

# Baltic Workboats wave-piercing series



PILOTS:  
BWB PILOT 1500WP  
BWB PILOT 2000WP

PATROLS:  
BWB PATROL 2200WP  
BWB PATROL 4500WP

CREW TRANSFER VESSELS:  
BWB CTV 2000WP  
BWB CTV 3000WP CATAMARAN  
BWB CTV 4000WP

## Baltic Workboats has unique expertise and experience in the design, development

Baltic Workboats is a growing shipyard with modern facilities and a highly skilled workforce of more than 200 people. Over the last 16 years, we have designed, built and delivered more than 160 highly versatile vessels, which are in service with governments, companies and research institutions in twelve countries around the world. We have been granted both ISO 9001 and ISO 14001 certificates, and are continuously improving production quality and efficiency through the development of enhanced standards and management processes. Our state-of-the-art covered facilities are located in the Baltic Sea on the island of Saaremaa, which is renowned for its shipbuilding heritage stretching back thousands of years.

At Baltic Workboats, we have brought ship-building into the 21<sup>st</sup> Century with a major modernization program, complete with considerable new investments in facilities, equipment and skills. Customers around the world now depend on us to deliver highly capable and durable vessels that connect communities, support businesses, protect maritime borders, promote security, carry out search and rescue operations and deliver cutting edge scientific research. Our vessels and their management systems are carefully modified to the unique requirements of customers in different countries, including harbours, pilots, coast guards, police forces, fishery inspections teams and research institutions.



## Wave-Piercing Bow

The new hull concept combines the wave-piercing bow's slender waterlines with the flare of a traditional high-speed bow with a falling stem and the smooth ride of the double chine hull design. The special bow shape offers long slender waterlines in calm to moderate water whilst preventing pitch motion in high seas.



All of our series wave piercing boats can be customized according to the customer's specific needs and requirements.

## Hull Design

The hull is specially designed for higher sea states. The hull shape is developed to minimize vertical accelerations at high speeds in rough weather conditions. Extra attention is also paid to assure excellent control and maneuverability in demanding following sea conditions.

## Performance

The design has been thoroughly tested in both head sea and rough sea states to deliver exceptional performance and helm control in the most challenging marine environments. The bow is deep and slender for high speed and fuel efficiency, yet the propeller tunnels are designed to support large, highly effective rudders to maintain control and stability in all conditions. The vessel can turn completely around in just four boat lengths at high speed, while maximum maneuverability is obtained at low speed for safe and efficient docking operations.

## Propulsion concept

The vessel's formidable power is delivered by best alternative choice for the customer needs.

## Vibration

The vessel has incredibly low levels of noise and vibration despite the considerable size and power of its engine, as Baltic Workboats has developed an advanced expertise in insulation and interior assembly. The maximum noise levels have been tested in all sailing conditions. Noise level at 25kn was recorded 58db.

## Fuel Consumption

The fuel consumption with fixed pitch propellers is up to 30% lower compared to similar vessels operating at the same speed with the same propulsion. The measured fuel consumption of similar vessels designed and built by Baltic Workboats and already in operation has been impressively low in 15m wave piercing pilot boat: 115 l/h at 21 knots and 168 l/h at 27 knots.

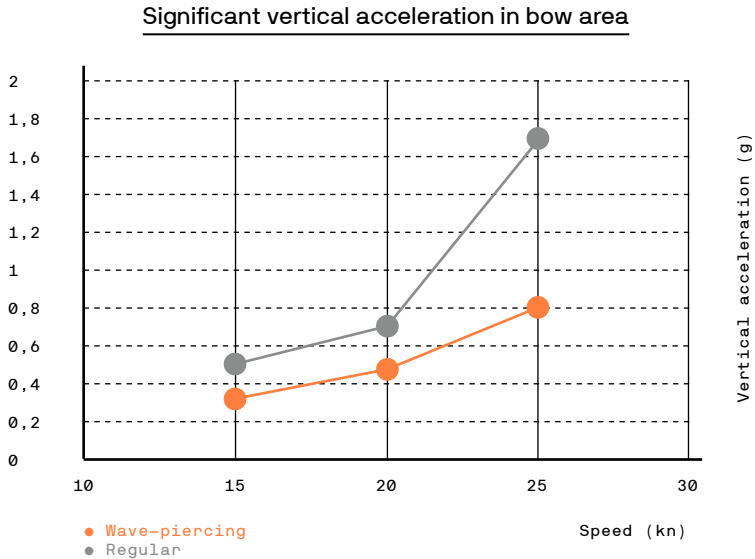
## Double Chine

Double chine maintains supreme sea-keeping and soft ride with minimum water spray on deck. The specially designed chine prevents the water spray and minimizes 'green water' on deck. Despite its light weight, the hull is strengthened for safe operations in heavy seas. All of the structural elements are designed to take into account a minimum of 10,000 hull contacts per year. In order to manage safe hull contacts, the vessel's hull is also heavily fendered at two different heights. The structure is designed according to the requirements of LRS Special Service Craft rules. Up to 20% lower fuel consumption with FPP compared to similar vessels making the same speed with the same propulsion.

The new design concept has been successfully developed and tested in both model test and full-scale sea trials. Baltic Workboat's unique experience and knowhow in building lightweight high performing vessels raise this boat to a new standard of fuel economy, manoeuvrability and seaworthiness.

During the sea trials in head waves, with a reference boat of equal size running parallel at the same speed, the hull concept proved to have much lower accelerations and lower frequency of slamming. The significant single acceleration amplitude was only 2/3 compared to the reference boat, which is in line with the model test results. Compared to the regular hull, slamming occasions above 2 g where 5 times less frequently detected.

54% lower significant vertical accelerations in bow area at 25 knots compared to conventional hulls. Even more at 30 knots.



Wave-piercing



Vessels are designed to be self-righting. This capability has been successfully verified in real life tests.





## Our fleet

BWB PILOT 1500WP  
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BWB CTV 4000WP  
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CATAMARAN  
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BWB PATROL 4500WP  
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BWB CTV 2000WP  
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1 : 2000



# WAVE PIERCING PILOT BOATS

are developed for tasks that require high speed, manoeuvrability, comfort ride and fuel efficiency in most challenging conditions. Excellent for pilot, patrol or SAR duties.

BWB PILOT 1500 WP  
BWB PILOT 2000 WP

# BWB PILOT 1500WP

## Lenght overall

14,95 m

50 ft

## Breath

4,5 m

14 ft

## Draught max

0,8 m

2 ft 7

## Displacement

~22.9 t

## Crew/passangers

2/6

## Power

2x368 kW

2x500 hp

## Speed

27 kn

## Range (estimated)

~270 NM

## Noise level

58 dB at 25 kn

## Fuel consumption at 25kn

150 L/h

39 gal/h

## Ambient conditions

Air temperature: -25 /+35 °C

-13 / +95 °F

Seawater: 0 /+27 °C

32 / +80 °F

Up to 5cm crushed ice

## Material

Marine Aluminium

## Tank capacities

Fuel: 1600 L / 422 gal

Water: 50 L / 13 gal

Gray water: 150 L / 39 gal

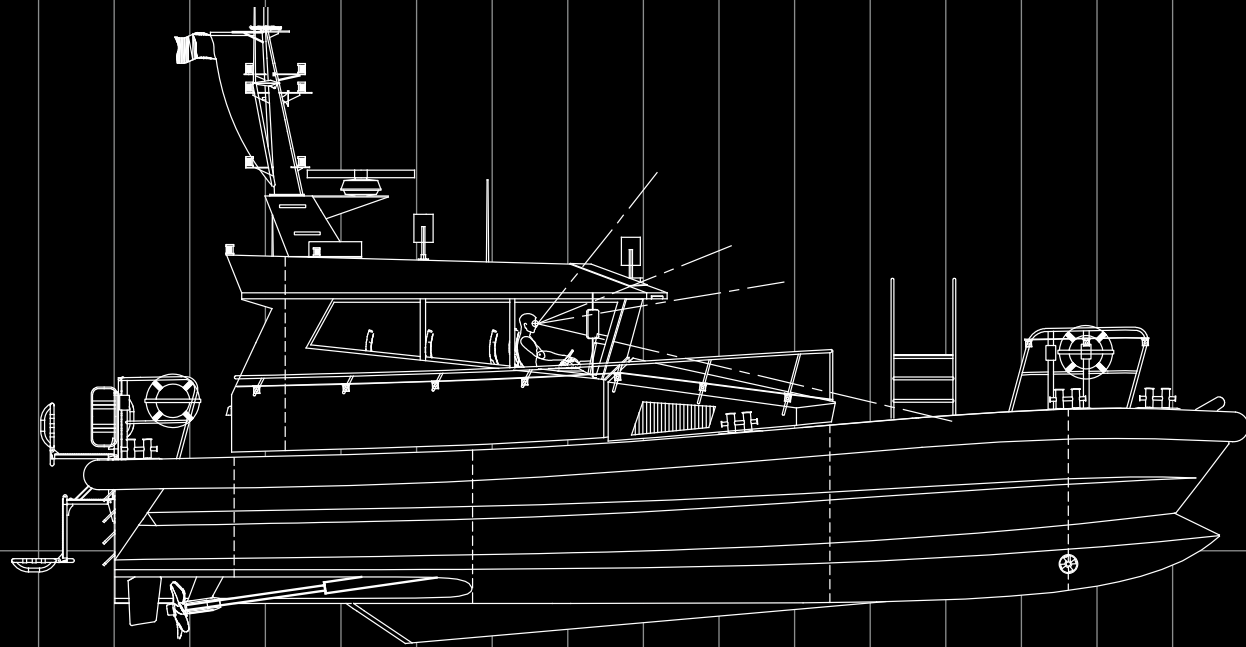
Black water: 150 L / 39 gal

## Propulsion concept

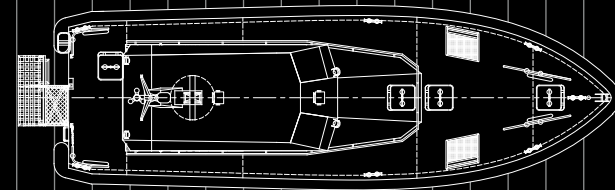
Main engine: 2xVolvo-Penta D13 MH

Propulsion: 2xPTI

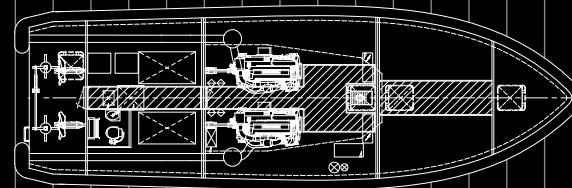
Gearboxes: 2xZF325-1



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 m



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 m



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 m







# BWB PILOT 2000WP

Lenght overall

20,3 m67 ft

Breath

6 m19 ft 8

Draught max

1,4 m4 ft 7

Displacement

~33 t

Crew/passangers

2/8

Power

2x478 kW2x650 hp

Speed

28 kn

Range (estimated)

~400 NM

Noise level

63 dB at 28 kn

Fuel consumption at 28kn

220 L/h58 gal/h

Ambient conditions

Air temperature: -25 /+40 °C  
-13 / +104 °F  
Seawater: 0 /+32 °C  
32 / +89.6 °F

Material

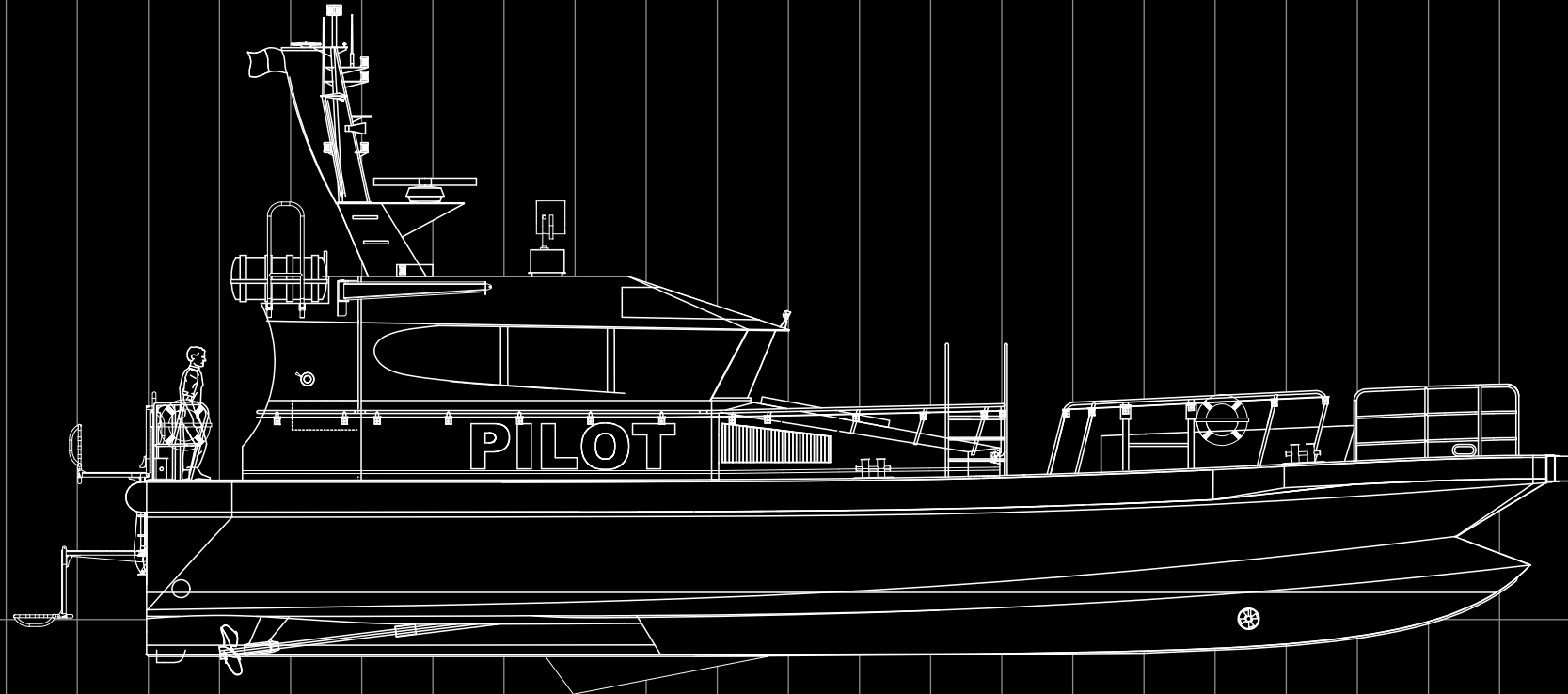
Marine Aluminium

Propulsion concept

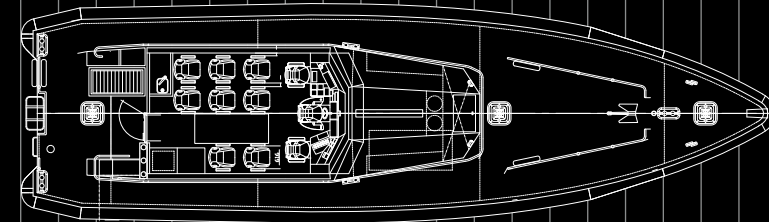
Main engine: 2xVolvo-Penta D16  
Propulsion: 2xFPP  
Gearboxes: 2xZF665 or equivalent

Tank capacities

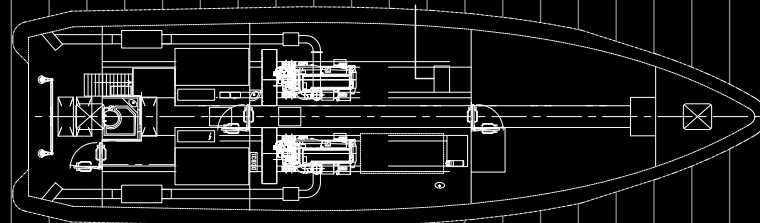
Fuel: 3000 L / 792 gal  
Water: 500 L / 132 gal  
Gray water: 300 L / 79 gal  
Black water: 500 L / 132 gal



20 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 m



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 m



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 m







# WAVE PIERCING PATROL BOATS

are designed for patrol duties in harbors', coastal and offshore areas for maritime surveillance, border control, customs, police, fisheries protection, fire fighting, SAR and crew transfer purposes. Baltic workboats have already proven the design for excellent sea keeping, extremely low fuel consumption and low noise levels.

BWB PATROL 2200WP  
BWB PATROL 4500WP

# BWB PATROL 2200WP

Lenght overall

21,97 m72 ft

Breath

6,40 m21 ft

Draught max

1,75 m5 ft 8

Displacement

~40 t

Crew/passangers

2/6

Power

2x405 kW2x550 hp

Speed

22 kn

Range (estimated)

300 NM

Noise level

62 dB at 20 kn

Fuel consumption at 20kn

150 L/h39 gal/h

Ambient conditions

Air temperature: -10 /+30 °C  
-13 / +86 °F

Seawater: 0 /+25 °C  
32 / +77 °F

Material

Marine Aluminium

Tank capacities

Fuel: 3000 L / 792 gal  
Water: 500 L / 132 gal  
Waste: 500 L / 132 gal  
Bilge: 300 L / 79 gal

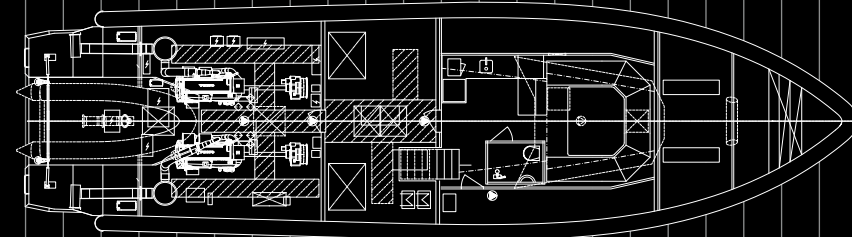
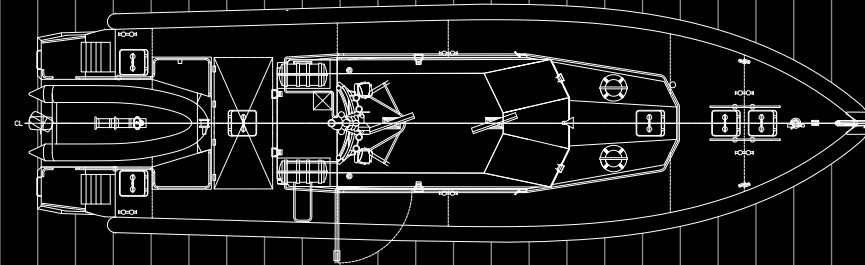
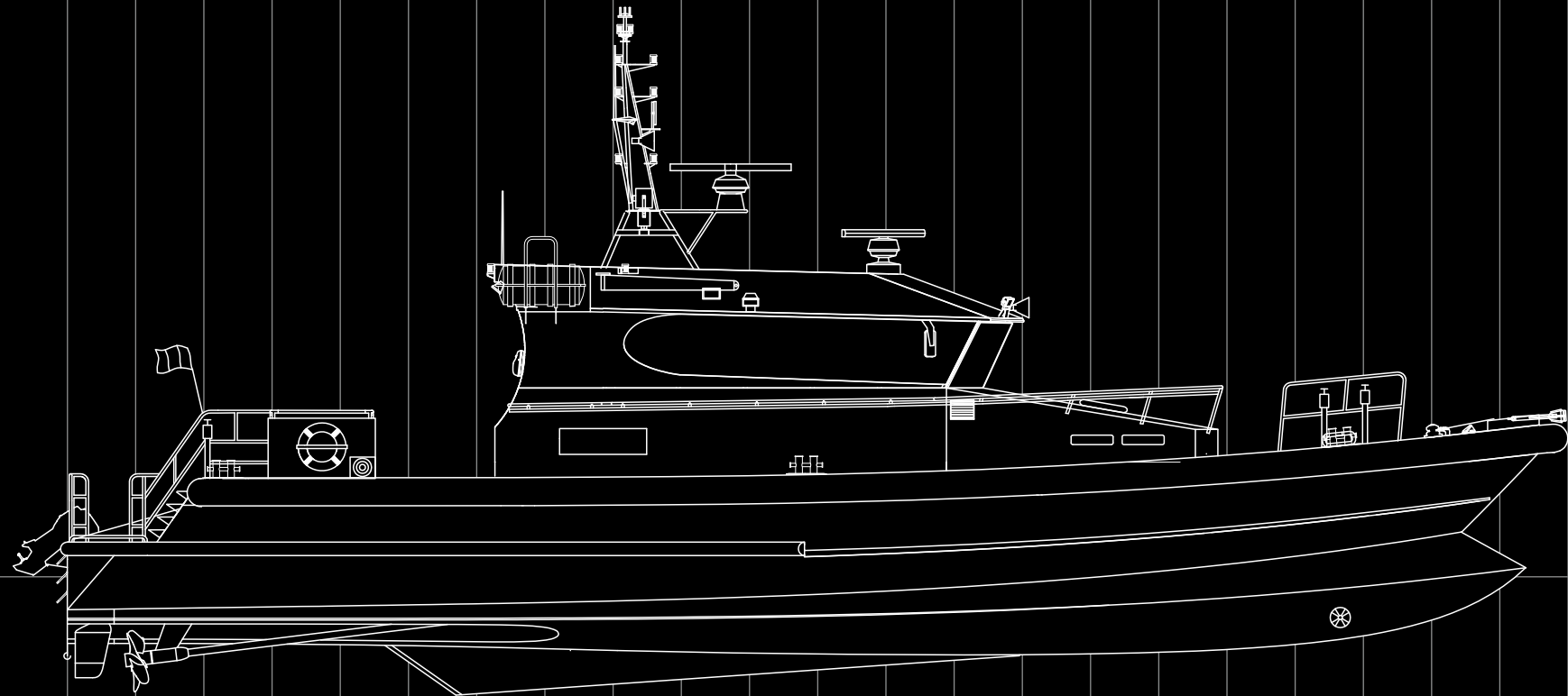
Propulsion concept

Main engine: 2x Volvo Penta D-16 MH  
Propulsion: 2x Fixed pitch, 5 blade  
Gearboxes: ZF 665V ratio 2,517:1

Classification

LRS Service Craft Rules  
+100A1 SSC Patrol, Mono,  
HSC, G6 (hull) and G4 MCH, UMS











# BWB PATROL 4500WP

Lenght overall

44,6 m146 ft

Breath

8,8 m28 ft 10

Draught max

2,6 m8 ft 6

Displacement

~220 t

Crew/passangers

10/35

Classification

LRS 100A1 SSC Patrol  
Mono / HSC G3 MCH UMS  
or equivalent

Power

2x1860 kW2x2500 hp

Speed

25 kn

Range (estimated)

2500 NM

Fuel Capacity:

15000 L3962 gal

Fuel consumption at 25kn

800 L/h211 gal/h

Ambient conditions

Air temperature: -35 / +35 °C  
-31 / +95 °F

Seawater: 0 / +25 °C  
32 / +77 °F

Up to 5cm crushed ice

Material

Marine Aluminium

Tank capacities

Water: 1800 L / 475 gal  
Gray water: 1800 L / 475 gal  
Black water: 1800 L / 475 gal

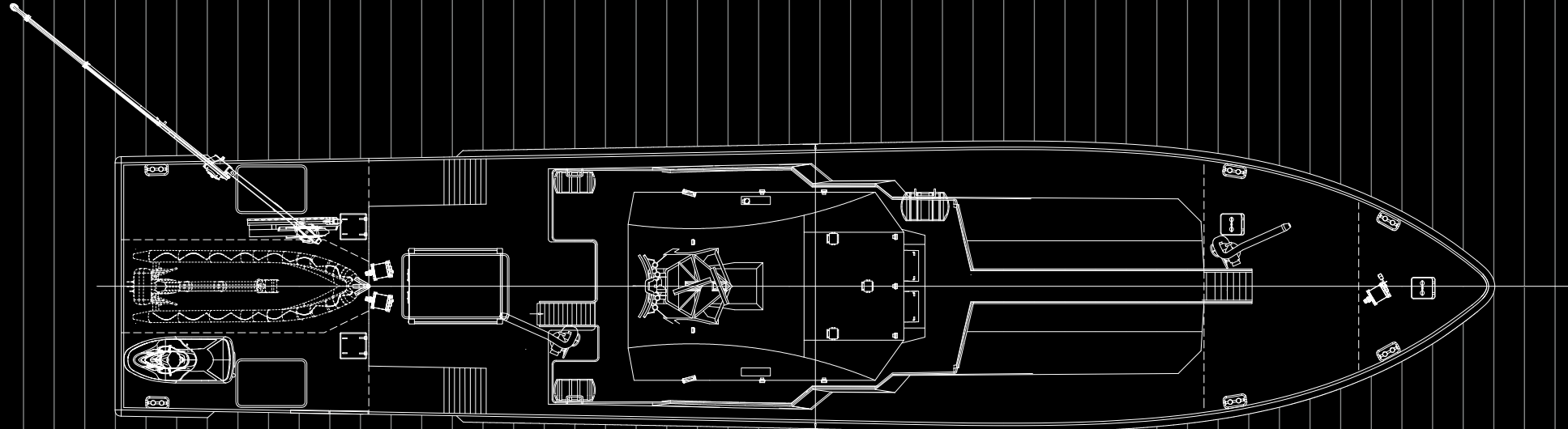
Propulsion concept

Main engine: 2xMTU16V4000  
Propulsion: 2xPTI and Shaft driven FPP,  
Gearboxes: 2xZF5360 with PTI optional  
pumpjet, Volvo-Penta D13 genset with  
400kW generator for hybrid propulsion

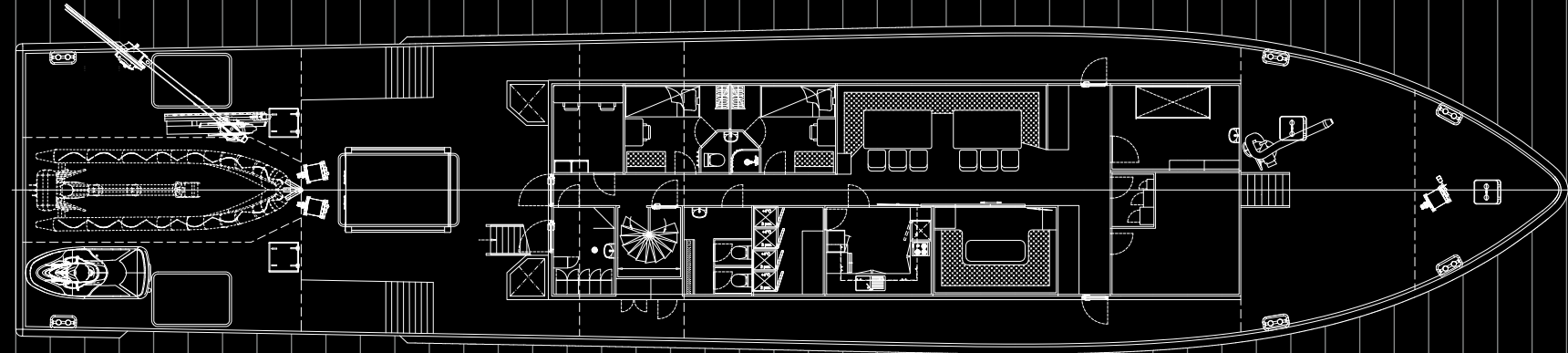
Multifunctions

Offshore patrol, SAR, combat pollution,  
fire fighting, hydrographic tasks and buoy  
servicing.





0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 m



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 m







# WAVE PIERCING CREW TRANSFER VESSELS

for servicing new growing industry alternative green energy wind farms. These wave-piercing boats are designed for the crew to transfer to the wind farm with exceptional comfort and safety even with high sea conditions.

BWB CTV 2000WP  
BWB CTV 3000WP CATAMARAN  
BWB CTV 4000WP

# BWB CTV 2000WP

Lenght overall

20,3 m67 ft

Breath

6 m19 ft 8

Draught max

1,4 m4 ft 7

Displacement

34 t

Crew/passangers

2/13

Power

2x551 kW2x750 hp

Speed

31 kn

Range at 20kn

400 NM

Noise level

63 dB at 31 kn

Fuel consumption at 28kn

220 L/h58 gal/h

Ambient conditions

Air temperature: -25 /+30 °C  
-13 / +86 °F  
Seawater: 0 /+27 °C  
32 / +80.6 °F

Material

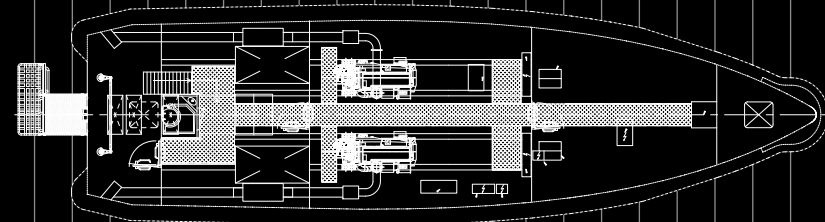
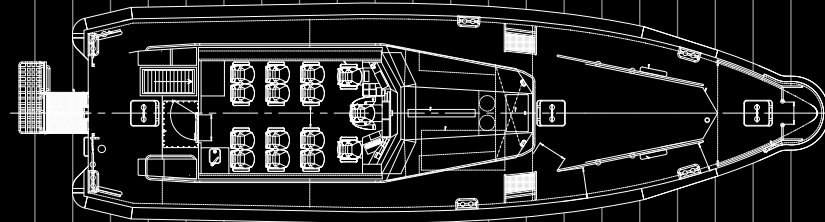
Marine Aluminium

Propulsion concept

Main engine: Volvo D16 1104kW  
Propulsion: 2x FPP 5 blade  
Gearboxes: ZF665

Tank capacities

Fuel: 3000 L / 792 gal  
Water: 500 L / 132 gal  
Waste: 300 L / 79 gal  
Bilge: 200 L / 52 gal









# BWB CTV 3000WP CATAMARAN

Lenght overall

29.9 m98 ft

Deadweight

40 t

Draught max

1.75 m5 ft 8

Power

4x515 kW4x700 hp

Crew/passangers

6/54

Speed

27 kn

Fuel Capacity:

32,000 L8453 gal

Ambient conditions

External air: -10 /+35 °C  
+14 / +95 °F  
Internal air: +20 / +27 °C  
+68 / +80.6 °F

Material

Marine Aluminium

Tank capacities

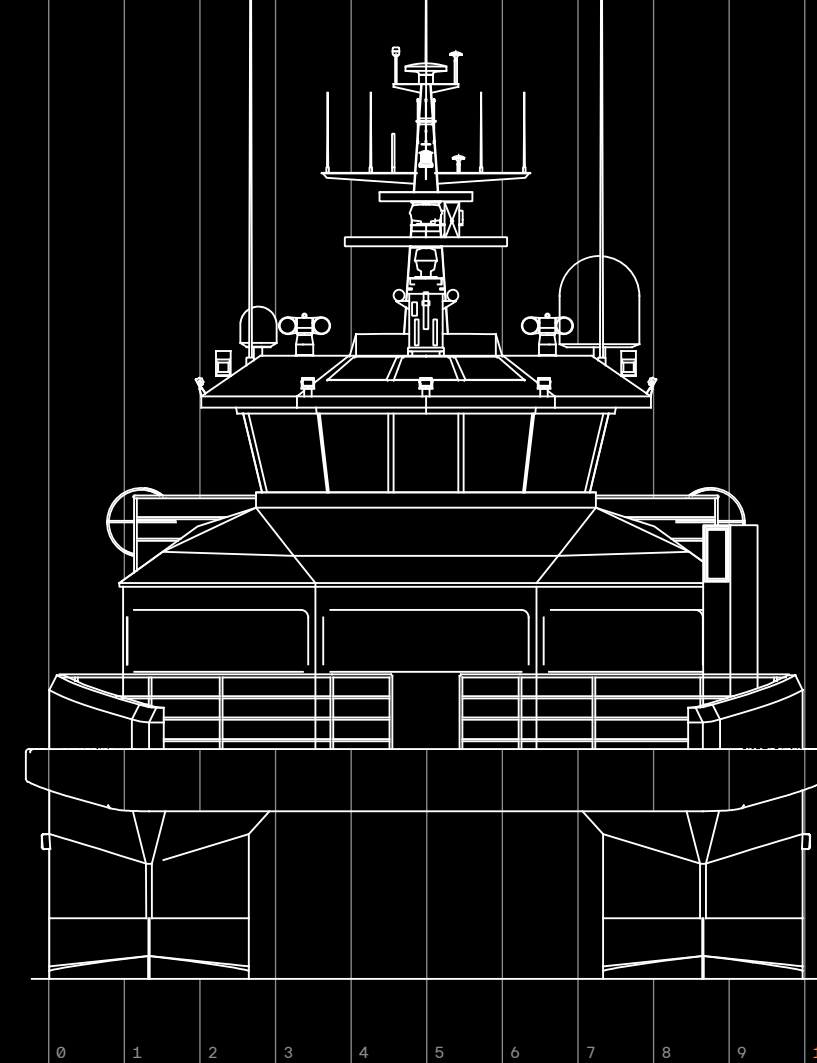
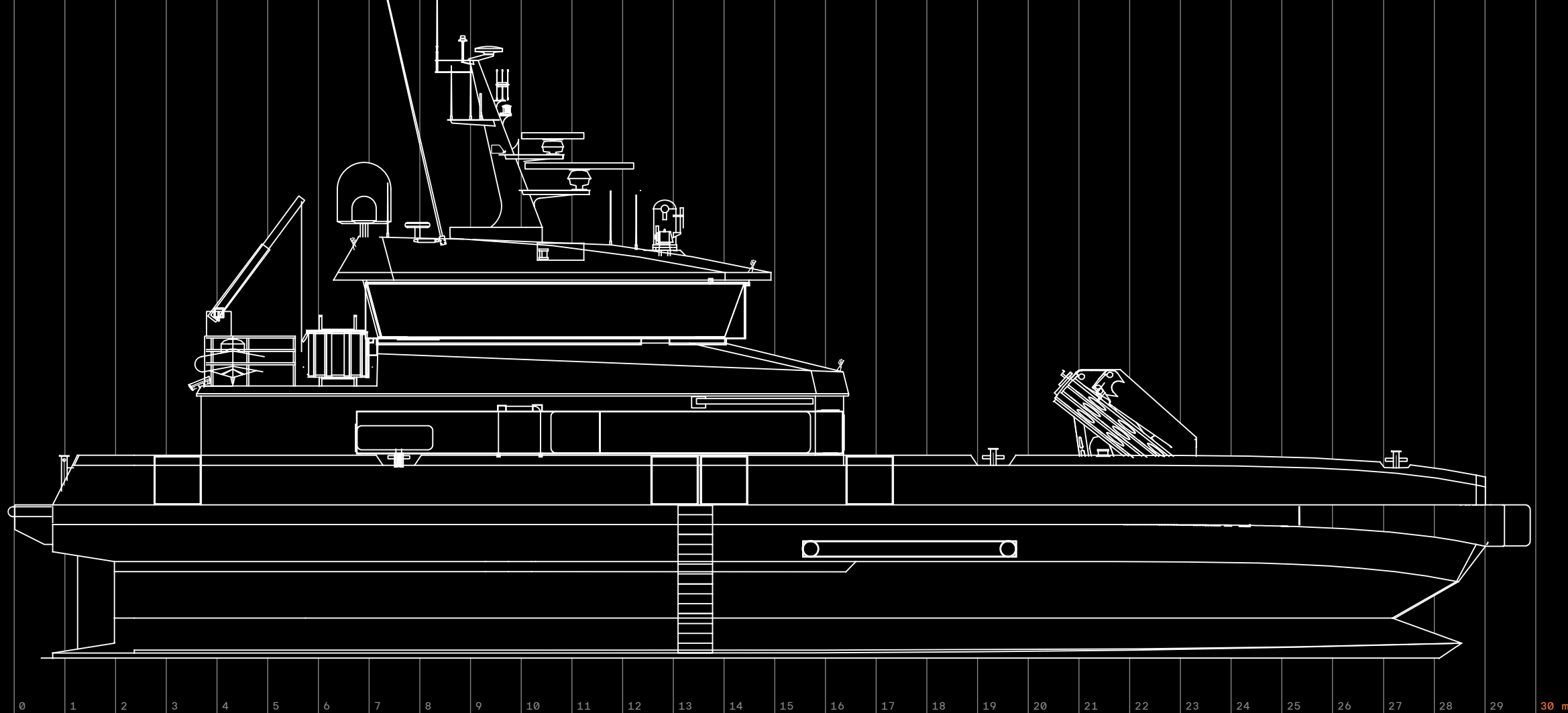
Water: 3,000 L / 792 gal  
Black water: 3,500 L / 924 gal  
Gray water: 3,500 L / 924 ga

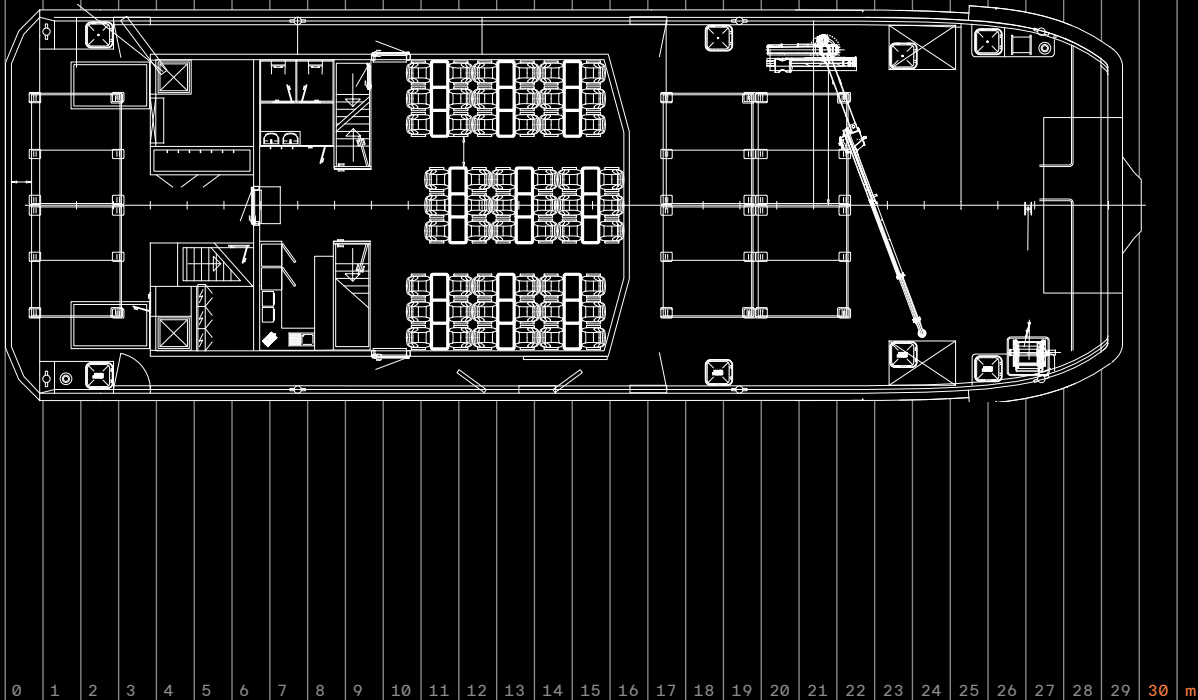
Propulsion concept

Main engine: 4 x Volvo D13-700  
Propulsion: 4 x Volvo Penta Quad IPS 900 Thrusters  
Generator: 2 x 30kw 230 VAC 50 Hz box cooled, sound shielded

Equipment

Forward Deck Crane:  
1 x Palfinger PK320002M (or analogue) - hydraulic foldable  
Aft Deck crane: marine crane  
1 x Steelhead E series electro hydraulic telescopic crane









# BWB CTV 4000WP

Length LOA

40,08 m131 ft

Draught max

2,33 m7 ft 7

Speed

20-25 kn

Crew/passangers

10/101

Ambient conditions

External air: -10 /+35 °C  
+14 / +95 °F  
Internal air: +20 /+25 °C  
+68 / +77 °F

Material

Marine Aluminium

Tank capacities

Fuel: 70,0 m3  
Water: 20,0 m3

Cargo

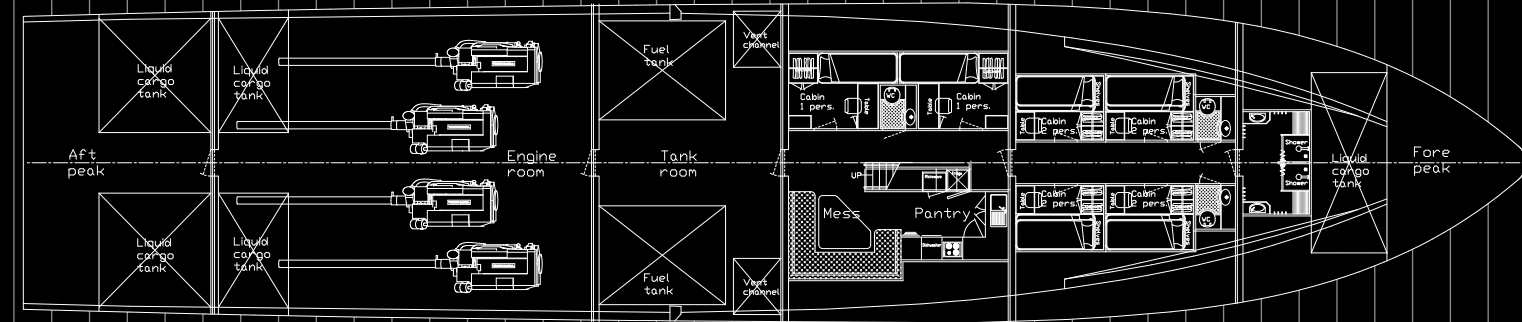
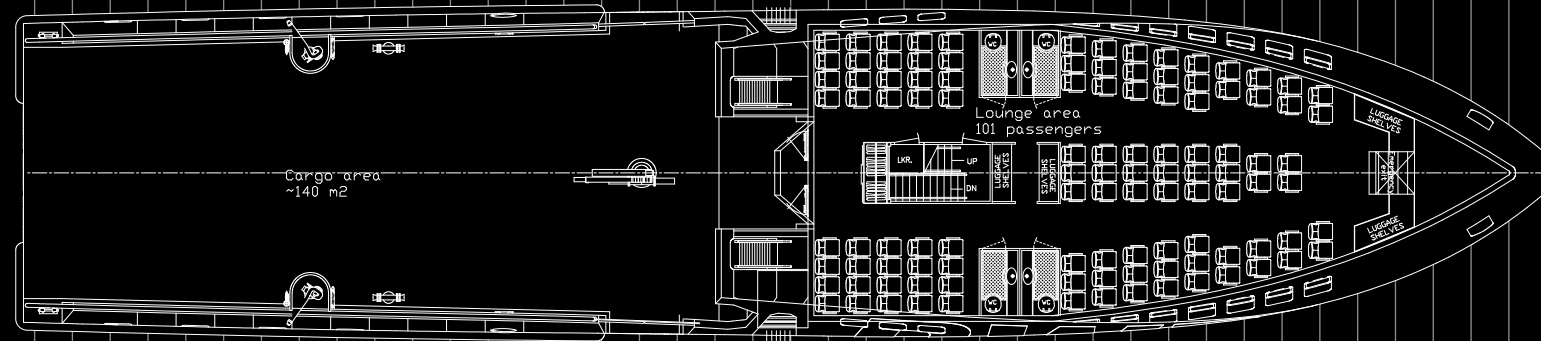
Fresh water cargo 71,0 m3  
Cargo deck area 140 m2

Propulsion concept

Main engine: 4 x MTU or equivalent













# Contact us for any enquiry.

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