The European Commission
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EOLI 2nd ANNUAL MEETING

DESIGN AND CONSTRUCTION OF A PILOT SBR WWTP

Presented by

Innovación e Ingeniería en Biotecnología Ambiental

http://www.ibtech.com.mx

jorge_lopez@ibtech.com.mx

jmms@pumas.iingen.unam.mx

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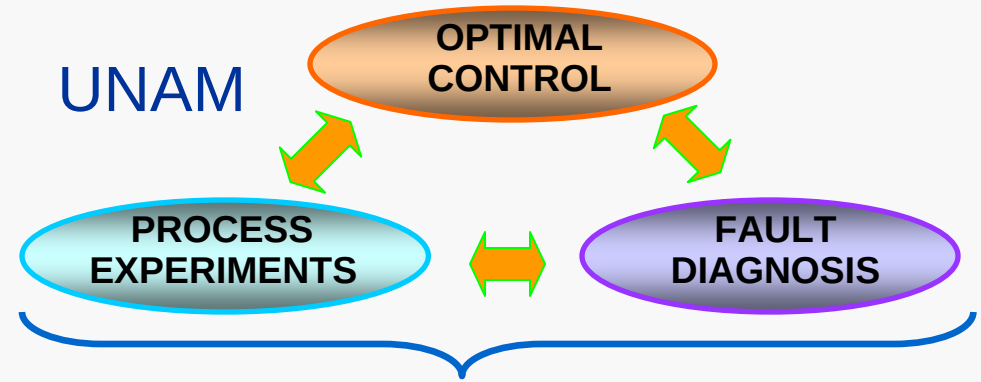
INTRODUCTION



DESIGN

IBTECH

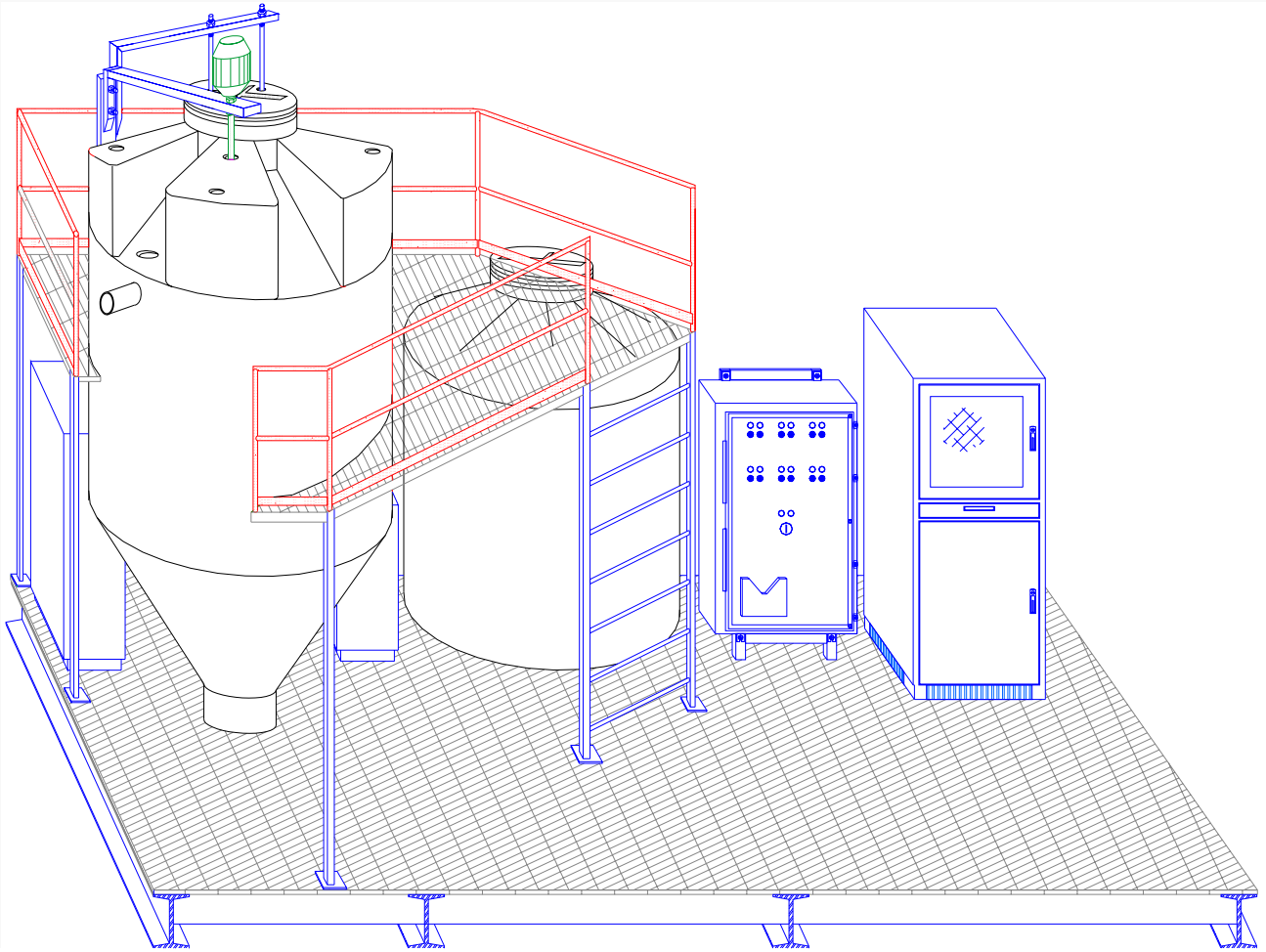
DESIGN AND CONSTRUCTION OF FIELD-SCALE PILOT PLANT.

CONSTRUCTION OF THE PILOT PLANT.

SUPPORT FOR THE OPERATION OF THE PILOT PLANT

DESCRIPTION OF THE PILOT PLANT

The pilot plant will be based on an aerobic process known as activated sludge in the Sequencing Batch Reactor modality, controlled by the system developed by Engineering Institute of UNAM.



MAIN ACTIVITIES

The activities of IBTech during this second year were conducted in narrow collaboration with the UNAM team, since the main objective was to construct the pilot plant according to the engineering design basis based on UNAM specifications.

IBTech started the construction of the pilot wastewater treatment plant the second week of August. This date was determined mainly due to the second payment received by de EC on July.

Currently all equipment has been delivered to the site where the pilot plant has been constructed. The exception is the Motor Control Center (MCC) and PC cabinet, whose specification and acquisition presented some administrative problems which were finally solved.

The construction project was planned to be carried out in four steps:

- Construction of mobile skid.
- Tankage and electromechanical equipment mounting. Hydraulic piping installation.
- Installation of field instrumentation.
- Wiring of all equipment and instruments.
- Motor Control Center and Computer control system installation.

Precomissioning and commissioning activities.

The skid construction is completely finished. All tankage has been already installed and the piping installation is already finished.

Electrical and instrumentation wiring has been finished as well, but IBTech is waiting for the MCC and PC cabinet that must be delivered by UNAM in order to finish its installation and to begin with the precomissioning activities.

For the next year:

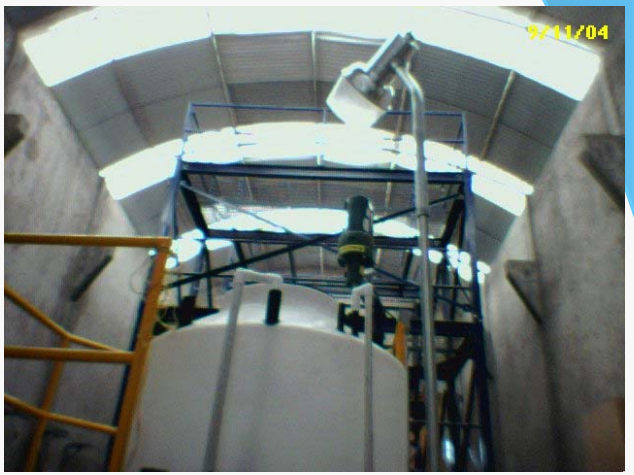
During the third year of the project, IBTech will start up the pilot plant and will be in charge of its operation and control. IBTech will integrate the results obtained during the operation of the pilot plant.

PICTURES

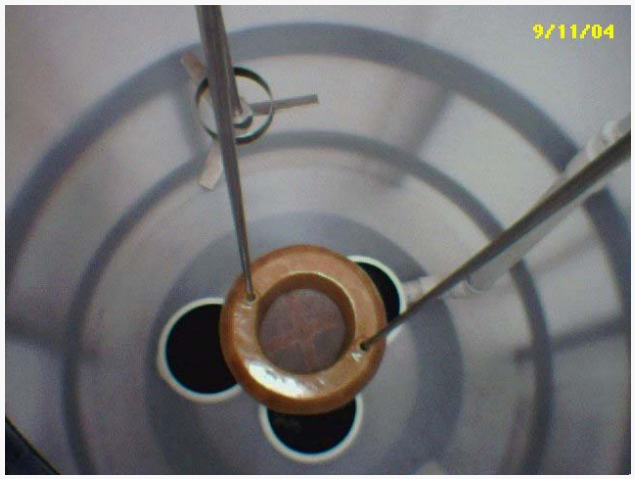
SBR reactor and mobile skid

Top of the SBR reactor with the mixer

Mixer

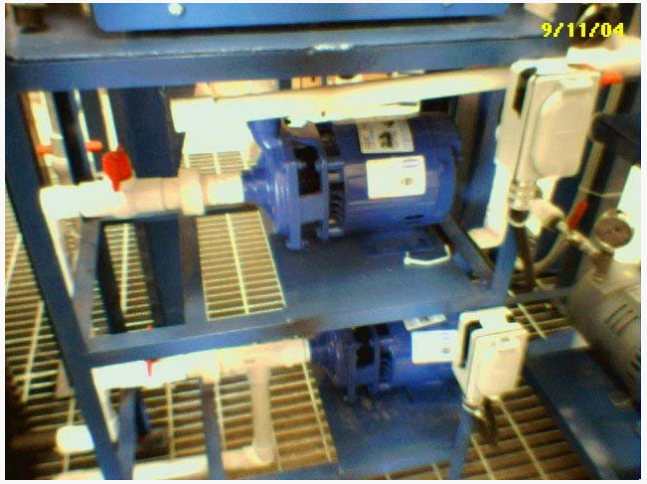


SBR reactor

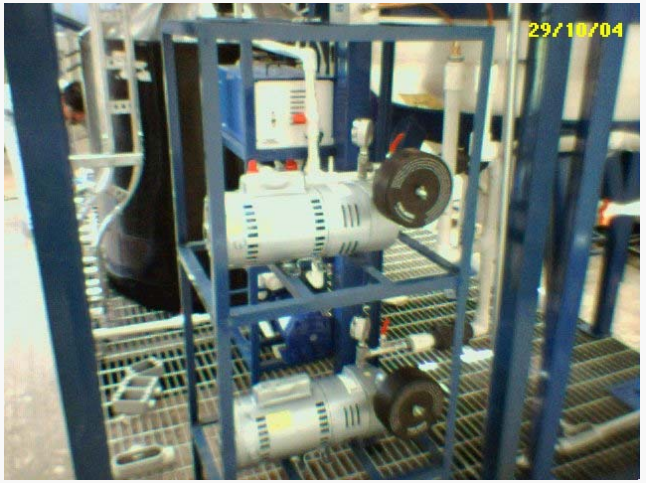


Bottom of the SBR reactor with diffusers, mixer propeller and floating basket.

Air Diffusers



Feeding pumps



Air compressors