



Energy and Water Savings at Ventura Foods

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UNIVERSITY OF MINNESOTA

Driven to DiscoverSM

Ventura Foods-Albert Lea

Background

- 200 Employees
- 214,000 sq ft
- Margarine, Shortening, and Lard Products

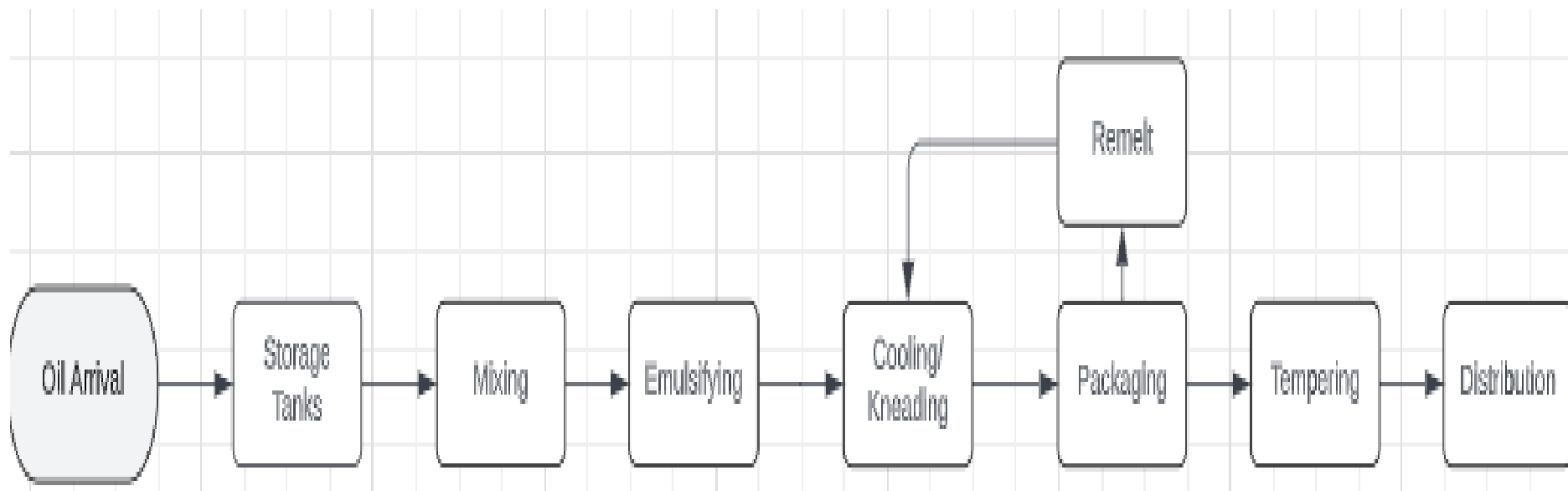


Incentives to Change

- High Utility Costs
- Safety Improvements

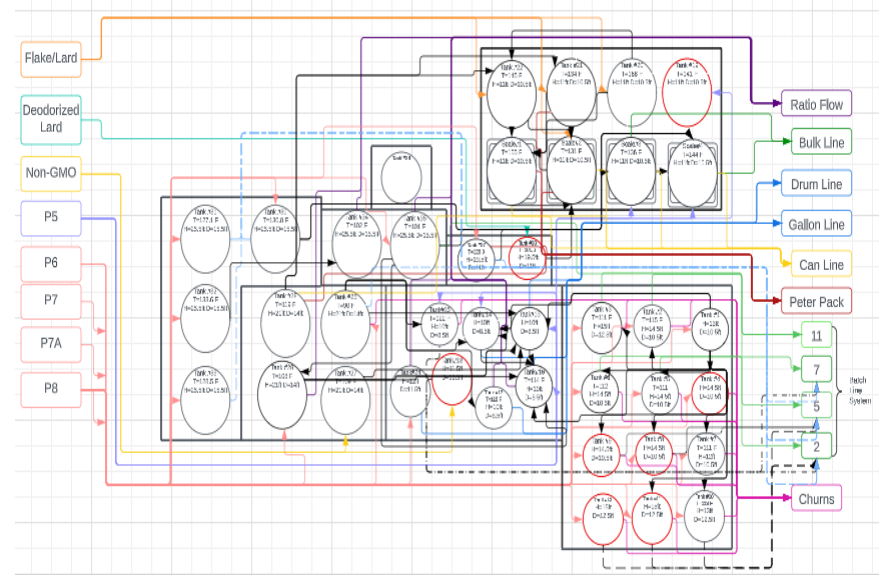


Process Overview Diagram



Insulate Hot Oil Tanks

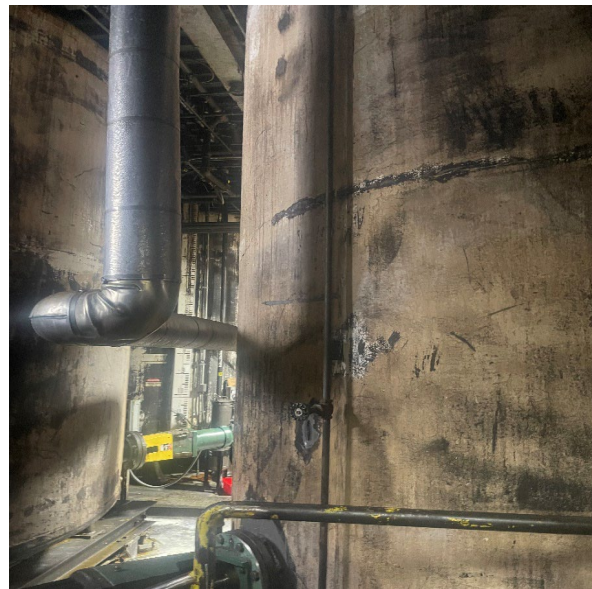
- **38 Uninsulated Tanks**
- **High Surface and Ambient Temperatures**
- **Natural Gas Savings and Safer Working Conditions**



Overview of the oil tanks

Insulate Hot Oil Tanks

- 3E Plus and Excel
- Closed Cell Spray Foam w/
DC315 Fireproof Paint
- Implementation Cost: \$98,700
- Annual Savings:
 - 74,000 therms
 - \$52,200



Oil Room 3

Solutions

Recommendation	Annual reduction	Total cost	Annual savings	Payback period	Status
Insulate Hot Oil Tanks	74,000 therms	\$98,700	\$52,200	23 months	Implementing
Repair Steam Traps	55,000 therms 600,000 gal water	\$31,000	\$46,000	8 months	Implementing
Replace Holding Tank 14	35,600 therms 4.5 mil gal water	\$5,000	\$69,000	1 month	Implementing
Control Valves on Thermolines	44,000 therms	\$62,000	\$37,900	23 months	Recommended
Install Sprayball System for Remaining Wash Tanks	635 therms 50,000 gal water	\$1,700	\$1,150	17 months	Recommended

Personal Benefits

- Opportunity to apply concepts from coursework
- Manufacturing experience
- Lived in a new part of Minnesota

