

→ Biological wastewater treatment

AquaBio



 **WashTec**

AquaBio – the biological water treatment system



**The AquaBio gives
you clean, economical
washwater:**

- Fully biological waste water treatment
- Continuously clean and odour-free washwater
- High filter performance of 4.5 m³/hour
- Up to 95% water recovery
- No addition of chemicals for up to 100 washes per day
- Compact construction and variable installation concept
- Design approval Z-83. 1-12

AquaBio – the eco-friendly water recovery system for gantry car washes.

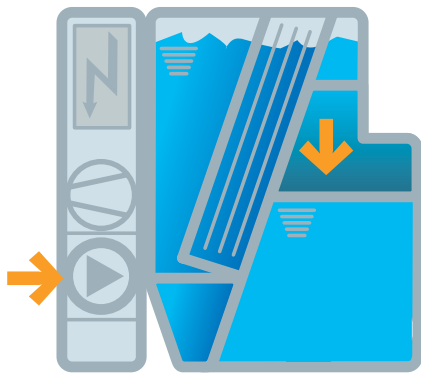
The Biofilm method is the most important and eco-friendly large-scale technology method for cleaning heavily polluted industrial waste water. The method is based on the principle of converting the waste water content. This content is used by micro-organisms as food and,

under the influence of oxygen in the air, is converted into the organism's own cell material and carbon dioxide. Through this elimination process, the waste water is thus cleansed of the contaminants. The water contaminants are measurably reduced. The aerobic process

guide ensures high water quality without odour emissions. No need for chemicals, no need to buy extra materials, no costs. AquaBio enables virtually all the washwater to be recovered. And that keeps your running costs low.

How does AquaBio work?

Angled treatment unit



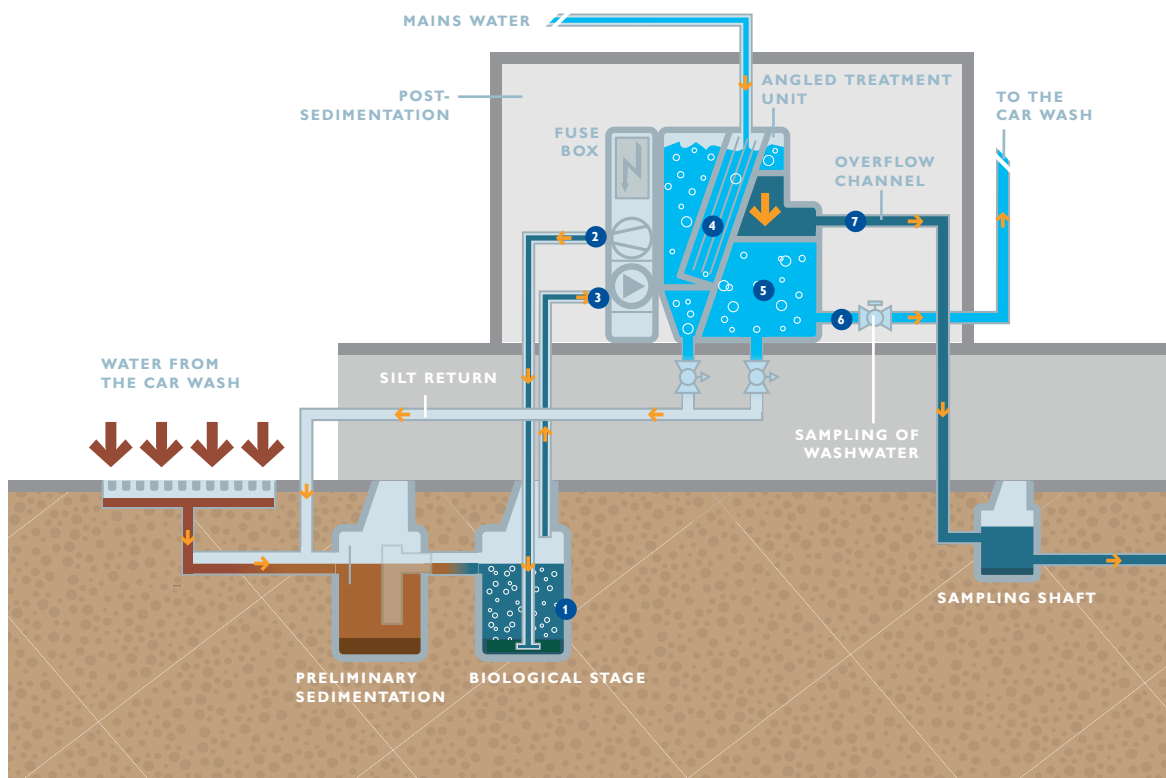
The AquaBio biological water treatment system works like a sedimentation plant in three key stages:

- Preliminary sedimentation
- Biological stage
- Post-sedimentation

The conventional silt trap serves as the preliminary sedimentation stage. The storage basin from the separating chain is converted through an aeration system and the addition of a carrier material into a biological reaction basin. There,

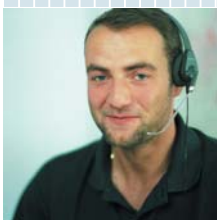
even after a short time, powerful micro-organisms begin to migrate to the carrier material. Hydrocarbons, cleaning agents and organic materials are separated from the car wash waste water. In the above-ground post-sedimentation stage, which takes place through an angled treatment unit, dissolved mineralised solids are separated from the carrier material and intermittently returned to the silt trap. The cleaned water is then emptied into the washwater store for use in the car wash.

The AquaBio's filtration circuit.



- 1 The aeration system provides the oxygen required for the conversion processes.
- 2 A fan provides the adequate volume of air.
- 3 The biologically-treated waste water is pumped into a lamella separator.
- 4 Water with traces of surplus silt flows through the lamellas. Silt particles sediment onto them and slide into the cone.
- 5 The cleaned water flows into the storage container.
- 6 The cleaned water is pumped from the storage container to the car wash.
- 7 Surplus water is cleaned and passed into the sewerage system or sampling shaft.

The "World of WashTec" has everything for your success.



- **Comprehensive range:** The right solution for your washing business can always be found.
 - **Roll-over car washes** for low, medium and high washing volumes
 - **Conveyor tunnel systems** with modular design for all sizes and all requirements
 - **Commercial vehicle washes** for washing companies and in-house requirements
 - **Self-service washing equipment** with modular design for all needs and different location sizes
 - **Water treatment** – chemical-free and environmentally friendly
- **Rapid service** 250 engineers in the field throughout Germany – **always in your neighbourhood.**
- **Customized financing plans:** We will promote your business at attractive conditions.
- **Reliable experience:** Innovative car washing technology for more than 40 years. **More than 2 million cars are cleaned in WashTec washing facilities every day.**
- **Value for money services:**
 - **Site analysis** for optimum sizing of your business
 - **Cost-effectiveness calculations** help with your planning
 - **Sales training for staff** increases revenue
- **Tested quality** EN ISO 9001, 14001 certification – for your safety.