



- ★ Environmental friendly
- ★ Greenest unit
- ★ Solvent recovery
- **★** High throughput

# **MVP Series**

**Fully Automatic Parallel Vacuum Concentrator** 

Your Lab, Our Tech

## About LabTech

LabTech (stock code: 688056.SH) was founded in 2002 as a global technology company manufacturing laboratory instruments and equipment.

LabTech has its own multiple brands of LabTech, CDS Analytical, Empore, etc. whose R&D and production sites are in China and the United States. We focus on combining multi-type and multi-functional sample preparation technologies and analytical systems into fully automated experimental and analytical platforms. Our products and services are comprised of laboratory analytical instruments, sample preparation instruments, laboratory equipment, medical equipment, laboratory consumables and laboratory engineering construction; So far, LabTech products have been supplied to more than 100 countries, serving nearly 30,000 customers around the world.

## **Product Lines**

#### **Analytical Instruments**

High Performance Liquid Chromatography
Gel Permeation Chromatography
UV/Vis Spectrophotometer

Mercury Analyzer

#### **Laboratory Equipment**

Water Chiller

Refrigerate & heating circulator

DigiBlock Digestor

AutoDigiBlock Auto-Digestor

Hotplate

Rotary Evaporator

#### Laboratory Engineering Solution

Ultra-clean Laboratory

Laboratory Ventilation

Fume hood

Safety Cabinet

#### Sample Preparation System

Microwave Chemistry Platform

Organic Sample Preparation Overall Solution

Gel Permeation Chromatography

Solid-Phase Extraction

Automatic Concentrator

Acid Purification and Ultra-trace Cleaner

#### **Consumables and Accessories**

Various digestion vessels

AAS/ICP/ICP-MS consumables and accessories

AAS/ICP/ICP-MS standard solution, standard substance

SPE column, SPE disk

HPLC/UV/GC consumables and accessories

## **MVP Series** Automatic Parallel Vacuum Concentrator

MVP vacuum concentrator is widely used for the preparation of environmental samples, natural products, food and agricultural product samples, and heat-sensitive products. It achieves high-throughput automatic evaporation of liquid samples through vacuum, heating, and rotation. It improves work efficiency and sample recovery, reduces human errors, and enhances the accuracy of analysis. Special solvent recovery design makes the unit greenest and protects the laboratory environment and the operator health.



## **Application**



Food

Pesticide residues and additives in food (such as grain, etc.)



Herbal Medicine

Determination of pesticide residues and mycotoxins in traditional Chinese medicine



Environment

SVOC pollutants in soil, solid waste and atmospheric samples, such as organochlorine residues, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, dioxins, etc.



**Agriculture Products** 

Pesticide residues in crops (such as tea, etc.), oil in seeds, etc.

### Flex-MVP Automatic Parallel Vacuum Concentrator

# Flexible and free access at any time

#### Super batch processing capability

16 sample positions and being compatible with 300ml, 50ml and other different sizes of sample tubes



#### Flexible and free access at any time

Integral & independent sealing 2-in-1 design, no needs to pause the instrument or pressure relief for all samples, single sample can be added and removed at any time, without affecting the concentration process of other samples.



The whole sample vial is fully immersed and heated in the water bath, which is not exposed in the air, and improves the evaporation efficiency.

## **MVP Application**

- Determination of organochlorine pesticide multi-component residues in food
- Determination of 486 pesticide and related chemical residues in grain by LC-MS/MS
- Food Safety -- Determination of residues of 208 pesticides and their metabolites in food of plant origin by GC-MS
- Determination of pesticide residues in tea by GC-MS
- Determination of polychlorinated biphenyls in soil and sediment by GC-MS
- Determination of SVOCs in Soil and Sediment by Mass spectrometry
- Determination of polycyclic aromatic hydrocarbons in soil and sediment by GC-MS
- Chinese Pharmacopoeia 2020: 2341 pesticide residue determination and 2351 mycotoxin determination method

#### Safe and Simple Operation

Flip-top design for the evaporation cover. It features a convenient snap-lock safety lock design, without disassembly for sealing and opening of the cover.



#### Independent pipeline to prevent cross-contamination.

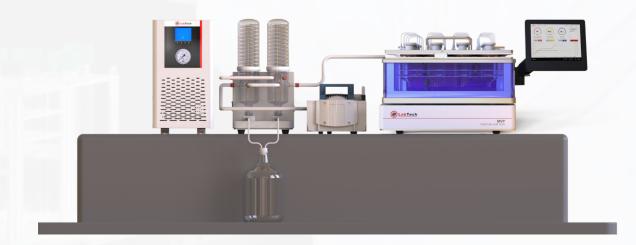
Each sample vessel is sealed and discharged independently through its own pipeline, avoiding liquid transfer issues caused by sample boiling, preventing cross-contamination and refluxing.

#### User friendly touch screen control

The instrument is designed with a 10-inch touch screen terminal computer control system. The software allows real-time adjustment of temperature, vacuum level, and rotation speed. It supports time programming, displays gradient curves graphically, and shows dynamic changes in various parameters.

#### Dual recovery of solvent vapor and exhaust gas

The condensation recovery module features a dualcondenser tower design, enabling dual recovery of solvent vapor and exhaust gas, ensuring comprehensive environmental friendliness.



# **MVP Series** Automatic Parallel Vacuum Concentrator



| Configuration/Model               | Flex-MVP                   | MVP 48                          | MVP 12                     |
|-----------------------------------|----------------------------|---------------------------------|----------------------------|
| Sample Position                   | 16                         | 48                              | 12                         |
| Sample Volume                     | 200ml Concentration<br>Cup | 60ml vial &50ml centrifuge tube | 900ml<br>Concentration Cup |
| Individual sample adding/removing | $\sqrt{}$                  |                                 |                            |
| Batch sample adding/removing      | $\sqrt{}$                  | $\sqrt{}$                       | $\sqrt{}$                  |

# **Overall Solution**



### MVP12 Automatic Parallel Vacuum Concentrator

# Edge tool of grease concentration for detecting food acid value and peroxide value.

#### **Technical Features**

- Large volume and high throughput: Up to 12 samples with max. 900ml of each can be concentrated simultaneously.
- High efficiency: Fully surrounded water bath heating with higher evaporation efficiency.
- High solvent recovery: Solvent recovery rate of 500ml petroleum ether is more than 85%
- Easy operation: Safety lock design enables fast open/close of the cover, more convenient and safer.
- Avoiding cross contamination: Independent pipeline design avoids liquid transfer issues caused by sample boiling, preventing cross-contamination.



# **Cooling Solution**

## LabTech Water Recirculating Chiller

LabTech offers a complete line of water recirculating chillers to meet all laboratory needs.

Combining operational excellence and technology expertise with an intimate understanding of customers' needs, LabTech state-of-the-art water chillers ensure accurate and constant cooling conditions of instruments even under tough Laboratory conditions.



#### Beijing LabTech Instruments Co., Ltd.

Address: No.6 Anging Street, Area B, Tianzhu Airport Industrial Park, Shunyi District, Beijing, 101300 P. R. China

Tel: +86 10 80486450 Fax: +86 10 80486354 E-mail: support@labtechgroup.com

www.labtechgroup.com

#### LabTech Hong Kong Ltd.

Address: Unit D, 22/F, YHC Tower, 1 Sheung Yuet Road, Kowloon Bay, Hong Kong

Tel: +852 2759 8199 Fax: +852 2331 8536 E-mail: support@labtechgroup.com www.labtechgroup.com

#### LabTech, Inc.

Address: 114 South Street, Hopkinton, MA 01748, U.S.A.

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

E-mail: support@labtechus.com

www.labtechus.com

#### LabTech S.R.L

Address: Via fatebenefratelli, 1/5-24010, Sorisole (BG), Italy

Tel: +39 035 576614 Fax: +39 035 4729414

E-mail: marketing@labtechsrl.com

www.labtechsrl.com

