The **C850M Integrated Water Insoluble Matter Testing System** is based on the principle of gravimetric method measurement and testing standards for chemical reagents, pharmacopoeias, and other relevant testing protocols. It is specifically designed for the detection of water insoluble matter in chemical reagents and pharmaceutical excipients.



Characteristics [Note 1]

Traceable Data

- Equipped with Labthink's latest fully automatic gripper that can simulate human hands to realize rapid moving and weighing of 12 test cups.
- Dual-chamber design realizes separation of evaporation and weighing in separate chambers to avoid the influence of high temperature and high humidity on the scale.
- High precision electronic scale with a repeatability up to 0.05mg (optional).
- The precision scale is easily visible through the viewing panel and can be calibrated and traced with a standard material(weights) for data traceability.
- The scale can be quickly disassembled for maintenance and calibration.

Safe & Compliant

- Fully-closed, zero leakage water bath avoids harmful gas overflow.
- Automatic filter residue cleaning and drainage system.
- Rapid liquid cooling system quickly achieves room temperature weighing.
- Nitrogen purge cycling and independent electrical control system are safer for tests.
- Condensation recovery system to reduce environmental pollution.

Intelligent Control

- 10.1" medical-grade touch screen user interface, the instrument is operated independently without a computer.
- The instrument's mainframe adopts a desktop design to save space.
- Washing, drying, cooling and weighing at room temperature are completed automatically.
- The instrument is equipped with various kinds of sensors with sound and light intelligent reminders for operator safety.
- The instrument is embedded with a network port and can be connected to the Internet for remote control and upgrading.
- Professional software meets GMP requirements for data traceability and the needs of the pharmaceutical industry.
- Multi-level operation authority management for users can be configured on demand.
- Electronic signature is designed as per standard requirements of 21 CFR Part 11.

Testing Principle

The sample is dissolved in water, and the insoluble matter is filtered out. The residue is washed with water to completely separate it from the main sample. After drying, the weight of the insoluble matter is measured using the balance.

Test Standard Compliance

GB/T 9738 and other relevant standards for testing water insoluble matter in chemical reagents and pharmaceutical excipients.

Applications

Basic Applications	**Chemical Reagents**	Determination of water insoluble matter in various chemical reagents.
	Pharmaceutical Excipients	Determination of water insoluble matter in various pharmaceutical excipients.

Technical Parameters

Table 1：Test Parameters [Note2]

Parameter\Model		**C850M**
Test Range	**mg**	0.3～80,000
		0.05～10,000（optional）
Resolution	**mg**	0.1
		0.01（optional）
Repeatability	**mg**	±0.3
		±0.05（optional）
Temperature Range	℃	Room temperature～130
Temperature Fluctuation	℃	±0.5
Extended Functions	**21 CFR Part11**	optional
	Computer system requirements for GMP	optional

Table 2：Technical Specifications

Test Stations	12
Glass Filter Crucible Volume	100mL [Note 3]

Glass Filter Crucible Pore Size	5um~15um Note 3
Gas Specifications	Compressed air (gas source is provided by the user)
Gas Source Pressure	≥ 72.5 PSI / 500 kPa
Port Size	Φ8 mm Polyurethane tube
Instrument Mainframe Dimensions	24.8” H x 41.3” W x 28.7” D (63cm× 105cm× 73cm)
Power Supply	120VAC±10% 60Hz / 220VAC±10% 50Hz
Net Weight	396Lbs（180kg）

Table 3：Product Configuration

Standard Configuration	Instrument mainframe, including scale (0.1mg), electrical control module, reagent collection module, liquid cooling module, glass filter crucibles (12), Φ8 mm Polyurethane tube
Optional Parts	Software, computer system requirements for GMP, 21 CFR Part11, air compressor (exhaust capacity > 200L/min), glass filter crucibles (100mL), scale (0.01mg), weight (50g)

Note 1: The described product characteristics are subject to the specific annotation of the "Technical Parameters" table.

Note 2: The parameters in the table are measured in Labthink’s laboratory by professional operators as per requirements and conditions of the relevant laboratory environment standards

Note 3: The glass filter crucible volume and pore size can be customized, but the test range may be subject to alteration.

✧ Labthink is always dedicated to the innovation and improvement of product performance and functions. Therefore, technical specifications are subject to change without further notice. Labthink reserves the rights of final interpretation and revision.