

TOPIC- (6) Ship hydrodynamics, seakeeping and maneuverability

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COMPARISON OF SEMI-PLANNING MONOHULL DESIGNS OF BASIC AND EXTENDED VERSION OF COASTAL PATROL CRAFT WITH UNMODIFIED BLOCK COEFFICIENT (C_B)

Summary

The goal of the paper is to represent a comparison of semi-planning monohull design features of basic and extended version of coastal patrol craft with unmodified block coefficient (C_B). Through the development of the project, from feasibility study to basic design, ship form features are given through three basic groups: stability, resistance and seakeeping. Calculations and results given in this comparison are in accordance with Rules for technical supervision of sea-going ships of Croatian Register of Shipping (CRS), NATO standards – STANAG, tank testing's and results given by software package Maxsurf Formation Design Systems.

Key words: coastal patrol craft, semi-planning monohull design, stability, resistance, seakeeping, block coefficient, centre of mass, righting arm, STANAG

USPOREDBA POLUDEPLASMANSKIH FORMI PRIMARNE I PRODULJENE INAČICE OBALNOG OPHODNOG BRODA S NEPROMIJENJENIM BLOK KOEFICIJENTOM (C_B)

Sažetak

Cilj članka je prikazati usporedbu projektnih značajki poludeplasmanske forme - osnovne i produljene inačice obalnog ophodnog broda, uz nepromijenjeni blok koeficijent (C_B). Kroz razvoj projekta od studije izvodljivosti do faze predprojekta značajke formi sagledavaju se kroz tri osnovne skupine: stabilitet, otpor i pomorstvenost. Proračuni i rezultati dani u ovoj usporedbi proizlaze iz pravila za tehnički nadzor pomorskih brodova Hrvatskog registra brodova (HRB), NATO standarda – STANAG, bazenskih ispitivanja i rezultata proizašlih uporabom računalnih paketa Maxsurf Formation Design Systems.

Ključne riječi: obalni ophodni brod, poludeplasmanska forma, stabilitet, otpor, pomorstvenost, blok koeficijent, težište sustava, poluga momenta stabiliteta, STANAG