



注射剂/ 整体解决方案

- 大容量注射剂
- 小容量注射剂
- 口服液生产线
- 冻干产品制剂
- 预灌装注射剂
- 体外诊断试剂



固体制剂/整体解决方案

- 实验室固体制剂项目
- 生产型固体制剂项目
- 密封型固体制剂项目
- 定制化固体制剂项目



中药制剂/整体解决方案

- 中药提取项目
- 生物发酵项目



生物制药/ 整体解决方案

- 血液制品项目
- 菌苗/疫苗项目
- 单抗生产项目



大/小容量注射剂
整体解决方案

Turnkey Solution for
Large/Small Volume Injection



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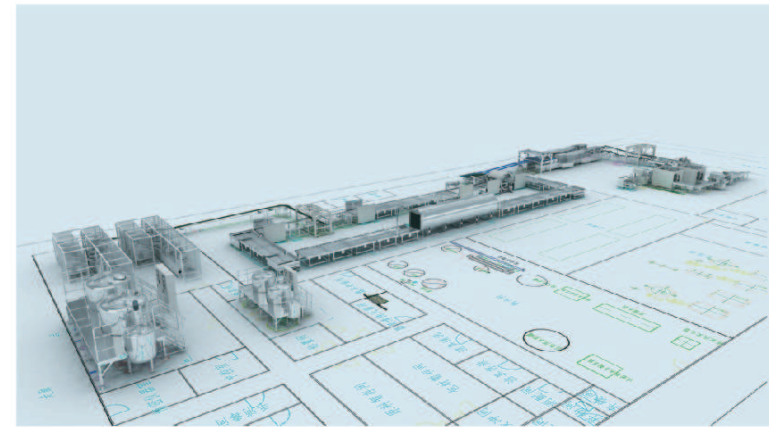
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ABOUT US



我们已是: 中国制药工程全领域极具影响力的制药装备技术供应商;

我们设立: 生物制药、注射剂、固体制剂、中药制剂四个工程技术中心;

我们期望: 在制药工艺、制药装备、制药工程三位一体的高度, 为客户提供全方位的服务;

我们能够: 为化学药、生物药、植物药的工程建设提供从概念设计、工艺试验、厂房规划、设备选型, 到竣工验收、人员培训等总包服务。

We are: the most influential equipment supplier in all Chinese pharma engineering fields;

We have: 4 engineering technology centers-biopharma, injection, solid preparation, Chinese herbal preparation;

We expect: to provide client with all-round service from the height of pharma process, equipment and engineering.

We are capable: to provide turnkey service ranging from concept design, process test, plant planning, equipment selection, completion acceptance and training for engineering construction of chemical, biological and herbal mechine.

Blow-Fill-Seal Machine For Plastic Bottle

塑料瓶吹灌封一体机



Product Introduction

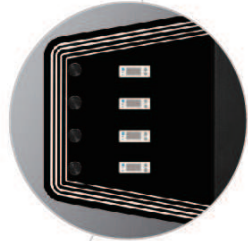
产品简介

吹瓶 - 灌装 - 封口 (BFS) 技术是一种无菌包装技术。采用该技术的单机设备在无菌状态下可以完成整个塑料产品的制作、药液的灌装、产品的封口的生产过程，广泛应用在塑料瓶包装的最终灭菌产品和非最终灭菌产品等生产领域。我公司通过引进国外先进技术，结合自身技术优势，自主创新研发出 SmartPack 系列塑料瓶吹灌封一体机。全新一代的塑料瓶吹灌封一体机具有自动化程度高、运行性能稳定、产品安全性高等诸多优势。新华医疗目前已成为国内最具竞争力的 BFS 设备供应商，为众多制药、化妆品企业提供了此工艺的整体解决方案，并受到行业内的一致好评。

Blow-Fill-Seal (BFS) is an aseptic packing technology which integrates plastic bottle forming, liquid filling and bottle sealing. The BFS machine is widely used for the production fields of plastic bottle of terminal or non-terminal sterilization. The self-developed SmartPack BFS machine absorbs international advanced technology and Shinva technical advantages. The BFS machine features high automation, stable performance and high safety. Shinva is now the most competitive BFS supplier in China and has been well received by the industry.

- 多种无菌保障技术的综合应用，保证制剂的无菌生产
Various aseptic guarantee technologies ensure the aseptic production.
- 流程清洗灭菌干燥自动化运行，药液包装污染零风险
Automatic cleaning, sterilization and drying eliminate the risk of contamination on liquid medicine products.
- 紧凑型标准模块化，维护便利操作效率高
Standardized modular design, easy maintenance and high operation efficiency
- 瓶型、模具等全方位定制服务，满足独有个性化定制
Customized service of bottle shape and mould
- 塑瓶生产全过程整体解决方案，助力快速实现市场化
The turnkey solution of plastic bottle production process helps rapid marketization.

大尺寸彩色工控机的操作界面，显示精准误操作率低
Large-size color IPC displays accurately and lower misoperation rate.



视觉警示系统和智能维护系统，实现稳定高效的运行
Visual warning system and intelligent maintenance system to achieve stable and efficient operation



BFS Auxiliary Equipment

辅助设备



Automatic Cutting Machine

自动冲切机

自动冲切机用于自动接收塑料瓶吹灌封一体机生产的成品，并实现自动定位，由冲切模具将成品块分离成单容器或容器组，冲出的成品自动输送至下一工序，余下的废料单独输出，成品高度改变时冲切模具可以调整以适应成品不同的高度。

It is used for automatically receiving, positioning and cutting plastic bottle finished products. After cutting, bottle products are conveyed to next station and waste materials come out for disposal. Moulds can be adjusted according to the bottle height.



Hot Melt Type Welding Cap Machine

热熔式焊盖机

热熔式焊盖机是一种通过热熔原理对输液用塑料瓶和欧洲盖进行焊接的自动化设备。该设备可广泛用于 PE 和 PP 材料的大输液用塑料瓶生产线，可以适应 250ml~1L、不同生产速度的产线的需求。

It is developed for the welding plastic caps on plastic bottles, it can work together with the BFS machine and handle PP/PE bottles ranging from 250ml~1L. Requirements on different production speed can be met.



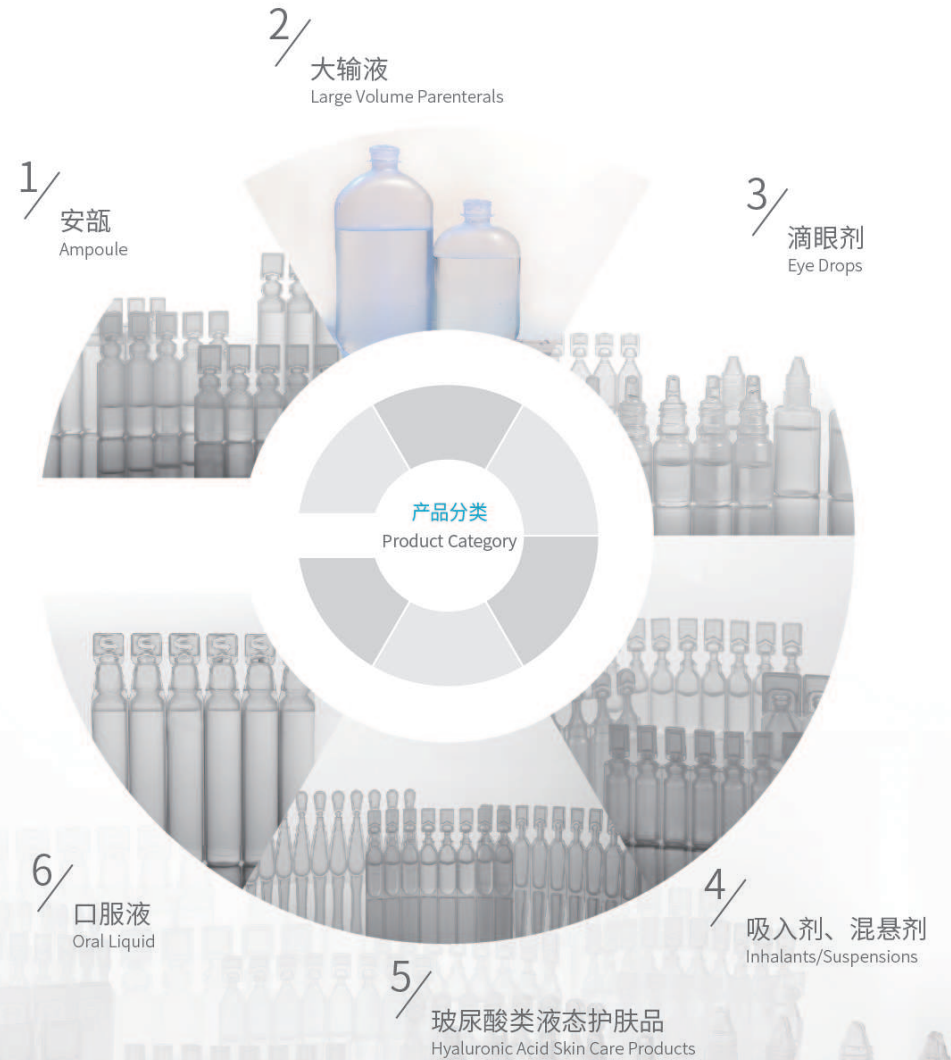
Mould Assembly Trolley

模具装配小车

模具装配小车用于塑料瓶吹灌封一体机的模具拆除和安装，小车有稳定的滚轮进行移动，带有可更换模具的固定装置，工作高度通过螺杆迅速的精确的提升。

The trolley is used to dismantle and install the mould in the BFS machine. It has steady wheel for moving, fixed device for replacing moulds, and screw rod for adjusting working height in a fast and accurate way.

我们专注 BFS 技术研究，专业生产塑料瓶吹灌封一体机，在以下几类产品的生产中，积累了丰富的经验。SHINVA focus on BFS technology research and specialize in the production of BFS machine; SHINVA has accumulated rich experience in the production of the following types of products.



Non-PVC Soft-Bag Form-Fill-Seal Machine

非PVC膜全自动制袋灌封机

Product Introduction

产品简介

R 系列非 PVC 膜全自动制袋灌封机，是新华医疗集团内外制袋灌装封口设备的先进技术与经验自主创新研究开发制造的，可依次完成非 PVC 软袋的上膜、印刷、制袋、灌装、封口、下线等全部功能。

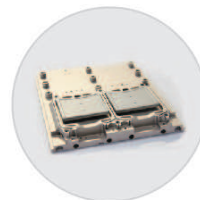
新华医疗结合不同品种非 PVC 软袋的生产工艺特点以及国内外用户的不同需求，有针对性的发展出了 RSY（基础输液）系列、RST（大容量）系列、RSHY（液液多室袋）系列、RSHF（粉液双室袋）系列以及相关配套设备，基本涵盖了市场上所有的非 PVC 软袋的包装形式。

R series non-PVC FFS machine can sequentially complete all functions of non-PVC soft bags, such as film feeding, printing, bag forming, filling, sealing, output, etc.

Shinva has developed RSY series (for basic infusion), RST series (for large volume infusion), RSHY series (liquid-liquid multi-chamber bag), RSHF series (powder-liquid double-chamber bag) and related supporting equipment, and these series basically covers all the packaging type of non-PVC soft bags in the international market.

Product Advantages

产品优势



先进的 DM 模具涂层，均衡的温度分布，制袋质量稳定可控；

Advanced DM mould coating, uniform temperature distribution, stable and controllable bag forming process;



三次接口焊接工艺，前后车双驱动，整机运行稳定可靠；

Three times port welding, double drive, stable and reliable operation;



成熟的设计，适应各种包材，可生产各种规格的单室袋或多室袋软袋线；

Mature design, suitable for all kinds of packaging materials, single-chamber bag or multi-chamber bag;



特殊设计的袋内氧气置换系统，适合厌氧药品。

Specially designed bag oxygen replacement system is used for anaerobic product.



Product Category 产品分类

RSY series Basic Infusion Non-PCV Soft-Bag Form-Fill-Seal Machine

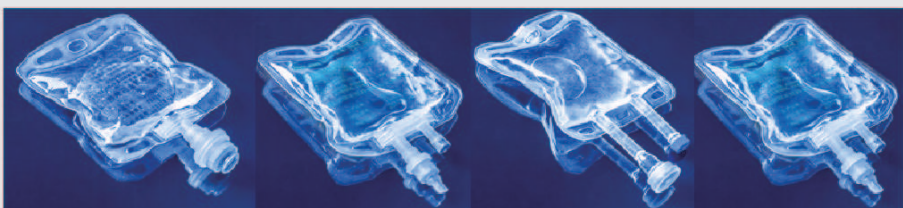
RSY系列基础输液非PVC膜全自动制袋灌封机

主要用于生产1L及以下容量的单室输液软袋，按适应的管口形式可分为硬管和软管两大类。

- > 生产速度快，性价比高。
- > 可适应单硬管、双硬管、单座双阀、双软管等多种管口形式。

For single-chamber bags (1L or less), with hard port or soft port

- > High output capacity and high cost performance
- > Port type: Single/double hard port(s), SPT, double soft ports



RSH Series Non-PVC FFS Machine For High-End Infusion Product (RSHY Series And RSHF Series)

RSH系列高端输液非PVC膜全自动制袋灌封机

> RSHY 系列主要用于液液多室袋的生产，例如肠外营养液等品种。设备配弱焊和充氮功能，可精确控制弱焊开膜张力和袋内的残氧量。

> RSHF 系列主要实现粉液双室袋制袋、液腔灌装、封口的功能，配合后续设备可完成粉液双室袋的粉剂分装、铝膜焊接功能。设备配备弱焊功能，可确保腔室之间的开通力，新华医疗可提供粉液专用膜。

> RSHY series: forming, filling and sealing of liquid-liquid multi-chamber bag, such as parenteral nutrient solution. Weak welding and nitrogen charging functions can accurately control the tension of film and the residual oxygen content in the bag

> RSHF series: forming, filling and sealing of powder-liquid double-chamber bags, and the machine can cooperate with the subsequent machines for powder filling and AL foil sealing



RST Series Large Volume Non-PVC Soft-Bag Form-Fill-Seal Machine

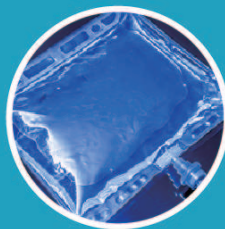
RST系列大容量非PVC膜全自动制袋灌封机

主要用于生产 1L 以上容量的大容量输液软袋，例如腹膜透析液，冲洗液等品种。

- > 独家采用制袋、灌装头数 1:2 的设计，综合效率高。
- > 多处针对大容量软袋特点的专有设计，运行稳定性高。
- > 可适应多种软管和塞子的组合。

For large volume bag (more than 1L), such as peritoneal dialysis fluid, flushing fluid

- > The number of bag-forming station and the number of filling head is 1:2, with high comprehensive efficiency.
- > Multiple patent designs for large volume bag to provide high operation stability
- > Port type: diversified combination of port and stopper



UVP Series UV Color Printing Machine

UVP系列UV彩色印刷机

可实现非 PVC 膜卷的放卷、印刷、固化干燥、收卷功能。UV 印刷是一种通过紫外光干燥、固化油墨的一种印刷工艺，可实现多色印刷、条形码印刷，具有印刷效果美观、附着率高、综合成本低等优势，在国内非 PVC 膜软袋领域正在快速发展。

- > 实现最多四色、套色印刷。
- > 印刷速度快，生产效率高。
- > 生产方式灵活，可与制袋灌封机一体化配套，也可单独印刷膜卷。

Performs unwinding, printing, curing, drying and winding of non-PVC film rolls. UV printing is a printing process that dries and solidifies ink through ultraviolet light. It can realize multi-color printing and bar code printing, with the advantages of beautiful printing effect, high adhesive force, low comprehensive cost. It develops rapidly in the field of non-PVC film soft bags in China.

- > Color printing (up to 4 colors), schromatic printing
- > Fast printing, high efficiency
- > Single machine operation, or working together with FFS machine



Ampoule Washing, Drying, Filling and Sealing Compact Line

安瓿瓶洗烘灌封联动线

Product Introduction

产品简介

本联动机组由 AQCL 系列立式超声波洗瓶机, ASMR 隧道式热风循环灭菌烘箱、AGF 系列立式灌封口机组成, 可单机使用。

This compact line is composed of AQCL series vertical ultrasonic washer, MRSJ tunnel hot air sterilization oven, AGF series vertical filling and sealing machine.

适用于 1-20ml 规格安瓿水针的生产, 分为清洗、干燥灭菌、灌装封口三个工作区。

Suitable for production of ampoule injection of 1-20ml. It has washing area, drying and sterilizing area and filling and sealing area.



每台可单机使用, 也可联动生产, 联动生产时可完成喷淋水、超声波清洗、机械手夹瓶、翻转瓶、冲水 (瓶内、瓶外)、冲气 (瓶内、瓶外)、预热、烘干灭菌、冷却、(前充气)、灌装、(后充气)、预热、封口等二十多个工序。主要用于制药厂针剂车间小容量注射剂生产。通用型既可用于安瓿瓶针剂也可用于抗生素瓶针剂的多功能生产。

Each area can work independently. The three areas can also be used as a linked compact line, which can complete more than 20 procedures such as water spraying, ultrasonic washing, manipulator clamping bottle, bottle overturn, water spraying (bottle inside, bottle outside), air blowing (bottle inside, bottle outside), preheating, drying and sterilizing, cooling, (front air filling), filling, (back air filling), preheating, sealing, etc. This system is mainly applied to the production of small volume injection in injection workshop of pharmaceutical companies. Universal type can be used not only in ampoule injection but also in antibiotics bottle injection.



Product Advantages 产品优势

超声波洗瓶机: 独立区分超声波空化、循环水、注射用水、压缩空气喷射冲洗; 设备运行平稳、可靠、易操作、易清洗。
Ultrasonic bottle washer: separate ultrasonic cavitation; circulating water, WFI and compressed air are used for washing; stable and reliable running, easy operation and easy cleaning.

隧道式热风循环灭菌烘箱: 采用先进的 PLC 人机界面控制系统, 可与清洗设备、灌装设备实行工作状况的联控。
Hot air tunnel oven: advanced PLC + HMI control system. It can work together with washing machine and filling machine.

立式灌封口机: 采用先进智能电控技术、简洁直观的人机界面, 实现了机电一体化设计, 采用无菌设计, 确保药品的无菌生产保障。
Vertical filling and sealing machine: advanced intelligent electronic control technology, simple and intuitive HMI, electromechanical integration design, aseptic design.

Turnkey Solution for Ampoule Products

安瓿产品整体解决方案



安瓿产品整体解决方案可完成安瓿产品的自动生产、自动输送、灭菌、自动灯检及自动包装。

Automatic production, automatic conveying, sterilization, automatic light inspection and automatic packaging of ampoule products can be realized.

Moist Heat Sterilizer For Liquid Preparation

液体制剂湿热灭菌器

SAS series Ampoule Steam Sterilizer

SAS系列安瓿蒸汽灭菌器

- ◇ 优化设计的喷淋系统，喷淋更均匀；
- ◇ 多重检漏方式，检漏更彻底；
- ◇ 全新的清洗方式，清洗更高效。
- ◇ Optimized design of spray system. The spray is more uniform;
- ◇ Multiple leak detection methods, leak detection more thoroughly;
- ◇ New washing method, high efficiency.



WAS series Ampoule Water Sterilizer

WAS系列安瓿水浴灭菌器

WAS 系列安瓿水浴灭菌器采用高温水淋浴方式对药品进行加热和灭菌，可实现较低温度下（100°C以下）的均匀灭菌，主要用于安瓿、口服液、小装量玻璃瓶等药品制剂的灭菌、检漏和清洗处理。

Hot water is used for heating and sterilizing products. Low temperature (below 100°C) uniform sterilization can be realized. The sterilizer is mainly used for sterilization, leak detection and washing of ampoule, oral liquid, small volume glass bottles and other medicine products.



WRA series Rotary Ampoule Water Sterilizer

WRA系列旋转式安瓿水浴灭菌器

WRA 系列旋转式安瓿水浴灭菌器主要用于安瓿瓶、口服液瓶及小容量静脉输液瓶包装的悬浊液、乳浊液及其它容易沉淀的或具有热敏化学特性的药液等药品的灭菌和检漏处理。

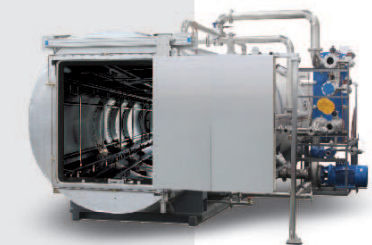
WRA Series Ampoule rotating super-heated water sterilizer is mainly used for the sterilization and checking leakage of ampoules, oral liquid bottles and small capacity venous infusion bottle package of suspension, emulsion and other drugs that are prone to precipitation or heat sensitive chemical properties.



PSM Series Super-heated Water Sterilizer

PSM水浴灭菌器

- ◇ 升降温速率高，可实现急速升降温；
- ◇ 独创的节能系统，可节约能源 20% 以上；
- ◇ 根据灭菌物品特性可实现动态灭菌。
- ◇ Rapid heating and cooling;
- ◇ Unique energy-saving system can save more than 20% of the energy;
- ◇ Dynamic sterilization can be realized according to the characteristics of products to be sterilized.



XASM/XPSM series Dynamic Super-heated Water Sterilizer

XASM/XPSM系列动态水浴灭菌器

药液在灭菌全程中处于运动状态，不但能够使药品更均匀的接触循环水而具备优秀的温度均匀性，而且能够防止药品在灭菌过程中发生沉淀或者凝固等。The liquid medicine is in a moving state in the whole sterilization process, which not only can make the medicine contact with circulating water more evenly and have good temperature uniformity, but also can prevent the medicine from precipitating or solidifying in the sterilization process.



RFM series Air Steam Mixture Sterilizer

RFM系列通风干燥灭菌器

- ◇ 独特的风道循环系统设计，冷却干燥效率高；
- ◇ 独家专利的控温策略，控温更精准；
- ◇ 适用于预灌装针、粉液多室袋等多种产品的灭菌。
- ◇ Unique air circulation system design, high cooling and drying efficiency;
- ◇ Exclusive patent temperature control strategy, good temperature control accuracy;
- ◇ It is suitable for many kinds of products such as pre-filled syringe, powder-liquid multi chamber bag, etc.

SH-BSY series Automatic Light Inspection Machine for IV Solution Containers

SH-BSY系列大输液自动灯检机



Product Introduction

产品简介

- > 能为 100mL-500mL 的塑料瓶 / 玻璃瓶 / 可立袋大输液, 可检测最小异物直径 50um;
- > 检测效率: 额定最高速率 300 瓶 / 分钟;
- > 5 套视觉检测系统: 液位检测工位, 背光检测工位 (检测异物), 底光检测工位 (异物), 瓶头检测和瓶底检测;
- > 伺服系统采用德国 Beckhoff 品牌, 通讯采用实时总线 EtherCAT, 最小延迟达到微秒级, 有效保证长期稳定地高精度工作;
- > 高速相机采用德国 Basler, 保证检测精度;
- > 采用 Beckhoff 的 PLC 进行集中控制, 并采用 Beckhoff 触摸屏控制, 实现人机界面与 PLC 的无缝衔接;
- > 能够进行大数据统计, 为药品的整体质量评估及质量提升提供指导;
- > 采用人工智能算法与机器视觉完美匹配, 极大提高准确率。
- > It is suitable for large volume IV plastic bottles/glass bottles/collapsible bags of 100mL-500mL, and the minimum foreign matter with diameter of 50um can be detected;
- > Detection efficiency: rated maximum speed is 300 bottles/minute;
- > 5 sets of visual inspection system: liquid level inspection station, backlight inspection station (foreign matter), bottom light inspection station (foreign matter), bottle top and bottom detection.
- > Beckhoff servo system + EtherCAT real-time bus: min.microsecond minimum delay, allowing long-term stable and accurate operation;
- > Basler high-speed camera with high precision, Beckhoff PLC + HMI;
- > Able to conduct big data statistics. Artificial intelligence algorithm is perfectly matched with visual system.

IV Solution Leakage Detection System

大输液检漏系统

大输液检漏系统是输液生产线上的设备之一, 用于检测输液袋 / 瓶是否有漏液, 分为压力式检漏机和高压放电检漏机:

- ◇ 压力式检漏机为机械检漏装置, 采用压辊对经过的输液袋 / 瓶挤压, 实现压力检漏;
- ◇ 高压放电检漏机是通过采集、分析放电信号来判定是否合格, 检测无损伤, 检测精度高;
- ◇ 高压放电检漏机具备自动剔除功能。

IV solution leakage detection system is one machine of the IV production line. Pressure leak detector and high voltage leak detector is used for detecting the leakage of the IV bag / bottle.

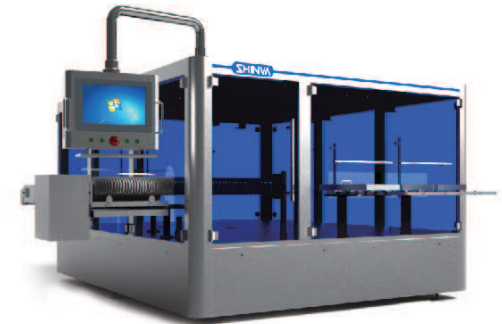


Ampoule Automatic Light Inspection Machine

安瓿自动灯检机

主要用于安瓿注射液中可见异物 (玻璃屑、金属屑、纤维、毛发、白点、白块等) 及液位的自动检测。也可用于口服液、西林瓶水针剂药液中可见异物的检测。

It is mainly used for automatic detection of visible foreign matters (glass chips, metal chips, fibers, hair, white spots, white blocks, etc.) and liquid level in ampoule injection. It can also be used for the detection of visible foreign matters in oral liquid and vial injection.



机器型号 Model	瓶型范围 Volume	最大速度 Max. speed	容器类型 Container Type	检测内容 Detection Content	检测精度 Detection Precision
AZD048	1-20ml	200瓶/bottles/min	安瓿瓶、口服液 Ampoule, Oral liquid	可见异物 (玻璃屑、纤维、白点、白块) Visible foreign matter (glass chips, fibers, white spot, white blocks) 瓶身及液位 Bottle body and water level 外观检测 Appearance detection 色深检测 Color depth detection	20-40微米 20-40 micron
AZD060	1-20ml	350瓶/bottles/min			
AZD096	1-20ml	450瓶/bottles/min			
AZD120	1-20ml	600瓶/bottles/min			



Automatic Sterilization Logistics System

灭菌自动物流系统

Product Introduction

产品简介

灭菌区域自动物流输送系统，是集输液产品的自动输送、自动装车、灭菌车的自动输送、自动灭菌以及灭菌后的自动卸车等一系列工艺流程为一体，是致力于制药装备自动化的最新一代药机产品；

- ◇ 该系统采用四轴机器人自动摆袋系统（伸缩式抛袋装盘系统）进行装盘、转笼式自动卸袋机作为卸盘系统，软袋输送采用带式皮带输送机以及 90° 拐弯皮带输送机，系统运行平稳可靠；
- ◇ 可以增加漏袋检测工位，防止混批，提高生产质量；
- ◇ 采用模块化设计，可以根据客户现场进行特殊设计，更好的适应场地的摆放；
- ◇ 多种规格生产可实现配方存储和调用功能，操作简便快捷；
- ◇ 空车位可以根据客户的要求并结合客户现场，在满足生产要求的情况下进行人性化的设计。

It includes automatic product conveying, loading and unloading and automatic sterilization trolley conveying, loading and unloading;

Four-axis robot is used to arrange bags. Rotary unloading machine is used to unload sterilization trays. Belt conveyor and 90° turn belt conveyor is used for conveying products. The whole system runs smoothly.

Bag detection station can be added to prevent mixed batches.

Modular design, special design according to the customer site.

Recipe storage and use

Manual Sterilization Logistics System

灭菌人工物流系统

大输液人工物流系统是集输液产品自动输送，人工装卸以及灭菌车的人工周转等一系列生产工位为一体，适用于产量不大的生产企业；

- ◇ 产品输送平稳，与产品直接接触的材质为 PU 或 POM，符合 GMP 要求；
- ◇ 装卸工位灭菌车的升降采用液压平台，运行平稳，方便操作；
- ◇ 地上轨道为不锈钢材质，框架牢固可靠。



It includes automatic conveying, manual loading and unloading of IV solution products, manual trolley transportation. It is suitable for enterprises with small production capacity;

- ◇ The product is transported smoothly, and the material in direct contact with the product is PU or POM, which meets GMP requirements;
- ◇ Hydraulic platform is used to lift the sterilization trolley;
- ◇ The track is made of stainless steel, and the frame is firm and reliable.

Drying Equipment

产品干燥设备

隧道式表面除水机专用于制药厂对大输液产品在水浴灭菌后表面的吹干，它可以快速除去产品表面的水珠，缩短用户的工作周期，使生产效率大大提高，同时节约了因自然干燥所使用的大量场地；

- ◇ 适合多种规格大输液产品的表面除水(100ml、250ml、500ml)；
- ◇ 除水机通过与高压风机连接的风刀将产品表面的水珠吹掉；
- ◇ 除水机可与输送线配套使用，实现生产自动化。



Tunnel drying machine is specially used for drying the IV product after sterilization. It can rapidly remove the water on the surface of the product, reduce the user's working cycle, greatly increases the production efficiency, and at the same time saves the large space required by natural drying;

- ◇ Suitable for multiple specifications IV product surface drying (100ml, 250ml, 500ml);
- ◇ The water on the surface of the product is removed by the air knives which are connected to the high pressure fan;
- ◇ The dryer work together with conveyor line .

Packing System for Finished Liquid Injection

注射剂成品包装系统



Automated Packing System For IV Solution 大输液自动包装系统

- ◇ 适应所有大输液产品的多种包装方式;
 - ◇ 不同装箱方式的自动化装箱成功案例, 基于用户现有装箱工艺的前提下实现自动化;
 - ◇ 生产线以直线输送单元串联, 各设备模块化设计, 选配更换灵活;
 - ◇ 整体方案可根据厂房灵活设计;
 - ◇ 可完美适应老厂房的改、扩建。
- ◇ It is suitable for multiple of packing of IV solution products;
- ◇ The success cases of automated packaging is based on customer existing casing process;
- ◇ The production line is concatenated by linear transportation unit, all equipments are in modular design, the options are flexibly to replace;
- ◇ The integrated solution can be flexibly designed based on the plant;
- ◇ Can be perfectly adapted to the old factory building reconstruction and extension;



Manual Packing System For IV Solution 大输液人工包装系统

- ◇ 适应所有大输液产品的多种包装方式以及不同装箱方式;
 - ◇ 非关键工位采用人工方式;
 - ◇ 生产线以直线输送单元串联, 人性化人工操作平台;
 - ◇ 可预留自动化改造空间, 可扩展性高;
 - ◇ 整体方案可根据厂房灵活设计;
 - ◇ 可完美适应老厂房的改、扩建。
- ◇ It is suitable for multiple of packing and casing for the entire IV solution products;
- ◇ Non-critical work station adopts manual way;
- ◇ The production line is concatenated by linear transportation unit, humanized manual operation platform;
- ◇ Reserve automation modification space, scalability is high;
- ◇ The integrated solution can be flexibly designed based on the plant;
- ◇ Can be perfectly adapted to the old factory building reconstruction and extension;



Ampoule Packing System 安瓿瓶包装系统

- 系统可实现产品的制托、入托、贴标、装小盒、装大箱以及大箱的開箱、输送、喷码、封箱、码垛等功能;
- ◇ 本系统可适应多种规格的玻璃安瓿和西林瓶产品;
 - ◇ 系统可集成二级药监码系统;
 - ◇ 系统各单机模块化设计, 可根据具体厂房灵活设计;
 - ◇ 可完美适应老厂房的改、扩建;
- The system can realize the function of automatic tray making, tray loading, labeling, box loading, carton loading, carton opening, transportation, coding, carton sealing and palletizing;
- ◇ The system can be suitable for various sizes of glass ampoule and vial products;
 - ◇ The system can integrate the secondary drug safety code system;
 - ◇ The integrated solution can be flexibly designed based on the plant;
 - ◇ Can be perfectly adapted to the old factory building reconstruction and extension.



Finished Carton Palletizing System 成品箱码垛系统

- 成品箱码垛系统是承接包装后成品箱与立体库之间的设备, 包括产品合流、成品输送、自动分拣以及自动码垛等功能;
- ◇ 自动分拣系统是将不同规格、不同去向的产品, 通过扫描装置和分流装置实现产品的自动化分拣, 自动化程度高、分拣效率高、分拣正确率高;
 - ◇ 控制系统由新华自主研发, 采用模块化设计, 可以根据客户现场进行特殊设计, 更好的适应场地的摆放。
- Finished product carton stacking system is a conveying equipment between carton sealing machine and stereoscopic storage. It has the function of products confluence, finished product conveying, automatic sorting and automatic stacking, etc.
- ◇ Automatic sorting system enables the product with different size and direction can realize the automatic sorting of products by the scanning device and distributary device. It has high level of automation, high efficiency of sorting, high sorting accuracy rate;
 - ◇ The control system is independently developed by Shinva and adopts modular design. It can be specially designed according to the customer's site to better adapt to the site placement.

Liquid Injection Supporting Auxiliary Equipment

注射剂配套辅助产品



Belt Conveyor

带式输送机

带式输送机用于软袋的直线输送：

- ◇ 皮带采用 PU 食品级输送带，该输送带的接口是采用交错焊接技术，具有精度高、接口强度高；
- ◇ 输送机的主动滚筒外表面挂胶，可提高主动滚筒和输送带内表面的摩擦力，还可有效防止输送带和主动滚筒长期摩擦造成的划伤，提高输送带的使用寿命；
- ◇ 地脚采用可调高度旋转杯脚，根据地面不同可调整水平和高度。

The belt conveyor is used for IV solution soft bag linear transportation;

- ◇ The belt is PU in food grade, the connector adopts staggered welding technology, high precision, and interface is in high intensity;
- ◇ The outside surface of the drive roller covers rubber to increase the frictional force between drive roller and belt, and it can also avoid scratch during long time friction between belt and drive roller and improve the service life of the conveyor belt;
- ◇ The ground foot adopts height adjustable rotating the cup-type foot, it can adjust the level and height according to the ground different.



Scraper Chain Conveyor

链板输送机

链板输送机用于塑瓶或玻璃瓶的输送，既可以直线输送，也可以拐弯输送：

- ◇ 链板材质为POM，符合新版GMP要求，耐磨性好、输送平稳；
- ◇ 链板长度可以根据现场布局随意调整，并且调整方便；
- ◇ 夹瓶式链板输送机可以将塑瓶或玻璃瓶进行垂直或者大角度提升下降输送，其最大的特点是占用空间小，夹瓶提升机可节省输送空间，提高厂房的使用率。

It is used for conveying IV solution plastic bottles or glass bottles. It can be transported straight or turning.

- ◇ The material of the chain plate is POM, which meets the requirements of GMP. The wear resistance is good and the conveying is stable;
- ◇ The length of the scraper chain can be adjusted freely according to the layout and the adjustment is convenient;
- ◇ Bottle clamping scraper chain conveyor can transport glass or plastic bottles through vertical or large angle lifting and down. Its biggest feature is small occupied space. It can save transportation space and improve the utilization rate of plant.



Roller Conveyor

滚筒式输送机

滚筒输送机可实现纸箱直线输送、拐弯输送以及旋转变向等功能：

- ◇ 24V 微电主动滚筒，多契带传动、噪音低、运行流畅；
- ◇ 主体框架采用一次性成型的铝型材结构，框架稳定牢固，组合灵活、方便，可根据现场布局定制长度；
- ◇ 7 档调速，可实现长距离输送，最大 80Kg/m 的载荷能力，最大输送速度 1.3m/s；
- ◇ 智能化控制，扩展方便。

Roller conveyor can realize the linear conveying, turning conveying and rotating direction changing of carton:

- ◇ 24V micro-motor drive roller, poly V-belt drive, low noise and smooth running;
- ◇ The main frame adopts aluminum profile structure of one-step modeling;
- ◇ 7 speed adjustment, can realize long-distance transmission, maximum 80Kg/m load capacity, maximum conveying speed is 1.3m/s;
- ◇ Intelligent control and easily extended.



Mesh-belt Conveyor

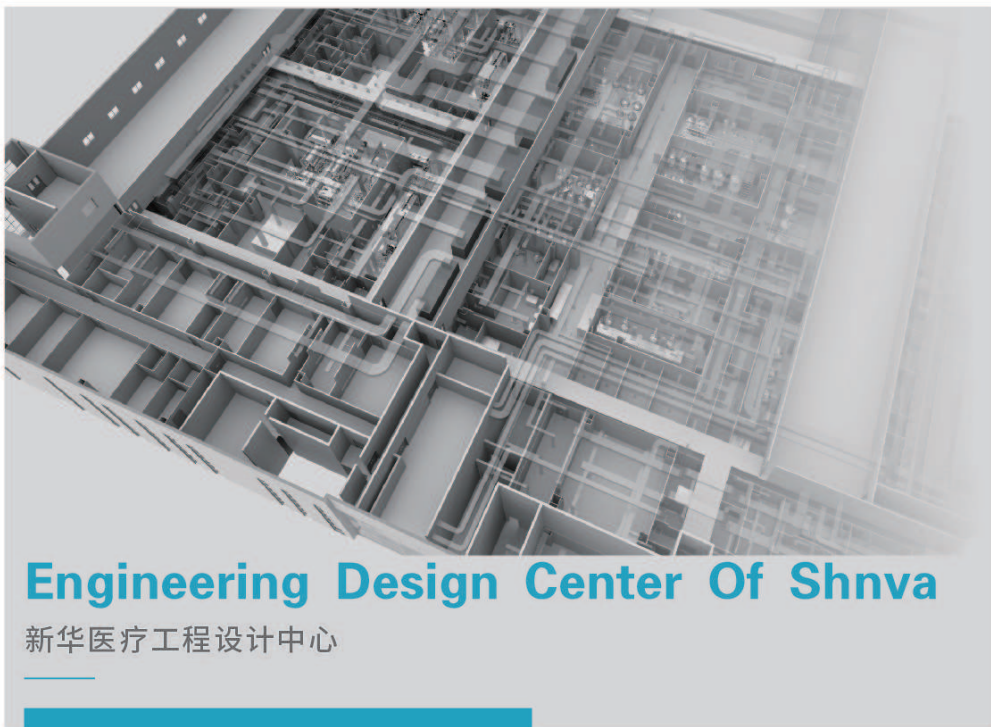
网链式输送机

网链式输送机用于软袋、口服液等产品的直线输送。

- ◇ 网链采用 POM 材料，符合新版 GMP 要求，耐磨性好、输送平稳；
- ◇ 网链长度可以根据现场布局随意调整，并且调整方便；
- ◇ 地脚采用可调高度旋转杯脚，根据地面不同可调整水平和高度，地脚螺栓为不锈钢材质，盘底为尼龙材料，有防震防滑橡胶垫。

Mesh-belt conveyor is used for linear conveying of vial, ampoule, oral liquid and other products:

- ◇ Mesh-belt adopt POM material, comply with GMP requirement, with good wear resistance and stable conveying;
- ◇ The length of mesh-belt can be adjusted randomly according to the site arrangement easily;
- ◇ The ground foot adopts height adjustable rotating the cup-type foot, it can adjust the level and height according to the ground different, the anchor bolt is stainless steel material, the bottom is nylon material, and has anti-vibration anti-slip rubber cushion.



Engineering Design Center Of Shnva

新华医疗工程设计中心

作为国内领先的制药工程整体解决方案服务商，新华医疗可以为用户提供从初期概念设计到项目整体（工艺装备及工程实施）的数据化交付。

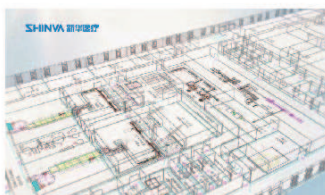
我们与西门子共同联合在生物制药行业中首次引入 COMOS（工厂工程设计软件）。从设计、数字化移交到运维都在一个工程数据平台上进行，符合未来工业 4.0 的高标准要求。

As a leading pharmaceutical engineering solutions service provider in China, Shinva can provide service from initial concept design to the whole project (Process equipment and engineering implementation) data delivery.

We cooperated with Siemens and first introduced COMOS (Plant engineering design software) in biopharmaceutical industry. From design and digital handover to operation and maintenance, it is carried out on one engineering data platform, which meets the high standard of future industry 4.0.



概念设计
Concept Design



基础设计
Basic Design



详细设计
Detailed Design

Engineering Service Center Of Shinva

新华医疗工程服务中心

山东新华医疗器械股份有限公司工程服务中心，是山东新华医疗器械股份有限公司的全资子公司，公司隶属于山东新华医疗器械股份有限公司制药科技集团。工程服务中心致力安装调试、验证、设备改造、电气自动化、配件、年保设备维修和整体工程项目实施等一条龙服务，为药企的安全稳定生产保驾护航。

Engineering Service Centre of Shinva is a wholly-owned subsidiary of Shinva; the company belongs to Pharma-Tech Group of Shinva. Engineering Service Centre dedicates to installation and commissioning, validation, equipment modification, electric automatization, spare parts, annual equipment maintenance and integrated project implementation and other services, and guarantees the safe and stable production of pharmaceutical enterprises.



Business Scope Of Engineering Service Center

工程服务中心业务



Life Science Industry Integration, Automation, Informationization

生命科学产业一体化、自动化、信息化

新华医疗制药行业自动化、信息化整体解决方案
 制药工程、信息工程、自动化控制、弱电系统工程
 Pharmaceutical engineering, information engineering,
 automation engineering, weak electricity system

Utilities

公用工程

洁净空调控制系统	Clean conditioning system
环境监测系统	Environmental monitoring system
纯化水、注射用水系统	PW/WFI system
弱电系统集成	Weak electricity integration
能源系统	Energy system
生产设备控制系统升级	Control system updating of production equipment
生产智能信息展示系统	Display system of intelligent production information



Automation of Engineering Process

工艺过程自动化

制剂过程控制系统	Control system for drug preparations production
原料药过程控制系统	Control system for API production
生物制药过程控制系统	Control system for biological pharmaceuticals production
固体制剂过程控制系统	Control system for solid preparations production
中药过程控制系统	Control system for herbal medicine production



Plant Information System

工厂信息系统

数据采集与监视控制系统	SCADA
制造执行系统	MES
信息显示系统	IDS
智能仓储管理系统	WMS
计算机化系统验证	CSV



1

公用工程自动化

新华医疗提供符合GMP、FDA、EMA规范的“一站式”公用工程控制系统。通过先进的、完善的控制方案，降低能源消耗，保障洁净室环境，减少设备故障，降低维护及运营成本。

“One-station” type utilities control system compliant with GMP, FDA and EMA can reduce energy consumption, guarantee clean room environment, lower equipment failure and maintenance cost.



2

工艺过程自动化

新华医疗提供符合GMP、FDA、EMA规范的“一站式”工艺过程自动化控制系统解决方案。通过精确的、优化的控制方案保证产品质量，提高生产效率，降低生产成本，保证生产安全。

The integration solution for engineering process automation covering main process and supporting process can greatly guarantee product quality, raise production efficiency, reduce cost and ensure production safety.



3

工厂信息系统

新华医疗提供符合GMP、FDA、EMA规范的“一站式”工厂信息化控制系统解决方案。通过及时、准确、全面的信息系统，提高生产协作化水平，改进生产流程，追溯事故问题，方便企业管理。

GMP, FDA, EMA compliant factory informatization solution provide quick, accurate and complete information system to improve production harmonization and process, track accident and problems and facilitate enterprise management.

