

Technical Specification Sheet

PurSpring® 10,000

Information	Bioreactor Vessel	Water Control Cabinet (WCC)	Electrical Control Panel (ECP)	Waterlock Assembly	Recirculation System (RS)
Dimensions :	39' 5"H x Ø11' 9 3/4"	60"H x 36"W x 16"D	36"H x 30"W x 12"D	2'-5"L x 2'-5"H x Ø4"	85"L x 85"W x 3'-4"H
Footprint :	140 ft ²	N/A	N/A	N/A	40 ft ²
Weight :	18697 lbs (transport) 77693 lbs (max. operational)	315 lbs	210 lbs	22 lbs	493 lbs
Materials :	Fiber Reinforced Plastic with internal corrosion protecting liner and external UV protecting coating	Stainless Steel (cabinet) PVC (internal water piping)	Stainless Steel (NEMA 4X Panel)	PVC	HDPE or PVC
Air pressure range :	- 12" W.C. till + 12" W.C.	N/A	N/A	- 8" W.C. till + 8" W.C.	- 8" W.C. till + 8" W.C.
Water pressure range :	N/A	60 - 75 PSI water source ¹	N/A	- 8" W.C. till + 8" W.C.	Max. 75 psi
Additional information :	<p>Color: RAL 7032 (pebble grey) Corrosion protection: Premium vinyl ester resin (ie: Corve 8301 or Heron 922 and blue pigment) External Topcoat: C-glass or synthetic veil with pigmented, isophalic resin and UV filter</p> <p>Wind load: max. 140 mph Seismic zone: 4 Foundation design: This standard is not part of the scope of supply. As guidance, the pad typically is a minimum of 18" (eighteen) >reactor (Ø) to allow for anchors.</p> <p>Provided with: Air Inlet Transition ductwork with a 30" diameter flange connection and includes one (1) one-inch coupling for air sampling or measurements. Exhaust Stack which includes two (2) one-inch couplings for process measurements.</p>	<p>Mounting: The panel should be mounted three (3) feet from the reactor in Class 1, Division 2 area. A pedestal is provided for mounting.</p> <p>Water Connections: ANSI 2" flanged inlet water connection to either potable or plant effluent water. Note: A junction box is included for all electrical connections to Electrical Control Panel.</p> <p>Provided with: Nutrient Dosing System including pump and tank. Panel Heater, 120VAC self-regulating unit.</p> <p>¹ Water pressure must remain constant, meaning fluctuating less than + / - 3 PSI.</p>	<p>Mounting: The panel should be mounted three (3) feet from the reactor in Class 1, Division 2 area. A pedestal is provided for mounting.</p> <p>Power connection: 480 VAC, 3-Phase, 60 Hz</p> <p>PLC model: Allen Bradley MicroLogix™ 1100</p> <p>HMI: To view control program settings, system alarms, system status and system data.</p> <p>Alarm outputs: System Running, System Failure</p> <p>Design: Complies with UL508; not NEC Class1, Div 2, Group D. Control of PurSpring® cycle, fan on/off/remote selector and recirculation pump only.</p>	<p>General: Two (2) Waterlock assemblies connect to the upper and lower bioreactor drains and prevent untreated air from bypassing the reactor and serve as a pH sampling location.</p> <p>Position on Bioreactor: Three (3) lower level and One (1) upper level drain outlets are provided to connect the Waterlock assembly. The lower level drains are located clockwise at 45°, 180° and 315° from the Air Inlet position (0°).</p>	<p>General: The permanent Recirculation System (RS) is used during start-up to speed up microbial growth and reduce the duration of the start-up period.</p> <p>Connections: The water outlet of the pump will be connected to the Water Control Cabinet (WCC). The power for the pump originates in the Electrical Control Panel (ECP).</p> <p>Pump specification: 480VAC, 3 Phase, 60Hz corrosion resistant pump</p>