Baltic Workboats wave-piercing series

PILOTS:
PILOT 15 WP
PILOT 20 WP

PATROLS:
PATROL 17 WP
PATROL 22 WP
PATROL 24 WP
PATROL 45 WP

CREW TRANSFER VESSELS:
BALTIC 20 WP CTV
BALTIC 30 WP CAT
BALTIC 40 WP CTV

Baltic Workboats shipyard

BWB.ee

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 sertificates, and are continuously improving production quality and efficiency through the development of enhanced standards and management processes. Out 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 21st 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, supportbusinesses, 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 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 xed pitch propellers is up to 20% 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

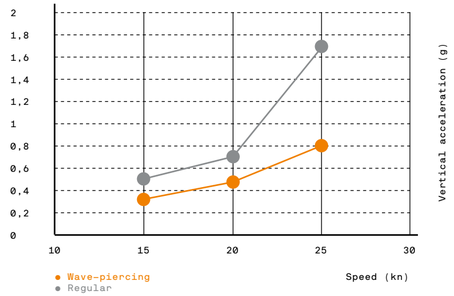
Double chine maintains supreme seakeeping and soft ride with minimum water spray on deck. The specially designed chine prevents the water spray and minimizes 'green water' on deck. Despite its light weight, the hull is strengthened for safe operations in heavy seas. All of the structural elements are 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.

Significantly reduced vertical acceleration in bow area



Wave-piercing

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

Our fleet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PILOT 15 WP
p. 12
PILOT 20 WP
p. 18
PATROL 22 WP
p. 32
PATROL 24 WP
p. 38
BALTIC 40 WP CTV
p. 68
PATROL 17 WP
p. 26
PATROL 45 WP
p. 44
BALTIC 30 WP CTV CAT
p. 60
BALTIC 20 WP CTV
p. 54

WAVE PIERCING PILOT BOATS

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

PILOT 15 WP
PILOT 20 WP

PILOT 15 WP

Lenght overall
14,95 m

Breath
4,5 m

Draught max
0,8 m

Displacement
~22.9 t

Crew/passengers
2/6

Power
2x368 kW

Speed
27 kn

Range (estimated)
~270 NM

Noise level
58 dB at
25 kn

Fuel consumption at 25kn
150 L/h

Ambient conditions

Air temperature: –25 /+35 C°
Seawater: 0/+27 C°
Up to 5cm crushed ice

Material

Marine Aluminium

Tank capacities

Fuel: 1600 L
Water: 50 L
Gray water: 150 L
Black water: 150 L

Propulsion concept

Main engine: 2xVolvo-Penta D13 MH
Propulsion: 2xPTI and Shaft driven FPP
Gearboxes: 2xZF325-1

PILOT 15 WP

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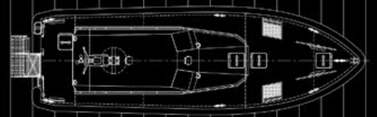

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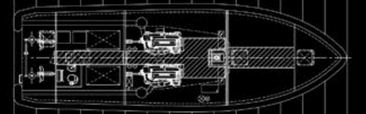

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PILOT

PILOT 20 WP

Lenght overall
20,3 m

Breath
6 m

Draught max
1,4 m

Displacement
~33 t

Crew/passengers
2/8

Power
956 kW

Speed
31 kn

Range (estimated)
~400 NM

Noise level
63 dB at
28 kn

Fuel consumption at 28kn
220 L/h

Ambient conditions

Air temperature –25 /+40 C°
Seawater 0/+32 C°

Material

Marine Aluminium

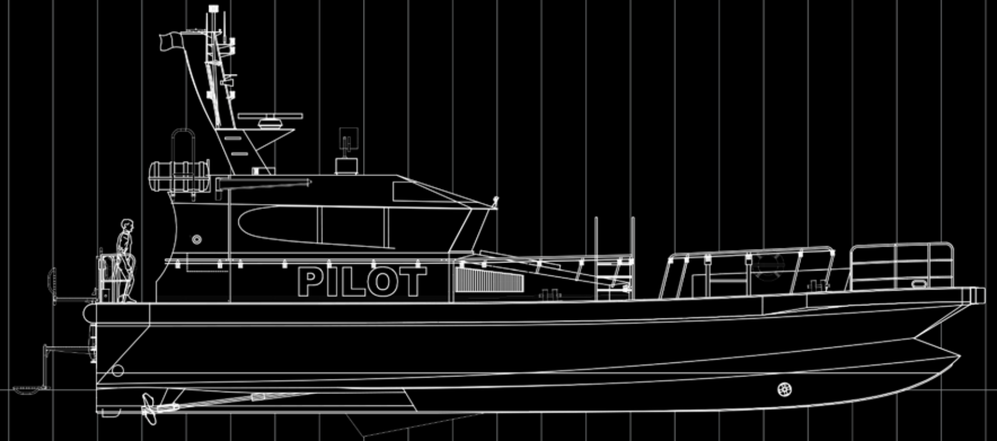
Propulsion concept

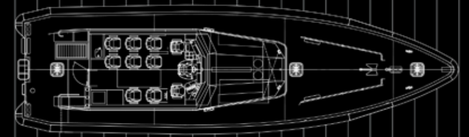
Main engine: 2xVolvo-Penta D16
Propulsion: 2xFPP
Gearboxes: 2xZF665 or equalent

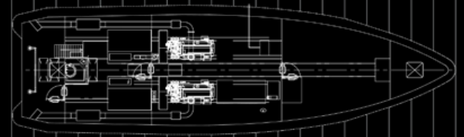
Tank capacities

Fuel: 3000 L
Water: 500 L
Gray water: 300 L
Black water: 500 L

PILOT 20 WP







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DEURLOO


DEURLOO

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 boats have already proven the design for excellent sea keeping, extremely low fuel consumption and low noise levels.

PATROL 17 WP
PATROL 22 WP
PATROL 24 WP
PATROL 45 WP

PATROL 17 WP

Lenght overall
17,0 m

Breath
4,67 m

Draught max
0,96 m

Displacement
~28 t

Crew/passengers
up to 4

Power
2x662 kW

Speed
35 kn

Range (estimated)
min 300 NM

Noise level
65 dB at
30 kn

Fuel consumption at 25kn
150 L/h

Ambient conditions

Air temperature: –15 /+35 C°
Seawater: 0/+25 C°
Up to 5 cm crushed ice

Material

Marine Aluminium

Tank capacities

Fuel: 3000 L
Water: 300 L
Black & grey water: 300 L

Propulsion concept

Main engine: 2 x Volvo Penta D13-900
Propulsion: 2 x Rolls-Royce Kamewa S36-3/CA waterjets
Gearboxes: 2 x ZF500

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027
TALLINN
POLITSEI-JA PIIRIVALVEAMET


026
POLICE AND BORDER GUARD
TALLINN

PATROL 22 WP

Lenght overall
21,97 m

Breath
6,40 m

Draught max
1,75 m

Displacement
~40 t

Crew / passengers
2 / 6

Power
2x405 kW

Speed
22 kn

Range (estimated)
300 NM

Noise level
62 dB at
22 kn

Fuel consumption at 20kn
150 L/h

Ambient conditions

Air temperature −10 / +30 C°
Seawater 0 / +25 C°

Material

Marine Aluminium

Tank capacities

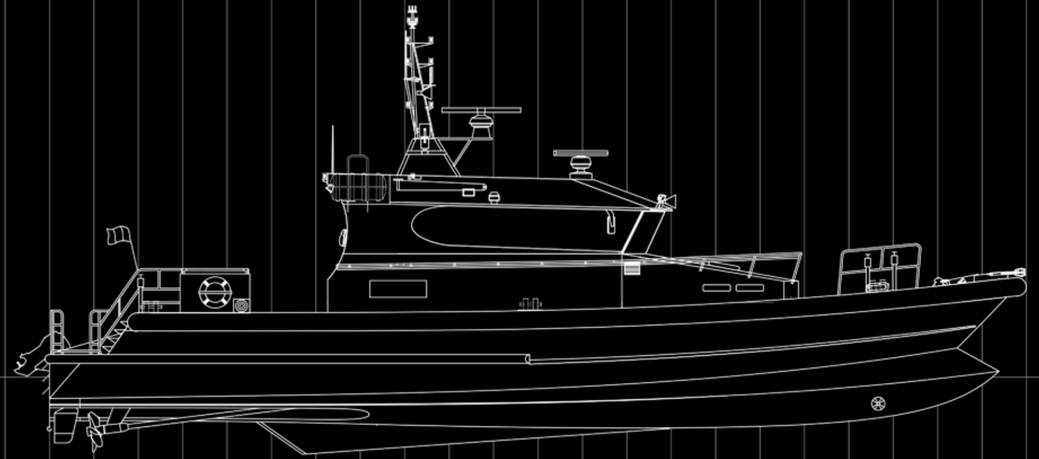
Fuel: 3000 L
Water: 500 L
Waste: 500 L
Bilge: 300 L

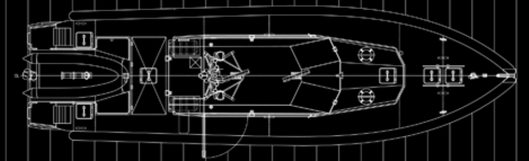
Propulsion concept

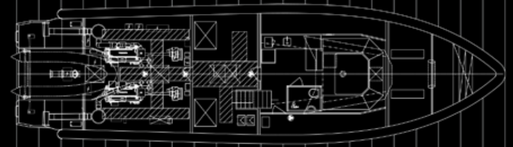
Main engine: 2x Volvo Penta D-16 MH
Propulsion: 2x Fixed pitch, 5 blade
Gearboxes: ZF 665V ratio 2,517:1

Classification

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







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ZEELEEUW

PATROL 24 WP

Lenght overall
24 m

Breath
6,49 m

Draught max
1,50 m

Displacement
~55 t

Crew/passengers
up to 6

Power
2x720 kW

Speed
24 kn

Range (estimated)
min 345 NM

Noise level
65 dB at
24 kn

Fuel consumption at 22 kn
240 L/h

Ambient conditions

Air temperature: –15 /+35 C°
Seawater: 0/+25 C°

Material

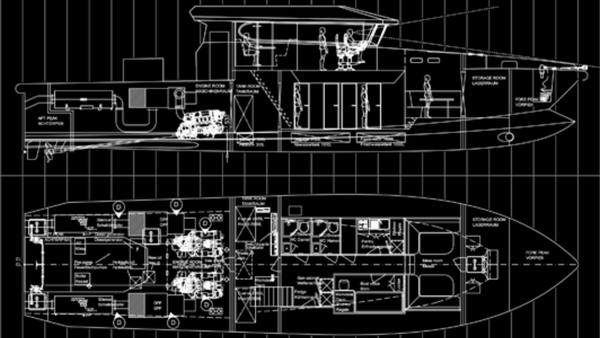
Marine Aluminium

Tank capacities

Fuel: 4000 L
Water: 1000 L
Black & grey water: 1100 L

Propulsion concept

Main engine: 2 x MTU 8V 2000 M72
Propulsion: 2 x fixed-pitch propeller (FPP)
Gearboxes: 2 x ZF2000



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PATROL 24 WP

PATROL 45 WP

Lenght overall
44,6 m

Breath
8,8 m

Draught max
2,6 m

Displacement
~220 t

Crew/passengers
10/35

Power
2x2000 kW

Speed
27 kn

Range (estimated)
3000 NM

Fuel Capacity:
30000 L

Fuel consumption at 25kn
800 L/h

Ambient conditions

Air temperature –35/+35 C°
Seawater 0/+25 C°
Up to 5cm crushed ice

Material

Marine Aluminium

Tank capacities

Water: 1800 L Black water: 1800 L
Gray water: 2000 L

Propulsion concept

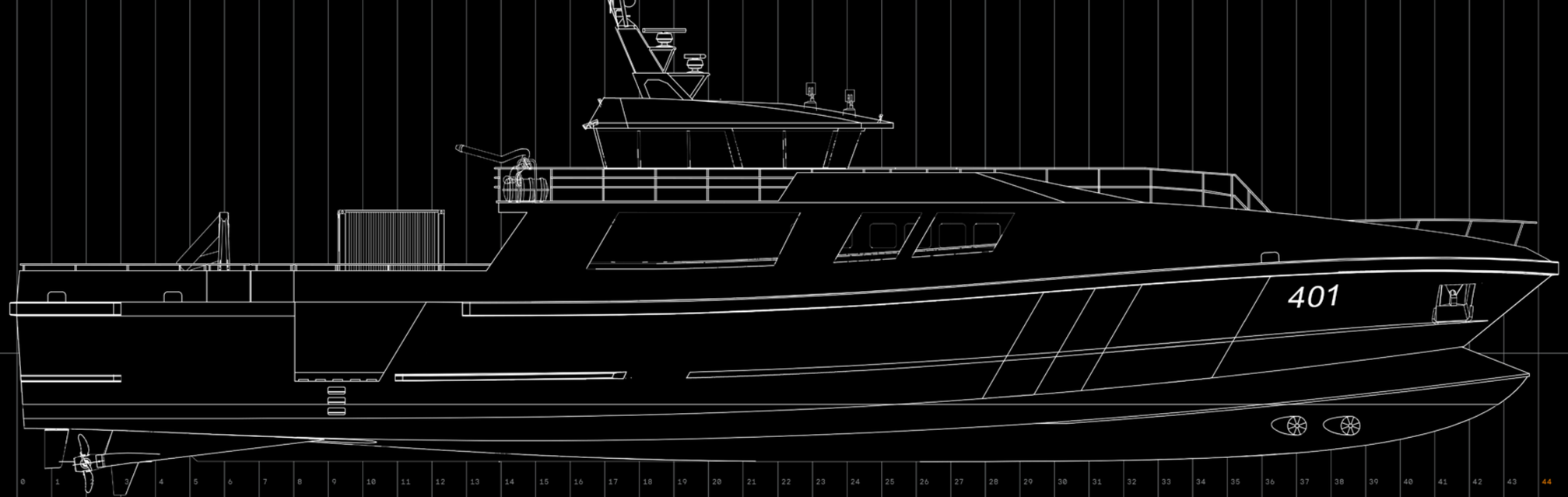
Main engine: 2xMTU16V4000
Propulsion: 2xPTI and Shaft driven FPP,
Gearboxes: 2xZF9300 with PTI optional pumpjet, Volvo-Penta D11 genset with 375 kW generator for hybrid propulsion

Multifunctions

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

Classification

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



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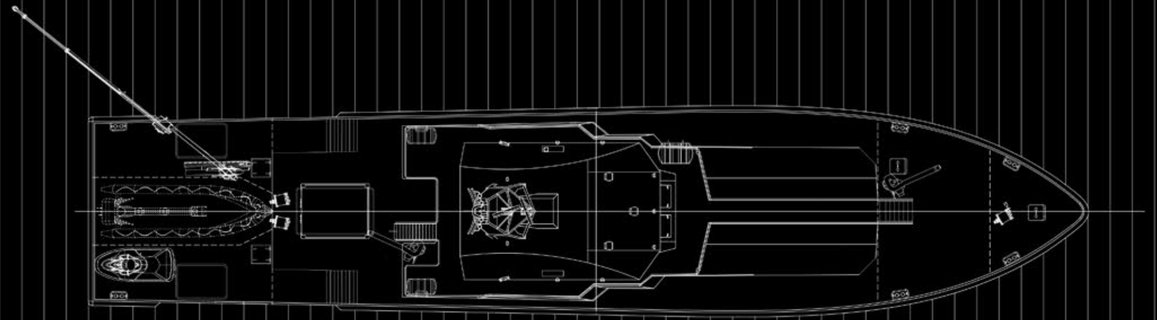

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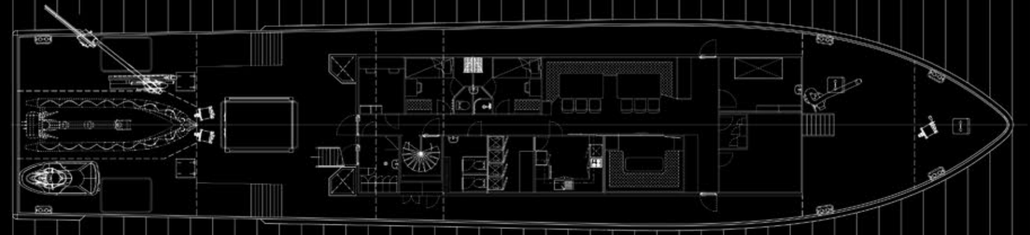

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PATROL 45 WP

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.

BALTIC 20 WP CTV
BALTIC 30 WP CAT
BALTIC 40 WP CTV

BALTIC 20 WP CTV

Lenght overall
20,3 m

Breath
6 m

Draught max
1,4 m

Displacement
34 t

Crew/passengers
2/13

Power
2x552 kW

Speed
31 kn

Range at 20kn
400 NM

Noise level
63 dB at
31 kn

Fuel consumption at 28kn
220 L/h

Ambient conditions

Air temperature –25 /+30 C°
Seawater 0/+27 C°

Material

Marine Aluminium

Propulsion concept

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

Tank capacities

Fuel: 3000 L
Water: 500 L
Waste: 300 L
Bilge: 200 L

BALTIC 20 WP CTV

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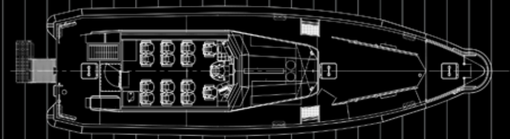

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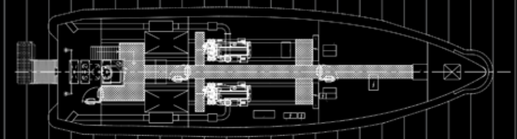

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АНТО-15

BALTIC 30 WP CAT

Lenght overall
29.9 m

Deadweight
40 t

Draught max
1.75 m

Crew / passengers
6 / 54

Speed
27 kn

Fuel Capacity:
32,000 L

Ambient conditions

External air –10 / +35 C°
Internal air +20 to + 25C°

Material

Marine Aluminium

Tank capacities

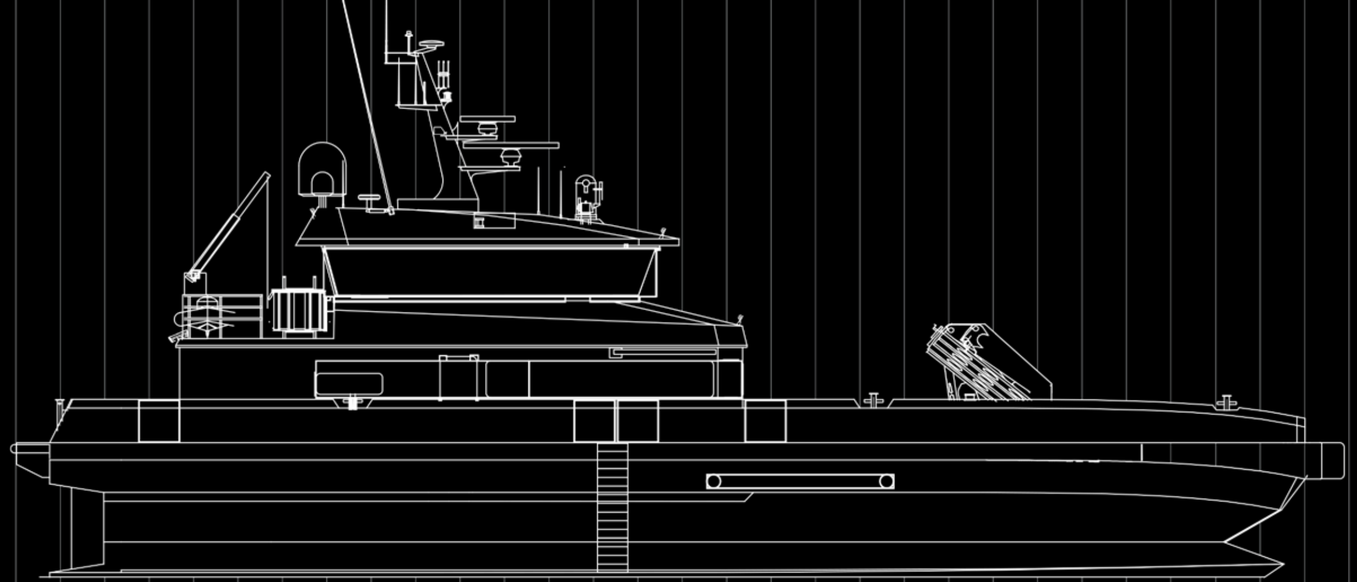
Fuel: 32,000 L
Water: 3,000 L
Black / Gray water: 3,500 L

Propulsion concept

Main engine: 4 x Volvo D13-700 High Speed Diesel Engines
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 analog) - hydraulic foldable
Aft Deck crane: marine crane 1xSteelhead E series electro-hydraulic telescopic crane



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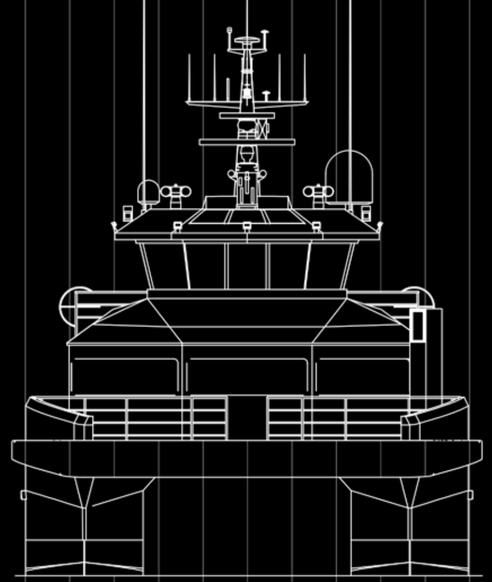

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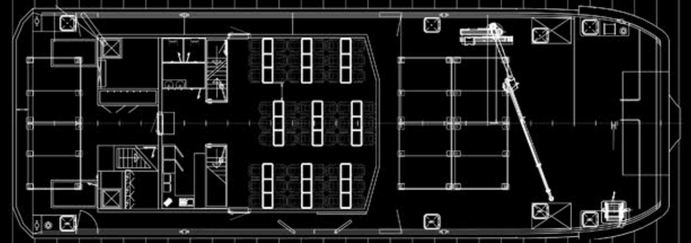

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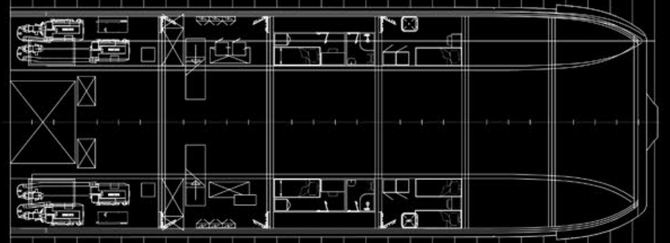

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BALTIC 40 WP CTV

Length LOA
40,08 m

Draugth max
2,33 m

Speed
20-25 kn

Crew/passengers
10/101

Ambient conditions

External air –10 /+35 C°
Internal air +20 to + 25C°

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

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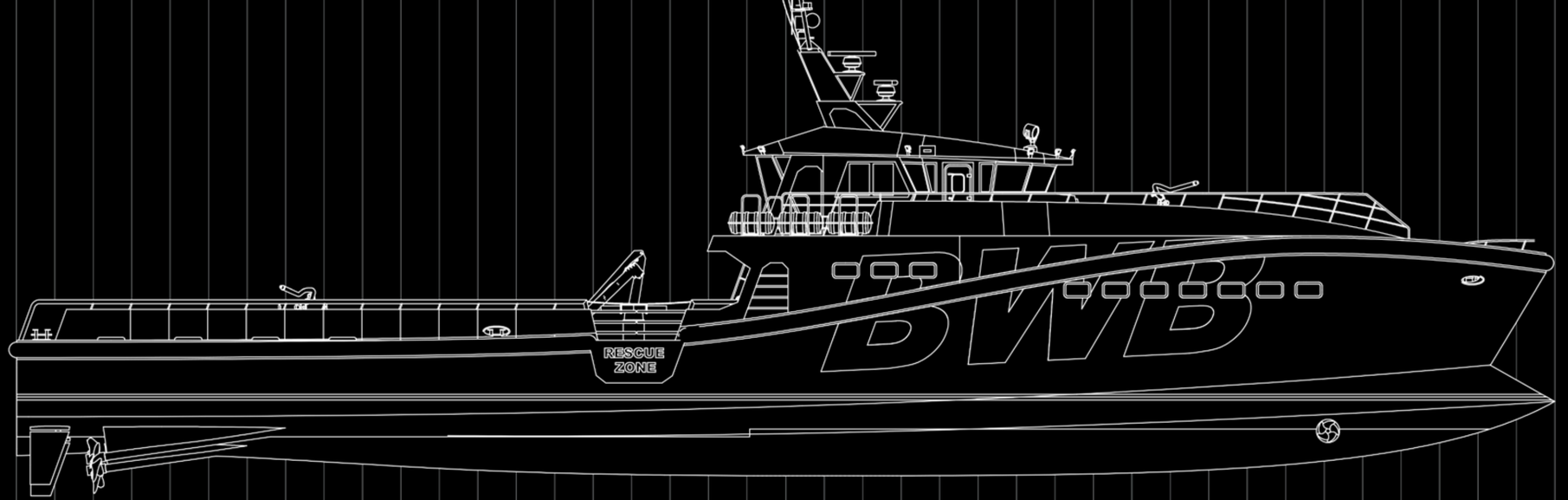

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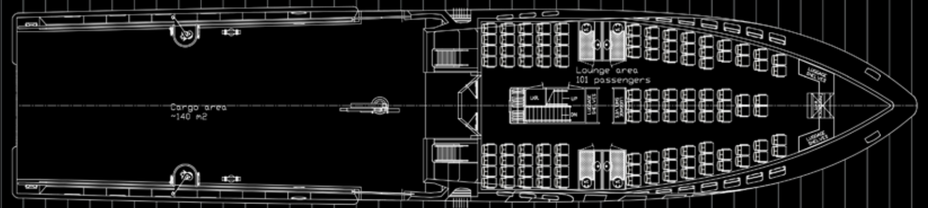

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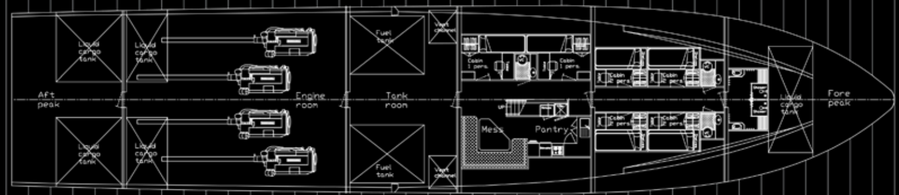

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BWB
RESCUE ZONE


RESCUE ZONE

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