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, O2 and CO2. The largest brewery, soft drink, dairy and food groups in the world are among our key customers.


Carbonator

Carbonation

Centec Beverage Systems

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

More information at www.centec.de
The Principle

The Centec Carbonator is applied for the addition of pressurized CO$_2$ to carbonate beverages like beer, cider, soft drinks and sparkling water and to reach exactly the required value of residual CO$_2$. Every skid is equipped with one or several specifically designed Vortex injectors that inject the gas as fine bubbles into the liquid stream. These nozzles ensure that the carbon dioxide dissolves perfectly and absolutely homogeneously in a very short time. At the outlet of the system the CO$_2$ content is permanently measured with a highly reliable CARBOTEC sensor developed and manufactured by Centec. Based on this accurate in-line measurement, the CO$_2$ flow is adjusted instantly and fully automatically. Due to the very low pressure drop in the product line, no static mixer is required for the Carbonator skid. The modular design of the process units allows for easy expansion, e.g. for carboblending or additional nitrogenation.

Technical Data

- **Capacity**: 10 - 2,000 hl/h
- **Range of CO$_2$**: 0 - 10 g/l or 0 - 5 vol.%
- **Control Accuracy**: ± 0.05 g/l or ± 0.025 vol.%
- **Pressure of Operation**: 1 - 10 bar
- **Temperature of Operation**: 2 - 50 °C
- **Temperature of CIP**: up to 85 °C
- **Material**: 1.4301/1.4404 AISI 304/316L
- **PLC**: SIMATIC S7
- **Options**: in-line measurement of O$_2$/CO$_2$/sugar/alcohol/... nitrogenation blending

The Centec production is certified according to ISO 9001.