

## CASE STUDY



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### DOSATRONIC CHLORINE DIOXIDE GENERATOR SYSTEMS FOR SAFE WATER STERILISATION AND USE

*DOSAIX Chlorine Dioxide Generator:*

- Chlorine dioxide production according to the approved chlorite acid process
- Security standard according to DVGW worksheet W 224 (German Standard)
- Anytime safe operating conditions due to optimum chlorine dioxide concentration of max. 2 g/l
- Microprocessor controller with menu-driven operating and service functions, as well as with clear alarm messages
- 3 solenoid diaphragm dosing pumps with automatic venting for unfailing plant operation
- Unfailing restart after power failure
- Direct controlling by contact water meter, IDM or online chlorine dioxide measuring

#### SCOPES OF APPLICATION:

- Potable water disinfection in public buildings, i.e. hospitals, hotels, sports facilities etc.
- Disinfection in cooling systems, as well as in ventilating systems or air conditions
- Operation in beverage and food industry, i.e. bottle cleaning facilities, CIP plants etc.

**ADVANTAGES OF CHLORINE DIOXIDE:** Can be used as a versatile disinfectant which has an excellent bactericidal and sporicidal effect with viral and Algic features. It is a stronger and above all faster disinfection in comparison to chlorine, which is only required in low concentrations.

**CHLORINE DIOXIDE APPLICATIONS:** Treating drinking water and service water, as well as other applications such as: In CIP plants (instead of other disinfectants), Pasteurisation (controlling algae and mucous-forming micro-organisms), Filler washing (cold) disinfection of top area of bottle-washing machines, Washing empties

**EFFECTIVENESS OF CHLORINE DIOXIDE:** Apart from the concentration and reaction time, the effectiveness of chlorine dioxide is also dependent on the respective micro-organisms. A chlorine dioxide concentration of 0.5 mg/l is sufficient to kill yeast, lactobacillus brevis, peilococcus damnosus, megasphaera sp. And pectinatus cerevisiiphilus at 20° C within 1 minute.



#### TYPICAL APPLICATION CONCENTRATIONS

|                         |                |                          |                |
|-------------------------|----------------|--------------------------|----------------|
| Drinking water          | 0.4 mg/l       | Cooling water            | 0.2 – 1.0 mg/l |
| Bottle-cleaning (cold)  | 2.0 mg/l       | Waste water              | 2.0 – 4.0 mg/l |
| Bottle-cleaning (fresh) | 0.5mg/l        | CIP                      | 0.5 – 3.0 mg/l |
| Tunnel pasteurisation   | 0.5 – 2.0 mg/l | Water level disinfection | 3.0mg/l        |