



POLYTEST

Advanced Falling Dart Impact Tester

**Drop Height
Variable between
660mm to 1525mm**

**Automatic Release
of Drop Dart**

**Manual version
also available**

**Test results downloaded
to PC**

**Conforms to
ASTM D1709 Method A & B
ISO 7765-1**

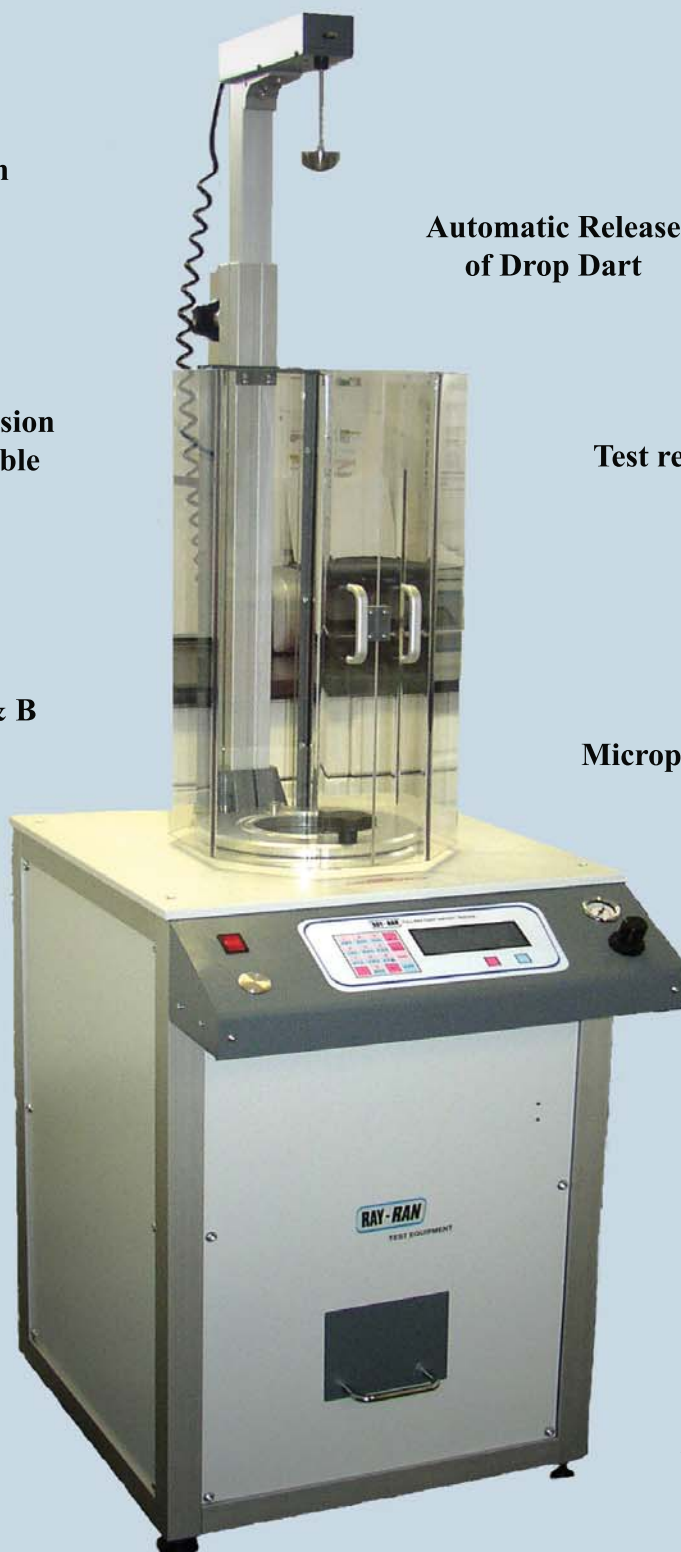
**Microprocessor Controlled
System**

**Floor Mounted
System**

**2 Drop Darts
supplied as Standard**

**Pneumatic Clamping
as standard**

**220/240v 50Hz or
110v 60Hz**



Certificate No. 4915

World Wide Testing for Quality

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Advanced Falling Dart Impact Tester

The Ray-Ran Advanced Falling Dart Impact Tester has been designed to determine the impact resistance of plastic films, papers and composite sheets by use of a free falling dart.

This instrument complies with the ASTM D1709 Method A & B and ISO 7765 test standard.

The sample is clamped in position, and a dart of known weight is allowed to fall from a either 660mm or 1500mm and hit the sample. The energy required to break the samples is expressed in terms of the weight (mass) of the dart which would result in the failure of 50% of test pieces taken from the sample under test. The test methods are designed to enable the operator to achieve the result by extrapolation from the figures obtained by testing at a number of different drop weights, on a significant number of test specimens. The determination of the result is obtained using the staircase method. The dart weight is decreased or increased by uniform increments after each test, depending on the result (failure or no failure) in the specimen.

Standard features include

- Variable height from 660mm to 1525mm ■ 38.1mm and 50.8mm Spherical headed darts
- Binary weight set ■ Pneumatic Clamping ■ Advanced dedicated microprocessor control
- Touch membrane Alpha / Numeric keypad for data entry ■ LCD display for sequence logic menu auto prompt selection
- Yes / no mode selector ■ RS232 output with data transfer lead ■ Specview "Scada" software to allow PC control of Tester and real-time viewing of results ■ Self-calibration procedure ■ Results downloaded to PC for spreadsheet analysis
- Metric units of measure ■ Ability to store User Names and Material Types ■ Recipe Manager to store and upload data
- High resolution positional encoder ■ Solenoid dart release ■ Levelling device ■ Full safety guarding electrically inhibiting operation when not closed ■ Fully traceable certificate of calibration ■ Product user manual
- CE mark of conformity ■ 1 year return to base warranty



Binary Weight Set consisting of

*2x5g 2x15g
8x15g 8x45g
8x30g 8x90g
8x60g*

Darts Supplied

*1 x 60g 38.1mm dart
1 x 100g 50.8mm dart*

Conforms to

■ ISO 7765-1 ■ ASTM D1709 ■ BS2782 Part 3 method 352D ■

*Electrical requirements 220-240v 50Hz
110-120v 60Hz*

Compressed air requirements 6 bar (90 psi)

Height 1730mm (extending to 2405mm)

Width 505mm

Depth 720mm

Net Weight 70Kg ■ Packed Weight 85Kg



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