



High Capacity Agent

大容量剂

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，现已成为世界医药装备行业的主要企业之一。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、四川医药设计院、楚天飞云、楚天源创、楚天华兴、楚天智能机器人等多家全资或控股子公司，全球员工总数 4500 人，总资产近 50 亿元。

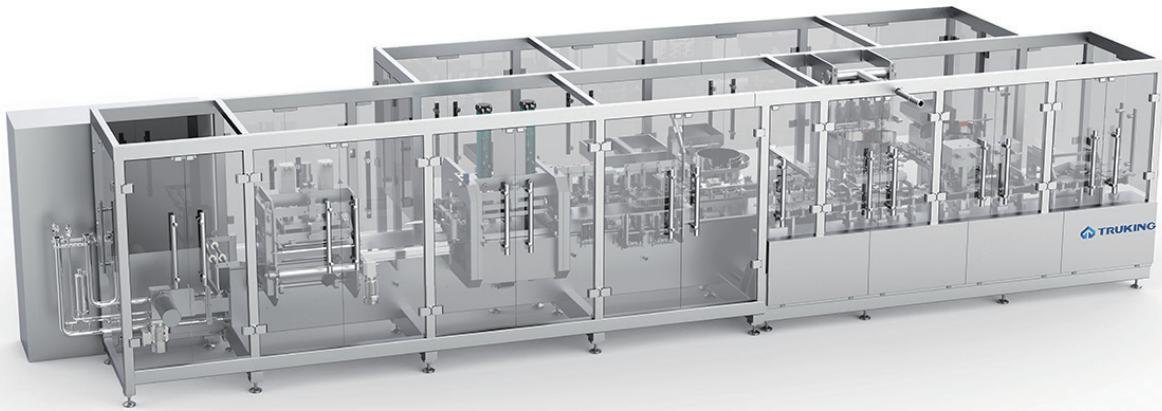
公司已有长沙和德国两大运营总部，建有长沙中央技术研究院、欧洲技术研究院和四川医药设计研究院三大研发机构。设有国家级企业技术中心，国家级创新基地，博士后科研工作站，院士专家工作站等多个技术与创新平台。截止 2021 年 3 月 31 日，共提出 3521 项中国专利申请，授权专利 2094 项。另提出 35 件 PCT 国际专利申请，在美国、俄罗斯、印度、韩国、德国、印尼、欧洲等多国获得 19 项专利授权。另提出 35 件 PCT 国际专利申请，在美国、俄罗斯、印度、韩国、德国、印尼、欧洲等多国获得 19 项专利授权。牵头制订了本系统国家行业产品技术标准 17 项。楚天本部产品已出口到亚洲、欧洲、南美洲等 40 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 one of the major pharmaceutical equipment suppliers in the world. The company specializes in pharmaceutical equipment and the corresponding integrated solutions, and takes the initiative to push forward the R&D of smart pharmaceutical factory. It is a listed A-share company with multiple wholly-owned or controlling subsidiaries, namely Germany based Romaco Group, Truking Watertown, Sichuan Phamaceutical Degisin Institute, Truking Feiyun, Truking Ingenuity Biotechnology, Truking Wachine, Truking Intelligent Robot, etc. The company has over 4500 employees around the global, a total asset of RMB 5 billion.

TRUKING has two operation headquarters respectively in Changsha, China and Germany; 3 big research institutes, namely Changsha Central Technology Research Institute, Europe Technology Research Institute, and Sichuan Pharmaceutical Design Institute. Truking has established National Enterprise Technology Center, National Innovation Center, Post-Doctoral Research Center, Academician Expert Workstation and many more technology and innovation platforms. By Mar. 31, 2021, Truking has submitted 3521 patent applications, and been granted with 2094 patents. Beyond China, Truking has applied for 35 PCT international patents, and been granted with 19 patents in USA, Russia, India, Korea, Germany, Indonesia, and many more European countries. Truking also took the lead in formulating 17 national industrial product technical standards. Our products have been exported to more than 40 counties and regions to Asia, Europe, and South America. The international market share is increasing rapidly each year.

SRD 系列非 PVC 膜软袋大输液生产线

SRD Series Non-PVC Film Soft Bag Large Infusion Compact Line



主要用途 / Main Application

非 PVC 膜软袋大输液，具有无毒、与药液相容性好、可自收缩、输液过程无需进入空气，消除了二次污染；具有很低的透水性、透气性及迁移性；机械强度高、抗低温、不易破裂、易于运输储存；回收处理对环境无害，已被公认为 21 世纪最安全环保的输液包装形式。

非 PVC 软袋大输液生产线由制袋成型、灌装与封口三大部分组成，可自动完成上膜、印字、接口整理、接口预热、开模、制袋、接口热熔封、撕废角，袋翻转或袋翻转转移、灌装、组合盖整理、焊盖、出袋等工序，还可与接口上料机、组合盖上料机、软袋灭菌输送机、灭菌柜、上下袋机、软袋烘干机、灯检机、枕式包装机、开装箱机、封箱机、码垛机等辅助设备组成整条软袋包装联动生产线。主要用于制药厂大输液车间 50-3000ml 非 PVC 膜软袋大输液的生产，为了满足客户的需求，楚天开发出了具有多项自主知识产权的 SRD 系列、SRSD（双硬管）系类、SRDR（双软管）系列、独立制袋机和独立灌装机等多种非 PVC 膜软袋大输液生产线。

Non-PVC film soft bag large infusion, non-toxic, compatible with liquid medicine, self-shrinking, no need to enter the air during the infusion process, eliminating secondary pollution; has low water permeability, gas permeability and migration; High mechanical strength, low temperature resistance, not easy to break, easy to transport and store; recycling treatment is harmless to the environment, and has been recognized as the safest and whitening infusion packaging form in the 21st century.

Non-PVC soft bag large infusion production line consists of three parts: bag forming, filling and sealing. It can automatically complete the film, printing, interface finishing, interface preheating, mold opening, bag making, interface hot seal, tearing angle, bag flip or bag flip transfer, filling, combination cover finishing, welding cover, bag out and other processes, can also be combined with the interface feeder, combined cover feeder, soft bag sterilization conveyor, sterilization cabinet, up and down Bag machine, soft bag dryer, lamp inspection machine, pillow packing machine, opening box machine, sealing machine, palletizing machine and other auxiliary equipment form the whole soft bag packaging linkage production line. It is mainly used in the production of 50-3000ml non-PVC film soft bag infusion in the large infusion workshop of pharmaceutical factory. In order to meet the needs of different customers, Truking has developed the series of SRD and SRSD (double hard tube) with various independent intellectual property rights. A variety of non-PVC film soft bag infusion production lines, such as SRDR (double hose) series, independent bag making machine and independent filling machine.



性能优势 / Performance Advantage

- ◎ 生产线采用直线式布置或前后交错布置，机座采用桌面式整体设计，操作、维修、清洁方便。制袋、灌封采用一根同步带传送或制袋、灌封采用二根同步带传送，可根据客户包材形式选择产品结构；
- ◎ 制袋规格多，可以适用 50ml-3000ml 等多种规格的生产，规格件少，更换十分简便；采用先进的 PID 温度控制，保证了制袋焊接质量，可以适用于不同品牌的包装材料；
- ◎ 采用可翻转传送装置，大大简化了设备结构，提高了操作简便性；
- ◎ 印字气缸、制袋气缸与其连接件采用浮动接头连接，延长气缸的使用寿命，确保机器的长久稳定运行；
- ◎ 成型模具采用特殊的优质材料加工，并采用特殊热处理和表面镀涂工艺，可使模具温度更均匀，确保制袋质量，成型结构采用楚天专利技术，使模具使用寿命远远高于同类产品；
- ◎ 采用质量流量计与高灵敏度无菌阀、高速 PLC 控制相结合实行灌装，灌装方式先进，计量准确，而且还可以很方便的实现在线清洗与在线灭菌；
- ◎ 一对一的接口预热和焊接技术，适用于不同厂家接口，保证焊接质量，泄漏率达到万分之二以内；
- ◎ 大量采用伺服控制技术，满足高精度高速需求，由伺服电机驱动同步带、拉膜和灌装头、气缸驱动焊盖头、加热板等，结构简单可靠，操作简单维护成本低；
- ◎ 采用现场总线，光缆传输信号的通讯方式，确保各控制信号的快捷准确传输，保证电气控制的可靠性。所有运行参数可做配方保存调用，自动化程度高，保证了整个机组的正常运行，其技术先进，安全可靠。辅助远程控制技术，快速实现程序升级与维护；
- ◎ 设备短小紧凑，净化面积最小，生产效率高，稳定性好，易损件少，使用维护成本为同类产品最低。
- + The production line adopts linear arrangement or staggered arrangement. The machine base adopts the desktop overall design, which is convenient for operation, maintenance and cleaning. Bag making and potting can use one or two timing belts, the product structure can be selected according to the customer package form.
- + There are many specifications for bags, which can be adapted to the production of multiple specifications such as 50ml-3000ml. The specifications are few and the replacement is very simple. The advanced PID temperature control ensures the quality of bag welding and can be applied to different brands of packaging materials.
- + The use of reversible conveyor greatly simplifies the structure of the equipment and improves the ease of operation;
- + Printing cylinders, bag-making cylinders and their connecting parts are connected by floating joints to extend the service life of the cylinders and ensure long-term stable operation of the machine.
- + Molds are processed with special high-quality materials, and special heat treatment and surface coating process, it can be used to make the mold temperature more uniform and ensure the quality of bag making. The molding structure adopts Truking patent technology, which make much longer life than similar products.
- + The mass flow meter is combined with high-sensitivity aseptic valve and high-speed PLC control to carry out filling. The advanced filling method can realize accurately measurement, and commodiously online cleaning and sterilization.
- + One-to-one interface preheating and welding technology, suitable for different manufacturers interface, to ensure welding quality, leak rates less than two ten thousandths;
- + A large number of servo control technologies are used to meet the high-precision and high-speed requirements. The servo motor drives the timing belt, the film, the filling head, the cylinder drive welding head and the heating plate, etc. The structure is simple and reliable, and the operation is simple and the maintenance cost is low.
- + Using fieldbus and the communication mode of optical cable transmission signal which can ensures fast and accurate transmission of each control signal, and the reliability of electrical control. All operating parameters can be recalled by formula, and the degree of automation is high, which ensures the normal operation of the whole unit, and its technology is advanced, safe and reliable. Auxiliary remote control technology to quickly implement program upgrade and maintenance.
- + The equipment is short and compact, the cleaning surface is the smallest, the production efficiency is high, the stability is good, and the wearing parts are few. It has lowest service maintenance cost among similar products.

 **产品参数 / Product Parameters**

(1) SRD 系列非 PVC 膜大输液生产线

SRD Series Non-PVC Film Large Infusion Compact Line

参数 / 型号 Parameter/Model	SRD2/SRD2A	SRD4/SRD4A	SRD6
适应包装药品 Applicable Product	标准静脉输液、透析液、冲洗液、氨基酸、抗生素、血液制品、脂类等 Standard intravenous infusion, dialysate, rinse, amino acids, antibiotics, blood products, lipids, etc.		
适应包装膜材质 Applicable Packaging Film Material	非 PVC 多层复合膜 Non-PVC multilayer composite film		
膜卷尺寸 Film Roll Size	市场上多用的内径 150 毫米，外径小于 800 毫米的标准膜材 Standard membranes with an inner diameter of 150 mm and an outer diameter of less than 800 mm		
适应接口 Applicable Interface	各种船型接口、圆形接口、异型接口 Various ship type interfaces, circular interfaces, special-shaped interfaces		
印刷形式 Printing Method	热箔印刷（可提供智能热箔打印技术） Hot foil printing (smart hot foil printing technology available)		
色带尺寸 Ribbon Size	市场上通用的内径 76-78 毫米，外径小于 140 毫米的标准色带 A standard ribbon with an inner diameter of 76-78 mm and an outer diameter of less than 140 mm		
制袋规格 Bag Making Specification	100ml、250ml、500ml、1000ml、3000ml		
袋宽度 Bag Width	130mm、135mm (可根据客户需求定制 Can be customized according to customer needs)		
灌装液体 Filling Liquid	无泡沫液体，液体压力 0.1—0.4mPa No foam liquid, liquid pressure 0.1-0.4mPa		
装量精度 Filling Accuracy	100ml±2%; 250ml±1.5%; 500ml、1000ml±0.8%		
室内环境要求 Indoor Environment Requirements	温度要求 18°C—24°C；平均湿度 45%—65% Temperature requirement 18 °C - 24 °C; average humidity 45% - 65%		
压缩空气 Compressed Air	压力不低于 0.6mPa、过滤精度为 5μm 干燥无油的压缩空 Dry oil-free compression air with a pressure of not less than 0.6 mPa and a filtration accuracy of 5 μm		
气洁净压缩空气 Clean Compressed Air	压力不低于 0.6mPa、过滤精度为 0.2μm 的洁净空气冷却 Clean air cooling with a pressure of not less than 0.6 mPa and a filtration accuracy of 0.2 μm		
水耗量 Water Consumption	200-400 升 / 小时，温度不高于 20°C 200-400 liters / hour, the temperature is not higher than 20 °C		
氮气耗量 Nitrogen Consumption	根据特殊要求可以用 0.1mPa 的氮气充氮保护，耗气量：2000-4000L/ 小时 According to special requirements, it can be protected by nitrogen gas with 0.1 mPa nitrogen gas consumption: 2000-4000L/hour		
电压 Voltage	三相五线制；380V；50Hz Three-phase five-wire system; 380V; 50Hz		
最大生产能力 Maximum Capacity	2500 袋 /h(100ml 计算)	4200 袋 /h(100ml 计算)	6000 袋 /h(100ml 计算)
每次制袋灌封数 Number of Bags Per Pot	2	4	6
功率 (kW) Power	25	35	40
压缩空气消耗 Compressed Air Consumption	2000L/min	4000L/min	5000L/min
洁净空气消耗 Clean Air Consumption	1000L/min	2000L/min	2500L/min
设备尺寸 (L*W*H) (mm) Equipment Size	5120*2700*2150	7500*2700*2150	9000*2700*2150
设备重量 (kg) Machine Weigh	6000	8000	9000

(2) SRSD 系列非 PVC 膜双硬管大输液生产线

SRSD Series Non-PVC Double Hard Tube Large Infusion Compact Line

参数 / 型号 Parameter	SRSD2	SRSD4/S DS4
适应包装药品 Applicable Packaging Product	标准静脉输液、氨基酸、抗生素、血液制品、脂类等 Standard Intravenous Infusion, Amino Acids, Antibiotics, Blood Products, Lipids, Etc.	
适应包装膜材质 Applicable Film Material	非 Pvc 多层复合膜 Non-Pvc Multilayer Composite Film	
适应接口 Applicable Interface	双硬管 (单座或分体) Double Hard Tube (Single or Split)	
制袋规格 Bag Specification	100ml、250ml、500ml、1000ml	
袋宽度 Bag Width	100-135mm (可根据客户需求定制 Can be customized according to customer needs)	
最大生产能力 Maximum Capacity	2500 袋/h (100ml 计算)	4000 袋/h/4500 袋/h (100ml 计算)
每次制袋灌封数 Number of Bags Per Pot	2	4
功率 (kW) Power	25	35/40
设备尺寸 (L*W*H) (mm) Mmequipment Size	6000*2700*2150	10000*2700*2150
设备重量 (Kg) Machine Weight	6000	9000

(3)SRDR 系列非 PVC 膜双软管大输液生产线

SRDF Series Non-PVC Film Multi-Chamber Soft Bag Infusion Compact Line

参数 / 型号 Parameter	SRDR 2	SRDR 4
适应包装药品 Applicable Packaging Product	标准静脉输液、透析液、冲洗液、氨基酸、抗生素、血液制品、脂类等 Standard Intravenous Infusion, Dialysate, Rinse, Amino Acids, Antibiotics, Blood Products, Lipids, Etc.	
适应包装膜材质 Applicable Film Material	非 PVC 多层复合膜 Non-Pvc Multilayer Composite Film	
适应接口 Applicable Interface	双软管 Double Hose	
制袋规格 Bag Specification	100ml、250ml、500ml、1000ml、3000ml	
袋宽度 Bag Width	100-135mm (可根据客户需求定制 Can be customized according to customer needs)	
最大生产能力 Maximum Capacity	2500 袋/h (100ml 计算)	4200 袋/h (100ml 计算)
每次制袋灌封数 Number of Bags Per Pot	2	4
功率 (kW) Power	25	35/40
设备尺寸 (L*W*H) mm Equipment size	6000*3000*2150	10000*3000*2150
设备重量 (kg) Machine weight kg	6000	9000

SLX 系列玻璃瓶大输液生产线 SLX Series Glass Bottle Infusion Compact Line



主要用途 / Main Application

本生产线由 SLP 系列大输液理瓶机、SQC 系列超声波粗洗机、SQL 系列大输液立式精洗机、(KSZ 系列隧道式灭菌干燥机)、SGS 大输液瓶灌装加塞机、SZG 系列大输液压盖轧(旋)盖、SDJR 系列灯检机、DZT 系列贴标机或 LTB 系列不干胶贴标机等几台单机组成。每台可单机使用,也可以联动生产,联动生产时可完成理瓶、超声波粗洗、冲循环水、冲注射水、(预热、烘干灭菌、冷却)、灌装(充氮)、理塞、压塞、理盖、轧盖、灯检、印字、贴标等二十多个工序。主要用于制药厂玻璃瓶大容量注射剂的生产。

This production line consists of SLP series large infusion bottle unscrambler, SQC series ultrasonic rough washing machine, SQL series large infusion vertical fine washing machine, (KSZ series tunnel type sterilization dryer), SGS infusion bottle filling and plugging machine, SZG series large transmission hydraulic cover rolling (rotary) cover, SDJR series light inspection machine, DZT series labeling machine or LTB series self-adhesive labeling machine and other single machines. Each unit can be used in a single machine or in conjunction with production. When it is linked to production, it can complete More than 20 processes, such as bottle treatment, ultrasonic rough washing, flushing water, (preheating, drying sterilization, cooling), filling (nitrogen filling), plugging, plugging, capping, capping, lamp inspection, printing, labeling, etc. It is mainly used in the production of large-capacity injections for glass bottles in pharmaceutical factories.



性能优势 / Performance Advantage

- ⊙ 整线采用串联连接方式，洗灌封连续作业，在不同的洁净级别区域间隔断，理瓶机不跨区，没有交叉污染。适用性好，可以适用 50-500ml 规格玻璃输液瓶的生产，更换规格件少，更换十分简便；
- ⊙ 洗瓶机清洗采用立式洗瓶结构，无交叉污染，规格件更换简单，清洗效果好。冲洗针头插入瓶内进行冲洗，其冲洗效果好，洗瓶澄明度高；
- ⊙ 采用恒压自流隔膜阀灌装，通过设定灌装时间来控制灌装装量，其自动化程度高，灌装精度高，并且还可以实现无瓶不灌功能以及在线清洗与在线灭菌功能；
- ⊙ 采用相邻扎盖头上的轧刀相互交错的专利技术，大大缩短了扎盖头之间的距离，减少扎盖头的回旋半径，降低了瓶子的线速度，从而提高了整机工作的平稳性和可靠性；
- ⊙ 采用 PLC 控制、人机界面操作，能联动控制和单机操作，自动化程度高，操作人员少，劳动强度低。
- + The whole line is connected in series, the washing and sealing machine is continuous operation, and its sections are separated in different clean level areas. The bottle unscrambler does not cross the area and there is no cross-contamination. Good applicability, can be applied to the production of 50-500ml glass infusion bottles, with fewer replacement specifications and easy to replace.
- + The washing machine is adopted in a vertical washing structure with no cross-contamination, the specification parts are replaced easily, and the cleaning effect is good. The rinsing needle is inserted into the bottle for rinsing, the rinsing effect is good, and the washing bottle has high clarity.
- + It is filled with constant pressure self-flow diaphragm valve, and the filling load is controlled by setting the filling time. The automation degree is high, the filling precision is high, and the function of no-filling and non-irrigating, as well as online cleaning and sterilization can be realized.
- + The patented technology of interlacing the rolling knives on the adjacent plucking heads, it greatly shortens the distance between the plucking heads, reduces the radius of gyration of the tying heads, and reduces the line speed of the bottles, thereby improving the stability and reliability of the whole machine.
- + It adopts PLC control and man-machine interface operation, can be linked control with single machine operation, which are high automation, less operators and low labor intensity.



产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	电容量 (kW) Electrical Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SLX50~500-D	50-500ml 玻璃输液瓶 Glass Bottle	3600-12000pcs/h	49	10000	21500*2000*2135
SLX50~500-C	50-500ml 玻璃输液瓶 Glass Bottle	3600-12000pcs/h	37	9000	21500*2000*2135
SLX50~500-B	50-500ml 玻璃输液瓶 Glass Bottle	3600-6000pcs/h	26	10370	22250*2160*2135
SLX50~500-A	50-500ml 玻璃输液瓶 Glass Bottle	1200-3600pcs/h	22	6720	17670*2160*1700

SLP 系列大输液瓶理瓶机

SLP Series Large Infusion Bottle Unscrambler



主要用途 / Main Application

主要用于玻璃瓶与塑料瓶的理瓶和输送瓶。

Mainly used for bottle and bottle of glass and plastic bottles.

性能优势 / Performance Advantage

◎ 采用大转盘旋转，自动进行输瓶，具有很好的理瓶与输送瓶效果。

+ The large turntable is rotated to automatically carry out the bottle transfer, which has a good effect of bottle arranging and bottle delivery.

产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	电容量 (Kw) Electrical Capacity	净质量 (Kg) Net Weight	外形尺寸 (Mm) Dimension
SLP1200	50-1000ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	6000-12000pcs/h	0.25/0.37	450	1240*1800*1100
SLP1600	50-1000ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	6000-18000pcs/h	1.5	550	1900*1665*975

SQC 系列大输液瓶超声波粗洗机 SQC Series Large Infusion Bottle Ultrasonic Primary Washing Machine



主要用途 / Main Application

主要用于制药厂大输液玻璃瓶的粗洗，也可用于其他玻璃容器的粗洗。

It is mainly used for rough washing of large infusion glass bottles in pharmaceutical factories, and also for rough washing of other glass containers.

性能优势 / Performance Advantage

本机采用超声波清洗原理对玻瓶进行粗洗，可自动完成进瓶，喷淋水、超声波清洗到出瓶的全过程。

This machine uses the principle of ultrasonic cleaning to rough wash the glass bottle, which can automatically complete the whole process of bottle feeding, spray water and ultrasonic cleaning to the bottle.

产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	常水耗量 Water Consumption	耗气量 Air Consumption	电容量 (kW) Electrical Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SQC30	50-250ml 玻璃瓶 Glass Bottle	6000-9600pcs/h	0.6m ³ /h	30 m ³ /h	13.6	1100	2620*1480*1470
SQC44	50-500ml 玻璃瓶 Glass Bottle	3000-9600pcs/h	0.6m ³ /h	60 m ³ /h	15.6	1500	2685*1395*1365

SQL 系列大输液瓶立式清洗机

SQL Series Large Infusion Bottle Vertical Washing Machine

主要用途 / Main Application

主要用于制药厂大输液玻璃瓶的粗洗或精洗，也可用于口服液瓶等其他药用玻璃瓶的清洗。

It is mainly used for the rough washing or fine washing of large infusion glass bottles in pharmaceutical factories, and also for the cleaning of oral liquid bottles and other pharmaceutical glass bottles.

性能优势 / Performance Advantage

本机为立式传鼓结构，采用水气交替喷射冲洗的原理，对容器逐个清洗。循环水、压缩空气、注射用水均使用独立的喷针，插入瓶内冲洗；无交叉污染，水、气、无压力损失，节约能源，且清洗效果好。同时还可目测到整个清洗过程，操作维护方便。

This machine is a vertical drum structure, which uses the principle of alternate jet flushing of water and gas to clean the containers one by one. Circulating water, compressed air and water for injection use separate injection needles and are inserted into the bottle for flushing; no cross-contamination, water, gas, no pressure loss, energy saving, and good cleaning effect. At the same time, the entire cleaning process can be visually observed, and the operation and maintenance are convenient.

产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	常水耗量 Water Consumption	耗气量 Air Consumption	电容量 (kW) Electrical Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SQL12/1	50-1000ml 玻璃瓶 Glass Bottle	1000-3000pcs/h	0.2-0.3mPa0.6m ³ /h	0.6mPa20m ³ /h	5	1800	1820*1850*1420
SQL28/1	50-500ml 玻璃瓶 Glass Bottle	3000-7000pcs/h	0.2-0.3mPa1.4m ³ /h	0.6mPa50m ³ /h	7	4000	2760*2400*1540
SQL28/2	50-250ml 玻璃瓶 Glass Bottle	6000-14000pcs/h	0.2-0.3mPa2.4m ³ /h	0.6mPa60m ³ /h	7	4000	2760*2400*1540
SQL28/21	50-500ml 玻璃瓶 Glass Bottle	3000-14000pcs/h	0.2-0.3mPa2.4m ³ /h	0.6mPa60m ³ /h	7	4000	2760*2400*1540

KSZ 系列隧道式灭菌干燥机 KSZ Series Sterilization and Drying Tunnel



主要用途 / Main Application

主要用于制药厂玻璃瓶的烘干、灭菌、去热原，也可以用于安瓿瓶、抗生素瓶、口服液瓶等玻璃容器的烘干灭菌。

It is mainly used for drying, sterilizing and depyrogenation of glass bottles in pharmaceutical factories. It can also be used for drying and sterilizing glass containers such as ampoules, vials and oral liquid bottles.

性能优势 / Performance Advantage

本机为整体隧道式结构，分为预热、高温灭菌、冷却三部分。采用层流原理和热空气高温灭菌工艺对容器进行灭菌、去热原，采用负压密封，均流技术的核心专利技术，热分布均匀、去热原效果好。

This machine is an integral tunnel structure, which is divided into three parts: preheating, high temperature sterilization and cooling. The laminar flow principle and hot air high temperature sterilization process are used to sterilize and depyrogenize the container, adopt negative pressure sealing, core patent technology of current sharing technology, uniform heat distribution and good dehydrogenation n effect.

产品参数 / Product Parameters

型号 Model	适应规格 (ml) Applicable Size	生产能力 Capacity	输瓶网带 有效宽度 (mm) Conveyor With Effective Width	电容量 (kW) Electrical Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
KSZ620/43B	50-500	360-1080pcs/h	600	54.3	3700	3680*1700*2410
KSZ620/60-C	50-500	480-2100pcs/h	600	73.4	4500	5075*1555*2410
KSZ620/75-C	50-500	660-2800pcs/h	600	91	6000	5705*1555*2410
KSZ920/100B	50-500	600-4200pcs/h	900	125.07	6500	5730*2050*2400
KSZ1200/60	50-1000	1200-7560 pcs/h	1230	80	8000	4440*2500*3000
KSZ1200/100	50-1000	1920-12000pcs/h	1230	123	1300	5540*2500*3000
KSZ1200/120	50-1000	2160-13800pcs/h	1230	150	1800	8010*2500*3000

SGS 系列重力旋转式灌装加塞机 SGS Series Gravity Rotary Filling and Stoppering Machine



主要用途 / Main Application

主要用于制药厂玻璃或塑料输液瓶的灌装和加塞，也可用于其他玻璃容器的灌装和加塞。

It is mainly used for filling and stoppering of glass or plastic infusion bottles in pharmaceutical factories, and also for filling and stoppering of other glass containers.



性能优势 / Performance Advantage

本机采用气动隔膜阀灌装与旋转跟踪式加塞。采用恒压自流灌装，通过设定灌装时间来控制灌装量，其自动化程度高，灌装精度高，并且还可以实现无瓶不灌功能以及在线清洗与在线灭菌功能。

This machine uses pneumatic diaphragm valve filling and rotary tracking type plugging. Constant pressure self-flow filling is adopted to control the filling amount by setting the filling time. Both automation degree and filling precision are high, and the function of no-slipping and non-irrigating, as well as online cleaning and sterilization can be realized.



产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	灌装头数 Filling Head	加塞头数 Stoppering Head	电容量 (kw) Electrical Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SGS3216	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	4800-18000pcs/h	32	16	6.5	2500	2900*2096*2260
SGS2016	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	3600-12000pcs/h	20	16	6	2000	3085*2132*2260

SGSC 系列重力旋转式抽真空充氮灌装加塞机

SGSC Series Gravity Rotary Vacuum Nitrogen Charging, Filling and Stoppering Machine

主要用途 / Main Application

主要用于制药厂玻璃或塑料瓶氨基酸或脂肪乳类药品的灌装和加塞，也可用于其他要求加塞后瓶内残氧量低的灌装和加塞。

It is mainly used for filling and stoppering of amino acid or fat emulsion drugs in glass or plastic bottles of pharmaceutical plants, and also for filling and stoppering of other drugs requiring low residual oxygen in bottles after stoppering.

性能优势 / Performance Advantage

本机采用恒压自流式隔膜阀控制灌装，灌装可先充氮再边充氮边灌装，灌装后再充氮保护。在加塞工位采用多次脉动抽真空充氮结构来置换瓶内的空气，降低了瓶内的氧气含量，有效的保护了药品质量。并且还可以实现无瓶不灌功能以及在线清洗与在线灭菌功能。

The machine adopts constant pressure self-flow diaphragm valve to control the filling. The filling can be filled with nitrogen and then filled with nitrogen, and then filled with nitrogen after filling. At the stoppering station, multiple pulsating vacuum nitrogen filling structures are used to replace the air in the bottle, which reduces the oxygen content in the bottle and effectively protects the quality of the drug. And it can also realize the function of no-bottle-non-irrigation and online cleaning and sterilization.

产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	灌装头数 Filling Head	加塞头数 Stoppering Head	电容量 (kW) Electrical Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SGSC2020	50-1000ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	3600-9600pcs/h	20	20	9	2500	3468*2505*2260
SGSC1212	50-1000ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	2400-6000pcs/h	12	12	8	2000	3021*2108*2260

SZG 系列大输液瓶压盖轧（旋）盖机

SZG Series Large Infusion Bottle Capping Machine



性能优势 / Performance Advantage

采用连续旋转式封口方式，可自动完成输瓶、上盖、封口到出瓶的全过程。采用先进的压盖、封口新工艺，此工艺先压后封，纠正挂盖偏差，封口平顺美观、合格率高。

The consecutive rotary sealing method can automatically complete the whole process of bottle feeding, capping, sealing and bottle discharging. Adopting advanced gland and sealing new technology, this process is first pressed and back sealed to correct the deviation of the hanging cover, the sealing is smooth and beautiful, and the pass rate is high.



产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	压盖头数 Cap Head	封口头数 Seal Head	电容量 (kW) Electrical Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SZG20	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	12000-18000pcs/h	0	20	9.3	1500	3100*1900*2260
SZG16	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	10800-14400pcs/h	0	16	7.8	1200	3050*1900*2260
SZG12	50-1000ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	7200-10800 pcs/h	0	12	7.8	1200	3050*1900*2260
SZG8	50-1000ml 玻璃瓶 Glass Bottle	4800-7200 pcs/h	8	8	7	1200	3050*1500*2260
SZG1	50-1000ml 玻璃瓶 Glass Bottle	900-3600 pcs/h	0	1	3.3	600	2140*1400*2260

SSS50-500 系列大输液瓶上瓶机

SSS50-500 Series Large Infusion Bottle Infeed Machine



主要用途 / Main Application

主要用于制药厂玻璃输液瓶在封口完成后，上到灭菌小车。

Mainly used in the pharmaceutical factory glass infusion bottle after the sealing is completed, up to the sterilization trolley.



性能优势 / Performance Advantage

采用气缸推瓶的上瓶方式，将瓶子从贮瓶台推入到灭菌小车上，完成上瓶工序。

The bottle is pushed from the storage bottle to the sterilization trolley by the upper bottle method of the cylinder pushing bottle, and the bottle up process is completed.



产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	电容量 (kW) Electrical Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SSS50-500/200	50-500ml 玻璃瓶 Glass Bottle	5000-12000pcs/h	2.25	1000	3170*2340*1020

SSX50-500 系列大输液瓶下瓶机 SSX50-500 Series Large Infusion Bottle Outfeed Machine



主要用途 / Main Application

主要用于制药厂玻璃输液瓶在灭菌完成后，推出灭菌小车。

It is mainly used in the pharmaceutical factory glass infusion bottle, pushing out the sterilization trolley when the sterilization is completed.



性能优势 / Performance Advantage

采用气缸推瓶的卸瓶方式，将瓶子从灭菌小车推出到贮瓶台上，完成下瓶工序。

The bottle is pushed out from the sterilization cart to the storage table by the unloading method of the cylinder pushing bottle, and the bottle remove process is completed.



产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	电容量 (kW) Electrical Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SSX50-500/200	50-500ml 玻璃瓶 Glass Bottles	5000-12000pcs/h	2.25	1000	6130*1545*1170

SGS 系列蠕动泵灌装加塞机

SGS Series Peristaltic Pump Filling and Stoppering Machine

主要用途 / Main Application

主要用于制药厂玻璃或塑料瓶的灌装与加塞，也可用于其他容器的灌装和加塞。

It is mainly used for filling and stoppering glass or plastic bottles in pharmaceutical factories, and also for filling and stoppering other containers.

性能优势 / Performance Advantage

本机采用蠕动泵灌装与旋转跟踪式加塞，可自动完成输瓶、定位、灌装、理塞、加塞等工序。通过蠕动泵中的转子挤压硅胶管实现灌装，其自动化程度高，灌装精度高。

This machine adopts peristaltic pump filling and rotary tracking type plugging, which can automatically complete the processes of bottle feeding, positioning, filling, plugging and stoppering. The filling is performed by the silicone tube extruded from the rotor in the peristaltic pump, which has high automation degree and high filling precision.

产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	灌装头数 Filling Head	加塞头数 Stoppering Head	电容量 (kW) Electric Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SGS10	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	1200-7200 pcs/h	10	16	6	1500	3010*1940*1900
SGS6	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	900-3600 pcs/h	6	16	6	1500	2510*1940*1900
SGS12	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	2100-9600 pcs/h	12	16	6	1800	3208*1940*1900

SG 系列大输液瓶灌装机 SG Series Large Infusion Bottle Filling Machine



主要用途 / Main Application

主要用于制药厂玻璃或塑料瓶输液瓶的灌装，也可用于其他玻璃容器的灌装。

It is mainly used for filling glass infusion bottles in pharmaceutical factories, and also can be used for filling other glass containers.



性能优势 / Performance Advantage

本机采用恒压自流气动隔膜阀灌装，通过设定灌装时间来控制灌装量，其自动化程度高，灌装精度高，并且还可以实现无瓶不灌功能以及在线清洗与在线灭菌功能。

The machine is filled with constant pressure self-flow pneumatic diaphragm valve, and the filling quantity is controlled by setting the filling time. The automation degree is high, the filling precision is high, and the function of no-filling and non-irrigating, as well as online cleaning and sterilization can be realized.



产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	灌装头数 Filling Number	电容量 (kW) Electric Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SG32	50-500ml 玻璃或塑料瓶 Glass Bottle or Plastic Bottle	4800-18000pcs/h	32	4	1300	1821*1700*2600
SG20	50-500ml 玻璃或塑料瓶 Glass Bottle or Plastic Bottle	3600-12000pcs/h	20	3	1000	1400*1285*2600

SYS 系列大输液瓶压塞机

SYS Series Large Infusion Stopper Press Machine

主要用途 / Main Application

主要用于制药厂玻璃或塑料瓶输液瓶的压塞，也可用于其他玻璃容器的压塞。

It is mainly used for the plugging of glass infusion bottles of pharmaceutical factories, and also for the plugging of other glass containers.

性能优势 / Performance Advantage

本机采用旋转跟踪加塞方式，可自动完成输瓶、理塞、压塞到出瓶的全过程。采用拨轮定位、逐步压塞的原理，定位精度高，压塞时间长。

This machine adopts the rotary tracking and plugging method, which can automatically complete the whole process of bottle feeding, arrange the plugs, plugging and bottle out. Adopting the principle of dial wheel positioning and stepwise tamping, the positioning accuracy is high and the tamping time is long.

产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	加塞头数 Stoppering Head	电容量 (kW) Electric Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
SYS16	50-500ml 玻璃或塑料瓶 Glass Bottle or Plastic Bottle	3600-18000pcs/h	16	4.7	1000	1550*1100*1200

DAT 系列转鼓贴标

DAT Series Drum Labeling Machine



主要用途 / Main Application

主要用于制药厂玻璃输液瓶及塑料瓶等各类圆形瓶浆糊贴纸标签。

It is mainly used for all kinds of round bottle paste stickers labels such as glass infusion bottles and plastic bottles in pharmaceutical factories.



性能优势 / Performance Advantage

采用直线式转鼓结构，自动完成输瓶、涂浆、递签、印批号或用喷码机喷印批号、贴标签等工序。

The linear drum structure is adopted to automatically complete the processes of transferring bottles, grouting, handing, printing batch numbers or printing batch numbers and labeling with inkjet printers.



产品参数 / Product Parameters

型号 Model	适应规格 Applicable Size	生产能力 Capacity	签盒数量 Box Number	标签规格 (mm) Label Size	电容量 (kW) Electric Capacity	净质量 (kg) Net Weight	外形尺寸 (mm) Dimension
DZT500C	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	6000-18000 pcs/h	3	≤ 130x110	3.5	850	1580*1010*1200
DZT500B	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	6000-12000 pcs/h	2	≤ 130x110	3.5	800	1580*1010*1200
DZT500A	50-500ml 玻璃瓶或塑料瓶 Glass Bottle or Plastic Bottle	3600-9600 pcs/h	1	≤ 140x110	3.5	800	800*860*1200



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，国家级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



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 medicine and pharmacy design institutes, product research institutes, a group of senior scientific research and technical personnel, national-level aseptic pharmaceutical process verification experts, professors, etc., to provide scientific and effective technical planning support for customers' projects.

◎ 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.

◎ 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 the market.

◎ 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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