

BALL DROP

Falling dart impact tests on plastic films

TECHNICAL DATASHEET

The apparatus determines the impact resistance of PE films and other plastic materials by means of a free dart falling from a pre-set height.

The relative energy – that takes place for breaking at least 50% of tested specimen – is based on the height of fall and on the weight of falling dart.

Impact tester according to ASTM D 1709 standard

Floor model equipment made of:

- Steel frame supporting the clamping device of the specimen and the cantilever arm for the dart.
- Clamping device of specimen that blocks the specimen on three points of a 127-mm dia. ring. System is operated by compressed air and a piston. Equipped with air treatment unit.
- Electromagnetic dart release system and support for a 660 or 1500 mm height of fall.
- Supplied front shield for safety (not shown on the picture in order to better show the test part)
- Adjustable feet for levelling the equipment and perpendicularity control system of falling dart by plumb line and centring disk.
- Overall dimension: 700x700x2860 mm
- Weight: 60 kg (approx.)
- Power supply: 230V, 50 Hz, singlephase.
- Air: 5 bar

Setting for tests according to ASTM D 1709/A

- Hemispherical dart (38.1 ± 0.13 mm $\varnothing$) – 1 off
- 31 mm $\varnothing$ masses: 5 g/4 off, 15 g/8 off, 30 g/8 off, 60 g/8 off

Setting for tests according to ASTM D 1709/B

- Hemispherical dart (50.8 ± 0.13 mm $\varnothing$) – 1 off
- 45 mm $\varnothing$ masses: 15 g/4 off, 45 g/8 off, 90 g/8 off



Reference Standards

ASTM	D1709
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Code Description

16020005	Impact tester according to ASTM D 1709
16020100	Accessories kit ASTM D 1709 Method A
16020101	Accessories kit ASTM D 1709 Method B

