



Bringing Value to Papermakers Through Lean Sigma Projects

Lean Sigma and AstenJohnson



RETHINK PAPER: Lean and Green

Principles of Lean	Principles of Six Sigma
Specify value in eyes of customer.	Relentlessly pursue variation reduction.
Identify value stream and eliminate waste.	Measure based on standard deviation.
Make value flow at pull of customer.	Benchmark based on Sigma level.
Involve & empower employees.	Utilize proven tools and methods.
Continuously improve in pursuit of perfection.	Achieve perfection through continuous pursuit of knowledge by all employees.

Lean Problem Solving: DMAIC

Define

Step 1

Control

Step 5

Measure

Step 2

Improve

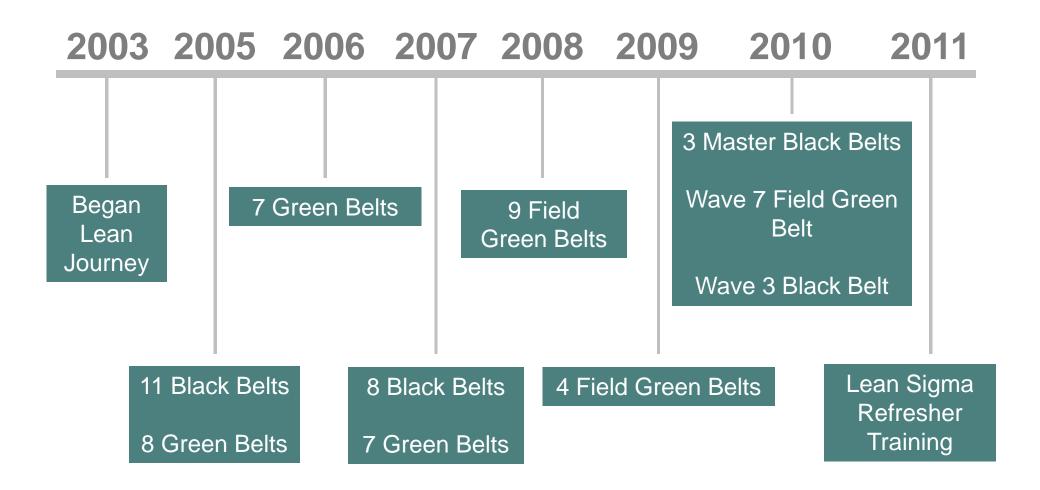
Step 4

Analyze





Our Lean Journey



Vision

 Provide exceptional value by improving our customers' operating results

Brand Vision

 To be recognized worldwide as the experts in maximizing pulp and paper machine performance and productivity

Deployment

- Training
 - 80 hours classroom training
 - Kaizen blitz
- Certification
 - Customer project
 - Kaizen blitz
 - Customer and AstenJohnson participants
 - Demonstrate financial/performance gain for customer
 - Present project results to internal review board





Results

- 33 projects since 2008
- Projects related to:
 - Sheet breaks
 - Edge breaks
 - Holes in sheet
 - SMED
 - Runnability

- Linting
- Printability
- Machine draws
- Clothing life issues



Lessons learned

- Fully understand problem cut through noise
- Follow DMAIC process
- Have an aggressive timeline
 - Priorities change quickly in paper mills!
- Control Phase: test and validate solution
- Consider "chaos factor"
 - Sponsorship
 - Resource availability
- Develop good data collection plan





Case Study: Domtar – Port Huron

- Problem Statement:
 - Eliminate sheet defects
- Results:
 - Sheet defects eliminated; gained production
- Benefits:
 - Process helps find causes and solutions
 - Employees involved, feel ownership

