

# PACKAGED FILTER SYSTEM

For Tertiary Treatment

# IRELAND

## Tricel® TERO

Next generation of Tertiary Treatment  
Providing efficient E.coli treatment  
(1,000 cfu/100ml).

For Single Dwellings & Small Communities.

*Innovative design for superior performance*



# TERO module

The Tricel TERO tertiary wastewater system further purifies the treated effluent from a packaged wastewater treatment plant resulting in a reduced area and depth of discharge bed.

## Stage One:

TERO receives secondary treated effluent from a wastewater treatment plant. The TERO is designed to work seamlessly with the Tricel NOVO but can also be used with third-party products, providing that a pumped discharge with a dose limit is utilised.

## Stage Two:

The pre-treated effluent is dispersed using an easily serviceable distribution network which ensures the effluent is distributed evenly and uniformly onto natural filter media. The effluent filters through the media and is treated by a combination of biological, chemical and physical processes. The treated water is transported to the soil at the base of the tank.



## The environmental advantages of TERO

- Improved E.coli treatment efficacy. Test results show less than 1000 cfu/100ml, reducing soil depth requirements to 600mm.
- TERO is an **Environmentally friendly** system that utilises natural, long-life renewable media. The remarkable filtration properties of coconut fibre requires no chemical additives in achieving exceptional results.
- The closed system design of TERO greatly reduces odour whilst ensuring high treatment efficiency of the wastewater.

## Advantages for you

- **Compact system** - one module meets requirements for 6PE.
- The **modular design** of TERO makes it ideal for retrofit upgrades, extensions etc., and can be used with many existing treatment systems.
- The shallow profile of TERO makes it easy to incorporate into landscape design.
- **Simple maintenance. No desludging required.**
- **No electrical components or power consumption** used in the TERO system.

## Advantages for installation

- **Easy installation** – Flat base for easy installation, one inlet connection from wastewater plant. Reduced discharge depth and area, thus reducing contractor expense and costs.
- **Plug and play system** – assembled module with single input connector.

## Simple installation, minimum maintenance

Easily installed by your contractor with full commissioning provided by qualified Technician. Annual maintenance recommended to extend life and performance of the system.

## Complementary products for the TERO residential system

- High Level Alarm(s)
- Sample Chambers
- Weatherproof GRP Enclosures & Kiosks

The TERO system has undergone a rigorous performance testing regime to achieve the highest results required. The tables below show the sizes and the wastewater treatment capability of a TERO. If you have any specific requirements, please contact the Tricel sales team who will be able to assist you with your enquiry.

Tertiary Treatment Performance	
ESSENTIAL CHARACTERISTICS	PERFORMANCE
Nominal Organic Design Load	0.01 kg BOD/d
Nominal Hydraulic Daily Design Load	0.90 l/d
COD	54 mg/l
BOD5	5 mg/l
SS	4 mg/l
NH4*	0.2 mg/l
Electrical Power Consumption	0.2 kWh/d
Number of desludging	0

\* determined at temperatures of  $\geq 12^\circ$

TERO module dimensions	
Length	2,444mm
Height	1,078mm
Width	1,012mm
Weight (one TERO module)	515kg

## SEWAGE TREATMENT SIMPLIFIED

**Sewage Treatment:** Combination of physical and biological processes which break down the organic and inorganic sewage content which cause pollution to receiving waters.

**Receiving Waters:** All groundwaters and watercourses such as streams and rivers.

**Population Equivalent (PE):** A measure of the number of people the treatment plant serves.

**Media:** Coconut fibre.

**Sludge:** The solids that settle to the bottom of the tank chambers.

**BOD:** Biological Oxygen Demand measured in milligrams per litre (mg/l) is a relative measure of how polluting the sewage is.

**SS:** Suspended Solids measured in milligrams per litre (mg/l) includes all suspended matter both organic and inorganic.

**E.Coli bacteria:** commonly used as an indicator microorganism for faecal pollution, and the sanitary quality of foods and water, measured in (cfu/100ml).

**Pathogenic Bacteria:** Pathogenic bacteria such as Streptococcus are bacteria which cause disease in humans and animals.

# 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 governing bodies on wastewater treatment



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

PIA (Prüfinstitut für Abwassertechnik GmbH) are the leading Test Institute in Europe for wastewater technology.

Tricel wastewater treatment plants meet with **EN12566-7** requirements which test both the quality of the components as well as the overall performance of the plant.

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



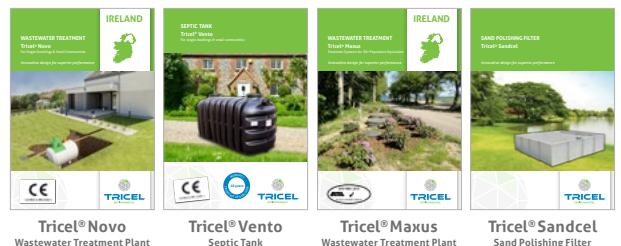
The **Irish Onsite Wastewater Association (IOWA)** formed in 2007 with the goal of improving the standard of professionalism in the on-site treatment of wastewater in Ireland.



### WARRANTY - IRELAND ONLY

- The warranty period for the Tricel TERO modules is 12 months from the date of purchase, including all internal components.
- The TERO is certified to EN12566-7 standards, and EU safety, health and environmental Requirements.

All warranties are subject to correct installation and use of the product, including maintenance as per manufacturer guidelines.



Get a Quote

Contact us Today  
to get a free quote on  
**00 353 (0) 64 663 2421** or email us at  
**sales@tricel.ie**