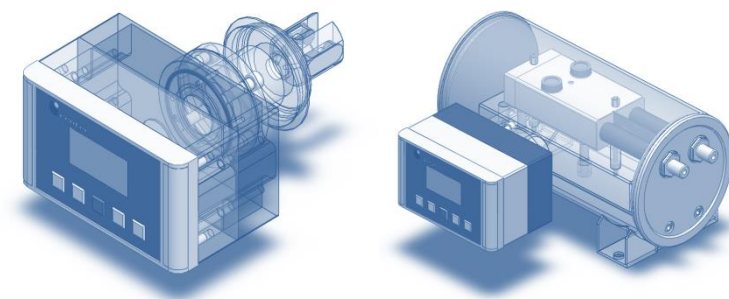


## The Centec Group

Centec is a privately owned group of companies. Our automated process skids are used throughout the entire brewing process. For soft drinks, dairy and food industries we offer a large variety of skid mounted systems. We have decades of experience in water purification and deaeration, carbonation, liquid blending and dosing, flash pasteurization and cleaning-in-place. Centec technology includes a range of high precision process sensors for accurately measuring critical product properties such as extract, alcohol, milk fat, O<sub>2</sub> and CO<sub>2</sub>. The largest brewery, soft drink, dairy and food groups in the world are among our key customers.



**Accuracy. Reliability. Centec.**

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**VeGas**

**Vacuum Deaeration**

**Centec Beverage Systems**



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

# VeGaS

## The Principle

The Centec vacuum deaeration system VeGaS is a modular skid using a vacuum vessel for the removal of oxygen and other gases from a wide range of liquid products such as soy milk or tomato ketchup. The presence of even low oxygen levels can increase microbial activity and adversely affect taste, colour and shelf life of beverages and food products. Through special dispersion nozzles the liquid is sprayed into a continuously evacuated vessel. Due to the distribution of the fine liquid droplets, the transfer surface area between the liquid and the vacuum is maximized. The large partial pressure difference of O<sub>2</sub> forces the oxygen out of the liquid into the vacuum. This fundamental scientific principle is described by “Henry’s Law”. Once the oxygen has been removed, it transfers out of the vessel through the vacuum line. The deaerated product collects at the bottom of the tank from where it is discharged for further processing. Vacuum deaeration can be assisted by a strip gas like nitrogen or carbon dioxide. O<sub>2</sub> content monitoring with highly accurate OXYTRANS optical sensing technology developed and manufactured by Centec can be added, as can various other options.

## Technical Data

Capacity	50 - 1.500 hl/h
Residual Oxygen	depending on product
Pressure of Operation	0 - 8 bar
Temperature of Operation	2 - 85 °C
Temperature of CIP	max. 85 °C
Material	1.4301/1.4404 AISI 304/316L
PLC	SIMATIC S7
Options	in-line O <sub>2</sub> /CO <sub>2</sub> measurement pre-filtration carbonation disinfection



The Centec production is certified according to ISO 9001.

- **Application Specific and Energy Efficient**  
extensive contact between liquid and vacuum  
subsequent disinfection of liquid product 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.

*Ion Exchange · Reverse Osmosis · Membrane Deaeration · Column Deaeration · Hops Pre-Isomerization  
Wort Aeration · Yeast Pitching · Nitrogenation · Carbonation · Carboblending · High Gravity Blending  
Multi Component Mixing · Additive Dosing · Flash Pasteurization · Cleaning-in-Place · Dealcoholization*

