



## Guaranteeing quality with root cause analysis



### Complete service journey for starches, sweetener and texturizers customer

**Alfa Laval is the leading supplier of process equipment and process lines to the starch industry all over the world. More than half of starch produced each year throughout the world passes through Alfa Laval Merco separators. Developed particularly for starch production, Merco separators provide an ideal combination of high flow capacity and low energy consumption that is used in the dewatering process associated with removing gluten (protein) from starch. Merco's well-known sturdy design ensures long service life, reliable uptime and low maintenance costs.**

When a global food corporation based in the Midwestern United States experienced high vibration levels in their Merco H-36B bowl, they knew they could turn to Alfa Laval for reliable service. During the inspection and repair process at Alfa Laval's Greenwood Service Center, it was found that the Merco Bowl hub was cracked. During the repair, the Greenwood Service Center had difficulty removing the damaged hub casing from the forged bowl rotor. If the hub was removed without damaging the rotor, a replacement hub could be used. The replacement hub could be cast, machined and threaded back to the original rotor (shell). When this process didn't work, the bowl was sent to Alfa Laval Sweden for a root cause analysis where it was determined that the issue was likely created during the actual casting of the bowl.

Alfa Laval worked with the customer to warranty the bowl due to the origin of the issue. Other Merco H36B bowls were also inspected by Alfa Laval to ensure the customer did not encounter similar issues. Additionally, the customer was provided the option of upgrading to H-38 since the replacement rotor/hub assembly would not be ready for several weeks.

The Alfa Laval guarantee behind the Merco H-36B bowl provided the customer with the additional confidence that Alfa Laval stands behind their products and works with customers to provide a satisfactory solution.

“Too bad all companies don’t stand behind their products in the same fashion. Thanks a bunch for getting us to where we are currently, and thanks a bunch to Alfa Laval for doing the right thing as it definitely won’t go unnoticed.”

— Maintenance coordinator

## Fast facts

### The customer

A global food corporation based in the Midwestern United States.

### The challenge

Determine the root cause of the excessive vibration in the Merco H-36B bowl.

### Reduce maintenance costs

Eliminate unnecessary downtime by providing an upgraded Merco bowl while the original was undergoing service.

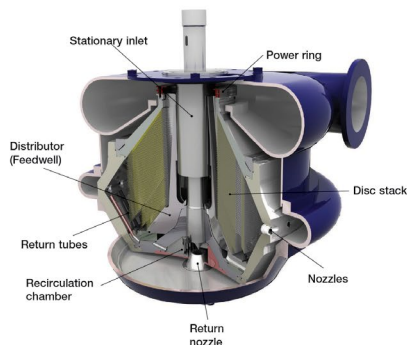
### The solution

The damaged Merco H-36B bowl was serviced under warranty and upgraded. Alfa Laval inspected the other bowls that the customer has on site that were manufactured around the same time as the damaged bowl.

### Benefits

Long service life, reliable uptime and low maintenance costs.

- 1 Make sure water and air of the correct quality is supplied to the machine as recommended in the manual.
- 2 Use only approved brands of oil for lubrication and check oil condition regularly.
- 3 Make sure that the Merco is operating in accordance with recommended design parameters.
- 4 Constantly monitor vibration levels and bearing temperatures. Check regularly for leaks and any abnormal noise.
- 5 Keep the service area clean and never place parts directly on the floor.
- 6 Stick to the recommended service intervals and the instructions for preventive maintenance.



- 7 Always clean parts thoroughly before re-assembling them.
- 8 Use only Alfa Laval supplied tools for service and maintenance. Store tools in a clean, secure and dry location.
- 9 Only use genuine spare parts to achieve guaranteed performance, reliability and equipment life.
- 10 Maintain a stock of crucial spare parts such as oil, intermediate and major service kits. Follow storage instructions to avoid damage and corrosion.

Ten  
top tips  
to keep your  
Merco in tip  
top condition

## How to contact Alfa Laval

[www.alfalaval.us](http://www.alfalaval.us)