KARG Industrietechnik

Elmendorf Impact Tester

ProTear TearTester

The original Elmendorf design

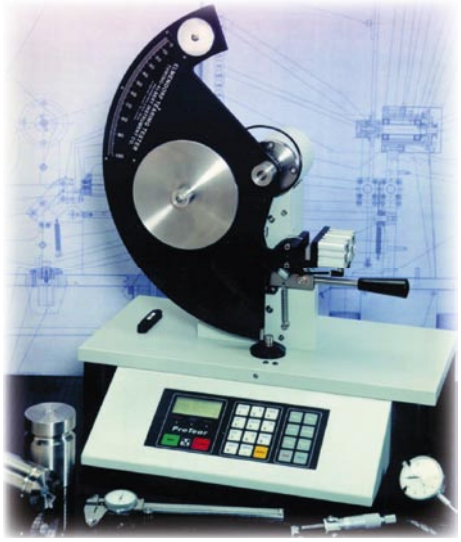
Ergonomically designed for ease of operation and conservation of laboratory space, the ProTear Electronic Model incorporates both mechanics and electronics into a singlefootprint design. Other standard features of the electronic model include air-actuated pendulum release and sample clamps, microcomputer-assisted pendulum balancing and a membrane switch display panel. The control panel provides one-touch clamping and test capabilities. Other functions include data entry of sample information such as sample ID, thickness, basis weight, sample direction and number of plies being torn. The “Units” key enables the simple configuration of result units.

Software

- Test Results include tear strength, tear per ply, average tear strength and tear index
- Quickly enter sample data — thickness, basis weight, sample ID, sample direction
- Obtain results as percent of capacity, grams, pounds or millinewtons
- Calculated Statistics — average, high, low, std. dev., range & variance
- Configurable reports
- Provision to delete and restore test results

Features:

- Digital encoder ensures accurate results
- Electronic Balancing of Pendulums
- Configurable display shows test information and software menus
- User-friendly, one-touch software
- Quick capacity change with augmenting weights
- One-touch pneumatic clamping and pendulum release available
- Industry Standards: ASTM D295, D751, D1424, D1922a, D5734, TAPPI T414, T496, BS 4253, 4468, CPPA D.9 ISO 1974, EN 21974, SCAN P11



Other models

Low cost mechanical model and heavy duty version

The Mechanical ProTear is a basic tear tester that offers an economic alternative to the electronic version. This model offers the quickchange pendulum configuration without an electronic readout.
Test results are obtained by means of a pointer on a graduated scale from 0-100%.

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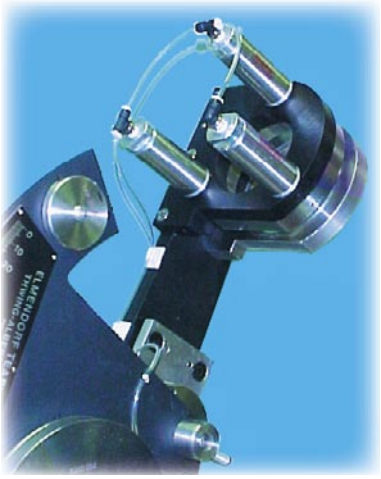
The Heavy Duty Elmendorf ProTear is ideal for measuring the tearing strength of textile materials and is available as an electronic or mechanical model. Extremely durable yet compact, this rugged instrument provides capacities of 6 400, 12,800, and 25,600 grams with the use of augmenting weights. Update an existing Heavy Duty Elmendorf with an electronics package to quickly enhance the functionality of the unit.

Options:

Spencer Impact Fixture

The Spencer Impact Attachment was developed for use with Elmendorf Tear Tester and complies with ASTM D3420-94. It provides one of the most repeatable methods of testing impact resistance of plastic films and packaging materials. The fixture closely approximates the strain rates experienced in end-use applications thereby results correlate well with actual material performance. The clamping mechanism is air-operated which ensures a secure hold and high level of accuracy. The Spencer Impact Attachment consists of a puncture arm that is permanently attached to the pendulum and is fitted on the end with an interchangeable impact head that is available in various shapes and sizes. The pendulum swings the impact head through the clamped specimen and the energy required to puncture the sample is recorded.



Air Clamp Assembly
An air-operated clamping assembly is available for both the Mechanical ProTear and the Mechanical Heavy Duty ProTear. Air clamps eliminate user variability, shorten sample set-up time and provide a secure hold.

Augmenting Weights
Quickly change the capacity of the ProTear Tester for testing different material.

Calibration Checkweights
To ensure the accuracy of test results, it is vital to maintain the calibration of the ProTear tester. Checkweights are available for periodically verifying the calibration of the instrument.

Software
An optional data acquisition software program installs quickly and is easily configured with user-friendly drop-down menus. It provides the ability to capture serial data, customize it for specific requirements and then transfer it to other applications such as Excel™ and Access™. Use the capabilities of these applications to create graphs and reports that automatically update with real-time data.

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Technical data:

	ProTear Electronic	ProTear Mechanical	Heavy Duty Electronic
Dimension			
Width (mm)	483	483	483
Height (mm)	578	539	610
Depth (mm)	389	229	330
Characteristics			
Capacity (gms)	200, 400, 800, 1600, 3200 & 6400	400, 800, 1600, 3200 & 6400	6400, 12800 & 25600
Accuracy	+/- 0,2% of Pendulum Capacity	+/- 0,5% of Pendulum Capacity	+/- 0,2% of Pendulum Capacity
Display	LCD	Analogic	LCD
Power Consumption (W)	600	-	600
Power Requirements	110V, 50/60 Hz 230 V, 50 Hz	-	110V, 50/60 Hz 230 V, 50 Hz
Weigth (kg)	15,2	14,2	31,3
Data port	RS 232	-	RS 232