

## Wastewater Solutions for Climate Smart Food & Beverage Processing



Our patented worm-powered wastewater treatment process can be customized for larger volume clients. We design our Biodynamic Aerobic (BIDA®) System specifically to meet your volume and nutrient loading. When paired with our Control Unit, you have a fully automated wastewater treatment system. Control units are housed in a shipping container and the color and branding can be customized.

Screened process water from the facility enters an equalization tank. In the Control Unit, probes and sensors monitor water quality before it is dispersed evenly across the BIDA<sup>®</sup> System where it percolates down through layers of wood media with worms and microbes to capture and digest contaminants, crushed rock, and drainage basins. Out flows clean water ready for irrigation reuse in as little as four hours. The system generates worm castings or vermicompost, a nutritious fertilizer, shown to improve soil health, crop yield, water retention, and carbon sequestration.



Turn your wastewater into an asset by choosing BioFiltro, the cost-effective and climate smart solution.





## **Take Control of Your Wastewater**

Each Control Unit comes with a control panel that is built in house and listed under UL508A; and includes an HMI and BioFiltro's own control system and monitoring software, Intelligence of Worms (IoW). Accessible from both mobile and desktop devices, IoW provides verified users with historians and the ability to monitor the system, equipment, and water levels in real time. IoW can push alerts and troubleshooting guidance to assigned operators to facilitate. Through IoW, the system's operations are automated and remotely accessible.



Technical Specifications		
Treatment Capacity	Designed to meet project-specific volume, nutrient loading, and effluent targets	
Removal of Commonly	Biological Oxygen Demand (BOD)	80-99%
Regulated	Total Suspended Solids (TSS)	80-99%
Constituents	Total Nitrogen (TN)	55-95%
Treatment Process	Continuous batch process	
Typical Flow (Varies case by case)	BioFiltro's typical scope of work	
	Screened & Equalization Pressurized Tank Cont Wastewater	rol Unit BIDA Treated Water System Storage
Medias	<ul> <li>Wood chips and/or shavings of any species, with exception of cedar or eucalyptus</li> <li>Wood chips of 1-2 inches in diameter, with less than 10% of sawdust or fine particles</li> <li>Almond shells, walnut shells, or other low-value "woody" material may be suitable</li> <li>Replaced every 2-3 years for typical food and beverage processor</li> </ul>	
	Additional layers of crushed rock, geotextiles, and drainage pallets	
By-Products	Over time, about 50% of the woody material will have been converted into worm	
	castings, which can be used as a natural fertilizer	
	Control Unit 20'L x 8'W x 9'H	
Operating Dimensions	Concrete BIDA Width	60ft Maximum
& Weight	Concrete BIDA Length	1,000ft Maximum
	Clearance around BIDA	Min. 20ft, with at least 3 sides accessible
Site Requirements	90% compaction & gravel or concrete pad; ~3HP per 5,000ft2 of BIDA, 240 or 480V, $3\phi$	
Electrical Demand	Single-Pass (80%+ BOD Removal)	Double-Pass (95%+ BOD Removal)
	~0.0007 kWh/gallon treated	~0.0014 kWh/gallon treated
Optional Equipment	Automatic pH adjustment, climate control equipment and insulation, solar panels	

## **Contact us for a quote today!**

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