

PROTOCOL



Czech

ON THE ASSESSMENT OF PERFORMANCE OF THE PRODUCT

Registration No. 1017 – CPR – 12.531.722

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC, and in compliance with Commission Delegated Regulation (EU) No 568/2014, this protocol is issued for the construction product:

Domestic wastewater treatment plant Type series AS-MONComp P - 4, 6, 8, 12, 16, 20, 30, 40, 50

ASIO NEW, spol. s r.o.

Kšírova 552/45, CZ - 619 00 Brno – Horní Heršpice
Company registration No: 29303125

**Place of production: PATRIA Kobylí, a.s., č.p. 716, CZ - 691 10 Kobylí
KELLNER CZ s.r.o., CZ - 696 34 Žarošice 357**

On the basis of testing, calculations, tabulated values and documentation within system 3 according to Annex V 1.4 CPR, TÜV SÜD Czech s.r.o. assessed the relevant characteristics of the product described in Annex ZA of the standard

EN 12566-3:2005 + A2:2013

The number of pages of this Protocol inclusive the title-page: 3

Essential characteristics	Performance			Harmonised technical specification
Treatment efficiency at tested organic daily load BOD ₅ = 0,24 kg/d	BOD ₅	98,2 %	5,3 mg O ₂ /l	EN 12566-3.2005+A2:2013 (Annex B)
	COD	94,9 %	36,2 mg O ₂ /l	
	SS	97,5 %	8,8 mg/l	
	NH ₄ - N	86,2 %	8,1 mg/l	
	N _{total}	83,2 %	13,1 mg/l	
	P _{total}	91,1 %	0,8 mg/l	
	KN	87,5 %	9,6 mg/l	
Watertightness (water test)	Pass			EN 12566-3.2005+A2:2013 (6.4.2, A.2)
Load bearing capacity (calculation)	Height of backfill: 0,5 m, DRY			EN 12566-3.2005+A2:2013 (6.2.2)
Durability (PP)*	Pass			EN 12566-3.2005+A2:2013 (6.5.7.2)

Prague, date 24.09.2019



on behalf of Notified Body 1017
Pavla Nerandžičová
Head of Certification Department

1. Equipment specification

Purpose of use:	For the treatment of sewage (household) wastewater, using the treatment technology SBR with an additional equipment for phosphorus precipitation.		
Limitations of use:	Not intended for traffic load. Not intended to be placed in the environments with groundwater level.		
Identification of the product:	Marking on the product and in the Declaration of Performance according to Annex ZA EN 12566-3+A2.		
Technical specifications:	Design daily flow rate Q from 0.6 to 7.5 m³/day according to the type. Design daily load BOD₅ from 0.24 to 3.00 kg/day according to the type.		
Components:	PP tanks - construction boards - self-supporting, PB, PB-SV		
	Blower		
	Type*	Vendor	Location, application
	Secoh, JDK	BIBUS s. r. o.	Outside the WWTP tank, to 12 PT
	AirMAC, DBMX	ECKOLD & VAVROUCH,	Outside the WWTP tank, to 20 PT
	DRT	MÍVALT s. r. o.	Outside the WWTP tank, 16-30 PT
	DRT	MÍVALT s. r. o.	Outside the WWTP, 30-50 PT
	Kubiček, 3D19S	KUBÍČEK VHS, s r. o.	Outside the tank, 30-50 PT
	* ...the specific type can vary according to the current offer of the vendors		
	Aerating elements		
Type*	Vendor	Location, application	
FB 102	KUBÍČEK VHS, s r. o.	In the tank	
PUM	MÍVALT s. r. o.		
Jaeger TD	BIBUS s. r. o.		
* ...the specific type can vary according to the current offer of the vendors			
Control unit			
Type*	Vendor	Location, application	
BonBloc	BIBUS s. r. o.	Outside the tanks	
* ...the specific type can vary according to the current offer of the vendors			
Metering pump			
Type*	Vendor	Location, application	
Peristaltic pump	MÍVALT s. r. o.	Outside the tank, type MONOcomp P	
* ...the specific type can vary according to the current offer of the vendors			

2. Material submitted by the manufacturer

- Assembly drawings and technical data; Flowsheet; Static calculation
- Accreditation certificate of laboratory No. 1163, incl. Annex
- Reports of raw-water and purified-wastewater analyses
- Technical data on the base-material properties
- Declaration of conformity and component certificates
- Design and installation documents



3. Sampling the product

Requirements	Sample
Treating efficiency	AS-MONOcomp P 4
Watertightness	AS-MONOcomp P - 4, 6, 8, 12, 16, 20, 30, 40, 50
Load bearing capacity	AS-MONOcomp P - 50
Durability	AS-MONOcomp P - 4, 6, 8, 12, 16, 20, 30, 40, 50

Date of sampling: 3 September 2018, 5 August 2019

Place of sampling: at the customer's

Sampling made by: Ing. Jakub Orlík, Ing. Jan Hořák

4. Assessment of performance on the basis of tests, calculations, tabulated values, documentation

4.1. Assessment of performance on the basis of tests

Property	Document	Evaluation
Watertightness and dimensions	Test report No. 12.538.190	No water leaks. Compliant for the entire type series AS-MONOcomp.P
Wastewater treatment efficiency	Test report No. 12.567.004 Test record ZZ12566-3-4 (0363-1093) AS-Monocomp.P	Annex No. 1 to the Test Report No. 12.567.004. Compliant for the entire type series AS-MONOcomp P.
Durability (PP construction boards, extruded)*	Test report No. 12.566.981.	<p>Material: Plastic boards, extruded from PP</p> <p>Type PP-B</p> <ul style="list-style-type: none"> - MFR (230°C/2.16kg) = 0.38 g/10 min - Density \geq 905 kg/m³ - Tensile yield stress = 26.4 MPa <p>Type PP-K</p> <ul style="list-style-type: none"> - MFR (230°C/2.16kg) = 0.45 g/10 min - Density = 920 kg/m³ - Tensile yield stress = 27.6 MPa <p>Suitable for the entire type series AS-MONOcomp P</p>

4.2. Assessment of performance on the basis of calculations

Property	Document	Evaluation
Load bearing capacity (Calculation)	Calculation 9/2019, ČKAIT authorized engineer Ing. Tomáš Focke. Software Solid Edge 2019 and Solid Edge Simulation, using the finite-element method.	Backfill 0.5 m, DRY Suitable for the entire type series AS-MONOcomp P

4.3. Assessment of performance on the basis of tabulated values or descriptive documentation

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5. Annex Drawings.

* NN 10) ČSN EN 12566-3+A2 (February 2014) – Detailed characteristics of material values for PP are listed in ČSN 75 6551:2008.

Test evaluation according to article 6.5.7.2 of EN 12566-3:2005+A2:2013 and Table A.2 of ČSN 75 6551:2008.



