

# **WATER BATH**



Enhance your laboratory's efficiency with the Vector Le Chatelier Water Bath, a high-quality device designed for precise temperature control in various applications within microbiology, research, and industrial laboratories. This water bath offers exceptional temperature sensitivity and uniform heat distribution, ensuring consistent and reliable results for your experiments.



## **VTR 13-020**



# Le Chatelier Water Bath

## Temperature Control for Laboratory Applications

### Overview

The Vector Le Chatelier Water Bath features a programmable microprocessor control system hidden beneath its simple exterior design. This advanced system provides accurate temperature control within  $\pm 0.1$  °C and a temperature reading accuracy of  $\pm 0.2$  °C, delivering the best liquid temperature management for homogeneous heat distribution and constant temperature maintenance.

Constructed with a triple insulation design, the water bath minimizes heat loss and promotes energy efficiency. The digital display allows you to easily monitor time and temperature settings, enhancing user convenience. An integrated drain hose enables effortless emptying of the tank, simplifying maintenance and cleaning procedures.

Designed to accommodate up to 12 Le Chatelier molds (available separately) in the removable rack supplied with the bath, this device is ideal for experiments requiring multiple samples. The bath reaches the boiling point in approximately 30 minutes, and an innovative system keeps the temperature at boiling while preventing water evaporation. This ensures that Le Chatelier molds remain submerged throughout the test, maintaining consistent testing conditions.

Safety is a priority with the Vector Le Chatelier Water Bath. It is equipped with a security device that automatically cuts off power if the water level is low, protecting both the equipment and the user. The durable construction, featuring an interior made of electrostatic powder-coated steel, ensures longevity and resistance to various chemicals.

Applications:

**Material Expansion Measurement:** Used with Le Chatelier molds to measure the expansion volume change of fly ash, lime, and other materials in cement and concrete.

**Laboratory Testing:** Suitable for general and specialized applications requiring precise temperature control in microbiology, research, and industrial laboratories.

**Quality Control:** Provides consistent testing conditions for reliable results in quality assurance processes.



## Le Chatelier Water Bath

### Key Features:

**Precise Temperature Control:** Programmable microprocessor system with control accuracy of  $\pm 0.1$  °C and reading accuracy of  $\pm 0.2$  °C.

**Triple Insulation Design:** Ensures homogeneous heat distribution and stable temperature maintenance.

**User-Friendly Interface:** Digital display for easy monitoring and setting of time and temperature.

**Efficient Heating:** Reaches boiling point in approximately 30 minutes, with a system to prevent water evaporation.

**Safety Mechanisms:** Automatic power cutoff when water level is low.

**Durable Construction:** Made of electrostatic powder-coated steel for enhanced durability and chemical resistance.

**Large Capacity:** Holds up to 12 Le Chatelier molds in the removable rack.

**Easy Maintenance:** Equipped with a drain hose for convenient emptying and cleaning.

### Accessories:

#### Le Chatelier Mold:

Used with the Vector Le Chatelier Water Bath to measure the expansion volume change of materials.

Made of chrome-plated brass for durability and accuracy.

Includes a glass plate and necessary weights for the experiment.



## TECHNICAL SPECIFICATION

| Model  | VTR 13-020-6                            | VTR 13-020-15 | VTR 13-020-30 | VTR 13-020-48 |
|--|---|---------------|---------------|---------------|
| Available Volume (Lt.)                         | 6                                       | 15            | 30            | 48            |
| Temperature Working Range                      | Ambient Temperature +5°C / +99 °C       |               |               |               |
| Temperature Sensor                             | PT Micro Processor Control System       |               |               |               |
| Control System                                 | 0,1 °C                                  |               |               |               |
| Temperature Adjustment and Reading Sensitivity | $\pm 0,2$ °C                            |               |               |               |
| Temperature Distribution                       | $\pm 0,1$ °C                            |               |               |               |
| Scheduler                                      | 1 min. - 99.9 Hours                     |               |               |               |
| Internal Surface Structure                     | Stainless Steel                         |               |               |               |
| Outer Surface Structure                        | Cold Drawn DKP Sheet or Stainless Steel |               |               |               |
| Power Values                                   | 220 V 50 Hz.                            |               |               |               |
| Installed Power                                | 900W                                    | 900W          | 1500W         | 2000W         |
| Internal Dimensions (cm)                       | 30x15x20                                | 30x23x20      | 50x30x20      | 50x60x20      |
| External Dimensions (cm)                       | 36x21x36                                | 36x31x36      | 56x36x36      | 58x68x40      |