

# 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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