

## Case story

Dabur Naturelle, Dubai,  
United Arab Emirates

# Plant upgrades drive operational efficiency and sustainability

Naturelle LLC produces about 28,000 tons of personal care products each year in UAE for use by a billion consumers worldwide. As part of its long-term sustainability agenda, Naturelle reached out to Swedinox International, the Alfa Laval distributor for the UAE and Oman, to address the issues of high power consumption and low efficiency from its existing pumps at its plant located in Ras Al Khaimah. The plant agreed to conduct a trial of Alfa Laval OptiLobe pumps; the trial resulted in significant energy savings and led to upgrading more than 30 pumps at the plant.



This was the beginning of a long-term partnership between Naturelle and Alfa Laval. The result? Minimized waste, a 65% reduction in energy costs and emissions, 50% savings in water consumption, 80% faster tank cleaning time – and lower total cost of ownership. All this demonstrates that operational improvements aligned with sustainability targets benefit business.

### **Sustainability: the core of significant savings**

Dabur Naturelle LLC is part of Dabur International, a wholly owned subsidiary of Dabur India, one of the largest fast-moving consumer goods companies in India. Dabur Naturelle plant in Ras Al Khaimah manufactures products for the company's Dabur brand of personal care products including shampoo, conditioner, toothpaste, skin lotions, creams, moisturizers, and hand sanitizers.

The Naturelle plant experienced high vibration and noise levels, increased pump wear, frequent and unexpected breakdowns, and reduced pump capacity. With Alfa Laval Joules, the online sustainability tool, the Alfa Laval engineer along with Swedinox calculated sustainability savings. Joules verified reductions in the use of water, energy, and cleaning media with OptiLobe pumps compared to the existing pumps.

### **Energy costs and emissions cut by 65%**

Based on these calculations, Dabur Naturelle agreed to a trial, replacing the seven existing 5-kW lobe pumps with the 1.73-kW Alfa Laval OptiLobe 32 rotary lobe pumps.

Upgrading to Alfa Laval OptiLobe pumps cut energy costs and carbon emission by 65% as well as drastically reduced noise levels, thereby improving worker safety. Moreover, the OptiLobe did not show any signs of wear or reduction in pump efficiency or capacity over time that Dabur Naturelle experienced with its existing pumps.

Once the OptiLobe proved that calculated energy savings were actual real-life savings, Dabur Naturelle not only bought the seven OptiLobe pumps installed at its UAE plant, but purchased an additional 35 Alfa Laval OptiLobe and SRU pumps for Dabur plants across the UAE, Egypt and Nigeria.

“We are very satisfied with the performance of the OptiLobe pumps,” says Karan Arora, Engineering Manager, Dabur International Ltd. “Pump uptime is very high. Power consumption is significantly lower than before.

### **50% water savings, 80% faster tank cleaning time**

Success with pump upgrading led to more opportunities for resource efficiency in other process lines as Dabur Naturelle continued to enhance and expand Naturelle LLC production facilities. Alfa Laval Middle East collaborated with Swedinox to conduct an equipment audit for Dabur Naturelle tank cleaning processes for its mixers and agitators.

Based on the audit, Alfa Laval's distributor recommended a complete hot water cleaning system along with six Alfa Laval GJ A6 tank cleaning devices. The Joules sustainability savings tool identified a 50% saving in water and cleaning media consumption as well as an 80% reduction in cleaning time. It was win-win – in theory and in practice.

### **Partnership for sustainable optimization**

Trust and transparency are vital to driving sustainable change in any industry. The strong bonds established by Dabur, Swedinox and Alfa Laval are based on common values, knowledge sharing, and the desire to produce more using less.

“We firmly believe that environmental sustainability serves as the essential element that underpins business success,” says Subba Rao, Head of International Operations, Dabur International. “Working with Swedinox and Alfa Laval has shown us that this is possible and the pathway forward.”



#### **OptiLobe rotary lobe pump**

For hygienic energy- and water-saving fluid transfer.

#### **Alfa Laval GJ A6**

Effective aseptic tank cleaning machine for microbe-free interior surfaces.

“We are very satisfied with the performance of the OptiLobe pumps. Pump uptime is very high. **Power consumption is significantly lower than before.**”

Karan Arora, Engineering Manager, Dabur International Ltd.



#### **Contact Alfa Laval**

Up-to-date Alfa Laval contact details for all countries are always available on our website at [www.alfalaval.com](http://www.alfalaval.com)