

# tricel<sup>®</sup>



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®

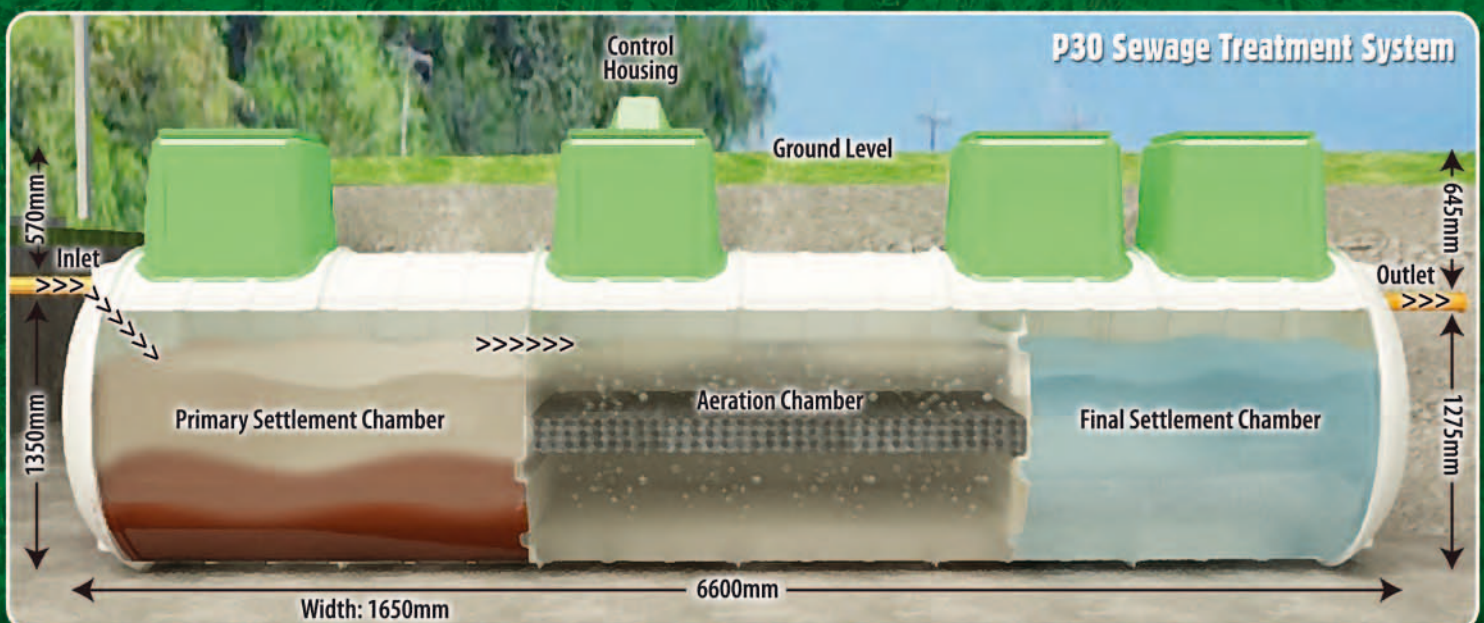
- EN 12566-3 European Certified
- Easy to install
- Low maintenance costs
- Low running costs
- Easily de-sludged
- Quiet in operation
- Manhole risers available
- Underground installation causes minimal visual impact

## 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.

P50 Certificate	
	
<b>TRICEL®</b>	
<b>I.S. EN 12566-3</b>	
Packaged domestic wastewater treatment plant for treatment of domestic wastewater	
Product's reference code: "Tricel P50"	
Material: GRP	
Effectiveness of treatment:	
Treatment efficiency ratios	BOD5: 95.8 % SS: 95.2 %
Nominal organic daily load (BOD5)	3.0 kg/d
Nominal hydraulic daily flow (QN)	10.0 m <sup>3</sup>
<b>Watertightness:</b>	Pass
<b>Crushing resistance:</b>	Pass
<b>Durability:</b>	Pass



# Tricel® P24-P50 Sewage Treatment System - Product Information

DESIGN POPULATION		P24	P30	P36		P42		P50	
				Tank A	Tank B	Tank A	Tank B	Tank A	Tank B
Treatment Capacity	litres	8756	10376	3820	8590	5410	8590	5410	10180
Primary Settlement Zone	litres	3320	3733	3820	980	5410		5410	
Secondary Treatment Zone	litres	2925	3754		4540		5060		6014
Final Settlement Zone	litres	2345	2889		3070		3530		4166
Nominal Inlet/Outlet pipe diameter	mm	150	150	150	150	150	150	150	150
Overall Length	mm	5600	6600	2600	5600	3600	5600	4600	6600
Overall Width	mm	1640	1640	1640	1640	1640	1640	1640	1640
Overall Height	mm	2230	2230	1990	2230	1990	2230	1990	2230
Weight Empty*	kg	600	700	300	600	400	600	500	700
Design Flow Rate	litres/day	4800	6000	7200		8400		10000	
BOD Load	kg/day	1.44	1.8	2.2		2.52		3.0	
Inlet invert to base	mm	1350	1350	1350	1350	1350	1350	1350	1350
Outlet invert to base	mm	1275	1275	1275	1275	1275	1275	1275	1275
Inlet Invert to Ground Level	mm	570	570	470	570	470	570	470	570
Outlet invert to Ground level	mm	645	645	545	645	545	645	545	645
Air Blower rating (mean)	watts	270	270	100+270		131+270		270x2	
Thickness (minimum)	mm	5	5	5	5	5	5	5	5
Retention Time	hours	44	41.7	42.5		41		42.2	

\*allow an extra 100kgs for lifting purposes



Tricel's production capacity extends beyond our standard ranges supplying systems up to a population of 350 persons. We offer site visits and assessments along with support on design and advice on a suitable system for your application.

Tel: 01278 671927

# Synergy

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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