



# Bending Resistance Tester

Model 79–56

The 79-56 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 79-56 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.

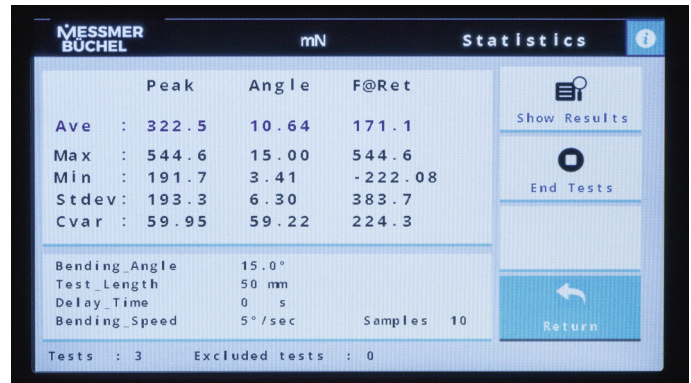
What makes our 79-56 instrument so unique is its versatility and accuracy. Bending forces are measured at selectable bending angles from 5.0 to 90°. The instrument is available with a 100 or 1000 gram precision load cell. The advanced data acquisition system senses forces down to 0.5g. Materials can range from 1 to 50mm in length, up to 2.5mm thick.

### 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
- GraphMaster™ analysis software
- Calculates Taber Stiffness, Youngs Modulus, Gurley
- Stiffness units
- Can be directly calibrated to traceable national standards

### Benefits:

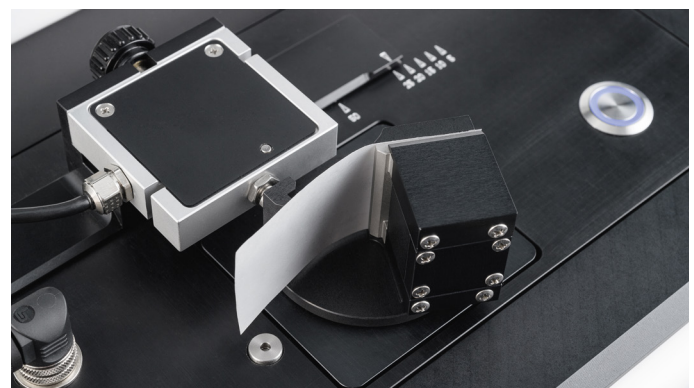
- Very flexible for performing different types of tests and for different standards
- Pre-certified weights and sample cutter options
- Ability to add special formulas to meet unique bending stiffness requirements
- Competitive advantages for accuracy and usability
- Motorized testing and pneumatic clamping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



### Optional GraphMaster™ Software



The 79-56 can perform five tests: Score Bend, Score Perforation, Break Force, Taber Stiffness, Bending Resistance, and Spring Back.



Setup to perform a bend test

## Technical Specification:

<b>Model</b>	79-56-00 Series
<b>Measuring units</b>	Mn, Nmm, Taber
<b>Ranges</b>	0–1000mN or 0–10mN (Please specify)
<b>Min. force sensitivity</b>	0.5mN with 1000mN load cell
<b>Accuracy</b>	+/- 1%
<b>Specimen Width Bend Angle</b>	Up to 38mm, 4mm opening 5.0–90.0 degrees (selectable in 0.1 steps)
<b>Accuracy</b>	± 0.1 degree
<b>Speed</b>	5°/second
<b>Bending length</b>	Motorized setting with 7 automatic stops
<b>Bending positions</b>	1mm–5mm–10mm–15mm– 20mm–25mm–50mm
<b>Clamp</b>	Pneumatic operated, 38mm wide with 4mm gap.
<b>Electronic Output</b>	GraphMaster™ compatible RS232 serial data output with 9 pin, printer output and optional analog signal output
<b>Electrical</b>	120 V/60 Hz or 220V/50 Hz
<b>Air connection</b>	6mm OD plastic hose
<b>Dimensions</b>	Length: 490mm Width: 425mm Height: 260mm Weight: ± 20kg
<b>Tests Performed</b>	<ul style="list-style-type: none"><li>• Score Bend</li><li>• Score Perforation Break Force</li><li>• Taber Stiffness</li><li>• Bending Resistance</li><li>• Spring Back</li></ul>

## 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

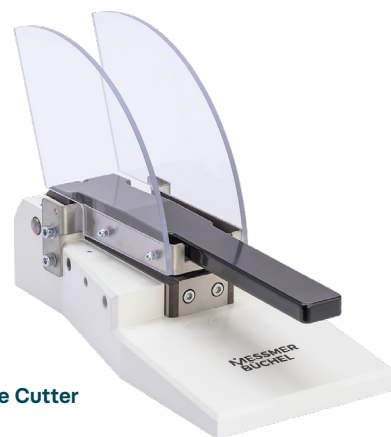
## Graphmaster™ Features:

- 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

## Standards:

Can be directly calibrated to traceable national standards

- ISO 2493
- AS/NZ 1301-4535
- BS 3748
- DIN 53121
- SCAN P29
- TAPPI T556



Optional Sample Cutter

Vertrieb in Deutschland durch:



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