



KES-FB2-A

Pure Bending Tester

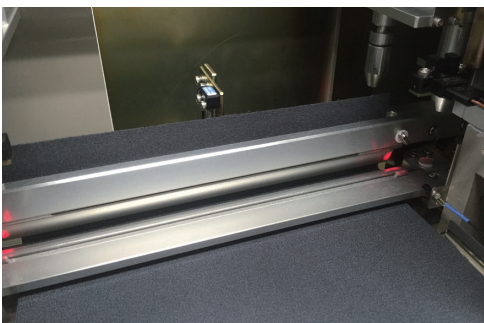
The KES-FB2-A Pure Bending Tester analyzes hand movements—referred to as “bending”—performed by artisans and professionals when judging a fabric’s texture. This device performs these movements mechanically, making it possible to obtain objective numerical data.

Obtainable data includes bending rigidity and recoverability for such targets as general fabric, cloth, paper, non-woven fabric, and film.

Bending characteristic data is useful for determining stiffness and fullness, softness, anti-drape stiffness.

Measurement Sample Example

General fabric, Fabric, Medicinal fabric,
Car seats, Interior fabric, Non-woven fabric,
Film-like samples



FEATURES

● Improved data accuracy

Motor chucking makes it easier to mount thin samples that would otherwise be difficult to mount. This eliminates errors caused by the user and improves the accuracy of data.

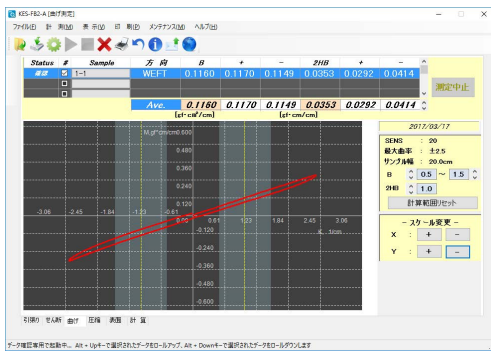
● Display resolution (of software): 0.0001

The ability to measure from extremely small values up to a maximum of 50 gf·cm means measurement can be performed for a wide variety of samples.

SYSTEM CONFIGURATION DIAGRAM / MEASUREMENT DATA



Sample Measurement Software Screens



▲ Bending properties

Obtainable Data

Item	Characteristic value	Description	Reading the data
Bending properties	B	Bending rigidity	Higher values mean more rigid bending
	2HB	Bending hysteresis (recoverability)	Higher values mean poor recoverability

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Dimensions/Weight (approx.)	Measuring unit: W830 × D530 × H370 (mm) / 60 kg
Power source	100 VAC, power consumption: 50W Max.
Measurement operation	Controlled maximum curvature system (However, control is inverted when over-torque occurs.)
Measurement environment temperature and humidity	20 to 30°C / 50 to 70% RH. (No condensation.) Temperature and humidity should be kept constant during measurement. (Standard temperature and humidity conditions: 20°C / 65% RH) *The instrument should be located to minimize influence from wind or vibrations.
Load detection	Detector: Detecting system for torsional moment of a steel wire Sensitivity (full scale): Switchable between 4 ranges (4 gf-cm, 10 gf-cm, 20 gf-cm, 50 gf-cm) Accuracy: ±0.5% or less of full scale

Curvature detection	Detector: Potentiometer Maximum curvature: $K = \pm 2.5 \text{ cm}^{-1}$ Accuracy: ±0.5% or less of full scale
Rate of bending deformation	0.5 cm ⁻¹ / sec (fixed)
Sample fixation method	Tightening: Tighten with a ratchet screwdriver at a constant torque Sample deformation length: 1 cm
Sample size	200 × 200 mm (standard) width: 200 mm (max.) thickness: 1 mm (max.)

⚠ Caution For safety use, please read the operation manual / the instruction carefully and thoroughly before using the tester.

Specification details recorded here are subject to change without notice. We appreciate your understanding.