

PRODUCT DESCRIPTION

The biological wastewater treatment plant EcoBox 6 - 9 PU is intended for cleaning wastewater from households. The tank of the WWTP is made of polyethylene (PE) and is distinguished by its excellent statics and load capacity, which enables deep underground installation and good durability even in high ground waters and under traffic loads.

The EcoBox wastewater treatment plant works safely and reliably, and is almost inaudible, without odour and is insensitive to temperature fluctuations in the environment.

The high efficiency of cleaning, easy management and the adaptation of the WWTP to the need of users is ensured by the SBR technology.

The WWTP EcoBox has been tested in accordance with standard SIST EN 12566 – 3.

TECHNICAL DATA EcoBox 6 – 9 PE

Technical data	Values
Maximum daily inflow	1350 L / day
Total volume	6000 L
Installation	Underground installation
Dimensions L x D x H [mm]	2450 x 1350 x 2720
Diameter of revision openings	2 x Ø 600
Material	Polyethylene [PE]
Inflow and outflow pipe diameter	DN 110
Compressor	Airmac DBMX 150
Compressor power	130 W
Electrical power consumption	1,7 kW/day
Compressor noise	48 dB
Standard	SIST EN 12566 - 3
UV material stability	Yes
Aeration system	Disc diffuser
Cover	PE walk-on cover
Water outflow	To surface waters or groundwater.

ECOBX WWTP ADVANTAGES

- High cleaning efficiency
- Low maintenance costs
- Long life service
- Square shape – easy installation
- Fast and simple installation
- Telescopic adjustable cover
- Two revision openings
- Low power consumption
- Integrated sample point
- Slovenian product

CLEANING EFFICIENCY

Daily load: **540 g BPK₅ / day**
 Cleaning efficiency: **KPK: 90,4% (93 mg / L)**
BPK₅: 97,4% (14 mg / L)
SS: 90,5 % (21 mg / L)

Cleaning efficiency checked (Report no.: Kenn-Nr. 1657, Stuttgart, 2009) by the institute:
*Universität Stuttgart, Institut für Siedlungswasserbau, Wassergüte
 und Abfallwirtschaft Prüfstelle für Kleinkläranlagen, Bandtäle 1, D – 70569 Stuttgart*



MECHANICAL RESISTANCE AND STABILITY

Mechanical resistance and stability checked (Report no.: P 0733 / 11 – 680 - 2)
Slovenian national building and civil engineering institute, Dimičeva ulica 12, 1000 Ljubljana



WATERTIGHTNESS

Watertightness checked (Report no.: P 0733 / 11 – 680 – 1)
Slovenian national building and civil engineering institute, Dimičeva ulica 12, 1000 Ljubljana



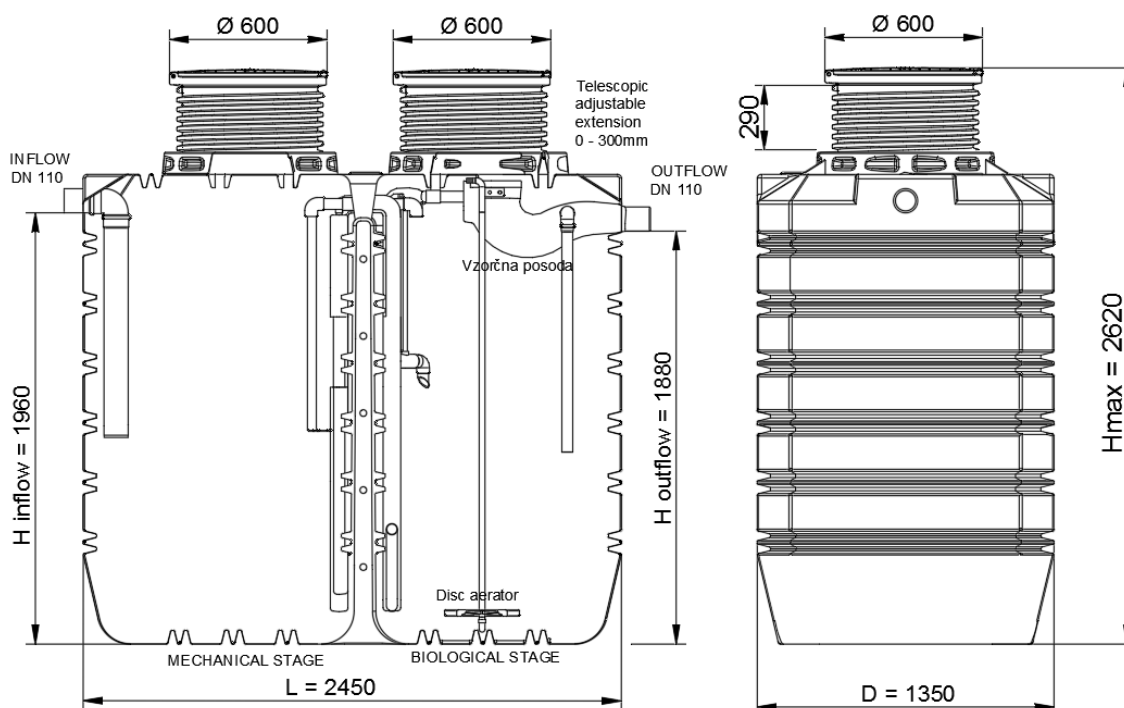
CONTROL UNIT

The suitability of the control unit checked (Report no.: T 251 – 0440 / 13)
Slovenian Institute of Quality and Metrology, Tržaška cesta 2, 1000 Ljubljana, Slovenia



WASTE WATER TREATMENT PLANT

The ROTO EcoBox 2-5 PE is on the list of typical small municipal waste water treatment plants GZS, which are in accordance with standard SIST EN 12566 – 3 and have appropriate documentation.
The Chamber of Commerce and Industry of Slovenia, Dimičeva ulica 13, 1504 Ljubljana, Slovenia



ADDITIONAL INFORMATIONS

INSTALLATION

WWTP EcoBox 6 - 9 PU can be installed in a few hours. Excavate the pit, install the wastewater treatment plant, and fill with the water at the same time. Connect it with the inflow and the outflow pipes (DN 110 connections). Install (4) air hoses in the protective tube and connect them to the valves of the same color in the control unit. The maximum distance between WWTP and the control unit must not exceed 15 m. After 2 weeks of continuous water supply, startup should be made. Waste water treatment plant can be installed by Roto experts. Installation must be made according to general instructions accessed on the QR code.



Instructions for installation

[Installation of EcoBox WWTP](#)

MAINTENANCE

Maintenance, start up and service should be carried out by technical experts. Service by ROTO technical team involves condition and operation checks of the components of the waste water treatment plant, as well as testing all the functions of the device. Users of the EcoBox will be educated about maintenance and proper use. Detailed maintenance instructions, service and startup orders are accessed with the QR code.



Service order

CONTROL UNIT

EcoBox WWTP is controlled by a computer built in the control box. The computer controls four electromagnetic valves, each of which has its own function:

1. Pumping water from the sedimentary chamber into a biological chamber
2. Aeration (air supply through disc diffusers at the bottom of the biological chamber)
3. Pumping purified water from a treatment plant
4. Pumping the sewage sludge from biological chamber back to the mechanical (sedimentary) chamber.

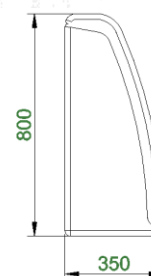
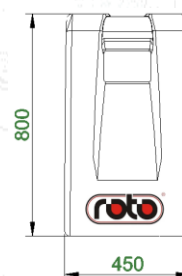


Startup order

The maximum distance of the control unit/box from the treatment plant is 15 m and can be installed inside or outside of the facility. A 3 x 2.5 mm² cable must be arranged to the control box for powering the control unit. Additional equipment – the cabinet base allows the installation of control box as a stand alone.

DIMENSIONS OF CONTROL BOX

PE control box length: **800 mm**
 PE control box width: **450 mm**
 PE control box thickness: **350 mm**



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