

Biocellwater.com

SEWAGE TREATMENT PLANTS

Simple & Reliable Wastewater Treatment

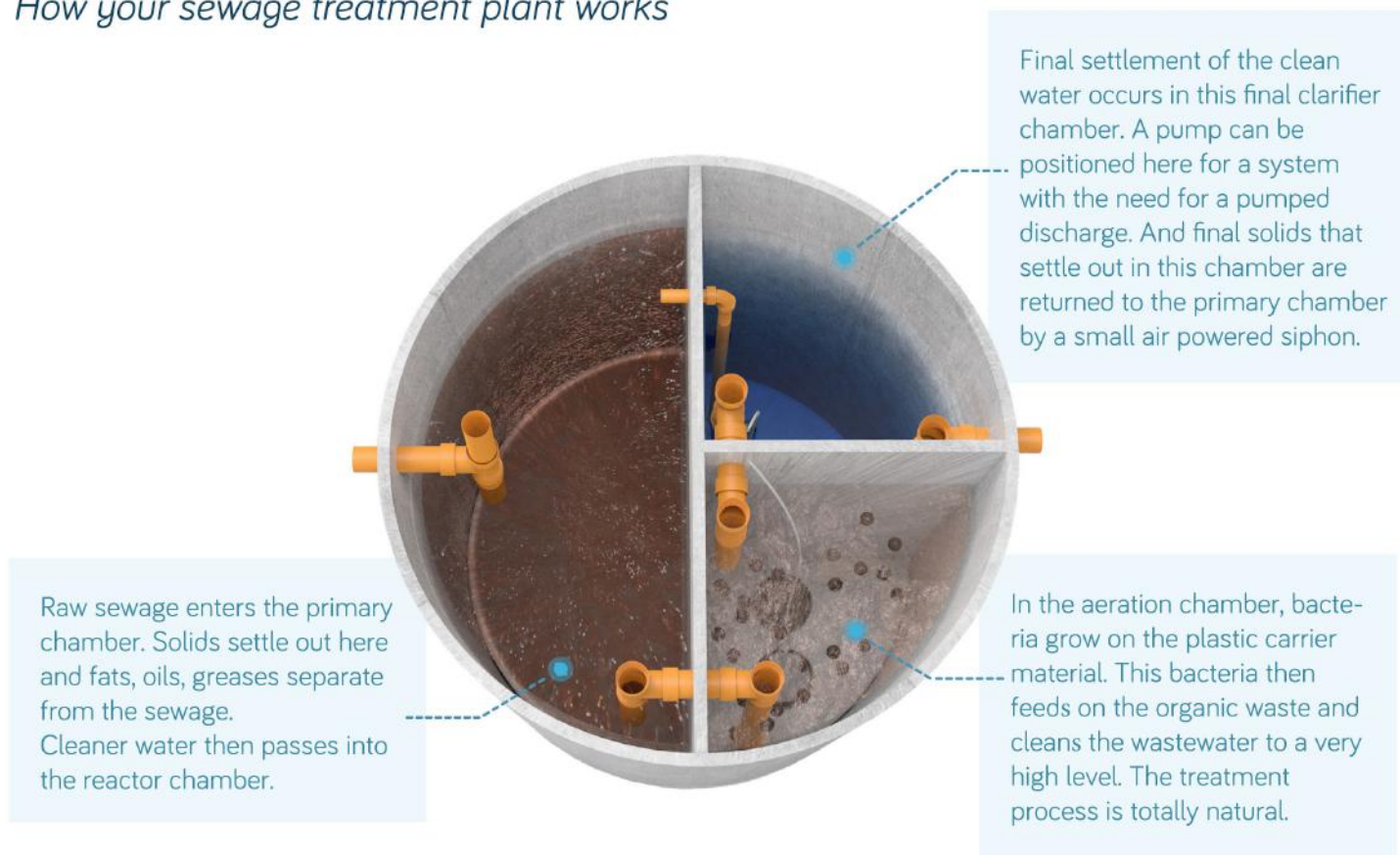
- Low running costs - only a 55 Watt air blower
- Simple aeration process that is low maintenance
- Easy to install in any site - even with high water tables / bad ground conditions
- Shallow dig tank for easy installation
- No moving parts in the tank
- GSM, audible and visual alarm systems available
- Certified to EN12566-3 and SR66
- Simple, reliable and trouble free operation
- Quiet, odourless operation
- Produces less sludge than other systems so has 30% longer desludging intervals

- Reinforced precast concrete tank
- Installation with truck mounted crane
- Simple, reliable system
- Low running costs



	HEIGHT	DIAMETER	WEIGHT	ACCESS OPENING	INLET	OUTLET	POWER SUPPLY	MATERIAL	CERTIFIED
1-8 PERSON									
	1600mm	2250mm	3500kg	900mm	110mm/4"	110mm/4"	3 core cable	Concrete	Yes
9-12 PERSON									
	1600mm	2550mm	4000kg	900mm	110mm/4"	110mm/4"	3 core cable	Concrete	Yes
12-20 PERSON									
	2000mm	2500 W + 4500 L	10000kg	900mm	110mm/4"	110mm/4"	3 core cable	Concrete	Yes

How your sewage treatment plant works



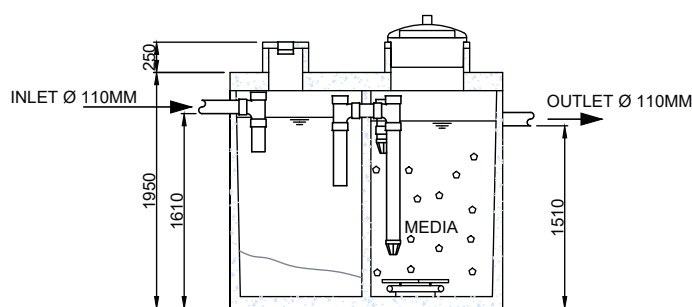
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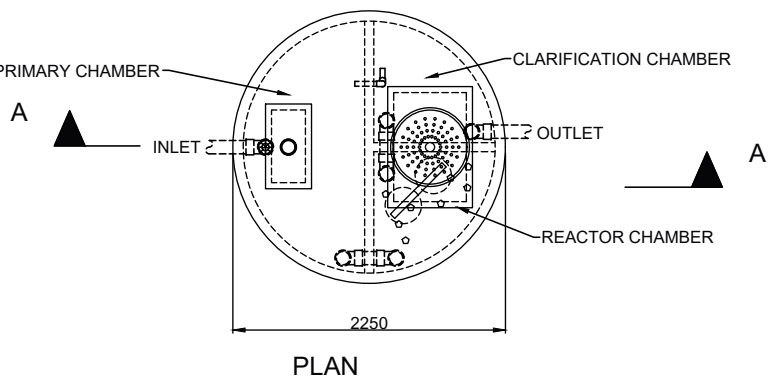
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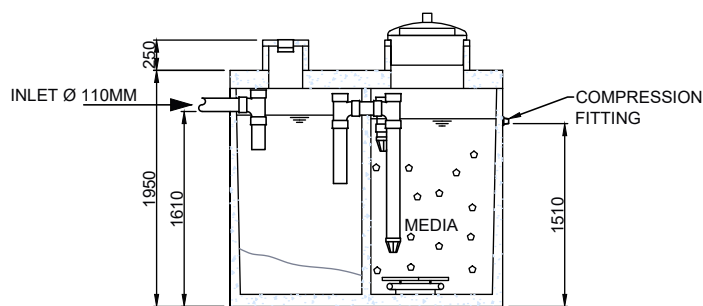
P 8 Gravity Version



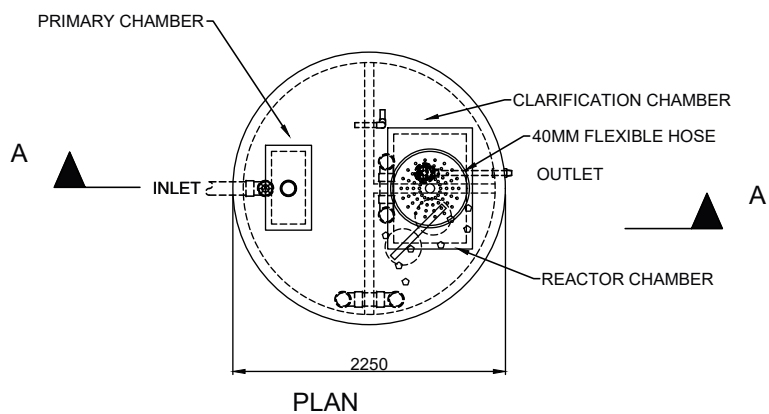
SECTION A-A



P 8 Pumped Version



SECTION A-A



NOTES:

1 - Population design equivalent up to 8 persons

2 - Maximum hydraulic loading - 1200L/day

3 - Maximum organic loading - 480g BOD/day

4 - Effluent standards - <20mg/l BOD, <30mg/l SS, <20mg/l Ammonia

5 - Tank manufactured from reinforced precast concrete.

6 - Tank tested to EN12566 for durability, structural integrity and water tightness.

7 - Equipment tested to EN12566-3

8 - Complete system compliant with SR66, EPA standards and EN12566-3.

9 - Total system volume - 6000L.

10 - System weight c.3750kg with lid.

11 - Electrical supply - single phase, 220v.

12 - Inlet/outlet connections 110mm uPVC (32mm Ø for pumped)

13 - A firm, rock free level base is required. Installation as per manual.

14 - Visual and audible alarms available.

15 - Observe all safety regulations in regard to excavation and lifting requirements.

16 - Specify any non standard requirements/optional extras prior to ordering.

17 - Venting by client as per building regulations.

18 - All civil works by client.

19 - Plumbing connections and electrical connection by client.

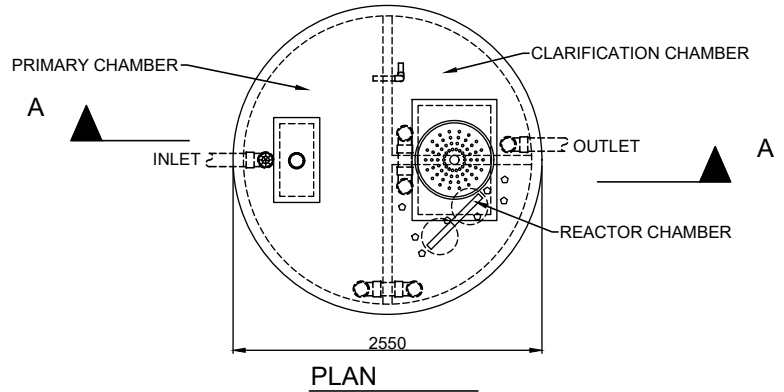
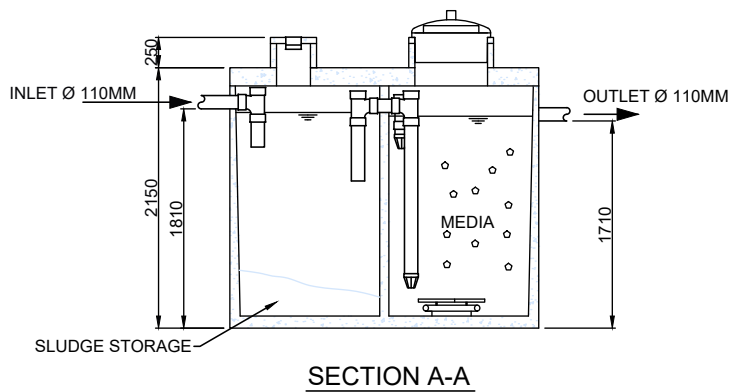
20 - Equipment must be operated in accordance with operation manual.

21 - Do not scale from this drawing. Only for illustration purposes.

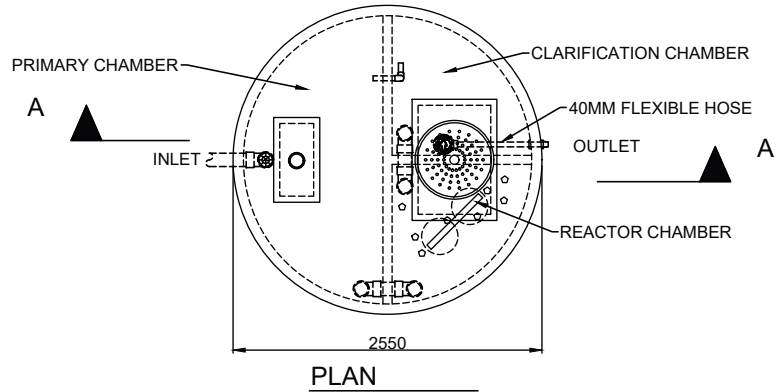
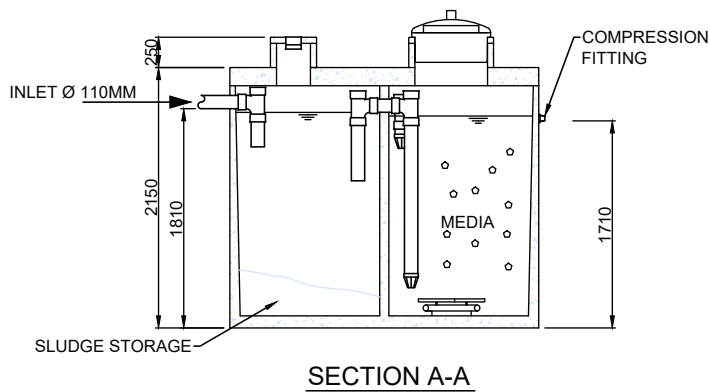
22 - Drawings and dimensions subject to change without notification. All dimensions +/- 25mm.

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P 12 Gravity Version



P 12 Pumped Version



NOTES:

- 1 - Population design equivalent up to 12 persons
- 2 - Maximum hydraulic loading - 1800L/day
- 3 - Maximum organic loading - 720g BOD/day
- 4 - Effluent standards - <20mg/l BOD, <30mg/l SS, <20mg/l Ammonia
- 5 - Tank manufactured from reinforced precast concrete.
- 6 - Tank tested to EN12566 for durability, structural integrity and water tightness.
- 7 - Equipment tested to EN12566-3

8 - Complete system compliant with SR66, EPA standards and EN12566-3.

9 - Total system volume - 9000L.

10 - System weight c.3750kg with lid.

11 - Electrical supply - single phase, 220v.

12 - Inlet/outlet connections 110mm uPVC (32mm Ø for pumped)

13 - A firm, rock free level base is required. Installation as per manual.

14 - Visual and audible alarms available.

15 - Observe all safety regulations in regard to excavation and lifting requirements.

16 - Specify any non standard requirements/optional extras prior to ordering.

17 - Venting by client as per building regulations.

18 - All civil works by client.

19 - Plumbing connections and electrical connection by client.

20 - Equipment must be operated in accordance with operation manual.

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TREATMENT PERFORMANCE RESULTS

Initial type test performed by **Bokatec**
Distributed by **PPU Umwelttechnik GmbH + Biocell Ireland**
95448 Bayreuth, Germany / Galway, Ireland

EN 12566-3 Annex B
Results corresponding to EN 12566-3 and S.R. 66
PIA-SR66-1604-1049, shared itt

Small wastewater treatment system Biocell-FBS
Fluidized bed process with throttle in final settlement chamber (initial type test) in
combination with Shay Murtagh tanks

Nominal organic daily load	0.27 kg/d		
Nominal hydraulic daily load	0.75 m³/d		
Treatment efficiency (nominal sequences)		Efficiency	Effluent
	COD	92.6 %	54 mg/l
	BOD ₅	96.5 %	12 mg/l
	NH ₄ -N	74.0 %	10 mg/l
	SS	96.8 %	11 mg/l
Number of desludging	Not more than once		
Electrical consumption	0.46 kWh/d		

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
[Signature]
geprüft - tested - teste

Elmar Lancé

November 2016

TREATMENT PERFORMANCE RESULTS

Initial type test performed by **Shay Murtagh**
Distributed by **PPU Umwelttechnik GmbH + Biocell Ireland**

EN 12566-3 Annex A and C
Results corresponding to EN 12566-3 and S.R. 66
PIA-SR66-1604-1049, shared itt

Concrete tank
Concrete tanks for Fluidized bed process with throttle in final settlement
chamber in combination with Biocell-FBS kit

Material	Concrete
Watertightness	Pass
Structural behaviour (vertical load test)	Pass (also wet conditions)
Durability	Pass

Performance tested by:

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

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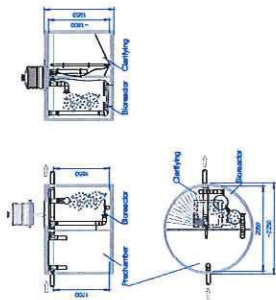
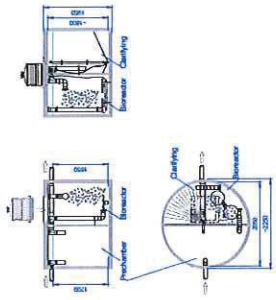
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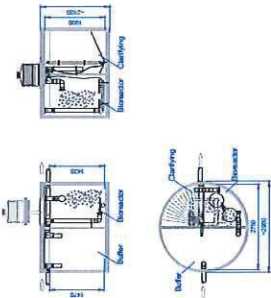
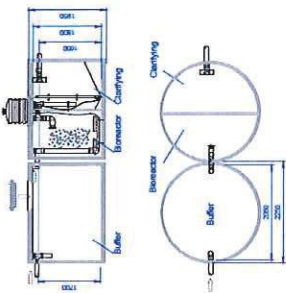
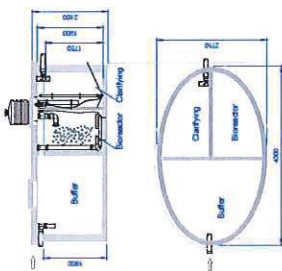
Prüfinstitut für Abwassertechnik GmbH
Geprüft - tested - teste

Elmar Lancé

November 2016

FBS range shared ITT and its referring test reports:

Population equivalent (PE)	Drawing of model of the range	Water-tightness (EN 12566-3 Annex A)	Treatment Efficiency (EN 12566-3 Annex B)	Structural Behaviour (EN 12566-3 Annex C)	Durability
Initial type test (ITT) 5	Not relevant	Not relevant	Pass PIA2013-199B10b.d.01	Not relevant	Not relevant
Compared Tank 5		Pass PIA2016-WD-1602-1025.01	Pass Shared ITT conformity check according to S.R. 66:2015	Pass For wet ground conditions also, 0.70 m installation depth from inlet invert	Pass PIA2016-DH-1602-1025.01
8		Pass PIA2016-WD-1602-1025.01	Pass Range conformity according to S.R. 66:2015	Pass For wet ground conditions also, 0.70 m installation depth from inlet invert	Pass PIA2016-DH-1602-1025.01

12		Pass PIA2016-WD-1602-1025.01	Pass Range conformity according to S.R. 66:2015	Pass PIA2016-ST-BT-1602-1025B.01 For wet ground conditions also, 0.70 m installation depth from inlet invert	Pass PIA2016-DH-1602-1025.01
16		Pass PIA2016-WD-1602-1025.01	Pass Range conformity according to S.R. 66:2015	Pass For wet ground conditions also, 0.70 m installation depth from inlet invert	Pass PIA2016-DH-1602-1025.01
20		Pass PIA2016-WD-1602-1025.01	Pass Range conformity according to S.R. 66:2015	Pass PIA2016-ST-BT-1602-1025A.01 Pass For wet ground conditions also, 0.70 m installation depth from inlet invert	Pass PIA2016-DH-1602-1025.01