



Alfa Laval Brew 701 eMotion™ cuts power consumption and noise levels

Brewery, Spain

Case story



A dramatic cut in power consumption, supreme beer clarification at high flow rates and lower noise levels were some of the benefits that a major Spanish brewing company experienced after exchanging two older clarifiers for an Alfa Laval Brew 701 eMotion™.

Replacement of two older clarifiers

The brewery planned to replace two older clarifiers operating at 400 hl/h with a single machine that was able to handle the entire flow of 800 hl/h.

The two existing clarifiers had high consumption of water and power. And they were so noisy that they had to be in a separate room due to worker safety regulations.

The first new supplier in 35 years

Previously, the brewery had used the same supplier of disc stack separators for 35 years, and they were happy with the partnership. Nevertheless, they decided to invite a new potential supplier, Alfa Laval, to present the Brew 701 eMotion™ separator.

After the first meeting, the brewery's team saw that Brew 701 eMotion™ could deliver better performance than the solution offered by their current supplier.

This included:

- lower energy and water consumption
- higher clarification efficiency (99.9%)
- less maintenance
- smaller size
- lower noise level
- minimal temperature pickup
- minimal oxygen pickup
- better CO₂ retention.

After a thorough technical investigation of the Brew 701 eMotion™ and a visit to the Alfa Laval test centre in Søborg in Copenhagen-Denmark, to test the machine in operation, the brewery's engineers and production manager gave the green light to BREW 701 eMotion™.

Smooth project execution

Thanks to a close cooperation between the customer and Alfa Laval, the execution of the project went very well. Since this was the first time in over three decades that the company was installing a disc stack separator from a new supplier, they required extra training for their personnel, and new routines had to be established for service and spare parts supply. Their partnership with Alfa Laval ensured this all went very smoothly, and soon the brewery was running at full speed.

MATURATION TANK



Matured
beer

CLARIFIER



Clarified
beer

COOLER



BUFFER TANK



FILTER



Filtered
beer

Impressive results

The new clarifier was commissioned in late 2016, and it has been in operation 24/7 with minimal operator supervision ever since.

The staff at the brewery was amazed with the performance of their new clarifier and see a big difference compared to the disc stack separators from their previous supplier.

A new standard

The brewing company has already ordered a second Brew 701 eMotion™ separator for the same factory. The customer is also interested in bringing

the solution to three of their other plants. Their idea is to have Alfa Laval Brew 701 eMotion™ become the standard solution for beer clarification in all breweries.

The customer's first Brew 701 eMotion™ unit was equipped with many extra features, such as remote monitoring, special sensors for colour, inlet/outlet oxygen levels and solids content. Investing in the best possible equipment is fully in line with their goal of producing beer of the highest possible quality while minimizing its environmental impact.

Fast facts**The plant**

The Spanish brewery has been in operation since the 1800s. It produces almost 4 million HI per year, and it will increase production up to 5 million HI next year.

The brewery's parent company produces almost 9 million HI beer per year and more than 18 millions HI beverages per year including soft drinks and water in addition to in 10 different factories.

The challenge

To clarify 800 hl beer/hour in one single separator, while keeping power and water consumption, as well as noise levels, to a minimum.

The solution

The company installed an Alfa Laval Brew 701 eMotion™.

The benefits

- Exceptionally low power consumption
- Minimal maintenance requirements
- Low noise level
- High clarification efficiency (99.9%)
- Low water consumption
- Minimal temperature pickup
- Minimal oxygen pickup
- Good CO₂ retention
- Compact installation



The eMotion unit is installed on a separate skid.

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com.