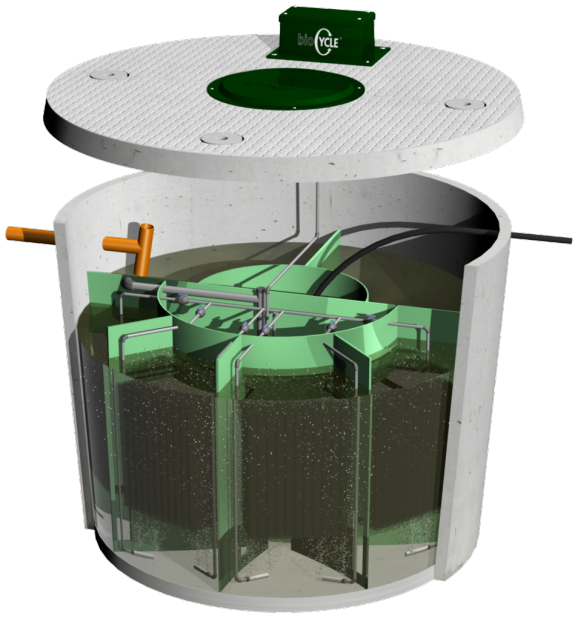
I.S EN 12566-3: 2005

NEW EUROPEAN STANDARD FOR WASTEWATER TREATMENT

I.S EN 12566-3 is the new European & Irish standard for wastewater treatment systems up to a population equivalent of 50. Wastewater treatment plants are tested in an EN 12566-3 accredited test facility over a 38 week period. The plants are tested to determine their treatment efficiency, structural behavior and watertightness. On successful completion of testing the system may be awarded a CE mark.



Results from bioCycle™

bioCycle's range of wastewater treatment systems have been tested up to a population equivalent of 50 and have been awarded the CE mark.

How do the results achieved by bioCycle™ relate to Local Authority requirements?

	Biochemical Oxygen Demand **BOD**	Suspended Solids **SS**	Ammonia **NH4**
Maximum generally applicable[2]	20 mg/l	30 mg/l	20 mg/l
bioCycle™ actual result[3]	**6 mg/l**	**8 mg/l**	**4.2 mg/l**

[1] Construction Products Directive Article 6.1

[2] As referred in the Departmental Circular Letter 16/2006.

[3] These values will be further reduced in the polishing filter (percolation area).

CE

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EN 12566-3
Small wastewater treatment systems for up to 50 PT - Part 3: Packaged and/or site assembled domestic wastewater treatment plants

“12,000 Series”

Hydraulic daily load :	1.6m^3/day
Material:	Steel Fibre Reinforced Concrete
Watertightness (water test):	Pass
Crushing resistance (Pit test):	Pass
Treatment efficiency:	**BOD: 97.5%** **COD: 92.1%** **TSS: 97.0%**
Electrical Consumption:	2 kWh/day
pH:	7.0-7.6
Nitrogen parameters:	NH4-N: 85.6%
Total phosphorus:	35%
Disolved oxygen concentration:	6mg/l
Sludge production:	Did not require desluding during test period

Results of testing under EN 12566 Part 3

bioCycle™ 12,000 Series System

Parameters	Units	Influent	Effluent
Temperature	[°C]	14.3	**13.6**
CODhom	[mg/l]	687	**50**
CODfil	[mg/l]	-	**37**
BOD	[mg/l]	258	**6**
NH4-N	[mg/l]	31.8	**4.2**
NO3-N	[mg/l]	-	**13.3**
NO2-N	[mg/l]	-	**0.4**
Ninorg	[mg/l]	-	**17.8**
Ntot	[mg/l]	49.4	**19**
Ptot	[mg/l]	7.9	**5.1**
pH	[-]	7.3	**7.4**
Conductivity	[uS/cm]	809	**644**
Suspended solids	mg/l	323	**9**
Settleable solids	[ml/l]	18	**0**
Turbidity	[FNU]	161.6	**4.9**
O2	[mg/l]	**6.2**	
Energy consumption	[kWh/d]	**2**	

Note:

1. Test conducted on 1600 litres of influent per day.
2. The above figures are averages ascertained over the test period.
3. Individual week-by-week results are available.
4. Faecalcoliforms - nil.
5. Test facility - PIA GmbH, Aachen, Germany