

Description

Oxygen in soft drinks affects their preservability and taste. Therefore, it is important to use deaerated water for the production of soft drinks. The GEA Diessel 1-stage water deaerating system, type **DIOX-1T™**, achieves a good value of residual oxygen and is, thus, especially suitable for many applications. For higher demands we recommend using our **DIOX-2™**.

The water to be deaerated is finely dispersed through a spray nozzle and carried into a tank which is subject to a vacuum, whereby the largest part of oxygen is extracted. A dry-running vacuum pump keeps the vacuum at the required value.

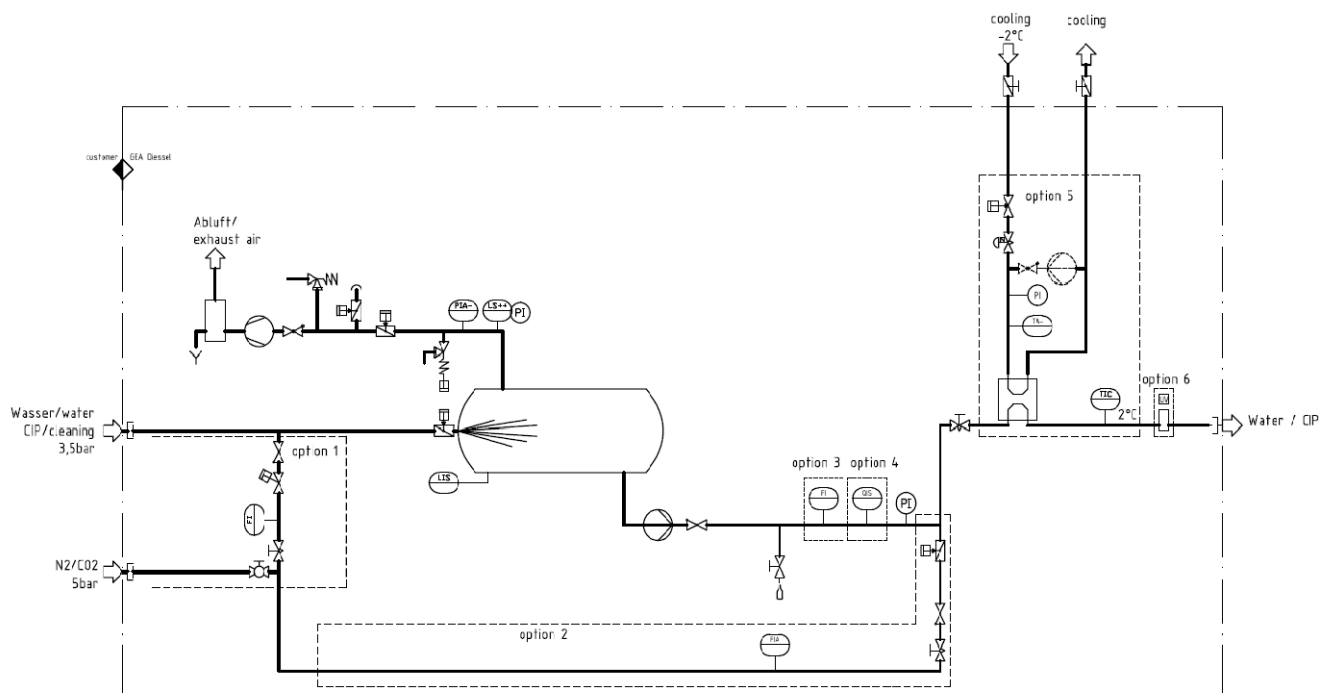
To achieve a further reduction of the oxygen content, the supplied water can be optionally enriched with CO₂ or N₂ before the deaeration is started.

A transfer pump conveys the deaerated water to the buffer tank or the consumer. The system is cleaned via the product path.

Special Features

- Residual oxygen content ≤ 1.0 mg of O₂/l (0.7 mg O₂/l is possible)
- No or low stripping gas consumption (0 - 0.5 g/l)
- Low assembly costs, as pre-assembled ready for operation and tested
- Available for flow rates of 50 - 600 hl/h

Flow diagram (Example)



The DIOX-1T™ is available with the following options:

1. Stripping gas supply
2. Precarbonation
3. Flow meter
4. O₂ measurement
5. Cooler
6. UV sterilization

Technical Data

Materials	1.4301/EPDM other materials on demand						
Dimensions	Qmax	Length	Width	Height		Installed electrical power	Approx. max. weight
	hl/h	mm	mm	mm	DN	kW	kg
	50	2,900	1,300	2,500	40	4	650
	100	2,900	1,300	2,500	50	5	750
	200	2,900	1,300	2,500	65	10	750
	300	2,900	1,700	2,700	80	12	1,100
	400	2,900	1,700	2,700	80	18	1,100
	500	3,600	1,800	2,700	100	20	1,200
	600	3,600	1,800	2,700	100	22	1,200
Admission pressure for water	3.5 bar						
Admission pressure for CO ₂	5 bar						
Control air pressure	6 – 8 bar						
CO ₂ consumption	0 – 0.5 g/l						
Required CO ₂ quality	≥99.99 % purity						
Residual oxygen content	≤1 mgO ₂ /l (by the addition of CO ₂ or N ₂ ≤0.7 mgO ₂ /l)						