

## The E-Chlor Dispenser for Easy Disinfection of Water

### **Dr. Amartya Kumar Bhattacharya**

BCE (Hons.) ( Jadavpur ), MTech ( Civil ) ( IIT Kharagpur ), PhD ( Civil ) ( IIT Kharagpur ),  
Cert.MTERM ( AIT Bangkok ), CEng(I), FIE, FACCE(I), FISH, FIWRS, FIPHE, FIAH, FAE, MIGS,  
MIGS – Kolkata Chapter, MIGS – Chennai Chapter, MISTE, MAHI, MISCA, MIAHS, MISTAM,  
MNSFMFP, MIIBE, MICI, MIEES, MCITP, MISRS, MISRMTT, MAGGS, MCSI, MIAENG, MMBSI,  
MBMSM

Chairman and Managing Director,  
MultiSpectra Consultants,  
23, Biplabi Ambika Chakraborty Sarani,  
Kolkata – 700029, West Bengal,  
INDIA.

E-mail: dramartyakumar@gmail.com

### **Ir. Martijn Nitzsche**

MSc.

Managing Director,  
Aqua-Aero Watersystems BV,  
Oude Delft 128,  
2611 CG Delft,  
THE NETHERLANDS.

E-mail: nitzsche@aaws.nl

### **New way to conveniently produce chlorine for water purification**

**A new method is available to produce chlorine for water purification: The E-Chlor Dispenser. The E-Chlorine dispenser offers you a high level of convenience, reliability and safety when producing germ free drinking water. No longer chlorine has to be bought expensively; no need to pay longer for transportation; or finding a safe place to store the aggressive liquid. And stinging eyes belong from now on to the past. Even the environmental is saved using the E-Chlor Dispenser.**

### **How it is done**

**E-Chlor dispenser turns the saline solution into pure chlorine gas using an electrochemical cell. The chlorine gas produced is automatically mixed with the water and within 30 minutes after production the water has transformed into clean sparkling drinking water.**

**And for producing the salt solution you simply make use of a fixed amount of table salt, dissolve it and water and let our E-Chlor Dispenser do the rest. Just like that.**

**E-Chlor Dispenser is located in the feedline running from bore well to water reservoir. It works automatically and safely. And it offers the same sanitation performance as the old fashioned manual chlorine addition. But now without the drawbacks. No need to buy, transport and store expensive**

chlorine compounds. No more odour, stinging eyes, irritated skin and bleached of your cloth when spilling the chlorine.

**Removal of germs and bacteria made easy and at lower price**

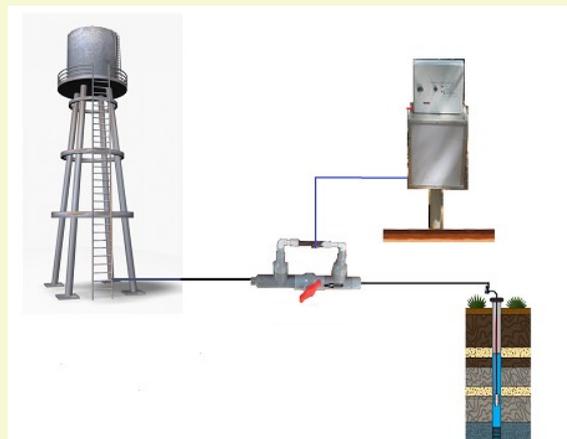
From now on, cleaning of your water source is easy: The E-Chlor Dispenser is more economic to operate and maintained, table salt can be acquired at your grocery shop and once the system is installed it simply starts working when you which the E-Chlor Dispenser on 'ON'.

**No more spills, odor, stinging eyes or irritated skin**

**No more buying, carrying, storing or handling chlorine**

**Location of the E-Chlor Dispenser system in bore well- overhead tank/ reservoir**

The diagram below displays the location of the E-Chlor Dispenser in the feed water line, running from the bore well to the overhead tank or water reservoir:



**Technical characteristics**

The E-Chlor Dispenser is fully automatic and is designed to work continuously for 10,000 hours or 4 years non-stop. The Dispenser is located parallel in the water feedline that takes the water from the bore well into the overhead tank.

And the electricity needed for the E-Chlor Dispenser is similar to the energy needed for the pump and thus can be easily connected at that point. When connected, it automatically switches "On" as soon as the bore well pump starts to work to pump water into the overhead storage tank. The Dispenser automatically switches "Off" as soon as the bore well pump is stopped pumping. Easy does it. The energy consumption of the system is 100-300 watt and the device runs on 220V.

**Water production ranges from 2 to 30 cubic meter/hour**

**E-Chlor Dispenser comes in 3 different models:**

**ECD-5: for water flow 2 m<sup>3</sup> - 5 m<sup>3</sup>/hour**

**ECD-15: for water flow 6 m<sup>3</sup> -15 m<sup>3</sup>/hour**

**ECD-30: for water flow 16 m<sup>3</sup> - 30 m<sup>3</sup>/hour**

**Some pictures of the E-Chlor Dispenser:**



© MultiSpectra Consultants, 2019.