

Introducing the cutting-edge One2Clean treatment plant range



Setting the standard

- ✓ Only one tank with just one chamber required
- ✓ Less energy consumption and less wear
- ✓ No mechanical elements in the wastewater
- ✓ No pumps in the wastewater
- ✓ No electrical components in the wastewater
- ✓ Incredibly low volume of sewage sludge

ADVANCED TECHNOLOGY

The go to treatment plant for Nutrient Neutrality.

Unrivalled effluent quality.

Treatment levels -

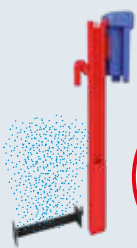
BOD - 7mg/l

Suspended Solids - 14mg/l

Ammonia - 0.5mg/l

Phosphate - 1.6mg/l

Nitrate - 7.9mg/l



**EFFICIENCY
FACTOR OF
UP TO 99 %**



**MINIMAL
OPERATING
COSTS**

one2clean set-up kit

- Conventional wastewater treatment systems require up to three pumping processes. one2clean only requires one pumping process, which saves energy and extends the lifetime of the air compressor – the core part of the system
- Rugged clear water lifter manufactured in one seamless piece. No connectors or screws necessary
- Simple maintenance via an integrated, self-cleaning sampling container

one2clean system control

- The one2clean has a compact controller
- The microprocessor control system ensures simple operation and maintenance

Wastewater tank

- Telescopic cover
- State-of-the-art manufacturing for maximum stability
- Suitable for vehicle loading in conjunction with telescopic vehicle dome shaft
- 100% watertight and corrosion-resistant
- Can be installed in groundwater

The one2clean system

The only wastewater underground tank of it's kind!



PRODUCT QUALITY

German engineering.



SUSTAINABILITY

Low power consumption - Daily energy usage of your One2clean treatment plant – from 0.63kWh/d.

Quiet operation – High quality diaphragm compressors.

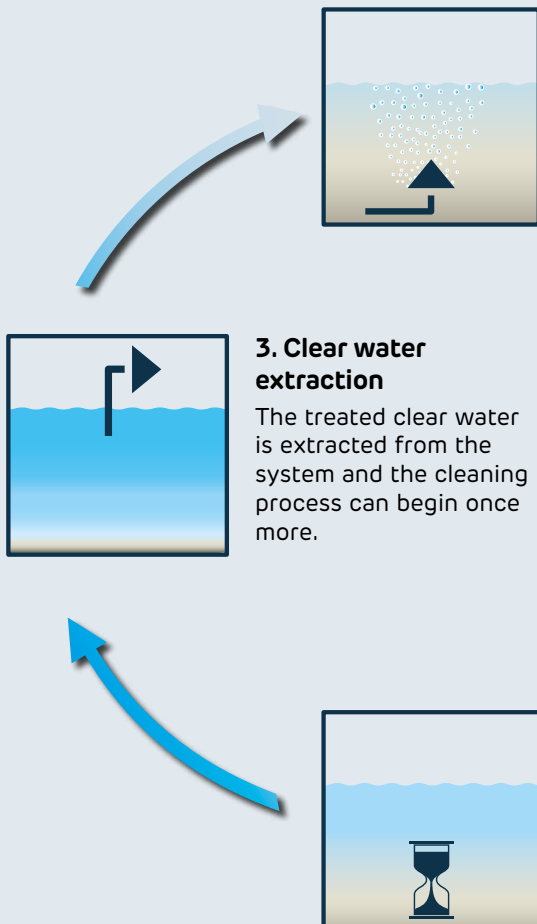
CUSTOMER SERVICE

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.



HOW IT WORKS



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 micro-organisms begin the biological cleaning process without delay.

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.

3. Clear water extraction

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

Incredibly low volume of sewage sludge

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

Conventional wastewater treatment systems



one2clean



Low maintenance costs

- Simple construction
- High-quality components
- Maximum performance using optimised technology
- Integrated sampling point

Minimal power consumption

- The one2clean has only one pumping process, reducing energy consumption and running costs
- Economical motor valve
- Energy-optimised membrane compressor

The one2clean system

The only wastewater underground tank of it's kind!



One2Clean systems

Inhabitants [max.]	Standard control system	Advanced control system	Max. daily flow [l/d]	Max. organic load [kg BOD5/d]	Total volume [l]	Length [mm]	Width [mm]	Height [mm]	Weight [kg]	Product code
5	✓	✓	750	0.3	3,750	2280	1755	1880	150	G50000
7	✓	✓	1,050	0.42	4,800	2280	1985	2110	185	G50002
9	✓	✓	1,350	0.54	6,500	2390	2190	2390	220	G50004
12	✓	✓	1,800	0.72	8,500	3500	2040	2515	380	G50200
15	✓	✓	2,250	0.9	10,000	5320	2240	2575	455	G50204
18*	✓	✗	2,700	1.08	13,000	5380	2190	2390	440	G50010
19**	✓	✓	2,850	1.14	13,000	4000	2420	2755	510	TBC
24	✗	✓	3,600	1.44	16,000	4590	2500	3160	890	G50300
32	✗	✓	4,800	1.92	22,000	6230	2500	3160	1085	G50302
45	✗	✓	6,750	2.70	32,000	8440	2500	3160	1430	G50304
50	✗	✓	7,500	3.00	38,000	9925	2500	3160	1630	G50306
60	✗	✓	9,000	3.60	44,000	11440	2500	3160	1840	G50308
70	✗	✓	10,500	4.20	48,000	12140	2500	3160	1970	G50310

18* - Two tank system

19** - Not available until summer 2024

Advanced control system incorporates an advanced Control M controller with plug and play options.

Technical data

System	one2clean
System conformity	EN 12566-3
Purifying technology	fully biological SBR lifting technology
One-tank systems available up to	9 inhabitants 1,350 l/d
Two-tank systems available up to	18 inhabitants 2,700 l/d
Maintenance interval	1 – 2 per year
Warranty for underground tank	15 years
Warranty for purifying technology	3 years
Cleaning performance	7, 14, 0.5

Control	
Holiday mode	Manual
+D Removal of nitrogen	●
+C Carbon infeed	○
Logbook function	●
Operation	4 keys
External control cabinet for installing control unit outdoors	○
Annual power consumption	230 kWh (5 inhabitants 750 l/d)

Parameter	%	mg/l
COD (chemical oxygen demand)	94,2 %	43
BOD ₅ (biochemical oxygen demand)	98,0 %	7
SS (suspended solids)	96,3 %	14
NH ₄ -N	98,3 %	0.5
N _{total}	87,0 %	7.9

Results of practical testing undertaken by the Prüfinstitut für Abwassertechnik (Testing Institute for Wastewater Technology), Aachen

- Standard equipment
- Available as options
- not available



Graf UK will arrange **FREE** commissioning of your system by a Graf accredited service provider who will register your system to activate your warranty. For more information go to <https://bit.ly/GRAFFreeCommission> or scan the QR code.



For general enquiries go to <https://bit.ly/grafuksts> or scan the QR code.

PERFORMANCE RESULTS

Otto Graf GmbH

Carl-Zeiss-Str. 2 - 6, 79331 Teningen, Germany

EN 12566-3

Small wastewater treatment systems for up to 50 PT

Small wastewater treatment system one2clean

SBR plant in one two-zone polypropylene tank

Test report PIA2014-216B14.01.e

Nominal organic daily load*	0.27	kg/d		
Nominal hydraulic daily load	0.75	m ³ /d		
Material	polypropylene			
Treatment efficiency (nominal sequences)			Efficiency	Effluent
	COD		94.2 %	43 mg/l
	BOD ₅		98.0 %	7 mg/l
	SS		96.3 %	14 mg/l
	NH ₄ -N**		98.3 %	0.5 mg/l
	N _{tot} **		87.0 %	7.9 mg/l
	P _{tot}		80.2 %	1.6 mg/l
Electrical consumption	0.63	kWh/d		

*at a test influent of ≥ 300 mg/l BOD₅ (mean)
**determined for temperatures $\geq 12^{\circ}\text{C}$ in the bioreactor

Performance tested by:

PIA – Prüfinstitut für Abwassertechnik GmbH

(PIA GmbH)

Hergenrather Weg 30

52074 Aachen, Germany

This document replaces neither the declaration of performance nor the CE marking.



Notified Body
No.: 1739



Certified according to
ISO 9001:2008



Deutsche
Akkreditierungsstelle
D-PL-17712-01-00

Prüfinstitut für Abwassertechnik GmbH



Geprüft - tested - testé

Elmar Lancé

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