

VACUUM CONCENTRATION SOLUTIONS



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MAIN FEATURES

MVP vacuum concentrators are widely used for the preparation of environmental samples, natural products, food and agricultural product samples, and heat-sensitive products. They achieve high-throughput automatic evaporation of liquid samples through **vacuum, heating, and rotation**. They improve work efficiency and sample recovery, reduce human errors, and enhance the accuracy of analysis.

The series include 4 models: the **MVP-12**, the **MVP-48**, the **FLEX-MVP** and the **FLEX-MVP EVO**.



MAIN APPLICATIONS

FOOD



Pesticide residues, additives in food, determination of acid in food and extraction.

PHARMA



Determination of API, extraction, contaminants and residues.

ENVIRONMENT



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

CHEMICAL



QC of plastics, petrochemical, oil, fats and textile.

FLEX-MVP

The **Flex-MVP** is a particularly flexible model, suitable for thermo sensitive samples. Thanks to its high solvent recovery rate, it allows to reduce the emissions of solvent, proving to be an environmentally friendly concentrator. The Flex-MVP boasts also energy-saving capabilities alongside its main functionalities.



GENERAL FEATURES & ADVANTAGES

▶ SUPER BATCH PROCESSING CAPABILITY

16 sample positions, compatible with **200ml or 50ml vials**.

▶ FULLY SURROUNDED HEATING WITH HIGH EVAPORATION EFFICIENCY

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.

▶ 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.

▶ FLEXIBLE AND FREE ACCESS AT ANY TIME

Integral and independent sealing 2-in-1 design.

No need to pause the instrument or pressure relief for all the samples as a **single sample can be added and removed at any time**, without affecting the concentration process of the other samples.

▶ FULL TRANSPARENCY

The evaporation chamber is designed with **full transparency**, providing **strong visibility**.

The hanging evaporation cup allows observation of the evaporation status at the bottom of the sample through **LED lights** during operation.

▶ 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 therefore cross-contamination and refluxing.

▶ SMART INTUITIVE ANDROID SOFTWARE

Equipped with a 7-inch touch screen running on an Android operating system, the Flex-MVP EVO offers smartphone-like operation and an unparalleled interactive experience.

▶ USER FRIENDLY OPERATIONS

The software allows real-time adjustment of temperature, vacuum, and shaking frequency, supports timed operations, graphical display of gradient curves, real-time monitoring of all parameters.

▶ COMPACT CONDENSATION MODULE

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

▶ SHAKING BATH SYSTEM

The water bath rotates evenly to create vortex on the surface of each liquid sample.

The evaporation surface expands through this vortex flow and speed up evaporation rate. The **sample is continuously mixed**, preventing the overheating.

▶ EXCHANGE TOP COVER SYSTEM

The MVP Series can use **3 different** models of **top cover**, known as Flex-MVP, MVP-12 and MVP-48, making the system more flexible and covering various applications by using the same bath.

FLEX-MVP EVO

The Flex-MVP EVO is a high-throughput and high-efficiency vacuum concentrator that quickly and accurately concentrates up to 16 samples to a defined volume under controlled heating, vacuum and rotation conditions.

In addition to the features of the FLEX-MVP, this model includes:



ACCURATE AND AUTOMATIC END-POINT DETECTION (0,5 & 1mL)

The system uses an invisible light optical design (Far-IR) with an independent liquid level sensor for reliable, interference-free detection with no signal attenuation. Unlike traditional sensors, it is unaffected by particles, bubbles, sample color or high-temperature environments, ensuring accuracy in complex matrices.

MVP-12



The **MVP-12** is specially produced for large volume needs. For this reason, it is suitable for extraction applications. Designed for high throughput, this instrument replaces up to 12 rotary evaporators, saving valuable lab space and resources.

LARGE VOLUME

Up to 12 samples with max. **900ml each**, can be concentrated simultaneously.

OPTIMIZED UPPER COVER

The cover includes an upgraded heating function to prevent condensation. Flow path upgraded to Tesla check valve (from PTFE tubing) eliminates cross-backflow, supports heating, and simplifies maintenance.

MVP-48



The **MVP-48** grants a larger capacity, thanks to its 48 positions.

The possibility to work with centrifuge tubes allows an easier workflow in the laboratories.

DIFFERENT VIAL OPTIONS

Up to 48 samples, 60ml vials or 50ml centrifuge tubes, concentrated simultaneously.

TECHNICAL FEATURES

	Flex-MVP EVO	Flex-MVP	MVP-12	MVP-48
Sample positions	16	16	12	48
Sample volume	200ml or 50ml concentration cup	200ml or 50ml concentration cup	900ml concentration cup	60ml vial & 50ml centrifuge tube
Individual sample adding/removing	✓	✓	✗	✗
Shaking bath	✓	✓	✓	✓
Shaking rpm range	0-300 rpm			
Temperature range	From room to 70°C			
Integrated Android controller	✓	✓	✓	✓
Power consumption	1,8 kW			
Power supply voltage	230V 50/60Hz			
Dimensions (WxDxH)	78x47x55 cm			
Weight	62 kg			
End point detection	✓	✗	✗	✗
Ordering information	LT-MVP-FLEX/EVO	LT-MVP-FLEX	LT-MVP-12	LT-MVP-48



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