

Professional Lab
Equipment Manufacturer
& Solution Provider



ABOUT US

Established in 2009, Shanghai Yuanhuai Industrial Co., Ltd (Registered Trademark: YHCHEM), is an integrated company specialized in the production and sales of lab apparatus for the pharmaceutical, chemical and biological industry. YHCHEM is also known as a solution provider for global customers in the areas of distillation, evaporation, purification, separation, concentration and crystallization etc.

The Research & Development Team is formed by highly skillful, knowledgeable and experienced engineers who have been focusing on technological innovation and product development in the past ten years which makes YHCHEM being a leader in lab apparatus manufacturing. The main products categories of YHCHEM cover Short Path Distillation Equipment, Wiped Film Molecular Distillation System, Fraction Equipment, Crystallization Equipment, Chromatograph Equipment, Customized Glass Equipment, Rotary Evaporator, Glass Reactors, Vacuum Filtration System, Vacuum Oven, Lab Thermostatic Equipment and Vacuum Pumps. The Wiped Film Molecular Distillation System was developed by YHCHEM independently and different models for applications of lab, pilot and industrial production can be provided.

The 5,000 square meter factory, including individual glassblowing and mechanical parts processing workshops and testing /storage areas, has enabled the ability of mass production, high flexibility of customization and large inventory, which leads to the fastest delivery in the industry. Strict quality management system is applied to our manufacturing process to assure high quality products throughout. With 10 years of experience, YHCHEM also developed global sales network , with exporting to the North America, Europe, Australia, South Africa, Southeast Asia, East Asia, and other regions, and comprehensive after-sale service system, such as service centers in Europe and North US, which can provide the immediate response to clients' maintenance needs.

Our mission is to lead the research and production of laboratory equipment and provide the best cost-effective solutions for global clients.



COMPANY PROFILE



What we can provide for you?



Why we are a Pro of lab equipment?

10 years' production experience of lab equipment

10 year's research & development of products as clients' requirement

10 years' expertise in providing lab solution

Sales Network

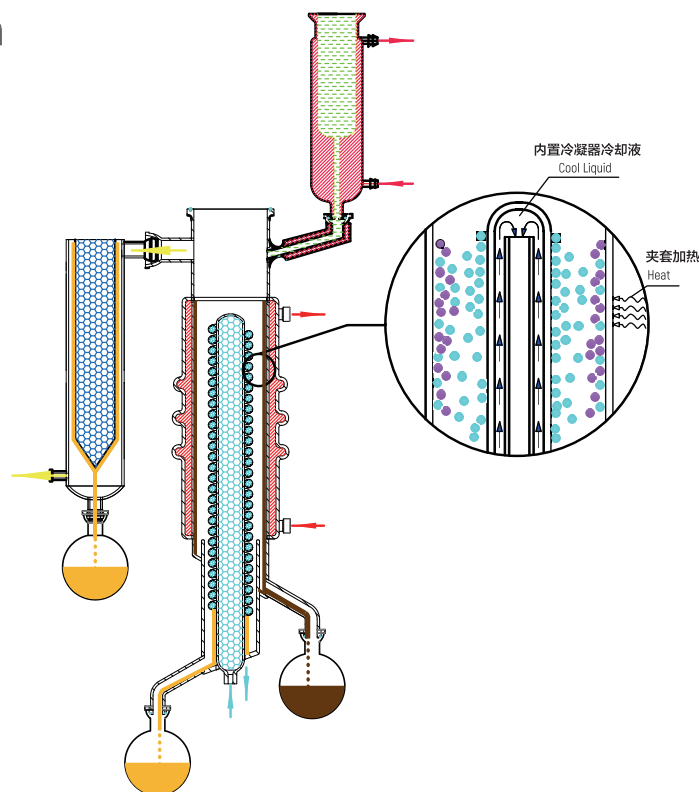


<< 06-16	Wipe Film Molecular Distillation System	●	Thin Film Evaporation System	17-19 >>
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Wiped Film Molecular Distillation System

Wiped Film Molecular Distillation System

Molecular Distillation is a special liquid-liquid separation technology, which is different from the traditional distillation by boiling point difference separation principle, but by different substances molecular movement of the average free path difference to achieve separation. Molecular distillation is considered as the safest mode of separation and to purify the thermally unstable molecules and related compounds with low volatility and elevated boiling point. The process distinguishes the short residence time in the zone of the molecular evaporator exposed to heat and low operating temperature due to vacuum in the space of distillation.



Working Process

Feed material is delivered from a feed flask into the main jacketed evaporator, having heating from the jacket, and a diagonally slotted wiper mechanism forcing liquid around and downward in a thin film on the inside. In the center of the body is a closely positioned internal condenser, providing a short path for vapor molecules traveling from the heated surface to the condenser surface. During the journey downward, lighter (lower boiling point) fractions of the liquid begin to vaporize, move to the internal condenser and condense, falling down as a liquid into a well that captures and separates the distilled liquid which flows into the Distillate receiving flask. Heavier residue material (like chlorophyll, salts, sugars, heavy wax) does not evaporate and instead travels the length of the main evaporator body and flows into the Residue receiving flask.

Wiped Film Molecular Distillation System

Applications

Molecular distillation is applied for separation of high boiling point, heat-sensitive and readily oxidizable materials.



Practices

Plants and animals essential oil distillation

Molecular distillation is used to distill high-value and high-purity extracts from essential oils of animals and plants, such as refined hemp oil, eaglewood, fish oil, traditional Chinese medicine, etc. Its extracts can be used as food additives, health products or medicinal raw materials.



Chemical separation and purification

Molecular distillation is applied to the separation and purification of high-value chemical synthesis products, such as chip glue, insulation coating, pharmaceutical intermediates and aviation lubricants.



Wiped Film Molecular Distillation System (Borosilicate Glass)

Features

Taking advantage of molecular distillation working principle, our YMD series Wiped Film Molecular Distillation System is a high efficient apparatus for distillation of animal and plants oil.

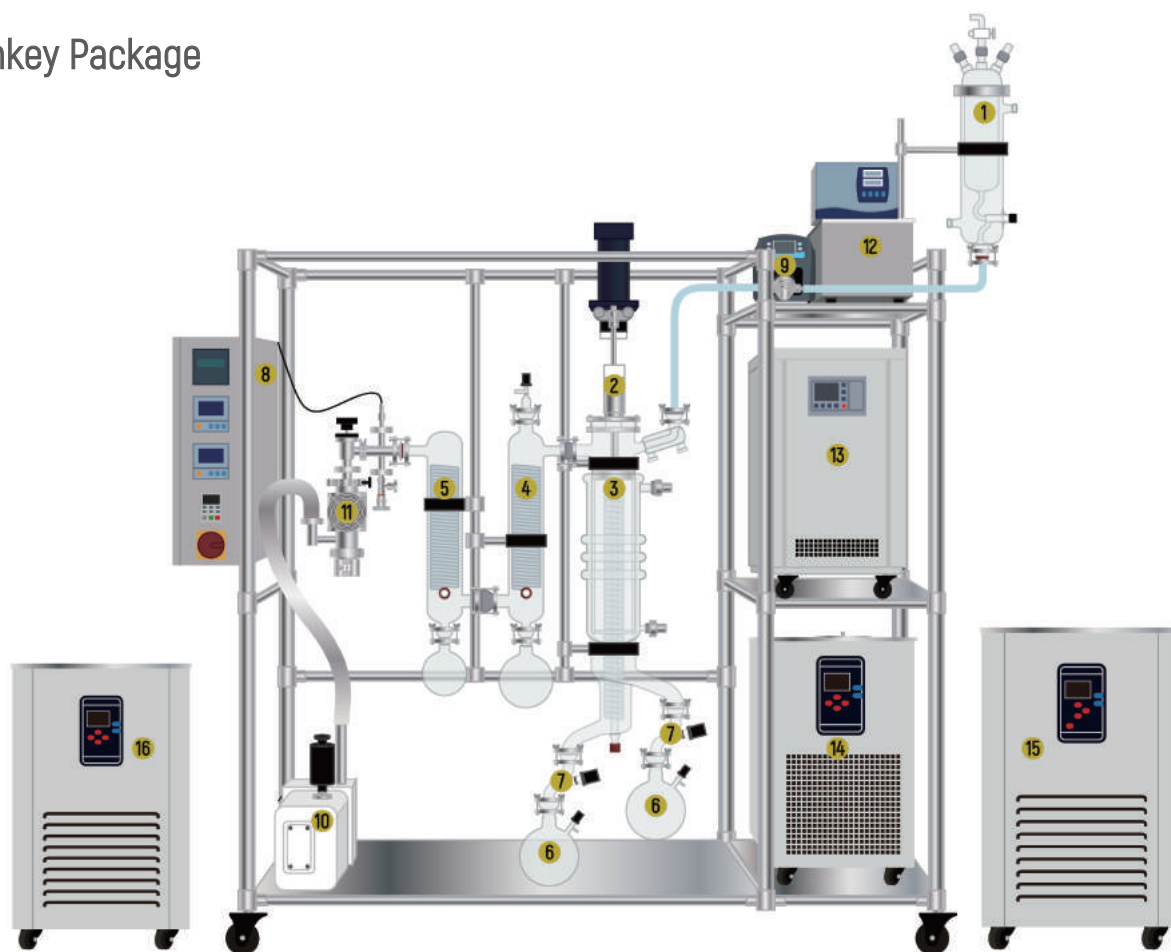
- Glassware parts with excellent visibility are self-manufactured, with great flexibility in production, and can be completely customized according to customer requirements.
- Magnetic seal components are independently developed to ensure maximum vacuum in the system and efficient evaporation.
- Short residence time so that heat-sensitive substances will not deteriorate
- Flexible configuration options for system so as to increase production capacity and save manpower.
- According to different customer's production needs and purchase budget, we provide customers with turnkey solutions.

Specification

Model	YMD60	YMD80	YMD100	YMD150	YMD200
Barrel diameter	60	80	100	150	200
Effective evaporation area	0.06	0.1	0.15	0.25	0.35
Feeding rate	0.1-2	0.1-4	0.2-6	0.5-10	0.5-15
Feeding flask volume	0.5	1.0	1.5	2	5
Distillate receiving flask	1	1	2	5	10
Residue receiving flask	1	1	2	5	10
Motor Power	90	120	120	120	200
Vaccum Level	0.001mbar				
Rotation speed	50-500rpm				
Operation temperature	Up to 300 C °				
Electrical requirement	220V/50-60Hz (Other options can be provided)				

Wiped Film Molecular Distillation System (Borosilicate Glass)

Turnkey Package



Main Distiller	1	Jacketed feeding flask with manual feeding valve
	2	Magnetic drive rotation with motor
	3	Jacketed glass barrel with internal condenser
★	4	External condenser for collecting Terpenes (Optional)
★	5	Cooling coils cold trap (Optional: Dry ice cold trap)
	6	Receiving flasks (Distillate and Residue)
	7	Continuous collection module (Distillate and Residue)
	8	Control system
★	9	Gear pump for automatic and continuous feeding (Optional)
Vacuum System	10	Vacuum pump
★	11	Diffusion pump (Optional)
Heater & Chiller	12	Heating circulator for jacketed feeding vessel
	13	Heating circulator for jacketed glass barrel
	14	Heating/cooling Circulator for internal condenser
★	15	Cooling circulator for external condenser (Optional)
★	16	Cooling circulator for cooling coils cold trap (Optional)

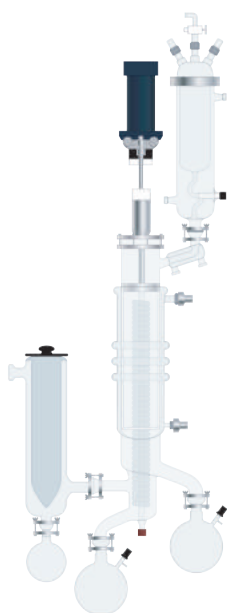
Wiped Film Molecular Distillation System (Borosilicate Glass)

Optional Package

A

High efficiency, suitable for clients with fully-equipped facility

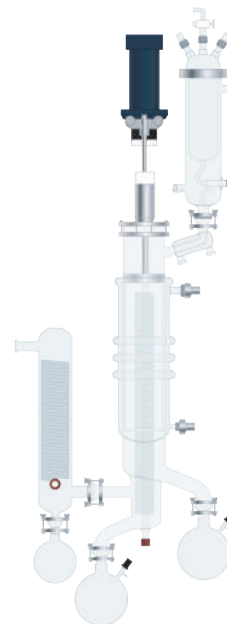
- * Jacketed feeding flask
- * Magnetic drive rotation with motor
- * Jacketed glass barrel with internal condenser
- * Dry ice cold trap
- * Collection flasks



B

Low cost and reducing consumables

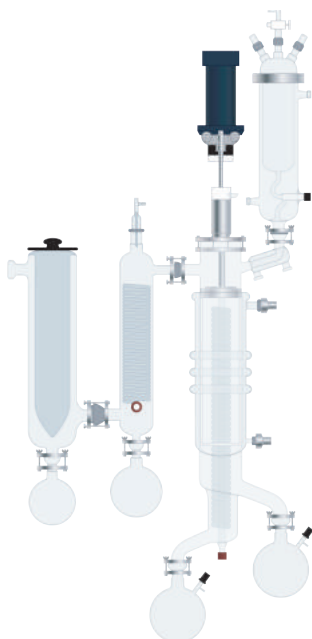
- * Jacketed feeding flask
- * Magnetic drive rotation with motor
- * Jacketed glass barrel with internal condenser
- * Cooling coils cold trap
- * Collection flasks



C

Wide applications, fit for purification and distillation of different materials

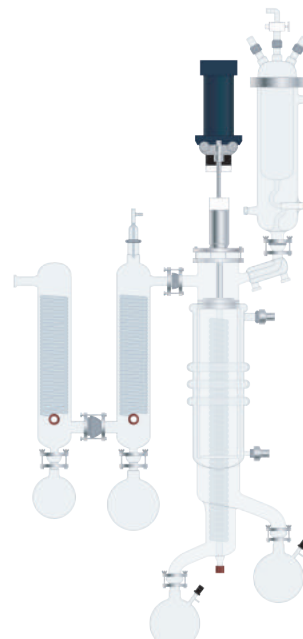
- * Jacketed feeding flask
- * Magnetic drive rotation with motor
- * Jacketed glass barrel with internal condenser
- * Cooling coils cold trap
- * Dry ice cold trap
- * Collection flasks



D

Accurate control, reducing consumables, fit for research and development

- * Jacketed feeding flask
- * Magnetic drive rotation with motor
- * Jacketed glass barrel with internal condenser
- * Cooling coils cold trap I
- * Cooling coils cold trap II
- * Collection flasks

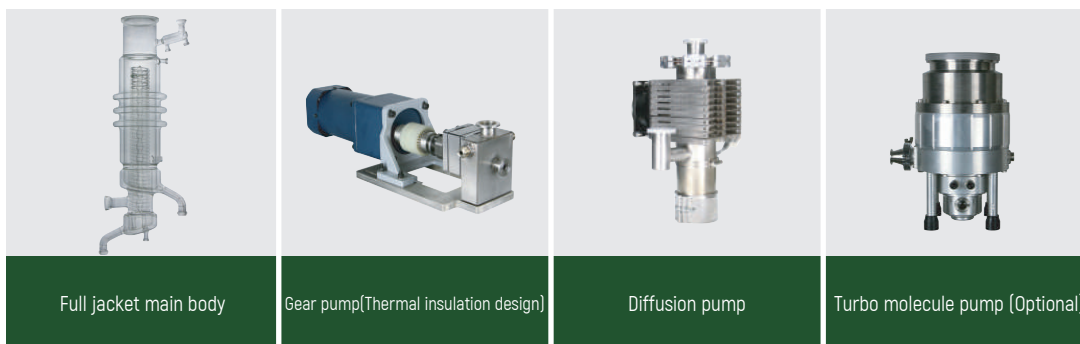


Wiped Film Molecular Distillation System (Borosilicate Glass)

Wiped Film Molecular Distillation System (Full Jacket Full Automation)

We can design full jacket full automation wiped film molecular distillation system, with automatic feeding and collection.

- Full jacket with full insulation, improving the flow ability of material
- High resolution gear pump for continuous feeding and discharging.
- Standard interface and modular design.
- Able to upgrade the module and expand the function

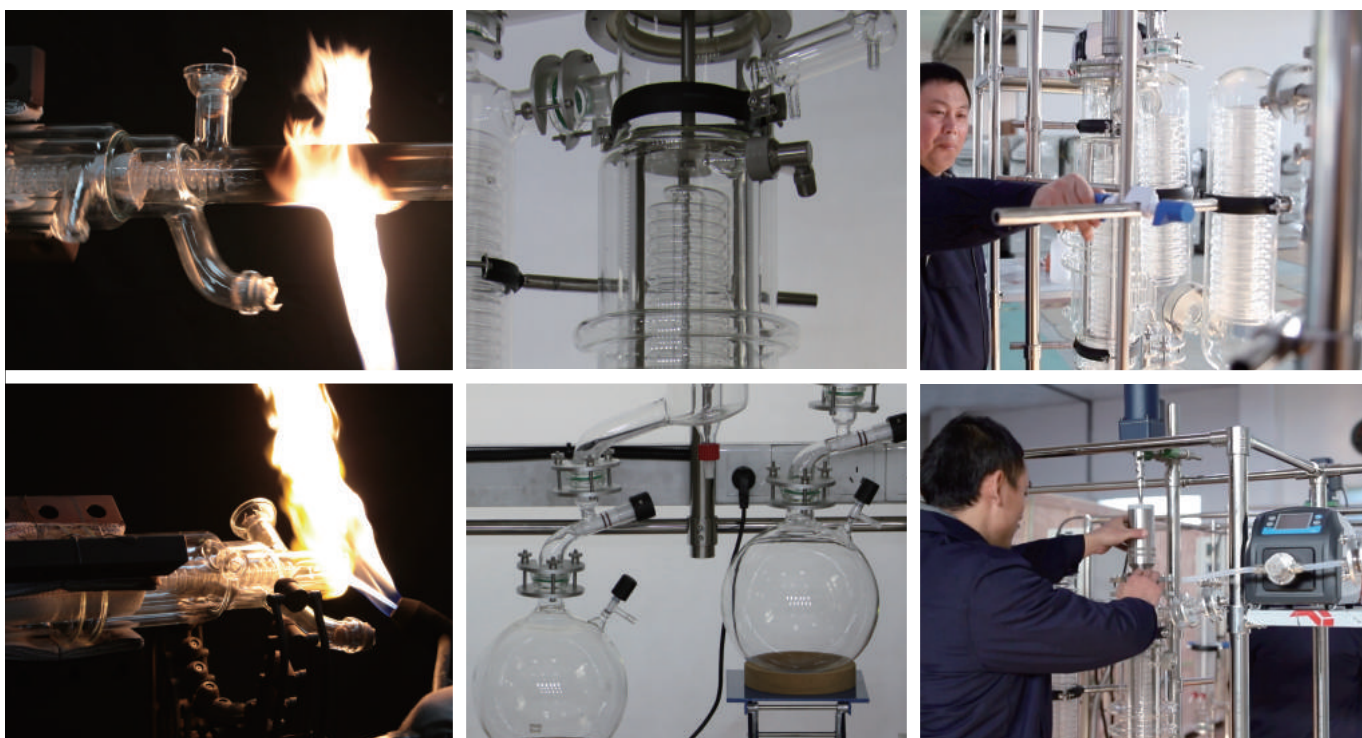


Wiped Film Molecular Distillation System (Borosilicate Glass)

Client's Cases



Inventory



Wiped Film Molecular Distillation System (Stainless Steel)

Wiped Film Molecular Distillation System (Stainless Steel)

We can develop stainless steel molecular distillation solutions based on the customer's production needs. Its efficient productivity can help customers save costs to the greatest extent .

- Modularized design for flexible options
- Continuous feeding & collection modules design, saving labor cost and working time.
- Fully jacketed design, wide applications for different materials
- 316L stainless steel, safe and reliable.
- Sight glass and quick-connect design, easy to disassemble and clean

Specification

Model	YMD-06S	YMD-1S	YMD-2S	YMD-5S	YMD-10S	YMD-15S	YMD-20S	YMD-30S	YMD-50S
Effective evaporation area	0.06	0.1	0.2	0.5	1	1.5	2	3	5
Cooling area of internal condenser	0.1	0.17	0.4	1.7	3	3.9	5	6.4	8
Feeding rate	1-5	2-10	4-20	10-50	20-100	30-150	40-200	60-300	100-500
Feeding mode	High-precision gear pump for continuous feeding								
Collection mode	High-precision gear pump for continuous collection								
Operation temperature	Up to 300 C								
Height	2000	2350	2650	3300	4450	4500	5000	6200	7500
Power supply	220V,380V,480V/50-60Hz								

Wiped Film Molecular Distillation System (Stainless Steel)

Featured Components

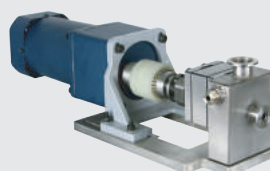
We offer a wide range of high performance components, stable inlet and outlet modules and magnetic seals to eliminate secondary contamination during distillation. Sight glass and molecular pumps provide consistently low vacuum conditions with high visibility.



Magnetic sealing wiper



Sight glass



Gear pump(Thermal insulation design)



Turbo molecular pump

Wipe Film Molecular Distillation System (Stainless Steel)

Client's Cases



Manufacturing



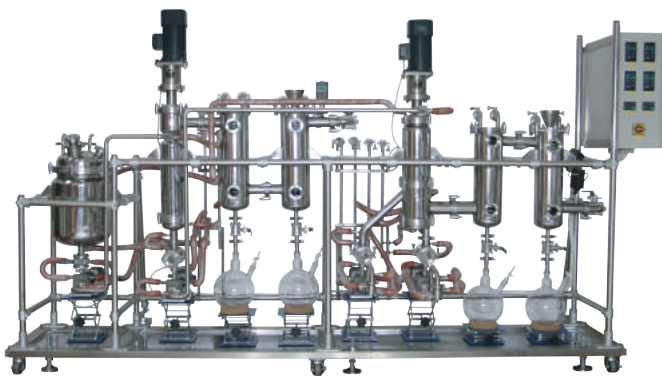
Wiped Film Molecular Distillation System (Stainless Steel)

Customization

We can provide customized services according to customer requirements, such as multi-level systems or other special requirements to meet different productivity needs.

- Continuous processing of materials, reducing downtime
- Overall design, reasonable optimization of operating space
- Save energy and reduce costs
- Versatile and flexible solutions

Multi Stage



1st stage: Thin Film Evaporator

2nd stage: Wiped Film Molecular Distillation



1st stage: Wiped Film Molecular Distillation

2nd stage: Wiped Film Molecular Distillation

★ Multiple stage can be customized upon clients' requests.

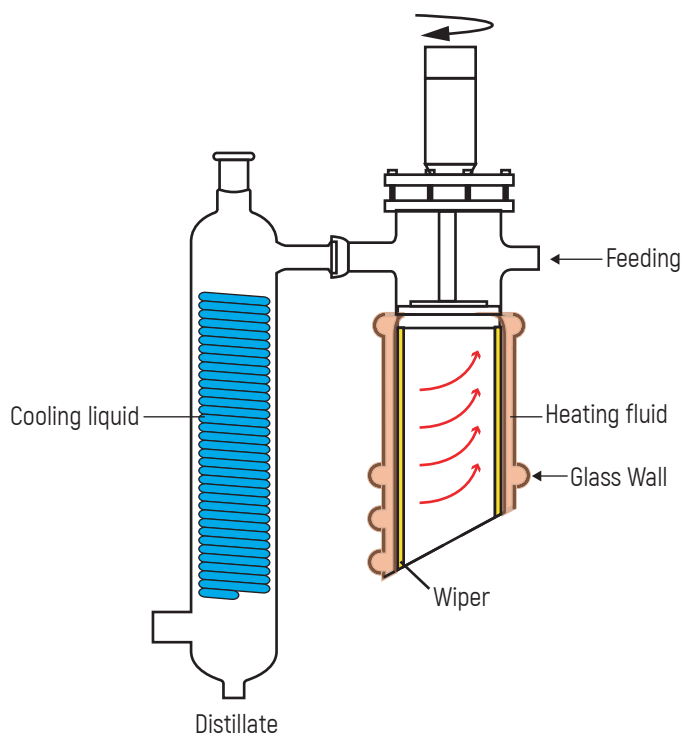
Work Process for Designing Solution for Clients

- Conduct feasibility and equipment layout analysis
- Process simulation with accurate analysis of data
- Complete the basic design and preliminary overall layout
- Complete detailed design by communication
- Manufacturing and transportation
- Installation and testing
- Training and after sales service

Thin Film Evaporation System

Thin Film Evaporation System

The thin film evaporator consists primarily of a heating jacket, an internally rotatable wiper, and a condenser and vacuum system. In the high vacuum system, the feeding liquid is fed from the upper part of the evaporator. After that, under the driving of the gravity and the rotating wiper, a downwardly swirling film is formed along the inner wall surface of the jacket. The finishing fluid is discharged from the bottom discharger, while the steam is discharged from the upper part. The system is very suitable for liquid materials with high viscosity, easy crystallization, easy scaling, suspended solids or heat sensitive properties, and is widely used for pretreatment and finishing of products in the chemical, pharmaceutical, health care and other industries.



Applications

The thin film evaporation system is mainly used in the pretreatment process of food and health products, also widely used in solvent removal and distillation separation in pharmaceutical, chemical industry and other industries.



Thin Film Evaporation System

Thin Film Evaporation System (Borosilicate Glass)



The YWF type glass thin film distillation system we produce uses high borosilicate glass 3.3. The metal parts in contact with the crude materials are 316L stainless steel and the wiper is made of PTFE. The main body has excellent sealing and corrosion resistance.

- High borosilicate glass design, high degree of visibility
- Short residence time so that heat-sensitive substances will not deteriorate
- Continuous distillation without interruption
- Thermal jacket design, uniform heat conduction
- Magnetic coupling seal, higher vacuum
- Save energy and reduce costs

Specification

Model	YWF60	YWF80	YWF100	YWF150	YWF200
Barrel diameter	60	80	100	150	200
Effective evaporation area	0.06	0.1	0.15	0.25	0.35
Feeding rate	0.2-3	0.2-6	0.2-10	0.5-15	0.5-20
Feeding flask volume	1	1.5	2	2	5
Distillate receiving flask	1	1	1	3	5
Residue receiving flask	1	1	1	3	5
Motor Power	90	120	120	120	200
Model	0.001mbar				
Rotation speed	50-500rpm				
Operation temperature	300℃ 以内 Up to 300℃				
Electrical requirement	220V/50-60Hz (Other options can be provided)				



- Modularized design for flexible options.
- Continuous feeding & discharging modules design, saving labor cost and working time.
- Fully jacketed design, better material adaptability.
- 316L stainless steel, safe and reliable.
- Sight glass and quick-connect design, easy to disassemble and clean.

Specification

Model	YWF-06S	YWF-1S	YWF-2S	YWF-5S	YWF-10S	YWF-20S	YWF-30S	YWF-50S
Effective evaporation area	0.06	0.1	0.2	0.5	1	2	3	5
Effective evaporation area	0.1	0.2	0.4	1.2	2	3.5	6	8
Feeding rate	1-8	2-15	4-30	10-80	20-150	40-300	60-450	100-600
Feeding flask volume	High-precision gear pump for continuous feeding							
Distillate receiving flask	High-precision gear pump for continuous collection							
Operation temperature	Up to 300 C°							
Motor Power	2000	2350	2650	3300	4450	5000	6200	7500
Electrical requirement	220V,380V,480V/50-60Hz (Other options can be provided)							

Short Path Distillation Kit

Short path distillation Kit

Short path distillation is a distillation technique that involves the distillate travelling a short distance. It is method of separating mixtures based on differences in their volatilities in a boiling liquid mixture under reduced pressure. As the sample mixture to be purified is heated, its vapors rise a short distance into a vertical condenser where they are cooled by water. This technique is used for compounds which are unstable at high temperatures because it allows a lower boiling temperature to be used.

Features

- Short condensing distance and few residue left after evaporation
- High quality and heavy duty Borosilicate 3.3 glass for durability
- Heating mantle with magnetic stirring function
- Cold trap protects the vacuum pump from contamination and damage of vapors
- Downward material drain port and distillation head with multiple sets of vigreux
- Turnkey solution is provided which includes the glassware, magnetic stirring heating mantel, cold trap, chiller and other accessories

Distillation Flow Chart

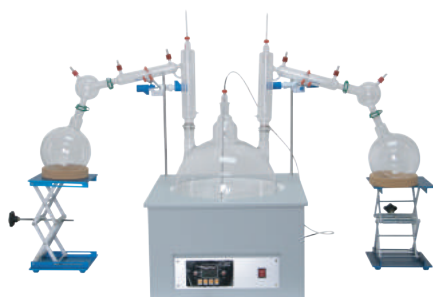


Parts Description

SPD-2L&5L



SPD-10L&20L



Part Description	Quantity	Part Description	Quantity
Round Bottom Flask, 5L, 3-neck, 34/45 Center Joint, 24/40 Side Joint	1	Round Bottom Flask, 10L, 3-neck	1
Short Path Distillation Head, Vacuum Jacketed, for SPD-05	1	Short Path Distillation Head, Vacuum Jacketed, for SPD-10 or SPD-05	2
Thermometer Inlet Adapter, Internal Thread, 24/40	1	Thermometer Inlet Adapter, Internal Thread, 24/40	1
Thermometer Inlet Adapter, Internal Thread, 14/20	1	Thermometer Inlet Adapter, Internal Thread, 14/20	2
Distillation Cow Receiver, 1-to-3, 24/40	1	Distillation Cow Receiver, 1-to-1, 24/40	2
Pear-shaped Flask, 1000mL, 1-neck, Hand Blown, 24/40	2	Pear-shaped Flask, 2000mL, 1-neck, Hand Blown, 24/40	2
Pear-shaped Flask, 500mL, 1-neck, Hand Blown, 24/40	1	Glass Funnel, 4" opening, 24/40	1
Glass Funnel, 4" opening, 24/40	1	Keck Clamp, 24/40, plastic	6
Keck Clamp, 24/40, plastic	4	Keck Clamp, 24/40, Stainless Steel	1
Keck Clamp, 24/40, Stainless Steel	2	Keck Clamp, 34/45, Stainless Steel	2
Keck Clamp, 34/45, Stainless Steel	1	Hexagonal glass bottle stopper, 14/20	2
Hexagonal glass bottle stopper, 14/20	1	Hexagonal glass bottle stopper, 24/40	1
Hexagonal glass bottle stopper, 24/40	1	Cork Ring Stand for Flask, 160mm	2
Cork Ring Stand for Flask, 3pcs 110mm, 1pcs 160mm	1	Silicone Tubing, 8mm I.D, 14mm O.D	10
Silicone Tubing, 8mm I.D, 14mm O.D	1	Silicone Tubing, 8mm I.D, 14mm O.D	2
Stainless Steel lab Jack, 20X20cm	1	Glass Thermometer, 300°C	2
Glass Thermometer, 300°C	1	Sealing Gasket for Screw thermometer Inlet Adapter, 24/40	10
Sealing Gasket for Screw thermometer Inlet Adapter, 24/40	10	clamp holder	2
vacuum grease	1	Lab Support Stand	1
3-prong Condenser Clamp	2	3-prong Condenser Clamp	2
clamp holder	1	Glass T Adapter, 3/8"	2
Lab Support Stand	1	vacuum grease	1
		1/2" fiberglass insulating rope	10

Cold trap



- DewarStyleGlassColdTrapwith 3/8" hosebarbs, 35/20 Joint
- 1L Receiving Flask, 35/20
- Cork Ring Stand for Flask, 1pcs 110mm
- Chain Clamp
- Stainless Steel lab Jack, 15x15cm
- PTFE Cover
- Stainless Steel Lab Clamp, 35/20
- Clamp Holder
- Lab Support Stand

Vaccum pump



- Model: 2XZ-2
- Pumping Rate: 2 L/s
- Max. Theoretical Vacuum Degree: 0.06 Pa
- Revolving Speed: 1440 rpm
- Power: 370 W

Desktop heater&chiller

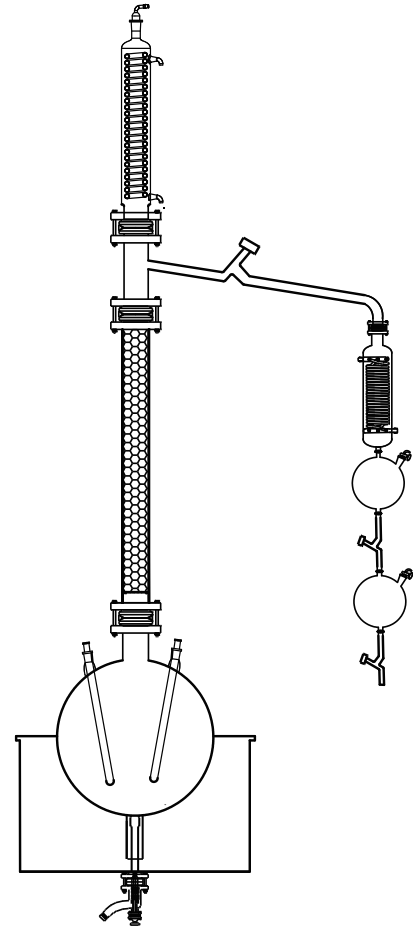


- Model: YHDC-0506
- Bath Volume: 6L
- Temperature Control Range: -5°C-95°C
- Temperature Accuracy: ±0.1°C
- Cooling Capacity: 650W
- Running Piping Silicone Pipe

Glass Fractionation Tower

Glass Fractionation Tower

The fractionation tower utilizes the difference in the volatilization ability of each component in the mixture, and the gas and liquid phases are reversely multi-stage contacted by the reflux of the liquid phase and the gas phase, and the volatile component is made under the constraint of the thermal energy drive and the phase equilibrium relationship. The light component is continuously transferred from the liquid phase to the gas phase, while the less volatile component migrates from the gas phase to the liquid phase, so that the mixture is continuously separated, and the process is called rectification.



Features

- The rectification tower body and the tray are made of stainless steel. The volume, tower diameter, board spacing and aperture of the rectification tower can be customized according to customer requirements.
- The reboiler is made of stainless steel and is heated by a built-in electric heating tube.
- The temperature control system adopts automatic stepless temperature control to undertake temperature control adjustment of the distillation column.
- The operation, temperature, pressure and flow display, adjustment and control are all carried out on the control panel.
- The frame is stainless steel, with compact structure, beautiful appearance, simple process and convenient operation.

Double Distiller

Double Distiller

The double distiller is a device that satisfies both distillation and extraction. The water or solvent (product) in the flasks on both sides are incompatible with each other, and the steam is separately returned to the respective flasks in the middle, and a large amount of sample can be extracted with a small amount of solvent. Applied to natural ingredient extraction and a pretreatment technology as well, compared with solid phase extraction and headspace injection, it has good repeatability and high extraction amount, and it is easy to operate and has good qualitative and quantitative effects.



Features

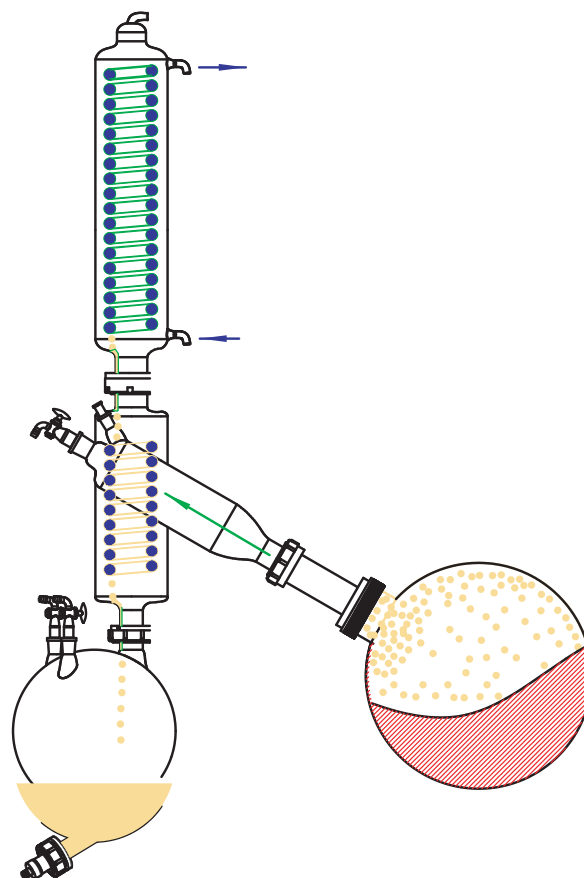
- Made of high borosilicate glass 3.3 with excellent structural strength
- Good visibility, easy to observe
- PTFE cock, excellent sealing

All kinds of customization or special requirement products are available.

Rotary Evaporator

Rotary Evaporator

A rotary evaporator is a device used in chemical laboratories for the efficient and gentle removal of solvents from samples by evaporation. It rotates and shapes a thin film in negative pressure condition by heating, evaporates, and then the vapor condensed, liquefied, and recollected for separation. We can provide the whole solution for rotary evaporator, including supporting equipment, like the circulating chiller and vacuum pump.



Features

- Modular design (individual rotary and bath modules) for extremely easy maintenance and easy future upgrades.
- PID temperature controller ensures accurate temperature control.
- Easy operation of motor lift, moving up and down smoothly and easy to lock.
- Heavy-duty SS304 support frame guarantees vibration-free operation.
- Double seal of Teflon (PTFE) and Viton ensures high vacuum.
- All parts that come into contact with chemical liquids and gases are made of PTFE and borosilicate glass 3.3 with high corrosion resistance.
- Specialized motor with extremely compact, intermeshed worm and gear provides precise driving for very quiet, vibration-free operation.
- Various options and accessories are available (vacuum pump, chiller, vacuum controller, cold trap, etc).

Rotary Evaporator

Motor lift Rotary Evaporator(0.5L-5L)

The small motor lift rotary evaporator is mainly used for laboratory chemical synthesis, concentration, crystallization, drying, separation and solvent recovery, especially suitable for the concentration and purification of biological products which are easily decomposed and degenerated by high temperature.



■ 0.5L-3L



■ 5L

Specification

Model	RE2000E	RE3000E	RE05V2
Rotation Flask	0.5-2L	3L	5L
Flask Rotatio Speed	0-199rpm		
Motor Power	40W	60W	80W
Receiving Flask	1L	2L	3L
Condenser	Glassware: Vertical with dual-spiral glass tubing		
Vacuum Degree(Ultimate Pressure)	< 399.9pa		
RPM Indicator	LCD display		
Temp.Range Heating Bath	Water bath/Oil bath: RT-180 C °		
Heating power	2KW		
Temp. Control	PID from main heater, ON/OFF Control		
Glass material	High borosilicate glass 3.3		
Power Source	110V,220V/50-60HZ		

Turnkey Solution

- Rotary evaporator
- Supporting chiller
- Supporting vacuum pump



Rotary Evaporator

Motor lift Rotary Evaporator(10L-50L)

The motor lift rotary evaporator is mainly used for pilot scale and production process, chemical synthesis, concentration, crystallization, drying, separation and solvent recovery. The sample is forced to convert and evenly distribute to prevent precipitation, thus also ensuring a relatively high evaporation exchange surface.



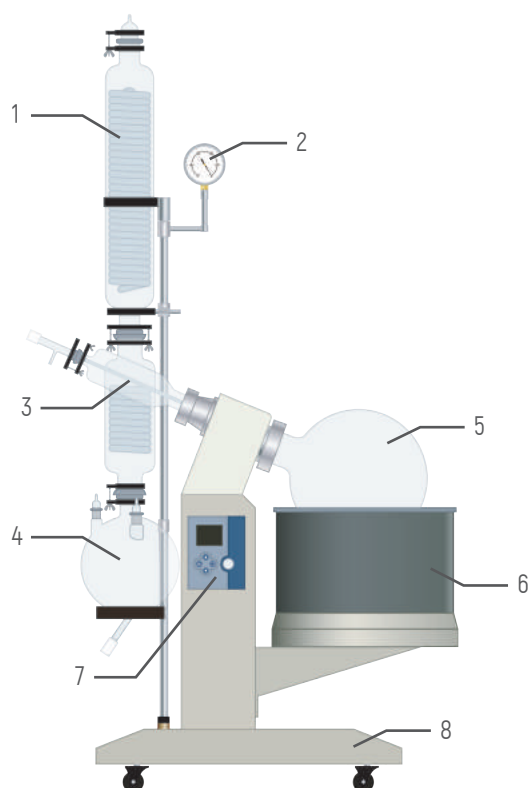
■ 10L-50L

Specification

Model	RE10V2	RE20V2	RE30V2	RE50V2
Rotation Flask	10L	20L	30L	50L
Flask Rotatio Speed	0-120rpm			
Motor Power	180W	180W	250W	250W
Receiving Flask	5L	10L	20L	30L
Condenser	Glassware: Vertical with dual-spiral glass tubing			
Vacuum Degree(Ultimate Pressure)	< 20mbar			
RPM Indicator	LCD display			
Temp.Range Heating Bath	Water bath/Oil bath: RT~180 C °			
Heating power	3KW	4KW	5KW	6KW
Temp. Control	PID from main heater, ON/OFF Control			
Glass material	High borosilicate glass 3.3			
Power Source	110V , 220V/50-60HZ (Other options can be provided)			

Rotary Evaporator

Structure Display



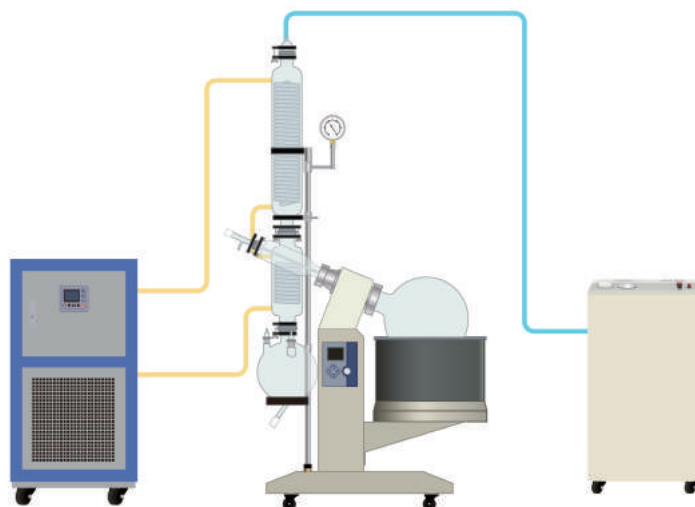
1	Large condensing area for high efficiency condensing
2	Vacuum gauge
3	Connection bottle with PTFE sealing valve
4	Receiving flask with vacuum valves allow for discharging solvents without breaking vacuum system
5	Perfect round shaped rotary flask
6	Water or oil bath with coating Telfon
7	Integral control panel with speed temperature and bath height control, LCD display and button to adjust lift of bath
8	High quality stainless steel main rack

★ Optional Explosion-proof Rotary Evaporator



Turnkey Solution

- Rotary evaporator
- Supporting chiller
- Supporting vacuum pump



Rotary Evaporator

Customized Motor Lift Rotary Evaporator (Dual Condensers&Collection Flasks)

As a professional manufacturer of lab equipment, we are specialized in producing customized machines as per clients' need.

1. Customize continuous collection.
2. Customize different models of condenser
3. Customized turnkey solution for clients'



Features

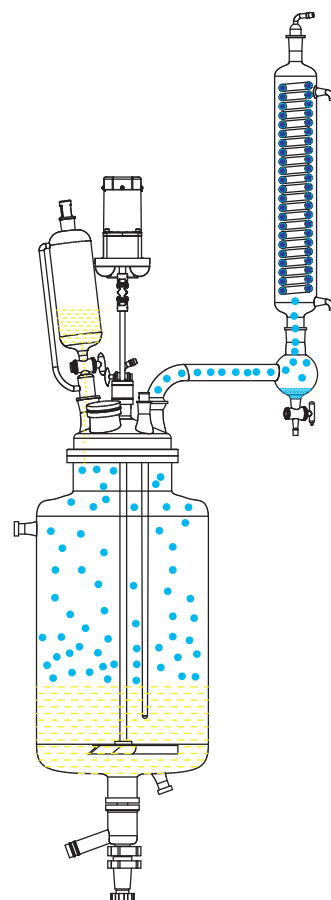
- Excellent handling by large and easy readable LCD display of temperature of bath and rotation speed of rotary flask
- Fast, easy and safe operation
- Safe handling and spring-loaded valves protect the glass
- High quality borosilicate glass fit for every applications
- Upgraded automatization, automatically adjusting the height of the bath by motor lift through Up and Down buttons
- Long life time due to exclusive use of corrosion-free stainless-steel
- Two collection flasks setting for continuous reaction, without breaking the vacuum system
- Cost-saving modular design and can be customized by clients' requirements

Jacketed Glass Reactor

Jacketed Glass Reactor

A jacketed glass reactor is a container that is designed for controlling temperature of its contents, by using a cooling or heating "jacket" around the vessel through which a cooling or heating fluid is circulated. The jacket has ability to permits the uniform exchange of heat between the fluid circulating in it and the walls of the vessel.

Here we offer a wide range of glass reactors with volumes from 500mL to 200L. They can be made into system devices with multi-function circulating water vacuum pump, diaphragm vacuum pump, low temperature circulating pump, circulating cooler, constant temperature circulator and cooling and heating circulating equipment. It can be used in the experiment and production of chemistry, fine chemical engineering, biological pharmacy and synthesis of new materials.



Features

- Solvent-resistant PTFE on all sealing components ensures long time durability and operation
- All glassware is hand-made from food grade high borosilicate 3.3 glass that is heat/cold/corrosion-resistant
- Adjustable stirring rate provides great torque or high speed
- Optional multi-layer stirring blades for optimal reaction results
- Wide range of temperature operations, from -60°C to 200°C
- Large condenser cooling surface for exceptional condensation performance
- Rugged stainless steel reinforced PTFE stirrer with anchored agitator, suitable for a wide range of viscous materials
- Easily visual operation with digital speed and temperature displays
- Heavy duty stainless steel supporting framework with lockable casters for mobility and stability
- Easy-to-install modular design for exceptional ease and low cost of maintenance
- Zero-dead-space bottom valve design

Jacketed Glass Reactor

Jacketed Glass Reactor (1L-5L)

Suitable for small batches of agitation, separation, distillation, mixing and chemical synthesis, the jacket design provides high or low temperature environments for experiments.

■ 1L-2L



■ 3L-5L



Specification

Model	JGR1L	JGR2L	JGR3L	JGR5L
Volume	1L	2L	3L	5L
Jacket volume	0.5L	1L	1.5L	2L
Discharge	PTFE(Teflon) bottom discharge valve			
Working temperature	-60~200 °C			
Stirring speed	0-600rpm			
Stirring power	90W			
Agitator	Anchor design, 304 stainless steel coated with reinforced PTFE			
Funnel	Pressure equalizing			
Number of Necks	5			
Power	110V , 220V/50-60HZ			

Jacketed Glass Reactor

Jacketed Glass Reactor (10L-200L)

Suitable for small tests, pilot tests, chemical reactions in the production process, stirring, distillation, temperature control, etc.

We can customize single layer and triple layer (double jacket) glass reactor.

■ 10L-30L



■ 50L-80L



■ 100L-200L

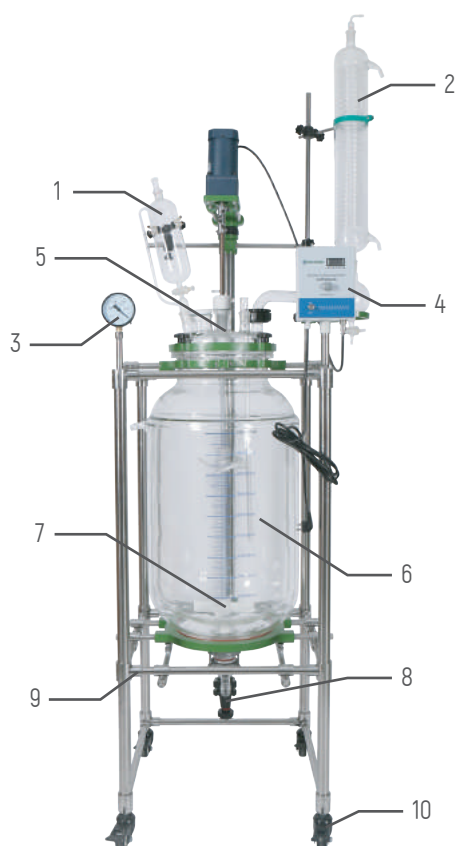


Specification

Model	JGR10L	JGR20L	JGR30L	JGR50L	JGR100L	JGR200L
Volume	10L	20L	30L	50L	100L	200L
Jacket volume	3L	6L	10L	16L	30L	60L
Discharge	PTFE(Teflon) bottom discharge valve					
Condenser cooling area	0.2m ²	0.2m ²	0.3m ²	0.3m ²	0.4m ²	0.4m ²
Working temperature	-60~200 °C					
Stirring speed	0-600rpm					
Stirring power	120W					
Agitator	Anchor design, 304 stainless steel coated with reinforced PTFE					
Funnel	Pressure equalizing					
Number of Necks	6					
Power	110V , 220V/50-60HZ (Other Options can be provided)					

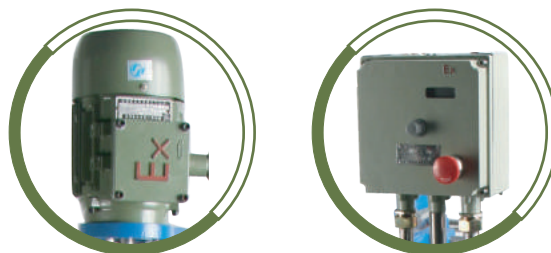
Jacketed Glass Reactor

Structure Display



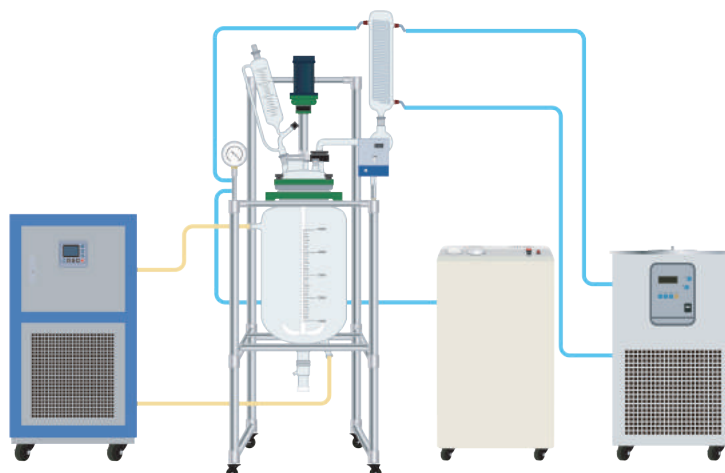
1	Dropping funnel (High Borosilicate Glass 3.3)
2	Reflux Unit: condenser+ receiving flask (High Borosilicate Glass 3.3)
3	Vacuum meter
4	Control panel of stirring speed of agitator (optional: explosion proof design) with digital display
5	Six-neck lid (customizable as clients 'requirement)
6	Reaction flask (customizable volume from 0.5-200L)
7	Rugged steel-reinforced PTFE agitator with anchor
8	Zero dead space detachable drain valve(PTFE) with knob to easily open and close
9	SUS 304 support frame
10	Heavy duty lockable casters, easy to move around and high stability with lock

★ Optional Explosion-proof jacketed glass reactor



Turnkey Solution

- Jacketed glass reactor
- Supporting chiller or heater
- Supporting vacuum pump



Stainless Steel Extraction Tank

Stainless Steel Extraction Tank

Stainless steel extraction tank have better structural strength and better thermal conductivity, with better temperature and pressure tolerance.

- The mirror-polished inner surface meets hygienic requirements
- Suitable diameter and height ratio design, customizable mixing function
- Good hygiene and tightness prevent material leakage and pollution



Specification

Model	JSR200	JSR500	JSR1000	JSR2000	JSR3000	JSR5000
Volume	200L	500L	1000L	2000L	3000L	5000L
Inner Diameter	650	900	1200	1400	1400	1600
Outer Diameter	750	1000	1300	1500	1500	1700
Motor power	2.2	3	4	5.5	7.5	7.5
Stirring speed	60-100					

Crystallization Reactor

Glass Crystallization Reactor(Explosion proof)

The crystallization reactor is a commonly used biochemical instrument, which combines the functions of the reactor and the filter. It is mainly used in modern fine chemicals, bio-pharmaceuticals, scientific research experiments, etc. It can make crystallization concentration, distillation, reflux, separation and purification which is an ideal instrument for teaching, lab test, pilot test and production.



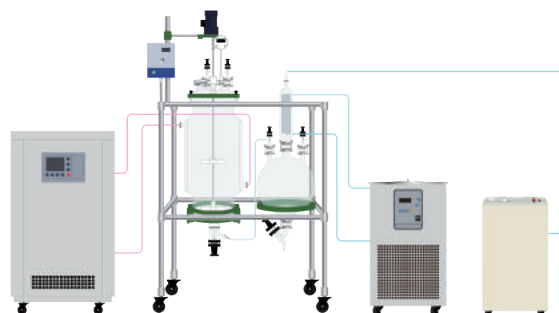
- Optional filter plate, pore size from 10-16um to 160-250um
- Number of ports on lid: 4-5
- Corrosion resistant sealing ring and quick release clamp
- PTFE bottom valve with no dead angle design
- Jacket interface can be matched with different heater and chiller
- PTFE paddle or glass paddle for clients' option
- Stainless steel bracket system, easy to disassemble
- Customized service according to customers' needs

Specification

Model	YFR-10L	YFR-20L	YFR-50L	YFR-100L
Volume of the reaction tank	10L	20L	50L	100L
Ball flask volume	10L	10L	30L	50L
Power	120W			
Rotating speed	0-600rpm			
Voltage	110V,220V/50-60Hz			

Turnkey Solution

- Crystallization Reactor (Nutsche Filter Reactor)
- Circulating Heater & Chiller
- Chillers for condensers
- Vacuum Pump



Crystallization Reactor

Stainless Steel Crystallization Reactor



The crystallization reactor is a crystallization equipment that needs to freeze the chilled water or the refrigerant in the interlayer after the material mixture reaction. The key part is the size of the interlayer, the structure of the agitator, the discharging port mode, the smoothness of the tank, and the zero dead end cleaning in the tank to meet the conditions of use of the process. The stainless steel crystallization reactor has extremely high requirements for polishing accuracy in the tank. We can customize 100L-5000L stainless steel crystal kettle according to customer requirements.

Features

- Made of 316L or 304 stainless steel with high thermal conductivity to achieve rapid heating and cooling of the kettle body
- No dead end cleaning for discharging
- Frequency control and sanitary seal
- Can withstand high temperature sterilization
- Can be flexibly customized according to customer requirements

Specification

Model	YHF100S	YHF200S	YHF500S	YHF1000S	YHF1500S	YHF2000S	YHF2500S	YHF3000S	YHF4000S	YHF5000S
Volume	100	200	500	1000	1500	2000	2500	3000	4000	5000
Diameter	500	600	800	1000	1200	1200	1400	1400	1500	1600
Pressure in reactor	0.5									
Pressure in jacket	0.25-0.6									
Motor power	1.1	1.5	2.2	4.0	4.0	4.0	5.5	5.5	5.5	7.5
Stirring speed	22	63	63	85	85	85	130	130	130	180

Crystallization Reactor

Stainless Steel Crystallization Reactor (Explosion proof)



We can produce stainless steel crystallization reactor as clients' requirement.

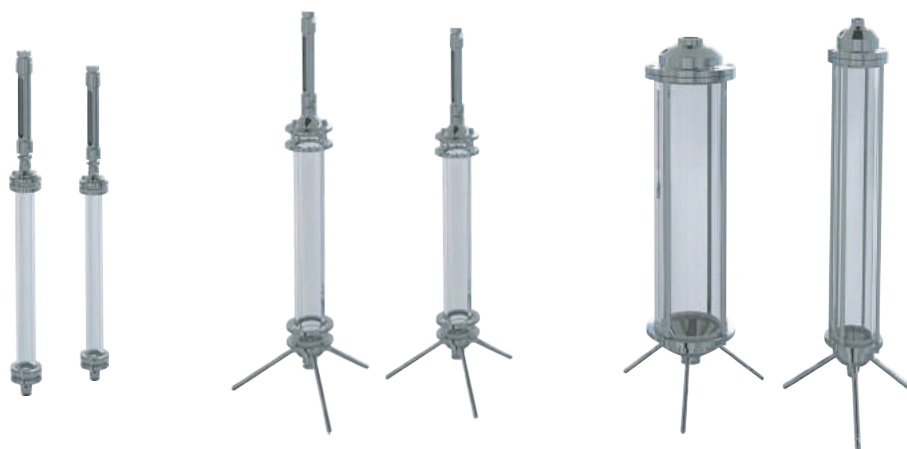
- Customizable large volume tank
- Sealing and stainless steel materials meet hygienic requirements
- Customizable hanging or floor type

Chromatography Column

Chromatography Column

The chromatography column is the main body of the gel chromatography technique and is generally made of a glass tube or a Plexiglas tube. Chromatography is a method of achieving separation depending on the partition coefficients of the components in the sample mixture in the stationary phase and the mobile phase. The degree of resolution depends on the column height while the diameter does not affect the resolution.

YMC series chromatography column is filled with packing by manual screw compression. It is simple in configuration, easy to clean and disinfect, and suitable for switching of diversified products. The chromatographic column structure is compact in design, convenient in operation and stable in performance. It can meet the requirements of most chromatographic packings, has good column filling effect and high column efficiency, which can meet the needs of customers from small to large scale production.



Features

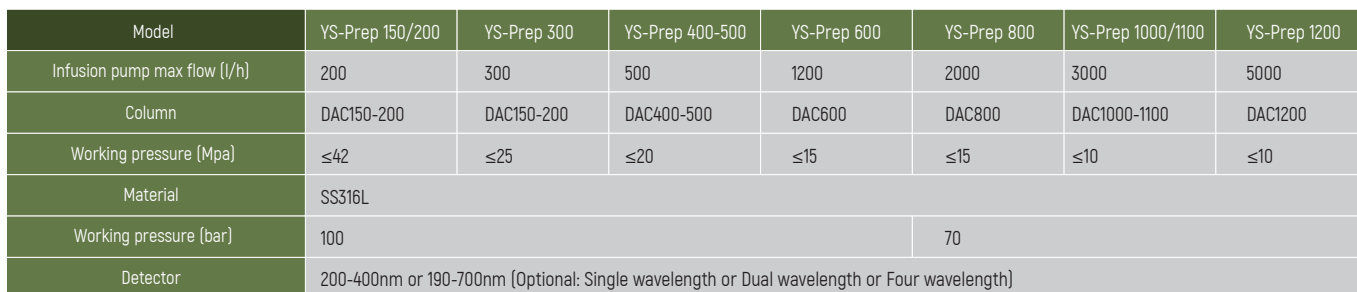
- Fine processing glass tube, easy to seal, with high strength
- The stigma side slide design, without manual handling
- The bottom sieve plate is directly replaced without disassembling the column
- Flow pipe with no dead end, with excellent cleaning verification performance
- Operation is reliable, portable and safe

High Performance Liquid Chromatography System (HPLC)

Lab Application



Model	YS4201	YS4205	YS4210	YS4330	YS4360	YS43100	YS43300
Infusion Unit							
Infusion pump max flow (ml/min)	0.001-9.999	0.01-49.99	0.01-99.99	0.01-299.99	0.01-599.99	0.01-999.99	0.01-2999.99
Working pressure (Mpa)	≤42	≤25	≤20	≤15	≤15	≤10	≤10
UV-Vis Detecting Unit							
Wave length	190-700 (Optional: Single wavelength or Dual wavelength)						
Lights Source	Deuterium lamp or Tungsten lamp						
Wavelength accuracy (nm)	±2						
Chromatograph Column							
Column type	Preload Column		Dynamic Axial Compression Column/ Spring Column		Dynamic Axial Compression Column		
Inner Diameter (mm)	4.6/10	10/20/30	50	50/80	100	150	200
Max pressure (MPa)	≤10						
Effective packing height (mm)	≤300					≤ 450	

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Vacuum Filter

Vacuum Filter

The vacuum filter is mainly used for liquid-solid filtration under vacuum condition. It has been widely used in laboratories nowadays. Though filtration can be done simply with gravity, more often vacuum filtration is employed because the filtration speed is much faster with vacuum.



Features

- High quality SUS 304 frame
- High quality Borosilicate glass 3.3 with excellent physical and chemical properties for glass parts
- Perfect sealing property and no dead corner design for charging solution or power more easily
- One vacuum valve for connecting vacuum pump for processing vacuum filtration
- Cost-saving modular design and can be customized by clients' requirements
- Safe in operation, easy to move around with lockable casters

Vacuum Filter

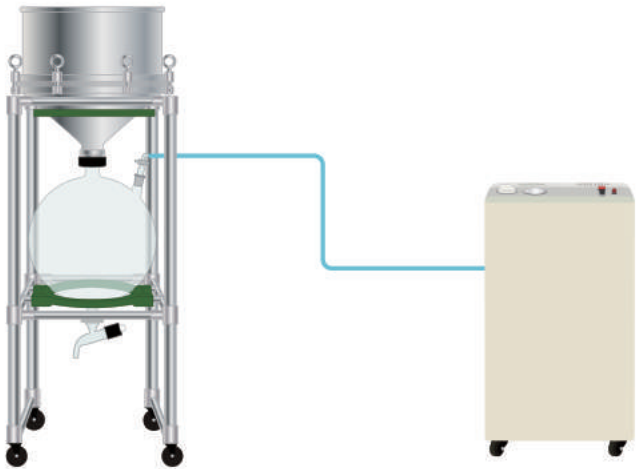
Specification

Model	YVF-10L(SS)	YVF-20L(SS)	YVF-30L(SS)	YVF-50L(SS)
Funnel inner diameter& height	250*250	300*300	350*350	400*400
Size of flange connection	60	60	60	60
Material of discharge valve	PTFE			
Glass material	Borosilicate glass 3.3			
Frame material	Stainless Steel 304			
Funnel type	Detachable funnel			

Turnkey Solution

- Vacuum Filter
- Vacuum Pump

Optional insulation devices to improve filtration effect



Heating Circulator

■ Heating Circulator

Mainly apply to Chemistry and Biotechnology physics experiment, which need to maintain different high temperature. It is designed for supporting jacketed glass reactors, wiped film molecular distillation equipment and etc.

■ GX Series



■ YHUC Series



■ Features

- Controllable temperature and flow to provide a thermostatic environment
- Digital display for convenient and flexible setting
- Efficient and secure temperature conversion
- Electrical setting, easy to operate
- Circulating system adopts Stainless Steel which can prevent corrosion, rust and high temperature liquid pollution
- Safe in operation, easy to move around with caster with lock

Heating Circulator

GX Series

Model	GX-2005	GX-2010	GX-2020	GX-2030	GX-2050
Temperature range	200				
Resolution	0.1				
Fluctuation	0.1				
Bath Volume	5	10	20	30	50
Flow rate	8	15	15	15	15
Heating Power r	1.6	2	3.5	3.8	4.4

YHUC Series

Model	YHUC-5030	YHUC-7030	YHUC-10030	YHUC-15030
Temperature control range	50-300			
Controller	LCD display of temperature and touch button input			
Heating mode	Heating tube			
Temperature control object	Thermal fluid outlet			
Temperature feedback	PT100			
Heating power	5.5	7.5	10.0	15.0
Circulation pump	Max25L/min	Max60L/min	Max60L/min	Max60L/min
Interface size	DN15	DN15	DN20	DN20
Security protection	With self-diagnosis function; temperature difference protection, overload relay, anti-dry protection, anti-flush temperature protection and other security functions.			
Closed circulation system	The whole system is a fully enclosed system. There is no oil mist at high temperature, and the low temperature does not absorb moisture in the air. The system does not increase the pressure due to high temperature during operation, and the heat medium is automatically supplemented at low temperature.			

Cooling Circulator

Cooling Circulator

The temperature of the system or object is cooled by the coolant flowing into it, and the heat is simultaneously discharged.

Chilling circulators are used to do low temperature experiment such as chemical, biological and physical experiment in low temperature. They are ideal equipment for cooling lab equipment like rotary evaporators, glass reactors, wiped film evaporators, etc.



■ YHLT Series



■ YHLX Series

Features

- Closed cycle pipeline design highly prevents circulating water pollution and extends the lifetime of circulation liquid.
- Multi-grade safety elements, user-friendly design.
- Brand compressor, cascade refrigeration cooling technologies.
- Efficient two-condensate system.
- Computer-cascade temperature controller, temperature figures display, adjustable unit is 0.10C
- Use of cold technology, can guarantee the stability of temperature at low temperature.
- Can set the temperature difference of compressor on/off.
- Monitoring the ambient temperature, prevent temperature to be higher in the running system.
- A variety of fault alarm (over temperature alarm, sensor alarm, high pressure alarm, compressor overheat alarm, liquid level alarm).
- Power on delay protection, three-level cascade system protectors.
- All parts are safety grounding.
- Adopt full closed circulation design, no water vapor at low temperature and ensure the purity of cooling medium in case of ice crystals, provide a long time life of heat transfer liquid.
- High-performance circulating pump, can guarantee 24 hours' continuously running a day.
- Use plate cool-heat-exchanger, heat transfer efficiency is provided.

YHLT Series

Model	Capacity(L)	Lowest temperature(°C)	Temperature accuracy(°C)	Cooling Capacity(W)	Circulating flow(L/min)	Lift(m)	Electricity(V)	Nominal Current(A)	Nominal Power(W)	Sink dimension(mm)	Opening dimension(mm)					
YHLT-5/10	5	-10	±1°C	242-685	12	4	220	2	500	180*160	170					
YHLT-5/15		-15		242-685	12	4		2	500	220*180	200					
YHLT-5/20		-20		242-920	18	6-8		3.6	880							
YHLT-5/25		-25		240-1050	18	6-8		3.6	880							
YHLT-5/30		-30		230-1100	18	6-8		3.6	880							
YHLT-5/40		-40		205-1230	18	6-8		3.6	880							
YHLT-5/60		-60		200-1350	18	6-8		10	1200							
YHLT-5/80		-80		200-1400	18	6-8		10	1200							
YHLT-5/120		-120		175-1600	15	4-6		11.5	1280							
YHLT-10/10	10	-10	±1°C	300-1600	18	6-8	220	4.2	850	250*250	200					
YHLT-10/20		-20		200-1870				5.2	1000							
YHLT-10/25		-25		200-2300				5.8	1000							
YHLT-10/30		-30		260-2400				5.8	1000	300*22	260					
YHLT-10/40		-40		330-2100				6	1200							
YHLT-10/80		-80		380-2600				11.8	2600							
YHLT-10/120		-120		380-4200				9.8	2300							
YHLT-20/0		20		0				±1°C	242-920	18	6-8	220	3.6	2100	300*300	320
YHLT-20/10				-10					600-1780				9.5	2000		
YHLT-20/20	-20		600-1780	5.7	1140											
YHLT-20/30	-30		600-2300	5.7	1140	350*250										
YHLT-20/40	-40		648-2200	7.3	1800											
YHLT-20/60	-60		450-2600	380	11.5				2400							
YHLT-20/80	-80		600-2800		4.2	3500										
YHLT-20/120	-120		1020-3380		12	8-10	14		7200							
YHLT-30/10	30		-10	±1°C	1850-3480	12	6-8		220				7	1000	350*350	
YHLT-30/20		-20	1460-3480		18	6-8	220	12	2000							
YHLT-30/30		-30	829-3380		18	6-8	380	12	2300							
YHLT-30/40		-40	1140-3600		12	8-10	380	6.6	3340							
YHLT-30/80		-80	1870-4500		8-12	8-12	380	13	3500							
YHLT-30/120		-120	1400-6100		18	8-10	380	10.5	2800							
YHLT-40/20	40	-20	±1°C	1500-3800	18	6-8	220	13	2300	400*400	320					
YHLT-40/40		-40			18	6-8	380	7.5	5400	350*350						
YHLT-40/60		-60		3200-5800	8-25	8-12	380	13	4500	400*400						
YHLT-50/10	50	-10	±1°C	2200-6800	18	6-8	380	6	4000	400*40	320					
YHLT-50/20		-20		3200-8500	18	6-8		5.7	4500							
YHLT-50/30		-30		2400-5250	18	6-8		10.2	4640							
YHLT-50/40		-40		2650-6480	18	6-8		6	5400							
YHLT-50/80		-80		2300-6200	18	6-8		14.5	14500							
YHLT-50/120		-120		2100-9600	25	8-12		22.5	14500							
YHLT-50/120		-120		2100-9600	18	8-10		22.5	14500							
YHLT-80/10	80	-10	±1°C	3600-5800	30	8-12	380	8	4000		320					
YHLT-80/20		-20		2650-6480	30	8-12		11.5	4500							
YHLT-80/30		-30		2500-6860	18	8		14.5	5500	400*400						
YHLT-80/120		-120		2000-10150	12	8-12		38	8600	350*350						
YHLT-100/20	100	-20	±1°C	2400-7850	35	10	380	15.5	5500	500*500	420					
YHLT-100/20		-20		2400-7850	35	10		8.5	4500							
YHLT-100/30		-30		1200-4500	35	12		16	8000							
YHLT-100/40		-40		3700-8500	35	8-10		22	11376							
YHLT-100/60		-60		2300-8200	25	6-8		16	8000							
YHLT-100/80		-80		4800-11800	35	8-10		32	8500							
YHLT-100/120		-120		4380-13600	25	8-10		40	10500							
YHLT-150/20	150	-20	±1°C	7500-15000	25	8-10	380	17.5	8500		420					

YHLT Series

Model	Temperature Range	Circulating Flow(L/min)	Vacuum Pump Pressure(bar)	Power	Cooling Capacity at 0°C(kW)	Cooling Capacity at -10°C(kW)	Cooling Capacity at -20°C(kW)	Charging refrigerant
YHLT-4018	-40~30°C	20	0.7	220V,380V/480V 50-60HZ	1.2	0.4		R404A
YHLT-4040	-40~30°C	20	0.7		2.7	0.75		
YHLT-4062	-40~30°C	35	1		3.8	1.15		
YHLT-4090	-40~30°C	35	1		5.5	1.5		
YHLT-40A1	-40~30°C	35	1		7	2.1		
YHLT-40A2	-60~20°C	80	1.5		14	4		
YHLT-6018	-60~20°C	20	0.7			0.6	0.4	R404A/R23
YHLT-6030	-60~20°C	20	0.7			1.15	0.6	
YHLT-6062	-60~20°C	35	1			2	1.15	
YHLT-60A1	-60~20°C	35	1			3.5	2	
YHLT-60A2	-60~20°C	75	1.5			13	5.8	

Model	Temperature Range	Circulating Flow(L/min)	Vacuum Pump Pressure(bar)	Power	Cooling Capacity at 0°C(kW)	Cooling Capacity at -10°C(kW)	Cooling Capacity at -20°C(kW)	Cooling Capacity at -10°C(kW)	Cooling Capacity at -20°C(kW)	Charging refrigerant
YHLT-8012	-80~20°C	20	0.7	220V /380V /480V 50-60 Hz	0.6	0.4	0.2			R404A R23
YHLT-8030	-80~20°C	20	0.7		1.4	0.8	0.5			
YHLT-8062	-80~20°C	20	0.7		2.7	1.5	0.9			
YHLT-8090	-80~20°C	35	1		3.6	2.1	1.2			
YHLT-80A1	-80~20°C	35	1		4.5	2.6	1.4			
YHLT-80A2	-80~20°C	80	1.5		8.7	4.8	2.2			
YHLT-A012	-105~60°C	20	0.7			1.2	0.6	0.4		R404A R14
YHLT-A025	-105~60°C	20	0.7			2.5	1.3	0.7		
YHLT-A050	-105~60°C	35	1			5	3	1.5		
YHLT-A080	-105~60°C	80	1.5			8.6	5	2.3		
YHLT-A215	-105~60°C	20	0.7				1.2	0.7	0.26	
YHLT-A230	-105~60°C	20	0.7				2.4	1.35	0.55	
YHLT-A255	-105~60°C	35	1				4	2.1	0.95	

YHLX Series

Model	Temperature Range	Circulating Flow(L/min)	Vacuum Pump Pressure(bar)	Power	Cooling Capacity at 0°C(kW)	Cooling Capacity at -10°C(kW)	Cooling Capacity at -20°C(kW)	Charging refrigerant
YHLX-0250	-15~30°C	20	0.7	220V 50-60Hz	1.5	1	0.55	R404A
YHLX-0400	-25~30°C	20	0.7		2.4	1.5	0.8	
YHLX-0700	-25~30°C	35	1	380V/480V 50-60Hz	4	2.7	1.5	
YHLX-1000	-25~30°C	35	1		7.5	6.3	3.5	
YHLX-1450	-25~30°C	60	1		10	8	5	
YHLX-2000	-25~30°C	75	1.5		15.5	12	7.3	
YHLX-3500	-25~30°C	110	1.5		28	21	12.3	
YHLX-5000	-25~30°C	110	1.5		41	30	17.4	
YHLX-8000	-25~30°C	150	2		71	48	28	

Compound Heating & Cooling Circulator

Compound Heating & Cooling Circulator

YHR Series compound heating/cooling circulators are suitable for fast and precise control of externally connected applications, without changing of thermal fluid. With a hermetic reservoir design, the user will not worry about problems like ice in the reservoir or heating oil vapor pollution.



Features

- Wide working temperature range with cooling and heating function.
- With LED display controller, can show the setting temperature & actual value, and alarm value for over temperature.
- Efficient fast, simple topping up liquid ensure fast cooling at high temperature and can achieve temperature control continuously.
- HR series heating & cooling circulator cycle system is closed; there is no oil mist and water vapor happen, so as to assure the lab safety and heat transfer fluid lifetime.
- HR series heating & cooling circulator use copeland brand compressor, circulation pump, stable performance and reliable quality.
- Self-diagnosis function; freezer overload protection; high pressure switch, overload relay, thermal protection device, liquid low level protection, high temperature protection and temperature fault protection.
- Use the same kind of heat conducting in the whole heating-cooling cycle when control heat conducting medium temperature.
- High-lift design and meet the long-distance transportation of heat conducting medium.

YHR Series

Model	Temperature Range	Circulating Flow(L/min)	Vacuum Pump Pressure(bar)	(kW)	Cooling Capacity at 200°C(kW)	Cooling Capacity at 100°C(kW)	Cooling Capacity at 20°C(kW)	Cooling Capacity at 0°C(kW)	Cooling Capacity at -20°C(kW)	Power
YHR-25	-25-200°C	25	1.5	2.5	2.5	2.5	2.5	1.5	1	220V
YHR-35	-25-200°C	35	2	3.5	3.5	3.5	3.5	3	2.1	380V/ 480V
YHR-50	-25-200°C	35	2	5	5	5	5	4.5	3	
YHR-70	-25-200°C	35	2	7	7	7	7	6.2	4.2	
YHR-100	-25-200°C	50	2	10	10	10	10	8	6	
YHR-150	-25-200°C	50	2	15	15	15	15	12	9	
YHR-180	-25-200°C	75	2	18	18	18	18	15	11	
YHR-250	-25-200°C	100	2	25	25	25	25	21	15	

Model	Temperature Range	Circulating Flow(L/min)	Vacuum Pump Pressure(bar)	(kW)	Cooling Capacity at 180°C(kW)	Cooling Capacity at 100°C(kW)	Cooling Capacity at 10°C(kW)	Cooling Capacity at -20°C(kW)	Cooling Capacity at -35°C(kW)	Power
YHR-25V	-40-180°C	25	1	2.5	2.5	2.5	2.5	1.5	0.5	220V
YHR-35V	-40-180°C	35	1.5	3.5	3.5	3.5	3.5	2.2	0.9	380V/ 480V
YHR-50V	-40-180°C	35	1.5	5	5	5	5	3.5	1.2	
YHR-70V	-40-180°C	35	1.5	7.5	7.5	7.5	7.5	4.8	1.7	
YHR-100V	-40-180°C	50	1.5	10	10	10	10	6	2.3	
YHR-150V	-40-180°C	50	1.5	15	15	15	15	10	3.7	
YHR-250V	-40-180°C	75	1.5	25	25	25	25	15	4.8	

Model	Temperature Range	Circulating Flow(L/min)	Vacuum Pump Pressure(bar)	(kW)	Cooling Capacity at 250°C(kW)	Cooling Capacity at 100°C(kW)	Cooling Capacity at -10°C(kW)	Cooling Capacity at -30°C(kW)	Cooling Capacity at -45°C(kW)
YHR-25T	-50-250°C	25	1.5	2.5	2.5	2.3	2.1	0.9	0.3
YHR-35T	-50-250°C	35	1.5	3.5	3.5	3.5	3.1	1.1	0.4
YHR-50T	-50-250°C	35	1.5	5.5	5.5	5.5	4.3	1.8	0.7
YHR-70T	-50-250°C	35	1.5	7.5	7.5	7.5	6.2	2.3	1.0
YHR-100T	-50-250°C	50	1.5	10	10	10	7.8	3.2	1.3
YHR-150T	-50-250°C	50	1.5	15	15	15	11	4.8	2.3
YHR-250T	-50-250°C	75	1.5	25	25	25	16	6.7	3.2

Model	Temperature Range	Circulating Flow(L/min)	Vacuum Pump Pressure(bar)	(kW)	Cooling Capacity at 250°C(kW)	Cooling Capacity at 100°C(kW)	Cooling Capacity at -10°C(kW)	Cooling Capacity at -30°C(kW)	Cooling Capacity at -45°C(kW)
YHR-25S	-70-250°C	25	1.5	2.5	2.5	2.3	2.1	1.3	0.4
YHR-35S	-70-250°C	35	1.5	3.5	3.5	3.5	2.6	1.6	0.5
YHR-50S	-70-250°C	35	1.5	5.5	5.5	5.5	3.9	2.3	0.7
YHR-70S	-70-250°C	35	1.5	7.5	7.5	7.5	5.2	3	0.9
YHR-100S	-70-250°C	50	1.5	10	10	10	7.2	3.9	1.2
YHR-150S	-70-250°C	50	1.5	15	15	14	10	5.4	1.8
YHR-250S	-70-250°C	75	1.5	25	25	25	14	8.7	2.8

Water Cycle Vacuum Pump

Water Cycle Vacuum Pump

Water vacuum pump is the best choice to support the lab rotary evaporator to complete the whole evaporation process efficiently. It provides vacuum condition for evaporation, distillation, crystallization, drying, sublimation, filtration depressurization, degassing and other processes. Water vacuum pumps are oil-free, chemical resistant and easy-to-maintain. Vacuum up to 20 mbar is generated by water flow via Venturi Effect.



Features

- Oil free, corrosion resistant, reliable
- All major valves and parts made of PTFE, ideal for chemical-related operation
- No oil changes, no cold trap required for water/ alcohol solutions
- Easy to maintain for laboratory environment
- Designed to work with rotary evaporators, vacuum filtration, etc
- High quality anti-corrosion shell; newly-developed 5 taps can work separately or together with 5-way pipe (optional) to increase the extraction capacity and match working with large rotary evaporators and reactors
- Cooper jet and PP triple-valve, check valve and suction mouth
- More extraction capacity compared with desktop vacuum pump
- Flexible moving around with steering wheels
- Eligible for extracting corrosive gas

Specification

Mode	SHZ-95B	SHZ-D(III)
Flow(L/min)	80	60
Lift(m)	12	8
Power (W)	370	180
Extraction gas capacity per tap(L/min)	10	10
Water storage capacity (L)	50	15
Vacuum degree (MPa)	-0.098	-0.098
Power supply(V/Hz)	220V, 50-60Hz	220V, 50-60Hz
Taps	5 taps per meter	Double(Optional :four vacuum meters and taps)
Material	Anti-corrosive material	Anti-corrosive material

Rotary Vane Vacuum Pump

Rotary Vane Vacuum Pump

The pump adopts gas ballast valve which can well rule out water vapor. The gas ballast can fill the air for exhaust compartment, which can reduce vapor ultimate partial pressure, the vapor will be removed. So the gas ballast can well remove the vapor in the pump oil, which can prolong the pump service time and prevent the mix for oil and water vapor.

Rotary vacuum pump is one of the basic equipment to pump gas, can be used alone, also can be used with a booster pump, diffusion pump, molecular pump and other ultra-high vacuum pump connected together as a backing pump, widely used in electronic devices manufacturing, vacuum drying oven, filtration, impregnation, coating, welding, smelting and laboratory equipment.



■ 2XZ Series



■ YHX Series

Features

- Light weight, compact design, low noise
- Gas ballast design, for better compatibility with moisture and solvent vapor
- Check valve to prevent pump oil backflow
- Different options for gas-taking speed (1L/s, 2L/s & 4L/s)
- Different options for vacuum connectors (KF25, hose barb, etc)
- Available in both 220V and 110V version

2XZ Series

Model	2XZ-0.5	2XZ-1	2XZ-2	2XZ-4	2XZ-8	2XZ-15
Pumping rate(L/S)	0.5	1	2	4	8	15
Extreme Pressure(Pa)	6.0×10^{-2}	6.0×10^{-2}	6.0×10^{-2}	6.0×10^{-2}	6.0×10^{-2}	6.0×10^{-2}
Rotating speed(rpm)	1440	1440	1440	1440	1410	1420
Power(W)	180	250	370	550	1100	1500
Suction diameter(mm)	16	16	25	25	40	40
Working temperature	-5-40°C					
Vacuum connection	KF25 or 10mm hose barb					

YHX Series

Model		YHX-8	YHX-16	YHX-32	YHX-60
Geometry pumping rate (L/s)		7.2	14.4	33.4	63.0
Nominal pumping rate (L/s)		8	16	28.8	54.0
Ultimate partial pressure (mbar)	Without gas ballast	$\leq 4 \times 10^{-2}$	$\leq 4 \times 10^{-2}$	$\leq 2 \times 10^{-2}$	$\leq 2 \times 10^{-2}$
	With gas ballast	$\leq 8 \times 10^{-2}$	$\leq 8 \times 10^{-2}$	$\leq 8 \times 10^{-2}$	$\leq 8 \times 10^{-2}$
Ultimate total pressure (mbar)	Without gas ballast	$\leq 5 \times 10^{-1}$	$\leq 5 \times 10^{-1}$	$\leq 5 \times 10^{-1}$	$\leq 5 \times 10^{-1}$
	With gas ballast	$\leq 6 \times 10^{-1}$	$\leq 6 \times 10^{-1}$	$\leq 6 \times 10^{-1}$	$\leq 6 \times 10^{-1}$
Noise Lw: dB (A)	Without gas ballast	62	65	69	70
	With gas ballast	65	67	71	72
Allowable pressure of vapor(Pa)		2000	2500	3000	4000
Pumping rate of vapor (L/Hr)		360	500	600	1200
Inlet Φ		DN25ISOKF	DN25ISOKF	DN25ISOKF	DN25ISOKF
Outlet Φ		DN25ISOKF	DN25ISOKF	DN25ISOKF	DN25ISOKF
Oil consumption (L)		1.1	1.5	2.8/3.5	4.0/4.8
Rotating speed (rpm)		1400	1420	1400	1420
Motor power		0.37	0.55	1.1	2.2

Diaphragm Vacuum Pump

Diaphragm Vacuum Pump

The diaphragm vacuum pump is a device that creates, improves and maintains vacuum environment in a closed space. The vacuum environment with lower atmospheric pressure can be helpful to some experiments. It also has been widely used in evaporation, distillation, crystallization, filtration, depressurization and sublimation etc by working with rotary evaporator or jacketed glass reactor.



Features

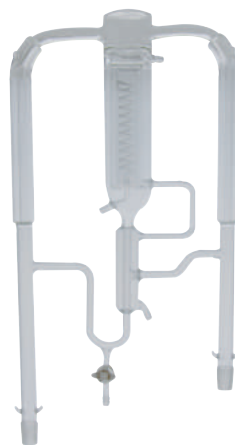
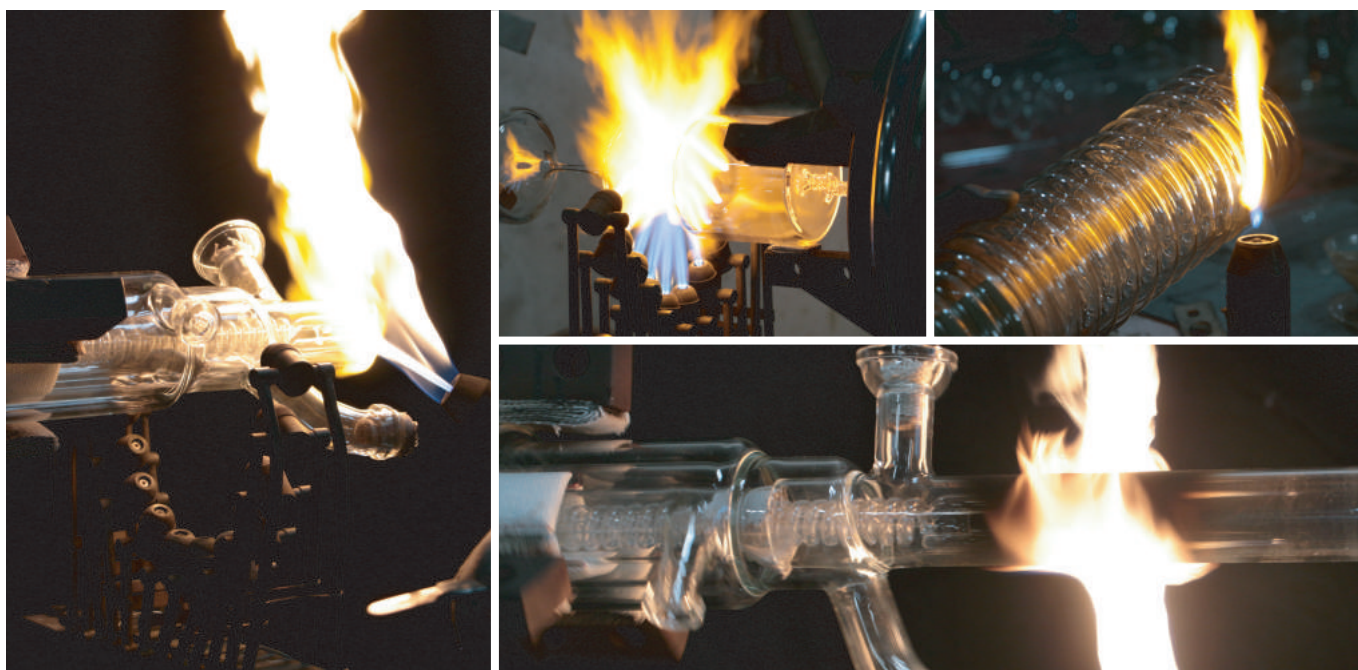
- Only PTFE components are exposed to vacuum, ideal for pumping corrosive gases and organic solvents
Oil-free, contamination-free
- Integrated design: Integrate the pump with motor to make the whole product compact and light. Very compact and light-weight
- Anti-backflow design to prevent the oil from flowing back, keep clear inside environment and enhance the stable function of the system.
- Big starting torque special design to guarantee motor starting normally even under low temperature in winter.
- Low noise and vibration coupling insert.
- Environment friendly special filter at the exhaust port to avoid oil spraying and spilling, elimating exhaust pollution of oil mist.

Specification

Model	YHDP20
Max pressure vacuum degree	≥0.095MPa, 50mbar
Power[W]	160
Extraction air capacity [L/min]	20
Diameter of air inlet and outlet (mm)	6
Power supply[V/Hz]	110V,220/50-60Hz
Weight [KG]	10
Diaphragm material	PTFE

High-end Glass Instrument Processing

All the glass instruments from YHCHEM are made of borosilicate glass 3.3, which has stable physical and chemical properties and excellent anti-corrosion properties. The sealing property and mechanical strength of our products can be comparable to those of European and American brands. We also undertake all kinds of high-end glass equipment processing and imported glass equipment maintenance.





Welcome to contact us!



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