

# BIOECO

## ■ ■ BIOLOGICAL COMPACT SYSTEM

### I.I MACHINE DESCRIPTION

Modular monolithic activated sludge treatment system with separate oxidation and sedimentation compartments.

The sludge oxidation process is achieved through aeration with micro air bubbles introduced through diffusers installed in the bottom of the tank.

Sedimentation occurs in the second section where a portion of the settled sludge is conveyed by an airlift to the oxidation section to activate the influent sludge.

The purified water overflows a Thompson Weir into a collecting trough.

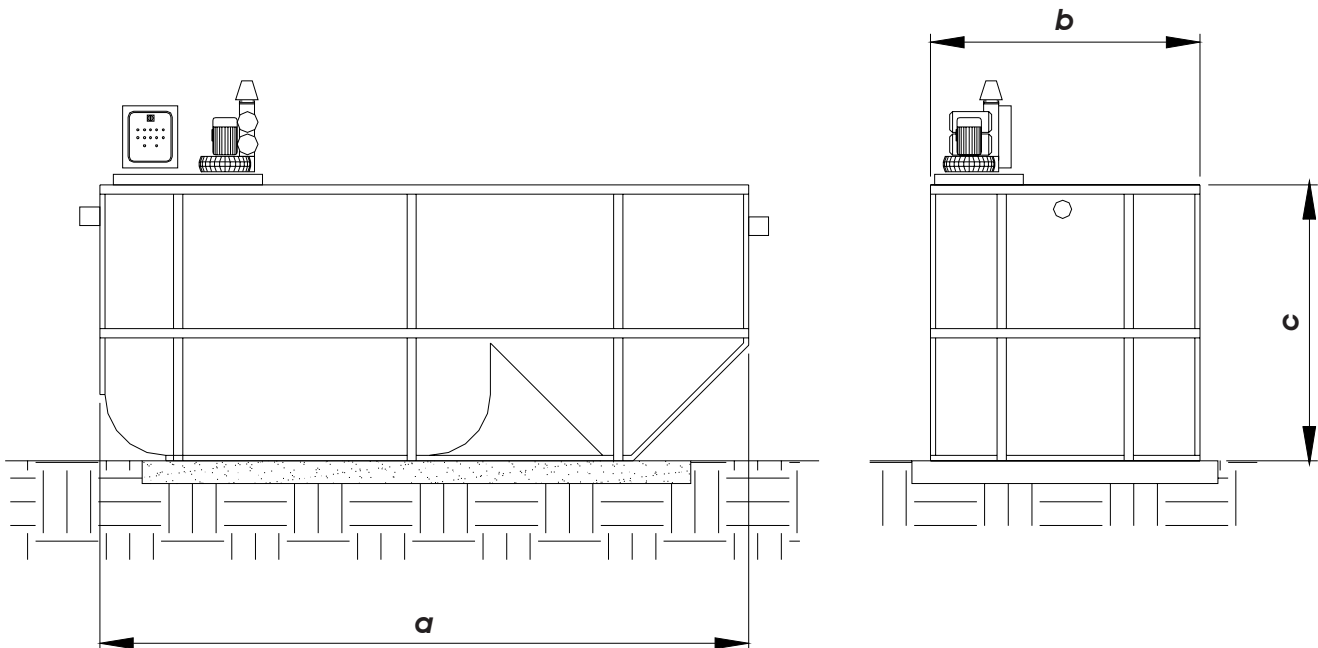
The settled sludge is extracted by a pump from the bottom of the tank and conveyed to the sludge treatment.



### I.II PAINTING

All wetted surfaces of this system are protected with coal tar epoxy coating with dry film thickness of 400 µm.

### I.III TECHNICAL DATA



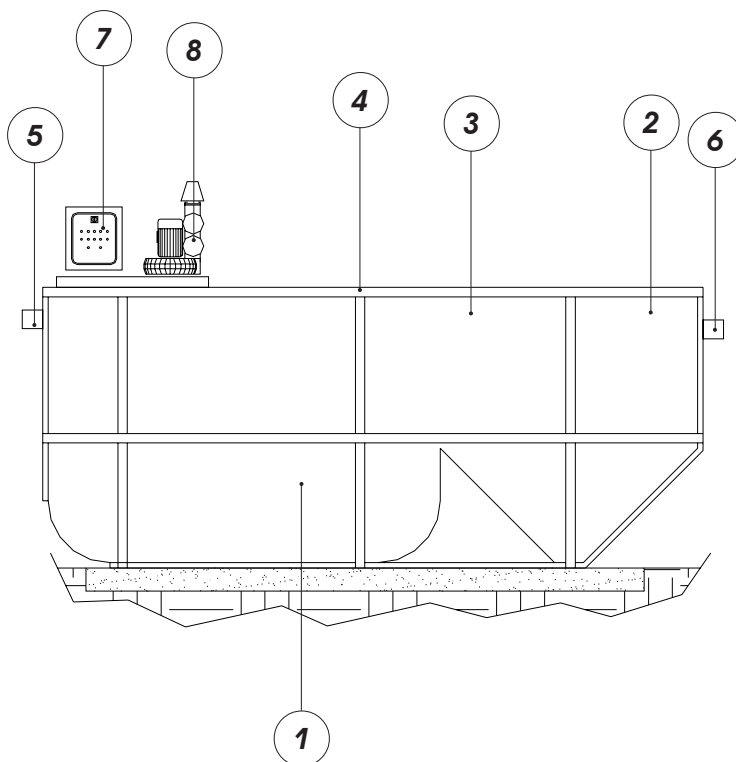
*n.b.: the manufacturer may modify some dimensions or sizes without prior information!*

■ **BIOECO - Biological Compact System**

	a - mm (Length)	b - mm (Width)	c - mm (Height)	Inhabitants equivalent (n.)	Peak flow (m <sup>3</sup> /h)	Diameter (inlet/outlet)	Installed power (kW)	Volume (m <sup>3</sup> )
<b>BIOECO 10</b>	4000	2000	2000	<b>100</b>	1.6	160	1.5	16
<b>BIOECO 20</b>	5500	2250	2500	<b>200</b>	3.3	160	2.2	32
<b>BIOECO 30</b>	7000	2690	2845	<b>300</b>	4.7	160	3.0	50
<b>BIOECO 40</b>	7800	2990	3000	<b>400</b>	6.0	160	4	63
<b>BIOECO 50</b>	10500	2900	3100	<b>500</b>	8.5	160	5.5	95
<b>BIOECO 60</b>	11500	3000	3100	<b>600</b>	11.0	160	6.0	108

*n.b.: the manufacturer may modify some dimensions or sizes without prior information!*

**I.IV SUPPLY COMPONENTS**



**Biological Compact System - BIOECO**

- 1 Rectangular tank made of mild steel with reinforcements and internal baffle for section separation
- 2 Scum collector
- 3 Thomson weir with collection trough
- 4 Load bearing grating cover
- 5 Inlet
- 6 Outlet
- 7 Control Cabinet
- 8 Blower

**I.V ACCESSORIES and OPTIONALS**

- Centrifugal blower with IP68 motor and intake filter for aeration;
- Galvanized carbon steel air intake manifold with regulator;
- Skimmer system for floatables removal installed in the sedimentation chamber;
- Control panel.