

“Technology changes manufacturing,
Innovation leads the future!
科技改变制造, 创新引领未来!”



中小试研发设备
Lab Equipment & Pilot Plant



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公司介绍 ABOUT US

上海易研机械设备有限公司, 是一家专注于流体食品饮料及生物工程整线交钥匙工程的专业制造商。我们提供从研发到生产的全方位服务, 拥有多项知识产权和发明专利, 先后通过ISO9001、欧盟CE认证, 并获得上海市高新技术企业认证。

2011年, 上海易研实验设备有限公司成立, 依托于上海市农业科学院及上海交通大学的技术攻关和新产品开发能力, 我们提供饮料研发中小试设备及技术服务, 包括UHT超高温杀菌、DSI蒸汽直接注入、CIP清洗系统、真空混合、在线均质等设备及技术服务。

通过不断创新, 我们在果汁、果酱、植物基饮料、奶酪等加工工艺及设备领域实现技术突破, 赢得了国内外用户的广泛好评。我们的产品不仅在国内市场表现突出, 还远销欧洲、非洲、东南亚和南美等地区, 树立了良好的国际口碑。

Shanghai EasyReal Machinery Co., Ltd. is a professional manufacturer specializing in turnkey solutions for fluid food and beverage processing as well as biotechnology engineering. We provide a full range of services from research and development to production, holding multiple intellectual properties and invention patents. We have successfully passed ISO9001, EU CE certification, and have been recognized as a High-tech Enterprise in Shanghai.

In 2011, Shanghai EasyReal Machinery Co., Ltd. was established, leveraging the technical expertise and new product development capabilities of the Shanghai Academy of Agricultural Sciences and Shanghai Jiao Tong University to provide small-scale experimental equipment and technical services for beverage R&D, including advanced equipment such as UHT ultra-high-temperature sterilization, DSI direct steam injection, CIP cleaning systems, vacuum mixing, and online homogenization.

Through continuous innovation, we have achieved technological breakthroughs in processing technologies and equipment for juice, jams, plant-based beverages, cheese, and other industries, earning widespread praise from both domestic and international users. Our products not only perform exceptionally well in the domestic market but are also exported to Europe, Africa, Southeast Asia, South America, and other regions, establishing a solid international reputation.



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实验型UHT/HTST中试线 Lab UHT/HTST Pilot Plant

企业资质与认证 Qualifications and Certifications



合作供应商 Cooperative Suppliers



公司专利 Company Patents



实验型UHT/HTST中试线

EasyReal 实验型UHT/HTST中试线是一款紧凑型模块化系统，专为食品饮料行业的研发设计，适用于模拟工业化生产过程，额定流量为20L/h与100L/h（可选配），支持小规模生产与试验测试。该系统完美支持样品准备、在线均质、热处理杀菌与无菌灌装，确保快速验证产品配方，优化产品工艺等。

设备配备人机界面（HMI）与可编程控制器（PLC），支持实时数据监测。精准控制温度、流量等关键参数。自带CIP清洗与SIP灭菌功能，确保符合卫生要求。模块化设计使得设备配置灵活，能够根据不同需求进行快速重组，提供高效的研发与小规模生产环境。

Lab UHT/HTST Pilot Plant

The EasyReal Lab UHT/HTST Pilot Plant is a compact, modular system specifically designed for R&D in the food and beverage industry. It simulates industrial-scale processes with rated flow capacities of 20 L/h and 100 L/h (optional), making it ideal for small-scale production and pilot testing. This system fully supports sample preparation, in-line homogenization, thermal sterilization, and aseptic filling, enabling rapid validation of product formulations and optimization of processing methods.

The equipment is equipped with a Human-Machine Interface (HMI) and Programmable Logic Controller (PLC), enabling real-time data monitoring. It allows precise control of key parameters such as temperature and flow rate. Integrated CIP cleaning and SIP sterilization functions ensure hygienic compliance. The modular design allows for flexible configuration and rapid reassembly to meet various requirements, creating an efficient environment for R&D and small-scale production.



特点

- 标准额定产能为20L/h与100L/h，最小投料量3L.
- 结构灵活紧凑，微型研发线仅占地约5平方米
- 自带SIP/CIP
- PLC,HMI控制

最小处理量
最小批量为3升（可调）

工艺流程速率
5-40L/h, 60-120L/h（可选配）

杀菌温度
最高152°C

最高压力
10.0bar(标准机型，可定制更高压力)

自动清洗与消毒
CIP/SIP

数据与控制
数据记录与触控面板操作界面

粘度处理能力
可处理最高达到6000cps的高粘度液体

加热管内直径
8mm or 10mm

接触材质
食品级 SS316L 不锈钢

所需公用设施
可靠的水、电

DSI蒸汽直接注入(可选配)
最大粒度（软颗粒）：0.5mm
闪蒸罐最小压力：-0.9 bar
闪蒸罐出口泵压力：10 bar
闪蒸罐最大粘度：3000cPs

在线均质 (可选配)
可调流量：15~30L/H
均质压力：600 bar

无菌灌装(可选配)
无菌等级 ISO Class 5 (Class 100)+

Features

- Standard rated capacity: 20 L/h, 100L/h, with a minimum batch volume of 3 liters.
- Flexible and compact structure, with the mini pilot line occupying only about 5 square meters.
- Equipped with built-in SIP/CIP systems.
- Controlled via PLC and HMI touchscreen interface.

Minimum Batch Volume
Minimum batch: 3L. (adjustable)

Process Flow Rate
5-40L/H , 60-120L/h(optional)

Sterilization Temperature
Up to 152°C

Maximum Pressure
10.0 bar (standard model, higher pressure customizable)

Automatic Cleaning and Disinfection
CIP/SIP

Data and Control
Data recording and touchscreen interface

Particle Flux
Maximum soft particle size: 2mm

Viscosity Handling Capacity
Can handle liquids with viscosities up to 6000 cps

Heating Tube Inner Diameter
8mm or 10mm

Product-contact Material
490kg [1080lbs]

Required Utilities
Reliable supply of water and electricity

Required Utilities
Reliable water, electricity

Optional: Direct Steam Injection (DSI)
Maximum Particle Size (soft particles): 0.5 mm
Minimum Flash Tank Pressure: -0.9 bar
Flash Tank Outlet Pump Pressure: 10 bar
Maximum Viscosity: 3000 cPs

Optional: In-line Homogenization
Adjustable Flow Rate: 15~30L/H
Homogenization Pressure: Up to 600 bar

Optional: Aseptic Filling
Aseptic Class: ISO Class 5 (Class 100)+

实验型UHT/HTST超高温杀菌机

EasyReal 实验型UHT/HTST超高温杀菌机是一款高效连续式热处理设备，专为液态食品与饮料的超高温灭菌而设计。系统可在数秒内将产品快速加热至135~152℃，并迅速冷却，最大限度保留风味与营养，同时延长保质期。

设备配备PID精密控温系统，支持管式或板式换热结构，并可根据需求设置持温时间。系统兼容间接加热与直接蒸汽注入（DSI）模式，支持与在线均质机、无菌灌装系统联动使用。

Lab UHT/HTST Sterilizer

The EasyReal Lab UHT/HTST Sterilizer is a compact and efficient ultra-high temperature processing unit designed for continuous sterilization of liquid food and beverage products. It rapidly heats products to 135–152°C within seconds and immediately cools them to preserve flavor, nutrients, and shelf stability—ideal for milk, juice, tea, plant-based drinks, and functional beverages.

Equipped with PID temperature control, tubular or plate-type heat exchangers, and customizable holding times, the system ensures precise and uniform sterilization. It supports both indirect and direct (optional DSI) heating modes and can be integrated with inline homogenizers or aseptic filling systems.



实验型直接蒸汽注入式杀菌机

EasyReal 实验型直接蒸汽注入式杀菌机是一款高性能热处理设备，采用直接蒸汽注入技术，对液体食品进行快速精准的超高温灭菌处理，有效保障加热效率、风味保留与食品安全合规性。

核心技术特点包括模块化结构便于灵活集成、全触控界面实现实时参数监控、加热温度高达152℃、内置自动CIP/SIP清洗功能，确保生产过程高效卫生。设备支持最高3000 cps的液体粘度及最大0.5mm颗粒的处理能力。

额定处理能力

20 L/h (可根据 UHT 系统容量调整为 10–40 L/h)

杀菌温度

最高 152°C

杀菌时间

3 秒、5 秒，可根据实际需求定制

最高工作压力

10 Bar

真空度

-0.9 Bar

阀门配置

盖米食品级隔膜阀

泵配置

德国耐驰 / 萨博特 / 莫诺螺杆泵

压力传感器

德国 IFM 易福门压力传感器

温度传感器

德国 IFM 易福门温度传感器

核心系统模块

蒸汽喷射系统

闪蒸罐系统

蒸汽过滤系统

真空系统

电源参数

1.5kW, 380V, 三相电源

Lab Direct-Steam-Injection Sterilizer

The EasyReal Lab Direct-Steam-Injection (DSI) Sterilizer is a high-performance thermal processing unit designed for rapid and precise sterilization of liquid food products using direct steam injection. It ensures efficient heating, flavor preservation, and compliance with food safety standards.

Key technical features include a modular structure for flexible integration, a full touchscreen interface for real-time parameter monitoring, heating temperatures up to 152°C, a built-in automatic CIP/SIP cleaning functions to ensure efficient and hygienic processing. The system supports liquid viscosities up to 3000 cps and particle sizes up to 0.5 mm.

Rated Capacity	20 L/H (10–40 L/H adjustable)
Sterilization Temperature	Up to 152°C
Sterilization Time	3–5 sec (customizable)
Maximum Working Pressure	10 bar
Vacuum Level	-0.9 bar
Valves	GEMÜ diaphragm valves
Pumps	NETZSCH / Sabot / Mono pump
Pressure Sensor	IFM pressure sensor
Temperature Sensor	IFM temperature sensor
Core Systems	Injection, flash, filtration, vacuum
Power Supply	1.5 kW, 380V, 3-phase



实验型在线均质机

实验型在线均质机是一款专为液态产品高效乳化、分散与均质处理而设计的连续式设备。通过高压将物料强制通过均质阀，实现颗粒细化、质地均匀、乳液稳定，广泛适用于乳制品、植物基饮料、调味品及功能性饮品等产品的研发与小规模生产。

设备结构紧凑，支持与UHT杀菌、巴氏杀菌或灌装系统进行上下游集成。具备压力可调、流速可控、适配不同温度工艺条件等特点，灵活满足试验与产线需求。接液部件采用食品级SS316L不锈钢，保障卫生与使用寿命。

压力范围 0 - 600 bar (可调)	均质级数 2级均质
最小处理体积 约 0.5 升	清洗/消毒方式 支持 CIP / SIP
进料粒径控制能力 ≤500 μm	电源参数 约 1.5 kW (视配置而定)
控制方式 PLC 触控操作，流量与压力可调	设备尺寸 根据型号定制，占地约 0.3-1 m²

Inline Lab Homogenizer

The Inline Lab Homogenizer is engineered for high-efficiency dispersion, emulsification, and particle size reduction of liquid products in continuous processing. It applies high pressure to force product through a homogenizing valve, ensuring uniform texture, stable emulsions, and consistent viscosity. Ideal for dairy products, plant-based beverages, condiments, and functional drinks.

This compact and modular system supports upstream or downstream integration with UHT, pasteurization, or filling lines. With adjustable pressure, flow rate, and temperature compatibility, it meets the requirements of both R&D and small-batch production. Built with SS316L stainless steel, the equipment ensures hygiene, durability, and compliance with food-grade standards.



Pressure Range	0-600 bar
Minimum Batch Volume	~3 L
Max. Feed Particle Size	≤500 μm
Particle Size Control	PLC control
Number of plungers	2-stage
Contact Material	316L stainless steel
Cleaning Method	CIP/SIP
Power Supply	Approx. 1.5 kW
Equipment Dimensions	Approx. 0.3-1 m²

无菌填充平台

EasyReal 无菌灌装平台是一款为食品研发、小试生产和中试验证量身打造的小型无菌灌装设备，专为果汁、乳制品、植物饮料等对卫生要求极高的液体产品设计，确保灌装过程的无菌性、精准性和灵活性。

设备配备ISO 5级（Class 100）垂直层流洁净系统，内置紫外线与臭氧双重杀菌装置，结合脚踏式气动三通阀，实现操作无接触、灌装更精准。支持SIP/CIP自动清洗消毒，并可搭配预消毒容器进行样品灌装，同时可选配氮气/二氧化碳冲洗功能，最大限度减少污染风险。

无菌等级 ISO Class 5 (Class 100)+	操作方法 脚踏电磁阀控制
清洗/消毒方式 支持 CIP / SIP	设备尺寸 根据型号定制，占地约 1-3 m²

Lab Aseptic Filling Cabinet

The EasyReal Lab Aseptic Filling Cabinet is a precision-engineered solution for small-scale aseptic filling, designed specifically for research and development, pilot trials, and limited production runs. It ensures high-level sterility and filling accuracy, making it ideal for sensitive liquid products such as juices, dairy-based drinks, and plant-based beverages.

Equipped with an ISO Class 5 (Class 100) vertical laminar airflow chamber, integrated UV and ozone sterilization, and foot-pedal-controlled pneumatic valves, the system creates a sterile environment that simulates industrial aseptic packaging. The unit supports SIP/CIP automatic cleaning and sterilization, and can be paired with pre-sterilized containers for sample filling. Optional nitrogen/CO2 flushing functions are available to minimize contamination risks.



Sterility Level	ISO Class 5 (Class 100)+
Operation Method	Foot-operated solenoid valve control
Cleaning/Sterilization Method	Supports CIP / SIP
Equipment Dimensions	1-3 m² (Customized)

中试型多效降膜浓缩蒸发器

EasyReal 中试型多效降膜浓缩蒸发器专为液态食品的温和浓缩处理设计，采用降膜与多效蒸发原理，实现高效能量利用并最大限度减少热损伤。适用于果汁、乳品、植物提取液、浓缩液及热敏性原料的研发与小规模生产。

设备采用模块化结构，可根据需求配置不同效数，具备PLC自动控制系统，精确调控温度与真空度，操作稳定可靠。薄膜状物料分布在换热管内，实现快速蒸发与短停留时间，有效保留产品风味、色泽与营养成分。支持溶剂回收及与上下游设备联动使用。

处理能力 20-500 L/H (可定制)	工作压力范围 常压或真空 (-0.16 ~ -0.92 Bar)
蒸发方式 连续式降膜蒸发	清洗系统 集成 CIP 自动清洗系统
蒸发段数 1-3 效 (可定制)	控制方式 PLC 触控屏，实时温度与压力监控
进料浓度范围 2-30 °Brix	接触材质 食品级 SS316L 不锈钢
处理粘度范围 ≤ 2000 cps	电源功率 约 3.5 - 15 kW (视配置而定)
蒸发温度 45-95°C (根据物料而定)	设备尺寸 按配置定制，占地约 2-5 平方米

Pilot-Scale Multi-Effect Falling-Film Evaporation

EasyReal Pilot-Scale Multi-Effect Falling-Film Evaporator is designed for efficient concentration of liquid food products under gentle thermal conditions. Utilizing falling film and multi-effect evaporation principles, it minimizes thermal damage while significantly improving energy efficiency. The system is ideal for processing juices, milk, plant-based extracts, concentrates, and heat-sensitive ingredients in R&D or small-scale production settings.

It features a modular design with customizable evaporation stages, PLC control, precise temperature and vacuum regulation, and automatic cleaning. The thin film ensures rapid evaporation and short residence time, preserving flavor, color, and nutrients. Optional configurations support solvent recovery and integration with upstream or downstream systems.



Processing Capacity	20-500 L/H
Evaporation Method	Falling-film evaporation
Number of Effects	1-3 effects
Feed Concentration Range	2-30 °Brix
Viscosity Range	≤ 2000 cps
Evaporation Temperature	45-95°C
Operating Pressure Range	Atmospheric or Vacuum Operation (-0.16 to -0.92 Bar)
Cleaning System	CIP cleaning
Control System	PLC control
Contact Material	316L stainless steel
Power Requirement	3.5-15 kW
Equipment Dimensions	2-5 m² footprint

多功能水浴槽

EasyReal 多功能水浴槽，采用水浴式热交换技术，可精准控制加热、冷却及搅拌过程中的温度与时间。设备主体采用食品级304或316L不锈钢制造，耐腐蚀、耐高温，适用于不同粘度物料。

内置夹套结构结合高效循环水泵，确保热量均匀传递。西门子PLC精密控温系统可自动监测并控制温度，当达到设定值时，自动停止加热/制冷，外部保温层提升操作安全性。搅拌系统可根据需求选配不同类型的搅拌桨，适应多种食品配方开发。

工作温度 5°C ~ 98°C	Temperature Range 5°C to 98°C
料桶 3L, 5L, 10L, 15L (可定制)	Vessel Volume 3L, 5L, 10L, 15L (Customizable)
数据与控制 可选料桶独立控温机型	Data & Control Optional models with independent tank temperature control

Water Bath Mixing & Fermenter Unit

EasyReal Water Bath Mixing & Fermenter Unit uses water bath heat exchange technology to ensure stable temperatures during mixing, fermentation, and sample preparation processes , made from food-grade 304 or 316L stainless steel, the system supports a wide range of viscosities and materials.

The tank features a jacketed design, high-efficiency circulation pump, Siemens PLC temperature control, and automatic heater/chiller shut-off at the target temperature. External insulation ensures operator safety, while interchangeable mixing blades meet diverse application needs.



一体式碳酸饮料灌装机

EasyReal 碳酸饮料灌装机，集碳酸化与灌装于一体，专为碳酸饮料的小批量生产与研发场景而设计。系统可精准调控CO₂注入量，实时控制压力与温度，支持多种容器（如瓶、罐）灌装。

设备配备高精度冷却系统与自动流量控制装置，确保气体均匀溶解及泡沫稳定。碳酸浓度可调（最高11g/L），灌装效率最高达20L每批次，适用于气泡果汁、汽水、气泡茶及功能饮品等研发场景。

整机采用食品级不锈钢制造，具备自动清洗功能与模块化结构，便于快速接入实验系统，操作简便。

接触材质 316 不锈钢（与物料接触部位）	冷却方式 双步冷却系统
最小加工量 5L	混合方式 支持预混和后混
适用瓶型容量 0.35-2.0 升瓶型	电源参数 220V, 1.5kW, 50Hz
充填压力范围 0-3.5 bar 可调	设备尺寸 1100 × 870 × 1667 mm占地面积不足 1 平方米
CO2 最大含量 最高 11 g/L	移动方式 万向脚轮，便于移动
碳酸化温度范围 2-20°C	

Pilot-Scale All-in-One Carbonator-Filler

The EasyReal All-in-One Carbonator-Filler integrates carbonation and filling into a compact unit, specially designed for laboratory R&D and small-scale production of carbonated beverages. It enables precise CO₂ injection, real-time pressure and temperature control, and flexible filling into bottles or cans.

Equipped with a high-precision cooling system and automated flow control, the system ensures uniform gas distribution and stable bubble quality across each batch. The unit supports adjustable gas concentration (up to 11g/L), filling speeds up to 20L per batch, and is suitable for sparkling juices, soft drinks, tea, and functional beverages.

Contact Material	316 stainless steel (product contact parts)
Minimum Batch Volume	5L
Compatible Bottle Volume	0.35-2.0 L bottles
Filling Pressure Range	Adjustable 0-3.5 bar
Maximum CO2 Content	Up to 11 g/L
Carbonation Temperature Range	2-20°C
Cooling Method	Two-stage cooling system
Mixing Method	Supports pre-mix and post-mix
Power Supply	220V, 1.5kW, 50Hz
Dimensions	1100 × 870 × 1667 mm
Footprint	Less than 1 m ²
Mobility	Swivel casters for easy movement



多功能真空斩拌机

EasyReal 多功能真空斩拌机专为食品研发而设计，具备真空条件下精准斩拌、混合、乳化功能，有效减少氧化，保留食材原有的色泽、风味与营养。特别适用于沙拉酱、蛋黄酱、乳品乳化物、蛋白补剂、浓缩果酱等半流体及膏状产品的研发与试产。

设备采用双组合刀片（直刀+锯齿刀）设计，配备独立刮壁结构，确保无死角混合。夹套式水浴温控系统精度达±0.3°C，最高真空度可达95%，提升产品稳定性。控制面板操作直观，结构紧凑，具备自动停机保护，广泛适用于食品实验室、原料供应商、高校及试点生产场景。

接触材质 食品级 SS316L 不锈钢（与物料接触部位）	工作温度范围： -5°C 至 100°C
真空泵能力： -0.93 bar	配套冷热系统： 小型冷热水系统
每批产量： 最大 5 升	温度稳定性： ±0.3°C
刀具配置： 不锈钢刀轴，2 把片刀 + 2 把锯齿刀	温度显示精度： 0.1°C
刮刀设计： 自动刮除锅壁残料并引导至缸体中间搅拌，无死角	电源功率： 5 kW, 380V, 50Hz
刀具转速： 0-3000 rpm 无级变速，变频器控制	设备尺寸： 980 × 750 × 1400 mm
温控夹层： 通冷水/热水，带温度探头与截止阀	

Multifunctional Vacuum Chopper Mixer

EasyReal Multifunctional Vacuum Chopper Mixer is designed for precision chopping, mixing, and emulsification of food materials under vacuum conditions. It minimizes oxidation while preserving the natural color, flavor, and nutritional value of ingredients. Suitable for sauces, dressings, dairy emulsions, and protein-based products, this equipment offers reliable control of temperature, mixing intensity, and time for small-batch R&D and pilot applications.

The system features dual-blade cutting (straight and serrated), a scraper structure for dead-zone-free mixing, and a water-jacket temperature control system (±0.3 °C accuracy). With vacuum levels up to 95%, it ensures superior product stability and batch consistency. Its intuitive control panel, compact design, and automatic protection functions make it ideal for food laboratories, ingredient manufacturers, and research institutions.

Contact Material	Food-grade SS316L stainless steel
Max. Batch Capacity	5 liters
Vacuum Capability	-0.93 bar
Blade Configuration	2 flat blades + 2 serrated blades
Blade Speed	0-3000 rpm, variable via inverter
Scraper Design	Automatic scraping, residue-free mixing
Temperature Control Jacket	Cold/hot water circulation with temperature probe
Operating Temperature Range	-5°C to 100°C
Temperature Stability	±0.3°C
Temperature Display Accuracy	0.1°C
Heating/Cooling System	Compact thermal water unit
Power Supply	5 kW, 380V, 50Hz
Dimensions	980 × 750 × 1400 mm



实验型真空脱气机

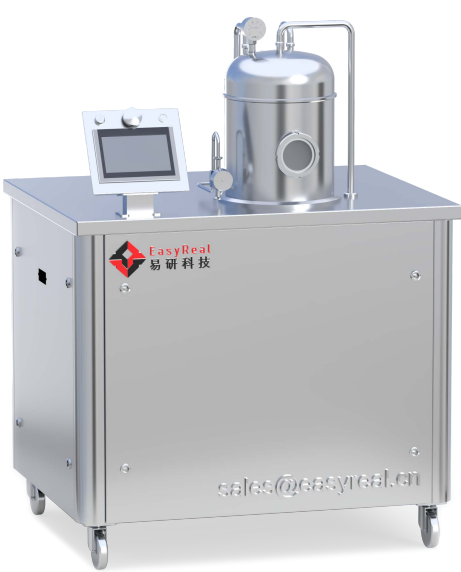
易研实验型真空脱气机专为果汁、乳品、酱料及营养饮品等液体物料脱除溶解空气和气体而设计。设备通过真空控制、加热预处理与薄膜式脱气技术的结合，有效提高产品稳定性，防止在UHT 杀菌、均质与灌装环节中出现氧化反应。

处理能力 5-40 L/h	最小批量 ≥ 3 L
脱氧能力 (出口 DO) ≤ 0.5 mg/L (标准真空) / ≤ 0.05 mg/L (膜 + N2 选配)	工艺温度 20-90 °C
粘度处理能力 ≤ 6000 cPs	外形尺寸 1100 × 870 × 1470 mm
CIP 支持	重量 230 kg
允许压力 耐真空 -1 bar(g); 正压至 0.5-2 bar(g) (视模块/容器而定)	

Lab Vacuum Deaerator

The EasyReal Lab Vacuum Deaerator is designed for removing dissolved air and gas from liquids such as juices, dairy products, sauces, and nutritional beverages. By combining vacuum control, heating pre-treatment, and film-type degassing, the system ensures product stability and prevents oxidation during UHT sterilization, homogenization, and filling operations.

Processing Capacity	5-40 L/h
Minimum Batch Size	≥ 3 L
Deaeration Capacity (Outlet DO)	≤ 0.5 mg/L (vacuum mode) / ≤ 0.05 mg/L (membrane + N2 optional)
Process Temperature	20-90 °C
Viscosity Capability	≤ 6000 cP
CIP (Cleaning in Place)	Supported
Overall Dimensions	1100 × 870 × 1470 mm
Weight	230 kg
Pressure Range	Vacuum -1 bar(g); Positive 0.5-2 bar(g) (depending on module and vessel)



乳品与果汁中试线

EasyReal乳品与果汁中试线集成了果蔬汁与乳品生产所需的关键工艺, 如UHT杀菌、混合与灌装, 适用于20-500L/H乳品与果汁的小批量测试与产品研发。
该系统结构紧凑、集成度高, 涵盖巴氏杀菌、UHT灭菌、在线均质、混合、过滤、灌装等核心模块, 同时具备原料处理、发酵、脱气与配料等功能。

- **多功能集成:** 系统全面模拟工业化生产流程, 适用于教学演示、配方优化、成分研究、小批量试产等多用途场景。
- **工艺完整性:** 覆盖果蔬类饮料与乳制品的清洗、榨汁、浓缩、调配、巴氏杀菌、UHT杀菌、均质、过滤、灌装等关键环节。
- **模块化结构:** 关键单元可独立拆分或组合使用, 便于针对不同产品工艺进行配置与扩展。
- **灵活产能设计:** 流量从20L/H起, 可适应不同批次及试验规模, 节省原料成本。
- **数字化控制系统:** 采用PLC及触控屏控制界面, 支持温度、压力、流量、时间等关键参数的精准调节与记录导出。
- **工艺可追溯:** 支持实验数据记录与导出, 便于研发部门对比分析及成果归档。
- **清洗消毒一体化:** 具备CIP/SIP在线清洗与灭菌功能, 保障食品卫生与样品安全。
- **外形紧凑美观:** 整体系统占地小, 移动方便, 适用于实验室及中试车间布置。

Pilot Plant for Dairy and Juice R&D

EasyReal's Pilot Plant for Dairy and Juice R&D integrates juice and dairy production functions like UHT, mixing, and filling—ideal for R&D and small-batch testing from 20-500 L/H.

This compact and highly integrated system combines key modules including pasteurization, UHT sterilization, inline homogenization, blending, filtration, and filling. It also incorporates functions such as raw material preparation, fermentation, deaeration, and dosing.

Key Features:

- **Multi-Function Integration:** Fully simulates an industrial production line, suitable for teaching demonstrations, formula optimization, ingredient testing, and small-batch trial runs.
- **Complete Process Coverage:** Handles all major stages of juice and dairy processing, including washing, extraction, concentration, formulation, pasteurization, UHT treatment, homogenization, filtration, and filling.
- **Modular Structure:** Key components can operate independently or be flexibly combined to meet different process needs.
- **Flexible Throughput:** Starting from 20L/H, ideal for R&D-scale production with minimized raw material consumption.
- **Digital Control System:** Equipped with a PLC and touchscreen interface for precise control of temperature, pressure, flow rate, and process time, with data export capability.
- **Traceable Processing:** Enables experimental data recording and export for easy comparison, analysis, and documentation.
- **Integrated Cleaning and Sterilization:** Supports CIP/SIP systems for hygiene assurance and safe product handling.
- **Compact and Aesthetic Design:** Space-saving layout, easy to move and install in laboratories or pilot workshops.

中试线现场项目实例 Pilot Plant On-Site Project Cases





注：排名不分先后
Note: Rankings are not in order