

FRIGOESPACIOS®

Quick freezing to create safer and more reliable frozen food.



FRIGOESPACIOS®

SPIRAL QUICK FREEZER



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The data will be modified without notice for technique improvement.

BRIEF INTRODUCTION

大连冰山菱设速冻设备有限公司采用日本菱设工业株式会社的工艺技术，以“三个同步”为原则，即与日本菱设技术同步、生产管理同步、质量标准同步，产品设计及制造采用日本工业厅标准，自公司成立以来，产品已覆盖至阿根廷、俄罗斯、日本、韩国、智利、巴西、印尼、马来西亚、菲律宾、孟加拉、缅甸、越南、比利时、非洲、欧洲等多个国家，现已拥有几百个国内外知名用户。公司始终以“快速冻结，创造更加安全、放心的冷冻食品”为企业宗旨；以“诚实守信、敬业务实、创新高效、追求卓越”为企业价值观；以“持续以领先速冻技术，为客户提供高品质产品”为质量方针；以“一切为了用户，快速反应到位”为服务方针。公司已于2006年2月17日通过莱茵公司ISO-9001(2000)认证。冰山菱设已成为国内速冻机行业的最高端品牌。

Dalian Bingshan Ryosetsu Quick Freezing Equipment Co.,Ltd adhere to the principle of "Three Synchronization" with Japan Ryosetsu Industries Co.,Ltd, technical synchronization, production management synchronization, quality standard synchronization. Our design and manufacture adopt Japan industry standard. Since foundation in 2003, our products have been sold to Argentina, Russia, Japan, South Korea, Chile, Brazil, Indonesia, Malaysia, Philippines, Bangladesh, Myanmar, Vietnam, Belgium, Africa, Europe and etc. With the "quick freeze, to create safer and more secured frozen food" as business purpose; "honest and trustworthy, dedicated and pragmatic, innovative and efficient, the pursuit of excellence" as the corporate values; "leading the frozen technology continuously, to provide customers with high quality product "as quality policy; "All for customer, quick response" as principle of service, the company was granted TUV ISO-9001(2000) certificate on February 17, 2006. Bingshan Ryosetsu has became the top-brand of domestic quick freezing industry.



Company 公司简介 Introduction

大连冰山菱设速冻设备有限公司是由冰山集团大连冷冻机股份有限公司与日本菱设工业株式会社共同出资兴建的合资公司，主要生产具有世界先进水平的高品质速冻机，于2006年2月通过莱茵公司ISO-9001 (2000) 认证。

冰山集团是国家机电产品出口基地和国家一级企业，在工业制冷行业一直处于排头兵地位，是国家“六五”、“七五”、“八五”、“九五”期间技术改造企业之一，是中国机械工业100强，国有优秀500家之一和国家重点扶持的520家企业之一。“冰山”标志作为被国家工商局指定的中国工业制冷空调行业唯一驰名商标，“冰山”产品被誉为“中国名牌”和“中国出口名牌”，是国家重点支持和发展的出口名牌。

菱设工业株式会社是日本从事专业速冻设备制造的公司，于1960年成立，是世界上少数技术领先的速冻机公司之一，其多项专利技术于世界领先。其中部分速冻设备直接为前川、三菱冷热配套制造，日本菱设是日本MYCOM、三菱的螺旋速冻机OEM工厂。

Dalian Bingshan Ryosetsu Quick Freezing Equipment Co., Which Ltd. is a joint venture of Dalian Refrigeration Co., Ltd. and Japan Ryosetsu Industrial Co. Ltd, mainly produces quick freezer with top advanced technology & superior quality. The company got the certificate of ISO9001 (2000) on Feb, 2006.

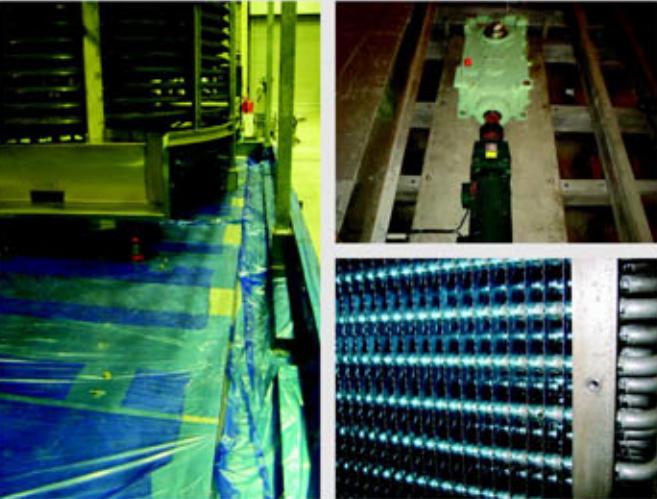
Dalian Bingshan Group is a national mechanical and electrical products export base , ranked among the top 10 National machinery industrial enterprises, the top 500 excellent state-owned enterprises, and 520 enterprises under the back up by the government. “Bingshan” brand is approved for the unique “Best Trademark” in the refrigeration and air conditioning industry of China by State Administration of Industry and Commerce, “Bingshan” brand is the famous brand supported to develop by the state for export. “Bingshan” Brand is conferred China Famous Brand and China Export Famous Brand.

Japan Ryosetsu Industry Co.,Ltd is a quick freezing equipment manufacturer, founded in 1960, owns a number of world-leading patented technology.



彻底清洁的冻结环境

- 采用世界专利的外传动系统，避免润滑油污染食品；
- 换热器翅片带亲水膜、避免氧化铝有害粉末的产生；
- 整体底盘彻底排水、无卫生死角；
- 库内电机、轴承：卫生；
- 自动清洗装置：高效。

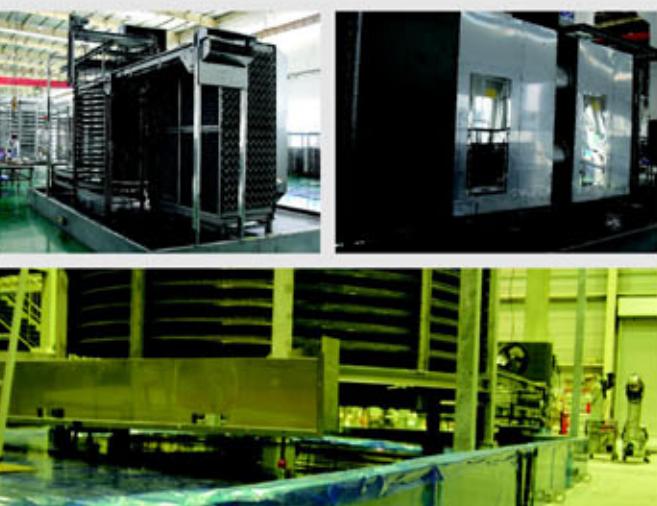


Hygienic Interior Processing Space

- World patent exterior driving device avoiding oil pollution
- Evaporator with epoxy fin avoiding powder of alumina
- Water drain through integral floor. No dust left inside
- Motor & Bearings inside: No oil pollution
- Automatic cleaning system: High efficiency

快速冻结、干耗低

- 独有专利的送风系统冷却效率高，干耗低；
- 换热器变片距结构，换热效率高，降温快；
- 全封闭风道设计，装机功率低，大量节省运行费用。

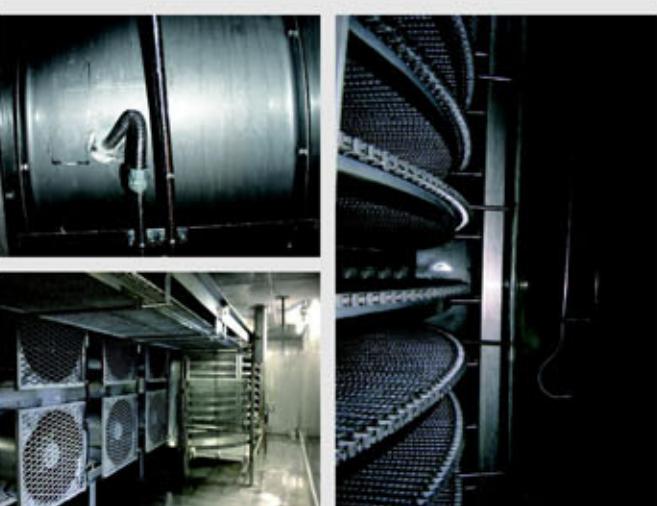


Quicker Freezing Lower Moisture-lost

- Patented airflow system to achieve quicker freezing &lower moisture-lost
- Different fin space in Evaporater to enhance heat exchange efficiency
- Closed-circle Air-Duct System to ensure low motor power and save great running cost

节省运行费用

- 同等产量装机功率最低；
- 最快速的冻结效果，采用专利的高效送风系统并配合全封闭风道设计结构；
- 亲水膜铝翅片，节省近一半冲霜水量。



Saving Running Cost

- Lower installed motor power
- Patented airflow system reduce the retention time
- Save defrost water due to Epoxy fin

可靠、稳定的运行保证

- 先进的结构设计，保证了设备的稳定运转；
- 采用世界一流的零部件及电器元件；
- 严格的制造工艺和安装工艺控制，确保精密可靠的设备；
- 国内唯一的出厂前试运转检验。确保100%出厂合格率；
- 多重的异常报警系统，消除设备隐患；
- 完善的售后服务体系，24小时内到达现场。

Credible & Stable Running

- Advanced technology to ensure stable running
- World-class parts & controller to ensure credible running
- Strict system control on fabrication and assembly to ensure accuracy and reliability of machine.
- Factory test before delivery to ensure 100% pass.
- Multi-alarm system for abnormal.
- Perfect after sales service.

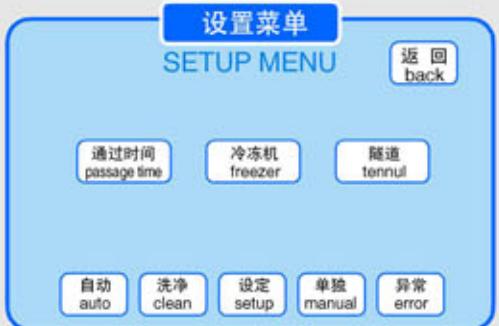
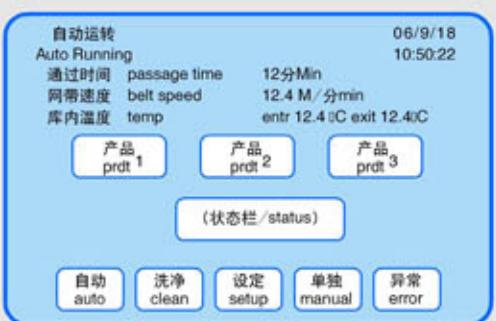


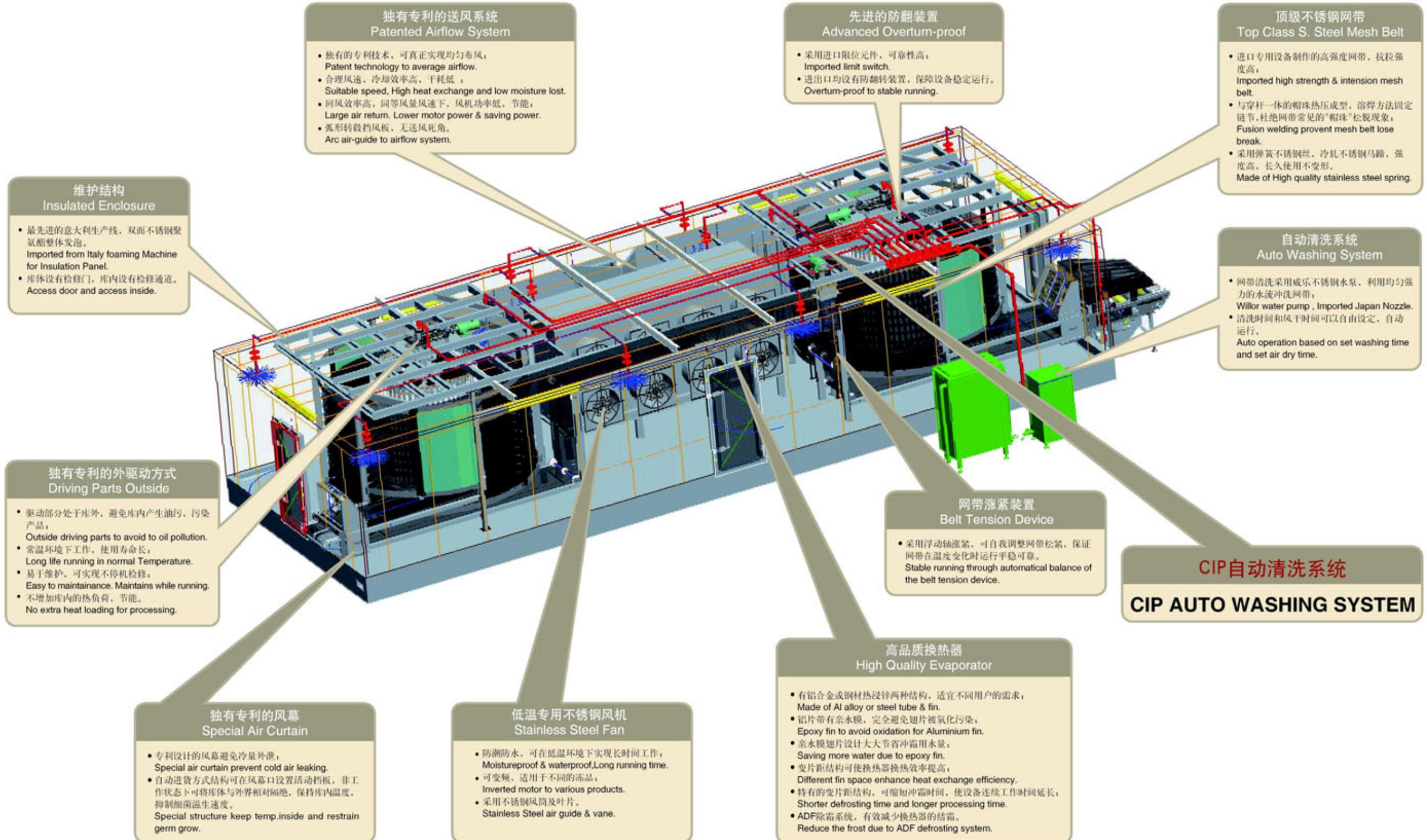
控制系统的易使用性及可靠性

- 采用三菱PLC可编程控制器，人机界面，可根据用户要求提供中/英文显示，并具有开放的网络通讯接口，可与制冷系进行对接，实现系统自动运行；
- 采用PLC可编程控制器对系统运行进行全自动精确控制，触摸屏式控制面板使操作更加方便、快捷、舒适。
可以同时设定三种冻品的冻结程序，冻结时只要点击相应品名即可自动进入特定运行模式，方便了更换冻品时的操作。
- 冻结操作时利用变频器对网带传送速度进行无级调节，使速冻机对各种冻品的适应性强；
- 清洗操作时冲霜水清洗、吹风等过程交替进行，并可对全过程进行监控，使网带清洗彻底、干净；
- 当出现异常时，屏幕上将会显示出问题内容，此时可根据说明书的指导快速排除问题，恢复正常运行。

Easy Operation

- Easy operation and Stability in Controlling system.Mitsubishi PLC (Chinese/English) in with the communication port, Controlling system, connect refrigeration system to realize automatic running.
- PLC control automatically and accurately system running. Controlling panel with LCD realize easy and quick operation.
User can set auto running according to different product.
- Belt speed will be controlled by inverter when running.It's suitable for various products.
- Air blowing after Water cleaning to ensure belt clean.
- Display the information of abnormal when malfunction.





技术参数 / DATA OF SINGLE SPIRAL FREEZER

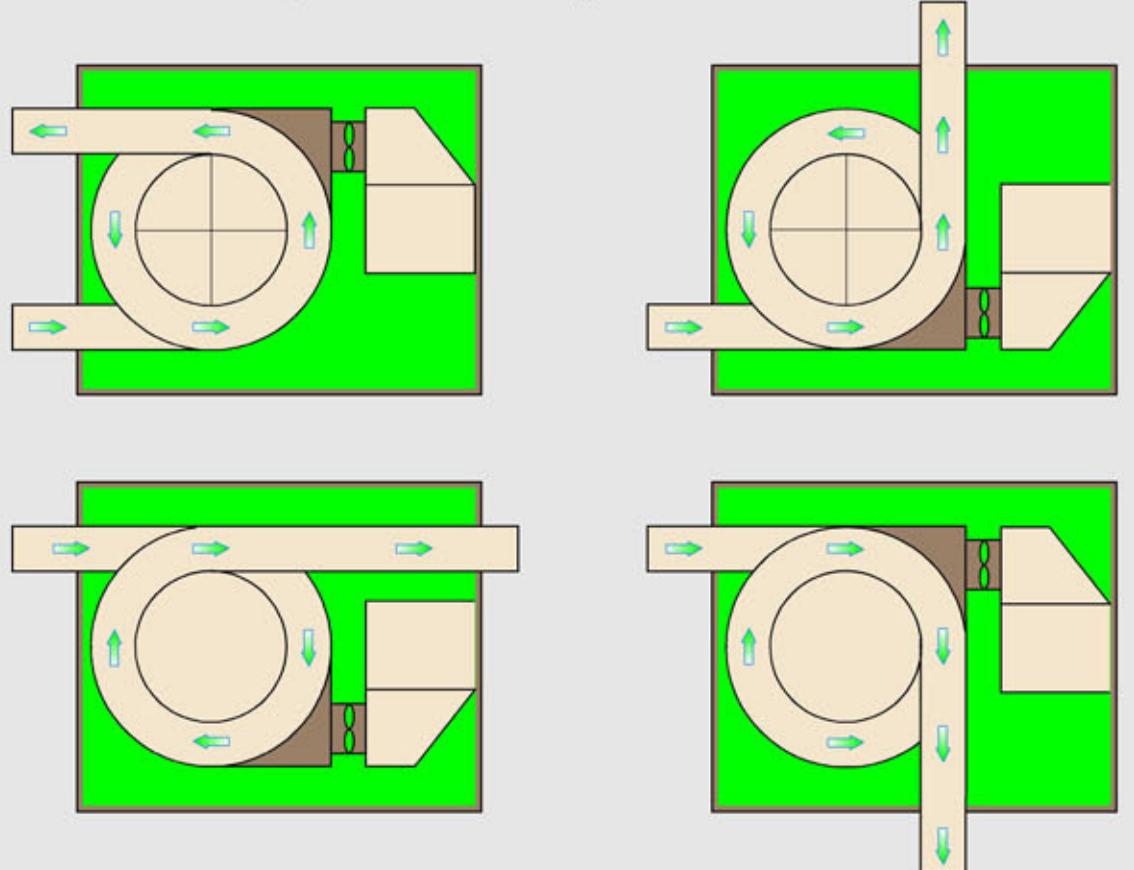
项目 Item	冻结能力 Freezing kg/h	配机冷量 Ref.load kw	装机容量 Motor Power kw	冻结时间 Freezing Time min	入料温度 Temp.in °C	出料温度 Temp.out °C	库内温度 Chamber Temp. °C	网带宽度 Belt Width mm	制冷剂 RFNT	外形尺寸 Overall Dim. L×W×H(m)
型号 Model										
RSSP-L450×14-300	300	55	7					450		7×4.5×3.55
RSSP-L650×12-500	500	80	12.5	20-60	+50	-18	-35	650	R717	7.8×5.2×3.25
RSSP-L650×18-750	750	125	15.5					650		7.8×5.2×4.15
RSSP-L650×24-1000	1000	165	22.5					750		8.3×5.5×4.15

注：1. 制冷剂除标准R717，也可采用R22等氟利昂工质。2. 冻结能力以炸鸡块为准。

Note: 1. Refrigerant: Ammonia R717, Freon R22. 2. Freezing capacity is calculated based on fried chicken.

可根据不同用户提供不同的进出货方式

Different Infeed/Outfeed Structure Option Based On Clients Requirement



单螺旋速冻机是在较小的地面空间内冻结大量产品的高效率冻结装置。

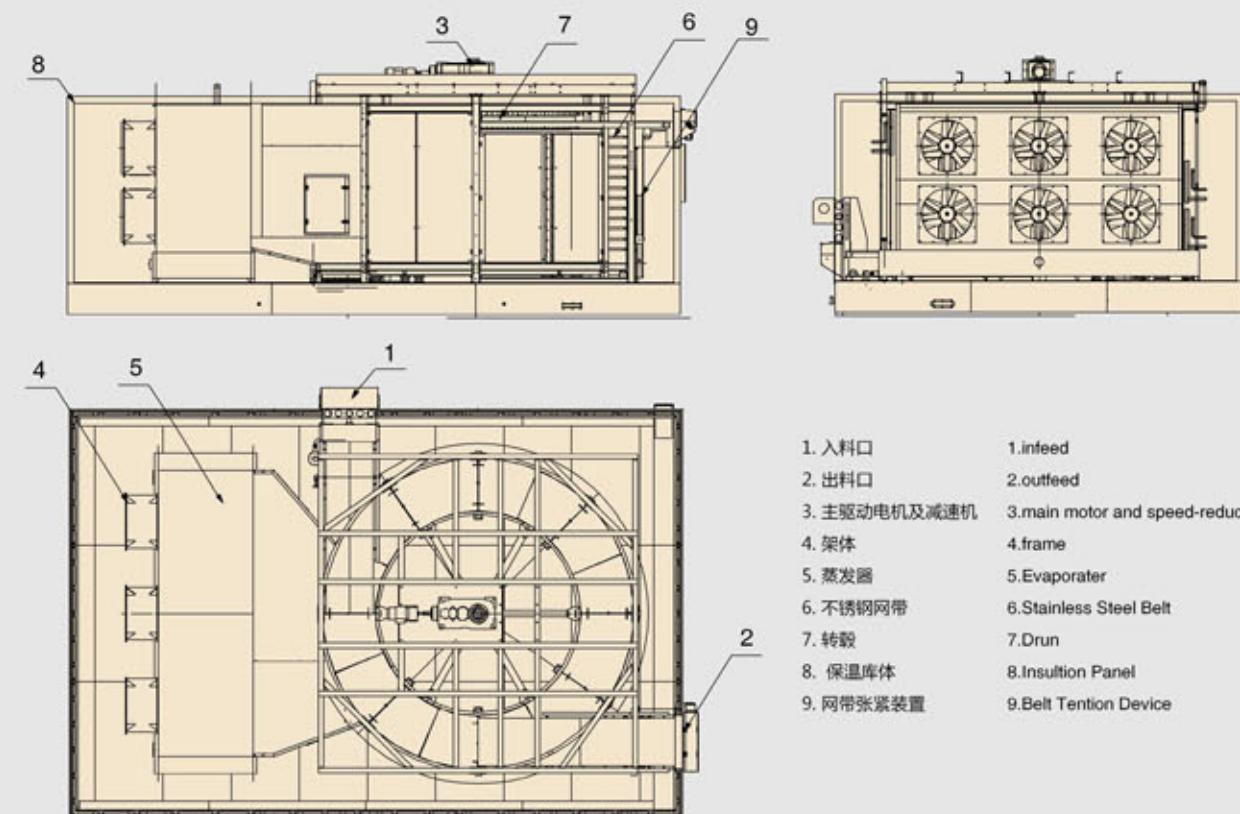
冻结量可达300kg/h-3000kg/h。

Single spiral freezer is a high efficient freezing system which can freeze large quantity of products in limited space.

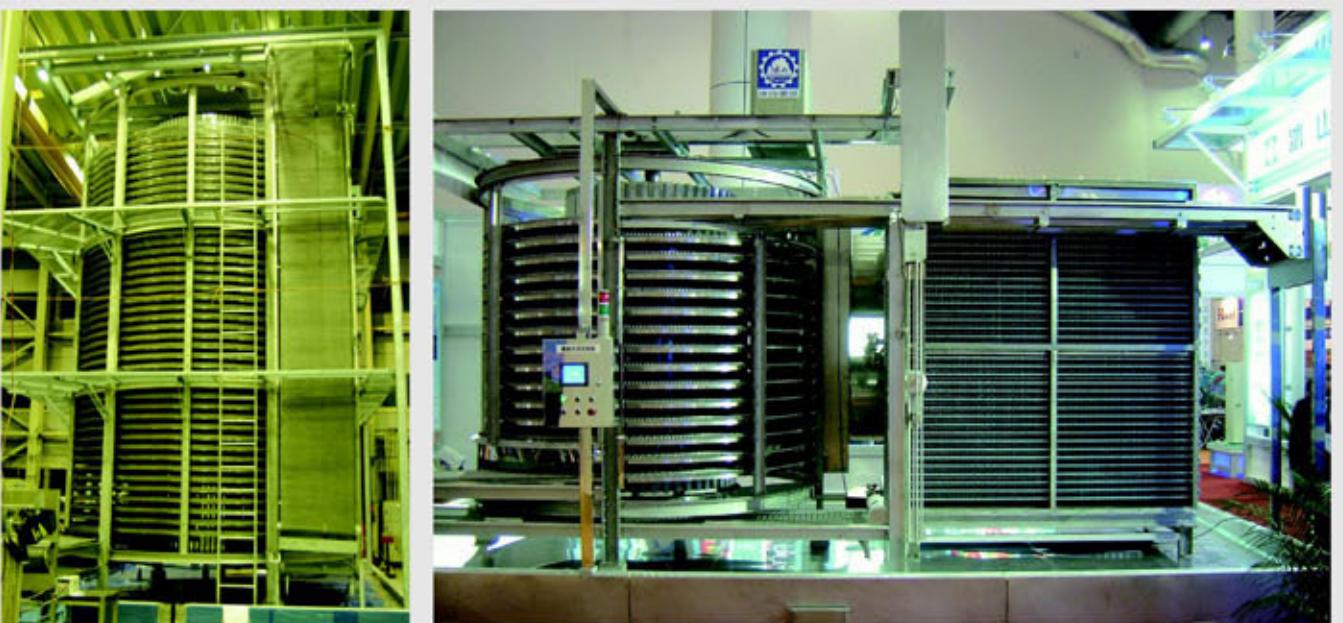
Freezing capacity is between 300kg/h to 3000kg/h.

结构型式 / STRUCTURE

单螺旋速冻机结构示意图 Single Spiral Freezer Structure Diagram



- | | |
|--------------|--------------------------------------|
| 1. 入料口 | 1.infeed |
| 2. 出料口 | 2.outfeed |
| 3. 主驱动电机及减速机 | 3.main motor and speed-reduced motor |
| 4. 架体 | 4.frame |
| 5. 蒸发器 | 5.Evaporator |
| 6. 不锈钢网带 | 6.Stainless Steel Belt |
| 7. 转毂 | 7.Drun |
| 8. 保温库体 | 8.Insulation Panel |
| 9. 网带张紧装置 | 9.Belt Tension Device |



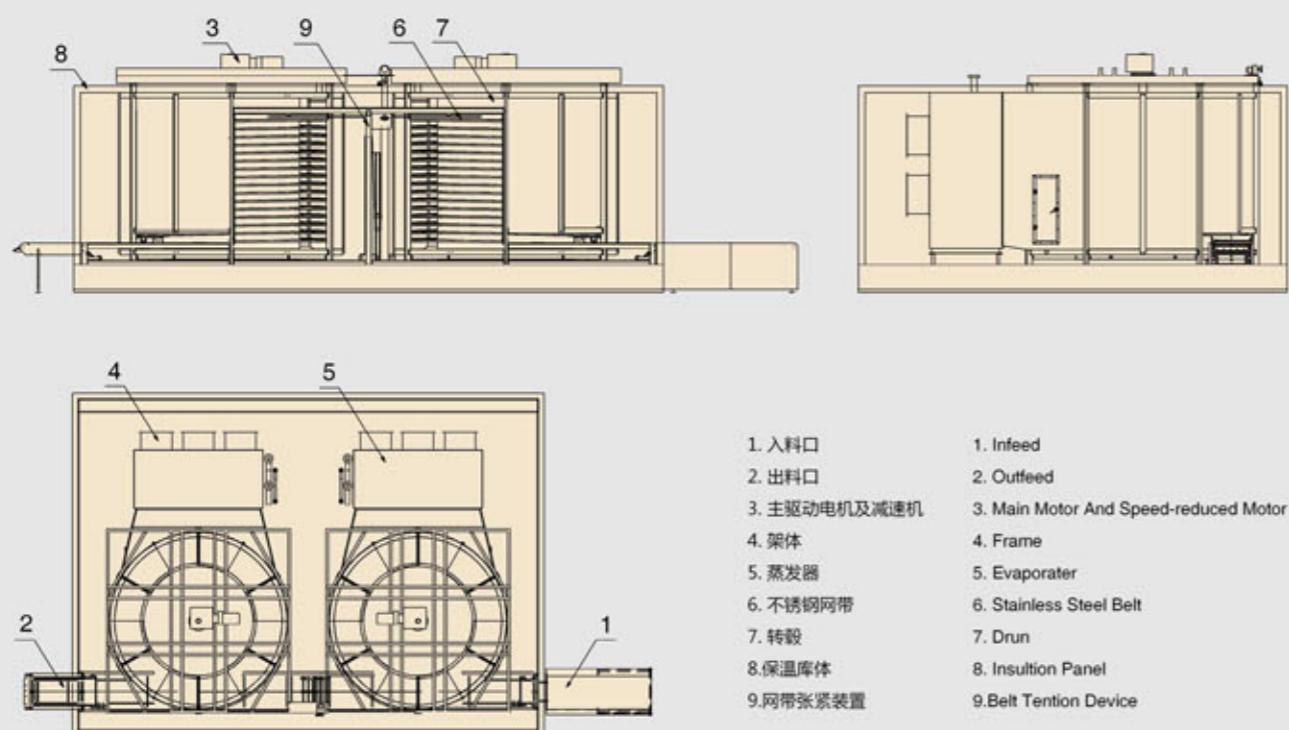
技术参数 / DATA OF DOUBLE SPIRAL FREEZER

项目 Item	冻结能力 Freezing kg/h	配机冷量 Ref.load kw	装机容量 Motor Power kw	冻结时间 Freezing Time. min	入料温度 Temp.in °C	出料温度 Temp.out °C	库内温度 Chamber Temp. °C	网带宽度 Belt Width m	制冷剂 RFNT	库体外形尺寸 Overall Dim. L × W × H(m)
型号 Model										
RSPT-S450×12-500	500	80	16					450		10.38×4.31×3.25
RSPT-L650×9-750	750	125	18					650		12.83×4.8×2.8
RSPT-L650×12-1000	1000	165	22					650		12.83×4.8×3.25
RSPT-L650×18-1500	1500	240	32	20~60	+50	-18	-35	650	R717	14×4.8×4.15
RSPT-L750×15-2000	2000	315	43					750		16.1×6×3.7
RSPT-L750×18-2500	2500	400	46					750		16.1×6×4.15
RSPT-L864×20-3000	3000	450	54					865		16.1×6×4.45

注：1. 制冷剂除标准R717，也可采用R22等氟利昂工质。2. 冻结能力以炸鸡块为准。

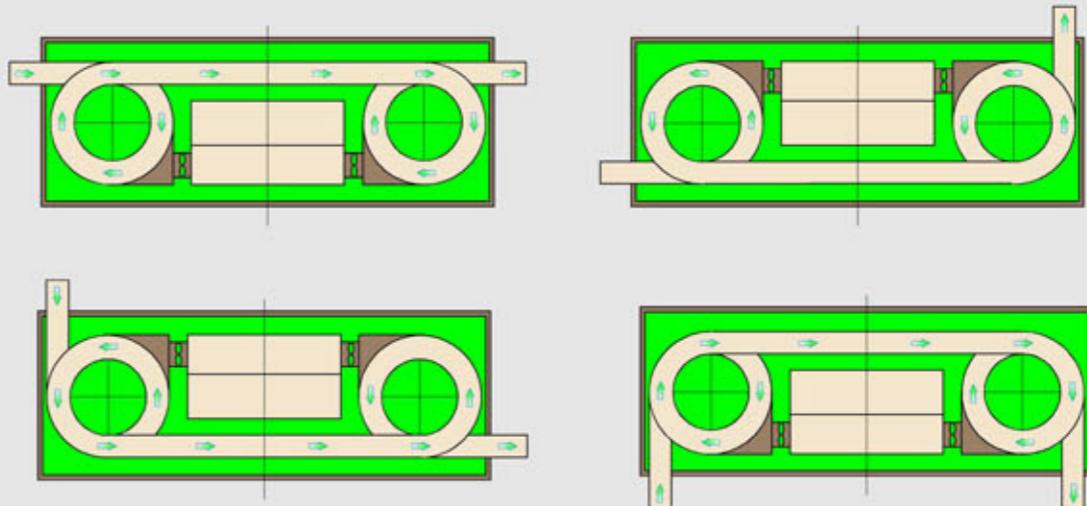
Note: 1. Refrigerant: Ammonia R717, Freon R22. 2. Freezing capacity is calculated based on fried chicken.

双螺旋速冻机结构示意图一 Double Spiral Freezer Structure Diagram 1

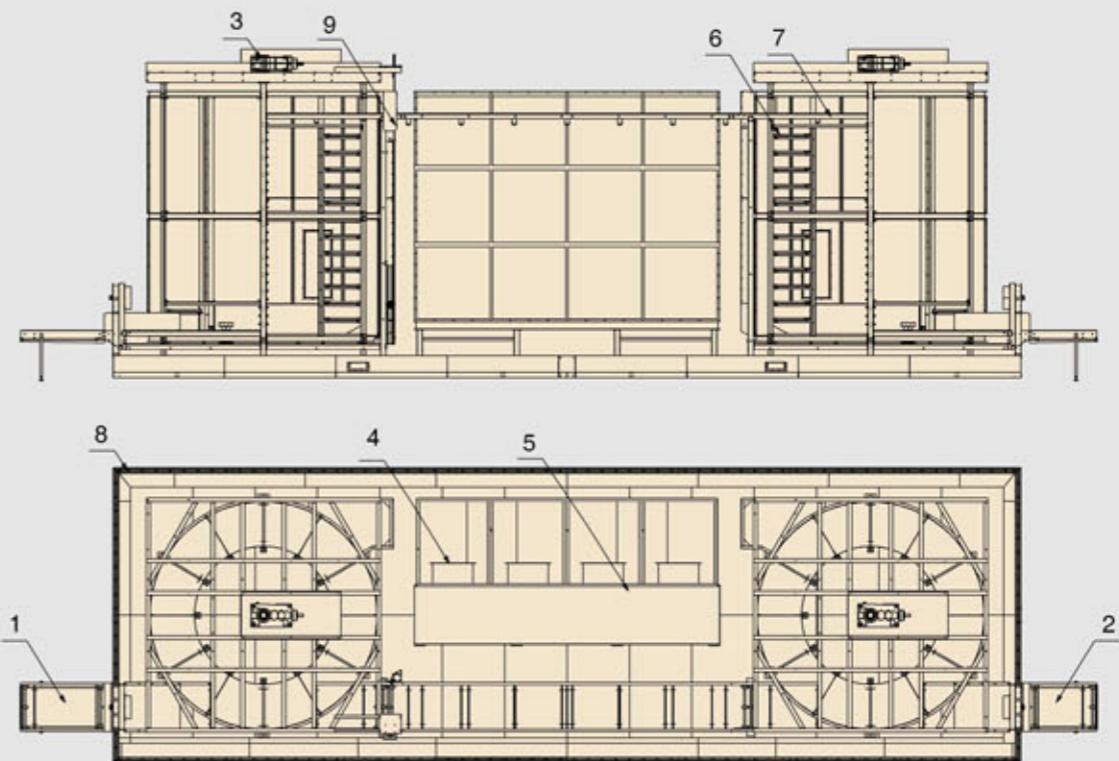


结构型式 / STRUCTURE

可根据不同用户提供不同的进出货方式
Different Infeed/Outfeed Structure Option Based On Clients Requirement



双螺旋速冻机结构示意图二 Double Spiral Freezer Structure Diagram 2



产品用途 / PRODUCT USE

螺旋速冻机用途十分广泛，可应用于海产品、调理食品、面点、肉类食品、家禽产品以及乳制品、冰淇淋等食品的单体速冻。

Spiral freezer is widely used for individual quick freezing of fermenting and cooling bread,freezing seafood,pastry,meat,poultry,ice cream,etc.



世界的冰山菱设 BINGSHAN RYOSETSU, CREATING THE WORLD BRAND

公司拥有完善的销售网络及服务体系，配备了各类优秀的专业技术人员和经验丰富的技师，辅以现代化的技术手段，能准确快捷地为用户提供售前指导、售后服务及设备的维修和大修。凭借公司拥有的先进技术装备和50余年速冻设备生产制造经验，能承揽国内外各种速冻设备的产品维修、改造、调试、备件等服务项目，并可为用户提供“交钥匙”工程。产品销往全国（包括港、澳、台）34个省、市、自治区，远销欧、美、亚、澳、非等70多个国家和地区。

We have established perfect sale net and service system with skilled professional engineers and experienced technicians. We can offer prompt guidance before, after sale service as well as maintenance and overhaul of equipment by means of modern technical measures. Based on our company's advanced technical equipment and more than 50 years' experience in Quick freezing equipment, we can undertake various projects such as maintenance, rebuilding and adjustment test of product as well as the spared parts. Also we can offer the turn key engineering.

