Viscometer

station or semi-automatic system

Code: A.913.xxx

Usage

To determine the intrinsic viscosity of pulps with cupri-ethylenediamine (CED) solution.

Applicable standards

- ISO 5351

Viscometer semi-automatic system with PC and analytical balance

Viscometer test station

Viscometer semi-automatic system

The *PTE Austria* semi-automatic Viscometer is a computer-controlled system for testing three samples at the same time. This system comes with a Viscomat II with three capillary tubes, a heating/ cooling bath which regulates the temperature of the sample solutions and the capillary tubes simultaneously and an analytical balance.

Process description

The weight of the cellulose pulp is determined with the analytical balance and automatically transferred to the measurement program. Then the cellulose is dissolved in a water and CED solution and its temperature controlled to 25°C in the thermostatic bath. The plastic bottle with the solution inside is put under the viscometer tube and connected to it. By opening a valve, the CED solution is sucked into the viscometer tube and stops over the higher mark of the tube. Now the test starts by reaching the upper mark and stops when reaching the lower mark of the viscometer tube. The time for this is measured and the data transferred into the software where the values are calculated.

Delivery content

- PC system with software
- automatic detection of up to three samples
- thermostatic water bath to reach exactly 25 ± 0,1°C
- three glass viscometers and one extra for calibration purposes
- analytical balance connected to the PC
- built in suction pump
- user manual

Connections

- Electricity: 110 - 230V, 50/60 Hz AC

Viscometer test station

The *PTE Austria* viscometer test station consists of a glass viscometer stand with a tubing tool for the vacuum suction, a shaking plate with sample bottles, a thermostatic bath with heating and cooling functions and a stop watch.

Process description

A CED solution is prepared with help of the shaker as described in the standard ISO 5351:2010. The plastic bottles with the prepared solution inside are ready for testing as soon as thermostatic bath has reached exactly 25°C. Take one of the bottles and suck the solution into the glass viscometer tube with the semi-automatic drip pipette. To calculate the value, it is necessary to rinse the solution from the top to the bottom point of the capillary tube and to measure the time of this process with the stop watch.

Delivery content

- thermostatic water bath with heating and cooling possibility to reach exact 25 ± 0.1°C
- shaker with 30 bottles
- stand with holder for glass viscometer
- one glass viscometer for determining
- one glass viscometer for calibration
- suction tool
- user manual

Connections

- Electricity: 110 - 230V, 50/60 Hz AC

Models

Code	Article
A.913.100	Viscometer test station
A.913.300	Viscometer semi-automatic system