

Aqua Innovations Ltd Battery Powered Catamaran Workboat

The effects of climate change and how we manage our carbon footprint is a major concern worldwide, reducing emissions from diesel engines by introducing battery powered electric cars is acknowledged as a step in the right direction.

As the efficiency of batteries continues to improve, the option of battery powered workboats, supplemented by small generators, particularly for aquaculture becomes achievable. On most sites the distance from shore base to cages is modest and well within the range of battery power, on site, cranes, winches ect can be operated by electro / hydraulic power packs, driven by a generator with surplus energy charging batteries. In this way the generator is always working under load and is most fuel efficient. Shore power can charge batteries overnight if necessary, the hull form and deep keels allow the workboat to be beached at high tide with access to the underwater hull at low water for painting, anode changing ect.

The introduction of battery powered rudder propellers allows a complete redesign of conventional workboats eliminating many features which require regular maintenance and work on a slipway. The catamaran hull form will require significantly less power to achieve 8 knots with corresponding savings in fuel and maintenance.

The length and beam can be designed to suit any application without changing the basic hull form, the benefits are the ability to produce standard, cost effective, fuel efficient workboats.

The advantages include:

- Novel modular construction at any fabrication yard and assembly afloat.
- Catamaran hull, fuel efficient, stable, sea kindly working platform.
- No conventional engine room, batteries in each hull, generator(s) where convenient.
- Rudder propellers mounted through the deck, removable afloat for maintenance or exchange.
- Annual painting, anode changing from a beach, never any need to slip for maintenance.
- No skin fittings below the waterline, no leaks from prop shaft seals, choked filters ect.
- Operationally efficient, clear deck space, half solid bulwarks, mooring bollards accessible.
- Heavily built, min 8mm hull plating and deck, heavy duty fendering and push bows.
- Standard design / components, but can be scaled / modified to suit any application.
- Wheelhouse / accommodation fitted out as required.

For more information on the design please contact us: 07903 039494

