

Expertise boosts dairy hygiene, safety, energy savings and uptime

Hatsun Agro Product Limited, Chennai, India

Case story



Alfa Laval expertise increased uptime, boosted energy savings and enhanced product safety and hygiene by training dairy staff to ensure proper agitator maintenance at one Hatsun Agro Product Ltd. plant and introducing Alfa Laval agitators at two additional facilities.

Hatsun Agro Product Ltd., one of India's largest private-sector dairies, was looking for modern agitator systems to increase uptime and minimize maintenance requirements. With its modern agitator systems and proper training of dairy staff about agitator maintenance, Alfa Laval increased dairy uptime, boosted energy savings and enhanced product safety and hygiene. The results were so convincing that the dairy bought Alfa Laval agitators for another plant with similar results. When it came time to select a partner as the single point of contact to supply equipment for the dairy's new curd plant, Hatsun naturally turned to Alfa Laval.

Standards are high at Hatsun's state-of-the-art dairies, which produce dairy whitener, skimmed milk powder, agmark certified ghee, butter, cooking butter, milk, curd, paneer and buttermilk. Handling two million litres of milk per day for domestic milk products as well as dairy ingredients for export to the Americas, the Middle East and Asia makes compliance with ISO standards for quality management, food safety and environmental management mandatory for business success.

At the Kolasanahalli plant in south India, Hatsun Agro opted for Alfa Laval's modern agitator systems and also asked Alfa Laval to train its staff. Alfa Laval supplied its modern agitator systems to the Hatsun Agro plant and helped it minimize maintenance requirements. Alfa Laval also helped Hatsun establish a suitable maintenance regime to improve plant operating performance. As a result of this systemic exercise, all of the agitators now operate trouble free.

Greater energy efficiency, hygiene and uptime

This positive experience in working with Alfa Laval led to the purchase of Alfa Laval ALS agitators with 1.5 kW (2 HP) motors for two 100-kilolitre (KL) silos for skim milk storage at another Hatsun plant located in Kanchipuram. With uniquely shaped EnSaFoil impeller blades, these side-mounted agitators are ideally suited to the task at hand, providing thorough mixing for product homogeneity with minimal product shear.

Mr. C. Sathyan, executive director of Hatsun Agro Product Ltd., explains that the Alfa Laval agitators are workhorses at



Alfa Laval agitators at the Hatsun Kolasanahalli plant optimized the use of energy, ensuring increased uptime and enhancing product safety and hygiene.

the plant, which is located on the banks of the Vegavathy River to the southwest of the Hatsun corporate offices in Chennai. The ALS agitators operate 16 hours a day and undergo daily cleaning-in-place (CIP). Comparable agitators with similar capacity at the plant use 5.5 kW (7.5 HP) motors. According to Alfa Laval estimates, the ALS agitators provide energy savings of up to 80%.

"Compared to the agitators we sourced locally, the ALS agitators are extremely energy efficient. Despite the grueling work schedule, these reliable agitators provide the safe hygienic processing environment that is critical to our operations," says Mr. Sathyan. "Plus they continue to operate without any problems whatsoever. This combination of energy savings and more uptime contributes to the dairy's profitability."

Single reliable partner for new curd plant

To keep pace with growing demand, Hatsun planned to expand its operations and build a new curd plant in Vellichandai four kilometers away from the Kolasanahalli plant. Hatsun put out a request for tender, asking Alfa Laval to respond based on the solid business relationship developed over the years.

As it turned out, both the Alfa Laval sales offices and the Alfa Laval distributor in India submitted separate tenders. Out of mutual interest and based on good synergies, Alfa Laval and its distributor approached Hatsun with a joint proposal with competitive pricing and the promise of unmatched service and support.

Alfa Laval's reputation for providing the highest quality equipment with ease of operation and maintenance combined with the ability of Alfa Laval's distributor to act as dairy contractor sealed the deal. Hatsun now produces 40 KL of curd per day at the plant, which includes a total of 174 Alfa Laval valves, ranging from Unique SSV and Unique Mixproof valves to LKB, LKLAT and CPMI valves, 26 centrifugal pumps, five M6M and M10M plate heat exchangers, tank cleaning machines, fittings and 11 Alfa Laval agitators.

"We could not be more pleased with the arrangement," comments Mr. R.G. Chandramogan, managing director at Hatsun. "All indications point to continued growth for the dairy industry here. Alfa Laval has proven to be a reliable partner that can supply the dairy equipment solutions we need, which conform to the highest standards of hygiene, reliability and energy efficiency, as well as solid services and support."



Energy-efficient Alfa Laval agitators enhanced dairy production at Hatsun Agro Product Ltd. plants.

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