

# BIT-1 Ball Impact Tester

BIT-1 Ball Impact Tester is an instrument developed and produced by AT2E for testing the impact resistance of different kinds of plastic closures. It provides an important technical support and reference for beverage bottlers and cap manufacturers to maintain and improve product quality and performance.

## Test Principle:

It is used to test the impact resistance of plastic closures under the impact of a steel ball at a certain height.

A steel ball of specified size and mass is placed in a guiding tube at a certain height, and the ball is allowed to fall freely and impact the closure, followed by observation of the closure to determine the impact resistance of the closure. The impact force is determined by the length of the guiding tube and the weight of the steel ball.

## Features:

- Safety design with enclosed test chamber
- The instrument design complies with the law of conservation of energy, which ensured the test accuracy and reliability.
- Suitable for glass and PET bottles
- Bottle support adjustable, compatible with the bottles of different size
- Impact height adjustable with different height of guiding tube
- Impact position adjustable
- High repeatability

## Technical specifications:

- Sample height: 0 - 350 mm (Higher by order)
- Sample diameter:  $\Phi 0-100$  mm (larger by order)
- Guiding tube height: 762 - 1000 mm (Higher by order)
- Steel ball diameter:  $\Phi 41 \pm 0.2$  mm
- Steel ball weight:  $286 \pm 2$  g
- Overall size: 700 (W) x 385 (D) x 1250 (H) mm
- Net weight: 25 kg

