

SERIES 3

Wind/Electric Aerator/Mixer

The SERIES 3 is the energy-efficient, environmentally friendly answer to aeration and mix needs, and a key element in the Accel-o-Fac® and Aero-Fac® advanced wastewater treatment systems. In wastewater treatment applications the SERIES 3 can literally pay for itself in energy savings alone.

THE SERIES 3 is a unique windpowered aerator/mixer unit used for wastewater treatment. The technology has been in existence for over 30 years and provides another means of re-aerating outdoor impoundments with very little associated energy cost and little operation or maintenance requirement. The SERIES 3 significantly increases residual dissolved oxygen levels in specific wastewater applications, but doesn't use conventional aeration techniques (neither surface splashing nor diffused air). The deep-mix capability and large area of coverage provides a zero-to-low energy method to treat wastewater and other water quality problems summer and winter. In wastewater treatment, the SERIES 3 "optimises" the overall biological conditions in facultative lagoon-based systems, including increasing typical DO levels, thereby boosting performance and solving numerous operational problems such as odour, shortcircuiting, overloaded conditions, sludge buildups, etc. all with zero-to-low energy costs and virtually no maintenance. (See Accel-o-Fac® and Aero-Fac® brochures for complete details.)



The SERIES 3 can often replace conventional expensive aerators or diffusers, as well as downsizing cells or allowing higher organic loadings than non-aerated cells — all without significant operating costs.

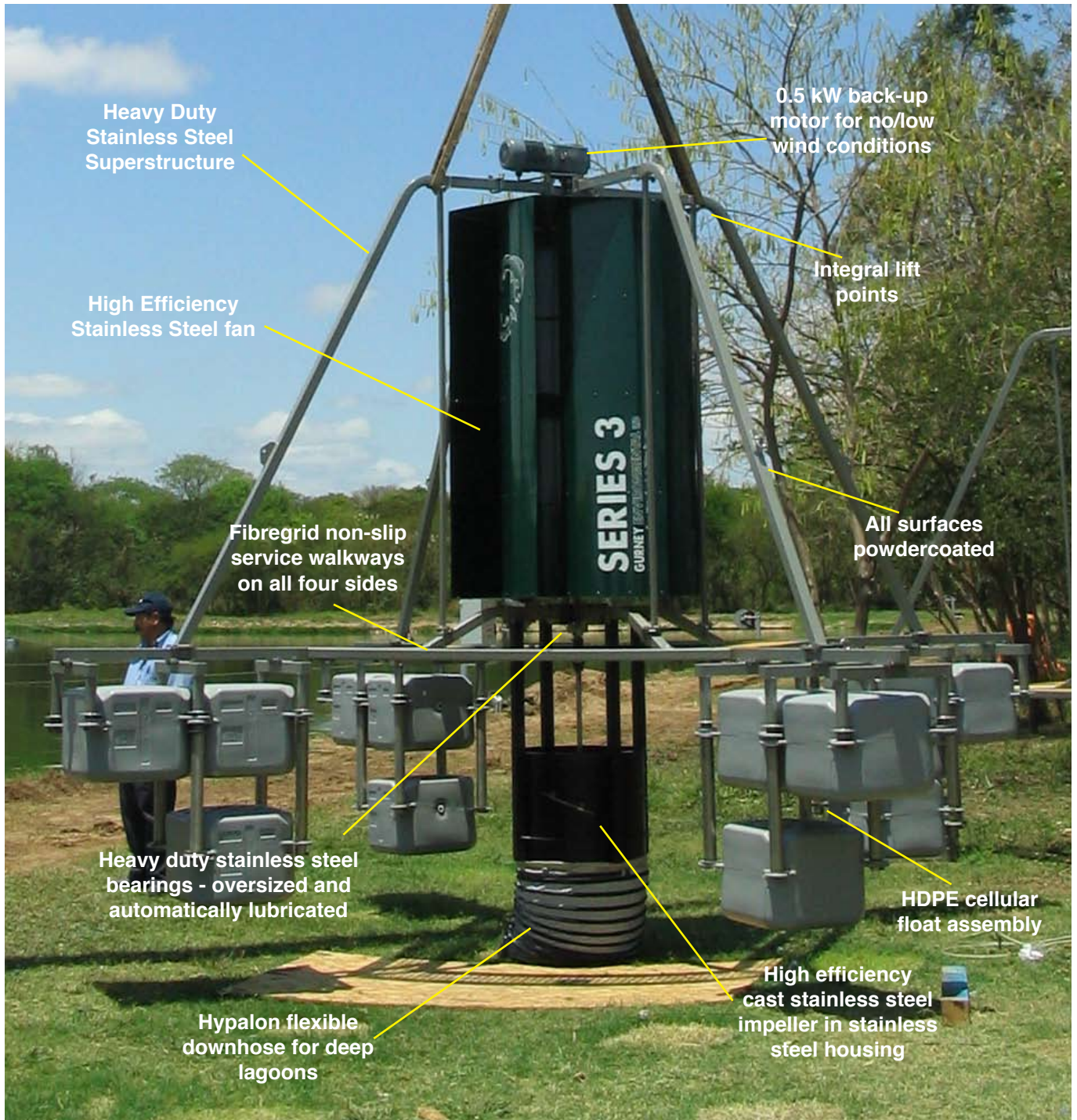
The technology has proved itself in a variety of climates and applications worldwide over 30 years assuring reliable performance. The efficient design requires a minimum wind speed of only about 5 mph 65–75% of the time to alleviate water problems, but can withstand strong winds. An optional 0.55 kW electric backup Motor Kit is available activated by wind speed. Cost savings in electricity alone can often pay for entire installations within 2–3 years.

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SERIES 3

MATERIALS: All stainless steel construction with powder coated surfaces. Floats are UV resistant HDPE material.

BEARINGS: Heavy-duty stainless steel automatically greased bearings.

DIMENSIONS: H- 3.5 m, W- 5.2 m. (Subject to change without notice.)

WEIGHT: Shipping — 900 kg, shipped in one crate, knocked down.

OPERATING DEPTH: Minimum— 70 cm. Maximum—any practical depth with downhose option.

ENERGY REQUIREMENT: none — wind power, with useful range from 5–70 mph. Constant wind not needed for effectiveness (70% above 5 mph typical).

EFFECTIVE COVERAGE AREA: Application dependent. Wastewater treatment: primary cell — up to 1.6 ha. Secondary cells — up to 4 ha. Consult Applications Engineering Department for details.

OXYGEN TRANSFER RATE: NOTE: SERIES 3 increases residual DO but not through conventional mechanical aeration techniques (surface splashing or diffused air); hence, the standard clean water oxygen transfer test (CWTR) is not an appropriate method of measurement. When installed within design specifications as provided by GEL Applications Engineering, SERIES 3 aerator/mixers should maintain DO levels required for predictable BOD, etc. reduction.

REQUIRED MAINTENANCE: Periodic visual inspection. Minor lubrication, replacement of grease pack. General cleaning and inspection of hardware on occasion, based on application.

ESTIMATED OPERATION LIFE OF UNIT: 20+ years. (subject to maintenance, acts of nature, etc.)

WARRANTY: 1 year limited parts warranty. See warranty statement for complete terms and conditions.