

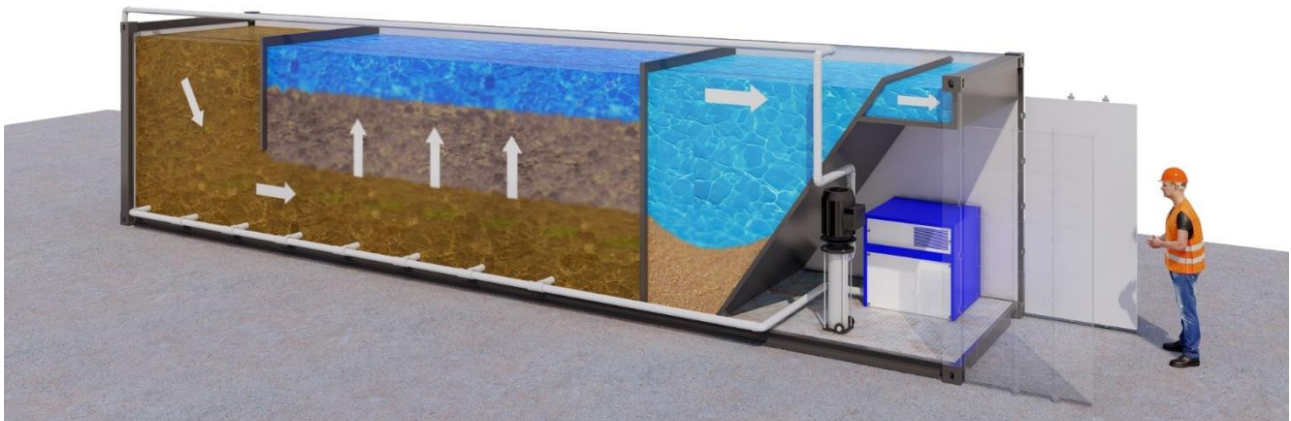


ALMAWATECH

INNOVATIVE SOLUTIONS FOR WATER

ALMA BIO Compact MBBR

Compact biological wastewater treatment stage



The **ALMA BIO Compact MBBR** is a biodegradation system designed in a compact container design. In this innovative moving bed biofilm reactor (MBBR), special carrier bodies are used on which the biomass is deposited. The use of these carriers enables a significantly higher biomass concentration in the bioreactor compared to conventional activated sludge processes. The system can be expanded to include nitrogen or phosphorus elimination in the event of increased nitrogen and phosphorus loads. It can also be implemented as a membrane bioreactor (MBR).

Applications

- Food & beverage industry
- Chemical and pharmaceutical industry
- Paint industry
- Washing areas
- Cosmetics industry
- Cardboard production

Technical versions

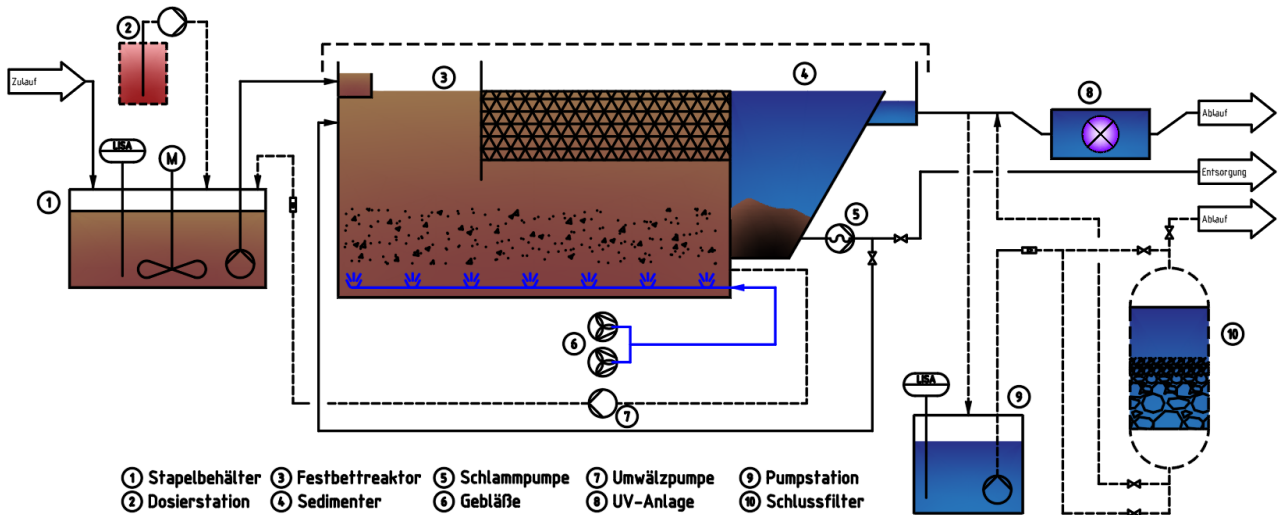
Designation	COD degradation [kg/d] (COD \leq 1-3)	Hydraulic power [m ³ /d]	Reactor volume [m ³]	Blower capacity [m ³ /h]	Electrical connection	Dimensions (L x H x W) [m]
ALMA Bio 25	approx. 25	20-30	25	120	3x400 V / 50 Hz	6.00 x 2.8 x 3.00
ALMA Bio 50	50	40-60	45	200	3x400 V / 50 Hz	12.00 x 2.8 x 3.00



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Process flow diagram



Specifications

- Simple and compact design
- Efficient ventilation module with low energy consumption
- Indoor and outdoor exhibition possible
- Modular design
- Permanently corrosion-resistant
- Easy control via ALMAVision software

Optional

- Phosphate elimination and (de-)nitrification
- Lifting system
- Cover and exhaust air extraction
- Insulation and heating of the machine chamber
- Container for accessories and control boxes
- Modularly expandable

Reference plant





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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.