



# Hermetic upgrade delivers major improvement in separation performance while cutting energy consumption in half and eliminating oxygen pick-up

A small upgrade is already delivering a big boost to the performance of legacy centrifuges in the brewing industry by reducing operating costs and ensuring a substantial improvement in clarification efficiency.

The Hermetic Booster, developed by Alfa Laval, is already showing its worth after its installation with a major brewer in the US and is set for a wider roll-out with the potential to deliver huge benefits for customers.



The Brew 2000 is the original centrifuge, which has operated successfully in breweries across the world for decades. However, as technology has advanced, newer centrifuges have been developed that operate hermetically – without oxygen entering the process – which leads to a more efficient operation, with superior beer quality and high aroma retention.

Alfa Laval is continually at the forefront of these technological advancements and developed the Hermetic Booster as a way to bring these innovations to existing machines without the need for replacement, boosting the sustainability of the operations while leveraging on design elements from its own unique hermetic design base.

Working with the US customer's existing Brew 2000s, the installation of the Hermetic Booster over the last two years has delivered a remarkable reduction in operating costs compared to its predecessor.

The upgrade, which takes less than one day, involves the quick installation of a few components in the centrifuge's bowl, as well as a new hermetic inlet and outlet. This simple upgrade has been delivering major benefits at a cost that is far less than if the customer bought new – and with none of the added costs and downtime that would come with a complex replacement programme, which would also include substantial ancillary costs elsewhere in the system.

Fernando Jimenez, Senior Global Sales, Key Accounts Brewery and Beverage, BU High Speed Separators, has been at the centre of the development to upgrade the Brew 2000s.

"This has been a work in progress in liaison with the US brewery for a few years and we are excited by the benefits it is delivering in terms of sustainability and operational efficiency," he says.

The R&D division in Tumba, Sweden, came up with the solution, developing the prototype, which was then tested in the US. The results have been impressive, with the oxygen pickup reduced to near zero, 40% increased separation performance (that can be used to increase flow rate and/or improve beer clarification), and a power consumption that is drastically reduced by 50%.

"It's a great co-operation with the customer, who is smart and proactive. They let you know when they feel there are areas of the system that could be improved – it's a continuous dialogue," says Fernando.

Centrifugation technology is traditionally energy-intensive and large brewers in particular are always looking at the bottom line. The Hermetic Booster is set to be a game changer and discussions with other interested customers are already taking place.

"Big breweries are constantly looking to minimize energy, water and waste without compromising quality. When beer is produced at such a large scale, every kilowatt or litre of water that you can save through the process makes a big difference," says Fernando. "It is not only money that goes directly to the bottom line, it is also an enabler in their sustainability goals in the current challenge of reaching a net zero carbon footprint."

### Upgrade to Hermetic Booster:

Alfa Laval Hermetic Booster offers:

- Improved performance by up to 40%
- Reduced energy consumption by 50%
- No oxygen pickup
- Simple installation

Read more on our website.

[alfalaval.com](http://alfalaval.com)