

## SB7500 v18 FEATURES

Technology Description:	Floating, solar powered, circulation equipment for wastewater treatment and freshwater applications. Day/night operation on solar only by utilizing a battery to store excess daytime power for nighttime operation.
Flow Rates:	<i>Flow rates at full speed at 10 feet (3 meter) diameter</i>
Direct Flow Rate	1,500 gallons per minute, (5,700 Liters per minute).
Induced Flow Rate	6,000 gallons per minute. (22,700 Liters per minute).
Combined Flow Rate	7,500 gallons per minute. (28,400 Liters per minute).
Machine Size/Weight:	Assembled machine is 16 feet (5m) in diameter and weighs 850 pounds (380kg).
Materials of Construction:	316 stainless steel construction. Foam-filled high-density polyethylene (HDPE) floats. Thermoplastic rubber intake hose. HDPE strainer. Concrete mooring blocks are encapsulated in HDPE.
Drive System:	High torque, direct drive (no gearbox), low voltage brushless D.C. motor.
Power Supply/Control System:	<i>PV solar panels are protected from bird fouling with bird deterrent kit.</i>
PV Solar Panels	3 X 80-watt photovoltaic solar panels orientated in triangular pattern. On-board battery storage for day/night operation.
Electronic Controller	Digital solid-state controller, mounted in weather-tight (NEMA 4X) enclosure with externally fused disconnect. SCADA output through RS-232 serial communication (Modbus RTU), DB9 male connection point inside enclosure. Wireless options available, not included.
Wiring	Corrosion-resistant industrial cord with molded watertight connectors that are indexed to prevent improper wiring.
Rotating Assembly:	Removable assembly with easy access to motor and digital controller. Impeller handles 4-inch (10cm) spherical solids. Oil-filled (food grade) teflon freeze sleeve with o-rings, shaft. Rotational indicator on shaft.
Flotation System:	Three floats in triangular pattern each with an adjustable float arm for proper vertical positioning, total float buoyancy of 1,450 pounds (660kg).
Fluid Intake Assembly :	<i>Hose system bolted to bottom of structural assembly.</i>
Hose System	20 to 60 ft (6 to 18 meter) available in 24-inch (61cm) diameter X 20 feet (6m) sections.
Intake Type	Inverted bell shape strainer with 3-inch (7.6 cm) holes.
Intake Depth Adjustment	Can vary from 0 to 60 feet (0 to 18 m). No depth adjustment necessary for fluctuations in water level. Weight and flotation of the 'J' bend of hose keeps intake above sludge or bottom of pond at all operating depths. Strainer can be chained up higher if desired.
Anchoring:	(1) Two mooring blocks tethered together with SS chain and attached to structural member on unit or (2) Tethered to shore with SS cable.
Ice Protection:	Freeze sleeve allows shaft to continue rotating when ice is built up on freeze sleeve.
Minimum Operating Depth:	60 inches (1.0 m) with 24" diameter hose or 31 inches (0.8 m) with fixed horizontal plate.
Accessories Available:	(1) Supplemental Shore Power Kit, (2) Chemical Injection Kit, (3) Marker Light Kit
Life/Maintenance/Warranty:	Expect 25-year life, minimal maintenance. Limited 2-year parts and labor warranty. Limited 25 year photovoltaic module manufacturer performance warranty and 10 year motor warranty.