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.

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

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

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

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

## 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