

CPS

## Continuous Premix System



## The Application

Every Centec carbonation unit is equipped with a special designed Vortex-Venturi nozzle for CO<sub>2</sub>. It achieves by using the integrated Vortex edge a perfect mixture of carbon dioxide with the beverage. No static mixer is required anymore thus the pressure drop in the main line is minimised. The integrated Centec in-line process measurement for CO<sub>2</sub> controls the dosing fully automatic.

Highly accurate flow meters and pneumatic control valves continuously monitor and adjust the mass ratio. A redundant Centec on-line density sensor, placed at the end of the system, accurately determines the °Brix/Diet content of the final product and if necessary, the mass ratio is automatically adjusted. An optional remote access service kit allows a Centec technician, located in Frankfurt, to update and maintain system software at any time. If required, the system can be equipped with a deaeration and carbonation system.

### Technical Data

|  |   |
|--|---|
| <b>Capacity</b>  | 10 - 150.000 l/h  |
| <b>Range and control of measurement CO<sub>2</sub></b> | 0-10 g/l bzw. 0-5 Vol%  |
| <b>Range of Dosing</b>                                 | 0-65°Brix ± 0,025   |
| <b>Components</b>                                      | 1 l/h to 75.000 l/h   |
| <b>Temperature</b>                                     | -2 - +50°C  |
| <b>Pressure</b>  | 0-10 bar  |
| <b>Material</b>  | 1.4301 / 1.4404   |
| <b>PLC</b>   | Siematic S7   |
| <b>Optional</b>  | Water Deaeration System<br>Oxygen Measurement<br>Chiller / Flash Pasteuriser<br>Remote Access Kit |

### ● Optional Integration of a water deaeration system

to deaerate continuously the blending water down to < 0,01 ppm

### ● Optional Process Visualisation

Visualize and store continuously the process on the local PLC or at an upper SCADA System.

### ● Optional In-line Measurement

for Oxygen, OG, conductivity, Alcohol or pH



- **Hygienic**  
in design and fully integrated in the CIP process
- **Flexible**  
by using a local PLC or fully integrated in the overall process
- **Full automatic**  
controlled by high sophisticated process measurement
- **Effective**  
by using the special designed Vortex Injector for CO<sub>2</sub>



Centec Carbotec TR-PT  
In-line Process Measurement for carbon dioxide



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