

# TREATMENT PERFORMANCE RESULTS

**Kingspan Environmental Limited.**  
College Road North, Aylesbury, HP22 5EW UK

**EN 12566-3, Annex B**  
"Small wastewater treatment systems for up to 50 PT"  
PIA-SR66-1802-1007

**Small wastewater treatment system BioDisc**  
Rotating disc unit with one reed bed

|  |  |            |          |
|--|--|------------|----------|
| Nominal organic daily load               | 0.29 kg/d                                |            |          |
| Nominal hydraulic daily load             | 1.20 m <sup>3</sup> /d                   |            |          |
| Material                                 | Glass reinforced plastic (GRP)           |            |          |
| Watertightness                           | Pass                                     |            |          |
| Structural behaviour (Pit Test)          | Pass (check table for ground conditions) |            |          |
| Durability                               | Pass                                     |            |          |
| Treatment efficiency (nominal sequences) |  | Efficiency | Effluent |
|  | COD                                      | 93.0 %     | 39 mg/l  |
|  | BOD <sub>5</sub>                         | 98.0 %     | 4 mg/l   |
|  | NH <sub>4</sub> -N*                      | 88.4 %     | 3.8 mg/l |
|  | SS                                       | 98.2 %     | 6 mg/l   |
| Number of desludging                     | Not more than once                       |            |          |
| Electrical consumption                   | 1.3 kWh/d                                |            |          |

\* determined for temperatures ≥ 12°C in the bioreactor

Performance tested by:

**PIA – Prüfinstitut für Abwassertechnik GmbH**  
(PIA GmbH)  
Hergenrather Weg 30  
52074 Aachen, Germany

This document replaces neither the declaration  
of performance nor the CE marking.



Notified Body  
No.: 1739



Certified according to  
ISO 9001:2008

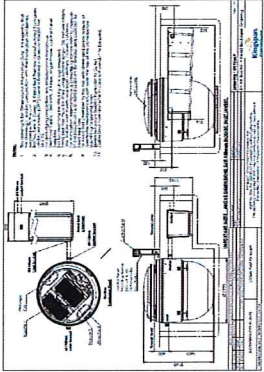
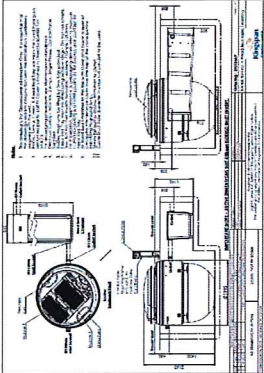


Prüfinstitut für Abwassertechnik GmbH  
*Daniel Verschitz*  
geprüft - getestet - teste

Daniel Verschitz

March 2018

BioDisc with reed bed range and its referring test reports:

| Population Equation (PE)     | Drawing of model of the range  | Watertightness (EN 12566-3 Annex A)                  | Treatment Efficiency (EN 12566-3 Annex B)          | Structural Behaviour (EN 12566-3 Annex C)  | Durability                      |
|------------------------------|--|--|--|--|---------------------------------|
| Initial type test (ITT)<br>6 |   | Pass<br>PIA2012-WD-1209-1056<br>PIA2018-WD-1802-1007 | Pass<br>Range conformity according to S.R. 66:2015 | Pass<br>For wet ground conditions also, Installation depth 1.00 m from inlet invert  | Pass<br>PIA2016-DH-1610-1115.01 |
| 8                            |  | Pass<br>PIA2012-WD-1209-1056<br>PIA2018-WD-1802-1007 | Pass<br>PIA024B13                                  | Pass<br>PIA2012-ST-PIT-1209-1056<br>For wet ground conditions also, Installation depth 1.00 m from inlet invert<br><br>PIA2018-ST-PIT-1802-1007<br><br>For dry ground conditions only, Installation depth 0.55 m from inlet invert | Pass<br>PIA2016-DH-1610-1115.01 |



