COMPLEXITY OF DAILY YIELD CALCULATIONS

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TIMES THEY ARE A CHANGING
Milking Cows Circa 1980

- Median herd size 40 cows
- 12 min per cow
- 3 milking units
- 3 hours per milking

Today’s Environment

- Groups of 225-250 cows
- 4-5 turns per hour
- Limit of 24 hours a day
“A PINT’S A POUND THE WORLD AROUND”

Elements Affecting Yield Calculations

- Equipment
- Software
- People
- Equations
MASTER OF MANY...

pail&scale
basement
in-place  rotary
hoses  Afimilk  Inline
certified  calibrations
EMM
VentedInflations
Sensors  ROBOTS
analog  vacuum  parallel
wide-bore
Meters  portable
"IT’S ONLY MATH..."

Start with Correct Parameters

- Times milked per day
- Milking times by pen
- Pen structures
- Tank totals and transport frequency

Unknown Influences

- Feeding times
- Ration changes
- Weather influences
- Random “whatevers”
# ParlorComp Overview

## Parlor Status

<table>
<thead>
<tr>
<th>Parlor Status</th>
<th>Current Shift</th>
<th>Current Pen</th>
<th>Current Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>1</td>
<td>4</td>
<td>65.00 GPM</td>
</tr>
</tbody>
</table>

### Cows in Pen
- 289

### Current Pen Total Milk
- 2850.00 GAL

### Current Shift Total Milk
- 28500.00 GAL

### Current Temp
- 145.90 °F

### Temp Alarm
- None

### Total Time
- 0 MIN

### Sec/Stall
- 97

## Last Rotary Data

<table>
<thead>
<tr>
<th>Rotary</th>
<th>Mins/ Turn</th>
<th>Sec/Stall</th>
<th>Cows/ Hour</th>
<th>Turns/ Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fastest</td>
<td>9</td>
<td>8.2</td>
<td>441.0</td>
<td>6.1</td>
</tr>
<tr>
<td>Average</td>
<td>9</td>
<td>7.8</td>
<td>460.0</td>
<td>6.4</td>
</tr>
<tr>
<td>Effective</td>
<td>11</td>
<td>6.7</td>
<td>372.0</td>
<td>5.2</td>
</tr>
</tbody>
</table>
UNDERSTANDING SOFTWARE INTEGRATIONS

- EID system is functioning
- Consistency of data
  - Measurements
  - Calculations
- Archived data patterns
People Make the Difference!

- Professional Expertise
- Proper Training
- SOPs
- Adaptation
- Interpretation
- Continuous Education
WE MUST ADAPT

- Take better advantage of technologies
- Prioritize development of new methods and different QC
  Herd level, pen level, cow level
- Faster implementation
- Improved educational resources
Thank You!

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