

AUTOMATIC KJELDAHL DIGESTOR TT- SH520/SH508



The Automatic Kjeldahl Digester TT-SH520/SH508 is a fully automated system designed with a focus on reliability, intelligence, and environmental friendliness.

Automatic Kjeldahl Digester TT-SH520/SH508 efficiently conducts digestion processes based on the Kjeldahl method automatically. Depending on the number of laboratory samples, Automatic Kjeldahl Digester TT-SH520/SH508 can accommodate either 8 positions or 20 positions. It operates on an Android system and integrates a main unit with a lifting device and scrubber, achieving complete automation throughout the digestion process.

APPLICATIONS

- **Food & Beverage Industry:** Determines protein content in food and feed products for nutritional analysis, labeling accuracy, and regulatory compliance.
- **Agriculture & Animal Feed:** Supports nitrogen and protein analysis in soil, fertilizers, crops, and feed formulations to improve yield and quality.
- **Pharmaceuticals:** Ensures accurate digestion for drug development, formulation studies, quality control, and compliance with pharmacopeial standards.
- **Environmental Testing:** Measures nitrogen levels in wastewater, sludge, and soil samples for pollution monitoring, environmental compliance, and remediation studies.
- **Chemical Industry:** Analyzes nitrogen-containing compounds for product formulation, R&D applications, and industrial process optimization.
- **Academic & Research Institutions:** Provides a dependable platform for teaching, training, and advanced research in biochemistry and analytical chemistry.
- **High-Throughput Laboratories:** 8- and 20-position configurations enable simultaneous multi-sample processing, boosting efficiency, safety, and reproducibility.

FEATURES

Characteristic

- **Full Automation:** Utilizing an Android system, it enables simultaneous control of the lifting device and exhaust gas neutralization, effectively enhancing experimental efficiency and minimizing the risk of gas leakage.
- **Lifting Function:** Equipped with a lifting function, the tube rack moves automatically in line with the experiment program, reducing laboratory labor costs and shortening cooling times.
- **Aluminum Deep-hole Heating Module:** Utilizing an aluminum deep-hole heating module enhances the digester's heating effect, preventing disturbances during operation.
- **Heat Insulation:** The use of ceramic and air duct heat insulation ensures excellent heat preservation, effectively reducing the digester's energy consumption.
- **Real-time Monitoring:** Offers real-time temperature display and records heating data and the digestion process, facilitating monitoring and review.
- **Ample Data Storage:** Built-in 8GB storage allows unlimited experimental information storage and access to historical digestion methods and heating curves.
- **Method Flexibility:** Pre-installs over 20 methods and supports customization of more than 500 methods, all designed for ease of use.
- **Programmable Heating Rate:** The heating rate is programmable, utilizing fuzzy PID temperature control technology for accurate temperature control and rate adjustments.
- **Regulatory Compliance:** Complies with 21CFR Part 11 standards, including audit trails and relevant information.
- **Data Transmission:** Provides two data transmission methods—WiFi and USB—for secure backup and access to historical data.
- **Robust Housing:** Constructed with high-grade anti-corrosive materials and Teflon coating, capable of withstanding high temperatures and strong acid corrosion.

WD03 Manifold

- **PFA Sealing Cover:** Utilizes a PFA sealing cover known for its extended service life.
- **Snap-On Design:** The sealing cover incorporates a snap-on design for easy replacement.
- **Water Jet Vacuum Device:** Equipped with a water jet vacuum device that operates without needing a power supply.
- **Professional Drip Tray Design:** Features a specialized drip tray design to minimize the damage from acid liquid pollution and corrosion.

S403 Scrubber

- **Exhaust Gas Recovery:** Automatic Kjeldahl Digestor TT-SH520/SH508 Utilizes cooling and chemical absorption in the exhaust gas neutralization process to enhance the recovery efficiency of the exhaust gas.
- **Scrubber Control:** The Automatic Kjeldahl Digestor TT-SH520/SH508 can control the scrubber.
- **PTFE Pipeline Design:** Incorporates a PTFE corrosion-resistant pipeline design, increasing the overall service life.

Automation

- **Automatic Lifting Mechanism:** Includes automatic lifting functionality, eliminating the need for manual labor. After digestion, the tube rack is automatically raised for rapid cooling.
- **Independent Cooling Support:** The Digestor is equipped with a separate cooling support that is adaptable and space-efficient, allowing samples to cool rapidly to room temperature.

High Productivity

The Automatic Kjeldahl Digestor TT-SH520/SH508 can simultaneously control both the lifting device and the Scrubber without requiring separate operations.

Multi-Protection

The Automatic Kjeldahl Digestor TT-SH520/SH508 is equipped with a multi-protection function, automatically triggering alarms in case of overvoltage, overcurrent, overheating, or any operational failure.

TECHNICAL SPECIFICATIONS

Model	TT-SH520	TT-SH508
Temperature Range	Room temperature +5°C~450°C	Room temperature +5°C~450°C
Temperature accuracy	±1°C	±1°C
Heating Method	Electric heating tube	Electric heating tube
Digestion Tube	300mL	300mL / 380mL
Digestion Capacity	20 Positions	8 Positions
Lifting	Yes	Yes
Mainfold	Yes	Yes
Scrubber	Optional	Optional
Interface	WIFI / USB	WIFI / USB
Power Supply	AC 220±10%V(50±1)Hz (110V is also available. Please specify when ordering)	AC 220±10%V(50±1)Hz (110V is also available. Please specify when ordering)
Rated Power	2300W	1400W
Dimension (LxWxH)	12 inches X 23.2 inches X 5.9 inches	2.9 inches X 17.3 inches X 5.9 inches

Net Weight	46.3 lbs.	33.1 lbs.
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