

# DEWATEC Package Plant 3K PLUS®



The new cylindrical small purification system in a plastic tank from DEUTSCHE DEWATEC impresses thanks to a range of unrivalled product characteristics. Thanks to its 3 standard diameters, it is therefore just as ideally suitable for a new construction as it is for the retrofitting of existing concrete tanks. Bespoke and tailor-made production for your needs is available.

## + Simple Assembly

Completely pre-assembled system - faultless installation as well as little time required until commissioning

## + „Garden-Friendly“ Installation

Tailor-made for your existing concrete tank—no earth excavation or heavy construction machines required

## + Complete Wastewater Resistance

of all components against domestic wastewater

## + DIBt-Approval and CE-Compliant

Hardly any other purification system in Europe has been tested as often, so rigorously and achieved such excellent results

## + Documented Performance

Best rating in the COMPAS-Study

## + Proven as Suitable for Under-Loads !

Particularly suitable for permanent low waste water volume

## + Modular System Structure

All tank equipment components can be reached with little assembly work. Europ. Patent EP 1380545A1

## + Environmentally Friends

Container completely consists of recyclable polyethylene

## + Wear Free Tank Installations

No electrically-operated or rotating components in the wastewater



## The Further Advantages of the 3K PLUS® Package Plant

- + **Tested over an extended period of time and also reliable** - over a quarter of a million people worldwide already purify their waste water with the 3K PLUS® System that has been distributed for over 20 years.
- + **Above average reliability** - thanks to continuous further development and the careful selection of premium components.
- + **Interior or exterior switch cabinet** - optional depending upon your requirements and desires
- + **Low maintenance effort** - thanks to advanced technology and the grouping of technical units away from the pit and the waste water
- + **Low formation of surplus sludge** - resulting in greater sludge removal intervals and lower disposal costs

DIBt

- Approval Mark  
Z-55.61-386

# The Reliable Purification of Domestic Wastewater through the Biofilm Process:

- 1

The first of the three chambers carries out the mechanical primary treatment.
- 2

Afterwards the wastewater is piped into the second chamber for biological treatment. At the bottom of this compartment aerators are installed that mix the wastewater with precisely determined amounts of air at regular intervals. Above the aerators the underwater fixed bed is installed. On the fixed bed the microorganisms living in wastewater settle down as a “biological layer” over a wide surface. In this combination, and with an exact administration of oxygen, they provide an excellent purification performance.
- 3

Superfluous microorganisms become detached from the fixed bed again and again by the rising air and are rinsed in the third chamber by the biologically purified water for sedimentation. There they settle down at the bottom as so-called excess sludge before being transported back into the first chamber by an airlift pump before the purified

- COD: 35.0 mg/l - 93.6%
- BOD<sub>5</sub>: 4.0 mg/l - 98.4%
- NH<sub>4</sub>-N: 5.1 mg/l - 85.8%\*\*
- TSS: 9.0 mg/l - 97.2%

Particularly Effective  
Wastewater Cleaning\*

\* Average results from testing of 3K PLUS in Germany, carried out by independent experts from the testing institute for wastewater technology at Aachen (Aachener Prüfinstitut für Abwassertechnik, in short PIA).

\*\* Average results for water temperatures of 12 °C or more in biological reactor.



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## Technical Overview:

User s	Total volume	Total weight	Diameter <sup>1)</sup>	Total height	Inlet pipe under ground level <sup>2)</sup>	Outlet pipe under ground level <sup>2)</sup>
[PE]	[m³]	[kg]	[cm]	[cm]	[cm]	[cm]
4	4,40	306	200	230	80 - 105	90 - 115
6	4,40	306	200	230	80 - 105	90 - 115
8	5,81	409	230	230	80 - 90	90 - 100

<sup>1)</sup> external diameter plus 7 cm    <sup>2)</sup> variable due to telescopic shaft pipe

## The Aggregate Unit for your Wastewater Treatment Plant 3K PLUS®:

Optional available weather-proof switch cabinet with socket for free-standing placement

Optional wall cabinet for indoor and outdoor installation



Unit console for weather-protected interior areas



Your local specialist dealer: