

Case story

Molkerei Wiegert GmbH & Co. KG,
Velen, Germany

Agitator boosts dairy energy efficiency

When Molkerei Wiegert Dairy first learned about the energy-saving potential of the Alfa Laval side-mounted agitator, they found it hard to believe. To verify its energy efficiency, they agreed to a three-month trial installation. The test results showed how replacing their old agitator with the new one could deliver significant savings.





"The energy-related savings are precisely in line with Alfa Laval's calculations and estimates."

Nicolas Becker
Operations Manager at Molkerei Wiegert

Agitators are essential to dairy production, handling key tasks such as mixing ingredients, ensuring uniform consistency and stability, supporting yoghurt and cheese fermentation, and evenly distributing temperature within the tanks. At its Velen site, Molkerei Wiegert operates nearly 40 agitators.

Putting the Alfa Laval agitator to the test

The trial involved replacing an existing lateral agitator, which homogenizes skimmed milk concentrate with a 35% dry matter content. Frequent mechanical seal failures due to the agitator's advanced age prompted the company to seek a replacement through SKS GmbH, the Alfa Laval sales partner in Dortmund.

The existing agitator consumed 8.6 kilowatts of energy when running at full capacity (150 m³) for about four hours per day. Alfa Laval estimated that a side-mounted agitator would reduce energy consumption to less than one-quarter of previous levels.

Proven energy savings with consistently high mixing quality

"We actually found it hard to believe Alfa Laval's calculations," explains Operations Manager Nicolas Becker. "Our old agitator was powered by a 15-kilowatt motor while the new agitator operates with just 2.2 kilowatts. We were sceptical but appreciated the chance to test the Alfa Laval agitator."

Installing the Alfa Laval side-mounted agitator took just one day, and it immediately operated without issues. After three months, the outcome was clear: the agitator delivered on its promises.

"We achieve the same consistent mixing quality but use significantly less electricity," Becker confirms.



Alfa Laval's side-mounted agitator is modular, energy-efficient and suitable for a wide range of tank sizes and applications, including CIP, sterile/aseptic and ATEX-certified environments.

Reduced costs and carbon footprint

By lowering energy consumption, the dairy reduces operating costs by approximately EUR 1,200 per year and annual carbon emissions by around 5.4 tonnes. The investment in an Alfa Laval side-mounted agitator pays for itself in just 2.8 years.

Wiegert Milch is committed to meeting the DIN EN ISO 50001 standards as part of its ambitious energy policy. In line with this commitment, the dairy ordered a second agitator for an identical tank.

Looking ahead, the dairy plans a comprehensive review of all its agitators. "We were unaware of the extent of the potential savings offered by replacing our agitators," Becker reflects.



Contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

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Photo: Alfa Laval.