



Case study	MiniPlant
Start Up	June 2016
Capacity	20 m ³ /d
Location	Shuyang China

Background

The growing pollution of our environment is a problem concerning everyone of us. Especially the pollution of lakes and rivers has increased to alarming proportions over the last years. At the same time legislation is demanding more and more of wastewater quality. Therefore the use of innovative technologies has become indispensable for future-orientated wastewater treatment.

The miniplant be desinged and manufactured, the advantages as below:

- Easy to Transport, Move, and Expand
- Quick Start-up - Fully Automatic and Mess Free
- No additional Shelters needed.
- Any Capacity, Any Effluent Requirements.
- No Odor – Low Power Requirements.



Challenge

Incoming wastewater is the livestock processing wastewater. This treatment is designed to remove Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), ammonia and from the wastewater.

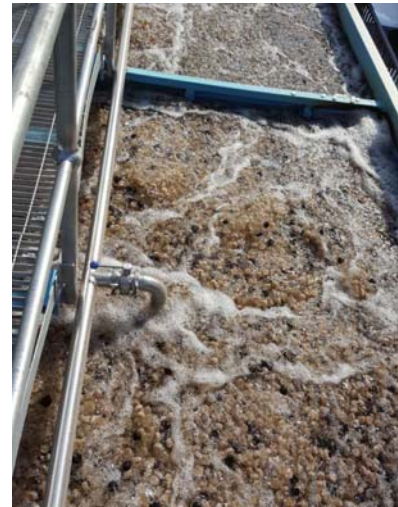
The Inlet and outlet design values of the MiniPlant as follows:

Parameter	Unit	Inlet values	Outlet values
COD	mg/L	3,500	60
BOD ₅	mg/L	2,000	20
NH ₄ -N	mg/l	100	10
OIL	mg/l	15	10

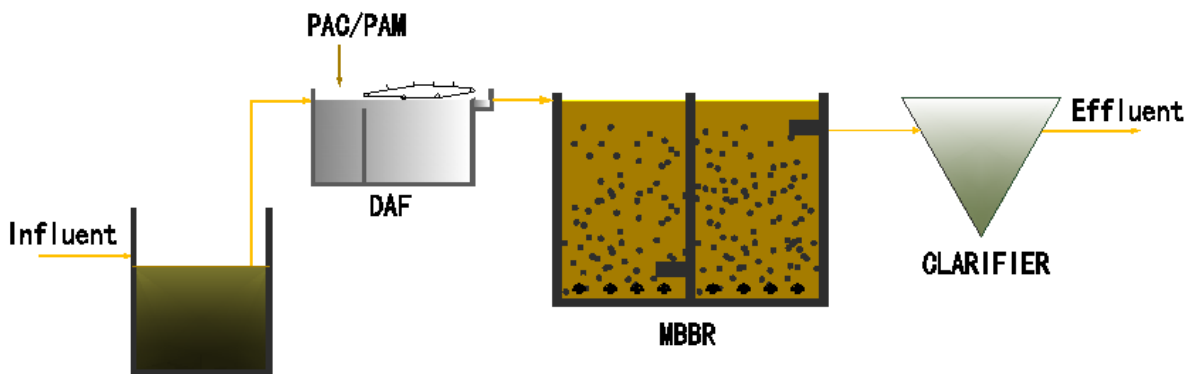
Solution

This MiniPlant consists of three system: DAF, MBBR and Clarifier.

For the first stage, the grid be used to remove the larger impurities. The second DAF (Dissolved Air Flotation) treatment stage could remove the relative density which is close to that of water, such as micro suspended matter, colloid, oil and grease. The third or biological treatment stage is designed to substantially degrade the wastes in the sewage water.



Flow Chart of the Process:



Results

The effluent met the requirements of discharge standard.

