

Membrane Deaeration System

General information

Haffmans has developed a Water Deaeration System based on membrane technology. The membranes give considerable flexibility, which helps construct units in a modular way. By installing the membranes in parallel, a big capacity range can be obtained. Serial installation of the membranes makes it possible to reach the required O_2 -value in the deaerated water. The unit's modular design allows for a compact build.

These advantages make membrane technology a very attractive alternative in comparison to other technologies that used to comprise a company's capital investment and operational costs.

Principle of Operation

The MDS System employs high-efficiency hollow fiber membranes creating an highly efficient contact surface between the water and the gas. Water flows on the outer side of the hollow fiber. Because the O_2 -concentration in the water at the outside of the hollow fibers is higher than on the inside, the O_2 in the water diffuses through the membrane. Inside the hollow fibers a low amount of sweep gas (CO_2) flows, helping a vacuum pump to deaerate the water. This results in effective deaeration with an exceptionally low CO_2 -consumption.

Description

The MDS is a skid-mounted system utilizing proven components, including all required piping, wiring and control system. Its hygienic, fully automatic and reliable design makes for easy handling, low maintenance and a long lifetime. Quality and reliability of the Membrane Deaeration System, type MDS, are guaranteed by extensive factory tests.

Beverage CO_2 Systems



Technical information

Cleaning

The MDS system is manufactured in accordance with sanitary standards. The unit is provided with fully automatic CIP-capability.

Service

The Membrane Deaeration System is a user-friendly and fully automatic system, which has very little need of spare parts. Clear operating instructions, maintenance information and a reliable service department are part of our services.

Benefits

- Residual O₂ < 0.01 ppm or lower on request
- Hygienic Design
- Modular
- Automatic CIP-capability
- Fully PLC-controlled with operating panel
- Compact design

Options

- In-line dissolved O₂-measurement
- Water cooling system
- UV-disinfection

O₂ content (accordance with customers' requests)

< 0.01 ppm or lower on request

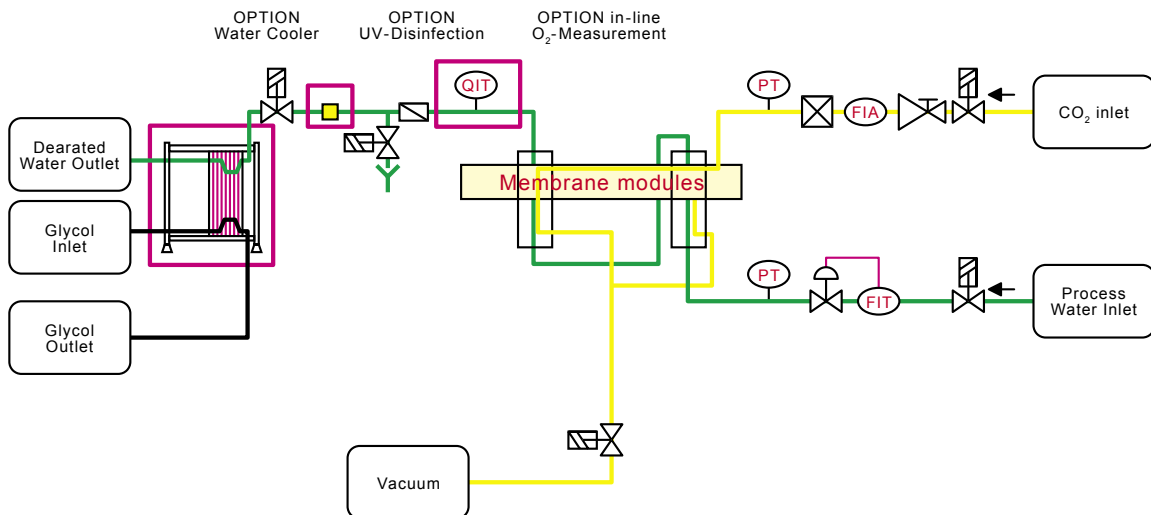
Material

Product contact parts: AISI 316L
Non-contact parts: AISI 304/316

Control Cabinet

Protection class: IP 54

Haffmans B.V. reserves the right to make changes in the technical specifications at any time.



Haffmans B.V.

P.O. Box 3150 NL-5902 RD Venlo, The Netherlands

T: (+31) (0)77 323 23 00 F: (+31) (0)77 323 23 23

E: info@haffmans.nl I: www.haffmans.nl



NORIT The Purification Company

MDS