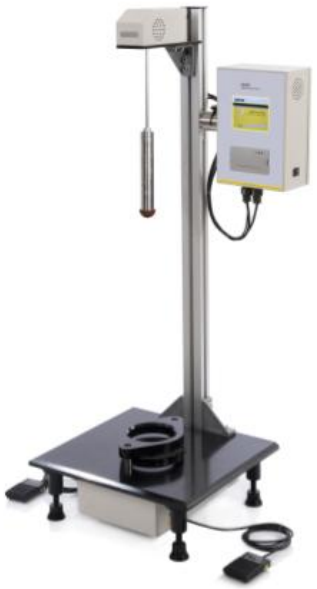
C670M Falling Dart Impact Tester is suitable for measuring the impact mass and energy of plastic film or sheet when 50% of the sample is damaged under the impact of free falling dart at a given height.



Product Features Notes1

- Menu interface, color touch screen operation, convenient and fast to set test parameters.
- Two test modes A and B are provided, and the test status is automatically judged.
- The falling dart adopts the principle of electromagnetic hanging, which can release automatically, effectively avoiding the system error caused by human factors.
- Pneumatic sample clamping, manual and pedal dual start mode, built-in observation lamp unique design; convenient, fast and accurate operation.
- Professional computer software supports the functions of multi unit display of test results, graphic display of test process, output and print function, showing the results clearly and intuitively.
- Micro printer and standard RS232 interface make the tester convenient for the external connection and data transmission between the system and the computer.

Testing Principle

At the beginning of the test, select the test method as the first procedure, estimate an initial mass and Δm value, and conduct the test. If the first sample is damaged, the weight Δm shall be used to reduce the falling mass; if the first sample is not broken, the weight Δm shall be used to increase the falling mass for test in turn. In short, the use of weights to reduce or increase the falling mass depends on whether the previous sample is damaged. After 20 samples are tested, the total number of damaged samples is calculated. If n is equal to 10, the test is completed; if n is less than 10, continue the test after supplementing samples until n is equal to 10; if n is greater than 10, continue testing after supplementing samples until the total number of undamaged samples is equal to 10. Finally, the system automatically calculates the impact results.

Reference Standard Note 1

ISO 7765-1-1988, ASTM D1709, GB/T 9639.1-2008, JIS K7124-1

Test Applications

Basic Applications	Film & Sheet	It is suitable for testing the impact resistance of plastic film, sheet and composite film with thickness less than 1 mm. Such as PE film, wrapping film, PET sheet, food packaging bags of various structures, heavy packaging bags, etc
	Aluminum Foil, Aluminum Plastic Composite Film	It is suitable for testing the impact resistance of aluminum foil and aluminum plastic composite film
	Paper and Paperboard Test	It is suitable for testing the impact resistance of paper and paperboard
Extended Applications	Drop Ball Impact Test	It is suitable for the drop ball impact test of the sample. The sample is clamped on the falling ball impact test fixture, and the falling ball of certain quality is selected to impact the sample from a certain height. The damage of the sample is checked and the impact resistance of the sample is judged
	Shoulder Lining Impact Test	It is suitable for the falling dart impact test of shoulder lining. Put the shoulder lining sample on the special test fixture, select a certain quality dart head to impact the shoulder lining sample from a certain height, and judge the impact resistance of the sample according to the sample damage

Technical Parameters Note 2

Items	Parameters
Measuring Method	Method A, method B (optional)
Test Scope	Method A: 50-2000g Method B: 300-2000g
Weight Accuracy	+0.5%
Sample Clamping	Pneumatic
Air Source Pressure	0.6 MPa (Prepared by user)
Air Connection	Φ 8 mm polyurethane pipe
Sample Size	>150 mm x 150 mm
Power Supply	220VAC 50Hz / 120VAC 60Hz
Net Weight	70 kg
Dimensions	Amethod:500 mm (L) ×450 mm (W) ×1320 mm (H)
	Method B: 500 mm (L) ×450 mm (W) ×2160 mm (H)

Product Configuration Note 1

Standard Configuration	A method configuration, touch screen, micro printer
Options	Method B configuration, professional software and communication cable
Remarks	The air source interface of the machine is Φ 8 mm polyurethane pipe; the air source is provided by the user

Notes1: The product functions, reference standards and configuration information are subject to the specific marks in the "technical indicators".

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

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