# 复合材料设备专业制造商

Professional Manufacturer of Composite Material Equipment

国家科技型中小企业丨自主研发

National Science & Technology SME丨Independent R&D




## 湖南精正设备制造有限公司

HUNAN JINGZHENG EQUIPMENT MANUFACTURING CO., LTD.

地址：湖南省湘潭市南岭路6号

电话：0731-52338609

邮箱：china@jzsb.com

Add : No.6Nanling Road,Xiangtan,Hunan

Tel : 0086(731)52338609

Web : http://www.jzsb.com

邮编：411100

传真：0731-52338587

网址：http://www.jzsb.com

P.C： 411100

FAX：0731-52338587

E-mail : china@jzsb.com



股权代码

100020HN

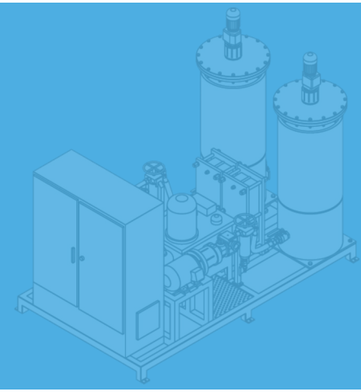

HN·JZ

# 聚氨酯成套设备供应商

Supplier of Complete Polyurethane Equipment

非 标 定 制丨整线解决方案

Non-standard Customization　Complete-line Solutions




## 湖南精正设备制造有限公司

HUNAN JINGZHENG EQUIPMENT MANUFACTURING CO., LTD.




COMPANY PROFILE

# 公司简介 > > >

湖南精正设备制造有限公司是一家国家认定科技型中小企业，专注聚氨酯设备、复合材料成套设备的研发、设计、生产、销售与一站式技术服务，是国内细分领域具备自主创新能力的专业装备制造企业。公司成立于1993年，深耕聚氨酯与复合材料行业多年，始终以技术研发为核心驱动力，专注打造高适配、高精度、高稳定性的工业生产装备。

公司主营产品覆盖聚氨酯发泡成套设备，以及复合材料模压、浇注、成型配套设备，可根据客户产品工艺、产能需求、场地条件等提供非标定制化设备与整线解决方案。产品广泛应用于新能源、汽车配件、建筑保温、家居制品、航空辅材、工业复合材料等多个领域，不仅服务国内各大生产企业，还远销全球多个国家和地区，适配国际化生产标准与出口交付要求。





Hunan Jingzheng Equipment Manufacturing Co.,Ltd. is a nationally-recognized Science and Technology SME. We specialize in the R&D, design, production, sales and one-stop technical services of polyurethane equipment and composite material complete-set equipment, and are a professional equipment manufacturer with independent innovation capabilities in domestic market segments.

Founded in 1993, the company has been deeply engaged in the polyurethane and composite material industries for many years. Taking technological R&D as its core driving force, we are committed to developing industrial production equipment featuring high adaptability, high precision and high stability.

The main products include complete-set polyurethane foaming equipment, as well as supporting equipment for composite material compression molding, pouring and forming. We provide non-standard customized equipment and complete-line solutions according to customers' product processes, capacity requirements and site conditions.

Our products are widely applied in new energy, auto parts, building thermal insulation, household products, aviation auxiliary materials, industrial composites and other fields. We not only serve major domestic production enterprises, but also export to many countries and regions around the world, complying with international production standards and export delivery requirements.





装配车间 Assembly Workshop

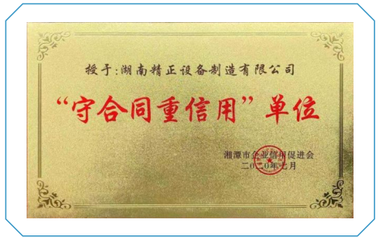
## QUALIFICATION
# 企业资质 >>>





























## TECHNICAL R&D TEAM
# 技术研发团队 >>>



**创新研发 · 智造核心**

Innovative R&D · Core of Intelligent Manufacturing

作为科技型中小企业，我司始终将技术创新作为企业发展的核心竞争力，组建了专业的机械结构、电气自动化研发团队，深耕聚氨酯、复合材料成型工艺与装备研发。

As a Science and Technology SME, our company regards technological innovation as the core competitiveness for corporate development.We have built a professional R&D team covering mechanical structure and electrical automation, and have been deeply engaged in the R&D of molding processes and equipment for polyurethane (PU) and composite materials.

## SERVICE SYSTEM
# 服务体系 >>>

**一站式全周期技术服务，全程为生产赋能**

One-stop full-cycle technicalservice, empowering productionthroughout the entire process



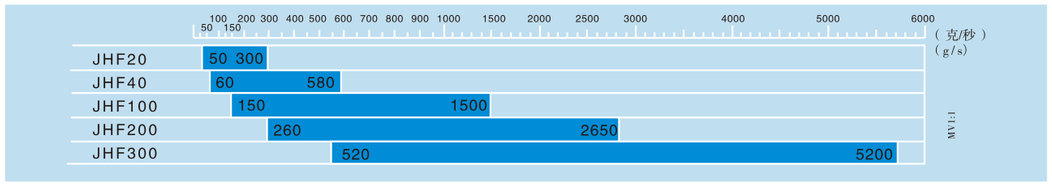


## 高压发泡机
PU high pressure foaming machine



聚氨酯高压发泡机广泛使用于家电、汽车内饰件以及保温建材产品的发泡生产。

PU high pressure foaming machine is widely used in the foaming production of home applicance,automtoive interior and insulation building material products.




## 环戊烷发泡机
Cyclopentane foaming machine

环戊烷发泡机作为淘汰ODS的发泡主机，广泛应用在家电、保温等行业的发泡生产，该设备适应环戊烷发泡，配置有安全报警系统，安全性能高。

Cyclopentane foaming maachine,as the main foaming machine of eliminating ODS, is widely used in the foaming production of home appliance and insulation building material etc,this equipment is suitable for cyclopentane to foam, and equipped with high performance safety alarm system.

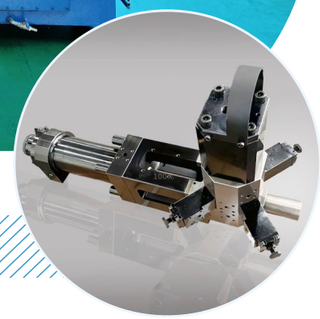







## 汽车座椅四组份、六组份高压发泡机
4 or 6 components high pressure foaming machine for automotive seat





四组份、六组份高压发泡机广泛用于汽车、摩托车座椅发泡生产，根据不同的原料配方及流量比例，适应多种密度和硬度的发泡。

4 or 6 components high pressure foaming machine is mainy suitable for various density and rigidity product to foam according to different material formula and flowrate ratio, widely used in the productioin of automotive seat and motorcycle seat.







# 连续板材发泡机
Continuous sandwich panel foaming machine



用于连续板材的生产，适用于生产PUR或PIR，可以是4组份，5组份或6组份。

This foaming machine is used for the continuous production of sandwich panel,which is suitable for producing PUR or PIR,and it can be 4 components,5 components or 6 components.











# 600型、900型大流量高压发泡机
600 type 900 type large flowrate high pressure foaming machine

专门针对保温管道行业开发的600型、900型发泡机用于直径1400mm甚至1800mm以上大口径保温管道的生产。每秒最大流量可以达到10–18kg。

This 600 type 900 type foaming machine is developped especially againest insulation pipe industry, and widely used in the production of large diameter insulation pipe with a diameter of 1400mm or above 1800mm,max flow rate can reach 10–18Kg/second.





# HP-RTM注胶机
HP-RTM injection machine



HP-RTM注胶机是湖南精正设备制造有限公司在消化国外技术基础上，自主研发的产品，该设备具有重复注射精度高、混料均匀、性能稳定、操作简便、生产效率高等特点。

The HP-RTM injection machine is independently developed by Hunan Jingzheng Equipment Manufacture Co., Ltd., building upon the assimilation of foreign technologies. It features high injection repeatability, uniform mixing, stable performance, ease of operation, and high production efficiency.

HP-RTM注胶机可以将聚氨酯/树脂原料通过高压计量泵，按照设定的比例、流量将原料高压送达混合头，然后通过专门的喷嘴将这种压力转化成喷射混合的动能。两种或三种原料通过这些喷嘴在混合腔内充分高压对撞混合，产生一种强烈的湍流，以实现最佳的混合效果。然后通过模具预留注胶口注入模腔内进行热塑或者热固成形。

The HP-RTM injection machine utilizes high-pressure metering pumps to deliver polyurethane or resin raw materials to mixing head at high pressure, according to the specified ratios and flow rates , Then the high pressure is converted into kinetic energy of mixing and injection through specialized nozzles, the two or three raw materials thoroughly collide and mix under high pressure in the mixing chamber via these nozzles, generating intense turbulence that ensures optimal mixing. The the mixed material is injected into the mold cavity for thermoplastic or thermosetting molding via designated injection ports on the mold.

本系统采用WinCC过程值归档，提供两类数据查询：一是查询单次浇注的整组生产记录；二是查看浇注过程中每500ms采集的瞬时流量、累积流量、压力、温度等过程参数。系统可存储约20万条浇注记录以及对应的过程采集数据，历史浇注记录可长期保存、随时追溯，便于工艺复盘与生产数据分析。

The system uses WinCC process value archiving and provides two data query functions: full production records of single pouring batches, and process parameters (instantaneous flow, cumulative flow, pressure, temperature etc.) sampled every 500 ms during pouring. Capable of storing around 200,000 pouring records and associated process data. Historical pouring data is long-term stored and traceable on demand for process review and production data analysis.





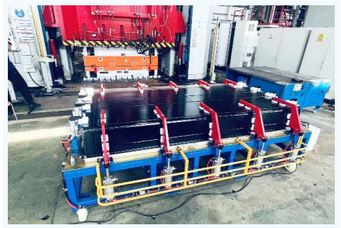
## 应用行业 Application Industries

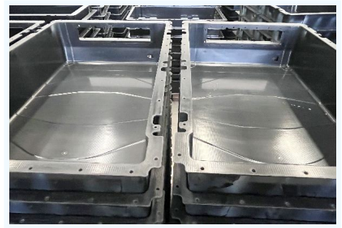
**汽车工业：**新能源车电池箱盖、碳纤维车身等零部件；
Auto industry：Battery pack covers of new energy vehicles、Carbon-fiber vehicle body parts；
**蓄能设备：**电池包上盖（壳体）
Energy storage equipment：The upper cover of battery pack(Shell)；
**航空航天：**飞机门框等结构件；
Aerospace：Structural components such as aircraft door frames；
**风电：**叶片前缘防护、叶片结构件；
Wind Power Industry：Leading edge protection of wind turbine blades、Structural components of wind turbine blades；
**轨道交通：**制造对强度、刚度要求高的轻量化部件；
Rail Transit：lightweight components with high strength and stiffness requirements
**其他：**高端体育器材、电动滑板车、船舶部件、医疗设备等结构件。
Others: Structural components for high-end sports equipment, Electric scooters, Marine parts, Medical devices, etc.

## 技术参数 Technical Parameter

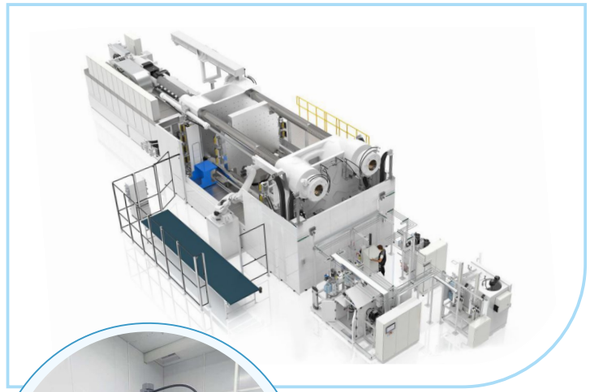
| 技术数据 Data \ 设备型号 Model No. | JZ-HP-RTM05 | JZ-HP-RTM10 | JZ-HP-RTM12 | |
|---|---|---|---|---|
| 流量 Flowrate | 5~50g/s | 30~300g/s | 150~750g/s | |
| 压力 Pressure | 10~180bar | 10~180bar | 10~180bar | |
| 料罐容积 Tank Volume | 25/50L | 50/100/250L | 50/100/250L | 支持定制<br>Customization supported |
| 混合头型号 Model of mixing head | JZ-HP-RTM-05-3K | JZ-HP-RTM-10-3K | JZ-HP-RTM-12-3K | |
| 原料体系 Raw material system | 可以提供环氧树脂、聚氨酯（PU）以及己内酰胺（CPL）进行选择。<br>Epoxy resin, polyurethane (PU), and caprolactam (CPL) for option | | | |
| 比例范围 Ratio range | 100:10~100:120 可供选择 | | | |
| 注射精度 Injection accuracy | ≤0.5% | | | |
| 真空度 Degree of vacuum | ≥-0.095MPa | | | |
| 混合头数量 Mixing head quantity | 可以提供单枪、双枪或者多枪进行选择。<br>Single,dual or multiple mixing head for option | | | |
| 控制系统 Control System | 德国西门子 S7-1500PLC<br>Germany Siemens S7-1500PLC | | | |
| 第三组份 The 3rd component | 可以提供独立脱模剂或色浆组份进行选择。<br>Separate mold release agents or color paste components are available for selection. | | | |
| 脱泡（预处理）罐<br>Deaerating Tank(Pre-treatment) | 可以提供机前脱泡（预处理）罐进行选择。<br>Upstream deaerating tank(pre-treatment) can be available for option | | | |







# PUR模内涂层浇注机
PUR In-Mold Coating Pouring Machine



模内喷涂：这是一种将注塑成型与聚氨酯反应成型集成的创新工艺，在注塑的过程中，通过模内系统将聚氨酯材料直接喷涂在基材的表面，不仅实现了一次成型，还能赋予产品自修复功能，它有效的解决了产品在使用过程中产生的表面凹陷问题。

In-mold spraying: This is an innovative process that integrates injection molding with polyurethane reaction molding. In the process of injection molding, a polyurethane material is sprayed directly onto the surface of the substrate via an in-mold system. This approach not only enables one-step forming but also imparts self-repair properties to the product, It effectively resolves the issue of surface depressions that occur during product use.

应用前景：该技术目前在汽车内外饰部件和民用3C产品领域都具有广阔的应用前景，甚至未来有望替代汽车行业线的传统喷涂工艺线。较传统喷涂工序，缩短工艺流程，降低生产成本；设计自由度高，高光泽度直接脱模，无需后续抛光；生产效率最大化，大大提高良品率；紧凑设计，节省生产空间;快速切换颜色，色嘴无颜色残留；低碳环保。

Application Prospects: This technology currently holds broad application potential in both automotive interior and exterior components and civil electronics (3C products). It even has the potential to eventually replace traditional painting process lines in the automotive industry.Compared to traditional painting processes, it shortens the production workflow and reduces production costs. It offers high design flexibility, produces parts with a high-gloss finish directly upon demolding,eliminating the need for subsequent polishing,and maximizes production efficiency while significantly improving the yield rate. Its compact design saves production space, allows for rapid color switching with no residual color left in the nozzle, and is environmentally friendly with a low carbon.





全自动生产的效率配以高水准的表面喷漆质量，高水准集成的工艺相比传统的装饰工艺节省了30%的成本，可完全满足客户需求且经济实惠的解决方案。

Compared to traditional decorative processes, this highly integrated approach,which combine the fully automated production efficiency with superior-quality surface painting,reduces costs by 30%, offering an economical solution that fully meets customer requirements.



## 技术参数 Technical Parameter

| | |
|---|---|
| 型号 Model No. | JZ-HP-RTM-05 |
| 流量 Flowrate | 5~50g/s |
| 压力 Pressure | 10~180bar |
| 料罐容积 Thank Volume | 25/50L（支持定制）Customization supported |
| 混合头型号 Model of mixing head | JZ-HP-RTM-05-2K |
| 原料体系 Raw material system | 可以提供环氧树脂、聚氨酯（PU）以及己内酰胺（CPL）进行选择。<br>Epoxy resin, polyurethane (PU), and caprolactam (CPL) for option |
| 比例范围 Ratio range | 100:10~100:120 可供选择 |
| 注射精度 Injection accuracy | ≤0.5% |
| 真空度 Degree of vacuum | ≥-0.095MPa |
| 混合头数量 Mixing head quantity | 可以提供单枪、双枪或者多枪进行选择。<br>Single,dual or multiple mixing head for option |
| 脱泡（预处理）罐<br>Deaerating Tank(Pre-treatment) | 可以提供机前脱泡（预处理）罐进行选择。<br>Upstream deaerating tank(pre-treatment) can be available for option |
| 控制系统 Control System | 德国西门子 S7-1500PLC<br>Germany Siemens S7-1500PLC |

# STM(PHC)喷胶机
STM(PHC)spraying machine




STM(PHC)为夹层结构，它以芯材为基板，上下复合面层，表面复合装饰层而成。其表面装饰层可以复合面料、无纺布和PVC革等材料，面层材料通常采用玻纤或碳纤维毡材料喷涂PU组合料。

STM (PHC) features a sandwich structure, consisting of a core material as the substrate, bonded with top and bottom facing layers, and finished with an outer decorative layer. The decorative surface can incorporate materials such as fabrics, non-woven textiles, or PVC leather, while the facing layers typically adopts fiberglass or carbon fiber mats coated with a sprayed polyurethane (PU) compound material.

STM(PHC)喷胶机是湖南精正设备制造有限公司在消化国外技术基础上，自主研发的产品，该设备具有重复注射精度高、混料均匀、性能稳定、操作简便、生产效率高等特点。

The STM (PHC) spraying machine is a equipment independently developed by Hunan Jingzheng Equipment Manufacture Co., Ltd., building upon the assimilation of foreign technologies. It features high repeatability in dispensing, uniform material mixing, stable performance, ease of operation, and high production efficiency.

可以将聚氨酯原料通过高压计量泵，按照设定的比例、流量将原料高压送达混合头，然后通过专门的喷嘴将这种压力转化成喷射混合的动能。两种原料通过这些喷嘴在混合腔内充分高压对撞混合，产生一种强烈的湍流，以实现最佳的混合效果。然后通过浇注头将原料均匀喷洒在产品表层，再进行后续固化成型。

The raw material of polyurethane can be delivered to the mixing head by high-pressure metering pumps according to the specified ratios and flow rates , Then the high pressure is converted into kinetic energy of mixing and injection through specialized nozzles, the two raw materials thoroughly collide and mix under high pressure in the mixing chamber via these nozzles, generating intense turbulence that ensures optimal mixing. Then, the raw material is evenly applied to the surface of the product via a mixing head,and then to proceed with subsequent curing and molding.





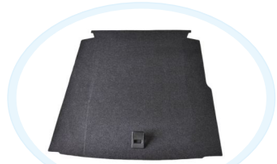
## 应用行业 Application Industries

**乘用车行业：**备胎盖板、C柱下饰板、遮阳罩支撑板、后搁物板等；

Passenger vehicle industry: The covers of spare tire, C-pillar trim panels, Sunshade support board, Rear parcel board, etc.;

**商用车行业：**卧铺板、高架箱、顶棚、导流罩、蓄电瓶箱盖、储物空间隔板等。

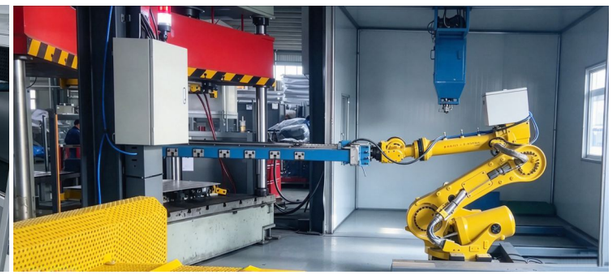
Commercial vehicle industry: Sleeper board, Overhead compartments, Ceiling, Fairing, Battery pack covers, Storage compartment board, etc.



## 技术参数 Technical Parameter

| | |
|---|---|
| 型号 Model No. | JZ-HF-40 |
| 流量 Flowrate | 50~450g/s |
| 压力 Pressure | 10~180bar |
| 料罐容积 Tank Volume | 300L（支持定制）Customization supported |
| 混合头型号 Model of mixing head | JZ-HS-10 |
| 适合原料粘度 Suitable raw material viscosity | 多元醇：1000~3000mPas；异氰酸酯：50~500mPas；<br>Polyol:1000~3000mPas；;ISO：50~500mPas； |
| 温度控制范围 Temperature control range | 2℃ |
| 注射精度 Injection accuracy | ≤0.5% |
| 比例范围 Ratio range | 100 ： 50~100 |
| 控制系统 Control System | 德国西门子 S7-1500PLC<br>Germany Siemens S7-1500PLC |





## 拉挤注胶机
Pultrusion Injection Machine





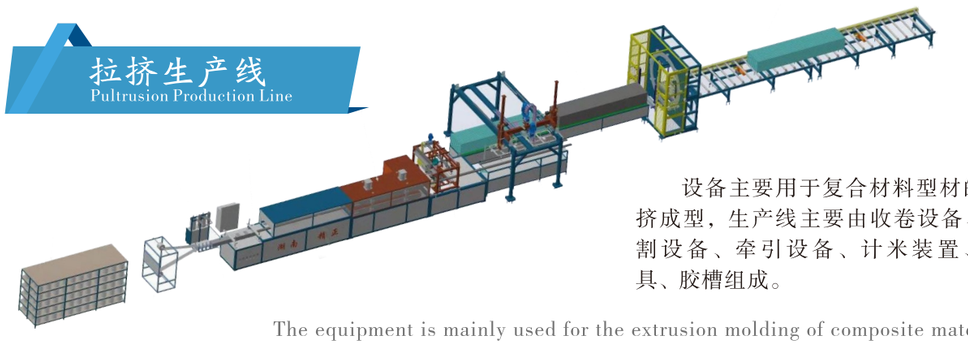
拉挤注胶机是一种用于复合材料型材连续成型注胶的专用设备，通过浇注机定量注胶，将玻纤/碳纤等增强材料与树脂基体复合，形成截面形状稳定、长度连续的复合材料制品。

Pultrusion injection machine is a specialized equipment designed for the continuous molding of composite profiles. It utilizes a dispensing unit to inject a precise, metered amount of raw material into a combination of reinforcing materials—such as glass or carbon fibers—to produce composite components with consistent cross-sectional shapes and continuous lengths.

### 技术参数 Technical Parameter

| | |
|---|---|
| 流量 Flowrate | 10~100g/s（支持定制）Customization supported |
| 压力 Pressure | 10~20bar |
| 料罐容积 Tank Volume | 150L（支持定制）Customization supported |
| 原料体系 Raw material system | 可以提供环氧树脂、聚氨酯（PU）以及己内酰胺（CPL）进行选择。<br>Epoxy resin, polyurethane (PU), and caprolactam (CPL) for option |
| 比例范围 Ratio range | 100:10~100:120 可供选择　100:10~100:120 for option |
| 注射精度 Injection accuracy | ≤0.5% |

## 拉挤生产线
Pultrusion Production Line



设备主要用于复合材料型材的拉挤成型，生产线主要由收卷设备、切割设备、牵引设备、计米装置、模具、胶槽组成。

The equipment is mainly used for the extrusion molding of composite material profiles. The production line is mainly composed of winding equipment, cutting equipment, traction equipment, length counting device, mould and Glue groove. The machine frame is welded with high quality profiles.





## 原料储存系统
Raw material storage system











原料储存系统用于多元醇/异氰酸酯/环戊烷原料的储存，该套设备可实现从卸料，供料到输料的全部自动化。

The raw material storage system is used for the storage of Polyol/Isocyanate/Cyclopentane, and it can achieve full automation from unloading, feeding to conveying.



# 多组份静态混合机
Multi–components static blending machine





静态混合设备广泛应用于家电、保温行业，适用环戊烷或245fa等原料的预混。

Static blending machine is widely used in home appliance and insulation industry, It is suitable for multi–components material to pre–blend such as cyclopentane, or 245fa etc material.







# 全自动预混系统
Full–automatic premixing system



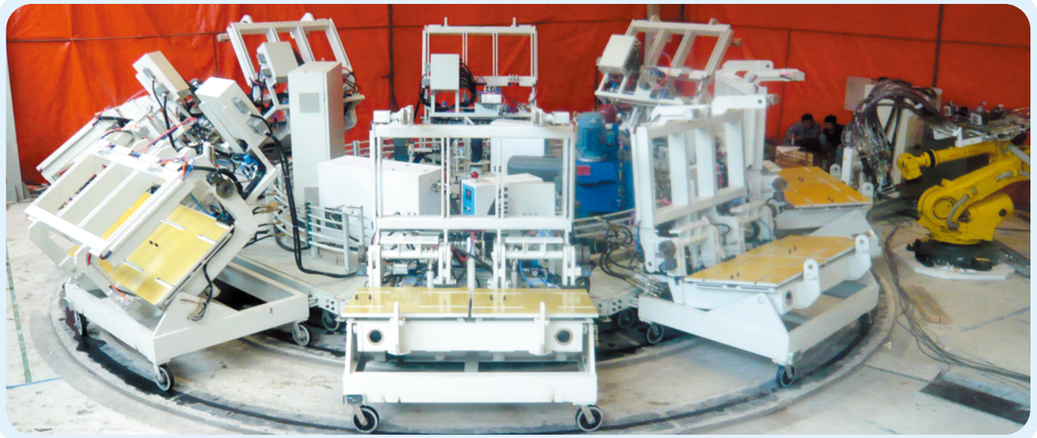




全自动预混系统在汽车座椅发泡行业应用广泛，该预混自动化程度很高，能适应多种原料多种配比预混，并且具有自动跟踪各组份原料的流量、比例、重量，自动储存混料数据报表，控制超差报警等功能。

Full–automatic premixing system is widely used in the application of automotive seat production,with high automation, this system can be suitable for multi materials and multi formula to pre–blend, and it also have the functions of automatically tracking material flowrate,ratio and weight of each component, automatically saving blending data report and controlling alarm of exceeding–tolerance.

## 转盘生产线
Turntable production line







汽车内饰转盘生产线采用一台水平圆形转盘，通过减速机驱动，在转盘上放置液压/气动模架，自动开、合模。采用机器人自动方式浇注，适用于汽车座椅，汽车内饰件的发泡。

Turntable production line,adopting one set of horizontal round turntable, is drived by reducer to rotate, hydraulic/pneumatic cassettes are mounted on the turntable to realize the mold open and close automatically, it adopts robot to inject, widely used in the foam of automotive seat and interior.





## 环形生产线
Oval production line









环形生产线采用椭圆形布置，适应汽车座椅的多品种、多密度、多硬度泡沫。

Oval production line adopts ellipse to arrange,and suitable for multi type, multi density and regidity products to foam in automotive seat production.



# 冰箱门体发泡生产线
Refrigerator door foaming production line



全自动冰箱门体发泡生产线采用环形结构布置，适用于各种不同型号冰箱门体的发泡生产，多种产品可在线上混线生产，线体运行速度可自行调节，大大提高生产节拍。

The fully automatic refrigerator door foaming production line adopts a circular structure layout, which is suitable for foaming production of various types of refrigerator doors. Multiple products can be mixed online for production, and the running speed of the line can be adjusted by itself, greatly improving the production rhythm.

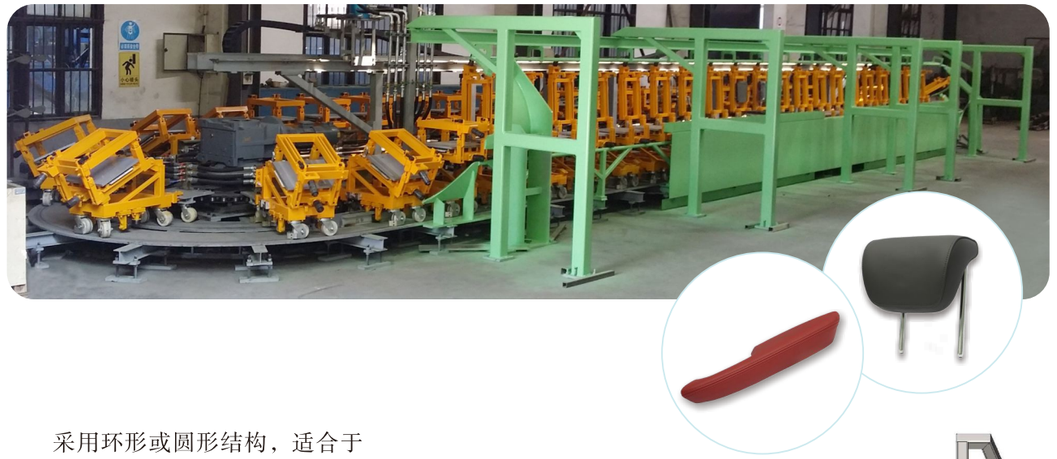






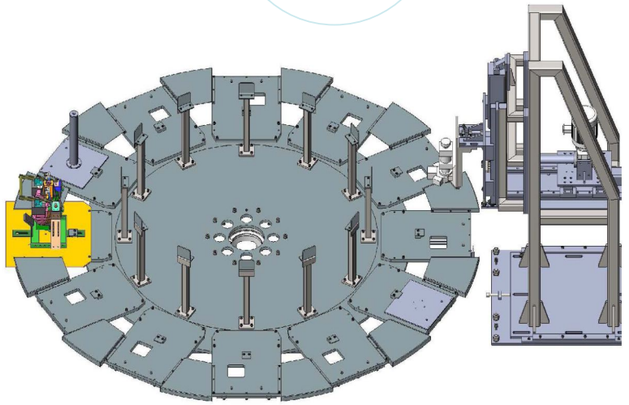


# 头枕发泡生产线
Headrest foaming production line



采用环形或圆形结构，适合于各种头枕、护手等小件的开模或闭模浇注。

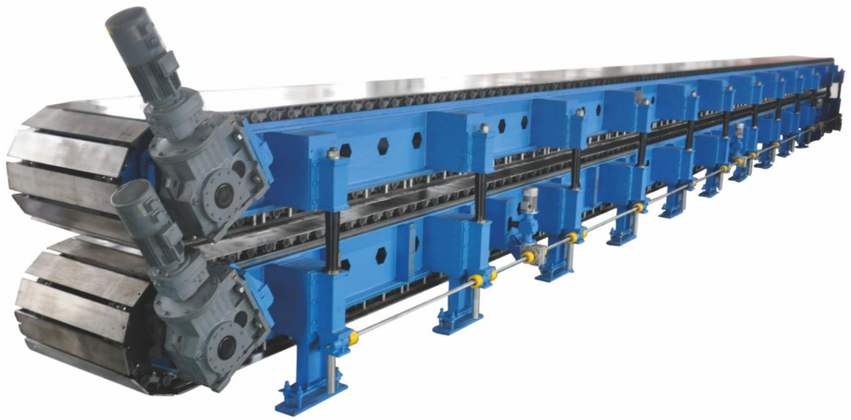
The production line adopts oval or circle structure, suitable for various headrest,armrest and other small items to inject in mold-opening or mold-closing.





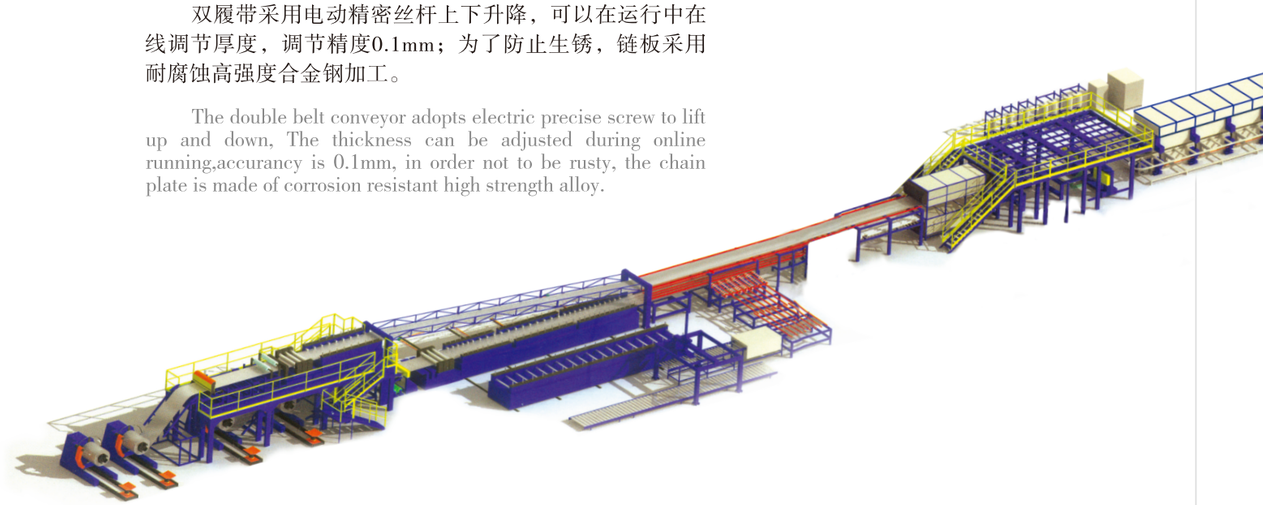


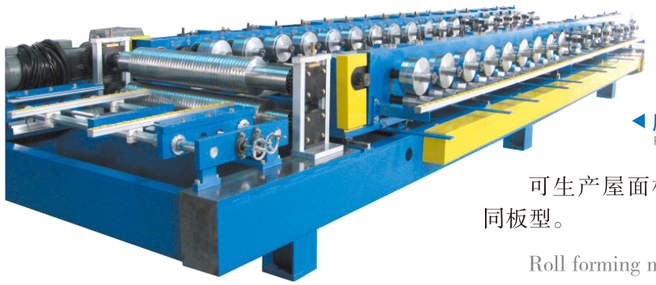
# 连续板材生产线
PU sandwich panel continuous production line



双履带采用电动精密丝杆上下升降，可以在运行中在线调节厚度，调节精度0.1mm；为了防止生锈，链板采用耐腐蚀高强度合金钢加工。

The double belt conveyor adopts electric precise screw to lift up and down, The thickness can be adjusted during online running,accurancy is 0.1mm, in order not to be rusty, the chain plate is made of corrosion resistant high strength alloy.





◀ 成型机
Roll forming machine

可生产屋面板、墙面板、冷库板各种不同板型。

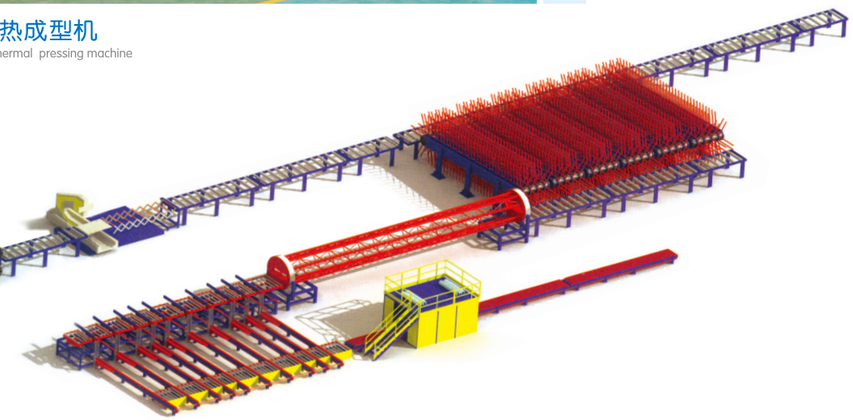
Roll forming machine can produce all kinds of sandwich panel, such as roof panel, wall panel and cold storage panel etc.







▲ 双履带热成型机
Double belt thermal pressing machine

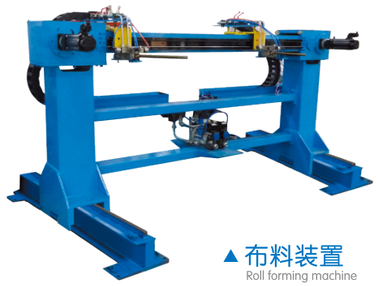




▲ 多组份发泡机
multiple component high pressure foaming machine

适合于生产PUR或PIR,可以是两组份、四组份或六组份。

It is suitable for the production of PUR or PIR, it can be 2 components, 4 components or 6 components.



▲ 布料装置
Roll forming machine

采用一个或两个混合头交叉布料，伺服驱动，布料精准。

One or two mixing heads are adopted for raw material crossing distributing. In order to make the raw material distributed evenly, it adopts servo motor to drive.

## 连续板材生产线
PU sandwich panel continuous production line



▲开卷机
Decoiler



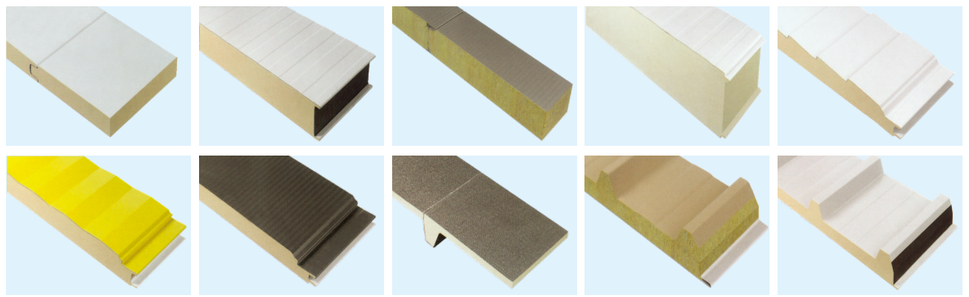
▲切割机
Cutting Machine



▲翻转码垛系统
Turnover anel stacker system



▲凉板系统 Panel cooling system

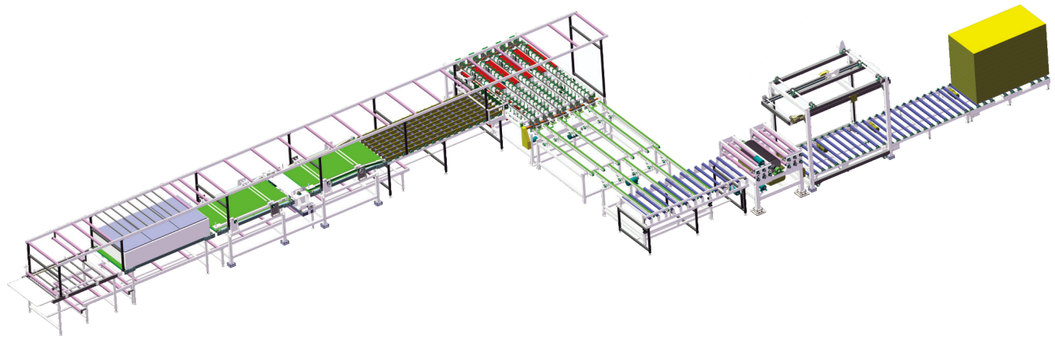


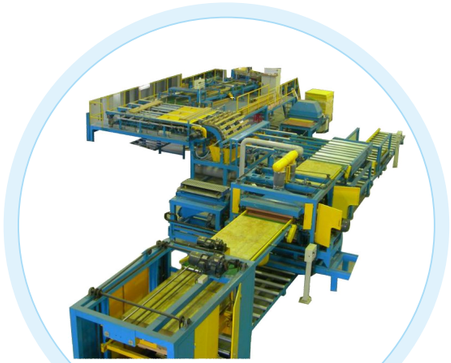
▲板型图 Panel profiles





## 岩棉板上料切割机
Rock wool board feeding cutting machine





用于矿物棉的装载、切割、补料和自动排料。

It is used for the loading,cutting,feeding and auto tidying of the mineral wool.





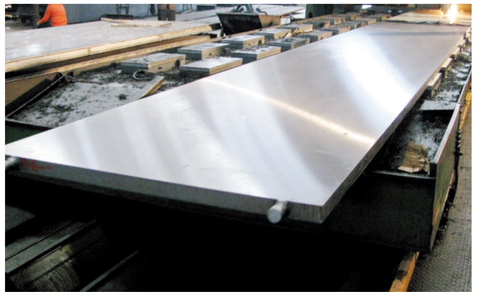
## 层压设备
Press machine

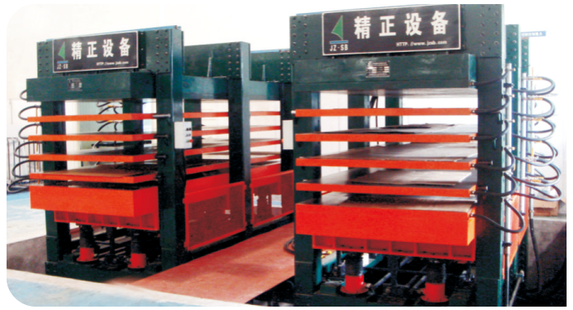


用于非连续方式生产面层为彩钢，镀锌板，中间夹芯PU的三明治板，最大长度15000mm,最大宽度3200mm,厚度50～200mm的单层或多层，多工位层压机。

The press machine is used for discontinuous production of pu sandwich panel, facing sheet of which is color steel or galvanized sheet. There are single layer,multi layers and multi station type for the machine, maximum length can reach 15000mm, and 3200mm for maximum width. The thickness can be adjusted from 50–200mm.



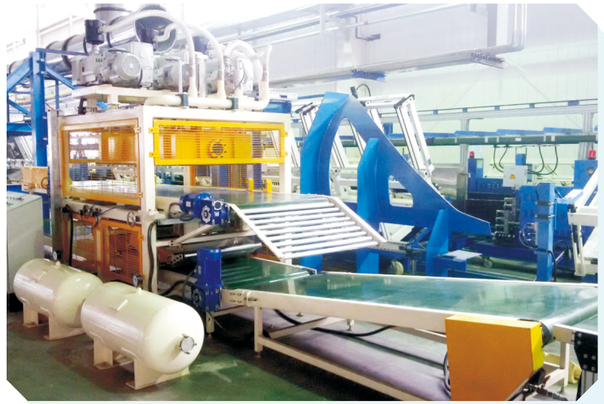









## 破泡机
Crusher



机械及真空开泡机主要应用在软泡的生产破泡，可以根据客户的要求设计不同型号规格。

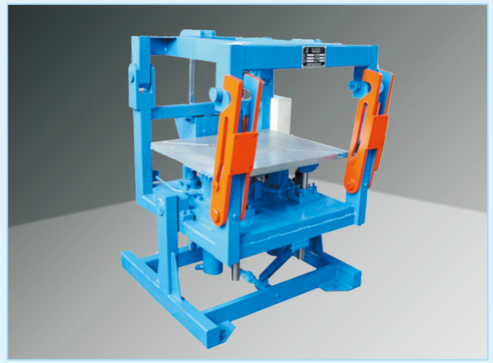
Mechanical& vacuum crusher is mainly used in the crushing of flexible foam, different specification can be designed according to customer’s requirements.







## 模架
Mold Base





各类气动、液压模架主要用于汽车方向盘、座椅、仪表盘以及冰箱、冷柜发泡生产。

Various pneumatic and hydraulic mold base are used for the foaming production of automotive steering wheel, seat, instrument board, as well as refrigerator and freezer.











## 安全系统
Safety system



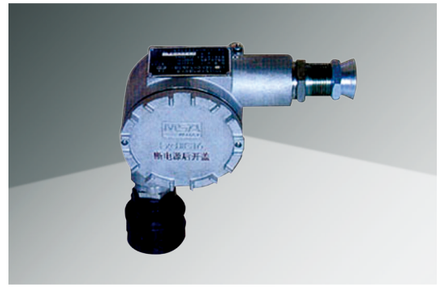
气体报警控制系统
gas alarm system



报警柜
alarm cabinet



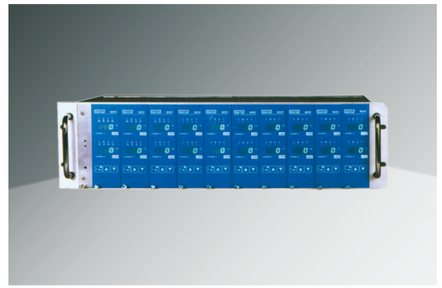
Drager探测器
Drager detector



MSA探测器
MSA detector

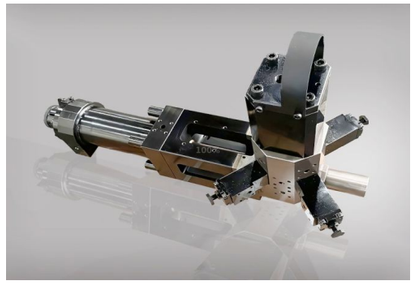


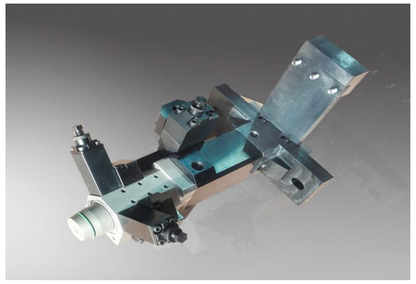
Drager 监测控制系统
Drager monitored control system



气体报警控制系统
gas alarm system

# 备品备件
Spare parts





## 混合头系列

适用于硬泡、软泡及自结皮发泡的各类混合头。

Mixing head series
Various mixing heads are used for rigid,flexible and intergral skin foaming.

## 流量计系列

◆德国VSE齿轮（蜗轮）式流量计
◆德国KRACHT齿轮（蜗轮）式流量计

Flow meter series
VSE gear(turbine) type flow meter from Germany
KRACHT gear(turbine) type flow meter from Germany









## 电器控制元件

Electrical control elements

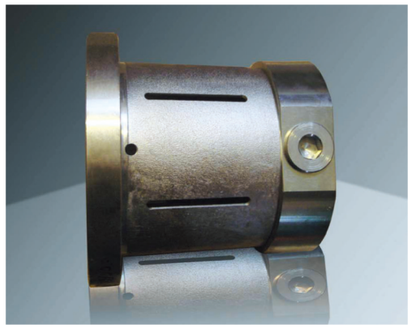


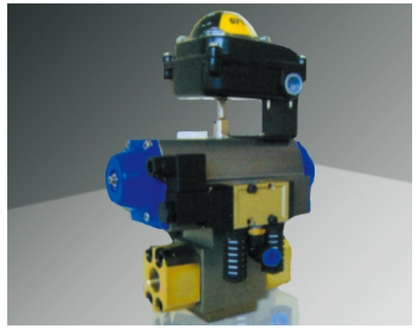


## 各类磁性联轴器

◆ 配置在高压计量泵上的磁性联轴器
◆ 配置在输送齿轮泵/螺杆泵上的磁性轴器
◆ 配置在料罐搅拌上的磁性联轴器

Various magnetic coupling
Equipped on the high pressure metering pump
Equipped on the delivery gear pump/screw pump
Equipped on the agitator of material tank







## 各类气动及液压高低压切换阀

Various pneumatic and hydraulic high–low pressure switch valve.





## 各类泵组

◆力士乐系列高压计量泵
◆各类聚氨酯原料输送泵

Various pump
High pressure metering pump–Rexroth series
Delivery pump for polyurethane material

# 产品实例
Product examples

公司深耕聚氨酯与复合材料装备领域，服务全国各省市新材料生产企业，设备批量出口海外多个国家和地区，积累了丰富的非标定制与整线落地项目经验。

The company is deeply engaged in the field of polyurethane and composite material equipment, serving new material production enterprises in various provinces and cities across the country. The equipment is exported in batches to multiple countries and regions overseas, accumulating rich experience in non-standard customization and whole line implementation projects.

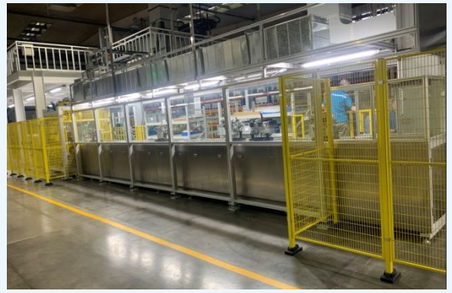


出口至印度 汽车座椅环形生产线
Export to India Oval production line for car seats

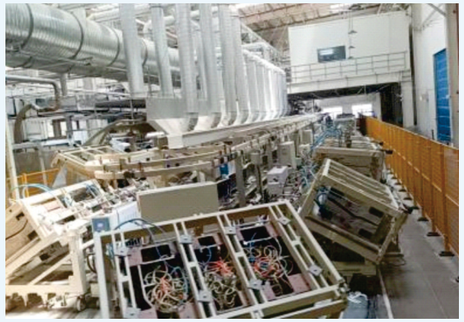


出口至美国 多元醇自动预混系统
Export to USA Automatic pre-mixing system for polyols





汽车座椅知名企业 PIP头枕线和发泡设备
Renowned enterprise in automotive seats
PIP headrest production line and foaming machine



座椅发泡线
Foaming line for seats



高压RTM注胶机
HP-RTM injection machine



双履带生产线
Double belt production line



发泡机
Foaming Machine



层压机
Press Machine



破泡机
Crusher




原料储罐
Raw material storage tank





# 经典客户
Key client

## 汽车内饰行业 Automotive interior industry

ADIENT · 五菱汽车 · 北京汽车 · YUTONG · BYD · LEAR CORPORATION · Yanfeng · 长城汽车 · WOODBRIDGE · JUJN 俱进汽摩 · KING LONG 金龙客车 · MAGNA

## 复材行业 Composite materials industry

北京维盛 · TIMES 时代工塑 · 众森 · 硕贝德科技 SPEED · 福建海源 · 鼎一科技DY · COLEITEC 卡涞科技 · CSR 时代新材 · YUDO · 维盛复材 VV Ocean Composites · 宏德新材 · 浙江韬普

## 家电行业 Appliance industry

Haier · Hisense 海信 · SANYO · XINGX 星星 · Homa 奥马 · AUCMA 澳柯玛 · Galanz 格兰仕 · 美的 Midea · 美菱Meiling

## 保温建材及管道 Insulation building materials and pipes

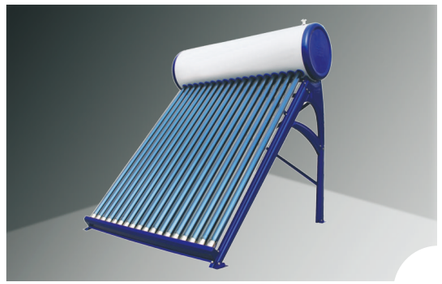
SINKO · TIANFON 天丰 · ZH.H 天津中滨 · TICA · 昊天集团 · 哈尔滨热电 · SUPER LIFT · YiDuo · WANHUA · 天津津能 · 三井物産 · Taihe

## 应用领域
## Application field

应用领域覆盖新能源新材料、汽车零部件、建筑保温建材、家居制品、工业密封配件、航空航天辅助材料、通用复合材料制品等。

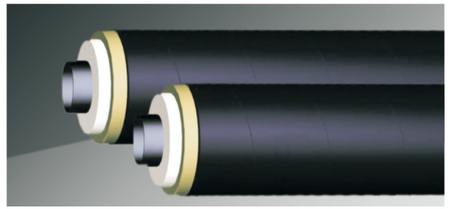
Application fields cover new-energy & new-materials, automotive components, thermal-insulation building materials, household products, industrial sealing components, aerospace auxiliary materials and general composite material products,etc.

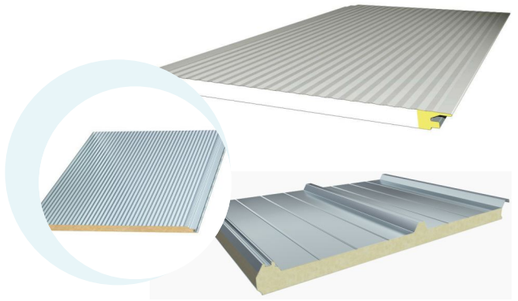












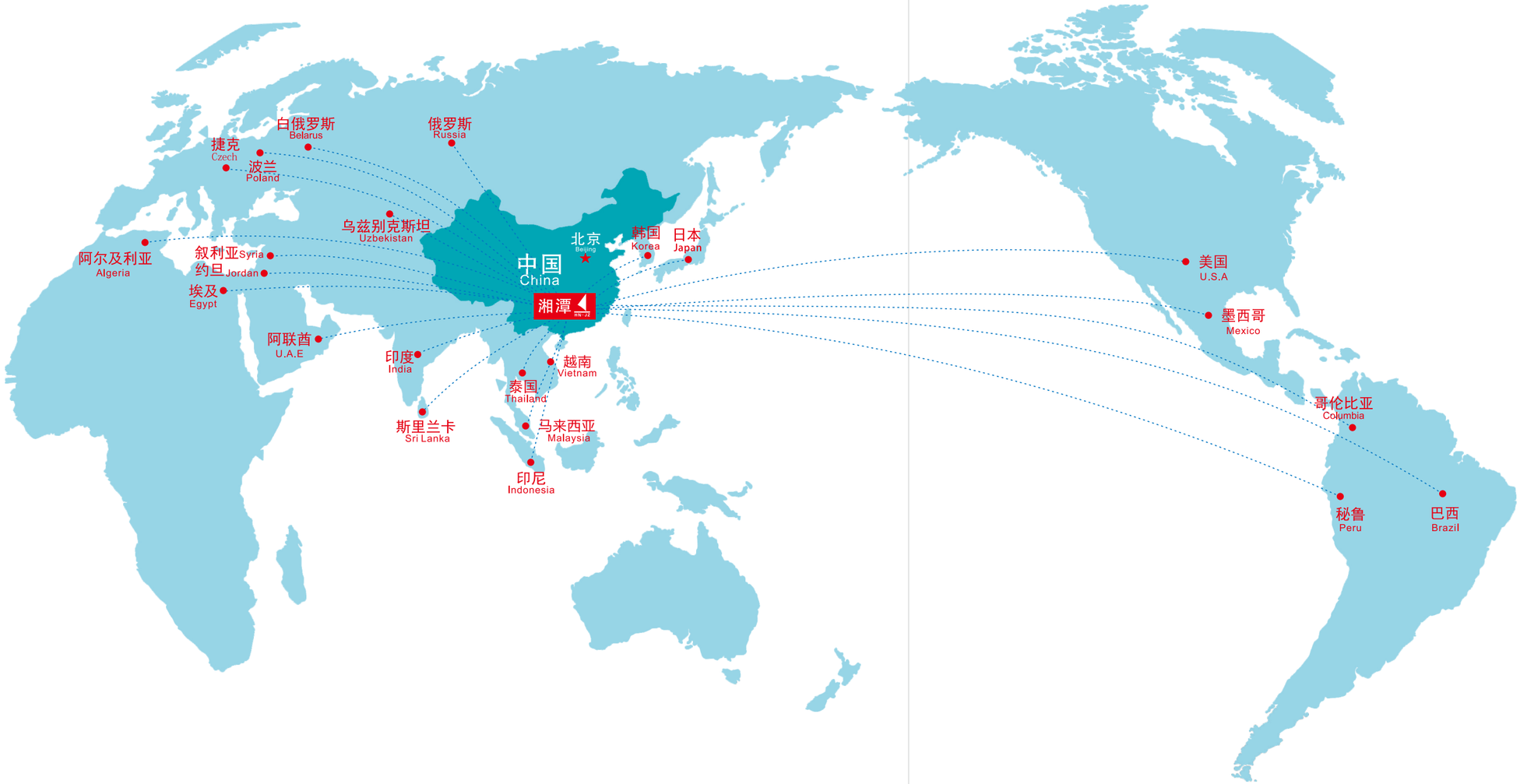








## 营销网络
Marketing






精诚合作 共创未来

创新竞争
追求卓越
精工制作
诚信经营
用户至上
合作双赢