

No. 2540

Automatic pH/temperature control sheet machine

Paper making test needs water whose pH and temperature are constant. The effect of chemicals added to the specimen varies with pH and temperature. Both pH and temperature of feed water are detected by sensors, while sulfuric acid solution is automatically pumped in from the auxiliary tank, thereby supplying the specimen tank with water whose temperature is kept constant by steam circulation.

Paper making size: 158 mm in diameter, 200 cm²

Specimen tank size: 158 mm in diameter, 400 mm high

Feed water tank: 1000 ℓ, made of stainless steel

Humidifier: heat exchange tubes with steam

Heating limit: 65°C

With pulp pH control chemical injection valve

In-tank agitation: stationary agitator 200 W with 3 blades, 2 stages

Water temperature detection/control: electronic digital temperature controller, measurement range: 0 to 65.0°C, with over heat buzzer

pH detection: measurement range 0 to 14 pH

Chemical injection pump: electromagnetic constant-feed pump: discharge 45 ℓ/min.

Chemical injection tank: capacity 25 ℓ, made of polyethylene

Circulating water feed: magnetic 65 W, 2 units, discharge 45 ℓ/min.

Dimensions of paper making machine: 1175×820×1585 mm

Weight of paper making machine: about 190 kg

Tank dimensions: 1100 mm in inner diameter, 3 mm thick plate, overall height 1700 mm (not including agitator or cover)

Tank weight: 280 kg

Power source: 100/110 VAC 50/60Hz 13 A

Steam source: pressure 0.4 MPa



No. 2540

No. 2541

Round type sheet machine with automatic couching

Like the No.2545 standard sheet machine, this round type machine is used to make paper sheets, with entirely automated couching process. It alleviates workload and variation in the characteristics of handmade paper due to skill of operators. This labor-saving sheet machine is designed with solenoid valve or pneumatic ball valve for water feed and drainage, enabling easy operation with push buttons.

Plate diameter: 158 mm in diameter, 200 cm²

Drainage time (water): 4.0 ± 0.2 sec. $20^{\circ}\text{C} \pm 1^{\circ}\text{C}$

Couch roll: 105 mm in diameter, 180 mm long, weight 13 kg

Number of couching operations: 5 (1 to 9) by presetting electromagnetic counter

Couching speed: about 130 mm/second, by air cylinder speed control

Air source: 0.5 MPa

Power source: 100/110 VAC 50/60 Hz 3 A

Outer dimensions: 1300×850×1320 mm

Instrument weight: 310 kg



No. 2541

No. 2542

KRK pneumatic type standard sheet machine

The conventional paper handmaking needs much labor and time for agitation of pulp suspension liquid and couching of wet paper mat. KRK pneumatic standard sheet machine is easy to operate, with the paper making process intrinsically the same as those of the conventional paper handmaking. It features the use of air pressure for agitation of suspension liquid and couching of wet paper. The couching plate lined with rubber diaphragm on the lower surface is put on the wet mat, and pressurized with air to perform couching. Air blows through the copper pipe of the annular air stirrer, to agitate pulp suspension liquid.

Paper making equipment: main dimensions are the same as the No.2545.

Agitator: outer dimensions 120 mm in diameter, air pressure 0.05 MPa

Couching equipment: diaphragm effective diameter 191 mm, air pressure 0.05 MPa

Air source: 0.5MPa

Outer dimensions: 1100×750×1550 mm

Instrument weight: 127 kg



No. 2542

Experimental orientated sheet former

The pulp and paper industry has been confronted with diverse problems such as requirements for resource saving, energy saving, and environmentally friendly activities, as well as development of value added products. Much attention has been devoted to relationship with the practical paper making machine, retention of filler and chemicals, and high concentration paper making. We KRK have developed an orientated paper machine that can be used instead of the conventional handmaking sheet machine. It is capable of changing the paper orientation as desired. Operation principle: slurry of a certain concentration is sprayed through the nozzle onto the wire mesh with water wall, to form paper on the wire on the drum inner wall. With this machine you can make orientated paper sheets, and check the filler retention on the paper making machine with high accuracy and reproducibility.

<Features>

1. Making paper and paperboard of diverse physical properties and optical features.
2. Orientation of various kinds of paper and paperboard, correctness of MD/CD
3. Paper making with filler retention on the wire and felt ranging from 65 to 70 %
4. High concentration paper making available
5. Making of combined board
6. Measurement of the effect of retention improving agent
7. The type with automatic dehydrator can make high quality without inter-operator variation.

Paper making speed: 600 to 1700 m/min. (speed variation with inverter)

Paper making size: 180 mm wide, 750 mm long

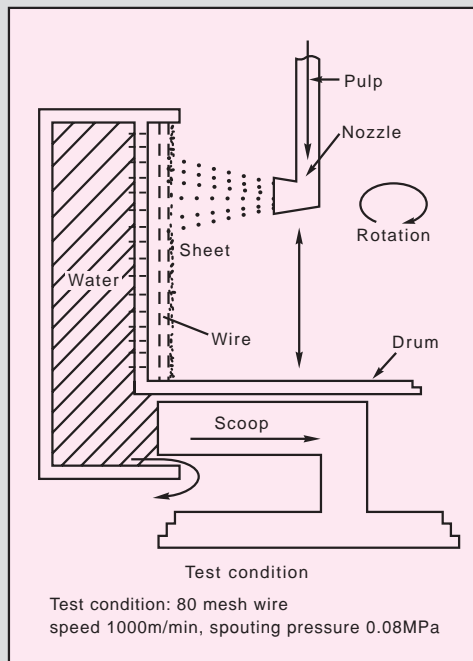
Motor: three-phase 200/220 VAC, 2.2 kW

Automatic dehydrator: optional

Power source: three-phase 200/220 VAC 50/60 Hz 10A

Outer dimensions: 1550×1000×1500 mm

Instrument weight: 708 kg





No. 2548

No. 2548

Labor-saving type standard sheet machine

This is an improved version of the standard sheet machine, for alleviating workload of the operator for couching. The couch roll is placed behind the water cylinder of sheet machine. It is taken out before couching. Press the roll to vertically move it by the function of an air cylinder. The roll is slowly placed down on the wet mat. At the end of the paper making, the roll is returned to the storage. Since it is not necessary to lift the couch roll by hand, it is very effective to prepare many sheets.

Paper making size: 158 mm in diameter, 200 cm²

Wire cloth: upper 150 mesh or 80 mesh, of bronze
lower 20 mesh, of bronze

Drainage time (water): 4.0±0.2 seconds, 20°C±1°C

Standard accessories: agitator, couch roll, couch plate, drainage receiver, mounting support

Referential standards: JIS P-8222-1998, ISO 5269/1, TAPPI T205om-88, TAPPI T-221om-81

Power source: 100/110 VAC 50/60 Hz 3A

Air source: 0.5MPa

Outer dimensions: 1000×750×1340 mm (with support)

Instrument weight: 155 kg



No. 2550

No. 2550

Large-size round sheet machine

The sheet made by the standard sheet machine is too small for property tests. This machine can prepare larger paper sheets. The forming performance is very excellent as with the standard machine. We also supply compression and drying device necessary for conditioning of paper sheets.

<Features>

1. Paper making area (415 cm²) larger than that of the standard sheet machine (200 cm²), enabling more effective sample preparation with less waste.
2. With larger capacity of the cylinder below the wire cloth and larger discharge pipe, suction power is increased, thereby producing high quality sheets.

Paper making size: 230 mm in diameter, 415 cm²

Accessories: couch roll, couch plate, agitator, discharge receiver, cylinder rest

Optional: mounting support

Outer dimensions: 1000×800×1380 mm (with support)

Instrument weight: 92 kg (with support)