# ROTARY EVAPORATOR SOLUTIONS





## **EVAPORATION SOLUTIONS**

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

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

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



- » Complete Package
- » 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 tube ensures high efficiency and easy operation
- Automatic lift-up protection in case of electric power failure
- Pre-loaded solvents library
- Availability of both vertical and diagonal column

### 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
- Thermostatic Bath with wide temperature range control from room temperature up to 230°C
- Innovative design to prevent corrosion and splashing
- Removable front panel
- Availability of Plastic-coated Glassware to guarantee complete safety in case of glass breakage

## **OPTIONS** FOR A COMPLETE PACKAGE

### **CHILLERS**

The LabTech SMART water chillers ensure accurate and constant cooling conditions of instruments even in the harsh laboratory conditions.

#### H50-500

Temp. control range: -5° to +35°C

• Temp. stability: ±0.3°C (P.I.D. / LCD)

Refrigeration capacity: 500 W

Pump capacity: 3.5 L/min@10psi

Dimensions (LxWxH cm): 48x25x47





### **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: 2~999 mbar / 0,2-99,99 Kpa
- Vacuum control precision: ±1 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



## **OPTIONS** FOR A COMPLETE PACKAGE

### **VACUUM PUMPS**

Totally oil free, mechanical 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 and gas analytical systems.



	VP30	VP18 PLUS	VP20 PLUS
Power (W)	80	140	280
Pumping speed (L/min)	30	18	20
Vacuum pressure (mbar/Kpa)	250/2.500	20/200	5/50
Vacuum controller	-	Manual	Manual
Noise (dB)	≤50	≤42	50
Dimensions (LxWxH cm)	30x17x24	30x17x24	30x17x38
Weight (kg)	6	7	14
Power supply voltage		230V 50/60Hz	
Ordering information	LV5010	LV5080P	LV5020P

# TECHNICAL SPECIFICATIONS

		EV400N	EV400NVAC
■ MAIN UNIT			
Rotation speed range (rpm)		20-300	
Display	LCD	LCD	Color Touch
Lift	Manual	Motor	Motor
Lift stroke (mm)	160	160	160
Head tilt angle (°)		0-60	
Condenser		Vertical or Diagonal	
Cooling surface (cm²)		1200 Standard (1500 Optional)	
Clockwise counter/rotation	Yes	-	Yes
Gradient distillation	-		Yes
Built-in vacuum controller	-	•	Yes
Solvents library	-		Yes
Vapor temperature	-	-	Optional
Auto distillation	-		Optional
Plastic-coated Glassware	Available	Available	Available
= HEATING BATH			
Temperature range (°C)		Ambient-230	
Temperature controller mode		P.I.D.	
Bath material		SS with PTFE Coating	
Temp. control accuracy (°C)	±1 (Water)	±1 (Water)	±1 (Water)
Temp. control decardey ( c)	±2 (Oil)	±2 (Oil)	±2 (Oil)
Heating power (W)		1300	
Bath capacity (L)		5	
= GENERAL			
Dimensions* (LxWxH cm)	60x44x82	60x44x82	60x44x90
Gross weight* (kg)	23	29	29
Power supply voltage		230V 50/60Hz (115V 60Hz)	
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LEV400N

LEV400NV

LEV400NH

Ordering information

<sup>\*</sup> Including glassware

## ROTARY EVAPORATOR **ACCESSORIES**

Item	Part number	Description
1	50103-V	1200 cm <sup>2</sup> Vertical Condenser
1	50103-L	1200 cm² Diagonal Condenser
1	50104 T-V	1200 cm² Vertical Condenser Vapour Sensor Hole
1	50105-V	1500 cm <sup>2</sup> Vertical Condenser
1	50105-L	1500 cm² Diagonal Condenser
1	50105T-V	1500 cm² Vertical Condenser Vapour Sensor Hole
2	50103-NC	Hose Nipple
3	50103-A	Stop Cork
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	Glass Axis
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**

1	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

### HEART-SHAPED FLASK

P/N	Volume	Joint Size
50102-0050J	50 mL	24/29
50102-0100J	100 mL	24/29
50101-0050J	50 mL	19/26

### ADAPTOR

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

### TRAP BALL

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
50104-29-24-2	25 mL 5 pcs	29/32 24/29
50104-29-19	10 mL 5 pcs	29/32 19/29

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

