



**YASUDA**  
— TESTING THE LIMITS —

# **No.309 Fenchel Expansion and Contraction Tester 【Yasuda Seiki】To measure the stretching properties of paper・paper board**

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No.309 FENCHEL EXPANSION AND CONTRACTION TESTER

No.309-AUTO FENCHEL EXPANSION AND CONTRACTION TESTER (AUTOMATIC)

**No.309 FENCHEL EXPANSION AND CONTRACTION  
TESTER**



J.TAPPI-No.27, ISO-5635

- This tester is used to measure the stretching properties of paper and paper board when it is submerged in water.
- After attaching the test specimen to the upper and lower Chucks and applying tensile force, the test specimen is to be submerged into water for a certain amount of time.
- The stretching properties of the test specimen will be read by transducer and the measurement value will be shown digitally displayed.

## Specification

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Specifications are subject to change without notice.	
<b>Model</b>	<b>No.309 FENCHEL EXPANSION AND CONTRACTION TESTER</b>
<b>Specimen</b>	W15 mm, L150 mm
<b>Chuck Distance</b>	Max. 100 mm (Pitch 5 mm)

<b>Weight</b>	5 g, 10 g, 20 g, 50 g: 1 pc each
<b>Displacement Measurement</b>	Differential Transformer:  Scale 0.01 mm, Stroke 0 to $\pm 10$ mm,  4 Digits Digital Displa
<b>Temperature Measurement</b>	—
<b>Elevation Method</b>	—
<b>Software</b>	—
<b>Accessory</b>	Glass Beaker
<b>Power Source</b>	AC 100 V, 1-Phase, 3 A, 50/60 Hz
<b>Air Source</b>	—
<b>Dimensions/ Weight (Approx.)</b>	Tester Body:  W250 × D300 × H1,050 mm, 30 kg

Control Box:

W400 × D300 × H150 mm, 6 kg

## No.309–AUTO FENCHEL EXPANSION AND CONTRACTION TESTER (AUTOMATIC)



J.TAPPI–No.27, ISO–5635

- The stretching properties are measured via digital encoder, automating the test procedure.

### Specification

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Specifications are subject to change without notice.

<b>Model</b>	<b>No.309-AUTO FENCHEL EXPANSION AND CONTRACTION TESTER (AUTOMATIC)</b>
<b>Specimen</b>	W15 mm, L150 mm
<b>Chuck Distance</b>	Max. 100 mm (Pitch 5 mm)
<b>Weight</b>	5 g, 10 g, 20 g, 50 g: 1 pc each
<b>Displacement Measurement</b>	Digital Encoder
<b>Temperature Measurement</b>	Digital Temperature Controller
<b>Elevation Method</b>	Air Cylinder
<b>Software</b>	Windows Compatible
<b>Accessory</b>	Plastic Beaker
<b>Power Source</b>	AC 100 V, 1-Phase, 3 A, 50/60 Hz

<b>Air Source</b>	0.5 MPa or More
<b>Dimensions/ Weight (Approx.)</b>	Tester Body:  W400 × D400 × H1,400 mm, 20 kg  Control Box:  W310 × D300 × H250 mm, 8.5 kg