# Introducing the cutting-edge OneAdvanced treatment plant range



## Setting the standard

#### **ADVANCED TECHNOLOGY**

SBR technology – the modern approach to wastewater treatment. Operational flexibility and excellent process control possibilities. Optimising treatment processes. Easily customised for bespoke design requirements.

#### **DESIGN SOLUTIONS**

Offering bespoke design solutions for the most challenging projects. Breweries Distilleries Dairies

#### MEETING INCREASINGLY STRINGENT **ENVIRONMENTAL DISCHARGE STANDARDS**

Nutrient Neutrality – phosphates and nitrates. Ammonia BOD Suspended Solids

#### **PRODUCT QUALITY**

German engineering.





#### **SUSTAINABILITY**

Low power consumption – Daily energy usage of your One Advanced treatment plant – from 1.03kWh/d. **Reduced sludge growth** – Longer de-sludging periods, lower annual volume of sludge removal. Quiet operation – High quality compressors.

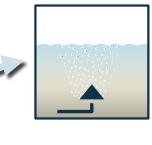
**GRAF recycling plant** – Supplying lightweight, high strength, injection moulded polypropylene tanks. Gravel backfill – Versatile and cost effective option to concrete.

#### **CUSTOMER SERVICE**

Lifetime support – Customer support on your project from start to finish. **GRAFter network** – Graf accredited service provider network for all your service and maintenance needs.

## The OneAdvanced system

A modern approach to wastewater treatment!



#### 1. Wastewater treatment

The wastewater arrives directly in the biological zone without the need for pumping processes. Aeration of the entire container leads to immediate wastewater activation. The microorganisms begin the biological cleaning process without delay.



3. Clear water extraction The treated clear water is extracted from the system and the cleaning process can begin once more.





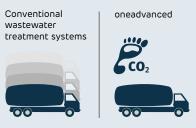


#### 2. Settling phase

Aeration is interrupted by the control unit, the activated sludge sinks to the bottom. A clear water zone develops in the upper part of the container.

#### Incredibly low volume of sewage sludge

- Aeration of the SBR wastewater tank
- Immediate wastewater activation
- Minimisation of sludge
- Less sludge removal
- Cost savings



### Special requirements

Systems for more than 50 inhabitants work on the same principle as small wastewater treatment systems and use the SBR process.

Because of the special requirements involved, all systems for more than 50 inhabitants are designed as individual projects.

Our experienced team of engineers and technicians will help you design your project.

We take all local circumstances into account from the initial planning phase to implementation.

### Optional plug and play upgrades for the OneAdvanced systems

#### +K Convenience Package (Standard supply)

Underload detection by a pressure sensor. Adapts number of batch cycles when inflow is low. Especially relevant to larger commercial systems reducing compressor run times.

#### HD Removal of nitrogen

Standard denitrification (removal of nitrogen compounds) package. Achieving levels <20mg/l.

#### Removal of nitrogen D+

Advanced denitrification (removal of nitrogen compounds) package. Achieving levels <15mg/l.

### Combined D+ +C Removal of nitrogen

Advanced denitrification combining carbon dosing (removal of nitrogen compounds) package. Achieving levels <10mg/l.

#### +P Phosphate removal package

Advanced phosphate removal package. Achieving levels <0.4-1.0mg/l (subject to system size).



#### +C Carbon dosing package

Solution for holiday homes. The addition of carbon as a nutrient allows the purification process to continue and prevents the biology from dying off.



WebMonitor - intelligent remote monitoring via access to control panel. LAN and SIM card options.

### + Hygiene package

Offers the following tertiary treatments. UV Chlorine dosina Sand filtration.



### Setting the standard

#### OneAdvanced wastewater treatment one-tank systems

nabitants [max.]	Max. daily flow [I/d]	Max. organic load [kg BOD5/d]	Total volume [l]	Volume [I]	Length [mm]	Width [mm]	Height [mm]	Weight [kg]	Product code
10	1,500	0.60	4,800	4,800	2280	1985	2110	185	G50138
14	2,100	0.84	6,500	6,500	2390	2190	2390	220	G50142

#### OneAdvanced wastewater treatment multi-tank systems

Inhabitants [max.]	Max. daily flow [I/d]	Max. organic load [kg BOD5/d]	Total volume [I]	Volume [I]	Length* [mm]	Width* [mm]	Height [mm]	Weight [kg]	Product code
22	3,300	1.68	9,600	2×4,800	5160	1985	2250-2450	440	G50024
28	4,200	1.92	13,000	2×6,500	5380	2190	2530-2730	530	G50026
35	5,250	2.10	17,000	2 x 8,500	15500	2040	2515-2715	780	G50028
40	6,000	2.40	20,000	2 x 10,000	15500	2240	1715-2915	930	G50030
50	7,500	3.00	26,000	4 x 6,500	11360	2190	2850-3050	1060	G50032
60	9,000	3.60	26,000	4 x 6,500	11360	2190	2850-3050	1060	G50034



### Setting the standard



#### Bringing modern SBR technology to the treatment of wastewater.



#### Multiple line design –

Splitting load design into multiple lines that can run independently or combined. Lines can be shut down when not required which is ideal for dealing with large seasonal fluctuations in loading. Modular design principle -

Future-proof longer-term projects. Later phases added when project growth dictates.

Spreads capital expenditure over project duration.



Multiple design options – Flexibility of SBR technology allows bespoke design solutions to meet your project requirements.

#### OneAdvanced wastewater treatment systems

Inhabitants [max.]	Max. daily flow [l/d]	Max. organic load [kg BOD5/d]	Total volume [l]	Length [mm]	Width [mm]	Height [mm]	Product code
75	11,250	4.50	32,000	9900	2500	3300-3500	G50036
100	15,000	6.00	44,000	12900	2500	3300-3500	G50040
125	18,750	7.50	52,000	15000	2500	3300-3500	G50280
150	22,500	9.00	64,000	17700	2500	3300-3500	G50042
175	26,250	10.50	76,000	20450	2500	3300-3500	G50282
200	30,000	12.00	88,000	26400	2500	3300-3500	G50044
220	33,000	13.20	88,000	23480	2500	3300-3500	G50284
250	37,500	15.00	116,000	13300	8700	3300-3500	G50046
275	41,250	16.50	100,000	13400	8440	3300-3500	G50286
300	45,000	18.00	116,000	13300	8700	3300-3500	G50048
350	52,500	21.00	142,000	19900	5600	3300-3500	G50050
400	60,000	24.00	140,000	18040	7200	3300-3500	G50052
450/500	75,000	30.00	170,000	25130	6200	3300-3500	G50054
550/600	90,000	36.00	206,000	16200	11800	3300-3500	G50056
650/700	105,000	42.00	216,000	27500	5600	3300-3500	G50058
750/800	120,000	48.00	272,000	26200	8700	3300-3500	G50060
850/900	135,000	54.00	324,000	29100	8700	3300-3500	G50062
950/1000	150,000	60.00	348,000	30500	8700	3300-3500	G50064

Standard LxWxH dimensions are given, alternative orientations are available on request. Standard inhabitant (PE) sizes are given. Bespoke inhabitant (PE) sizes can be designed on request.