

# Process Analysis

## (Packaging Value Chain)

September 2009

### Process Analysis, methods for assessment of products and processes in the packaging value chain

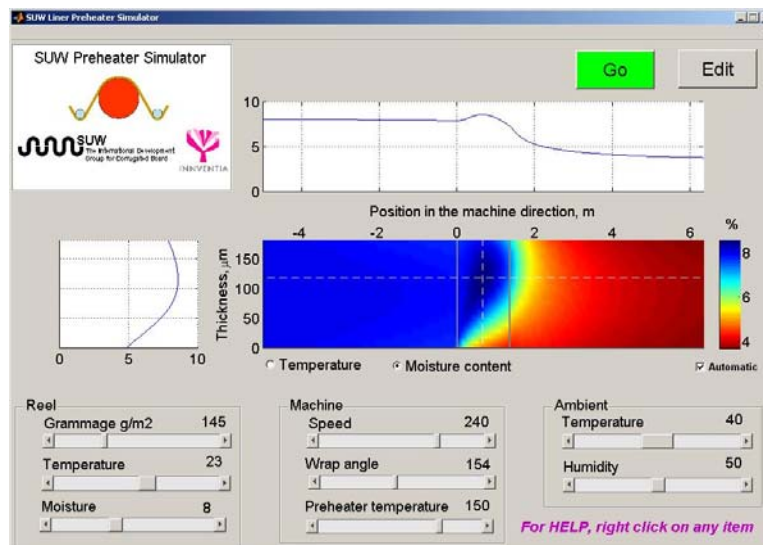
Innventia is working along the entire wood-pulp-paper/board-packaging value chain to assess product quality and to optimise production processes. Methods originating from Innventia are used for controlling and assessing the product quality from paper and board machines.

In converting processes there is often a need to secure the quality, and understand the variations, of the incoming raw material (not the least in terms of machine direction and cross direction variations).

Production processes utilise sensors and control algorithms where the functionality often can be further optimised. Data-logging systems provides huge amounts of data, but to extract the true “information” from the data can often be quite demanding.

Innventia has the resources to support your activities in the field of process analysis in several ways, such as...

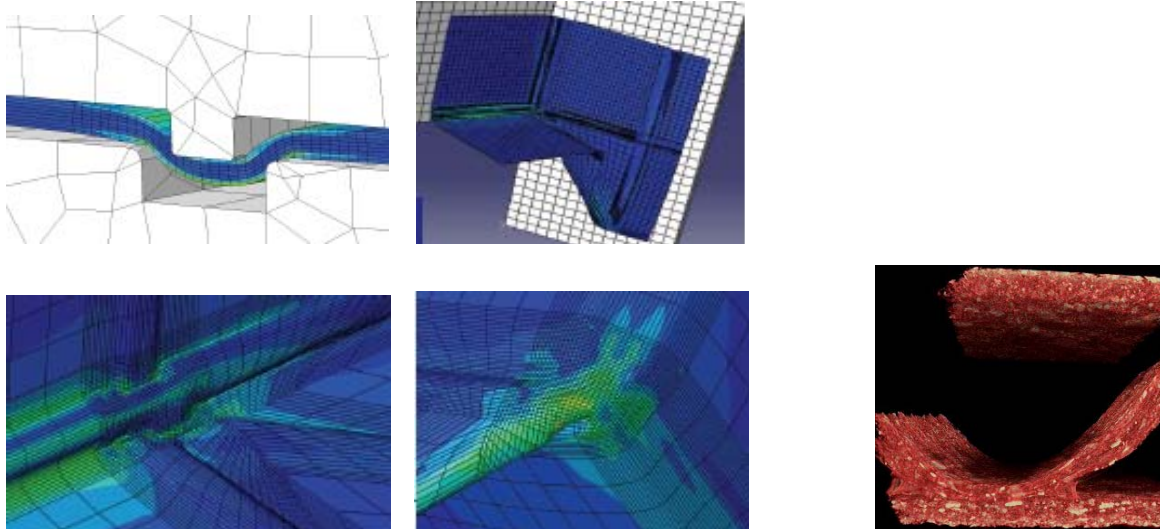
- When there is a sensor/analyser which data is not fully appreciated and therefore sits more or less” on standby”.
- When you have need for development, or a have recurring process disturbance, but find it hard to find the professional support to deal with it in a timely order.
- When you have a potentially valuable product or process improvement idea, but where additional professional knowledge and experience is needed for implementation.



*The SUW Preheater Simulator, developed by Innventia for SUW (Skandinaviska utvecklingsgruppen för Wellpapp, The Scandinavian group for development of corrugated material). [Image courtesy of Birger Edholm, Innventia]*

Innventia's pool of knowledge and experience include...

- Data analysis using common tools such as Excel and Matlab
- Design and execution of experiments in a process line, or within Innventia's pool of laboratory and pilot scale equipment
- Verifying the functionality of measuring instruments and analysers and optimising production processes
- Modelling and simulation of products and processes



*Examples from folding and creasing models which are used for improving the raw material and/or the converting processes. [Images courtesy of Mikael Nygård, Innventia]*

*3-D microtomograph from corrugated board [Lars Olsson, Innventia]*

In a typical Process Analysis Project **You** own the project and Innventia provides professional experience and complementary knowledge thereby allowing you to fine tune your group's knowledge profile by adding specific knowledge and experience on a project-by-project basis.

Every project is of course unique and customer oriented. A project can take on many forms such as...

- You can send data, or samples, to Innventia for evaluation
- Innventia can design and perform test runs, in the process of interest, or at Innventia's own pilot equipment
- Innventia can bring people, sensors (i.e. a high speed temperature camera, delamination sensor, moisture profiling equipment) or other equipment to the plant for assessing raw material/process/product data.

## Contact

For an open-ended discussion about "Boosting business with Science" and your particular issues, please contact...:

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