



Measure



Improve



Service

## GURLEY BENDING STIFFNESS TESTER



Genuine Gurley™ Stiffness Testers are capable of evaluating more different sample sizes, weights, and thicknesses than any other similar instrument. For flat and sheet like materials, there are fifteen possible specimen sizes and an unlimited range of thicknesses up to 0.25 inch.

A complete set of accessory weights (5, 25, 50, 200 grams) are included as standard. Whether you are testing fine films or asphalt roofing shingles, the Gurley bending resistance / stiffness tester offers you the greatest range of possibilities. All combinations of size and counter weights are reduced to a common basis by means of a lookup table, and/or software. This provides a range of readings on a continuous scale from 1 to 3,358,720. Cylindrical jeweled bearings make the mechanism highly sensitive even to light-weighted materials. There are no cumbersome attachments which could negate the effectiveness of the test.

All standard Gurley™ bending resistance / stiffness testers measure the force required to bend a wide variety of flat materials under controlled and repeatable conditions. This force may be equated to stiffness, resilience, flexibility, or pliability depending on the nature of the material and the purpose of the test. There are 15 possible specimen sizes and an unlimited range of thicknesses up to 0.25 inches.

Gurley bending resistance / stiffness testers are unique in that they not only meet the most rigorous accuracy and sensitivity requirements but they are simple to operate, require virtually no maintenance, and are capable of testing a wider and more diverse range of products than any other instrument available.

### Why choose Gurley? It's Digital

That means you can get all your calculations and measurements easily and accurately, right off your computer. RS232c serial communications port on the Model 4171S allows the user to send test data to a computer or printer.

## Models

### 4171S

Digital Bending Resistance /Stiffness Tester with RS232 port, touch pad entry, and parallel clamp.

### 4171T

Digital Bending Resistance /Stiffness Tester with RS232 port, touch pad entry, Tubing clamp, and parallel clamp.

## Specifications

The arm, which carries the sample clamp, is rotated left and right by a capacitor-type synchronous motor geared down to 2 RPM. The arm moves 75 degrees left or right of vertical. The operator can select left or right movement with a switch located on the front panel. The smooth, uniform motor operation produces consistent and accurate test results.

Cylindrical jewel bearings make the vane highly sensitive even to very lightweight materials. The instrument is not recommended for heavy, limp materials.

Four leveling screws and a circular spirit level are used to make the base level. The loading weights, in two sections, screw together to get mounted on the pointer, or to be stored on the bracket when not in use.

### Accessory weights

5, 25, 50 and 200 grams

### Clamp

Accommodates materials up to 50 mm wide and 6 mm thick

### Power Supply

Electrical 220V / 110V , 50/60 Hz

### Dimensions

Height 20-1/2"

Base 13-3/8" d x 9 1/4" w

## Applications

- Gen. manufacturing control (testing packaging, cards, containers, wire, tubing, plastic and metal parts,...)
- Medical manufacturing (testing adhesive bandages, laminated or coated materials, catheters,...)
- Textile testing (effect of laundering, filling, starching or coating)
- Research (product development & quality control)
- Chemical, temperature and other treatments (effect of softening, stiffening, radiation and environmental exposure)
- Custom applications

## Standards

Meets industry std TAPPI #T543, ASTM D-6125-97.