

KLARO

KLARO *Tiger*

Basic wastewater treatment plant

Simple & robust



GERMAN
DESIGN AND
ENGINEERING



No mechanical parts
in the wastewater



No pumps
in the wastewater



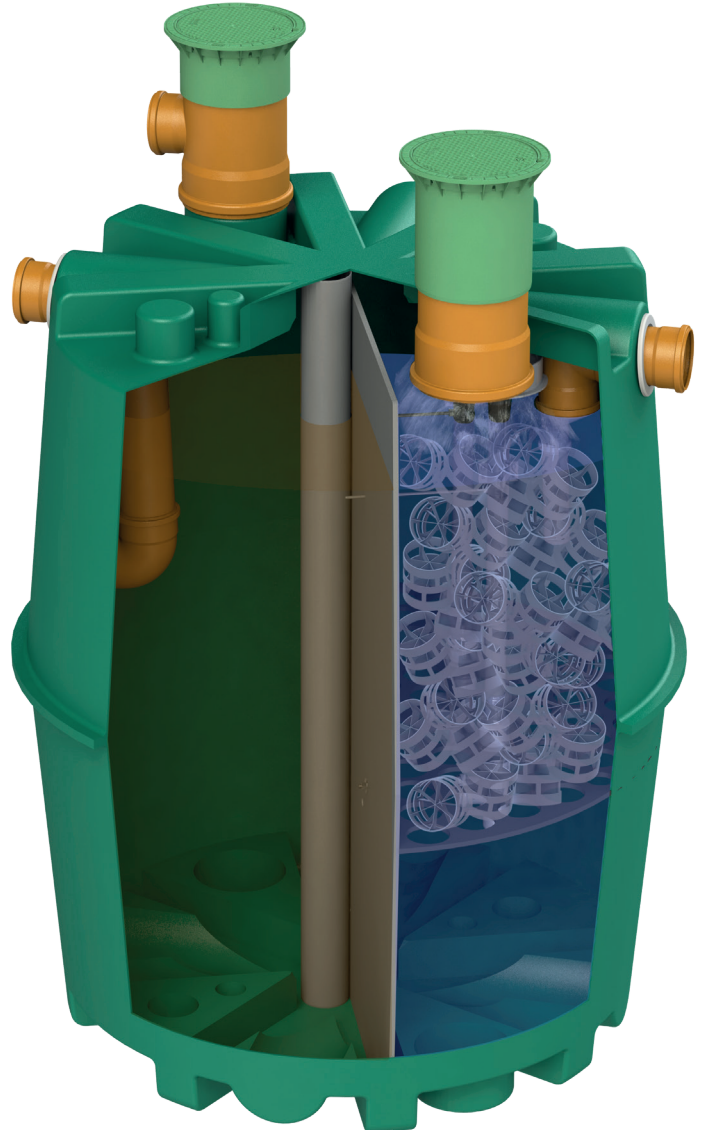
No electrical parts
in the wastewater

117-EN-0922

Fully biological sewage treatment system for domestic wastewater using a continuous running process with submerged media. Tested and certified according to EN 12566-3.

Advantages

- Compact system: 4 PE in a 1.600l tank up to 16 PE with 6.400l in four tanks
- Fully biological system
- Simple and robust system working with the KLARO principle: No mechanical, no pumps and no electrical parts in the wastewater.
- No control unit, no valves
- Suitable for underground as well as above installation
- Use of reliable air lift technology
- Low footprint due to compact tank
- Low shipping costs due to stackable tanks
- Stable performance even in underload cases
- No wearing parts inside the tank



Outdoor cabinet
for compressor



Indoor mounting plate
for compressor



Process

Pre-treatment

Incoming wastewater arrives in the first chamber. Settling solids and floating substances remain in the first chamber. Pre-treated wastewater overflows into the aeration chamber.

Aeration

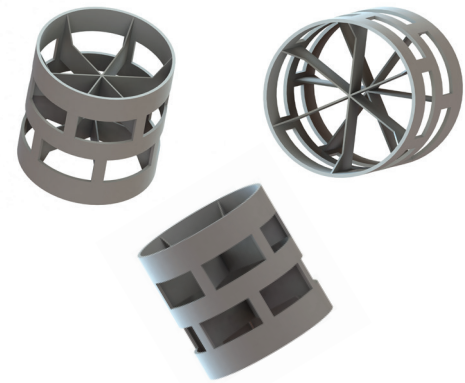
External compressor provides compressed air to the internal lifter, which is permanently lifting the wastewater against an integrated deflector plate at the top. The wastewater is equally distributed above the media. Microorganisms are breaking down the organic wastewater.

Biofilm growth

Sessile microorganisms are growing on the submerged media and breaking down Re-organic waste.

Discharge

Finally water passes through the outlet channel for final clarification.



Effluent values

Wastewater parameter	KLARO compact drainage values*	Degree of efficiency
COD (chemical oxygen demand)	74 mg/l	85.3 %
BOD ₅ (biochemical oxygen demand)	19 mg/l	89.6 %
NH ₄ -N (ammonium nitrate)	18 mg/l	45.3 %
N _{tot} (total nitrogen)	27 mg/l	42.3 %
P _{tot} (total phosphate)	3.9 mg/l	33.5 %
SS (suspended solids)	19 mg/l	92.8 %



Electrical consumption: 1.7 kWh/d
Sludge removal interval: 6 months

* Results of the practical test carried out by PIA (Prüfinstitute für Abwassertechnik GmbH), Aachen. Average values and efficiencies of the plant operation for nominal phases (100%)

Address



KLARO GmbH
Spitzwegstraße 63
95447 Bayreuth

Telephone



Technical hotline
+49 (0) 921 16279-370

Internet



Further information
under **www.klaro.eu**

Message



E-Mail:
info@klaro.eu

