

Heavy duty Protear™ elmendorf tearing tester

The Elmendorf tear tester is essential in materials quality control - providing more information on tearing properties than any other instrument. Therefore it is recognised as the standard worldwide.

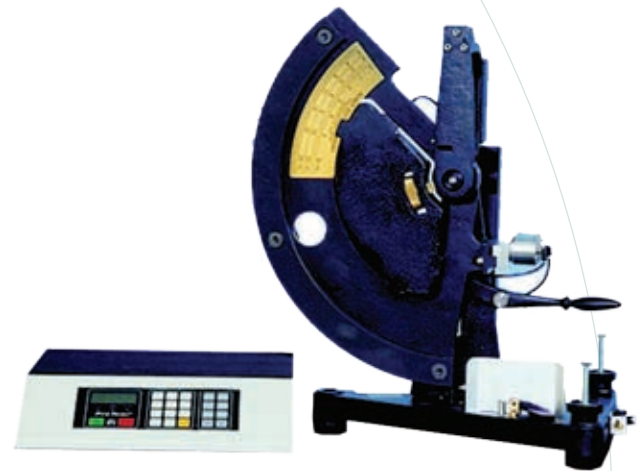
The Heavy Duty Elmendorf ProTear quickly and accurately measures the tearing strength of heavy weight materials including paper, non-wovens, plastics and textiles.

A high capacity instrument, the Heavy Duty Elmendorf is equipped with augmenting weights to increase capacity to 25600 grams-force.

A mechanical model is available which obtains test results by means of a pointer on a graduated scale from 0-100 % and reports it as a percentage of the pendulum capacity.

Advanced electronics enhance the functionality of the unit by providing complete test control and direct digital readout of results. Pneumatic clamping and a digital encoder which monitors pendulum movement ensures repeatable, precise test results.

Quickly enter sample data, configure test parameters, results and reports, obtain results as percent of scale, tear index grams, mN or pounds, and receive instant analysis with an easy to read display and one-touch software.



Features

- User-friendly, one-touch software :
 - test results include tear strength, tear per ply, average tear strength and tear index
 - quickly enter sample data - thickness, basis weight, sample id and sample direction
 - configurable display - test parameters, results and reports
 - obtain results as percent of pendulum capacity, grams, pounds and millinewtons
 - calculated statistics - average, high, low, standard deviation, range and variance
 - configurable reports
 - provision to delete and restore test results
- Digital encoder ensures accurate results (0.2 % accuracy of the pendulum capacity)
- Pneumatic clamping
- RS-232 data output

Technical specifications

Capacity

6400, 12800 and 25600 g

Accuracy

± 0.2 % of pendulum capacity

Display

4 line by 16 character backlit LCD, wide angle view

Statistical analysis

Average, standard deviation, high, low, range

Test memory

99 test results

Power supply

110 V, 50 Hz - 120 V, 60 Hz - 220/230 V, 50 Hz

Power consumption

Max 10 W

Operating/storage environment

Air temperature : operating 10° tot 50° C, storage -25° to 70° C

Relative humidity : operating 10 to 85 % (non-condensing), storage 5 to 90 % (non-condensing)

Physical specifications

Dimensions

48 x 33 x 61 cm (W x D x H)

Net Weight

31.3 kg (includes 6400 gram pendulum)

Sample clamps

Manual or pneumatic

Standards

ASTM D751, D5734

Options

- Augmenting weights
- Calibration checkweights - maintaining the calibration of the Heavy Duty Elmendorf is vitally important to the units performance. Checkweights are available for periodically verifying the calibration of the instrument. Calibration certificates available.
- Sample cutter - Accurate samples are necessary to achieve repeatable test results. A twin blade cutter which ensures precise cuts, facilitates testing and reduces operator fatigue. Quickly and accurately prepare samples 63 mm wide and up to 6" long.
- Data acquisition software (DAS) to capture serial data, customise it for specific requirements and then transfer it to any Windows application. Enables to create graphs and reports that automatically update with real-time data.
- ProTear electronic upgrade package - Update an existing Heavy Duty Elmendorf with the advanced ProTear electronics and quickly enhance the functionality of the unit.