

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



Rapid Köthen automatic model with white water circulation & 3 dryers



Stainless steel sheet former column



Stainless steel dryers

Device description

The Rapid Köthen device is built upon a warp resistant stainless steel frame. This robust base holds the pump, hot water boiler, suction chamber, etc. On the left side of the work table you can find the sheet forming column, the white-water tank and the white-water thermostat (C model only). The dryers are located on the right of the former column. They can be operated separately. You can find only a few important control switches on the work table in order to ensure work space for the transferring process between sheet former and dryer. Adjustments and setting for the automatic sheet forming process as well as parameters for the drying process can be controlled by using the touch screen located next to the dryer timers and gauges.

Automatic former (RK-A)

The automatic former is equipped with a touch screen panel on which all the times for each step can be adjusted. The device runs through these steps automatically upon pushing the start button. Additionally, it is equipped with a manual 6-position switch. The user can change from automatic to manual sheet forming any time.

Automatic former with white water circulation-system (RK-C)

The former with circulation water system is working just like the automatic former. But instead of draining the water to the drainage after sheet forming, the water can get stored in a separate tank by switching a button on the touch screen. When another sheet is formed, the stored water is used to fill the former-column. After a circle of several sheets, the stored water can be taken out by opening a tap on the side of the device and chemical analysis of the white-water can be done.

Drying process description

The Rapid Köthen Sheet Formers are equipped with up to five dryers. The temperature of 94–97 °C is reached due to a water circulation system. Each dryer can dry one hand sheet within 5 to 10 minutes depending on the grammage of the sheet. After the forming process, the sheet gets placed into an empty dryer. The dryer gets closed and the start button of that specific dryer is pushed. The vacuum pump starts to suck the air out of the dryer. Due to the vacuum in the dryer, the membrane lowers onto the sheet and applies pressure to it. After the preset time has passed, a sound signals the end of the drying process. By pressing the stop button, air is released into the dryer and the dryer-cover can be lifted. After taking out the sheet, the carrier board and the cover sheet are removed and the hand sheet can be further processed.



Sheet former column & white water tank



10" water resistant touch panel

Specifications for automatic model

- top quality and manufacturing
- built into a sturdy stainless steel frame
- former column made from stainless steel
- built-in water-resistant touch screen control panel
- fully automatic sheet forming
- additional 6-position switch to change to manual sheet forming at any time

Specifications for automatic model with white water circulation system

- top quality and manufacturing
- built into a sturdy stainless steel frame
- former column made from stainless steel
- built-in water-resistant touch screen control panel
- fully automatic sheet forming
- additional 6-position switch to change to manual sheet forming at any time
- white water tank for saving the water used for sheet forming
- switchable water source:
tap water or white water
- tap to take out white water for chemical analysis

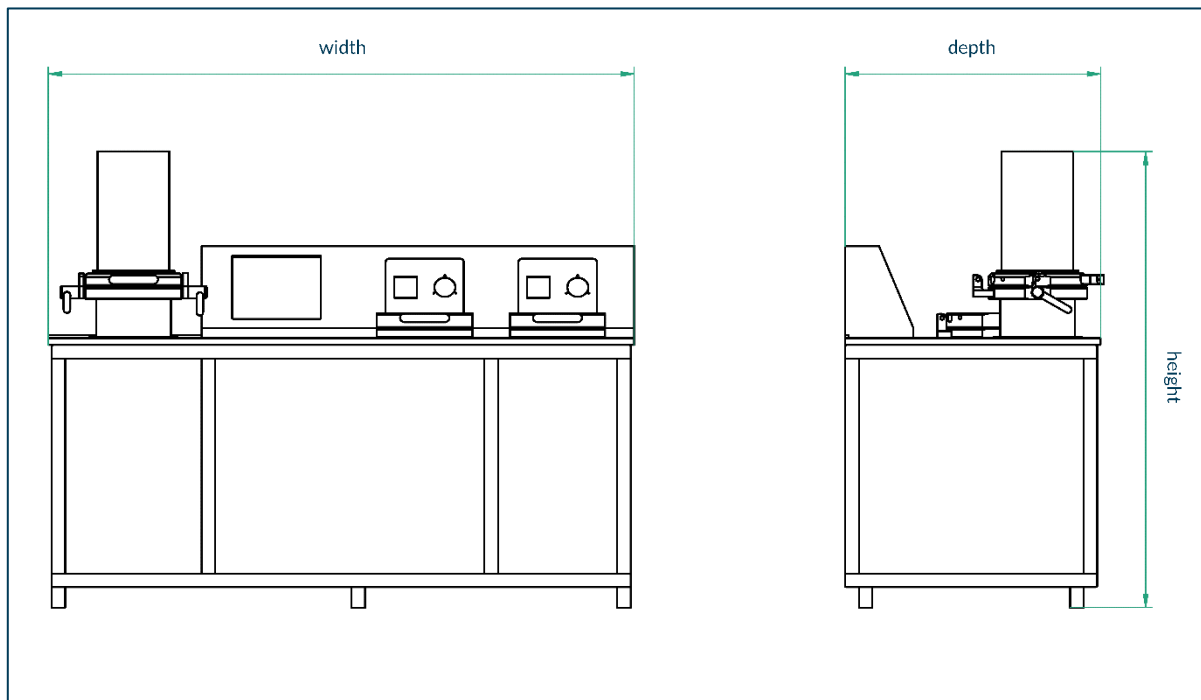
Specifications for dryer

- made of stainless steel
- heated by a heating water circulation system
- exchangeable membrane
- dryer water circulation of 3 – 6 l/min acc. to standards
- dryer water temperature (93 – 97°C acc. to standards); adjustable up to 97°C
- amount of hand sheets that can be done within an hour (depending on usage and grammage):

1 dryer:	up to 10 sheets/hour
2 dryers:	up to 20 sheets/hour
3 dryers:	up to 30 sheets/hour
4 dryers:	up to 40 sheets/hour
5 dryers:	up to 50 sheets/hour

Connections

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



Models

Code	Control System	Dryers	Dimensions net	Weight net
P.405.A0	A	none	1200 × 760 × 1377 mm	195 kg
P.405.A1	A	1	1333 × 760 × 1377 mm	275 kg
P.405.A2	A	2	1722 × 760 × 1377 mm	355 kg
P.405.A3	A	3	2111 × 760 × 1377 mm	435 kg
P.405.A4	A	4	2500 × 760 × 1377 mm	515 kg
P.405.A5	A	5	2899 × 760 × 1377 mm	595 kg
P.405.C0	C	none	1600 × 760 × 1377 mm	275 kg
P.405.C1	C	1	1722 × 760 × 1377 mm	355 kg
P.405.C2	C	2	2111 × 760 × 1377 mm	435 kg
P.405.C3	C	3	2500 × 760 × 1377 mm	515 kg
P.405.C4	C	4	2899 × 760 × 1377 mm	595 kg
P.405.C5	C	5	3288 × 760 × 1377 mm	675 kg

Control System: A = Automatic, C = Automatic with White Water Circulation

Customized devices are available!
For more information ask your personal distributor or PTE Austria directly!