

Rapid Köthen

Sheet Former

Code: P.405.xxx

Usage

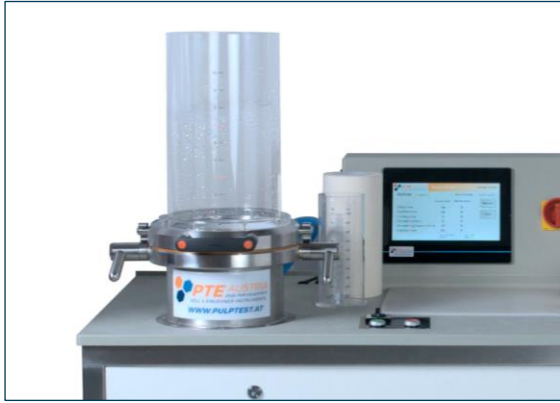
To prepare laboratory sheets of pulp for physical testing.

Applicable standards

- ISO 5269-2
- DIN 54358
- Zellcheming Merkblatt V/8/76



Rapid Köthen automatic model
with white water circulation & 3 dryers



Stabile Formersäule aus hochwertigem Akryl

Device Description

The Rapid Köthen Sheet Former is a precise and robust system for the production of laboratory sheets, integrated into a sturdy stainless-steel frame that ensures durability and reliability. Operation is conducted via a water-resistant touch display, offering intuitive and user-friendly control of the system.

The sheet-forming process can be fully automated, with the device independently carrying out the process steps. For more flexible applications, it is possible to switch to manual mode at any time. The C model additionally features a white water tank, enabling efficient reuse of process water.

The drying unit is designed to ensure uniform and rapid drying of laboratory sheets through precise temperature control and vacuum assistance. Each dryer can be individually controlled and is equipped with a timer and vacuum gauge to optimize process control.



Ergonomisch leichte Trocknerdeckel

Automatic Sheet Former (A)

This model offers automatic control of the entire sheet-forming process via the touch display. The times for individual process steps, such as stirring, resting phase, and dewatering, can be pre-set. A start button activates the automatic process sequence. For manual adjustments, a six-position switch allows switching to manual mode.

Automatic Sheet Former with White Water Circulation (C)

The RK-C model provides all the functions of the automatic sheet former, supplemented by a white water circulation system. The integrated white water tank allows easy storage of process water, which can be drained via a tap after several cycles or used for analysis.

Process Description

By pressing the start button, the former column is automatically filled with water. Once the water level reaches the 4-liter mark, you manually add the suspension. The water inflow automatically stops at the 7-liter mark, and the next step of the sheet-forming process begins.

In this phase, the suspension is mixed (stirring) according to the programmed parameters. This is followed by a brief settling phase, allowing the suspension to stabilize. The dewatering process is assisted by vacuum pressure, ensuring an even distribution of the material across the forming screen.

After dewatering is completed, you can easily open the former column using a special locking mechanism. The formed laboratory sheet is then couched together with a carrier board (P.405.V1) and the Merino sheep wool-covered couch roll.

The couched sheet is placed, along with a cover sheet, into one of the integrated dryers. The drying process occurs at temperatures between 94 and 97°C, supported by a water heating circulation system. Depending on the sheet's grammage, the laboratory sheet is dried within 5 to 10 minutes. The dryer uses vacuum pressure to ensure uniform drying and stable sheet formation.

Available models

Code	Control System	Dryers
P.405.A0	automatic	none
P.405.A1	automatic	1
P.405.A2	automatic	2
P.405.A3	automatic	3
P.405.A4	automatic	4
P.405.A5	automatic	5
P.405.C0	aut & white water	none
P.405.C1	aut & white water	1
P.405.C2	aut & white water	2
P.405.C3	aut & white water	3
P.405.C4	aut & white water	4
P.405.C5	aut & white water	5
For further information on customized devices, please contact your personal distributor or PTE Austria directly!		

Connections

- Voltage: 230 V, 50 Hz AC without dryer
400 V, 50 Hz AC with dryer
(other voltages on request possible)
- Compr. air: 400 – 600 kPa
- Water: tap water connection is required
- Drainage: Ø50 mm drainage pipe

Supply content

- 1x Rapid Köthen sheet former as per order
- 1x Support screen for former
- 1x Screen ring incl. support screen for former
- 1x Couch roll
- 1x Rubber plate
- 1x Replacement sealing set
- 1x Set of drainage hoses
- 1x Water connection hose
- 1x Air connection hose
- 1x Spare dryer membrane with screen fabric
- 1x Starter pack of carrier boards (1000 sheets)
- 1x Starter pack of cover sheets (1000 sheets)
- 1x Operating manual
- 1x Certificates

Specifications

Top Quality and Craftsmanship:	High-quality materials and precise manufacturing ensure outstanding performance and durability.
Corrosion-Resistant Materials:	Only corrosion-resistant materials are used for maximum longevity.
Easy Operation:	Intuitive control via a user-friendly touch display.
Semi-Automatic Process:	Partially automated operations with the option for manual control.
Vacuum-Assisted Dewatering:	Efficient dewatering of the sheet using vacuum technology for consistent results.
Pneumatic Swirling:	Even distribution of the suspension using pneumatic technology.
Manual Mode:	Switchable to manual operation at any time for flexible process adjustments.
Safety:	Easily accessible emergency stop button for safe operation.
RK C Modell:	
White Water Circulation System:	Integrated white water tank for storing and reusing process water.
Switchable Water Source:	Option to select between tap water and white water to enhance efficiency.
Sampling Tap:	Easy collection of white water for chemical analysis.
Dryer:	
Stainless Steel Construction:	Durable and resistant to corrosion.
Anodized Aluminum Lids:	Corrosion-resistant and lightweight for ergonomic handling.
Heating Circulation System:	Even heating through efficient water circulation.
Replaceable Membrane:	Flexible and easy to maintain for various applications.
Water Circulation:	3–6 L/min, compliant with international standards.
Temperature Control:	Adjustable up to 97°C (standard: 93–97°C) for optimal drying results.