

Starch washing part gets an overhaul

Successful starch production requires getting the most out of raw materials and achieving the desired end-product quality through safe, cost-effective and sustainable processing. Cyclonettes provide versatile, highly efficient centrifugal separation to wash starch and to concentrate, clarify or classify corn, wheat, tapioca, potato and pea-type starch suspensions.

Cyclonettes are installed inside the multicyclone housing. Separation takes place when the feed pressure is converted to a rotation of the liquid as it enters the cyclonette. This generates the required g-force inside the cyclonette for fast and accurate particle separation.

In the past, when Alfa Laval needed a cyclonette part for starch washing, they used an external supplier. When this vendor was consistently poor and unreliable, Alfa Laval knew it was time for a change. Alfa Laval is known for quality products and dedicated service so they quickly realized this supplier problem could be remedied through Alfa Laval-manufactured cyclonettes. An Alfa Laval food and water engineer worked with Research and Development to design, test and launch the Alfa Laval cyclonettes. The new PC10 and RC10 were received with such tremendous success in the United States that customers from the former supplier have turned to Alfa Laval as their supplier. In fact, compared to the former supplier, the Alfa Laval cyclonette has improved quality, a lower price and reduced down time. Alfa Laval turned a problem with the supply chain into an innovative solution to help their customers.

CASE STORY



The benefits of cyclonettes

- High separation efficiency of starch boosts product yield
- Optimum washing efficiency and low wash water consumption
- Easy to operate, long service lifetime
- Optional automated control
- Low maintenance costs due to no moving parts
- Easily expandable to increase capacity

Fast facts

The vendor A Danish multinational engineering company.

The challenge Long delivery timelines due to their supply chain.

The solution

Alfa Laval designed and manufactured their own cyclonette.

Benefits

Improved quality, reliable service, lower cost and reduced down time. With Alfa Laval's separation experience, customers can now experience shorter delivery time.

Alfa Laval is one of the world's leading suppliers of process technology to the starch industry. For more than 80 years we have been helping starch producers across the globe stay ahead of the competition. We have the experience, know-how and equipment to help you make the most of every phase of your starch production line.

Alfa Laval cyclonette PC10 and RC10 design

The PC10 cyclonette is designed for Alfa Laval's PH multicyclones with cyclonettes installed in a parallel pattern. The cyclonette has an overflow nipple with vortex finder, that fits over the top of the cyclonette body. The PC10 cyclonette is fully interchangeable with the cyclonettes for Dorr-Oliver multicyclones type TM.

The RC10 cyclonette is designed for Alfa Laval's RH multicyclones with cyclonettes installed in a radial pattern. The cyclonette has a threaded apex

end and a threaded connection for the overflow nipple with vortex finder. The RC10 cyclonette is fully interchangeable with the cyclonettes for Dorr-Oliver radial multicyclones type RC. The PC10 and RC10 cyclonettes are made of food grade nylon and meets the requirements of EC 1935/2004 and FDA regulations 21 CFR.

The cyclonette gaskets and O-rings are available in NBR and Viton/FPM and are in compliance with EC 1935 and FDA.