

“CORE advanced process controllers have given us remarkable stability in controlling our dryers. The CORE installation also enables us to adapt the processing speed to the different raw material specifications at any given time. We have built a good working relationship with Haarslev.”

- Hans Erik Lundsten

Production manager at Biosirk Hamar

BIOSIRK NORGE A/S ENSURES HIGH PRODUCTION RATE BY CHOOSING CORE

CHALLENGE

Biosirk Norge AS is Norway's largest manufacturer of protein products for animal feed and fertilizers, and fat for production of biofuels, using by-products sourced from meat production companies, as well as fallen livestock.

Sustainability is crucial for Biosirk Norge, and the company works hard to improve the energy efficiency of its plants and to optimise the extraction of fat from the mixed raw material inputs the company receives. The Biosirk processing setup complies with Norwegian as well as EU regulations in full.

SOLUTION

With increased global competition, it quickly became a top priority for Biosirk to improve its processing profitability.

The company decided to implement CORE advanced process control technology in a setup consisting of two high-temperature dryers. Aiming to ensure a process that is stable, efficient and faster, at the same time as minimising fluctuations of key process variables – with less waste resulting. The payoffs included better output quality, increased throughput and lower energy consumption.

Process optimized

- Dry rendering
- Category 1 processing
- 2 dryers
- Company :Biosirk Norge AS
- Country: Norway

RESULTS

6.3% increase in production rate

3.7% reduction in fat content per kg meal

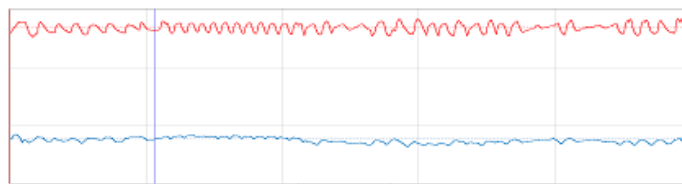
Steam consumption per amount of raw material unchanged

CASE STORY DETAILS

The trend graphs below show the improved cooker control achieved when using CORE advanced process control technology.

The temperature level is kept closer to its programmed setpoint.

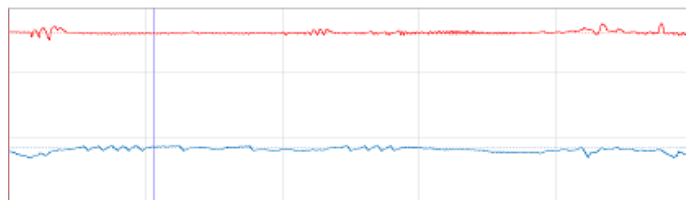
Cooker performance without CORE (18 hours)



— Exit temperature (0-150°C)

— Dryer level (0-20T)

Cooker performance with CORE (18 hours)



— Exit temperature (0-150°C)

— Dryer level (0-20T)

--- Exit temperature setpoint (132°C)

--- Dryer level setpoint (5.6T)

More effective temperature control makes it possible to set a lower setpoint while still complying with the veterinary requirements for discharge (130°C).

This saves steam during Category 1 and Category 3 processing, and ensures higher, more uniform moisture levels in the meal during Category 3 processing.