



# **Falling Dart Impact Tester BMC-B1**

This falling dart impact tester is designed and manufactured according to Chinese state standard GB 9639 and ASTM D 1709.

It is applicable for energy tests which cause plastic films and foils to fail under specified conditions of impact of a free falling dart. This energy is expressed in terms of the weight of the dart falling from a specified height which would result in 50% failure of specimens tested.

## **Principle**

At the beginning of the test, choose a test method, and estimate an initial weight.

#### Start the test.

If the first specimen fails, decrease mass of the falling dart by changing the weight. If the first specimen isn't a failure, add mass to the falling dart by increasing the weight.

The energy is expressed in terms of weight of the dart. When 50% of the film specimens fail under the conditions specified. Then the test calculates the total test results automatically according to a special formula.



#### **Features**

- Touch screen
- Windows visual menu interface
- Dual test methods A or B
- Built-in observation light
- Pneumatic samples clamp and release
- Falling dart electromagnetic control and automatic release
- Two start modes: hand- and foot-pedal
- Automatic testing status judgment

- Multi-units result display and incorporated printing
- Display testing procedure using graphs
- RS232 interface
- Network tranmission interface for LAN data management and Internet data transmission

## **Technical specifications**

**Test method** 

A or B

**Test range** 

Method A: 50 - 2000 g Method B: 300 - 2000 g

**Test accuracy** 0.1 g (0.1 J)

**Specimen Size** 

> 150mm x 150mm

**Power** 

AC 220V 50Hz/

Pneumatic air pressure

6 bar

## **Physical specifications**

**Dimensions** 

Method A: 500 mm x 450 mm x 1320 mm Method B: 500 mm x 450 mm x 2160 mm

**Net Weight** 

70 kg

#### Standards

ASTM D1709, ISO 7765, JIS K7124, GB 9639

## Configuration

Standard: Method A configuration, touch screen, miniprinter

Optional: Method B configuration, professional software, communication cable, accessoiries for falling ball tests

Note: Compressed air provided by the customer

