C860H Integrated Residue-on-Ignition Testing System



C860H Integrated Residue-on-Ignition Testing System is based on the gravimetric method and designed and manufactured in accordance with pharmacopoeias and testing standards for pharmaceutical packaging materials, chemical reagents, and food, etc. It is suitable for the determination of residue on ignition and ash content in pharmaceuticals, pharmaceutical packaging materials, food, and food contact materials, as well as residue on ignition in chemical reagents.

Product Features [Note 1]

Precise, Traceable, and Convenient Measurement

- Dual-chamber independent design achieves true separation of ignition and weighing, avoiding the influence of high temperatures on the balance.
- German-imported touch-screen electronic balance with repeatability up to 0.05 mg.
- Visualized balance design and traceable data.
- Internal calibration balance for quick disassembly and easy measurement.

Safe and Compliant: Standardized Processes and Safer Operation

- Integrated design, combining the traditional muffle furnace, dryer, and balance in one.
- Testing procedures strictly adhere to multi-national pharmacopoeias, ISO and GB standards.
- Rapid liquid-cooling system achieves true room-temperature weighing.
- Automatic timed and quantitative sulfuric acid fill.
- Discrete electronic control system for enhanced testing safety.
- Equipped with various sensors and intelligent audible and visual alerts for safer operation.

Intelligent and Efficient: Fully Automated Process, Saving Time and Space

- Equipped with fully automatic gripper, Labthink's latest technological advancement, that can mimic manual weighing of 36 test cups.
- Ignition, cooling, drying, and room temperature weighing are fully automatic and require no human

intervention.

- 12.1" medical-grade touchscreen allows the instrument host to operate independently of a computer.
- The instrument host features a desktop design, saving space and adapting to various laboratory layouts.
- The system has an embedded network port, which can be connected to the Internet for remote control and upgrades.
- Professional computer software complies with GMP requirements for data traceability, satisfying the needs of the pharmaceutical industry.
- Multi-level user access control with configurable permissions.
- Electronic signature is designed in accordance with 21 CFR Part 11.

Test Principle

Take 1.0－2.0 g or a specified weight of sample and place it in a test cup that has been ignited to constant weight. Weigh accurately, slowly ignite until it is completely carbonized, and cool down. Unless otherwise specified, add 0.5－1 mL of sulfuric acid to moisten the sample. Heat at a low temperature until the sulfuric acid vapor is completely removed. Then ignite at 700－800 ℃ to completely ash it. Transfer it to a dryer, let it cool, weigh accurately, and then ignite it again at 700－800 ℃ to constant weight to obtain the residue on ignition.

Reference Standards:

US Pharmacopeia, European Pharmacopoeia, British Pharmacopoeia, Japanese Pharmacopoeia, ISO 3826-1, ISO 3826-4, Chinese Pharmacopoeia, YBB00012002-2015, YBB00342002-2015, YBB00262005-2015 and other pharmaceutical and pharmaceutical packaging standards;
GB 5009.4, GB 31604.6 and other related standards for food and food contact materials and articles;
ISO 6353-1, GB/T 9741 and other standards for chemical reagents.

Applications

Basic Applications	**Pharmaceuticals**	Determination of residue on ignition and ash content of various pharmaceuticals.
Extended Applications	**Pharmaceutical Packaging Materials**	Determination of residue on ignition and ash content of various pharmaceutical composite films, pouches, bottles, rubber stoppers, and gaskets.

	Food	Determination of residue on ignition and ash content of various food products.
	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		**C860H**
Test Range	mg	0.05 ～ 20000
		0.3 ～ 60000 (Optional)
Resolution	mg	0.01
		0.1 (Optional)
Repeatability	mg	±0.05
		±0.3 (Optional)
Temp. Range	℃	Room Temp. ～ 800
Temp. Fluctuation	℃	±0.5
Temp. Deviation	℃	±25
Extended Functions	21 CFR Part 11	Optional
	GMP Computer System Requirements	Optional

Table 2: Technical Specifications

Test Stations	36
Test Cup Volume	60 mL Note 3
Gas Specifications	Compressed air (air source is provided by the user)
Gas Source Pressure	0.5 MPa～0.7 MPa (72.5 PSI～101.5 PSI)
Port Size	Φ8 mm polyurethane pipe
Host Dimensions	45.2” H x 49.2” W x 30.7” D (115cm× 125cm× 78cm)

Power Source	120 VAC ±10% 60 Hz / 220 VAC ±10% 50 Hz (Select one from the two)
Net Weight	440 lbs (200 kg)

Table 3: Product Configuration

Standard Configuration	Instrument host, balance (0.01 mg), liquid cooling module, test cups (36 pcs), Φ8 mm polyurethane tube, B2860 automatic acid filling device
Optional Parts	Software, GMP computer system requirements, 21 CFR Part 11, air compressor, test cup (60 mL), weight (50 g), balance (0.1 mg), weight (200 g)

Note 1: All product features described are subject to the specific specifications in the "Technical Parameters" tables.

Note 2: All parameters in the table have been measured in the Labthink laboratory by professional operators, according to the requirements and conditions of relevant laboratory environmental standards.

Note 3: The test cup volume can be customized, but its corresponding testing range may vary and should be based on actual delivery.

✧ **Labthink is committed to innovation and improvement in product performance and functionality. For this reason, product technical specifications may change accordingly. No further notice will be given for the above changes. The company reserves the right to modify and provide the final interpretation.**