C860M Integrated Residue on Ignition Testing System is designed and produced based on the principle of Gravimetric Method and testing standards for Pharmacopoeia, pharmaceutical packaging materials, chemical reagents, food safety, etc. It is professionally suitable for the determination of residue on ignition and ash content in pharmaceuticals, pharmaceutical packaging materials, foods, food contact materials (FCMs), and chemical reagents.



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 16 test cups.
- Dual-separate-chamber design realizes separation of ignition and weighing to avoid the influence of high temperature and high humidity on the scale.
- Germany imported touch electronic scale with a repeatability up to 0.05mg (optional).
- Visual scale design and the data are traceable.
- Self-calibration scale can be quickly disassembled and is convenient for measurement

Safe & Compliant

- The integrated design combines a traditional muffle furnace, desiccator, and analytical balance into one compact system.
- The entire testing process strictly complies with relevant standards.
- Rapid liquid cooling system truly achieves room temperature weighing.
- Independent electrical control system ensures safe operation.
- Automatic timed and quantitative sulfuric acid fill.

Intelligent Control

- 10.1" medical-level touch screen; the instrument host can operate independently without a computer.

- Instrument host adopts desktop design to save space.
- Ignition, drying, cooling and weighing at room temperature can be completed automatically.
- The instrument is equipped with various kinds of sensors with sound and light intelligent reminder for safer control.
- The instrument is embedded with a network port and can be connected to the Internet for remote control and upgrading.
- Professional software meets the GMP requirements for data traceability and the needs of the pharmaceutical industry.
- The instrument adopts multi-level operation authority management for users and the authority details can be configured on demand.
- Electronic signature is designed as per requirements of 21 CFR Part 11.

Testing Principles

Take 1.0–2.0 g or the prescribed amount of sample, place it in a crucible that has been ignited to constant weight, and weigh accurately. Ignite gently until completely carbonized, then cool. Unless otherwise specified, moisten with 0.5–1 mL sulfuric acid, heat at low temperature until the sulfuric acid vapors are completely removed, then ignite at 700–800°C until completely ashed. Cool in a desiccator and weigh precisely. Ignite again at 700–800°C to constant weight. The residue obtained is the residue on ignition.

Test Standard Compliance

Pharmacopoeia, YBB00012002-2015, YBB00342002-2015, YBB00262005-2015 and other standards for pharmaceutical production and pharmaceutical packaging.

GB/T 5009.4, GB 31604.6 and other standards for food and food contact materials.

GB/T 9741 and other related standards for determination of chemical reagent residue on ignition.

Applications

Basic Applications	**Pharmaceuticals**	Determination of residue on ignition and ash content of various pharmaceuticals.

Extensive Applications	Pharmaceutical Packaging Materials	Determination of residue on ignition and ash content of various pharmaceutical composite films, bags, bottles, rubber plugs and caps.
	Foods	Determination of residue on ignition and ash content of various foods.
	Food Contact Materials	Determination of residue on ignition of various food contact materials.
	Chemical Reagents	Determination of residue on ignition of various chemical reagents.

Technical Parameters

Table 1: Test Parameters Note 2

Parameter\Model		C860M
Test Range	mg	0.3～60000
		0.05～20000 (optional)
Resolution	mg	0.1
		0.01 (optional)
Repeatability	mg	±0.3
		±0.05 (optional)
Temperature Range	℃	Room temperature～800
Temperature Fluctuation	℃	±25
Extended Functions	21 CFR Part11	optional
	Computer system requirements for GMP	optional

Table 2: Technical Specifications

Test Stations	16
Test Cup Volume	60mL Note 3

Gas Specifications	Compressed air (gas source is provided by the user)
Gas Source Pressure	0.5 MPa～0.7 MPa （72.5PSI～101.5PSI）
Port Size	Φ8mm Polyurethane tube
Instrument Host Dimensions	31.5” H x 43.3” W x 29.5” D (80cm× 110cm× 75cm)
Power Supply	120VAC±10% 60Hz / 220VAC±10% 50Hz (Select one from the two)
Net Weight	396Lbs (180kg)

Table 3: Product Configuration

Standard Configuration	Instrument host, scale (0.1mg), liquid cooling module, test cups (16 cups), Φ8 mm Polyurethane tube, B2860 automatic acid filling device
Optional Parts	Software, computer system requirements for GMP, 21 CFR Part11, air compressor, test cup (60mL), 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 laboratory by professional operators as per requirements and conditions of the relevant laboratory environment standards.

Note 3: The test cup volume can be customized, but the test range may be subject to actual delivery.

✧ 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.