

Pilot scale - Rotary Evaporator



R-1005



R-1020



R-1050

Features

- Excellent sealing design, without vacuum silicone grease, the system pressure rise rate is $\leq 5\text{Kpa/h}$.
- PTFE "Teflon" + FV rubber, fluorinated rubber double sealing ring and other technologies are used to ensure negative pressure indicators.
- A manual switching valve is equipped, which has little effect on the overall negative pressure, and the distilled solvent can be collected at any time according to the test.
- A rubber protective cover is configured on the outside of the bath to reduce the possibility of scalding.

Installation Cases



Standard

Quick Release Flange

Adopt triangular quick-release flange, easy to connect components between glass



Insulation Sleeve

The bath is equipped with a rubber cover to prevent burns.



PTFE Seal Ring

Adopt "Teflon" + FV rubber, fluorinated rubber to ensure system sealing



Bottle Return Wrench

The bottle return wrench is standardly equipped to facilitate the removal of the rotating bottle and prevent high temp. from burning your arms.



Glass Components

Switching flange/feeding flange/gas guide bottle/condenser/collecting bottle/rotating bottle, etc.



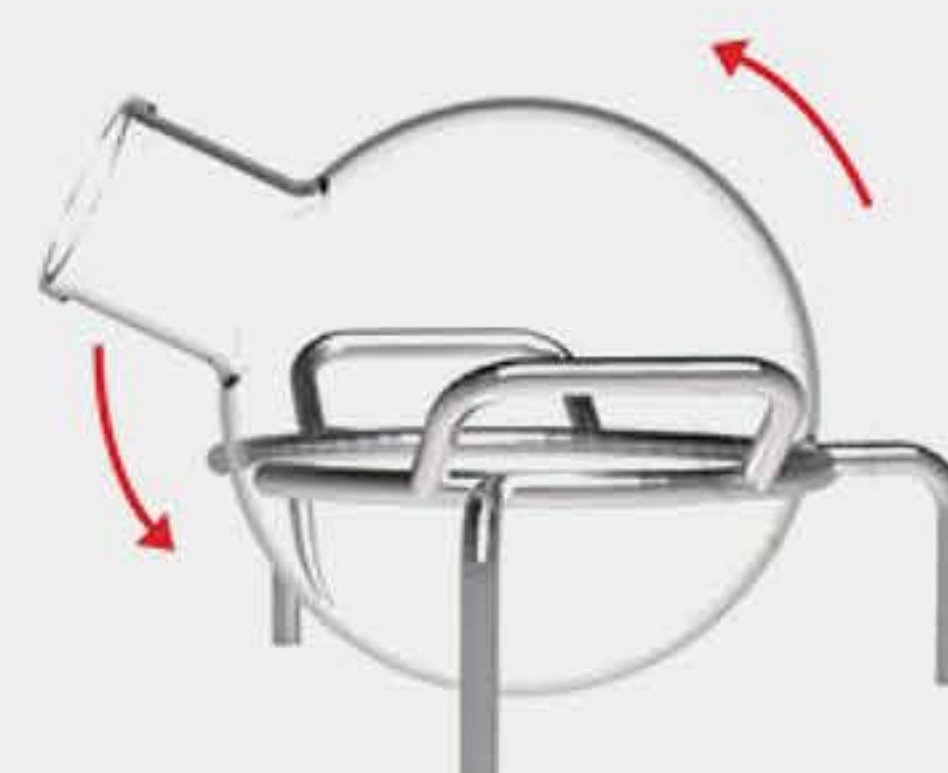
Optional



Flameproof heater



Flameproof motor



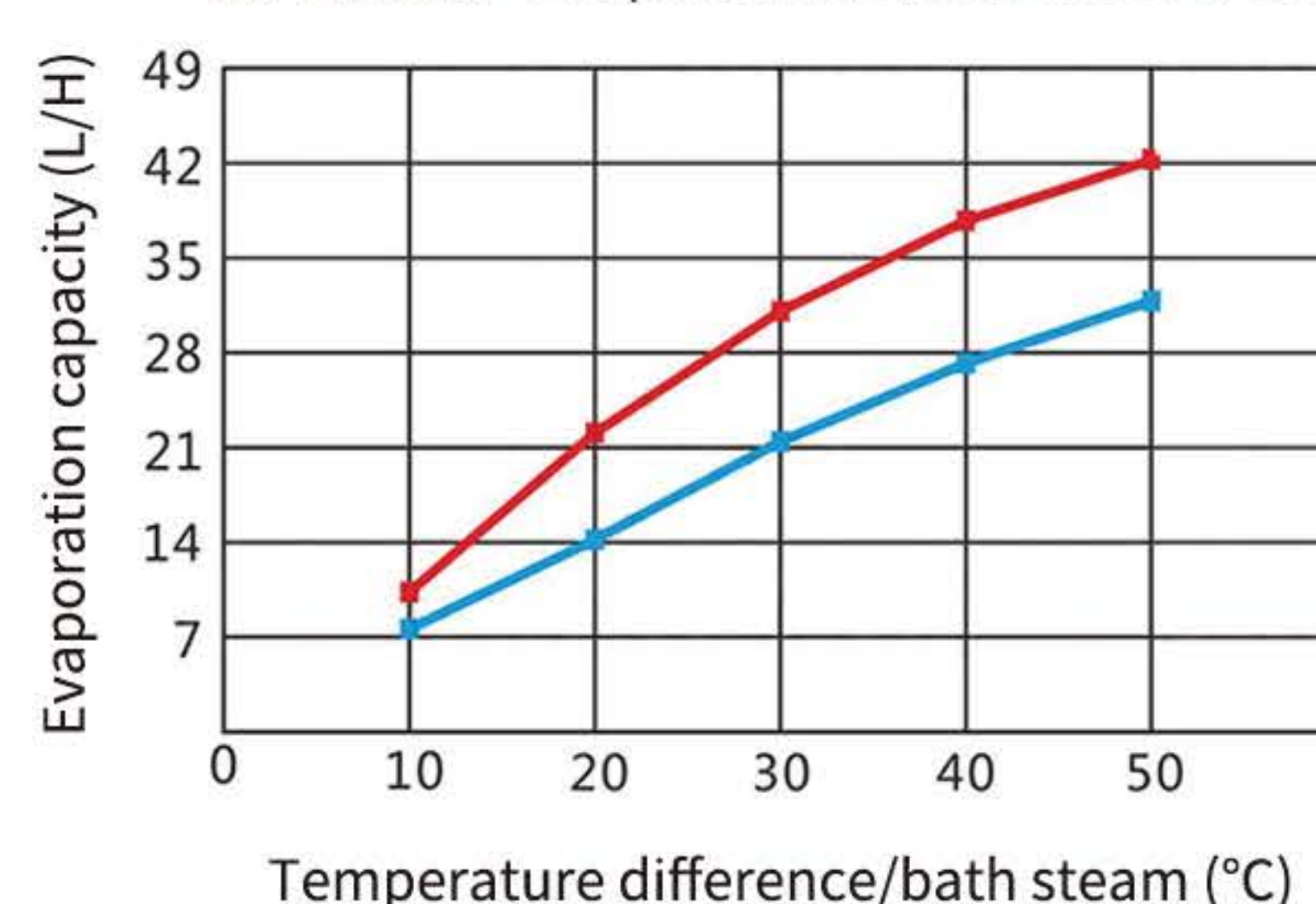
Rotating bottle stand



Bath cover

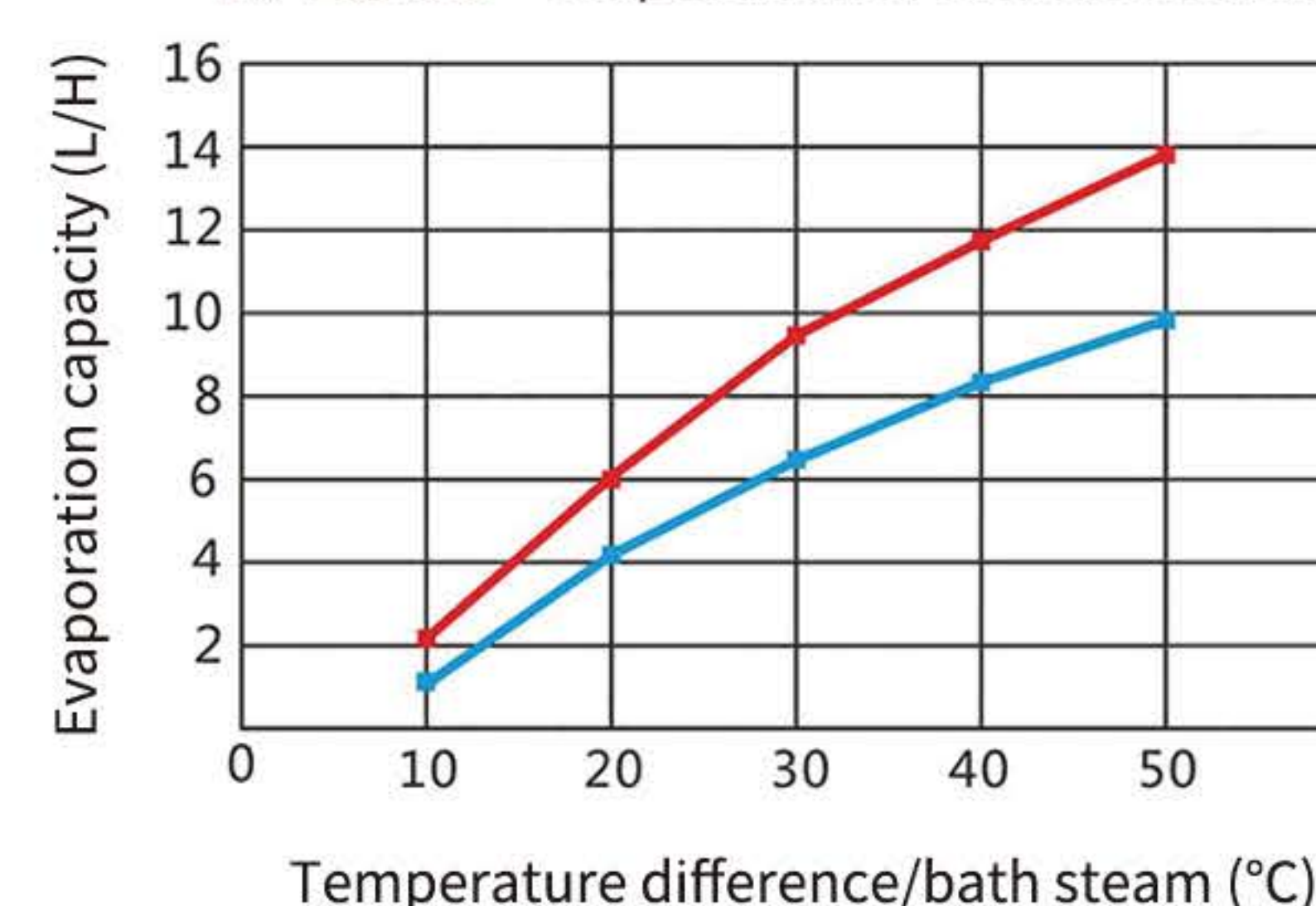
Test Curve

R-1050 Evaporation of solvent over time



— Ethyl acetate ~30rpm

R-1005 Evaporation of solvent over time



— Ethyl acetate ~130rpm

Parameters

Product number	R1005	R1010	R1020	R1050	RE-1050
Temp.range	RT~99 (medium: water) / RT~180 (medium: silicone oil)				
Temp. and speed	Digital Display				
Heating power (W)	1500	3000	4000	6000	6000
Machine power (W)	1800	3300	4300	6300	6000
Vacuum boost rate	≤2kPa/h				
Max vacuum (P)	399.9(≤3mmHg)				
Motor power (W)	100		250		250w/EX-370W
Speed adjustment	Digital DC stepless speed regulation				Frequency
Speed range (rpm)	20~140	0~120			
Condenser	Double serpentine	Vertical, main cooling + auxiliary cooling, high-efficiency three-reflux condenser			
Condensation area (m ²)	0.27	Main:0.42/Sub:0.22	Main: 0.8 Vice: 0.39	Main: 1.04 Vice: 0.22	Main: 1 Vice: 0.6
Spinner bottle	5L/Flange Ø50mm	10L/Flange Ø125mm	20L/Flange Ø125mm	50L/Flange Ø125mm	20L/Flange Ø125mm
Collection volume (L)	3	5	10	20	10
Bath material	Stainless steel/SUS304 material				
bath size(mm)	Ø300mm×170mm	Ø350mm×220mm	Ø450mm×260mm	Ø550mm×320mm	Ø550mm×320mm
Accuracy (°C)	±1.5				
lift form	Electric lift				Manual lifting
Lifting stroke	0~100	0~160	0~190	0~180	0~200
Lifting speed	10mm/s				N/A
Vacuum seal	Teflon + Teflon - fluorinated rubber double seal				
Discharging valve (spool)	PTFE				
Evaporation capacity(L/h)	Water: 2/Ethanol: 5.4	Water: 3.2/Ethanol: 8.6	Water: 5/Ethanol: 14.3	Water: 9/Ethanol: 24.5	Water: 5/Ethanol: 14.3
Protective	Over-current protection, ground fault protection, over-temperature protection, anti-dry protection				
Power supply	1Phase 110V/220V, 50Hz/60Hz		3Phase 220V/380V, 50Hz/60Hz		1Phase 220V 50/60Hz
Dimensions (mm)	660W×400D×1020H	920W×550D×1700H	1250W×600D×2100H	1320W×710D×2340H	1350×550D×650H
Weight (kg)	33	68	85	115	83
Packing size (mm)	910W×430D×860H	1020W×520D×1220H	1230W×570D×1200H	1350W×660D×1380H	1080W×690D×1450H
Gross weight (kg)	50	120	150	180	150

LBRE Operating System:

The system can integrate the operation interface of the existing laboratory equipment, use PLC to control the operation of the basic functions of all equipment, and integrate all equipment operations into one touch screen through the communication interface. It can realize the lifting and lowering of the touch screen operation, the control of the speed, temperature and vacuum degree, and can also record the operation of the equipment, and support the USB Flash Disk to export the equipment operation data of the entire production process, and the data collection is once a minute.

1. One screen can control recirculating chiller, rotary evaporator and vacuum pump.
(Multiple sets of equipment can be selected according to the on-site control situation)

2. The operation process is traceable and support data export.

3. Free the operator and realize remote monitoring.

4. Perfect alarm function, real-time feedback.

5. Modular customization, the system can be customized according to the site conditions and process flow.

