

ATAC MBBR

Specifications



ATAC's Moving Bed Biofilm Reactor (MBBR) represents an advanced wastewater treatment solution that combines innovative design with proven technology.

The proposed MBBR technology entails the construction of a single cell box, aligning with ATAC's commitment to staying at the forefront of wastewater treatment advancements. Drawing inspiration from the design of an ATAC 44 SAF cell, the MBBR design seeks to maximise treatment capacity within the same tank size.

One of the remarkable advantages of the MBBR lies in its ability to treat double the loads within the same volume tank, as compared to traditional SAF units.

Despite these remarkable benefits, challenges such as retaining the media and preventing media loss from the cell have been carefully considered. The MBBR will operate as a down-flow unit, with the media supported on an 8mm holed plate to prevent media from exiting the plant in the effluent.

The technology is particularly valuable for temporary installations during maintenance operations, small reed bed projects, and replacing media in underground SAF plants. Its scalable design and minimal operational input requirements make it an ideal solution for various wastewater treatment applications, from ground water to raw sewage treatment.

Moving Bed Biofilm Reactor

Specifications



Tank Material	304 Stainless Steel
Tank Construction	Fully Welded Construction – suitable for above and below ground installation
Tank Colour	Self Colour or Painted (Standard Colour = 12-B-29)
Tank Connections	INLET – DN100 PN16 OUTLET – DN150 PN16 AIR – DN50 PN16 DESLUDGE/DRAIN – DN80 PN16 DESCUM – DN100 PN16
Dimensions	H = 3.86m W = 2.21m D = 2.94m
Media Type	Wardens Biomedia – Biotag 650
Media Surface Area	Total Surface Area = 832m ² /m ³ Protected Surface Area = 650m ² /m ³
Media Volume	8m ³
Total Working Volume	12.4m ³
Freeboard	500mm
Blowers	3 No. JDK-500 – Duty/Duty/Standby 0.45kW / 230V / 50Hz / Q=500l/min at H=200mBar per Blower
Diffusers	4 No. CoarsAir MaxAir 304L SS L = 610mm per Diffuser 0-56m ³ /hr per Diffuser
Access	Ships Ladder
Dry Weight	~3100kg
Control Panel	Control Panel LCP Included - 240V / 1Ph

