

# ANAEROBIC WATER TREATMENT PILOT PLANT

## Mod. BIO1c/EV



### INTRODUCTION

This pilot plant consists of a reactor with built-in settler. Sludges are fed and recycled by two peristaltic pumps; a compressor will recycle gas from the top to the bottom of reactor keeping biomass stirred. Data acquisition is carried out by a specific software.

### TRAINING PROGRAM:

The process unit enables to develop and analyze the following issues:

- Purification efficiency versus the following parameters:
  - recycle ratio
  - digester temperature
  - organic load
  - pH and rH

## TECHNICAL CHARACTERISTICS:

- AISI 304 stainless steel framework with castors
- Feed tank, 80 l capacity
- Transparent plastic cylindrical digester with settler, 15 l capacity
- Peristaltic feed pump
- Sludge recirculation peristaltic pump
- Diaphragm compressor with body of stainless steel
- Microprocessor-controlled board-type pH-meter, with range of 2 to 12 pH, 4 to 20 mA output signal
- Microprocessor-controlled board-type rH-meter, with range of -1500 and +1500 mV, 4 to 20 mA output signal
- Microprocessor-controlled board-type dissolved oxygen meter, with range of 0 and 20 ppm, 4 to 20 mA output signal
- Switchboard IP55, complying with EC conformity mark, including plant synoptic and ELCB
- Data acquisition software for Windows

**Power supply:** 230 Vac 50 Hz single-phase - 1,5 kVA  
(Other voltage and frequency on request)

**Dimensions:** 1600 x 700 x 1900 mm

**Weight:** 250 kg

### REQUIRED

#### UTILITIES (PROVIDED BY THE CUSTOMER)

- Tap water (valve with ½" hose connector)
- Water floor drain

#### ACCESSORIES (NOT INCLUDED)

- Personal Computer running a recent version of MS Windows

### SUPPLIED WITH

#### THEORETICAL – PRACTICAL – EXPERIMENTAL HANDBOOK



### VARIATIONS OF THE PLANT UPON REQUEST:

This equipment can be modified upon specific request of the Customer.