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SISTEMAS ELECTRÓNICOS
PARA EL TRATAMIENTO DE AGUAS



aquascenic

Hidrolisis oxidation



aquascenic

In water with low conductivity (from 500 mS) generates OH, Ozone, peroxide and oxygen automatically for the disinfection of the water on-line. It incorporates besides in the same electronic box the ionization of Copper and Silver. Do not need to add salt.

OH, (500)

Hidrolisis oxidation

Their principle of operation is based on the capacity of the copper (Cu++) and the silver (Ag +) as flocculant and antibacterial agents that utilized jointly with a hydrolysis system to separate water molecule to generate oxygen, ozone and peroxide, they achieve an integral water processing of oxidation-flocculation without chemical products. . ANTI LEGIONNAIRE'S DISEASE SYSTEM.

()

The Hydrolysis. The water (H2O) is composed of 2 parts of hydrogen and 1 part of oxygen (H2O). Hydrolysis signifies, etymologically, disorder by the water. When the electric current passes through the water breaks the chemical link, the negative loads or ions of oxygen emigrate to the positive electrode (anode). Reaction produced is as follows:



In the HYDROLYSIS numerous secondary chemical reactions exist, that also produce ionic species with being able to oxidante and acts as an additional disinfectant. In chart01 appears the potential REDOX values of the elements produced by the hydrolysis.

(H2O) ()

$$+2 \text{ } 2 = 2 \text{ } 2 + \text{O}_2$$

Cu/Ag Ionization. Jointly a Cu-Ag IONIZER enormously powers the efficacy of the hydrolysis, permitting that the antibacterial and algicidepower of the Cu-Ag ionization system be completed by the high oxidation rate of the Hydrolysis system, acting jointly in a free and natural cycle without the addition of chemical products.

Cu/Ag	Cu/Ag
()	()
()	()

* 1,5 / .



CHARACTERISTICS

Optional equipment included in the box

pH CONTROL *pH*

All complements for an accurate pH water control (Components: pH measurer inside the same electronic box, pH probe, probe support and pH buffers - Optional Output to increase pH or Increase / decrease pH).

pH-

(*pH*).

pH

pH-

REDOX CONTROL *REDOX*

On-line REDOX (mV) measurement and automatic titanium cell activation when reading is lower than programmable set point (Components: REDOX measurer inside the same electronic box, REDOX probe, probe support, Buffers).

Redox-

(*Redox*)

FREE CHLORINE CONTROL

On-line Free Chlorine (ppm) measurement and automatic titanium cell activation when reading is lower than programmable set point (Components: Free Chlorine measurer inside the same electronic box, amperometric Clprobe (Cu/Pt), transparent probe support, rotameter).

(*Cl*)

(*Cu/Pt*).

SALT CONCENTRATION CONTROL

On-line salt measuring using the conductivity value (CD). A 220V output is available to connect our Salt Automatic dosing system.

(*CD*) 220

Serial equipment

1 ELECTRONIC BOX

Reduced size fireproof ABS plastic (255x200x124 mm). Low level of salt and lack of flow alarms incorporated. Selfcleaner change of polarity temporization can be programmed to prolong life of the cell up to 15.000 hours. WORKING HOURS COUNTER.

(255 200 124)

HIDROLYSIS AMPERS INTENSITY CONTROL

Electronic circuit with microprocessor of 16bits for the control of the OXIDANT production by Amperage. This system permits a stable production of OXIGEN and to work with conductivity concentrations between 500 and 6000mS.

16-

500

6000

2 SELF-CLEANER CELL HIDROLYSIS

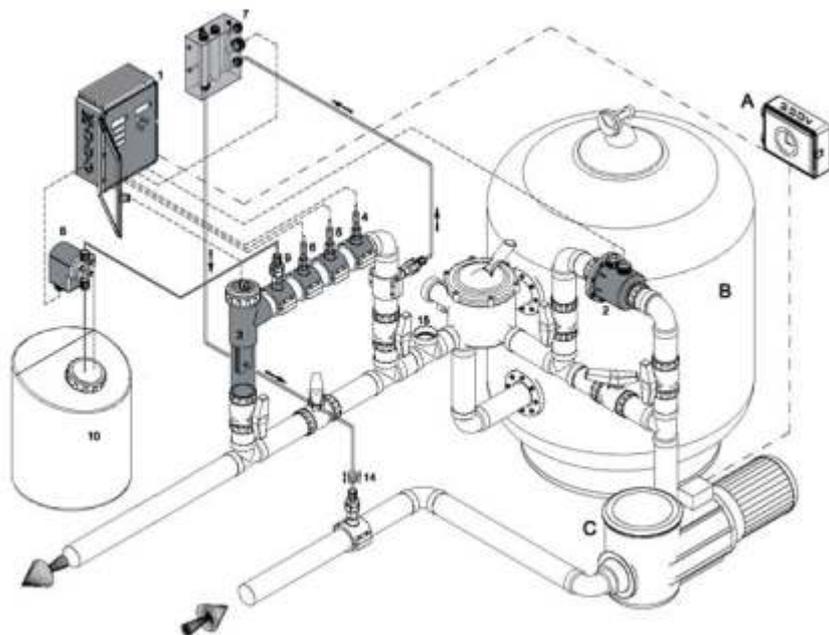
Anode and cathode coated. It allows to produce OXIDATION even during the self-cleaner process.

3 FLOCCULATION/ALGICIDE SYSTEM

ABS transparent Electrode support for on-line generation of flocculant and algicide. It has electrodes Cu/Ag and is resized in dependence of water volume. ANTILEGIONELLA SYSTEM.

Cu/Ag.





OXIDATION REDUCTION POTENTIAL

Chemical product	Symbol	Relative value (ORP)
Fluor /	F	2,25
Radical Hidroxide /	OH	2,05
Atomic oxigen /	O	1,78
Ozone /	O ₃	1,52
Hidrogen Peroxide /	H ₂ O ₂	1,30
Permanganate /	KMnO ₄	1,22
Hipochlor acid /	HCl	1,10
Chlorine gas /	Cl	1,00
Oxigen /	O ₂	0,94
Sodic hipochloride /	NaCl	0,69
Brome /	Br	0,57

MODEL TABLE

Model	Indoor private swimmingpools and outdoor up to 28°C
	28°C
HD1	75 m ³
HD2	150 m ³
HD3	250 m ³

Available models for higher volumes and automatic control for pH / Redox / Free Cl / Conductivity.

pH/ / /



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