Lean Management Systems
Driving Performance

Jon Harry
Vice President Organizational Excellence
Our Purpose...

Systems Control designs and manufactures engineered solutions that enable the reliable delivery of energy to the world. Continuously improving and learning as individuals and as a company is a core value.
What is a Yooper?
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Our Two Value Streams

Panels

Equipment
Enclosures
Fast Facts...

- 675 employees
- 270,000 square feet
- Union Workforce in Factory
- Privately held
- 56 years old
Our Lean Story…

• Our beginning
• Lean as we matured
• Lean in the future
• Our results
• Some takeaways
Lean in the Beginning
Learning the Tools

Lean Tools at Systems Control

- Standard Work
- Value Stream Mapping
- 5S
- The 8 Wastes
- Kaizen Events
- Visual Management
- Daily Kaizen “My Idea”
- Practical Problem Solving

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Our first year with Lean

- 36 RI Events, VSM’s, 5S and the other tools
- N/10
The Events were powerful...

- Got results
- Built momentum and buy-in
- Our people knew the tools of Lean
The Value of Kaizen Events...

• Intensity
• Learning
• Leadership Development
• Culture
• Find your “Warriors”
My IDEA System, beyond Events

MY IDEA GOALS

1. Involve All employees in improving our work place DAILY, not just in RI Events

2. To allow employees to take ownership of the improvement opportunities in their areas (vs. having someone else make the improvements)

3. To Empower employees to make their jobs safer, better, faster, easier, and cheaper

How it works:

Your involvement is a critical part of the improvement process.

Thank you!
My IDEA System, beyond Events
Over 2,000 IDEA’s
4 Tips for a Successful Daily Improvement Process

• Train “Receivers”
• Follow up!
• Teach People to Recognize Waste
• Share/Recognize the IDEA’s
58 Second Takt Time vs. 30 Hours
Lean in low volume world…

- Customers make late changes
- Standard work when every unit is different
What can we control and improve?

- Our velocity
- Our internal information flow
- Our communications with customer

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 14</th>
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<tr>
<td>Order Entry, Approvals,</td>
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<td>Engineering, Purchasing,</td>
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Load ≠ Capacity

• Work OT
• Hire Flex workforce
• Push out deliveries
• Cross Train and move people to bottlenecks
Lean as we Matured
Lean Management Systems

- A3 Thinking
- Strategy Deployment
- Leader Standard Work
- Gemba Focus
- Visual Management
- Accountability Systems

Lean Management Systems at Systems Control
Working with LEI
Working with Jim and Dave

• How do leaders add value?
Strategy Deployment

- True North
- Mother A3’s
- Supporting A3’s
- Control Panels
- Check and adjust monthly
### 2018 Mother A3 Strategies

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<tr>
<th>EBITDA Improvement</th>
<th>Revenue Growth</th>
<th>Operational Excellence</th>
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### Supporting Strategies

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<th>Mnfg. Cost Reduction</th>
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<th>Safety Improvements</th>
<th>Org. Development</th>
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<th>Manufacturing Engineering</th>
<th>Recruiting</th>
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Creating better Processes

Current State

- How we spend our time:
  - 40% of time
  - 30% of time
  - 20% of time

Waste Observed:

- Transportation: Moving material to cells are at a stand.
- Inventory: Bins waiting to be cleaned up to 20 hours.
- Rearrangement: Not reused, not moved. AT Kind. Patterns not put away.
- Motion: Extraneous travel, while waiting, standing, looking. Procedure is in computer for reference, to teach material.
- Waiting: Waiting to break to deliver. Waiting for answers on pull materials.
- Over Processing: Sorting SEI orders with multiple tools, Kanban placed on second pallet, receiving transferred material.
- Over Production: Less material missing, >1 week before Assembly Shop.
- Defects: Wastes are there! Fact: 20% of parts being bad. EE material delivered to first side, not worse, no rework.

Proposed Future State

- Lean layout, material in process.
- Pull system, good material.
- Continuous improvement, all levels.

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Developing Lean Thinkers
People Development

• Leaders walk the GEMBA
• Teach and use Problem Solving and A3 Thinking
• Encourage experiments
Leading by Questioning

- Lean Leaders perfect the art of questioning
- Why and How questions vs. Who questions
- Teaching vs. telling
Some examples...

- What are you working on?
- Who caused this problem?
- When is it going to get solved?
- Which of your projects are you most concerned about?
- What do you think our problem is?
- What countermeasures have you tried?
- What have you learned?
Visual Management at Systems Control
Making Flow Visible in the Office
Making Flow Visible in the Office
Lean Supply Chain
As we focused on Lean Management...

- Fewer Events
- Lot’s of new people
- Diluted knowledge base of lean
- Basic Lean tools like 5S, standard work etc. slipped
2016 Lean Leader Development
Lean Leader Training

➢ Lean Tools
➢ Change Agent Skills
➢ Lean Management Systems

2018 CANADIAN LEAN CONFERENCES

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Rebuilding the Foundation

Not Exactly...

We are looking for volunteers who would be interested in learning more about 5S & My IDEA, teaching the concepts to others, and putting their knowledge to work on the floor and in the office.

We want at least (8) people:

- (3) People from Pans Mfg (1 per shift)
- (3) People from EE Mfg (1 per shift)
- (2) People from the Office

This will be a time commitment of (1) to (2) hours per week for the first (4) weeks. Afterwards, the expectation is (1) to (2) hours a month to train new hires, in addition to 5S and My IDEA activities to support your shifts/form.

Please email me directly or let your supervisor know by Friday, March 23rd.

5S Explanation

MY I.D.E.A.
5S Training for New People
Back to 5S Basics...
Back to 5S Basics...
Back to 5S Basics...
Back to Basics with Events...
Back to Basics with My IDEA

Cumulative IDEAs Implemented

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<tr>
<th>Month</th>
<th>2017</th>
<th>2018</th>
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<tr>
<td>January</td>
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Developing Lean Learners
Lean Looking Ahead

• We need both tools and management system
• Regular RI Events (N/25)
• Back to basics 5S (3S?), Daily Improvements
• Lean Leader Development (3% Rule?)
Our Results…
14% CAGR over 15 years
OnTime Delivery

2007: 62%
2008: 62%
2009: 90%
2010: 75%
2011: 68%
2012: 85%
2013: 94%
2014: 93%
2015: 97%
2016: 96%
2017: 97%
Some Takeaways...

- Lean works in the Low Volume World
- Find and engage “Lean Warriors”
- Balance Lean Tools and the Management System
- Show your people Lean in action
Thank You!
Lean Management Systems Driving Performance
Jon Harry
Systems Control
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