# **ROTARY EVAPORATOR** EVAPORATION SOLUTIONS



### **EVAPORATION SOLUTIONS** BY LABTECH

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

With an innovative and ergonomic design, EV series rotary evaporators include 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 LabTech vacuum and cooling accessories to reach top efficiency of process.

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



Rotary evaporator

### **ROTARY EVAPORATROR APPLICATIONS**

- Solvent recycling
- Solvent distillation
- Powder drying
- Chemical synthesis
- Extraction
- Research

- Active agent concentration
- Vacuum distillation of sensitive substances
- Liquid mixture separation

### CHILLER

LabTech's state-of-the-art water chillers ensure accurate and constant cooling conditions of your instrumentation in the harsh laboratory environment.

#### H50-500

- » Temp. Control Range: -5° to +35°C
- » Temp. Stability: ±0.3°C (PID/LCD)
- » Refrigeration Capacity: 500W@25°C
- » Pump Capacity: 3.5L/min@10psi
- » Dimension: 480Lx250Wx470Hmm

#### Smart H150-100LT

- » Temp. Control Range: -20° to +35°C
- » Temp. Stability: ±0.1°C (PID/LED)
- » Refrigeration Capacity: 1000W
- » Pump Capacity: 6 L/min@60psi
- » Suitable for cooling of 2 units simultaneously

### VACUUM PUMP

LabTech pumps are specifically designed for laboratory operations to meet the highest standard of precision, reliability, and ease of use.

#### VP18R

- » Pumping speed: 18L/min
- » Vacuum pressure: 20mbar
- » Noise: ≤ 42dB

#### VP50

- » Pumping speed: 50L/min
- » Vacuum pressure: 150mbar
- » Noise: ≤ 58dB

#### VP30

- » Pumping speed: 30L/min
- » Vacuum pressure: 250mbar
- » Noise: ≤ 50dB

### 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.

- » Large LCD display
- » Vacuum control range: 0~999mbar
- » Vacuum control precision: ±1mbar
- » 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
- » Control ON/OFF of vacuum pump to extend the pump working life
- » Alarm when the vacuum control fail to reach to the desired value

### 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 grants high efficiency and easy operation
- » Automatic lift-up protection in case of electric power failure



#### Safety & Easy to use

- » Stand alone heating bath guarantees maximum safety and easy maintenance
- » Motorized vertical lift
- » Wide range of evaporation flasks
- » Self calibration function and wide temperature range control from room temperature up to 200°C
- » Automatic stop heating in dry bath condition
- » Innovative design to prevent corrosion and antisplashing

## TECHNICAL SPECIFICATIONS

		EV311H	EV311	EV311 PLUS	EV311 ADVANCED	EV311 VAC	
Main Unit	Evaporation volume	50-4000 ml					
	Rotation speed	20-280 rpm					
	Rotation speed control	Adjustable control knob					
	Rotation speed display	LED		LCD			
	Head tilt angle	0-60°					
	Rotation motor power	40 Watts					
	Lift up and down	Manual Motor					
	Motorized lift stroke	160 mm					
Heating Bath	Model	HB-03 HB03PLUS					
	Temperature range		Ambient to 200°				
	Bath material	Stainless steel		Teflon coated			
	Temperature control	PID LED PID (LCD)			PID (LCD)		
	Temperature accuracy	±1°C (Water) ±2°C (Oil)					
	Heating power	1300 Watts					
	Bath diameter	250 mm					
	Bath volume	5 Lt					
Advanced Functions	Timer		- Yes			S	
	Clockwise/coun- ter-clockwise rotation	-			Yes		
	Timer for clockwise/ counter-clockwise rotation	-			Yes		
	Programmable Speed Control	-			Ye	S	
	Lift up when timer end	-			Yes		
	Built-in programmable vacuum control	-				Yes	
	Control on/off of vacuum pump	-				Yes	
Condenser		Vertical or Diagonal with 1300 cm <sup>2</sup> condensing surface					
L×W×H mm (lift stroke 160mm included)		380×340×692 380×			380×340×797		
Weight		23 Kg					

*Every LabTech rotary evaporator comes with 1L evaporating flask, 1L receiving flask and vertical condenser as standard. Other glassware assembly configurations including different flasks, diagonal and dry ice condenser are available upon request.* 



#### W W W . L A B T E C H S R L . C O M

The solution to your laboratory needs. LabTech is a young manufacturing company with skill and passion, devoted to provide advanced laboratory solutions to the analytical community. We are located in Sorisole, northen of Italy with facilities in USA and China. Incorporated with global branches, LabTech is organized with R&D, production, marketing & sales and customer support. Major LabTech products include organic/inorganic sample preparation systems, laboratory cooling/heating/temperature control equipments, analytical instruments, laboratory information management system and laboratory design and engineering. With knowledgeable scientists and experienced engineers, our R&D team has developed and released a series of new lab equipments and instruments. With all these accomplishments and our never stopping efforts on research and development, we are proud of being one of few providers able to produce the most advanced sample preparation products.



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