



# ASO<sup>®</sup> MBBR

## AEROBIC TREATMENT SYSTEM

### Moving Bed BioReactor (MBBR).....Aerobic Treatment for Soluble Organics

The **ASO<sup>®</sup> Moving Bed BioReactor (MBBR)** is a stand alone wastewater treatment system used for the reduction of soluble organics and nutrients. The key to the system is the plastic media which provides a suitable home for biological colonies of bacteria and protozoa to grow and flourish. The **ASO<sup>®</sup> MBBR** technology is a straightforward flow through design with no sludge recycling or backwashing is necessary. The media are contained within the vessel(s) and mixing energy is applied via coarse bubble aeration. If de-nitrification is necessary mechanical agitation will be applied in place of aeration. The **ASO<sup>®</sup> MBBR** is a flexible biological platform with easy future expansion— just add media.

Operational control parameters are relatively simple. All that is required is monitoring of DO (keep above 2ppm) in the reactor via continuous automated control; test the daily organic COD feed (proxy for BOD); and dip strip check the nutrient levels in system. The several installation options ensure maximum exposure of MLSS to the media. The bacteria adhere to the media while digesting waste from the plant effluent stream. The result is a resident population of biomass that removes BOD and COD efficiently.



ASO<sup>®</sup> MBBR Biological Treatment



**“Removes  
BOD, COD & Nutrients”**

### Typical Installation

The **AUQUIX<sup>®</sup>** complete integrated **ASO<sup>®</sup> MBBR** system package generally consist of an initial pre-screen, equalization/buffer tank, the **ASO<sup>®</sup> MBBR** vessel with dual blowers, nutrient feed station, dissolved air flotation unit and a flocculent feed station. The entire package is controlled with a state-of-the-art PLC with color touch-screen operator interface.

**COMPACT BIO SYSTEM  
MAX OPERATING RANGE  
SHOCK RESISTANT**

### Flexible Design

This flexible design feature allows for a small foot print at new installations or upgrades to existing systems. Importantly the **ASO<sup>®</sup> MBBR** technology may be adapted to BOD, COD and Nutrient removal applications.

Consult your **AUQUIX<sup>®</sup>** Client Systems Engineer for your specific biological needs.

