

Over ProZero & Van Dyke Marine

De ProZero-serie van Tuco Marine staat voor toonaangevende kwaliteit en maatwerk in high-performance werkboden en crew transfer vessels. Elke boot wordt ontworpen op basis van uw operationele eisen, met een doordacht design en bewezen technologie. Het resultaat: maximale snelheid, brandstofefficiëntie en veiligheid, zelfs onder de zwaarste omstandigheden.

Van Dyke Marine is vertegenwoordiger van ProZero in de BeNeLux en begeleidt klanten volledig: van eerste advies en ontwerp tot levering, onderhoud en service.



VAN DYKE MARINE

Vertegenwoordiging in de
BeNeLux van

PROZERO
WORK BOATS

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PRO:ZERO

Fast Boats for Professionals



PROVEN TECHNOLOGY

PROZERO BOATS



At Tuco we specialize in fast boats for professionals. Every day we work to set the standard in innovative lightweight maritime constructions and supreme material technology. We strive to deliver durable solutions that reflect and support the development of a safe, sustainable and prosperous future in maritime logistics.

Customers can rely on Tuco as a loyal partner that draws on intimate market knowledge, expert craftsmanship and years of experience with successful deliveries to ensure more than just customer satisfaction.

#weloveworkboats



PRO:ZERO

The ProZero series is a range of fast boats designed specifically for professional use. They are built to endure the harsh conditions of operations on open sea while providing the operator with an ideal work environment.

With advanced design and sophisticated application of composites materials, the ProZero series offers the customer significant commercial benefits and enhance overall vessel performance and energy efficiency. The ProZero range covers Offshore, Workboats and vessels for Security & Defense.

#weloveworkboats

PRO:ZERO



HISTORY OF TUCO'S WORKBOATS

CONSTANTLY EVOLVING

The ProZero vessels represent the cutting edge of a development process that constantly aims to balance technology innovation, customer demands and industry trends.

This process took flight in 2002 when Tuco launched the first vessels of the now superseded AluGuard series. These vessels have proven themselves over years of service and have benefitted many satisfied customers. Furthermore, our key proficiencies have been tried, perfected and validated through contributions to several large-scale, both national and international, development projects. The technical, empirical and commercial insights and accomplishments gained during many years in the business have been condensed and applied in our state-of-the-art ProZero vessels.



PROVEN TECHNOLOGY

The ProZero series of workboats is the quintessence of years of experience. Building on well-consolidated technology and Tuco's long and productive history in the industry, the ProZero workboats provide unrivaled safety, performance and comfort.

We are the trusted supplier of many customers and have delivered vessels to both private organizations, shipyards and governmental institutions.



Efficient and proven hull
Matchless strenght-to-weight and seaworthiness. Shaping first-class hulls with precision technique and cost-effective production.



PRO:ZERO



PROVEN TECHNOLOGY

PRO:ZERO



7.5M FRC MRK3

7.5M FRC MRK3

The 7,5 m FRC is a third-generation design built around the already well proven ProZero 7,5-meter Fast Rescue Boat. The first two iterations of the 7,5-metre FRC design have been developed and tested thoroughly during the ProZero development project for which Tuco received funding under the Horizon2020 SME Instrument programme.

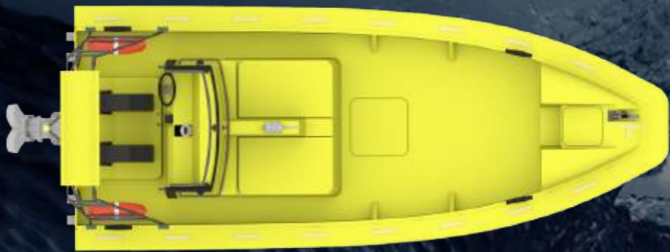
This development project ended in 2018, but Tuco Marine has continued to refine the project results and implement them in the ProZero series. The third generation FRC represents the highest level of refinement yet.

The carbon fibre materials technology secures ultra-high levels of strength and durability at a very low structural weight. The new design presents a very large deck area which will accommodate large payloads or up to 16 persons. New bow and fender configurations have been added for improved safety during transfer operations across the bow.

As standard the FRC features a single water jet installation, but twin water jet installations are available upon request.



Low weight
Cutting weight and adding value.
Low weight design lifts the value chain.



Design: 2019 | 5000-01-19
Length overall, approx.: 7.7 m
Beam overall, approx.: 2.86 m
Draft, approx. (without sterndrive): 2.36 m
Crew: 2 persons
Capacity: 14 persons
Maximum Load (incl. persons): 1310 kg
Engine: 1 x Water jet

OPERATIONAL FEATURES:
Speed (lightweight): 27 kts.
Speed (full load): 20 kts.

DESCRIPTION
The boat has been built to meet the SOLAS requirements for fast rescue boats

HULL, DECK AND SUPERSTRUCTURE:
The boat is made of a combination of glass- and carbon fiber as sandwich construction with PVC as core material. This core material act as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space.

FENDER:
The fender is made from closed cell polyethylene foam. It is non-deflatable and features a solid core that cannot lose buoyancy or absorb water. Any damage is strictly cosmetic keeping crew safe. The fender system absorbs major impacts and retains integrity and shape. The ProZero fender profile gives substantially more interior room than a comparable RIB.

DECK:
Deck is self-bailing.
Stowage for SOLAS equipment and mooring equipment.
Mooring bites.
Single point lifting hook (optional equipment).
Self-righting system.
Metallic arch.
Seats for crew.
Steering console with all around railing.
Painter hook (optional equipment).

TECHNICAL:

ENGINES, PROPULSION, STEERING & MANOUEVERING
1 x Diesel inboard engine.
1 x Water jet (Option 1).
1 x Stern drive (Option 2).

Possibility of twin engine and drive installation for redundant propulsion system.

Main switches with separate battery systems for start and consumption.
Battery charger with indicator.
Navigational lights.
Working lights.
Searchlight.



TANKS:
Fuel tank (130 liter).

ELECTRICAL SYSTEM & LIGHTING:
All electrical wiring in marine cable.
Isolation transformer with earth plate for protection against galvanic corrosion.

NAVIGATION & ELECTRONIC EQUIPMENT
Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.
1 x start battery and 1 x consumption battery
Fuel gauge.
Control panel for all lighting and other electrical equipment.
Fixed VHF (optional equipment)
Magnetic Compass

SECURITY EQUIPMENT:
Manual bilge pump.
Electrical emergency pump in bilge, manual start, in the bilge and in the engine room.
Fire extinguisher on starboard side of steering console.
2 x lifebuoys.

DELIVERY:
All boats are launched, tested and calibrated and has gone through a scrupulous quality control at the yard in Denmark.
Delivery, hand over, test drive and technical review with customer at yard in Denmark. All boats are delivered with a complete owner's manual.

GENERAL:
The boat is built as standard according to the technical specification and our general quality standard. The specification is valid when being printed. Details in construction, design and equipment can be changed as a result of the experience from the use of the boats. The quality and the equipment standard, however, are equivalent at least to this specification. The hull and structure have a 2 years' warranty from the date of delivery. The equipment and devices fitted in the boat have a 1 year's warranty from the date of delivery.

PRO:ZERO



WORKBOATS
7.5M FRC MRK3



DECK LAYOUT

The boat has been designed to offer best in class maximized deck areas, enabling optimized operations, load carrying, and passenger capacity.

OPTIMIZING OPERATIONS

Attending to the human factor. Functional, and ergonomic console layout arranged to maximize the use of state-of-the-art operations management and situational awareness electronic aids.



PREVIOUS MODEL



PRO:ZERO

DECK
LAYOUT

PRO:ZERO



8M
P-TOP OPEN CABIN

MAKING THE MOST OF IT

New ProZero 8-meter P-top - OUTBOARD. - The low-weight, semi-open design results in a faster workboat that has a larger operational range and extended working time on sea. The P-top features a protective P-top console solution and flexible seating arrangements which can accommodate up to 12 passengers or a full deck cargo. The first new P-top in the ProZero P-Top line is the 8m-meter P-Top featuring double outboard engines, although water jet or Z-drive propulsion systems are also available. The boat is delivered in a special P-Top configuration featuring a protective full-beam console with front window and closed roofing. The sides and aft on the P-top can be closed off with canvas sides for further comfort and flexibility. Tuco has been working closely with highly experienced workboat clients to ensure that the new design, layout and functionality profile will fulfill the demands for semi-open and flexible boats in a market that is growing.



Design: 2017 | 5000-02-14
Length overall, approx.: 7,95 m
Beam overall, approx.: 2,84 m
Draft, approx. (sterndrive): 0,7 m
Crew: 2 persons
Capacity: 6 persons
Payload: 750kg (including passengers)

BENEFITS:
The boat is specially designed for transport of up to 6 passengers at high speeds. Sheltered steering position with full enclosed in the front, this raise comfort for crew. The boat is significantly lighter than the market average which benefits fuel consumption and adds to the already proven seaworthiness.

OPERATIONAL FEATURES:
Speed, approx.: + 35 kt (lightweight condition).
Range: 4 hours at cruise speed.

DESCRIPTION:
The boat has been built to meet the requirements from the competent authorities.

HULL, DECK AND SUPERSTRUCTURE:
The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material. This core material acts as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

FENDER:
The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. The ProZero fenders profile gives substantially more interior room than a comparable RIB.

DECK:
Deck and cabin are self-bailing. Metallic mooring bollards. Modular and easy detachable aluminium railings. Lashing points on aft deck for equipment. Protection bar on the transom for engines protection.



COCKPIT:
Windshield wiper.
Seats for crew.
Steering console.

TECHNICAL:

ENGINES, PROPULSION, STEERING etc.:
2 x 150 hp outboard petrol engines.

TANKS:
Petrol tank with hatch and filling protection.

ELECTRICAL SYSTEM & LIGHTING:
All electrical wiring in marine cable. Shore power with control lamp, marked fuses, earth connection and shore cable. 24-volt DC system electrical system. Main switches with separate battery systems for start, navigation and consumption. Battery charger with indicator. Searchlight on cabin roof, manually operated. Navigational lights. Floodlights on the aft deck.

NAVIGATION & ELECTRONIC EQUIPMENT:
Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer. Fuel gauge. Control panel for all lighting and other electrical equipment. 1 x magnetic Compass. 1 x electric horn.

SECURITY EQUIPMENT:
Manual bilge pump, electrical emergency pump. Portable fire extinguishers.

PRO:ZERO

WORKBOATS
8M P-TOP OPEN CABIN



INTERIOR DESIGN

The P-Top deck lay-out has been designed to provide the user with maximal comfort and spacious working conditions. Ergonomic seats ensure a comfortable ride, and the semi open lay-out ensure easy boarding and cargo handling from the deck areas and great operational flexibility.



PRO:ZERO

INTERIOR
DESIGN



PRO:ZERO



8m
FULL CABIN DC

MAKING THE MOST OF IT

The 8M FULL CABIN DC – OUTBOARD is the Outboard version of the popular ProZero 8m Full Cabin workboat and is as its sister, built on the proven reliable and extremely seaworthy ProZero hull platform. The 8m ProZero workboat is strategically sized and carefully equipped for fast response, crew transport and patrol missions in coastal and offshore waters.

Particular attention has been paid to crew comfort. The vessel is built to minimise noise and vibrations while preserving structural rigidity, integrity and strength and enhancing mission-capability.

The cockpit layout in the ProZero 8m Full Cabin DC is arranged to maximize the use of state-of-the-art operations management and situational awareness electronic aids. And the cabin can be delivered in a variety of layouts including benches and separate suspended seatings.

Like all ProZero vessels, this boat is built from robust lightweight glass- and carbon fibre composites, which reduces the weight of the boat and thereby allowing both higher speeds and lower fuel consumption. Good ride quality and ergonomics is key to enduring long and exhausting missions, and the ProZero 8m full cabin DC is designed to provide just that. With its non-stepped, variable deadrise deep V-bottom hull featuring good forward entry, a flared bow, wide chines and lifting strakes/spray rails, the hull provides a safe and reliable base for high-speed operations and will tackle even very agitated sea states.



Design: 2017 | 5000-02-20
Length overall, approx.: 7,95 m
Beam overall, approx.: 2,84 m
Draft (full load), approx.: 0,7 m
Crew: 2 persons
Capacity: 6 persons
Payload: 750 kg (including persons)

BENEFITS:
The boat is specially designed for transport of up to 6 passengers at high speeds. The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort. The boat is significantly lighter than the market average which benefits fuel consumption and adds to the already proven seaworthiness.

OPERATIONAL FEATURES:
Speed, approx.: +25 kt (lightweight condition).
Range: 4 hours at cruise speed.

DESCRIPTION:
The boat has been built to meet the requirements from the competent authorities.

HULL, DECK AND SUPERSTRUCTURE:
The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material. This core material acts as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

FENDER:
The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ubstantially more interior room than a comparable RIB.

DECK:
Deck and cabin are self-bailing.
Metallic mooring bollards.
Modular and easy detachable aluminium railings.
Lashing points on aft deck for equipment.
Aluminium frame on the aft with strong points for towing and equipment attachment.
Protection bar on the transom for engines protection.

CABIN & COCKPIT:
Hinged door in the aft of the cabin.
Windshield wiper.
LED lights in cabin and cockpit.
Seats for crew.
1 x Padded foldable bench for up to 3 persons.
1 x Padded deployed bench for 3 persons.

TECHNICAL:

ENGINES, PROPULSION, STEERING etc.:
2 x outboard petrol engines.

TANKS:
Petrol tank with hatch and filling protection.

ELECTRICAL SYSTEM & LIGHTING:
All electrical wiring in marine cable.
Shore power with control lamp, marked fuses, earth connection and shore cable.
24-volt DC system electrical system.
Main switches with separate battery systems for start, navigation and consumption.
Battery charger with indicator.
Navigational lights.

NAVIGATION & ELECTRONIC EQUIPMENT:
Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.
Fuel gauge.
Control panel for all lighting and other electrical equipment.
1 x magnetic Compass.
1 x electric horn.

SECURITY EQUIPMENT:
Manual bilge pump, electrical emergency pump.
Portable fire extinguishers.

PRO:ZERO



WORKBOATS
8M FULL CABIN DC



INTERIOR DESIGN

The interior has been designed to provide the user with maximal comfort and spacious working conditions. Ergonomic seats ensure a comfortable ride, noise insulation eases communication and large windshields afford ample light and great visibility.



Comfortable cabin
Attending to the human factor. Functional, bright and ergonomic working conditions with noise insulation for ease of communication.



PRO:ZERO



INTERIOR
DESIGN

PRO:ZERO



8M FULL CABIN

8M FULL CABIN

The boat is designed and optimized to serve as a platform for service and subsea operations. Operations include transport of personnel, underwater inspection and research, repair and maintenance of machinery and structures and recovery of sunken assets.

In addition to the spacious driver and control cabin that has room for up to 6 extra passengers, the boat is equipped with a well-organized working deck. The cabin protects the crew against the surrounding environment, enhances comfort and provides ideal work conditions for the operators. Powerful light projectors on the aft deck provide ample light when operations can't benefit from the luxury of daylight.

The 8-meter ProZero vessel comes as standard with a single inboard diesel engine and Z-drive.

Sturdy railings and well-designed bow access are vital parts of the deck layout which also features a raised aft deck that functions as a full beam work platform for the crew.

The ProZero 8m hull provides for a stable ride, even in rough seas where most vessels must surrender. Fast operations in rough seas are only limited by human constraints.

The ProZero boats are available in multiple versions, all of which are carefully tailored to suit particular user requirements. The cockpit layout in the workboats is arranged to maximize the use of state-of-the-art operations management and situational awareness electronic aids.

PRO:ZERO



WORKBOATS 8M FULL CABIN



PRO:ZERO



11M CREWBOAT

11M CREWBOAT

The 11m ProZero crew boat is a fast transfer vessel designed specifically for speed, agility and comfort. With a top speed of more than 35 knots, the 11m crew boat wastes no time. This means that resources can be put to use where they create real value; with reduced travel time comes more dynamic mission planning and organization. More missions can be carried out in shorter time and the flexible design of the vessel makes it suitable for any type of mission that can benefit from the speed and agility.

The design of the fore and aft deck ensures quick and safe accommodation of passengers in the cabin and cargo on the foredeck.

The sleek and deep v-bottom of the boat secures a stable ride and provides the boat with exceptional seakeeping capabilities which contributes even further to crew comfort.

The vessel is made from composite materials and is equipped with aluminium railing. Smart material selection contributes to significant weight reductions and the low weight translates directly into impressive reductions in fuel consumption and emissions. In addition, the strong and durable composite materials are non-corrosive and virtually maintenance-free which cuts the cost of ownership.



Low weight
Cutting weight and adding value.
Low weight design lifts the value chain.



Design: 2018 | 5000-02-23
Length overall, approx.: 11,9 m
Beam overall, approx.: 2,7 m
Draft, approx. (without sterndrive): 0,6 m
Crew: 1 persons
Persons: 6 persons
Engine: 1 x Inboard Diesel
Drive: Z-Drive

BENEFITS:

This daughter craft is designed to fulfil requirements as Crew transfers at fish farms. The unique ProZero system with a flexible attached cabin reducing both noise and vibrations from hull and engines. The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort. Benefits by being significantly lighter than market average are lower fuel consumption. Supporting the great and proven sailing capabilities.

OPERATIONAL FEATURES:

Design Speed, approx.: + 35 kt (lightweight condition).
Fuel capacity, approx.: 400 l.

DESCRIPTION:

The boat has been built to meet the requirements from Norwegian Maritime Authorities, rule (FOR-2014-12-19-1853).

HULL, DECK AND SUPERSTRUCTURE:

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material. This core material acts as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

FENDER:

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe.



DECK:

Railings.
Decks are self-bailing.
Engine room cover with easy access for engine maintains.
Storage for mooring equipment.
Mooring bites.
Storage in forward compartments.
Benches in both sides forward deck.
Deck lights on aft and fore deck.

CABIN & COCKPIT:

Cabin fixed through anti vibration blocks to hull.
Seats for crew and persons.
Sliding door at the starboard.
Windshield wiper.
All windows are glued into the structure.
Comfort insulation in the cabin.
Heating system.

TECHNICAL:

ENGINES, PROPULSION, STEERING etc.

1 x Inboard diesel engine, 400 Hp.
1 x Sterndrive.
1 x Bow thruster.

FUEL TANKS:

Diesel tank with hatch and filling protection.

ELECTRICAL SYSTEM & LIGHTING:

All electrical wiring in marine cable.
Main switches with separate battery systems for start, navigation and consumption.
Battery charger with indicator.
Navigational lights.
2 x floodlights on the working aft deck.
2 x floodlights on the working foredeck.

NAVIGATION & ELECTRONIC EQUIPMENT:

Fuel gauge.
1 x magnetic compass.

SECURITY EQUIPMENT:

Manual bilge pump.
Electrical emergency pump in bilge, manual start.
Fire extinguisher at helmsman station.

PRO:ZERO



11M CREWBOAT



INTERIOR DESIGN

Great comfort in the cabin is achieved with a heating system to regulate the temperature, comfortable seats, an air-suspended driver's seat and state-of-the-art electronic equipment.



Comfortable cabin
Attending to the human factor. Functional, bright and ergonomic working conditions with noise insulation for ease of communication.



PRO:ZERO



INTERIOR
DESIGN

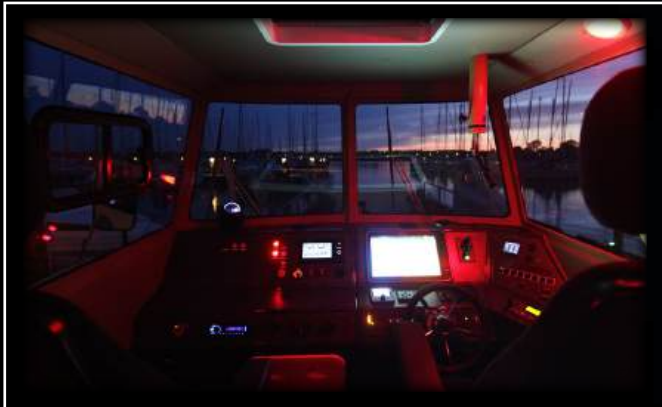


PRO:ZERO

11M MULTI-PURPOSE WORKBOAT

11M WBW ARCHIPELAGO JET

The ProZero WBW Archipelago workboat is a fast and light multipurpose workboat that features a hydraulic bow gate and a deck crane for handling cargo. To inhibit noise and enhance crew comfort in the cabin, the vessel is fitted with a flexible, hung cabin mounted on rubber shocks. Two suspended seats, a passenger sofa and a toilet are installed to afford the very best travelling experience for the crew and passengers. Large windows provide ample light and great visibility and a sliding door secures access to and from the cabin. The boat is equipped with state-of-the-art communication equipment and a heated locker is mounted on the aft deck where it serves as a dry locker for clothes and tools. The ProZero workboat is equipped with an inboard diesel engine that secures speeds of more than 25 knots. - Multiple engine and propulsion choices are available. - The handling characteristics are excellent and the low weight which distinguishes all vessels in the ProZero series ensures outstanding fuel efficiency.



Design: 2015 | 5000-05-04
Length overall, approx.: 10,80 m
Beam overall, approx.: 3,60 m
Draft (full load), approx.: 0,75 m
Displacement (full load), approx.: 8.500 kg
Capacity: 5 persons
Maximum load: 1.500 kg
Engines: 1 x Inboard Diesel

BENEFITS:
This vessel has been designed for multipurpose with a hydraulic wide bow door and a crane for lifting equipment. The unique ProZero system with a flexible attached cabin reduces both noise and vibrations from hull and engines. The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort. The boat is significantly lighter than the market average which benefits fuel consumption and adds to the already proven seaworthiness.

OPERATIONAL FEATURES:
Speed (max): +24 kt.
Range: 12 hours.
Fuel capacity: 600 l .

DESCRIPTION:
The boat has been built to meet the requirements from the competent authorities.

HULL, DECK AND SUPERSTRUCTURE:
The boat is made from a combination of glass- and carbon fibre as sandwich construction with PVC as core material. The core material acts as a natural buoyancy reserve, due to its lightweight and zero water absorption. The sandwich construction avoids the use of internal stiffeners, increasing exploitation of internal space while working as insulation, improving comfort in the cabin.

FENDER:
The fender has a D profile of 50 x 50 mm. It is made of hard rubber and bolted to the hull.

DECK:
Decks are self-bailing, both interior and aft deck. Large working area. Access hatch to engine room in front of the cabin. Wide bow hinged door, with hydraulic opening system. 1 x hydraulic crane. 1 x horizontal hydraulic winch. 1 x towing bollard. 6 x mooring bites. Storage for mooring equipment. Watertight storage cabinet for rainwear.

CABIN & COCKPIT:
Cabin fixed through anti vibration blocks to hull. 1 x bench for 3 passengers in the aft bulkhead. 2 x pilot seats for the crew. Sliding door in the starboard side of the cabin. Windshield wiper. All windows are glued into the structure. Lights in cockpit with dual mode white / red light. Heating system. Access to toilet from aft deck.

TECHNICAL:
ENGINES, PROPULSION, STEERING etc.:
1 x inboard diesel engine.
1 x bow thruster.
1 x stern thruster.
1 x water jet.
1 x hydraulic pump coupled to the main engine.

TANKS:
2 x diesel tank with hatch and filling protection. All fuel systems are pressure tested.

ELECTRICAL SYSTEM & LIGHTING:
All electrical wiring in marine cable. Shore power with control lamp, marked fuses, earth connection and 20 m shore cable. 24-volt electrical system. Main switches with separate battery systems for start, navigation and consumption. Battery charger with indicator. 220 V-outlets in cabin. 1 x searchlight on cabin roof, manually operated. Navigational lights. 1 x floodlight on the working aft deck.

NAVIGATION & ELECTRONIC EQUIPMENT:
Electric engine controls. Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer. Fuel gauge. Control panel for all lighting and other electrical equipment. 1 x magnetic compass.

SECURITY EQUIPMENT:
1 x manual bilge pump.
1 x electrical emergency pump in bilge, manual start.
1 x electrical emergency pump in engine room, manual start.
1 x fire extinguisher at helmsman station.

PRO:ZERO



***2015 DESIGN**

MEETING THE DEMANDS FOR SAFE TRANSFER

The 11m DCW Offshore Transfer is a fast transfer boat designed specifically for transporting personnel. It is a highly versatile and flexible vessel that is designed to meet the high safety and operational requirements for this type of boat. In addition to its purpose as a fast crew and passenger transporter, it is also capable of performing a range of other tasks where agility and efficiency is important.

The design allows for easy access from both fore and aft deck with an emphasis on quick, but safe accommodation of passengers in the cabin and cargo on the foredeck. Particular measures have been taken to develop the specialized boarding area at the bow fender, or optionally at the side fender, to guarantee safe passage for crew and personnel.

For daughter craft versions, the safe launch and recovery mechanism can be altered according to individual specifications and can be fitted for both single point hoisting or access to a stern garage on a mothership. Besides improved comfort, efforts have been made to secure a high level of redundancy to keep the vessel operational and fit as a stand-alone unit that is capable of carrying out transfer operations to and from shore.



***2018 DESIGN**



Design: 2016 | 5000-03-38
Length overall, approx.: 11,48 m
Beam overall, approx.: 3,85 m
Draft (full load), approx.: 0,73 m
Displacement (full load), approx.: 9.500 kg
Capacity: 10 passengers
Maximum load: 1.000 kg
Engines: 2x inboard diesel

BENEFITS:

This daughter craft is developed for wind farm service, with a specially designed fender for safe transfers. The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average are lower fuel consumption and lighter lifting equipment on mother vessel. Supporting the great and proven sailing capabilities.

OPERATIONAL FEATURES:

Speed: 25-30 kt (with 3 persons).
Speed (cruise): 25 kt.
Range: 8 hours at cruise speed.
Fuel capacity: 600 l.

DESCRIPTION:

The boat has been built to meet the requirements from the competent authorities, and features a redundant propulsion system.

HULL, DECK AND SUPERSTRUCTURE:

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material. This core material act as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

FENDER:

The fender is constructed of closed cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape. ProZero fender's profile gives substantially more interior room than a comparable RIB. The fender has a special profile in the boat shaped to fit into the docking station of the wind mills, enabling a safe transfer between this one and the boat. Also, the frontal section is a separate wearing part bolted to a special reinforced composite profile in the bow, so it can be easily replaced.

DECK:

Equipped for single point lifting hook. Deck and cabin are self-bailing. Large working area in the fore deck. Transfer raised platform in the bow with stepped transition between this one and the main deck. 6 mooring bites. Aluminium railings in aft and fore deck. Aft platform over the water jets.

CABIN & COCKPIT:

Toilet with WC and washbasin. 8 comfort seats for passengers plus 2 pilot seat. Hinged door in the aft of the cabin. Hinged door in the front of the cabin. Defreezing system for windows with hot air blowers. All windows are glued into the structure. LED lights in cabin and cockpit. Comfort insulation in the cabin.

TECHNICAL:

ENGINES, PROPULSION, STEERING etc.

2 x inboard diesel engine 2 x Sterndrivers, Engine split for redundancy. Redundant propulsion system.



TANKS:

Structural diesel tank with hatch and filling protection. Independent fresh water tank. Independent dark water tank with odourless filter.

ELECTRICAL SYSTEM & LIGHTING:

All electrical wiring in marine cable. Shore power with control lamp, marked fuses, earth connection. Isolation transformer with earth plate for protection of galvanic corrosion. 24-volt electrical system. Main switches with separate battery systems for start, navigation and consumption. Battery charger with indicator. 1 x searchlight on cabin roof, manually operated. Navigational lights. 2 x floodlight on the working foredeck.

NAVIGATION & ELECTRONIC EQUIPMENT:

Complete engine instruments supplied by engine manufacturer. Fuel gauge. Control panel for all lighting and other electrical equipment. 1 x magnetic compass.

SECURITY EQUIPMENT:

Bilge pumps. Fire extinguisher at helmsman station. Automatic fire extinguisher system in engine room.

11M DAUGHTER DRAFT

PRO:ZERO

ROBUST HOOK MECHANISMS
SAFE AND EASY ACCESS

EASY ACCESS TO HOOK

The ProZero design ensures easy access to the lifting hook from the front deck or through a passageway in the cabin. Safety railing is mounted so that the hook operator can focus fully on the job at hand. Certified and safety approved lifting mechanisms can be fitted according to customer preference.



Low consumption
Minimized operating costs and improved environmental impact. For a sustainable and prosperous future.



LAUNCH AND RECOVERY

Not taking any risks

Launch and recovery of Daughter Crafts is an area that requires exceptional vigilance. The ProZero series is carefully designed to secure maximum safety and reliability for the users in these high-risk situations, and special care is taken in the design process to ensure accessibility to hooking points.

Lighter overall solution

Due to the lightweight construction of the ProZero Daughter Crafts, less stress is exerted on the lifting equipment. This allows fitting of lighter davit equipment which benefits the overall naval architecture and saves resources that enable clients to pursue their real goals. Light weight solutions lift the entire value chain.

We work closely with a number of leading equipment manufacturers and we are happy to include customized LARS solutions for individual clients.



Low weight
Cutting weight and adding value. Low weight design lifts the value chain.



PRO:ZERO



PRO:ZERO

STURDY RAILINGS

OPTIMAL WORK SPACE AND SAFETY

SAFETY ONBOARD

The foredeck is a large, skid proof cargo deck that is reachable by crane from the turbine or mothership. The helmsman can maintain a clear view of the cargo and deck crew while loading/unloading.

ROBUST RAILINGS

Sturdy railings are installed around work areas to ensure the safety of the personnel. The railings can be removed to accommodate oversized cargo and to provide easy access and transfer.

LASHING POINTS

Dedicated cargo zones with lashing points are installed on deck to secure cargo during operations. The deck has been reinforced to accommodate the added load.

LIFTING EQUIPMENT

The ProZero Daughter Crafts can be equipped with a hydraulic crane for easy handling of equipment and cargo. Different onboard cranes are available to ensure compliance with local regulations.



Flexible construction
Construction with a purpose.
Know-how and expert engineering
at the service of unique client
demands.

PRO:ZERO



PRO:ZERO

PREVIOUS MODEL

NOISE INSULATION
EFFORTLESS COMMUNICATION

INTERIOR DESIGN

The interior has been designed to provide the user with maximal comfort and spacious working conditions. Ergonomic seats ensure a comfortable ride, noise insulation eases communication and large windows afford ample light and great visibility.



Comfortable cabin
Attending to the human factor. Functional, bright and ergonomic working conditions with noise insulation for ease of communication.



PRO:ZERO

COMFORTABLE RIDE
AIR SUSPENDED SEATS

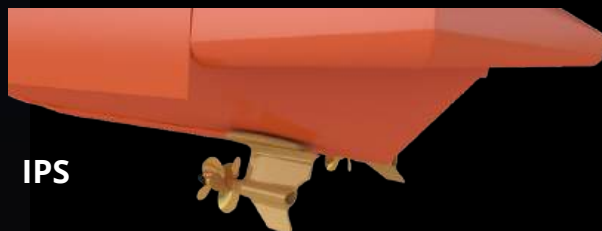


PRO:ZERO

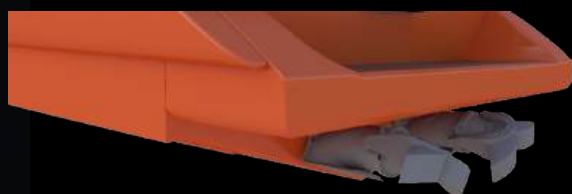
**MOVE FORWARD
YOU CHOOSE HOW**

PROPULSION OPTIONS

The ProZero Daughter Crafts can be delivered with different propulsion systems according to customer needs.



IPS



Water Jet



Sterndrive

Further propulsion options are available:

Shaft drives

Outboards

EASY CONNECT FENDER

Close connections

The Easy Connect fender is optimized for safety and functionality

Easy Connect Fender

The Easy Connect fender is designed for enhanced grip in order to facilitate landing and safe transfer operations at stationary installations. The fender is made of closed cell polyethylene foam with a non-deflatable solid core that maximizes durability and landing grip. The standard Easy Connect fender is equipped with a high friction surface. Low friction surface is available upon request. The Easy Connect fender is bolted to the hull which allows easy replacement if damaged or substitution if an alternative landing profile is required.

EASY REPLACEMENT AND UPGRADE

Upgrade kit available

Upgrading to the Easy Connect fender is quick and efficient. The Easy Connect fender is composed of only three individual sections, which reduces cost and time required for upgrading.

2015



2017



Old



New



PRO:ZERO



EFOILER
12M EF-12 WORKBOAT

12M EF-12 WORKBOAT

The 12M Artemis eFoil[®] propelled multi-purpose workboat is the world's first high-speed 100% electric foiling commercial vessel. It is designed and built to high commercial standards, delivering market leading electric propulsion, ride comfort and energy efficiency during operations in the harshest environments.

The walk-around deck layout with a central cabin and doghouse, provides flexibility and room for a variety of missions and boarding requirements.

Our vessels and subsystems have been rigorously tested to ensure operational capability, and efficient performance, across a range of tough conditions. The deep carbon composite V-bottom hull provides a safe and reliable base for high-speed foiling operations in coastal and offshore waters.



Low consumption
Minimized operating costs and improved environmental impact. For a sustainable and prosperous future.

Design: 2022 | 5000-07-27
Length overall, approx.: 11,5 m
Beam overall, approx.: 4 m
Draft (full load), approx.: 2,2 m
Displacement (full load), approx.: 10000 kg
Capacity: 6 persons
Maximum load: 10000 kg
Engines: 400 kWh battery pack

BENEFITS:
The 12M Artemis eFoil[®] propelled multi-purpose workboat is the world's first high-speed 100% electric foiling commercial vessel. It is designed and built to high commercial standards, delivering market leading electric propulsion, ride comfort and energy efficiency during operations in the harshest environments.

The walk-around deck layout with a central cabin and doghouse, provides flexibility and room for a variety of missions and boarding requirements.

OPERATIONAL FEATURES:
Speed (cruise): 25 kt.
Range: 60 Nautical miles.
Fast charge time: 52 seconds per Nautical mile.

DESCRIPTION:
The boat has been built to meet the requirements from the competent authorities, and features a redundant propulsion system.

HULL, DECK AND SUPERSTRUCTURE:
ProZero Foam cored carbon vinylester infused laminate.

PROPULSION:
Main propulsion with 250 kW and 60 kg Tunnel thruster.

DECK:
Handrails: Alloy fabricated and powder coated.
Custom rigid fender around deck edge.

ACCOMMODATION:
Capacity for up to 8 Seats - Client Specific layout
Wheelhouse: Navigation console.

ENGINES, PROPULSION, STEERING etc.
1 x battery pack.
Grid fed booster (Battery storage system) and dispenser (1 or 2 outlets).

ELECTRICAL SYSTEM & LIGHTING:
System includes an Artemis Technologies 800V marinised EV battery, with a hydrogen fuel cell range extender option under development.

FLIGHT CONTROL SYSTEM:
Flight control: Autonomous.
Manual inputs: Steering & throttle.

SHIP SYSTEMS:
Bilge and Fire pump: 5 x Electric bilge pumps + 1 x manual bilge pump.
Fixed system in battery enclosures and portable fire extinguishers.

PRO:ZERO



EFOILER 12M CREW TRANSFER VESSEL

12M EF-12 CREW TRANSFER VESSEL

The 12M Crew Transfer Vessel, is designed and built to allow engineers to get to their destination and deliver their services without discomfort, in a safe and efficient manner.

The Artemis EF-12 CTV has a top speed of 32 knots, and a range of 50 nautical miles at a cruising speed of 25 knots.

Interior cabin layout is adjustable and can be transformed into mission specific environments for the crew, or seating arrangements for passenger transport.

The workboats create minimal wake when foiling, enabling them to operate at high-speed in inland waterways, or in busy ports and harbours.

Whether undertaking Crew Transfer, Emergency Response or Patrol Operations, our range of Artemis eFoiler® 100% Electric Commercial Workboats are specifically designed for high-speed operations in the most challenging environments.

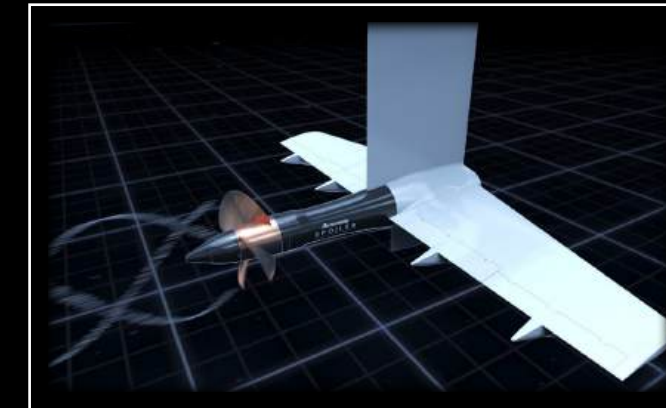


CREW TRANSFER

Manufactured from robust lightweight glass and carbon fibre composites, which reduces the weight of the boat enabling higher speeds and longer range.



Comfortable ride
Due to the electric fully submerged drivetrain, the Artemis eFoiler® provides a quiet experience. Flying over the waves on a high-speed foiling vessel removes the usual bumpy ride, and associated sea sickness.



PRO:ZERO



GAME CHANGING TECHNOLOGY

PRO:ZERO

PROZERO USV TECHNOLOGY

The USV hull is made of a combination of glass and carbon fiber and combined monolithic and sandwich construction with PVC as core material. Moreover, the construction minimizing the use of internal stiffeners, increasing the usable internal space.

The ProZero USV series is a series of extremely rugged and durable, offshore USV's build to survive and operate in the toughest conditions and provide its operators with reliable data and surveillance information.

Tuco Marine Group have been a part of the Horizon 2020 ENDURUNS project consortium consisting of highly specialized partners such as Comex, Engitec Systems International and Altus LSA. The main ambition of the ENDURUNS research and development project have been to develop an integrated hybrid AUV system capable of operation under deep ocean conditions and performing a wide- range of missions, targeting the increase scientific knowledge as well as industrial capability and performance.



8M PROZERO USV

The 8m USV is based on the well proven ProZero hull platform, built in composite materials and features a double engine installation for maximum redundancy. The vessels feature specialized technology and remote-controlled deck equipment that enables the vessels to operate at sea without humans onboard for several months.

The ProZero USV's have exceptional track records of harsh environment operations, such as the 8m ProZero USV operating from Dec. 2021 to May 2022 in the Danish "Kattegat" and in the period effectuated 6x 30days 24/7 data collection circles, of DNV certified data. - Well proven USV concept from 6 to 12 meters.

Remarkably the period saw two major storms in Denmark. 29-30th of January 2022 the Storm Malik, reached 40ms pr second and closed major bridges and coursed severe flooding of large areas in Denmark. On the 18th of February 2022 the storm NOAH reached Denmark with 37,4ms and in "Kattegat" the 8m ProZero USV operated right through these storms.



PRO:ZERO

USV RANGE



PRO:ZERO

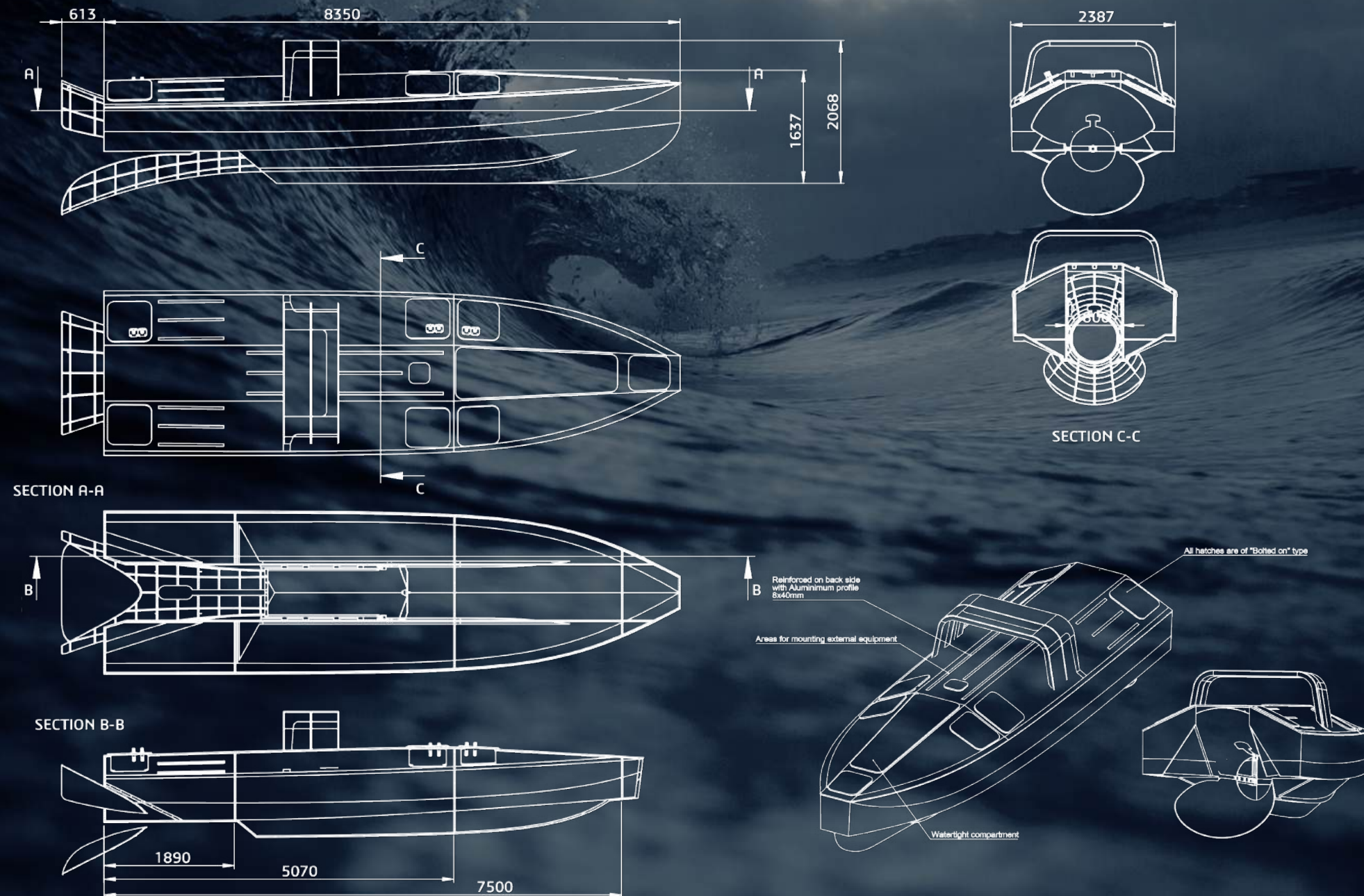
USV RANGE 8M PROZERO ENDURUNS

8M PROZERO ENDURUNS

The ProZero 8m ENDURUNS USV, a groundbreaking unmanned surface vessel developed through the EU-funded ENDURUNS research and development project. This innovative ProZero hulled, USV incorporates cutting-edge hydrogen fuel cell technology to unlock unprecedented capabilities for extended operations at sea.

The ENDURUNS research and development project brought together a consortium of leading experts, and organizations to develop the hybrid USV and AUV system that is powered by high-energy density hydrogen fuel cells. This breakthrough allows the ProZero 8m USV to operate autonomously for in extended periods offshore, revolutionizing marine missions by enabling multiple tasks to be accomplished within a single launch sequence.

The ProZero 8m USV is equipped with a range of advanced features that ensure seamless integration with the ENDURUNS AUV system. It serves as a vital companion, facilitating geotagging, communication, and command transmission between the AUV and the RMCC. This dynamic collaboration allows for real-time updates and mission adjustments, ensuring optimal performance and flexibility in any environment.



PRO:ZERO

USV RANGE
8M PROZERO ENDURUNS



MAPPING THE OCEANS

The ENDURUNS team in July 2023 completed the first demonstration of the ProZero 8m USV in the picturesque Venice Lagoon. The successful tests included infrastructure inspection and seabed mapping, captivating the attention of locals and tourists alike. The docking and undocking of the AUV with the USV were flawlessly executed, showcasing the exceptional performance of this groundbreaking platform.

The technical objectives of the ENDURUNS research and development project have been meticulously achieved within the duration of the project, encompassing the implementation of a hybrid AUV design.



ENDURUNS USV/AUV

One of the standout features of the ProZero 8m USV is its ability to connect with the AUV when needed and return to port as a single unit. This streamlined operation not only enhances efficiency but also facilitates accurate geotagging of the areas mapped or inspected by the AUV, providing invaluable data for various applications.

To extend operational autonomy, the ProZero 8m ENDURUNS USV integrates a hybrid power bank comprising a hydrogen fuel cell, battery pack, and photovoltaic panels.



PRO:ZERO



PRO:ZERO



USV RANGE
10M PROZERO USV



USV CAPABILITIES

The hull of the ProZero 10M USV is crafted from solid laminate for durability, with both the deck and internal structures utilizing composite materials for strength and lightness. The vessel's GRP structure is integral to its integrity, emphasizing the need for specialized maintenance and modifications with manufacturer consultation.

For operational efficiency, the vessel features double engines with advanced fuel supply management, including quick-close valves and filter selection valves, all integrated into the vessel control system. Bilge management is sophisticated, with each compartment equipped with both primary and high-capacity pumps, alongside level sensors for comprehensive fluid management.

The engine room benefits from efficient ventilation via the hydraulic oil cooler fan, essential for maintaining optimal operating conditions. Technical and payload compartments are outfitted with double dehumidifiers and dedicated AC units to ensure equipment functionality and longevity. Additionally, the vessel boasts five seawater intakes for cooling various systems, emphasizing the importance of regular maintenance for optimal performance. The vessel's adaptability is further enhanced by the ability to lower or remove masts and deck equipment.

SAFETY SYSTEMS

Safety is paramount on the ProZero 10M USV, featuring a fixed firefighting system that encompasses aerosol generators, temperature sensors, and heat detectors across key compartments. This comprehensive system ensures rapid response to any fire incidents onboard.

Overall, the ProZero 10M USV represents a huge achievement in unmanned surface vessel design, offering both advanced technology, operational flexibility, and safety features for a wide range of maritime applications.



PRO:ZERO



PRO:ZERO



14M HYDROGRAPHIC SURVEY BOAT

The 14m subsea survey boat is designed to accommodate workspace for 2 subsea specialists in addition to the helmsman’s workstation. The design enables efficient surveys under changing weather conditions and the hydrodynamic profile of the hull minimizes turbulence that can interfere with the highly sensitive measuring equipment.

The advanced sonar equipment is recessed into the hull structure to protect it against adverse conditions. The equipment includes high-performance sensors and processors that can capture the signals, manage multiform data streams and constantly produce and store high-quality information that truthfully represents the sea floor.

The cabin has been designed with acute attention to ergonomics and working environment. Noise insulation ensures comfort and easy communication under all operating conditions and the layout have been organized to facilitate workflow coordination, both during the missions and during transport to and from the sites. The cockpit layout is arranged to maximize the use of state-of-the-art operations management equipment and electronic aids for situational awareness..



Unmatched strength
Confront the elements with confidence. Built for strength, safety and durability.



Design: 2017 | 5000-03-60
Length overall, approx.: 14 m
Beam overall, approx.: 3,75 m
Draft (full load), approx.: 0,92 m
Displacement (full load), approx.: 14000 kg
Capacity: 5 persons
Maximum load: 1.500 kg
Engines: 2 x inboard diesel

BENEFITS:
The 14m subsea survey boat is designed to accommodate workspace for 2 subsea specialists in addition to the helmsman's workstation. The design enables efficient surveys under changing weather conditions and the hydrodynamic profile of the hull minimizes turbulence that can interfere with the highly sensitive measuring equipment. The advanced sonar equipment is recessed into the hull structure to protect it against adverse conditions. The equipment includes high-performance sensors and processors that can capture the signals, manage multiform data streams and constantly produce and store high-quality information that truthfully represents the sea floor.

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OPERATIONAL FEATURES:
Speed: 32 kts (with 3 persons).
Speed (cruise): 25 kt.
Range: 8 hours at cruise speed.
Fuel capacity: 2.000 l.

DESCRIPTION:
The boat has been built to meet the requirements from the competent authorities, and features a redundant propulsion system.

HULL, DECK AND SUPERSTRUCTURE:
The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material. This core material acts as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

FENDER:
The fender has a D profile of 85 x 75 mm. It is made of hard rubber and bolted to the hull.

DECK:
Deck is self-bailing.
Large working area aft of the cabin.
6 mooring bites.
Aluminium railings on aft and fore deck.

CABIN & COCKPIT:
Toilet with WC and washbasin and technical room in separate cabin.
Main cabin mounted on anti-vibration shock mounts to ensure low noise levels.
2 Hydrographical workstations and a combined helmsman/workstation.
1 bench and table in the aft of the main cabin.
Hinged door in the aft of the cabin.
Defreeze system for windows with hot air blowers.
All windows are glued into the structure.
LED lights in cabin and cockpit.

TECHNICAL:

ENGINES, PROPULSION, STEERING etc.
2 x inboard diesel engine.
2 x water jet.
Redundant propulsion system.
Independent diesel generator – 230V.

TANKS:
Structural diesel tank with hatch and filling protection.
Independent fresh water tank.
Independent black water tank with odourless filter.

ELECTRICAL SYSTEM & LIGHTING:
All electrical wiring in marine cable.
Shore power with control lamp, marked fuses, earth connection.
Isolation transformer with earth plate for protection of galvanic corrosion.
24-volt electrical system.
Main switches with separate battery systems for start, navigation and consumption.
Battery charger with indicator.
1 x searchlight on cabin roof, manually operated.
Navigational lights.
Floodlights on foredeck and aft deck.

NAVIGATION & ELECTRONIC EQUIPMENT:
Complete engine instruments supplied by engine manufacturer.
Fuel gauge.
Control panel for all lighting and other electrical equipment.
1 x magnetic compass.

SECURITY EQUIPMENT:
Bilge pumps.
Fire extinguisher at helmsman station
Automatic fire extinguisher system in engine room.

14M HYDROGRAPHIC SURVEY BOAT

PRO:ZERO



14M HYDROGRAPHIC BOAT



INTERIOR DESIGN

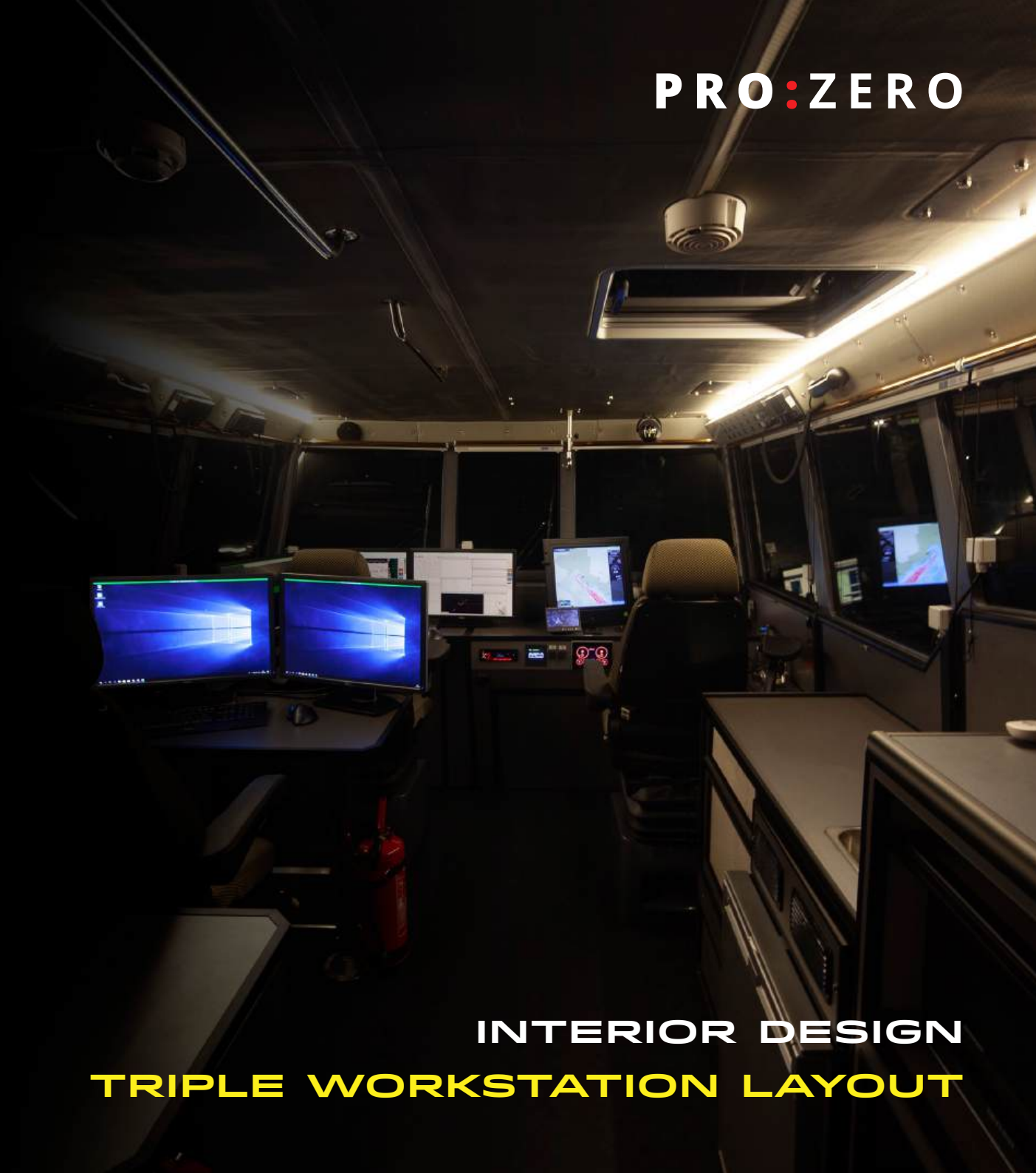
The cabin offers great comfort and is equipped with an adjustable heating system, an air-suspended driver's seat, ergonomic passenger seats and state-of-the-art electronic equipment.



Comfortable cabin
Attending to the human factor. Functional, bright and ergonomic working conditions with noise insulation for ease of communication.



PRO:ZERO



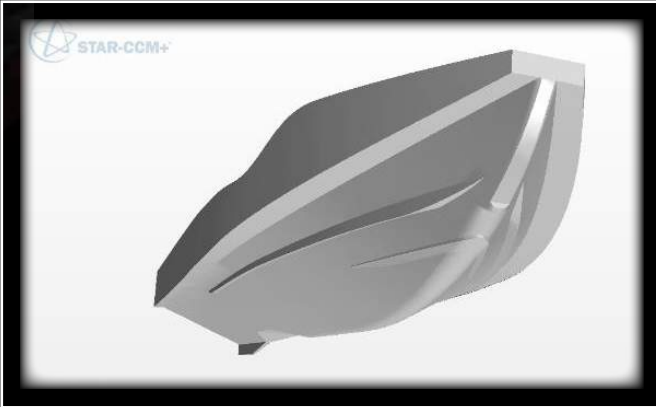
INTERIOR DESIGN
TRIPLE WORKSTATION LAYOUT

PRO:ZERO

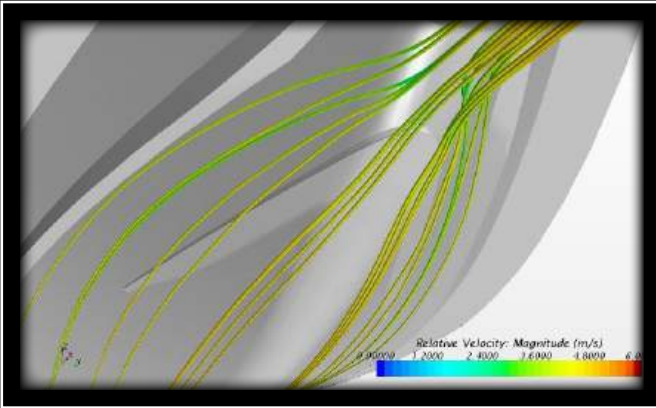
INNOVATIVE HULL DESIGN
HULL MOUNTED SONAR

DETAILED HULL
ANALYSIS

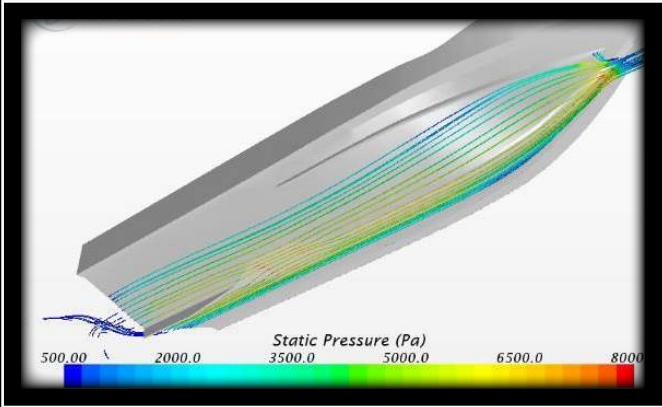
Acquisition of high-quality hydrographic data requires optimal conditions. Consequently, special attention has been paid to obtain a hull profile which reduces or eliminates hydrodynamic phenomena that affect the sonar equipment. The enemy is cavitation bubbles and sweep-down of bubbles from the bow that become entrained under the hull. Computational analyses carried out by Hauschildt Marine A/S, Copenhagen, helped to reveal the best hull design before the vessel was put into production.



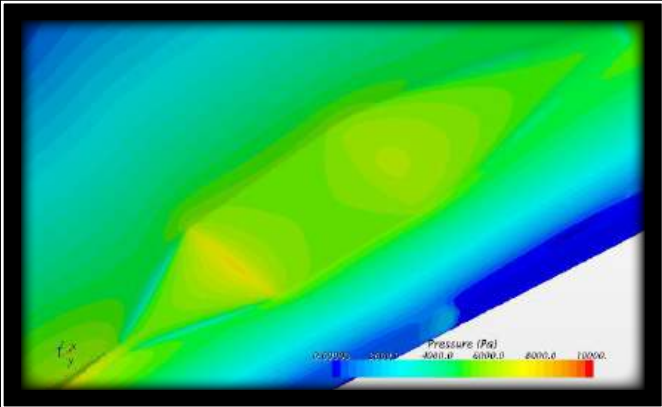
* A proposed bow mounted feature for redirecting streamlines carrying bubbles



* A proposed bow mounted feature for redirecting streamlines carrying bubbles



* Velocity Lines and pressure lines on existing hull at 10 knots



* Velocity Lines and pressure lines on existing hull at 10 knots

“The 14m ProZero Subsea Survey vessel exceeded all expectations and contractual demands when being able to do more than 14 kts without any disturbance and air-bubbles in the sonar area. This is way better than the contractual requirements when contracting the vessel with Tuco Marine.”

- Preben Thuren Larsen, Project Manager

PRO:ZERO

INNOVATIVE HULL DESIGN
HULL MOUNTED SONAR

PRO:ZERO



15m
FR WORKBOAT

MAKING THE MOST OF IT

The ProZero 15m FR Workboat is strategically sized and carefully equipped for workboat operations and built on the proven, reliable and extremely seaworthy ProZero hull platform. The ProZero FR Workboats originates from the ProZero offshore Daughter craft lines and have the same superior harsh weather performance.

Like all ProZero vessels, this boat is built from robust lightweight glass- and carbon fibre composites, which reduces the weight of the boat and thereby allowing both higher speeds and lower fuel consumption. Good ride quality and ergonomics is key to enduring long and exhausting days at sea, and the ProZero 15m FR Workboat is designed to provide just that. With its non-stepped, variable deadrise deep V-bottom hull featuring good forward entry, a flared bow, wide chines and lifting strakes/spray rails, the hull provides a safe and reliable base for high-speed operations and will tackle even very agitated sea states.

Particular attention has been paid to crew comfort, as the ProZero 15m FR Workboat is further designed to minimize noise and vibrations while preserving structural rigidity, integrity and strength and enhancing operational capability.

The walk-by deck layout with a asymmetric cabin provides flexibility and room for a variety of operations and mooring situations, in combination with a larger cabin. The interior cabin layout is adjustable and can be transformed into operation-specific environments with comfortable over-night accommodation areas for the crew or seating arrangements for efficient passenger/crew transport.



Design: 2019 | 5000-05-19-01
Length overall, approx.: 14,3, m
Beam overall, approx.: 3,54 m
Draft (full load), approx.: 0,73 m
Capacity: 6 persons
Payload: 1.000 kg (including persons)
Engines: 2 x inboard diesel

BENEFITS:
This 15m FR Workboat is designed for crane operations and manoeuvrability. The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort. The boat is significantly lighter than the market average which benefits fuel consumption and adds to the already proven seaworthiness.

OPERATIONAL FEATURES:
Speed: 30+ kt.
Speed (cruise): 30 kt.
Fuel capacity: 1000L.

DESCRIPTION:
The boat has been built to meet the requirements from the competent authorities.

HULL, DECK AND SUPERSTRUCTURE:
The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material. This core material acts as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

FENDER:
The fender is constructed of closed-cell polyethylene foam. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape.

DECK:
Deck and cabin are self-bailing.
Large working area in the aft deck.
6 mooring bites.
Aluminium railings in aft and fore deck.
Aft platform.
Crane on starboard side.
Winch on starboard side.
Line hauler on portside.



CABIN & COCKPIT:
Toilet with WC and washbasin.
1 pilot seats.
1 Hinged door in the aft of the cabin for workshop access.
1 Sliding door on starboard for main cabin access.
Large storage-compartment in fore-cabin.
Pantry with sink and refrigerator.
Dining area with seating for 4 persons
Diesel-driven air heating system.
Defrosting system for windows with hot air blowers.
All windows are glued into the structure.
LED lights in cabin and cockpit.
Comfort insulation in the cabin.

TECHNICAL:

ENGINES, PROPULSION, STEERING etc.
2 x Volvo Penta DPH
9kW Genset

TANKS:
Structural diesel tank with hatch and filling protection.
Independent fresh water tank.
Independent black water tank with odourless filter.

ELECTRICAL SYSTEM & LIGHTING:
All electrical wiring in marine cable.
Shore power with control lamp, marked fuses, earth connection.
Isolation transformer with earth plate for protection of galvanic corrosion.
24-volt electrical system.
Main switches with separate battery systems for start, navigation and consumption.
Battery charger with indicator.
1 x searchlight on cabin roof, manually operated.
Navigational lights.
2 x floodlight on the working foredeck.

NAVIGATION & ELECTRONIC EQUIPMENT:
Complete engine instruments supplied by engine manufacturer.
Fuel gauge.
Control panel for all lighting and other electrical equipment.
1 x magnetic compass.
1 x Chart plotter
1 x Echosounder

SECURITY EQUIPMENT:
Bilge pumps.
Fire extinguisher at helmsman station.
Automatic fire extinguisher system in engine room

PRO:ZERO



WORKBOATS
15M FR WORKBOAT



INTERIOR DESIGN

The interior has been designed to provide the user with maximal comfort and spacious working conditions. Ergonomic seats ensure a comfortable ride, noise insulation eases communication and large windshields afford ample light and great visibility.



Comfortable cabin
Attending to the human factor. Functional, bright and ergonomic working conditions with noise insulation for ease of communication.



PRO:ZERO



INTERIOR
DESIGN

PRO:ZERO



15M HPC VESSEL

15M HPC VESSEL

The 15m ProZero HPC boat has been developed in cooperation with leading aquaculture experts. It is built from composite materials which reduce the structural weight of the vessel and ensure low maintenance and superior durability.

Thanks to the low weight and the twin inboard diesel engines connected to the distinctive Volvo Penta IPS propulsion system with forward-facing, counter-rotating propellers, the vessel is capable of operating at more than 33 knots. Other propulsion systems available on request.

The union of low weight and efficient hull lines result in impeccable control and handling, world-class fuel efficiency and minimal environmental impact.

The hull has special features and reinforcements that make it ideal for fish farm operations. The ProZero hull is highly efficient and provides for a stable ride, even in rough seas where most vessels must surrender.

The cockpit layout in the 15m Prozero is arranged to fully exploit the latest monitoring systems and the most reliable and accurate navigation technology available.



Flexible construction
Construction with a purpose.
Know-how and expert engineering at the service of unique client demands.



Design: 2016 | 5000-03-51
Length overall, approx.: 14,96 m
Beam overall, approx.: 3,85 m
Draft (full load), approx.: 1,08 m
Capacity: 4 persons
Maximum Load: 3.000 kg
Engines: 2 x inboard diesel
Drive: 2 x IPS

BENEFITS:
This boat is developed for fish farm service. The design of the ProZero cabin ensures a huge amount of daylight, this also improves the personal comfort.

OPERATIONAL FEATURES:
Speed (max, lightweight): 35 kts.
Fuel capacity: 2.500 l.

DESCRIPTION:
The boat has been built to meet the requirements from the competent authorities.

HULL, DECK AND SUPERSTRUCTURE:
The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material. This core material acts as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

FENDER:
The fender is built from a hard rubber holed D profile fender, running all around the sides and the bow. Additionally, on the starboard side a fender is situated underwater to protect the hull when working on the farm rings.

DECK:
Deck and cabin are self-bailing.
Large working aft deck.
1 x 2,5 Tm Hydraulic crane.
1 x 1,0 Tn Hydraulic capstan.
2 x Door openings with ladder to waterline on the sides.
6 mooring bites.
Black anodized detachable aluminium railings.

CABIN & FORECASTLE:
Toilet with WC and washbasin.
Pantry with sink, fridge and microwave.
Hinged door in the aft of the cabin.
Ladder from cabin to forecastle.
4 x Comfort seats for crew.
2 x Bunks in the forecastle (3rd bunk optional).
Defrost system for windows with hot air blowers.
All windows are glued into the structure.
LED lights in cabin, cockpit and forecastle.
Comfort insulation in the cabin.
Diesel heater.



TECHNICAL:

ENGINES, PROPULSION, STEERING etc.:
2 x 625 hp inboard diesel engine.
2 x IPS pods.
1 x hydraulic pump coupled to the SB engine.
1 x flushing pump coupled to the PS engine with outlet in the main deck.

TANKS:
Structural diesel tanks with 2.500 l capacity.
Structural fresh water tanks with 500 l capacity.
1 x 100 l fresh water tank for consumption.
1 x 100 l dark water tank with odourless filter.
1 x 20 l hot water thermos.
1 x hydraulic tanks.

ELECTRICAL SYSTEM & LIGHTING:
All electrical wiring in marine cable, power with control lamp, marked fuses, earth connection. Insulation transformer with earth plate for protection of galvanic corrosion.
24V DC, 240V 2-phase AC electrical system.
El, DC and AC outlets in, cabin, forecastle and main deck (protected).
Main switches with separate battery systems for start, navigation and consumption.
Battery charger with indicator.
1 x searchlight on cabin roof, manually operated.
Navigational lights.
Multiple floodlights on the working deck.

NAVIGATION & ELECTRONIC EQUIPMENT:
Complete engine instruments supplied by engine manufacturer.
Control panel for all lighting and other electronic equipment.
1 x fixed VHF.
1 x magnetic compass.

SECURITY EQUIPMENT:
Bilge pumps.
Automatic fire extinguisher system in engine room.

PRO:ZERO



15M HPC VESSEL

CRANE

The vessel is equipped with a hydraulic crane and capstans to optimize operations and easy handling of the aquaculture equipment and ROVs. Different onboard cranes are available to ensure compliance with local regulations and statutes.

IMPROVED RAILING

Sturdy railings are installed around work areas to ensure the safety of the personnel. The railings can be removed to accommodate oversized cargo and to provide easy access and transfer.

CARGO ZONES

Dedicated cargo zones with lashing points are installed on deck to secure cargo during operations. The deck has been reinforced to accommodate the added load.



INTERIOR DESIGN

The interior has been designed to provide the user with maximal comfort and spacious working conditions. Ergonomic seats ensure a comfortable ride, noise insulation eases communication and large windshields afford ample light and great visibility.



Comfortable cabin
Attending to the human factor. Functional, bright and ergonomic working conditions with noise insulation for ease of communication.



PRO:ZERO



INTERIOR
DESIGN

PRO:ZERO



15M MULTIMISSION VESSEL

15M MULTI MISSION VESSEL

The 15m ProZero Multi Mission Vessel is built on the proven, reliable and extremely seaworthy ProZero hull platform. The vessel is strategically sized and carefully equipped for fast response, crew transport and patrol missions in coastal and offshore waters and comes equipped for emergency firefighting.

Particular attention has been paid to crew comfort. The vessel is built to minimise noise and vibrations while preserving structural rigidity, integrity and strength and enhancing mission-capability.

The full beam cabin has been designed with acute attention to ergonomics and working environment. Noise insulation ensures comfort and easy communication under all operating conditions and the layout have been organized to facilitate workflow coordination, both during the missions and during transport to and from the sites. The cockpit layout is arranged to maximize the use of state-of-the-art operations management equipment and electronic aids for situational awareness.



Unmatched strength
Confront the elements with confidence. Built for strength, safety and durability.



Design: 2018 | 5000-03-65
Length overall, approx.: 14,82 m
Beam overall, approx.: 3,84 m
Capacity: 12 persons
Maximum load: 3.000 kg
Engines: 2 x inboard diesel

OPERATIONAL FEATURES:

Speed: 25 kt (with 3 persons)
Speed: (cruise): 25 kt
Range: 8 hours at cruise speed.

BENEFITS:

This multi mission vessel is developed for fast response service, equipped for emergency fire-fighting and personnel transfer. The design of the ProZero cabin ensure a huge amount of daylight, this also improve the personal comfort. Benefits by being significantly lighter than market average are lower fuel consumption. Supporting the great and proven sailing capabilities.

DESCRIPTION:

The boat has been built to meet the requirements from the competent authorities, and features a redundant propulsion system.

HULL, DECK AND SUPERSTRUCTURE:

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material. This core material act as a natural buoyancy reserve material, due to its lightweight and zero water-absorption. Moreover, the sandwich construction avoids the use of internal stiffeners, increasing the usable internal space and offers a natural insulation capability, improving the comfort in the cabin and manned compartments.

FENDER:

The fender is constructed EPDM Rubber. Not deflating with solid core that cannot lose buoyancy or absorb water. Damage is strictly cosmetic keeping crew safe. Fender system absorbs major impacts and retains integrity and shape.

DECK:

Hydraulic crane in starboard fore deck. Large working area in the fore deck. Transfer raised platform in the bow with stepped transition between this one and the main deck. 4 mooring bites. Aluminium railings in aft and fore deck.

CABIN & COCKPIT:

Toilet with WC and washbasin. Roof-mounted manually operated firefighting turret, accessed through a hatch in the roof. 10 comfort seats for passengers plus 2 pilot seats. Hinged door in the aft of the cabin. Hinged door in the front of the cabin. Defreeze system for windows with hot air blowers. All windows are glued into the structure. Led lights in cabin and cockpit. Comfort insulation in the cabin.

TECHNICAL:

ENGINES, PROPULSION, STEERING etc.

2 x inboard diesel engine
2 x IPS



TANKS:

Structural diesel tank with hatch and filling protection. Independent fresh water tank. Independent dark water tank with odourless filter.

ELECTRICAL SYSTEM & LIGHTING:

All electrical wiring in marine cable. Shore power with control lamp, marked fuses, earth connection. Isolation transformer with earth plate for protection of galvanic corrosion. 24-volt electrical system. Main switches with separate battery systems for start and consumption. Battery charger with indicator. Navigational lights. 2 x floodlight on the working foredeck

NAVIGATION & ELECTRONIC EQUIPMENT:

Complete engine instruments supplied by engine manufacturer. Control panel for all lighting and other electrical equipment. 1 x magnetic compass

SECURITY EQUIPMENT:

Bilge pumps
Fire extinguisher at helmsman station
Automatic fire extinguisher system in engine room.

PRO:ZERO



15M MULTIMISSION VESSEL



INTERIOR DESIGN

The cabin offers great comfort and is equipped with an adjustable heating system, an air-suspended driver's seat, ergonomic passenger seats and state-of-the-art electronic equipment.



Comfortable cabin

Attending to the human factor. Functional, bright and ergonomic working conditions with noise insulation for ease of communication.



PRO:ZERO

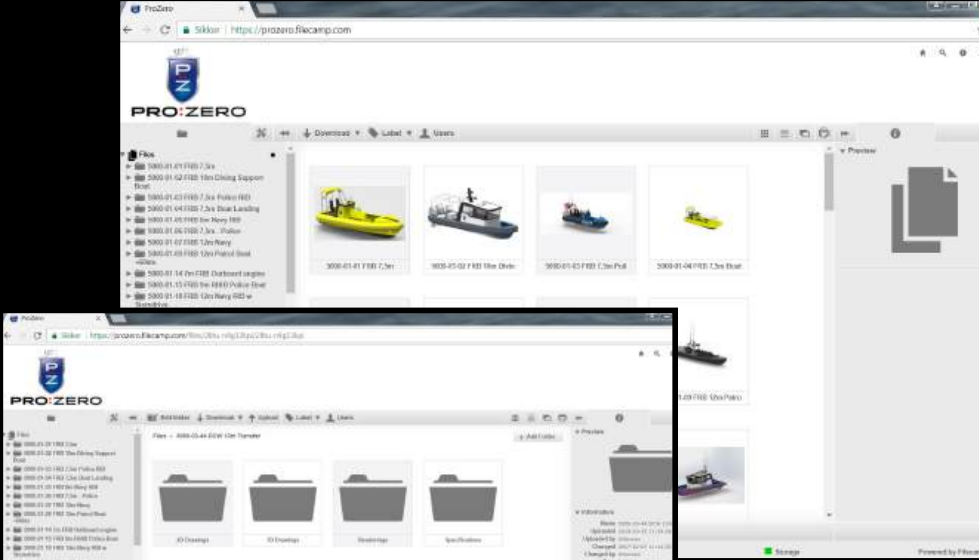
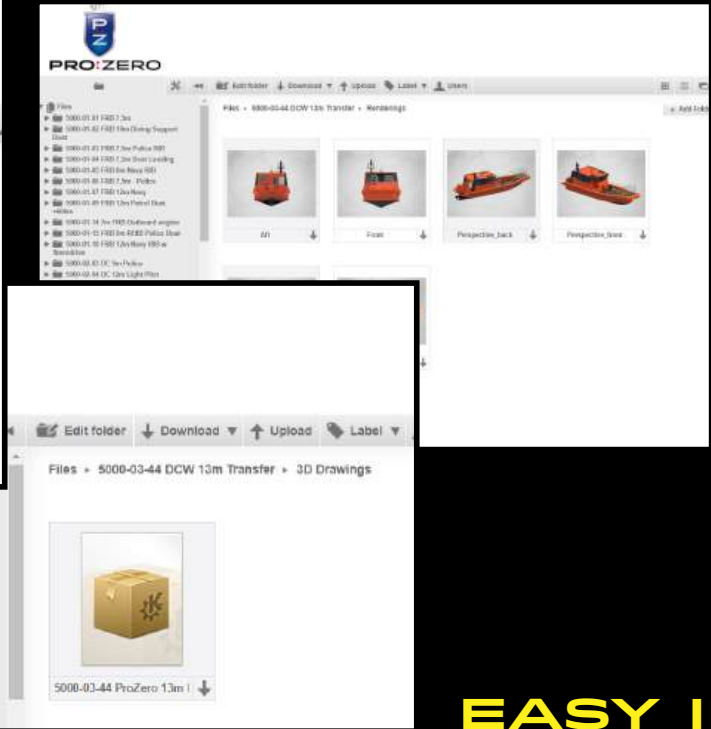
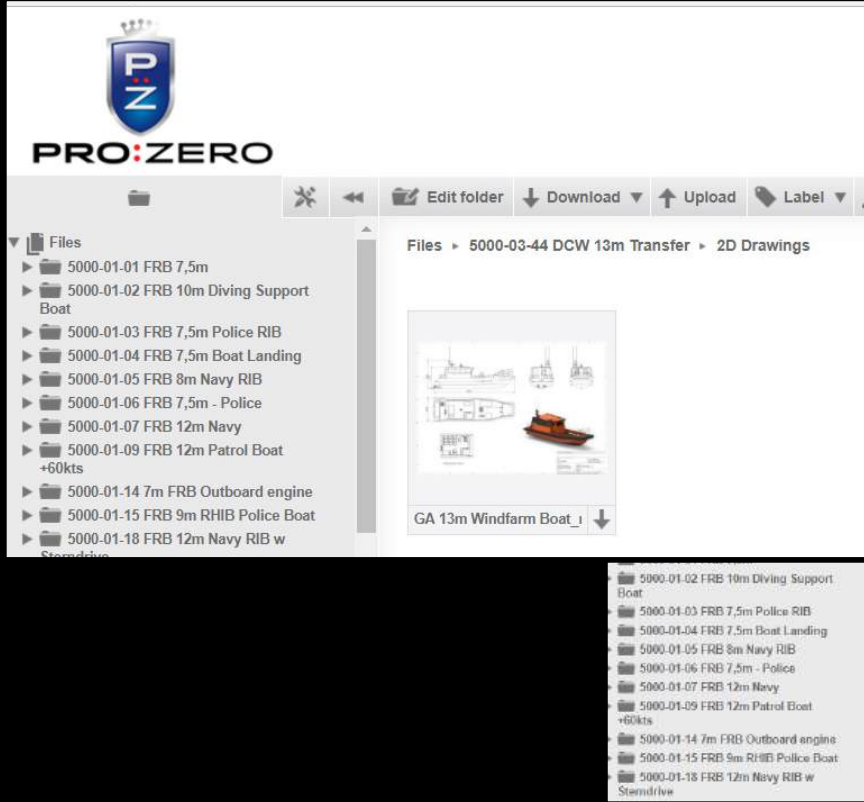


INTERIOR
DESIGN

ACCESS TO DRAWINGS
AND 3D FILES

Easy decisions – exploit our design library and
save time

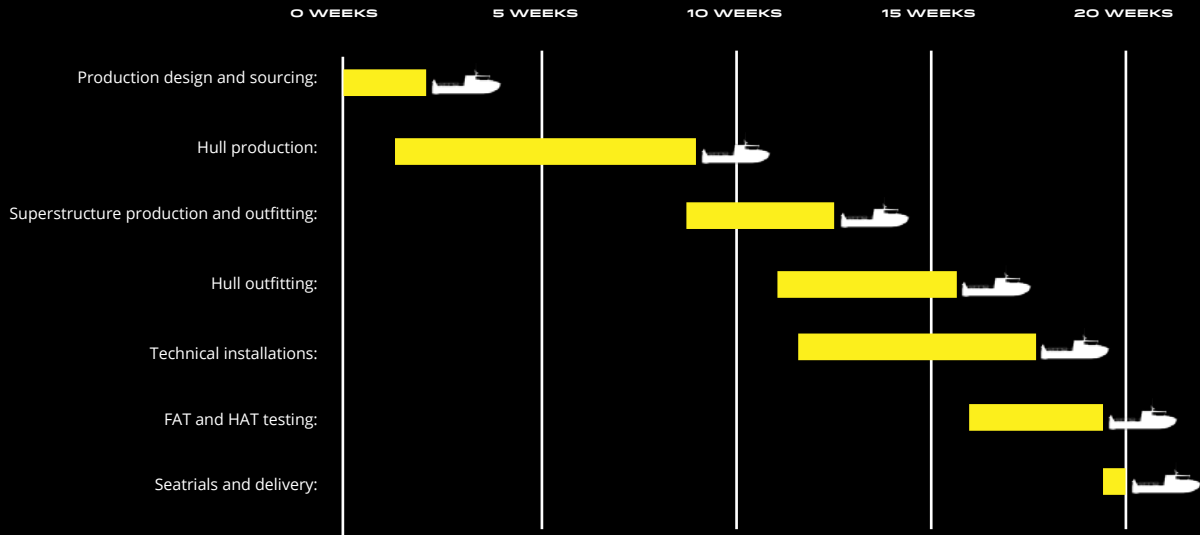
As a service for naval architects and users, Tuco has launched a design library containing drawings and renderings for our range of ProZero vessels. The Filecamp library provides an efficient and convenient way for naval architects to access the ProZero designs. The comprehensive Filecamp data can support and facilitate planning, eliminate superfluous procedures and help in reaching informed design choices.



FILECAMP
EASY INTEGRATION

PRO:ZERO

PRO:ZERO



SHORT LEAD TIME
EFFICIENT PRODUCTION PLATFORM

SERIAL PRODUCTION

Merging unparalleled quality with cost-efficiency
and prompt delivery

Construction with fiber-reinforced composites is highly suited for serial production. Tuco has developed an exceptionally efficient modular production method to fully exploit the advantages inherent in composite materials. To guarantee product excellence and quality uniformity across our range of vessels, female moulds are applied in the production of all ProZero hulls. This permits a very high degree of accuracy and consistency in the manufacturing process so that every single hull lives up to our rigorous quality standards. Production using high quality moulds outperforms any other building technique in terms of cost-effectiveness.

Our modular production method enables us to integrate specific design requests and we cooperate closely with all involved stakeholders to deliver uncompromising quality and excellent products without sacrificing short delivery times.



REFERENCES



*To the above comes a large number of businesses within Renewable Energy and Offshore that are covered by Non-Disclosure agreements



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