

RAYSHAPE

The Solution of Fully Automatic
Plastic Thermoforming

Shaping The Future With Cutting-edge Innovation

以锐意之姿，塑行业未来



中文网站: www.rayshape.net
Website: www.cnrayshape.com
E-mail: mark@cnrayshape.com

地址: 浙江省温州市平阳县滨海新区平海大道东段19号



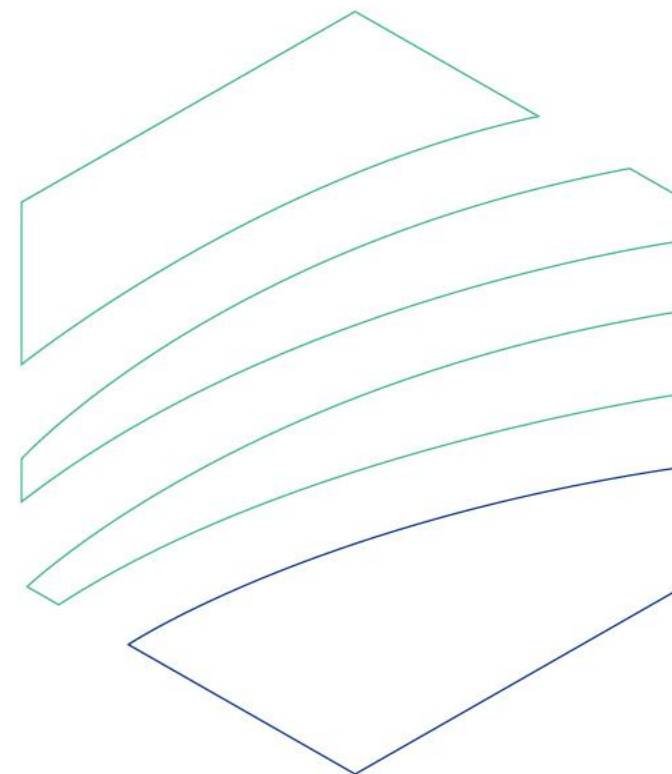
2025

公司有权保留对机器技术参数进行修改，恕不另行通知。
Our company reserves the right to change technical
characteristics without further notice.

Service

Quality

Sincerity



RAYSHAPE
THE SOLUTION OF
FULLY AUTOMATIC PLASTIC
THERMOFORMING

全自动塑料热成型解决方案

温州锐塑机械有限公司

WENZHOU RAYSHAPE MACHINERY CO., LTD.



www.cnrayshape.com





RAYSHAPE

THE SOLUTION OF FULLY AUTOMATIC PLASTIC THERMOFORMING

全自动塑料热成型解决方案

→ www.cnrayshape.com

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Who is ELEMOTION?

Elemotion is a young and dynamic company committed to becoming a leader in the domestic packaging machinery industry. Currently, ELEMOTION has a team of over 700 people, serving more than 7,000 companies, with cumulative sales of nearly 20,000 packaging machines.

Branch offices have been established across the country, including in Wuhu, Anhui; Wenzhou, Zhejiang; Jiaxing, Zhejiang; Shanghai; Jiulongpo, Chongqing; Changsha, Hunan; Chengdu, Sichuan; Shantou, Guangdong; Foshan, Guangdong; Shenyang, Liaoning; Hohhot, Inner Mongolia; Zhengzhou, Henan; Zhucheng, Shandong; Liuzhou, Guangxi; Xi'an, Shanxi; Jinjiang, Fujian; Wuhan, Hubei; Kunming, Yunnan; and Guiyang, Guizhou. Among these, Wuhu Elemotion and Wenzhou Elemotion have physical factories, covering an area of 320 m².

裕东是谁？

裕东是一家年轻又有活力的企业，立志成为国内包装机械行业领军企业。目前，裕东总共拥有超700人的团队，服务于7000多家企业，累计销售包装机设备将近2万台。

全国各地设立分支机构，包括安徽芜湖、浙江温州、浙江嘉兴、上海、重庆九龙坡、湖南长沙、四川成都、广东汕头、广东佛山、辽宁沈阳、内蒙古呼和浩特市、河南郑州、山东诸城、山东枣庄、广西柳州、陕西西安、福建晋江、湖北武汉、云南昆明、贵州贵阳等，其中芜湖裕东和温州裕东设有实体工厂，占地面积320亩。



Elemotion Wuhu Factory
裕东芜湖工厂

320+

Total Plant Area
占地面积

700+

Powerful Team
强大团队

60+

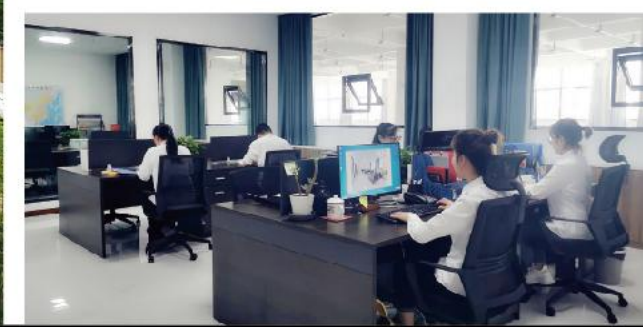
R&D Technical Staff
研发技术团队

7000+

Customer Base
客户群体



→ www.cnrayshape.com



About RAYSHAPE

Wenzhou Rayshape Machinery Co., Ltd. is a subsidiary of Elemotion Group, located in the beautiful coastal city of Pingyang County, Wenzhou, Zhejiang Province, at No. 19, East Section of Pinghai Avenue, Binhai New Area. It is a manufacturing enterprise that integrates mechanical and software R&D, production, marketing, and after-sales service. In 2021, Elemotion invested in Wuhu Youhe Automation Technology Co., Ltd., which was officially renamed Wenzhou Rayshape Machinery Co., Ltd. in 2025 and is now wholly owned by Wenzhou Elemotion Holdings.

Wenzhou Rayshape Machinery Co., Ltd. boasts a seasoned R&D team, strong operational and after-sales service capabilities, as well as a solid financial foundation. The company is dedicated to the development and production of high-end, energy-efficient, and highly automated equipment, including positive and negative pressure plastic thermoforming machines, plastic sheet extrusion lines, and plastic lid forming machines. These machines are compatible with a wide range of materials such as A-PET, R-PET, BOPS, HIPS, PP, PLA, and PVC, enabling the production of various plastic finished products.



Wenzhou Rayshape Machinery Co., Ltd. carries forward Elemotion's spirit of diligence and continuous improvement, constantly striving for self-surpassing excellence. Embracing innovation, the company has successively developed high-quality automated equipment and is committed to learning from Elemotion's path toward becoming a leading enterprise in the industry.

Wenzhou Rayshape Machinery Co., Ltd. adheres to a people-oriented approach, upholding honesty and integrity as its core values, and has established a strong market presence through its comprehensive after-sales service system.

The company provides customers with comprehensive, optimal plastic molding solutions tailored to their specific needs, including the development of intelligent unmanned workshops, information-driven internet systems, and digital management frameworks.



关于锐塑

温州锐塑机械有限公司属于裕东旗下子公司，现坐落于美丽的滨海城市浙江省温州市平阳县滨海新区平海大道东段19号，是一家集机械与软件研发、生产制造、营销、售后服务于一体的制造企业。裕东于2021年投资芜湖优禾自动化科技有限公司，2025年更名为温州锐塑机械有限公司，由温州裕东控股。

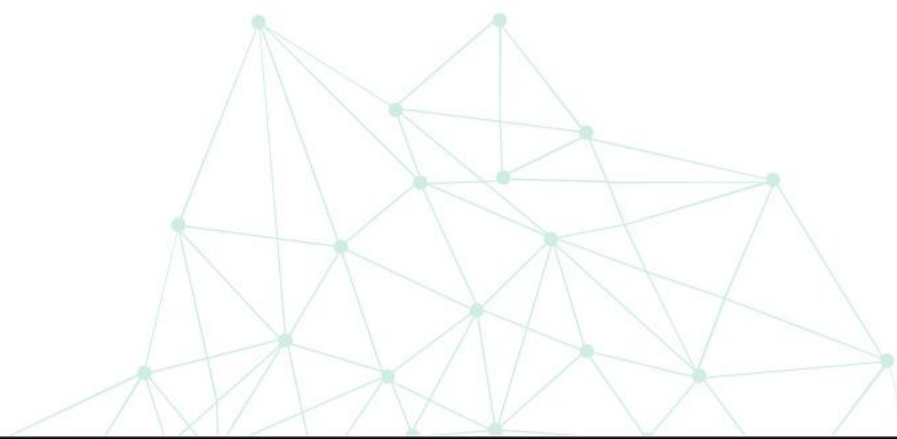
温州锐塑机械有限公司拥有行业内资深的技术研发团队、运营和售后服务管理能力，同时拥有雄厚的资金背景，致力于研发与生产高端品质、高效节能、自动化程度高的正负压塑料热成型机、塑料片材挤出机、塑料盖成型机等，适用于A-PET、R-PET、BOPS、HIPS、PP、PLA、PVC等材料的塑料成品。

温州锐塑机械有限公司发扬裕东精益求精的精神，不断的自我超越，更有着吸纳创新，陆续打造出高品质的自动化设备，学习裕东成为行业领军企业。

温州锐塑机械有限公司坚持以人为本，诚实、守信为己任，以完善的售后体系立足于市场；为客户提供各种全方位的最佳组合的塑料成型解决方案，打造智能化无人车间，信息化互联网，数字化管理体系。



Shaping The Future With Cutting-edge Innovation
以锐意之姿，塑行业未来



About RAYSHAPE Origin Of The Brand

In the grand landscape of industrial manufacturing, plastic thermoforming machines often operate behind the scenes, yet they serve as the vital catalyst propelling countless packaging, medical, electronics, and consumer products into the market. When a group of engineers with over a decade of expertise in thermoforming decided to establish their own brand, they envisioned a clear mission: to transcend mediocrity and become the disruptors driving the industry toward efficiency, precision, and intelligence. Thus, Rayshape Machinery was born—not merely a trademark but a solemn pledge from a band of technical idealists to the industry.

The Soul of "RAY": The Sharp Edge of Innovation

"RAY" is a transliteration of the Chinese word "锐", which originally means sharp blade and is extended to mean sharpness, courage, and breakthrough. The name "RAYSHAPE" comes from the team's profound insight into industry pain points: traditional hot forming machines often lead to material waste due to insufficient accuracy, drag down production efficiency due to low automation, and are difficult to adapt to the needs of emerging materials due to rigid design. We are well aware that true "锐" is not an exaggerated concept, but rather the conversion of every technological investment into perceived value for users - for example, by optimizing the temperature control algorithm of the heating module, the molding temperature fluctuation is controlled within $\pm 1^\circ\text{C}$, greatly improving the yield rate of thin-walled products; For example, the independently developed servo drive system has made the opening and closing speed of the mold much faster than the industry standard, resulting in a significant increase in single shift production capacity; For example, in response to the deformation characteristics of environmentally friendly materials such as bio based plastics, adjusting the response speed of the mold cooling curve can solve the long-standing problem of "difficult material adaptation" in the industry. These 'sharpness' hidden in the details are the hard power we have polished with hundreds of experiments and thousands of sets of data.



The Foundation of "SHAPE": Painting Industry Blueprints with Equipment

SHAPE "is a transliteration of the Chinese character" 塑 ". Its original meaning is not only the starting point of business, but also the extension of responsibility. Plastic thermoforming machine is not only a tool, but also a bridge connecting raw materials and end products. We always believe that the value of equipment lies in empowering users' creativity: a stable machine can enable small factories to undertake more complex orders; A set of intelligent control systems can help enterprises reduce energy consumption and labor costs; A customized solution that meets the needs can even give rise to new product forms. Therefore, since its establishment, "RAYSHAPE" has established the concept of "technology as the core, demand as the foundation" - the R&D team includes both mechanical automation experts and technical consultants who are stationed in the factory for years. They will go deep into the customer's workshop, observe the pain points in the actual production process, and then transform these real needs into the direction of equipment upgrades. We are not proud of how many machines we have sold, but of seeing our customers use our equipment to produce higher quality fruit boxes, milk tea cups, plastic cup lids, plastic trays, vegetable boxes, and other products, ultimately bringing the name "RAYSHAPE" to thousands of households with each end product.

Nowadays, "RAYSHAPE" is not only a trademark, but also synonymous with "reliability, innovation, and trustworthiness" in the industry. But we know that true 'RAY' is always oriented towards the future: as the industry transitions towards digitization and greenization, we will continue to use 'sharp' technological breakthroughs as our blades, based on the responsibility of 'shaping' the industry, and work together with our partners to write a new chapter in the field of plastic thermoforming.

Shaping the Future with Cutting-edge Innovation

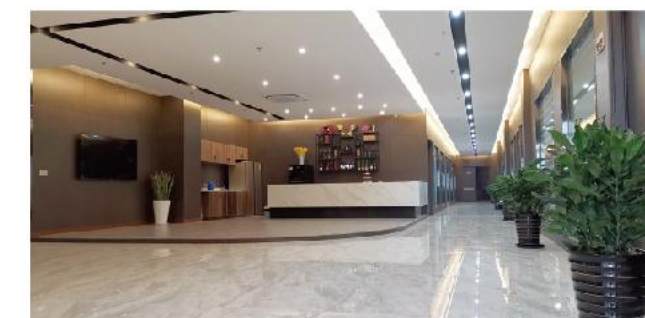
锐塑机械——以锐意之姿，塑行业未来



在工业制造的宏大版图中，塑料热成型机虽常隐于幕后，却是无数包装、医疗、电子产品、日用品走向市场的关键“推手”。当几位深耕吸塑机领域十几年的工程师决定创立自己的品牌时，他们心中已有一个清晰的愿景：不做平庸的跟随者，而要成为推动行业向高效、精密、智能跃迁的“破局者”。于是，“锐塑机械”应运而生——这不仅是一个商标，更是一群技术理想主义者对行业的郑重承诺。

"锐" 字为魂：锋芒背后是匠心的沉淀

"锐"的本义是刀刃锋利，引申为敏锐、果敢与突破。取名“锐塑”，源于团队对行业痛点的深刻洞察：传统热成型机常因精度不足导致材料浪费，因自动化程度低拖累生产效率，因设计僵化难以适配新兴材料的需求。我们深知，真正的“锐”不是浮夸的概念，而是将每一分技术投入都转化为用户可感知的价值——比如，通过优化加热模块的温控算法，将成型温度波动控制在 $\pm 1^\circ\text{C}$ 以内，让薄壁产品的良品率大大提升；比如，自主研发的伺服驱动系统，使开合模速度比行业标准快了许多，单班产能提高显著；再比如，针对环保材料（如生物基塑料）易变形的特性，调整模具冷却曲线的响应速度，解决行业长期存在的“材料适配难”问题。这些藏在细节里的“锋利”，是我们用数百次试验、上千组数据打磨出来的硬实力。



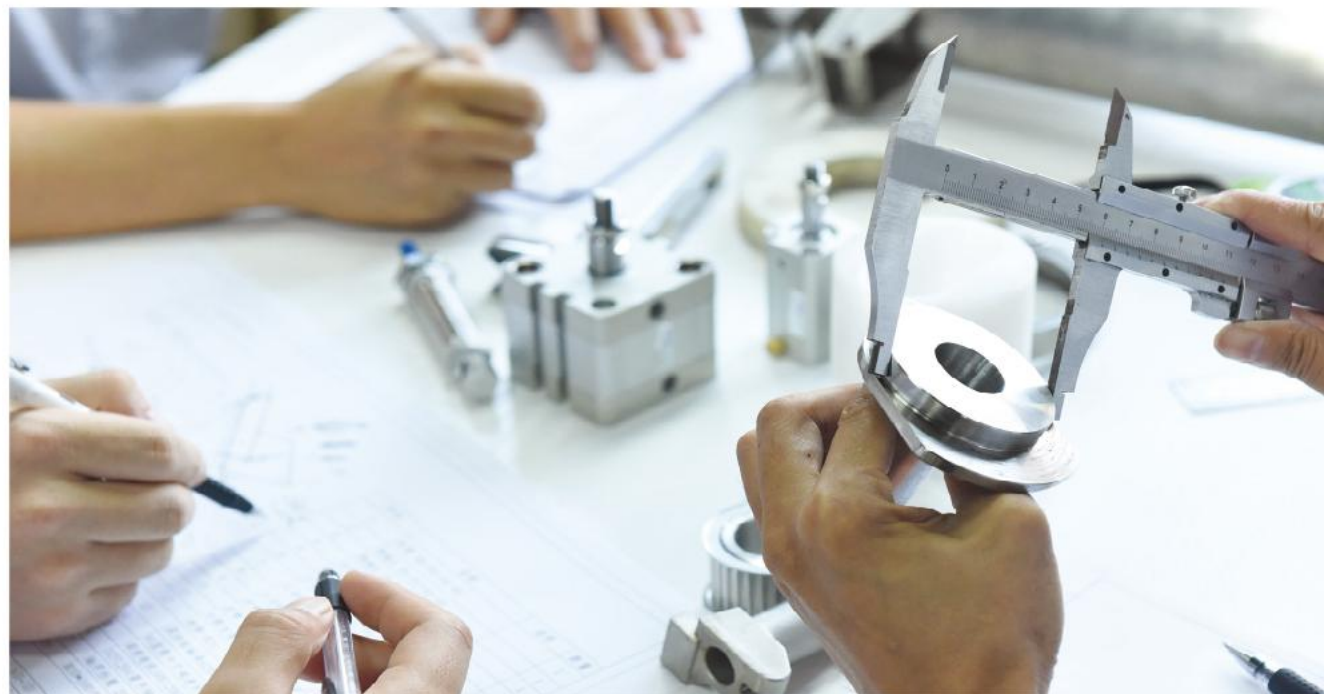
"塑" 为根基：以设备为笔，绘产业蓝图

"塑"是业务的起点，更是责任的延伸。塑料热成型机不仅是工具，更是连接原材料与终端产品的桥梁。我们始终相信，设备的价值在于赋能用户的创造力：一台稳定的机器，能让小型工厂承接更复杂的订单；一套智能的控制系统，能帮助企业降低能耗与人力成本；一项贴合需求的定制方案，甚至能催生全新的产品形态。因此，“锐塑”从创立之初就确立了“技术为核，需求为本”的理念——研发团队中既有机械自动化专家，也有常年驻厂服务的技术顾问，他们会深入客户的车间，观察实际生产流程中的痛点，再将这些真实需求转化为设备升级的方向。我们骄傲的不是卖出了多少台机器，而是看到客户用我们的设备生产出更优质的水果盒、奶茶杯、塑料杯盖、塑料托盘、蔬菜盒等产品，最终让“锐塑”的名字，随着一件件终端产品走进千家万户。

如今，“锐塑机械”已不仅是商标，更成为行业内“可靠、创新、值得信赖”的代名词。但我们知道，真正的“锐”永远面向未来：当行业向数字化、绿色化转型时，我们将继续以“锋利”的技术突破为刃，以“塑造”的产业责任为基，与合作伙伴共同书写塑料热成型领域的新篇章。



R&D and Technical Team



Achieve the perfect combination of technology and process with the eyes of an expert and the heart full of wisdom.
No defect for every product has always been the direction of our efforts.

用专家的眼、智慧的心，实现科技与工艺的完美结合。
使每一个产品做到无缺陷、无瑕疵，一直是我们努力的方向。



Each thermoforming machine order is managed with a project-oriented mindset, and strict technical control is implemented over every process. Through repeated discussions and in-depth efforts to overcome key challenges, a comprehensive solution is ultimately developed.

以项目化思维承接每台热成型机订单，从技术层面严格把控每个环节。
通过反复研讨与深度攻关，最终形成完善的解决方案。

Unite science and technology quality,
Spirit to build **RAYSHAPE**

POWERFUL TEAM PRESENCE

团队风采



Erwin

Automation Engineer

Second-generation engineers, proficient in the entire process of developing and debugging automated systems, capable of solving complex technical problems in production and able to iterate solutions in line with industry trends. They can also design automated systems to reduce costs and improve efficiency.



Lee

Deputy General Manager Mechanical Design engineer

With 15 years of experience in the field of vacuum forming machines, I understand cross-disciplinary collaboration, can optimize design by integrating new materials and new processes, and can also teach new talents and pass on technical experience.



Lan

Director of Research and Development Chief Engineer of Mechanical Design

A rare female engineer in the mechanical industry with over 20 years of experience, she possesses profession depth and a global perspective in technical control, team coordination, project implementation, and risk prediction.



Calvin

Structural Engineer

With 15 years of experience in the packaging machine field, I possess solid mechanical design knowledge and innovation capabilities, and can accurately select models and solve technical problems.



Andy

Vice President of Sales

From operating a lathe to tackling sales challenges, and then becoming one of the company's founders. He has built the foundation of his entrepreneurship with technology, connected with customers using sales thinking, and is committed to transforming professional technology into practical value.



Leo

Production Director

With over 20 years of production management experience in the machinery industry, I can precisely control the entire production process, quickly resolve issues such as equipment malfunctions and supply chain fluctuations, and ensure stable production capacity.



King

Network engineer

With 15 years of experience in network application and development, we have solved cross-device compatibility issues and transformed operation and maintenance from passive response to proactive prevention and control, significantly enhancing network stability and operational efficiency.

About PRODUCTION WORKSHOP

Unite science and technology quality,
Spirit to build RAYSHAPE



130+
Patents Owned By
Elemotion



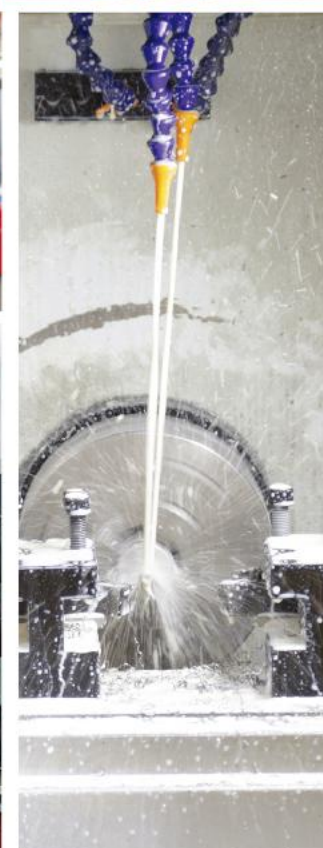
78%
Of Our Customers
Repeat Order



20.000+
Elemotion Machines Sold
And Installed

WELL-EQUIPPED ADVANCED TECHNOLOGY

No defect for every product has always been the direction of our efforts.
Achieve the perfect combination of technology and process with the
eyes of an expert and the heart full of wisdom.



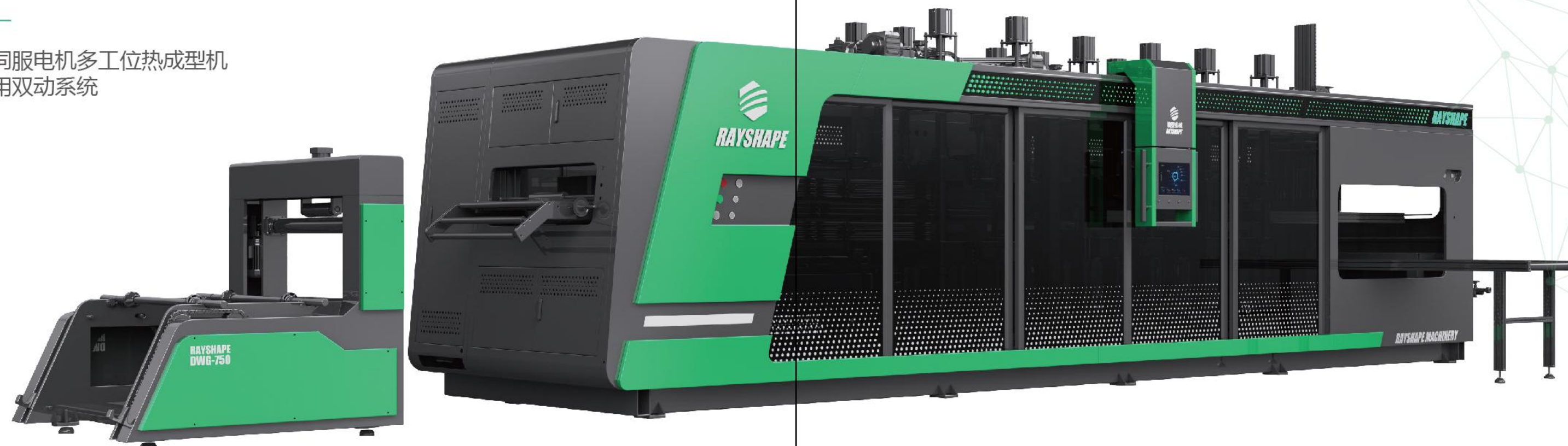
MACHINING CENTER



RAYSHAPE

All Servo Motor Multi-Stations Thermoforming Machine With Double Moving System

全伺服电机多工位热成型机
采用双动系统



INTRODUCTION

设备简介

Our positive and negative pressure multi-station plastic thermoforming machine, uses internationally advanced plastic sheet forming technology. It is a plastic sheet forming equipment with mechanical, pneumatic and electrical integrated design. It can automatically complete all actions such as loading, feeding, heating, forming, punching, cutting, stacking, finished product transportation, and edge material winding.

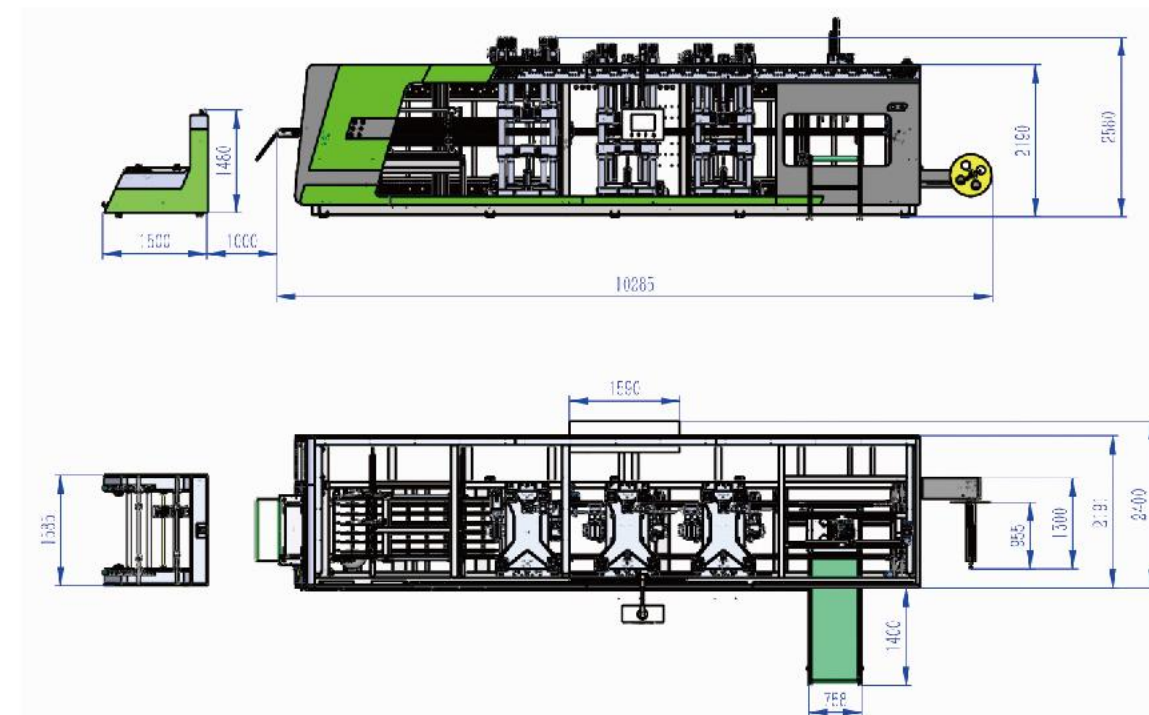
It is suitable for processing different materials, such as A-PET, R-PET, BOPS, HIPS, PP, PLA, PVC and barrier materials, processing high transparency, high stretch, shallow stretch, round, square, upper and lower two-way stretch, flanged and other products, including trays, lids, fruit and vegetable boxes, flower pots, shells, seedling trays and plates, etc.

我们的正负压多工位塑料热成型机，运用国际先进塑料片材成型工艺技术，是集机械、气动、电气一体化设计的塑料片材成型设备，全自动完成上料、送料、加热、成型、打孔、裁切、堆叠、成品输送、边料收卷等所有动作。

适用于处理不同的材料，如 A-PET、R-PET、BOPS、HIPS、PP、PLA、PVC 和阻隔材料，加工高透明、高拉伸、浅拉伸、圆型、方型、上下双向拉伸、翻边等制品，包括托盘、盖子、水果和蔬菜盒、花盆、贝壳、育苗托盘和盘子等。

MACHINE STRUCTURE

机械构造



FEATURES AND ADVANTAGES

特征与优势

- High degree of standardization, complete functions, safe, efficient, energy-saving and hygienic.
- It integrates mechanical, pneumatic and electrical integration, and is controlled by microcomputer and programmable controller (PLC).
- Easy-to-operate human-machine interface, and has the function of remote connection.
- Electric lifting, double-station large-diameter unwinding, allowing a single person to load coils weighing up to 600KG.
- Servo feeding, stepless adjustment of sheet length, high speed, accuracy and stability.
- The upper and lower electric heating furnaces are used for four-stage heating and protection to reduce the impact of air convection on temperature, so that the product molding is stable, from 0-400 degrees in just 3 minutes, improving production efficiency. The electric heating furnace can automatically remove the device.
- A new real-time distributed digital dynamic hot forming temperature control system is used to control the temperature of the tile at a single point, and it has automatic compensation control, with an accuracy of $\pm 1^{\circ}\text{C}$. Energy saving of about 15% and extended furnace plate service life.
- The quick mold change system can conveniently, quickly, accurately and safely change molds, reduce machine downtime, reduce labor waste, and improve production efficiency.
- The mold opening and closing of the forming, cutting station are controlled by servo motor, with high precision, low wear, fast speed and low noise. Each station is supported by four columns, combined with a five-point structural connecting rod, which has good stability.
- The unique vertical stacking concept ensures continuous stacking of products.
- Automatic counting of finished product output, with production data memory function, can store 90 sets of operating data.
- Combined with the edge material winding device, the entire production process is clean, without burrs and waste.
- The design of the electrical cabinet is simple and refreshing, simplifying the machine assembly and wiring installation process.

- 标准化程度高，功能齐全，安全、高效、节能、卫生。
- 集机械、气动、电气一体化，采用微电脑与可编程控制器（PLC）控制。
- 易于操作的人机界面，并具备远程连接的功能。
- 电动抬料，双工位大直径放卷，允许单人上料重达600KG的卷材。
- 采用伺服送料，片材长度无级调整，高速准确稳定。
- 采用上、下电热炉四段加热并做防护，减少空气对流对温度的影响，使得产品成型稳定，从0-400度只需3分钟，提高生产效率。电热炉可自动移出装置。
- 采用一种全新的实时分布式数字动态热成型温控系统，对瓦片单点控温，并具有自动补偿控制，精度可达 $\pm 1^{\circ}\text{C}$ 。节能15%左右，延长炉板使用寿命。
- 快速换模系统，可方便快速精准安全换模，减少机器停机时间，减少人工浪费，提高生产效益。
- 成型、打孔、裁切工位部分开模、合模由伺服电机控制，精度高、磨耗低、速度快、低噪音。每个工位有四根立柱支撑，结合五支点结构连杆，稳定性好。
- 独特的垂直堆叠理念，确保产品连续堆叠。
- 自动计数成品输出，具有生产数据记忆功能，能存储90组运行数据。
- 结合边料收卷装置，整个生产过程洁净，无毛刺、无废料。
- 电柜箱设计简洁清爽，简化机器组装以及接线安装流程。

SPECIFICAITON

技术参数

Model	型 号	RS-650-450-3	RS-650-450-4	RS-730-610-3	RS-730-610-4	RS-730-800-3	RS-730-800-4
Sheet Materials	片材材质	PP/PS/PET/PLA PE	PP/PS/PET/PLA PE	PP/PS/PET/PLA PE	PP/PS/PET/PLA PE	PP/PS/PET/PLA PE	PP/PS/PET/PLA PE
Sheet Thickness	片材厚度	0.2-1.5mm	0.2-1.5mm	0.2-1.5mm	0.2-1.5mm	0.2-1.5mm	0.2-1.5mm
Forming Area	成型面积	650*450mm	650*450mm	730*610mm	730*610mm	730*800mm	730*800mm
Width Of Sheet	片材宽度	370-700mm	370-700mm	400-800mm	400-800mm	400-800mm	400-800mm
Upper Forming Depth	上模制品成型深度	100mm	100mm	100mm	100mm	100mm	100mm
Bottom Forming Depth	下模制品成型深度	130mm	130mm	130mm	130mm	130mm	120mm
Max Speed	最大速度	60moulds/min	60moulds/min	50moulds/min	50moulds/min	48moulds/min	48moulds/min
The Longest Knife	最长刀线	8m	8m	10m	10m	12m	12m
Dimension	尺寸	10210*2300*2700mm	11230*2300*2700mm	11500*2350*2700mm	12785*2350*2700mm	11500*2350*2700mm	14500*2350*2700mm
Forming clamping force	成型合模力	600kn	600kn	750kn	750kn	750kn	750kn
Punching clamping force	冲切合模力	600kn	600kn	750kn	750kn	900kn	900kn
Air Consumption	耗气量	3m ³ /min 0.5-0.8bar	3m ³ /min 0.5-0.8bar	4m ³ /min 0.5-0.8bar	4m ³ /min 0.5-0.8bar	4m ³ /min 0.5-0.8bar	4m ³ /min 0.5-0.8bar
Weight	重量	8500kg	11000kg	12500kg	15500kg	14500kg	17500kg
Total Installed Power	总装机功率	116Kw	125Kw	174Kw	185kw	185kw	200kw
Heating Power	加热功率	90kw	90kw	140kw	140kw	140kw	140kw
Feeding Motor	送料电机	3kw	3kw	4.4kw	4.4kw	4.4kw	4.4kw
Control Forming Plug Motor Power	拉伸电机功率	3kw	3kw	4.4kw	4.4kw	4.4kw	4.4kw
Stacking Motor	堆叠电机	1.8kw	1.8kw	1.8kw	1.8kw	2.9kw	2.9kw
Winding Waste Of Edge Sheet Motor Power	卷边电机功率	0.4kw	0.4kw	0.4kw	0.4kw	0.4kw	0.4kw
Forming Motor	成型电机	4.4kw*2	4.4kw*2	5.5kw*2	5.5kw*2	7.5kw*2	7.5kw*2
Cutting Motor	裁切电机	4.4kw*2	4.4kw*2	5.5kw*2	5.5kw*2	7.5kw*1, 11kw*1	7.5kw*1, 11kw*1
Punching Motor	冲孔电机		4.4kw*2		5.5kw*2		7.5kw*1, 11kw*1

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MACHINE STRUCTURE

机械构造



LOADING SHEET PART:

Load automatically, lower human resource cost. Proximity switch clever control, getting the rid of falling down of the sheet by conveying too fast. Double stations, big diameter, reduce the frequency of changing sheet coil, improve the the production efficiency. Max undertake roll of sheet Weight:600kg, Diameter 800mm.

上料部分:

自动上料,降低人力资源成本。接近开关智能控制,有效避免输送速度过快导致板材下落。双工位,大直径,减少更换板材卷料的频率,提高生产效率。最大承接板材卷料重量:600kg,直径:800mm



FEEDING SHEET PART:

Automatic feeding reduces human resource costs. Actively transport the sheet and reduce the load on the conveying servo motor. Cleverly control the proximity switch to prevent the sheet from falling too quickly during transportation.

送料部分:

自动送料,降低人力资源成本。片材积极输送,降低输送伺服电机负荷。接近开关巧妙控制,杜绝片材输送过快下落。



HUMAN-MACHINE INTERFACE:

Controlled by microcomputer and programmable controller (PLC), all action programs can be operated through the human-machine interface, simple and convenient, 15-inch touch screen.

人机界面:

采用微电脑与可编程控制器(PLC)控制,所有动作程序可以通过人机界面操作,简单便捷,15英寸触摸屏。



HEATER:

1. Vacuum insulation cotton is installed in the heater, which has a fast reaction speed, short processing time and energy saving.
2. The furnace body is divided into two layers, the layout of the heating tiles is optimized, so that the plate is heated evenly.

加热器:

加热器内加装真空保温棉,反应速度快,处理时间短,节省能源。炉体分上下两层,优化加热瓦布局,使板材受热充分均匀。



MOLDING STATION:

1. Mold changing auxiliary mechanism, using sliding guide rails and support rods to achieve fast mold change, saving time and effort.
2. Adopting high-power servo motor drive, high precision, high efficiency and low noise.

成型工位:

换模辅助机构,采用滑动导轨和支撑杆,实现快速换模,省时省力。采用大功率伺服电机驱动,精度高,效率高,噪音低。



MOLDING MOLD:

The working principle is a combination of positive and negative pressure, and some nylon plugs are used to assist stretching in the mold to make it have stronger molding ability. There is cooling water in the mold cavity to speed up the cooling speed and make demolding easier.

成型模具:

工作原理是正负压结合,通过一些尼龙塞在模具内辅助拉伸,使其具有更强的成型能力。模腔内有冷却水,加快冷却速度,脱模容易。

MACHINE STRUCTURE

机械构造



GUIDE HEAD STRUCTURE:

The workstation is supported by four columns (45# steel, hard chrome plated). The integrated mold table (QT-600 steel) is made by a high-precision CNC milling machine. Therefore, it is wear-resistant, stable, and accurate, which prolongs the service life of the equipment.

导头结构:

工作站由四根立柱(45#钢,镀硬铬)支撑。一体式模台(QT-600钢)采用高精度数控铣床加工而成,耐磨、稳定、精准,延长设备使用寿命。



A FIVE-POINT-CONNECTING-ROD STRUCTURE:

This structure design provides more stable operation and faster speed.

五支点结构:

此种结构设计,工作更稳定,速度更快。



MOLD CHANGE STRUCTURE:

Greatly reduce mold change time and labor costs, improve production efficiency and safety factor, and provide convenience for your diversified product chain.

换模结构:

打孔工位与裁切工位的换膜结构一样,大大减少换模时间和人工成本,提高生产效率和安全性,为您提供多元化的产品链提供便利。



SERVO MOTOR:

The station mold closing, forming auxiliary stretching, and pull-tab parts are all driven by servo motors, which have fast speed, low noise, high precision, and high efficiency.

伺服电机:

工位合模、成型辅助拉伸、拉片等部件均采用伺服电机驱动,速度快、噪音低、精度高、效率高。



SERVO-CONTROLLED CONVEYOR BELT:

Set conveyor belt parameters directly on the operation screen. Freely adjust and control conveying length and speed.

伺服控制的输送带:

在操作屏直接设置输送带参数,自由调节和控制输送长度和速度。



REWINDING WASTE OF EDGE SHEET:

Our multi-station thermoformers feature a winding unit with torque motor to efficiently collect the offcuts and wind them into a roll with one side retractable, which can be conveniently removed at the end of production. This advanced waste management system improves operating efficiency and cleanliness, making multi-station thermoformers ideal for high-quality and sustainable production.

边料收卷:

我们的多工位热成型机配备伺服电机的收卷装置,可高效收集边料并将其卷绕成单侧可伸缩的卷筒,方便在生产结束时取下。这种先进的废料管理系统提高了操作效率和清洁度,使多工位热成型机成为高质量、可持续发展的理想选择。



PRODUCTS RANGE

产品范围



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It can make some products which unable to be made in one station thermoforming machine, like for example: PLA products, plastic lids or containers which has holes, the packing containers (fruit box, egg trays) with body and cover connected etc.

它可以制造一些单工位热成型机无法制造的产品：
例如：PLA 产品、有孔的塑料盖或容器、主体和盖子连接的 包装容器（水果盒、鸡蛋托盘）等。

For more information,
please consult the manufacturer.



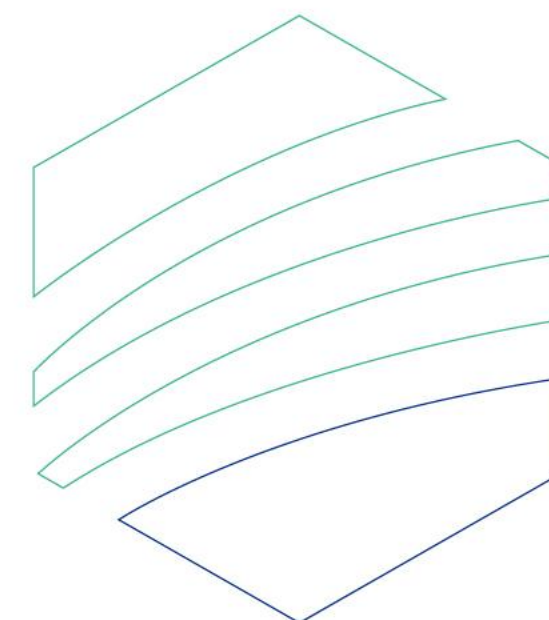
CONFIGURATION LIST

配置清单

Motor Reducer 电机减速机	Guangdong 广东	Temperature Module 温度模块	Taiwan Delta 台湾台达
Molding Solenoid valve 成型电磁阀	Japan SMC 日本SMC	Heating Brick 加热瓦	Jiangsu Tianbao 江苏天宝
Solenoid Valve 电磁阀	Japan SMC 日本SMC	Contactor 接触器	America Eaton 美国伊顿电气
Cylinder 汽缸	Taiwan AirTac 台湾亚德客	Low Voltage Apparatus 低压电器	America Eaton 美国伊顿电气
Servo Motor 伺服电机	China Inovance 中国汇川	Other Electrical Appliances 其他电器	Germany Phoenix 德国菲尼克斯

THE SOLUTION OF FULLY AUTOMATIC PLASTIC THERMOFORMING

全自动塑料热成型解决方案



Shaping The Future With Cutting-edge Innovation

以锐意之姿，塑行业未来

RSC-800-500

All Servo Thermoforming Machine

全伺服塑料热成型机



INTRODUCTION

设备简介

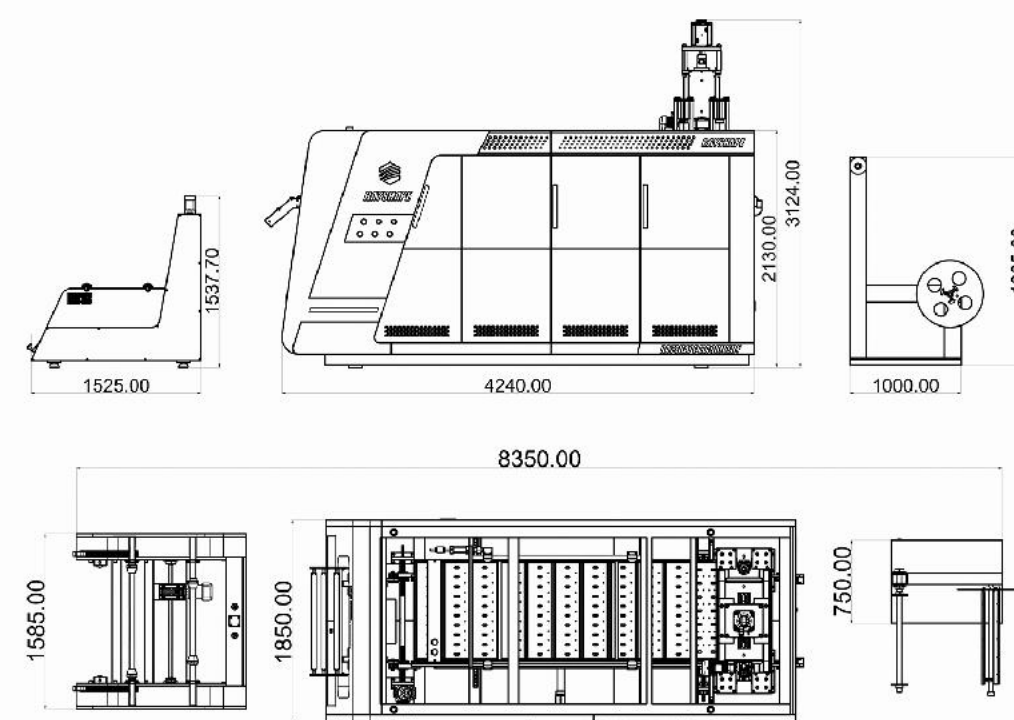
RS-800-500 is a new generation full servo plastic thermoforming machine. It uses internationally advanced plastic sheet forming technology. It is a plastic sheet forming equipment that integrates mechanical, pneumatic and electrical integrated design. It can automatically complete all actions such as loading, feeding, heating, forming and cutting. Compared with hydraulic drive, this machine has more stable forming, faster speed and cleaner production.

RSC-800-500全新一代全伺服塑料热成型机，运用国际先进塑料片材成型工艺技术，是集机械、气动、电气一体化设计的塑料片材成型设备，全自动完成上料、送料、加热、成型、裁切等所有动作。相比液压驱动，本机成型更稳定、速度更快、生产更清洁。



MACHINE STRUCTURE

机械构造



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FEATURES AND ADVANTAGES

特征与优势

- High degree of standardization, complete functions, safe, efficient, energy-saving and hygienic.
- It integrates mechanical, pneumatic and electrical integration, and is controlled by microcomputer and programmable controller (PLC).
- Easy-to-operate human-machine interface, and has the function of remote connection.
- Electric lifting, double-station large-diameter unwinding, allowing a single person to load coils weighing up to 600KG.
- Servo feeding, stepless adjustment of sheet length, high speed, accuracy and stability.
- The upper and lower electric heating furnaces are used for 6-7 heating stages and protection to reduce the impact of air convection on temperature, ensuring stable product molding. It only takes 3 minutes to heat from 0 to 400 degrees, improving production efficiency. The electric heating furnace can be automatically removed.
- The quick mold change system can conveniently, quickly, accurately and safely change molds, reduce machine downtime, reduce labor waste, and improve production efficiency.
- The mold opening and closing by servo motor, with high precision, low wear, fast speed and low noise. Each station is supported by four columns, combined with a five-point structural connecting rod, which has good stability.
- Positive pressure forming ensures uniform thickness, full shapes, and sharp corners.
- The chain frame features a fast cooling and wear-resistant design.
- The cup blowing system offers adjustable blowing angle and air volume.
- A servo motor chain drive automatically extends the track to prevent sheet sagging, ensuring stable, precise, and smooth sheet feeding.
- Combined with the edge material winding device, the entire production process is clean, without burrs and waste.
- The design of the electrical cabinet is simple and refreshing, simplifying the machine assembly and wiring installation process.

- 标准化程度高，操作简单、性能可靠、低噪音、高品质。
- 集机械、气动、电气一体化，采用微电脑与可编程控制器（PLC）控制。
- 易于操作的人机界面，并具备远程连接的功能。
- 电动送料，双工位大直径放卷，允许单人上料重达600KG的卷材。
- 采用伺服送料，片材长度无级调整，高速准确稳定。
- 采用上、下电热炉6-7段加热并做防护，减少空气对流对温度的影响，使得产品成型稳定，从0-400度只需3分钟，提高生产效率。电热炉可自动移出装置。
- 快速换模系统，可方便快速精准安全换模，减少机器停机时间，减少人工浪费，提高生产效益。
- 开模和合模由伺服电机控制，精度高、磨损低、速度快、低噪音。每个工位有四根立柱支撑，结合五支点结构连杆，稳定性好。
- 正压成型，厚薄均匀、成型饱满、棱角清晰。
- 链条架采用降温快，耐磨设计。
- 吹杯系统可调节吹杯角度和风量。
- 伺服电机链条传动，自动伸张轨道防止片材下垂，送片稳定、精准、平滑。
- 结合边料收卷装置，整个生产过程洁净，无毛刺、无废料。
- 电柜优化设计，简化机器组装以及接线安装流程。

CONFIGURATION LIST

配置清单

Motor Reducer 电机减速机	Guangdong 广东	Temperature Module 温度模块	Taiwan Delta 台湾台达
Molding Solenoid valve 成型电磁阀	Japan SMC 日本SMC	Heating Brick 加热瓦	Jiangsu Tianbao 江苏天宝
Solenoid Valve 电磁阀	Japan SMC 日本SMC	Contactora 接触器	America Eaton 美国伊顿电气
Cylinder 汽缸	Taiwan AirTac 台湾亚德客	Low Voltage Apparatus 低压电器	America Eaton 美国伊顿电气
Servo Motor 伺服电机	China Inovance 中国汇川	Other Electrical Appliances 其他电器	Germany Phoenix 德国菲尼克斯

SPECIFICAION

技术参数

Sheet Materials 片材材质	PP/PS/PET/PLA/PE	Air Consumption 耗气量	4m³/min 0.5-0.8bar
Sheet Thickness 片材厚度	0.2-2.5mm	Weight 重量	7500kg
Forming Area 成型面积	780*480mm	Total Installed Power 总装机功率	150KW
Width Of Sheet 片材宽度	400-850mm	Heating Power 加热功率	122kw
Max Speed 最大速度	35模/分钟 35moulds/min	Feeding Motor 送料电机	44kw
The Longest Knife 最长刀线	12m	Control Forming Plug Motor Power 拉伸电机功率	5.5kw
Dimension 尺寸	4500*2000*2600mm	Winding Waste Of Edge Sheet Motor Power 卷边电机功率	0.4kw
Forming clamping force 成型合模力	1100kn	Forming Motor 成型电机	15kw
Max. Forming Depth 最大成型深度	≤180mm 吹杯 ≤180mm by blowing	Machine Travel 机型行程	≤220mm

PRODUCTS RANGE

产品范围

It is suitable for processing different materials, such as A-PET, R-PET, BOPS, HIPS, PP, PLA, PVC and barrier materials, and is suitable for the production of various beverage cups, coffee cups, milk cups, water cups, bowls, boxes and other plastic products.

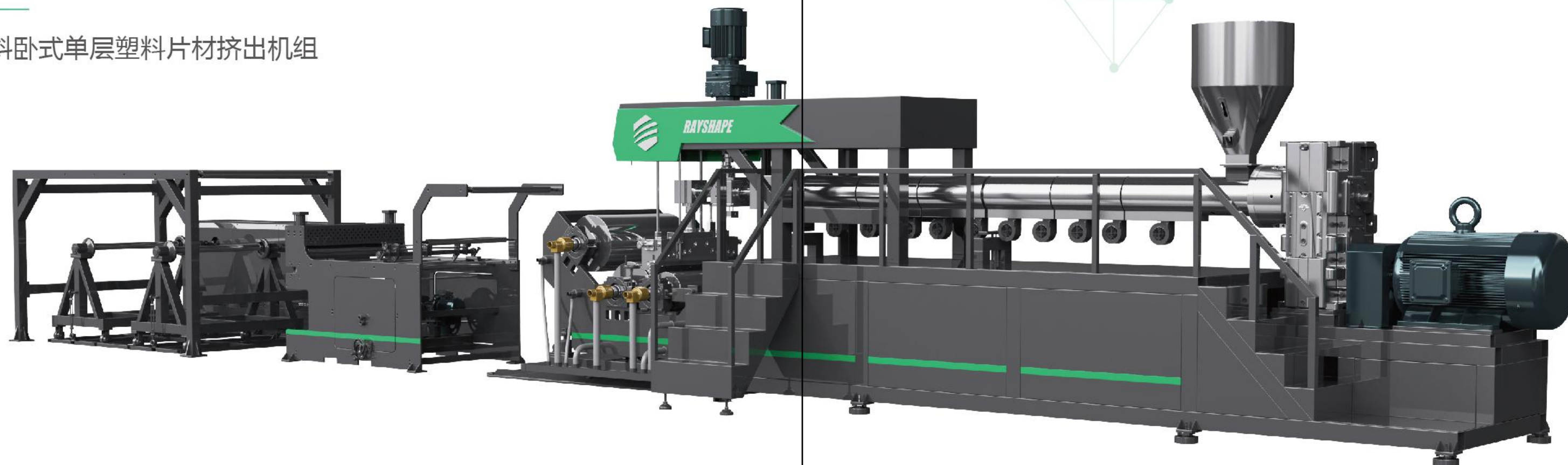
适用于处理不同的材料，如 A-PET、R-PET、BOPS、HIPS、PP、PLA、PVC 和阻隔材料，适合生产各种饮料杯、咖啡杯、牛奶杯、水杯、碗、盒子等塑料制品。

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INTRODUCTION

设备简介

Inclined single-layer plastic sheet extruder unit is composed of an extruder, calendering, traction, winding machine, and electrical control cabinet. It is a production line designed with mechanical, pneumatic, and electrical integration, and is suitable for high plasticization requirements, uniform mixing, and high-quality sheet materials for various production needs. All machine accessories are sourced from well-known domestic and foreign brands, ensuring high efficiency and stability throughout the entire production process.

斜卧式单层塑料片材挤出机组是由挤出机、压延、牵引、收卷机、电器控制柜组成，集机械、气动、电气一体化设计的生产线，针对薄片材塑化要求高、混炼均匀、高品质片材，适合各种产量需求。机器配件全部采用国内外知名品牌，保证了整个生产过程都具有高效率 and 稳定性。



Suitable for extruding plastic sheets such as polypropylene (PP), polystyrene (PS), polyethylene (PE), etc. The formed plastic sheets are used to make thermoformed packaging containers or printed products such as plastic trays, beverage cups, ice cream cups, yogurt cups, lids, plates, fruit boxes, etc.

适用于聚丙烯(PP)、聚苯乙烯(PS)、聚乙烯(PE)等塑料片材挤出，成型后的塑料片材用于制作塑料托盘、饮料杯、雪糕杯、酸奶杯、盖子、碟子、水果盒等热成型包装容器或印刷制品。

winding sheet system

收卷部分



SPECIFICAITON

技术参数

Model 型号	RSE-110-1000	RSE-120-1000	RSE-130-1000
Applicable Materials 适用材料	PP、PS、PE	PP、PS、PE	PP、PS、PE
Product Width 制品宽度	PP、PE: 850mm PS: 750mm	PP、PE: 850mm PS: 750mm	PP、PE: 850mm PS: 750mm
Product thickness 制品厚度	PP、PE: 0.3-2mm PS: 0.2-2mm	PP、PE: 0.3-2mm PS: 0.2-2mm	PP、PE: 0.3-2mm PS: 0.2-2mm
Effect Width Of Die 模头有效宽度	1000mm	1000mm	1000mm
Effective Width Of Roller 辊筒有效宽度	1000mm	1000mm	1000mm
Diameter Of Three Roll 三辊直径	350mm*1 450mm*2	400mm*1 500mm*2	400mm*1 600mm*2
Diameter Of Screw 螺杆直径	110mm	120mm	130mm
Length/Diameter Ratio 螺杆长径比	1:32	1:35	1:36
Main Motor Power 主电机功率	60kw	132kw	160kw
Heating Power 加热功率	40kw	75kw	85kw
Total Power 总功率	100kw	210kw	235kw
Cooling Water Flow 流水量	50m³/h	80m³/h	80m³/h
Line Speed 线速	15-30m/min	15-30m/min	15-30m/min
Output 产量	150-200kg/h	300-400kg/h	300-400kg/h
Equipment Weight 设备重量	7500kg	10500kg	12000kg
Equipment Size 设备尺寸	L*W*H 12000*1800*3000mm	L*W*H 13000*1800*3000mm	L*W*H 13500*1800*3500mm

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SUPPORTING REQUIREMENTS

配套要求

Processing materials: PP、PS、PE

- **Electric Power Supply:**
All Cabinets (including main power supply and control) and all internal cables will be supplied by the seller, buyer's responsibility is for external cables and cable frame to main panel/input power position of sheet extrusion machine)
Mains input: 3×380V
Fluctuation: ≤±10% (max)
Frequency: 50Hz
Fluctuation: ±0.5Hz (max)
- **Cooling water supply:**
water used on machinery in closed or open loop circuits must follow the general requirement: clean filtered and free of sediments.
Supply temperature: ≤30℃
Supply pressure: 3~5bar
Pressure variation: ±0.5bar
Return pressure average: 1.5bar
consumption capacity: 25~30m³/h
- **Compressed air:**
clean, free of oil, dust and water
supply pressure at point of use: ≥7bar
Pressure variation: ±1%
Consumption capacity: 1.0m³/h

加工物料：PP、PS、PE

- **电气供应：**
所有的电柜（包括主电柜和控制电柜）以及挤出机组的内部电线电缆都由卖方提供，买方的责任是需要提供到挤出机组的主电柜/输入电源的外部电缆及电缆架等辅助设施。
输入电源电压：3×380V
电压最大波动：≤±10%
频率：50HZ
频率最大波动：±0.5HZ
- **循环冷却水供应：**
无论客户使用开环或闭环循环冷却水系统，都必须要保证水质清洁、无沉淀物。
最高供水温度：≤30℃
供水压力：3~5bar
压力波动：±0.5bar
平均回水压力：1.5bar
循环水量：25~30m³/h
- **压缩空气供应：**
气源清洁，无油水和灰尘。
供给气源压力：≥7bar
压力波动：±1%
气压量：1.0m³/h

PRODUCTS RANGE

产品范围



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MOLD INTRODUCTION

模具介绍



Water-immersion molds:

A wraparound cooling and exhaust system is used around the perimeter and bottom of a single cavity mold.

Advantages:

Fast cooling and exhaust, high production output, and ease of future maintenance and after-sales service.

泡水模：通过单个腔模体的四周及底部，采用环绕式方法去冷却和排气。

优势：冷却快排气快，产量高、方便未来维修售后。

通水模：通过整个模体排布U形水管的方式去局部冷却，和排布间隔性排气孔排气。

劣势：冷却慢排气慢，产量低，不方便未来维修售后。

Water-through molds:

U-shaped water pipes are arranged throughout the mold body for localized cooling, and intermittent vent holes are arranged for exhaust.

Disadvantages:

Slow cooling and exhaust, low production, and inconvenient future maintenance and after-sales service.



AUXILIARY EQUIPMENT

辅助设备



Hopper Dryer

斗式干燥机

- High efficiency, significantly shorten the drying time.
- The high precision temperature regulator adopted to eliminate the temperature error, save time and save manpower. Convenient, simple and quick refueling.
- Direct heat drop, shorten the time of raw materials. Improve the injection rate.



Crusher

粉碎机

- This machine adopts the knife type design unique, mainly applicable to thin, hollow, broken pot, without flattening can be directly put into the broken.



Vertical Mixer

立式混料机

- Mainly through wind electric water surface and the inner surface of the material drying, dehumidifying to achieve adequate drying purposes.
- A capacity choice loose, there 0.5-10T available.
- Efficient heat pipes, energy efficient heat quickly.
- Dry stir synchronization, effectively prevent uneven heating of materials and agglomeration phenomenon.
- The unique design of the circulating air, heating faster, less electricity.
- Humidity and moisture device can effectively discharge the barrel.



Cooling Tower

冷却塔

- According to aerodynamic theory, using the natural flow of county-based design, the minimum air resistance, a structure compact. Assembly convenient, durable, cooling effect is good. Tower made of high-quality glass, steel, surface clothing resistant to corrosion, Anti-aging, bright clean, non-fade, water distribution system, water distribution uniformity, water pressure is low, flow, large pressure head loss, cooling tower chassis can be used for water catchment tray to use, and is equipped with automatic, manual cloth in water, over flow, sewage and other devices, Can be used for closed-cycle pools that do not require a separate pool.

AUXILIARY EQUIPMENT

辅助设备



Screw Feeder

螺旋上料机

- The screw feeder (the auger feeder) scope is broad, plastic (pellets, powder, crushed material, film material, crops (grain, wheat, beans, etc.) and other grain powder easy to use, mobile convenient, height adjustable, is the provincial labor is a good helper.
- Tips: To adjust well before starting the discharge height and tighten the screw press to identify the direction of rotation, using the process can not reach into the hopper operations, issuing different sound abnormal noise when used to shut down and power off checks.



Cooling Chiller

冷水机

- Chiller is a kind of cooling water equipment that can provide constant temperature, constant flow and constant pressure. It is mainly used for cooling and process cooling of precision instruments and industrial equipment. Chiller is mainly used for cooling and process cooling of precision instruments and industrial equipment.



Online Crusher

在线粉碎机

- It is used for grinding the skeleton of sheet to flakes, then transporting by the blower through pipe to extrusion hopper, ensure continuous production or can be customized according to customer different requirements.



Screw Air Compressor

螺杆空压机

- With a unique coating design, it features high strength, sturdiness and durability, a long service life, low energy consumption, and low noise. High-efficiency oil/gas separation design with high efficiency. There is also a good shock absorption design, enabling smooth and silent operation. It adopts cyclone air intake, with filtration precision of 99.9%, and still ensures reliability even in harsh environments.

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