

Case Study

Berner Foods

The Big Cheese

Berner Foods, based in Dakota, IL, is a leading manufacturer of shelf-stable dips, sauces, aerosol cheese, and milk-based ready-to-drink beverages. The 70-year-old family owned business works with major retailers, including Wal-Mart, Target and Aldi. Their state-of-the-art 290,000 square foot facility, which includes a recent 200,000 square foot production and warehouse addition, is a USDA approved facilities level 3. Additionally, it is a HACCP certified, and meets the demanding standards of virtually every major retailer in North America. Because of stringent and rapidly changing industry requirements and parameters, Berner saw energy efficiency as the key to ensuring product safety, market competitiveness, optimal run rates, and low operating costs – all of which translate to low consumer costs and overall growth of the business.

Gouda Partnerships

Upon the completion of a study of their steam boiler operations, Berner Foods realized an opportunity to achieve two goals – increase boiler efficiency and reduce operating costs. Boilersource, Enerstar, and Nicor energySMART, along with Berner Foods devised a well-executed energy-savings plan to lower operating costs and maintain the high standards mandated by the Food and Drug administration for dairy products. It was concluded that conditions were ideal for the installation of a fully condensing HeatSponge economizer. They're completely manufactured out of stainless steel to provide for the longest life in an aggressive condensing environment and dramatically increases the potential heat recovery.

Milking the Savings

Tony Ranallo of Boilersource provided the on-site support to both properly size and install the HeatSponge condensing economizer unit on a 400 HP firetube boiler, as well as coordinate with NICOR Gas on obtaining an impressive rebate of \$135,685. Berner Foods not only saw a dramatic and documented increase in efficiency of the boiler system, but the condensing economizer also provides an annual reduction in fuel use of 152,420 therms, which equates to an estimated savings of \$83,830. This was the first HeatSponge economizer that set the standard for 3 more units in the years to follow. With the help of Boilersource, Enerstar, and Nicor energySMART, Berner foods has grown its business, created jobs, and taken steps toward its sustainability. Success sure tastes good.

Over two years, enhancements were made that included:

- Flue gas economizer
- Blow down heat exchanger
- Waste condensate heat exchanger
- Vent condenser for the deaerator

Nicor Energy

rebate of \$135,685

Annual reduction

in fuel use 152,420 therms

Annual fuel savings

of over \$83,830



BOILERSOURCE
Going Beyond the Boilerplate