ABSTRACT

ECONOMICAL AND TECHNICAL ANALYSIS DESIGN OF CRUISE CATAMARAN VESSEL IN TERRITORIAL OF MANADO - BUNAKEN

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Territorial water of Bunaken which is located at north Manado sea have great potential in tourism. This great potention will be tried to be increased with design of cruise catamaran.

This final project design cruise catamaran with, which suitable for Bunaken territorial water economically and technically. The design is started with determination variables, parameters, and constraints which suitable for Bunaken territorial water.

The objective function of this optimization model is minimize building cost. The optimization result are $L_{PP} = 25$ m, $Bm = 9.5$ m, $H = 2.77$ m, $T = 1.7$ m, $B1 = 2$ m and $V_S = 25$ knots, then lines plan & general arrangement were made. Total building cost Rp 2,073,817,220

Keywords: catamaran, catamaran cruise, Bunaken