



How a dairy saved €19,500 in annual energy costs

DAIRY, HOMOGENIZATION

Having the correct homogenizer pressure for your application can save you a lot of electricity – and therefore money and environmental impact. By being proactive and analysing a customer's operations, Tetra Pak was able to reduce electricity consumption at their dairy by a full 26%. And we can do the same for you.

IT'S NOT unusual to buy a homogenizer for the production of one dairy product, only to switch to another product later. But if you don't reconfigure your homogenizer when you change production, you could be wasting energy and causing unnecessary wear and tear on components.

So when Nicole Uvenbeck, Line Product Manager at Tetra Pak, learned that a customer who had previously bought a Tetra Pak Homogenizer had switched production from sour cream to milk without considering the implications for the homogenizer, she realized that the machine would not be optimized for its new application.

Same product quality, lower pressure

"When you change from one product to another it's really important to fully analyse what pressure is needed for the new production setup," she says. "The homogenizer was running at 240 bar, but with the right homogenizing device 177 bar was enough. Essentially we enabled the customer to maintain the same product quality at lower pressure."

So Uvenbeck recommended that the customer bought a new homogenizing device – an investment with a payback time of less than a year. The savings in electricity were 260,000 kWh per year (from 8.1kWh per tonne to 6 kWh per tonne).

Specifically, calculating with a price of €0.075 per kWh, the savings of 260,000 kWh per year would be €19,500 per year – fully 26% of the dairy's annual energy costs. On top of this, the lower pressure means less load on the homogenizer, which in turn translates into less wear on parts like pistons and bushings, as well as longer service intervals.

"By acting proactively and optimizing our customer's operations, we were able to suggest to them what was really a minor change – but it meant a lot of savings," says Uvenbeck. "It's always better to do be able to do something specific that makes a real improvement for our customers, rather than to just talk about how great our homogenizers are. And we are always happy to help optimize our customers' operations."

Want to receive updates with useful tips and information about reducing homogenizer total cost of ownership?

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