



Operation panel

## No.2046

## Clark stiffness tester (automatic type)

This machine measures the stiffness of paper, fiber and film by the self-weight flexing method. Typical specimens are papers of small basis weight such as newspaper and thin paper. The specimen is pinched between a set of rolls, and the rolls are turned slowly in both directions. The length of specimen projection from the rolls is measured, when the deflection angle of the specimen from one side to the other becomes 90 degrees. Based on this length, the Clark stiffness is determined. Conventionally, this test has required skilled technique and much time of operation, which would often cause inter-operator error. Aimed at solving such problems and labor saving, we have developed this tester that performs a series of operation steps automatically.

Type: fully automatic with digital display

**Measurement method:** per JIS (Clark stiffness), both methods A and B are available

- Automatically performs repetitive bending to determine the critical length.
- Specimen length: 100 to 500mm, to be input from the ten-key pad Maxim critical length on display 46cm while measuring

Specimen feed switch: Even with a long specimen, measurement is done in a short time, by adjusting the projection length.

- Specimen width: 15 to 50mm (typically 30mm) Selectable among 15, 20, 25, 30, 40, 50 (mm) by the selection switch.
- Specimen direction: MD, CD, non-directional
- Selection of test method: Selectable between methods A and B by the selection switch.

Determination of bending angle: Method A: 90-degree bending,

Method B: bending at an acute angle and at an obtuse angle (the critical length is obtained by calculation from the extending length)

Flexing speed: 1rpm (rotation speed of specimen)

**Data display:** Critical length and stiffness are shown digitally **Optional:** Acrylic case

Referential standards: JIS P-8143-1996, TAPPI T451cm-84 Power source: 100/110VAC 50/60Hz 1A Outer dimensions: 320 x 385 x 480mm Instrument weight: 18kg

## No.2047

## Clark stiffness tester (motorized type)

Paper stiffness is one of essential characteristics. Newspaper and printing paper must have a stiffness enabling proper handling. This machine measures the stiffness of papers, fibers and films. Typical specimens are papers of small basis weight such as newspaper and thin paper. Stiffness is determined from the flexing load of the specimen. The length of specimen portion extending from the rolls is measured, when the deflection angle of the specimen from one side to the other becomes 90 degrees. Based on this length (critical length), Clark stiffness is obtained.

Specimen width: 15 to 50mm (typically 30mm) Flexing speed: Specimen rotating speed 1rpm Scale: 30 to 300mm Referential standards: JIS P-8143-1996, TAPPI T451cm-84 Power source: 100/110VAC 50/60Hz 0.5A Outer dimensions: 225 x 320 x 260mm Instrument weight: 8kg

