



TREATMENT PERFORMANCE RESULTS

PIA-SR66-2405-1033

Kingspan Water & Energy Ltd.

College Road North, Aston Clinton, Aylesbury, HP22 5 EW, United Kingdom

EN 12566-3

Results corresponding to EN 12566-3 and S.R. 66

BioTec+

Sequential Batch Reactor

Nominal organic daily load (influent)	0.30 kg BOD ₅ /d		
Nominal hydraulic daily load	0.90 m ³ /d		
Material	Polyethylene		
Watertightness	Pass		
Crushing resistance (pit test)	Pass (also wet conditions)		
Durability	Pass		
Treatment efficiency (nominal sequences)		Efficiency	Effluent
	COD	95.9 %	32 mg/l
	BOD ₅	98.5 %	5 mg/l
	TN _b	75.5 %	15 mg/l
	NH ₄ -N*	67.9 %	16.4 mg/l
	P _{tot}	60.8 %	3.5 mg/l
	SS	97.6 %	9 mg/l
Electrical consumption	0.6 kWh/d		
Number of desludging	Not more than once		

* determined for temperatures $\geq 12^\circ \text{C}$ in the bioreactor

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.



June 2024

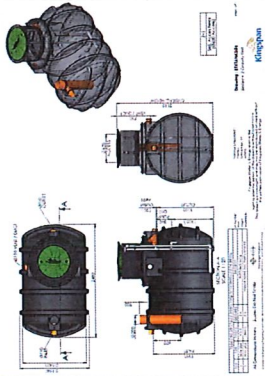
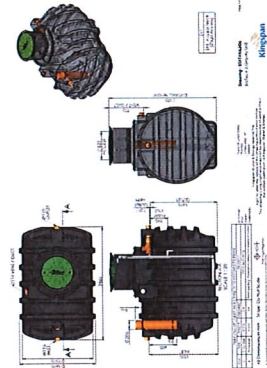


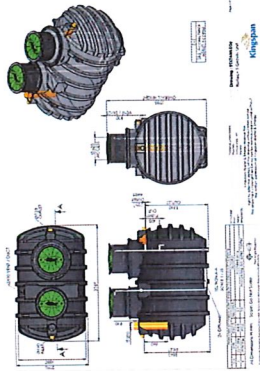
Notified Body
No.: 1739

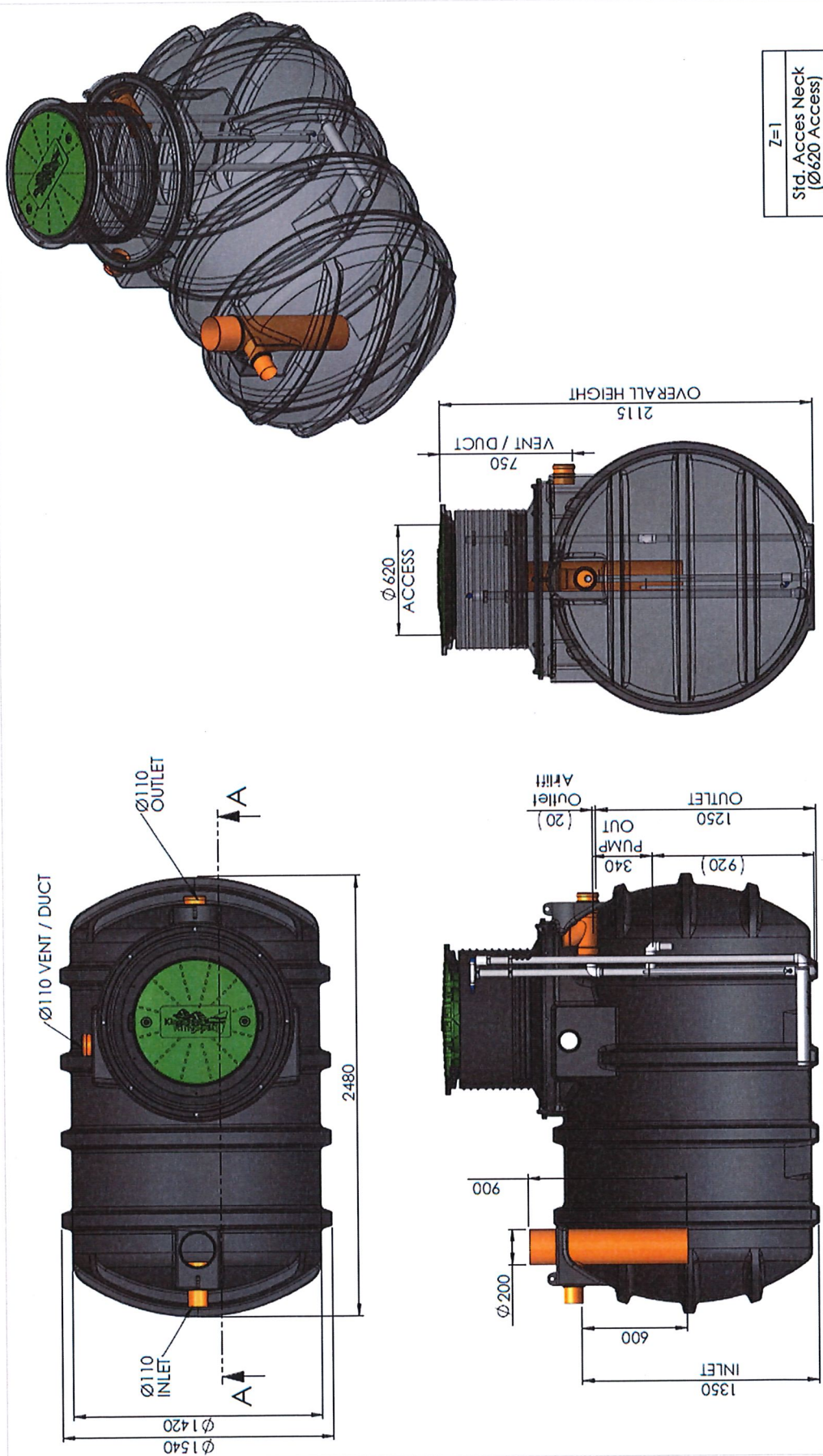


Certified according to
ISO 9001:2015

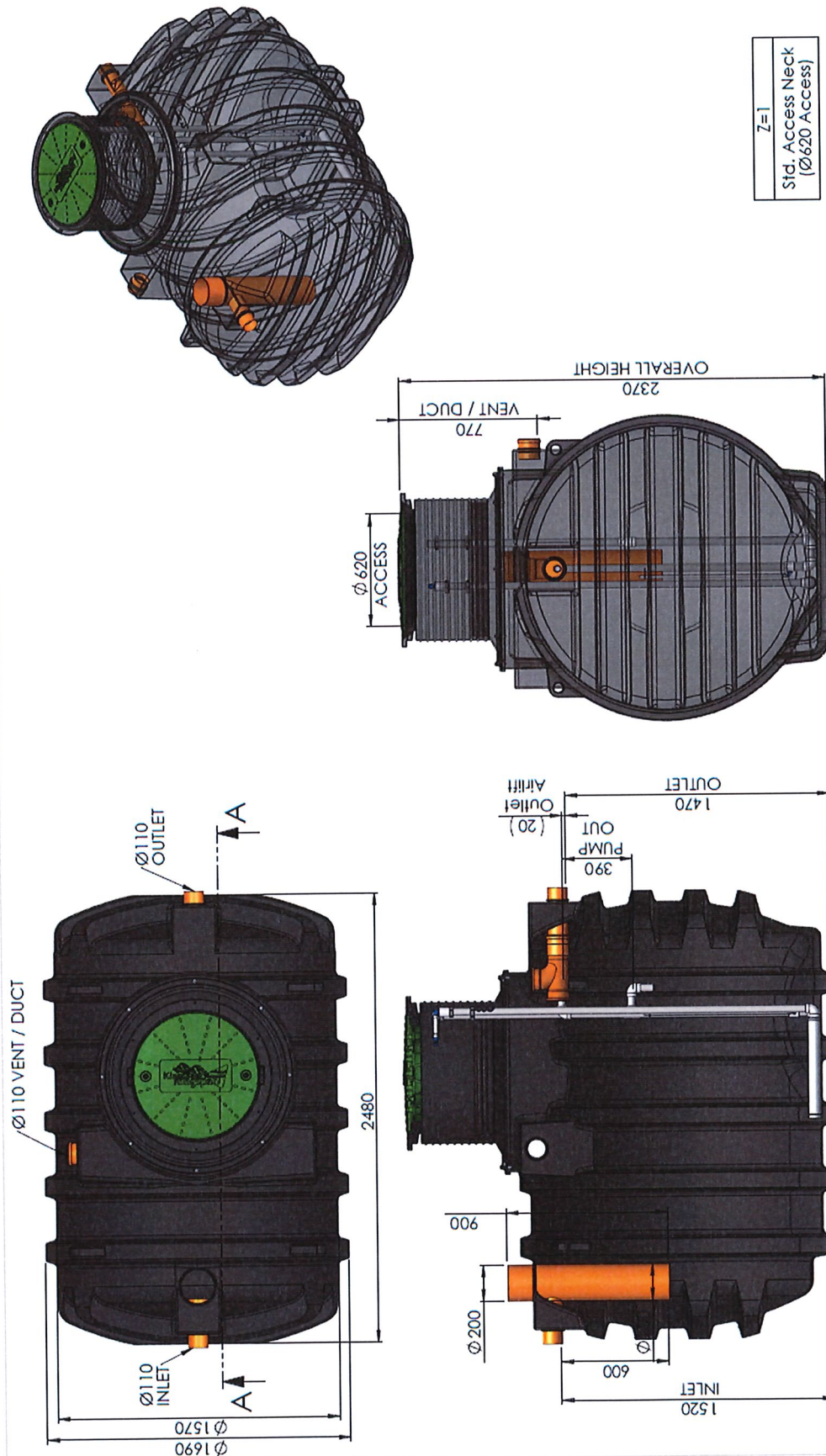
BioTec+ range and its referring test reports:

Population equivalent (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) 6 900 l/d		Pass PIA2024-WD-2404-1021	Pass PIA2023-458B26	Pass For wet ground conditions also, 1.50 m installation depth from inlet invert	Pass PIA2022-DH-2202-1005
9 1,350 l/d		Pass PIA2015-WD-1508-1044.01	Pass Shared itt conformity check according to S.R. 66:2015	Pass For wet ground conditions also, 1.50 m installation depth from inlet invert	Pass PIA2022-DH-2202-1005

<p>16 2,400 l/d</p>		<p>Pass PIA2015-WD-1508-1044.01</p>	<p>Pass Range conformity check according to S.R. 66:2015</p>	<p>Pass PIA2022-ST-PIT-2205-1005B For wet ground conditions also, 1.50 m installation depth from inlet invert</p>	<p>Pass PIA2022-DH-2202-1005</p>
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Please check with Kingspan Water & Energy for the latest issue of the drawing		LT Number:	Tolerance (unless stated):	Drawing : BTXTANK2Gz	Page 1 of 1
Issue	Date	Drawn By	Approved By	Description	
A	25/04/2024	W.N.L.D.		Prototype Drawing	
B	28/05/2024	J.Belovic	D.M.	Pipework added/mod. sheet 2 removed	
All Dimensions in mm				Scale: Do Not Scale	
 Third Angle Projection				Kingspan Water & Energy reserve the right to alter the details of this drawing without prior notice. This drawing is copyright and may not be reproduced or used without the written permission of Kingspan Water & Energy	BioTec+ 2 Gravity Unit
A:\Workshop\Engineering\Projects\SR66 - BioTec+ (BioTec+ Mod) \Modelling\BioTec+ Gravity\BTXTANK2Gz - Issue 1 Prototype Drawing					



Z=1
Std. Access Neck
($\phi 620$ Access)

Please check with Kingspan Water & Energy for the latest issue of the drawing

Issue	Date	Drawn By	Approved By	Description
A	21/03/2024	W.M.D.	D.H.	Prototype Drawing
B	30/04/2024	W.M.D.	D.H.	Prototype Dwg - Pipework modified, Dim added /modified

All Dimensions In mm
Scale: Do Not Scale
Third Angle Projection
A:\Walkdown\Engineering\Projects\SR66 - BioTec (Bios M&E)\Modelling\BioTec-3\Gravity\BETA\SR66

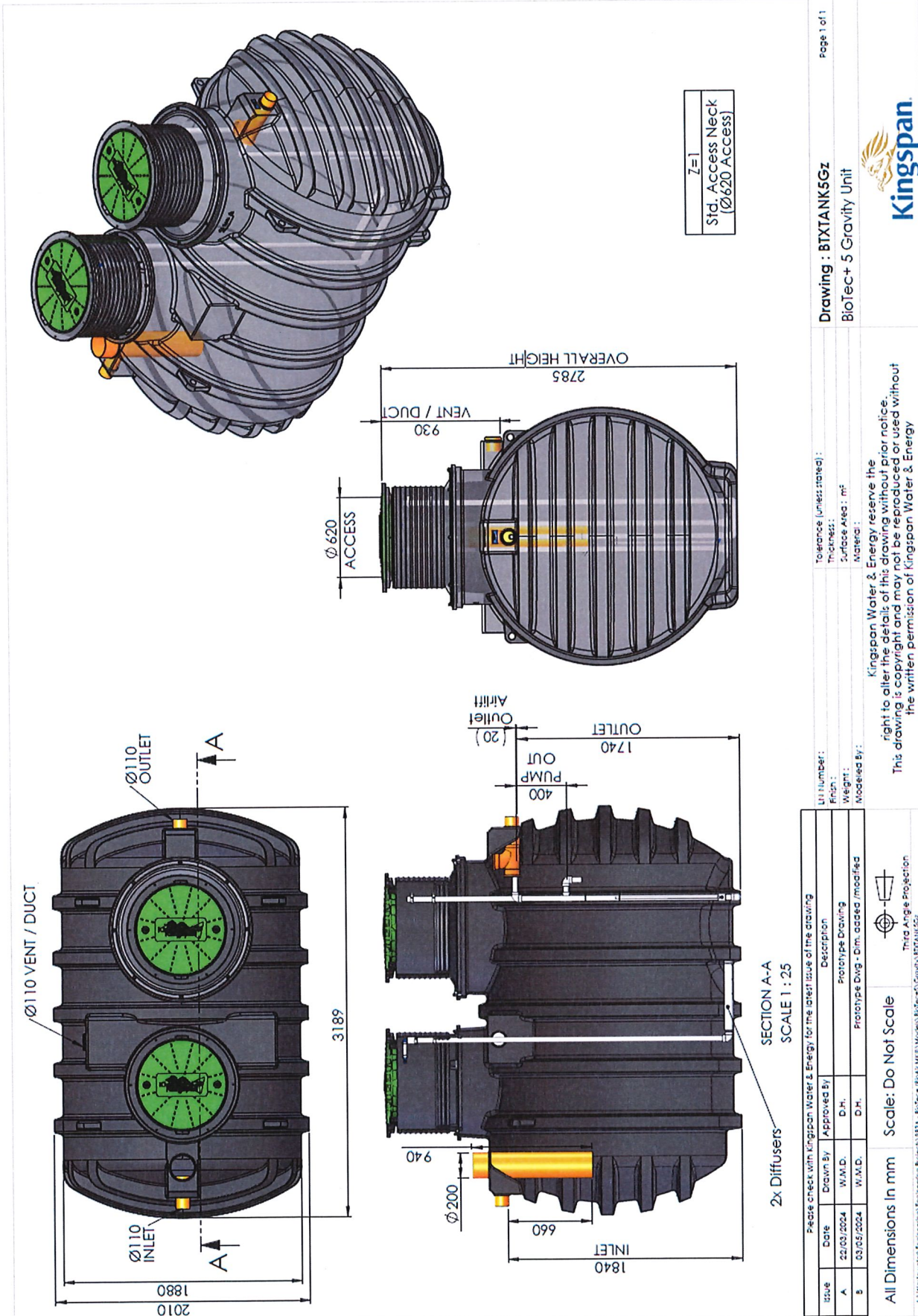
Drawing : BXTANK3Gz
BioTec+ 3 Gravity Unit

Tolerance (unless stated):
Inches:
Surface Area : m²
Material :

Uti Number:
Finish:
Weight:
Modelled By:

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Drawing: BITXANK5Gz		Page 1 of 1		
BioTec+ 5 Gravity Unit		Kingspan		
Tolerance (unless stated):				
Thickness:				
Surface Area: m ²				
Material:				
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Li Number:		Li Number:		
Finish:		Finish:		
Weight:		Weight:		
Modeled By:		Modeled By:		
Please check with Kingspan Water & Energy for the latest issue of the drawing				
Issue	Date	Drawn By	Approved By	Description
A	22/03/2024	W.M.D.	D.H.	Prototype Drawing
B	03/05/2024	W.M.D.	D.H.	Prototype Dwg - Dim. added / modified
All Dimensions In mm				Scale: Do Not Scale
A:\Washington\Engineering\Projects\VEBA - BioTec+ (BIO43 M&E)\Models\BioTec+5\Gravity\BITXANK5Gz				Third Angle Projection