

Lamb Weston RDO Frozen, Park Rapids



Lamb Weston
RDO
Frozen

Micah Calderon

*Mechanical Engineering, North Dakota State University
Paul Pagel, MnTAP advisor*

Organization

Lamb Weston RDO Frozen is the premier frozen potato product producer in the United States.

Intern Project

Study the use of freshwater flushes and the effects on water usage, starch content, energy efficiency and color variation in the production of frozen potato products.

Incentives to Change

Efficient resource usage reduces costs and allows the plant to engage in larger opportunities.



Minnesota Technical
Assistance Program

Solutions

Install turbidity sensors on the blancher:

Optimize water flush rate the by controlling water volume based off continuous water quality readings.

Increase Interval time on Foamer Stations:

Increase the interval time on the foaming stations by 50% to minimize the chemical runoff to the waste stream

Convert to LED lighting:

Swap fluorescent lighting for more efficient and long lasting LED lighting.

QA Sample Return:

Return unused product from QA sampling to minimize finished product waste and to maximize output.

