



乳品工业整体解决方案

Machinery & Complete Solution for Dairy Industry

Triowin
沃迪装备

关于我们

About us



上海沃迪自动化装备股份有限公司成立于1999年，现注册资本3748万元，在册员工近400人。金山新厂占地80.5亩，建筑面积33000平方米，总投资超过1.8亿元人民币。沃迪装备视科技创新为核心竞争力，在立足自主创新的基础上，同时整合、吸收欧美先进的机械设计理念以及自动化控制技术，拥有一支以硕士、博士和高级工程师为核心的研发团队，并积极联合上海交通大学、同济大学、上海理工大学、上海海洋大学、江南大学、华中农业大学等多所国内著名高校共建硕、博研究生培养点及博士后工作流动站。经过多年累积，沃迪已拥有各类专利100多项，先后承担了国家科技部、工信部的多项国家重点装备攻关课题项目及上海市科委、上海市机器人产业十二五规划纲要的多个重大项目。沃迪现在已成为机器人自动化搬运包装领域以及智能食品装备领域（特别是整厂装备交钥匙工程领域）世界范围内的行业领导者之一。

沃迪装备由食品智能装备和机器人智能装备两大事业部构成，市场覆盖欧盟、美国、加拿大、新加坡、澳大利亚、日本、英国等发达国家和地区，力求打造和提升中国装备在世界舞台上的全新形象。

沃迪食品装备事业部又包含：果蔬装备、实验设备及乳品装备；

从原料奶的接受，杀菌，标准化，浓缩，干燥到无菌灌装和包装，乳品装备部可以提供生产各种乳制品的整体方案：巴氏杀菌奶；延长保质期（ESL）牛奶；超高温灭菌（UHT）牛奶；酸奶和发酵乳饮料；含乳饮料；还原奶；豆奶；植物蛋白奶；炼乳；稀奶油；人造奶油；黄油；奶粉；干酪；冰淇淋等等。且乳品装备部可提供整厂安装工程交钥匙系列服务，具备整体项目的开发设计、生产制作、安装调试、技术培训、售后服务诸多方面的综合能力。以“融合世界先进科技、造福民族饮料工业”为己任，致力于消化、吸收并掌握国际先进的乳品加工工艺的前沿科技，具备根据客户的不同要求提供个案化的精辟解决方案的能力。2014年6月，公司在新三板挂牌，股票代码：830843。

“变、渐进、学习力”，完美诠释了沃迪装备积极进取、锐意创新、“不以一日造罗马、矢志百年铸沃迪”的企业精神。“日本式管理、德国式技术、中国式人文”体现了沃迪人集众家之长，以人为本，力求在国际舞台发中国声音的匠心文化。全体沃迪人秉持精益求精造精机的理念，争做精品民族机械的领导者！



Established in 1993, reconstructed in 1999, Shanghai Triowin Automation Machinery Co., Ltd. is specialized in providing complete plants for dairy, beverage, fruits and vegetables juice processing and packaging. Thanks to our research & develop and engineering teams with rich experience over 30 years and 110 whole lines. Due to our continuous investment on R & D and upgrading in industrial application year by year, Triowin has formed its own unique and beneficial characters in design and process technology. All the plants are manufactured strictly under guideline of ISO 9001, 5S management system. Attribute to high level management, Triowin has been awarded CE certificate, and our products have been exported to Europe, North America, Oceania, Southeast Asia, Latin America, Africa, Middle East, Middle Asia regions etc.

From the milk reception, pasteurization, standardization, concentration, drying to aseptic filling and packaging, Triowin can provide total solution for pasteurized milk, ESL milk, UHT milk, yogurt & fermented products, milk based drinks, recombined milk, soymilk, vegetable protein milk, condensed milk, cream, non dairy cream, butter, butter oil, milk powder, infant milk powder, cheese, ice cream processing and packaging.

The highly educated staffs have obtained their MA degree and Ph.D in majors of Food Engineering and Packaging Machinery, who allow Triowin to be capable of designing, developing, manufacturing, installing, commissioning as well as technical training and life-cycle services of whole line.

Triowin has been taking "Integrating the advanced food processing technology in the world and branding No.1 manufacturer in China" as its own mission for a long time. Through studying and adopting global newly-developed process and packaging technologies in the last 10 years, Triowin has enhanced its compatibility and obtained a deep understanding of advanced packaging technologies in the world. Subsequently, we formed our own insight for food processing industry and our solutions are verified successfully for customers.

Triowin are always ready and expecting to work with our partners to create the glory of Chinese food processing and packaging industry.



专业从事食品、饮料、生物、制药领域内的实验和中试设备工程项目的设计制造、销售与售后服务。装备有实验室小试与中试生产线及先进仪器设备，架设由实验室通向工业化生产的桥梁，加速科研成果转化为生产力。可以提供全面的试验性服务。



The lab team in Triowin is aiming at “Branding No. 1 pilot plants with advanced pilot & lab technology”, and we are always happy to work with our clients and committed in fabricating top lab & pilot plants
“倡导领先实验科技, 打造第一设备品牌”正是沃迪实验设备研发团队的奋斗目标
沃迪期愿与我们的客户一同为创造中国的实验设备精品而孜孜奋进



Triowin equipped with Lab.& Pilot Plants has been devoted in digestion and absorb the worldwide advanced packaging and processing technology for a long time. Developed lab. & pilot processing line and instrument. Build a bridge from lab. test to pilot running until to production to fast convert R & D result to production for our customers, such as milk, juice, tea, milk based beverage, vegetable protein beverage, tomato juice, spice, beer, cream, ice cream, egg products and milk powders.

业务领域

Business Field



关键乳品加工设备的制造、全套巴氏奶生产线、UHT牛奶生产线、ESL牛奶生产线、酸奶生产线、奶粉生产线、冰淇淋生产线、炼乳生产线、奶油生产线、干酪生产线等各种乳制品生产线。



Key dairy processing machinery manufactory; turnkey based pasteurized milk line; UHT milk line; ESL milk line; yogurt line; milk powder line; ice cream line; condensed milk line; butter line; cheese line; other dairy products production line.



沃迪装备“变、渐进、学习力”“日本式管理、德国式技术、中国式人文”完美诠释了沃迪装备积极进取、锐意创新、“不以一日造罗马、矢志百年铸沃迪”的企业精神。





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牛奶生产线

Milk Production Line



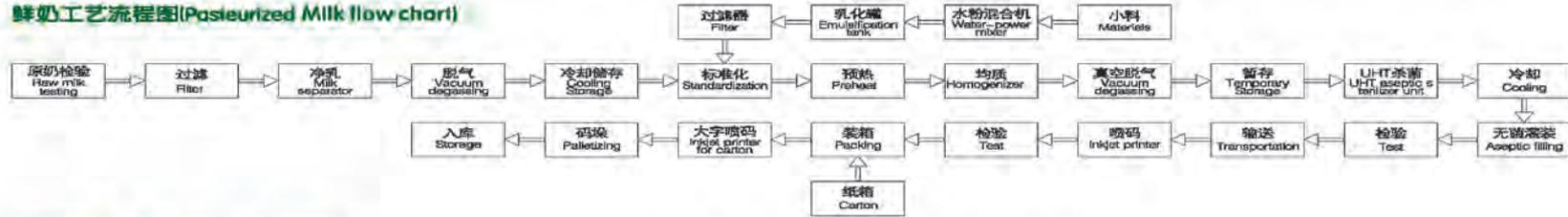
- 1.磅奶槽 Milk weight tank
- 2.受奶槽 Milk receiving tank
- 3.离心泵 Centrifugal pump
- 4.净乳机 Milk separator
- 5.脱气机 Vacuum degasser
- 6.板式换热器 Plate heat exchanger
- 7.奶仓 Outdoor milk tank
- 8.冰水罐 Ice water tank

- 9.制冷机 Ice water machine
- 10.冷却塔 Cooling tower
- 11.转子泵 Rotor pump
- 12.发酵罐 Fermentation tank
- 13.种子罐 Seed tank
- 14.板式巴式杀菌机 Plate pasteurizer
- 15.均质机 Homogenizer
- 16.保温罐 Temperature holding tank

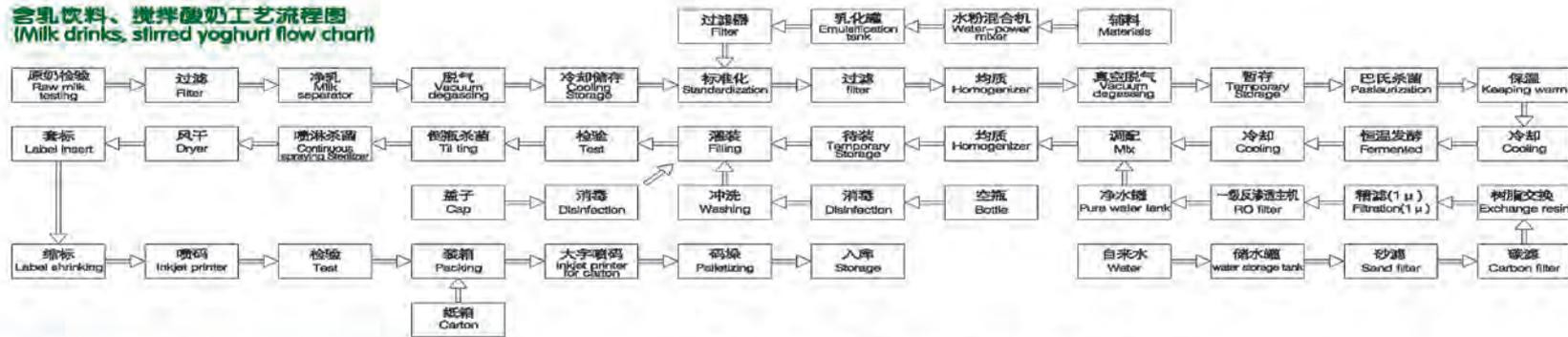
- 17.离心泵 Centrifugal pump
- 18.配料罐 Mixing tank
- 19.高剪切乳化罐 Emulsification tank
- 20.水粉混合机 Water-powder mixer
- 21.待装罐 High level tank
- 22.均质机 Homogenizer
- 23.UHT管式杀菌机 UHT tube sterilizer
- 24.砖式灌装机 Brick shape filling machine

- 25.贴管机 Paste tube machine
- 26.喷码机 Inkjet printer
- 27.打包机 Packer machine
- 28.液体软包装机 Plastic bag packing machine
- 29.八联杯灌装机 Plastic cup molding filling sealing cutting machine
- 30.全自动屋顶盒灌装机 Automatic gable paper box packing machine
- 31.CIP系统 CIP system

鲜奶工艺流程图(Pasteurized Milk flow chart)



含乳饮料、搅拌酸奶工艺流程图 (Milk drinks, stirred yoghurt flow chart)



凝固酸奶工艺流程图 (Settled yoghurt flow chart)



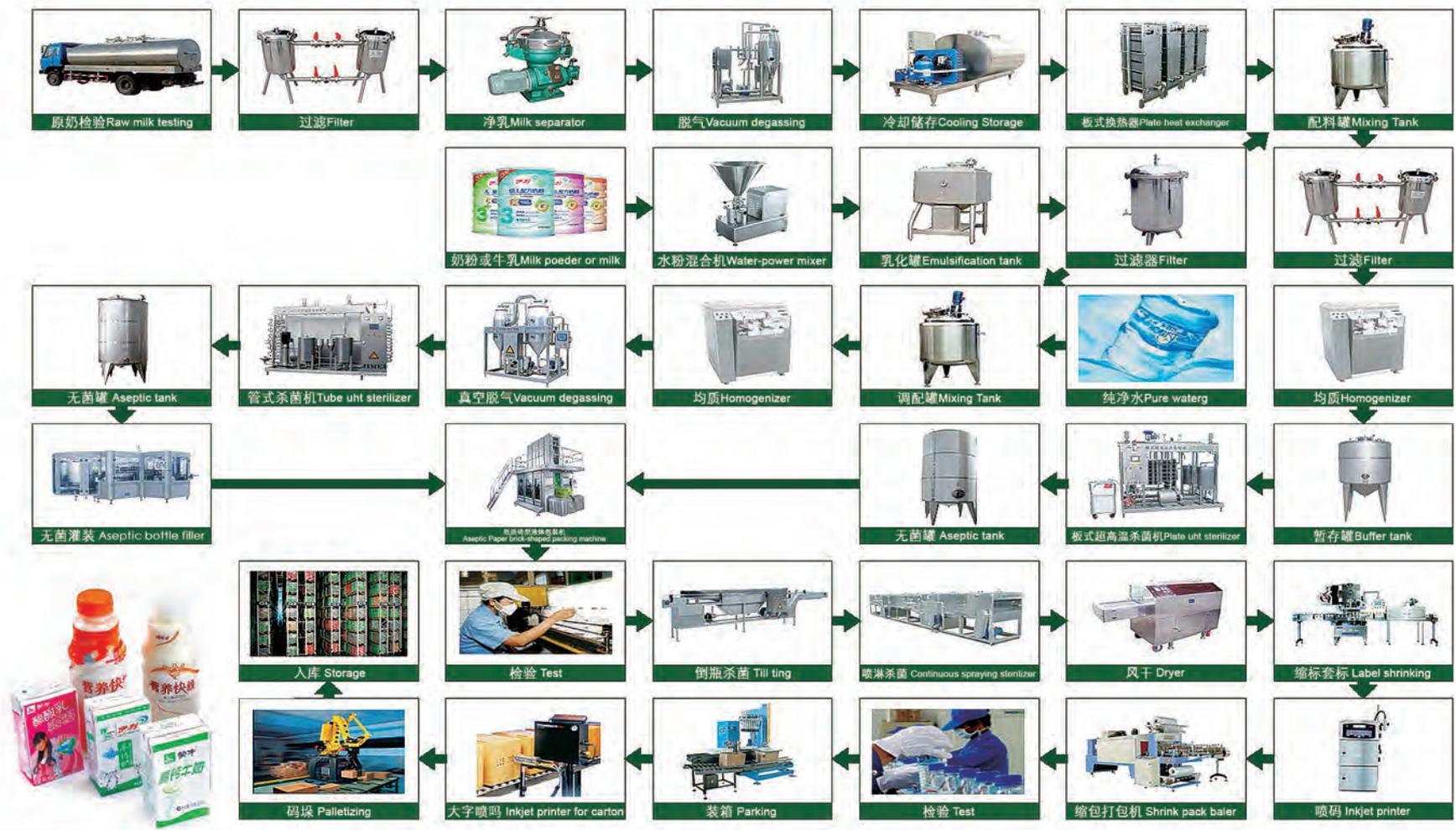
以上工艺均符合《GB 5408.2-1999 灭菌乳》、《GB 19645-2005 巴氏杀菌、灭菌乳卫生标准》、《GB/T 21732-2008 含乳饮料》、《乳酸菌饮料卫生标准 GB16321-1996》等标准，在处理过程中要注意原奶的酸度、蛋白质、脂肪、固形物、水份、等，好的原奶才能做出好的产品。
 These processes are in line with "GB 5408.2-1999 sterilized milk", "GB 19645-2005 pasteurization, sterilization milk hygiene standards", "GB / T 21732-2008 milk drinks" "lactic acid bacteria beverage health standards GB16321-1996" and other standards, in the process should pay attention to the acidity of the original milk, protein, fat, solids, water, etc., good raw milk to make a good product.

签字	日期	修改
设计		
校对		
制图		

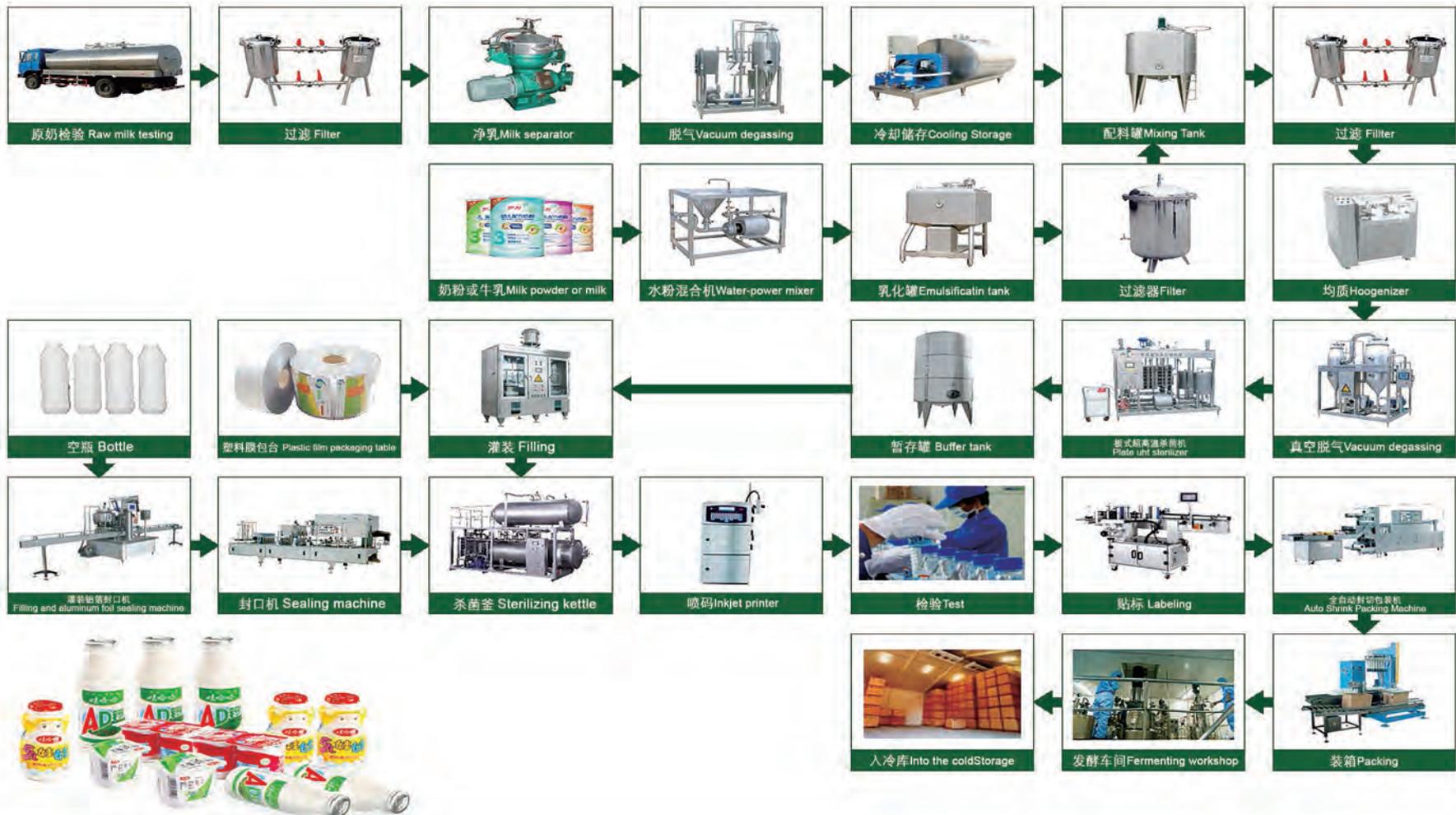
酸奶鲜奶工艺流程图
Triowin



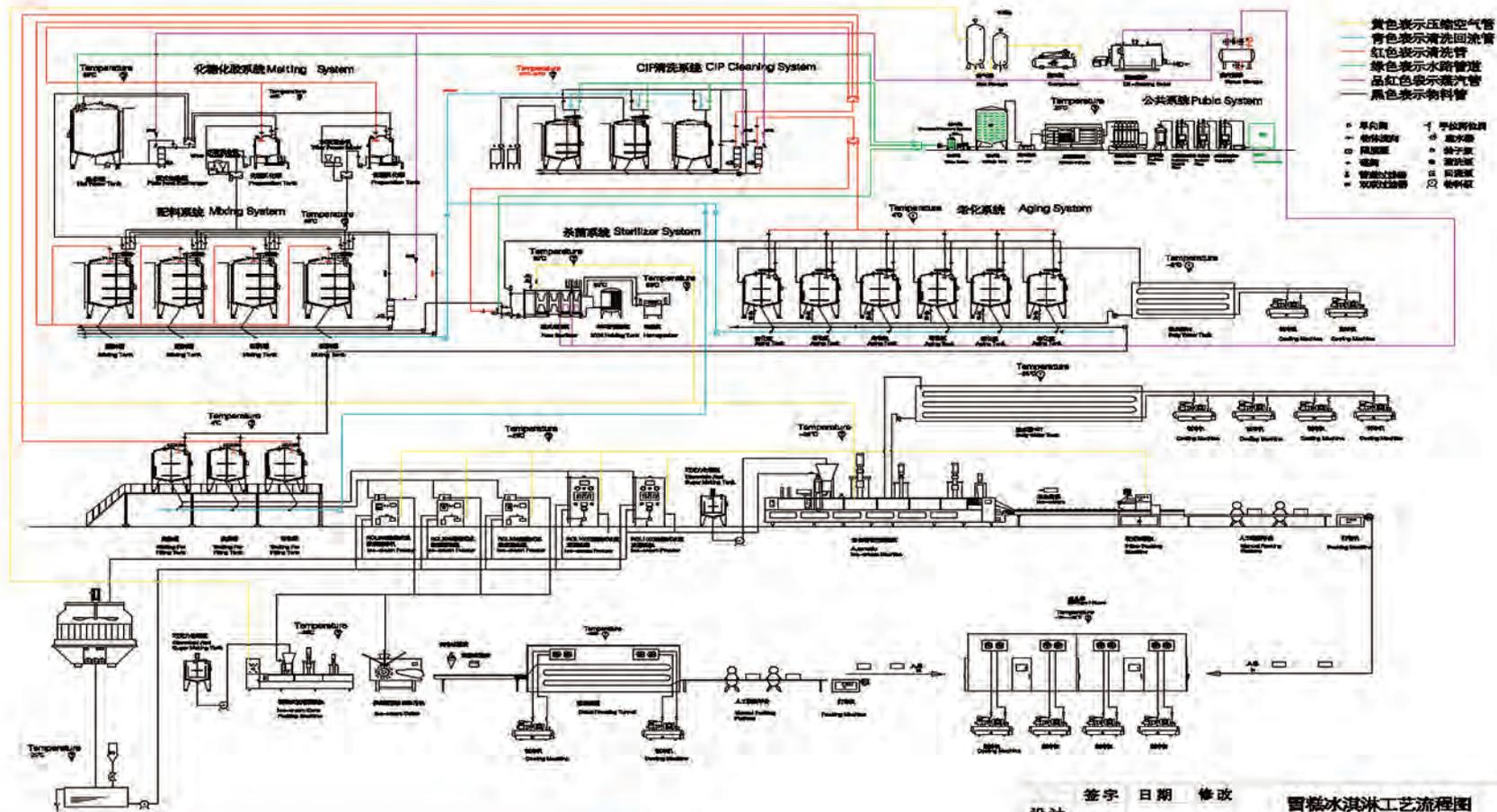
鲜奶工艺流程图 | Pasteurized Milk Flow Chart



超高温牛奶工艺流程图 | UHT Milk Flow Chart



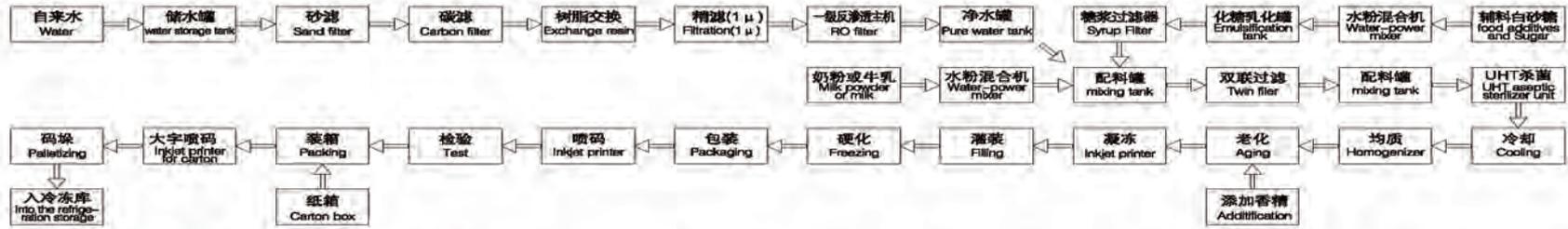
二步灭菌奶工艺流程图 | 2 Stage UHT Milk Flow Chart



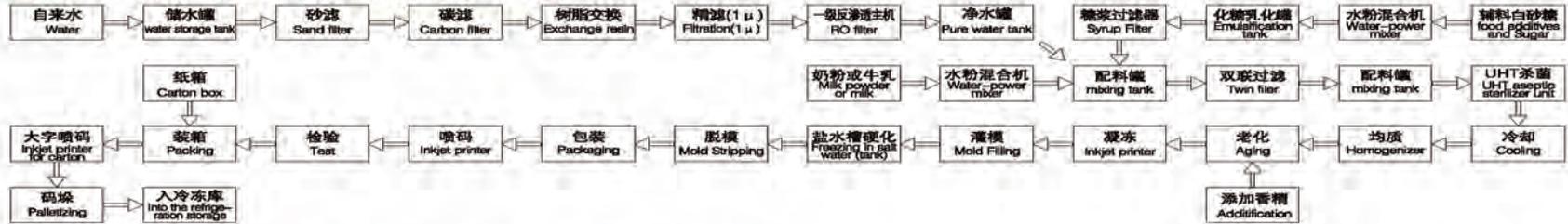
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雪糕冰淇淋生产工艺流程图 | Flow Chart of Popsicle and Ice Cream

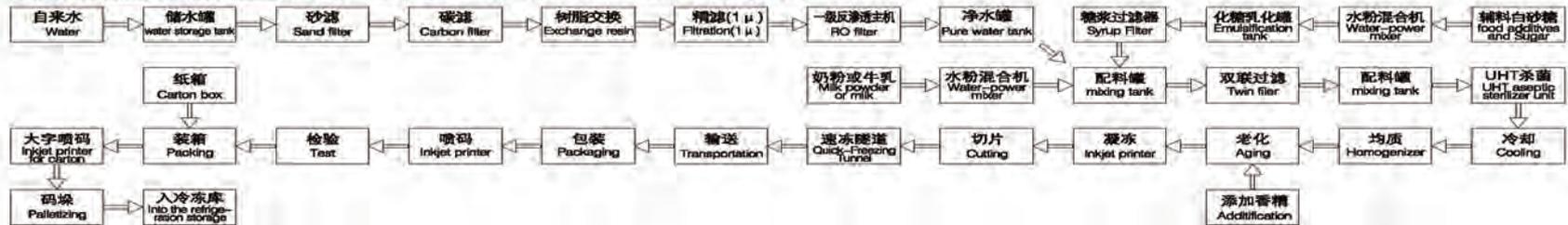
冰淇淋工艺流程图(Technological flow chart of ice cream)



雪糕冰棒工艺流程图(Technological flow chart of popsicle)



冰淇淋雪糕切片工艺流程图(Slicing technological flow chart of ice cream and popsicle)



以上工艺均符合《SB/T 10013-2008 冷冻饮品 冰淇淋》。生产中要注意按产品分类、技术要求、生产过程控制、检验方法、检验规则、标签、包装、运输、贮存等要求进行生产。

(These processes are in line with "SB / T 10013-2008 frozen ice cream drinks." Should pay attention to the production by product, technical requirements, manufacturing process control, inspection methods, inspection rules, labeling, packaging, transportation, storage and other requirements Jinxing production.)

设计	签字	日期	修改
校对			
制图			

雪糕冰淇淋工艺流程图





冰淇淋生产工艺流程图 | Flow Chart of Ice Cream

重点单机设备

Key Machinery

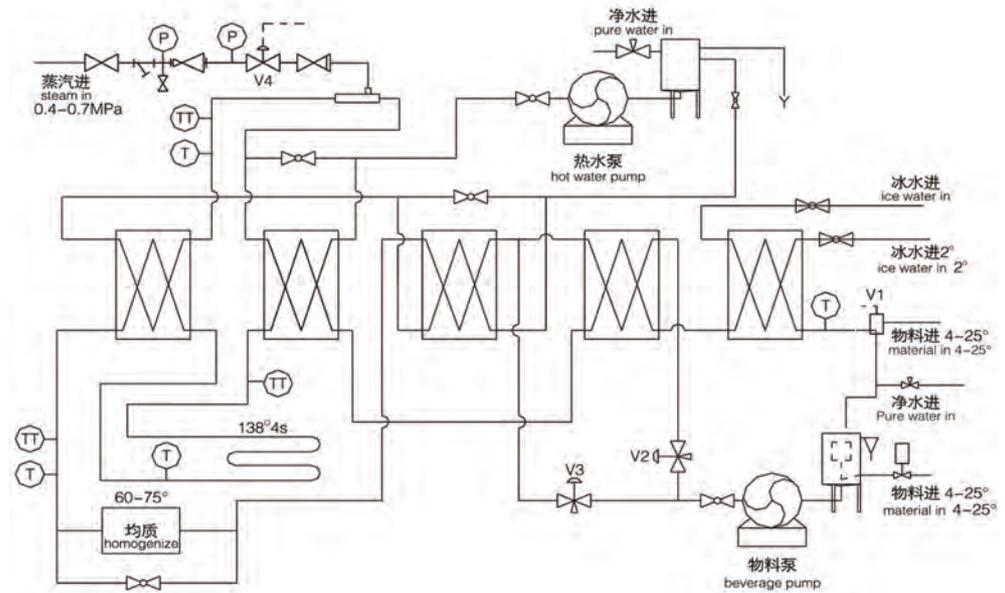
- 管式板式杀菌系统 | Tublar and Plate Sterilization System **A**
- 不锈钢罐 | Stainless Steel Tanks **B**
- 无菌罐系统 | Aseptic Tank Unit **C**
- 调配系统 | Preparation System **D**
- CIP清洗系统 | CIP Cleaning System **E**
- 脱气和闪蒸机组 | Deaerator & Flash Evaporator **F**
- 离心分离机 | Centrifugal Separator **G**
- 均质机 | Homogeniser **H**
- 降膜蒸发器 | Falling Film Evaporator **I**
- 喷雾干燥机和奶油制造 | Spray Dryer and Butter Churn **J**
- 干酪槽 / 干酪热煮拉伸机 / 干酪压缩机 | Cheese Vat / Cheese Stretcher / Cheese presser **K**
- 一体式设备 | One-piece Equipment **L**
- 车载式迷你型果蔬及乳品生产线 | Movable Mini Processing Plant for Dairy&Fruit Processing **M**
- 砖型包装设备 | Brick-shaped Packaging Equipment **N**
- 灌装包装设备 | Filling Packing Equipments **O**



A

管式板式杀菌系统
Tubular and plate sterilization system

板式超高温杀菌机
PLATE UHT STERILIZER



该系统采用超高温处理方法，使液体乳制品、茶饮料、果汁达到严格的灭菌，进而转入无菌包装，其杀菌温度为137°C，保温时间为3-5秒，从而尽可能的保持饮料、乳品的原有营养色泽及风味。本设备具有热回收率高，结构紧凑、美观、温度控制等特点；本产品有热灌装，出料温度自控，也可冷灌装。
控制方法：半自动、全自动(PLC控制，触摸屏显示)。

The machine adopts UHT processing method to make liquid dairy products, tea beverage and juice strictly sterilized and packed aseptically, with sterilization temperature at 137°C, holding time at 3-5s, which keeps the original nutrition, color and flavor of the beverage and dairy. The machine has the advantages of high heat recycle, compact and fine structure and controllable temperature etc. It can be applied for both cold filling and hot filling whose outlet temperature can be controlled automatically.
Control method: Semi-automatic and fully automatic control(PLC control and touch screen).

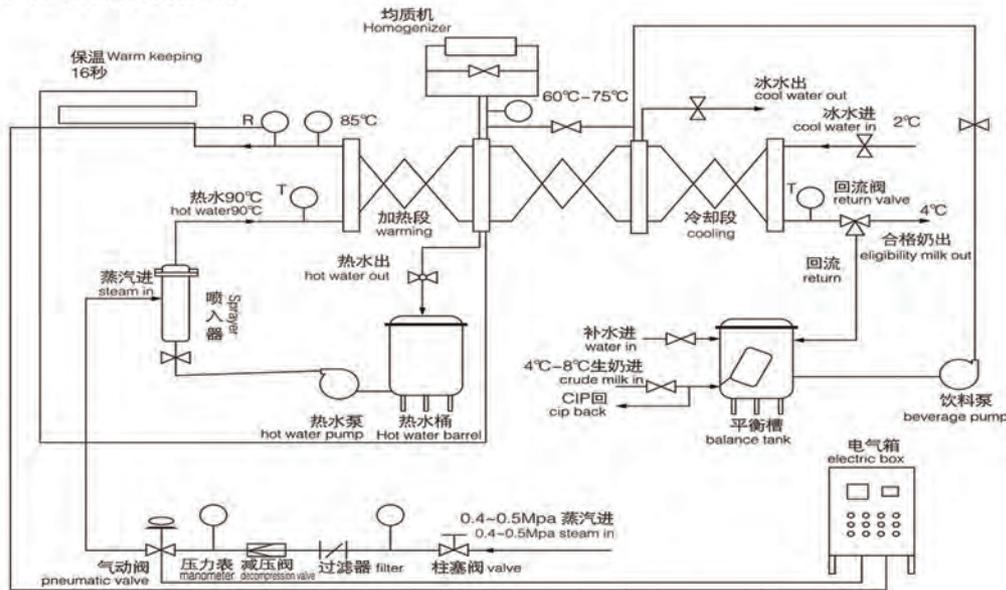


管式板式杀菌系统

Tubular and plate sterilization system



板式巴氏杀菌机
PLATE PASTEURIZER



本设备适用于鲜奶、果汁饮料、酒类等热敏性液体的加热、杀菌、保温、和冷却等工艺要求。本设备具有热回收高，节能降耗，结构紧凑，操作简单，维护方便等特点。
控制方式：半自动控制、全自动控制(PLC控制，触摸屏显示)
设备主要配置：物料泵、平衡桶、热水系统、温度控制及记录仪、电器控制系统等。
生产能力：0.5-20t/h
杀菌温度：85-95°C
保温时间：15-30s

It fits to heat,sterilize,keep warm,and cool the heat sensitive liquid such as the fresh milk, beverage and juice, wine. This machine is of high recycle, energy saving, and reducing cost, compact constructure,simple operation,and convenient maintain.
Controlling methods: semi-automatically, fully automatically(PLC control, touching view)
Main fittings: material pump, balance tank hot water system, Temperature control and tape recorder,and electric,controlling system
Product capacity: 0.5-20t/h
Sterilizing temperature: 85-95°C
keeping time:15-30s



Triowin
沃迪装备



管式板式杀菌系统

Tubular and plate sterilization system

板式加热器 (物料加热机组)
PLATE HEAT EXCHANGER (PRODUCT HEATING UNIT)



物料加热机组(配料)

物料: 5°C→65°C

热水: 75°C

流量: 2:1

Material heating unit (dispensing)

Material: 5°C→65°C

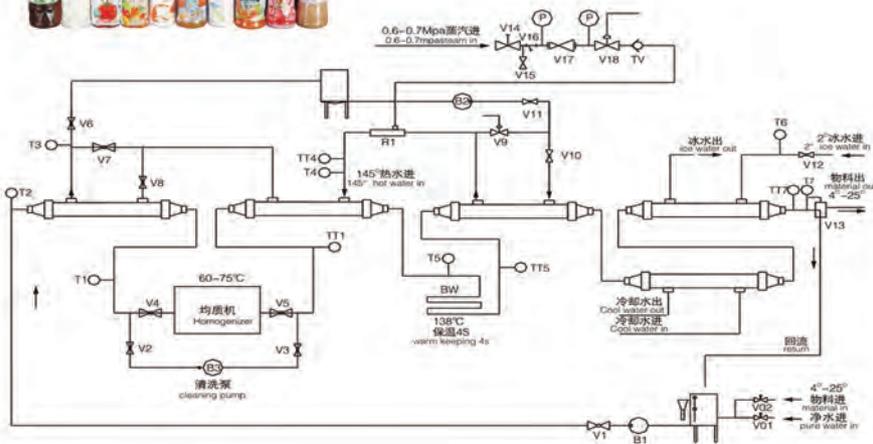
Hot water: 75°C

Flow rate: 2:1

技术参数 Technical parameter

型号 Model	流量 Flow rate (l/h)	物料口径 Material diameter (mm)	介质口径 Medium diameter (mm)	外形尺寸 Outline dimensions (mm)	重量 Weight (kg)
BR1-JR-1J	1000	Φ25	Φ25	450 × 285 × 810	100
BR16-JR-2J	2000	Φ25/38	Φ38	600 × 350 × 1320	150
BR16-JR-3J	3000	Φ38	Φ38	800 × 350 × 1320	180
BR26-JR-4J	4000	Φ38	Φ38	1000 × 460 × 1520	480
BR26-JR-5J	5000	Φ51	Φ51	1100 × 460 × 1520	520
BR26-JR-6J	6000	Φ51	Φ51	1200 × 460 × 1520	550
BR4-JR-8J	8000	Φ51	Φ51	1200 × 700 × 1550	600
BR4-JR-10J	10000	Φ51	Φ63	1300 × 700 × 1550	800
BR4-JR-15J	15000	Φ63	Φ63	1400 × 700 × 1550	900
BR56-JR-20J	20000	Φ76	Φ76	1500 × 1000 × 1600	1050
BR56-JR-30J	30000	Φ76	Φ101	1620 × 1000 × 1600	1250

管式杀菌机
TUBE UHT STERILIZER



管式板式杀菌系统
Tubular and plate sterilization system



管式杀菌机可用来对各种乳品、果汁、饮料、糖浆、酱油、酒类、醋类、药液进行热处理，与其它种类的杀菌机相比有如下优点：

- ◆ 热效率高，物料加热后，90%的热能可以回收。
- ◆ 加热介质与物料温差小，可实现温和加热，换热管采用了波纹管，物料和换热介质都在湍流状态工作，换热效率高，结垢少、增长了杀菌机的连续工作时间。
- ◆ 自动化程度高，从设备的CIP清洗、设备管道杀菌到物料杀菌整个过程可实现自动控制、记录。
- ◆ 杀菌温度控制精确可靠：影响杀菌温度的系统和蒸汽压力、流量，物料流量等都严格自动控制。
- ◆ 物料管内壁采用先进技术抛光，管道焊接采用自动焊，管道设计实现完全自动清洗，设备全过程自动杀菌，确保系统无菌性。
- ◆ 系统安全性强，系统配件皆选用性能好可靠性高的产品系统设计高度重视人身，设备安全，蒸汽，热水，物料等都有压力保护措施和报警系统。
- ◆ 系统可靠性高，主要部件如物料泵、热水泵、各类阀门，控制系统的电气元件和执行器件都是世界名牌。管式巴氏杀菌机和酸奶专用杀菌可根据用户要求进行设计。我公司的管式UHT灭菌机组是专为无菌包装设备配套设计，它适用于各种类型的无菌包装，如：无菌纸包装，无菌塑料薄膜包装，无菌PET瓶包装等，特别用于液态奶及饮料的生产。

The tube sterilization machine can be used for heat treatment on a variety of dairy, juice, beverage, syrup, soy sauce, wine and vinegar etc.

- ◆ High thermal efficiency, 90% of the heat energy can be recycled after material heating.
- ◆ The temperature difference about heating medium and material is small, which can realize moderate heating. Heat exchange tube adopts wave pipes, so material and heat transferring medium work in the turbulent state, with high thermal efficiency, less fouling, thus increasing the continuous working time.
- ◆ It's of highly automatic degree, it can realize automatic control and record from CIP cleaning to pipe sterilizing and then to material sterilizing.
- ◆ Accurate and reliable sterilization temperature control. System affecting sterilizing temperature, system affecting sterilizing temperature, steam pressure, flow and material flow are all controlled automatically.
- ◆ The inside of the material pipe adopts advanced polish technology, pipes joint automatically, pipe design realize complete automatical cleaning, and the whole process sterilizes automatically to ensure the system aseptic.
- ◆ System with strong security. The parts all adopt reliable products with high performance, which value human and equipment's safety best. Steam, hot water and material all have pressure protection and alarm system.
- ◆ It's of high reliability system. Main parts like material pump, hot water pump, valves, electric elements adopt world famous brands. Tube pasteurizer and yoghurt sterilizer can be designed according to customers' requirement. The tube sterilizer is specially designed for aseptic packaging equipment. It's applied for various aseptic packaging like aseptic paper packaging, aseptic plastic film packaging, aseptic PET bottle packaging etc., Especially for the production of liquid milk.

B

不锈钢罐 Stainless steel tanks

技术说明

- ◆ 罐体材料: 全SUS304-2B不锈钢制作, 内胆 $\delta=3\text{mm}$, 外壳 $\delta=2\text{mm}$ 。
- ◆ 罐体形式: 立式圆柱体, 锥顶、锥度 15° , 斜底、锥度 5° , 底部设底座。
- ◆ 保温材料: 采用聚氨酯发泡保温, 厚度 100mm , 顶、桶身保温。
- ◆ 罐体尺寸: 根据容积定, 下部 $1/3$ 夹层。
- ◆ 罐体附件:
 - ◇ 一个罐底侧人孔
 - ◇ 一个顶部安全透气罩带接水盘导水管。
 - ◇ 一个顶部双T型CIP喷淋头
 - ◇ 一个温度表, 温度显示范围 $0^\circ\text{C} \sim 100^\circ\text{C}$
 - ◇ 一个无菌取样阀
 - ◇ 一个卧式搅拌机(4kw 、 $960\text{转}/\text{min}$ 、ABB电机)
 - ◇ 两个进/出料口 $\phi 63.5\text{mm}$
 - ◇ 一个高中低液位报警
 - ◇ 一个压力传感器(E+H)
 - ◇ 一个 $\phi 38\text{mm}$ 介质进口, 一个 $\phi 38\text{mm}$ 介质出口。
 - ◇ 一个罐体底座
 - ◇ 一个罐体连接到室内的奶仓室
 - ◇ 一个不锈钢外梯带罐顶护栏杆。
 - ◇ 容量从 $15000\text{L} \sim 150000\text{L}$
 - ◇ 特殊规格、特殊尺寸、和特殊要求, 可根据用户要求制作。
 - ◇ 搅拌机形式、转速和电机可根据用户要求定制。

Technical explanation

- ◆ Tank body materials: completely made of SUS304-2B stainless steel, internal bladder $\delta=3\text{mm}$, external shell $\delta=2\text{mm}$
- ◆ Tank body form: vertical cylinder, taper top, with taper of 15° ; inclined bottom with taper of 5° . A base is set at the bottom.
- ◆ Heat preservation material: polyurethane foaming heat preservation with thickness of 100mm for heat preservation of top, bottom and tank body.
- ◆ Tank body size: depending on volume, $1/3$ jacket layer at the lower part.
- ◆ Tank body accessories:
 - ◇ One side manhole at the tank bottom
 - ◇ One safe ventilating cover at the top with water pipe for connecting with water disc
 - ◇ One double-T type CIP spray head at the top
 - ◇ One thermometer, with temperature display range of $0^\circ\text{C} \sim 100^\circ\text{C}$
 - ◇ One aseptic sampling valve
 - ◇ One horizontal blender (4kw , $960\text{r}/\text{min}$, ABB motor)
 - ◇ Two inlets and outlets of $\phi 63.5\text{mm}$
 - ◇ One high, medium and low liquid level alarm
 - ◇ One pressure sensor (E+H)
 - ◇ One medium inlet of $\phi 38\text{mm}$ and one medium outlet of $\phi 38\text{mm}$
 - ◇ One base
 - ◇ One tank connecting with indoor milk warehouse
 - ◇ One stainless steel ladder with guard rail at the tank top
 - ◇ Volume varies from 15000L to 150000L
 - ◇ Products of special specifications, dimensions and requirements can be customized according to customer requirements.
 - ◇ Form of blender, rotation speed and motor can be customized according to customer requirements.

技术参数 Technical Parameters

有效容积 Effective volume (L)	筒体尺寸(Dx h) Dimension of tank (mmxmm)	总高(H) Total height (mm)	保温层? Heat preservation layer (mm)	进/出料口径 Diameter of inlet & outlet (mm)	电机功率 Motor power (KW)	搅拌速度 Blending speed (r/min)
20000	2260x5600	7000	100	51	5.5	960
30000	2800x5600	7500	100	51	5.5	960
50000	2800x5600	7500	100	51	5.5	960
60000	3000x9500	11100	100	51	5.5	960
100000	3400x11000	12600	100	51	5.5X2	960
120000	3400x13500	15100	100	51	5.5X2	960

室外贮罐
OUTDOOR MILK STORAGE TANK (INSULATED)



室外奶仓 (保温)
OUTDOOR MILK STORAGE TANK (INSULATED)



发酵罐是一种对物料进行机械搅拌与发酵的设备。该设备采用内循环方式，用搅拌分散和打碎气泡，它溶解速度快，混合效果好。罐体采用SUS304或316L进口不锈钢，罐内配有自动喷淋清洗机头，确保生产过程符合GMP要求。

使用范围：乳品行业中可用做各种调配罐、配料罐来使用。

Fermentation tank is the equipment for mechanical blending and fermentation of materials. The equipment adopts internal recycling mode and blending paddle to distribute and break up bubbles. Therefore, high speed of oxygen solution and good quality of blending are achieved. Tank body is made of SUS304 or 316L imported stainless steel, and automatic spraying and cleaning nozzle in the tank to ensure producing procedure comply with GMP requirements.

Application field: It can be used as all kinds of rearrangement tank, material mixing tank in dairy industry.

技术参数 Technical parameter

型号 Model	公称容积(L) Normal Volume	外径(D) Diameter(mm)	总高(H) Height(mm)	进出口径 Diameter of inlet outlet
SSG-600	600	900	2140	38
SSG-1	1000	1050	2380	38
SSG-1.5	1500	1180	2550	38
SSG-2	2000	1340	2760	51
SSG-2.5	2500	1420	2940	51
SSG-3	3000	1540	3050	51
SSG-3.5	3500	1600	3180	51
SSG-4	4000	1650	3200	51
SSG-5	5000	1780	3250	51
SSG-8	8000	2100	3900	51
SSG-10	10000	2300	4050	65
SSG-15	15000	2650	4450	65

单层储罐
SINGLE-LAYER STORAGE TANK



- 使用范围:**
- ◆ 常用做储水罐、储液罐、暂存罐等。
 - ◆ 适用于乳品、果汁饮料、医药化工或生物工程等领域。
- 结构特征:**
- ◆ 设备为单层结构
 - ◆ 材料均为优质不锈钢。
- 标准配置:**
- ◆ 快开式人孔
 - ◆ 数显温度表
 - ◆ T型清洗头
 - ◆ 拉杆式出料阀
 - ◆ 可调式锥形支脚。

保温罐
INSULATED TANK



- Application field:**
- ◆ Usually is used for storage water tank, storage liquid tank, temporary storage tank, etc.
 - ◆ Suitable for such fields as dairy, juice, beverages, medicine, chemical or bio-engineering project, etc.
- Structure:**
- ◆ Single layer structure
 - ◆ Stainless steel materials
- Standard scheme:**
- ◆ Quick open manhole
 - ◆ Numerical indication type thermometer
 - ◆ T type cleaning head
 - ◆ Hauling lever style releasing valve
 - ◆ Adjustable taper branch foot.

冷热缸
COOLING & HEATING TANK



- 使用范围:** 可作配料罐(加热)、消毒缸、老化缸、发酵缸、搅拌罐等。
- Application field:** Used as material mixing (heating) tank, disinfection tank, aging tank, fermentation tank, mixing tank, etc.

菌种培养罐
CULTURE TANK



- 使用范围:** 常用的一种菌种培养罐，及来制作酸奶的工作发酵剂。
- Application field:** Usually used for a bacterium seed cultivating and yogurt fermentation.

调配罐
MIXING TANK

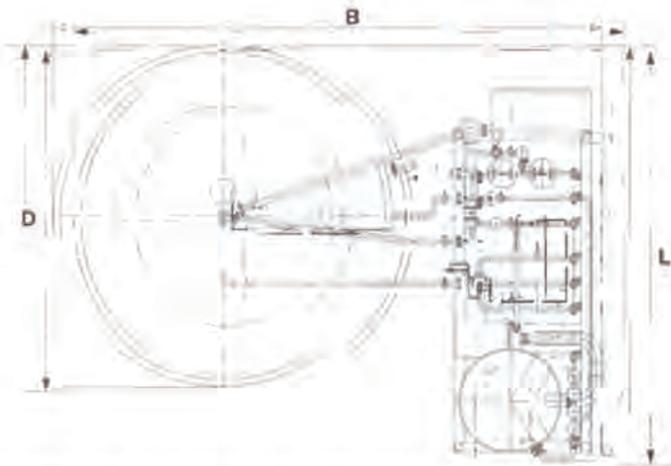


发酵罐
FERMENTATION TANK





无菌罐系统 Aseptic Tank Unit



Ltr.	2000	4000	6000	8000	10000	12000	18000	20000	25000	30000
Legs	3	3	4	4	4	4	6	6	6	6
D	1500	1900	1900	2400	2400	2400	2800	2800	3100	3100
Height	2900	3400	3600	3700	4200	4700	4700	5700	6000	6700
L	2865	2865	2865	3050	3050	3050	3300	3300	3400	3400
B	3100	3500	3500	4000	4000	4000	4400	4400	4700	4700

技术数据:

压力: Max. 3 bar
真空: Max. 1 bar
蒸汽压力: 4-9 bar
蒸汽入口: 1" BSP
工作电压: 3 x 380V, 50 Hz
控制电压: 24 V AC

Technical data:

Pressure: Max. 3 bar
Vacuum: Max. 1 bar
Steam pressure: 4-9 bar
Steam inlet: 1" BSP
Operating voltage: 3 x 380V, 50 Hz
Control voltage: 24 V AC

应用范围: 在乳品和食品工业中, 需要无菌加工和存储时。罐体应预先用143度灭菌。
标准设计: 无菌罐体由不锈钢材质制成, 带有冷却夹套和保温层(不包括顶部和底部)。
无菌罐系统包括以下标准配置:

- CIP清洗装置, 包括平衡罐, 循环泵, 水汽混合器和温度控制装置。
- 产品的无菌阀门组。
- 无菌空气过滤和调节装置。
- 此无菌罐系统由PLC控制。

可选装置:

- 无菌搅拌器
- 空气压缩机组
- 罐底部的保温

Field of application: In dairy and food industries where aseptic processing and storage conditions are required. The tank can be presterilized at 143C.

Standard design: The aseptic tank is made of stainless steel with cooling jacket and insulation on the cylindrical part. Top and bottom are not insulated. The tank is delivered with following

main components mounted on a frame:

- CIP equipment include balance tank, circulation pump, steam injector and temperature regulating equipment
- Valve battery for product
- Air regulating and filtering equipment

The system is controlled by a PLC.

Optional extras:

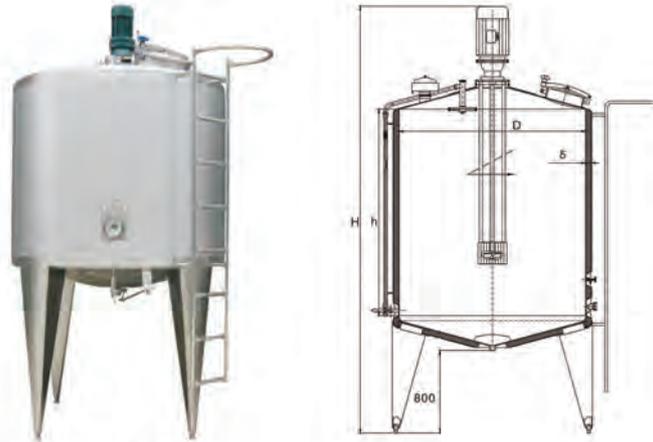
- Aseptic agitator
- Compressed air module
- Insulation of tank bottom

- * If one of the packaging machines incidentally stops the aseptic tank take care of the surplus product during the stoppage.
- * Simultaneous packaging of two products. The aseptic tank is first filled with one product, sufficient to last for a full shift of packaging. Then the UHT plant is switched over to another product which is packed directly in the line of packaging machines. One or more aseptic tanks included in the production line thus offer flexibility in production planning.
- * Self-standing C.I.P. system: plant washing fully independent from external, uncontrolled factors.
- * Separate control panel, PLC and human machine interface, Liquid level and temp controlled on real time
- * Also possibility to be controlled together with UHT plant control panel.
- * 如果无菌灌装设备突发故障停止运行, 无菌罐可以暂存多余的产品, 保持无菌状态。
- * 如果同时灌装两种不同的产品时, 无菌罐可以先储满一种产品, 维持灌装量。然后UHT灭菌机可以生产另一种产品, 直接连接灌装机灌装。一台或多台无菌罐的配置, 可以使生产的安排更灵活。
- * 自带CIP清洗装置, 可以使系统更独立而不受外界以及不可控制的因素影响。
- * 带有分开的控制屏, PLC控制器和人机界面, 实时的液位和温度控制。
- * 也可以和UHT灭菌机的控制系统合并。



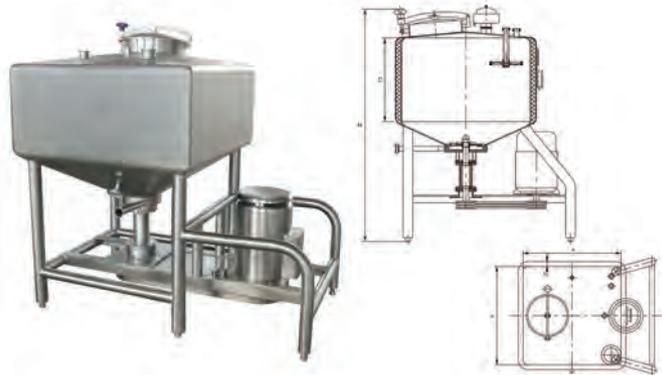
圆形乳化罐系列

ROUND HIGH SHEAR EMULSIFYING TANK AERIES



方形乳化罐系列

SQUARE HIGH SHEAR EMULSIFYING TANK SERIES



高剪切乳化罐是目前国内乳品、饮料果汁、食品等行业最先进的混合设备。高速乳化头工作时将转子中心的物料高速抛向定子，通过定子的齿间隙，在转子和定子之间通过剪切、碰撞、粉碎而达到乳化的目的。是集混合、乳化、均质、溶解、粉碎等功能于一体的设备。

High-speed super-fine emulsification tank is the most advanced blending equipment in fields of dairy products, beverages, fruit juice and foods etc. When the high-speed super-fine emulsification paddle works, it throws the materials in the center of rotor to stator at a high speed, then through tooth clearance of stator, and shearing, collision and crushing between rotor and stator, the super-fine emulsification is realized. Therefore, it is an integrated equipment comprising functions such as blending, emulsifying, homogenizing, solving and crushing etc.



技术参数 Technical parameter

有效容积 Effective volume	筒体尺寸(Dxh) Dimension of tank	总高(H) Total height	保温层 δ Heat preservation layer	电机功率 Motor power	搅拌速度 Blending speed
(L)	(mmxmm)	(mm)	(mm)	(kw)	(r/min)
1000	1060x1220	2950	60	7.5	1750
2000	1340x1500	3400	60	11	1750
3000	1410x2000	3900	60	15	1750
4000	1620x2000	4030	60	18.5	1750
5000	1810x2000	4130	60	22	1750

本设备采用底部叶轮高速转动，使物料在搅拌、挤压和剪切等物理作用下快速高效地混合，特别适合于对糖类、淀粉类、奶粉类、蛋粉类产品和乳化剂、稳定剂、增稠剂的混合，通常在配方奶粉、酸奶、各种饮料、冰淇淋、蛋卷和华夫饼干的配料流程中使用。在结构设计上，我们采用R圆弧过渡，保证卫生无死角；而且在底部搅拌的密封结构上不断进行技术改造，最大限度地延长了机械密封和轴承的使用寿命，同时为客户节省了一定的使用成本。

This equipment is to blend the materials efficiently under mixing, pressing and cutting by the high-speed rotation of the impeller in the bottom, which is especially applicable for the mixture of sugar, starch, milk powder, egg powder products with the emulsifying agent, stabilizing agent and thickening agent, usually used in the mixing flow of formula milk powder, acidophilus milk, various drinks, ice cream, egg roll and waffles. We have adopted R-arc transition regarding the structural design to guarantee there is no dead corner to influence the sanitation; furthermore, the technical innovation has been carried out on the sealing structure for the mixing at the bottom to prolong the service life of the mechanic seal and bearing to the largest extent, and it has also saved the service cost for the clients.

D

调配系统 Preparation System

本水粉混合器由主机体与离心泵水轮构成，二者垂直安装。通过一个双层壁管道将液态物与固态物分别抽吸进去，避免了在进入主体部分前凝结成块。液体高速进入混合机主体机。在水轮中产生真空，以吸入固态物。固态物通过在斗口罐下方的阀门调节均匀吸入。设计简洁，功能多样。可以迅速、均匀地混合多种固态物，不与空气接触。充分混合，产品再循环。某些情况下，可以使用“联机”不必再循环。卫生设计。快装连接，拆装方便。清洗与消毒时不需拆卸设备。机械闭阀，内部保持卫生。40℃标装斗口罐。本设备专为乳品，饮料企业设计，用于混合固态物与液态物，溶解糖浆，山梨糖醇，葡萄糖，乳糖及其副产品；奶粉还原，可可粉或白砂糖溶于牛奶。溶解乳清粉，面粉与淀粉溶于水，制作盐水，预混酸奶和其他奶制品。本设备设计先进，制作精良，生产效率高，经久耐用。

The water-power mixer is composed of main machine body and centrifugal pump water wheel, which are vertically installed. Through a double-layer wall pipe, the liquid materials and solid materials are separately pumped in, which can prevent them from agglomerating before entering into the main body. When the liquid enters into the main machine body of mixer at high speed, vacuum will produce in the center of water wheel to suck the solid material. The solid material will be evenly sucked in through the regulation of valve under douché tank. It has brief design and multiple function. It can rapidly and evenly mix multiple solid material without contacting the air. The mixing is enough and product can be recycled. Under some condition, use "online" and there is no need for recycling. Sanitary design and clamp connection with convenient assembly and disassembly. No need to dismantle any device during the cleaning and disinfecting. Mechanically close the valve to keep the inside sanitation 40°C standard douché tank. Specially designed for manufactures of dairy product and beverages, the equipment can be used to mix material and liquid material in the production of syrup, sorbitol, glucose, lactose and its side products, in the reduction of milk powder, in the solving into milk with cocoa powder or white sugar, in the solving of whey powder in the solving into water milk flour and starch, in the production of salt water and in the preliminary mixing of yoghurt and other dairy products. With advanced design, fine manufacturing, high production efficiency and durable use, it has obtained state patent.



技术参数 Technical parameter

型号 Model	能力(t/h) Capacity	电机功率(kw) Motor power	剪切泵转速 Rotation speed of vane pump(rpm)
SFH-5	0.3-5	3	2800/1400
SFH-10	1-10	7.5	
SFH-20	2-20	11	

分立式CIP系统
SUB-VERTICAL CIP SYSTEM



◆成熟的PLC控制系统

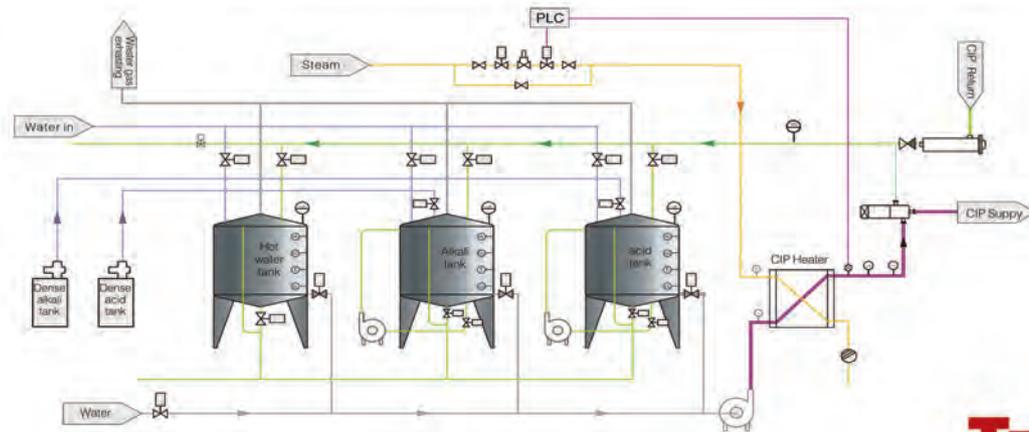
多年的经验积累，使我们的程序更加完善，加上进口优质的控制元件，可以保证系统长期、稳定的工作；友好的人机界面可以缩短操作人员的培训时间，可以直观的显示设备关键部件的工作状态；通俗易懂的帮助界面可以协助操作人员判断、处理多种常见的故障信息，以使设备及时的恢复到正常状态。

◆Matured PLC Controlling System

Years of experience accumulation enhances the programs. Imported qualified controlling part can keep the system operate steadily for along time; friendly interface between people and machine shortens the training time of the operators, and shows directly work condition of key parts of the machine; easily understandable interface can cooperate the operator to make decision, and deal with the common problems, so to ensure the machine return to work in time.

CIP系统组成 CIP SYSTEM COMPOSITION

名称 Aame	简单说明 Simple instruction
碱罐 Alkali tank	材料304, 锥顶锥底, 50mm厚保温 Material 304, conic top and tonic bottom, thickness:50mm, keeping warm
酸罐 Acid tank	材料304, 锥顶锥底, 50mm厚保温 Material 304, conic top and tonic bottom, thickness:50mm, keeping warm
热水罐 Hot water tank	材料304, 锥顶锥底, 50mm厚保温 Material 304, conic top and tonic bottom, thickness:50mm, keeping warm
清水罐 Clean water tank	材料304, 锥顶锥底, 50mm厚保温 Material 304, conic top and tonic bottom, thickness:50mm, keeping warm
浓酸、碱罐 Dense acid and alkali tank	材料316, 单层平顶平底罐或地埋式罐 Material 316, single layer, plate top and plate bottom pot or berried pot
进程泵 Advancement pump	材料316, 流量20m³/h, 扬程36m, 电机功率5.5kw Material 316, flow:20m³/h, lift:36m, electric motor:5.5kw
浓酸、碱泵、气动隔膜泵 Dense acidity and alkali pump Steam motored film pump	材料316, 流量1000L/h 316, flow:1000L/h Material 316, flow:1000L/h
板式换热器 Plate heat exchanger	材料304, 18m² Material304
过滤器 Filter	材料304 Material304
回程泵、自吸泵 Returning pump, self-priming pump	材料316, 流量20m³/h, 扬程20m, 电机功率4kw Material 316, flow:20m³/h, lift:20m, electric motor:4kw
控制柜 Controlling cabinet	不锈钢外壳, 控制方式根据要求定, 见上表 The shell is stainless; controlling method can be made to order





CIP清洗系统 CIP Cleaning System

小型一体式CIP系统 SMALL INTEGRATED CIP SYSTEM



CIP清洗系统是食品、药品生产中卫生标准的前提条件之一，它可以消除活性成分交叉污染，消除异物不溶性微粒，降低或消除微生物及热源对产品的污染。GMP要求尽力推荐食品及制药企业使用CIP在线清洗系统，由于国外全自动CIP清洗系统价格昂贵，制约了我国相关企业的使用。我公司专业技术人员针对诸多问题，对引进的国外先进技术进行消化吸收，研制成功具有自动化程度高，操作简便，价格合理等优点的自动CIP清洗系统。

性能特点 Performance Characteristic

◆灵活、通用

系统可单独进行酸洗、碱洗、热水冲洗等工序，也可根据需要编制特定的清洗程序进行全自动的清洗；不仅能有效的将设备清洗干净，而且还能控制微生物生长；同时可根据客户要求配置半自动和全自动控制系统。

◆经济、高效

与手动清洗相比，大大缩减了清洗时间，提高了工作效率；清洗剂和水的使用将更加科学合理；同时蒸汽耗量也相对较小，可以达到合理利用能源的目的；因此有效的降低了清洗成本。

◆安全、可靠

浓酸、浓碱液在埋地式浓酸、浓碱缸中进行；罐内液位自动控制并有溢流保护系统；独特的出料口结构可以防止清洗液析出结晶堵塞管路。

CIP system is one of the prerequisites of food pharmacy production sanitary standards. it can remove the active mixed pollution and insoluble particles of impurity, reduce or remove the micro chemicals and heat source that pollute the productions. GMP requires CIP system in food and pharmacy industry, which limits related industries because the high expense in overseas completely automatically CIP system. The specialists in our company import and digest international advanced technique, and successfully make automatically CIP system with high automation, simple operation, and reasonable price.

◆Flexibility And General Usage

The system can undertake single process such as acid cleaning, alkali cleaning, and hot water cleaning, and also can take completely automatic cleaning according to the cleaning process designed. Besides, it can control the growing of micro chemicals. semi-automatic or fully automatic equipments can be made to order.

◆Economics And High Efficiency

This equipment greatly reduces the cleaning time and increase the work efficiency compared with cleaning by hand; the use of cleaning liquid and water is more reasonable; meanwhile steam cost is relatively small, so to make full use of energy, and reduce the cleaning cost.

◆Safety and Reliance

Dense acid liquid and alkali liquid are in the buried acidity pot and alkali pot; the liquid position is automatically controlled, fixed with overflow protecting system; and unique material outlet construction can stop crystallization from the cleaning liquid to stop the pipe.

无脱气和闪蒸机组 Deaerator & Flash Evaporator



真空脱气机
VACUUM DEGASSER



适用范围及工作原理:

脱气机又叫脱气罐，通常用来对果汁进行真空脱气，以抑制果汁的氧化和褐变。经过脱气可以同时去除悬浮微粒上附着的气体，防止微粒上浮，改善产品外观；减少高温灭菌和灌装时起泡，改善杀菌效果，减少容器内部的腐蚀。生产液体奶或含乳饮料也经常进行脱气。一般真空脱气是在均质后进行，有时也在灌装前脱气。

Applicable field and work principle:

Degasser is also called degassing pot, mainly used in degassing the fruit juice in vacuum to prevent the oxidation and turning brown, at the same time, removing the gas attaching to the suspended particulates, stopping the particles upping, improving the looking, reducing bubbles in high temperature sterilizing and filling, and reducing the corrosion. Degasser can also be used in producing liquid milk, and beverage containing milk. Normally, vacuum degassing is after homogenizing, and sometime, is before filling. Main material: The surface of this machine in touch with material adopts high quality of stainless steel, and sealing packing collar is made in entable silica gel.

技术参数 Technical parameter

型号 Model	ZTD-1	ZTD-2	ZTD-3
处理能力 Processing capacity	1000L/H	2000L/H	3000L/H
工作真空度 Work vacuum	0.064-0.087MPa	0.064-0.087MPa	0.064-0.087MPa
电机总功率 Total Power	5.2kw	6.2kw	7.3kw
外形尺寸 Size	1035x750x2840	1135x780x3040	1185x800x3140
重量 Weight	270kg	350kg	450kg

闪蒸机组
FLASH EVAPORATING EQUIPMENT UNIT



适用范围及工作原理:

本设备主要用于液体奶生产的预处理工序，由于采用真空瞬间蒸发，使鲜奶在不破坏有效营养成分的情况下得到浓缩，如原奶干物质含量为11.5%-12%时，闪蒸后可达到12.5%-13%，使产品干物质含量得到提高，同时能脱除原奶中的异味，使产品具有纯正的奶香味。本设备需要与杀菌或其他加热设备配套使用。通常是串接在杀菌机的保持管后，进料温度90℃左右，具体接法请参考工艺流程图。

Applicable fields and work principle:

This unit is mainly used in the preprocessing steps of producing liquid milk. Vacuum instant vaporization concentrates sweat milk without damaging nutritional components, for example: the dry matter in sweat milk of 11.5%-12% can reach up to 12.5%-13% after flash vaporization, which increases the dry matter and removes the smell as well, so to keep the original milk flavor. This machine needs to be matched with other heating machine. Generally, it is connected after the keeping pipe of sterilizer, with imputing material temperature about 90°C. The specific connection method reference to craft flow chart.

技术参数 Technical parameter

型号 Model	SZZ-5	SZZ-10	SZZ-15	SZZ-20D
处理能力 Processing capacity	5000L/H	10000L/H	15000L/H	20000L/H
蒸发量 Evaporation	400kg/h	800kg/h	1200kg/h	1600kg/h
工作真空度 Work vacuum	0.064-0.084MPa			
电机总功率 Total Power	13kw	16.5kw	21kw	26.5kw
外形尺寸 Size	2500x860x3150	2800 x 1060 x 3600	3500x1500x400	3800x1800x4200
重量 Weight	900kg	1100kg	1500kg	2000kg

G

离心分离机 Centrifugal Separator



设备描述:

对于液/液/固相分离机，需要选用有自净功能的。由于强大的离心力，可以有效地把两种液相物质分离开，同时可以净化液相物质。

Description

For liquid/liquid/solid separation, proposes a wide range of self-cleaning separators. This kind of separator by means of a very high peripheral field centrifugal force, the recovery of fine particles (0.5-500 μm), the efficient separation of a mixture into its two phases and simultaneously clarification of both.

自动控制:

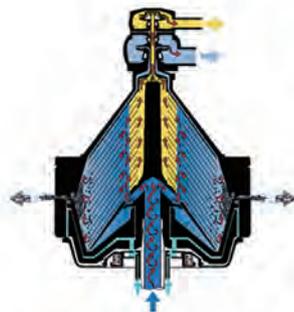
渣的周期排放是PLC自动控制操作水的电磁阀定时开关而实现。

Automatic control

The periodical solids discharge is carried out automatically by means of a PLC which controls the opening and closing water solenoid valves and the solenoid valves of operating water circuit.

应用：离心分离机用于牛奶的净化、分离脱脂和脂肪标准化。

Application: Centrifugal separator is used for milk clarification, separation (skimming) and fat standardization.



设备优势

1. 连续运行，减少停机时间
2. 不锈钢材质制成，卫生型设计提高了产品质量，减少了清洗的成本
3. 方便地操作阀门和表具，减少占地面积
4. 自动化控制

Features & Advantages

1. Continuous design and reduced downtime.
2. Fabricated from stainless steel associated with maximum sanitation designs to improve the product quality and reduce the cleaning cost.
3. Easy access to valves and gauges, reduced floor space.
4. Process controls improve both production and processor's bottom line.

█ Incoming milk
█ Skimmilk
█ Cream

分离

产品通过管道进入分离机的分配器，加速到钵的转速，液态的轻相和重相分开了。净化的轻相集中到钵的中间上部腔室，而净化的重相集中到钵的外面上部腔室。那里的两个向心泵分别把它们泵出出料管。

Separation

The product to be treated flows into the bowl through feed pipe and into the distributor it undergoes acceleration until it reaches the bowl rotating speed. The distributor conveys the product to the disks stack where the separation between light and heavy phase takes place. Light clarified phase flows to the centre of the bowl and heavy phase flows to the bowl outer diameter. Both phases rise in the disks stack and reach the two upper chambers of the bowl. Here two fixed centripetal pumps convey them under pressure to the outlet pipe lines.

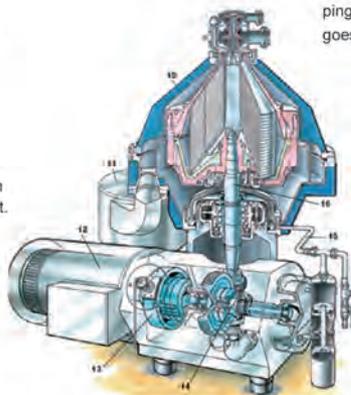
渣的排放:

经分开的渣集中到钵的最外围，周期地通过排渣口排出。渣的排放是通过控制操作水来达到排渣口的开启而排放。

Solids discharge

The separated solids are collected in the peripheral part of the bowl and are periodically discharged through the discharge holes.

The pressure produced by water in chamber keeps the hydraulic operated ram in closed position. By feeding with water the pipe line, the bowl valve let the water in chamber to flow away; the product pressure pushes down the hydraulic operated ram and the solids are immediately ejected through the discharge holes. By stopping the opening water feed and filling the closing water line into chamber opening, the hydraulic operated ram goes back to the closed position.



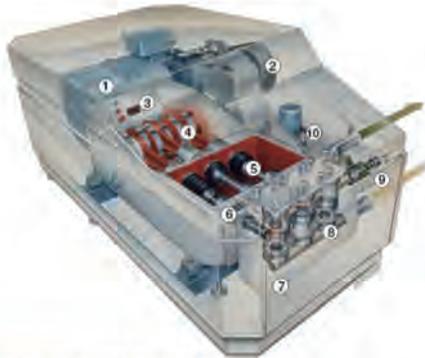
封闭式分离机的剖面图

1. 出料泵
2. 钵罩
3. 分配孔
4. 圆盘钵片
5. 固定环
6. 分配器
7. 滑动钵体的底部
8. 钵体
9. 圆盘钵片的中空轴
10. 机盖
11. 渣罐
12. 马达
13. 刹车
14. 齿轮
15. 操作水系统
16. 圆盘钵片的中空轴

Section through the bowl with outlets of a modern hermetic separator

1. Outlet pumps
2. Bowl hood
3. Distribution hole
4. Disc stack
5. Lock ring
6. Distributor
7. Sliding bowl bottom
8. Bowl body
9. Hollow bowl spindle
10. Frame hood
11. Sediment cyclone
12. Motor
13. Brake
14. Gear
15. Operating water system
16. Hollow bowl spindle

均质机 Homogeniser



高压均质机是高压泵装有均质阀

1.主马达 2.V型皮带 3.压力指示 4.曲轴箱 5.柱塞 6.柱塞密封腔
7.硬质不锈钢泵座 8.吸入/排出阀 9.均质阀 10.液压压力调节装置

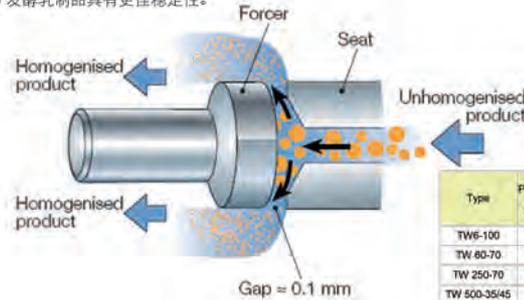
The homogeniser is a high-pressure pump with a homogenising valve

1.Main drive motor 2.V-belt transmission 3.Pressure indication
4.Crankcase 5.Piston 6.Piston seal cartridge 7.Solid stainless steel pump block
8.Suction/discharge valves 9.Homogenising valve 10.Hydraulic pressure setting system

设备描述

柱塞泵把牛乳在机器中的压力加大到100-250巴, 要根据不同的产品要求。压力可以通过机器上的压力表显示。如果是两级均质机时, 均质总是发生在第一级均质。均质阀是经精密加工的, 冲击环以一定的方式固定在阀座上, 冲击环的内表面与间隙的出口相垂直。阀座有一个5°的倾角, 使产品有控制地进行加速, 这样, 就可以减少不如此而发生的快速磨损。牛乳以较高的压力被送入阀座与均质头之间的空间, 间隙的宽度大约是0.1mm 或是均质乳中脂肪球尺寸的100倍。液体通常以100-400 m/s的速度通过窄小的间隙, 均质就在这10-15 微秒中发生。在这一刹那, 所有柱塞泵传过来的压力能都转换成了动能。经过均质装置后, 这些能量中的一部分又转回为压力能, 另一部分能量作为热量散失了。在均质装置上每40bar的压力降就会使温度升高1°, 用于均质的能量不足1%。但尽管如此, 高压均质可能还是最有效的方法。均质给牛乳的物理性质带来很多的优点:

- 脂肪球变小不会导致形成奶油层。
- 颜色更白, 更易引起食欲。
- 降低了脂肪氧化的敏感性。
- 更强的整体风味, 更好的口感。
- 发酵乳制品具有更佳稳定性。



Description

The piston pump boosts the pressure of the milk to a homogenisation pressure of 100 – 250bar depending on the product. The pressure can be read on the high-pressure gauge. Homogenisation always takes place in the first stage if it is a two stage homogeniser. The parts in the homogenisation valve are precision ground. The impact ring is attached to the seat in such a way that the inner surface is perpendicular to the outlet of the gap. The seat has a 5° angle to make the product accelerate in a controlled way, thereby reducing the rapid wear and tear. Milk is supplied at high pressure to the space between the seat and forcer. The width of the gap is approximately 0.1 mm or 100 times the size of the fat globules in homogenised milk. The velocity of the liquid is normally 100 – 400 m/s in the narrow annular gap, and homogenisation takes place in 10 – 15 microseconds. Every 40 bar in pressure drop over the device gives a temperature rise of 1°C. Less than 1% of the energy is utilised for homogenisation, but nevertheless high pressure homogenisation is the most efficient method available. The effect of homogenisation on the physical structure of milk has many advantages:

- Smaller fat globules leading to no cream-line formation,
- Whiter and more appetizing colour,
- Reduced sensitivity to fat oxidation,
- More full-bodied flavour, better mouth feel,
- Better stability of cultured milk products.

Type	Plunge Qty	Flow rate L/H	Max pressure Mpa	Working pressure Mpa	Power KW	Weight Kg	Size L*W*H m
TW6-100	1	6	100	0-80	0.75	90	0.55*0.5*0.33
TW 60-70	1	60	70	0-56	3	270	0.7*0.4*1.3
TW 250-70	3	250	70	0-56	5.5	700	1.2*0.8*1.0
TW 500-35/45	3	500	35/45	0-28/36	5.5/7.5	700/750	1.2*0.8*1.0
TW 500-70	3	500	70	0-56	11	800	1.2*0.8*1.3
TW 1000-35/45	3	1000	35/45	0-28/36	11/15	800/850	1.2*0.8*1.3
TW 1000-70	3	1000	70	0-56	22	1500	1.2*0.9*1.4
TW 1500-30	3	1500	30	0-24	15	850	1.2*0.8*1.3
TW 1500-60	3	1500	60	0-48	30	1800	1.2*0.9*1.4
TW 1500-90	3	1500	90	0-72	45	2800	1.6*1.1*1.6
TW 2000-25/30	3	2000	25/30	0-20/24	15/22	1500	1.2*0.9*1.4
TW 2000-40/45	3	2000	40/45	0-32/36	30	1800	1.3*0.9*1.5

TW 2000-70	3	2000	70	0-56	45	2800	1.6*1.1*1.6
TW 2000-90	4	3000	90	0-72	75	3000	1.7*1.5*1.3
TW 3000-25	3	3000	25	0-20	22	1500	1.2*0.8*1.4
TW 3000-30	3	3000	30	0-24	30	1800	1.3*0.9*1.5
TW 3000-40	3	3000	40	0-32	37	1800	1.3*0.9*1.5
TW 3000-55	3	3000	55	0-44	55	2800	1.6*1.1*1.6
TW 3000-70	4	3000	70	0-56	75	3000	1.7*1.5*1.3
TW 3500-40	3	3500	40	0-32	45	2800	1.6*1.1*1.6
TW 3500-60	3	3500	60	0-40	55	2800	1.6*1.1*1.6
TW 4000-25/30	3	4000	25/30	0-20/24	37/40	1800	1.7*1.1*1.5
TW 4000-40	3	4000	40	0-32	55	2800	1.6*1.1*1.6
TW 4000-60	3/4	4000	60	0-48	75	3000	1.7*1.5*1.3
TW 4000-70	4	4000	70	0-56	90	3000	1.7*1.5*1.3
TW 5000-25/30	3	5000	25/30	0-20/24	45/55	2800	1.7*1.1*1.6
TW 5000-45	4	5000	45	0-36	75	3000	1.7*1.5*1.3
TW 5000-70	4	5000	70	0-56	110	3000	1.8*1.5*1.4
TW 6000-25/30	3/4	6000	25/30	0-20/24	55/75	3000	1.7*1.5*1.3
TW 8000-55	4	8000	55	0-44	110	3000	1.8*1.5*1.4
TW 7000-25/30	3/4	7000	25/30	0-20/28	55/75	3000	1.7*1.5*1.3
TW 7500-30	4	7500	30	0-24	75	3000	1.7*1.5*1.3
TW 8000-25/30	4	8000	25/30	0-20/24	75	3000	1.7*1.5*1.3
TW 8000-40	4	8000	40	0-32	110	3000	1.8*1.5*1.4
TW 10000-25	4	10000	25	0-20	80	3000	1.8*1.5*1.4
TW 10000-35	4	10000	35	0-28	110	3000	1.8*1.5*1.4
TW 2000-30	4	12000	30	0-24	100	3000	1.8*1.5*1.4



降膜蒸发器 Falling Film Evaporator



描述:

该蒸发器适用于热敏性物质（如牛奶、果汁、药液等）在真空条件下进行低温连续浓缩。它由加热器、蒸发室、水力喷射器、多级水泵、水箱、循环出料泵和操作台等组成，凡物料接触部分均采用不锈钢材料制成。具有体积小，效率高，成本低等特点，是理想的浓缩设备。

Description:

Triowin's falling film evaporators are specially designed to obtain high quality concentrated milk, whey, juice, pharmaceutical liquids and other heat sensitive materials. The evaporator operates under vacuum and low temperature, which is the key factor in maintaining the organoleptic properties of the processed products. The multiple effects design allows energy savings thus reducing operating costs. In falling film evaporators, liquid and vapors flow downwards in parallel flow. The liquid to be concentrated is preheated to boiling temperature. An even thin film enters the heating tubes via a distribution device in the head of the evaporator, flows downward at boiling temperature, and is partially evaporated. This gravity-induced downward movement is increasingly augmented by the co-current vapor flow.

设备优势

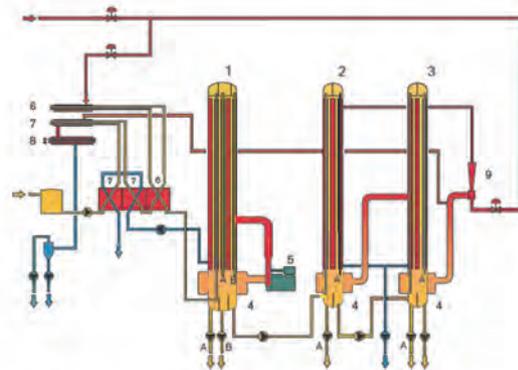
1. 可调节，可控制的直接接触加热设备
2. 因为产品布满在整个蒸发器列管，故在蒸发器内滞留时间很短
3. 特殊的设计保证产品均匀分布于蒸发器列管。列管顶部的分配器保证产品在列管的表面形成薄膜
4. 二次蒸汽和产品相对流动，提高了换热效果。二次蒸汽和产品在分离器中分开
5. 高效分离的设计
6. 多作用的布局，使蒸汽耗量很经济

Features & Advantages

1. Adjustable and controllable direct contact heat treatment units.
2. Shortest possible residence time, presence of a thin film along the entire length of the tubes reduces holdup and residence time.
3. Special design of liquid distribution systems to ensure correct tube coverage. The feed enters at the top of the calandria where a distributor ensures film formation on the inside surface of each tube.
4. The vapor flow is co-current to the liquid and the vapor drag improves the heat transfer. The vapor and the remaining liquid are separated in a cyclone separator.
5. Efficient design of separators.
6. Multiple effect arrangement provides steam economy.

Parameters

Model	TW15B1200		TW15B2400		TW15C3600			TWC15C10000			TWC15C20000		
Hydraulic Times(effect)	1st	2nd	1st	2nd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
Hydraulic Capacity(l/h)	1200		2400		3600			10000			20000		
Vacuum Degree (kpa)	65.3-73.4	89.0-91.0	65.3-73.4	89.0-91.0	59.0	78.0	90.0	52.0	76.0	88.0	52.0	76.0	88.0
Evaporating Temp.(°C)	67.0-73.0	46.0-50.0	65.3-73.4	46.0-50.0	76.0	62.0	48.0	75.0-80.0	55.0-65.0	45.0-50.0	75.0-80.0	55.0-65.0	45.0-50.0
Heating Temp.(°C)	82-86	67-73	87-90	70	40	76	62	93	80	65	93	80	65



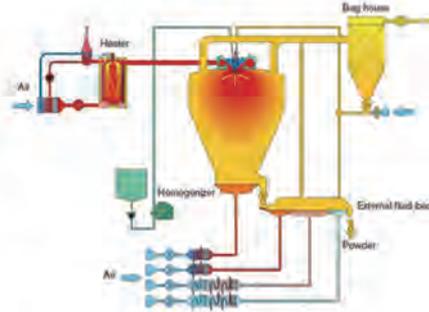
MVR FLOW

- 1-3 Calandrias
- 4 Vapor separator
- 5 High-pressure fan
- 6 Pasteurizing unit
- 7 Pre-heater
- 8 Condenser
- 9 Thermo-compressor

- 1-3 蒸发器 4 二次蒸汽分离器 5 高压风箱 6 杀菌单元
7 预热单元 8 冷凝器 9 热压缩泵

SC. For End Product(%)	45-65	48-65	48-65	45-72	45-72
Heat Pump Pressure (mpa)	0.5-0.6	0.5-0.6	0.5-0.6	0.6-0.8	0.6-0.8
Steam Consumption (kg/h)	≅ 500	≅ 1000	≅ 1550	≅ 3300	≅ 6600
Water Consumption (t/h)	≅ 11	≅ 22	≅ 16.5	≅ 125-150	≅ 250-300
Power(kw)	17.7	20	25.3		
Dimension (mm)	6000*3000*7100	7200*3700*8000			

喷雾干燥机和奶油制造 Spray Dryer and Butter Churn

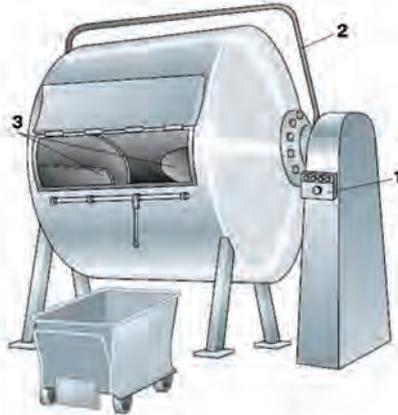


描述:

三段式干燥塔三段式干燥塔带有内置流化床和外置干燥、冷却流化床。细粉由干燥空气带回到塔身顶部的湿润区域，和湿的液滴耐聚成颗粒状。在外置流化床中的再湿润区域喷涂软磷脂，可以达到速溶的效果。

Description:

A three-stage spray bed dryer The three-stage dryer involves the spray dryers with integrated fluid bed and having the final drying and cooling in the third stage fluid bed located outside the drying chamber The fines are conveyed with the drying air to the wet zone in the drying chamber top, where the fines agglomerate with the wet droplets. Instant properties of some agglomerated products can be achieved by adding lecithin in the rewet zone of the fluid bed outside the drying chamber.



设备优势

奶油摔打机由不锈钢材料制成可以调节摔打速度，满足不同工序的要求带有真空装置，用以在摔打过程中防止空气混入到奶油里带有水冷装置，用以在摔打过程时降低奶油的温度

Advantage and strong points

The butter churn is made of stainless steel Adjustable churning speed for different processing phase It is equipped with vacuum device to limit air content in butter when churning It is equipped with water rise for cooling the churn when processing

特点与优势

设备的个性化设计和工程，使其能在最低能耗的工况下运行。

- 产品质量的一致性—整套的控制，如水分；颗粒结构；颗粒大小分布；溶解性；分散和湿润性；自然风味和芳香的保留等
- 温和的产品处理精确的工程，设计配合过程的控制，对自然风味、芳香和颜色的影响最小
- 最佳的运行和能耗比有效的装置，连续快速的干燥，方便的操作以及自动控制，能有效全面地控制产量和能耗
- 多用性个性化设备设计，使其有广泛的应用，可满足不同的需要
- 运行寿命长高质量，可靠的部件，有效的CIP清洗，专业的工程提高了设备的运行寿命
- 可追溯性自动的工艺过程控制保证了产品根据现行法规的可追溯性

Features & Advantages:

The dryers are designed, engineered and customized to provide unbeatable performance at the lowest possible cost.

- Uniform product quality Complete control of moisture content, particle structure, particle size distribution, solubility, dispersability and wettability, and retention of natural aromas and flavours
- Gentle product treatment Precision engineering combines with total process control to minimize impact on natural aromas, flavours and colouring
- Optimized performance/cost ratio Energy efficient components, continuous and rapid drying, ease of operation and process automation provide complete control over yield and costs.
- Versatility Customizable plant design in a wide range of applications is your assurance of complete compliance with your individual requirements.
- Long service life Top-quality, reliable components, efficient and straightforward CIP and expert engineering increase service life and availability for maximum performance
- Traceability Automated process control enables end-to-end traceability in compliance with current food standards and regulations

描述:

奶油摔打机是用于间歇式生产的。在搅拌过程中稀奶油被剧烈摔打，以打碎脂肪球，使脂肪球聚合成奶油团粒，所以剩余在液体即酪乳中的脂肪含量减少。这样稀奶油被分为两部分：奶油粒和酪乳。在搅拌中，当奶油粒达到一定大小时搅拌机停止，并排走酪乳。排出酪乳后，将奶油压炼成水呈细微分散的脂肪连续相。如果奶油准备加盐，在间歇生产的情况下盐撒在它的表面，加盐以后，为了保证盐的均匀分布，必须强有力地压炼奶油。奶油的压炼也影响产品的感官特性即香味、滋味、贮存质量、外观和色泽。最终的奶油被传送到包装设备包装，然后冷却贮存。

Description:

The butter churn is for batch butter making. The processed cream is churned in the churn then split into two fractions: butter grains and buttermilk. The machine is stopped when the grains have reached a certain size, and then the buttermilk is drained off. After drainage buttermilk the butter is worked to a continuous fat phase containing a finely dispersed water phase. If the butter is to be salted, salt is spread over the surface in the churn The working of the butter is done in the churn as well. When the aroma, taste, keeping quality, appearance and colour is approach the final product requirement, the finished butter is discharged into the packaging unit and thence to cold storage.

K

干酪槽 / 干酪热煮拉伸机 / 干酪压缩机 Cheese Vat / Cheese Stretcher / Cheese presser



描述

干酪槽材质为不锈钢，装有加热器和循环泵，内有PH和温度探头，变速搅拌器。水槽和加工罐都配有排水装置。底座上有各种仪表，显示PH值，控制温度和搅拌速度。同时提供数据输出点，可使用相关配件将数据传送到计算机。与产品接触部分均方便拆卸，便于清洗。带有多种配件，满足各种干酪制作需要。

Description

The stainless steel cheese vat is with heater and hot water circulation pump, containing pH and temperature probes and a variable sweep rate agitator paddle driven by a guarded motor. The vat provide with drain down facilities. Full instrumentation is integral for temperature display and control, pH display and agitator paddle speed control. Data logging points are also provided allowing process data to be transferred to a PC via an optional data logging accessory. All parts in contact with the product are designed to be easily dismantled for cleaning. The cheese vat is supplied with a comprehensive range of accessories required to make a variety of cheeses.

优势与强项

变速搅拌机适合干酪生产中各个阶段温度可以显示和控制能显示PH值提供数据输出点，可使用相关配件将数据传送到计算机带有多种配件，满足各种干酪制作需要槽的容量可根据要求。

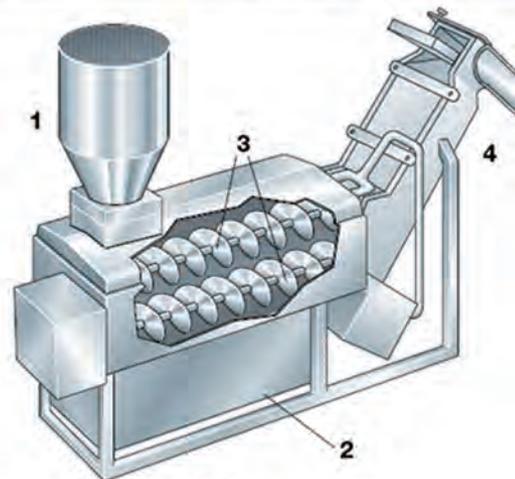
Advantage and strong points

Variable speed of agitator to be suitable for deferent phase of cheese making Temperature is displayed and controlled PH is displayed Data logging points are also provided allowing process data to be transferred to a PC via an optional data logging accessory The cheese vat is supplied with a comprehensive range of accessories required to make a variety of cheeses Vat capacity is customized



技术参数

- | | |
|-------------------------|-----------------|
| 1. Batch capacity | 槽容量：根据要求 |
| 2. Vat material | 槽材质：SUS304 |
| 3. Agitator paddle | 搅拌器材质：SUS304 |
| 4. Agitator drive motor | 搅拌器转速：0-100rpm |
| 5. Filter tube | 过滤器材质：SUS304 |
| 6. Power | 电源：380V/3p/50Hz |



- | | |
|----------|---|
| 1. 添料漏斗 | 1. Feed hopper |
| 2. 控温热水罐 | 2. Container for temperature-controlled hot water |
| 3. 双对转螺杆 | 3. Two counter rotating augers |
| 4. 螺杆传送器 | 4. Screw conveyor |

设备描述

此机用于莫泽莱拉干酪的生产。经软化后的干酪条由螺杆传送器传送到热煮拉伸机的入口，塑性的凝块随后连续挤出到装模机，在进入装模机途中，干酪可加干盐。双对转螺杆的转速可以调节，可以调节到最佳状态，热煮水的温度和液位也可以控制。与盐接触的设备材质必须是特殊的。

Description

It can be used for Mozzarella cheese. The curd is plasticised and then continuously extruded to the moulding machine. The speed of the counter rotating augers is variable so that an optimal working mode can be achieved. The temperature and level of cooking water are continuously controlled. The cheddared curd is continuously transferred into the hopper or cyclone of the machine, depending on the method of feeding – screw conveyor or blowing. The container, augers and all other parts in contact with the brine must be made of special material.



设备描述

可使用手动操作的垂直压榨，气压或液压压榨系统可使所需压力的调节简化，可在压榨系统上配置计时器，用信号提醒操作人员按预定加压程序改变压力。

Description

Manually operated vertical or horizontal presses are available for small-scale cheese production. Pneumatic or hydraulic pressing systems simplify regulation of the required pressure. It is equipped the pressing system with a timer, signaling the operator to change pressure according to a predetermined program. Figure shows a vertical pressing unit with pneumatically operated pressing plates.

一体式设备

One-piece Equipment



小型牛奶, 酸奶, 果汁生产线

The Small Scale Milk, Yoghurt, Juice Combined Production Line



多功能牛奶饮料生产系统采用最先进的技术, 集水处理、制冷缸, 调配罐、待装罐、剪切罐、均质机、高温管式杀菌机、胶体磨、灌装机、制冷机, 空压机, 电锅炉, CIP清洗机为一体的多功能生产机组, 从该系统出来可直接接到灌装机械上进行灌装。设备结构合理, 造型美观, 能大大节省生产场地的空间, 一个工人即可操作生产, 低成本的维护保养, 零件标准化, 替代品本地化。多功能牛奶饮料生产线可生产鲜奶、巴氏奶、酸奶、果味型酸奶、果汁、调配型果汁、茶饮料、雪糕冰淇淋等。所有电器及配件均采用国际名牌产品。生产线结构为不锈钢。

This multifunctional milk beverage production system adopts the most advanced technology, collection of water treatment, cooling tank, mixing tank, waiting for filling tank, shear emulsification tank, homogenizer, high-temperature tubular sterilizer, colloid mill, filling machine, chiller, air compressor, electric boiler, CIP cleaning machine into a multifunctional production line, from the system can be directly to the filling machine for filling. Equipment has simple structure, beautiful appearance, can greatly save the space production sites, one of the workers to operate, low cost of maintenance, spare parts standardization, substitute for localization. Multifunctional milk beverage production line to produce milk, pasteurized milk, yogurt, fruit yogurt, fruit juice, mix juice, tea drinks, ice cream, etc. All electrical appliances and accessories adopt international famous brand products. Production line for high quality stainless steel structure.

技术参数 Technical parameter

名称Name 型号model	SCX-500 (SCX-1000)
生产速度Production capacity	2000Litre/Shift (5000L/Shift)
产品Final Products	Drinking Milk, Yoghurt, Juice
包装Packaging	Plastic Pouch, Bottle, Cup, Doypack etc
整机功率Power	28kw
外形尺寸Dimension	4800x2000x2500(mm)
生产面积Production Area	80-100 sq.m
生产人员Production Personal	5-6 per shift
外形尺寸Size	2800x2000x2500(mm)
设备重量Weight	3500(kg)

技术参数 Technical parameter

名称Name 型号model	SCX-200 (SCX-500)
生产速度Production capacity	2000Litre/Shift (5000L/Shift)
产品Final Products	Drinking Milk, Yoghurt, Juice
包装Packaging	Plastic Pouch, Bottle, Cup, Doypack etc
整机功率Power	38kw
外形尺寸Dimension	2800x2000x2300(mm)
生产面积Production Area	80-100 sq.m
生产人员Production Personal	5-6 per shift
外形尺寸Size	2800x2000x2500(mm)
设备重量Weight	2400(kg)

小型牛奶, 酸奶, 果汁生产线采用最先进的技术, 包括200L/H的组合机组, 灌装机和发酵柜和冷柜, 该200L/H组合机组, 包括水处理, 调配罐, 发酵罐, 待装罐, 板式杀菌机, 均质机, 锅炉, 空压机, 管道, 阀门等。该生产线需要5-6个人操作, 只需要一个20尺的货柜进行运输。操作维护方便, 适合小产量的生产巴氏奶, 酸奶和果汁。所有电器及配件均采用国际名牌产品。生产线结构为优质不锈钢。

The small scale milk, yogurt, juice production line adopts the most advanced technology, including 200L/H combined unit, filling machine and incubation cabinet and refrigerator cabinet, and this 200L/H combined unit, including water treatment system, mixing tank, fermentation tank, waiting for filling tank, plate sterilizer, homogenizer, boiler air compressor, pipe, valve, etc. This line need 5 to 6 people, the operation of the production needs only a 20' container transportation. Operation and maintenance is convenient, suitable for small production production of pasteurized milk, yogurt and fruit juice. All electrical appliances and accessories adopt international famous brand products. Production line for high quality stainless steel structure.



Triowin
沃迪装备



车载式迷你型果蔬及乳品生产线

Movable Mini Processing Plant for Dairy & Fruit Processing



UHT的牛奶和酸奶线可移动的小型乳品厂与500千克/小时(2500升/D)的能力,还包括公用事业,如电力蒸汽发生器,柴油发电机和压缩空气,冷却水供应系统。

1.原料奶接待,测量,冷却和贮存;2.酸奶牛奶澄清,均质和巴氏杀菌;3.酸奶发酵;
4.酸奶装入杯铝盖;5.UHT奶均质,杀菌;6.UHT奶装入无菌塑料袋;

参数

容量: 500千克/小时(2500升/D)

灌装速度: 超高温灭菌奶: 200毫升*2500袋/小时

酸奶: 180毫升*1800杯/小时

尺寸: 15000*2500*2200毫米(L*W*H)



The movable mini dairy plant of UHT milk and yogurt line with the capacity of 500kg/h (2,500l/d) also includes the public utilities such as electrical steam generator, diesel generator and compressed air, chill water supply system.

1.Raw milk reception, measuring, cooling and storage; 2.Yogurt milk clarification, homogenization and pasteurization; 3.Yogurt fermentation;
4.Yogurt filled into cup with aluminum lid; 5.UHT milk homogenization and sterilization; 6.UHT milk filled into aseptic plastic pouch

Parameters

Capacity: 500kg/h (2,500l/d)

Filling speed: UHT milk: 200ml *2500pouchs/hour

Dimension: 15000*2500*2200mm (l*w*h)

Yogurt: 180ml *1800cups/h

砖型包装设备 Brick-shaped Packaging Equipment



砖型无菌灌装机
Brick type aseptic filling machine

主要设备参数 Main technical parameters

生产速度 Productivity	净含量125-350毫升, 每小时4000包 4000BPH for 125-350ml	净含量500-1000毫升, 每小时2000包 2000BPH for 500-1000ml
包装形状 Package shape	砖形、苗条形 brick base shaped, brick slim shaped	
包装材料 Packaging material	PE/PAPER/PE/AL/PE/PE 六层卷筒复合材料 aseptic packaging material roll	
用电功率 Electric power	30kw (其中动力 Mechanical transmission: 9kw, 电加热 Electric heating power: 25kw)	24kw (其中动力 Mechanical transmission: 4kw, 电加热 Electric heating power: 30kw)
用电电压 Rated voltage	220V/380V	
用电频率 Power frequency	50Hz/60Hz	
压缩空气 Compressed air	0.4-0.6Mpa, 1.0m ³ /min	
工艺流程 Technological process	进纸-打码-灭菌-灌装-成形 form feed - print date - sterilize - filling - shaping	
运行方式 Operation mode	PLC控制, 人机界面操作 PLC control, man-machine interface operation	
产品保质期 Shelf life	在室温25-30°C条件下, 一般饮料保质期可达12个月, 奶类6个月 In 25-30°C, juice 12 months, milk 6 months	
外形尺寸 Outside measurement	L × W × H=4500 × 1600 × 4000mm	

主要特点

一次性自动完成进纸、灭菌、制盒、灌装、成型、封合动作, 复合材料采用双氧水喷雾和高强度紫外线照射及无菌热空气烘干, 包装盒的成型、物料的灌装和灌装后的封口都是在具备正压条件的无菌室内完成, 从而保证了包装材料和物料的无菌, 使被包装经过UHT杀菌后的果汁饮料在常温下保质期长达一年。另外, 该机的PLC、光电纠偏、变频调速、气动电磁阀、真空系统、液位控制、智能电子温控调节、故障自动报警系统和无菌室等均采用德国、日本等国家的著名品牌, 整机全部采用了不锈钢制造, 外观精美, 操作方便。

设备介绍

JMB-4000 型贴管机适用于无菌砖盒、屋顶盒和直立袋等食品包装上粘贴吸管。整机采用欧姆龙 PLC 控制, 人机界面触摸屏操作。气源处理及执行元件采用日本 SMC 品牌, 气动控制元件采用美国 MAC 高频电磁阀; 旋转定位马达和菠萝头换位马达采用日本安川高速伺服系统; 热熔系统采用了全球最著名的美国诺信尊蓝系列热熔胶机。可自动完成产品输送、吸管输送、吸管裁切、产品上胶、吸管粘贴和故障报警等工序, 节省大量人力物力。

The main features

Disposable auto-complete feed, sterilization, box making, filling, forming, sealing action, the molding of composite materials using hydrogen peroxide spray and high-intensity ultraviolet radiation and sterile hot air drying, packaging, materials completion of the aseptic chamber of the filling and after the filling of the seal are in a positive pressure conditions, thus ensuring a sterile packaging materials and materials to be packaged through a juice beverage after the UHT sterilization at room temperature shelf life of long up to one year. In addition, the aircraft PLC optical correction, frequency control, pneumatic solenoid valve, vacuum systems, liquid level control, smart electronic thermostat adjustment, automatic fault alarm system and sterile room, etc. Germany, Japan and other countries of the famous brand, the whole machine is used stainless steel, beautiful appearance, convenient operation.

Machine introduction

JMB-4000 Straw applicator is suitable for aseptic brick pack, gable top carton and pouches food packaging straw application. The whole machine adopts Omron PLC control, man-machine interface touch screen operation. Air source treatment and actuator adopts Japanese SMC brand pneumatic control components using the U.S. MAC high frequency solenoid valve; motor Japanese Yaskawa high-speed servo system; system uses the world's most well-known American Nordson hot melt rotation positioning motor and pineapple head transposition Zun Blue Series hot melt adhesive machine. Product delivery can be done automatically, straw conveying crop straw, plastic products, straw paste and fault alarm processes, save a lot of manpower and resources.



砖型全自动打盖机
Brick Carton Cap Applicator



机器尺寸 Machine Size	功率 Power	总重量 Machine Weight	打盖效率 Cover Efficiency	适用纸箱 Carton Size	控制方式 Electric	使用气源 Pneumatic
4000x1100x1800	9kW/380V	1200kg	2000-4000	L100-270W105 -150x425-100	西门子PLC控制	5-8kg/cm ² , 150Nm/min

贴管机
Straw Applicator



技术参数 Technical parameter

外形尺寸 Overall Dimension	1320x860x1300mm
重量 Machine Weight	300kg
电压 Power Voltage	3N~380V/220V
频率 Power Frequency	50/60Hz
功率 Horse power	4.5kw (最大功率 Max.)
最大产量 Max Production Capacity	8000 盒/小时
进料方式 Feed Pattern	单列 Single File
输送带宽度 Width of Carrying Belt	B55
工作气压 Application Gas pressure	0.4-0.6Mpa
热熔胶机工作压力 Hot Melt Adhesive Working Pressure	0.28Mpa
最大耗气量 Max Gas Consumption	100L/min

Triowin
沃迪装备



砖型包装设备 Brick-shaped Packaging Equipment

全自动屋顶型纸盒包装机 Automatic Gable Top Carton Filling Machine



该包装机为单线、单体变速箱控制的屋顶型纸盒成型、灌装及密封的包装设备。本机适用于各种液态食品灌装(如牛奶、酸奶、鲜奶油及果汁饮料),并可配合选项,灌装高粘性、颗粒或固态之食品或非食品。新型 CAP-PAC 加盖机可直接加装在该设备上运用,将各式塑料瓶盖直接利用超声波焊接在屋顶型纸盒加盖预留孔上。

This machine is specially designed for molding, filling and sealing gable paper box with single line and single body gear box control. It is applicable to filling various liquid foods (such as milk, yoghurt, fresh oil and fruit juice drinks). Combined with its options, it can fill high-viscosity, granular or solid food products or other products. New CAP-PAC capping machine can be fixed on this packing machine directly to weld various plastic caps onto the preserved opening on the gable box directly by ultrasonic technique.



设备特点

- ◆简单明了的设计
- ◆一位技工即可操作,低成本维护保养
- ◆零件标准化,替代品本地化
- ◆不同纸盒规格转换时间短
- ◆灌装精度高,设有微调装置
- ◆紧密式设计,占用空间小,低噪音设计
- ◆低能耗
- ◆PLC电脑控制,操作简单,方便灵活
- ◆售后服务及零配件供应有保障
- ◆满足美国3A级标准
- ◆生产速度、灌装容量、纸盒高度可调节性,适应性强

设备配置

- ◆不锈钢外壳结构
- ◆机械驱动系统自动吸盒、放盒
- ◆触屏式PLC电脑程式控制
- ◆吸盒部位电眼识别装置
- ◆无纸盒不充填之自动感应开关
- ◆安全性聚乙烯防护罩、电控自锁门开关
- ◆不锈钢产品缸及液位气动阀控制
- ◆标准导流充填嘴及充填微调机构
- ◆顶部、底部热风封口
- ◆水冷成型棒、密封夹
- ◆电动调速电机实现机械标准速度至零速度无极调整
- ◆去泡沫马达及真空发生器
- ◆高、中、低液位控制及低液位自动报警、停吸纸盒装置
- ◆全自动喷码机
- ◆液位控制器/低液位报警器
- ◆附充填系统CIP清洗配件
- ◆不锈钢控制盘配合3PH/50HZ/38 电源
- ◆集中润滑系统
- ◆一年备件包

Main characteristics

- ◆Simple design
- ◆Only need one operator, low-cost maintenance
- ◆Standardized parts, localized replacement
- ◆Short time for changing box sizes
- ◆High filling precision, with fine tuning device
- ◆Compact design, less space required Low noise
- ◆Low energy consumption
- ◆PLC control, easy operation, flexible
- ◆Guaranteed after-sales service and spare parts supply
- ◆Meeting USA 3A standard
- ◆Adjustable production speed, filling volume and box height, high adaptability

Equipment configuration

- ◆Stainless steel shell structure
- ◆Mechanical drive system automatic vacuum box, put the box
- ◆Touch screen type PLC program control computer
- ◆Vacuum box part magic eye identification device
- ◆No paper boxes not filling the automatic induction switch
- ◆Safety polyester shields, electric control since
- ◆Stainless steel products to lock the door when you switch cylinder and level of pneumatic valve control
- ◆Standard diversion filling lips and filling fine-tuning institutions
- ◆The top, bottom sealing hot air
- ◆Water cooling molding rods, sealing clamp
- ◆Electric control motor speed to realize the mechanical standard zero adjustment speed variation
- ◆To foam motor and vacuum generator
- ◆High, medium and low level control and the low level to be automatic alarm, stop device
- ◆Automatic paper box absorption to spurt the code machine
- ◆Liquid level controller/low level alarm
- ◆With filling system CIP cleaning accessories
- ◆Stainless steel panel with 3 PH/frequency 50 HZ/38
- ◆Centralized power supply lubrication system
- ◆A year spare parts bag

技术参数 Technical parameter

名称 Name	型号 Model	WDB-1000	WDB-2000	WDB-3000
生产速度 Production capacity		1000box/h for 250,500ml 500box/h for 1000ml	2000box/h for 250,500ml 1000box/h for 1000ml	3000box/h for 250,500ml 1500box/h for 1000ml
气源 Air consumption		85psi/7bar, 2.5scfm/65lpm	85psi/7bar, 4.0scfm/113lpm	85psi/7bar, 6.5scfm/184lpm
冷却水 Cooling water		50l/10°C, 2.0gpm/7.6	50l/10°C, 2.0gpm/7.6	50l/10°C, 2.0gpm/7.6
耗电量 Power consumption		22kw	26kw	30kw
控制方式 Control method		Semi-auto electric control	Semi-auto PLC control	Fully-auto PLC control
外形尺寸 Size		3500x1500x2800mm	3500x1500x2800mm	3500x1500x2800mm
重量 Weight		2440kg	2450kg	2460kg

无菌枕式包装机
Aseptic plastic/paper pouch filler



该机适合于牛奶、豆奶、花生奶、果汁等产品的无菌包装。自动完成制袋、充填封口、日期打印、计数、供袋清洗等功能。人机界面,可编程控制、气动、伺服电机驱动,先进的杀菌与无菌保障。其人机界面、PLC、光电、气动、润滑、无菌处理、伺服等系统和各种阀体均采用国际知名品牌。304、316、材料卫生安全保证。

This machine is suitable for milk, soy milk, peanut milk, fruit juice, and other products of aseptic packaging. Automatic completion of bag making, filling, sealing, printing date, counting, bag for cleaning, etc. Man-machine interface, programmable control, pneumatic, the servo electrical engineering drive, Advanced sterilization and aseptic security. The man-machine interface, PLC, photoelectric, pneumatic, lubrication, aseptic processing, servo system and all kinds of valve body adopt international famous brand. and the material of SUS 304, 316 are used for sanitary warranty.

全封闭自动液体包装机
Full Close Liquid Packing Machine



全封闭自动液体包装机:适用于牛奶、豆奶、花生奶、果奶、果汁、饮料、酱油、醋酸等液态食品的全自动袋式包装。本机内制袋、灌装、封口、计数、打印日期、紫外线杀菌一次性全自动完成。

Full close liquid packing machine: applicable to automatic bag style package of liquid foods, such as milk, bean milk, peanut milk, fruit milk, juice, beverage, soy sauce and acetic acid, etc. This machine is probably sack, filling, sealing, counting, date printing and UV sterilizing are automatically accomplished in a one-off.

技术参数 Technical parameter

设备型号 model	WJB-2500,6000
膜宽 Film width	240mm,320mm
生产能力 Production capacity	2500,6000 pouch/hr
灌装容量 Filling Volume	200-500ml
电源 Power	380V/50hz, 220V/60hz
功率 power consumption	10kw
压缩空气 Air compressing	0.6Mpa
蒸汽 Vapor steam	0.4 Mpa
双氧水用量 Hydrogen consumption	100pouch/0.5L
主机尺寸 Size	1000x1000x2600 mm

技术参数 Technical parameter

型号 Model	YTB-2500,5000
膜宽 Film width	240mm,320mm
生产能力 Production capacity	2500,5000 pouch/hr
包装容量 Packing vloume	100-500ml
灌装精度 Filling precision	± 2%
整机功率 power	380V/50hz, 220V/60hz
外形尺寸 Size	1250x820x2500mm
灌装方式 Filling mode	Filling by spontaneously flowaing from the hight position kettle

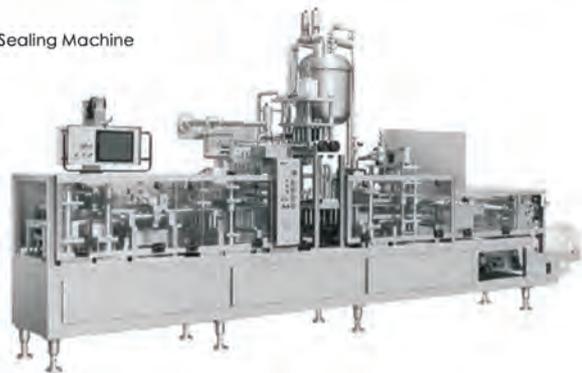
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灌装包装设备 Filling Packing Equipments

全自动预制杯灌装封口设备
Full-Automatic Preformed Cup Filling Sealing Machine



DGD系列设备适用于酸奶、牛奶、饮料、调味品等物料的包装，全自动完成纸杯或塑杯的上杯、落杯、灌装、加盖、封口、日期打印、加罩和成品输送。设备主要配置的部件均采用国际知名品牌。该系列设备可选配100级层流保护系统、果粒及香精动态混合系统、高温灌装系统和移动式喷码系统等，是高效、节能、全自动化生产的首选设备。



The DGD series machines are applicable to the packaging production of yogurt, milk, beverage, seasoning, etc. With the function of accom-plishshing paper cup or plastic cup loading, cup locating, filling, lid placing, sealing, date printing, covering and product transportation full -automatically. These machines are equipped with world famous top brands systems. This series machines, which have the optional systems of 100-class laminar flow protection, fruit particle and essence dynamic mixture, high-temperature filling and mobile code printing etc., Are the first choice for for high-efficiency, energy saving and full-automatic production.

技术参数 Technical parameter

型号 Model	DGD-600F	DGD-300F	DGD-200F	DGD-100F
产量 Production capacity	20000c/h(150ml)	10000c/h(150ml)	6600c/h(150ml)	3000c/h(150ml)
运行方式 Operation Mode	直线步进 Linear Step			回转步进 Rotary Step
预制杯种类 Preformed Cup Type	塑杯、纸杯 Plastic Cup, Paper Cup			
盖膜种类 Lid Type	片盖、卷膜 Precut Lid, Rolling Film			
总功率 Total Power	18kw	9kw	7kw	4.5kw
运转功率 Operating Power	10kw	5kw	4kw	2.2kw
工作气压 Working Air Pressure	0.7MPa	0.7MPa	0.7MPa	0.7MPa
耗气量 Air Consumption	1.5m ³ /min	1.1m ³ /min	0.9m ³ /min	0.5m ³ /min
外型尺寸 Overall Dimension	9300 × 3750 × 4000	4200 × 3000 × 2880	4200 × 2900 × 2880	2900 × 2100 × 2750
重量(约) Weight Approx	6t	3.2t	2.6t	1.8t

灌装铝箔封口机
Filling And Aluminum Foil Sealing Machine

本机用于生产牛奶、乳酸菌、豆奶、果汁等，全程采用负压灌装、自动制盖、电加热封口和旋盖(可选择)。阀门、PLC控制系统，光电温度控制，气动控制盒自动润滑等采用德国、美国、日本等国家的知名品牌。本机是现代化企业的最好选择。

This machine is used for production of bottle of milk, lactate milk, soy milk, juice etc., The machine completes the process of vacuum negative pressure filling, cap forming, capping (optional) and electricity heat sealing automatically. Adopting world famous brand products from Germany, America, Japan, etc., Including various sorts of valve and the system of PLC, optic-electronic and temperature control, pneumatic control and automatic lubrication, etc., It is the best choice for middle size enterprises.



技术参数 Technical parameter

型号 Model	生产能力 Capacity (BPH)	适用瓶型 Bottle Size	装机容量 Power (kw)	外型尺寸 Measurement (m)
10/10	4000	瓶径 Bottle diameter: φ50-90 瓶高 Bottle height: 110-280	3	1.6x1.4x2.1
20/12	8000		3.2	1.8x1.6x2.1
24/14	10000		3.2	1.9x1.65x2.1
30/30	18000		4	2.4x2x2.1

常压灌装三合一机
Normal Pressure Filling Machine 3-In-1 Unit



技术参数 Technical parameter

型号 Model	QGF14-12-5	QGF18-18-6	QGF24-24-8	QGF32-32-10	QGF40-40-12
生产能力 Production capacity (600ml)(b/h)	4000	8000	12000	15000	18000
灌装精度 Filling precision	> ± 5mm(液面定位 > ± 5mm Liquid level)				
聚脂瓶规格 polyester bottle standard(mm)	瓶径 φ 50- φ 100 瓶高 :150-320 Bottle diameter: φ 50- φ 100 Heigh:150-320				
适用盖形 Suitable cap shape	塑料螺纹盖 Plastic screw cap				
冲瓶用水压力 Water pressure of washing bottle(Mpa)	0.18				
冲瓶用水量 Water consumption of washing bottle(kg/h)	800	1600	2500	3500	4500
喷冲工位 Spraying position	5	5	6	12	20
沥瓶工位 Dripping position	3		3.5		14
气源压力 Air source pressure(Mpa)	4				
耗气量 Air consumption(m ³ /min)	-	0.3	0.4	0.5	0.6
总功率 Power(kw)	4.23	5.03	6.57	8.07	5.6
总重量 Weight(kg)	2500	3000	4000	5000	6000
外形尺寸 Size(mm)	2300x1550x2500	2640x1800x2500	3000x2000x3150	3600x2800x3150	4500x3400x3150

产品描述

本系列产品为冲瓶、灌装、拧盖一体机，主要适用于各种瓶装矿泉水、纯净水、果味水等不含气饮料的生产，产量从3000至36000瓶每小时。

Description

The series of machine are the integrated rinsing, filling and capping machine, mainly suitable for producing the bottled mineral water, pure water, fruit juice, wine and so on. output from 3000 to 36000 bottles per hour.

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Triowin
沃迪装备

上海沃迪自动化装备股份有限公司

Shanghai Triowin Automation Machinery Co., Ltd.

中国 上海 金山工业区亭卫公路5899号
邮编: 201506 传真: 0086-21-54331011
总机: 0086-21-37901188
网站: www.triowin.com

NO.5899 Tingwei Rd. Jinshan Industrial Zone Shanghai
P.C.: 201506 Fax: 0086-21-54331011
Tel: 0086-21-37901188
[Http://www.triowin.com](http://www.triowin.com)