



Innovative self-priming pump does double duty for dairies

Reduce total cost of ownership with Alfa Laval LKH Prime for CIP return and dairy product handling

Article by Allan Bruun, Industry Manager, Dairy, Market Unit Food, Alfa Laval

Share this document!



Innovative self-priming pump does double duty for dairies

Reduce total cost of ownership with Alfa Laval LKH Prime for CIP return and dairy product handling

Many industries have been looking for a self-priming pump that meets requirements for improved energy efficiency and reduced noise levels, as well as the latest hygienic design standards. Using airscrew technology, the Alfa Laval LKH Prime sets a new standard in self-priming pump technology. This bodes well for the dairy industry, offering a sound way to realize low cost of ownership and increased uptime.

Many industries have been looking for a self-priming pump that meets requirements for improved energy efficiency and reduced noise levels, as well as the latest hygienic design standards. Using airscrew technology, the Alfa Laval LKH Prime sets a new standard in self-priming pump technology. This bodes well for the dairy industry, offering a sound way to realize low cost of ownership and increased uptime.

This new self-priming pump is based on the Alfa Laval LKH premium range of centrifugal pumps, which is world-renowned for hygienic design and gentle product treatment. The Alfa Laval LKH Prime is specially constructed for pumping liquids containing entrained air, making it an excellent choice as a CIP return pump. Depending on the duty point, the Alfa Laval LKH Prime is 60 to 70 percent more energy efficient than a conventional liquid-ring pump and operates at noise levels of 74 dB(A), a full 80 percent less than a conventional liquid-ring pump. Like the other pumps in the LKH family, the Alfa Laval LKH Prime is EHEDG certified and authorized to carry the 3-A symbol.

Versatile and efficient, the Alfa Laval LKH Prime is therefore of interest to dairy owners and operators who are concerned with:

- Reducing energy consumption
- Improving the work environment
- Reducing installation costs

Reducing energy consumption

The hydraulic efficiency of the Alfa Laval LKH Prime reaches over 50% (Image 1). This means the Alfa Laval LKH Prime offers an added advantage over liquid-ring pumps, which typically reach efficiencies of approximately 30 percent. Its high efficiency is easily attainable at a wide flow range, which translates into substantial savings no matter the duty point. Energy efficiency is important for operations, and the Alfa Laval LKH Prime does not disappoint. It can be used as a Cleaning-in-Place (CIP) return pump for several different product lines so that the Alfa Laval LKH Prime is operational for several hours a day. Its hygienic design means the pump may also be used to empty dairy product tanks, which further increases the pump's operating hours.

Image 1. Pump efficiency.

