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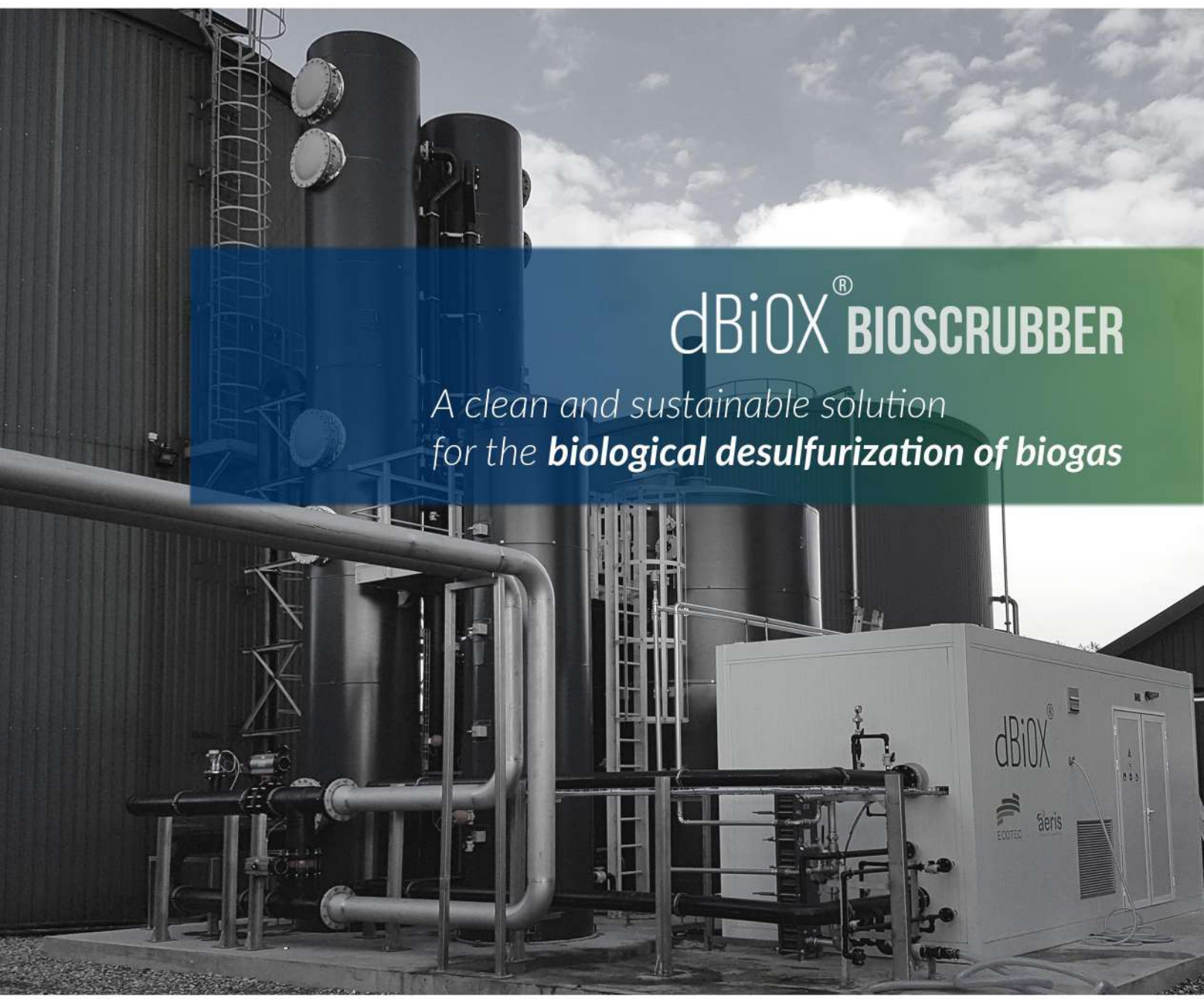


dBiOX® BIOSCRUBBER

A clean and sustainable solution
for the ***biological desulfurization of biogas***

dBiOX® BIOSCRUBBER

A CLEAN AND SUSTAINABLE SOLUTION FOR BIOLOGICAL DESULFURIZATION OF BIOGAS

dBiOX® Bioscrubber comprises a biological system in two stages that facilitates the immediate absorption and transformation of contaminants in an alkaline medium, obtaining transfer efficiencies greater than 99% and thus achieving emissions of undiluted biogas free of H_2S.

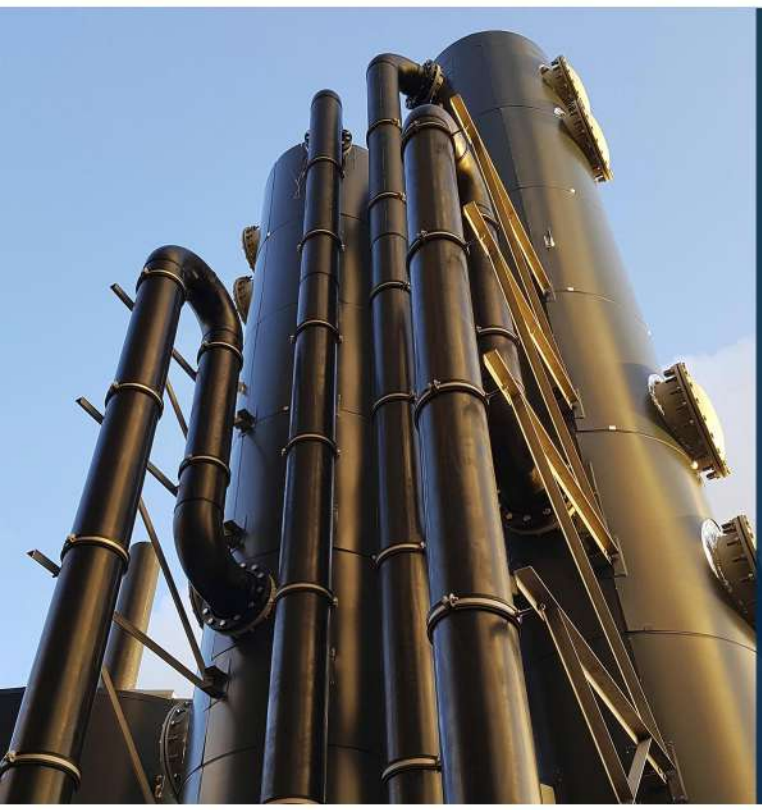
The Empty Bed Residence Time (EBRT) inside the scrubber is minimal, which leads to lower investment costs. Consequently, the $H_2S(l)$ is conducted to a bioreactor (liquid phase), where anaerobic microorganisms perform biological oxidation in alkaline pH.

In order to maximize the effectivity of microorganisms, the equipment incorporates an advanced control system for aeration, as well as for temperature, redox potential, pH and nutrient control devices. The biological liquor is continuosly recirculated from the reaction phase to the absortion phase in the bioscrubber.

These systems enable both efficient and economical removal of H_2S present in biogas in concentrations greater than 20.000 ppmv and flow rates up to 10.000 m^3/h

The consumption of reagents and water in this biological system is minimal, which reduces operating costs significantly compared to alternative technologies.

The process generates a small flow of liquid effluent that can be reused in other applications of different industrial sectors without the need for additional expensive treatment. All operating parameters are continuously recorded and stored, which ensures that the installation is monitored effectively.



KEY FACTS OF dBiOX® BIOSCRUBBER

High efficiency in H_2S removal

Minimum consumption of reagents and water

Low operating costs, which reduces the amortization period and allows for short-term investment returns

Minimum waste generation

Capacity to treat high loads of pollutants

No biogas dilution

dBiOX®

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C/ Esteve Terradas, 37 A,
Pol. Ind. Bufalvent, 08243 Manresa,
Barcelona (Spain)
Tel: +34 938 77 31 33
ecotec@ecotec.es
www.ecotec.es