

## MOVING BED BIO FILM REACTOR



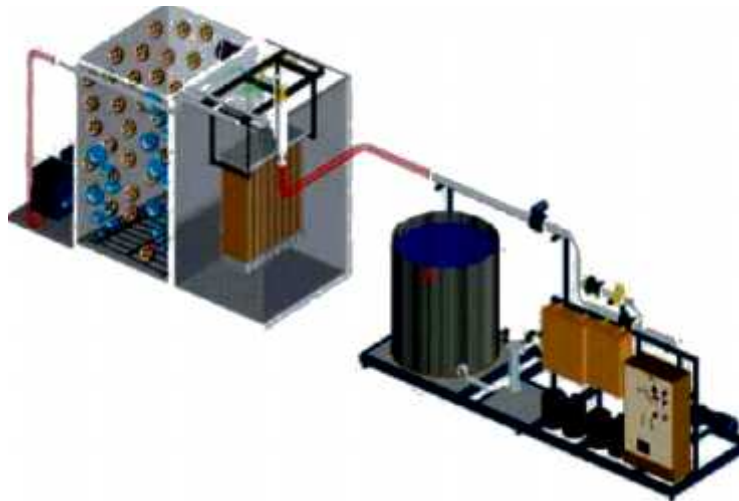
*MANAGING GREEN FROM WASTE*

## MOVING BED BIO FILM REACTOR

The MBBR technology is a leading-edge biological solution for waste water treatment.

Polyethylene bio film carriers provide a large surface area for micro-organism to grow on and perform specific biological treatment. Carriers are kept in suspension in the reactor either by the aeration system. Bacteria from the waste water attach themselves to the floating carriers.

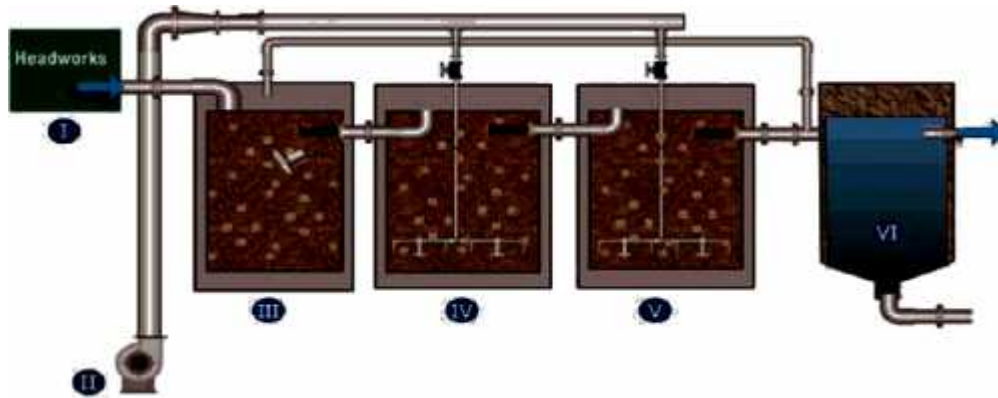
The small and compact size helps to achieve a highly active biomass in the reactor tank and a low settling load in the downstream solids separation process. Biofilm waste water treatment technologies are very robust, especially when compared to conventional technologies like active sludge. The retention time compared to the conventional technology are very low and the startup time is four times faster than the conventional system, this makes the WWTP very compact and efficient in operation.



Advantages:

- Fast start-up and fast recovery after shut-down
- Easy reuse of existing structures
- Stable process and easy to operate
- Low solids load on clarifier
- Ideal for upgrades
- No sludge bulking problems
- High removal efficiencies for nitrogen, BOD and COD
- Low maintenance
- Very compact configuration, able to fit in very small spaces
- High tolerance to load variations ( including suspended solids ) and toxic shocks

## MBBR Process Flow



- I Primary Screening
- II Air Blower for mixing
- III Reacted for Nitrification
- IV Reacted for BOD reduction
- V Nitrification
- VI Settling and Clarification for Reduction of Suspended solid by Clarifier

## STANDARD SPECIFICATION

Model	BT-ION-108750	BT-ION-201675	BT-ION-302480	BT-ION-403280	BT-ION-504050
FLOW (m <sup>3</sup> /hour)	10	20	30	40	50
Feed (BOD/COD)	300/400	300/400	300/400	300/400	300/400
	400/600	400/600	400/600	400/600	400/600
Treated (BOD/COD)	20/200	20/200	20/200	20/200	20/200
Media (Qty)	35%	35%	35%	35%	35%
Dimension	8.75mx3.6mx3.5m ht	16.75mx3.6mx3.5m ht	24.8mx3.6mx3.5m ht	32.8mx3.6mx3.5m ht	40.5mx3.6mx3.5m ht

Prices can be offered based on request

### SCOPE OF SUPPLIES

1. Primary Screening
2. Primary MBBR Tank
3. Secondary MBBR tank
4. Blower
5. Defusser
6. Coagulation
7. Settling
8. Chlorination
9. Steel Tank as per above dimension
10. Electrical panel
11. Flow measuring instrument
12. PLC
13. Piping and Valves

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