



ROTARY EVAPORATOR

Labocon Scientific Limited

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Thank you for choosing the Labocon Product. Please read this information guide carefully to be able to safely install, use and maintain your product





Labocon Rotary Evaporator LRE-700 Series are used to remove solvents from reaction mixtures. It's robust and durable and used for most reaction requirement. It is highly recommended and widely used in R&D laboratory.

Features

- The housing of water bath is of stainless steel to prevent it from undesirable corrosion of the bath.
- Vacuum seal is made of double-binding Teflon and NBR nitrile in order to provide the seal with antiabrasion, anti-aging and anti-chemical functionality, which enables the machine to make higher vacuum pressure compared to most of other imported equipment.
- The leaning angle of the evaporating flask can be easily manipulated by screwing a simple bolt type controller.
- Combi-Clip can easily remove or attach the evaporating flask.
- The insulated heater prevents the machine from burning accident or heat loss.
- Condenser cooling area- 1500 cm2
- Evaporating flask can be adjusted using bolt type screwing controller to the required leaning angle between 0 35°.
- Stroke distance covered is 150 mm further it can be extendable up to 100 mm.
- Class IP42 Protection

Conditions for distillation

- Set the water temperature in water bath at 60°C.
- Set the cooling water speed at 40-60 L/h
- Inject the cooling water (15°C-25°C) into the condenser coil.
- Set the vacuum degree at 700mmHg or above.
- Suction Capacity: 1.3m³/hr with two steps

Condition of Evaporating Capacity

- Temp. of cooling water: 25°C-27°C
- Sample Flask: 1L
- Sample Input: 500 ml
- Vacuum Pressure Range: 10mbar(+-3 mbar Accuracy)



Application

Labocon Rotary Evaporator LRE-700 Series are used for condensation, distillation, menstruum recycle, crystallization and separation of heat-sensitive materials. Moreover, they can perform the additional function of reflux extraction.

Technical Specification

Model No.	LRE-701A	LRE-701B	LRE-702A	LRE-702B	
Speed	20-28	20-280 rpm		0 rpm	
Capacity of Flasks		ml to 3000 ml I: 4000 ml		0 ml to 3000 ml al: 4000 ml	
Temperature Range and Accuracy	RT-180°C	C,+/- 0.5°C	RT-180°	C,+/-0.5°C	
Display	Dig	ital	Digital		
Timer	0-999	0-999 min		0-999 min	
Capacity of Bath	4.3	4.3 L		4.3 L	
Bath Dimension (φ×H) and Weight	245×120 mm / 2.8 kg		245×120 r	nm / 2.8 kg	
Power of Heating Bath	100	1000 W		1000 W	
Condenser Cooling Area	1500 cm ²		1500 cm ²		
Height adjustment of Heating Bath	150 mm		150	mm	
Lift	Moto	Motorized		rized	
Dimension [W×D×H mm	730×410×630 mm	620×410×870 mm	720×340×510 mm	610×340×730 mm	
Vacuum Controller	Vacuum Range 1400 mbar-1 mbar, Control Range : 1100 mbar-1mbar		Vacuum Range 14 Control Range : 1	100 mbar-1 mbar, 100 mbar-1mbar	
Power Supply	AC 220V 50/60 Hz		AC 220V	50/60 Hz	
Weight	19.5 kg		20kg	21 kg	
Catalog No.	5245701A163	5245701B163	5245702A163	5245702B163	

*A refers to Slant type condenser

B refers to Vertical type condenser

NOTE-Vacuum Controller included with LRE-702 A & B and Optional with LRE-701 A &B

ROTARY EVAPORATOR LRE-703 Model

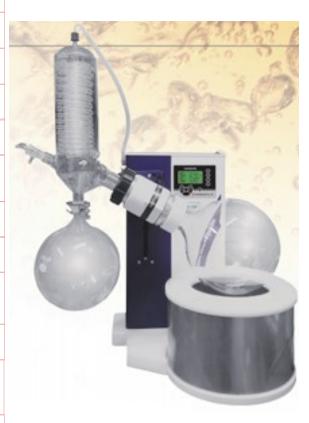


Features

Labocon Rotary Evaporator LRE-703 model Comes with Vertical type condenser, Digital interior temperature measure and display (It catches the temperature changes caused by the interior pressure drops) Motorized UP- DOWN control switch, Easy to utilize standard distillation solution, Auto timer function Autonomous condenser lifting function after acomplete shut down of the machine

Technical Specification

Model No.	LRE-703
Speed	20-280 rpm
Capacity of Flasks	Evaporating flask 5000ml Receiving flask 3000ml
Temperature Range and Accuracy	RT-180°C,+/- 0.5°C
Display	Digital
Timer	0-999 min
Capacity of Bath	8 L
Bath Dimension (φ×H)and Weight	300×150 mm / 3.5 kg
Power of Heating Bath	1800 W
Condenser Cooling Area	1800 cm ²
Height adjustment of Heating Bath	150 mm
Lift	Motorized
Dimension [W×D×H mm	4000×400×800 mm
Vacuum Controller	Vacuum Range 1400 mbar-1 mbar, Control Range : 1100 mbar-1mbar
Power Supply	AC 220V 50/60 Hz
Weight	26 kg
Catalog No.	5245701A1631



NOTE-Vacuum Controller included with LRE-703





Labocon Rotary Evaporator LRE-800 Series are used to remove solvents from reaction mixtures. It's robust and durable and used for most reaction requirement. It is highly recommended and widely used in R&D laboratory.

Features

- Excellent durability of the body and the vapour contacting area.
- PTFE sealing method is adopted for glass contacted area.
- Visual display can indicate important status of the machine such as rotating speed, bath temperature, vapour temperature, etc.
- Borosilicate glass
- Motor drive : Equipped with both motor and fan
- FND Display: Display can indicate the bath temperature, rotation speed, rotation amount, etc.
- Condenser: three fold coil (multiflux type)
- Final vacuum pressure : 710~760mmHg
- Large diameter (82mm) of evaporating flask enables users to easily wash and remove viscous materials in the flask.



Application

Labocon Rotary Evaporator LRE-800 Series are used for condensation, distillation, menstruum recycle, crystallization and separation of heat-sensitive materials. Moreover, they can perform the additional function of reflux extraction.

Technical Specification

Model No.	LRE-801	LRE-802
Speed	10-180 rpm	
Capacity of Evaporating Flask	10 L	20 L
Capacity of Receiving Flask	5 L	10 L
Temperature	95°C	
Display	FND	
Timer Range	0-999 min	
Height adjustment of Heating Bath	150 mm	
Lift	Motor	
Dimension [W×D×H mm]	1000x550x1900 mm	
Power	3500 W	
Power Supply	AC 200 50/60 Hz	
Weight	78 kg	
Catalog No.	5245801163	5245802163



ACCESSORIES

1.Labocon Cold Trap Bath



Specification:

Model	LCB-01
Capacity	4 L
Temp. Range	Down to -40°C
Туре	Glass Trap
Controller	FND Controller
Refrigerator	1/3HP
Refrigerant	134A
Bath Dimension (D×H)	190×200 mm
Dimension (W×D×H)	250×510×510 mm
Power	334W
Power Supply	AC 230V 50/60Hz
Weight	28kg



Application

- When cold trap needs to be done in extremely low temperature.
- Solvent vapour trap to prevent contamination of vacuum pump by lubricating oil.
- Quick freezing of sample for freeze-drying.
- Quick freezing for reaction stop of enzyme.

2.Labocon Circulating Chiller



Features

As a source of cooling water to the Rotary Evaporator and as a heat-emitting equipment it supplies sufficient quantity of cooling water as highly efficient chemical pumps are installed and does not contaminate other instruments as it does not get corroded.

Safety Features : Over current/Over Voltage, Leakage Protection.



Specification:

Model	LCWC-01	LCWC-02
Capacity	4 L	15 L
Temp. Range	+ 20°C to -20°C with Stability of +/- 0.1°C	
Circulator Pump & Pressure Flow rate	$15\ell/min$ with pump pressure of 0.3 bar	
Controller	FND Controller	
Refrigerator	1/3HPz	3/4HP
Refrigerant	134A	
Bath Dimension (D×H)	190×200 mm	280×270 mm
Dimension (W×D×H)	250×510×510 mm	350x390x840 mm
Power	450W	920W
Power Supply	AC 230V 50/60Hz	
Weight	28 kg	40 kg

3.Labocon Vacuum Solvent Recycling System





Features

- It's a highly efficient cooler. It has a collector of wastewater which is easily assembled or disassembled from the main body.
- The lower cooler temperature, users can expect, the higher receiving rate of solution.
- Users can easily and instantaneously control vapour temperature of the main body. Such controls are carried out by setting 10 different representative vacuum pressure for different solutions.
- A diaphragm vacuum pump is attached.
- The device is efficient stand alone equipment which has a highly efficiently cooler, a collector of wastewater, diaphragm pump and vacuum pressure assembled altogether as one machine.
- Recommended usage of this unit is a waste collection. The unit starts work if a hose and main power are connected properly.

Model	LVSRS-01
Temperature	5-35°C
Pumping Principle	2-stage diaphragm pump
Pressure	730mmHg (970mbar)
Pressure Measurement Range	0-760mmHg (0-1013h/Pa/mbar)
Pressure Setting Range	0-760mmHg (0-1013hPa/mbar), 1-700mmHg (1-933hPa/mbar)
Receiving Container	Receiving Flask 1000ml, Wastewater Trap :1000 ml
Control Mode	Two types of control modes : The parameter setting mode and the continuous setting mode
Display	FND
Pipe Material	Glass, PP, PTFE, Viton
Solution Collection Type	Vacuum controller+ Trap+ Condenser
Connecting Nozzle	External diameter 10mm (piping, leak, cooler, ventilation purpose)
Connecting Pump	Diaphragm vacuum pump
Power Supply	220~230V, 50/60Hz
Weight	19.2 kg

Specification:



4.Labocon Vacuum Controller



Solid state module maintains precise control (\pm 3%) of the system vacuum by cycling the pump on/off as required.

Specification:

Model	LVC-01
Vacuum Range Control Range	1400 mbar-1 mbar, 1100 mbar-1mbar
Dimensions (W×D×H)	160×130×95 mm
Power source	AC 220V 50/60Hz
Weight	1.8 kg

5.Labocon Diaphragm Vacuum Pump





Features

- Pure transfer, evacuation and compression.
- Highly compatible with vapours and condensation.
- Dual Stage diaphragm vacuum pump 100% oil free transfer
- Chemically-resistant.
- Suitable for highly aggressive and corrosive gases or vapours.
- Maintenance-free
- Environmentally friendly

Specification:

Model	LVP-01
Capacity	20 L/min
Suction Capacity	1.3 m³/h
Ultimate Vacuum	10mbar(+-3 mbar Accuracy)
Material	PE or PTFE
Dimensions (LxHxW)	180x220x130 mm
Power	120 W
Operating Current	0.5A
Weight	9.3 kg

6.Labocon Electric Aspirator





Features

- Material of Bath : Polypropylene Material of Aspirator : Metal 2 pcs
- Excessive consumption of water may be reduced that can happen when city piped water is used.
- Utilizing water pressure gained by motor pump, two aspirators can be installed.
- By preventing reflux of air, vacuum, filtering and vacuum distillation is possible.
- Applicable to Rotary vacuum evaporator.
- A cooling coil could be installed to prevent the loss of vacuum effect in the case when the water temperature increases (option).
- Vacuum controller could be equipped for checking degree of vacuum status during

Model	LEA-01
Pump Capacity	18 L/min×2EA
Bath Capacity	8 L
Dimensions (WxDxH)	320×240×350 mm
Power	150 W
Power Supply	AC 220V 50/60Hz 0.7A
Weight	6 kg

Specification:



Glassware

Labocon Duct	
Labocon Bulb	日 日
LB-01 = 100 ml	
LB-02 = 250 ml	
Labocon Four Bulb	
Labocon Stop Cock	
Labocon Connecting Adapters	



Glassware

Labocon Evaporating Flask	
LEF-01= 50ml	
LEF-02= 100ml	
LEF-03= 250ml	
LEF-04= 500ml	
LEF-05= 1L	
LEF-06= 2L	U U
LEF-07= 3L	
Labocon Receiving Flask	
LRF-01= 100ml	
LRF-02= 250ml	LE .
LRF-03= 500ml	
LRF-04= 1L	
LRF-05= 2L	
LRF-06= 3L	
Labocon Evaporating Condenser	
LEC-01	
LEC-02	
LEC-03	

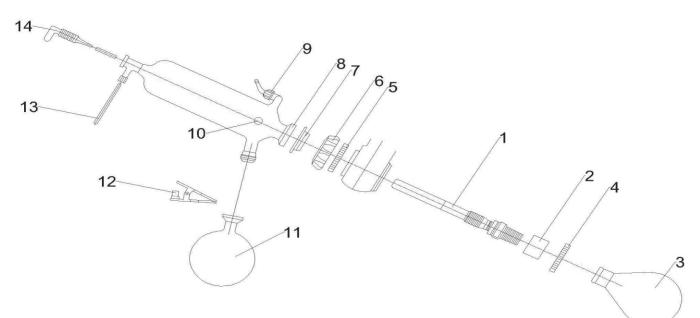


Glassware

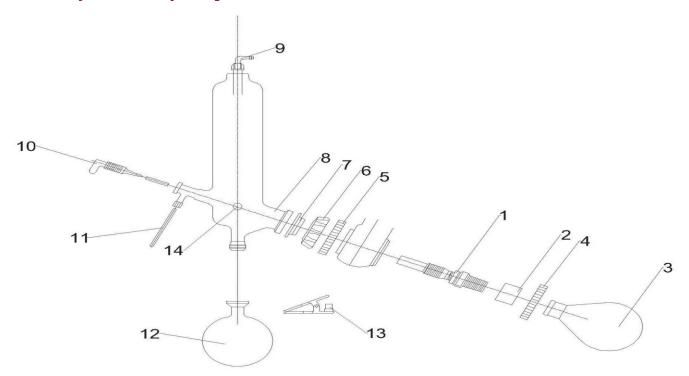
Labocon Vacuum Seal Ring	
Labocon Receiving Flask Ball Clamp	
Labocon Joint Clamp	Received and a second s
Labocon Adapter	
Labocon Vacuum Gauge	
Labocon Cooling Coil (Copper)	



Glass Assembly Assembly for Rotary Evaporator LRE-701A and LRE-702A

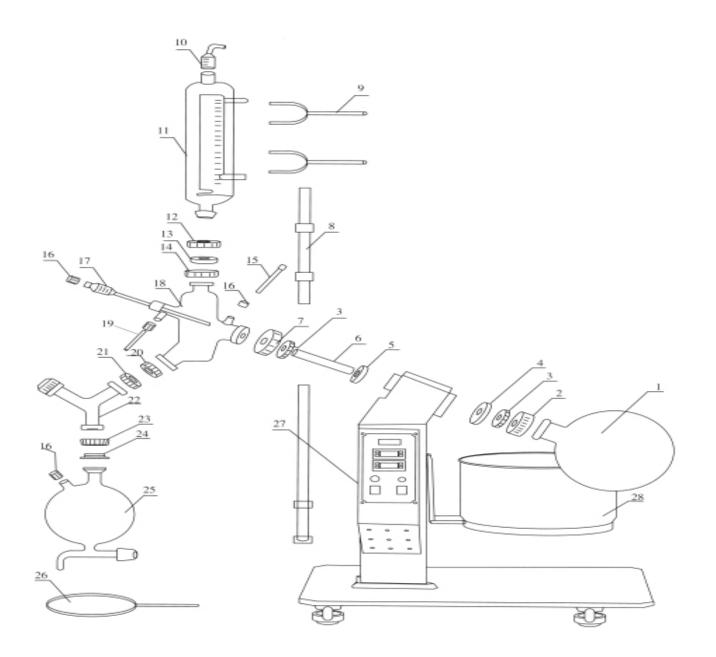


Glass Assembly Assembly for Rotary Evaporator LRE-701B and LRE-702B





Assembly for Rotary Evaporator LRE-801 and LRE-802





1.Evaporating Flask	15.Thermometer Sensor
2.Flange Screw Coupling	16.Screw Cap
3.Holder Spring	17.Glass Stop - Cock
4.Vacuum Gasket	18.Cold Trap
5.Vacuum Seal	19.PTFE Plug
6.Vapour Duct	20.Screw Coupling
7.Flange Screw Coupling	21.Screw Coupling
8.Pipe Stand	22.Receiver Cock Adapter
9.Condenser Clamp	23.Screw Coupling
10.Vacuum Connector	24.Screw Coupling
11.Glass Assembly Condenser	25.Receiving Flask
12.Condenser Screw Clamp	26.0 Ring Clamp
13.Holder Spring	27.Controller
14.Condenser Screw Clamp	28.Water Bath

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