



TESTING VACUUM AND PRESSURE FILTRATION

BoFilTest – quick and easy determination of filtration properties.



BoFiltest in action

The simple handling of BoFilTest allows a quick test procedure. Due to the quick-release closures on the upper and lower part of the pressure filter cell, a test can be started immediately after filling in the sample suspension. One hand movement is enough to get BoFilTest ready for a test.

With a filtration area of only 20 cm² and a filtration pressure of up to 11 bar (a) BoFilTest allows

- a fast, easy and reproducible analysis of filtration data
- the variation of all filtration parameters such as cake height, pressure difference (for cake formation, washing and dehumidifying), amount of wash liquid
- the determination of the relevant filtration parameters and material parameters for both vacuum and pressure filtration such as: cake forming time, air breakthrough time, wash time, demisting time, gas flow rate, cake and filter media resistance, etc.
- the determination of the suitable filter medium
- the production of small amounts of material (solid or filtrate)
- the production of analysis samples (solid or filtrate) for further subsequent analysis

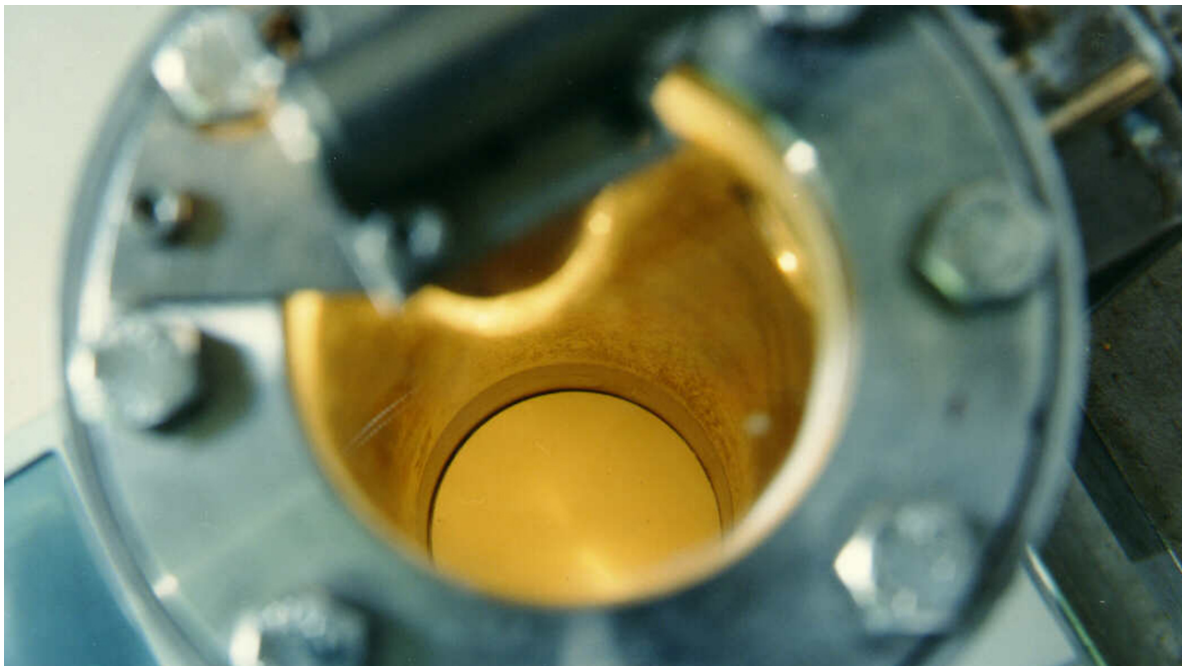
Optionally, the measured values can be electronically recorded and evaluated.





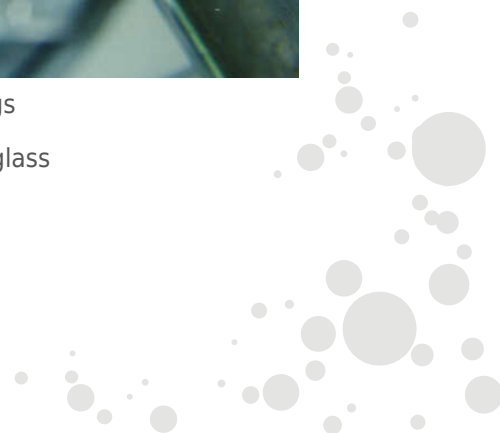
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BoFilTest in action - filling in of test suspension



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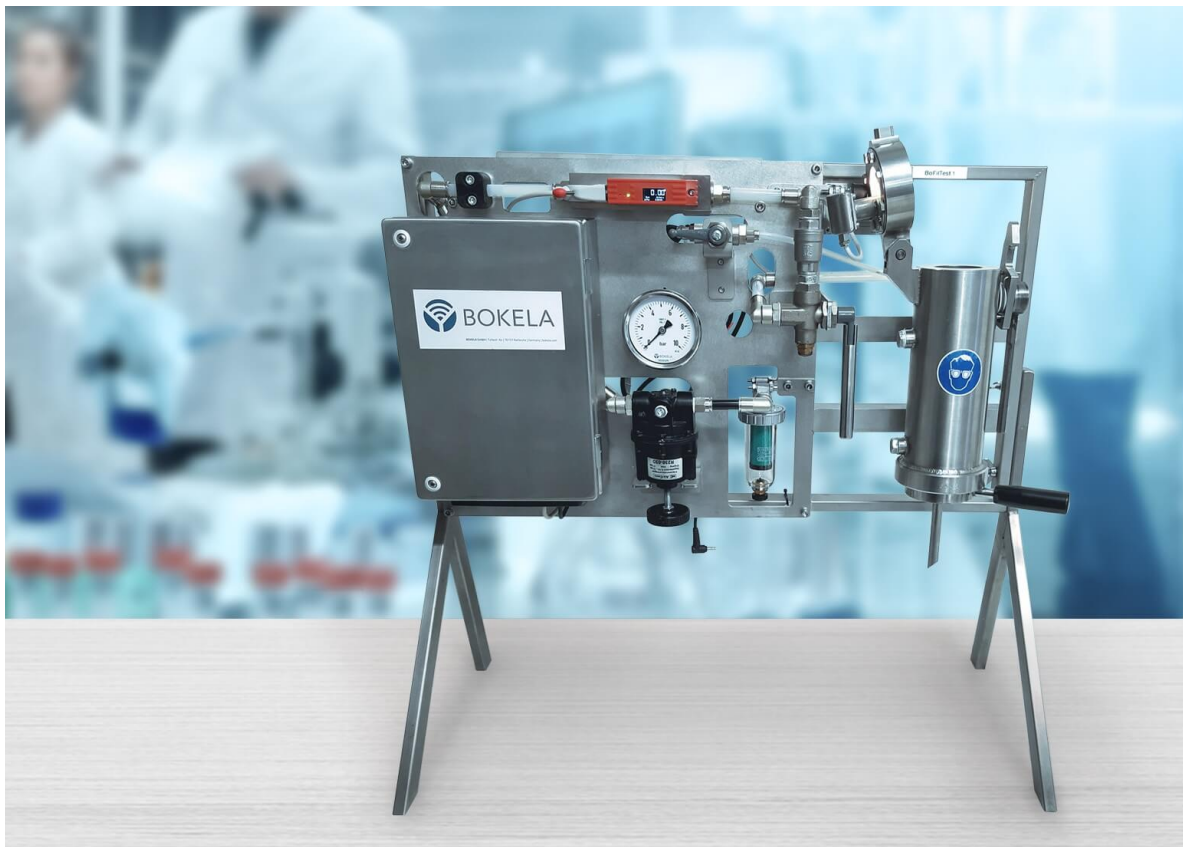
BoFilTest in action – view of filter cake through sight glass



Construction

The core of the BoFilTest is a double-walled pressure filter cell made of stainless steel, which can be tempered by a liquid circulation if required. It is closed by a quick release lid with hinge and sight glass. The lower part is attached to the body of the pressure filter cell with a bayonet quick release. In this lower part of the filtrate outlet funnel, a perforated plate as support for the filter medium and a removable cake-forming ring are integrated. The pressure filter cell is mounted on a base frame in which a laptop holder is integrated. In the basic version, this device is supplemented by a manometer for setting and measuring the filtration pressure difference.

The basic version was deliberately designed in such a way that it can be operated on site even without power supply. The versatility and ease-of-use of the BoFilTest can be adapted at any time to suit individual requirements by means of various, mostly metrological, auxiliaries.



BoFilTest – basic version with auxiliaries

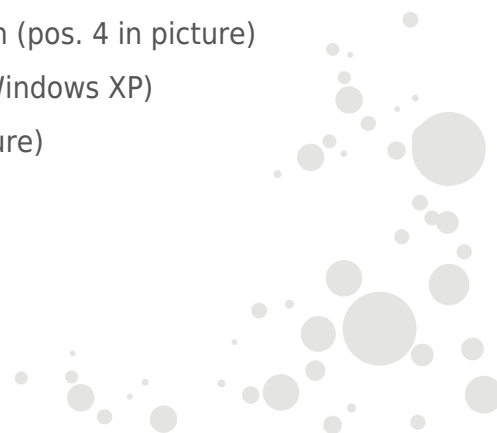
Technical data

Feature	Data/Specifications
Filtration Area	20 cm ²
Volume	380 cm ³
Filtration pressure p, abs	11 bar
Operation temperature	max. 120 °C
Height of filter cake	50 mm (on demand up to 100 mm)
Dimensions (W × L × H)	815 × 680 × 330 mm
Tempering	heated double jacket
Lid	quick-release lid with sight glass for quick test start (one-hand operation)
Bottom	bayonet lock (one-hand operation)
Compressed air connection	quick coupling
Material	SS316 stainless steel for wetted parts, SS304 for non-wetted parts

Auxiliaries

Supplementary equipment can be ordered separately and may be integrated subsequently into the basic version without any mechanical effort. The modular structure includes the following components:

- electronic filtrate measurement with scale
- electronic gas flow meter with a large measuring range (pos. 2 in picture)
(It is no longer necessary to estimate and preset gas consumption before starting the test)
- interface box for power supply of all components and for bundled data transfer via USB connection (pos. 3 in picture)
- electronic precision measuring gauge
- software for BoFilTest program for fast & safe data evaluation (pos. 4 in picture)
(compatible with current and older Windows versions up to Windows XP)
- hardware (PC or laptop) for BoFilTest software (pos. 4 in picture)



- lighting unit for the interior of the filter cell
- transport case
- other equipment/options such as
 - version in special materials
 - filter area reduction
 - cake height measurement device
 - cake washing device

Older versions of the portable filtration test equipment Filtratest can be upgraded to the current BoFilTest design using an upgrade kit consisting of 4 components (see picture):

1. base frame made of stainless steel hollow profiles including base plate and laptop holder
2. new electronic gas flow measurement device
3. interface box
4. software for BoFilTest program



