform Height	客户提供为准 Customized
整机功率 Power	≈3KW
整机重量 Machine Weight	1500Kg
工作电压 Working Voltage	380VAC/3 相 phase5 线 wires/50Hz
耗气量 Gas consumption	2000ml/min
气动工作压力 Pneumatic Working Pressure	0.5~0.6MPa
III.包装材料 Wrapping Material	
拉伸膜材料 Stretching Film Material	LLDPE 拉伸薄膜： LLDPE Stretching Film
薄膜宽度 Film Width	500mm
厚度 Film thickness	20-35m
最大外径 Max.Diameter	260mm
纸芯内孔 Paper Core inner bore	76mm
纸芯长度 Paper Core Length	520mm

全自动机械手码垛系统
Robot Palletizer System

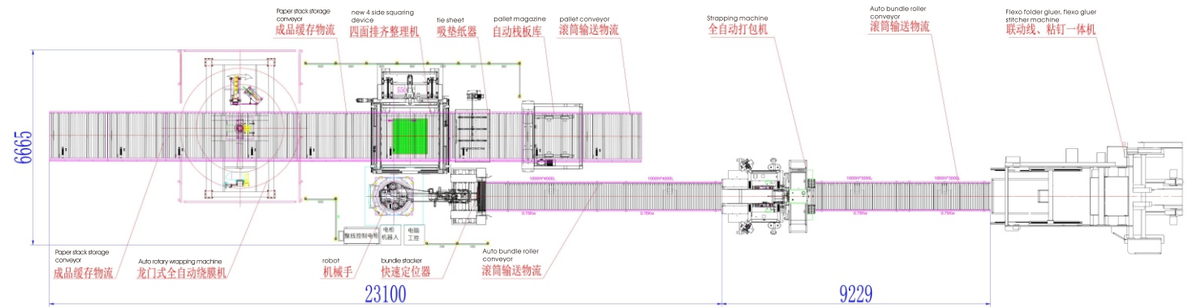
➤ 联线方案一：机械手码垛系统（双码垛）
Inline solution 1: Auto Robot Palletizer System (Double Section)



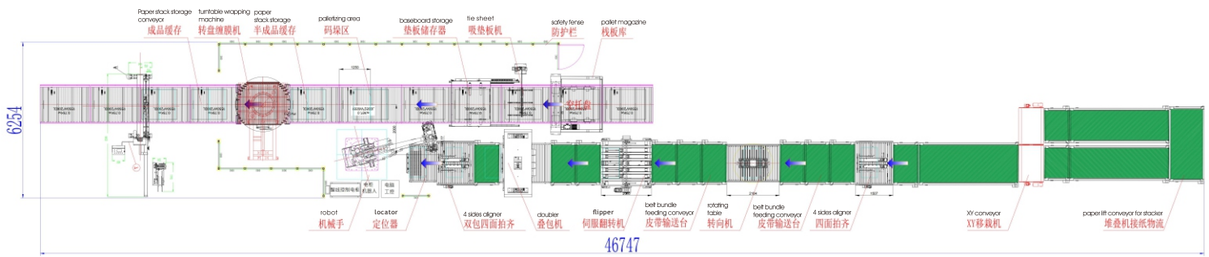
➤ 联线方案二：全自动机械手码垛系统（单码垛）
Inline solution 2: Auto Robot Palletizer System (Single Section)



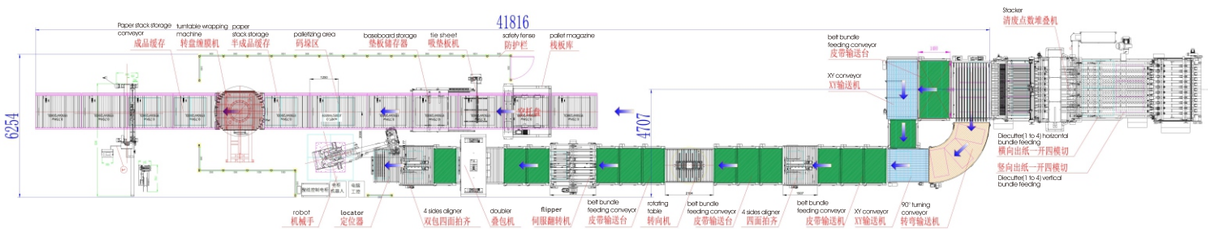
➤ 联线方案三：全自动打包机+全自动机械手码垛系统+全自动缠绕膜机（直行方案）
Inline solution 3: Auto strapping machine+Auto robot palletizer system + Auto rotary wrapping machine(Direct line solution)



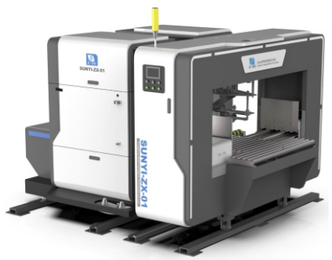
➤ 联线方案四：全自动片包箱机械手码垛系统 横向接纸（方案1）
Inline solution 4: Auto RDC robot palletizer system horizontal bundle feeding (solution1)

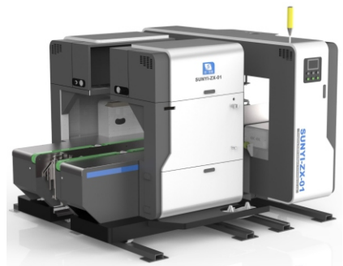


➤ 联线方案五：全自动片包箱机械手码垛系统 高配方案（方案2）
Inline solution 5: Auto RDC robot palletizer system - higher setting solution



纸箱打包机
Automatic PE Bundles Tying Machine for Carton boxes



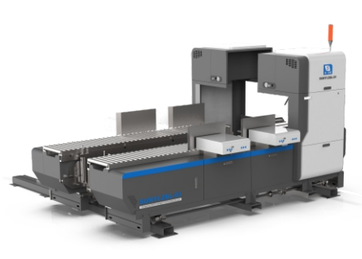


- 整机采用西门子PLC、V90伺服控制系统，打包机应用了4G网络远程维护系统，可实现与联动线、打包机、机械手码垛系统智能互联。
  The whole machine adopted Siemens PLC and V90 servo control system,and 4G network remote maintenance system which can realize intelligent interconnection with FFG line, tying machine and robot palletizing system.
- 全自动多点位润滑加油
  Fully automatic multi-point lubrication and refueling
- Pe绳全自动伺服双绳打包机，可连接全自动粘箱机、钉箱机全自动打包
  PE rope fully automatic servo double rope packaging machine, which can be connected to fully automatic box gluing and nailing machines for automatic packaging
- 高速印刷联动线，可联线整机调整尺寸、自动调机功能，可与机械手实现在线联动高中低速全自动打包
  High speed printing linkage line, which can adjust the size of the entire machine and automatically adjust the machine. It can achieve online linkage function with a robotic arm, and can be fully automatically packaged at high, medium, and low speeds.

纸箱打包机参数 Carton Bundling Machine Specifications

机型 Model	SUNYI-ZX-01-S	SUNYI-ZX-01-H
打包尺寸 (A) Packing Size (A)	380–1400 mm	380–1400 mm
打包尺寸 (B) Packing Size (B)	260–1400 mm	260–1400 mm
打包尺寸 (C) Packing Size (C)	60-300 mm	60-300 mm
捆绑速度 Packing Capacity*	28-30 包/分钟 (28–30 packs/min)	32-35 包/分钟 (32–35 packs/min)
尺寸变换 Size Switch	触摸屏自动调整 (Full auto by touch panel)	触摸屏自动调整 (Full auto by touch panel)
使用包装材料 Packing Material	PE绳 (28#–35#)	PE绳 (28#–50#) 如用50＃提前说明
机械尺寸 Machine Size	3200(L)×2790(W)×2650(H) mm	3200(L)×2790(W)×2650(H) mm
工作压力 Working Pressure	0.5-0.8 Mpa	0.8-1.2 Mpa
工作电压 Working Voltage	三相 380V (Three phase 380V)	三相 380V (Three phase 380V)
总功率 Total Power	5.0 kW	5.5 kW
控制系统 Control System	西门子系统+三菱电机驱动	西门子系统+西门子V90伺服驱动
远程监控 Remote Monitoring	4G网络远程维护(4G remote maintenance)	4G网络远程维护(4G remote maintenance)

纸板打包机
Automatic PE Bundles Tying Machine for Carton boxes


- 可与纸板线点数、模切点数连线打包
  Inline corrugator counter;and RDC counter for Strapping.
- 可集合多台半自动钉箱机连线自动打包
  It can gather multiple semi-automatic stitching machine inline automatically packaging.
- 节约劳动力（相当于4-8个人工），减少因人的因素影响生产；节约生产成本
  （PP绳每米的成本是PE绳的3~5倍左右）
  Save labor (equivalent to 4-8 labor) and reduce the impact of human factors on production; Save production costs (the cost per meter of PP rope is about 3-5 times that of PE rope)
- 打包速度是传统PP带全自动打包机的两倍以上
  The speed is more than 2 times that of the traditional PP belt strapping machine.
- 纸板打包机
  Bundles Tying Machine for Carton sheets.

纸板打包机参数 Board Bundling Machine Specifications

机型 Model	SUNYI-ZB-02-S	SUNYI-ZB-02-H
打包尺寸 (A) Packing Size (A)	500–3000 mm	500–3000 mm
打包尺寸 (B) Packing Size (B)	260–1380 mm	260–2500 mm
打包尺寸 (C) Packing Size (C)	50-300 mm	50-350 mm
捆绑速度 Packing Capacity*	25-28 包/分钟 (25–28 packs/min)	28±2 包/分钟 (28±2 packs/min)
尺寸变换 Size Switch	触摸屏自动调整 (Full auto by touch panel)	触摸屏自动调整 (Full auto by touch panel)
使用包装材料 Packing Material	PE绳 (28#–35#)	PE绳 (28#–35#)
机械尺寸 Machine Size	2820×2750×2000 mm	3662×4000×2053 mm
工作压力 Working Pressure	0.5-0.8 Mpa	0.5-0.8 Mpa
工作电压 Working Voltage	三相 380V (Three phase 380V)	三相 380V (Three phase 380V)
总功率 Total Power	5.0 kW	5.5 kW

西门子PLC、V90伺服控制及4G远程维护等先进功能，可满足纸箱及纸板打包的多样化需求。如有特殊尺寸或功能要求，可提供定制服务。



产品说明 Product description

- 移动型； Mobile model;
- 机体颜色为（RAL-9010)米黄白色；Color of machine body（RAL-9010)Beige yellowish and white;
- 无人操作、减少工人，有效降低企业两人用工成本，减少劳动强度；
  Unmanned operation reduces workforce, effectively lowering the labor cost of two-person operations for enterprises and decreasing physical exertion;
- 高效能低噪音的油压系统，故障率低；High efficiency and low noise hydraulic system with low failure rate;
- 人机操作介面，对话设定，以及故障提示说明，易于操作及维修；
  The human-machine interface, dialog settings, and fault prompts are easy to operate and maintain;
- 前拍齐板采用气缸拍齐，不伤纸板；The front alignment cylinder ensures precise alignment without damaging the cardboard;
- 瓦积式连接送纸，与设备同步补给；Tile-type paper feeding with synchronous replenishment;
- 皮带速度变频调速度，采用同步皮带，防止打滑现象；
  The belt speed is regulated via frequency conversion, utilizing a synchronous belt to prevent slippage;
- 整机移动式。Whole machine Movable.

主要技术特点 Key technical features

- 该机采用变频电机传动，PLC集中控制、同步轮带传动、运行控制精准；
  The machine employs frequency conversion motor drive, centralized PLC control, and synchronous pulley belt drive for precise operation control;
- 液压升降上料，保持升降的稳定性，做到降低成本、减小人员、提高效率；
  Hydraulic lifting and feeding system ensures stable operation, reducing costs, minimizing manpower, and enhancing efficiency;
- 操作简单，使用方便，适合于印刷机，平压平模切机，钉糊一体机使用。
  Easy to operate and convenient to use, suitable for Flexo printer, flat-bed flat-cutting machines, and Stitcher-gluer.

主要配置说明 Main Configuration Instructions

- 拍纸板为一体式拍纸置于水平输送带前端，自动纵向拍纸；
  The integrated paper-pounding device is placed at the front end of the horizontal conveyor belt, automatically performing longitudinal paper-pounding.
- 拨叉翻转后自动推动纸板前送；
  The fork flips and automatically pushes the cardboard forward;
- 水平输送带输送可由水印机光电控制，变频调速；
  The horizontal conveyor belt can be controlled by photoelectric control of the printing machine, and the speed can be adjusted by frequency conversion.
- 链条推纸上升用光电开关控制；The chain pusher is controlled by photoelectric switch;
- 模组带入纸方式。module feed method.

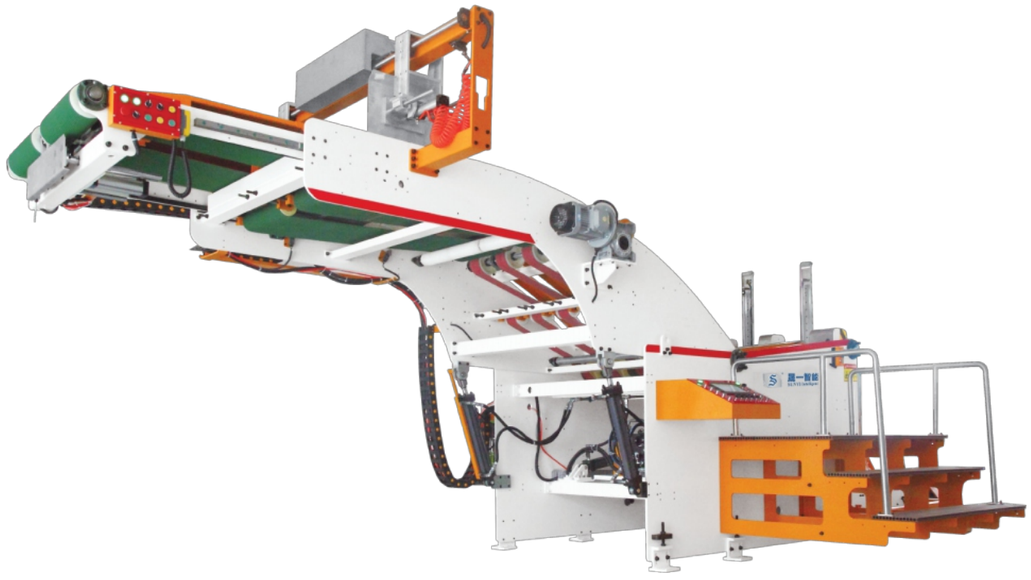
主要技术参数

型号 Model	SY-618	SY-920-925	SY-1125-1228	SY-1624-1632
最大用纸规格 Max size	600×1800(mm)	900×2500(mm)	1200×2800(mm)	1600×3200(mm)
最小用纸规格 Min size	200×400(mm)	230×450(mm)	350×600(mm)	450×600(mm)
车速表 Feeding Type	450-400	400-350	330-230	220-180
纸板堆积高度 Cardboard stacking height	1800 mm			
最大堆积重量 Maximum stacking weight	2000 Kg			
电压 Voltage	380V / 50Hz			
纸板升降方式 Cardboard Lifting Method	链条拨叉升降 Chain fork lift			
拨叉翻转动力 Turning fork power	液压驱动 Hydraulic drive			
水平输送部升降动力 Lifting power of horizontal conveyor	液压驱动 Hydraulic drive			

设备参数 Corollary equipment parameters

型号 Model	SY-618	SY-920-925	SY-1125-1228	SY-1624-1632
最大用纸规格 Max size	600×1800(mm)	900×2500(mm)	1200×2800(mm)	1600×3200(mm)
最小用纸规格 Min size	200×400(mm)	230×450(mm)	350×600(mm)	450×600(mm)
配套设备接纸平台后挡架高度 Height of rear stop of supporting equipment receiving platform	H =1210mm			
配套设备有无侧拍装置 Supporting equipment with or without side-shooting device	有 / Have			
车间内是否装有地辊（辊面离地面高度） Whether the foor roller is installed in the workshop (the height of the roller surface from the ground)	以需方提供数据为准 Subject to the data provided by the buyer			
配套设备踏板离地高度 Pedal height of supporting equipment	以需方提供数据为准 Subject to the data provided by the buyer			
机器长×宽 ×高 Machine length×width×height	7500*3500*2900（固定臂） 8600*2500*2900（伸缩臂）			





平压平模切机专用
Pre-feeder for Flatbed Die-cutter



西门子1200PLC
Siemens PLC

Professional accessories



施耐德低压电气
Schneider low voltage electric parts



西门子V90伺服驱动
Siemens servo driver



汇川变频器
Inovance inverter



公司拥有专业的研发团队和售后安装维护团队，安装调试与培训一体式-并拥有网络工程师团队通过晟一专用软件实现网络实时对接。

The company has a professional R&D team and after-sales installation team,integrating installation,debugging,and training.It also has a team of network engineers to achieve real time online connection through SUNYI dedicated software.



▲ 东莞银洲Dongguan Yinzhou



▲ 东莞银洲Dongguan Yinzhou



▲ 东莞振兴Dongguan Zhenxing



▲ 联合集团（大连）工厂RengoGroup(Dalian Factory)



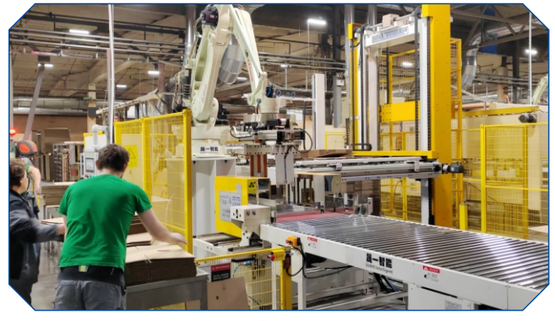
▲ 加拿大Canada Customer



▲ 西班牙客户Spain Customer



▲ 英国UK customer



▲ 俄罗斯客户Russia Customer



产品国内市场销量领先，同时积极开拓国际市场，期望拓展更宽更广阔的全球市场。

SUNYI products have got the leading sales in domestic market, at the same time, it also actively develops the international market, hoping to explore a wider and broader global market.

业务覆盖范围 Business coverage

- 全自动打包机
  Automatic bundling machine
- 全自动机械手码垛
  Automatic robot palletizer system
- 全自动缠绕膜机
  Automatic Rotary-arm Pallet Stretch Wrapper
- 全自动穿剑打包机
  Automatic pallet strapping machine
- 全自动送纸机
  Fully Automatic Paper Feeder

广东，福建，湖北，湖南，安徽
Guangdong, Fujian, Hubei, Hunan, Anhui

上海，浙江，江苏，山东，河北
Shanghai, Zhejiang, Jiangsu, Shandong, Hebei

黑龙江，吉林，辽宁，宁夏，内蒙
Heilongjiang, Jilin, Liaoning, Ningxia, Inner Mongolia

四川，重庆，甘肃等……
Sichuan, Chongqing, etc...

英国，加拿大，俄罗斯，印度，泰国，越南，西班牙，阿根廷，墨西哥，波兰，巴西，土耳其，柬埔寨，越南，哈萨克斯坦，沙特
U.K.,Canada,Russia,India,Thailand,Vietnam,Spain,Argentina, Mexico,Poland,Brazil,Turkey,Cambodia,Vietnam,Kazakhstan,Saudi Arabia

合作客户以及搭配联动线品牌 Customers and inline FFG brand

部分合作客户 Customers

联动线品牌 Inline FFG brands