

ALMA BIO SBR rural

Biological wastewater treatment in lagoon construction



That **ALMA BIO SBR Rural** process was specially developed for efficient wastewater treatment in remote rural areas. The system is characterized by the robust lagoon design of the aeration tanks, which makes it a cost-effective alternative to conventional wastewater treatment systems. In these aeration tanks, carbon and nitrogen compounds are successfully eliminated by microbial degradation processes. For further treatment, the process can be supplemented with precipitation and flocculation systems, making it suitable for industrial wastewater from the non-food sector. The wastewater is delivered conveniently via tanker trucks. In cooperation with our subsidiary Eco ALMA, we have successfully established two disposal centers for industrial wastewater from the food and non-food industries. These centers, which were built in the rural areas of Londrina Parana and Maringa (Brazil), treat wastewater containing heavy metals, among other things, using precipitation and flocculation systems installed in containers. Our customers come from various industries, including pharmaceuticals, chemicals, food and metal processing.

Applications

- Food and non-food industry
- Industrial parks
- Waste disposal company
- Pharmaceutical and chemical industry
- Food industry
- Metalworking industry



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Specifications

- Can be expanded with precipitation and flocculation systems if necessary
- Activated sludge biology in the SBR process
- Robust and proven plant technology
- Volume flows from 200 – 2000 m³/d

Advantages

- Flexible and modular design
- Use of local construction technology
- Low space requirement due to SBR process
- Low investment and operating costs due to lagoon construction

Reference plant in Brazil aeration stage





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INNOVATIVE SOLUTIONS FOR WATER

ALMAWATECH GmbH - Your plant manufacturer and service provider in industrial water and wastewater technology offers everything from a single source

**Analysis &
Optimization**

**Planning &
Consulting**

**Water
chemicals**

**Operations
Management**



Plant engineering

Wastewater and process water

-  Treatment for direct and indirect dischargers
-  Pre- and post-treatment of wastewater
-  Process water Recycling
-  Ultrapure water production
-  Individual system solutions for all branches of industry

Procedure

-  Biological (aerobic/ anaerobic/ anoxic)
-  Precipitation, flocculation and neutralization
-  Filtration & reverse osmosis
-  Oxidation & hygienization
-  Modular systems

Specialized water chemicals from ALMAWATECH for wastewater applications, cooling water circuits, membrane systems and boiler plants.