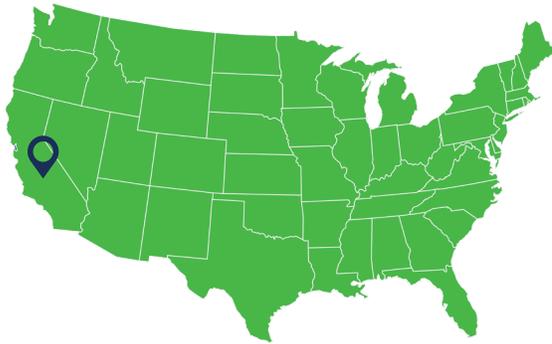


DEMING®



PUMP

Deming Demersible Chopper



OPERATIONAL IMPROVEMENT

Reduced Costs



MUNICIPALITY POPULATION

Dairy Farm



INSTALL DATE

April 2018



VAN GROUW DAIRY Tulare County, CA

Application Overview

The Van Grouw Dairy, established in 1989 by Rob Van Grouw, is home to approximately 3,000 head of cattle with 2,000 of those cows milking at any time. The dairy sits at the base of Sequoia National Park in Tulare County, and spans over 100 acres. It employs 12 people and averages sales around \$1.1 million annually. The majority of Tulare County's economy stems from dairy farming, bringing in over \$1 billion annually in revenue. Tulare is also the site for the World Ag Expo, which is the world's largest agricultural exposition.

Pump Station Details

The 3,000 cattle split their time between a pasture and large barns, which require regular cleaning. When the barns are washed down, the water drains to a large lagoon, measuring around 80,000 square feet. This water is mostly manure and hay, but often can include sticks, twine and rocks. Van Grouw Dairy is approximately 30 years old, and the lagoon has been on the farm since its founding. This lagoon is pumped into the farm's fields to act as a fertilizer, which is accomplished with a single pump. The crops grown in these fields are then used as feed for the cattle.

Over its 30 years of operation, Van Grouw Dairy has utilized turbine pumps and non-clog pumps. The original submersible turbine pump had great difficulty with the high solids content, which caused Van Grouw to replace the turbine with a non-clog pump. The non-clog pump had to be removed from the station about once per year, for various reasons. The existing pump experienced clogging issues, an overheating motor, and seal failures. The one common theme for each failure was that the pump was expensive to repair and maintain. The final time the non-clog pump was pulled, Rafael Padilla, who maintains the dairy's equipment, noted that "the pump was just too expensive to repair."

Each time the non-clog pump needed to be removed from the lagoon, it cost the dairy about \$3,000 in labor alone – not including the cost of downtime at the dairy or any new parts required.

Installation

In April 2018, Van Grouw Dairy worked with Willitts Equipment & Engineering Co, a local pump service provider, and Preferred Pump, the local Deming distributor, to purchase a 6" 30HP Deming Chopper pump to replace the failed non-clog pump. Since installation, the Deming Chopper pump has operated better than any of the previous pumps. Gary Cowan of Willitts Equipment pointed out that they were able to use the existing rail system, which made the installation efficient and cost effective. Due to its performance since installation, the Deming Chopper has saved the Van Grouw Dairy a significant amount of money.

Key Takeaways

Pain Points

- Existing non-clog pumps failed approximately once per year due to clogging, seal failures and motor failures
- The pumps were very expensive to remove and repair each time a failure occurred

Benefits

- Van Grouw Dairy replaced the existing non-clog pump with a Deming Chopper pump
- Deming's high reliability and exceptional chopping design has saved Van Grouw Dairy significant time and money