

Ray-Ran



Manual Basic Falling Dart Impact Tester

RR-FDT-MB

The Ray-Ran **Manual Basic Falling Dart Impact Tester** provides a basic method for determining the energy that causes thin flexible materials such as plastic film, paper and composite sheets to fail under specified conditions of impact from a free-falling dart. The energy required to cause Initial Failure to the test specimen is expressed in terms of the dart's weight, which would result in the failure of 50% of specimens being tested. The instrument complies with the ASTM D1709 Method A & B and ISO 7765 part 1.

Introducing the Ray-Ran Manual Basic Falling Dart Impact Tester, our straightforward instrument designed for ASTM D1709 compliance.

The methods for holding the test specimen and releasing the dart ensure accurate repeatability. Test specimens are clamped in a two-piece system, providing constant tension. A known-weight dart is allowed to free fall, with the addition or removal of weights determining initial failure.

For compliance, a dart drop height of 660 mm with a 1½-inch spherical radius dart (Method A) and a 1524 mm height with a 2-inch spherical radius dart (Method B) are used. The dart release mechanism is pneumatically actuated, requiring both hands for operation to ensure maximum safety. A clamp guard protects against falling and rebounding darts.

The instrument is floor-standing, featuring a telescopic arm for adjusting the dart drop height. It comes standard with the 1½-inch spherical radius tup for Method A testing, with the 2-inch Method B darts and weights sold separately. Digital counters record "Fails" and "Non-fails," along with the total number of tests conducted. Results are manually plotted on graph paper.

This is one of the many impact testing solutions we offer. Explore our knowledge base for articles on Falling Dart Impact Testing to ASTM D1709 and our Instrumented Falling Weight Impact Tester for fast results.

Disclaimer

The information contained in this document is liable to modification from time to time in the light of experience and our policy of continuous product development. Check the Industrial Physics website for the latest version.

Specifications (supplied as standard)

- Conforms to ISO 7765 and ASTM D1709 Methods A (and method B with an extension)
- Floor mounted
- Pneumatically operated
- Simple set up and operation
- Low maintenance
- Unique constant tension sample clamping
- 2 hand safety operation for clamp and dart release
- Fixed height assembly 0.66 mtrs
- Method A 1.5" Aluminium tup and weight set
- Set of 2 x 5g, 8 x 15g, 8 x 30g, 8 x 60g weights
- 'Fail' and 'non-fail' test counters

Weights & Dimensions

Weight:	70 kg
Dimensions:	53 x 72 260 cm (WxDxH)
Power:	110-240 VAC, 50-60 hz
Display:	Digital counters



Contact Details

web. www.industrialphysics.com
email. info@industrialphysics.com