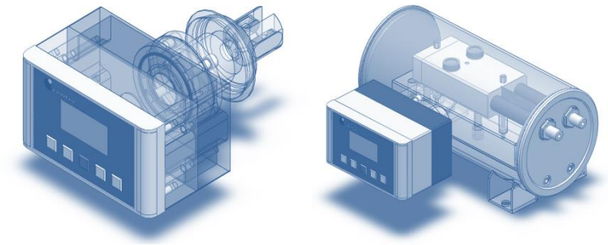
The Centec Group

Centec is a privately owned group of companies. Based on extensive know-how, we are a specialist for automated process skids for high precision dosing – even of smallest quantities. For media supply we offer water purification and pure steam generation systems. CIP- and SIP-units designed and manufactured by Centec are widely used in chemical industries. Centec technology includes a range of high precision process sensors for accurately measuring critical product properties such as the concentration of acidic and caustic solutions and O_2 content. The largest chemical groups in the world are among our key customers.



Accuracy. Reliability. Centec.

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DeGaS-C

Cold Column Deaeration

Centec Chemistry Systems

More information at **www.centec.de**

Automated process skids and high precision sensors from a single source. Centec.

DeGaS-C

The Principle

The Centec column deaeration system DeGaS-C is a modular skid for removing oxygen from water at ambient temperature. The presence of even low O_2 levels can cause serious corrosion damage by forming oxides. For treatment in DeGaS-C, the liquid is injected at the top of the column. The column contains a matrix of structured packing comprising thin corrugated metal plates arranged so that the liquid takes multiple paths as it flows downwards through the column. This maximizes the transfer surface and the contact time between the liquid and the strip gas; CO_2 or N_2 may be used. The strip gas is fed into the bottom and flows upwards inside the column. The large partial pressure difference of O_2 forces the oxygen out of the liquid into the gas phase. This fundamental scientific principle is described by “Henry’s Law”. At the top of the column the removed O_2 leaves the system together with the undissolved CO_2 or N_2. The resultant deaerated liquid is slightly carbonated or nitrogenated depending on the strip gas used. O_2 content monitoring can be done with accurate OXYTRANS optical sensing technology developed and manufactured by Centec.

- **Application Specific and Energy Efficient**
  extensive contact between liquid and strip gas
  subsequent disinfection of liquid possible
- **Modular Design with Standard PLC**
  skid mounted for easy installation and start-up
  sturdy execution and largely maintenance-free
- **Hygienic Execution and Full CIP Capability**
- **Outstanding Price-Performance-Ratio**

Experience. Expertise. Centec.

Particle Pre-Filtration · Disinfection · Water Softening & Demineralization · Ultrafiltration · Reverse Osmosis
Electro Deionization · WFI Distillation · Membrane Deaeration · Column Deaeration · Vacuum Deaeration
Multi Component Mixing · Additive Dosing · Flash Pasteurization · Cleaning-in-Place · Pure Steam Generation

Technical Data

Capacity	1 - 200 m³/h
Residual Oxygen	< 10 ppb
Pressure of Operation	0 - 8 bar
Temperature of Operation	ambient temperature
Temperature of CIP	max. 85 °C
Material	1.4301/1.4404 AISI 304/316L
Cooling Medium	glycol, ice water, ammonia, brine
PLC	SIMATIC S7
Options	in-line O_2 measurement pre-filtration disinfection

The Centec production is certified according to ISO 9001.