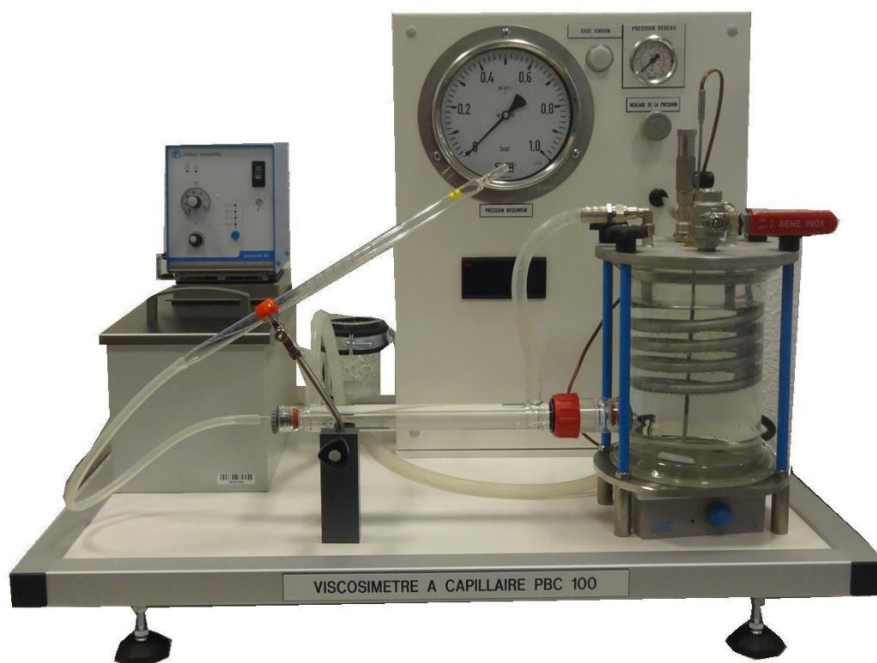


CAPILLARY VISCOMETER



Experimental capabilities

- From the measurements of flow rate and pressure losses in the capillary, the viscometer allows:
- To study the Poiseuille flow
- To study a liquid of known viscosity
- Precisely determining the radius of the capillary tubes
- To measure the dynamic viscosity of a liquid and to study its variation based on the temperature

PBC100



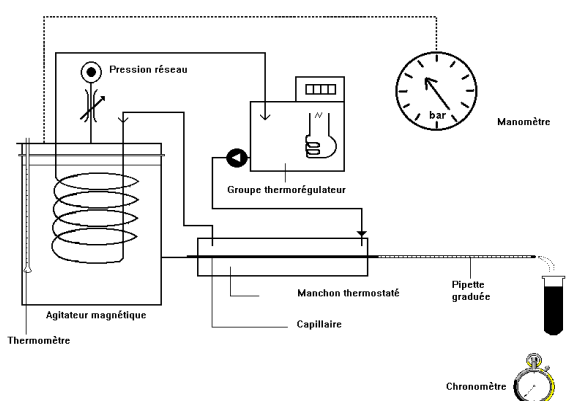
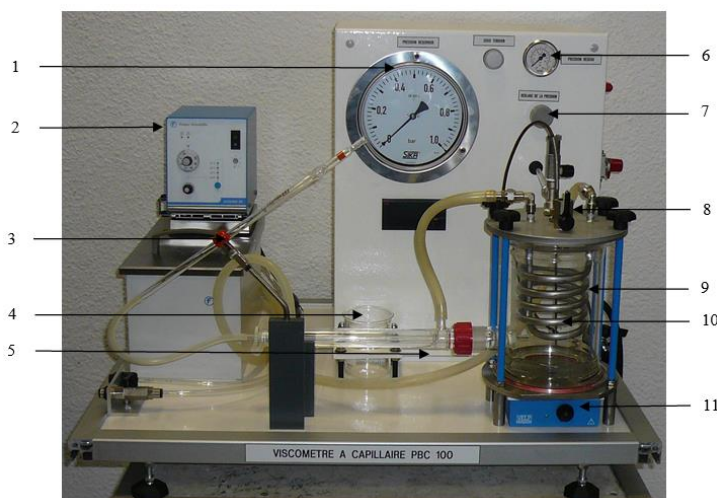
Principle of operation

The PBC 100 bench allows for typical tests of the study of the viscosity. The bench allows to study the flows of POISEUILLE and accurately measure the dynamic viscosities of liquids, kept at constant temperature, from the reading of a pressure and a measured time. The liquid whose flow is studied is placed in a detachable pressurizable thermostatic enclosure that feeds a capillary tube, also thermostatic. One can continuously vary the pressure of the pressurization of the enclosure as well as the temperature of the studied liquid that we constantly stirred to ensure the homogeneity. The capillary tube is also removable.

The robust design of this equipment makes it perfectly suited for use in schools. Its anodized aluminum structure on wheels makes it extremely robust as well as great flexibility of integration into your premises. The manufacturing of this equipment meets the European machine directive.

Illustrations

Technical specifications



- 1. Manometer with calibrated scale**
Pressure in enclosure : 0-1 bar
 - 2. Thermostatic bath**
Capacity : 5L
Power: 2000 W
Setting of +25°C to 100°C
 - 3. Graduated pipettes with bracket**
Volume : 10mL and 20 mL
 - 4. Beaker for recovery**
 - 5. Capillary tube with thermostatic sleeve**
 $\varnothing=0,2\text{mm}$, $\varnothing=0,4\text{mm}$, Length = 400 mm
 - 6. Manometer of the network of compressed air**
Scale 0-10 bars
 - 7. Pressure regulating valve in the enclosure**
 - 8. Filling valve or venting**
 - 9. Pressurized glass container**
The presence of a safety valve
 - 10. Exchanger by coil**
Allows the heating of the liquid in the enclosure
 - 11. Magnetic stirrer**
Magnetic bar
- Enclosure temperature display**
Thermocouple of type T
Digital stopwatch for time measurement

Services required

Documentation

- Power supply : 230 VAC – 50Hz – 20 A
- Supply in compressed air: 3 bars
- Dimensions: (LxWxH mm): 760 x 605 x 590
- weight (Kg): 45

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Lab exercises
- Certificate of conformity CE

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

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As part of the continuous improvement of our products, this technical specification may be modified without previous notifying

Illustrations non contractuelles / Illustrations not contractual

version : FT-PBC100-STD-C