



ASO® Alpha!

Wastewater Treatment MBBR

US Patent #D827765

Small Wastewater MBBR System

The **ASO® Alpha!** moving bed bioreactor wastewater treatment system is a continuous flow design utilized for the reduction of soluble organics and nutrients. The key to the system is the US Patented media which provides a home for biological colonies of bacteria and protozoa to grow and flourish. The media are contained within the sub-grade serial tank system where they are immersed. Water flows via gravity from influent to effluent discharge. A gentle submerged mixer evenly applies the water to the media throughout the anoxic zone. Next a coarse air dispersal system aerates the media via a stainless steel grid for continuous application of oxygen to the bio-colony. Simple clarification removes solids for efficient operation of the system.

MBBR BOD & Nitrogen Removal

The **ASO® Alpha!** provides control of the system with **PEWE Command Control®**. Initial treatment begins with reduction of excess BOD from the wastewater. A level transmitter on the incoming EQ tank allows the PLC to then send water to the treatment plant as needed. The de-nitrification or anoxic stage is facilitated by a media agitating mixer. Next a quiet blower incorporates optimal dissolved oxygen levels while mixing the media during the nitrification stage. Final clarification is achieved by settling solids for later collection at the influent chamber with a timed recirculation pump.

Consult your **PEWE** Representative today.



ASO® Alpha! Better MBBR Only With PEWE

Many MBBR Applications

The **ASO® Alpha!** patented media technology provides reliable, cost effective, long-term wastewater treatment. Whether desert or arctic conditions, the **ASO® Alpha!** MBBR can be configured for the world's most remote places. Applications include municipal, residential, community, commercial and industrial.

Benefits:

- Applications flows; 5k to 30k GPD
- Ship by truck, rail or sea
- Simple MEP connections
- Serial MBBR tanks no problem to install
- Versatile for many effluent applications
- Easy to operate and maintain
- High energy efficiency

ASO® Alpha!

<u>MODEL</u>	<u>GPD</u>	<u>Min ft² ConfigA</u>
AL-05	5k	325 ft²
AL-10	10k	325 ft²
AL-15	15k	897 ft²
AL-20	20k	897 ft²
AL-25	25k	1152 ft²
AL-30	30k	1152 ft²

**ASO® Alpha! model design:
75 BOD 200 TSS Nil FOG Avg @ 60F**

