



Producing alcohol-free beer with same flavour, body and aroma as the original

**Asahi Group Holdings Co., Ltd,
Tokyo, Japan**

As part of its Smart Drinking initiative, Asahi Breweries, one of Japan's leading brewers, set out to create a beer with little to no alcohol content. Using the Alfa Laval De-alc module, Asahi now produces alcohol-free beer that retains the flavour, body and aroma of the original.

De-alc effectively removes the alcohol content from the base beer while preserving its distinctive character, catering to evolving consumer preferences. It allows Asahi to diversify its offerings and expand into the low- to no-alcohol beverage without requiring major capital investment.



Keeping pace with the rapidly expanding low- to no-alcohol beer market

As a leading global manufacturer of various brands, Asahi Group Holdings is addressing consumer demand by creating products that promote smart, responsible drinking habits. When Asahi Breweries initially started developing low- to no-alcohol beer, most such beer in Japan was crafted using blending techniques of non-fermented beverages.

Mr. Jun Kubota, Global Chief Brewer at Asahi Group Holdings and project manager overseeing the company's dealcoholization efforts, explained how they explored innovative technology to meet changing consumer preferences while crafting an alcohol-free blend mimicking the taste of regular beer.

“Breweries in Japan have been responding to health-conscious consumer demand for no-alcohol beverages.”

Jun Kubota, Global Chief Brewer at Asahi Group Holdings

“As the market matures, Asahi would like to offer customers an unmatched zero-alcohol product portfolio,” Mr. Kubota explains.

Despite the growing demand for low- and no-alcohol beer in Japan, the available offerings fall short of meeting market demand and customer expectations

regarding flavour, aroma and mouthfeel. Crafted from different ingredients and lacking fermentation, these beers cannot replicate the flavour profile of traditionally brewed beer.

“Asahi wanted to create a low- or no-alcohol beer that mirrored the flavour profile of our regular beer,” explains Mr. Kubota. “That’s when we came across the Alfa Laval De-alc module, a significant departure from our previous attempts to reduce the alcohol content of our beer.”

High-quality, full-flavoured dealcoholized beverages

The De-alc module efficiently removes alcohol from beer at low pressure and temperatures using a single-pass stripping column. With short residence times, this process produces high-quality, full-flavoured dealcoholized beverages.

Alfa Laval utilized its vast expertise in stripping technology to craft top-quality low-alcohol beer with less than 0.5% alcohol content and alcohol-free beverages with 0.0% alcohol content. The stripping column, free of moving parts, ensures minimal operating and maintenance costs.

The Alfa Laval De-alc module has proven effective in Europe and other countries worldwide. Mr. Kubota traveled to Denmark with Alfa Laval representatives to gain firsthand experience with the De-alc module.

“After tasting the alcohol-free beer produced by the De-alc, I was impressed by its high quality,” he remarked. “The sample had the authentic taste of beer that we were looking for.”

Facts about De-Alc

Alfa Laval De-Alc is an innovative combination of Alfa Laval technologies that work together as a well-integrated system.

This fully automated, plug-and-play module seamlessly integrates into existing production lines, allowing breweries to produce low- to no-alcohol beer without requiring substantial capital investment.



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Expanding the low- and no-alcohol portfolio worldwide

Introducing new technologies to existing process lines can be time-consuming, involving management decisions, investment considerations, and integration challenges. However, Asahi leveraged Alfa Laval's proven track record.

“We had concerns about scaling up to commercial production,” states Mr. Kubota. “However, based on our longstanding relationship, we trusted Alfa Laval to integrate the De-alc module seamlessly into our processing lines. Everything proceeded smoothly.”

Incorporating the De-alc module into its production lines in 2024 enabled the brewer to meet the increasing demand for Asahi ZERO, its 0.00% beer, by expanding production, covering a limited regional footprint to nationwide availability.

“We foresee continued growth in the no-alcohol beer market,” says Mr. Kubota. “Diversifying our product offerings to adapt to changing consumer preferences and take advantage of growth opportunities is essential to our business, both now and in the future.”

Asahi is committed to ongoing innovation, incorporating new technologies into its production lines that benefit people, the planet and productivity.

“Integrating the De-alc module into our production lines not only helps Asahi meet its sustainability objectives but also strengthens our competitive edge,” remarks Mr. Kubota.

Investing in the low-alcohol beverage market

The Alfa Laval De-alc modules are crucial to Asahi's production lines at its Fukushima and Suita Breweries. In 2021, the brewer introduced Asahi BEERY as Japan's inaugural low-alcohol beverage, with a 0.5% alcohol content. BEERY received acclaim for its outstanding flavours, delivering an authentic beer taste despite its low alcohol content.

The Asahi Group has now integrated the De-alc module into its European production lines in Italy, the Czech Republic and Australia, enabling a broader production footprint and distribution of its low- to no-alcohol beer.



Mr. Jun Kubota adjusts parameters on the Alfa Laval De-alc control unit for a batch of low-alcohol beer at an Asahi Breweries production facility.

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

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