“From Waste to Efficiency: Transforming Operations at Daily’s premium Meats”

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Tech. Advisor: **Van Lefevre, Maintenance Mgr.**

MMEC Advisor: **Steve Dybdal**

SELF INTRODUCTION

WESTERN ILLINOIS UNIVERSITY

Biological Sciences

Career interest: Environmental and Conservational Biologist

Why P2 ?

- Personal Motivation

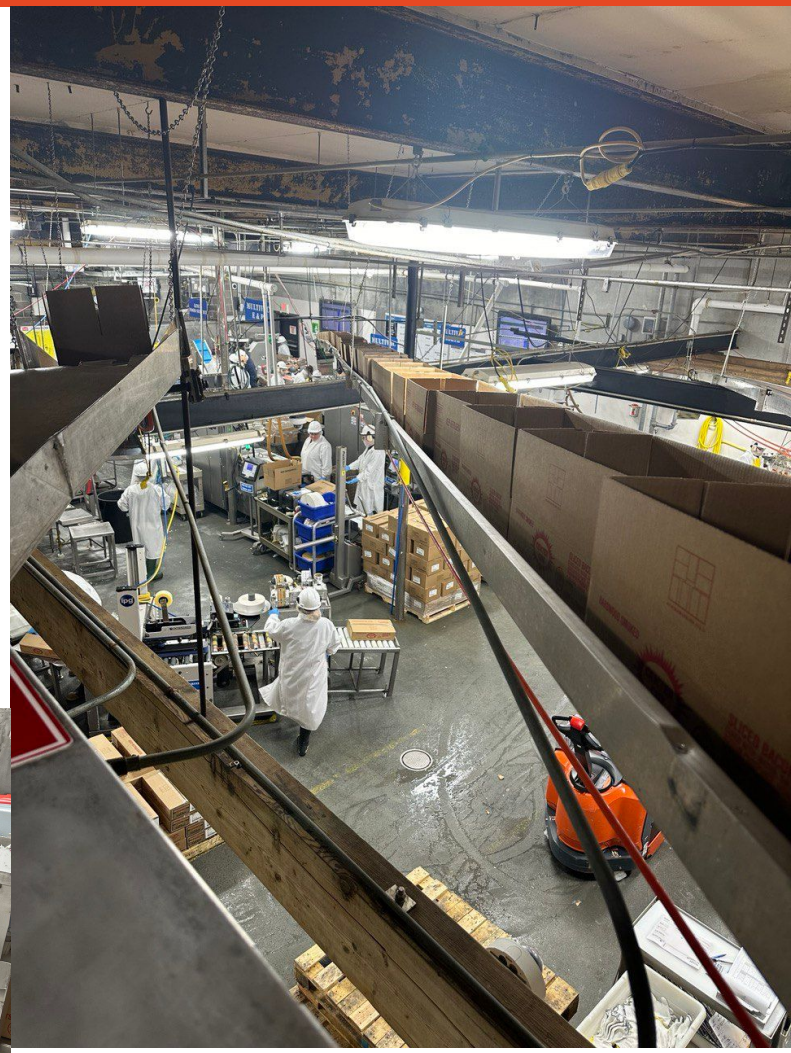
- Industrial insight/networking

INDUSTRY SIGNIFICANCE

- **INDUSTRY: MEAT PROCESSING**

- **ENVIRONMENTAL IMPACTS:**
  - Greenhouse Gas Emissions
  - Energy Consumption
  - Excess Water Usage
  - Land Use and Deforestation

- **IMPACTS ON ECONOMIC DEVELOPMENT**
  - Job Creation
  - Contribution to GDP
  - Support for Local businesses
  - Economic Stability



COMPANY INTRODUCTION

- in 1893, John R. Daily and James Walsh opened the union market in Missoula, MT.
- In the 1980's, the company focused on building it expertise and built the reputation as **"The Bacon Specialists".**
- Locations: Missouri, Montana, Utah

PRODUCTS

- The Original (Thin cut Bacon)
- Black Pepper (Thick cut Bacon)
- Applewood Smoked
- Cherry Applewood Smoked
- Honey Cured
- All Natural (Uncured Bacon)

Challenges in P2/Area of Focus

- ✔ Reduce Wastewater usage at the cure machine
- ✔ Reduce Waste from the Slicing Machine
- ✔ Avoid Overproduction
- ✔ Improve safety and reduce cycle time in the pressing room.

ATTEMPT AND TRIALS

- Designed a new tank to collect brines for reuse
- Suggestion to change the slicing machine position
- Communicated with Fusion tech Integrated, Inc. to remold the belly remover.
- Proposed a 316 Stainless Steel Filter Bag Housing with 50 Micron Filters

RESULTS

- Installed a new sheet that works effectively and saves brines.
- Now capturing 1 gallon per minute, saving over 450 gallons per day (8 hours).
- Installed a new Filter Housing.
- Fusion tech Integrated, Inc. came for inspection and Design of the new belly remover.
- Installation of a new conveyor from the slicing machine to the waste bin in process.

If implemented					If Not Implemented		
Recommended P2 Actions	Annual Reductions						
	One-time cost to implement ($)	Annual savings from P2 Action	Water pollution (lbs)	Water use (gal)	Barriers to Implementation	Plans to implement within 5 years?	
Cure Recycle sheet	N/A (used materials from store)	$60,520	1,367,572	230,908	Already Implemented	Done	
Conveyor for Waste carrier	$3,150	$25,200	N/A	N/A	Shipping delay	Yes	
Belly remover remodification	TBD	$33,790	N/A	N/A	waiting on company feedback	Yes	
Filter bag housing + 20 micron filters	$2,561.6	$214,450	450,765	120,089	Already implemented	Done	

REFLECTIONS/RECOMMENDATIONS

❖ Personal Learning:

- Collaboration and Communication
- Adaptability and Innovation
- Lean Principle
- Hands-On Experience with P2 Tools

❖ Recommendations for Future P2 Interns:

- Be Proactive and Innovative
- Always Ask Questions and Seek Feedback
- Understand the Company's Processes
- Build Strong Relationship

❖ Recommendation for P2 Advisors:

- Provide a connection between past interns and current interns placed at the same company.

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LAND ACKNOWLEDGEMENT: "Montana State University is located upon the homelands of indigenous peoples: people with proud heritage, a vibrant present, and a bright future. We acknowledge the Assiniboine, Blackfeet, Chippewa Cree, Crow, Gros Ventre, Kootenai, Little Shell, Northern Cheyenne, Pend d'Oreille, Plains Cree, Salish, Sioux, Hidatsa, Mandan, Arikara, and the other indigenous nations of this region in the past, present, and future. We recognize that this rich human tapestry is central to our institutional mission of learning, discovery, and engagement."

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- Van Lefevre
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- Jennifer Grossenbacher
- Barbara Watson

SINCE 1893 Daily's PREMIUM MEATS

MONTANA MANUFACTURING EXTENSION CENTER

MTP2 MONTANA POLLUTION PREVENTION PROGRAM

EMPOWERING BUSINESSES TO BE PART OF THE SOLUTION, NOT THE POLLUTION.

- THANK YOU
- QUESTIONS?