

# FALLING DART IMPACT TESTER

MODEL: 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 the 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 50 grams 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
- Cutting Template 200mmx200mm)

# **APPLICATIONS**

- Flexible Films
- Plastic Films

# **STANDARDS**

- ASTM D 1709
- ASTM D 4272
- JIS K7124
- ASTM D 1709
- ASTM D 4272
- JIS K7124

## **CONNECTIONS**

#### **INSTRUMENTS:**

• 220/240 VAC @ 50 Hz

Or,

- 110 VAC @ 60 Hz
- \*\* Please specify when ordering.

## **DIMENSIONS**

## IDM-F0008-M1 - A METHOD

# INSTRUMENTS:

# • H: 1035 mm

- W: 400 mm
- L: 400 mm
- · Weight: 30 kg

#### **PACKAGE:**

- Box 1
- H: 520mm x W: 520mm x
- L: 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

#### **INSTRUMENTS:**

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

#### PACKAGE:

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



#### OPTIONAL MODELS

#### IDM-F0008-M1 - A METHOD

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

#### IDM-F0008-M2 - A & B METHOD

- 1 x Aluminum Dart Head Ø 38mm (50g)
- 1 x Stainless Steel Dart Head Ø 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 are used to comply with ASTM 04272: Total Energy Impact of Plastic Films. The Falling Dart Impact Tester is mounted on top of the Kinetic Energy option. A catch box and two optical filter sensors measure 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

# 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 through regular calibration, service and replacement of defective parts. Talk to us about this today.

