

TESTING INSTRUMENTS FOR
A MEASURABLE DIFFERENCE...

IDM
instruments

FALLING DART IMPACT TESTER

MODELS: IDM-F0008-M1, IDM-F0008-M2



INTRODUCTION

The Falling Dart Impact Tester covers the determination of the energy that causes Polyethylene Film to fail under specified conditions, with the impact of a free-falling dart. This energy is expressed in terms of weight (mass) of the dart falling from a specified height, which would result in 50% failure of specimens tested. For example: Using Method A, the unit employs a dart with a 38mm diameter hemispherical head, dropped from a height of 660mm. This unit may be used for films whose impact resistance requires masses of approximately 50gms to 2 kg to fracture them.

FEATURES

- Bench-mounted system
- Pneumatic clamping of films
- Two Darts as per method(s) required
- Adjustable dart drop height
- Foot Switch for dart release
- Brass Weight set supplied
- Stainless Steel Cutting Template 200mmx200mm)

APPLICATIONS

- Flexible Films

OPTIONAL MODELS

IDM-F0008-M1 - A Method

- 2x Aluminium Dart Head - 38mm (50g)
- Drop Height - 660mm
- Brass Weights - 2x5g, 8x15g, 8x30g, 8x60g

IDM-F0008-M2 – A & B Method

- 1x Aluminium Dart Head - 38mm (50g)
- 1x Stainless Steel Dart Head - 50mm (280g)
- Drop Height: 660mm & 1500mm
- Brass Weights - 2x5g, 8x15g, 8x30g, 8x60g, 2x15g, 8x45g, 8x90g

OPTIONAL ITEMS

IDM-F0008-OP1 - Kinetic Energy Option

The Kinetic Energy options is used to comply with ASTM D4272: Total Energy Impact of Plastic Films. The Falling Dart Impact Tester is mounted on top of the Kinetic Energy option. There is a catch box and two optical filter sensors measuring the fall time difference after breaking the film and passing through which is displayed on an instrument panel as time.

IDM-F0008-OP2 – Dart Rebound Protection tube

** Custom Brass Weights made to order.



STANDARDS

- ASTM D 1709
- ASTM D 4272
- JIS K7124
- AS/NZS 4347.6
- GB 9639
- ISO 7765-1

DIMENSIONS

IDM-F0008-M1 - A Method

Instrument:

- H: 1035 mm
- W: 400 mm
- D: 400 mm
- Weight: 30 kg

Packaged:

- Box 1: H: 520 mm x W: 520 mm x D: 520 mm @ 26 kg
- Box 2: H: 100 mm x W: 100 mm x D: 1160 mm @ 4 kg

IDM-F0008-M2 – A & B Method

Instrument:

- H: 1885 mm
- W: 400 mm
- D: 400 mm
- Weight: 33 kg

Packaged:

- Box 1: H: 520 mm x W: 520 mm x D: 520 mm @ 28.5 kg
- Box 2: H: 130 mm x W: 200 mm x D: 11950 mm @ 4 kg

CONNECTIONS

Electrical: 220/240 VAC @ 50 HZ
or
110 VAC @ 60 HZ
(please specify when ordering)

WARRANTY AND CALIBRATION SERVICES

- 1 year Warranty

Our Preventive Maintenance and Calibration (PM&C) program has been designed to make the maintenance and calibration of your valuable testing equipment more cost effective by preventing breakdowns and downtime by regular calibration, service and replacement of defective parts. Take to us about this today.