



ALDOX™ MINI

Water deaeration module for beer and soft drinks

Application

ALDOX™ MINI is a process system for production of deaerated and carbonated high-quality water for breweries and soft drink manufacturers. The factory assembled system, developed in co-operation with the brewing industry, is designed as a skid-mounted unit and intended for low capacity demands.

Working principle

Oxygen is removed in the ALDOX™ column, provided in a space-saving wall-mounted design. The high desorption of oxygen is achieved using carbon dioxide (CO₂) as a stripping gas through a packed bed operating at atmospheric pressure. Water is distributed at the top of the column and trickles downward counter currently to the CO₂ flow. The internal packing material, specifically developed for this application, ensures a large effective contact area between water and stripping gas. The benefits are highly efficient oxygen removal at very low gas flow rates with almost all of the CO₂ added to the column dissolved in the water.

The virtually oxygen-free water collects at the bottom of the column and transfers by gravity to the buffer tank, where it is stored at atmospheric pressure under a blanket of CO₂ to avoid oxygen pick-up. To deaerate still drinks, nitrogen (N₂) is used instead of CO₂.

The ALDOX™ MINI is a fully automatic system with a small PLC controlling the plant operation and operated by means of push buttons. Cleaning-in-place (CIP) is integrated into the unit and can be performed automatically.



Benefits

- Automatic control
- Hygienic and compact skid-mounted design
- Water dissolved oxygen (DO) levels down to less than 0.02 ppm can be achieved
- CO₂ losses below 5%
- Low maintenance
- No pressure rated or heavy duty vessels needed
- Integrated CIP functionality

Basic unit

The ALDOX MINI water deaeration system is self-contained, factory preassembled and tested before delivery. In compliance with food industry regulations, all components in contact with the process liquids are made of stainless steel with heat resistant seals. CIP functionality using the buffer tank is included.

Optional equipment

- Remote control

Technical data

(Other specifications on request)

Capacity range:	10-40 hl/h (4.4-17.6 gpm)
Deaeration to:	< 0.02 ppm

Utility data

Temperature range:	10-30°C (50-86°F)
Installed power:	2 kW
Carbon dioxide*:	1-5 Kg/h (2.2-11 lbs/h)
Purity	> 99.95%
Gas losses	< 5%

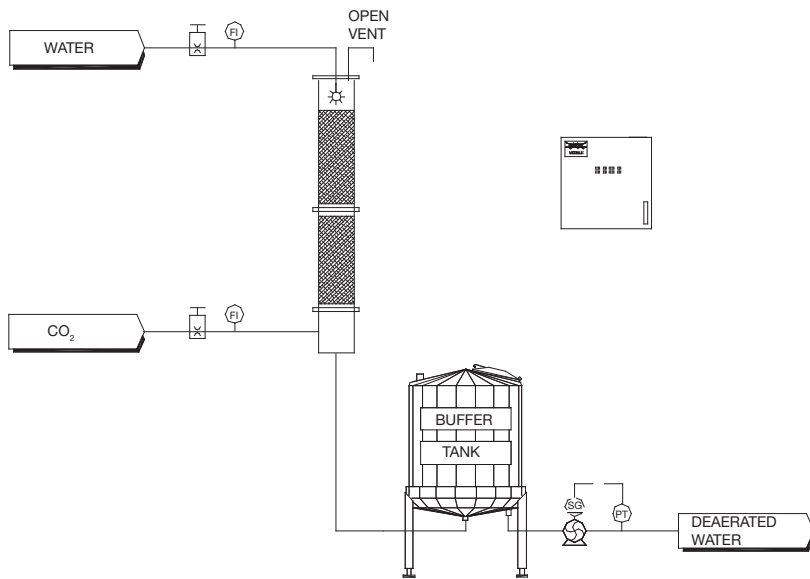
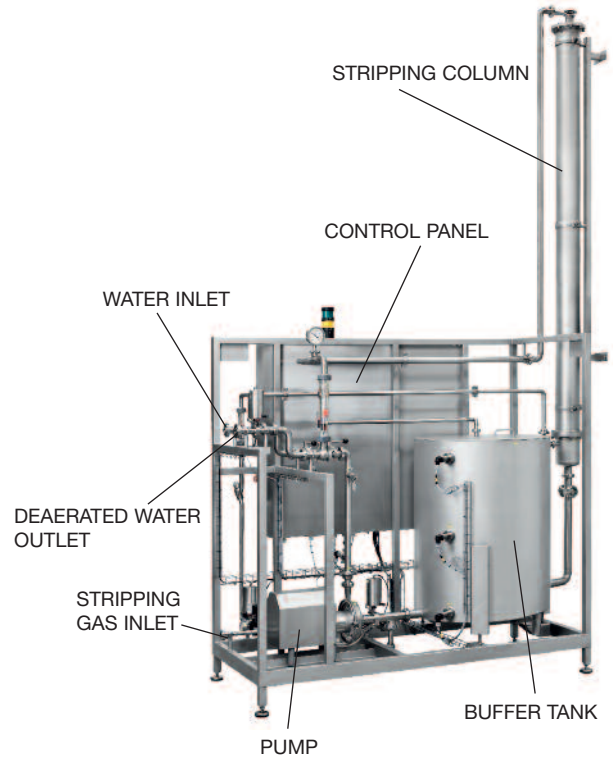
*Depending on capacity and temperature

Dimensions

Approximate dimensions and weight:

L	W	H
2,500 mm (98.4 inches)	1,175 mm (46.3 inches)	5,000 - 8,000 mm (196.8 - 314.9 inches)

Weight: 1,000 kg (2,205 lbs)



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