# **Stand Alone**

# **Bending Stiffness Tester**

For determination of the dynamic forces in a 2-point bending test.





**✓ PAPER** 



# **MOST IMPORTANT BENEFITS:**

- Easy operation via inbuilt touch screen
- Special vibration dampers and wind shield
- Three measuring points and dwell time individually adjustable
- **Exchangeable load cell slides for measuring** with more measuring ranges







#### Sales and service benelux

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# Article No. S58566

# PRODUCT DESCRIPTION

The bending stiffness tester was especially developed for the paper and automotive industry (VDA). To avoid falsifying influences, the tester is installed on especially developed anti-vibration dampers. A protection cover made of acrylic glass protects the measurements area. Sample clamping either happens pneumatically manually with a torque screwdriver. measurement length can be set as required from 1 to 50 mm. The touchscreen is used to select the test program and assign the samples to the corresponding test series (MD/CD, front side/ rear side, angle data, etc.) A comparison of the individual test series can be selected as needed. More settings are available like bending angle, dwell time, angle speed etc.

# TEST DESCRIPTION

After preparing the sample with the punch, put it into the support. Close the acrylic glass cover, select your test program and assign your test to a test series. When you press the start button, the machine pushes the sample towards the measurement cell with precisely defined speed. When the pre-defined bending angle is reached, the sample remains in this angle for the pre-set dwell time. When the pre-set dwell time is over, the sample returns to the initial position. The touchscreen displays the testing results of up to three pre-defined measurement points. The results are displayed in values as well as in the form of a real-time diagram. If various tests of a test series were done, the results can be compared statistically, and the ratios can be displayed.



Measuring unit with pneum- clamp 38mm and slate with 10N Load cell

## **TECHNICAL DATA**

#### **DEVICE/INSTRUMENT**

- Einfache Bedienbarkeit über Touchscreen
- Winkelgeschwindigkeit von 0,5-50 °/s einstellbar
- Klemmen wahlweise pneumatisch oder manuell
- 3 Messpunkte (Winkel und Verweilzeit individuell einstellbar
- Anzeige von bis zu 3 Messpunkten (z.B. 7,5°/ 15° / 30°)
- Anzeige von Einzelwerten, Diagrammen und Statistikfunktionen

# ANWENDBARE STANDARDS

DIN 53121 ISO 2493-1 TAPPI T556 VDA 230-209

\*more standards on request

#### **MEASUREMENT**

Angle speed: 0,5-50 °/s Bending angle: 0-92°

Bending length: Adjustable: up to 55mm
Clamping: Version Paper: 38 x 35 mm
Version VDA: 30 x 35 mm

Clamping force: Clamp VDA: 30 x 35 mm
Clamping force: Clamp VDA: manual Torque wrench

0,05-0,2Nm

Clamp manual: adjustable by hand Clamp pneu.: acc. to standar

Sample specs: 38 x 80 mm paper up to 3mm thick

30 x 80 mm leather or plastics (VDA)

Measuring range: 2/5/10/20 N (acc. load cell)

Display: Width-r

Width-related bending stiffness [Nmm²]

Bending stiffness [N] at bending angle

Max. force [N]

Bending moment [Nm] Force after adjustable time [N] +-1% (of displayed value)

Accuracy: +-1% (of displayed value)
Statistics: Min, Max, mean, Var. coef., standard

deviation of measuring series

#### CONNECTIONS

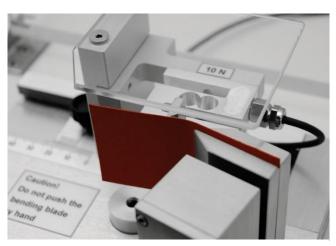
Power: 110-230V/50-60Hz

Power consumption: <40W
Water: Compressed air: 4-6 bar

Connection for hose 6mm

#### DATA

RS232: Data output Ethernet: Dataoutput (MQTT) USB: Updates Service



The sample is automatically bend against the bending blade



Manual clamp 30mm according VDA for tightening with torque wrench

# Article No. S16502

## **DIMENSIONS**

Version LxHxB

S58566000/1/2 430 x 450 x 320 mm

Weight: net/gross S58566000/1/2 28kg / ca. 45 kg

#### ARTICLES / MODELS

S58566000 Bending stiffness tester - individual

(load cell and clamp of choice)

Bending stiffness tester – paper testing (loadcell of choice, clamp 38mm pneumatic) S58566001

Bending stiffness tester - VDA testing

S58566002 (load cell of choice, clamp 30mm VDA)

#### **Available loadcells:**

S585661010	Load cell	2N
S585661011	Load cell	5N
S585661012	Load cell	10N
S585661013	Load cell	20N

#### Available clamps:

S585661001	Clamp pneu.	38 x 35mm
S585661002	Clamp manual.	38 x 35mm
S585661003	Clamp manual.	50 x 35mm
S585661008	Clamp pneu.	50 x 35mm
S585661018	Clamp manual (VDA)	30 x 35mm

<sup>\*</sup> weitere auf Anfrage

#### Sample preparation:

S209100002 Sample punch pneumatic

38 x 80 mm (bending stiffness paper)

S209100007 Sample punch pneumatic

30 x 80 mm (bending stiffness VDA) S403310006 Sample punch manual

38 x 80mm (bending stiffness paper)

## **More Accessories:**

#### Sleighs for exchange of the load cell

Sieigns for exchange of the load cell					
	S585661022	Sleigh with load cell	2N, blade 38mm		
	S585661024	Sleigh with load cell	2N, blade 30mm (VDA)		
	S585661026	Sleigh with load cell	5N, blade 38mm		
	S585661020	Sleigh with load cell	5N, blade 30mm (VDA)		
	S585661027	Sleigh with load cell	10N, blade 38mm		
	S585661025	Sleigh with load cell	10N, blade 30mm (VDA)		
	S585661028	Sleigh with load cell	20N, blade 38mm		
	S585661023	Sleigh with load cell	20N, blade 30mm (VDA)		

The bending stiffness tester can be used with a maximum of one additional force sensor (total of 2 force sensors)

S406900001 ProbeNet Software incl. with one license

\* more on request

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