

Experimental Investigation of Hull Form for Electric Driven Ferry

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Abstract : In this paper, the resistance and pitching values of the test of an electric ferry are presented. The research was carried out in the open flow channel of Klaipėda University with a multi-axis dynamometer. The received model resistance values were recalculated to the real vessel and the preliminary chosen propulsion unit power was compared. After analyzing the results of the pitching of the model, it was concluded that the shape of the hull needs to be further improved, taking into account the possible uneven weight distribution at the ends of the ferry. Further investigation of the hull of the electric ferry is recommended, including experiments with various water depths and activation of propulsion units.

Keywords : electrical ferry, model tests, open flow channel, pitching, resistance

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