

# MiTA; A flashlight in your black-box



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MiTA; A flashlight in your black-box, 7<sup>th</sup> April 2004

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# Coldenhove Paper; Passion for paper



- Since 1661, private company, located in Eerbeek
- 130 Employees
- Duplex paper machine (250cm width, 50 – 200 gsm)
- Single wire paper machine (350cm width, 45 – 120 gsm)
- Laminating machine (167cm width, boards up to 480 gsm)
- Specials in technical paper and board
- Production capacity 30,000 ton / year
- 3 shifts



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# Why MiTA?



- Possibility to measure at different positions
  - Change of position during operation
- Can be used in both paper machines
- Single Side measurement
- Flexibility in choice of sensor



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# MiTA



MiTA stands for:

Multiple  
applicable  
Traversing and  
Analyser Unit

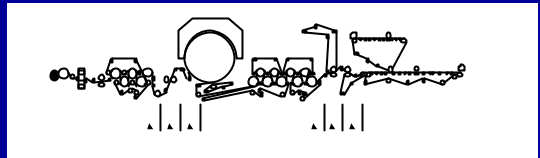


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# The MiTA at Coldenhove



PM1: measuring positions



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## The MITA at Coldenrove

- Possibility to measure at different positions
  - Change of position during operation
- Traversing and analysing unit, width 3.5 m
  - Applicable in both machines
- NDC moisture sensor IG710
  - Near Infrared sensor
- Moveable computer
  - possibilities for connection to mill network



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## Problems to be solved

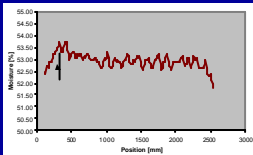
- Curved edges
  - Laminated paper
  - Problem can be simulated during test
  - No solution found yet
- Short running time second press
- During production
  - Decrease changing times between products
  - Optimize quality of the products
  - Produce at constant quality
- Pinpoint the location of problems
- Track changes in the process



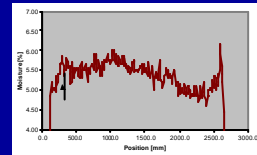
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## Pinpointing the location of problems



Moisture profile after second press  
Measured by MITA



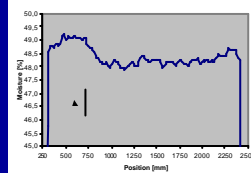
Moisture profile after drying  
Measured by Measurix



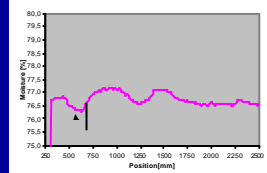
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## Pinpointing the location of problems



Moisture profile after second press  
Measured by MITA



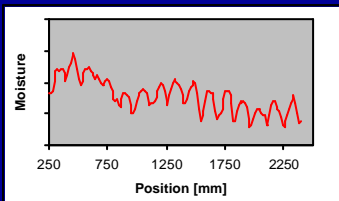
Moisture profile after wire section  
Measured by MITA



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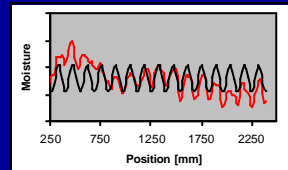
## Pinpointing of problems



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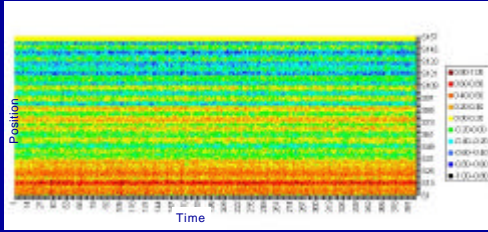


## Pinpointing of problems



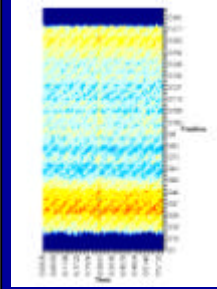
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### Moisture profile in time after second press

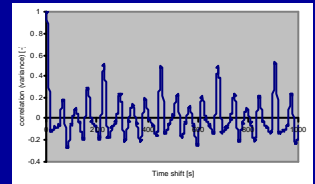


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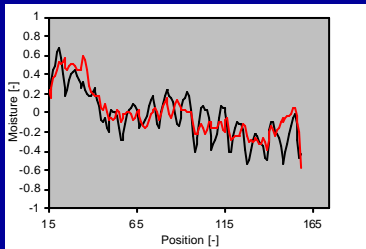
### Recurrent moisture content after second press



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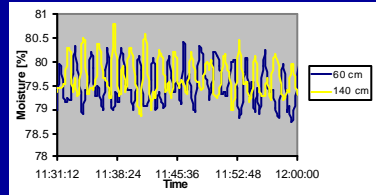


### Running time of second press: Profile before (black) and after (red) change in configuration of the press section



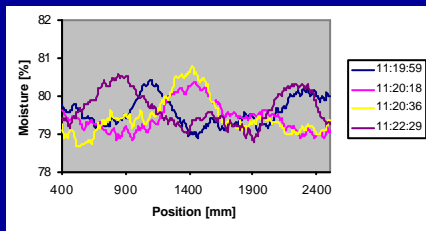
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### Stationary or traversing: Change of moisture content in time at a fixed position after wire section



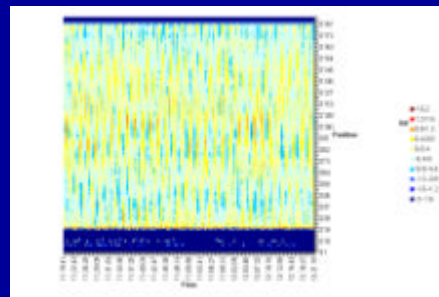
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### Stationary or traversing: Moisture profile after the wire section



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### Recurrent moisture profile after wire section



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## Experiences and Wishes



- Reliability (after 5 months)
  - Continuous performance
    - Blown Fuse (once)
    - Difficult startup (once)
  - Little fouling of sensor
    - without air purch
- Good acceptance in Mill



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## Experience and Wishes



- Ease of operation
  - Quicker change of measuring device during operation, click on Sensor
  - Easier format to export data (.xls?)
  - Eliminate condensation on outer beam
  - Optimisation of web-end detection



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## Intended use of MiTA in near future



- Analyse curling problem by measuring at all positions
- Coating yield measurement
- Use in laminating machine
- Continuous use in PM1 after second press (if not otherwise engaged)



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