

Product information

Drop Weight Testers for Impact Tests – DPFest up to 2800J

Machine use

Drop weight tester machines produced by LABORTECH Company are designed for testing falling weight. Weights can be tested in free fall, or accelerated by linear springs and they are automatically adjusted to a defined position. We offer standard drop weight testers for various applications that can be adapted to a variety of impact energy and impact speed up to 2800J.

Machine description and main advantages

- Robust vertical test frame with high stiffness, durability, good ergonomic design and maintenance-free operation.
- The device meets all necessary safety requirements such as DIN 51333, EN ISO 13489 and other European standards.
- Special feet and suspension absorbing impact energy
- Automatic and fast approaching X-head travel with weights to the defined position with accuracy of 0.01 mm.
- Modular configuration of the machine with the ability to add any accessories of LABORTECH company, including temperature chambers, special tools, punch plugs, clamps, external sensors...
- Possibility of performing tests at reduced and increased temperatures
- Measuring electronics with a high-speed card up to **12MHz**
- **16 Bit** electronics in combination with a load cell and a track sensor allows performing a very precise testing at speeds up to 20m/s.
- High level of testing comfort due to operating panel with a touch-screen LCD and software DropTest.
- Support for standards DIN, EN, ISO, ASTM, GOST.

Machine base includes:

- A machine frame incl. sensors and engine displacement of weights
- A set of calibrated weights according the type of drop weight tester
- Protective safety cover
- Measuring and control electronics in bench top or floor top design
- Basic software DropTest

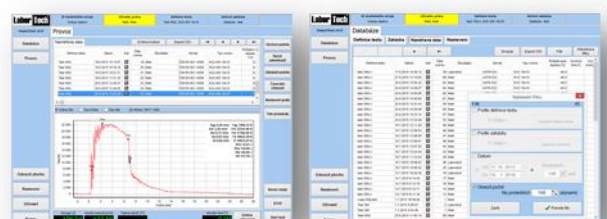
Supplements and accessories:

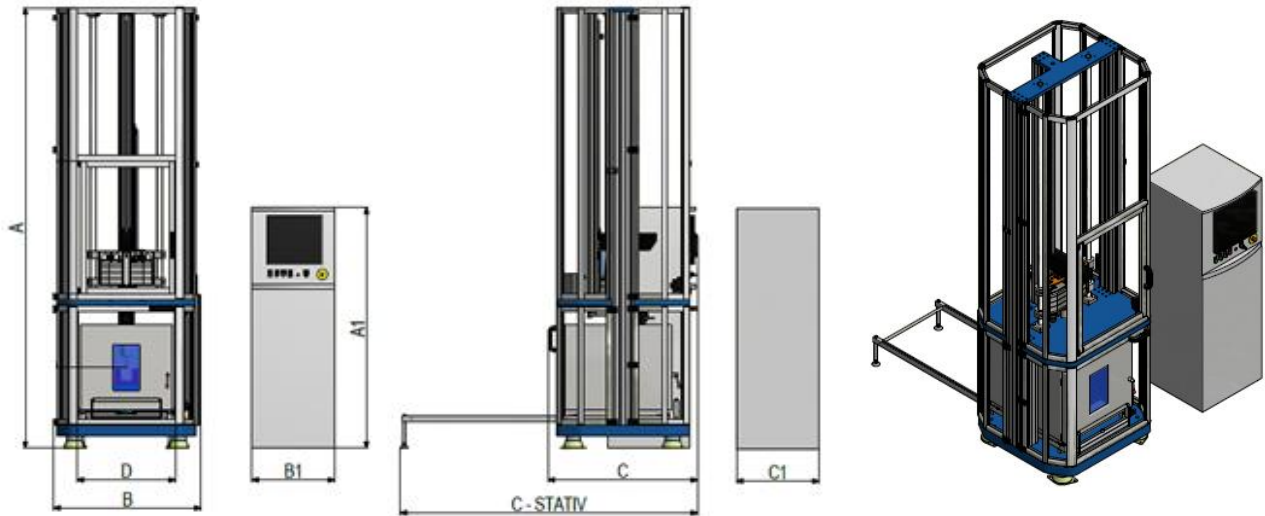
- Fixtures (blades, abutments, punches) according to EN ISO 148-1, ISO 179, ISO 9854, ISO 14556, ISO 3351: 1975 49 0117, EN ISO 6603, ASTM D3763, ASTM E23, ASTM D6110 etc.
- Pneumatic centring device
- Temperature chambers and furnaces



Description of software DropTest

Drop Test is a complete software for the drop tester that supports DIN, EN, ISO, ASTM, GOST standards and other industry standard testing methods. The program consists of management tools, a record of the tests performed, a database of test results and subsequent data filtering ability. The program uses MS Windows 7 and higher. The application is designed not only for traditional PCs and LCD monitors but also for industrial systems, which are controlled by touch LCD monitors. DropTest software is designed for serial measurement in impact tests with speeds up to 20m / s.





Technical data	Units	DPFest 2000	DPFest 3000
Energy range	J	0,3-1800	0,5-2800
Impact speed	m/s	0,346-7,171	0,316-7,888
Dimensions for weights	kg	5-70	10-90
Range of drop height	m	0,0061-2,622	0,0051-3,172
Weight accuracy	%	<1%	
Accuracy of impact sensor	%	<1% - EN ISO 7500-1	
Supply and air control	bar	5-8	
Colour finish	kg	1240	1380
Barevná kombinace		RAL 1015, 5015	
Dimensions			
Height of the Machine (A) ²	mm	4120	
Width of the Machine (B)	mm	1099	
Depth of the Machine (C)	mm	1114	
Width of the test area (D)	mm	730	
Height of the operating panel (A1) ³	mm	2000	
Width of the operating panel (B1)	mm	600	
Depth of the operating panel (C1)	mm	600	
Environmental conditions			
Operating temperature	°C	10 to 35	
Storage temperature	°C	-35 to 55	
Humidity of workplace	%	< 90	
Noise level ⁴	dB	< 65	
Electrical connection			
Supply voltage	V	230... 240/50-60Hz	
Fuse	A	16	
Power input (without accessories)	kVA	2	2,2

Software DropTest features:

- Simple, inductive, efficient
- Intuitive control via LCD
- Quick and efficient testing
- Modification of item names
- Editable types of specimens and test standards
- Digital indication of all current standards
- Automatic temperature evaluation
- Data export into CSV – BASIS, or MY SQL and MS SQL
- Data transfer from temperature chamber, thermometer etc.
- Automatic temperature evaluation before testing acc. EN ISO 148-1 and ASTM E23
- Saving of measure data into a database with optional filtration
- Extensive calibration mode
- Dynamic linearization for ASTM tests
- Linearization of instrumented blades travel
- Multilanguage versions (English, Polish, Russian etc.)
- PDF protocol printing
- Record of multiple curves, zooming using the ZOOM - detection of x, y coordinates of individual samples etc.
- Adjusting of the starting position of the ram depending on the required power and speed

¹Without accessories

Technical changes are reserved by manufacturer

² Height of the machine including vibration dampers

³Panel height without temperature controller

⁴Measured at a distance of 1 m from the machine when moving crosshead to the basic position

The protective safety shield made from an aluminium construction with profile ITEM and 5 mm safety plexiglass surrounds the testing machine from all four sides, the safety door on the front side is electrically monitored and ensures the blocking process.

Manufacturer:

LABORTECH s.r.o., Rolnická 130a, 747 05 Opava, Czech republic. Tel.: +420 553 731 956, +420 553 775 327
Mob.: +420 602 527 646, +420 731 656 723, info@labortech.cz, www.labortech.cz, Czech republic

