

## GREYWATER UTILISATION PROGRAMME

### AS-GW/AQUALOOP

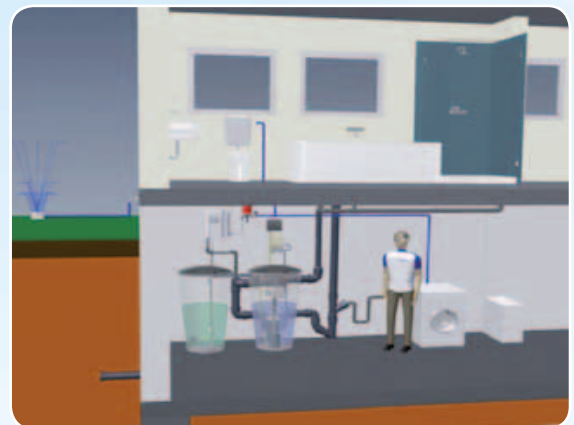
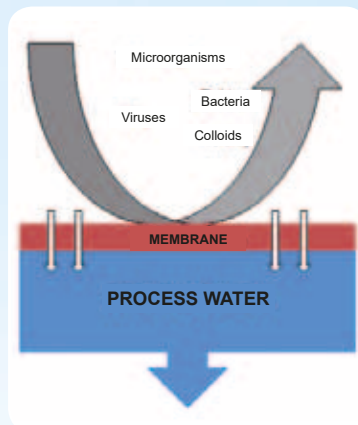
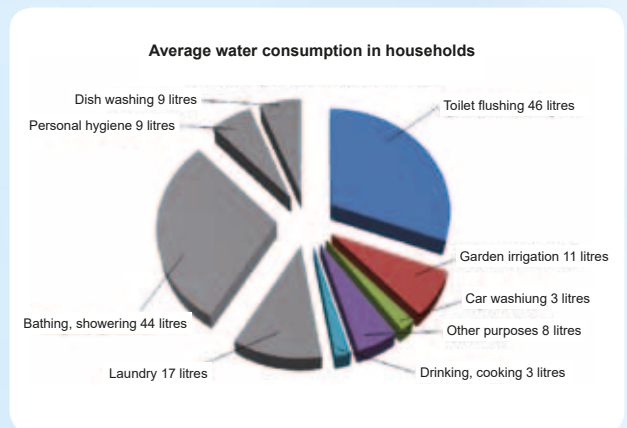


Along with the ever-increasing price of drinking water, its reuse becomes even more important. **AS-GW/AQUALOOP is environmentally friendly and cost-saving technology** with a low demand for energy consumption and independent of climatic conditions.

Recycling of greywater generated in showers, washbasins, washing machines and technical processes, i.e. wastewater without faecal and urine contamination, can produce high quality process water suitable for further use.

### Why use AS-GW/AQUALOOP

- Drinking water economy irrespective of rainwater precipitation
- Quick return on investment – drinking water cost savings, savings in charges for wastewater discharging
- Low energy demand – high-quality treatment of moderately contaminated wastewater
- Low demand for space – the membrane technology used in the system decreases its demand for space, and - as a result - also capital expenditures
- Use of the well-proven membrane technology
- Limited sources of drinking water – protection of the environment and water resources



## There are many opportunities in greywater utilisation ...

- **Family houses** – the water demand of a normal family house is about 600 litres a day, out of which some 50% can be reused
- **Apartment houses** – the use of greywater and rainwater can be advantageously combined here to provide for improved savings
- **Hotels, wellness centres** – large volumes of greywater are generated here; in hotels, the water consumption fluctuates from 125 to 200 litres per guest per day
- **Sports facilities, stadiums** – large lawn & planting areas must be irrigated; purified greywater can be used advantageously to this purpose
- **Commercial and industrial buildings** – large volumes of greywater are generated here from showers and washbasins; this water can be used elsewhere, e.g. for flushing of toilets

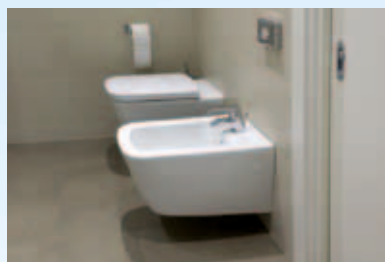


## Description of the process

Wastewater flows in through a filter of mechanical particles to a reaction tank, where the water is biologically treated. A membrane module is placed inside the reaction tank; in the module bottom part, there is an aeration system. A pump is fitted above the membrane module. This pump sucks off (by negative pressure) water over the membranes and transports the cleaned water consequently to an accumulation reservoir. From the accumulation reservoir, the water stream is pumped into the distribution system of process water. For emergencies, the reaction tank is equipped with an overflow. If necessary, the system can be replenished also with drinking water.



Wastewater treatment plant – type	PE number	Max. daily inflow [litres per day]	Greywater accumulated volume [litres]	Process water accumulation - volume [litres]
AS-GW/AQUALOOP 6	6	300	300	300
AS-GW/AQUALOOP 12	12	600	600	600
AS-GW/AQUALOOP 18	18	900	900	900
AS-GW/AQUALOOP 24	24	1200	1200	1200
AS-GW/AQUALOOP 30	30	1500	1500	1500
AS-GW/AQUALOOP 36	36	1800	1800	1800
AS-GW/AQUALOOP 48	48	2400	2400	2400



Recycling of greywater generated in showers, washbasins, washing machines and industrial processes, i.e. wastewater without faecal and urine contamination, will produce high-quality process water suitable for further use.

**WE SHALL BE DELIGHTED TO PREPARE FOR YOU A TECHNICAL EQUIPMENT DESIGN!**

**FOR MORE DETAILS, PLEASE ASK FOR DESIGN & INSTALLATION SUPPORTING DOCUMENTS!**

