

## Manual Lift Rotary Evaporator

A rotary evaporator is a device used in chemical laboratories for the efficient and gentle removal of solvents from samples by evaporation. Rotary evaporation is most often and conveniently applied to separate "low boiling" solvents such as n-hexane or ethyl acetate from compounds which are solid at room temperature and pressure. However, careful application also allows removal of a solvent from a sample containing a liquid compound if there is minimal co-evaporation (azeotropic behavior), and a sufficient difference in boiling points at the chosen





2L rotary evaporator with hand lifting



5L rotary evaporator with hand lifting



10L/20L/50L rotary evaporator with hand lifting

### *Product Features*

- ✓ Small footprint, quiet operation
- ✓ User-friendly operation with hand water bath lifting
- ✓ Fully customizable condenser structure
- ✓ Swivel casters can be adjusted for rotovap to stand securely on uneven floor.
- ✓ Solvent-resistant PTFE and Viton gaskets, ensuring long time operation.
- ✓ Downward-condensing vacuum connection design ensures safe vacuum operation.
- ✓ Easy, straight-forward visual operation with digital speed and temperature display.
- ✓ Immediate adjustment of heating temperature and rotation speed with LCD display controller

## Specifications

	Product	Rotary Evaporator	
	Model	RE-102	RE-105
<b>Basic Parameters</b>	Glass Material	GG-17	
	Support Material	Stainless Steel	
	Size of Shell (mm)	270*270*195	310*320*240
	Size of Baffle (mm)	250*140	280*170
	Size of Baseboard (mm)	280*330	350*330
	Volume of Rotary Flask	Standard configuration 1L 24#standard	5L $\phi$ 50 flange mouth
	Volume of Receiving Flask	1L 35#ball mill mouth	3L 35# ball mill mouth
	Vacuum Degree	0.098Mpa	
	Rotary Power	30W	40W
	Rotary Speed	0-120rpm	
	Heating Power	1.5KW	2KW
	Temp. Control of Water Bath	0-400°C	
	Temp. Control Accuracy	$\pm 1^\circ\text{C}$	
	Voltage/frequency (V/Hz)	220V/50Hz	
	Lifting Stroke	120mm	
	Size (mm*mm*mm)	700*440*885	700*335*1009
	Package Size (mm*mm*mm)	590*460*460	1040*620*410
	Package Weight (Kg)	21	38
<b>Function Configurations</b>	Speed Regulation	Electronic stepless speed regulation	
	Rotary Speed Display	Digital Display	
	Temperature Display	K type sensor digital display	
	Temp. Control	Intelligent temperature control	
	Sealing method	PTFE	
	Condenser (mm)	$\phi$ 85*460	$\phi$ 100*590
	Lifting Method	Hand-lifting	
	Continuous Charging	19#standard charging valve	
	Discharging	None	Teflon discharge valve, $\phi$ 50 flange mouth
	Vacuum Display	Vacuum meter	
<b>Optional Configurations</b>	Explosion-proof	Optional explosion-proof transducer, motor, EX40W	
	Baffle	Optional plastic or PTFE spraying	

## Specifications

Model	RE-110	RE-120	RE-130	RE-150
Rotary flask	10 L	20 L	30 L	50 L
Receiving flask	5 L	10 L	20 L	20 L
Condensing area	0.59 m <sup>2</sup>	1 m <sup>2</sup>	1 m <sup>2</sup>	1.5 m <sup>2</sup>
Condenser type	Main condenser + assistant condenser			
Evaporating speed	H <sub>2</sub> O>3 L/h	H <sub>2</sub> O>5 L/h	H <sub>2</sub> O>7 L/h	H <sub>2</sub> O>9 L/h
Discharge	PTFE (Teflon) Bottom discharge valve			
Motor power	180W		250W	
Rotation speed	10~120 rpm/min		10~90 rpm/min	
Bath power	3KW	3KW	6KW/9KW	6KW/9KW
Voltage	220V/60Hz	220V/60Hz	220V/60Hz; 380V/60Hz	
Bath temp. range	Water: RT~99°C Oil: RT~200°C, ±0.2°C			
Glass material	GG-17 (3.3) High Borosilicate Glass			
PTFE Sealing	Excellent wear and corrosion resistance			
Vacuum Meter	-0.1~0Mpa			
Reachable vacuum rate	<133Pa (1.33mbar, 1 Torr, 1mmHg)			
Bath dimension	560*480*635mm	610*570*650mm	670*670*710mm	730*730*750mm
Machine size	1100*600*1730mm	1200*650*1950mm	1200*700*2000mm	1250*750*2100mm

## Supporting Equipment

### 1) Water-jet Aspirator Vacuum Pump with water circulation

Low cost and easy to maintain (changing water), highly corrosion-resistant, clean vacuum (generated from water, instead of oil).



### Product Features

- Dramatically reduced water consumption compared to tap water
- Assured constant water circulation which is independent from tap water contingencies like water availability or low pressure
- Oil-free and maintenance-free design, absolute clean vacuum
- Chemical corrosion-resistant ABS structure for long time service
- Two independent vacuum channels to support two vacuum systems simultaneously
- Small footprint design, ideal for desktop rotary evaporator operation.

### Specifications

Model	WVP-02 (for 2L/5L rotary evaporator)	WVP-05 (for 10L/20L/50L rotary evaporator)
Ultimate Vacuum	20 mbar	20mbar
Gas-taking Speed	10 L/min x 2 ports	10 L/min x 5 ports
Water Tank Volume	15 L	50 L
Water Flow Rate	60 L/min	90 L/min
Lift	6 m	12 m
Power	180 W	370w
Voltage	220 V	220V
Weight	15 kg	37 kg
Dimension	400 x 280 x 420mm	450 x 870 x 340

## 2) DL-series Chiller Circulator



### Product Features

- Small footprint, quiet operation
- Significantly reduces water consumption and improve condensation performance
- Temperature Range: -30/-20°C ~ Room Temp.
- Suitable for low temperature control precision occasions, such as condensing tube of rotovap
- Water/oil bath design, suitable for internal/external applications
- Open design meets a variety of needs
- Different power capacity is available;
- Voltage can be customized

### Specifications

#### For 2L/5L rotary evaporator

Model	DL-30-05
Temperature Range	RT to -30C
Flow Rate	10 L/min
Reservoir Volume	5 L
Pressure	0.7 bar
Temperature Accuracy	+/- 1C
Max Chilling Power	740 W
Max. Operating Current	12 A
Thermally Conductive Liquid	Ethanol or Ethylene Glycol: Water= 55: 45
Voltage	220V Single-stage (customizable)
Total Power	650 W
Dimension	480×345×690mm
Weight	30 kg

### For 10L rotary evaporator

Model		DL-20-20L
Lowest Temp.		-20°C
Reservoir		20L
Thermally Conductive Liquid		Anhydrous Ethanol or Ethylene Glycol: water=55 : 45
Total Power		1400w
Maximum Current		7.3A
Temperature Setting Range		±100°C
Temperature Control Accuracy		±0.5°C
Cooling Power		2800W
Circulating Pump	Flow Rate	20L/min
	Lift	4-6m
Control	Temp. Control	Electronic Temperature Control
	Setting Model	Any setting within the temperature range, the minimum display value is 0.1°C
	Safety Protection	Compressor Overheat, Automatic Stop Compressor Delay Start Protection Leaking Tripping protection Current Overload protection
Main Mechanism Performance	Refrigerating Fluid	R404
	Circulating Pump	100W 220V Single-stage
	Temp. Probe	Pt100, ±100°C, Thermistor Circuit
Requirement	Temp.	≤30°C
	Humidity	60-80%
	Power Supply	220V 60HZ
Connection Size	Thread	1/2" BSP Female
	Hose Barb	14mm
Package Dimension (W x H x L)		650×570×1020mm, volume weight 76kg

### For 10L/20L rotary evaporator

Model		DL-30-30L
Cooling Temp.		-30°C - RT
Reservoir Volume		30L
Total Power		2100w
Maximum Operating Current		10A
Thermally Conductive Liquid		Ethanol or Ethylene Glycol: Water=55: 45
Temperature Setting Range		±100°C
Temperature Control Accuracy		±0.5°C
Cooling Power		4.6kw
Circulating Pump	Flow	Q=20L/min
	Lift	4-6m
	Temp. Control	Electronic Temperature Control
Control	Setting Model	Any setting within the temperature range, the minimum display value is 0.1°C
	Safety Protection	Delay, Leakage, Overcurrent, Overheating Protection
Main Mechanical Properties	Cooling unit	Hermetic Compressor: 3.7Kw
		R404
	Circulating Pump	100W 220V Single-stage
	Temp. Probe	Pt100, ±100°C, Thermistor Circuit
Requirement	OperatingTemp.	≤30°C
	Humidity	60-80%
	Power Supply	220V Single-stage
Connection Size		1/2" BSP Female to 11mm Hose Barb
Warranty		One Year
Package Dimension (W x H x L)		710×610×1170mm, actual weight 120kg



### For 50L rotary evaporator

Model		DL-20-50L
Temp. Range		-20°C ~ RT
Circulation		Closed-loop Circulating
Reservior		50L
Thermally Conductive Liquid		Anhydrous Ethanol or Ethylene Glycol: water=55 :45
Total Power		2650w
Maximum Current		12A
Temperature Setting Range		±100°C
Temperature Control Accuracy		±0.5°C
Max. Cooling Power		6750W
Circulating Pump	Flow	Q=20L/min
	Lift	6m
Control	Temp. Control	Electronic Temperature Control
	Setting Model	Any setting within the temperature range, the minimum display value is 0.1°C
	Safety Protection	Compressor Overheat, Automatic Stop
		Compressor Delay Start Protection
Leaking Tripping protection		
Main Mechanical Properties	Cooling unit	R404
		Compressor Power 2250w
	Circulating Pump	100W 220V 60HZ
	Temp. Probe	Pt100, ±100°C, Thermistor Circuit
Requirement	Temp.	≤30°C
	Humidity	60-80%
	Power Supply	220V single phase
Warranty		One year
Package Dimension (W x H x L)		820 x 750 x140mm, actual weight 180kg