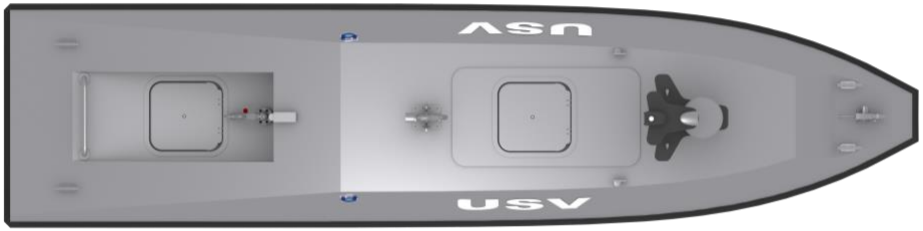
ProZero 10m Unmanned Surfaces Vessel - Oil Spill Response

OFFSHORE

POLICE / MILITARY

WORKBOATS



Design:	**2022 | 5000-01-35-3**
Length overall, approx.:	**10,10 m**
Beam overall, approx.:	**2,50 m**
Capacity:	**Unmanned**
Pay load:	**2.000 kg**
Range:	**250 nm**
Bollard pull:	**5.000 kg**
Engines:	**1 x Inboard diesel engines**

BENEFITS:
ProZero 10m Oil Spill USV - the ultimate solution for autonomous oil spill response operations. This state-of-the-art unmanned surface vessel is specifically designed and expertly crafted to collaborate with other vessels and perform the most efficient offshore oil spill response missions.
Equipped with a powerful propulsion package, including a Power Take Off (PTO), the ProZero 10m USV can supply power to skimmers and other equipment, making it an essential tool for oil spill response operations. With maximum bollard pull, it will tow oil-boom equipment, enabling it to efficiently contain and clean up the spill.
The ProZero 10m unmanned surface vessel is engineered to work in tandem with other vessels in the fleet, communicating seamlessly with other autonomous systems to ensure a coordinated response. With its advanced sensors and communication systems, it can autonomously navigate to the spill site and operators can assess the situation in real-time. Mission control center can quickly and accurately identify the size and location of the spill and provide critical data to other vessels in the fleet, enabling them to respond effectively and efficiently.

Built to last, the ProZero 10m unmanned surface vessel is constructed using the latest in composite materials, making it highly durable and low maintenance. Its innovative design also allows for customization to meet specific operational needs of our clients.

OPERATIONAL FEATURES:
Speed max.: 10 kt
Speed (Cruise): 8kt
Range @cruise: 250 nm
Draft of 1,5 meters

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

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. The sandwich construction also functions in effect as a double skin hull. Hull can be fitted with integrated tanks on request.

FENDER:
The fender is built from a hard rubber holed D profile fender. The fender is bolted to the hull and protects the hull all around.

DECK:
Central placed mast for optimum position of observation module.
Deck is self-bailing.
4 mooring bites.
Recces on aft deck for protection of air intake.
Large deck hatches allowing fast replacement of main components.
Small and lockable inspection hatches.
Remote release single point lifting system.
Remote release painter hook.

SUPERSTRUCTURE:
The superstructure is designed to handle adverse weather and provide a stable platform for towing operations. Furthermore, ensuring able installation space for various equipment inside, minimizing clutter top side. The superstructure can be fitted with further hatches for couplings to hydraulic PTO for powering external equipment.
The great volume of superstructure allows for added equipment such pumps, winch and other equipment demanded.

ENGINES, PROPULSION, STEERING etc.
1 x Inboard diesel engine.
Ducted propeller with bollard of 5 ton
Propeller protected against debris and grounding.
Remote operations
Complete propulsion and steering system integrated into hull for added protection.
Hydraulic PTO for skimmer and other relevant equipment.
Transfer pumps and further equipment available on request.

TANKS:
Independent diesel tank with hatch and filling protection. Further tanks available on request.
Tanks can be free standing or integrated GRP tank in the hull.

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.
Navigational lights.
Floodlights on the deck by request
Searchlight.

NAVIGATION & ELECTRONIC EQUIPMENT:
Fluxgate/Gyro/satellite compass
Radar
Radio wave remote control
Other passive/active sensors and equipment can be fitted on request.
Complete engine instruments supplied by engine manufacturer.

SECURITY EQUIPMENT:
Bilge pumps
Fire extinguisher in engine room
Fire extinguisher in technical compartment
Further equipment can be fitted on request.

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