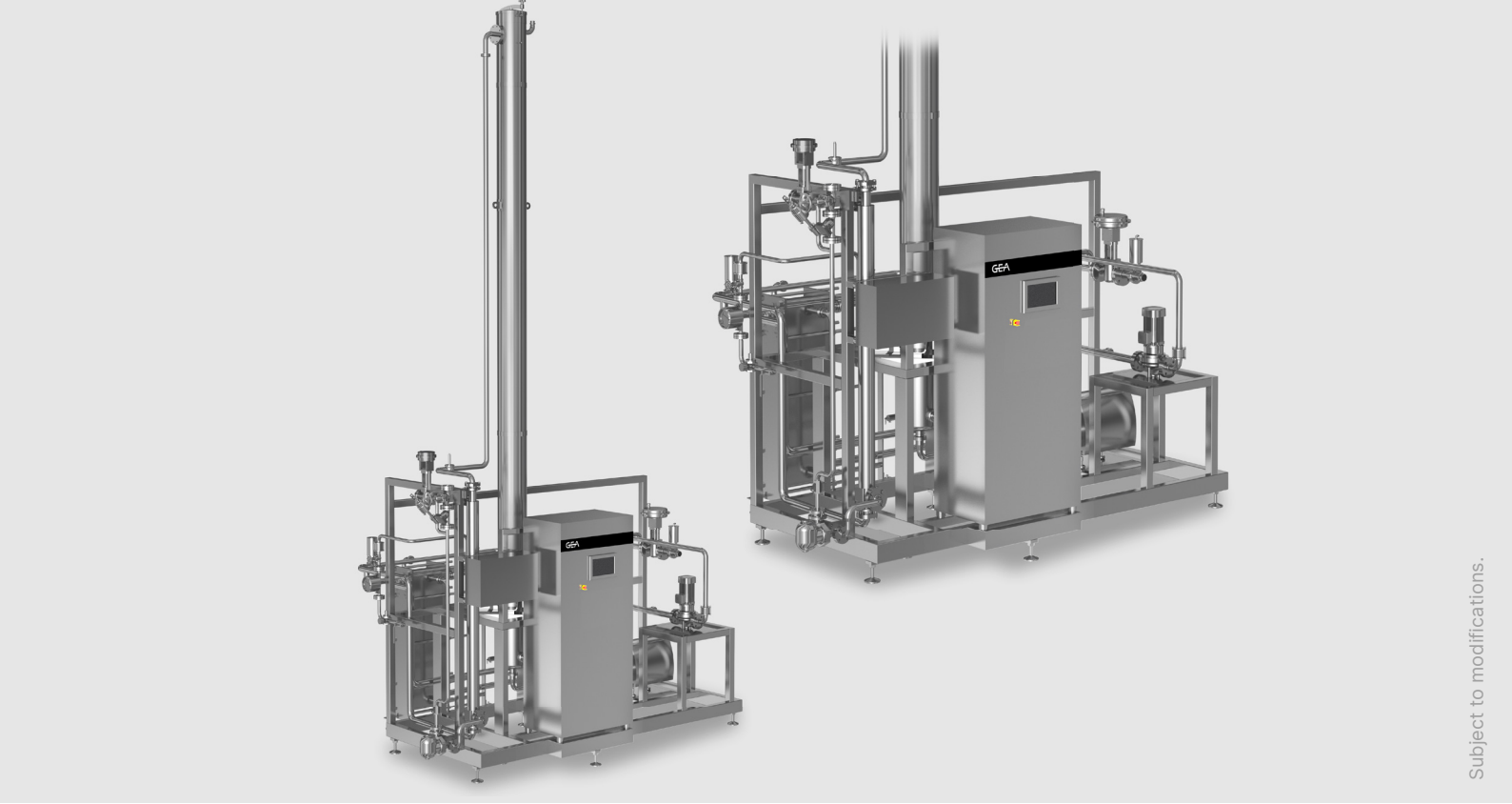

GEA VARIDOX-H Water deaeration system for hot deaeration

Technical data

Oxygen in beer or beverages may affect the shelf life and spoil taste. It is therefore important to use optimum deaerated water for the production of beverages and for the redilution of beer. The proven GEA water deaeration system GEA VARIDOX-H uses hot deaeration to achieve excellent residual oxygen values which makes it most suitable for this and other applications.

The pasteurization of the water offers an additional advantage. The water is heated up to approx. 72°C. At that temperature it is fed to the deaerating column and slowly trickles down the packed column. The high temperature strongly reduces the solubility of the oxygen in the water. The bottom-up flowing CO_2 (N_2) ensures an additional release of the oxygen.

When the water is cooled down after leaving the column, a heat recovery of >90 % is obtained by means of the regenerating step. The water is subsequently cooled down to the desired temperature. The sensors for flow rate, level and optionally oxygen monitor the GEA VARIDOX-H to maintain proper function. The GEA VARIDOX-H is cleaned via the product pipe as necessary; this is rarely required unless the water quality is poor.

Features

- Residual oxygen content ≤0.02 mg O_2/l (option: 0.01 mg O_2/l; option: 0.005 mg O_2/l)
- Low running costs
- Low wear and tear
- Factory-tested unit

GEA VARIDOX-H is available with the following options:

1. Pre-carbonation
2. Sterile filter for CO_2
3. Deaeration to ≤ 0.01 mg O_2/l
4. Deaeration to ≤ 0.005 mg O_2/l
5. O_2 measurement
6. Column on skid

Technical data

Capacity	see below	**CO_2 pre-pressure**	6 - 12 bar depending on the pressure reducer
Water pre-pressure	3 bar	**CO_2 supply** **• remains in the product** **• CO_2 consumption**	0.5 g/l 0.45 g/l 0.05 g/l
Control air pressure	6 - 8 bar	**Required CO_2 quality**	≥ 99.998% purity

Max. capacity [hl/h]	Design size [DN]	Length [mm]	Width [mm]	Height* [mm]	Weight approx. [kg]	Elec. capacity [kW]
45	25	3,500	3,000	7,000	2,000	2.5
100	40	3,500	3,000	7,000	2,000	5.0
175	50	3,500	3,000	7,000	2,000	9.0
300	65	3,500	3,000	7,000	2,000	12.0
450	80	3,500	3,000	7,000	2,000	17.0
700	100	4,500	3,500	7,000	3,500	22.0
1,000	125	4,500	3,500	7,000	3,500	34.0

* Depending on the residual oxygen content (the higher the residual oxygen content, the smaller the overall height).
at 0.02 mg O_2/l: Height approx. 6.0 m
at 0.01 mg O_2/l: Height approx. 6.5 m
at 0.005 mg O_2/l: Height approx. 7.0 m

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