

Modernization of the ship lock

Ship lock Bogojevo, hydrotechnical complex, located in the western part of AP Vojvodina.

It connects the Bečej-Bogoevo canal with the Danube.

It enables the navigation of vessels up to 1000 tons.

The width of the lock is 12 m, the useful length for vessels is 85 m.



The ship lock Bogojevo, together with the pumping station of the same name, forms a hydrotechnical complex, located in the western part of AP Vojvodina. More precisely, it is located about 4 km southwest of the place Bogojevo.

The ship lock was built in 1968 and connects the Bečej-Bogoevo canal with the Danube. The main function is to enable the navigation of vessels up to 1000 tons as well as to monitor irrigation and drainage.

The width of the lock is 12 m, the useful length for vessels is 85 m, on average there are 10 ship passages per week. Over many years of work, in addition to regular maintenance, overhauls of hydromechanical and electrical equipment were carried out. The last works of such scope were started at the end of 2023 and finished in March 2024.

HYDRO

INSTALLED EQUIPMENT

- > Dunube gate:
SA 35.1 + GHT 500.3
- > Canal gate
SA 30.1 + GHT 320.3
- > Clinkets for Danube and
Canal gate
8 sets:
SA 14.6 + GK 14.6 + AC
01.2

BOGOJEVO

https://maps.app.goo.gl/LmGgp_gXTaTs48FPj6





Danube gate:
stroke 12,5 m; width 3,5 m; height 13 m; weight 70 t; opening
speed 12 m/min

Canal gate:
stroke 12,5 m; width 2,5 m; height 13 m; weight 62 t; opening
speed 12 m/min



Clinkets (for Danube and canal gate):
stroke 0.6 m, width 2 m, height 0.72 m, weight 600 kg, opening
time 6.5 min

RECONSTRUCTION AND MODERNIZATION

The reconstruction of the ship lock included the selection of an appropriate combination of actuator and gearbox, considering the required torque and the closing/opening time of the Danube and canal sides.

The selected combination is driven by an external frequency converter.

Also, combinations for the clinkets (valves on the doors for releasing water for the purpose of water level equalization) were chosen.

After delivery, the equipment was installed, electrical connections were made, adjustments were performed, and it was put into operation.

