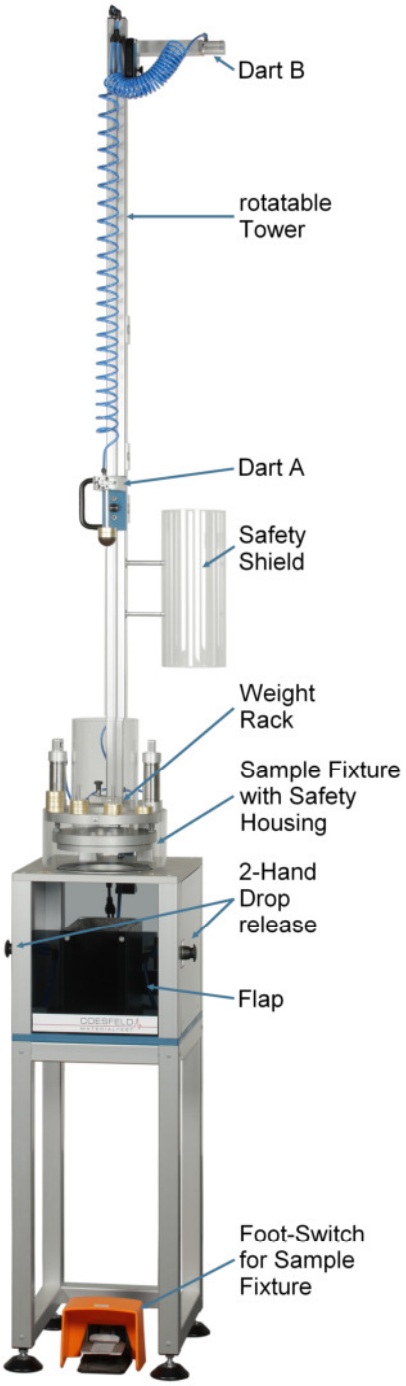
42-500-200 Dart Drop Tester

Standards

DIN EN ISO 7765-1, ASTM D 1709, JIS K7124-1, GB/T 9639.1

Table Top Setup

Weight Set



Floor Standing Setup

Application

Dart drop test on foils determining the energy that causes plastic film to fail under specified conditions of impact of a free-falling dart in accordance with the standards DIN EN ISO 7765-1 and ASTM D 1709.

Features

The Dart Drop Tester equipped with a pneumatic sample fixture and dart release. The modular design allows desktop as well as floor standing set-up and is optionally equipped for Method A of Method B testing.

The sample fixture works via foot switch to keep your hands free. The drop is released via two-hand safety release.

The dart drops into the easy to access flap or if sample does not break the dart can be easily removed out of the acryl safety cylinder.

The standard weight set can be fixed directly at the testing space for fast weight changes.

The optional intuitive software guides you through the measurement and provides a ready to print report.

Technical Data

	Method A	Method B
Drop Height	660 mm	1500 mm
Impact Speed	3.6 m/s	5.4 m/s
Impact Weight	45 g – 1400 g	300 g – 3000 g
Diameter of the Dart	38.1 mm	50.8 mm

Dimensions and Connection

Dimensions (DxWxH)	approx. 460 x 330 x 1340 mm (Method A), approx. 460 x 330 x 2170 mm (Method B)
Weight	approx. 50 kg
Air Supply	6 to 10 bar

Part list

Item no.	Description
42-500-200	Dart Drop Tester
42-500-210	Drop Tower, Method A, 660 mm
42-500-211	Drop Tower, Method A+B, 1500 mm, fixed
42-500-212	Drop Tower, Method A+B, 1500 mm, rotatable
42-500-201	Plummet for drop tower alignment
9-115-481	Dart foil Ø 180/125/60 for drop tower alignment *1x in the scope of delivery with each purchase of 42-500-200*
42-500-220	Dart Catcher
42-500-222	Dart Catcher Extension, Floor Standing
42-500-221	Dart Catcher Extension, Table Top Set-Up
42-500-230	Sample Fixture Ring-Set
42-500-240	Dart A, phenolic, 45 g to 1400 g, for Weight-Ø 31 mm
42-500-241	Dart B, stainless steel, 300 g to 3000 g, for Weight-Ø 45 mm
9-415-108	Brass Collar and Screw *1x in the scope of delivery with each purchase of a Dart*
9-415-095	Weight, 5 g - Ø31 / Ø6,6 mm
9-415-096	Weight, 15 g - Ø31 / Ø6,6 mm
9-415-097	Weight, 30 g - Ø31 / Ø6,6 mm
9-415-098	Weight, 60 g - Ø31 / Ø6,6 mm
9-415-099	Weight, 120 g - Ø31 / Ø6,6 mm
9-415-102	Weight, 15 g - Ø45 / Ø6,6 mm
9-415-103	Weight, 45 g - Ø45 / Ø6,6 mm
9-415-104	Weight, 90 g - Ø45 / Ø6,6 mm
9-415-105	Weight, 180 g - Ø45 / Ø6,6 mm
42-500-251	Weight Box
42-500-141	DDT-Software
	--- One foot valve must be selected per device ---
4-164-253	Foot valve with spring return
4-164-254	Foot valve with locking function
42-500-231	Safety Housing, Sample Fixture
42-500-213	Protective tube A
42-500-214	Protective tube B

Standard and non-standard weights available on request

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