

Specialise in providing a range of marine ecological survey, analysis and consultancy services for marine development and activity in both the coastal and offshore zones

MACV 'Solea' Hovercraft



The MACV 'Solea' is a twin engine purpose-designed, ultralight Coastal-Pro hovercraft, providing a high specification, multi-use survey platform for a variety of intertidal and coastal requirements.

Designed specifically for undertaking marine ecological surveys, the *MACV* 'Solea' has a wide range of applications including:

- ✓ Phase I and II habitat surveys
- ✓ Intertidal sandbank/mudflat access
- ✓ Seagrass monitoring surveys
- ✓ Aerial survey (drone) support
- ✓ Asset inspection/assessment
- ✓ Crew transfers in shallow/tidal environments

OceanEcology provide the MACV 'Solea' for charter as a fully functional survey hovercraft with pilot, crew and experienced ecologists, as required.





MACV 'Solea' Hovercraft

Technical Specification

Hull construction	Kevlar reinforced fibreglass, landing skids & perimeter aluminium strip.
Fan protection	2"/50mm guard to front of duct.
Dry Weight	Approx. 770lbs/350kgs
Payload	In excess of 660lbs/300kgs on water
Seating	Three/four persons.
Length	13' 8"/4.30m (off cushion)
Width	7' 0"/2.10m (off cushion)
Height	5' 0"/1.50m (off cushion), 5' 10"/1.75m (on cushion)
Thrust Engine	Briggs & Stratton air cooled, 50bhp engine, electric start.
Lift Engine	Briggs & Stratton 13.5bhp air cooled engine, electric start.
Buoyancy	Floats & starts on water, positively buoyant when swamped.
Noise	74dBA (25m) at cruising speed. Maximum 78dBA at full power.
Fuel Capacity	7 Gallons/35 litres.
Range	Approx. 100miles/160km.
Max. Speed	Approx. 35mph/56kmh, depending on surface/wind/load.
Cruising Speed	Approx. 25mph/40kmh, depending on surface/wind/load.
Skirt	Neoprene coated nylon in 68 replaceable segments.
Lift	Approx. 10" (25cm), 8" (20cm) obstacle clearance.
Thrust Fan	6 6Z Blades, 1100mm duct, 93m/s tip speed.
Lift Fan	7 3Z Blades in sound deadened compartment.
Lighting	Yellow beacon, navigation lights, all round white light, LED deck light.
Battery/Electric	Twin 12V batteries, marine grade wiring, IP66 Switching.
Instruments	GPS Analogue display Speedo, two tachometers, hour meter.
Water Ingress	Two drain plugs to void interior, high capacity bilge pump.
Certification:	Statement of compliance with 2014 HCoP. CE plate of compliance with 2004/108/EC.
Safety Equipment	Horshoe lifebuoy, first aid kit, thermal blankets, flare kit, safety lines, rada reflector, mud escape system, anchor & scope, paddle/boat hook, mooring line and hand held torches.

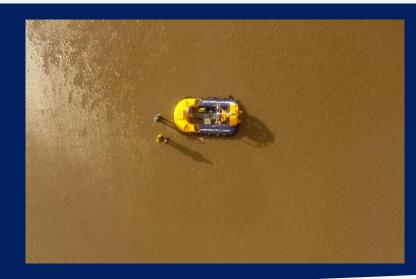
Hovercraft Code (2015) Compliance

In order to comply with the Hovercraft Code (2015) and be fully prepared for commercial marine operations, the *MACV* 'Solea' has been fitted with a number of safety and technical items including:

- ✓ Strengthened hull layup,
- ✓ Kevlar reinforced floor.
- Thrust engine 50bhp engine to ensure maximal power and ability to get over the hump (standing start on water) when at capacity with survey samples.
- ✓ Fuel system internal tank with a removable 33 litre tank and metal fuel lines.
- Steering modified to allow rudders to be locked amidships to maximise manoeuvrability,
- Bilge pump bilge pump and manual pumping system,
- ✓ Electrics IP66 switching,
- Lights yellow beacon, navigation and all-round white light as standard. LED duct mounted deck/search light,
- ✓ Navigation Garmin Chart Plotter (S/H CP180i,
- ✓ Communications fixed Horizon marine VHF; and
- ✓ Battery twin battery system with isolator switch

Aerial survey (drone) support

The MACV 'Solea' is able to provide our drone pilots with access to areas impossible to reach on foot or boat. This enables us to rapidly collect high resolution aerial imagery of intertidal habitats found on the extreme lower shore only exposed during low tide for very limited time periods.



If you would like further details or a quotation please contact the OceanEcology team at info@ocean-ecology.com.





