

No.2049-D

Gurley stiffness tester (automatic type)

This machine automatically measures the stiffness of paper, film, nonwoven textile, etc. By changing the specimen size and selecting a weight on the pendulum, it enables measurements of a wide range of stiffness. One end of the specimen is held on the movable clamp. The other end is set at a position so that it overlaps the top of the pendulum by 6.4mm. Then the arm with the specimen is slowly moved to deflect the specimen as the load increases, thereby tilting the pendulum. At last, specimen detaches from the pendulum. The maximum rotation angle at that detaching moment is captured by a sensor, to calculate and display stiffness. This machine releases the operator from tiresome calculation involving the specimen size and weight and position of the mass, as with the conventional tester, permitting accurate and rapid measurements, thereby increasing productivity in research and develop activities.

Measurement range: 1.39 to 450000mg

Specimen length: 1", 1 1/2", 2 1/2", 3 1/2", 4 1/2"

Specimen width: 1/2", 1", 2"

Pendulum mass: weight and position (1" , 2" or 4") of the mass set on the pendulum are selected, depending upon the flexural strength of the specimen.

Direction of specimen: Three directions can be set: MD, CD and non-directional (for recording)

Weights: 5, 25, 50, 200g

Load detection: The inclination angle of the pendulum is detected, and sine of the angle is multiplied by a constant that depends upon the measurement conditions, to determine the load.

Zero point automatic correction:

Correct the machine posture, and adjust the pendulum pointer to zero on the scale, and push the zero point adjusting switch.

Bending speed: rotation speed of the movable arm: 2rpm

Display of the results: left and right bending, average

Referential standards: JIS L-1085, 1096, TAPPI T-543 pm-00

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

Outer dimensions: 360 x 370 x 660mm

Instrument weight: 22kg



Operation panel



Weight for Range



No.2049-M

Gurley stiffness tester (motorized type)

This machine measures the flexibility of papers, films and fabrics. Construction: one end of the specimen is put in the clamp of the movable arm, and the other end is made to contact the measurement pendulum. The movable arm is rotated to left and right at a constant speed. The specimen deflects, inclining the pendulum. As the load increases, the specimen deflects increasingly, and finally it detaches from the contact point, when the deflection, that is, inclination angle of the pendulum, is read on the lower scale. A wide range of measurement is available by changing the clamp position and the weight and the weight position, depending upon specimen stiffness.

Weights: 5, 25, 50, 200g

Weight position: 1", 2", 4" (from the pendulum axis center)

Specimen size: 1", 1 1/2", 2 1/2", 3 1/2", 4 1/2" long, 1/2", 1", 2" wide

Rotation speed: 2rpm

Referential standards: JIS L-1085, 1096, TAPPI T-543pm-94

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

Outer dimensions: 270 x 240 x 460mm

Instrument weight: 7.2kg