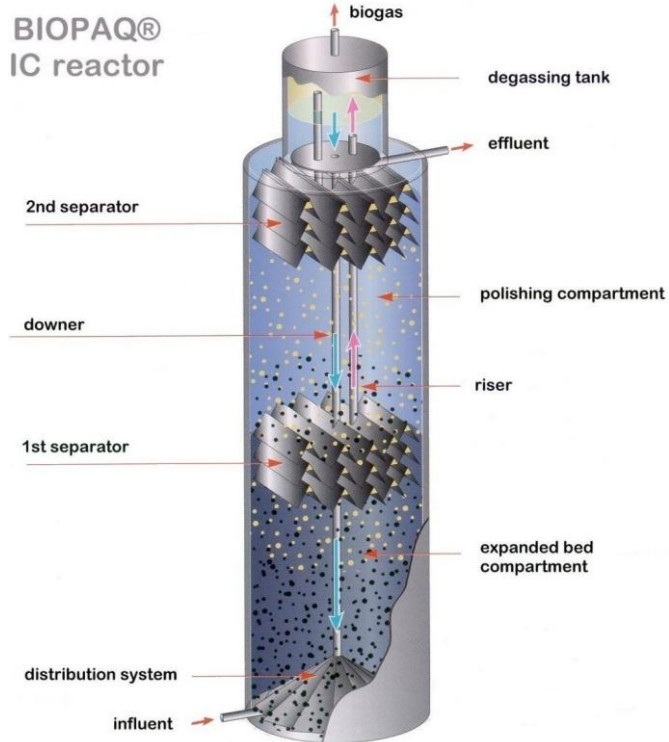


# BIOPAQ® IC



The BIOPAQ®IC bioreactor is a vertical tank 16-28 meters high and 1,5 - 15 meters wide. The influent is pumped into the bottom of the reactor using an efficient distribution system, and is mixed with the granular anaerobic biomass. In the lower reactor compartment most of the organic components are converted into methane and carbon dioxide. This biogas is collected in the lower level phase separator (1st separator). This generates a gas lift that forces the water upwards through the riser into the liquid/gas separator on the top of the reactor. The biogas leaves the reactor through this separator, and the water returns

through the downer back to the bottom of the system: hence the name, Internal Circulation. In the second, upper compartment the effluent is polished. The biogas formed here is collected in the upper phase separator (2nd separator) while the cleaned effluent leaves the reactor from the top.

## Advantages of the BIOPAC® IC:

Provides wastewater treatment solution for industries with limited space, solving at the same time odor and noise issues.

Very high efficiency rate, of 90 to 94%, so that the effluent can be easily treated in conventional aerobic biological systems, resulting in very high purification grades

The effluent can be used for irrigation purposes or it can be disposed to sewer.

Production of "green" energy-rich biogas that can be used for electrical and heating purposes, leading to reduced operational costs.

The reactor is capable of dealing with high loading rates and requires short start-up time.