



**Thwing-Albert  
Instrument Company**

**More Than a Century of Testing Solutions**

## ***Bending Resistance/ Stiffness Tester***

The Model 4171 Bending Resistance/Stiffness Tester, measures 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 materials and purpose of the test.

The bending resistance/stiffness tester is designed to accommodate a diverse range of products allowing for up to fifteen possible sample sizes and an unlimited range of thicknesses up to 0.25 inches (6.35 mm). A complete set of accessory weights (5, 25, 50 and 200 grams) are included offering a great range of testing possibilities.

Incorporating digital technology, the 4171 Model provides fast, accurate measurements. The point when the sample is released is automatically recorded by an optical encoder and displayed on a digital readout. Both the right and left direction are recorded and simultaneously display the average left/right deflection, and the resulting bending force.



### **FLAT SHEET MODEL:**

#### **Model 4171S**

Digital Bending Resistance/Stiffness Tester with RS-232 serial communications port and parallel clamp.

\* All flat sheet models meet industry standards  
TAPPI #T543 and ASTM D6125-97

### **TUBING MODEL:**

#### **Model 4171T**

Digital Bending Resistance/Stiffness Tester with RS-232 communications port, parallel and tubing clamp assemblies.

### **Features:**

- Push-button control converts scale readings automatically
- RS-232 computer output
- Flat Sheet Model 4171S  
Tubing Model 4171T
- Industry Standards:  
TAPPI #T543  
ASTM D-6125-97



## **Physical Specifications**

### **Dimensions:**

20.5" H x 13.375"D x 9.25" W

### **Sample Dimensions:**

Accommodates materials up to 2 in wide and 0.25 in thick

## **Performance Data**

### **Counter Weights:**

5, 25, 50 and 200 grams

### **Test Speeds:**

Capacitor-type synchronous motor geared-down to 2 RPM

### **Sample Arm Movement:**

75 degrees left or right of vertical

### **Electrical Requirements:**

Power Options: 115V, 50Hz or 115V, 60Hz

### **Outputs:**

RS-232 serial port

### **Result Reporting:**

Digital Encoder & Display

### **Result Units:**

Gurley units, milligrams, grams centimeters and millinewton meters



*Specifications subject to change without notice.*

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