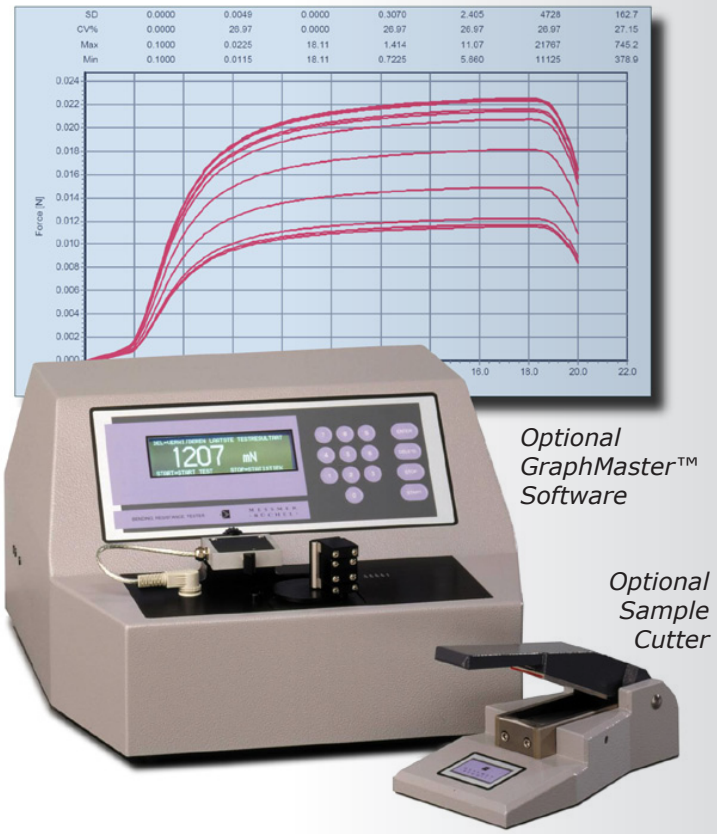
Bending Resistance Tester

Model 79-25

The 79-25 is a user-friendly microprocessor controlled instrument designed to determine the bending resistance of paper, paperboard, plastic film, medical tubing and wire. Bending stiffness is a characteristic associated with the rigidity of a material. This property is related to the modulus of elasticity of the material's stiffness. The 79-25 was developed to produce a more concise, consistent measurement for the paper industry but is also used in a variety of industries including personal products, paper, films, packaging and non-wovens.

The two-point testing method secures the specimen into a pneumatic clamp and bends the sample up to 90° against a force transducer.

What makes our 79-25 instrument so unique is its versatility and accuracy. Bending forces are measured at selectable bending angles from 5.0 to 90°. The instrument is available with a 100 or 1000 gram precision load cell. The advanced data acquisition system senses forces down to 0.5g. Materials can range from 5 to 50mm in length, up to 2.5mm thick.



The 79-25 can perform five tests: Score Bend, Score Perforation, Break Force, Taber Stiffness, Bending Resistance, and Spring Back.

HARDWARE FEATURES

- Direct sample to load cell contact for accurate measurement
- Easy selection of test parameters from a comprehensive range through a setup menu
- Motorized test length setting
- Pneumatic clamps with fast release provide consistent clamping pressures for fast, repeatable results
- Large, clear display showing peak value and angle
- Load cells are fitted with overload protection
- Direct data output via RS-232 to printer or optional GraphMasterTM analysis software
- Calculates Taber Stiffness, Youngs Modulus, Gurley Stiffness units
- Can be directly calibrated to traceable national standards

BENEFITS

- Very flexible for performing different types of tests and for different standards
- Pre-certified weights and sample cutter options
- Ability to add special formulas to meet unique bending stiffness requirements
- Competitive advantages for accuracy and usability
- Motorized testing and pneumatic clamping eliminates operator influence

GRAPHMASTER™ FEATURES

- One click on the Database feature allows the operator to select a favorite format to save critical test information using Microsoft® compatible programs such as Clipboard®, Excel® or other standard file types
- The software automatically captures, graphs and reports force, position and time during a testing sequence.
- A library of calculations is available to report commonly used test results based on international standards
- GraphMaster™ test reports include single and multiple test curves, sample information and statistics
- GraphMaster™ software includes a language database of 8 languages to select; additional languages can be easily added by request

Bending Resistance Tester

Model 79-25

SPECIFICATIONS

Model	79-25-00 Series
Measuring units	Mn, Nmm, Taber
Ranges	0- 1000 mN or 0-10 mN (Please specify)
Min. force sensitivity	0.5mN with 1000mN load cell
Accuracy	+/- 1%
Specimen Width Bend Angle	Up to 38 mm, 4 mm opening 5.0 – 90.0 degrees (selectable in 0.1 steps)
Accuracy	± 0.1 degree
Speed	5º/second
Bending length	Motorized setting with 6 automatic stops
Bending positions	5mm - 10mm - 15mm - 20mm - 25mm and 50mm.
Clamp	Pneumatic operated , 38mm wide with 4mm gap.
Electronic Output	GraphMaster™ compatible RS232 serial data output with 9 pin, printer output and optional analog signal output
Electrical	120 V/60 Hz or 220V/50 Hz
Air connection	6mm OD plastic hose
Dimensions	Length : 490 mm Width : 425 mm Height : 260 mm Weight : ± 20 kg
Tests Performed	Score Bend
	Score Perforation Break Force
	Taber Stiffness
	Bending Resistance
	Spring Back

OPTIONAL ACCESSORIES

Certified dead weight set to meet ISO requirements
Sample Cutter
Load cell in 1 Newton or 10 Newton (Please specify)
GraphMaster™ software
Analog signal output (use for X-Y recorder)

INCLUDED ACCESSORIES

Clear plastic table for dead weight calibration

STANDARDS

ISO 2493
AS/NZ 1301-4535
BS 3748
DIN 53121
SCAN P29
TAPPI T556
Can be directly calibrated to traceable national standards

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The TMI Group of Companies
Phone: (302) 613-5600 Fax: (302) 613-5619
info@testingmachines.com

Testing Machines, Inc.
Delaware, USA

Messmer Büchel (Büchel BV)
Veenendaal, Netherlands

FIBRO System AB
Stockholm, Sweden

PT. TMI Asia
West Java, Indonesia

TMI Trading (Shanghai) Co., Ltd.
Shanghai, China

Visit us on the web at: www.testingmachines.com