



COESFELD 
MATERIAL TEST

Dart Drop Tester

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ASTM D1709, DIN EN ISO 7765-1
JIS K7124-1, GB/T 9639.1

The COESFELD Dart Drop Tester is designed for determination of the impact braking energy of foils with a thickness of less than 1 mm. The device has a modular structure and meets the requirements for tests according to method A and B.

Operation of the device is simple and intuitive. The pneumatic sample clamping is activated by foot-switch and fixes the sample film evenly and prevents slipping during impact. The dart is released by 2-hand operation. Operational safety can be further increased with additional protective shields. A flap in the catchment area provide ergonomic access to the darts after test. Weights can be easily attached to the dart and can be changed quickly.

Thanks to its compact design, the device can be easily placed in a wide variety of workplaces. If a suitable work table is not available, a floor-standing construction is available.

The COESFELD Dart Drop software guides through the standard-compliant measurement process. It instantaneously analyses data and provides a ready to print report.

Set-Up

Rotatable Tower for quick change
in-between Method A and B

Variable drop height with markers for easy
setting of standard heights

Flap for dart access after drop

Foot-Switch for Sample Fixation

Floorstanding Model

Dart Release
(Method A und B)

Safety shield

Weight storage

Sample rings with
safety shield

2-Handed drop release



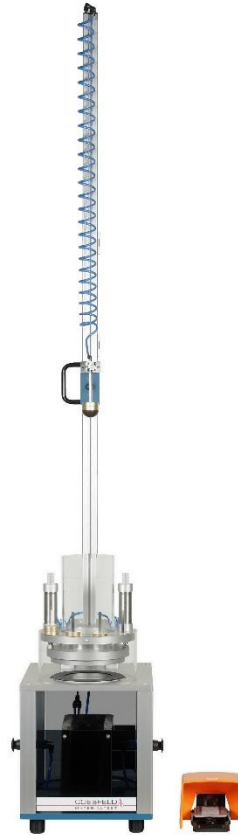
Models

Select:

- Model A
Model A+B Fixed Tower
Model A+B Rotatable Tower



Model A Standard
+ table top extension



Model A+B fixed tower
+ table top extension



Model A+B rotatable tower
+ floor standing extension

Model A

Equipped with:

- Pneumatic sample clamping and foot switch
- Drop tower for Method A, Height 660 mm
- Dart for Method A, 45 g to 1400 g, phenolic resin
- Set of weights with box
- 2-Hand dart release
- Plummet for drop tower alignment



Model A+B fixed

Equipped with:

- Pneumatic sample clamping and foot switch
- Drop tower for Method A & B, Height from 660 mm to 1500 mm variably adjustable
- Dart for Method A, 45 g to 1400 g, phenolic resin
- Dart for Method B, 300 g to 3000 g, stainless-steel
- Set of weights with box
- 2-Hand dart release
- Plummet for drop tower alignment



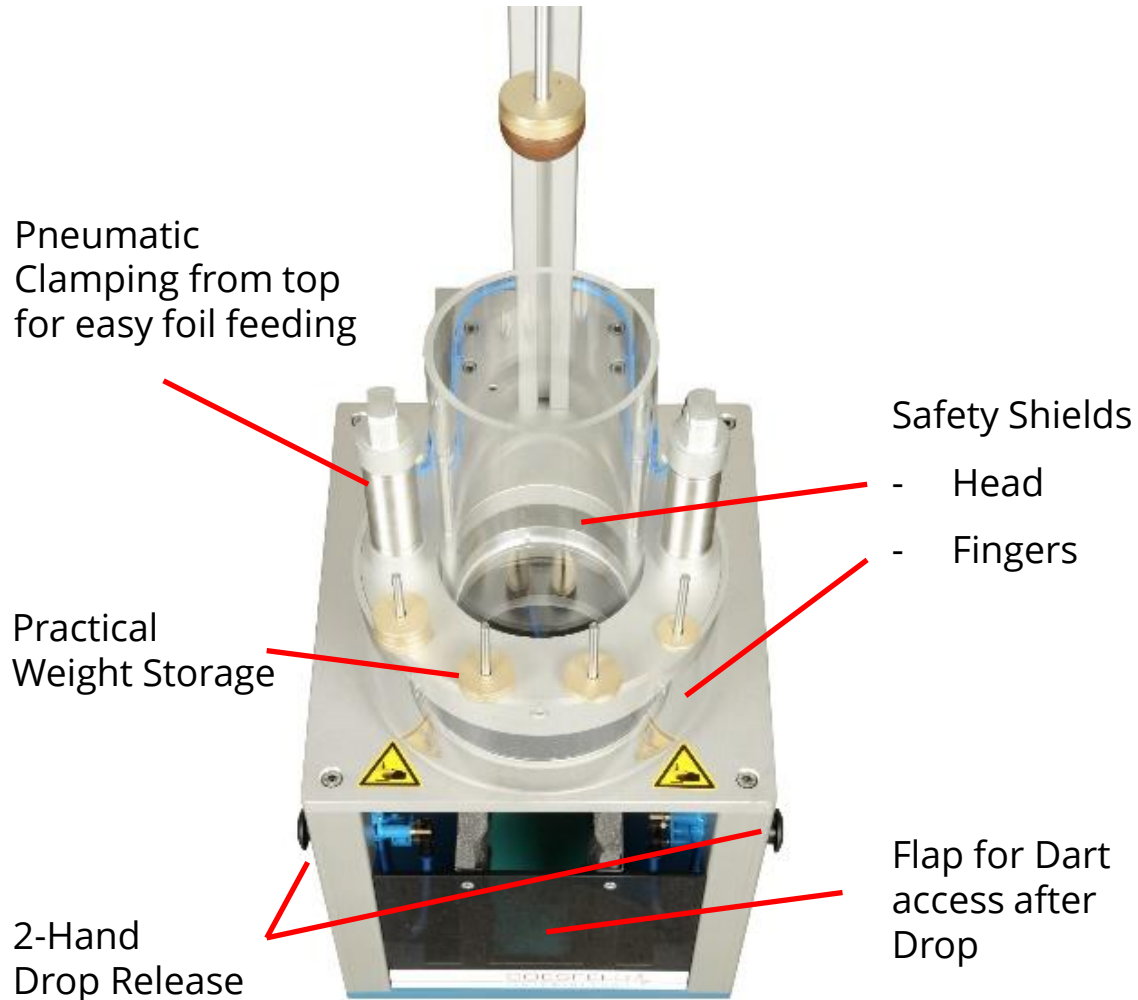
Model A+B rotatable

Equipped with:

- Pneumatic sample clamping and foot switch
- Drop tower for Method A & B, Height from 660 mm to 1500 mm variably adjustable & rotatable
- Dart for Method A, 45 g to 1400 g, phenolic resin
- Dart for Method B, 300 g to 3000 g, stainless-steel
- Set of weights with box
- 2-Hand dart release
- Plummet for drop tower alignment



Features



Intuitive Software

- Determine damage after each drop
- Information about next weight step
- Standard conforming evaluation and report

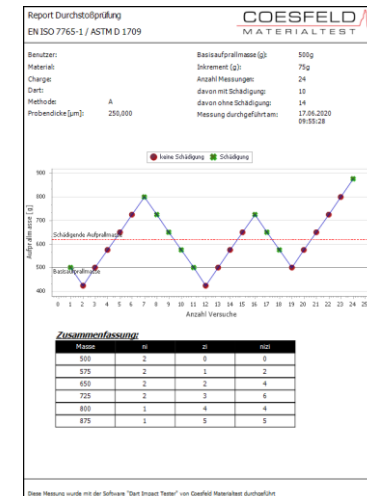


Main Screen / Measurement Status

The screenshot displays the 'Dart Drop Test' software interface, specifically the 'Order Information' section. The top menu bar includes 'Home', 'Options', 'Change Parameter', 'Save Parameter', 'Start Measurement', 'Stop Measurement', 'Show Report', 'Save Measurement', 'Load Measurement', 'CSV Export', and 'Exit'. The main window is divided into several sections:

- Parameter 2 Measurement:** A section for entering measurement parameters. It includes fields for 'Operator', 'Material', 'Charge', 'Dart', 'Method', 'Specimen Thickness [µm]', 'Base Impact Weight [g]', and 'Increment [g]'. The 'Dart' field is set to 'Steel' and the 'Method' field is set to 'A'.

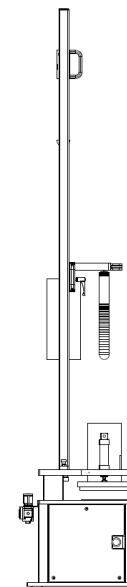
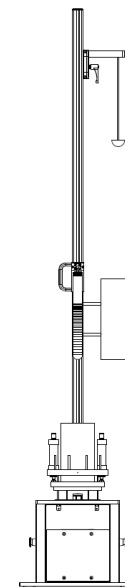
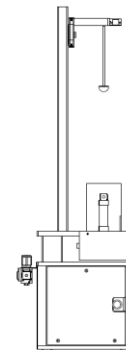
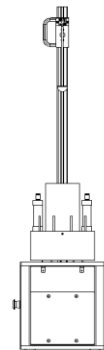
Order Information



Automatic Report

Technical Specification

COESFELD Dart Drop Tester only requires a compressed air supply for operation



	Method A	Method B
Drop height	660 mm	1500 mm
Drop speed	3.6 m/s	5.4 m/s
Drop weight *	45 g to 1400 g **	300 g to 3000 g **
Dart diameter	38,1 mm	50,8 mm
Dimensions (DxWxH)	460 x 330 x 1340	460 x 330 x 2170
Weight	25 kg	30 kg
Compressed air	6 to 10 bar	6 to 10 bar

* Standard and non-standard weights available on request

** Lightweight darts from 25g for method A and 125g for method B available on request

COESFELD

MATERIALTEST



TESTING EQUIPMENT

for plastics and rubber

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