



Operation panel

No.2033

Elmendorf tearing tester (digital display type)

This machine is designed to measure the resistance to tearing of various kinds of printing paper such as newspaper, paper bags, packing paper, when subject to tearing stress during their use. Usually, tear resistance is composed of force of extracting fibers from paper layers and force of cutting the fibers. In general, the longer the fiber length is, the stronger tear resistance is. When the binding area among fibers increases, exceeding the optimal area, the tear strength decreases inversely with the trends of tensile and bursting strengths. This machine with an additional weight on (option) is able to measure a wide range of materials, including paper, paperboard, fibers, plastic film and the like. With a pneumatic specimen clamp, the system is excellent in operation, displaying an average measurement for a unit of 16 sheets.

Pendulum capacity: standard type (strength 0 to 1000mN per specimen)
Heavy-duty type (strength 0 to 2000mN per specimen)
The capacity of an added weight (optional) can be changed with the capacity-setting switch.

Precision: + 1%

Specimen clamp: pneumatic clamp with a push button

Number of specimens: Set the number of specimens laid one on the top of another.

The numbers of specimens set are 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16

Input of a basis weight: inputting of a basis weight enables to determine the specific tear value

Error warning: When the tear value is not included in the range of 20 to 80%, the error lamp warns of this event

Pendulum friction display: announces whether or not the rotation friction of the pendulum is in an allowable range

Automatic setting of the zero point:

While the pendulum swings automatically, pushing the zero setting switch allows automatic correction

Data display: The data of tear value and tear ratio are shown by pushing the changeover switch

Data output: RS-232C

Referential standards: JIS P-8116-2000, TAPPI T414om-98, ISO 1974

Power source: 100/110VAC 50/60Hz 1A

Air source: 0.5 to 0.6MPa

Outer dimensions: 520 x 370 x 660mm

Instrument weight: 22kg