

# WASTEWATER TREATMENT

## Tricel® Vitae T3 (5 to 14 PE)

For single dwellings & light commercial applications

*Innovative design for superior performance*



## What is the Tricel Vitae

Tricel Vitae wastewater treatment plants are reliable, easy to install and simple to maintain for all wastewater requirements. These highly functional plants can cater for ranges from 5 to 14 PE (Population Equivalent).

The Tricel Vitae T3 is suitable for single dwellings and light commercial application. Its unique design treats waste water in three distinct treatment zones: settlement, aeration and clarifier.

CE  
>97.5% BOD5  
Certified to EN12566-3

## European Certification Requirements

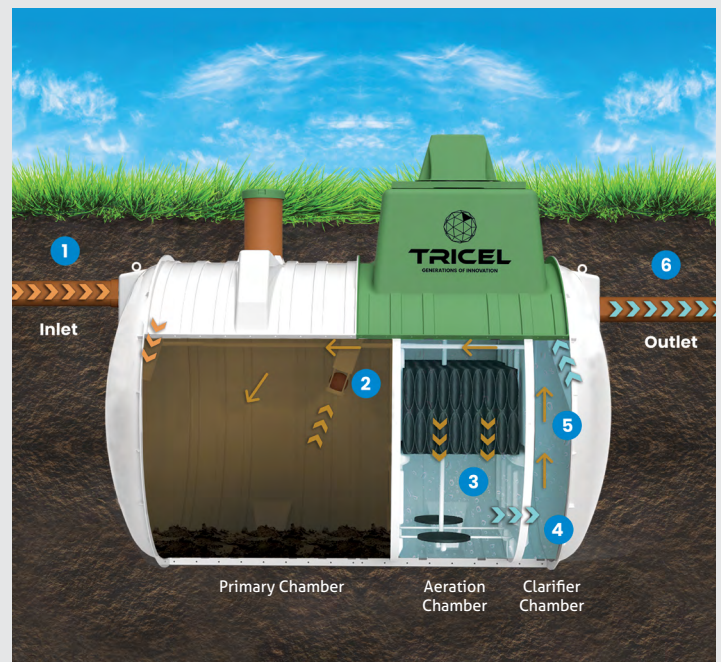
All Tricel wastewater treatment plants have been tested to European certification EN 12566-3. This certification tests all plants for strength, water tightness, durability and treatment efficiency.

Tricel Vitae wastewater treatment plants comply with all national requirements offering customers peace of mind that they are installing a fully approved plant.

## How a Tricel Vitae works

Tricel Vitae plants use a simple, proven technology, consisting of three treatment stages.

1. Inlet (1): wastewater enters the primary chamber which acts as a storage chamber to hold the wastewater until it is ready to be treated. While being stored, the heavy solids settle to the bottom of the tank and the light particles, like fats and oils, float to the top of the water to create a scum. The wastewater feeds (2) from the primary chamber into the aeration chamber.
2. Aeration (3): within the reactor, naturally-occurring bacteria work to eliminate contaminants from the wastewater. These bacteria thrive thanks to the introduction of air through a diffuser located at the bottom of tank, thereby enhancing the efficiency of the treatment process.
3. Clarifier (5): following the aeration process, the wastewater in the clarifier undergoes a settling phase, during which excess bacteria separate from the liquid and settle at the bottom of the tank. Excess sludge removal (4): the sludge-return airlift-pipe recirculates the excess sludge back to the primary chamber. Finally, the treated liquid meets the necessary standards and is discharged from the tank (6).



*Tricel Vitae wastewater treatment plant has an overall efficiency > 97.5% BOD removal during EN12566-3 test*

## Key features & benefits

- ▶ **Compression moulded SMC tank**, manufactured under heat and high pressure ensuring unrivalled strength and durability. Tricel SMC tanks are operating in some of the harshest climatic conditions for over 40 years with no defects.
- ▶ SMC tanks are **robust and lightweight** making them **easy to install**.
- ▶ **Low running cost**. The control panel operates both the blowers and the sludge return system to achieve optimal performance with minimal operating cost.
- ▶ **Locally manufactured** with swift back up.
- ▶ **Full traceability**, from factory floor to local installation.
- ▶ The control panel and blower are conveniently situated beneath the blower housing to ensure easy access and dependable operation, ultimately leading to **reduced maintenance and repair expenses**.
- ▶ Every plant is commissioned specific to requirements. **Service contracts are available** to ensure the correct long-term operation of the plant.
- ▶ **Risers** available for deep inverts
- ▶ **Integrated pumped outlet** available on all PE's.

Contact Depawater, Tricel's partner in Northern Ireland, for a Free Quote

Tel: 02837 507 023 | Email: [sales@depawater.co.uk](mailto:sales@depawater.co.uk)

## Homeowners: individual domestic installations



▶ Tricel Vitae 6 being installed



▶ Tricel Vitae 6 installed



▶ Retrofit of Tricel Vitae plant

## Larger projects: commercial installations up to 50 PE



▶ These plants are suitable for installation at housing estates, camping sites, hotels etc., and have low maintenance and running costs.



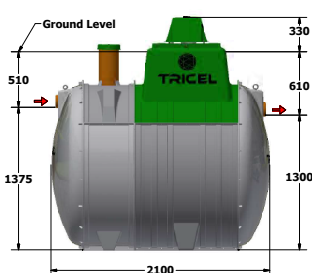
▶ Each wastewater treatment plant unit is constructed of lightweight SMC and is easy to manoeuvre which simplifies the installation process.



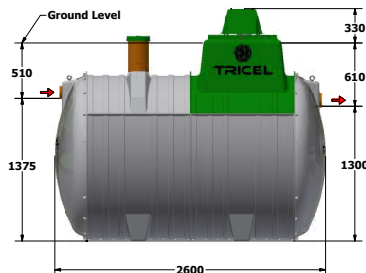
▶ Example of a Tricel Vitae kiosk - Tricel Vitae's have minimal visual impact on the environment.

## Technical characteristics/ Plant dimensions

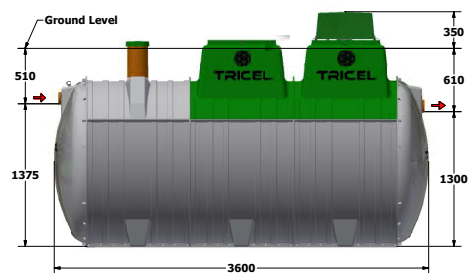
Vitae Design Population	No. of People	Length	Width	Height	Nominal inlet diameter	Nominal outlet diameter	Weight empty	Inlet invert to base	Outlet invert to base	Inlet invert to ground level		Outlet invert to ground level		Air blower rating
										m		m		Watts
UK5	1-5	2.1	1.64	2.24	110	110	250	1.375	1.3	0.51	0.61	65		
UK6	2-6	2.6	1.64	2.24	110	110	300	1.375	1.3	0.51	0.61	86		
UK10	3-10	3.6	1.64	2.27	110	110	400	1.375	1.3	0.51	0.61	100		
UK14	5-14	4.6	1.64	2.27	110	110	500	1.375	1.3	0.51	0.61	65+100		



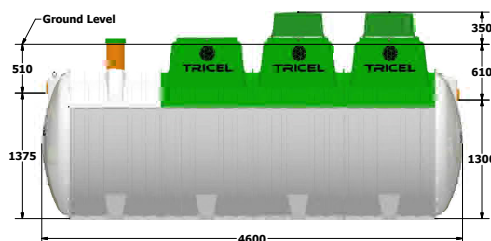
Tricel Vitae T3 UK05



Tricel Vitae T3 UK06



Tricel Vitae T3 UK10



Tricel Vitae T3 UK14

## Tricel Vitae riser option for deep installations

Tricel offers a riser to suit a deeper invert/inlet level. Manhole risers allow for the positioning of the treatment plants at the depth which is optimum to each individual installation. Wastewater is gravity fed from the premises to the treatment plant. The inlet pipe's position from the premises determines the excavation depth for the wastewater treatment plant.

Tricel offers a riser to help with installation where site conditions require a flexible solution.

## Tricel Group

Tricel is a world recognised global provider of **high-performance solutions**. Today, the company operates across multiple industries such as **Environmental, Construction, Water and Distribution**, including both composite materials and lubricants.

We occupy a unique position in the field of reinforced plastics, combining the technical expertise of **over 50 years in the press-moulding and composites industry**. Tricel is proud of being one of the largest manufacturers of wastewater treatment plants in Europe, and are regarded by regulators as the standard setters within the industry.

Tricel are **experts in Sheet Moulding Compound (SMC)** processes and produce the only wastewater treatment plant in Europe constructed from this material. This process gives the highest strength to thickness ratio of any tank on the market, and has no risk of corrosion over time.

Our company offers industry **leading innovative solutions** that our customers can trust, and with operations in 17 locations across Europe we supply a comprehensive range of products to **over 50 countries worldwide**.



## Membership of European associations on wastewater treatment

Tricel wastewater treatment plants are fully tested and accredited to **European standards for CE certification**.

Tricel Vitae wastewater treatment plants meet with **EN12566-3** requirements which test both the quality of the components as well as the overall performance of the plant.



**British Water** is the leading association representing suppliers, manufacturers, contractors, consultants and others in the UK water industry supply chain.



The Irish Water Treatment Association (IWTA) is the national association for the treatment, conservation, recycling and reuse of water and wastewater in Ireland.

## WARRANTY



- The warranty period for **mechanical parts** within the products is **2 years** from the date of purchase. This includes the compressor, control panel, diffusers and all internal components.
- The SMC structure of the tanks carry a **10 year warranty** from date of purchase.
- All products are **CE certified to EU safety, health and environmental requirements**.

Commissioning of the tank should be completed within 6 months of purchase.

Contact **Depawater**, Tricel's partner in Northern Ireland, for a **Free Quote**

Tel: 02837 507 023 | Email: [sales@depawater.co.uk](mailto:sales@depawater.co.uk)

