

MIT Auto Industry Systems Study (2003.001 v1.0 Unit 2)

Passing the Point of No Return: Accelerated Implementation of a Lean Manufacturing System

Overview and Expected Outcomes – Unit 2

■ Overview

- ◆ Case Overview
- ◆ Discussion Questions

■ Expected outcomes

- ◆ Appreciation of the complexity in transforming a production system
- ◆ Understanding of the “brownfield” challenge in the auto industry
- ◆ Insights into leading lean manufacturing systems change initiatives – particularly in the auto industry context

Case Overview

- A Core Challenge in the Auto Industry: Transforming “Brownfield” Operations
- A History of Joint Initiatives
- Initial Launch of a Lean Manufacturing System: The Challenge of the “Hope/Heartbreak” Cycle
- Value Stream – Within the Plant and Across the Enterprise
- Stability, Infrastructure and Continuous Improvement
- Leadership

Discussion Questions

1. What do you see as the top three challenges in transforming an existing brownfield plant into a lean production system?
2. What are the top three strengths and the top three weaknesses in the transformation process undertaken in Riverside up to this point?
3. Do you think this plant has passed the “point of no return” – where it is harder to revert back to the old approach than it is to continue forward with the transformation?
 - a. What are the biggest vulnerabilities of the change process, i.e., what events or process failures might derail the change effort and start it to revert back to the old approach?
 - b. What would you do to address these vulnerabilities?
4. What systems changes are required in other parts of an enterprise to support a plant that has reached this stage of transformation?
5. Do you believe that a “brownfield” plant can end up just as capable in terms of lean manufacturing – or even more capable – than “Greenfield” plant that was designed to be lean from the outset? Put differently, what should our expectations for performance be for this plant?