

## Falling Dart Impact Testers

### Technical Datasheet

MEC-FD Falling Dart Impact Testers measure the toughness of films, paper and thin packaging materials. They include accessories to determine the impact resistance of plastic film in accordance with ASTM D1709 and ISO 7765 Standards Test Methods A and B.

#### Description

The Mecmesin MEC-FD Falling Dart Impact Tester is designed to measure the impact resistance or toughness of plastic films in compliance with ASTM D1709 and ISO 7765 free-falling dart Methods A and B. The machine is available in 3 different versions, each supplied with all the relevant weights and darts required to perform one or both Methods, using the 'standard' (staircase) or 'alternative' techniques.

Versions with manual or pneumatically-operated sample clamping and dart release are available.

The tester is small enough to conveniently stand on a desktop or laboratory bench.

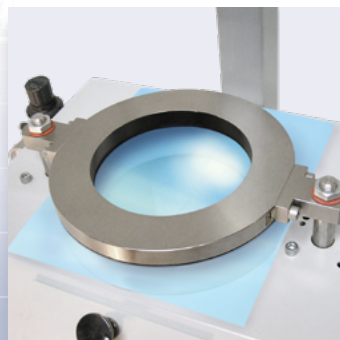
#### Application

Impact resistance of:

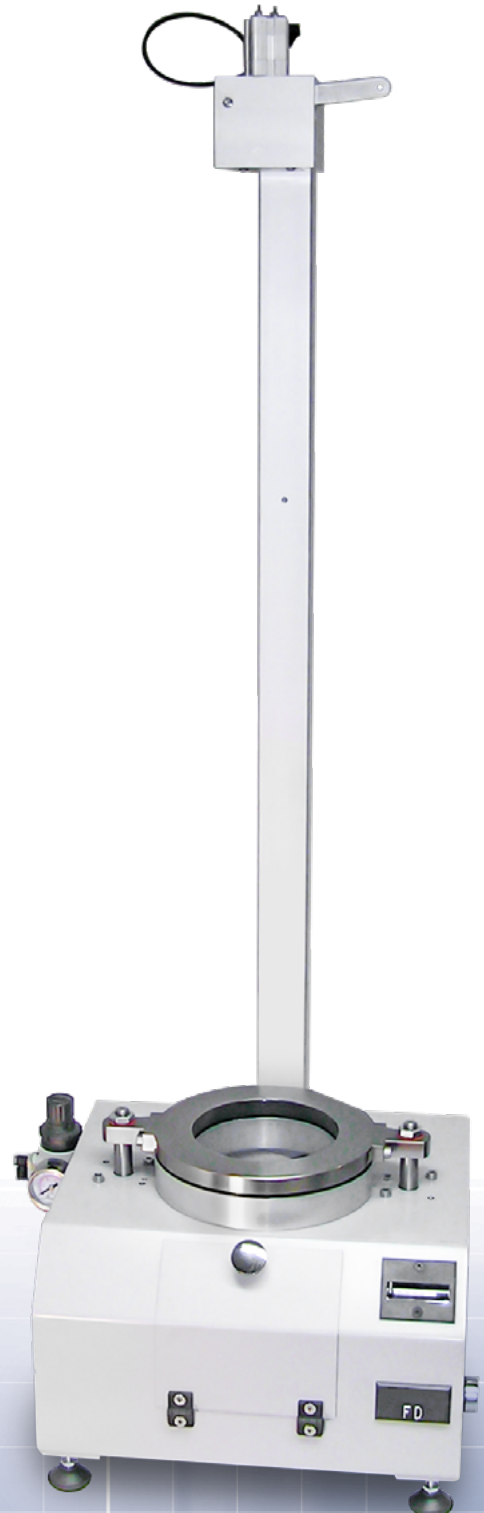
- Plastic film
- Flexible packaging material
- Thin sheets
- Paper



▲ Dart well (includes foam pad) and dart drop counter (FD2, FD3)



▲ Rubber-lined sample contact surfaces and pneumatic clamp (FD2, FD3)



▲ MEC-FD3 Pneumatic Falling Dart Impact Tester set for ASTM D1709 / ISO 7765-1 Method B

## Specification

### Falling Dart Impact Testers

Model	Standard Method	Drop Height	Darts	Weights	Drop Counter	Sample Clamping and Dart Release
MEC-FD1	A	660 mm	1 & 2	A	N	Manual
MEC-FD2	A	660 mm	1 & 2	A	Y	Pneumatic*
MEC-FD3	A & B	660 mm, 1500 mm	1, 2 & 3	B	Y	Pneumatic*

\* Operating pressure adjustable min 3 bar, max. 8 bar

## Accessories

### Weights

Set	Weight and Number Supplied
A	5g x 4, 15g x 8, 30g x 8, 60g x 8, 120g x 1
B	5g x 4, 15g x 8, 30g x 8, 45g x 8, 60g x 8, 90g x 8, 120g x 1, 180g x 1
B Extra	45g x 8, 90g x 8, 180g x 1

### Darts

Type	Weight	Head ø
1	20 g	38.1 mm
2	60 g	38.1 mm
3	100 g	50.8 mm

Dart head material: Paxolin phenol formaldehyde resin

- Pneumatic operation optimises reproducibility of test results



- Spare darts and weight sets are available for specific missile weights to test a wide range of film materials



### Pneumatic Drop Counter



FS 58553

Mecmesin reserves the right to alter equipment specifications without prior notice. E&OE

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