## **GENESIS SPECIFICATIONS**

PUMPING CAPACITIES: The aerator shall produce a dual spray pattern; a jetted geyser type center spray surrounded by a fan shaped pattern. Inner spray dimensions are \_\_\_\_\_\_ feet or \_\_\_\_\_\_ meters in height and \_\_\_\_\_\_ feet or \_\_\_\_\_\_ meters in diameter. Outer spray dimensions are \_\_\_\_\_\_feet \_\_\_\_\_ meters in height and \_\_\_\_\_\_ feet or \_\_\_\_\_\_ meters in diameter. The primary pumping rate of the unit is \_\_\_\_\_\_ GPM or \_\_\_\_\_\_ m<sup>3</sup>/hr and the secondary or induced circulation rate is \_\_\_\_\_\_ GPM or \_\_\_\_\_\_ m<sup>3</sup>/hr.



**FLOAT:** The float shall be made of seamless, one-piece high-density polyethylene plastic, filled with high density closed cell polyurethane foam. The float shall be capable of providing full floatation if the shell is punctured or cracked. The float shall have protective pockets for lights and handles molded into the bottom for easy handling. Metal floats or those with an internal void for additional ballast are not acceptable.

**IMPELLER:** The impeller shall be injection molded from a polyurethane isoplast material with a brass insert. All Aerating Fountain impellers and pumping chambers are interchangeable.

**MOTOR:** The motor shall be a \_\_\_\_\_\_ HP, \_\_\_\_\_ volt, \_\_\_\_\_ phase, 60 Hz oil-cooled, submersible motor operating at 3450 RPM or 50 Hz operates at 2875 RPM. The service factor shall be 1.15 except for 5HP 1Ph which shall be 1.00. The motor shall operate in a reservoir of Otterbine oil for continuous lubrication of bearings and for efficient transfer of heat through the motor housing wall. Top mounted motors and water-lubricated motors are not acceptable. The rotor shall be dynamically balanced. The winding (stator) wires shall be covered with class F rated insulation designed for complete immersion in oil. The motor shall be attached to a thermoplastic motor base plate. The motor shall be protected against oil and water leakage by a combination of rotary seals, stationary seals, and molded rubber "O" rings. The rotary seal shall be accessible without removing the motor base plate. Motor shall be serviceable.

**MOTOR HOUSING**: The external motor housing shall be a canister formed from deep drawn 316 stainless steel. The motor base plate shall be constructed of 420 Valox thermoplastic. A Valox boss will provide support and protection for the male electrical connector.

**FASTENERS:** All fasteners are to be metric and type 304 or 316 stainless steel.

**ELECTRICAL CONNECTORS:** The electrical connectors shall consist of a receptacle and a plug constructed of nonconducting polymers. The system shall create a vacuum seal when connected and have a threaded nut system as a backup. The plug shall have a keyway and be threaded into the motor base plate. The connector system shall be ETL and UL approved.

**UNDERWATER POWER CABLE:** The power cables shall be type SOOW specifically designed for underwater use. The conductors shall be flexible, stranded bare copper 12, 10 or 8 gauge, triple insulated to resist moisture, cracking, and softening. The outer jacket of the cable shall be a black CPE material. All underwater connections shall be vulcanized. Power cable shall be able to be furnished in unspliced lengths up to one thousand feet (305 m) if necessary.

**POWER CONTROL CENTER:** The electrical control components shall be mounted in a NEMA 3R enclosure with an externally mounted disconnect switch and a HAND - OFF - AUTO selector switch. The electrical system for units operating on 115, 208-230 volt, single or three phase, shall include a circuit breaker and a

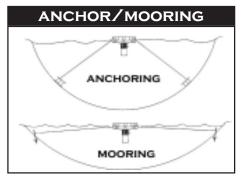
GFCI (Ground Fault Circuit Interrupter). To operate the GFCI on 208-230 volt systems a grounded neutral must be present or an optional control transformer may be supplied. The electrical system for units operating on 400 and 460 volt shall include fuses. Fuses, if used, shall be dual-element type, mounted in three pole fuse blocks, and with spring reinforced clips. For all units the motor starter shall be a combination magnetic full-voltage non-reversing type, 600 volts maximum, with bimetallic, ambient compensated overload relays. The electrical system shall include a lightning arrester, rated for a maximum of 100,000 amperes discharge for three phase and a maximum of 60,000 amperes discharge for single phase. The system will include a 24-hour timer.

## TESTING:

A. Safety - The aerator system shall be tested and approved as a unit. Separate component testing not allowed. Unit must be tested by ETL, ETL-C, CE, UL, or other accredited testing facilities.

**WARRANTY:** Warranty shall be five years.

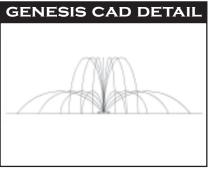
ACCEPTABLE MANUFACTURER: This unit shall be an OTTERBINE \_\_\_\_\_\_ Model, \_\_\_\_\_ horsepower manufactured by OTTERBINE/BAREBO, INC., 3840 MAIN ROAD EAST, EMMAUS, PA 18049 U.S.A. PH: (610) 965-6018. www.otterbine.com



Anchoring/mooring the Otterbine Unit is simple. Each owner's manual provides the steps necessary to securely place your unit in the waterway.



U.S. Package: Unit, NEMA 3R Power Panel (with timer, GFCI (except 460V), breaker, surge arrestor, HOA switch and thermal overload protection), 50 ft. of SOOW cable. Int'l Package: Unit and 15m of cable (no cable on CE).



Line drawing of the 3HP Genesis unit, for a more detailed diagram of this and other models visit www.caddetails.com

## **GENESIS SPECIFICATIONS**

HP	Voltage Phase/Hz	Motor RPM	Running Amp Draw	Spray Dimensions in Ft. (m)		*Pumping Rate	Min. Oper.		laximum able Runs		**Ship Weight 60Hz-Ibs
				Inner Outer		GPM/m3/hr	Depth	(approximate length)			50Hz dim. kg
				Height/Width	Height/Width			12awg	10awg	8awg	
1	115/1/60	3450	14	6ft/8ft	3ft/24ft	150 GPM	30"	n/a	175ft	275ft	150 lbs
	230/1/50	2875	7.2	2.1m/3m	1.2m/7.6m	32.4 m <sup>3</sup> /hr	75cm	117m	186m	297m	68 kg
	230/1/60	3450	8.3 - 7.5	6ft/8ft	3ft/24ft	150 GPM	30"	385ft	615ft	985ft	150 lbs
2	230/1/50	2875	12.6	3.4m/4m	1.5m/10.7m	45.3 m <sup>3</sup> /hr	75cm	67m	107m	172m	68 kg
	230/1/60	3450	13.7-12.4	10ft/11ft	5ft/32ft	210 GPM	30"	210ft	340ft	535ft	150 lbs
3	230/1/50	2875	13.5	4.2m/5m	1.7m/13.7m	59.3 m³/hr	75cm	n/a	3101m	158m	70 kg
	230/1/60	3450	15.5 - 14	15ft/20ft	6ft/50ft	275 GPM	30"	n/a	315ft	500ft	155 lbs
	230/3/60	3450	9.7 - 8.6	15ft/20ft	6ft/50ft	275 GPM	30"	380ft	610ft	965ft	155 lbs
	400/3/50	2875	4	4.2m/5m	1.7m/13.7m	59.3 m <sup>3</sup> /hr	75cm	419m	671m	1067m	70 kg
	460/3/60	3450	4.3	15ft/20ft	6ft/50ft	275 GPM	30"	1600ft	2525ft	4000ft	155 lbs
5	230/1/60	3450	23	18ft/24ft	7ft/62ft	400 GPM	30"	n/a	n/a	370ft	160 lbs
	230/3/60	3450	15.1 - 13.4	18ft/24ft	7ft/62ft	400 GPM	30"	235ft	375ft	590ft	160 lbs
	400/3/50	2875	4	4.2m/5m	1.7m/13.7m	59.3 m <sup>3</sup> /hr	75cm	239m	389m	610m	73 kg
	460/3/60	3450	7.2	18ft/24ft	7ft/62ft	400 GPM	30"	925ft	1475ft	2350ft	160 lbs
*Induced circulation is 10x the pumping rate **Package includes unit, cable and power control center, 50Hz applications do not receive power											

panel. 415 and 575 volt units available upon request. Pumping rates may vary due to voltage, elevation and relative humidity.