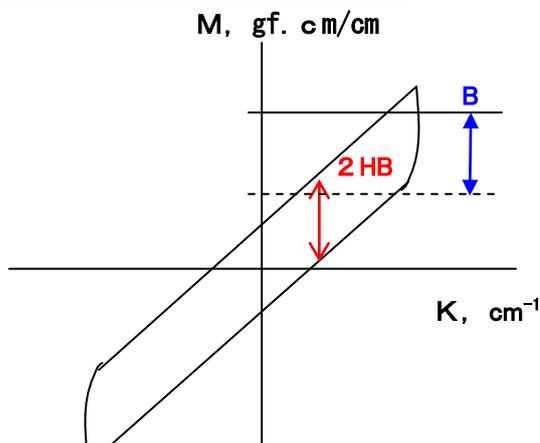# KES-FB2-L   Large Bending Tester

The KES-FB2-L Large Bending Tester accurately and quickly measures factors related to curvatures in small bending moments (bending hardness and recoverability).

Feature

Torque sensitivity　: 800 gf·cm(max.)

Measurement Sample Example　:
Automotive interior material, Film,
Disposable diapers,Hygiene product,
Resin sheet material,Leather seats,
Architectural membrane material.

Adding to the small area available with conventional models, the KES-FB2-L enables measurements that were not previously possible, such as large bending moments and bending rigidity of thick sheet material and composites (products) made from multiple materials. The device also offers excellent data reproducibility in addition to easy measurement.

M, gf. cm/cm

B

2 HB

K, cm⁻¹

B : (Bending rigidity)
　　　Curvature : 0. 1°～0. 3°

$2HB$: (Bending hysteresis (recoverability))
　　　Curvature : 0. 2° hysteresis

※This is sample length:10cm model

Relationship between B and 2HB, and human perception of bending rigidity

B : B correlates to the flexibility and rigidity felt when bending the object by hand.
The larger the B value becomes, the more rigid the sensation becomes, and the smaller the value becomes, the more flexible the sensation becomes.

$2HB$: 2HB correlates to the recoverability (elasticity) felt as the object returns to its original position after being bent. The larger the 2HB value becomes, the poorer the recoverability becomes, and the smaller the value becomes, the better the recoverability becomes.

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Specification (Overseas)	
Measurement mechanical apparatus	
Torque detection (Bending moment)	
Torque detector	The twist detection system of a steel wire
Torque sensitivity	Full-scale 80, 200, 400, 800 gf・cm
Accuracy	±0.5% full-scale
Dimension (approx.) 【mm】	Measuring unit　W420 × D370 × H970 Electronic unit　　W180 × D400 × H400
Weight（approx.）	Measuring unit　50kg Electronic unit　20kg
Power supply	100V Single phase maximum power consumption:30W
Curvature detection	
Curvature detector	potentiometer
Accuracy	±0.5% full-scale
Maximum curvature	$K=\pm0.4$ cm^{-1}
Sample size	
Thickness of sample	MAX　15mm
External dimension	MAX　20cm × 20cm
Temperature at the time of use	The best condition of RH: 50%－70%, The best condition of RT: 20℃－30℃ ＊Keeping under constant measurement 　　condition is the best

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

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