



AQUATRUCK: WORLD-LEADING HDPE WATERCRAFT

Designed for the Southern Ocean and built in Tasmania, our vessels are made from High Density Polyethylene (HDPE), a next-generation boatbuilding material with unparalleled safety and durability properties. All our boats have incredible longevity, will not corrode, are incredibly strong, buoyant, virtually maintenance-free, and built to work.



High Density Polyethylene (HDPE) is the next generation boat-building material, with unparalleled safety and durability properties.

HDPE outperforms alternative watercraft alloy or composite materials:

- Personnel safety: superior impact and vibration absorption reducing personnel fatigue
- Incredibly durable and impact-resistant
- Positive buoyancy offering premium stability
- No corrosion, electrolysis, or delamination
- UV stable and fouling resistant
- In-situ repairs with no hot works required
- Lasts up to four times longer than alternative materials with comparable gross weight

MATERIAL PROPERTIES

Comparison of the properties of high-density polyethylene (HDPE), and alternative tactical watercraft hull types.

	Aluminium	Fiberglass	Carbon Fibre	HDPE
Toughness	• •	•	•	• • •
Corrosion / Electrolysis	•	• •	•	• • •
Maintenance Intervals	•	• •	• •	• • •
Processing / Machining	• •	•	•	• • •
Repairability	•	•	•	• • •
Whole of life costs	•	• •	•	• • •
Recycling	• • •	•	•	• • •
Strength	• •	• •	• • •	• •
Weight - Hull	• •	• •	• • •	• •



World Champion axeman, David Foster OAM took a swing at HDPE. Using similar force and the same equipment the aluminium section buckled significantly and came close to tearing. Apart from scuff marks, the HDPE was totally undamaged.



Factors incorporated into the VSS include:

- Design systemic design delivers exceptional stability and seakeeping capability
- Material excellence incorporating next generation HDPE
- Construction Sentinel Boats quality assured craftsmanship.
- Invigilation superior monitoring, observation, and cloud based capabilities



AQUATRUCK®

The Aquatruck is the ultimate workboat, built for maximum reliability in extreme conditions.

Its expert design and construction from next-generation HDPE material provides superior stability, rideability and handling. Our customers are guaranteed a reliable vessel with significantly reduced operating costs, improved operational availability, and lowered operator risk through improved fatigue, vibration, and exertion characteristics.

Our workboats are so durable, the first boat we built almost 30 years ago has not yet reached end of life and remains in full commercial survey.

This makes the Aquatruck the vessel of choice for defence, border control, public safety, fisheries, and parks organisations around Australia.





SEARCH & RESCUE

From patrol boats to rescue vessels, Sentinel Boats range of watercraft can be found right across the Search and Rescue sector.

Sentinel Boats vessels are currently in operation around Australia, by the Queensland Police Service, Western Australian Department of Fire and Emergency Services, Tasmanian Police Service, and Parks Victoria - Marine Science and Research.





Aquatruck 2.8

The Aquatruck 2.8 is an ideal flood rescue vessel for use in rapidly rising floodwaters and under emergency situations.

The stability of this vessel is unreal. When fully loaded and has been tested with 10-men while it maintained flotation. The vessel is rated to 10HP and is surveyed for 2 passengers. Unloaded, it is fast and responsive. With a draught of only 0.25m, the Aquatruck 2.8 has been designed for emergency flood water situations where stranded communities need rescuing in family groups. Weighing only 85kg under commercial survey and with 22 vessels capable of fitting into a standard 20-foot container, the Aquatruck 2.8 makes an ideal solution for bulk storage in communities prone to flash flooding and mudslides.

Model	Aquatruck 2.8	
Class	ANS Commercial Tender	
Passengers	1+2 crew	
Length (OA)	2.8 m	
Beam	1.55 m	
Draught	0.25 m	
Engine	10 HP Outboard	
Fuel	25 L	
Speed	10 knots	
Options	Lifting lugs, removable seats, oars	





Aquatruck 5.5

The Aquatruck 5.5 is a proven performer as an inshore patrol vessel and has been put to extensive use by Queensland Police, Northern Territory Police Fire and Emergency Services, Tasmanian Inland Fisheries Service, Birkenhead Point Marine, and Rufus King Fisheries. The reliability of vessel performance is exceptional, and the use of HDPE material increases operational availability as there is little to no maintenance or repair required. Ten vessels were ordered by Queensland Police and delivered in 2018 and are used at remote locations along the Queensland border, as far north as Thursday Island.

Deck layout options include aft, centre, or side console, with or without canopy, and can be further enhanced with custom storage lockers and a dive door.

Model	Aquatruck 5.5
Class	NSCV 2C
Passengers	2+ 2 crew
Length (OA)	5.7 m
Beam	2.47 m
Draught	0.42 m
Engine	2x 115 HP Outboard
Fuel	150 L
Speed	38 knots
Options	Aft / centre / side console, canopy, gun mounts, gun lockers, bow boarding step, stokes litter





Aquatruck 7.0

The Persephone was originally designed and supplied as a hydrographic survey vessel with a comprehensive cockpit, galley, and generous cabin layout. The vessel is also ideal as an offshore patrol vessel. The vibration-absorbing HDPE hull not only ensures that personnel remain fit over long journeys but also that sensitive equipment is not subject to unnecessary loads and forces.

The cabin layout is customisable, and features include the provision of hard-mounted survey equipment, computer workstations, map/planning table or bench, lounges or additional seating, freshwater, and sullage tanks. Craneage may be installed on the aft deck and other options include gun turrets, dive doors, moon pools, dog transportation, stokes litter, or Jason's Cradle for personnel recovery.

As with all Aquatruck vessels, the HDPE hull offers no corrosion or electrolysis, is extremely stable and smooth in the water, and has a 50-year of UV protection.

Model	Aquatruck 7.0	
Class	NSCV 2C, Workboat	
Passengers	2+ 4 crew	
Length (OA)	6.95 m	
Beam	2.43 m	
Draught	0.51 m	
Engine	2x 150 HP Outboard	
Fuel	400 L	
Speed	35 knots	
Options	Fixed survey equipment, work stations, map desk, gun mounts, gun and ammunition lockers, dive doors, moon pools, dog transportation,stokes litter or jason's cradle, water tanks, sullage tanks	





LANDING CRAFT

Sentinel Boats has developed a highly configurable landing craft with a deck carrying capacity of 6,000kg.

Capable of carrying a range of vehicles, the vessel can also be fitted with oil spill response or debris recovery equipment.

The HDPE construction material allows for hard beaching to occur and with a draught of just 300mm, this is a go-anywhere vessel.

"The HDPE material has proven to be the perfect choice for our oil recovery operations, delivering a fast, safe, stable platform that has required no maintenance over nine years' of service.

Since delivery, we have had next to no contact with **Sentinel Boats** as everything works, and the vessel still presents as new."





Aquatruck 9.0

Designed as a strong and robust landing craft coupled with oil spill response recovery, the Aquatruck 9.0 is a testament to the flexibility and adaptability of the Aquatruck range. The vessel has a 2,500kg deck loading capacity, capable of carrying a Landcruiser or smaller vehicles, quad bikes, and trailers.

The landing ramp is opened and closed using hydraulic control and the draught of the vessel is only 0.3m. The HDPE material used in the Aquatruck construction is capable of hard beaching and can withstand placement on rocks, allowing for go-anywhere operations to access remote locations or recover from difficult terrain.

The vessel can also be fitted with an oil spill or debris recovery apparatus. The first vessel was completed with a removable oil skimming device complete with a 2,500L collection tank and used as an oil response vessel. The Aquatruck 9.0 can also be fitted with a crane for recovering heavier items from the water.

Standard military options also include gun mounts, gun and ammunition lockers, dive doors, moon pools, dog transportation, stokes litter, or Jason's Cradle.

Model	Aquatruck 9.0	
Class	NSCV 2C	
Passengers	2+ 4 crew	
Length (OA)	9.0 m	
Beam	3.44 m	
Draught	0.30 m	
Engine	2x 150 HP Outboard	
Fuel	500 L	
Speed	32 knots	
Options	Aft/side console, canopy, oil spill or debris recovery, crane, gun mounts, gun lockers, gun and ammunition lockers, dive doors, moon pools, dog transportation, stokes litter or jason's cradle	







SUPPORT CRAFT

Sentinel Boats range of vessels includes Support Craft for civilised harbour and marina roles within the defence and security sector.

These vessels are nominally fitted with lifting capacity and towing features, and serve as general workboats.

Stability of vessel is paramount in lifting operations and HDPE construction material is ideal for providing the safest platforms. Support Craft, with 3m elevated work platforms fully extended, do not need outriggers to stabilise the vessel.





Aquatruck 7.5

The Aquatruck 7.5 showcases unprecedented stability – using a 3m elevated work platform on the foredeck that, when fully extended, does not require outriggers on the vessel. The Aquatruck 7.5 was designed and delivered as a customised vessel to port authorities, for on-water inspection of vessels, harbours, and port infrastructure.

These vessels can be supplied with or without the elevated work platform and can incorporate other useful equipment for port operations, such as oil and debris booms, and customised seating for transfer of personnel.

Model	Aquatruck 7.5	
Class	NSCV2C Restricted	
Passengers	2+ 4 crew	
Length (OA)	7.78 m	
Beam	3.49 m	
Draught	0.53 m	
Engine	2x 40 HP Outboard	
Fuel	400 L	
Speed	10 knots	
Options	Elevated work platform, oil and debris booms, stokes litters, custom seating plans	





Aquatruck 8.8

Born of a need to provide crew transfer vessels with lifting capacity for the Southern Ocean, the Aquatruck 8.8 is a powerful blue water vessel. It has a simple and rugged layout, making it ideal for transferring a small crew with lots of equipment. The cabin layout is large enough for all crew to be out of the weather, however small enough and aft positioned to maximise foredeck space.

The 500mm vibration-absorbing HDPE hard collars create a smooth ride, provide stability at rest, and do not puncture like typical soft collared vessels.

The Aquatruck 8.8 is optioned with either outboards or jets, towing post, deck winch, and crane.

Model	Aquatruck 8.8
Class	NSCV 3D
Passengers	2+ 4 crew
Length (OA)	8.8 m
Beam	3.0 m
Draught	0.57 m
Engine	2x 150 HP Outboard
Fuel	150-400 L
Speed	35 knots
Options	Outboards / inboard jets, towing post, winch, crane



