## FRET

## **INNOVATION FOR PAPER - FORMATION RETENTION TESTER**

The FRET is specifically designed for investigative testing of additive influences on pulp quality. The FRET (retention tester) is an ideal and unique tool for controlling and setting up new chemicals, testing new wires, identifying additive problems and developing new paper products.

This automated system offers a tight control on suspension shearing consistency, additive contact time optimization and drainage conditions. Because of this, the FRET produces sheets that have technical characteristics closely related to those of industrial paper.

A typical FRET test output yields a handsheet, the white water and the drainage vacuum curve for study.

## PRINCIPLE

The upper tank of the retention tester is designed for complete pulp shearing and offers an ideal point for manual or automatic additive injection and mixing under industrial conditions with regards to strength and time.

This upper tank, also known as the first stage, simulates the feed circuits of a typical paper machine :

- The suspension is then transferred in the formation tank.

- After a rapid homogenization of the suspension using air blown through the wire, a strong vacuum is introduced on the pulp to drain the sheet of excess water.

- A vacuum curve is calculated on the drainage time and pressure. This second stage simulates the head box, table and the drainage part of the paper machine.

- The lower tank can be opened to recover the sheet.
- White water is totally retained in a jar inside the Fret for analysis or recycling.





## **TECHPAP SAS**

BP 251 - 38044 Grenoble cedex 9 - France Tél. +33 (0)4 76 51 74 75 - Fax +33 (0)4 76 42 05 04 www.techpap.com - techinfo@techpap.com

