

RAPID KÖTHEN SHEET MACHINE AUTOMATIC

For the production of standardized hand-sheets (Ø 200 mm)

- PLC-controlled process for automatic sheet-forming (Siemens Simatic)
- Process can also be carried out manually
- Strong stainless steel frame with waterproof polypropylene working top
- Lightweight dryer lids for easy handling
- Sufficient space on working top for handling sheets
- Simple push-button control to start/stop the drying process
- Drying time for standard handsheets 3 – 6 min)
- Optional white water system
- Optional dryers up to 145°C (standard is up to 97°C)



*RK4A-KWT
Sheet-machine with 4 Dryer,
Automatic with circulation Water system*

Applicable standards:

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



*RK2A-KWT
Sheet-machine with 2 Dryer,
Automatic with circulation Water system*

Description

The machine consists of a strong stainless steel table with a waterproof polypropylene working top, a built-in sheet-former, 1 to 5 dryers, a bronze-pump (2 in case of white water option), 1 or 2 water heaters, water reservoir, valves, control cabinet, etc. Just behind each dryer is a control panel with displays for vacuum, time and temperature; the start/stop buttons are just in front of it. The machine is built for fully automatic forming of handsheets and is easily operated by pressing the start button and adding the pulp suspension. The finished sheet is taken out after couching and placed in one of the dryers.

With a 4-dryer machine 40-50 sheets can be produced per hour.

Test description

After preparing the pulp sample the process is started by pushing the "Start" button. Water is pumped into the stock container. When the 4 litre mark is reached, the suspension is added and at the 7 litre mark the filling process stops. The suspension is automatically agitated with compressed air for 5 sec, and then 5 sec are allowed for the turbulence to cease. After automatic de-watering the sheet is finished and the former can be opened. A dry carrier board is placed on top and the couch roll applied. The sheet forming screen together with the wet sheet and carrier board is turned over and tapped onto the soft underlay which releases it from the screen. A cover sheet is placed on top of the wet sheet. Together they



*RK1A
Sheet-machine with 1 Dryer*



*RK5A
Sheet machine with 5 Dryer*



*RK3A-KWT
Sheet machine with 3 Dryer*



Dryer



Manual and automatic control



Temperature and vakuum Display

are placed in one of the dryers and the dryer lid is closed. By pressing the “Start” button the automatic drying cycle begins. A buzzer and a red light indicate the end of this cycle. The sheet is now ready for conditioning and subsequent testing.

Specifications

Manual version:

- Only manual cycle control

Automatic version:

- Automatic cycle control with 24 individual programs
- Manual cycle control with 6-position switch
- optional with white-water system

All versions:

- Special lightweight dryers
- 0 to 5 dryers
- Dryers are started with a single button
- Vacuum pump made of tin bronze
- Strong stainless steel frame with waterproof polypropylene working top and side covers
- Pump, water bath, control cabinet, valves, former and lightweight dryers easy to service
- all parts made of non-corrosive materials

OPTIONS:

WHITE WATER CIRCULATION SYSTEM:

- In this case the water is not drained but pumped into a separate acrylic glass cylinder and recycled. This version is mainly used in research to determine the accumulation of chemicals in the white water and those retained in the sheet. The white water can be heated (max. 75°C).

DRYER HEATING up to 145°C:

- In this case an oil-bath with silicon-oil is used to attain the required heat in the dryer
- Because of the use of silicon-oil all components have to be silicon-oil-proof. The materials are specially made for this purpose and therefore only Teflon-membranes can be used which are not according to standard.

Electricity	400 V, 50 Hz
Water supply	water (drinking water quality) min. 1 bar, Drain Ø 50 mm
Compressed air	400–600 kPa
Dimensions (WxDxH)	100–235x82x150 cm
Net weight	250–500 kg
Gross weight	300–600 kg