From Sorting to Inspection

Need to speak with reliable data!
Need to speak with reliable data!

A simple example
Need to speak with reliable data! - A simple example

A box in a corner
Need to speak with reliable data! - A simple example

What’s happen if we see from another perspective?
Need to speak with reliable data! - A simple example

Imagine what it could be in real life, in a complex process!

“Beware of perception, of interpretation“

To fully master a complex process

**Need for real and reliable data!**

Same drawing, three interpretations !!!
From Sorting to Inspection

Need to speak with reliable data!
Mastering the drying process - A real industry challenge

If I could know what’s really coming in.

If I could really know what’s really coming out.

Total non quality, can be as high as 20 to 35%

Need to speak with reliable data!
Overall performance of the industry according to

Need for a new approach

Continuous improvement

Need for a **breakthrough**!
The 3Delta system
Accurate data for the real control of the drying process
The 3Delta system

- **8 years** of development,
- **A new approach:**
  - definition of the “Dryability profile” of **each piece**,  
  - No segregation of species,
- Process “Input and output” accurate data’s,
- Installed **in the line**, up to **250 pieces per minute**.

A proven answer in mastering the drying process
The 3Delta system

- Multi points readings at 24" and 60" from one end,
- Automatic correction to the SPF-COFI table or other,
- Constant verification of good communication with the central system,
- Automatic self calibration,

- More than one year of experience on site,
- Performance confirmed by Forintek,

A proven answer in mastering the drying process
The 3Delta system

Proven on site reliability
A real improvement in mastering the drying process
The 3Delta system

1. More homogenous drying lots
   - More “fast dry” wood

2. Reduced drying time

3. Quality up-grading
   - Output increase

Accurate data’s, independent from the mix, the period of the year, etc.
What differentiates the 3Delta Systems from other technologies?

- A new approach;
  - Definition of the “Dryability profile” of each piece.
  - No need to differentiate species

- Real measures for each pieces in multiple locations.
  - Accurate and reliable data’s
    (No interpretation, no extrapolation)
  - Real time input-output data management
    (At Sorter and Planner)
  - A real and reliable process management tool

3Delta: For a real and accurate process control
Let’s speak with data!

3Delta confirmed performance
3Delta performance audited by Forintek

December 2006. (Forintek test report #690-5642)

<table>
<thead>
<tr>
<th></th>
<th>Without 3Delta</th>
<th>With 3Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast drying volume</td>
<td>25%</td>
<td>38%</td>
</tr>
<tr>
<td>Average humidity</td>
<td>14.2%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>5.14</td>
<td>4.31%</td>
</tr>
</tbody>
</table>

Confirmed potential benefits of >15%
Experience in GDS Matane, Canada.

One year Experience

Estimated savings of more than 1,2MS per year

<table>
<thead>
<tr>
<th></th>
<th>With 3Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of pieces</td>
<td>14 178 618</td>
</tr>
<tr>
<td>Too dry &lt; 9%</td>
<td>3.31%</td>
</tr>
<tr>
<td>Too wet &gt; 19%</td>
<td>11.52%</td>
</tr>
<tr>
<td>Average humidity</td>
<td>14.12%</td>
</tr>
</tbody>
</table>
The benefits for your mill
The potential benefits for your mill (typical)

The real mastering of the drying process
The potential benefits for your mill (typical)

- Important reduction of “too dry” (up to -75
- Important reduction of “too wet” (up to -33
- Quality upgrading
- Energy savings (- 10%)
- Reduction of manpower at sorting
- Increased output (+10% to 30%)
- Postponement of heavy investment (kiln)

Real mastering of the drying process - Important savings
The potential benefits for your mill (typical)

<table>
<thead>
<tr>
<th>Category</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
<td>US$7,00 to 15,00 / Mbf</td>
</tr>
<tr>
<td></td>
<td>Ex: for a 100000Mbf sawmill $700,000 to 1,5 M$ / year</td>
</tr>
<tr>
<td>Energy</td>
<td>Reduction by more than 10%</td>
</tr>
<tr>
<td>Sawmill output</td>
<td>Increase by more than 10%</td>
</tr>
<tr>
<td>ROI</td>
<td>Less than 6 months</td>
</tr>
</tbody>
</table>

Rapid return and benefits
Conclusion
Let’s master your drying process

3Delta: a real breakthrough for the industry
Steps to your 3Delta project
Steps to your 3Delta project

1. Definition of your “Sawmill profile”.  
   (You complete a sawmill profile data sheet)

2. We estimate your potential benefits and ROI.

3. We agree on benefits data sheet.  
   (your project justification data’s)

4. Site test validation can be done on demand  
   (with mobile unit: commercial conditions to be discussed)

5. Turn key installation, delivery time: 3 months

3Delta: Our proud contribution to your success