



AUTONOM'EAU

Autonomous water treatment and disinfection unit

Area of use:

- ✓ Water reuse unit for industrial companies, agriculture and breeding by photo-catalytic process in homogeneous phase.
- ✓ Pollution control unit contaminated with various pollutants (pesticides, nitrogen residues, organic pollution)
- ✓ unit for producing drinking water from polluted surface water

The method used is a hybrid POA that uses a UV irradiation source, to increase the level of free radicals by stimulating the reduction of Fe^{3+} to Fe^{2+} .

The elements necessary for the process are generated in situ in a reactor including the electrochemical photocell. is patented. The process works in energy self-sufficiency thanks to the reuse of the gases produced during the treatment of the effluents.

These gases feed the bi-fuel generator. used as a source of energy.



- ✓ POA hybrid
- ✓ Fine Filtration 20 μm at the outlet
- ✓ Additional activated carbon filter
- ✓ No use of unnecessary chemicals and consumables generating an external dependency
- ✓ Energy operation by gasoline / gas bi-fuel gasoline generator with the possibility of recovering the gas resulting from electrolysis as a fuel (almost complete autonomy)
- ✓ Quick commissioning without external equipment (Energy, consumables)

water quality compatible with the process

- ✓ Water coming from industrial or agricultural process
- ✓ Wastewater treated conventionally
- ✓ Irrigation water
- ✓ Drilling water



- ✓ River or pond water
- ✓ Max solids concentration 10 mg / l (recommended prefiltration)
- ✓ Presence of organic matter and pathogenic microorganisms accepted
- ✓ Presence of complex pollutants according to our prescriptions

Water quality after AUTONOM'EAU

Meets reuse standards for treated water in France
drinking water quality according to the standard parameters analysed in France

the yields on the elimination of intestinal enterococci bacteria, Escherichia coli, Coliforms at 36 ° C, micro-organisms revivable at 36 ° C, is greater than 99.9%.

Standard features of the equipment

- ✓ Uv lamp 300 watts (4 x 75 watts)
- ✓ Electrochemistry 75 A / 10 volts 750 watts
- ✓ Auxiliary power 350 watts including Feed pump
- ✓ pH regulation

Energy source

Generator BI Carburation 3000-watt genset (gas / butane or propane gas, and process gas)

technical characteristics

treated flow de 2 to 5 m³/h
Maximum pressure 1.2 bar regulated by discharge valve.
gas production (depending on operating conditions)

Road trailer 1300 kg suspension pullman, max height 2.04m (access underground car park)

Possible options

48-volt 5 kW battery with hybrid inverter (solar wind)
Generator BI Carburation 4500-watt genset (gas / butane or propane gas, and process gas)

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