

Rebuilding of the plant

Pond Treatment Plant, Rio Medio, Mexico

Stable plant operation



Rio Medio (Veracruz), Mexico

Operation

16 turbine aerators and
6 OLOID Type 400 in pond 1;
16 turbine aerators and
6 OLOID Type 400 in pond 2 and
2 turbine aerators und 1 OLOID
Type 400 in the polishing pond

Period

Since 2017

Success

Stable discharge values
Energy savings of 30-40 %

Goal of the OLOID operation

Optimised operation through improved ventilation (turbine aeration) and better distribution of air bubbles and improved mixing with the OLOID while saving energy.

Operational optimisation

During conversion of the pond treatment plant, the following process technology was applied in stages:

1. Mechanical pre-cleaning by an automatic grill system
2. Two aerated ponds with 16 turbine aerators and 6 OLOID Type 400 each
3. One polishing pond with 2 turbine aerators and 1 OLOID Type 400
4. UV disinfection at the pond treatment plant outlet

The plant is operated with a minimum of 102 litres per second and with a maximum of 611 litres per second with waste water from a mixed sewer.

The ventilated ponds are up to 4.5 m deep and the two ventilated ponds are again divided into two areas.

Summary results

By installing the turbine aerators and the OLOIDS, the ponds can be operated with approx. 30 - 40% less energy while the plant is stable at the same time in comparison to the first planned rebuilding.

See also a video on our YouTube channel: <https://youtu.be/kxOKrWRUiW8>

The project was carried out together with our partner Aguas Latinas México.

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