GRAVITY FILTRATION PILOT PLANT Mod. FTR1c/EV



INTRODUCTION

This filtration plant mainly consists of a sand filter; filtered water is collected into a tank from which samples for proper laboratory analyses can be extracted. An in-line turbidimeter enables to measure the turbidity of water.

Data acquisition is carried out by a specific software.

TRAINING PROGRAM:

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

- mechanical filtration
- main parameters affecting filtration
- influence of feed flow rate on filtration

TECHNICAL CHARACTERISTICS:

- AISI 304 stainless steel framework with castors
- Sand filter of transparent methacrylate, diameter = 100 mm, height = 1000 mm
- Feed tank, 120 I capacity
- Tank for collecting the filtered water, 120 I capacity
- AISI 316 stainless steel magnetic induction flowmeter
- Electronic differential pressure transmitter to measure the pressure drop in the column
- Centrifugal pump with casing and rotor of AISI 304 stainless
 steel
- Electronic turbidimeter, with programmable range, 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 kVA |
|---------------|--|
| | (Other voltage and frequency on request) |
| Dimensions: | 2000 x 800 x 2000 mm |
| Weight: | 200 kg |

REQUIRED

- **UTILITIES** (PROVIDED BY THE CUSTOMER)
- Tap water (valve with $\frac{1}{2}$ " 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.