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. Note, 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 assures 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 (keep above 2ppm for aerobic treatment) in the reactor; test the daily organic COD feed (proxy for BOD); and dip strip check the nutrient levels in system. The result is a resident population of biomass that removes BOD and other nutrients efficiently. The ASO® Bio-Carrier is a flexible biological platform with easy future expansion, just add media.

Efficient MBBR Media

The ASO® Bio-Carrier is an efficient media for moving bed biofilm reactor 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 cylinder shape readily peel from each other and are not prone to stacking. Benefits are:

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

### ASO® Bio-Carrier

**US Units** | **Metric Units**
---|---
Material | 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
Active Surface Area | 684.6 yrd² / 1.094 yrd³ | 626 m² / m³
Packaging | 1.3 yrd³ Super-sack | 1.0 m³ Super-sack
Weight | 374 lbs / Super-sack | 170 kg / Super-sack