

Truking FS20 Flexible Smart Tablet/ Capsule Packaging line

楚天科技灵动 20 智能瓶装数粒线

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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FS20 Flexible Smart Tablet/Capsule Packaging line

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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。

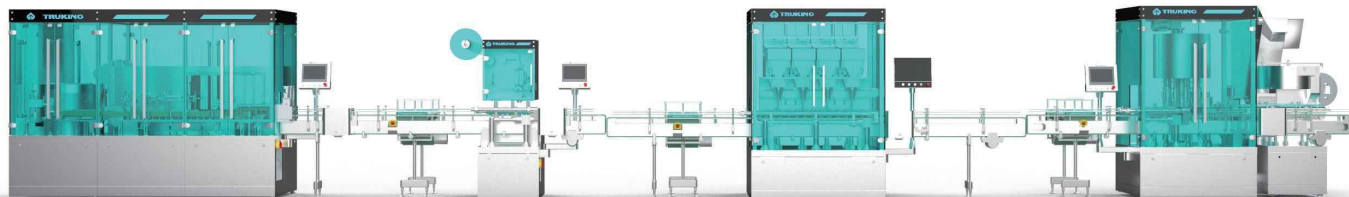
公司已有长沙和德国两大运营总部，建有长沙中央技术研究院、欧洲技术研究院和四川省医药设计院等研发机构。设有国家级企业技术中心，国家级创新基地，博士后科研工作站，院士专家工作站等多个技术与创新平台。截至2023年12月31日，共提出5466项中国专利申请，授权专利4313项，有效专利3090项。另提出54件PCT国际专利申请，在美国、俄罗斯、印度、韩国、德国、印尼、日本、欧洲等多国获得26项专利授权。牵头制订了本系统国家行业产品技术标准20多项。集团产品与服务已累计覆盖180多个国家和地区，国际市场占有率正逐年快速提升。

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.

FS20 智能瓶装数粒线

FS20 Flexible Smart Tablet/Capsule Packaging line



应用范围 / Scope of Application

本生产线适用于各种片剂、软硬胶囊、丸剂及其它固体药粒的数粒分瓶包装，可广泛应用于制药、食品、保健品、糖果等领域。

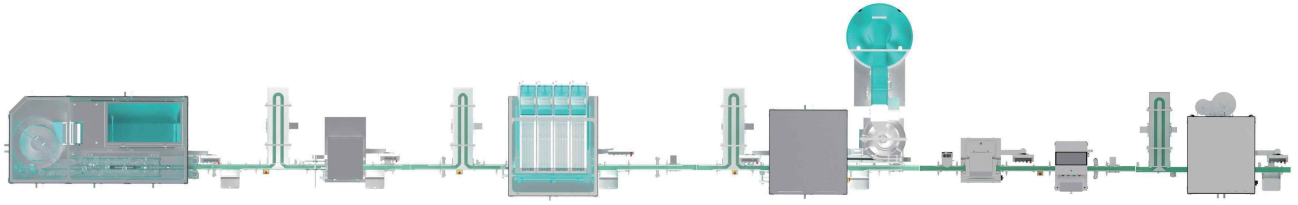
The production line is widely used to count fill and pack a varieties of tablets, soft and hard capsules, pills and other solid granules in the pharmaceutical, food, healthcare product and candy areas, etc.



优势特点 / Advantages & Features

- 整线采用标准化、模块化、柔性化设计。单机可独立运行，与上下游设备智能通讯。整线由各单机模块柔性拼接而成，布局灵活，方便运输，节省安装、调试、交付时间。
- 缓存采用 U 型模块设计，与单机输送带柔性垂直拼接，节省占地空间。在生产线上可拓展，不影响整线布局。
- 各单机间采用无缝侧拼，不倒瓶、无滞留，提高生产效率。
- 模具标识清晰，无工具快拆快换模块化设计，品种切换简单、一次到位。

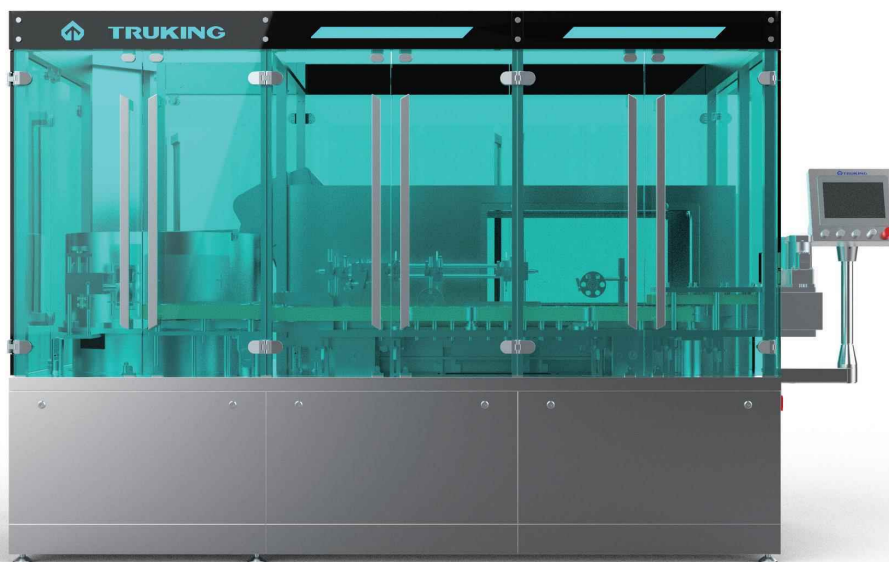
- + The line adopts the standard, modular and flexible design. A single machine can operate independently with smart communication with upstream and downstream devices. The entire line is flexibly assembled with individual machine modules, thereby enabling flexible arrangement, facilitating transportation, and saving the installation, commissioning and delivery time.
- + The buffer utilizing U-type modular design is vertically assembled to an individual machine's conveyor belt in a flexible way, thus saving the floor space. Further extension in the production line is allowed without impact on the entire layout.
- + The seamless side assembly is applied to individual machines to obtain improved productivity as a result of freedom from bottle tilting and retention.
- + Provide clearly marked moulds and modular design supporting tool-free quick release/quick change. Quickly complete change in product types at one attempt.



- ◎ 整线设备采用低台面悬浮钢化玻璃防护门，优质不锈钢和铝合金混搭，风格统一，整洁亮丽，视野通透，方便清洁，机型高档。
 - ◎ 整线高度信息化、自动化、智能化。稳定的单机，合理的缓存，传感器的实时监测，保障整线卓越的综合效率。
 - ◎ 整线可通过楚天云管理平台，实现互联网技术与工厂的深度融合，实现数粒包装全流程信息的自动化采集、存储、分析、追溯，应用大数据、云计算以及物联网技术，有效实现设备自动预警、远程维护与运营管理等，实现智能生产、智能服务。
- + The low-counter floating tempered glass protection door is used for all machines across the entire line. Plus, application of high-quality stainless steel and aluminum alloy can help assure uniform style, create a clean and tidy environment and provide easy access to view. Provide machines of the latest version.
 - + The entire line features a high level of information, automation and intelligence. An individual machine with adequate caching operates steadily by means of real-time monitoring by sensor, thus assuring the entire line to operate efficiently.
 - + Wide application of Internet technology across the complex is achieved by running the entire line through Truking' s cloud management platform, so that the counting and filling packaging information across the entire process is subject to automatic acquisition, storage, analysis and tracing. Application of big data, cloud computation and IOT technology can make happen the machine' s automatic pre-warning, remote maintenance and operation management, etc., thus facilitating smart production and service.



BU-250 高速理瓶机 BU-250 High Speed Bottle Unscrambler



应用范围 / Scope of Application

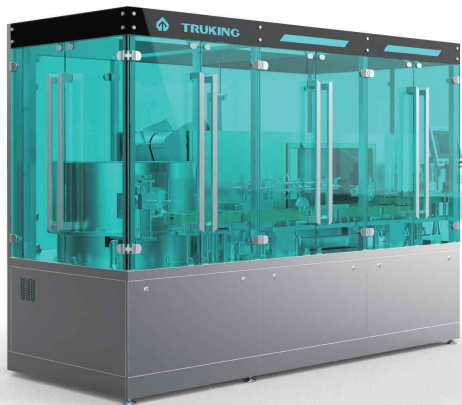
本设备适用于圆瓶、方瓶、扁瓶等各类形状的塑料瓶的有序整理，可广泛应用于制药、食品、保健品、糖果、日化等领域。

Application of this bottle unscrambler can properly deal with plastic bottles of different shapes, such as round bottle, square bottle, squashed bottle, etc. It is widely used in the pharmaceutical, food, healthcare product, candy, daily chemicals areas, etc.



优势特点 / Advantages & Features

- ◎ 0.8 立方米超大容量储瓶仓，加料高度仅 1.4 米；双输送结构，料仓无余瓶；料仓少瓶检测、声光提示加料，确保及时自动供瓶。
- ◎ 理瓶转盘扇页形设计，外圆周可伸大缩小，针对不同大小的瓶子，可实现快速调节，无需更换理瓶转盘。
- ◎ 伺服电机调节两理瓶夹带之间间距，适应不同大小的瓶子。食品级 PU 夹带，模具整体成型，防刮伤、不掉屑。
- ◎ 5 分钟即可完成规格切换，无需更换模具。
- ◎ 独特旋转气缸勾瓶机构，快速精准识别正反瓶。
- ◎ 高速静电发生器，产生线性连续离子风幕，正负离子云平衡控制，喷流角度可调，确保每个瓶都可充分中和。
- ◎ 出口配置倒瓶、反瓶检测剔除。出瓶合格率达 100%。
- ◎ 透明翻盖防护罩、低台面设计，优质不锈钢和铝合金混搭，整洁亮丽，视野通透，方便清洁，机型高档。
- ◎ 10 寸大屏，人机交互符合人体工程学。
- + 0.8 m³ large bottle storage with loading height only 1.4 m. adopt dual loading structure to ensure zero bottle left. bottle detection in the silo, charging on voice and light alert to ensure automatic charging without delay.
- + Utilize the fan-shaped bottle unscrambling rotary table, whose outer periphery can be shrunk or expanded in response to bottles of different size. Thus, it is possible to complete quick adjustment without change of bottle unscrambling rotary table.
- + Distance between the two bottle unscrambling clamp straps can be varied by means of servo motor to deal with bottles of different size. The food-grade PU clamp strap undergoes integral forming in the mould without scratch and discoloration.
- + Complete size change in 5min, without mould change.
- + Quickly identify bottles in correct or reverse position with use of a unique rotatory cylinder mechanism.
- + Generate the linear continuous ion wind screen through the strip DC high-speed electrostatic generator. Provide the positive and negative ion cloud balance control and jet flow at an adjustable angle. Thus, ensure that every bottle is adequately neutralized.
- + A detector to identify and remove bottle in reverse or opposite position is installed at the discharge. Thus, ensure that only bottles in correct position can be discharged.
- + Use the transparent flip hood and low-counter design. Plus, application of high-quality stainless steel and aluminum alloy can help assure uniform style, create a clean and tidy environment and provide easy access to view. Provide machines of latest version.
- + Provide a 10" screen conducive to ergonomics-based HMI operation.

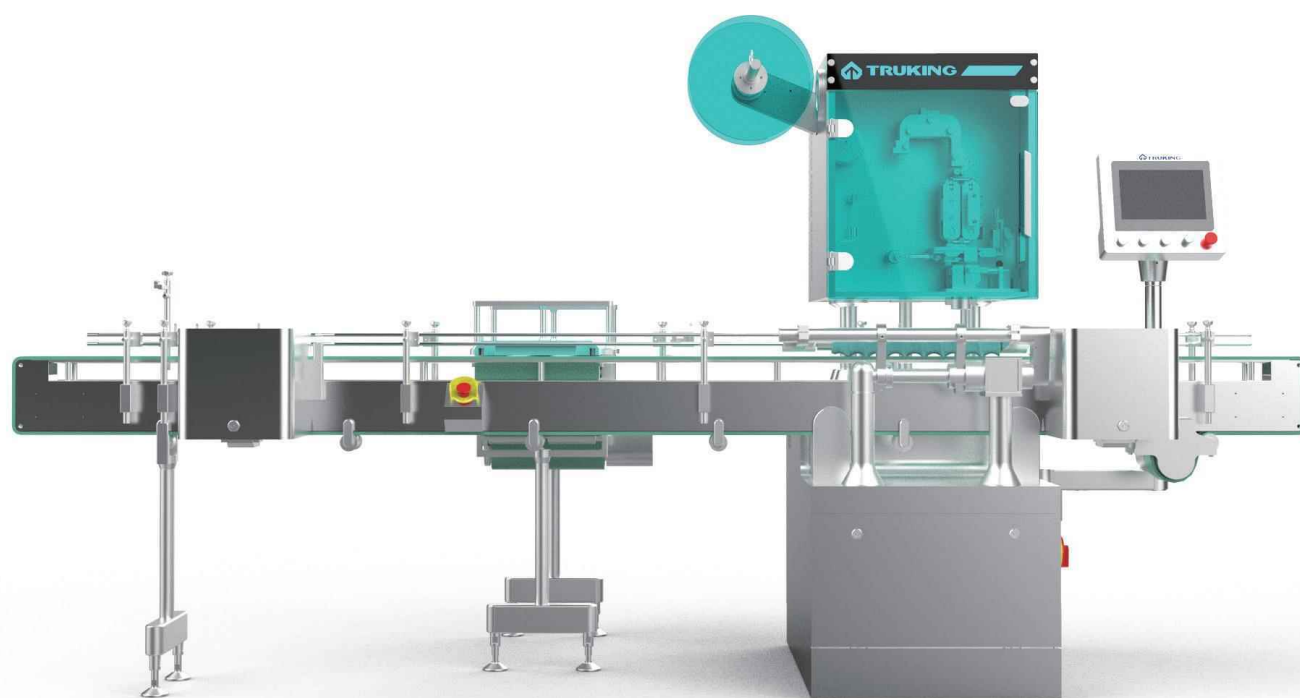




主要技术参数 / Main Technical Parameters

外形尺寸 Overall dimension	2800mm (L) x 1400mm (W) x 1650mm (H)	
设备重量 Weight	850kg	
最高产能 Max. capacity	300 瓶 /min(按国标 40ml 瓶计) 300 bottles/min. (as the national standard 40ml bottle)	
适应规格 Applicable specification	方瓶：25---80mm Square bottle: 25-80mm	
	圆瓶：Φ20---Φ100mm Round bottle: Φ20-Φ100mm	
	瓶高：40---220mm Bottle height: 40-220mm	
瓶材质 Bottle material	PP	
	PE	
	PET	
检测剔除 Detection and removal	倒瓶反瓶剔除（标配） Removal of bottles in reverse or opposite position (standard)	
破损率 Breakage rate	≤ 0.001%	
理瓶合格率 Bottle unscrambling pass rate	≥ 99.99%	
设备噪音 Noise	≤ 80 分贝（理瓶状态） ≤ 80dB (under bottle unscrambling)	
客户公用工程参数 Customer' s utility specification	主电源 Main power supply	三相 AC380V-50Hz-5 线 3-phase AC380V -50Hz-5-wire
	装机功率 Installed capacity	4.0kW
	压缩空气 Compressed air	快插接口：φ10mm Quick-change adaptor: φ10mm 1000L/min(静电消除)，(0.6MPa-0.8MPa) 1000L/min (electrostatic elimination), (0.6MPa-0.8MPa)

ISD-200 高速袋装干燥剂投入机 ISD-200 High Speed Sachet Desiccant Inserter



应用范围 / Scope of Application

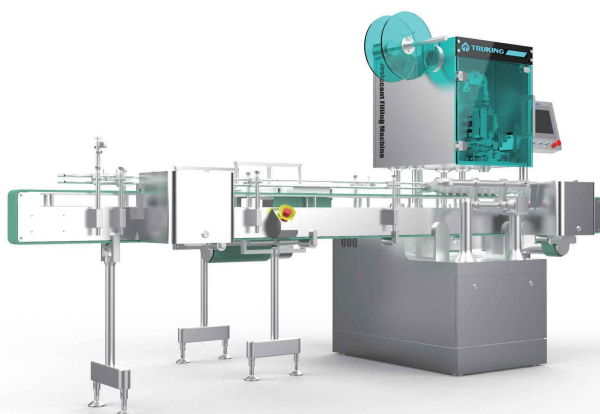
本设备适用于在包装容器内投入链式袋装干燥剂、脱敏剂、调料包等。可广泛应用于制药、食品、保健品、糖果等领域。

The inserter is suitably used to feed package containers with chain sachet desiccant, desensitizer, seasoning packet, etc. It is widely applied in the pharmaceutical, food, healthcare product, candy areas, etc.



优势特点 / Main Characteristics and 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。
- 伺服夹带夹持送料，色标定位检测，干燥剂定长精准，无破包。
- 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。
- 干燥剂被剪切时上下都夹持固定，确保切断位置准确，无破包。
- 干燥剂被剪切后，伺服驱动夹持轮快速启动，主动投送干燥剂精准入瓶，落料时间可控。
- 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 5 分钟。
- 堵料、无投入、空包自动检测剔除。
- 电动调节主机高度升降，以适应不同高度的瓶子，省时省力。
- 透明钢化玻璃防护门、低台面设计，优质不锈钢和铝合金混搭，整洁亮丽，视野通透，方便清洁，机型高档。
- 10 寸大屏，人机交互符合人体工程学。
- + The motor is automatically activated to start feeding at a high level with use of swinging lever buffer. The swinging lever may push the desiccant strip to drop by gravity. The motor stops feeding at a low level.
- + Perform feeding by holding the servo clamp strap. Perform detection with color code. Assure to provide the desiccant at a specified fixed length without breakage.
- + Provide servo-powered cutting, double straight guide rail, steady operation at low noise. Ensure cutting to accurate size. Operate at high speed for a long service life.
- + The desiccant is fixed as it is being cut to ensure cutting at correct position without breakage.
- + When the desiccant is cut, the servo-driven clamping wheel quickly starts running to accurately charge the bottle with desiccant in a controlled way.
- + The servo screw quickly extends into the bottle in a continuous way.
- + Prevent desiccant misalignment by means of guide block limit across the entire stroke.
- + Provide tool-free quick change of screw, guide block and nozzle, which may be completed in less than 5min.
- + Provide automatic detection and removal in case of seizing, no charging or empty bag.
- + Vary the machine height by means of motor to deal with bottles at different height, thus facilitating efficient manpower input.
- + Use the transparent tempered glass protection door and low-counter designs. Plus, application of high-quality stainless steel and aluminum alloy can help assure uniform style, create a clean and tidy environment and provide easy access to view. Provide machines of latest version.
- + Provide a 10" screen conducive to ergonomics-based HMI operation.

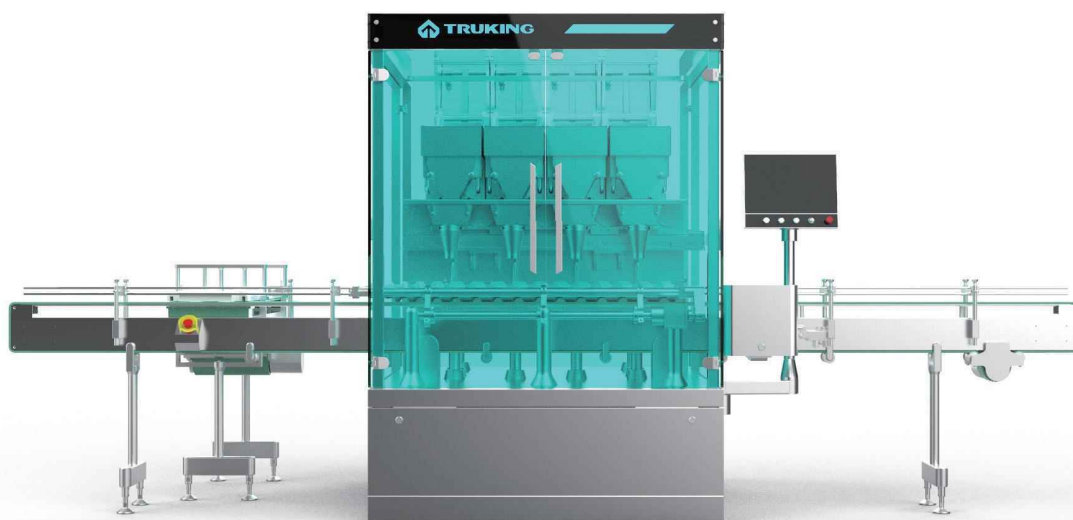




主要技术参数 / Main Technical Parameters

外形尺寸 Overall dimension	650mm (L) x 1050mm (W) x 1850mm (H) (主机) 650mm (L) x 1050mm (W) x 1850mm (H) (main machine)	
设备重量 Weight	500kg	
最高产能 Max. capacity	300 瓶 /min 300 bottles/min	
适应规格 Applicable specification	袋长: 25mm-65mm Bag length: 25mm-65mm	
	袋宽: 10mm-36mm Bag width: 10mm-36mm	
	链式袋装干燥剂 Chain sachet desiccant	
检测剔除 Detection and removal	空包、塞入确认检测剔除 (标配) Detection and removal of empty bag and loading (standard)	
破损率 Breakage rate	< 0.001%	
合格率 Pass rate	≥ 99.99%	
设备噪音 Noise	≤ 50 分贝 ≤ 50dB	
客户公用工程参数 Customer's utility specification	主电源 Main power supply	AC220V -50Hz-3 线 AC220 -50Hz-3-wire
	装机功率 Installed capacity	1.0kW
	压缩空气 Compressed air	快插接口: φ10mm Quick-change adaptor: φ10mm 10L/min,(0.6MPa-0.8MPa)

CFM-04 伺服模块化数粒机 CFM-04 Servo Modular Counting and Filling Machine



应用范围 / Scope of Application

本设备适用于各种片剂、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。

The machine is used for split charging of counting and filling suitable for varieties of tablets, soft and hard capsules, pills and other solid granules in the pharmaceutical, food, healthcare product and candy areas, etc.



优势特点 / Advantages & Features

- ◎ 模块化设计，单一模块独立电控，完成伺服定量送料、三级振动分料、电子计数、伺服料门灌装功能。
- ◎ 料仓斜体设计，料仓振盘不承压，直线伺服电机定时定量推出料，送料均匀，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。
- + Utilize the modular design configured for individual module operating at independent electrical control. Complete servo feeding at constant flow, 3-level vibration segregation, electronic counting and servo sluice filling.
- + Utilize the sloped silo design, in which the vibrating disc takes no load. The straight servo motor is set to discharge at constant flow in specified intervals. The silo vibrating disc operates steadily without upset. Maintain real-time communication between the feeding servo motor and sluice servo motor. Perform real-time feeding flowrate in response to filling speed. Thus, assure steady operation without seizing.

CFM-04 伺服模块化数粒机 / CFM-04 Servo Modular Counting and Filling Machine

- ◎ 三级振盘采用德国原装振动器，振动稳定，起停响应快。
- ◎ 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。
- ◎ 楚天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。
- ◎ 全密封设计，防止粉尘进入振动内腔。
- ◎ 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。
- ◎ 吸尘系统全方位覆盖料仓、三级振盘、电眼盒、料门，集成式管路吸尘设计，杜绝粉尘渗入，满足 GMP 洁净要求。
- ◎ 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。
- ◎ 螺杆进瓶，伺服随动灌装，德国倍福运动控制，EtherCAT 总线协议，整机有机协调，高速稳定运行。
- ◎ 电动调节主机高度升降，以适应不同高度的瓶子，省时省力。
- ◎ 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。
- ◎ 螺杆、料嘴无工具快速更换。切换规格时间少于 10 分钟。
- ◎ 可选配在线碎片摄像检测剔除系统。
- ◎ 透明钢化玻璃防护门、低台面设计，优质不锈钢和铝合金混搭，整洁亮丽，视野通透，方便清洁，机型高档。
- ◎ 15.6 寸平板电脑，人机交互符合人体工程学。
- + Utilize 3-level vibrating disc made in Germany, thus assuring steady vibration and quick response to startup/shutdown.
- + Use a vibrating disc totally made of aluminum, whose surface is subject to hard anodizing. It is abrasion resistant, and easily disassembled for cleaning. It is integrally formed to allow interchangeability.
- + The Truking' s tailor-made sluice straight servo motor operates with quick response, in which the speed curve can be varied, and the operation status can be monitored, thus eliminating jamming or ejection.
- + Utilize a totally air-tight design preventing dust penetration into the vibration chamber.
- + Utilize the infrared counting control panel and dust-proof optimized design; eave-type design conducive to controlling dust adhesion on the sightglass, thus alleviating cleaning workload.
- + Provide a dust collection system covering the entire silo, 3-level vibrating disc, electric eye box, sluice, integrated piping dust collection design to eliminate dust penetration, thus complying with GMP' s hygiene requirements.
- + Utilize a double gate design conducive to coordinated operation in storage and discharging. Thus, eliminate seizing at the nozzle and improve filling efficiency.
- + Start servo filling as the screw moves into the bottle. Perform Beckhoff motion control. The machine steadily operates at high speed with EtherCAT bus protocol.
- + Vary the machine height by means of motor to deal with bottles at different height, thus facilitating efficient manpower input.
- + An individual module electrical board may be separately pulled out. The entire module may be moved out along the guide rail to facilitate cleaning and maintenance.
- + Provide tool-free quick change of screw and nozzle, which may be completed in less than 10min.
- + Optionally, provide an online camera detection system for removal of broken pills.
- + Use the transparent tempered glass protection door and low-counter designs. Plus, application of high-quality stainless steel and aluminum alloy can help assure uniform style, create a clean and tidy environment and provide easy access to view. Provide machines of latest version.
- + Provide a 15"6" screen conducive to ergonomics-based HMI operation.

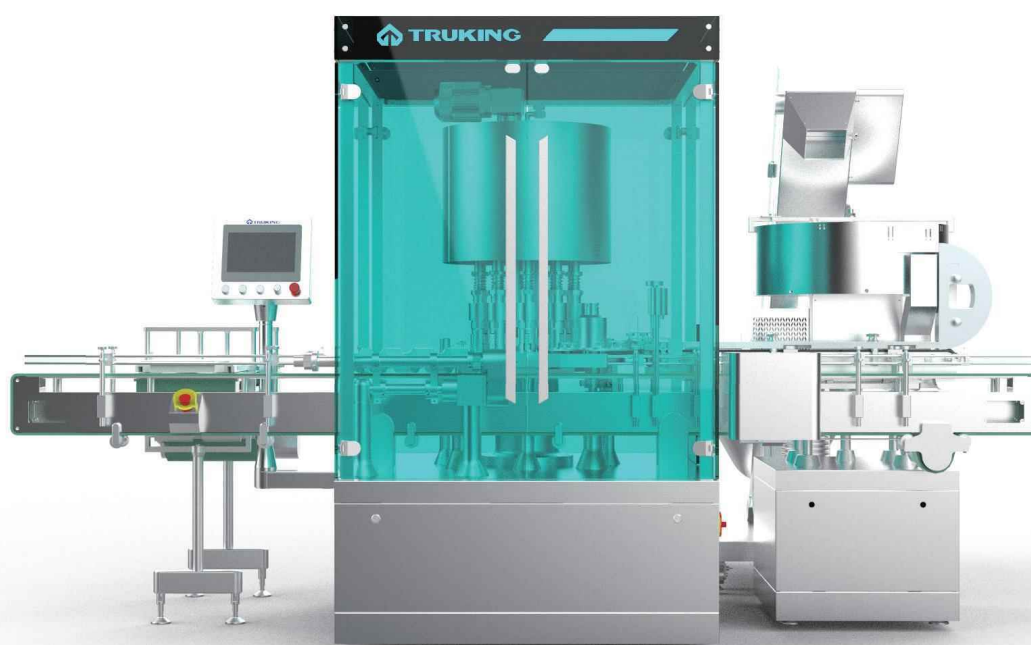




主要技术参数 / Main Technical Parameters

外形尺寸 Overall dimension	1450mm(L)x 1850mm(W)x 2250mm(H)(主机) 1450mm(L)x 1850mm(W)x 2250mm(H)(main machine)	
设备重量 Weight	2400kg	
最高产能 Max. capacity	24000 粒 /min 24000 pills/min	
适应规格 Applicable specification	瓶高: 40 ~ 240mm Bottle height: 40-240mm	
	瓶径: 20 ~ 100mm Bottle diameter: 20-100mm	
	药粒: $\Phi 2$ — $\Phi 20$ mm 的片剂、丸剂、及各种软硬胶囊 Tablet: varieties of tablets, pills, soft and hard capsules of $\Phi 2$ - $\Phi 20$ mm	
轨道数 No.s of rail	4 模块, 共 32 轨 4 modules, totaling 32 rails	
计数方式 Way of counting	红外电眼计数 Counting with infrared electric eye	
检测剔除 Detection and removal	药粒超长、多装、少装、粉尘异常剔除 (标配) Over-sized tablet, over-filling, less-filling, dust removal (standard)	
摄像检测 Camera detection	药粒缺陷摄像检测剔除 (选配) Video detection and removal of defective tablets (optional)	
计数合格率 Counting pass rate	100%	
灌装合格率 Filling pass rate	$\geq 99.98\%$	
设备噪音 Noise	≤ 70 分贝 ≤ 70 dB	
客户公用工程参数 Customer' s utility specification	主电源 Main power supply	三相 AC380V-50Hz-5 线 3-phase AC380V -50Hz-5-wire
	装机功率 Installed capacity	6.0kW
	压缩空气 Compressed air	快插接口: 10mm Quick-change adaptor: 10mm 80L/min (0.6MPa-0.8MPa)

SC-R250 旋转式旋盖机 SC-R250 Rotary Screw-On Capper



应用范围 / Scope of Application

本设备适用于各种圆瓶、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。

The capper is used for automatic filling, unscrambling and capping of round bottle, square bottle and oval bottle in different size, which can be applied in the pharmaceutical, food, healthcare product, candy, daily chemical and beverage areas, etc.



优势特点 / Advantages & Features

- 转盘离心盖，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，定位销定位，更换一步到位，确保即装即用。切换规格时间少于 30 分钟。
- 倒瓶检测，螺杆过载保护。
- 气动三爪抓盖，自动定心，无损伤。
- 楚天定制永磁离合扭力限制器，刻度调节，精准控制旋盖扭力。
- 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。
- 透明钢化玻璃防护门、低台面设计，优质不锈钢和铝合金混搭，整洁亮丽，视野通透，方便清洁，机型高档。
- 10 寸大屏，人机交互符合人体工程学
- + Allow the centrifugal unscrambling in the rotary table. Perform cap detection with CMOS laser sensor, removing incorrectly installed caps with air blowing, thus leading to no damage to the bottle cap.
- + Provide the tool-free quick release design for screw, planetary gear, chute and screw-on cap. Locate with dowel pin to facilitate easy replacement and installation. It may take less than 30min. in completing size change.
- + Provide detection of bottles in wrong direction, and screw over-load protection.
- + Utilize a pneumatic three-jaw catcher, which can be automatically aligned without damage.
- + Provide Truking's tailor-made permanent magnet clutch torque limiter. It has scale readings conducive to accurate control of screw-on cap torque.
- + Vary the machine height by means of motor to deal with bottles at different height, thus facilitating efficient manpower input.
- + Perform detection to remove defective products, such as reversed cap, lack of aluminum foil, inappropriate screw-on capping (unfixed or misaligned cap).
- + Use the transparent tempered glass protection door and low-counter designs. Plus, application of high-quality stainless steel and aluminum alloy can help assure uniform style, create a clean and tidy environment and provide easy access to view. Provide machines of latest version.
- + Provide a 10" screen conducive to ergonomics-based HMI operation.





主要技术参数 / Main Technical Parameters

外形尺寸 Overall dimension	1250mm (L) x 1350mm (W) x 2250mm(H) (主机) 1250mm (L) x 1350mm (W) x 2250mm(H) (main machine)	
设备重量 Weight	1600kg	
最高产能 Max. capacity	250 瓶 /min 250 bottles/min	
适应规格 Applicable specification	瓶高：45 ~ 200mm Bottle height: 45-200mm	
	瓶径：Φ20 ~ 100mm Bottle diameter: Φ20-100mm	
	瓶盖高度：10 ~ 30mm Cap height: 10-30mm	
	瓶盖直径：Φ20 ~ 60mm Cap diameter: Φ20-60mm	
旋盖头数 No.s of screw-on cap	10	
理盖速度 Unscrambling speed	最高理盖 350 个 /min Max. 350 caps/min.	
检测剔除 Detection and removal	高盖，歪盖，无铝箔剔除（标配） Removal of high cap, misaligned cap and no aluminum foil (standard) 反铝箔剔除（选配） Removal of reversed aluminum foil (optional)	
破损率 Breakage rate	< 0.001%	
旋盖合格率 Screw-on cap pass rate	≥ 99.98%	
设备噪音 Noise	≤ 70 分贝 ≤ 70dB	
客户公用工程参数 Customer' s utility specification	主电源 Main power supply	AC220V -50Hz-3 线 AC220 -50Hz-3-wire
	装机功率 Installed capacity	3.0kW
	压缩空气 Compressed air	快插接口：10mm Quick-change adaptor: 10mm 200L/min (0.6MPa-0.8MPa)

CSI-200 电磁感应封口机 CSI-200 induction cap sealer



应用范围 / Scope of Application

本设备适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。

The cap sealer is suitable for bottles of different style to complete automatic sealing of aluminum foil at the cap. It is widely applied in the pharmaceutical, food, healthcare product, candy, cosmetics areas, etc.



优势特点 / Advantages & Features

- ◎ 封口头美国 Enercon 原装进口，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。
- ◎ 异常停机剔除。
- ◎ 10 寸大屏，人机交互符合人体工程学
- + Provide capping heads made by US Enercon. The machine is manufactured according to US FDA standard, with sealing up to NEMA 4/ IP65.
- + Provide the independent conveyor belt, touch screen, alarm light and stainless steel body.
- + The splitting wheel operates for uniform splitting, and also ensure uniform transmission of sealing heat, thus improving sealing property.
- + Vary the machine height by means of motor to deal with bottles at different height, thus facilitating efficient manpower input.
- + Utilize the simple fan for air-cooling, thus eliminating complexity of traditional water cooling system and safety concerns from leak.
- + Troubleshooting.
- + Provide a 10" screen conducive to ergonomics-based HMI operation.





主要技术参数 / Main Technical Parameters

外形尺寸 Overall dimension	650mm (L) x 750mm (W) x 1550mm (H) (主机) 650mm (L) x 750mm (W) x 1550mm (H) (main machine)	
设备重量 Weight	100kg	
最高产能 Max. capacity	220 瓶 /min 220 bottles/min	
适应规格 Applicable specification	盖子直径: $\Phi 24 \sim \Phi 120\text{mm}$ Cap diameter: $\Phi 24\text{-}\Phi 120\text{mm}$	
	瓶子高度: 30 ~ 300mm Bottle height: 30-300mm	
感应头 Sensing probe	美国 Enercon SS 100 US Enercon SS100	
检测剔除 Detection and removal	异常、停机拦瓶剔除、剔除确认 (标配) Upset, shutdown troubleshooting, removal confirmation (standard) 无铝箔、歪盖剔除 (选配) No aluminum foil, misaligned cap removal (optional)	
封口合格率 Capping pass rate	$\geq 99.99\%$	
设备噪音 Noise	≤ 50 分贝 $\leq 50\text{dB}$	
客户公用工程参数 Customer's utility specification	主电源 Main power supply	AC220V-50Hz-3 线 AC220-50Hz-3-wire
	装机功率 Installed capacity	4.0kW
	压缩空气 Compressed air	快插接口: $\Phi 10\text{mm}$ Quick-change adaptor: $\Phi 10\text{mm}$ 5L/min, (0.6MPa-0.8MPa)



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



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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