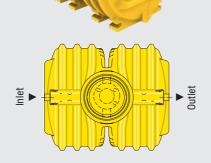
Single tank system **Products Population** Total capacity of Weight Installation version Illustration / Article description equivalent ' the system (liters) in kg (approx.) 1 2 3 97804A 97804B 4800 I 530 97804 PΕ PE 6 97806A 97806B 4800 I 530 97806 7600 I 700 97808 97 808A 97808B PE 8 PE 10 7600 I 700 97810 97810A 97810B



GW = max. ground water level (Dmin 700 mm)
DEC = depth of earth coverage

 $\begin{array}{ll} {\sf DEC} &= {\sf depth\ of\ earth\ coverage} \\ {\sf h\ _{empty}} &= {\sf height\ of\ cable\ piping} \end{array}$

InnoClean PLUS Fully biological wastewater treatment system according to EN 12566 manufactured from polyethylene

Single body (monolythic) tank, for underground installation. Installation depth D = mm. Chamber with gasketed inlet / outlet openings for connection of \varnothing 160 mm PVC inlet and outlet piping according to EN 1401-1 or for \varnothing 160 mm PE-HD inlet and outlet piping according to EN 12666-1. For installation in high groundwater areas, maximum groundwater level GW = 1840 mm. With integrated, pre-installed cleaning system. All ventilation hoses and clamps for connection of *InnoClean PLUS* tank to control unit / compressor are included with system.

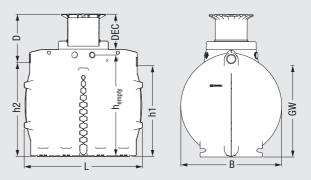
With control unit and low maintenance compressor (230 V $\,$ 50 Hz). Float switch and air compressor connections to be made on-site.

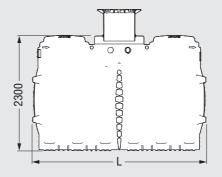
Certification number: Z-55.3-185 / Z-55.3-187

Installation versions:

- With polymer vertically adjustable upper section, with polymer cover (600 kg load class).
- 3 With polymer vertically adjustable upper section, with concrete / cast iron cover (Class B, 12.5 t).

Accessories: see page 277 to page 279



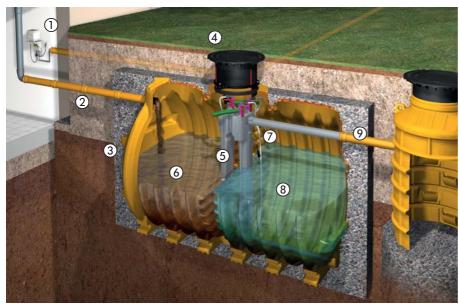


Population				D	DEC				
equivalent *	L	В	min.	max.	= D	GW	h2	h1	h _{empty}
PE 4	2350	2000	590	- 1026	D - 255	1775	1875	1775	2000
PE 6	2350	2000	590	- 1026	D - 255	1775	1875	1775	2000
PE 8	3470	2000	590	- 1026	D - 255	1775	1875	1775	2000
PE 10	3470	2000	590	- 1026	D - 255	1775	1875	1775	2000

^{*} Population equivalent = number of people living in home which will be connected to the InnoClean PLUS

Professional advantages

Installation example



- 1 Control unit and compressor
- ② Wastewater inlet
- (3) KESSEL InnoClean PLUS tank
- 4 Child proof load class B (12.5 ton) cover
- (5) Treatment tower with integrated sampling
- 6 Pre-treatment chamber
- 7 Integrated separation wall
- (8) Activation chamber
- 9 Outlet to dry well

- Full line of system sizes

 Available in size PE 4 to PE 50
- User friendly operation Interactive control unit with LCD read-out and user friendly touch pad (max. distance to system 27.5 m)
- Low weight
 Complete installation handled with standard construction equipment.
- Quick connection for ventilation hoses
- Easy connection of air compressor no tools required
- Treatment tower is completely removable for maintenance / inspection
- Ready to go system provides simplified on-site installation
- Compressor pump and aeration diffusor easily removed for inspection and maintenance
- Three different installation versions to meet custom installation requirements
- Variable upper section inclinable, height adjustable and private vehicle traffic proof

Power usage calculation example:

0.11 KWh x 2 hours/day x 365 days/year = 80.30 KWh (Power usage air compressor)

0,01 KWh x 24 hours/day x 365 days/year = 87.60 KWh (Power usage control unit)

Total annual power consumption: = 167.90 KWh

At 0.25 \in /KWh this results in a total annual operational cost of only 42 \in

Note: If the *InnoClean* automatically goes into vacation or sleep mode, annual power costs would be even lower.



Scan this QR code to directly view the corresponding product video.



Description of operation



6 Sludge transfer

Excess sludge is returned to the sludge storage tank



5 Emptying of treated wastewater

The treated wastewater is then pumped out of the treatment chamber

After 8 hours the complete cycle has ended. In the case that sufficient wastewater is available in the pre-treatment chamber, the entire 8 hours cycle begins again.

In the case that no or little wastewater has been collected, the *InnoClean PLUS* automatically goes into energy savings mode.



1 Incoming wastewater

Wastewater enters the pretreatment chamber where solids settle to the bottom.



4 Sedimentation phase

After the 6 hour treatment phase a 1 or 2 hour sedimentation phase begins where sludge settles to the base and the treated wastewater clears.



2 Filling of treatment chamber

The pre-treated wastewater is pumped to the treatment chamber.



3 Treatment / Ventilation of wastewater

The 6 hour treatment phase begins - the wastewater is intermittently supplied with bursts of oxygen.

These bursts provide the microorganisms with required oxygen to begin their treatment process (denitrification).

