

## Sludge-Recycling (option)

### • Self-contained BOD-measurement with activated sludge

The unique measurement system of the **BioMonitor** with the original activated sludge performs optimally when a permanent activated sludge supply (for example from the aeration tank) is provided.

Whenever, there is no continuous activated sludge supply available, the **BioMonitor** with Sludge-Recycling is the right choice.

After the first supply, the activated sludge is circulated through the **BioMonitor** with aid of the Sludge-Recycling Unit (see Figure 6).

The Sludge-Recycling works exactly like the sedimentation tank of the treatment plant. Thereby the measuring system becomes independent from a permanent activated sludge supply.

In combination with the Sludge-Recycling Unit the **BioMonitor** works independent just like small treatment plants everywhere !



Fig. 5: SludgeRecycling Unit

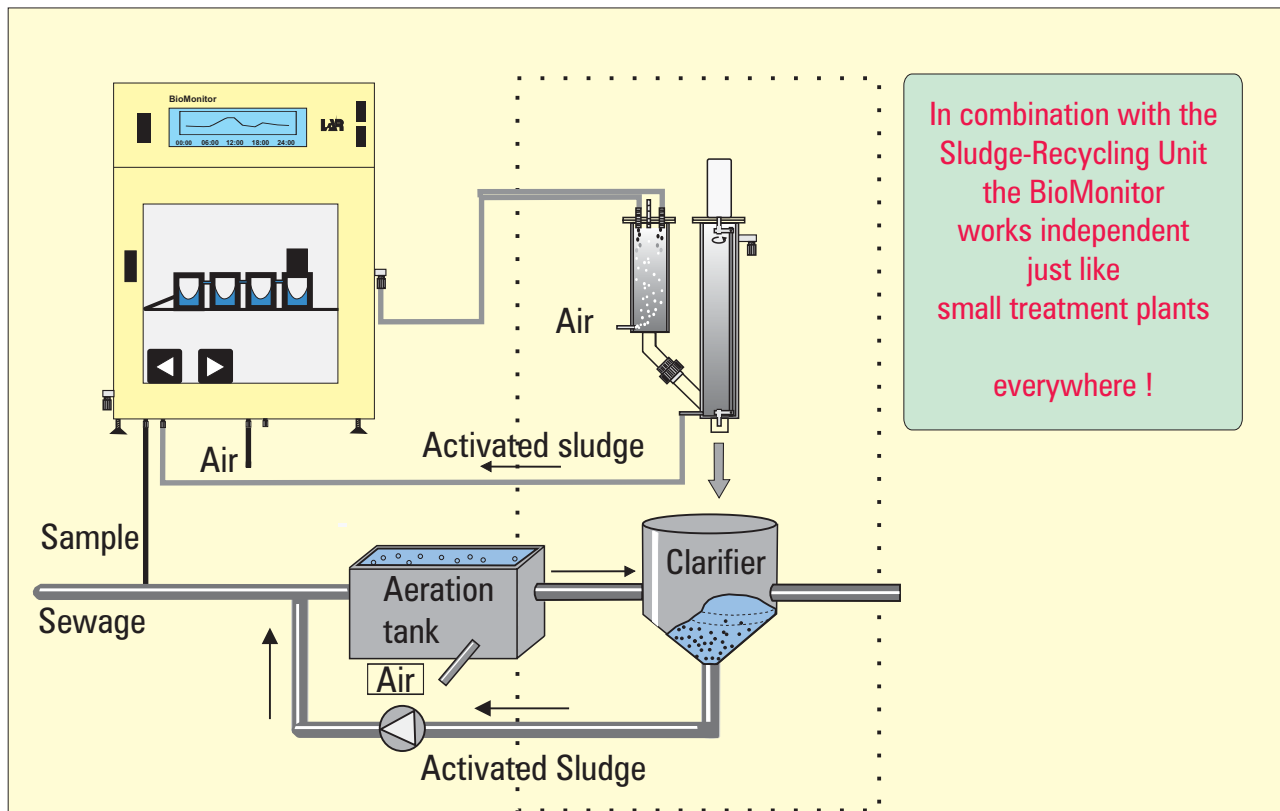


Fig. 6: BioMonitor and Sludge-Recycling Unit

- **A unique measuring principle, requiring minimum maintenance**

The measurement of BOD with the aid of the original activated sludge has been achieved in an instrument design which meets the high requirements of the continuous operation in waste water treatment plants.

The instrument design which has been patented by and awarded to LAR, embodies a high standard of operational safety and requires very little maintenance.

This is testified by the measurement of oxygen with air-oxygen sensors that do not suffer from conventional fouling problems.

The self-cleaning reactor cascades and the maintenance-free sample preparation "FlowSampler" minimize the need of maintenance of the **BioMonitor** and safeguard a problem-free continuous operation with lowest operation costs, for many years.

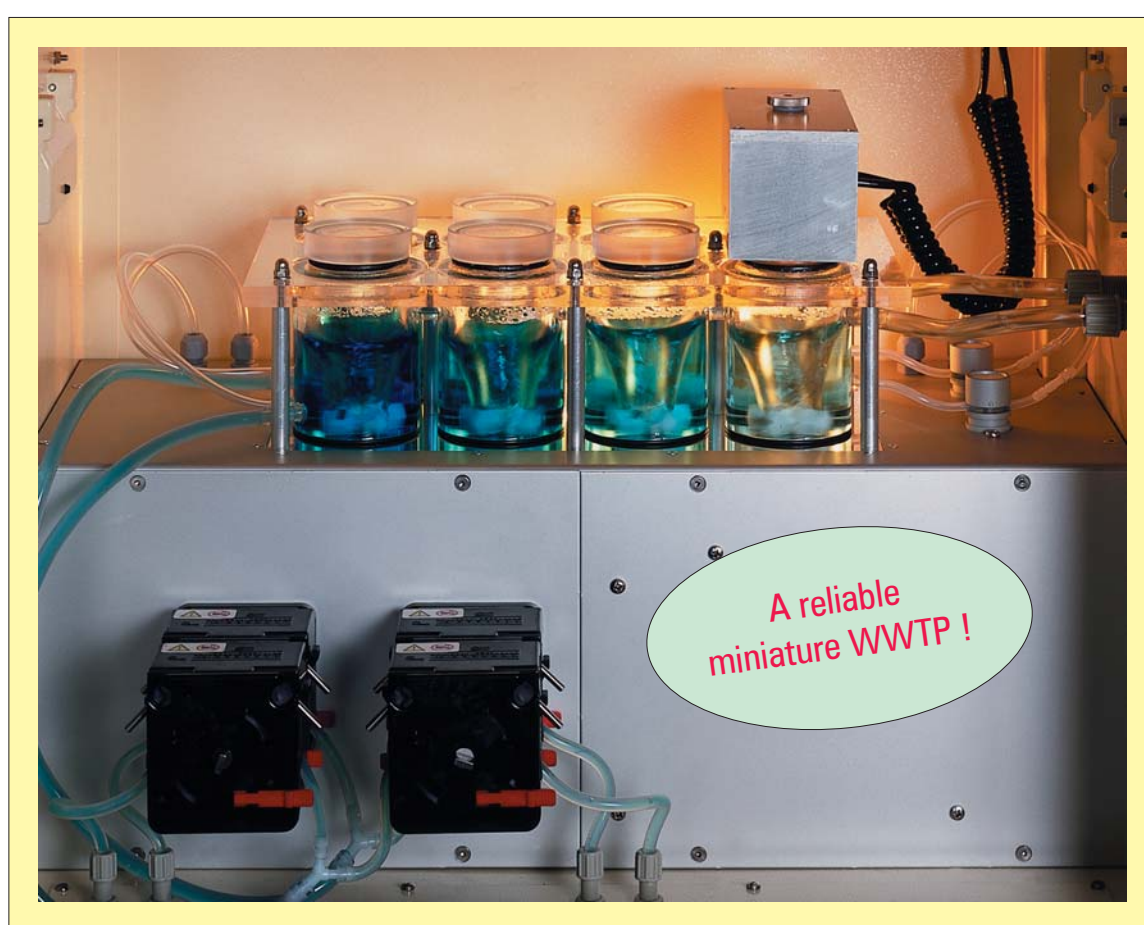


Fig. 7:  
Inside  
the  
BioMonitor

- **Your advantages:**

- Correct and precise measurement of the BOD in 4 minutes
- Simultaneous measurement of the activated sludge respiration (ASR)
- BOD measurement under the degradation conditions of your plant
- High operational safety