

# GREYWATER-RECYCLING





### **GREYWATER-RECYCLING**

#### **ECOLOGICAL AND SUSTAINABLE**

#### Drinking water - our most important food - is too good for the toilet



#### Sustainable GreenLife water management

The use of rainwater and/or reuse of certain portion of wastewater e.g. greywater, significantly helps to reduce the constantly increasing costs of water and wastewater. Greywater is wastewater generated during daily care for human body - i.e. it comes from sinks, bathtubs and showers, and is therefore almost inexhaustible resource, while rainwater is also available. Greywater is not highly contaminated, it is free from faecal matter and solids, and includes only slight amount of bacteria. It is collected in a separate network of pipes and possibly separated along with the treated rainwater.





#### Smart plant engineering

- indoors and outdoors versions
- for combination with rainwater harvesting systems
- remote control
- monitoring

## **GREYWATER-RECYCLING**

ECOLOGICAL AND SUSTAINABLE

Process based on ultrafiltration



The service water can be used for:



Toilet flushing



Irrigation



Washing machine



Cleaning purposes

Process based on fixed-bed reactor and UV-disinfection



The service water can be used for:



Toilet flushing



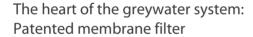
Irrigation

### **GREYWATER-RECYCLING-SYSTEMS**

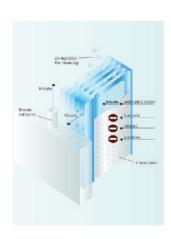
#### HIGH LEVEL OF SAFETY DUE TO PATENTED PROCESS

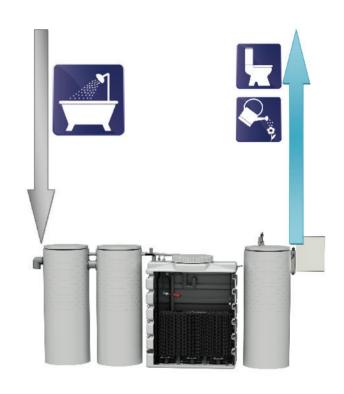
#### The operation principle of GreenLife greywater-recycling-systems

The technology of bio-membrane filters (Micro-Clear®) guarantees full separation of the biomass from the purified greywater. In this way, the user may obtain purified water free of solids rand with removed all bacteria and viruses in almost 100%. The overall purification process consists of a biological treatment and ultrafiltration (membrane bio-reactor MBR). After that water is stored in the purified water tank or transferred to the rainwater tank.



Maintenance costs are extremely low: Once a year you should inspect the operation of system components and possibly simple back-washing of the membrane. The membrane filter may treat greywater for many years, supplying clean hygienic water.





#### Applications of greywater-recycling-systems:

- hotels / pensions
- swimming pools and saunas
- Boarding houses, dormitories, single- and multi-family youth hostels, camping sites
  - houses
- sports facilities
- industry and commerce

#### Resultat:

Generated water presents no hygiene risk and it is suitable in particular for:

- flushing toilets
- irrigation
- cleaning
- washing

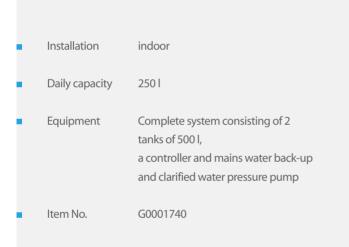


### **GREYWATER-RECYCLING-SYSTEMS**

### HIGH LEVEL OF SAFETY DUE TO PATENTED PROCESS



#### **GWI 1.0-250**





#### **GWO 1.0-250**

•	Installation	outdoor
•	Daily capacity	2501
•	Equipment	Complete system consisting of 2 tanks of 950 l, a controller and mains water back-up and clarified water pressure pump
•	Item No.	G0001739

	Item No.	Туре	max.filtration capacity liters/day	Quantity of tanks
	G0001740	GWI 1.0-250	250	2
	G0002407	GWI 1.1-500	500	3
	G0003662	GWI 1.2-750	750	4
	G0002408	GWI 1.3-1.000	1 000	4
•	G0002396	GWI 2.3-2.000	2 000	5
•	G0003075	GWI 3.2-3.000	3 000	6
•	G0003078	GWI 4.2-4.000	4 000	6
•	G0003079	GWI 5.2-5.000	5 000	4
•	G0003102	GWI 6.2-6.000	6 000	6
•	G0003902	GWI 7.2-7.000	7 000	6
•	G0003137	GWI 8.2-8.000	8 000	6
•	G0003903	GWI 9.2-9.000	9 000	6
	G0003771	GWI 10.2-10.000	10 000	6

For more detailed information on our greywater-recycling- systems, please visit our website:



### **GREYWATER RECYCLING**

#### PROCESS BASED ON FIXED-BED REACTOR AND UV-DISINFECTION

# The operation principle of GreenLife greywater-recycling-systems

GW-FB devices for greywater recycling are available with the daily capacity of greywater treatment starting at 250 litres/day. The system is suitable for treatment of low-contaminated water after body care (shower, bathtub, sink).

Usable water is free from solids, it is biologically purified with oxygen from air and disinfected by UV rays. No chemical additives are used. Usable water is well suited for flushing toilets and watering gardens.

The system operates fully-automatically. The annual maintenance inspection may be carried out independently, basing on instructions supplied with the device. No special materials are required. It takes about 2 hours, depending on the intensity of work and skills. The daily electricity consumption is approx. 1.5 kWh per m³.

#### Result:

Generated water presents no hygiene risk and it is suitable in particular for:

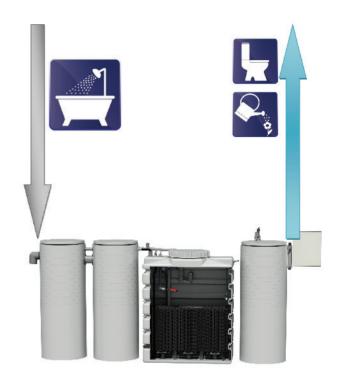
- flushing toilets
- watering gardens

#### Stage 1 - sedimentation



Stage 3 – UV disinfection





#### Application of installations using ground water:

- single- and multi-family houses
- industry and crafts
- boarding houses / dormitories / youth hostels / camping sites
- sports facilities

Stage 2 - Biological treatment



Stage 4 – service water tank



## **GREYWATER RECYCLING**

### PROCESS BASED ON FIXED-BED REACTOR AND UV-DISINFECTION





#### **GW-FB 250**

•	Installation	indoor
•	Daily capacity	250
•	Equipment	Complete system consisting of 2 tanks of 350 l, a controller and mains water back-up supply and household water supply system
•	Item No.	G0003510

#### **GW-FB 500**

•	Installation	indoor
•	Daily capacity	5001
•	Equipment	Complete system consisting of 3 tanks (2x 350 l, 1x 1000 l), a controller and mains water back-up supply and household water supply system
•	Item No.	G0003511

	Item No.	Туре	max.filtration capacity liters/day	Quantity of tanks
•	G0003510	GW-FB 250	250	2
	G0003511	GW-FB 500	500	3
	G0003655	GW-FB 750	750	4
•	G0003512	GW-FB 1.000	1 000	5
•	G0003739	GW-FB 2.000	2 000	6
•	G0003740	GW-FB 3.000	3 000	7
•	G0003741	GW-FB 4.000	4 000	5
	G0003742	GW-FB 5.000	5 000	5
•	G0003898	GW-FB 6.000	6 000	6
•	G0003899	GW-FB 7.000	7 000	6
•	G0003900	GW-FB 8.000	8 000	6
•	G0003901	GW-FB 9.000	9 000	6
•	G0003794	GW-FB 10.000	10 000	6

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