



ASO® Bio-Carrier

MBBR Media

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Efficient MBBR Media

The **ASO® Bio-Carrier** is an efficient media for moving bed biofilm reactor or MBBR aerobic or anoxic applications. The plastic surface is especially designed to provide a suitable home for biological colonies of bacteria and protozoa to grow and flourish. The technology provides for a cylindrical self-sloughing flow through carrier. The MBBR method of treatment requires no sludge recycling or backwashing and is a single pass system.

The **ASO® Bio-Carrier** is made of virgin high density polyethylene material and comes standard with a UV white finish. The outer hub ring has added thickness for superior crush resistance and strength. Interior striations provide additional surface area for the maximum biofilm capacity. And unlike square media, the cylindrical shape readily peel from each other and are not prone to stacking.

ASO® Bio-Carrier benefits are:

- Compact Bio System**
- Max Operating Range**
- Shock Resistant**
- Easy Care and Maintenance**
- Made in the U.S.A.**

MBBR Installation & Operation ... Aerobic or Anoxic

For aerobic treatment the installation starts with the placement of the coarse bubble aeration grid and retention sieve(s) within the basin or tank. If de-nitrification is needed, mechanical agitation will be applied in place of the aeration grid. Next, the **ASO® Bio-Carrier** are loaded at a fill fraction between 25% and 65% by volume. This ensures optimal carrier contact and mixing for maximum exposure of MLSS to the bacteria. The bacteria adhere to the **ASO® Bio-Carrier** media while digesting waste from the effluent stream. Aerobic operational control parameters are relatively simple. All that is required is monitoring of dissolved oxygen in the reactor (keep above 2ppm for aerobic treatment); test the daily organic COD feed (proxy for BOD); and dip strip check the nutrient levels in the system. The result is a resident population of biomass that removes BOD and nutrients efficiently. The **ASO® Bio-Carrier** is a flexible biological platform with easy future expansion, just add media.

ASO® Bio-Carrier	US Units	Metric Units
Material	High Density Polyethylene, virgin	High Density Polyethylene, virgin
Nominal Diameter	0.590" +/- 0.030"	15.0mm +/- 0.76mm
Nominal Height	0.375" +/- 0.030"	9.5mm +/- 0.76mm
Color	UV White, Black Available	UV White, Black Available
Active Surface Area	684.6 yrd ² / 1.094 yrd ³	626 m ² / m ³
Packaging	1.3 yrd ³ Super-sack	1.0 m ³ Super-sack
Weight	374 lbs / Super-sack	170 kg / Super-sack

