

Kjeldahl Digester, Gas Collection Hood, Exhaust System Scrubber



Kjeldahl Digester

Kjeldahl Digester System with Gas Collection Hood and Exhaust System Scrubber

The Kjeldahl Digester system from Master Science, Switzerland, is a powerful solution for chemical analysis and sample digestion. It includes advanced components like the Kjeldahl Digester, Gas Collection Hood, and Exhaust System Scrubber to ensure efficient sample processing, acid gas handling, and environmental protection. Here's an overview of each component and its technical details:

1. Kjeldahl Digester (Model: MSBKD10RSSWISS)

Introduction

The Kjeldahl Digester enables precise wet digestion of samples, essential for preparing plant, seed, feed, soil, ore, and more. It complements the Kjeldahl nitrogen analyzer, widely utilized in agriculture, forestry, environmental protection, geology, chemical industries, food analysis, and scientific research.

Key Features

- **High-Density Graphite Heating Module:** Ensures even temperature distribution, reaching up to 550°.
- **5.6-inch Color Touch Screen:** Multi-language interface for easy operation.
- **Programmable Heating:** Flexible control with 0-40 segment programs and curve heating modes.
- **Precision Temperature Control:** Intelligent PID self-tuning for high stability.
- **Safety Mechanisms:** Over-temperature, over-current protection, and automatic restart features.

Technical Specifications

- **Temperature Range:** RT + 5° to 550°
- **Capacity:** Holds 10 x 300ml glass digestion tubes
- **Heating Block Material:** High-density graphite
- **Control:** 1-40 segment program heating or single-point heating
- **Screen:** 5.5-inch color touch screen
- **Power:** AC 220V / 50Hz, 1.4 kW
- **Dimensions:** 871 x 461 x 601 mm (W x H x D)
- **Weight:** Net - 18 kg, Gross - 24 kg

2. Gas Collection Hood (Model: MSGCH10SWISS)

Introduction

The Gas Collection Hood is designed for capturing and managing acid gases during the digestion process, routing them to a neutralization device to minimize harmful emissions.

Key Features

- **High Resistance Materials:** Made from PTFE for resistance against high temperatures and chemicals.
- **Conical Cap Structure:** Gravity-based sealing mechanism for effective acid gas collection.
- **Corrosion Resistance:** Constructed with 316 stainless steel for durability.

Technical Specifications

- **Collecting Ports:** 10
- **Compatibility:** Works with the MSBKD10RSSWISS Digester
- **Dimensions:** 350 x 260 x 260 mm (W x H x D)
- **Weight:** Gross - 3 kg

3. Exhaust System Scrubber (Model: MSES1BSWISS)

Introduction

The Exhaust System Scrubber neutralizes and filters acid fog, ensuring compliance with pollution standards and protecting the environment and facilities from acid damage.

Key Features

- **Acid & Alkali Neutralization:** Negative pressure pump for large flow capacity.
- **Three-Stage Filtration:** Neutralizes acid fog, filters waste gas with distilled water, and buffers remaining gases.
- **User-Friendly Design:** Easy maintenance and solution replacement.

Technical Specifications

- **Extraction Flow:** 18 L/min
- **Interface:** ?8-10 mm (reducer fittings available)
- **Alkaline Solution Bottle:** 1 L
- **Power:** AC 220V / 50Hz, 120 W
- **Dimensions:** 470 x 480 x 450 mm (W x H x D)
- **Weight:** Gross - 15 kg