

# ROTARY EVAPORATORS EVAPORATION SOLUTIONS



**LabTech**

WWW.LABTECHUS.COM

# EVAPORATION SOLUTIONS

LabTech evaporation solutions introduce a new concept in routine distillation/evaporation processes: safety, efficiency and durability to support the lab user's work!

With an innovative and ergonomic design, the EV series rotary evaporators include a color digital display to monitor and control rotation speed and temperature, motorized vertical lift, evaporation flasks, on line sample adding through PTFE valve and can be completed with the LabTech vacuum and cooling accessories to reach a top efficiency of process.

The stand alone heating bath guarantees maximum safety in operations and easy maintenance.



- » **Total solution**
- » **Programmable operations**
- » **Anticorrosion sealing system**
- » **Integrated vacuum control**
- » **Maximum safety**
- » **Quite operation**
- » **Excellent price/performance ratio**

## MAIN APPLICATIONS

- **Solvent recycling**
- **Solvent distillation**
- **Powder drying**
- **Chemical synthesis**
- **Extraction**
- **Research**
- **Active agent concentration**
- **Vacuum distillation of sensitive substances**
- **Liquid mixture separation**

# THE IDEAL PARTNER FOR LABORATORY EVAPORATIONS



## Technology & Design

- Digital rotation speed control and temperature display ensure accurate and stable unit operations
- Trouble free operation and long lifetime
- PTFE seal loop ensures excellent elasticity and resistance at high temperature acid/solvent corrosion
- Online sample addition by PTFE valve ensures high efficiency and easy operation
- Automatic lift-up protection in case of electric power failure
- Pre-loaded solvents library

## Safety & Easy to use

- Stand alone heating bath guarantees maximum safety and easy maintenance
- Motorized vertical lift (depending on model)
- Wide range of evaporation flasks
- Self calibration function and wide temperature range control from room temperature up to 230°C
- Automatic stop heating in dry bath condition
- Innovative design to prevent corrosion and splashing
- Removable front panel

## OPTIONS FOR A COMPLETE PACKAGE

### CHILLERS

The LabTech's state-of-the-art water chillers ensure accurate and constant cooling conditions of instruments even in the harsh laboratory conditions.

#### H50-500

- Temp. control range:  $-5^{\circ}$  to  $+35^{\circ}\text{C}$
- Temp. stability:  $\pm 0.3^{\circ}\text{C}$  (P.I.D. / LCD)
- Refrigeration capacity: 500W
- Pump capacity: 3.5 L/min@10psi
- Dimensions (LxWxH cm): 48x25x47



ORDERING INFORMATION  
**LW500**



### VACUUM CONTROLLER

Commonly used solvents have different boiling points and vacuum evaporation levels, if the vacuum is not properly controlled, a risk of too rapid or too slow evaporation could occur reducing recovery of vapors. To optimize the whole process, an electronic vacuum controller connected to the pump is recommended. LabTech offers a light, compact and extremely easy to use vacuum controller without any extra cost for accessories.

#### LV6010

- Large LCD display
- Vacuum control range: 0~999mbar
- Vacuum control precision:  $\pm 1\text{mbar}$
- Step vacuum control (different vacuum pressure with different holding time)
- Built-in gas release valve ensures high efficient and stable vacuum control
- Built-in anticorrosive vacuum sensor with high precision
- Fully anticorrosion design
- ON/OFF control of vacuum pump to extend the pump working life
- Alarm when the vacuum control fails to reach the desired value
- Dimensions (LxWxH cm): 20x20x12.5



ORDERING INFORMATION  
**LV6010**

# OPTIONS FOR A COMPLETE PACKAGE

## VACUUM PUMPS

Totally oil free, mechanical (diaphragm) vacuum pumps with features of advanced design, low noise level, high efficiency and long lifespan.

The LabTech vacuum pumps are specially designed for laboratory operations to meet the highest expectations of precision, reliability and ease of use. They can be used in a multitude of applications, such as vacuum filtration, degassing, impregnation, drying chambers, rotary evaporations, distillation, gel dryers, gas analytical systems and roughing of wide-range turbo molecular pumps.



	VP30	VP18 PLUS	VP50 PLUS
Power (W)	80	30	100
Pumping speed (L/min)	30	18	50
Vacuum pressure (mbar/psi)	250/3.62	20/0.29	150/2.17
Vacuum controller	-	Manual	Manual
Noise (dB)	≤50	≤42	≤58
Dimensions (LxWxH cm)	30x17x24	30x17x24	35x18x24
Weight (Kg)	3	3	6
Power supply voltage	115V 50/60Hz		
Ordering information	LV5010	LV5080	LV5060

# TECHNICAL SPECIFICATIONS

	EV400H	EV400	EV400 Touch	EV400VAC
<b>▪ MAIN UNIT</b>				
Rotation speed range (rpm)	20-300			
Display	LCD	LCD	Color Touch	Color Touch
Lift	Manual	Motor	Motor	Motor
Lift stroke (mm)	150	160	160	160
Head tilt angle (°)	0-60			
Condenser	Vertical or Diagonal			
Cooling surface (cm <sup>2</sup> )	1200 Standard 1500 Optional			
Clockwise counter/rotation	Yes	-	Yes	Yes
Gradient distillation	-	-	-	Yes
Built-in vacuum controller	-	-	-	Yes
Solvents library	-	-	-	Yes
Vapor temperature	-	-	Optional	Optional
Auto distillation	-	-	-	Optional
<b>▪ HEATING BATH</b>				
Temperature range (°C)	Ambient-230			
Temperature controller mode	P.I.D.			
Bath material	SS with PTFE Coating			
Temp. control accuracy (°C)	±1 (Water) ±2 (Oil)	±1 (Water) ±2 (Oil)	±1 (Water) ±2 (Oil)	±1 (Water) ±2 (Oil)
Heating power (W)	1300			
Bath capacity (L)	5			
<b>▪ GENERAL</b>				
Protection class (IP)	21			
Dimensions* (LxWxH cm)	38x56x90	44x56x90	44x56x90	44x56x90
Gross weight* (Kg)	23	29	29	29
Power supply voltage	115V 50/60Hz			
Ordering information	LEV400H	LEV400	LEV400T	LEV400V

\* Including glassware

# ROTARY EVAPORATOR ACCESSORIES

Item	Part number	Description
1	50103-V	Vertical Condenser
1	50103-L	Diagonal Condenser
1	50104 T-V	Vertical Condenser Vapour Sensor Hole
2	50103-NC	Hose Nipple
3	50103-A	Stop Cock
4	50103-CS	Ball Joint Clamp
5	50103-SR3	Lock Handwheel

Item	Part number	Description
6	50103-SR9	Lock Spring
7	50103-SR1	Seal Ring Set
8	50103-NS	Lock and Push-off nuts Set
9	50103-GA	Vapor Tube
10	50103-CLIP1	Clip 19 mm
10	50103-CLIP2	Clip 24 mm
10	50103-CLIP3	Clip 29 mm
11	50103-1000	Evaporating Flask 1L
12	50103-C1	Receiving Flask 1L

## EVAPORATION FLASK

P/N	Volume	Joint Size
50103-0050	50 mL	29/32
50103-0100	100 mL	29/32
50103-0250	250 mL	29/32
50103-0500	500 mL	29/32
50103-1000	1000 mL	29/32
50103-2000	2000 mL	29/32
50103-3000	3000 mL	29/32
50103-0100	100 mL	24/29
50103-0250	250 mL	24/29

## HEART-SHAPED FLASK

P/N	Volume	Joint Size
50102-0050J	50 mL	24/29
50102-0100J	100 mL	24/29
50101-0050J	50 mL	19/16

## ADAPTER

P/N	Volume	Joint Size
50103-29-24	29/32	24/29
50103-29-19	29/32	19/26
50103-24-19	24/29	19/26

## RECEIVING FLASK

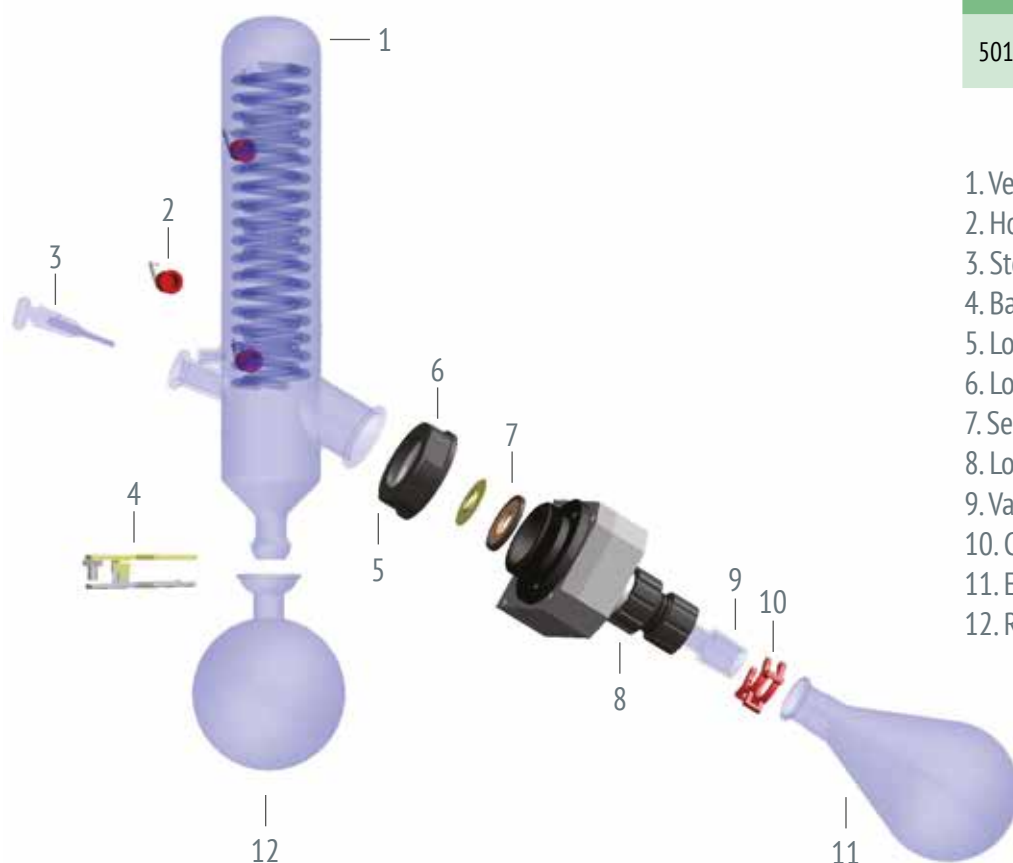
P/N	Volume	Joint Size
50103-C0	500 mL	35/20
50103-C1	1000 mL	35/20
50103-C2	2000 mL	35/20

## BUMP TRAP

P/N	Volume	Joint Size
50103-0001	100 mL	29/32 24/29

## SPIDER WITH 5 FLASKS

P/N	Volume	Joint Size
50104-29-24	50 mL 5 pcs	29/32 24/29



1. Vertical/Diagonal
2. Hose Nipple
3. Stop Cock
4. Ball Joint Clamp
5. Lock Handwheel
6. Lock Spring
7. Seal Ring Set
8. Lock and Push-off Nuts Set
9. Vapor Tube Set
10. Clip 19/24/29 mm
11. Evaporating Flask 1L
12. Receiving Flask



# LabTech

WWW.LABTECHUS.COM

**LabTech.** Your reliable laboratory solution provider. LabTech is a leading manufacturing company with skill and passion devoted to provide advanced laboratory solutions to the analytical community. We are located in Hopkinton, Massachusetts USA, with facilities in Italy and China. Incorporated with global branches, LabTech is organized into R&D, production, marketing & sales and customer support. Major LabTech products include organic/inorganic sample preparation systems and laboratory cooling/heating/temperature control equipments. With knowledgeable scientists and experienced engineers, our R&D team has developed and released a series of new lab equipments and instruments dedicated to the modern analytical laboratories. With all of these accomplishments and our endless research and development efforts, we are proud to be your professional partner.



## LabTech, Inc.

114 South Street, Hopkinton MA USA

Tel: +1 508 435 5500 Fax: +1 508 435 5595

www.labtechus.com - email: support@labtechus.com