



## Scandi Brew 3-in-1 Brewery Yeast Module

Yeast propagation, rehydration and storage



### Application

This module is specially designed to accommodate the particular needs of brewers seeking batch propagation and rehydration of new yeast as well as the reliable storage of harvest yeast – all under sterile and sanitary conditions.

Scandi Brew 3-in-1 brewery yeast modules are available with working capacities from 1 up to 10 hectolitres.

This standardized solution, based on well-proven Alfa Laval technology, involves significantly lower investment costs than any individually customized set-up, with the added advantages of streamlined commissioning and ease of operation.

### Construction

The module consists of a specially designed and manufactured vessel featuring a unique top plate design incorporating all the equipment necessary for completely sanitary operation, including pressure regulator, safety valve, anti-vacuum valve, agitator, aeration device, opening to add pressed/dried yeast, pressure transmitter and level probe. The module is fully automatic and equipped with a PLC control system and touch-screen interface panel.

## Operation

For propagation or rehydration, the vessel is filled with hot or cold wort. If desired, the wort can be sterilized in the vessel using a steam jacket built into the cone. After cooling, yeast for propagation is injected into the vessel either by means of a Carlsberg flask through the sample valve, or, in the case of rehydration, pressed/dried yeast is added into the vessel through the opening on the top plate.

The propagation is by means of aeration and takes place at the customer-defined temperature – normally until the end of the exponential growth phase. During rehydration, the yeast is suspended in the wort (or water if preferred) and aerated (if required). This process is very fast – normally not exceeding 2 hours – depending on whether aeration is applied or not. The propagated or rehydrated yeast is then ready for transfer into the fermentation process.

For storage, the harvest yeast is kept in the vessel and agitated to ensure effective and consistent homogenization, decarbonization and cooling. The aim is to maintain a high level of vitality and viability in the yeast between fermentations. If required, aeration prior to pitching can also be implemented.

## Cleaning

The module is designed for complete water flushing, steam sterilization and cleaning (using an external CIP plant).

## Mounting

The module is self-contained, pre-assembled in the factory and tested before delivery. Once on site, the installation tasks are limited to connections of utility lines and product mains.

## Maintenance

The valves should be checked and gaskets changed at regular intervals. The filter insert must be replaced every two years, as a minimum.

## Benefits

- Flexible 3-in-1 operation for propagation, rehydration and storage
- Gentle methods for aeration and agitation secures unstressed yeast with maximum viability and vitality
- Simple to shift between different yeast strains and between the three functions
- Lower investment and installation costs compared to customized plants
- Easy commissioning and operation incorporating well-proven technology

## Extra equipment

- Three-step sterile air filters (mandatory if sterile air is not available)
- Carlsberg flask
- Frequency-controlled yeast pump
- Load cell under one leg to monitor/control vessel fill volume
- Steam pressure reduction station with steam filter (mandatory if steam supply exceeds 2 barg and is not food grade)
- Cooling of vessel cone instead of steaming
- Cooling loop to minimize the temperature difference between cooling media and product
- Manual shut-off valves for the utility lines

Alfa Laval reserves the right to change specifications without prior notification.

## 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](http://www.alfalaval.com)