

Stand Alone



Bending Stiffness Tester

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

For:



✓ PAPER



✓ BOARD



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

 **FRANK-PTI**
QUALITY TESTING INSTRUMENTS

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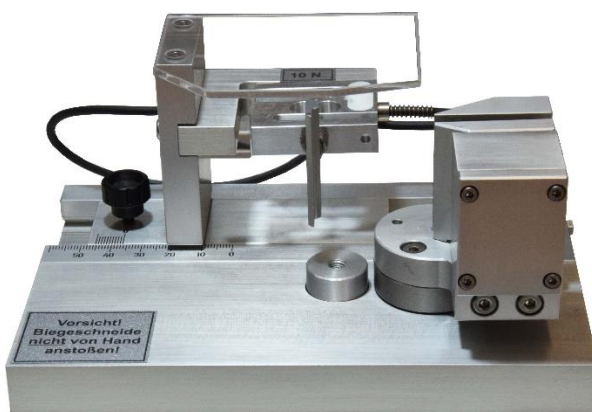
🌐 www.frank-pti.com

PRODUCT DESCRIPTION

The bending stiffness tester was especially developed for the paper and automotive industry (VDA) and can also be used for creaseability measurements. 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 or manually with a torque screwdriver. The 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: 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-related bending stiffness [Nmm ²] Bending stiffness [N] at bending angle Max. force [N] Bending moment [Nm] Force after adjustable time [N]
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

