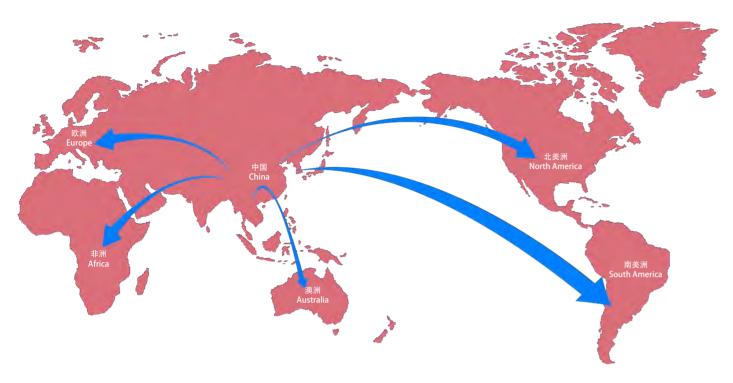
## Shanghai EasyReal



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# 果蕊加工及包装整厂设备交钥匙工程

TURNKEY SOLUTION FOR FRUIT AND VEGETABLE PROCESSING AND PACKAGING COMPLETE LINES

目录

**CONTENTS** 

公司介绍 P01 **Company Profile** 公司荣誉 P03 **Company Honor** 公司专利 P04 **Company Patent** 工艺流程 P05 **Process Flow** 单机设备 P17 **Key Equipment** 合作供应商 P33 **Cooperative Supplier** 合作伙伴 P34

**Corporate Partner** 

Intelligent, environmental protection, safety.

智能、环保、安全 //







# 公司介绍 ABOUT US

#### 企业精神:

日月之行谓之易, 金石为开谓之研!立于研, 终为易;

#### 企业愿景:

让研发更易探索,让生产更易操作,让消费者更容易吃上健康安全的食品,让中国制造更容易进入国际市场!

EasyReal上海易研成立于2011年,主要从事果蔬加工等食品整厂设备及实验型中小试设备的研发设计及制造。公司依托于上海市农业科学院的技术攻关和新产品开发能力;先后与德国STEPHAN、荷兰TERLET、德国RONO等公司达成战略合作,为国内外客户提供从研发到工业大生产的全套交钥匙工程服务。

在吸收国外关键技术的基础上,开发出多种自主知识产权的设备,从全世界最小的超高温UHT杀菌机,到中试设备,工业无菌灌装及浓缩蒸发器均有涉及,在果汁果酱面,全面实验各改进方面,全面实验各部与工业设备部独立运营,同时泰州工厂筹建;为未来给客户提供更优的服务奠定了坚实的基础。





Established in 2011, Shanghai EasyReal Machinery Co. Ltd. is a manufacturer specialized in providing turn-key solution for not only the fruit & vegetable production lines but also pilot lines. Due to our continuous development and integration with international companies like STEPHAN Germany, Rossi & Catelli Italy, etc, Easyreal Tech. has formed its unique and beneficial characters in design and process technology and developed a variety of machines with independent intellectual property rights. Thanks to our much experience over 100 whole lines, Easyreal TECH. can offer production lines with daily capacity from 20tons to 1500tons and customizations including plant construction, equipment manufacturing, installation, commissioning and production. Providing the most optimized implementation plan and manufacturing quality equipment is our basic duty. A focusing on customers' every need and providing the most optimal solution is the value we represent.

In 2017, the department of Lab & pilot equipment and the department of industrial equipment was operated independently, and the Taizhou Factory is also under construction. All these lay a solid foundation for providing better services to customers in the future.

EasyReal TECH. provides the European leavels solution in the fruit & beverage industry and has received widespread praises from customers from both the domestic and overseas. Our machines have already been exported to all over the world including the Asian countries, African countries, South American countries and even European countries.

#### Our Vision:

Intelligent factories, Environmentally friendly processes and Safe food!

02

# 企业使命 **Corporate Mission**

专注于液态食品工程设计及整线生产安装为主营业务的专业制造商。 我们致力干为用户提供从研发到生产的全方位服务!

A professional manufacturer focusing on liquid food engineering design and whole line production and installation as its main business. We are committed to providing users with a full range of services from research and development to production!

# **Qualification And Patent**

企业资质与认证











# 公司专利 **Company Patent**













专利号:ZL 2018 2 0194501.1

专利号:ZL 2018 2 0207365.5

专利号:ZL 2019 2 0699595.2











专利号:ZL 2019 2 0705981.8

专利号:ZL 2018 2 0165863.8

专利号:ZL 2018 2 0127274.0

专利号:ZL 2019 2 0699579.3

专利号:ZL 2021 2 1302119.6











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专利号:ZL 2021 2 1302148.2





专利号:ZL 2021 2 1319947.0









专利号:ZL 2021 2 1302117.7 专利号:ZL 2021 2 1308154.9





# 番茄酱生产线工艺流程

## **Tomato Paste Processing Line Flow Chart**

















# 番茄酱调配沙司加工生产线工艺流程

## **Tomato Sauce Processing Line Flow Chart**



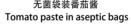














熬煮调配系统 Dilution Cooking tanks



真空脱气系统 Vacuum deaerating



高压均质系统 Homogenization







后端杀菌冷却系统 Post-pasteurization



灌装封口系统 Filling and capping



杀菌系统 Sterilization



易拉罐,袋装, PET瓶装番茄沙司 End product in different package

技术改变制造业, 创新引领未来! www.easyreal.cn



# 芒果加工生产线工艺流程

## **Mango Processing Line Flow Chart**















新鲜芒果 Fresh mango



清洗和拣选 Washing&Sorting



连续预煮机 Continguous precooking



真空脱气系统 Vacuum deaerating







Pulping and refining



芒果去皮去核机 Mango pleeling and destoning



杀菌系统 Sterilization



无菌袋灌装系统 Aseptic filling



无菌袋芒果原浆/浓缩浆 Mango pulp or puree in aseptic bags



桃/杏/李原汁原浆生产线工艺流程

Peach, Apricot And Plum Processing line Flow Chart

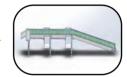




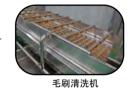
新鲜杏,桃,李等 Fresh apricot, peach plum



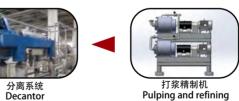
提升系统 Elevating



清洗或拣选 Washing&Sorting



Brush washing



Pulping and refining



预热系统 Pre-heating



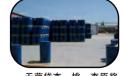
去核机组 Destoning machine



Sterilization



无菌袋灌装系统 Aseptic filling



无菌袋杏, 桃, 李原浆 Apricot,perch,plum pulp or puree in aseptic bags



# 椰奶&椰子加工生产线工艺流程

Coconut milk&Coconut Processing Line **Flow Chart** 















椰子原料 Raw coconut



人工去壳 Coconut peeling by manual



螺旋榨汁机 Screw Extractor



过滤系统 Filtration



无菌袋灌装系统 Aseptic filling



杀菌系统 Sterilization



真空脱气系统 Deaerator



调配罐 Blending tanks



Ting can filling

09



Post sterilization



Packaging



Finished product



果汁加工生产线工艺流程

## **Fruit Juice Processing Line Flow Chart**











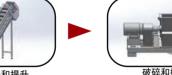


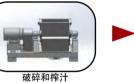


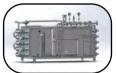




Washing and elevating

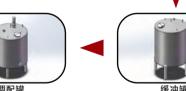






Crushing and extracting













高压均质系统

Homogenization





后端杀菌冷却系统

Post-paseurization





Finished product

10



# 浆果类加工生产线工艺流程

## **Berry Processing Line Flow Chart**





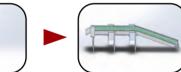


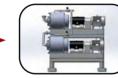




Blueberries, Strawberries









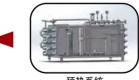








拣选 Sorting

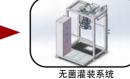


预热系统 Pre-heating











Finished product



**Apple&Pear Production Line Process** Flow Chart



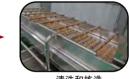




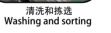












破碎系统 Crushing









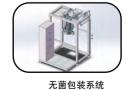
预热系统 Pre-heating Belt processing





Separation





Aseptic filling



成品 Finished product

Sterilization Aseptic filling

降膜浓缩蒸发器 Falling Film Evaporator

杀菌系统 Sterilization

11



# 胡萝卜原浆,原汁生产线工艺流程

**Carrot Puree And Raw Juice Production Line** Flow Chart







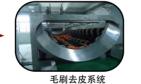














打浆精制系统 Pulping and pefining







切断和破碎系统 Chopping and crushing 预热系统 Pre-heating



降膜浓缩蒸发器

**Falling Film Evaporator** 

Decantor





Sterilization



Aseptic filling



Finished product



# 益生菌发酵果蔬汁生产线工艺流程

**Probiotic Fermentation Fruit And Vegetable** Juice Production Line Flow Chart

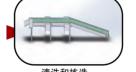
















新鲜水果 Fresh fruits

清洗和拣选 Washing and sorting

打浆精制系统 Pulping and refining









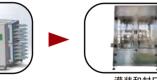


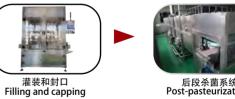


高压均质系统

Homogenization







后段杀菌系统 Post-pasteurization



风刀吹干系统 Air knife dryer

Finished product



后段输送包装系统 Packaging

贴标或套标 Labelling, shrinking labelling

13

# 果酱生产线工艺流程

#### **Jam Production Line Flow Chart**





新鲜水果 Fresh fruits





破碎系统 Crushing



打浆精制系统





胶体磨

Colloid grinder

真空夹层锅 Vacuum pan



清洗和拣选 Washing and sorting

后段杀菌系统 Post-pasteurization



风刀吹干系统 Air knife dryer



灌装和封口 Filling and capping

贴标或套标 Labelling,shrinking labelling



杀菌系统

Sterilization

后段输送包装系统 Packaging



成品 Finished product



洋葱, 大蒜加工生产线工艺流程

Onion Garlic Processing Line Flow Chart













大蒜去皮机 Garlic peeler



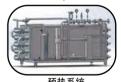
新鲜洋葱 Fresh onion





破碎系统 Crushing





Pulping and refining



Pre-heating



杀菌系统

Sterilization

无菌袋灌装系统 Aseptic filling



Concentration

无菌袋装大蒜, 洋葱原浆 Garlic and onion puree in sterile bags



#### Technology changes manufacturing, Innovation leads the future!

# 单机设备 Key Equipment

#### 果蔬提升机 Fruit & vegetable Scraper Elevator

刮板提升机通过电机驱动的隔板向上移动来运输物料。水果和蔬菜由低点输送至高点(下一阶段设备)。适用于番茄、苹果、草莓、芒果、桃子、胡萝卜等多种水果和蔬菜的输送提升。主要结构采用优质304不锈钢制造,使用寿命长,故障率低等。

Scraper elevator transports the material by up moving the clapboard driven by the motor. The fresh fruits and vegatable are convried by low-level elevator to next section. It is used for lifting of tomato, apple, strawberry, mango, peach etc. many kinds of fruits. The main structure is made of high quality SUS 304 stainless steel, which has long lifetime, low failure rate, preventing fruits blocking etc.

#### 毛刷洗果机 Roller Brush Cleaning Machine

毛刷洗果机主体采用优质304不锈钢材质制作。机架采用304不锈钢方管焊接而成,方管厚度3mm,不锈钢辊表面种植尼龙丝,硬度依据物料定(直径为0.15~0.2),设备顶部设置喷淋清洗装置。

适用于刷洗水果(桃, 苹果, 梨等)表面附带的污物, 以达到清 洗水果的目的。

Main structure of roller brush cleaning machine is SUS304 stainless steel. Stainless steel tubes as bearing and with brush on the tubes to wash the fruits and vegetables. The stainless steel tubes make the brush circumvolve, the neighbour hood brushes make the fruits and vegetables circumvolve and to be washed, meanwhile the bad fruits and vegetables will be picked up manually.

Characteristics: Applicable for brushing & cleaning fruit peels (peaches, apples, pears etc.)

#### 鼓泡浮洗机 Air-blowing & Washing Machine

采用独特的鼓泡冲浪式结构,清洗用水如沸水一样使物料在水上层做翻滚旋转并慢速向前运行,从而既保证物料得到彻底清洗,也把物料损伤降到最低。清洗用水经过滤后可进入循环使用。控制系统采用变频调速或无级变速。

Air-blowing & washing machine produce water bubble by air blower to wash fruitts& vegetable. The system is composed of cabinet, air blower, etc. And elevator is optional and it always depends on the requirment of process. But the elevator is always matched with the washer. And extra water spraying device can be installed on the elevator.















#### 检果机 Sorting Machine

本机主要用于清洗后对坏的水果或蔬菜进行挑选,剔除对产品品质有影响的腐烂果和青果以及异物。

www.easyreal.cn

辊筒在公转的情况下同时在自传,方便工人剔除异物。检果机上不可以选 配清水喷淋装置。设备底部设置有接水盘。

This machine is mainly used for selecting of the bad fruits or vegetables by workers after washing.

Material of the roller can be sus304 stainless steel tubes or PVC plastic tube. Working principle: The stainless steel chain makes the tube moving ahead, and meanwhile the tubes rotates on the rubber track because of friction, so the fruits on the tubes will rotate freely, and the bad quality fruits will be picked up and separated manually. And extra water spraying device can be installed on the sorting machine.

#### 滚筒分级机 Roller Grader

滚筒分级机主要用于各种球形或椭圆形果蔬的筛选和分级。适用于橙、柠檬、桃、枣、苹果、梨、葡萄柚等分级。

Roller Grader is mainly used for screening and grading of kinds of spherical or oval fruits and vegetables. Be Suitable for orange, lemon, peach, date, apple, pear, grapefruit, etc.

#### 芒果去皮去核机 Mango Peeler and Destoner Machine

该设备主要用于芒果的去皮去核。经过清洗的芒果进入该台设备去皮去核处理,芒果出浆率收率高。

The system is mainly used in the pre-processing of mango production line. Its main function is to remove the peels and cores of mango after cleaning. The pulp has a high recovery rate.

Mango peeler and destoner machine has the function of peeling and pitting of mango without preliminary classification.

#### 桃杏李去核机 Peach and Apricot Destoner

本机主要用于桃、杏、李等果核、果肉的分离。

The machine is mainly used for separating core and pulp of peach and apricot and plum, etc.

The fruits will be transported to the inlet of destoner where the fruits are broken by designed device with rubber and roller. As the separating boards with different angles, the fresh pulp and core are separated each other. As a result, the pulp and core will discharged for exit from two different channels.

#### Technology changes manufacturing, Innovation leads the future!

#### 连续式预煮机 Continuous Precooking Machine

连续式预煮机主要用于原料的预煮和漂汤产品,达到杀青、软化和活性酶 灭活作用。这台机器主要用于胡萝卜、桃、杏、芒果等。特别是用于胡萝卜前处理的预煮脱皮工序,便于后续的制浆操作。

Our company designed and manufactured this machine, it is used for cooking & boiling of products, this processing method can soften the product, destroying enzyme, removing green etc. This machine mainly used for soft and enzyme destruction of carrot, peach, apricot, mango etc. And especially used for Carrot before removing peels and then pulping.



主要用于各种水果或蔬菜的破碎,如:番茄、苹果、梨、草莓、芹菜、青瓜等,可将原料粉碎成小颗粒,更适合下一段加工。

该机由主轴、电机、进料斗、侧盖、机架、轴承座、电机结构等组成。

It is mainly used for crushing of many kinds of fruits or vegetables, for example: tomato, apple, pear, strawberry, celery, fiddlehead etc. it can crush the raw materials into small particles, and it will be better for the next processing section.

The machine is composed of principal axis, motor, feed hopper, side cover, frame, bearing block, motor structure, etc.

#### 预热器 Pre-heater

预热机主要有两种大类。一种是列管结构,另一种是套管结构。根据被加工材料的不同性质,选择相应的预热形式。主要用于破碎产品的预热和巴氏杀菌。温度可根据不同的产品进行调整。

The pre-heating machine has 2 forms. One is tubular structure, and other is Tube-in-tube structure. According to the different nature of the material to be processed, the corresponding preheating form will be selected. It is mainly used for the pre-heating and pasteurizing of crushed product. The temperature can be adjusted according to different products.

#### 果蔬打浆精制机 Pulping And Refining Machine/ Refining Unit

融合欧洲先进设备的设计理念,对意大利先进设备进行了改进,以最先进的工作原理、最高的制造精度制造的打浆精制机具有制浆率高、操作方便、容量大、性能稳定等优点。

主要用于番茄、桃、杏、芒果、苹果、猕猴桃、草莓、山楂等的制浆、去皮、去籽。

我们有两种型号可供选择:单道打浆和双道打浆。

筛网尺寸可根据客户要求制作。

It is mainly used for pulping, peeling, removing seeds of the tomato, peach, apricot, mango, apple, kiwifruit, strawberry and hawthorn etc. We have two models for choice: Single-stage pulper and Double-stage

The sieve mesh can be made according to customers' requirements.

















#### 带式榨汁机 Belt Press Extractor Machine

我公司通过学习国外先进技术研发的带式榨汁机,可极大的提高果蔬汁榨汁工艺的效率和出汁率;广泛应用于苹果、梨、菠萝、胡萝卜;以苹果为例,出汁率可超过75%;具有十分重要的意义。

EasyReal company manufactured the belt press by learning foreign advance technology and it is an efficient press machine and quite important, which can increase the juice capacity during the fruit juice or vegetable juice processing.

It is widely used for fruits and vegetables in squeezing apple, pear, pineapple and carrot etc. And the juice rate is more than 75%(depend on apple).

#### 碟式离心分离机 Disc Clarifier Separator

碟式离心分离机是专门用于两相和三相分离的专业分离设备。

两相分离机主要应用:

乳品净化、果汁(橙汁、苹果汁等)、蔬菜汁、茶饮料、啤酒等行业。

三相分离机主要应用:

果汁澄清、混浊果汁和其他饮料、乳品加工、茶饮料、咖啡、啤酒等液体 澄清。

Disc centrifugal separator is a professional separating equipment specially used for separating two and three phases.

The main applications of two-phase separators are:

Dairy purification, fruit juice (orange juice, apple juice, etc.), vegetable juice, tea beverage, beer and other industries.

The main applications of three-phase separators are:

Fruit juice clarification, cloudy juice and other beverages, dairy processing, tea drinks, coffee, beer and other liquid clarification.

#### 卧式螺旋离心分离机 Decantor Centrifugal Separator

卧式螺旋离心机是一种螺旋卸料沉降离心机,通过螺旋推料器上的叶片推 至转鼓小端排渣口排出,液相则通过转鼓大端的溢流孔溢出。如此不断循 环,以达到连续分离的目的。

设备应用:大豆、麦类蛋白的脱水;酒糟的脱水;果汁的净化与果肉纤维的脱水;动、植物油的分离与净化;淀粉的分离与脱水。

continuous separation of a liquid and a sedimenting solid. The clarified liquid flows to the cylindrical end of the bowl where it exits over weir plates and oversized discharge ports. The easily adjustable weir plates allow for the precise adjustment of the pond depth inside the bowl. Overflow is collected in the centrate chamber and discharged by gravity. The settled solids are conveyed to the conical end of the bowl where they are discharged through ports via centrifugal force.

Modular design guarantees optimum adaptation to an extremely wide range of separating tasks. Adjustable impeller for optimum separation results, even when the product properties in the feed change. Independent adjustment of the bowl and differential speed High operating reliability. All parts that come into contact with the product are made from high-quality stainless steel (rust and acid-resistant). Wear protection guarantees minimum maintenance work with very abrasive. products. All wear protection parts can be replaced (except heat applied hard facings).

#### Technology changes manufacturing, Innovation leads the future!

## 各类罐体 Serie of Tanks

我司提供不锈钢缓冲罐、储存罐、酶解罐、搅拌罐、高速剪切罐、双层保 温罐、三层加热罐、发酵罐、乳化罐等。罐体根据工艺要求可分为:单层 罐、双层罐和三层罐。罐体可配置搅拌功能。

Stainless steel buffer tank, Storage tank, Enzymolysis tank, blending tank, high speed shearing tank, double layer insulation tank, three layer heating tank, fermentation tank, emulsification tank, etc. The tanks are classified into tanks of 50-50000L. It can be made to be single layer, double layer, three layer depend on the requirment in process. The tank can be equipped with the function of agitation. The agitation with the sealing pairing of rotor and stator.

#### 暂存罐和酶解罐 Stainless Steel Storage Tank & Enzymolysis Tank & Buffer Tank

储罐采用优质316L或304不锈钢制造,具有良好的保温性能。根据储罐罐体容量,储罐分为50-50000L的储罐。储罐广泛应用于牛奶、饮料、食品等行业,根据工艺要求可分为单层、双层、三层。罐体可配置搅拌功能。温度可液位自动控制调节。

The storage tank is made of SUS316L or SUS304 stainless steel and has good heat preservation performance. According to storage capacity, the storage tanks are classified into tanks of 50-50000L. The storage tank is widely used in milk, drink and food etc. It can be made to be single layer, double layer, three layer depend on the requirment in process. The tank can be equipped with the function of agitation. The agitation with the sealing pairing of rotor and stator.

#### 调配罐 Blending Tank

调配罐采用优质316L或304不锈钢材质制造,可以设计为具有良好的保温性能的罐体,也可以设计为单层罐体。调配罐广泛应用于果汁、牛奶、饮料、食品等行业,根据工艺要求可分为单层、双层、三层。该设备配备搅拌功能。

The Blending tank is made of 316L or SUS304 stainless steel and has good heat preservation performance. The blending tank is widely used in juice, milk, drink and food etc. It can be made to be single layer, double layer, three layer depend on the requirment in process. The tank equip with the function of agitation.

#### 高剪切溶糖系统 High Shear Emulsification Dissolving Tank

高剪切溶糖乳化罐是目前最先进的混合搅拌之一,广泛应用于牛奶、饮料、食品等行业。罐体配备高剪切乳化头,转速达到2800rpm,提供良好的高剪切乳化效果。可以依据实际生产需求设计为单层,双层和三层夹套结构。

High sheer dissolving and emulsification tank is one of the most advanced blenders and widely used in milk, drink and food etc. This tank has its own agitation with the sealing pairing of rotor and stator to ensure that the materials can be cut in high speed 2800 rpm.. It can be made to be single layer, double layers, three layers.















#### 超滤 Ultrafiltration

设备应用:主要苹果汁、梨汁、草莓汁、桃汁、桑葚汁、胡萝卜汁、番茄汁、波箩汁、葡萄汁等澄清;蔬菜抽提汁澄清、浓缩,葡萄酒澄清,葡萄酒糟回收,茶饮料浓缩等;啤酒/果酒/黄酒/葡萄酒/白酒等脱醇浓缩。

Using ultrafiltration to Clarify juice can reduce the maual labor and various reagents and shorten the production cycle period, reduce the cost.

Tubular Ultrafiltration membrane clarification has become the standard in the industry. It filters the pulp combined with soluble macromolecular organic matter.

No need to add any additives and the process of filtering operation is simple.

#### 圆盘硅藻土 Diatomite Filter

广泛用于各种清汁、清酒、饮料、果酒、饮料、食醋、食品添加剂、医药 化工液体制品的各种液体澄清过滤。

硅藻土过滤器采用硅藻土作为过滤介质,通过硅藻土过滤器,可使直径1~3 um的细菌与固体颗粒100%截留分离。

Widely used in kinds of clear juice, wine, drink, fruit wine, beverage, vinegar, food additives, and medicine and chemical industry liquid products of the various kinds of liquid clarify filtering.

The Diatomite filter adopts the filter medium of diatomite as fitration medium, through the diatomite filter can make the separation of diameter  $1\sim3$  um of the bacteria and solid particles interception by 100%.

#### 真空脱气机 Vacuum Deaerator And Degasser

应用于:1.提高牛奶、果汁和原浆的品质和质量。2.主要用于在真空条件下对果汁、原浆和饮料进行脱气,防止产品被氧化,从而延长产品的贮存期,保证良好风味。3.真空除氧除气器是果汁、原浆、牛奶生产线的必备设备之一。

1.Improve quality of milk, juice and pulp.

2.It is mainly used for degassing the juice under vacuum condition and to prevent the juice from being oxidized and then to extend the storing period of the juice or beverage.

3.The vacuum deaerator and degasser is one of the necessary equipment in fruit juice and fruit pulp and milk production line.

## 高压均质机 High Pressure Homogenizer

设备应用:高压均质机广泛应用于许多领域,如:工业生产、科研和技术 开发,如:食品工业:果汁、原浆、乳品、酸奶、豆浆、饮料、各种香料及食 品添加剂;生物工程技术:细胞破壁、酶工程、活性成分提取等。

High pressure homogenizer is widely used in the production, scientific research and technical development of a lot of areas, such as: Food industry: juice, pulp, milk, yogurt, soy milk, natural drinks, various spices and food additives.Bio-engineering technology: cell disruption, enzyme engineering system, the active ingredient extraction.

## 降膜浓缩蒸发器 Multi-Effect Falling Film Evaporation



- 1). 主体结构为优质304不锈钢或者316L不锈钢制作;
- 2).设计结合意大利技术,生产标准符合欧洲设备加工标准:
- 3).设备使用稳定性高、效率高;
- 4).换热系数高;
- 5).完全自动化控制;
- 6).节能设计,减少能源消耗;
- 7).独立西门子控制系统。



降膜蒸发器是一种新型、高效的蒸发系统。

降膜蒸发是蒸发所有低粘稠度、热敏性物料的理想之选。可以 用于浓缩清汁、浊汁、果蔬原浆等,同时也可用于制药、化工 等行业领域。由于热蒸汽再压缩技术的应用,它能够提供高效 的蒸汽使用效率并且温和的热处理物料,也由于蒸发时间短,

The falling film evaporator is a kind of new high-efficiency evaporator that carries out falling film evaporation under vacuum.

Falling film evaporation is ideal for evaporating all low viscosity heat-sensitive products. It is capable of concentrating pulp, cloudy juices, fruit and vegetable clear juices, but also a number of products for the pharmaceutical and chemical industry. Thanks to Thermal Vapour Recompression technology, it is capable of providing a highly efficient evaporating action along with a mild heat treatment which, also owing to the short residence time, ensures the best quality of the products.

特别适用于粘稠度低、热敏性物料的浓缩蒸发,如:果汁(清汁或混浊)、椰子水、豆浆、牛奶、原浆等。

It is especially suitable for evaporation, concentration of heat sensitive materials, like:Juice (clear or cloudy), coconut water, soya milk, milk and pulp etc.

- 1.Independent Siemens control system.
- 2.Main structure is SUS304 stainless steel or SUS316L stainless steel.
- 3.Combined Italian technology and confirm to Euro-standard.
- 4. Running stably, high efficiency.
- 5.Low energy consumption, design for saving steam.
- 6.High heat transfer coefficient.
- 7. High evaporation intensity.
- 8. Short flow passing time and high operating elasticity.



## 强制循环浓缩蒸发器 Multi-Effect Forced Circulation Evaporation





易研机械专业生产制造系列连续真空浓缩蒸发系统。可以根据不同的产品和客户的实际要求设计和制造蒸发器。

强制外循环浓缩蒸发器主要适用于粘稠物料或含有悬浮物的流动性差的物料浓缩(如果果蔬原浆等)。

蒸发器主体结构为优质304不锈钢,由蒸发室、分离室、冷凝泵、泵(产品循环泵、进料及出口泵、真空泵、水泵)、PLC自动控制系统、人机界面、阀门、仪表仪表、操作平台等组成。

根据不同的蒸发处理能力,蒸发器有如下分类单效蒸发器、双效蒸发器、三效蒸发器和多效蒸发器。

上海易研机械可根据客户要求生产:30升/小时至35000L/小时蒸发量的浓缩蒸发设备。

EasyReal Company manufactured the professional continuous Vacuum Evaporation system; we also design and manufacture the evaporators depend on different products and customers' requirements.

Viscous liquids or products with suspended solids like fruit and vegetable pulp is pumped through the vertical or horizontal heating elements and circulates in the system under pressure.

The evaporator main structure is SUS 304 or SUS316l stainless steel, which is composed of tubular heater, vacuum evaporating chamber, Condensate pump, pumps (product recycle pump, feed & outlet pump, vacuum pump, water pump), PLC auto control system, man-machine interface, valves, Instrumentation and gauges, operating platform etc.

According to different capacity, we have single-effect evaporator, double-effect evaporator, triple-effect evaporator and multi-effect evaporator for choice.

We can manufacture the evaporating capacity from 500L to 35000L/hour according to customers' requirements.

- 1). 主体结构为优质304不锈钢或者316L不锈钢制作;
- 2).设计结合意大利技术, 生产标准符合欧洲设备加工标准;
- 3).设备使用稳定性高、效率高;
- 4).换热系数高;
- 5).完全自动化控制;
- 6).节能设计,减少能源消耗;
- 7).独立西门子控制系统;
- 8).多型号设备供选择,满足市场多样性需求。
- 1.Independent Siemens control system.
- 2.Main structure is SUS304 stainless steel or SUS316L stainless steel.
- 3.Combined Italian technology and confirm to Euro-standard.
- 4. Running stably, high efficiency.
- 5.Low energy consumption, design for saving steam.
- 6. High heat transfer coefficient.
- 7. High evaporation intensity.
- 8.Short flow passing time and high operating elasticity.



## 板式浓缩蒸发器 Multi-Effect Plate Concentrator Evaporation





板式蒸发器是一种节能,高效的蒸发系统。可以根据不同的产品和客户的实际要求设计和制造蒸发器。

主要应用:适用于果汁、乳品、酱油等流动性较好的产品浓缩。

主体结构为优质304不锈钢,由蒸发室,平衡罐,板式预热系统,板式冷凝器、出料泵、冷凝水泵、真空泵、热泵及控制系统等组成。

该系统中除了完成蒸发浓缩任务以外,还为客户提供了更节能的蒸发系统解决方案,通过使用热泵回收利用二次蒸汽,提高蒸汽的利用率。利用系统所产生冷凝水的余热预热初始的物料,有效降低了能耗,为客户大大降低了设备的使用成本。

Plate type concentrating evaporator is an energy-saving and efficient evaporation system. It can be designed and manufactured according to different products' characters and customers' requirements.

Main application: It is suitable for the evaporation, concentration of materials with good fluidity, like: fruit juice, dairy products and soy sauce, etc.

Its main structure is high-quality SUS304 or SUS316L, which is composed of evaporation chamber, balance tank, plate preheating system, plate condenser, discharge pump, condensate water pump, vacuum pump, heat pump and independent control system.

The plate evaporator can not only complete the concentration task efficiently, but also achieve the purpose of energy saving. Adopt heat pump to recycle secondary steam for improving the utilization of steam. The waste heat of the condensed water generated by the system is used to preheat the initial materials, which effectively reduces the energy consumption and greatly reduces the using cost of equipment for customers.

- 1). 主体结构为优质304不锈钢或者316L不锈钢制作;
- 2).设计结合意大利技术, 生产标准符合欧洲设备加工标准;
- 3).设备使用稳定性高、效率高;
- 4).换热系数高;
- 5).完全自动化控制;
- 6).节能设计,减少能源消耗;
- 7).独立西门子控制系统;
- 8).多型号设备供选择,满足市场多样性需求。
- 1.Independent Siemens control system.
- 2.Main structure is SUS304 stainless steel or SUS316L stainless steel.
- 3. Combined Italian technology and confirm to Euro-standard.
- 4. Running stably, high efficiency.
- 5.Low energy consumption, design for saving steam.
- 6. High heat transfer coefficient.
- 7. High evaporation intensity.
- 8. Short flow passing time and high operating elasticity.

## 列管式杀菌机 Tubular Type Sterilizer





待杀菌物料通过换热器加热到85 ~ 150℃(温度可调)的温度。在这个温度下,保持一定的时间(几秒钟至几十秒)以达到商业无菌水平。然后在无菌环境下,装入无菌袋中;或者采取热灌装的形式灌装至容器中。整个杀菌过程在高温下瞬间完成,彻底杀死有害微生物。产品的原始风味和营养物质得到了极大的保留。严格的加工工艺有效防止了食品的二次污染,大大延长了产品的保质期。

The Raw material under the condition of continuous flow through the heat exchanger heating to 85 ~ 150 °C (The temperature is adjustable). And at this temperature, keep a certain amount of time (several seconds) in order to achieve commercial asepsis level. And then in the condition of sterile environment, it is filled in aseptic packaging container. The whole sterilization process is completed in a moment under high temperature, which will completely kill the microorganisms and spores which can cause corruption and deterioration. And as a result, the original flavor and nutrition of the food were greatly preserved. This strict processing technology effectively prevents the secondary contamination of food and greatly extends the shelf life of products.

We can manufacture customize the sterilizer according to the process and the requirment from customer with capacity

易研机械整合意大利技术并且生产出符合欧洲设备标准的全自动列管式杀菌机广泛应用于果汁(浊汁和清汁)、原浆、饮料、牛奶等流动性较好的液体灭菌。

Easyreal Company has manufacturered the advanced automatic tubular sterilizer Combined Italian technology and conform to Euro-standard. This tubular sterilizer is widely used for the natural fruit juice, fruit pulp, drink, milk and other liquid products with relatively good fluidity.





## 四层套管式杀菌机 Tube-in-tube Type Sterilizer





待杀菌物料通过换热器加热到85 ~ 125℃(温度可调)的温度。在这个温度下,保持一定的时间(几秒钟至几十秒)以达到商业无菌水平。然后在无菌环境下,装入无菌袋中;或者采取热灌装的形式灌装至容器中。整个杀菌过程在高温下瞬间完成,彻底杀死有害微生物。产品的原始风味和营养物质得到了极大的保留。严格的加工工艺有效防止了食品的二次污染,大大延长了产品的保质期。

本公司可根据客户的要求, 定制生产各种规格的杀菌机, 生产能力为: 500L/H - 12000L/H。

The Raw material under the condition of continuous flow through the heat exchanger heating to  $85 \sim 125$  °C (The temperature is adjustable). And at this temperature, keep a certain amount of time (several seconds) in order to achieve commercial asepsis level. And then in the condition of sterile environment, it is filled in aseptic packaging container. The whole sterilization process is completed in a moment under high temperature, which will completely kill the microorganisms and spores which can cause corruption and deterioration. And as a result, the original flavor and nutrition of the food were greatly preserved. This strict processing technology effectively prevents the secondary contamination of food and greatly extends the shelf life of products.

We can manufacture customize the sterilizer according to the process and the requirment from customer with capacity

易研机械整合意大利技术并且生产出符合欧洲设备标准的全自动四层套管式杀菌机广泛应用于高粘度物料的灭菌,如膏状、果酱、泥状、浆状、浓缩果汁等。

Easyreal Company has manufacturered the advanced automatic Tube-in-tube sterilizer Combined Italian technology and conform to Euro-standard. This Tube-in-tube sterilizer is specially used in sterilization for high viscosity materials such as Paste, Jam, Puree, Pulp and concentrated juice, etc.





## 板式杀菌机 Plate Type Sterilizer





侍杀菌物料通过换热器加热到85 ~ 150℃(温度可调)的温度。在这个温度下,保持一定的时间(几秒钟至几十秒)以达到商业无菌水平。然后在无菌环境下,装入无菌袋中;或者采取热灌装的形式灌装至容器中。整个杀菌过程在高温下瞬间完成,彻底杀死有害微生物。产品的原始风味和营养物质得到了极大的保留。严格的加工工艺有效防止了食品的二次污染,大大延长了产品的保质期。

The Raw material under the condition of continuous flow through the heat exchanger heating to  $85 \sim 150$  °C (The temperature is adjustable). And at this temperature, keep a certain amount of time (several seconds) in order to achieve commercial asepsis level. And then in the condition of sterile environment, it is filled in aseptic packaging container. The whole sterilization process is completed in a moment under high temperature, which will completely kill the microorganisms and spores which can cause corruption and deterioration. And as a result, the original flavor and nutrition of the food were greatly preserved. This strict processing technology effectively prevents the secondary contamination of food and greatly extends the shelf life of products.

We can manufacture customize the sterilizer according to the process and the requirment from customer with capacity from 20L to 50000L/hour.

易研机械整合意大利技术并且生产出符合欧洲设备标准的全自动板式杀菌机广泛应用于果汁、茶饮料、牛奶等流动性较好的液体灭菌。

Easyreal Company has manufacturered the advanced automatic plate type sterilizer Combined Italian technology and conform to Euro-standard. This sterilizer is widely used for the natural fruit juice, tea drink, milk and other liquid products with relatively good fluidity.





## 无菌灌装系统 Aseptic Filling System

无菌灌装系统采用意大利技术制造,符合欧洲设计标准,对于高、低酸食品是一种高效、可靠的无菌包装设备。广泛应用于番茄酱、果酱、果汁、浓缩果汁、蔬菜汁、浓浆、原浆、浓缩汁、酱汁、汤和乳制品的无菌包装。果汁或原浆可常温保存一年以上,浓缩果汁或果肉可常温保存两年以上。

The aseptic Filling Systems combined Italian technology and conform to Euro-standard, is a highly effective and reliable aseptic method of bulk packaging for high and low-acid food products. It is widely used in aseptic packaging of tomato paste, jam, fruit juice, juice concentrate, vegetable juice, purees, pulp, concentrates, sauces, soups and dairy products. The natural fruit juice or pulp can be kept more than one year under constant temperature, the concentrated fruit juice or paste can be kept more than two years.

- 1.主体结构为优质304不锈钢制作;
- 2.整合意大利技术,符合欧洲设计标准;
- 3.配有流量计(质量流量计或者电磁流量计)或电称重系统(根据无菌袋的 材质和体积而定);
- 4.提供多种安全措施(位置控制、计量控制和温度控制),保证产品质量;
- 5.采用镜面焊接技术,确保焊接线整齐平整;
- 6.独立的西门子控制系统。PLC控制和人机界面操作(英文/中文);
- 7.活动阀门、灌装头等运动部件均有蒸汽挡板保护;
- 8.使用蒸汽作为保护屏障,使灌装室始终保持无菌状态;
- 9.与杀菌机配套使用具有CIP清洗和SIP在线杀菌功能;
- 10.可根据无菌袋的体积和大小,一键切换调整灌装容积。更换零件简单
- ,调整方便;
- 1). Main structure is highi-quality SUS 304 stainless steel.
- 2). Combined Italian technology and conform to Euro-standard.
- 3). Equipped with flow meter or electric weighing sensor, depend on the material and volume of aseptic bags .
- 4). Provide several security measures (position controlling, computation controlling, temperature controlling) to prevent the machine from destroying and guarantee the product 's quality.
- 5). Mirror welding tech to ensure tidy and smooth welding line.
- 6). Independent Siemens control system. PLC control and human machine interface (English/Chinese) and manual button control as alternative.
- 7). Products' valves, filler head and other moving parts have steam barrier for protection.
- 8). Keep the filling chamber sterilized all the time using steam protection.
- 9). CIP and automatic SIP available together with sterilizer.
- 10). Easily adjustable with simple change parts according to the aseptic bag volume and size.
- 11). When shifting the aseptic bag or some thing wrong with the filler, the product will be auto backtracked into the buffer tank before the UHT sterilizer.







## 非无菌灌装机 Non-Aseptic Filler





本机是一种模块化、半自动的灌装机,适用于将各种液体灌装在预先制好的阻隔袋中。最终多做成盒中袋包装形式。 非无菌灌装机是一种小型、高效的灌装设备,专为饮用水、葡萄酒、食用油、糖浆、饮料、蛋液等灌装而特殊设计。 灌装机适用于2~25升的小中型阻隔袋。

Modularly-built, semi-automatic machine intended for filling pre-made spouted pouches with various kinds of fluids. Non-aseptic filling machine is a small and efficient filling equipment specially designed for filling drinking water, wine, cooking oil, syrup, post mix beverage package, and egg, etc.

The filler is ideal for medium and large scale bags from 2 to 25 liters.

#### 设备应用:

酒类灌装(黄酒、白酒、米酒等);饮用水灌装;糖浆灌装;乳制品(奶油、牛奶、炼乳)灌装;果汁产品(果汁、纯果汁、果酱和浓缩物)灌装;液态蛋制品(全蛋、蛋清、蛋黄)灌装;糖浆灌装;酱汁(蛋黄酱、番茄酱);肥料灌装等等。

#### Applications:

Drinking water.Tea concentrates. Syrup.Dairy products (cream, milk, condensedmilk).Fruit products (Juices, pureses, jams, and concentrates).Liquid egg products (Whole egg, egg white and egg yolk).Post mix and syrups. Sauces (mayonnaise, ketchup).Water Bakery products.Wine /coking oil.Pharmacy Fertilizer.

- 1.主要结构为优质304不锈钢;
- 2.整合意大利技术,符合欧洲设计标准;
- 3.紧扣横河电磁流量计及称重2种计量方式供选择;
- 4.独立的西门子控制系统和人机界面触摸屏操作;
- 5.自动完成生产过程,自动化程度高,操作方便;
- 6.系统配备CIP清洗功能。
- 7.一台机器适用不同规格的袋型,只需要在触摸屏上一键修改灌装参数即可
- 1. Main structure is highi-quality SUS 304 stainless steel.
- 2. Combined Italian technology and conform to Euro-standard
- 3. Japan YOKOGAWA Electromagnetic flowmeter and modes of weighting for choice.
- 4.Independent Siemens control and man-machine interface monitoring operating.
- 5.Completion of production process in automatic mode with the FEATURES: of high automation extent& convenience for operation
- 6. CIP cleaning function.

## RO水系统 RO Deionized Water Treatment System



RO水处理系统也称反渗透水处理系统,其原理是原水在高压力的作用下通过反渗透膜,水中的溶剂由低浓度向高浓度扩散从而达到分离、提纯、浓缩的目的,由于它于自然界的渗透方向相反,因而称它为反渗透。反渗透水处理系统可以去除水中的细菌、病毒、胶体、有机物和98%以上的溶解性盐类。该方法具有运行成本低,操作简单,自动化程度高,出水水质稳定等特点。

This system occupy little space, easy to operate, wide application range. When used for disposing industrial water, the reverse osmosis device does not consume large amounts of acids and alkalis, and there is no secondary. In addition, its operation cost also low.

#### 设备应用:

RO水纯水发生系统广泛应用于饮料、食品、化妆品、制药、化工等行业的加工流水线,尤其是食品行业的加工流水线。

#### Application:

The RO Deionized Water Treatment System is widely used in industry processing lines, like beverage, food, cosmetics, pharmacy, chemical industry etc. Especially, it is necessary for food industry processing line.





## 控制系统 Contral System

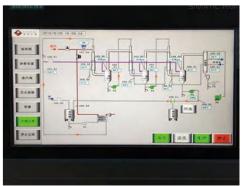


自动控制系统是在原有手动操作设备的基础上实施的,自动控制系统不仅可以降低工人劳动强度,大大提高生产效率,大大降低生产线或者设备出错的概率。

Automatic control system is completed on the basis of the original manual operation equipment, automatic control system can not only reduce the labor intensity of labor, but also can greatly provide production efficiency. Reduce the probability of human error.

- 1.自动化程度高,最大化减少操作人员的数量;
- 2.所有电器元件均为国际一流顶级品牌,确保设备运行的稳定性和可靠性;
- 3.在生产过程中,采用人机界面操作。设备运行和状态完成并显示在触摸屏上;
- 4.设备采用联动控制,对可能发生的突发事件自动、智能化响应。
- 1. High degree of automation, minimize the number of operators on the production line.
- 2.All electrical components are international first-class top brands, to ensure the stability and reliability of equipment operation;
- 3.In the process of production, man-machine interface operation is adopted. The operation and state of the equipment are completed and displayed on the touch screen.
- 4.The equipment adopts linkage control to automatically and intelligently respond to possible emergencies.





## CIP清洗系统 CIP Cleaning System



自动CIP清洗系统适用于乳品厂、啤酒厂、饮料及一般食品厂的物料管道设备的就地清洗。主要材质为优质304或者316L不锈钢。本系统由碱罐、酸罐、水罐、管道和气动阀门、电导率仪(可选)、出料泵、换热系统及控制系统等构成,其利用离心泵输送清洗液在物料管道和设备内进行强制循环,达到清洗目的。因此,不需要对管道设备解体,可以提高设备利用率,减轻工人劳动强度。

The CIP cleaning system is necessary in juice and beverage and milk processing line. installed on a frame and supporter which is easy for transportation especially exporting; The operating principle of the full auto CIP cleaning system means that the tank body, pipelines, pumps and all valves and also the whole processing line are cleaned on line no need to disconnect the pipes or the equipments, all cleanings are done at the closed circuit.

- 1. 独立的西门子控制系统和采用人机界面监控操作;
- 2. CIP清洗液储罐(包括酸液储罐、碱液储罐、热水储罐、清水储罐); 3.浓酸罐和浓碱罐;
- 4. CIP液出口离心泵;
- 5. 美国ARO英格索兰气动隔膜泵;
- 6. 板式换热器(板式或管式结构);
- 7. 英国斯派莎克Spirax Sarco蒸汽阀门;
- 8. 德国易福门IFM流量开关;
- 9. 德国E+H电导率仪(可选)。

1.Independent Siemens control system and man-machine interface monitoring operating.

- 2.CIP cleaning liquid storage tanks (include acid tank, alkali tank, hot water tank, clear water tank);
- 3.Acid tank and alkali tank.
- 4.CIP forward pump and return self-priming pump.
- 5.USA ARO iaphragm pumps for acid/alkali concentrate.
- 6.Heat exchanger (plate or tubular type).
- 7.UK Spirax Sarco steam valves.
- 8.Germany IFM Flow Switch.
- 9.Germany E+H Hygienic measuring system for conductivity and concentration (optional).





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Note: Ranking in no particular order





