

Based on high-quality products, create top-level projects in the sterilization industry

Talent-oriented, Technological innovation,
Professionalism, Concentration

zlpH 中联普惠

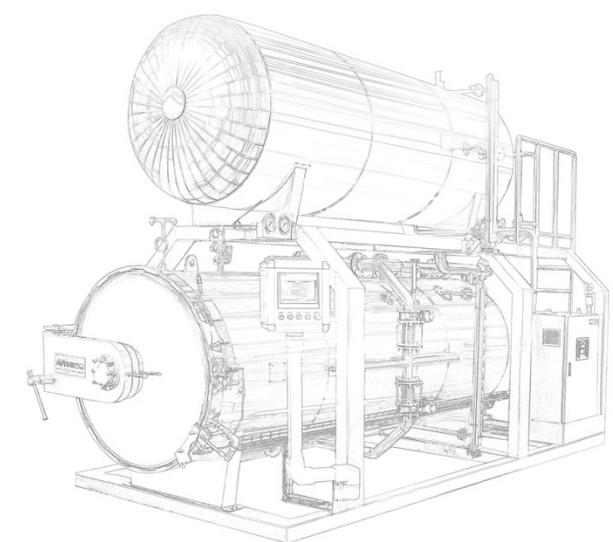
ONE-STOP MANUFACTURER RETORT / LOADING UNLOADING SYSTEM

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English
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ZLPH MACHINERY TECHNOLOGY CO., LTD.

zlpH 中联普惠

Focus on smart sterilization solutions

Design and development, production and sale

20 years experience in sterilization industry
develop efficient energy -saving retorts

MANUFACTURING EQUIPMENT



ABOUT ZLPH

ZLPH MACHINERY TECHNOLOGY CO., LTD. is a comprehensive enterprise with high-end sterilization equipment as its leading industry, integrating intelligent sterilization production line design and manufacturing; ZLPH is committed to creating a safer, more energy-saving and efficient refined sterilization autoclave and customized intelligent sterilization production line.

Currently we have 15000m² factory with more than 150 employees includes 26 mechanical design engineers and PLC programming engineers, 8 R&D engineers, 55 certified workers in pressure vessel industry, and 20 professional after-sales personnel and many of them with many years experience in sterilization and oversea service background.

As a leading manufacturer of retort and whole line solution provider in food, beverage, pharmacy in China, ZLPH pay more attention on user's experience. We concerns every detail from raw material supply, product research and development, design and manufacturing, finished product inspection, and after-sales service. To provide satisfying products and services for customers is our eternal pursuit.



Thermal processing lab



Red flame deep penetration auto welding machine



Laser tube cutting machine



Constant temp. precision assembly



Stress relief equipment



Large floor machine tool



CNC lathe



20,000 watts large laser cutting machine



FAT area



Pipeline auto welding machine



X-ray inspection



Pipe endoscope

With advanced processing and testing equipment, strict technological process control and professional finished product testing, we concerns every detail from raw material processing and production to equipment completion inspection and delivery, the fine manufacturing of each process provides the guarantee to you for the high-quality equipment.

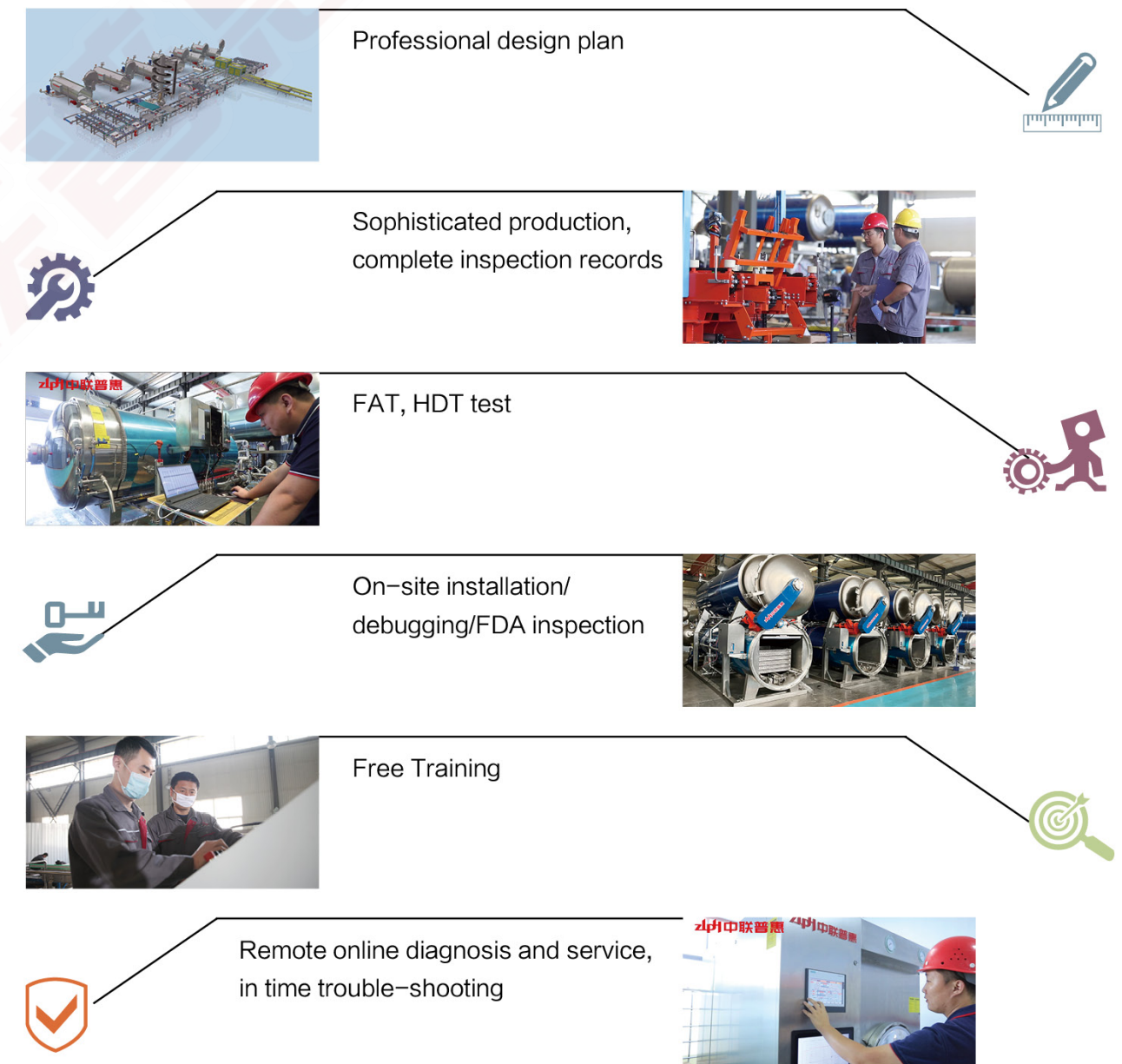
ZLPH QUALIFICATION

The perfect standard achieves the reputation. The selfless devotion accumulates Industry prestige .



ZERO-DISTANCE SERVICE

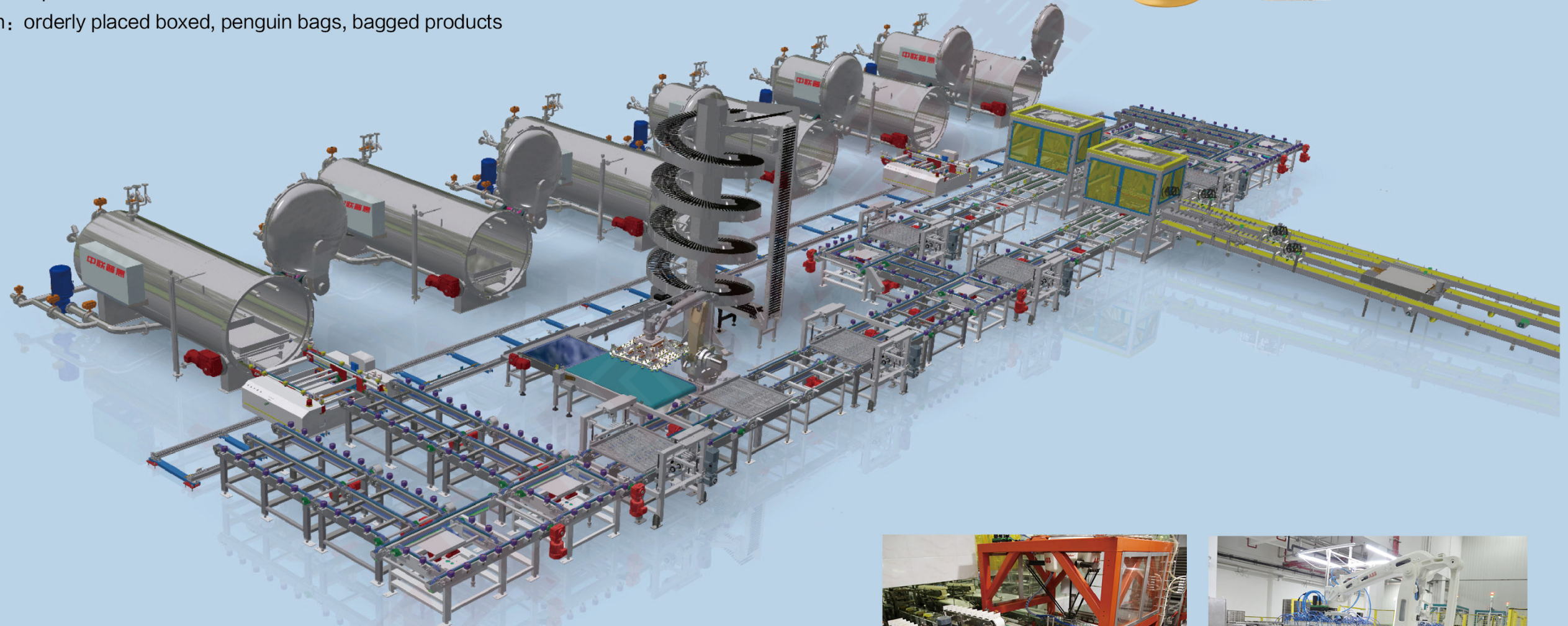
ZLPH more concentrates on user experience, and it is our eternal goal to provide satisfying products and services for customers. Complete team structure, professional technology and service, provide you with 360-degree all-round support.



Bag / Cup Food Sterilization Line

产线参数 /Parameter

- ◆ Capacity: 225 pcs / min
- ◆ Workers: 1-2 persons
- ◆ Application: orderly placed boxed, penguin bags, bagged products



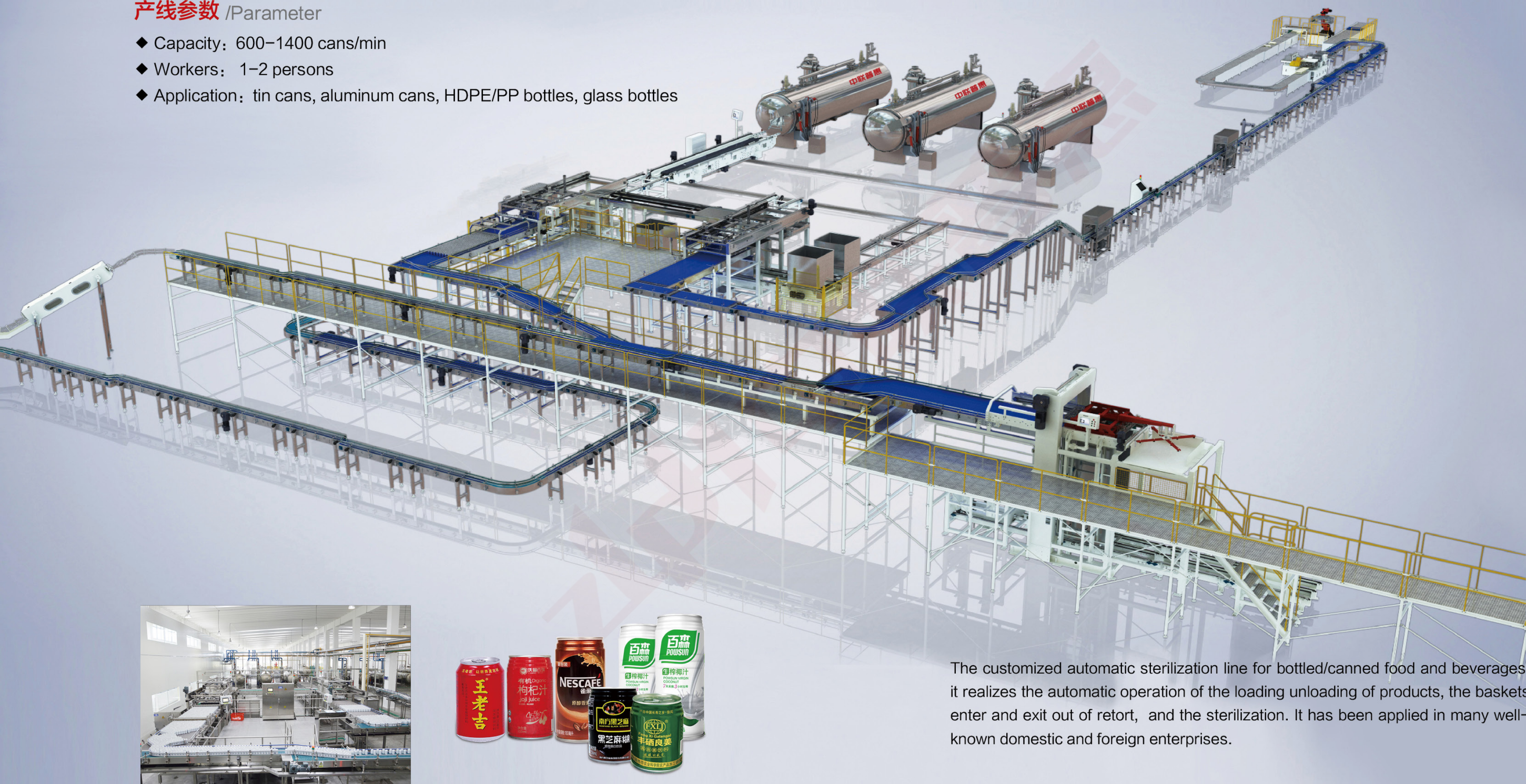
First automatic retort line, customized for flexible container, tray and cups; with robot for loading and unloading in order, automatic stacking and destacking of retort trays, automatic sterilization, 1-2 workers required for whole line.



Bottled / Canned Food Sterilization Line

产线参数 /Parameter

- ◆ Capacity: 600-1400 cans/min
- ◆ Workers: 1-2 persons
- ◆ Application: tin cans, aluminum cans, HDPE/PP bottles, glass bottles

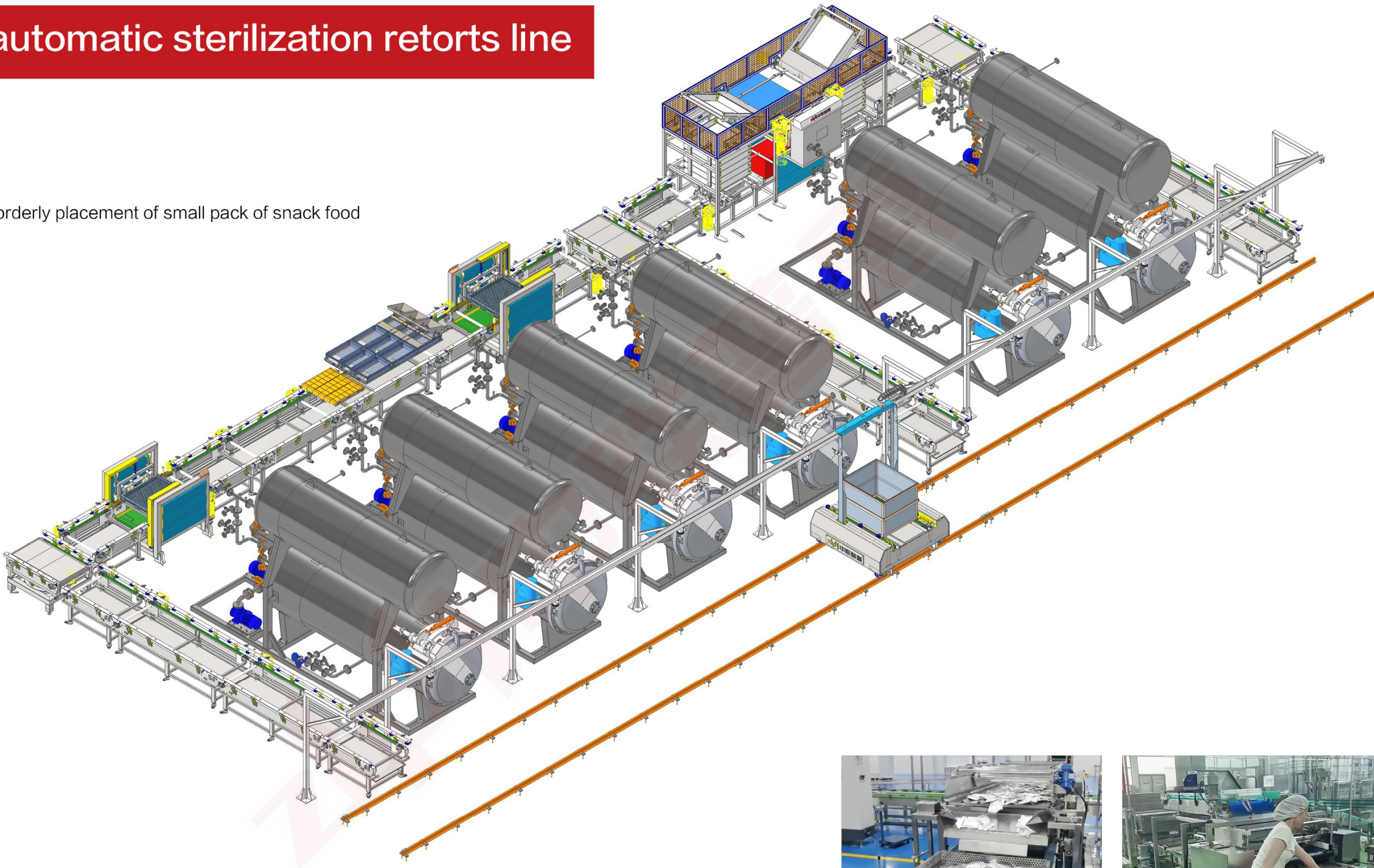


The customized automatic sterilization line for bottled/canned food and beverages, it realizes the automatic operation of the loading unloading of products, the baskets enter and exit out of retort, and the sterilization. It has been applied in many well-known domestic and foreign enterprises.

Snack food automatic sterilization retorts line

产线参数 /Parameter

- ◆ Capacity : 66 tons /day
- ◆ Worker: 1-2 people
- ◆ Scope of application: disorderly placement of small pack of snack food



This line is an automatic quantitative loading of bulk and leisure foods tailored for Zhangzhou Hongxiangji Food Co., Ltd., RGV smart trolley transport, automatic sterilization, and automatic stacker/destacker integrated intelligent sterilization production line.

This design is adopted by Daoxiangcun Group (rice products), Firmus Group (vacuum bag -loaded corn products), Shenghetang (jelly sterilization) Yuwang Group (hand -tear meat), emblem food (bags of tofu) and other companies adopted and use.



Weighing loading belt



Customer part of the project site / Customer site

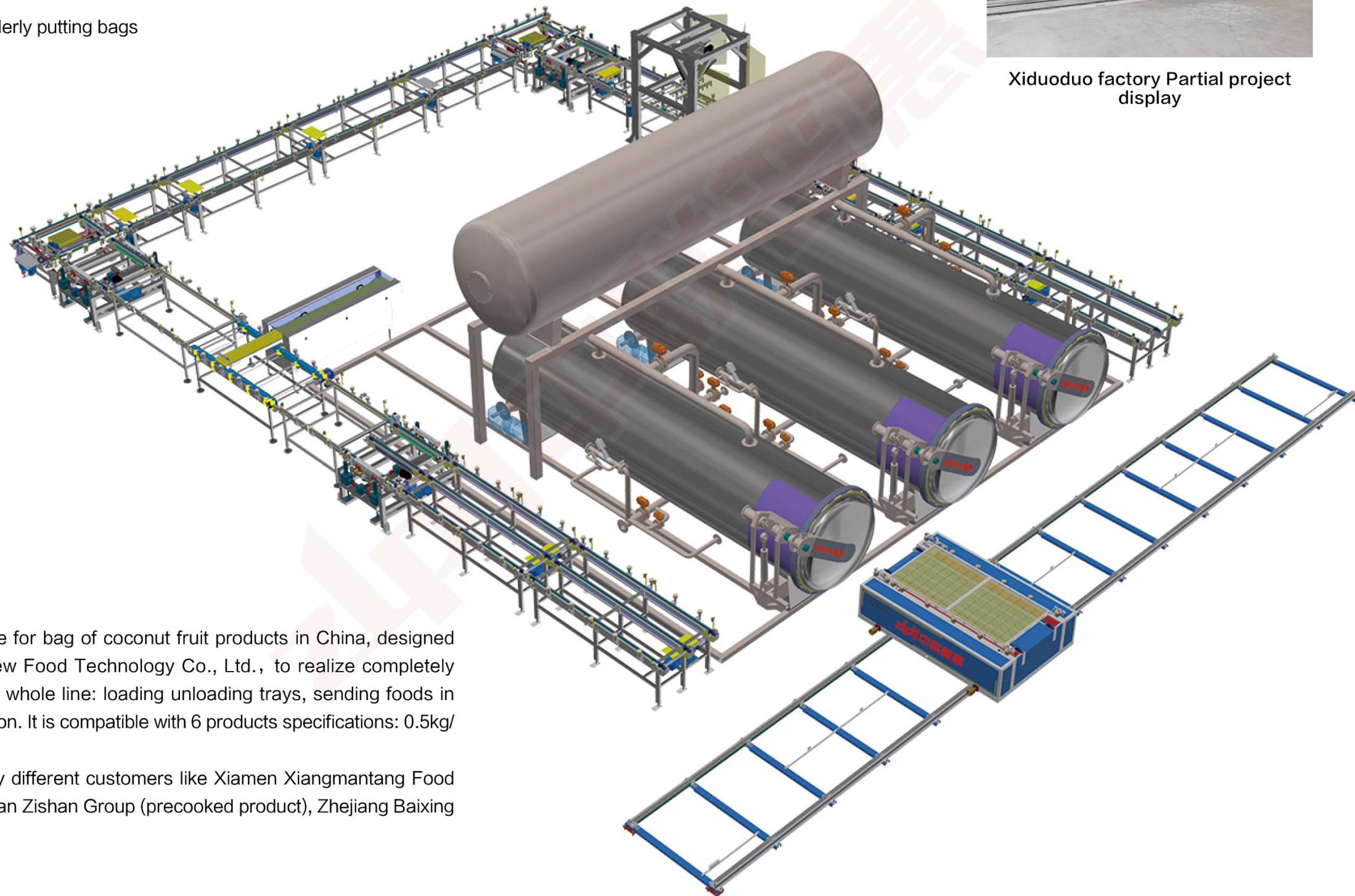
Bag automatic loading and unloading retorts line

产线参数 /Parameter

- ◆ Capacity : 100 bags/min
- ◆ Worker: 1-2 people
- ◆ Scope of application: orderly putting bags



Xiduoduo factory Partial project display



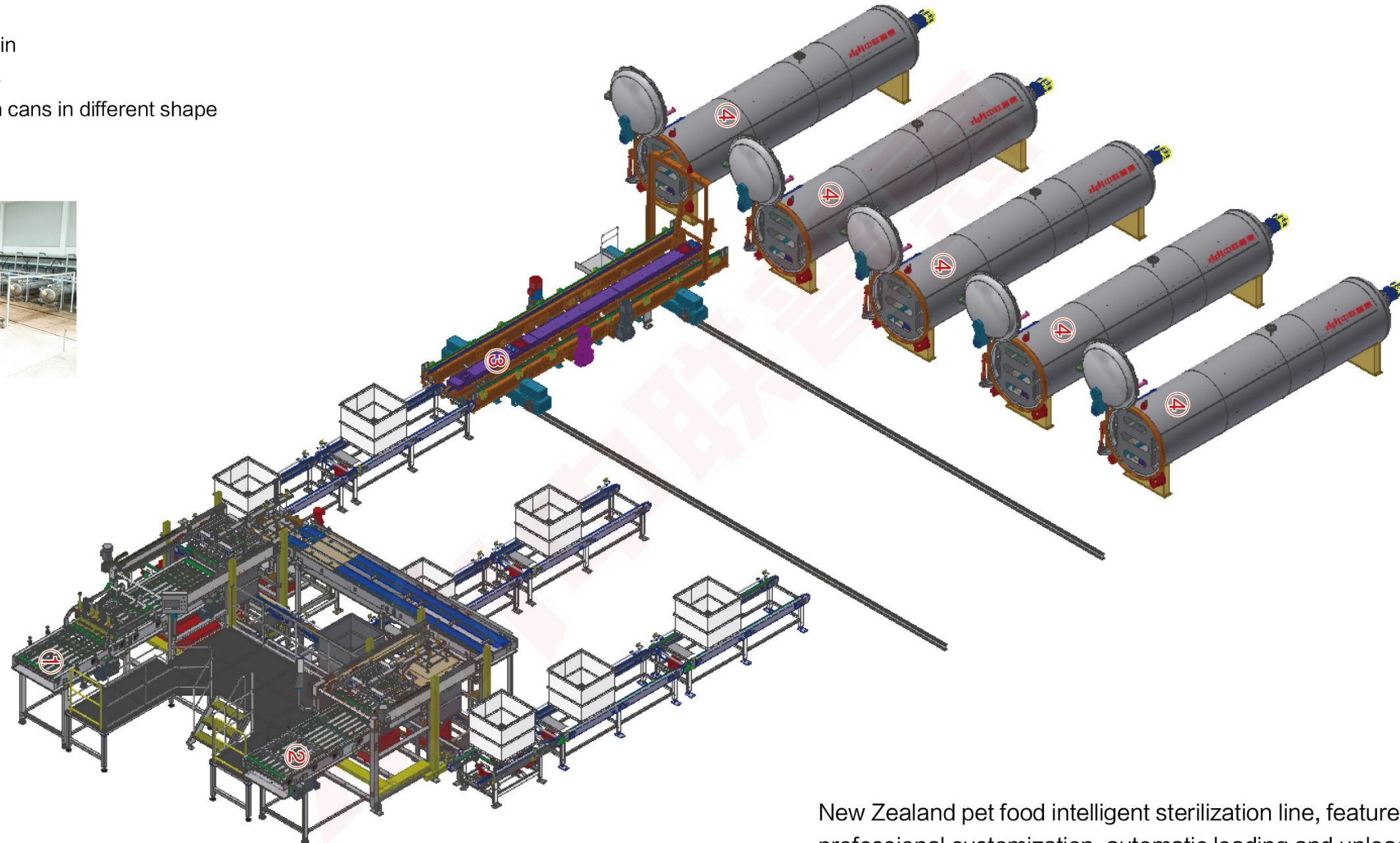
This is the first tailored line for bag of coconut fruit products in China, designed for Chuzhou Xiduoduo New Food Technology Co., Ltd., to realize completely automatic operation of the whole line: loading unloading trays, sending foods in and out of retorts, sterilization. It is compatible with 6 products specifications: 0.5kg/1kg/1.5kg/2kg/2.5kg/3kg.

This line has been used by different customers like Xiamen Xiangmantang Food (ready meal products), Fujian Zishan Group (precooked product), Zhejiang Baixing and other companies.

Auto-loading Unloading Sterilization Line for Canned Food

产线参数 /Parameter

- ◆ Capacity: 240 cans /min
- ◆ Workers: 1-2persons
- ◆ Application: various tin cans in different shape



Retort Line:

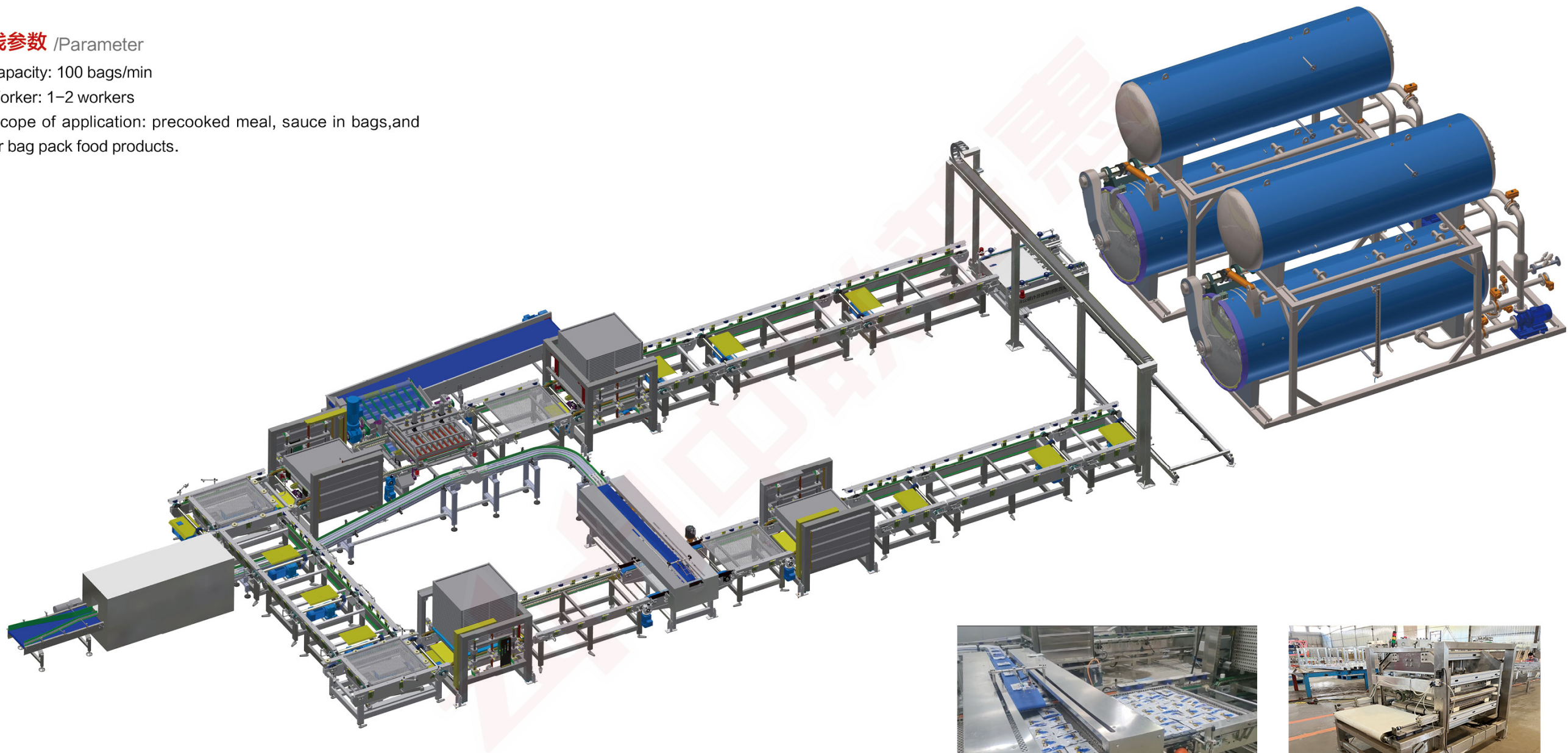
- ① Automatic loader
- ② Automatic unLoader
- ③ Auto RGV shuttle trolley
- ④ Automatic retort

New Zealand pet food intelligent sterilization line, features of high professional customization, automatic loading and unloading, intelligent sterilization, automatic control of the whole line and saving time and effort. This line can be designed as magnetic loading and unloading to provide a highly customized loading unloading solution for special-shaped tin cans. It is featured at stable performance, firmly holding cans and wide application.

Prepared bag food automatic sterilization production line

产线参数 /Parameter

- ◆ Capacity: 100 bags/min
- ◆ Worker: 1-2 workers
- ◆ Scope of application: precooked meal, sauce in bags, and other bag pack food products.



This line is customized for the bagged precooked vegetable made by Fujian Zishan Group Co., Ltd., which is automatic loading unloading trays, sterilization, and automatic trays delivery by RGV trolley.

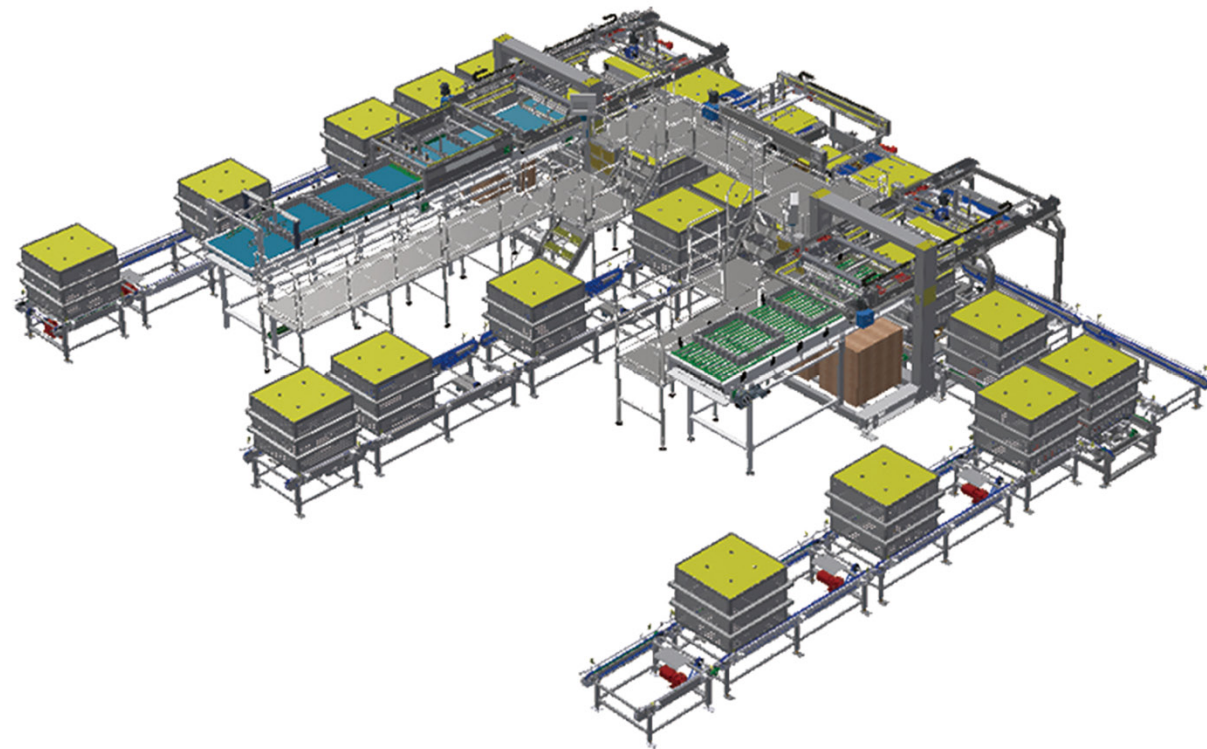


Retort Pouch Loading Belt



Retort Tray Turnover Unloading Device

AUTOMATIC LOADING AND UNLOADING SYSTEM



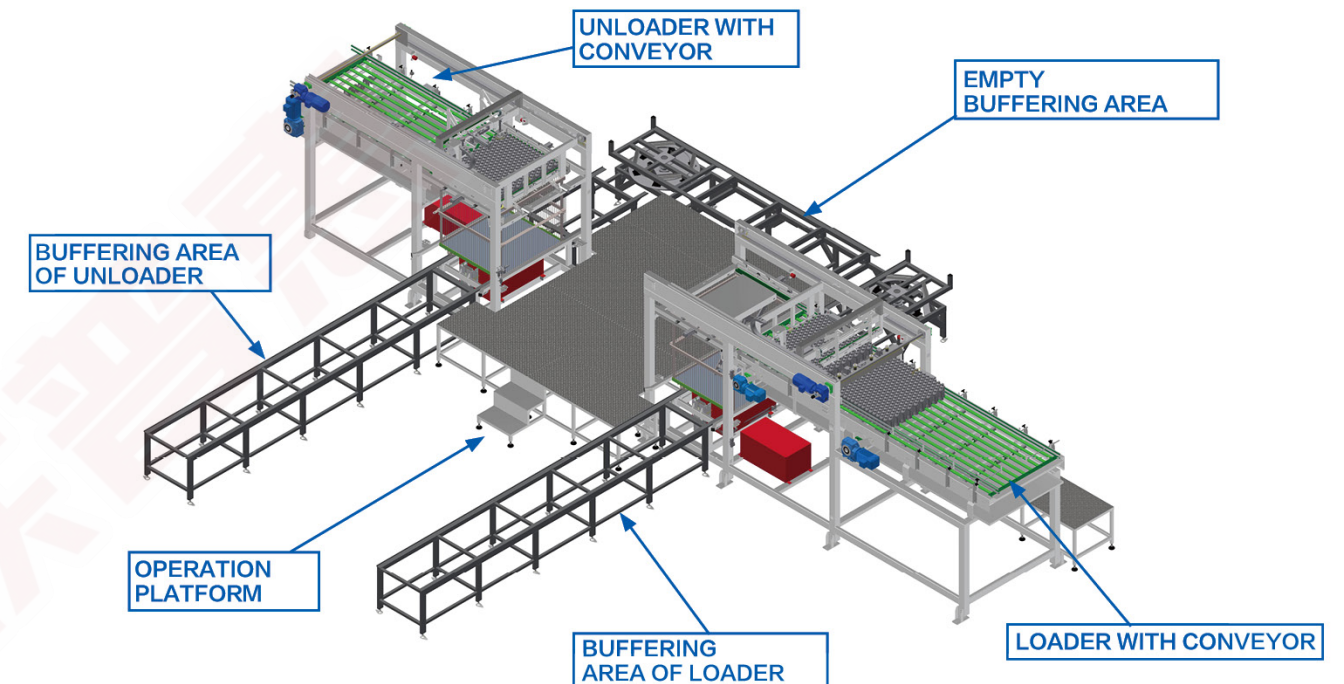
Equipment introduction

The fully automatic loading and unloading system is an important guarantee for the continuous and efficient work of the entire sterilization system. It is mainly composed of the automatic loading and unloading system, basket turnover and buffer system, layer pads circulation system, containers arrangement and conveying system.

The series of action is executed by PLC automatically, ensuring smooth operation, accurate positioning, cans layer is compact and arranged neatly, saving manpower and improving production efficiency. The loading and unloading speed reach up to 1400 cans/min. It is for loading unloading works of the beverage and foods in metal cans, glass bottle, and PE bottle etc.before and after sterilization .



SEMI-AUTOMATIC LOADING UNLOADING SYSTEM



Equipment introduction

The semi-automatic loading unloading machine is to load and unload products before and after sterilization, which can save manpower and improve production efficiency. It is the best choice for high cost performance and low investment.

The equipment is controlled by manual buttons, the products are arranged neatly, the loading and unloading is easy , and the operation is stable. Its speed is up to 3.5 layers/min, and requires 2-4 workers.

Applicable to various tin cans, glass bottles and HDPE/PP bottles, etc.

AUTOMATIC SHUTTLE TROLLEY

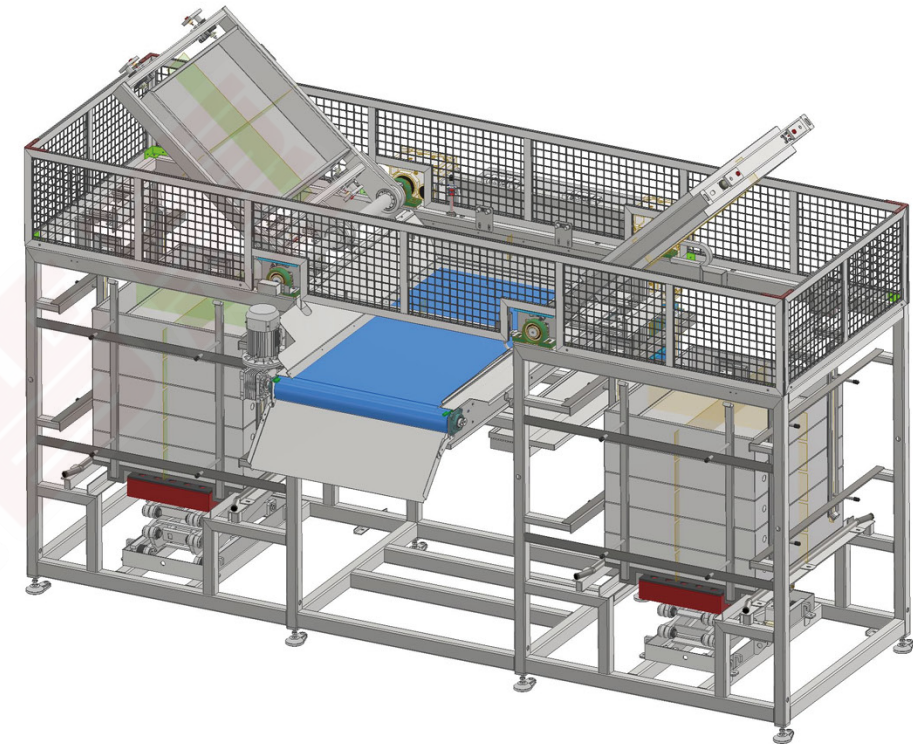


Equipment introduction

This equipment uses various types of photoelectric sensors and combine with the Siemens PLC control system to achieve precise loading, positioning and transportation without operator. It can be widely used in retort line for the accurate transportation of unsterilized products to the retort for sterilization and pick-up of products from retort after sterilization, and send them to unloader for next steps.



SEMI-AUTOMATIC RETORT POUCH UNLOADER



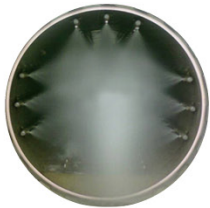
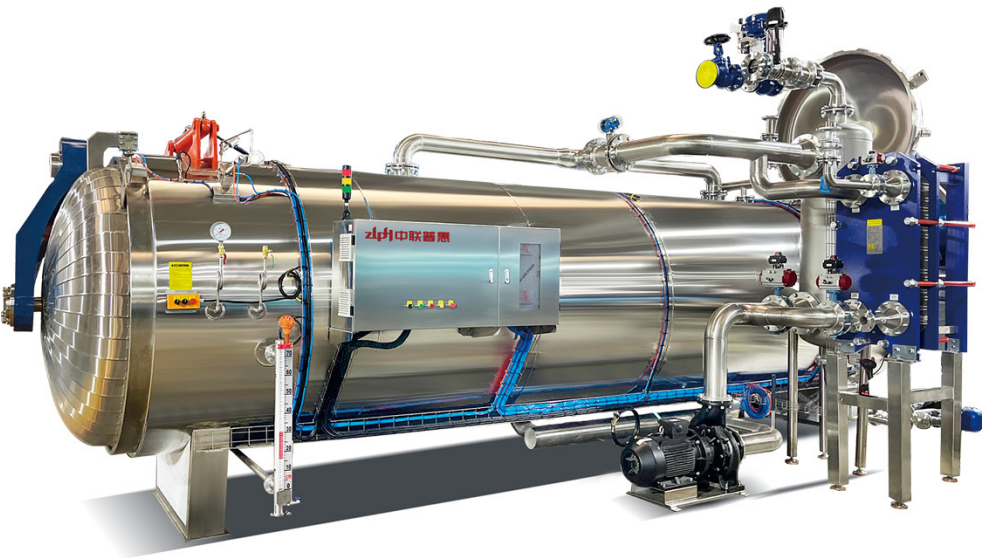
Equipment introduction

The equipment realize the functions of automatic trays stacking and destacking, and unloading products, therefore it can be used individually or used in the automatic loading and unloading lines. It is applicable to products in various packages.

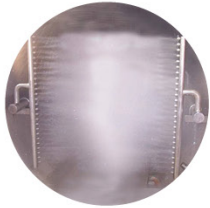
The compact smart design saves much space and cost. It adopts pneumatic device to hold the food trays and the motor to flip trays 180 ° for unloading, and products are transported by the conveyor belt, while the tray is automatically stacked one by one. With PLC, Photoelectric induction program and the automatic failure alarm, it operates safely; visual security protection effectively detect the operating status of the equipment;



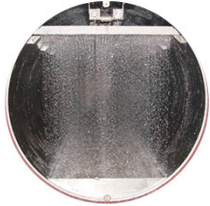
WATER SPRAY RETORT



Water spray retort



Side spray retort



Water cascade retort

Equipment introduction

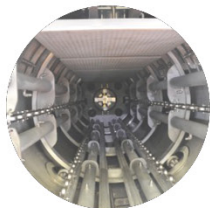
- ◆ Intelligent PLC control, one-button start;
- ◆ Large flow detachable filter, flow monitoring device to ensure a constant water flow during circulating;
- ◆ Linear control of temperature for heating, in line with FDA regulations (21CFR), control accuracy $\pm 0.4\text{ }^{\circ}\text{C}$;
- ◆ The crucial sensing system (temperature, pressure) adopts design with double pieces;



技术参数 /Parameter

Specifications	Tray size (mm)	Basket size (mm)	Power kW	Volume m ³	Floor area (length/width/height mm)
DN700x1200	1140x420x420	540x380x420	2.2	0.55	2700x1500x1700
DN900x1800	890x560x600	560x560x560	4	1.32	3000x1600x2100
DN1000x2400	790x630x650	700x605x620	4	2.12	4000x1800x2500
DN1200x3600	890x800x800	850x780x780	7.5	4.46	6000x2000x2800
DN1400x4500	1100x930x900	1050x900x900	11	7.23	7000x2500x3100
DN1500x5250	1030x970x970	1000x1000x970	15	10.02	7700x2700x3300
DN1600x6500	1220x1050x1050	1010x1050x1050	18	13.97	8500x3100x3000
DN1800x7500	1180x1180x1160	1180x1180x1160	22	19.72	9800x3100x3500

ROTARY STEAM RETORT



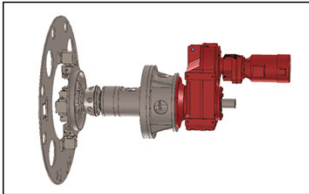
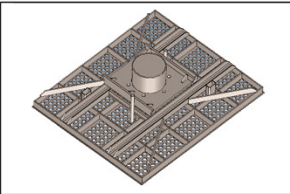
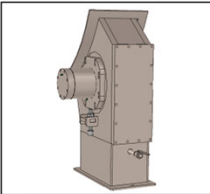
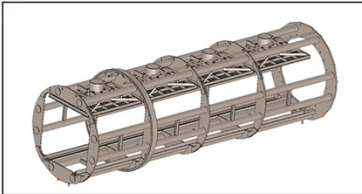
Rotary water spray



Rotary water immersion

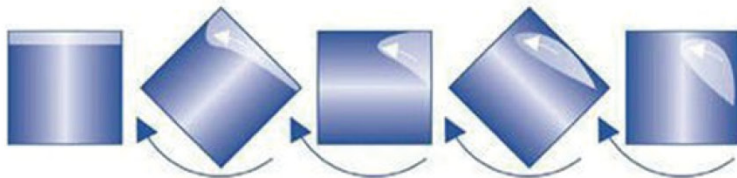


Rotary steam



Equipment introduction

Rotating body processed at one time, forged rolling ring and aging vibration treatment for longer service life and less maintenance;
External tug-wheel and the protecting plate for better wear resistance and simple repair;
Alloy cylinders for auto pressing eliminate the problems spring type without leakage ;
Dynamic balance treatment and brake reducer for auto-positioning and easy docking with supporting equipment.



STEAM AIR RETORT



Save steam energy
23%



Equipment introduction

Steam-air retort, it doesn't requires exhaust period to drive cold air in retort before heating. It utilize the fan system to break the corresponding rules of temperature and pressure under saturated steam and achieve flexible pressure control under the steam sterilization process. Therefore, it can save energy by more than 23% compared with the steam retort.

STEAM RETORT



Equipment introduction

Metal containers: tin cans (Wangwang, six walnuts, etc.);



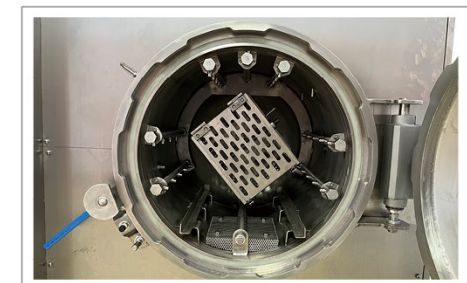
WATER IMMERSION RETORT



Equipment introduction

- ◆ The upper tank preheats the sterilization water, 2.5min come down to the retort tank during sterilization;
- ◆ With the function of remote housekeeper to realize zero-distance service by the cloud;
- ◆ Configure F0 monitoring equipment to prevent insufficient sterilization;
- ◆ The surface temperature of retort body lower than 40℃, reducing heat loss by about 5%.

PILOT RETORT



Equipment introduction

For developing new products & sterilization formulas.
Diversified sterilization modes for various packages and food products .
Simulate the actual production sterilization environment for identification of the customer's sterilization process;
F0 function for exploring sterilization formula.

ON-SITE CASES



TYPICAL PARTNERS

