



## Techpap SAS

Always on the run for high visibility TECHPAP attended various shows throughout the world this autumn :

- ATIP grenoble (end of october)
- PapFor Russia (end of october)
- Paperplus Chennai India (november)
- Marocco Colloquium (november)

Techpap Mother company CTP was awarded the **Palme d'Or for the 3D- Stick Sensor** :  
" A breakthrough to characterise the stickies in three dimensions" during ATIP 2014

Paperplus in Chennai was a very active exhibition with several interesting contacts. In addition Thierry de la Goutte (CTP) was presenting the new development of the 3D stick at the conference meeting.

Following up on Newsletter 002, let's focus this time on another interesting application for our ever successful MORFI COMPACT device :

## Morfi Compact and Fiber Analysis in Reconstituted Tobacco

Reconstituted tobacco range between 5 to 10 % or more inside the cigarette. It is made out of tree barks, tobacco leave branches, reprocessed materials, and some long fibers such as cotton, softwood fibers, linen etc to provide strength on the paper web.

Apart from the long fibers, most other raw materials are usually in large pieces and require significant amount of refining before obtaining usable fibers for the sheet, however, the complexity of the materials can be difficult for the paper maker to predict what is coming through the process.

Morfi compact allows large chunks of fibers coming through without clogging the cell, and the interests of measure starts as soon as the first stage of refining, then continues onto the second stage, third stage of refining, mixing tank, headbox, and it does not stop there : monitoring the incoming long fiber source is as important as others, changes in long fiber length often creates sheet breaks on the machine.

Throughout the process, it is important to look at the increase of the defibering amount, short pieces of fibers are released after each stage of refining, these short fibers either categorized as fibers or fines will contribute to the fiber network forming, paper machine retention, drainage. This is represented by the fiber length, width and fines changes.

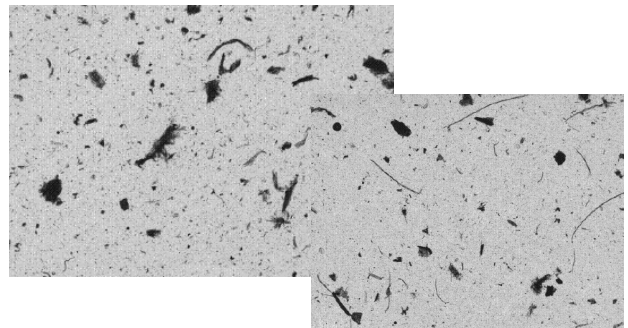
Under each stage of refining, the amount of refining is indicated by the Macrofibrillation%, measured by the length of macrofibrills over total length of fiber and macrofibrills. It is an essential indicator for the paper maker to know at which stage the fibers are at, and whether greater or less refining energy is needed, or maybe if there is an issue with the refiner plates.

**Curl measurement.** Curl, believe or not, it is related to fiber network strength and formation, it is as important to know the curl% as the macrofibrillation%.

**Shive measurement .** The MorFi Compact allows paper maker to know the changes in large chunk of fibers (usually larger than 75 micron), if they are reacting to refining processes.

MorFi Compact allows the paper maker to have an overall picture of the most important ingredient – fiber in the process, it enables the control of paper machine stability, continuity.

Successful installations include : Philp Morris in Switzerland, Schweitzer Mauduit, China Tobacco YuXi mill, HuBei Wuhan Tobacco, TaiCang tobacco, GuangDong JinYe tobacco, XiaMen tobacco, HuNan Tobacco, HangZhou LiQun Recon Tobacco, Fujian LuoYuan Tobacco, JiangSu XingYuan Tobacco.



fibers images using MorFi



Paper Plus CHENNAI



### TEHPAP SAS

CS 90251 - 38044 Grenoble cedex 9

Tél. +33 (0)4 76 51 74 75 - Fax +33 (0)4 76 42 05 04

[www.techpap.com](http://www.techpap.com) - [techinfo@techpap.com](mailto:techinfo@techpap.com)