Code: **P95586, P95587, P95588**

SCHOPPER-RIEGLER FREENESS TESTER

For the determination of the degree of refining (beating) of a pulp suspension in water and expressing it in terms of the Schopper-Riegler (SR) number, and to determine the de-watering time

- Completely made of stainless steel materials
- 5 models available:
  - Mechanical
  - Pneumatic
  - Digital: Electronic determination of results with digital display and data transfer (pneumatic lifting)
  - U-shaped stand for the direct use of a balance under the measuring cylinder (optionally for all models available)
  - Drainage chamber with bayonet fixing of wire screen
- Single-button control (meets the safety requirements)

P95588: *Schopper-Riegler Freeness Tester, digital version*

Applicable standards:
ISO 5267-1
Scan C 19 M3
BS 6035/1
etc

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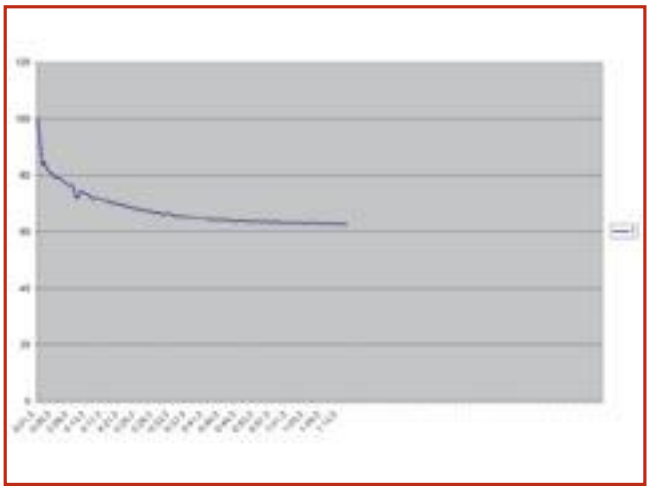
P95587: *Pneumatic version,* ***P95586:*** *manual version*



P95588: *Drainage graph of electronic model*

Electricity	230 V, 50 Hz (digital version only)
Water supply	None
Compressed air	400-600 kPa (not applicable for mech. lifting weights)
Dimensions (WxDxH)	38x35x87 cm
Net weight	32 kg
Gross weight	42 kg

Description

Mechanical model:
As pneumatic model, but sealing cone is lifted by built-in weights.

Pneumatic model:
As above, but without display and sensor.

Digital model:
The Schopper-Riegler apparatus measures the degree of work done on the fibres during stock preparation (refining) and is therefore a primary tool in the evaluation of the characteristics of pulp. The apparatus consists of a drainage chamber and rate measuring funnel on a sturdy support. The drainage chamber is fitted with a wire screen (100 cm^2) at its lower end and is sealed 25 mm above the screen when the sealing cone is lowered. After filling 1 litre of suspension into the drainage chamber the sealing cone is raised pneumatically. As the filtrate drains into the rate measuring funnel a fibre pad is formed on the screen, slowing down the process depending on the mechanical treatment to which the pulp has been subjected. The discharge from the side orifice is collected in a graduated cylinder, measured by an ultrasonic sensor and the result displayed digitally.

Test description

The funnel and drainage chamber of the Schopper-Riegler apparatus are cleaned thoroughly and finally rinsed with water. The drainage chamber is placed in the seat of the funnel. The temperature of the apparatus is adjusted by rinsing it with water at 20.0 ± 0.5 °C. The sealing cone is closed by pressing "stop" and the SR measuring cylinder is positioned beneath the side orifice. Whilst stirring, 1,000 ml ± 5 ml of homogeneous pulp suspension is transferred to a clean measuring cylinder. The sample is mixed by closing the top of the cylinder by hand and turning it end-over-end for two cycles. Care should be taken not to introduce air into the stock at this stage. The sample is poured rapidly but smoothly into the drainage chamber. The sealing cone is raised 5 sec after all the pulp suspension has been added. When no more water drips from the side orifice, the SR number on the display is read to the nearest unit.

Specifications

P59588, digital version:
- Digital display for °SR and 4 de-watering periods,
- Pneumatic lifting
- Ultrasonic sensor, RS-232 interface, software and cable
- All non-corrosive materials
- Drainage chamber, funnel, and orifices made of 316 stainless steel
- 2 SR-cylinders, tool for easy wire screen change

P59587, pneumatic version: without display, cable and software
P95586, mechanical version: as pneumatic, but with mechanical lifting weights