

HDPE boat “Arctic Bort 10.0”



Purpose:

The low-density polyethylene sailing boat is designed to solve various tasks, including:

- transportation of team members with disembarkation to an unequipped shore;
- transportation of goods;
- Carrying out works on the installation of booms;
- exploration and study of the water basin;
- fishing, diving and outdoor activities;

The small vessel has seaworthy properties that ensure the use of its technical means and the safety of navigation during sea waves up to 4 points inclusive in displacement mode and up to 2 points inclusive in planing mode.

In the displacement mode, the small vessel retains the possibility of stable movement and controllability at any heading angles in relation to the direction of waves and winds with a wave height of 3% coverage of no more than 2.0 meters with speed limits up to 15 knots with a distance from the coast up to 12 miles.

Terms of Use:

- exposure to ambient temperature from -45 ° C to +40 ° C
- exposure to seawater temperature from -2 ° C to +35 ° C
- exposure to ambient air humidity up to 98% at 35 ° C
- exposure to aggressive media (sea water, oil, salt fog, detergents, degassing agents, disinfection).

With the simultaneous operation of all installed equipment, there is no electromagnetic interference that affects the quality of the navigation and radio equipment.

Housing:

The boat is an arctic planing type vessel, the hull and deckhouse of which are made of low pressure polyethylene.

The design of the boat ensures trouble-free and reliable operation of the boat in conditions of temperature drops (-50C to + 50C). The boat can move in fine ice without negative impact on the hull and its components and equipment.

The outer skin of the bow of the hull is made of ultramolecular polyethylene HDPE of at least PE 100.

Superstructure:

The superstructure is in the northern version, with insulation and interior trim, suitable for use in small-size shipbuilding. In the aft part there is a splash-proof door with a porthole and a lock. The cabin is kept at a comfortable temperature thanks to the functioning of ventilation and heating systems. The cockpit has a control panel for crew members with instrumentation and boat controls located on them.

The wheelhouse provides storage space for working equipment, emergency equipment, supplies, lockers and cabinets for storing personal belongings. There are sofas in the saloon, two armchairs for the navigator and navigator. Passenger capacity is 6 people.

The perimeter is glazed with splash-proof windows, the front windows are equipped with windscreen wipers. In the aft part of the boat there is a locker under the battery boxes.

Electric power system (EES):

The electric power system is designed to supply power to consumers of a small boat.

The electric power system provides generation, conversion, distribution of electrical energy during the operation of a small boat, including starting the engine, recharging the battery (additional option), signal lighting, protection of the network by fuses against short-circuit overload currents, power supply of signal and distinctive lights.

A service battery (accumulator battery) is used as a power source, its capacity depends on the installed outboard motor.

The battery provides constant power to the following consumers:

- Signal and distinctive lights;
- lighting of the superstructure;
- starting the outboard motor.

Navigation and communication systems:

The small vessel is equipped with a carplotter, an echo sounder, and there can also be a radio station (additional option), radar (additional option), navigation maps (additional option)

Rescue equipment and means:

On a small boat, life-saving appliances are delivered according to passenger capacity.

Control Panel:

A control post (panel) with a frame located in the front part of the superstructure and equipped with controls, instrumentation, controls for light signaling devices, communication and navigation facilities is provided to control the small vessel, its main technical means and to guide the crew's actions.

Marine devices:

It is possible to install a mini crane lifting device up to 2500 kg (additional option)

The small vessel is equipped with anchor, mooring and line devices.

The anchor device ensures the holding of the small vessel in the anchorage site. The anchor equipment is located in the forepeak.

The anchor device consists of: an anchor; anchor polymer rope.

The mooring device provides mooring of a small vessel to coastal and floating objects, as well as unequipped coast.

The mooring device consists of: mooring fenders (two fenders are located side by side in the aft end of the small vessel, two fenders are located side by side in the bow end of the small vessel).

The handrail device consists of stationary handrails located side by side.

For launching and raising the vessel into the water, cargo eyes are provided.

Ship systems:

The small vessel is equipped with an automatic drainage system and a ventilation system.

The vessel is equipped with a heating system. (additional option)

The small vessel is equipped with a self-draining cockpit system.

Fuel system with a 300 l fuel tank, including fuel gauge sensors.

Increase up to 800 liters possible. (additional option)

Electric power plant:

The power plant consists of two outboard boat motors (engines). (additional option)

(Model and manufacturer of the engine is agreed with the customer)

Engine type - four-stroke.

The power of each engine is at least 200 hp.

It is also possible to install stationary motors of the same power.

Small craft navigation lights include:

- left - red, right - green running lights;
- towing yellow; (additional option)
- a stern light; (additional option)
- light pulse signal; (additional option)
- pilot lights according to MPPSS-72; (additional option)
- switch for control of lights;
- circular white with a 360 degree lighting arc;
- remote controlled searchlight. (additional option)

Main characteristics:

Length 10.0 m

Width 3.2 m

Cylinders d 0.5m (filled with PSB) do not require any repair during the operation of the vessel

Killage on transom 21gr

Full displacement 4.5 t

Passenger capacity 6 people

Production time 8-10 months, depending on the order

