

# **BIOXYMOP** 5 AND 6 PE MICRO TREATMENT UNITS

3M3 PRIMARY SETTLING TANK POLYETHYLENE (PE)



Give the best back to earth

### Technical definition

BIOXYMOP micro-stations are designed according to the aerobic fixed culture process and are used to treat domestic wastewater from individual homes.

Designed to be simple and easy to install, this system guarantees the most effective treatment.

### **Functioning**

The micro-stations are composed of 3 compartments:

Primary settling tank

Aeration basin

- Clarifier

Domestic wastewater arrives in the primary settling tank where the heaviest materials are retained at the bottom and the floating materials on the surface.

The pretreated effluent then passes into the aeration basin where the dissolved pollution is eliminated by the purifying bacteria attached to the free supports.

The final stage of treatment is carried out in the clarifier.

The treated effluent is separated from suspended solids.

The AIRLIFT system allows the recirculation of the effluent to the primary clarifier.

The treated effluent meets the requirements of standard EN12566-3 and the decree of 07/09/09 modified.

Treated wastewater can be discharged in two ways:

- by drainage and infiltration into the soil (preferable).
- by discharge into the surface water environment, subject to compliance with the technical prescriptions in force and an authorization from an engineering office.



#### BENEFITS

- very small footprint
- Plug & Play system
- Single vessel
- Very low energy consumption
- Shallow depth
- Oil change every 36 months
- Low maintenance cost
- Installation in green spaces or under pavement
- Laying with water table
- Gravity system
- Good tolerance to load variations
- Odorless
- Secured by an alarm



# Commissioning & maintenance

Afterwards, we strongly advise you to take out a maintenance contract with a SIMOP-approved specialist, to guarantee the long-term efficiency of the device, on the basis of an annual visit.



All maintenance instructions are included in the user's guide.

### Guarantees

Simop guarantees that the Bioxymop micro-stations will treat domestic wastewater in accordance with the regulatory requirements in force at the time of their installation.

This performance is guaranteed under normal conditions of use, care and maintenance in accordance with the user's guide.

The PE tank is guaranteed for 10 years, if the installation conditions have been respected.

The electromechanical elements are guaranteed for 1 year under normal conditions of use.

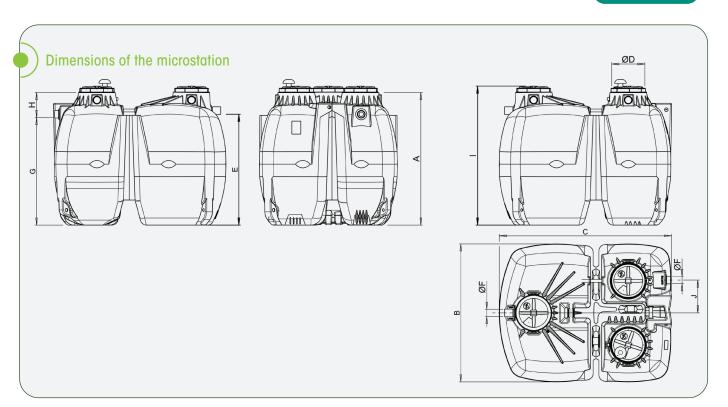
The warranty period begins on the day the microstation is installed at the user's premises.

# **5 AND 6 PE MICRO TREATMENT UNITS**

3M<sup>3</sup> PRIMARY SETTLING TANK POLYETHYLENE (PE)



6027



	А	В	С	ØD	E	ØF	G	Н	ı	ETC volume	Useful volume	Weight
BIOXYMOP6027/05	1850	1912	2405	400	1550	100	1500	350	1940	110 liters	5060 liters	370 kg
BIOXYMOP6027/06	1850	1912	2405	400	1550	100	1500	350	1940	130 liters	5060 liters	370 kg



Option:

RH2/4031 ..... Screw-on extension shaft of 300 mm that can be cut every 50 mm



**WASTEWATER TREATMENT** 

## 5 AND 6 PE MICRO TREATMENT UNITS

3M<sup>3</sup> PRIMARY SETTLING TANK POLYETHYLENE (PE)



## HANDLING, INSTALLATION AND COMMISSIONING





please refer to the BIOXYMOP6027 New Generation user's guide, section "Installation and handling guide" or to our PHPE installation guide.

The maximum height of the backfill without a load-bearing slab is 600 mm. Maximum level of the water table = 1,5 m from the bottom of the tank. Filling of the tank through the aeration tank.

The tank has fork pockets for forklifts to facilitate handling. The use of fork extensions is strongly recommended for safety during handling. Lifting can also be carried out using lifting straps using the lifting rings provided for this purpose.

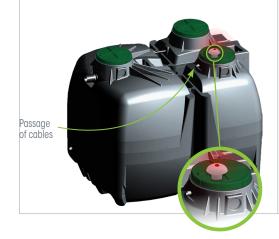
#### **HYDRAULIC CONNECTION**



The inlet and outlet of the micro-station are identified by inscriptions (see photos). The micro-station has DN100 sleeves at the inlet/outlet and is ready to be connected with DN100 PVC pipe.

The effluent inlet and outlet pipes must have a minimum slope of 2% (take into account the settlement of the ground). There must be no 90° bends 1 m before the inlet and after the outlet of the micro-station.

#### **ELECTRICAL CONNECTION**



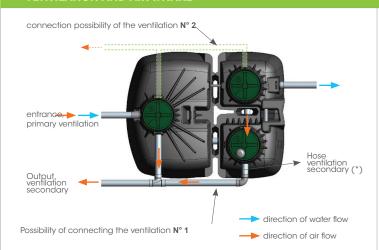
During the earthwork, install a 60 mm diameter sheath between the micro-station and the general electrical panel. The compressor is supplied with 1 m of cable. It is therefore necessary to draw a 1.5 mm2 cable (for a 230 V + earth supply) to the micro-station, by inserting it into the manhole's cable gland. Important: The sheathing and cable drawing are imperative prior to the commissioning assistance visit, which is offered with the product .

Before any intervention on the electrical equipment, switch off the installation. The connection can be made on a socket with a differential protection of 30 mA. Direct connection to a differential circuit breaker is not mandatory, but recommended.

The compressor cable is connected to the male plug, on which the female plug is plugged. Install the female plug on your power cable and connect the two to put the microstation in operation. Plug the cable gland pipe with a spray of expanding foam.

Note: If you wish to activate the alarm supplied with the micro-station, remember to return the Letter T or register the system on the website www.simop.fr.

### **VENTILATION AND AIR INTAKE**



The connection of the ventilation of the micro-station must respect the XP DTU 64.1.

The illustration opposite shows the connection points for the primary and secondary ventilation on the micro-station.

The air inlet is ensured by the wastewater drop pipe in primary ventilation in its diameter (100 mm minimum) to the open air and above the inhabited premises. The fermentation gases must be evacuated by a ventilation system equipped with a static or wind extractor located at 0.40 m above the ridge and at least 1 m from any opening and any other ventilation.

Note check the presence of the 100 x 100 mm semi-rigid foam square at the inlet of the secondary ventilation pipe (\*), to contain the starting foams and ETCs, while allowing air to pass through.