



PRODUCT DESCRIPTION

The biological wastewater treatment plant RoEco 3 PE is intended for cleaning wastewater from households. The reservoir of the plant is made of polyethylene (PE) and is distinguished for its excellent statics and load capacity. Vertical shape and dimensions of the reservoir enables installation of the WWTP on small surface.

The RoEco treatment plant operates on the basis of the flow technology of wastewater treatment. Water from households flows into the first sedimentary chamber. Across the opening at the bottom of the chamber drains into the aeration part of the plant. In the aeration chamber, through the tube diffusers, air is supplied which, in the form of bubbles rise to the water level. The water then flows over the overflow knee into the third post sedimentary chamber, where the mammoth pump is installed which returns sludge back to the first chamber.

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

TECHNICAL DATA RoEco 3 PE

Technical data	Values
Maximum daily inflow	450 L / day
Total volume	3200 L
Installation	Underground installation
Dimensions D x H [mm]	Φ 1800 x 2000 mm
Diameter of revision openings [mm]	Φ 800
Material	Polyethylene [PE]
Inflow and outflow pipe diameter	DN 110
Compressor	Hiblow XP 80
Compressor power [W]	58 W
Electrical power consumption	0,43 kW/day
Compressor noise [dB]	36 dB
Standard	SIST EN 12566 - 3
UV material stability	Yes
Aeration system	Disc aerators
Cover	PE walk - on cover
Water outflow	To surface waters or groundwater.

ROECO WWTP ADVANTAGES

- High cleaning efficiency
- Low maintenance costs
- UV stability control box
- Easy installation
- Stand alone control unit
- Monolithic reservoir
- Revision opening Φ 800
- Low power consumption
- Integrated sample point
- Slovenian product

CLEANING EFFICIENCY

Cleaning efficiency:

COD: **90 %**

BOD₅: **96 %**

SS: **84 %**



Cleaning efficiency checked (Report no.: 211c – 11/5426 – 16) by the institute:

National Laboratory of Health, Environment and food (NLZOH)

MECHANICAL RESISTANCE AND STABILITY

Mechanical resistance and stability checked (Report no.: P 0087 / 17 – 680 -2)

Slovenian national building and civil engineering institute, Dimičeva ulica 12, 1000 Ljubljana



WATERTIGHTNESS

Watertightness checked (Report no.: P 0087 / 17 – 680 – 1)

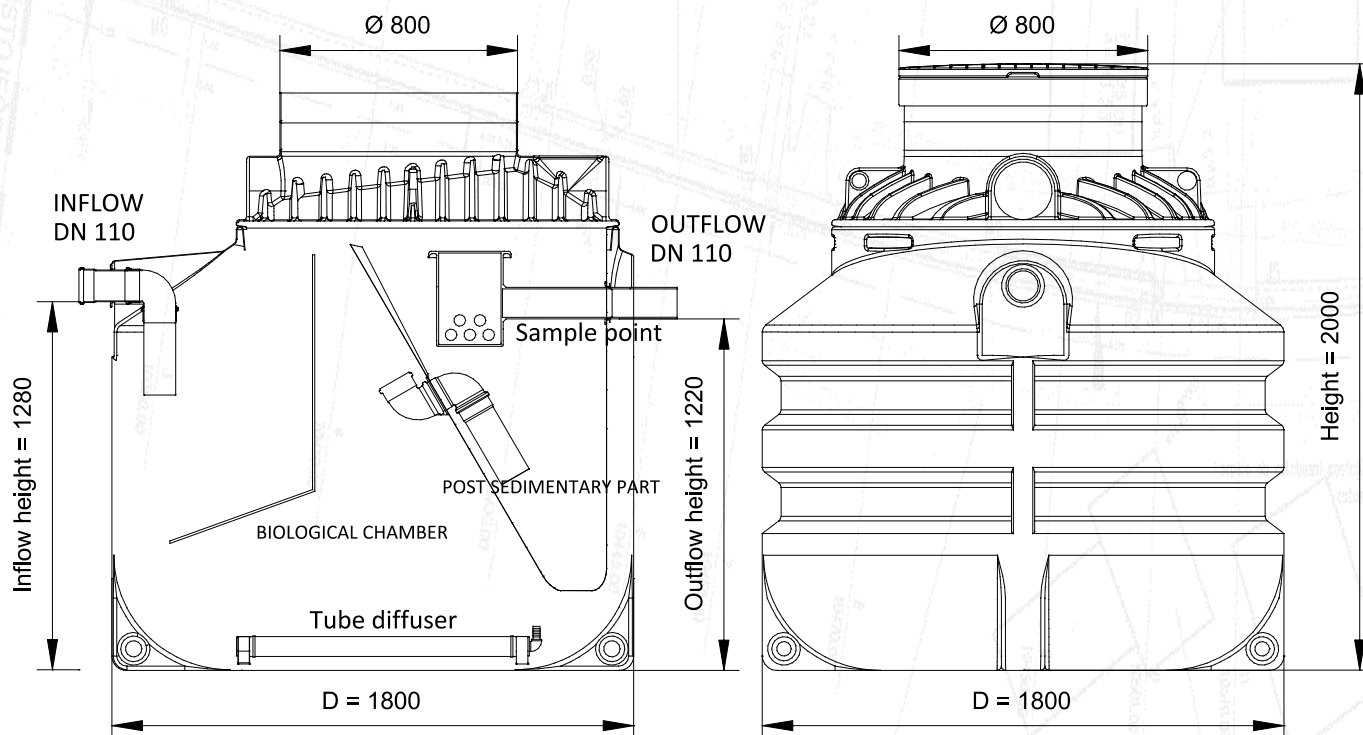
Slovenian national building and civil engineering institute, Dimičeva ulica 12, 1000 Ljubljana



WASTE WATER TREATMENT PLANT

The ROTO RoEco 3 PU 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

ROECO INSTALLATION

Installation of RoEco is fast and simple. Excavate the pit, install the waste water treatment plant, and fill with the water at the same time. Connect it with the inflow and the outflow pipes (DN 110 connections). Install (3) 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 10 m. After 2 weeks of continuous water supply, startup should be made. Wastewater 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

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

1. Pumping the sludge from post sedimentary chamber back to mechanical part of the WWTP,
2. Aeration (air supply through difusers at the bottom of the biological chamber).

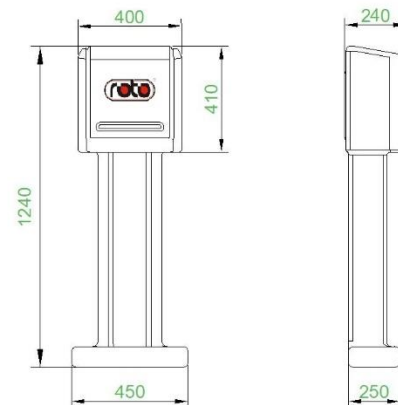


Startup order

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.

DIMENSION OF PE CONTROL UNIT BOX

PE control box height: **1240 mm**
 PE control box width: **400 mm**
 PE control box thickness: **240 mm**



Roto Eco d.o.o.

Puconci 12, 9201 Puconci,

SLOVENIA

Customer support: (+386) 2 5252 152

Technical support: (+386) 2 5252 196

Zadnje novice preverite na

www.rotoECO.eu

Web page: www.rotoECO.eu

All rights reserved, including the rights of photomechanical reproductions and storage on electronic media. The manufacturer reserves the rights to change the product. Any commercial use of the processes and working procedures assumed in this document is prohibited. Although information, texts and photos were carefully collected. The mistakes can not be completely excluded. The publisher and editors can not assume legal responsibility or guarantee any incorrect information. The publisher and editors are grateful for any possible suggestions for improvements and warnings of possible mistakes in the text.