'Glops' flexibility put the stops on pollution

Ecoceane aluminium catamarans were designed from the start to be integrated pollution clean-up vessels.

THE LATEST VERSIONS of Ecoceane's catamarans, the Workglop range, are an extension of the original pollution clean up vessels but they are much more flexible and can double up as general supply boats, even having a crane.

Barrie Dannenberg of IAC UK explained that Ecoceane aluminium catamarans were designed from the start to be integrated pollution clean up vessels, able to deal with both oil spills and collect solid waste.

However, the original Cataglops are 6m to 9.9m long and road-trailer transportable, so suitable for ports, harbours, estuaries, and other calm waters. The 9.9m version has an inboard diesel engine making it suitable for certification for oil spill clean up work. These Workglops can also take on open estuary work, coastal intervention and offshore duties, being able to handle force six wind conditions.

However, the Workglop range goes well beyond this first remit. These new designs run from 10.6m to 13m, and are not just pollution clean up craft but can also stand as multi-purpose supply vessels, able to run 1,000 nautical miles without support and stay on station for long periods.

The Workglops have a crane, a fire protection system, and can be supplied with a bow landing platform. They can also be set up for grey water pump out and are able to carry diesel to supply offshore facilities.

Ecoceane claims its method of spill clean up is far more efficient than others and can work in harsher sea states. The Workglop simply sails into the spill and sucks in the oil, whether it is moving forward or astern or is stationary. It can get there quicker than other systems in practical terms, as equipment does not have to loaded and thus little preparation in port is needed.

All of Ecoceane's 'Glop' vessels have a funnel arrangement with a boom system to allow a wide area of oil to be sucked in. The turbine effect of the propeller sucks oil in, through a mesh basket that traps solid waste, and into a storage tank without pumping.

Water is sucked out of the bottom of the tank as oil comes in through a venturi, so there is no emulsification of the oil, which can be pumped ashore after the clean up.

In case of a major spill, hydrocarbons can be pumped into floating flexible tanks or into a bunker barge, allowing continuous, fast and efficient spill clean up.

The solid waste trapped in the basket is lifted by a hydraulic mechanism and tipped into a deck container. Workglop has a big sister, *Catamar*, an 18m version, and there are designs for a 25m as well as a 40m vessel suitable for arctic use.

Eight Cataglops were sold into the Gulf of Mexico as part of the response to the Deepwater Horizon incident, and the bigger 18m Catamar was sent there for three months.

'Clean cleaner' should make ports greener

The Sea Cleaner 400 is based on an easily driven catamaran hull with the standard construction in aluminium.

SWISS COMPANY Grove Boats has introduced a debris clearing boat that is claimed to have zero emissions. The SeaCleaner 400 features electric propulsion and has been designed for operating in ports, marinas and swimming areas.

With over 20 years experience in the development of solar electric boats for passenger transport and aware of the increasing volume of floating waste, particularly in ports and bathing areas, Grove Boats launched its Sea Cleaner 400 as a clearing boat that runs on electric power supplied by solar energy. As Grove Boats describes this new vessel, it is a "clean, cleaning boat".

UNDER DEVELOPMENT

While navigating in a chosen area, this vessel collects floating waste such as plastics, polystyrene, algae, wood, etc and stores it on board in a dedicated container which can then be lifted ashore. A mechanism for the skimming of hydrocarbons is under development and will be available as an option.

The Sea Cleaner 400 is based on an easily driven catamaran hull with the standard construction in aluminium. Grove is offering the option of environmentally friendly and recyclable construction materials such as a laminate constructed from flax, with cork used as the sandwich material, adding to the environmental credentials.

The Sea Cleaner 400 is 4m in length with a beam of 2m and a draft of just 0.4m. Its compact size allows it to gain access to tight corners in harbours, the sort of places where debris can collect. The empty weight of the vessel is 420kg.

The power comes from a pair of electric motors that are rated at 1.6kW each, driving fixed propellers. These motors are powered from a bank of lithium or lead batteries which can be charged overnight from shore power and which are topped up by a solar array panel mounted on the T-Top over the helm, which can supply 600W. This gives the Sea Cleaner an autonomous full day of operation.

Amongst the benefits claimed by Grove Boats are that the Sea Cleaner is highly manoeuvrable and easy to handle, it projects a 'green' image, and it is silent with very low maintenance requirements. It is also very low cost to operate, with no fuel required.

The first of these Sea Cleaners is scheduled for launch early this year.

By DAG PIKE