



A new whey to process

Foremost Farms USA® maximizes whey production

Case Story

Foremost Farms is a leading Midwest dairy cooperative known for high-quality cheeses, dairy products and ingredients with a network of 17 processing plants across Wisconsin, Minnesota and Iowa.

The Plover whey

Since 1970 their Plover, Wisconsin plant has been processing whey as a functional and nutritious ingredient for food and even animal feed companies. Today, their primary focus is on processing liquid whey into powder form as a critical infant formula ingredient. Business has been good at this Foremost Farms plant for years as they have been running three daily shifts, seven days a week.

Looking for a new whey to maximize production

Foremost Farms was recently at a crossroads where they needed to update their process to maximize production. While considered a continuous whey process, Foremost Farms was still required to shut down and clean after each batch. Since they run four batches each day, they were required to shut down four times each day.

By 2008, Foremost Farms engineers knew that mixproof valve technology evolved to the point where they could both update their process and eliminate the four shut down periods each day – capturing several additional hours of production time each day and essentially turning their plant into a continuous processing facility.

After a number of discussions, including a conversation with the State of Wisconsin to confirm PMO compliance, they agreed the *Unique PMO Plus® – CP* valve was the perfect solution. Once installed, Foremost Farms could run CIP solution to clean one valve seat while liquid whey was running in the opposing valve chamber – meeting their need for continuous operation and increased production.

The Foremost Farms continuous process

Today, the *Unique PMO Plus – CP* Mixproof valve is the heart of their continuous processing line and



has run flawlessly since May 2008. Jim Czysen, Maintenance Manager at the Plover plant explains, “Ever since it was installed, we really haven’t had to touch the valves and only maintained them once – and that was just for training purposes.” Jim adds, “Alfa Laval was excellent to work with in the planning stage and provided really good technical support as they were here for start-up – just to make sure the valves were installed and worked perfectly.”

In addition to the continuous processing benefits, Jim sees the **PMO Plus® – CP** Mixproof valves helping from a plant safety perspective, “In the past, our process line used a series of single seat valves where we would have to manually disassemble and switch the piping. Now, the line can be cleaned-in-place which helps keep our employees safe.”

The Plover plant still has one last line where single-seat valves are used. Based on the success of this installation, Foremost Farms plans to have this final line converted in 2010 with Alfa Laval’s *Unique PMO Plus – CP* valve – making the entire Plover plant a continuous processing facility.

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**-Jim Czysen,
Foremost Farms**

**Foremost Farms USA –
Plover, Wisconsin:**

- Built in 1969 by Foremost McKesson
- Produces a variety of high quality sweet dairy whey, lactose, reduced minerals whey products and whey protein concentrate
- Over 72 million pounds of product produced annually
- Plant runs 24 hours a day, seven days a week
- Employs 60 people



About Foremost Farms USA:

- Formed in 1995, Foremost Farms is the result of the consolidation of Wisconsin Dairies Cooperative and Golden Guernsey Dairy Corporate
- In addition to whey products, they specialize in Italian and American cheeses, bulk fluid milk, and butter
- Nearly 500 million pounds of cheese produced annually
- Operates 17 total plants with over 1,000 total employees



Before:
old single-seat line - required four daily shut-downs/cleaning cycles



After:
new continuous processing line with *Unique* PMO and PMO *Plus* – CP Mixproof valves

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How to contact Alfa Laval

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