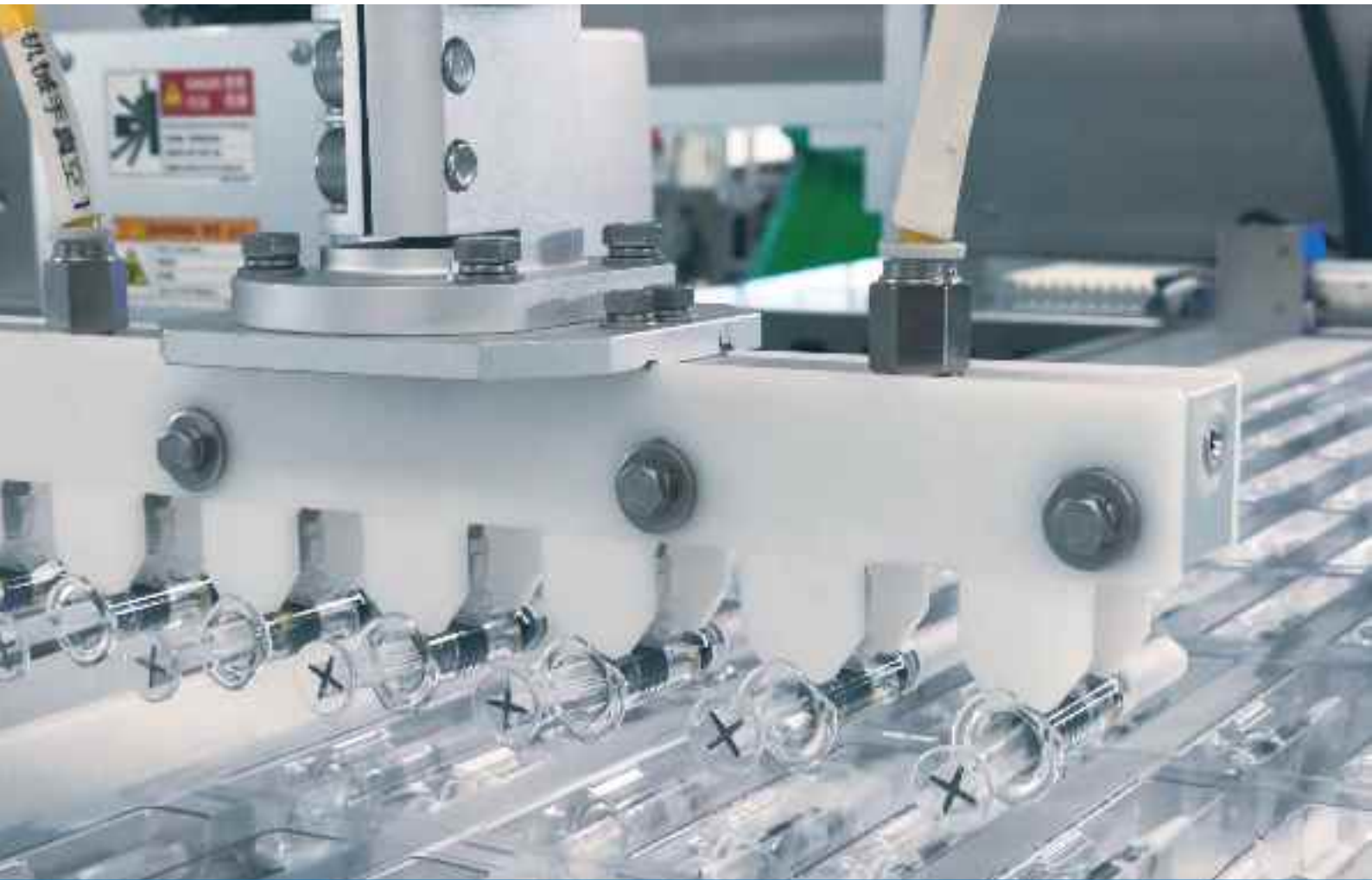




Intelligent Secondary Package Overall Solution

智能包装整体解决方案

让世界制药工业插上智慧的翅膀

Equip global pharmaceutical manufacturing industry with intelligent wings.





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楚天科技股份有限公司成立于2000年，是中国医药装备行业的领军企业，也是世界医药装备行业的知名企业之一。主营业务系医药装备及其整体技术解决方案，并率先推动智慧医药工厂的研究与开发。公司系中国A股上市公司。旗下拥有德国ROMACO集团、楚天华通、四川省医药设计院、楚天飞云、楚天源创、楚天微球、楚天思优特、楚天思为康、楚天华兴、楚天长兴、楚天科仪、楚天净邦、楚天派特、楚天博源、楚天新材料、楚天智能机器人等十多家全资或控股子公司，全球员工总数9000余人，总资产110亿元。

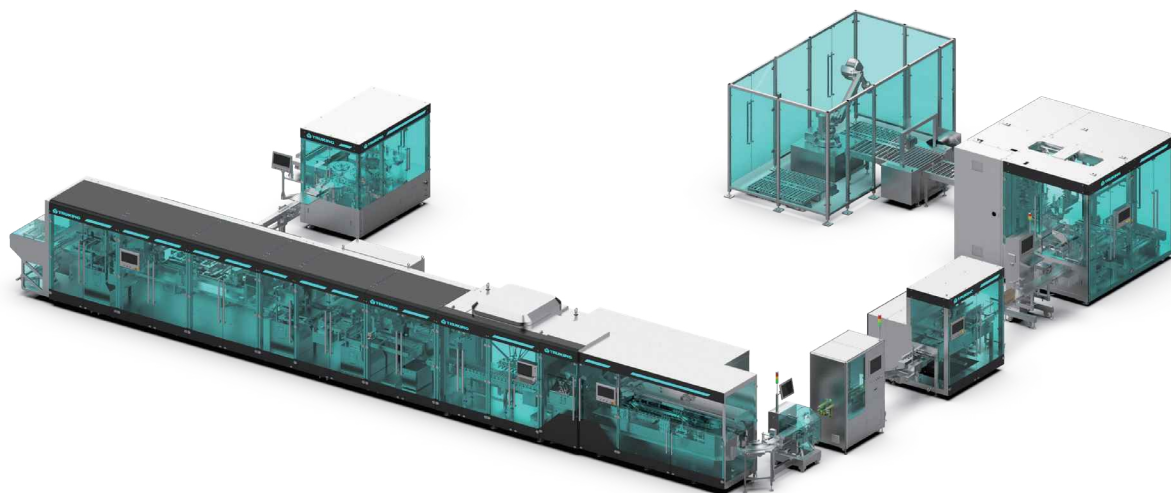
公司已有长沙和德国两大运营总部，建有长沙中央技术研究院、欧洲技术研究院和四川省医药设计院等研发机构。设有国家级企业技术中心，国家级创新基地，博士后科研工作站，院士专家工作站等多个技术与创新平台。截至2023年12月31日，共提出5466项中国专利申请，授权专利4313项，有效专利3090项。另提出54件PCT国际专利申请，在美国、俄罗斯、印度、韩国、德国、印尼、日本、欧洲等多国获得26项专利授权。牵头制订了本系统国家行业产品技术标准20多项。集团产品与服务已累计覆盖180多个国家和地区，国际市场占有率正逐年快速提升。

Founded in 2000, Truking Technology Limited has become a leading pharmaceutical equipment company in China and renowned worldwide. The company specializes in pharmaceutical equipment and integrated solutions and takes the initiative to push forward the R&D of smart pharmaceutical factories. It is a listed A-share company with multiple wholly-owned or holding subsidiaries, such as Germany-based Romaco Group, Truking Watertown, Sichuan Pharmaceuticals Design Institute, Truking Feiyun, Truking Ingenuity, Truking Micro-Sphere, Truking SUT, Truking Gene, Wachine, Truking Changxing, Truking Scientific Instrument, Truking Jingbang Engineering Technology, Truking Pitide Biotechnology, Truking Boyuan Intelligent Technology, Truking New Material, Truking Intelligent Robot etc. Truking has over 9000 employees around the globe, with a total asset of over 11 billion RMB.

Truking has two operational headquarters in Changsha, China, and Germany, with research and development institutions including Changsha Central Technology Research Institute, Europe Technology Research Institute, and Sichuan Pharmaceuticals Design Institute. It has established many platforms for technology innovation, such as the National Enterprise Technology Center, National Innovation Center, Post-Doctoral Scientific Research Station, and Academician Expert Workstation. By December 31, 2023, a total of 5,466 patent applications from China have been submitted, with 4,313 patents granted and 3,090 patents currently in force. Additionally, 54 PCT international patent applications were filed, resulting in 26 patents granted in multiple countries including the United States, Russia, India, South Korea, Germany, Indonesia, Japan, and Europe. The company has led the development of over 20 national industry product technical standards for this system. The products and services of the group have now reached over 180 countries and regions, with its international market share steadily increasing year by year.

西林 / 安瓿 / 口服液 / 卡式瓶后道包装整体解决方案

The Overall Solution of the Vials & Ampoules & Cartridge & Oral Liquids



主要用途 / Main Application

适用于西林瓶、安瓿瓶、口服液瓶、卡式瓶等玻璃瓶装类型药品的自动化后道包装，整线由贴标机、泡罩机、装盒机、称重机、激光打码机、三维裹包机、监管码系统、装箱机、码垛系统组成。

Mainly used for automatic secondary packaging of glass bottles such as vials, ampoules, oral liquid bottles, and cartridges. The whole line consists of labeling machine, blister machine, cartoning machine, weighing machine, laser coding machine, 3D wrapping machine, supervision code system, case packing machine and palletizing system.

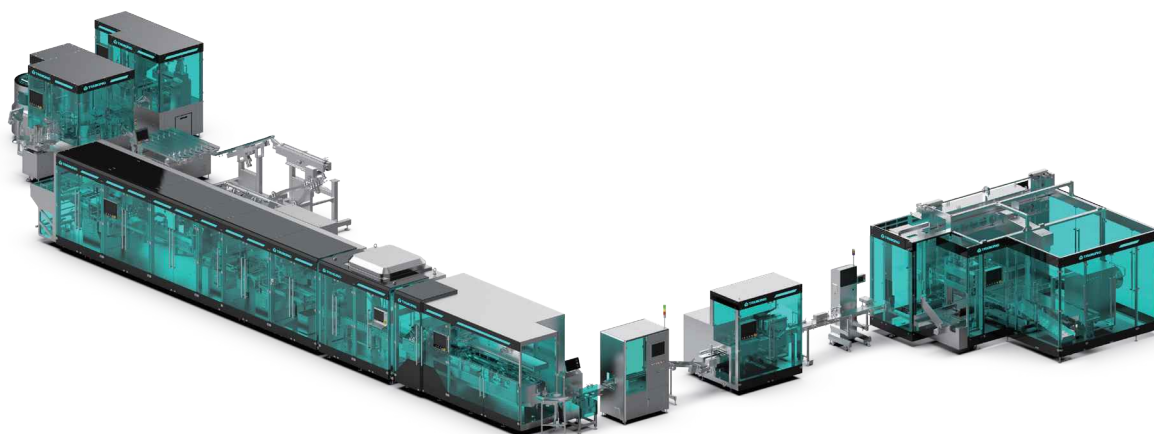


性能优势 / Performance Advantages

- 整线稳定运行速度可达 450 盒 / 分钟；
- 完善的质量实时监控矩阵保障生产质量连续稳定；
- 单机设备间可灵活组合完成不同的包装形式；
- 可通过更换轻量化的模具兼容多种规格生产；
- 工作面纯阳台式结构设计，便于清洁维护；
- 整线全伺服驱动，运行高度协同流畅；
- 制药行业特性化设计，符合 GMP 认证要求；
- 统一的简约 UI 控制系统，可快速掌握操作；
- 德国技术标准设计制造，可 24h 稳定运行。

- + Stable running speed reach to 450 boxes/min;
- + Quality real-time monitoring matrix ensures continuous and stable production quality;
- + Flexible combination of stand-alone equipment can complete different packaging forms;
- + Lightweight molds can be replaced to be compatible with various specifications;
- + Balcony structure design working surface, easy to clean and maintain;
- + Full servo drive, highly coordinated and smooth operation;
- + Characteristic design meets the requirements of GMP certification;
- + Unified simple UI control system, easy to master and operate;
- + Designed and manufactured according to German technical standards, can run stably for 24 hours.

预充针后道包装整体解决方案 PFS Secondary Packaging Overall Solution



主要用途 / Main Application

适用于预充针分装类型药品的自动化后道包装，整线由脱巢机、拧杆贴标机、缓存系统、泡罩机、装盒机、称重机、激光打码机、三维裹包机、监管码系统、装箱码垛一体机组成。

Mainly used for automatic secondary packaging of pre-filled syringes. It is composed of de-nesting machine, plunger labeling machine, a buffer system, blister machine, cartoning machine, weighing machine, laser coding machine, 3D wrapping machine, supervision code system, packing and palletizing integrated machine.



性能优势 / Performance Advantages

- 整线稳定运行速度可达 400 支 / 分钟；
- 完善的质量实时监控矩阵保障生产质量连续稳定；
- 单机设备间可灵活组合完成不同的包装形式；
- 可通过更换轻量化的模具兼容多种规格生产；
- 工作面纯阳台式结构设计，便于清洁维护；
- 整线全伺服驱动，运行高度协同流畅；
- 制药行业特性化设计，符合 GMP 认证要求；
- 统一的简约 UI 控制系统，可快速掌握操作；
- 德国技术标准设计制造，可 24h 稳定运行。

- + Stable running speed reach to 400 boxes/min;
- + Quality real-time monitoring matrix ensures continuous and stable production quality;
- + Flexible combination of stand-alone equipment can complete different packaging forms;
- + Lightweight molds can be replaced to be compatible with various specifications;
- + Balcony structure design working surface, easy to clean and maintain
- + Full servo drive, highly coordinated and smooth operation;
- + Characteristic design meets the requirements of GMP certification;
- + Unified simple UI control system, easy to master and operate;
- + Designed and manufactured according to German technical standards, can run stably for 24 hours.

西林瓶贴标机

Vials Labeling Machine



主要用途 / Main Application

LM-A01 贴标机是一台全自动高速贴标机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，可用于对西林瓶、安瓿瓶和口服液等圆形瓶子进行标签打印和粘贴工作，具有自动进料、标签打印检测、标签粘贴、不良品剔除、合格品输出等功能。

The LM-A01 is a fully automatic high-speed labeling machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It mainly used for label printing and pasting of circular bottles such as vials, ampoules and oral liquids, and has functions such as automatic feeding, label printing detection, label pasting, rejecting defective products, and outputting qualified products.



性能优势 / Performance Advantages

- ◎ 宽网带进料，平稳容量大不易倒瓶，配备料位检测；
 - ◎ 稳定出标速度可达 80 米 / 分钟，配备伺服抚标装置；
 - ◎ 采用双路漏贴检测系统，避免不良品流出；
 - ◎ 由出料拨轮和剔废拨轮完成出料控制，两个拨轮均配有多通道真空吸附系统，可保证高速出料时准确不卡料，配有自适应式的剔废收集托板。
- + Wide mesh belt feeding, stable and large capacity, not easy to fall bottles, equipped with material level detection;
 - + Stable marking speed up to 80 m/min, equipped with servo marking device;
 - + 2-way missing detection system to avoid the outflow of defective products;
 - + The outfeeding control is completed by the outfeed dial and the waste rejection dial. Both dials are equipped with a multi-channel vacuum adsorption system, which can ensure accurate and non-jamming during high-speed outfeed, and equipped with an adaptive waste collection tray.



技术参数 / Product Parameters

LM-A01 Product Parameters	
生产产能 Capacity	450 ~ 550 瓶 / 分钟 (以 2ml 西林瓶计) bottles/min (2ml)
适用规格 Suitable Size	Φ15 ~ 26mm
出标方向 Outfeed Direction	标签长度方向出标 Label length direction
打印方式 Printing Method	色带打印 / 喷墨打印 Ribbon Printing / Inkjet Printing
进料高度 Infeed Height	950±50mm
出料高度 Outfeed Height	950±50mm
电源参数 Electric Parameters	2.4kW, AC380V±10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	30m ³ /h(0.6MPa-0.8MPa)
外形尺寸 Dimension	3000×2330×1800mm
整机重量 Weight	1500Kg

预充针脱巢机

PFS De-nesting Machine



主要用途 / Main Application

PSHK300 是一台全自动高速脱巢机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，用于对蜂巢盒内的预充针进行脱巢输出，具有自动进盒、调整巢盒方向、取巢板、取预充针、巢盒堆叠回收、巢板集中回收、输出预充针等功能。

PSHK300 is a fully automatic high-speed de-nesting machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It is used to output the PFS in the nest box, has the functions of automatic box feeding, adjusting the direction of the nest box, taking the PFS, stacking the nest box, collecting the nest box, and outputting the PFS.



性能优势 / Performance Advantages

- 配备 1.5 米长进料输送装置，工人上料轻松；
 - 伺服脱巢，高速运行更稳定；
 - 空巢盒自动堆叠收集；
 - 柔性脱巢，减少颗粒，对针筒无损伤；
 - 带物料缓存平板，避免输送轨道堵料。
- + Equipped with a 1.5-meter-long feeding conveying device, workers can easily load materials;
 - + Servo de-nesting, high-speed operation is more stable;
 - + Empty nest boxes are automatically stacked and collected;
 - + Flexible de-nesting, reducing particles, no damage to the syringe;
 - + Material buffer plate, to avoid material blockage on the conveying track.



技术参数 / Product Parameters

PSHK300 Product Parameters	
生产产能 Capacity	300 瓶 / 分钟 (以 1ml 计) 300 bottles/min (1ml)
生产规格 Suitable Size	1-20ml
适用巢盒 Suitable Net Box	1、10×10 标准 1ml standard 2、10×10 细长 1ml slim 3、10×10 标准 2.25ml standard 4、10×10 标准 3ml standard 5、10×16 标准 1ml standard 6、10×16 细长 1ml slim 7、根据样品非标定制 Customized
进料高度 Infeed Height	920±30mm
出料高度 Outfeed Height	920±30mm
电源参数 Electric Parameters	3.5kW, AC380V±10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	接口管径 Interface diameterφ16mm, 6m ³ /h(0.6MPa-0.8MPa)
外形尺寸 Dimension	2520×1173×2130mm
整机重量 Weight	1800Kg

预充针拧杆贴标机

PFS Plunger & Labeling Machine



主要用途 / Main Application

PPL20 是一台全自动高速拧杆贴标一体机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，用于完成预充针产品包装工序的推杆拧入和标签打印粘贴工作，具有自动进料、推杆理料送料、推杆拧入胶塞、标签打印粘贴、不良品剔除、合格品输出等功能。

PPL20 is a fully automatic high-speed plunger insertion & labeling machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11 and CE. It is used to complete the plunger insertion label printing and pasting, with functions such as automatic feeding, plunger sorting and feeding, push robber screwing into plunger, label printing and pasting, rejecting defective products, and outputting qualified products.



性能优势 / Performance Advantages

- 配有满料检测、少料检测，缺料检测、卡料检测传感器，配有吹扫装置；
- 伺服控制拧杆旋转，精准高速生产；
- 贴标工位后配有漏贴检测和推杆位置检测装置；
- 标配 7 道 S 型缓存装置，缓存时间长达 3 至 5 分钟，可提高联线生产时整线的综合生产效率。
- 可配置空瓶视觉检测系统；
- 可增加分步式拧杆机构，精准控制拧杆扭力。
- + Equipped with full material, less material, shortages of material, jam of materials sensors, equipped with purging device;
- + Servo control the rotation of the plunger insertion, accurate and high-speed production;
- + Missing label detection and plunger rod position detection devices after the labeling station;
- + Standard 7-channel S-type buffer device, the buffer time is 3 to 5 minutes, which can improve the overall production efficiency during online production;
- + Empty bottle visual inspection system can be configured;
- + Step-by-step plunger insertion mechanism, precise control of torque.



技术参数 / Product Parameters

PPL20 Product Parameters	
生产产能 Capacity	300 支 / 分钟 boxes/min (以 1ml 标准型计) (1ml)
生产规格 Suitable Size	0.5 ~ 5ml 玻璃瓶预充针，注射器长度 ≤ 115mm，推杆长度 37 ~ 100mm，加塞后推杆杆帽离瓶口距离 ≥ 18mm，标签贴付位置离法兰下端面 7 ~ 8mm
出标方向 Outfeed Direction	标签长度方向出标 Label length direction
打印方式 Printing Method	热转印 Thermal transfer printing
进料高度 Infeed Height	920±30mm
出料高度 Outfeed Height	800±30mm
电源参数 Electric Parameters	9kW, AC380V±10%(50Hz)-5
气源参数 Air Source Parameters	接口管径 Interface diameter φ16mm, 6m³/h(0.6MPa-0.8MPa)
外形尺寸 Dimension	3170×3010×2050mm
整机重量 Weight	4500Kg

泡罩包装机

Blister Packaging Machine



主要用途 / Main Application

DPP380 是一台高速多功能泡罩机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，用于西林瓶、安瓿瓶、卡式瓶、预充针、口服液瓶等产品的单一或混合泡罩包装，具有自动理料进料、泡罩成型、加料入托、覆膜热封、三期打印、冲易撕线、冲裁出料等功能，配有泡罩成型检测、加料视觉检测、热源主动隔离、牵引自动纠偏等完善的质量保证功能。

DPP380 is a high-speed multifunctional blister machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It is used for the single or mixed blister packaging of vials, ampoules, cartridges, PFS, and oral liquids, with functions such as automatic material sorting and feeding, blister forming, feeding into trays, film lamination and heat sealing, 3-phase printing, punching and tearing lines, punching and discharging, etc., Equipped with complete quality assurance functions such as blister forming inspection, feeding visual inspection, active isolation of heat source, and automatic rectification of traction.



性能优势 / Performance Advantages

- ◎ 不停机换 PVC，具备两卷 PVC 相互更替使用，具有 PVC 缺料报警；
- ◎ 加热均匀，并配备主动分离机构；
- ◎ 采用预冲压 + 吹塑组合成型，避免成型不均和破孔；
- + PVC can be replaced without stopping the machine, with 2 rolls of PVC replaced with each other, with PVC material shortage alarm;
- + Uniform heating and equipped with active separation mechanism;
- + Pre-stamping and blow molding combined to avoid uneven molding and breakage;

- ◎ 采用抽屉式安装设计，可快速换模；
 - ◎ 配置电子凸轮驱动，无机械损耗，成型参数可调整；
 - ◎ 配备双路交替压瓶装置，配备冒瓶检测装置，避免瓶子异常弹出；
 - ◎ 配备视觉检测装置，可单个不良品精准剔除；
 - ◎ 膜卷可快速安装和拼接；
 - ◎ 采用直线式机械手对泡罩进行出料转接，转接位置可参数化调整，输出时不抓取不良品，可实现单板精准剔除。
- + Drawer style installation design for quick mold change;
 - + Electronic cam drive, no mechanical loss, adjustable molding parameters;
 - + 2-way alternate bottle pressing device; bottle-escape detection device to avoid abnormal ejection of bottles;
 - + Visual inspection device can accurately reject single defective products;
 - + The film roll can be quickly installed and spliced;
 - + A linear manipulator is used to transfer the blister, and the transfer position can be adjusted by parameter, so that the defective products are not caught during the output, and the single board can be accurately removed.

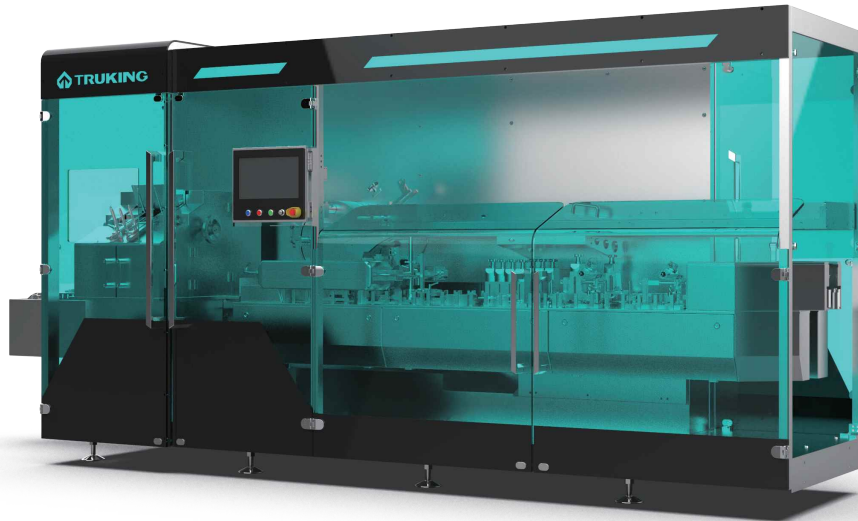


技术参数 / Product Parameters

DPP380 Product Parameters	
生产产能 Capacity	10 ~ 35 冲 / 分钟 punch/min
成型材料 Forming Materials	L370×W230×H26mm
覆膜材料 Film Material	PET/PE/EVA 复合膜、透析纸、铝箔，厚度 0.02 ~ 0.06mm。 PET/PE/EVA composite membrane, dialysis paper, aluminum foil, thickness 0.02 ~ 0.06mm.
进料高度 Infeed Height	920±30mm
出料高度 Outfeed Height	920±30mm
电源参数 Electric Parameters	36kW, AC380V±10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	接口管径 Interface diameterφ16mm, 42m ³ /h(0.6MPa-0.8MPa)
外形尺寸 Dimension	(单 single 7676) (双 double 9167) (三 Triple 10410) ×1903×2105mm
整机重量 Weight	(单 single 8000Kg) (双 double 9000Kg) (三 Triple 10000Kg)

自动装盒机

Automatic Cartoning Machine



主要用途 / Main Application

PCH555 装盒机是一款全自动超高速卧式装盒机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于西林瓶、预充针、安瓿瓶、口服液瓶、BFS 等产品的泡罩装盒或裸瓶装盒，具有自动进料输送、说明书或小册子在线下料、纸盒输送开盒、产品和说明书装载、纸盒封盒等功能，具有进料检测，说明书料位、输送、入盒检测，纸盒开盒、输送、封盒检测等生产全过程监测系统。

PCH555 is a fully automatic ultra-high-speed horizontal cartoning machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It is mainly used for the blister packaging or bare bottle packaging of vials, PFS, ampoules, oral liquid bottles and BFS, with automatic feeding and conveying, online unloading of the booklets, carton conveying and unpacking, product and instruction loading, carton sealing and other functions. It has a monitoring system for the whole production process such as feeding detection, manual material level, conveying, box entry detection, carton unpacking, transportation, and box sealing detection.

性能优势 / Performance Advantages

- 配备双通道料位检测，无瓶不下说明书与纸盒；
- 配置德国进口的原装 GUK 品牌折纸机，精度高，高速稳定；
- 配备扭力弹簧夹对说明书进行输送，夹子与说明书 C 型曲面接触，避免了输送过程中说明书出现歪斜、掉落的风险，保障设备高速稳定运行；
- + Double-channel material detection, no bottle no manual and carton;
- + The original GUK brand origami machine imported from Germany has high precision, high speed and stability;
- + The torsion spring clip to transport the manual, the clip is in contact with the C-shaped surface of the manual, which avoids the risk of skewing and falling of the manual during the transportation process, and ensures the high-speed and stable operation of the equipment;
- + The rotary 4-way unpacking device is equipped with a vacuum

- 采用旋转式四路开盒装置进行取盒开盒，配有真空拉伸预开盒装置，可消除纸盒开盒时的应力，保证高速开盒的稳定性；
 - 采用组合式推杆，保障装盒稳定性；
 - 推杆组件采用意大利原装进口组件，定位精准，传动阻尼小，可长时间高速运行，运行稳定性高；
 - 配备荧光光电检测装置，避免漏装说明书；
 - 配备双路激光电眼检测装置，自动剃废。
- stretching pre-opening device, which can eliminate the stress when the carton is opened and ensure the stability of high-speed unpacking;
 - + Combined push rod to ensure the stability of the box;
 - + The push rod components are imported from Italy, with precise positioning, small transmission damping, long-term high-speed operation and high operating stability;
 - + Fluorescent photoelectric detection device to avoid missing instructions;
 - + Dual-channel laser electric eye detection device, automatic waste rejection.



技术参数 / Product Parameters

PCH555 Product Parameters	
生产产能 Capacity	300 ~ 500 盒 / 分钟 boxes/min
纸盒尺寸 Case Dimension	长度 Length: 65 ~ 180mm; 宽度 Width: 33 ~ 55mm; 高度 Height: 20 ~ 55mm; 最大纸盒需满足 Max Dimension: 宽 + 高 Width + Height < 120mm
纸盒材质 Case Materials	250 ~ 300 g/m ² 标准白卡纸 Standard white cardboard
说明书尺寸 Manual Dimension	取决于待包产品的纸盒尺寸, 最小 (90 长 × 105 宽) mm, 最大 (320 长 × 210 宽) mm Depends on the case size, min(90L × 105W) max(320L × 210W)
说明书材质 Manual Materials	60 ~ 70g/m ² Standard Double Adhesive Paper
进料高度 Infeed Height	900/1100±30mm
出料高度 Outfeed Height	850±30mm
电源参数 Electric Parameters	10kW, AC380V±10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	接口管径 Interface diameterφ16mm, 16m ³ /h(0.6MPa-0.8MPa)
外形尺寸 Dimension	4704/5883 (蜘蛛手转接 Spider hand transfer) × 1908 × 2100mm
整机重量 Weight	4500Kg

三维裹包机

3D Wrapping Machine



主要用途 / Main Application

BWS280 裹包机是一款全自动三维裹包机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于西林瓶、预充针、安瓿瓶、卡式瓶、BFS 等产品的小盒三维裹包包装，具有自动进料输送、小盒立盒整理、膜材切割输送、消除静电、裹盒端封、折耳侧封、气流散热等功能；具有进料检测、膜材料位、输送、到位检测、热封温度检测等生产全过程监测系统。

BWS280 is a fully automatic 3D wrapping machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It is mainly used for the 3D packaging of vials, PFS, ampoules, cartridges, BFS, etc., the product has the functions of automatic feeding and conveying, small box vertical box sorting, film cutting and conveying, eliminating static electricity, wrapping box end sealing, folding ear side sealing, airflow heat dissipation and other functions; The whole production process includes the monitoring system such as material position, transportation, position detection, heat sealing temperature detection, etc.



性能优势 / Performance Advantages

- ◎ 下坡皮带进料，保证小盒高速稳定；
 - ◎ 气胀轴固定膜卷，更换方便，带低位提示；
 - ◎ 采用夹持热封皮带进行连续热封和出料输送，热封时间均一，外观质量稳定，可避免药品长时间处于高温区，避免出现中包粘连的现象；
 - ◎ 出料带散热保证药性稳定；
 - ◎ 伺服控制动作，精度高稳定好。
- + Downhill belt feeding ensures high speed and stability of the small box;
 - + The inflatable shaft fixes the film roll, easy to replace and has a low-level prompt;
 - + Clamping heat-sealing belt for continuous heat-sealing and outfeed conveying, uniform heat-sealing time, can prevent the medicine from being in the high temperature area for a long time and avoid adhesion;
 - + The outfeed belt heat dissipation ensures the stability of the drugs;
 - + Servo control the action, high precision and good stability.



技术参数 / Product Parameters

BWS280 Product Parameters	
生产产能 Capacity	≤ 40 包 / 分钟 Packets/min
裹包尺寸 Wrapping Dimension	最大裹包尺寸：长 320× 宽 225× 高 125mm, 宽 + 高 < 250mm Max Wrapping Dimension: L320×W225×H125mm,W+H < 250mm
纸盒材质 Case Materials	BOPP 膜；最大膜宽 280mm BOPP Film; Max film width 280mm
膜材规格 Film Materials Size	厚度 0.022 ~ 0.028mm；膜卷内径 70-75mm，外径 300mm thickness 0.022 ~ 0.028mm; Inner diameter of film roll 70-75mm, external diameter 300mm
进料高度 Infeed Height	900±30mm
出料高度 Outfeed Height	900±30mm
电源参数 Electric Parameters	18kW, AC380V±10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	接口管径 Interface diameterφ16mm, 5m³/h(0.6MPa-0.8MPa)
外形尺寸 Dimension	3510×1855×2100mm
整机重量 Weight	1500-2000Kg

装箱码垛机

Case Packing Palletizer



主要用途 / Main Application

MZ3 装箱码垛机是一款全自动立式装箱码垛一体机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于西林瓶、预充针、安瓿瓶、卡式瓶、BFS 等产品的小盒、中包或中盒进行装箱，具有自动进料理料、纸箱开箱、立式装箱、垫板纸投放、合格证投放、胶带封箱、大箱标签打印贴标、捆扎打包、自动码垛等功能；配有进料检测，纸箱料位、输送、到位检测等生产全过程监测系统。

MZ3 is a fully automatic vertical packing and palletizing machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11 and CE. It is mainly used for the case packaging of vials, PFS, ampoules, cartridges, and BFS etc.

It has the function of automatic feeding of materials, carton unpacking, vertical casing, backing paper delivery, certificate delivery, tape sealing, large box label printing and labeling, bundling and packaging, automatic palletizing and other functions; equipped with feeding detection. The whole production process includes the monitoring system such as feeding detection, material position, transportation, position detection etc.



性能优势 / Performance Advantages

- ◎ 伺服系统整理纸盒，并配备超长缓存料仓；
 - ◎ 伺服开箱，开箱精准可靠；
 - ◎ 上下同时封箱，封箱平整捆扎可靠；
 - ◎ 集成自动码垛系统，结构紧凑，占地面积小，还可集成大箱标签在线打印贴标机，自动完成包装关系关联。
- + Servo system sorts out the carton and is equipped with an extra-long buffer storage bin;
 - + Servo unpacking, accurate and reliable unpacking;
 - + The upper and lower sides are sealed at the same time;
 - + Integrated automatic palletizing system, compact structure, small size, can also be integrated with a large box label online printing and labeling machine to automatically complete the packaging relationship.

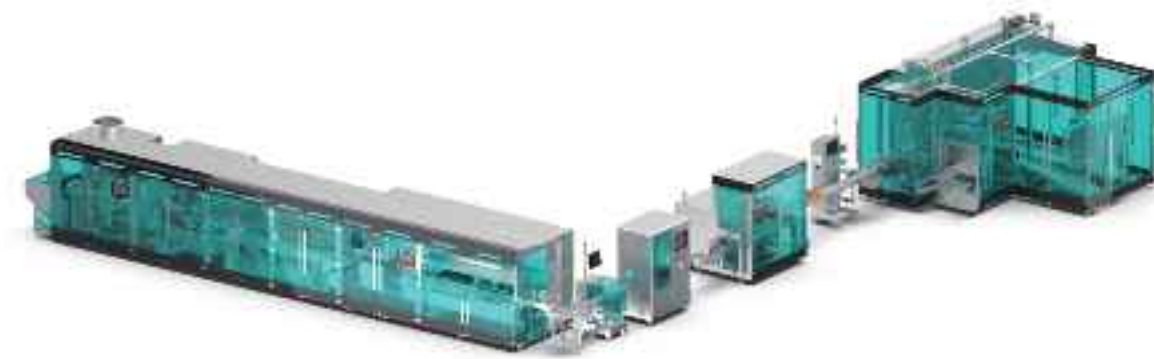


技术参数 / Product Parameters

MZ3 Product Parameters	
生产产能 Capacity	3 箱 / 分钟 3 case/min
装箱尺寸 Casing Materials	最大装箱尺寸 Max: 450×315×350mm 最小装箱尺寸 Mix: 180×150×120mm
纸箱材质 Case Materials	3 层或 5 层瓦楞纸箱 3-layer or 5-layer corrugated case
封箱胶带 Sealing Tape	胶卷内径 76mm，最大外径 200mm Inner diameter 76mm, max. outer diameter 200mm
进料高度 Infeed Height	950±30mm
电源参数 Electric Parameters	22kW, AC380V±10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	接口管径 Interface diameterφ16mm, 42m ³ /h(0.6MPa-0.8MPa)
外形尺寸 Dimension	4825×4050×3100mm
整机重量 Weight	5000Kg

铝塑 / 铝铝包装整体解决方案

Alu-plastic & alu-alu packaging overall solution



主要用途 / Main Application

适用于胶囊、片剂类型药品的自动化铝塑或铝铝包装，整线由铝塑泡罩机、枕包机、装盒机、称重机、激光打码机、三维裹包机、监管码系统、装箱码垛一体机组成。

It is suitable for automatic alu-plastic or alu-alu packaging of capsule and tablet type drugs. The whole line consists of aluminum-plastic blister machine, pillow wrapping machine, cartoning machine, weighing machine, laser coding machine, 3D wrapping machine, supervision code system, packing and palletizing integrated machine.



性能优势 / Performance Advantages

- 整线稳定运行速度可达 500 板 / 分钟、300 盒 / 分钟；
 - 完善的质量实时监控矩阵保障生产质量连续稳定；
 - 单机设备间可灵活组合完成不同的包装形式；
 - 可通过更换轻量化的模具兼容多种规格生产；
 - 工作面纯阳台式结构设计，便于清洁维护；
 - 整线全伺服驱动，运行高度协同流畅；
 - 制药行业特性化设计，符合 GMP 认证要求；
 - 统一的简约 UI 控制系统，可快速掌握操作；
 - 德国技术标准设计制造，可 24h 稳定运行。
- + Stable running speed reach to 500 blister/ min, 300 boxes/min;
 - + Quality real-time monitoring matrix ensures continuous and stable production quality;
 - + Flexible combination of stand-alone equipment can complete different packaging forms;
 - + Lightweight molds can be replaced to be compatible with various specifications;
 - + Balcony structure design working surface, easy to clean and maintain;
 - + Full servo drive, highly coordinated and smooth operation;
 - + Characteristic design meets the requirements of GMP certification;
 - + Unified simple UI control system, easy to master and operate;
 - + Designed and manufactured according to German technical standards, can run stably for 24 hours.

铝塑 / 铝铝泡罩包装机

Blister Packaging Machine



主要用途 / Main Application

BPH360 是一台高速泡罩包装机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于胶囊、片剂等口服固体制剂的自动化泡罩包装，具有自动泡罩成型、自动加料、覆膜热封、三期压印、冲易撕线、板块冲裁、废边收集、转接输出等功能，配有泡罩成型检测、泡罩加料检测等完善的质量保证功能。

BPH360 is a high-speed blister packaging machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It is mainly used for automatic blister packaging of oral solid preparations such as capsules and tablets. It has the functions of automatic blister forming, automatic feeding, film lamination and heat sealing, 3-phase imprinting, punching and tearing line, plate blanking, waste collection, transfer output, etc., equipped with complete quality assurance functions such as blister forming detection and blister feeding detection.



性能优势 / Performance Advantages

- 不停机换 PVC，具备两卷 PVC 相互更替使用，具有 PVC 缺料报警；
 - 配备视觉检测装置对泡罩内的物料量进行检测，防止出现缺料、破损、的不良品流出。
- + PVC can be replaced without stopping the machine, with 2 rolls of PVC replaced with each other, with PVC material shortage alarm;
 - + Equipped with a visual inspection device to detect the amount of material in the blister to prevent material shortage, damage, and outflow of defective products;

- ◎ 膜卷采用气胀轴定位安装，配有真空定位接膜平台，可实现膜卷的快速安装和拼接。
 - ◎ 规格件免工具快拆设计，简单方便易操作；
 - ◎ 配备四向往复式转接机械手保证高速下精度；
 - ◎ 配备废边冲切装置，不停机收废料。
- + The film roll is positioned and installed by shafts, and is equipped with a vacuum positioning film connection platform, which can realize the rapid installation and splicing of the film roll;
 - + The tool-free quick-release design of the specification parts is simple, convenient and easy to operate;
 - + Equipped with 4-direction reciprocating transfer manipulator to ensure high-speed accuracy;
 - + Equipped with a waste edge punching device to collect waste without stopping the machine.

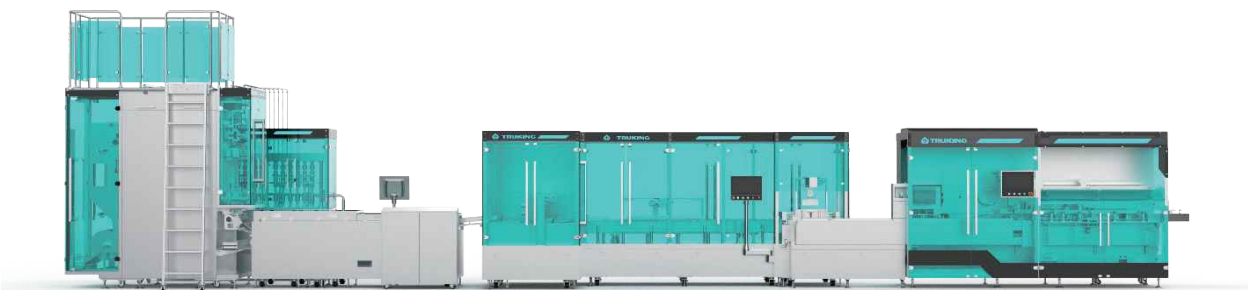


技术参数 / Product Parameters

BPH360 Product Parameters	
生产产能 Capacity	150 冲 / 分钟 punch/min (铝塑 Alu-plastic) , 80 ~ 120 冲 / 分钟 punch/min (铝铝 alu-alu)
成型材料 Forming Materials	PVC 聚氯乙烯固体药用硬片, 厚度 0.2 ~ 0.35mm PVC polyvinyl chloride solid medicinal hard sheet, thickness 0.2 ~ 0.35mm 冷冲压成形铝 (PA/Al/PVC) , 厚度 0.14 ~ 0.15mm Cold stamping aluminum (PA/Al/PVC), thickness 0.14 ~ 0.15mm
覆膜材料 Film Material	PTP 铝箔, 厚度 0.024 ~ 0.032 mm
进料高度 Infeed Height	1000±30mm
出料高度 Outfeed Height	1100±30mm
电源参数 Electric Parameters	36kW, AC380V±10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	接口管径 Interface diameterφ16mm, 40m ³ /h(0.6MPa-0.8MPa)
外形尺寸 Dimension	4500×1800×2100mm
整机重量 Weight	4000Kg

条包包装整体解决方案

Stick-pack packaging overall solution



主要用途 / Main Application

适用于颗粒、粉末、药片、口服液、膏滋类型药品或食品的自动化条袋包装，整线由条包灌封机、条包称重机、整列计数机、装盒机、称重机、激光打码机、三维裹包机、监管码系统、装箱码垛一体机组成。

It is suitable for automatic stick packaging of granules, powders, tablets, oral liquids, cream type drugs or food. The whole line is composed of a stick filling and sealing machine, counting machine, a cartoning machine, a weighing machine, a laser coding machine, a 3D wrapping machine, a supervision code system, and a boxing and palletizing machine.



性能优势 / Performance Advantages

- 整线稳定运行速度可达 600 袋 / 分钟、120 盒 / 分钟；
- 完善的质量实时监控矩阵保障生产质量连续稳定；
- 单机设备间可灵活组合完成不同的包装形式；
- 可通过更换轻量化的模具兼容多种规格生产；
- 工作面纯阳台式结构设计，便于清洁维护；
- 整线全伺服驱动，运行高度协同流畅；
- 制药行业特性化设计，符合 GMP 认证要求；
- 统一的简约 UI 控制系统，可快速掌握操作；
- 德国技术标准设计制造，可 24h 稳定运行。

- + Stable running speed reach to 600 bags/ min, 120 boxes/min;
- + Quality real-time monitoring matrix ensures continuous and stable production quality;
- + Flexible combination of stand-alone equipment can complete different packaging forms;
- + Lightweight molds can be replaced to be compatible with various specifications;
- + Balcony structure design working surface, easy to clean and maintain;
- + Full servo drive, highly coordinated and smooth operation;
- + Characteristic design meets the requirements of GMP certification;
- + Unified simple UI control system, easy to master and operate;
- + Designed and manufactured according to German technical standards, can run stably for 24 hours.

条包灌封机

Stick-pack Filling Machine



主要用途 / Main Application

SP-L12 是一台十二列条包灌封机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于各种口服液、漱口水、膏滋等流体类物质的定量条袋包装。

SP-L12 is a 12-column stick packaging filling and sealing machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11 and CE. It is mainly used for quantitative strip bag packaging of various oral liquids, mouthwashes, creams and other fluid substances.



性能优势 / Performance Advantages

- 采用独有的泵体倒灌及回吸防滴漏控制技术，保障充填精度可高达 $\pm 1\%$ (灌装量 2ml 以上时)；
 - 开卷、膜纠偏、灌装、纵封、定点避让、横封拉膜、圆角切，均采用伺服控制；
 - 纵封、横封机构均可打开，便于彻底清洁；
 - 楚天液体灌装回吸控制，有效防止充填后滴液、漏液，
 - 伺服灌装分段曲线控制灌装速度，防止液体飞溅；
 - 切刀采用高精度加工高速钢材质，纵封、横封烫块选用铬锰合金材质保证稳定高效；
 - 横封及纵封机构均独立的加热系统，保证加热均恒，保证密封牢实；
 - 纵封定点避让，避免长时间高温烤烫薄膜变形。
- + The unique pump body backflow and back suction anti-drip control technology ensures that the filling accuracy can be as high as $\pm 1\%$ (when the filling volume is more than 2ml);
- + Unwinding, film correction, filling, vertical sealing, fixed-point avoidance, transverse film sealing, and corner cutting are all servo-controlled;
- + Both vertical sealing and horizontal sealing mechanism can be opened, which is convenient for thorough cleaning;
- + Truiking liquid filling and suction control, effectively preventing dripping and leakage after filling
- + Servo filling segmented curve controls the filling speed to prevent liquid splashing.
- + The cutter is made of high-precision machining high-speed steel material, and the vertical sealing and horizontal sealing ironing blocks are made of chrome-manganese alloy material to ensure stability and efficiency;
- + Both the horizontal and vertical sealing mechanisms have independent heating systems to ensure constant heating and firm sealing;
- + Longitudinal seals should be avoided at fixed points to avoid deformation of the film after long-term high-temperature baking.



技术参数 / Product Parameters

SP-L12 Product Parameters	
适应规格 Suitable Size	长度 $\leq$ 200mm, 宽度 $\leq$ 60mm, 袋长 50-200mm; Length/Width / Bag Length
最大膜宽 Max. Film Width	800mm
条包列数 Packet Columns	12 列 12 columns
最高产能	50 切 / 分钟 50 cut/min
灌装形式 Filling Form	伺服陶瓷泵 / 伺服螺杆 / 伺服量杯 Servo Ceramic Pump/Servo Screw/Servo Measuring Cup
灌装精度 Filling Accuracy	与灌装形式及装量相关 Related to filling form and filling volume
横封形式 Horizontal Seal	直纹、钻石纹、棋盘纹、双横封 Straight grain, diamond grain, checkerboard grain, double horizontal seal
易撕口形式 Tear-off Form	横封纵封易撕口一次切成 Horizontal seal and vertical seal, easy to tear and cut at one time
切刀形式 Cutter	圆角切刀 Corner Cutter
破损率 Damage Rate	$\leq$ 0.001%
合格率 Pass Rate	$\geq$ 99.999%
噪音 Noise	$\leq$ 75dB
设备重量 Weight	2600kg
外形尺寸 Dimension	2900mm(L) $\times$ 2750mm(W) $\times$ 3320mm(H)
电源参数 Electric Parameters	35kW, AC380V $\pm$ 10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	18m ³ /h(0.6MPa-0.8MPa)

条包称重机

Stick-pack Filling Machine



主要用途 / Main Application

SP-W12 是一台十二列条包称重机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于条包灌装装量的在线检测分选。

SP-W12 is a 12-column stick packaging weighing machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It is mainly used for online inspection and sorting of stick packaging filling.



性能优势 / Performance Advantages

- ◎ 采用德国 HBM 称芯，每个轨道可单独完成高精度称重和分选；
- ◎ 称重值实时反馈给伺服灌装系统，灌装系统根据称重趋势对灌装量进行自动修偏。
- + German HBM weighing core, each track can individually complete high-precision weighing and sorting;
- + The weighing value is fed back to the servo filling system in real time, and the filling system automatically corrects the filling volume according to the weighing trend.



技术参数 / Product Parameters

SP-W12 Product Parameters	
称重范围 Weighing Range	1g—300g
动态精度 Dynamic Accuracy	±0.01g
称芯品牌 Weighing Core Brand	HBM
称重速度 Weighing Speed	60 次 / 分钟 60 times/min
轨道数量 Tracks	12 列 12 columns
轨道间距 Track Spacing	≤ 50mm
适应规格 Suitable Size	10mm ≤ W ≤ 25mm, 50mm ≤ L ≤ 200mm, 5mm ≤ H ≤ 20mm
设备重量 Weight	1000kg
外形尺寸 Dimension	2810mm(L) × 1560mm(W) × 1500mm(H)
电源参数 Electric Parameters	5kW, AC220V±10%(50Hz)-(L+N+PE)
气源参数 Air Source Parameters	12m ³ /h(0.6MPa-0.8MPa)

条包整列计数机

Stick-pack Filling Machine



主要用途 / Main Application

SP-S12 是一台高速条包整列计数机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于条包装盒前的输送整理及二次计数。

SP-S12 is a high-speed stick-packaging whole-column counting machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It is mainly used for conveying sorting and secondary counting before stick packaging.



性能优势 / Performance Advantages

- 可对称重不合格而剔除的列自动进行条包补充，减少排出量，增加得率；
- 二次计数装置对条袋进行重新计数时可在允许的装盒宽度范围内，实现任意计数。
- + Automatically supplement the sticks for the columns that are rejected due to unqualified weighing, reduce the discharge volume;
- + It can achieve arbitrary counting within the allowable cartoning width when the secondary counting device recounts the bags.



技术参数 / Product Parameters

SP-S12 Product Parameters	
称重范围 Weighing Range	1g—300g
整列速度 Speed	720 袋 /min 720bags/min
叠料高度 Stack Height	≤ 90mm, 1-3 层叠料 1-3 layers stack
出料工位 Outfeed Station	1~4 工位 1-4 station
出料范围 Outfeed Range	最大尺寸: 220×200×90mm Max.: 220×200×90mm
隔板材质 Separator Materials	200~400g/m ² 标准卡纸 200~400g/m ² standard cardboard
适应规格 Suitable Size	50mm ≤ L ≤ 200mm, W ≤ 60mm
设备重量 Weight	3000kg
外形尺寸 Dimension	2900mm(L)×2450mm(W)×3320mm(H)
电源参数 Electric Parameters	16kW, AC380V±10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	30m ³ /h(0.6MPa-0.8MPa)

瓶包包装整体解决方案

Bottle-pack packaging overall solution



主要用途 / Main Application

适用于片剂、胶囊、丸剂类型药品或食品的自动化瓶包包装，整线由理瓶机、干燥剂投入机、数粒机、旋盖机、铝箔封口机、封口检测机、贴标机、装盒机、称重机、激光打码机、三维裹包机、监管码系统、装箱码垛一体机组成。

It is suitable for automatic bottle packaging of tablet, capsule, pill type medicine or food. It is composed of box machine, weighing machine, laser coding machine, three-dimensional wrapping machine, supervision code system, and packing and palletizing machine.

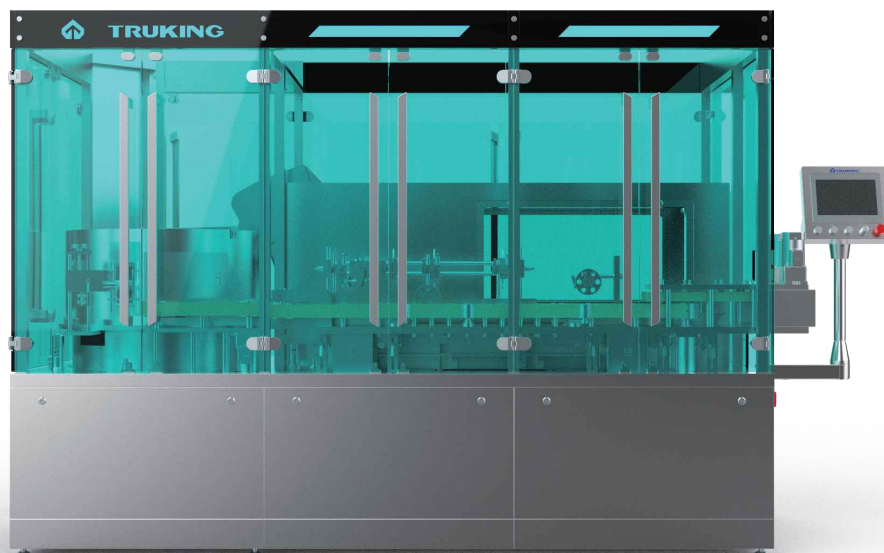


性能优势 / Performance Advantages

- ◎ 整线稳定运行速度可达 250 瓶 / 分钟；
 - ◎ 完善的质量实时监控矩阵保障生产质量连续稳定；
 - ◎ 单机设备间可灵活组合完成不同的包装形式；
 - ◎ 可通过更换轻量化的模具兼容多种规格生产；
 - ◎ 工作面纯阳台式结构设计，便于清洁维护；
 - ◎ 整线全伺服驱动，运行高度协同流畅；
 - ◎ 制药行业特性化设计，符合 GMP 认证要求；
 - ◎ 统一的简约 UI 控制系统，可快速掌握操作；
 - ◎ 德国技术标准设计制造，可 24h 稳定运行。
- + Stable running speed reach to 250 bottles/ min;
 - + Quality real-time monitoring matrix ensures continuous and stable production quality;
 - + Flexible combination of stand-alone equipment can complete different packaging forms;
 - + Lightweight molds can be replaced to be compatible with various specifications;
 - + Balcony structure design working surface, easy to clean and maintain
 - + Full servo drive, highly coordinated and smooth operation;
 - + Characteristic design meets the requirements of GMP certification;
 - + Unified simple UI control system, easy to master and operate;
 - + Designed and manufactured according to German technical standards, can run stably for 24 hours.

自动理瓶机

Automatic bottle unscrambler



主要用途 / Main Application

BU-250 是一台高速自动理瓶机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，适用于圆瓶、方瓶、扁瓶等各类形状的塑料瓶的有序整理，可广泛应用于制药、食品、保健品、糖果、日化等领域。

BU-250 is a high-speed automatic bottle unscrambler. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It is suitable for plastic bottles of various shapes such as round bottles, square bottles, and flat bottles. It can be widely used in pharmaceuticals, food, health products, candy, daily chemicals and other fields.

性能优势 / Performance Advantages

- ◎ 设置 0.8 立方米超大容量储瓶仓，加料高度仅 1.4 米，上料频次低、高度低；
- ◎ 采用双输送结构，具有料仓少瓶检测、声光提示功能，确保及时自动供瓶；
- ◎ 理瓶转盘采用扇形设计可调节以适应不同大小瓶子；
- ◎ 出瓶夹带采用食品级 PU 开模成型，防刮伤、不掉屑；
- ◎ 通过伺服电机调节两理瓶夹带之间间距，适应不同大小的瓶子；
- + 0.8 m³ super-capacity bottle storage bin, the feeding height is only 1.4 meters, low feeding frequency, low height;
- + Double-way conveying structure, with the function of silo less bottle detection, sound and light prompt function, to ensure timely and automatic bottle supply;
- + The bottle-arranging tray adopts a fan-shaped design and can be adjusted to adapt to different sizes of bottles;
- + The bottle-out entrainment is formed by food-grade PU, which is scratch-proof and chip-free;

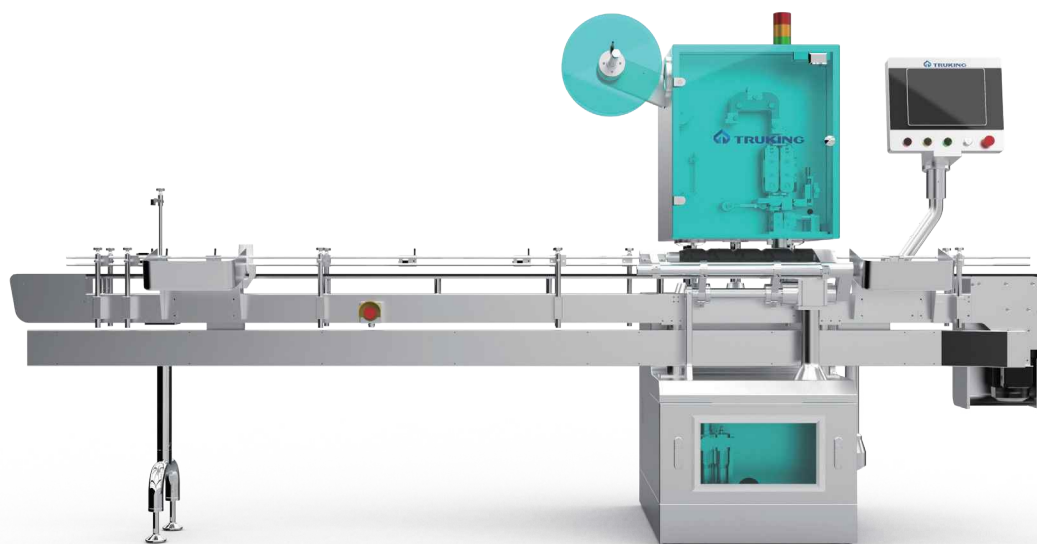
- ◎ 规格件采用快换设计，整机更换规格时间小于 5 分钟；
 - ◎ 采用旋转气缸勾瓶机构，快速精准识别正反瓶；
 - ◎ 配备静电消除装置，消除瓶身内外静电，减少瓶子对灰尘的吸附；
 - ◎ 出口配置倒瓶、反瓶检测剔除。出瓶合格率高达 100%。
- + The distance between the two bottles can be adjusted by the servo motor to adapt to different sizes of bottles;
 - + The specification parts are designed with quick change, and the replacement time of the whole machine is less than 5 minutes;
 - + Rotary cylinder bottle hook mechanism, quickly and accurately identify positive and negative bottles;
 - + The static elimination device eliminates the static electricity inside and outside the bottle body and reduces the adsorption of dust on the bottle;
 - ◎ The outlet is equipped with bottle pouring and bottle backing detection and rejection. The qualified rate of the bottle is as high as 100%;



技术参数 / Product Parameters

BU-250 Product Parameters	
理瓶速度 Unscramble Speed	300 瓶 /min(按国标 40ml 瓶计) 300 bottles/min (40ml)
适应规格 Suitable Size	方瓶：25—80mm square bottle:
	圆瓶：Φ20—Φ100mm round bottle
	瓶高：40—220mm Bottle height:
瓶子材质 Bottle Materials	PP/PE/PET
检测剔除 Detection Rejection	倒瓶反瓶剔除 (标配) Reverse bottle rejection (standard)
破损率 Damage Rate	≤ 0.001%
理瓶合格率 Pass Rate	≥ 99.99%
设备重量 Weight	1000kg
外形尺寸 Dimension	2800mm(L) × 1400mm(W) × 1650mm(H)
电源参数 Electric Parameters	4kW, AC380V ± 10%(50Hz)-(3P+N+PE)
气源参数 Air Source Parameters	60m ³ /h(0.6MPa-0.8MPa)

干燥剂投放机 Desiccant Dispenser



主要用途 / Main Application

ISD-200 是一台袋装干燥剂投放机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，用于在包装容器内投入链式袋装干燥剂、脱敏剂、调料包等。可广泛应用于制药、食品、保健品、糖果等领域。

ISD-200 is a bagged desiccant dispenser. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11 and CE. It is used to put bagged desiccant, desensitizer, seasoning package, etc. can be widely used in pharmaceutical, food, health products, candy and other fields.



性能优势 / Performance Advantages

- ◎ 摆杆式缓存，高位时电机自动送料，摆杆自重牵引干燥剂带下垂，低位时电机停止送料；
- ◎ 伺服螺杆快速连续进瓶，全程导引块限位，防止干燥剂卷跑偏；
- ◎ 螺杆、导引块、料嘴无工具快速更换，切换规格时间少于 10 分钟；
- ◎ 伺服夹带夹持送料，色标定位检测，确保切断位置准

- + Pendulum type cache, the motor automatically feeds in the high position; the swing rod pulls the desiccant belt to sag with its own weight, and the motor stops feeding when it is low;
- + The servo screw feeds the bottle quickly and continuously, and the guide block is limited in the whole process to prevent the desiccant roll from deviating;
- + Screws, guide blocks and nozzles can be quickly replaced without tools within 10mins.
- + Servo entrainment clip-type feeding, color mark positioning

确，无破包；

- ◎ 食品级夹带，PU 材料，不掉粉屑，空包自动检测剔除；
- ◎ 伺服动力切料，双直线导轨导向，快速平稳低噪音，切料精准，高速耐用，切刀选用钨钢材质，耐磨性能好；
- ◎ 采用伺服投料，精准投送，落料时间可控，速度快，不堵塞；
- ◎ 电动调节主机高度升降，以适应不同高度的瓶子，省时省力。

detection, to ensure accurate cutting position and no broken bags;

- + Food-grade entrainment, PU material, no powder drop, automatic detection and rejection of empty bags;
- + Servo power cutting, double linear guide, fast, stable and low noise, accurate cutting, high speed and durability, the cutter is made of tungsten steel, with good wear resistance;
- + Servo feeding, precise feeding, controllable blanking time, fast speed, no blockage;
- + The height of the main unit is adjusted electrically to adapt to bottles of different heights, saving time and effort;



技术参数 / Product Parameters

ISD-200 Product Parameters	
投放速度 Dispense Speed	200 瓶 / 分钟 200 bottles/min
适应规格 Suitable Size	袋长: 25mm-65mm Bag Length:
	袋宽: 10mm-36mm Bag Width:
	链式袋装 Chain Bag
瓶子材质 Bottle Materials	PP/PE/PET
检测剔除 Detection Rejection	空包、塞入确认检测剔除 (标配) Empty package, put in confirmation detection and rejection (standard)
破损率 Damage Rate	$\leq 0.001\%$
理瓶合格率 Pass Rate	$\geq 99.99\%$
设备重量 Weight	1000kg
外形尺寸 Dimension	650mm(L)×1050mm(W)×1850mm(H)(主机)
电源参数 Electric Parameters	1kW, AC220V±10%(50Hz)-(L+N+PE)
气源参数 Air Source Parameters	6m ³ /h(0.6MPa-0.8MPa)

伺服数粒机 Servo Counting Machine



主要用途 / Main Application

CFM-04 是一台四通道伺服数粒机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于各种片剂、软硬胶囊、丸剂及其它固体制剂的数粒分装。可广泛应用于制药、食品、保健品、糖果等领域。

CFM-04 is a 4-channel servo counting machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11 and CE. It is mainly used for several sub-packaging of various tablets, soft and hard capsules, pills and other solid preparations, can be widely used in pharmaceutical, food, health products, candy and other fields.



性能优势 / Performance Advantages

- ◉ 单模块电气板可单独拉出，整个模块亦可沿导轨移出，便于清洁、维护；
- ◉ 料仓斜体设计，料仓振盘不承压，料仓振盘振动平稳无波动；
- ◉ 送料伺服电机与料门伺服电机实时通讯，根据灌装速度反馈，实时调节送料频率，有效防止叠药，生产速度稳定；
- ◉ 全密封设计，防止粉尘进入振动内腔；
- ◉ 全铝振盘，表面硬质氧化，质轻、耐磨，拆卸清洗方便，一体成形，可互换；
- ◉ 吸尘系统全方位覆盖料仓、三级振盘、电眼盒、料门，

- + The single-module electrical board can be pulled out separately, and the entire module can also be moved out along the guide rail, which is convenient for cleaning and maintenance;
- + Italic design of the silo, no load on the vibrating plate of the silo, stable vibration without fluctuation;
- + The feeding servo motor communicates with the feeding gate servo motor in real time. According to the feedback of the filling speed, the feeding frequency is adjusted in real time, can effectively prevent drug stacking and keep the production speed stable;
- + Fully sealed design to prevent dust from entering the vibration cavity;
- + All-aluminum vibrating plate, surface hard oxidation, light weight, wear-resistant, easy to disassemble and clean, integrally formed, interchangeable;
- + The dust collection system covers the silo, 3-grade vibration plate, electric eye box, and material door in an all-round way. The

集成式管路吸尘设计，杜绝粉尘渗入，满足 GMP 洁净要求；

- ◎ 红外计数控制板，防粉尘优化设计，屋檐式设计，减少粉尘粘附视窗玻璃，延长清洗时间；
- ◎ 双总料门设计，储料、放料协调，不在料门口形成堵塞，提高装瓶速度；
- ◎ 定制料门直线伺服电机，响应速度快，速度曲线可调，运行状态可监控，有效防止卡药、弹药产生；
- ◎ 三级振盘采用德国原装振动器，振动稳定，起停响应快；
- ◎ 电动调节主机高度升降，以适应不同高度的瓶子，省时省力。

integrated pipeline dust collection design prevents dust infiltration and meets GMP cleanliness requirements;

- + Infrared counting control board, dust-proof optimized design, eaves-type design, reduce dust adhesion to window glass, prolong cleaning time;
- + Double main material gate design, coordinate material storage and discharge, no blockage at the mouth of the material, improve bottling speed;
- + Customized material gate linear servo motor, fast response speed, adjustable speed curve, monitoring of running status, effectively preventing the generation of jammed drugs and ammunition;
- + The 3-grade vibration plate adopts the original German vibrator, which has stable vibration and fast start-stop response;
- + The height of the main unit is adjusted electrically to adapt to bottles of different heights, saving time and effort.



技术参数 / Product Parameters

CFM-04 Product Parameters	
最大产能 Max. Capacity	24000 粒 /min 24000 grain/min
适应规格 Suitable Size	瓶高：40 ~ 240mm Bottle height:
	瓶径：20 ~ 100mm bottle diameter:
	药粒：Φ2 — Φ20mm 的片剂、丸剂、及各种软硬胶囊 Granules: Φ2 - Φ20mm tablets, pills, and various soft and hard capsules
轨道数 Tracks	4 模块，共 32 轨 4 module, 32 tracks
计数方式 Counting Method	红外电眼计数 Infrared Eye Counting
检测剔除 Detection Rejection	药粒超长、多装、少装、粉尘异常剔除 (标配) Over-long pills, multi-pack, less-pack, abnormal dust removal (standard)
摄像检测 Camera Detection	药粒缺陷摄像检测剔除 (选配) Particle defect camera detection and rejection (optional)
破损率 Damage Rate	≤ 0.001%
理瓶合格率 Pass Rate	≥ 99.99%
设备重量 Weight	2400kg
外形尺寸 Dimension	1450mm(L) × 1850mm(W) × 2250mm(H) (主机)
电源参数 Electric Parameters	6kW, AC380V ± 10% (50Hz) - (3P+N+PE)
气源参数 Air Source Parameters	48m ³ /h (0.6MPa-0.8MPa)

旋转式旋盖机 Rotary Capping Machine



主要用途 / Main Application

SC-R250 是一台高速连续旋转式旋盖机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于各种圆瓶、方瓶、椭圆瓶等的自动进瓶、理盖、旋盖。可广泛应用于制药、食品、保健品、糖果、日化、饮料等领域。

SC-R250 is a high-speed continuous rotary capping machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11, and CE. It is mainly used for the automatic bottle feeding, cap unscrambling and capping of various round bottles, square bottles, oval bottles, etc. can be widely used in pharmaceutical, food, health products, candy, daily chemicals, beverages and other fields.



性能优势 / Performance Advantages

- ◎ 转盘离心理盖，CMOS 激光传感器检测正反盖，反盖气吹剔除，对瓶盖零损伤；
- ◎ 螺杆、星轮、滑道、旋盖头无工具快拆设计；
- ◎ 倒瓶检测，螺杆过载保护，气动三爪抓盖，自动定心，无损伤；
- ◎ 定制永磁离合扭力限制器，刻度调节，精准控制旋盖扭力；

- + turntable centrifugal to unscramble the caps, the CMOS laser sensor detects the forward and reverse caps, and the reverse caps are removed by air blowing without damage to the caps;
- + The screw, star wheel, slideway, and capping head are tool-less quick release design;
- + Bottle pouring detection, screw overload protection, pneumatic 3-claw grasping cap, automatic centering, no damage;
- + Customized permanent magnet clutch torque limiter, scale adjustment, precise control of capping torque;

- ◎ 电动调节主机高度升降，以适应不同高度的瓶子，省时省力；
 - ◎ 反盖、无铝箔、旋盖不良（松盖、歪盖）检测剔除。
- + The height of the main unit is adjusted electrically to adapt to bottles of different heights, saving time and effort;
 - + Reverse caps, no aluminum foil, bad capping (loose cap, crooked cap) are detected and rejected.



技术参数 / Product Parameters

SC-R250 Product Parameters	
最大产能 Max. Capacity	250 瓶 /min 250 bottles/min
适应规格 Suitable Size	瓶高 Bottle height: 40 ~ 240mm
	瓶径 bottle diameter: 20 ~ 100mm
	瓶盖高度 Cap height: 10 ~ 30mm
	瓶盖直径 Cap Diameter: Φ20 ~ 60mm
旋盖头数 Caps	10 组 10 groups
理盖速度 Unscramble speed	最高理盖 350 个 /min Max. 350 caps/min
检测剔除 Detection Rejection	高盖，歪盖，无铝箔剔除（标配），反铝箔剔除（选配） High cap, crooked cap, no aluminum foil rejection (standard), anti-aluminum foil rejection (optional)
破损率 Damage Rate	≤ 0.001%
合格率 Pass Rate	≥ 99.98%
设备重量 Weight	1600kg
外形尺寸 Dimension	1250mm(L)×1350mm(W)×2250mm(H)(主机)
电源参数 Electric Parameters	3kW, AC220V±10%(50Hz)-(L+N+PE)
气源参数 Air Source Parameters	12m ³ /h(0.6MPa-0.8MPa)

电磁感应封口机

Electromagnetic Induction Sealing Machine



主要用途 / Main Application

CSI-200 是一台高速连续电磁感应封口机，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于各种瓶型的瓶口铝箔片自动密封。可广泛应用于制药、食品、保健品、糖果、化妆品等领域。

CSI-200 is a high-speed continuous electromagnetic induction sealing machine. The design and manufacture of the whole machine follow the requirements of GMP, cGMP, GAMP5, CRF21-part11 and CE. Mainly used for automatic sealing of aluminum foil at the bottle mouth of various bottle types, can be widely used in pharmaceutical, food, health products, candy, cosmetics and other fields.



性能优势 / Performance Advantages

- 采用美国 Enercon 原装进口封口头，主机符合美国 FDA 医药生产标准设计，NEMA 4/ IP65 密封等级；
- 配置独立输送带、触摸屏、报警灯、不锈钢机身；
- 分瓶轮均匀分瓶，使封口热量传递均衡，提高封口质量；
- 电动调节主机高度升降，以适应不同高度的瓶子，省时省力；
- 冷却方式为风冷，风扇装置简单，避免了传统水循环系统复杂、漏水的安全隐患；
- 异常停机时可自动进行剔除。
- The original imported sealing head from Enercon in the United States, the main engine is designed in accordance with the US FDA pharmaceutical production standards, and the sealing level is NEMA 4/ IP65;
- Independent conveyor belt, touch screen, alarm light, stainless steel body;
- The bottle dividing wheel divides the bottles evenly, so that the heat transfer of the sealing is balanced and the sealing quality is improved;
- The height of the main unit is adjusted electrically to adapt to bottles of different heights, saving time and effort;
- Air cooling, simple fan device, which avoids the safety hazards of complicated and leaking water in the traditional water circulation system;
- Automatic rejection when abnormal shutdown occurs.



技术参数 / Product Parameters

CSI-200 Product Parameters	
最大产能 Max. Capacity	220 瓶 /min 220 bottles/min
适应规格 Suitable Size	瓶子直径 bottle diameter: $\Phi 24 \sim \Phi 120\text{mm}$
	瓶高 Bottle height: 30 ~ 300mm
感应头 Induction head	美国 Enercon SS 100
检测剔除 Detection Rejection	异常、停机拦瓶剔除、剔除确认 (标配)、无铝箔、歪盖剔除 (选配) Abnormal, stop bottle rejection, rejection confirmation (standard), no aluminum foil, crooked cap rejection (optional)
合格率 Pass Rate	$\geq 99.99\%$
设备重量 Weight	500kg
外形尺寸 Dimension	650mm(L) $\times$ 750mm(W) $\times$ 1550mm(H) (主机)
电源参数 Electric Parameters	4kW, AC220V $\pm 10\%$ (50Hz)-(L+N+PE)
气源参数 Air Source Parameters	3m ³ /h(0.6MPa-0.8MPa)

圆瓶贴标机

Round Bottle Labeling Machine



主要用途 / Main Application

LM-W01 是一台立式圆瓶贴标机，由输送带、分瓶轮、送标器、卷瓶装置、检测系统及控制系统等组成，整机设计及制造遵循 GMP、cGMP、GAMP5、CRF21-part11、CE 的规范要求，主要用于各种圆瓶不干胶标签全自动贴标。可广泛应用于制药、食品、保健品、糖果、化妆品等领域。

LM-W01 is a vertical round-bottle labeling machine. It is composed of conveyor belt, bottle wheel, label feeder, bottle reeling device, testing system and control system, etc., and the whole machine is designed and manufactured in accordance with GMP, cGMP, GAMP5, CRF21-part11, CE specification requirements, mainly used for various round bottle self-adhesive labels automatic labeling. It can be widely used in pharmaceutical, food, health care products, candy, cosmetics and other fields.



性能优势 / Performance Advantages

- ◎ 具有倒瓶、三期印字检测、贴标检测及自动剔除功能；
 - ◎ 送标器选用先进的伺服电机驱动，停标精度可达 $\pm 0.5\text{mm}$ ；
 - ◎ 采用动力松卷，动力收卷，避免底纸松脱或拉断；
 - ◎ 配备双驱动辊，软胶，包角大，摩擦力大，不打滑，确保出标准确；
 - ◎ 安装支架多维可调，可适用的更多形式的贴标；
 - ◎ 采用开放式设计，结构精巧，换标方便。
- + It has functions of bottle pouring, three-stage printing detection, labeling detection and automatic rejection;
 - + The standard feeder is driven by advanced servo motor, and the accuracy of the mark stop can reach $\pm 0.5\text{mm}$;
 - + Power loose winding and power winding are used to avoid loosening or pulling off the liner;
 - + It is equipped with double drive rollers and soft rubber with large wrapping angle, high friction and no slippage to ensure accurate bidding;
 - + The mounting bracket is multi-dimensionally adjustable, which can be applied to more forms of labeling;
 - + Open design is adopted with exquisite structure, and it is easy to change standards.



技术参数 / Product Parameters

LM-W01 Product Parameters	
最大产能 Max. Capacity	250 瓶/min
适应规格 Suitable Size	直径 diameter: $\Phi 20 \sim \Phi 100\text{mm}$
	瓶子高度 Bottle height: $40 \sim 220\text{mm}$
破损率 Damage Rate	$< 0.001\%$
合格率 Pass Rate	$\geq 99.99\%$
出标速度 Outfeed Speed	$3\text{-}60\text{m/min}$
贴标精度 Labeling Accuracy	$\pm 1\text{mm}$
标签宽度 Label Width	$10\text{mm}\sim 100\text{mm}$
设备重量 Weight	300kg
外形尺寸 Dimension	$1100\text{mm(L)} \times 1650\text{mm(W)} \times 2050\text{mm(H)}$ (主机)
电源参数 Electric Parameters	2kW , $\text{AC}220\text{V} \pm 10\%(50\text{Hz})$ -(L+N+PE)
气源参数 Air Source Parameters	$0.6\text{m}^3/\text{h}$ ($0.6\text{MPa}\text{-}0.8\text{MPa}$)



服务理念

400-9988-900



秉承“一切为客户着想，为一切客户着想，为客户着想一切”的理念，以“为客户创造价值”为己任，楚天专注于打造一流的研发、设计、销售、制造、服务团队及服务管理体系，为客户提供高效、优质的产品与服务。



项目规划支持

楚天拥有系列专业医药设计院、产品研究院，一批行业资深科研技术人员，无菌制药工艺的验证专家、教授等，为客户的项目提供科学、有效的技术规划支持。



过程保障服务

楚天推出的医药装备整体解决方案，实现药品生产过程的全自动化、无菌化，智能检测、分选，以及计算机验证保障，生产出让市场“放心”的产品。



走进园区服务

楚天作为设备供应商，不仅仅将行业法规标准融入到产品设计、制造中，还让法规标准以讲座、交流的形式走进园区，与药企的工艺、生产形成互动与融合。



设备管理咨询服务

楚天致力于满足客户效益最大化需求，提供一揽子的设备管理模式，协同药厂实现投入最小化，产出最大化。

坚持“以客户为中心”，以匠人之心打造极致服务体验，为客户创造更多价值

34 全国 34 个省（市）

365 全年 365 天

7x24 7X24 小时服务时间

我们随时待命为客户单位设备正常运行保驾护航

- + 现场安装、调试、验收
- + 设备工艺、操作、维护等相关培训
- + 周期性的定期上门维护与回访
- + 设备各部件性能的检测与保养
- + 备品备件的及时供应
- + 产品技术升级与技术二次开发
- + 设备大修



Service Concept

400-9988-900



Adhering to concept of “all for customers, for all customers” , and with the mission of “creating value for customers” , TRUKING focuses on building first-class R&D, design, sales, manufacturing, service teams and service management system to offer high-efficient and high-quality products and services for the customers.



◎ Project Planning Support

TRUKING has a series of professional medical and pharmaceutical design institutes, product research institutes, a group of senior scientific research and technical personnel, aseptic pharmaceutical process verification experts, professors, etc., to provide scientific and effective technical planning support for customers' projects.

◎ Process Assurance Service

TRUKING launched the overall solution for medical & pharmaceutical equipment realizing the full automation and aseptic production process, intelligent detection and sorting of the drug, as well as computer verification assurance so as to produce assured products for market.

◎ Service In The Park

As an equipment supplier, TRUKING not only integrates industrial regulations and standards into product design and manufacturing, but also introduces the industrial regulations and standards into Truking industrial park in the form of lectures and exchanges to interact and integrate with the technology and production of pharmaceutical enterprises.

◎ Equipment Management Consultation Service

TRUKING aims to satisfy the maximum benefited demands of the customer and to provide a package of equipment management services to realize minimization investment and maximization production output together with pharmaceutical factories.

- ◎ Adhere to the philosophy of "customer-centric", TRUKING creates the extraordinary service experience with the spirit of the craftsman, to create more value for customers.
- ◎ We are always ready to escort the normal operation of the customer's equipment.

- + Onsite equipment installation, commissioning, acceptance
- + Training for equipment process, operation and maintenance
- + Periodic door-to-door maintenance and return visit
- + Performance test and maintenance for machinery parts
- + Timely supply of spare parts
- + Product technology upgrading and secondary development
- + Equipment overhaul



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