

A Can of Worms for Climate Smart Winemaking



By pairing our Control Unit with the Wiggle Room, BioFiltro delivers the ultimate can of worms. Our prepackaged system includes a solid separator, pH adjustment system, flow meter, equalization tank, pumps, PLC & HMI and a two-story BIDA® System, our patented worm-powered wastewater treatment process. Units are built in the US and clients can customize the color and branding.

Process water from the winery enters the Control Unit through its included solid separator before arriving to the equalization tank. Here, probes and sensors monitor water quality before it is dispersed evenly across the two floors of the Wiggle Room(s) where it percolates down through layers of wood media where worms and microbes capture and digest organic nutrients. Once treated, water gravity feeds out of the system and is 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.

Blend our earthy tones with your sustainability forward wines and choose worms for cost-effectiveness and a climate smart wastewater solution.





Take Control of Your Wastewater

Each Control Unit comes with a control panel that is built in house and listed under UL508A; an HMI, and Intelligence of Worms (IoW); BioFiltro's very own control system and monitoring software. 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	≤1,200 GPD for average winery (~10,000 cases), per Wiggle Room*	
	Biological Oxygen Demand (BOD)	90-99%
Nutrient Removal*	Total Suspended Solids (TSS)	90-99%
	Total Nitrogen (TN)	55-95%
Treatment	Continuous batch process to dose wastewater on top of the filter	
Treatment Media	~30 cubic yards of wood media per Wiggle Room ~1/2-2" Douglas Fir shavings or equivalent with minimal sawdust	
Operating Dimensions & Weight	Wiggle Room 20' L x 8'W x 11'H & ≤ 22,000 lbs Control Unit 8'L x 8'W x 9'H & ≤ 12,500 lbs At least three sides of the Wiggle Room need to be accessible	
Client Site Prep Requirements	90% compaction & gravel or concrete pad Concrete footings <u><</u> 50A, 240 or 480 V, 3PH	
Electrical Demand	0.0007 kWh/gallon treated when operating in parallel 0.0014 kWh/gallon treated when operating in series	
Optional Equipment	Solar panels for off-grid operations, climate control equipment and insulation	

Contact us for a quote today!