



Choose a sure thing

Industrial-scale yeast and yeast extract production requires a number of critical choices. The equipment selected and the way each system is designed can have a significant impact on the quality of the end product.

That's why it's critical to engage a supplier who deeply understands the nuances of each process and the core technologies required to achieve the process excellence you want. With many years experience in the production process and a wide range of support services, Alfa Laval is such a supplier.

Alfa Laval in brief

Alfa Laval is a leading global provider of specialized products and engineered solutions.

Our equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

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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Expand your business

Process solutions for bakers' yeast, yeast extract and molasses pre-treatment

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Get it right from the start



We can help turn a sensitive process into a sure thing

Our leading core technologies in the area of separation, fluids handling and heat transfer meet the most demanding requirements. Equipment from all of Alfa Laval's technologies is used in each step in the production process, from molasses pre-treatment and fermentation to dewatering and waste disposal.

In the pretreatment phase, it is vital that you remove the suspended solids – sand, mud and clay – as efficiently as

possible without losses of sugar. Otherwise, additional wash water may be required at a later phase, adding unnecessary costs.

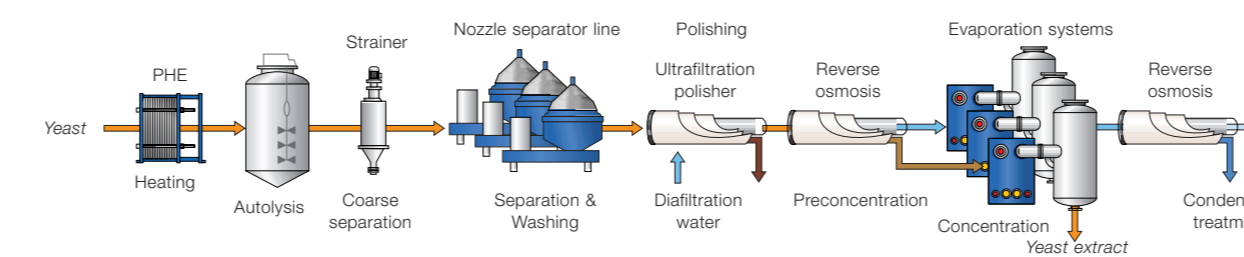
A correctly designed molasses pre-treatment system employs equipment from all of Alfa Laval's key product areas – fluids handling, separation and heat transfer. The right selection, coupled with Alfa Laval's experience and process know-how, guarantees product quality, operational reliability and the highest possible efficiency.

Heating, cooling or holding steady

Alfa Laval heat exchangers play a key role in these industries. Throughout the entire process heat exchangers are used for heating, cooling and steady temperature control.

Our heat exchangers features sanitary design, extremely close temperature approaches, fast response times, low product hold-up as well as being fully cleanable in place.

Yeast extract process



Yeast extract concentrate

Yeast extracts are manufactured from baker's yeast. Manufacture from recovered brewer's yeast is also possible. Through controlled autolyses, the proteins of the yeast cell are solubilized. Cell walls are separated and washed in centrifugal separators to secure maximum product recovery. Membrane filtration may be used for polishing and pre-concentration before concentration by evaporation. Finally, yeast extract concentrate is generally dried and sold as a powder.

In the yeast extract process, Alfa Laval membrane technology may be combined with our traditional high-speed separators to enhance product quality by selectively removing "soluble" components which may also improve the efficiency of downstream processing.

Reduce size and costs

Compared to conventional shell-and-tube evaporators and condensers, AlfaVap and AlfaCond work wonders on your wallet. They not only require less space but also substantially reduce investment and maintenance costs – without sacrificing reliability or safety.

The unique designs of AlfaVap and AlfaCond provide substantially higher thermal efficiency than conventional shell-and-tube units, which means much lesser heat transfer area is needed. This makes AlfaVap and AlfaCond extremely economical. The compact

design saves you space and makes erection and installation cheaper. The flexible design makes it easy to adjust capacity to meet changing needs, simply by adding or removing plates.

The more than 1,500 AlfaVap and/or AlfaCond installations in different applications worldwide testify to the success of these products.

In addition to those generated by the AlfaVap, you can achieve further cost savings for both concentration of yeast extracts and effluent treatment (vinasse) by incorporating our custom-made solutions in membrane technology. Specifically, this technology can be placed as a pre-concentration step to the evaporator stage. In this way, apart from offering further savings in costs for new lines, the membranesystem can also be used to de-bottleneck existing process lines.

Furthermore, to reduce environmental impact and effluent treatment costs, Alfa Laval membrane technology can be used to concentrate the evaporator condensate producing a clean water stream for reuse and a low volume stream containing the BOD/COD loading.

Other Alfa Laval fermentation applications

Alfa Laval equipment and expertise is used in related fermentation applications, including algae, amino acids, fodder yeast, organic acids, polysaccharides, vitamins, enzymes and single-cell proteins.

Service counts

In modern yeast processing, efficient, well-planned service plays an important part in maintaining profitable operations.

Full control

Alfa Laval operates with a highly sophisticated Nonstop Performance concept made possible by our worldwide network of service and spare parts distribution centres in more than fifty countries throughout the world. Alfa Laval has full control over the entire supply chain, which means that we can provide customers with response times, availability and lead times that are second to none.

Service when it fits in

The service requirements for Alfa Laval yeast processing equipment are minimal, and planned preventive maintenance is the key to making sure this always remains the case. Alfa Laval's worldwide service capabilities and vast experience with the contract maintenance and service of our equipment ensure that any service work required involves the absolute minimum of disturbance to operations.

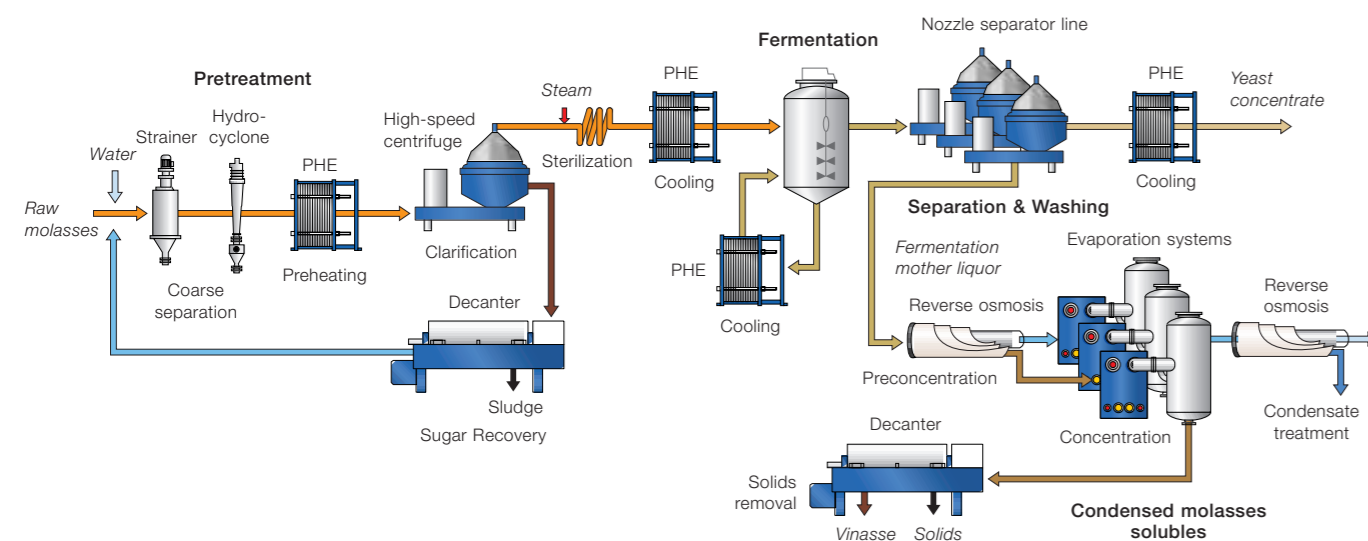
And when your business is running 24 hours a day, seven days a week, you need excellent backup service, technical and after-sales support. With 70 service centers worldwide and a presence in some 100 countries, we are uniquely qualified to ensure you produce the quality and quantity of yeast you want, at price and productivity levels that will help expand your business.



A correctly designed system employs equipment from all of Alfa Laval's key product areas – fluids handling, separation and heat transfer.

Yeast production process

A typical molasses-based yeast production process.



- Alfa Laval product portfolio for yeast**
- plate heat exchangers
 - decanter centrifuges
 - strainers & cyclones
 - high speed separators
 - plate evaporators
 - plate condensers
 - membranes
 - valves and pumps