



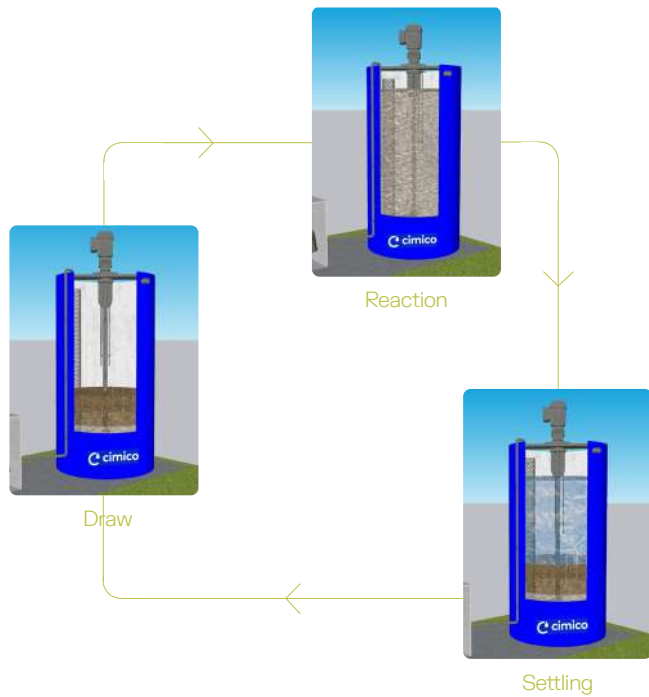
Innovative solutions for
biological wastewater
treatment.



cimico sembba[®] mbsbr ifas

Technical sheet

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Description

Our MBSBR IFAS technology, an optimized SBR with MOBED[®] moving bed.

A new technology that, by incorporating MOBED[®] moving bed to an SBR process, adds the high treatment capacity of an IFAS process to the already known benefit of minimum footprint of an SBR, obtaining a high nitrification rate in biofilm, maintaining high rates of denitrification and removal of phosphorus in suspension and overall achieving a high degree of IFAS effect and high biological removal of nitrogen and phosphorus. At the same time, a minimization of filamentous bulking is achieved for a better sludge sedimentability (SVI). All this ultimately results in a smaller reactor volume and footprint.

Ensuring this operation is possible thanks to an automatic control designed by Cimico, which in turn provides robustness of treatment and minimization of energy

Benefits

- Simple and robust solution.
- Decoupled IFAS effect.
- High nitrification in biofilm.
- High denitrification in suspension.
- High nitrogen removal capacity.
- Biological phosphorus removal.
- Low SVI (filamentous bulking).
- Dimensioned with Filmath.
- Smaller footprint than conventional SBR.
- Minimum MOBED[®] volume.
- Cimico's own automatic control.

Main applications

- Retrofitting of existing SBRs
- New greenfield WWTPs
 - Where footprint is the main limitation
 - Where the inflow is not constant throughout the day.

Simple and robust option for optimized SBR

The trend of optimized SBRs for smaller footprint, higher treatment capacity and lower investment and operating costs is tremendously interesting and powerful.

On the market, there are different options and innovations that follow this trend, from AGS technologies to hybrid configurations between conventional activated sludge and SBR.

However, all these options have a major twofold problem: their robustness and simplicity. Some, because they do not work consistently, and others, because their design is complex.

At Cimico, we are committed to simple and robust solutions, and SEMBBA[®] MBSBR IFAS, is our optimized SBR proposal, as the sequential version of an IFAS solution, with all the robustness and simplicity of hybrid technologies (treatment capacity, resistance to load variability, easy operation) and the minimum footprint and costs of an SBR.

