KLARO

Highly productive wastewater treatment systems up to 1.225 PE

We provide clear water

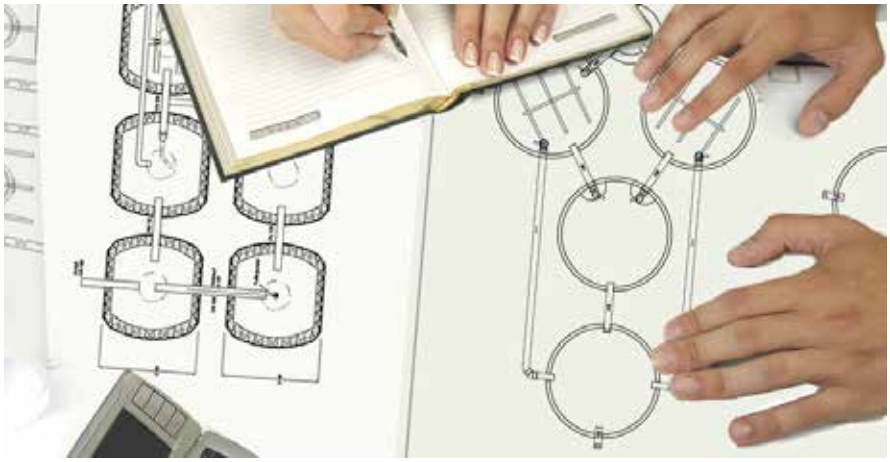
No mechanics in the wastewater

No pumps in the wastewater

No electrical parts in the wastewater

Many questions? We have got the answers!

With the construction of a wastewater treatment plant many questions emerge which have to be settled… Which advantages offer the different tank materials and how to arrange them most effective? How much water must be treated by the wastewater treatment plant? How can high cleaning requirements be achieved? How to deal with great fluctuations in the wastewater quantity and –load? What to keep in consideration in case of topographical and climatical peculiarities? All those factors have to be considered with the planning of wastewater treatment plants to react optimally and make the right decisions.



You can benefit from our experience

Our experienced team of engineers and technicians supports you with the planning of your projects. From the conception to the realization we adjust to the individual situation and the local requirements.

On the next pages you can find a sample of different KLARO projects.

Individual adapted wastewater technology from 50 PE!

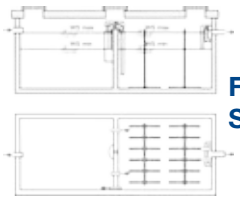
Designed for your requirements.

KLARO is market leader

KLARO is market leader for SBR wastewater treatment plants with air lifter technology.

KLARO is worldwide

North America, South America, Europe, Asia, Africa and Oceania.



Full Support

We care about planning, measurement and calculation.

KLARO is safety

NO Pumps, NO mechanical and NO electrical parts in the wastewater.

Clear cost structure

With KLARO wastewater treatment systems you have cost certainty from the start of the project.

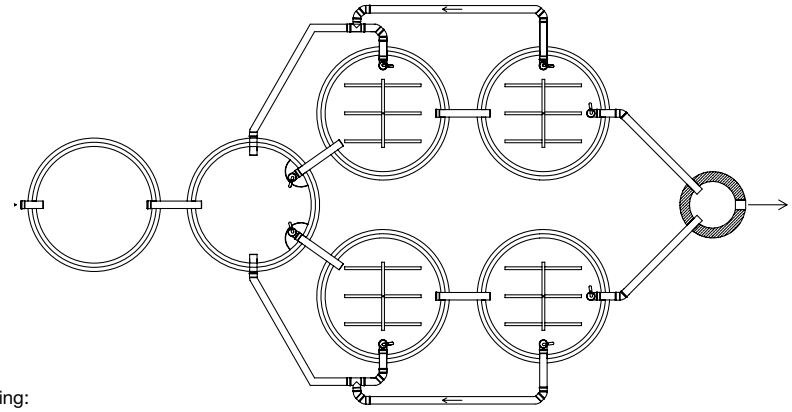
KLARO is flexible

KLARO systems are flexible, easy adaptable (concrete, plastic, GFK) and fast to assembly.

Holiday homes / Hotel
4 PE to 200 PE

Walchensee and Hotel Post major project

By the Walchensee lake lies the village of Walchensee with approximately 600 inhabitants. For years, there were discussions over which opportunity of wastewater treatment was the best. The decentralised solution was ultimately chosen - a contributing factor was KLARO's clear cost structure, whereby everyone knew from the outset what costs they would incur.
In addition, the Hotel Post located there needed to be „retrofitted". Limited space, heavily fluctuating wastewater incidence due to seasonal factors and high treatment requirements were only some of the challenges posed to the system.
The solution: a two-line system, each with an output of 100 PE. Additional dispensing technology for P precipitation and a UV module were installed with the machine technology in an easily accessible manner in a cellar room of the hotel.



Drawing:
200 PE Hotel Post, two-line plant

Project data

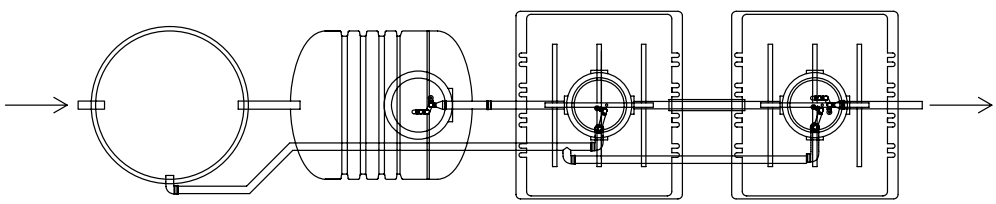
Location: Walchensee, Germany
Number of plants: ca. 150
Sizes: 4 PE - 200 PE
Construction: 2010
Extra: with phosphate precipitation and partly disinfection

Winery in Serraux, Lake Geneva

Project data

Location: Serraux, Switzerland
Size: 80 PE
Construction: 2008
Extra: for industrial wastewater with heavy fluctuations

KLARO supplied a wastewater treatment system for a winery at Lake Geneva.
Three plastic tanks with pre-assembled technology were placed behind an existing concrete tank.
Three different types of wastewater arise from the wine press house, public room and house that need to be treated. In addition, the grape harvest and the infrequent events (including wine tasting) lead to strong fluctuations in wastewater quantity and load. In its first year of operation, the plant was scientifically monitored as part of a pilot project. It was established that the strict effluent values demanded are always safely complied with by KLARO, even at busy times.



Drawing:
80 PE Winery in Serraux, one-line plant

Village
Gumpersdorf 100 PE

Gumpersdorf

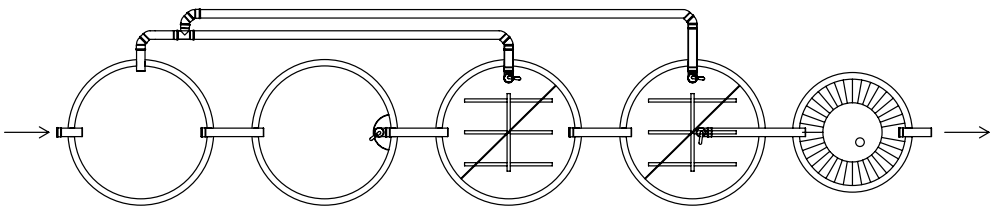
The village of Gumpersdorf lies near the drinking water fountains of the Upper Franconian town of Kulmbach. The heightened requirements of the degree of cleanness of the wastewater could no longer be fulfilled with the outdated facilities. The monetary and labour outlay for a central solution was somewhat higher than the construction of a KLARO wastewater treatment system.

The specially constructed building for technical purposes also houses the machine technology and the UV module with sampling facilities. Monitoring and maintenance work can be performed easily in all weather.

In addition, the plant is connected to the KLARO WebMonitor®.

Project data

Location: Gumpersdorf, Germany
Size: 100 PE
Construction: 2013
Extra: with disinfection and remote monitoring



Drawing:
100 PE Village Gumpersdorf, one-line plant

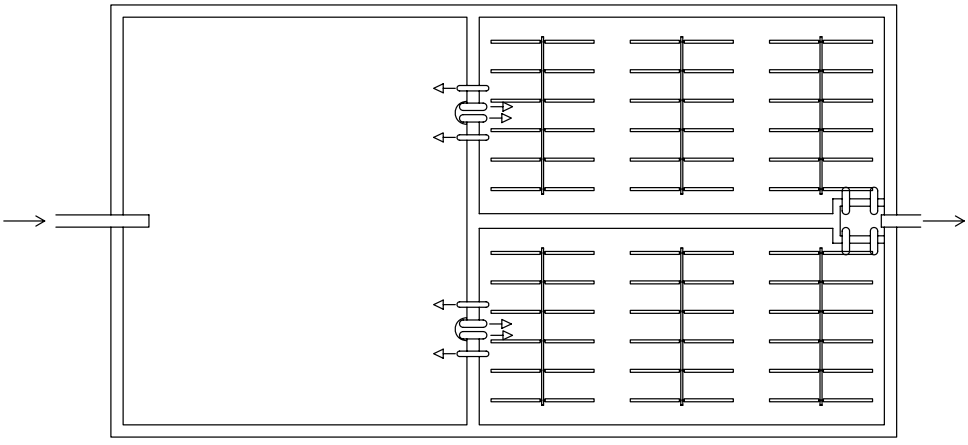
Shipyard
1.000 PE

Shipyard

Project data

Location: Stord, Norway
Size: 1.000 PE
Construction: 2009
Extra: Phosphate precipitation, two-line

A KLARO 1,000 PE plant works for Aker Kværner, Norway's largest shipyard, in Stord. The largest oil platforms in the world were constructed and equipped here.
The plant, which is located right at the bank of the fjord, treats all the wastewater for offices, canteens and the worker flats.
The septic tank was manufactured in a rectangular shape from cast-in-place concrete, with approximately half of it rising out of the ground. The biological level is divided onto two basins, which can be driven independently of each other.



Drawing:
1.000 PE Stord, rectangular concrete tank

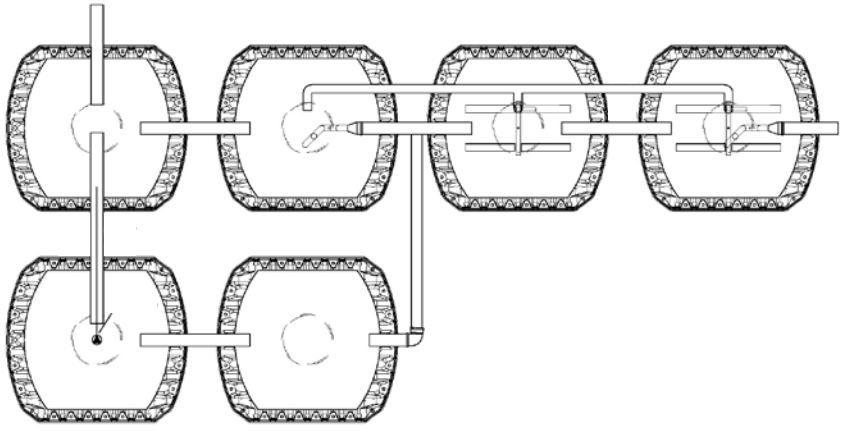
Sillberghaus

The Sillberghaus Almbad & Lodge lies at a height of 1,100 m in the middle of the Bavarian Alps and serves numerous guests as a place of relaxation or for events in a special ambience.
For the 51 PE wastewater treatment system, plastic tanks were opted for, which facilitated transportation and installation.

The technology in the tanks was also completely pre-assembled.
Particularly heavy peak loads at weekends and on public holidays can be handled with an additional buffer. In the event of low load, this buffer disassembles itself.

Project data

Location: Bayrischzell, Germany
Size: 51 PE
Construction: 2009
Extra: with additional buffer



Drawing:
51 PE Sillberghaus

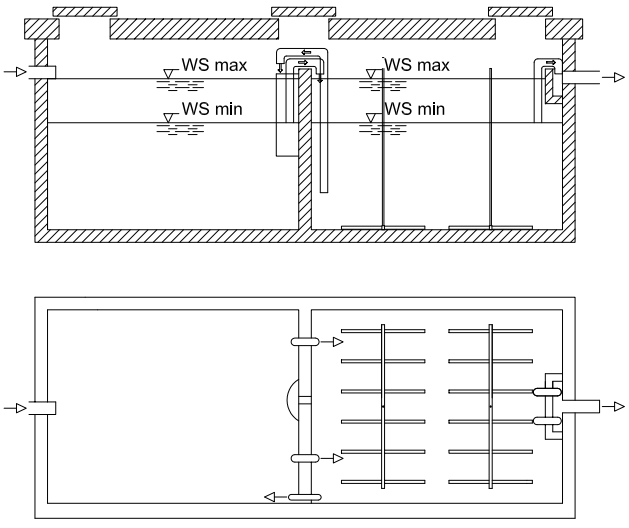
Mountain village
200 PE

Avers im Kanton Graubünden

Project data

Location: Avers, Switzerland
Size: 200 PE
Construction: 2011
Extra: Onsite concrete tank

The municipality of Avers in the Swiss canton of Graubünden lies at a height of 2,126 m and is thus the highest settlement in Europe that is inhabited all year round.
Due to the location, which is difficult to access, the concrete tank required for the 200 PE plant was cast on site. This approach shows that we find a customised and suitable solution for the tank even for places that are difficult to access.



Drawing:
200 PE Concrete tank, Avers, Kanton Graubünden

Safe technology in a switch cabinet or a machine cabin!

Safe keeping of the machine technology inside the switch cabinet or the machine cabine

KLARO Indoor switch cabinet A-4

- Suitable for compressor LA 60, LA 80, LA 120, LAM 200, DT 4.4, DT 4.6, DT 4.8
- Metal
- Size: 114 x 120 x 75 cm (b x h x t)
- Empty weight: 142 kg

KLARO Outdoor switch cabinet A-4

- Suitable for compressor DT 4.25, DTN41, KDT 3.60, 3.80
- Metal
- Size: 120 x 111 x 80 cm (b x h x t)
- Empty weight: 140 kg

KLARO Outdoor switch cabinet concrete

- Suitable for compressor KDT 3.100, 3.140
- Concrete
- Size: 206 x 110 x 90 cm (b x h x t)
- Empty weight: 800 kg

Inside a machine cabin with UV-module

KLARO Machine cabin

The alternative to the conventional switch cabinet offers sufficient space for possibly required additional components.

Machine cabin of a 100 PE plant

Components for your plant

Further information in the brochure „KLARO WebMonitor®“

Standard components

The following components are standard that every KLARO plant consists of:

- air compressor
- magnetic distributor
- cooling fan
- micro-processor control
- main switch
- management plan

Additional components

Due to our modular applied waste-water technology various additional components can be installed:

- metering technology (e.g. for phosphate precipitation)
- telecontrol (modem or LAN)
- warning lights
- acoustic hood for air compressor

KLARO WebMonitor®

Remote monitoring

For use, wherever the highest degree of operational safety is required. The plant can be monitored remotely by a maintenance company thanks to a remote diagnosis system. Intervention in the case of faults is possible immediately.

KLARO WebMonitor

- Increased efficiency and operational safety
- Optimized service intervals
- Increased customer benefit thanks to monitoring services
- Low-priced remote diagnosis in the event of a fault

UV-Module

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