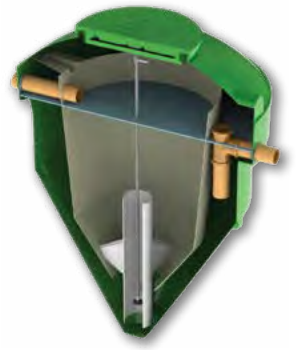


WCS Environmental
Engineering

A WCS Group Company



DIAMOND

SIMPLE, RELIABLE & DISCREET

Compact wastewater treatment plant



25
YEAR

WARRANTY

Our Diamond Range

Environmentally compliant

Our Diamond (formerly WPL Diamond) small packaged wastewater treatment range is suitable for domestic and commercial properties in all ground conditions where mains drainage is unavailable.

British design and build

Our patented Diamond not only gives you the highest quality process on the market, but also provides you with a discreet, efficient and cost-effective solution for the longevity of the plant. This is achieved through our continued commitment to improve product design, development and manufacturing processes; backed by our commitment to engineering excellence.

Trusted network

Our trusted network of independent experts can offer professional advice on project specifications, compliance and guidelines; whilst providing installation, service and maintenance.





Our Promise



Low maintenance and long-term value:

- **25 years tank warranty** - and 2 years warranty on the blowers (housed in the kiosk)*.
- **Longer emptying cycles (up to 3 years desludge)** - due to our highly efficient aeration process which breaks down organic matter at a reduced sludge growth rate.
- **No internal electrical or mechanical moving parts** - inside the tank, offering minimal maintenance compared to other processes on the market which are prone to breaking down.



Compliant - meeting standards and codes of practice:

- **Discharge** - of final effluent into a drainage field or watercourse.
- **Fully tested, accredited and certified** - under European Standard BS EN12566-3 2014 approval which allows a CE mark.
- **Meets consent standards** - of 20mg/l BOD; 30mg/l SS; 20mg/l NH₄ as a minimum.
- **Part H2 UK** - of building regulations.
- **Designed using the British Water Code of Practice Flows and Loads** - to ensure that the tank is correctly sized.
- **Additional published test results:**
 - total 'P' mean average removal 52%, mean concentration 3.8mg/l
 - total 'N' mean average removal 52.2%, mean concentration 25mg/l

*The above figures are taken from the Diamond EN 12566-3 test report covering 38 weeks in PIA GmbH, a European accredited test facility



Discreet

- **Our plant is odourless** - so you won't even know it's there!*
- **Flushest lids to the ground** - creating perfect integration in to the landscape.
- **Compact in design** - keeps the excavation to a minimum and installation simple.
- **Range of invert depths** - for complicated sites, allowing more discharge options.

*subject to correct installation, consistent influent conditions and regular plant maintenance as per the manufacturers' instructions

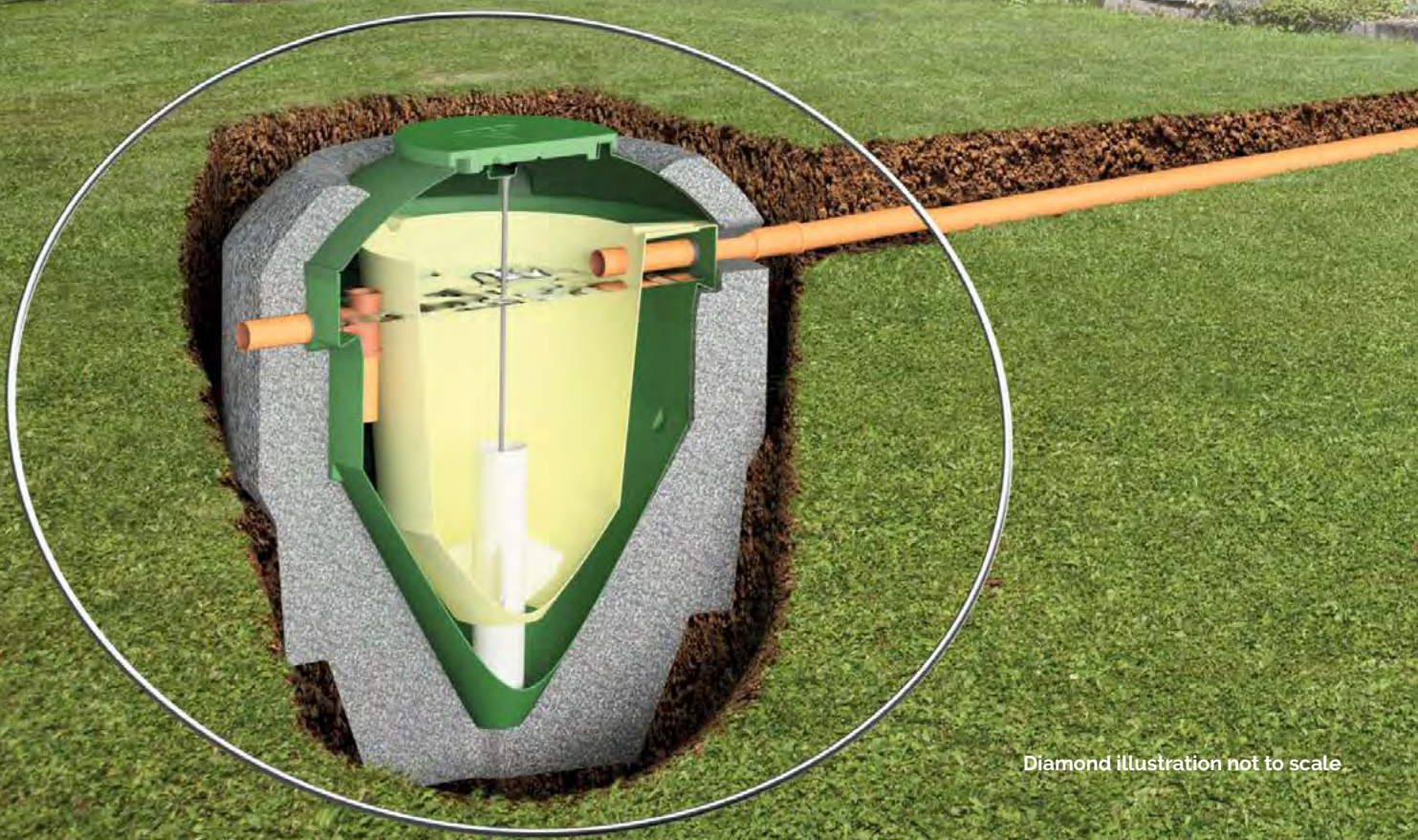
Planning

Please ensure all necessary permissions have been granted and due consideration has been given to:

- Planning permission, building regulations, and other regulating or interested parties.
- Sizing of the plant is in line with the British Water Flows and Loads codes of practice.

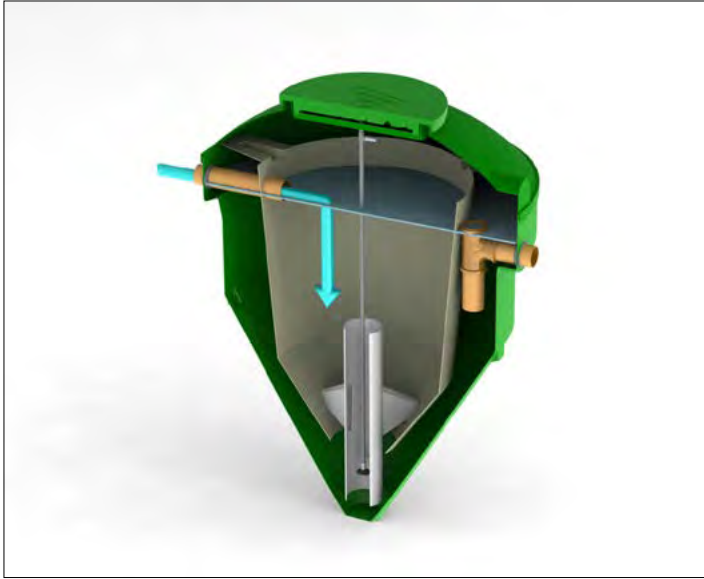
Discharging to a watercourse

If your septic tank is discharging to a watercourse for example a river or a stream, you now need to consider an alternative option such as a package treatment plant, which treats sewage to a higher standard. Please visit your local environmental protection agency such as the Environment Agency (England), Natural Resources Wales requirements or SEPA (Scotland) for guidance.



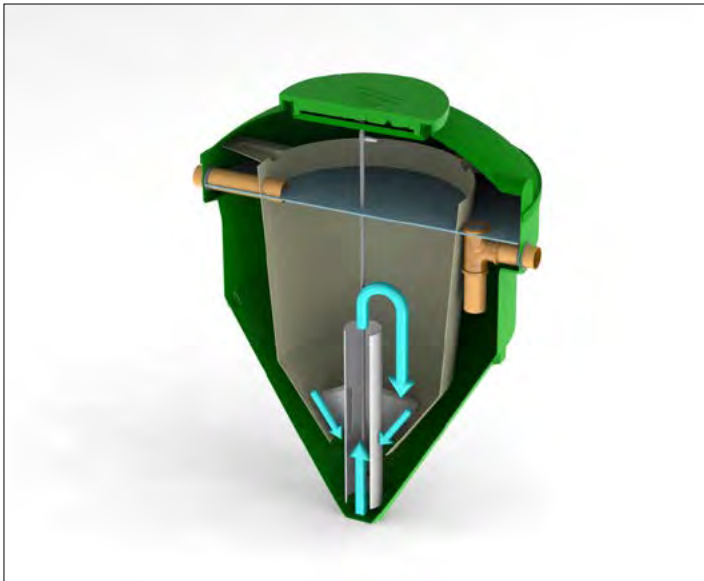
Diamond illustration not to scale

Simple and reliable operation

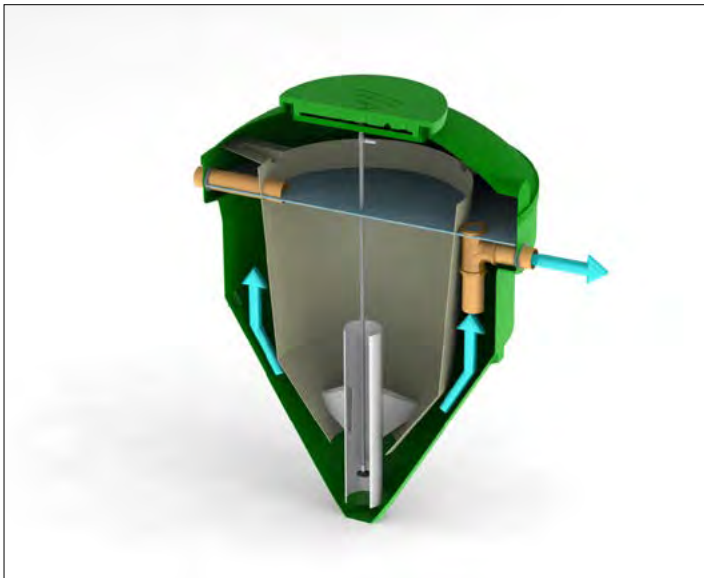


1: The wastewater flows into the main tank and enters directly into the bio-chamber.

The bio-chamber is a zone where the solids circulate continuously; this is achieved by air rather than mechanical or electrical parts inside the tank.



2: The draft tube enables the solids to be drawn back up into the central aeration chamber and re-circulated through the treatment process.



3: The treated liquid then exits through the dip pipe and is discharged safely in to the environment, meeting the required consent standard.

Watch how the process works:

[How the Diamond compact wastewater treatment plant works](#)

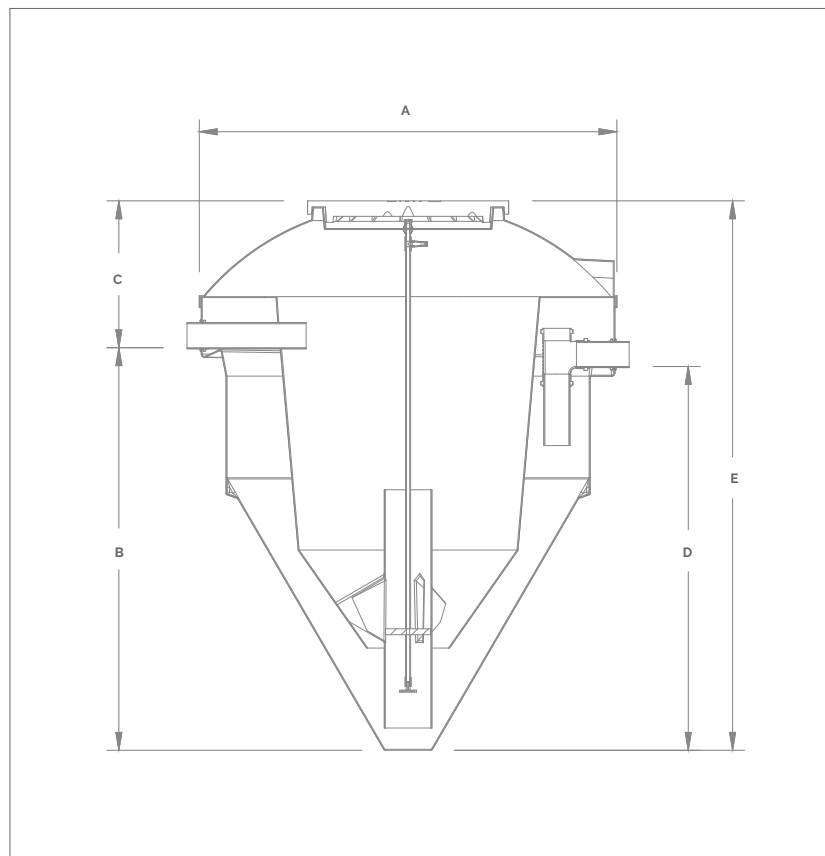
DMS range

Our reliable DMS range caters for properties housing 1 up to 20 people. Typical uses include domestic homes and small commercial businesses such as farm shops, B&Bs and glamping sites.

The standard tank models come supplied with a weather proof kiosk and low air pressure alarm beacon and blower inside.

Model	Population	Max Outside Diameter	Height to Inlet	Inlet Invert Depth	Height to Outlet	Max Height/ In Ground Depth	Weight Empty	Total Capacity
		(A)	(B)	(C)	(D)	(E)	(KG)	(L)
DMS2	1-6	1740	1700	630	1610	2330	155	2270
DMS3	5-11	1960	1830	760	1730	2590	192	3030
DMS4	10-15	1990	2000	780	1930	2780	210	3975
DMS5	14-20	1990	2000	780	1930	2780	210	3975

- Dimensions above shown in mm
- Deeper inverts can be accommodated with our range of standard invert extensions.
- Indicative technical drawing only



Model	Blower type	Blower consumption (kW)	Kiosk consumption (kW)
DMS2	JDK80C	0.050	0.060
DMS3	JDK100C	0.075	0.080
DMS4	JDK150C	0.115	0.120
DMS5	JDK200C	0.180	0.190

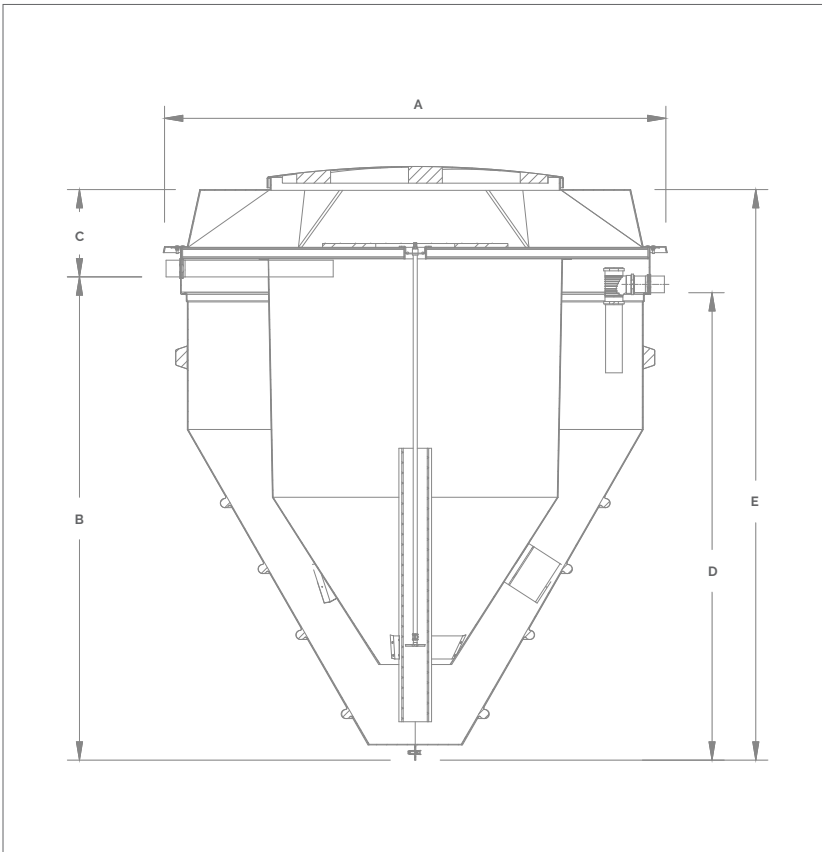
DMC range

Our robust DMC range caters for properties housing from 21 up to 55 people. Typical uses include domestic homes, small rural communities and small commercial businesses such as industrial units, campsites and country estates.

The standard tank models come supplied with a blower housed in a weatherproof kiosk and a separate small consumer unit.

Model	Population	Max Outside Diameter	Height to Inlet	Inlet Invert Depth	Height to Outlet	Max Height/ In Ground Depth	Weight Empty	Total Capacity
		(A)	(B)	(C)	(D)	(E)	(KG)	(L)
DMC6	21-27	3300	2780	570	2680	3350	380	9056
DMC7	28-35	3300	2780	570	2680	3350	380	9056
DMC8	36-45	3300	3140	580	3040	3750	460	15038
DMC9	46-55	3300	3140	580	3040	3750	460	15038

- Dimensions above shown in mm
- Deeper inverts can be accommodated with our range of standard invert extensions
- Indicative technical drawing only



DMC kiosk power consumption				
Model	Blower Type	Power per blower (kW)	Min Power Consumption (kW)	Max Power Consumption (kW)
DMC6	3D19T-050-0.37	0.37	0.27	0.37
DMC7	3D19T-050-0.55	0.55	0.37	0.55
DMC8	3D19T-050-0.55	0.55	0.37	0.55
DMC9	3D19T-050-0.55	0.55	0.37	0.55

External pumping chamber (EPC)

The EPC has been developed to provide a means of delivery for treated effluent where the existing terrain and invert levels of the pipework prevent normal gravitational discharge.

The unit delivers up to 100litres/minute of effluent. The EPC can also be used as a sample chamber.

Additional parts

Depending on site conditions, models may be supplied with an invert extension, sample chamber or external pumping chamber (EPC).

Reliable and environmentally compliant

Our process performance is tested, certified and guaranteed subject to consistent influent conditions and regular plant maintenance as per the manufacturer's instructions. The PIA performance certificate is available for download at:

wcs-group.co.uk/environmental-engineering-diamond

We're here to help!

For more information, please chat to our friendly team.

Find us online at: wcs-group.co.uk/environmental-engineering-diamond

Call us on: **+44 (0) 23 9224 2600**

Or email: **info@wcs-group.co.uk**



So flexible

Designed to treat flows from between 1 and 55 people, our Diamond range is ideal for small rural business that are off mains drainage, such as glamping and camp sites, country estates, farm shops, B&Bs and garden centres, as well as individual homeowners. Our systems are known for their quality and reliability, giving you reassurance your environmental requirements are taken care of.





OUR ROOTS

WPL (which is now a part of WCS Environmental Engineering) has been at the forefront of wastewater treatment technology for over 30 years, with international experience of technical design, quality of manufacture and supply of environmental wastewater solutions. Our high level of expertise means that we offer all of our customers, from the individual homeowner to large municipal communities and industrial markets, robust wastewater treatment process solutions that are environmentally compliant.

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Disclaimer

WCS Environmental Engineering has a policy of continual product development and the above information may be subject to change without notice. Errors and omissions excepted. Technical drawings are indicative only. WCS Environmental Engineering Ltd is a portfolio company of Marlowe PLC.

Brochure updated November 2023

Independent expert: