

ACPM 200P Automatic Bending Stiffness Testing Device with Parallel Measurement Value Logging

Product description

The ACPM 200P Automatic Bending Stiffness Testing Device operates according to a measuring method which is based on the Cantilever method according to DIN 53362.

It allows the determination of wide-related bending stiffness of flexible, homogeneous, light-proof materials, such as textiles, papers and films.

The ACPM 200P Features

Sample parameters

- sample length: 50 to 350 mm
- sample thickness: 0,01 to 10 mm
- sample width: 20 to 240 mm
- sample mass: 0,01 to 1000 g

Process features

- realisation of two measuring ranges by the arrangement of two measuring planes with different inclination angles
- selectable variable feed rate
- constant feed during testing
- detection of a maximum of 21 parallel measurement data at a distance of 10 mm along the sample width
- single and serial measurements are possible
- high degree of automation
- easy and convenient operation
- data output is possible as a file
- reproducibility of the results > 95 %



ACPM 200P with PC (option)

ACPM 200 P Biegesteifigkeitsmessgerät (Cantilever)								tex" Institut für Textil - u ungsmaschinen gemeinnützi Gm		
statusmetoting Transportarm abschwenken und Schieber mit Probe zur Startposition bringer						gen!	Messung verwerfen			
Geräheinstellungen Messebene Probenparameter Scheider Nr.: 3 Scheider Nr.: 3 Scheider Nr.: 5 Scheider Scheider Scheider Nr.: 5 Scheider Scheider										
						Protokoll spei		ichern (Einzelmessung)		
Scheberorete: 210 mm Geschwindigkeit: 240 mm/min Messebene: A (steil) Befeuchtungseinn: passiv	 A (stell) B (flach) 	Länge: 297,0 mm Breite: 210,0 mm Dicke: 0,10 mm		Masse: Flächenmasse: Vorkrümmung:	4,99 g 80,00 g/m² 0,00 mm		Start Messung	Abbruch		
Breiten-						Breiten-	Überhang-	Biegesta 1 (Textil)	ifigkeit 2 (PT	
poonton						pos. 7 mm	lange / mm	7 mN-m	7 mN	
100 mm						100	169,44	0,4838	0,38	
80 mm						30	170.09	0,4000	0,30	
						70	170.32	0.4915	0.35	
60 mm						60	170.33	0.4915	0.38	
						50	170,16	0,4901	0,36	
40 mm 🔳 📁						40	170,18	0,4902	0,38	
						30	170,25	0,4908	0,38	
20 mm						20	170,11	0,4896	0,36	
•						10	170,00	0,4887	0,36	
0 mm 🔳 🗖						0	170,52	0,4932	0,38	
						-10	170,57	0,4936	0,35	
-20 mm						-20	1/0,44	0,4925	0,36	
10						-30	170,56	0,4936	0,35	
						-40	170,52	0,4952	0,38	
-60 mm						-00	170,75	0,4302	0,33	
						.70	170,53	0,4933	0.30	
-80 mm						-80	170.33	0.4915	0.36	
	_					-90	170.15	0.4900	0.38	
						-100	170.01	0.4887	0.38	
-100 mm 🔳 🗖										

The theoretical foundations for the development were laid within the scope of the dissertation of M. Sc. Manal Seif at the Institute of Textile Machinery and High Performance Material Technology (ITM) at the TU Dresden.

Technical Data

Device dimensions:

- Total length, transport arm up
- Total height, transport arm up
- Total width
- Total mass

Electrical power:

Measuring device:

- Voltage
- Current
- Degree of protection

External power supply:

- Input voltage 100-240 V AC
- Input current max. 1,2 A
- Supply frequency 50 / 60 Hz
- Output voltage 24 V DC
- Output current max. 2,7 A
- Degree of protection IP 54

Laser module:

- Laser class II
- Wavelength 650 nm
- Radiant power <1 mW

Environmental conditions:

- Environmental temperature: 5.... 40°C
- Relative humidity: ≤ 80%
- No aggressive media





870 mm (otherwise 770 mm) 785 mm (otherwise 410 mm) 330 mm 35 kg

24 V DC (circular connector, positive potential inside) max. 1,8 A IP 54