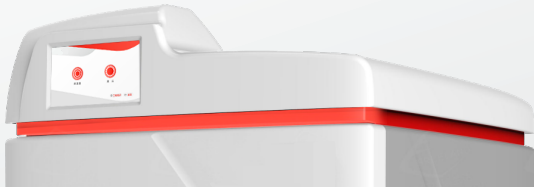


Efficient, Safe, and Reliable Sample Pre-treatment Partner.

Product Features

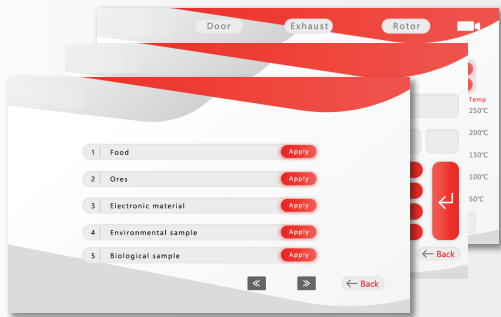
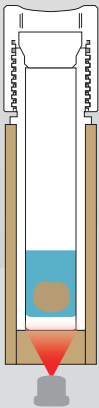


**Furnace Chamber**  
Industrial-grade large-capacity stainless steel chamber, protected by multi-layer PFA coating for high temperature and corrosion resistance, with at least a 5-year quality guarantee. Includes multiple protection features such as real-time flame monitoring inside the chamber, automatic anomaly alarms, and auto-shutdown to eliminate any potential hazards.

**Light Recognition System**  
By observing changes in the device's lights from a distance, user can understand the working status of the device (such as standby, running, and completion) to enhance the safety protection level.

**MATE-T Non-Contact Temperature Monitoring and Protection System**  
Utilizes mid-infrared light waves that can penetrate the vessel, combined with Boao's unique optimization scanning algorithm, to display and monitor the digestion temperature of each sample and its changes in real time. The device automatically alarms and ceases microwave output when temperatures reach the set upper limit, ensuring uniformity of all sample digestions, safety of the device's operation, and accuracy of analysis results.

**MATE-P Non-Contact Pressure Monitoring and Protection System**  
Employs modern optical sensing measurement technology for precise non-contact pressure monitoring, allowing real-time monitoring and tracking of the actual reaction pressure of each sample. The device immediately alarms and stops microwave output when pressure values reach the set pressure, ensuring the safety of the digestion process and the accuracy of analysis results.



**Smart Control System**  
Monitors instrument operating parameters such as temperature and pressure in real-time, displaying dynamic trends of operating parameters through curves, histograms, and videos. Also, the device has multiple safety features including automatic anomaly detection and shutdown.

**MATE-Dynamic Method Library**  
User-friendly dynamic method library design allows users to adjust the method library according to different user and sample types and implement one-click invocation, greatly simplifying the sample pre-treatment operation process.

**Rapid Cooling**  
A large airflow exhaust system combined with an active cooling fan cools the digestion vessels to a safe temperature within 15 minutes.

**Vessels:**  
Features an active elastic pressure relief protection design to prevent sample vessel pressure overload while minimizing the impact of pressure release on subsequent digestion processes.

| Digestion Vessel Parameters |   |   |
|-----------------------------|---|---|
| Rotor Model                 | DT-16   | DT-42   |
|                             |  |  |
| Vessels                     | 16  | 42  |
| Inner Vessel Material       | TFM   | TFM   |
| Outer Vessel Material       | PEEK+GF   | PEEK+GF   |
| Inner Vessel Volume         | 100mL   | 75mL  |



Graphite Acid Evaporator

- 1、Fast heating and uniform temperature: Utilizes a high-purity graphite heating module with excellent thermal conductivity and integrated molding for uniform overall heating, with minimal temperature difference between digestion positions (temperature control precision of  $\pm 1^{\circ}\text{C}$  between positions) using a PID controller for precise temperature control.
- 2、Excellent corrosion resistance: Features a fully PTFE-coated work panel and PTFE-coated chassis, offering corrosion resistance and extended durability.
- 3、Stepwise program temperature setting and control: Allows users to customize or store heating programs. Additionally, the instrument includes integrated over-temperature protection and a timed automatic heating stop function to ensure experimental safety.

| ID | Model  | Positions | Temperature range |
|----|--------|-----------|-------------------|
| 1  | AUG-16 | 16        | RT~240°C          |
| 2  | AUG-24 | 24        | RT~240°C          |
| 3  | AUG-42 | 42        | RT~240°C          |