

## Efficient and safe

### Chlorine dioxide production and metering system Bello Zon<sup>®</sup> CDLb



The new CDLb is characterised by the outstanding long-term stability of the solution, exceptional efficiency in the reaction without any  $\text{ClO}_2$  loss from the gas phase and step by step controlled process.

The chlorine dioxide system Bello Zon<sup>®</sup> CDLb uses the chlorite/acid process. A chlorine-free chlorine dioxide is generated from a sodium chlorite solution using hydrochloric acid in a batch process. The innovative reactor design and the step by step controlled process make the production of chlorine dioxide exceptionally safe and reliable. Depending on the type of system, up to 120 g per hour of chlorine dioxide is produced and put into intermediate storage in an integrated or separate storage module. The solution concentration is 1000 or 2000 mg/l. Putting 60 g of chlorine dioxide into intermediate storage means that the system no longer has to be configured to its peak load but simply to the average consumption.

#### Advantages

- Outstanding long-term stability of the solution
- Exceptional efficiency in the reaction with no  $\text{ClO}_2$  loss from the gas phase
- High operational safety due to process controlled one step at a time
- Several points of injection can be operated
- Economical operation due to minimal use of chemicals
- Minimal investment costs

The ProMinent<sup>®</sup> product range offers a wide range of metering pumps and control versions to choose from. So it's possible to supply several points of injection with chlorine dioxide from a storage module.

The innovative process produces a chlorine dioxide solution of exceptional long-term stability and achieves a high output of over 90% from the chlorine dioxide generation. No chlorine dioxide can escape from the system due to the closed gas system. Thereby economical, environmentally-friendly operation with minimal use of chemicals is provided. The modular construction of the system is designed to serve a range of different applications.

Possible applications for the chlorine dioxide system Bello Zon<sup>®</sup> CDLb is mainly used for applications like legionella prevention as well as for disinfection in the food and beverage industry. Other applications are in cooling and potable water treatment, and in swimming pool filter disinfection.

The systems meets the high standards of the W 224 and W 624 German Association for Gas and Water (DVGW) worksheets.

# Excellent degree of protection

## Applications

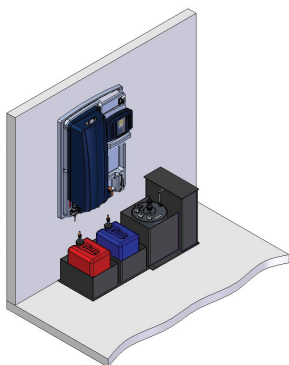
- Legionella prevention
  - hotels, hospitals etc.
- Disinfection for the food and beverage industry
  - Bottle rinser, CIP, bottle washing machine
  - Fruit/vegetable rinser
- Horticulture
  - Irrigation water and sprinkler water
- Cooling water treatment
- Potable water treatment
- Swimming pools
  - Filter disinfection

Type	Preparation capacity [g/h]	Solution concentration [mg/l]	Metering capacity [l/h]	Dimensions (approx.) H x W x D [mm]
CDLb 6	6*	1000	8	1236 x 878 x 306
CDLb 12	12*	2000	8	1236 x 878 x 306
CDLb 22	22*	2000	13	1236 x 878 x 306
CDLb 55	55*	2000	30	1550 x 800 x 345
CDLb 120	120**	2000	**	1300 x 880 x 425
<i>Storage module</i>		<i>with useful volume of 30 l</i>		<i>670 x 540 x 655</i>

\*Option: Integrated storage tank and integrated metering pump with corresponding capacity up to 7 bar back pressure

\*\* with external storage module and separate metering pump(s)

- Power supply: 100-230 V, 50/60 Hz
- Inputs: 2 freely configurable digital inputs for the pause functions, high metering, shock dosing, or manual metering, including external failure message  
 4 digital inputs for monitoring (Warning/ empty message) of the chemical supply  
 1 digital input for contact water meter 0.25-20 Hz (\*)  
 1 frequency input for water meter 10-10 000 Hz (\*)
- Outputs: 1 digital output operation  
 1 digital output alarm  
 1 digital output warning  
 1 voltage output +5 V as supply voltage for a water meter with Hall sensor
- Operating fluids: Sodium chlorite 7.5 %, purity according to EN 938  
 Hydrochloric acid 9% purity according to EN 939  
 Potable water



- Optional: Version with separate storage module
- Net volume of 30 litres for distribution to several points of injection
  - Allows continuous metering and peak load metering in parallel