

Product Information

Device for determining bursting strength



Device for determination of bursting strength

Applications

CTA: 99909 27559

- testing paper to ISO 2758 (Item No. 1106840)
- determination of bursting strength of solid and corrugated board and the papers used for them for tests to DIN 53141 Part 1 and ISO 2759 (Item No. 1106841)
- Specimen material:

paper, solid board, corrugated board

The device for determining the bursting strength consists of a hydraulic actuator and a burst device.

The hydraulic actuator is used to generate pressure. It is mounted in the testing system. The volume flow can be steplessly adjusted by changing the crosshead speed. The hydraulic actuator is connected to the burst device via a high pressure hose.

Pressure is measured electronically using a strain gage sensor.

A pneumatic actuator is integrated in the burst device. It is used to clamp the specimen between the compression plate and the pressure chamber.



Device for determination of bursting strength, with pneumatic control unit

The moving crosshead presses against the hydraulic actuator during the test. This causes a liquid volume to be pressed out of the actuator into the pressure chamber. The resulting, increasing pressure causes the rubber membrane to arch. The rubber membrane then presses against the specimen until it breaks.

Advantages and features

- Excellent price-performance ratio for a burst-pressure tester with electronic measurement and evaluation.
- Low-inertia measured-value acquisition with straingauge pressure sensor: genuine peak value acquisition.
- Automatic detection of bursting process and automatic machine return ensure short test times.
- Flexible measured-value processing, providing comparability with mechanical instruments.
- PC-controlled data-processing for optional elimination of diaphragm characteristics.
- Bursting pressure, burst index and burst energy can be determined using a single program.
- ZwickRoell test programs with prepared data interface to CAQ systems, guaranteeing rapid data integration.



Product Information

Device for determining bursting strength

Technical data

Item No.	1106840 ¹⁾	1106841 ¹⁾²⁾	
Test pressure, max.	1100	6000	kPa
Membrane opening, lower	Ø 33.1	Ø 31.5	mm
Compression plate:			
Inner diameter	Ø 30.5	Ø 31.5	mm
Outer diameter	Ø 60.0	Ø 97	mm
Ambient temperature	+10 +35	+10 +35	°C
Scope of delivery	Impression cylinder, clamping fixture	Impression cylinder, clamping fixture	
Surface pressing of the clamping fixture		400 1000	

1) A testing system with a test speed of >500 mm/min is required.

2) To reach the max. test pressure of 6,000 kPa, a testing system with at least 2.5 kN is required.

Accessories required

- Pneumatic control unit (see below)
- DCSC/USC module for electronics
- Set of pneumatic hoses, ArticleNumber 1112640
- For installation in the upper test area of a zwickiLine:
 - 1 additional top crosshead
 - -2 mounting studs, Ø 20 mm

Pneumatic control unit

Description	ArticleNumber
Pneumatic control unit	1108557

Optional accessories Replacement diaphragm

Description	ArticleNumber
as per ISO 2758 for test device with locking ring inside diameter 33.1 mm (Item No. 1106840)	318003
as per ISO 2759, DIN 53141 for test device with locking ring inside diameter 31.5 mm (Item No.	318001
1106841)	