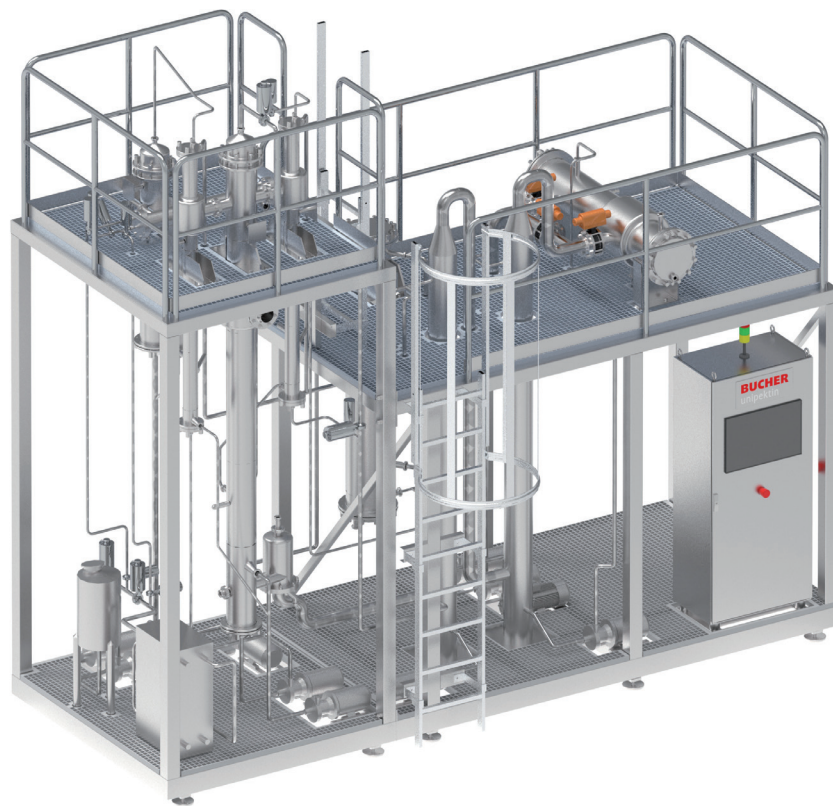


# DE-ALCONOX B

Thermal dealcoholisation of beer



## Dealcoholisation of beer

- Processing at lowest temperatures <math>< 38\text{ }^\circ\text{C}</math>
- Dealcoholisation down to <math>< 0.03\text{ } \% vol.
- Suitable for filtered and non-filtered beer

**Application** Bucher Unipektin dealcoholisation plants are designed in a way to produce a highly dealcoholised beer as well as rectified alcohol with minimum negative side effects on beer quality. Additionally, the design is flexible regarding product flow and composition and is also well suitable for non-filtered beer. It is therefore a sustainable investment enabling a brewery to serve all current or future market trends.

**Process** Firstly, the beer is gently degassed in order to avoid foaming throughout the process. The temperature of the incoming product is adjusted in counterflow to the outgoing dealcoholised beer. In a special Bucher Unipektin degassing system very low final gas levels are achieved at a pressure slightly below the boiling pressure.

The alcohol is then removed from the beer and rectified in a special column. The column consists of two sections: a first section for stripping the alcohol out of the beer and a second section for rectifying the alcohol to the desired concentration. The unique design of the used high precision inserts provides several advantages:

- minimum pressure drop allows a low temperature at the bottom of the column with least impact on beer quality and optimised energy consumption compared to similar systems
- high tolerance for suspended particles enabling trouble-free processing of non-filtered beers
- very low alcohol content achievable providing maximum options for final blending with non-treated beer

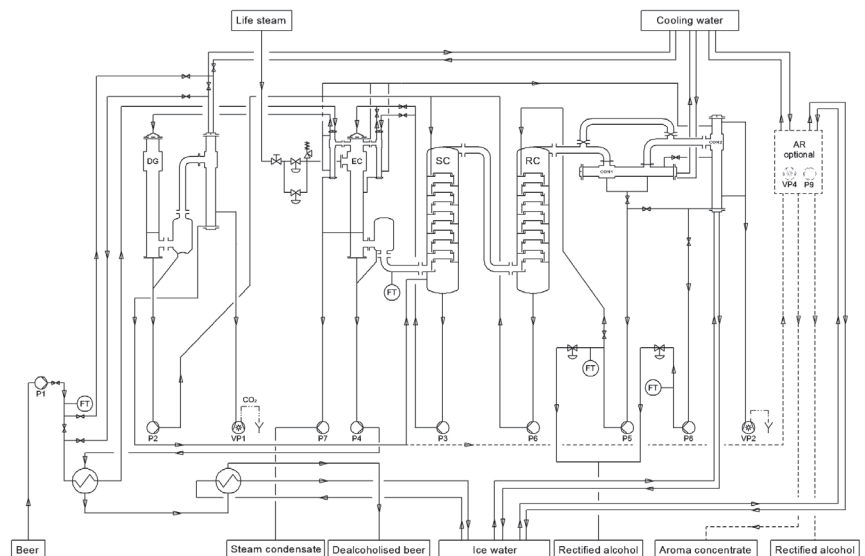
The energy for the stripping and rectifying column is supplied by a small amount of vapour which is evaporated out of the already dealcoholised beer. Bucher Unipektin uses evaporator bodies with a large heat transfer surface which minimises the required surface temperature in contact with the product. Finally the beer is cooled back and carbonised again.

The whole process is operated under vacuum limiting the product temperature to <38 °C and excellently preserving the quality of the treated beers.

**Technical data / Capacities** Standardised dealcoholisation plants are available from 5 up to 200 hl/h.

### Process flow diagram

- DG: Degassing
- EC: Evaporation column
- SC: Stripping column
- RC: Rectification column
- CON1: Condenser 1
- CON2: Condenser 2
- AR: Aroma recovery



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### Let's be clear!

**Bucher Unipektin, Competence Center Filtration**, is the world leading manufacturer of complete filtration solutions for the beverage industries. Our outstanding candle and horizontal leaf filters for the pre-coat filtration with kieselguhr and PVPP are the benchmark for the filtration of beer, sugar syrup, tea, gelatine and other liquid foods. We also develop and manufacture beer-recovery systems with ceramic membranes, crossflow membrane systems for beer main stream filtration, sterile filter systems with membrane cartridges and vacuum-distillation plants for de-alcoholisation.

**Bucher Unipektin, Competence Center Filtration**, is a business partner with a long-term industrial focus, committed to fair partnership with our customers, employees, and business associates.