

Wastewater Treatment plants

SUSTAINABLE WATER SOLUTIONS

PIPELIFE 

Certified product

Our treatment plants are in conformity with
BDS EN 12566-3,
ATV - M 210



ECOBIX

Wastewater treatment plants BDS EN 12566-3, ATV – M 210



Complete
solution by one
manufacturer

Application of wastewater treatment plant

The wastewater treatment plants, manufactured by Pipelife Bulgaria "ECOBIX" are designed according to the requirements of **ATV-M 210** and they are applicable in places where sewage network is not

available and its construction is not cost-effective. Those places can be: single- and multi- family buildings, villas, hotels, camping sites and others.

Treatment technology

The wastewater treatment plants "ECOBIX" are composed of two separate tanks and are not hydraulically connected. The are:

Mechanical step (Settler / Buffer):

The water flows by the force of gravity in the tank where heavy non-organic particles are settled in the bottom. The volume of the tank is calculated with a buffer volume included i.e. when a larger water flow is discharged the sewage is not backfilled. This tank is emptied / cleaned once per year.

Biological step – sequence batch reactor (SBR):

The sequence batch reactor is a tank in which the water is treated biologically using active sludge (AS). These are microorganisms that are present in the human digestive system.

In the SBR series of processes are done to treat the wastewater. A series of completed processes is called a cycle. One cycle is one in 8 (eight) hours and it is repeated three times per day. The completed processes are:

- Filling;
- Aeration;
- Settling;
- Extraction of useless sludge;
- Clear water flush;

The filling, emptying and extraction of the sludge in the SBR is done by air lift system. This a system that transports the fluid by feeding compressed air, and does not have any moving mechanical components, which lowers the risk of a failure due to mechanical component failing.

The maximum treatment effect is reached after the fourth week of the process start – this is the time needed for the sufficient quantity of active sludge to be reached. If the system is used seasonally, the maximum time that the system cannot be used is two months. In that time the aeration process should not be stopped. During this time a part of the active sludge transforms to spores. When this occurs the system can be in "stand by" mode from 3 to 6 months.

This process is controlled automatically by a control unit with a compressor.

The treated water values are in conformity with:

Ordinance N-6, 9.11.2000

Ordinance N-7, 14.11.2000

Advantages of wastewater treatment plants

Guaranteed watertightness;

Treatment effect – 98%

Wide product range 4 to 50 PE*;

Automated process;

Low maintenance costs;

Lack of smells;

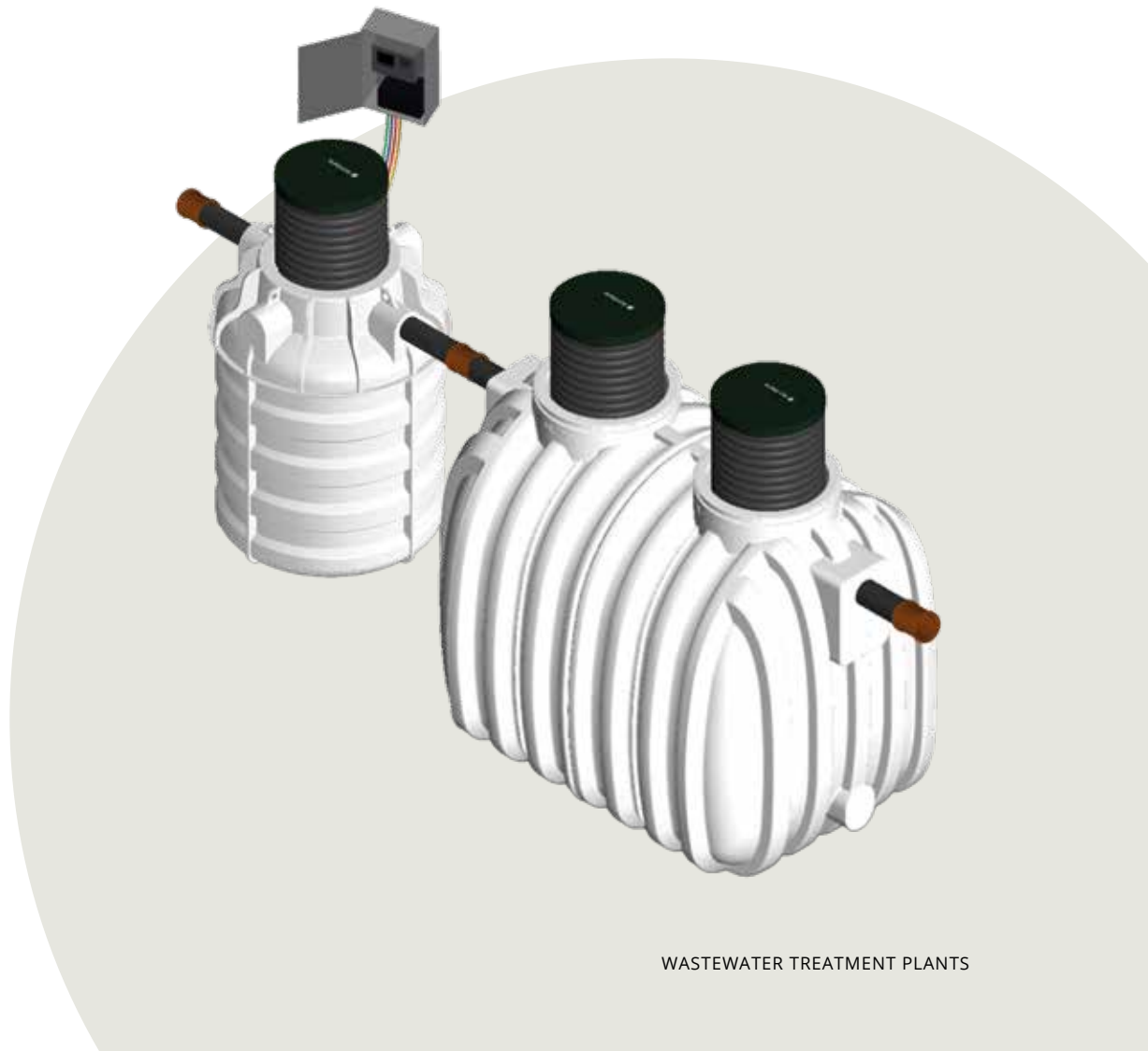
Possibility to reuse the treated wastewater;

Long lasting exploitation life – min 20 years

Product range

Description	Persons equivalent	Flow of WW	Standard installation depth (from terrain to bottom of inlet)
[-]	[-]	[l/d]	[mm]
Wastewater treatment plant ECOBOX/Air 4-6PE	4 - 6	750	1345
Wastewater treatment plant ECOBOX/Air 8-10PE	8 - 10	1350	1295
Wastewater treatment plant ECOBOX/Air 12-16PE	12 - 16	2400	1345
Wastewater treatment plant ECOBOX/Air 20PE	20	3000	1345
Wastewater treatment plant ECOBOX/Air 24PE	24	3600	1330
Wastewater treatment plant ECOBOX/Air 28-32PE	28 - 32	4800	1330
Wastewater treatment plant ECOBOX/Air 36PE	36	5400	1330
Wastewater treatment plant ECOBOX/Air 40-44PE	40 - 44	6600	1330
Wastewater treatment plant ECOBOX/Air 48-50PE	48 - 50	7500	1330

* For configurations other than those listed, contact your sales representative or product manager





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Note: The images may differ from actual products.

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