

THE NARO STATION

WATER TREATMENT

ROTOPLAST SAS, in collaboration with a specialist in the treatment of waste water, developed the NAROPUR system (4-20 EH) for individual sanitation of domestic sewage.



STATION SBR SYSTEM
MEMBRANE AERATION
MICROPROCESSOR CONTROL
DESIGN OF 4 TO 50 EH (INHABITANTS)
EASY INSTALLATION WITH CLIP SYSTEM

What does the NARO-Station do ?

THE DIFFERENCE IN DETAIL

A CERTIFIED PRODUCT

According to DIN and ISO 9001

According to EC standards

Tests made according to EC regulations on the PIA platform (Aachen-Germany)

DIBT certification : Class C and D

Guaranteed decrease and increase of the needs on a standard flow of 150 litres per day and per capita

A GUARANTEED PRODUCT

a material guarantee of 25 years on the components in PE

a 3 year warranty on the SBR technique

AN EASY PRODUCT

a simple and fast installation with easily connectable accessories. The low weight enables an easy installation without the use of special machines. The ease of the installation and the connection is exceptional: a complete system, ready to connect.

A «LOW COST» PRODUCT

A facility that uses little electricity (+/- 0.18 kwh/d per inhabitant). Maintenance only every two years.

No electrical accessory, or pump, are put in contact with waste water thanks to the lifting by air and the external control system.

AN ENVIRONMENT-FRIENDLY PRODUCT

Polyethylene is a material that resists the sewage of individuals and of small communities.

Moreover, polyethylene is 100% recyclable.

THE FUNCTIONING OF THE NARO STATION

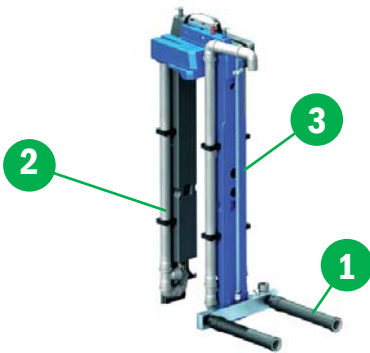
1. PE-TANKS

The absence of welds and seals, as well as the production in monoblock contribute to the quality of the tank in polyethylene (PE-LLD). The 100% tightness between the two chambers, essential for the proper functioning of the SBR system, is ensured through the partition / dividing wall which forms a single entity with the tank.

2. THE NAROPUR-CLIP

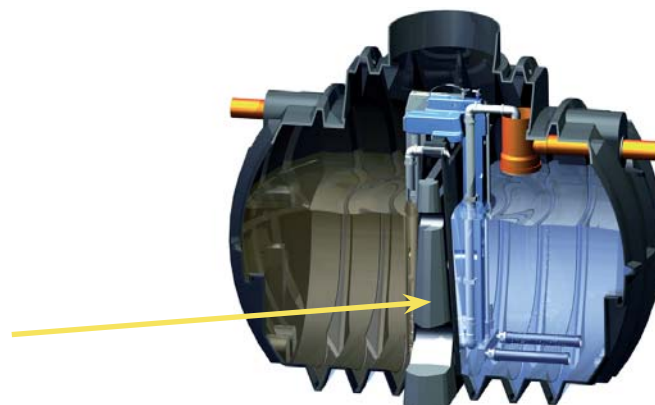
The SBR technique used („Sequencing Bath Reactor“) with membrane aeration (1) enables a sustainable functioning. The damming / stowing of liquids is done by airlift (2) and no mobile or electromechanical element is put in contact with waste water. The airlift, that is responsible for the rejection of clear water, is equipped with a valve (3) thus avoiding an accidental release of sludge.

Conclusion: a very efficient waste water treatment system



3. DIVIDING WALL

a PE partition ensures the structure and strengthens the separation of the chambers of the tank.



4. SEDIMENTATION CHAMBER

In this chamber, water undergoes a preliminary sedimentation. Suspended solids settle out in this part.

5. PURIFICATION CHAMBER

In this chamber water gets purified. The oxygen allows the growth of micro-organisms that purify water. At the end of a cycle of 8 hours, a clean water area is formed in the upper part. The airlift, that is responsible for the rejection of clear water, is equipped with a valve thus avoiding an accidental release of sludge

The sedimentation compartment gets filled up again by domestic sewage and so on...

6. CONTROL UNIT

The command of the SBR is carried out by microprocessor. The switch box is responsible for a fully automated command and it incorporates a sensor for malfunctions.

This PLC command allows the registration of the operating hours, allows visual and auditory dysfunctions reporting, acoustic alert during a power failure and it stores error messages in the internal memory.

It is also possible to opt for a mobile telemetry system.



RESULTS

The system provides an effective functioning and excellent treatment performances.

CLASS C	150 mg/l	CSB	CLASS D	90 mg/l	CSB
	40 mg/l	BSB5		20 mg/l	BSB5
				10 mg/l	NH4-H
				25 mg/l	Nanorg

CUSTOM IMPLEMENTATION

a simulation of the Narostations for more than 4/8 persons

a double tank for 4/8 persons

two double tanks for 10/16 persons

three double tanks for 20 persons