



Redesigning Repulping Operations A Success Story

BPM Inc. – Changes in One Mill's Attitude



RETHINK PAPER: Lean and Green

Mill Overview

BPM Inc
"Downtown" Peshtigo



Mill Overview

- Two Paper Machines
 - PM1 Yankee
 - PM2 Fourdrinier
- Stock Prep Pulpers
 - Small one for broke
 - Small one for PM1
 - Large one for PM2
- After the mill shutdown, the employees needed to buy in to the notion that restarting the mill could work but it would take everybody's help
- Success would come from reducing production costs with an eye to becoming energy efficient





Problem Description

- Restarting a mill that has been down brings special challenges.
 - Assuring employees that the plan is for real
 - Spending time listening to employees' ideas
- Reducing costs in order to become competitive in a very tough market.
 - Letting workers know that new ideas are welcome in order to improve on the old ways of operating
 - Sharing with the workers the results of their ideas in something easy to understand - \$\$\$
- Finding answers to simple questions concerning fiber prep that no one on-site had an answers for.
 - Were we over pulping our bales of fiber?
 - How do we know when it was fully de-fibered?
 - Can we improve our operating procedure?





Solution Strategy

- The Plant Energy Team was lead by the Mill Manager and looking to improve profitability
- Examine everything. Leave nothing out simply "because we have always done it that way"
- Look at our repulping strategy
 - How long?
 - What endpoint?
 - Why?
 - Is more or less better?
 - New procedures?





Implementation

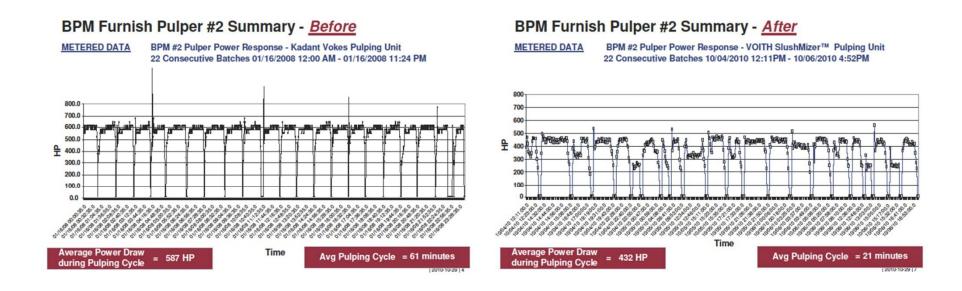
- Action Plan called for
 - Vendor (Voith Paper) involvement
 - Determining a pulping end point
 - Helping operators hit the target
 - Modifying equipment
 - Upgrading where it made sense
- Problems encountered and overcome
 - No flexibility in running the pulper
 - Pulpers dedicated to a single machine
 - Biggest most efficient pulper did not run the most
 - Inefficient and outdate rotor and extraction plate design





Success

Description of results







Success

Documentation

BPM Furnish Pulper #2 – Overall Summary

Average Pulping Power Draw – Before	587 HP	26%
Average Pulping Power Draw – After	432 HP	Energy Saving
Average Pulper Cycle Time Before	61 minutes	66%
Average Pulper Cycle Time – After	21 minutes	Pulping Time
Specific Pulper Power Intensity – Before	3.98 HPD/T or 71.23 kWh/T	75% Energy
Specific Pulper Power Intensity – After	1.01 HPD/T or 18.07 kWh/T	Saving

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Success

- Team members
 - Jim Koronkiewicz Mill Manager
 - Randy Cohorst Production Manager
 - Steve Peterich Plant/Energy Engineer
 - Steve Bradford Account Manager Wis. Public Service
 - Tom Wroblewski Focus on Energy Energy Specialist
 - Jerry Aue Focus on Energy P&P Energy Engineer



