

tricel[®]



environmental solutions



Sewage Treatment Systems

Certified to the European Standard EN 12566-3



Synergy 
WASTEWATER TREATMENT
P R O D U C T S

Tel: 01278 671 927



The Wastewater Purification Process

1. Primary Settlement 2. Aeration 3. Final Settlement



Stage 1

Stage 1 takes place in the primary settlement chamber where the wastewater is introduced. The solids drop to the bottom and are separated from the liquid. Anaerobic breakdown now begins to occur and improves the water quality.

Stage 2

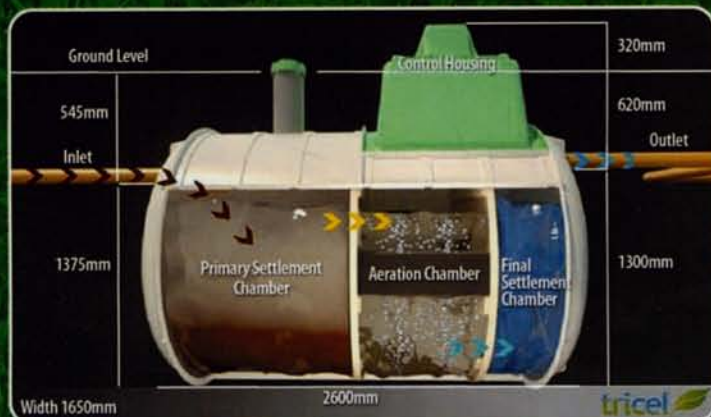
Stage 2 takes place in the aeration chamber where masses of naturally occurring bacteria inhabit specially designed filter media. These bacteria are sustained with air, which is continuously supplied from a purpose built pump in the top section of the unit. As the liquid flows through the filter media the bacteria feed on the impurities, consuming them, thus removing them from the liquid.

Stage 3

The liquid now flows from the aeration chamber into the final settlement chamber. Small quantities of bacteria known as sludge are carried with the liquid at this stage. This sludge settles towards the bottom of the final settlement chamber where a continuous sludge return system pumps back to chamber 1. The remaining treated liquid now meets the required standard to be safely passed out of the Tricel® unit.

Advantages of Tricel®

- EN 12566-3 European Certified
- Easy to install
- Low maintenance costs
- Low running costs
- Easily de-sludged
- Quiet in operation
- Manhole risers available
- Site assessments to meet planning requirements
- Maintenance contracts available
- Underground installation causes minimal visual impact



P6 Sewage treatment system

European Certification required for Sewage Treatment Systems

Achieving European Standard EN12566-3

The Tricel® Sewage Treatment Systems have successfully passed these tests and is now approved to the New European standard EN 12566-3 Small wastewater treatment systems for up to 50 PT-Part 3: Packaged and/or site assembled domestic wastewater treatment plants.

The Tricel® system was placed through a rigorous 38-week test, by the certifier laboratory PIA GmbH-Testing Institute for Wastewater Technology in Aachen, Germany. The Biological tests carried out in Aachen on the Tricel® system provides us the knowledge that our product is still the best in the business with a treatment efficiency of 95.7% for BOD5 and 95.4% for S:S. Structural testing (leak test, crush test & durability test) was carried out by PIA staff at our headquarters in Killarney and the range of tanks upto P50 successfully passed all of the required tests.

CE

TRICEL®

I.S. EN 12566-3

Packaged domestic wastewater treatment plant for treatment of domestic wastewater

Product's reference code: "Tricel P6"

Material: GRP

Effectiveness of treatment:

Treatment efficiency ratios BOD5: 95.7 %
SS: 95.4 %

Treatment capacity (nominal designation):

Nominal organic daily load (BOD5) 0.36 kg/d

Nominal hydraulic daily flow (QN) 1.2 m³/d

Watertightness: Pass

Crushing resistance: Pass

Durability: Pass

Tricel® P6-P18 Sewage Treatment System - Product Information

DESIGN POPULATION		P6	P9	P12	P18
Treatment Capacity	litres	4000	4000	5516	7136
Primary Settlement Zone	litres	1931	1400	2113	2889
Secondary Treatment Zone	litres	1188	1575	2134	2372
Final Settlement Zone	litres	881	1025	1269	1875
Nominal Inlet/Outlet pipe diameter	mm	110	110	110	110
Overall Length	mm	2600	2600	3600	4600
Overall Width	mm	1640	1640	1640	1640
Overall Height	mm	2230	2230	2230	2230
Weight Empty*	kg	300	300	400	500
Design Flow Rate	litres/day	1200	1800	2400	3600
BOD Load	kg/day	0.36	0.54	0.72	1.08
Inlet invert to base	mm	1375	1375	1375	1375
Outlet invert to base	mm	1300	1300	1300	1300
Inlet Invert to Ground Level	mm	545	545	545	545
Outlet invert to Ground level	mm	620	620	620	620
Air Blower rating (mean)	watts	60	100	100	100 (x2)
Thickness (minimum)	mm	5	5	5	5
Retention Time	hours	78.3	52.2	55.4	47.8

*allow an extra 100kgs for lifting purposes



Installation of the Tricel® P6 Sewage Treatment System



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WASTEWATER TREATMENT
P R O D U C T S

Other products include:

- ⊗ Sewage treatment plants
- ⊗ Septic tanks
- ⊗ Cesspools & Storage tanks
- ⊗ Rainwater harvesting systems
- ⊗ Package pump stations
- ⊗ Oil-water separators
- ⊗ Grease traps
- ⊗ Storm water attenuation tanks
- ⊗ Dirty water settlement tanks
- ⊗ Silage effluent storage tanks
- ⊗ Above ground storage tanks

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