PERANCANGAN KAPAL *TANKER* 14000 DWT KECEPATAN 12 KNOT DENGAN RUTE PELABUHAN TANJUNG INTAN CILACAP – PELABUHAN TANJUNG PRIOK JAKARTA

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Abstrak

Indonesia sebagai negara maritim memiliki posisi yang sangat strategis dalam jalur pelayaran dunia. Hal ini membuat kebutuhan akan kapal meningkat termasuk kapal *tanker* karena kapal *tanker* memiliki nilai ekonomis yang tinggi. Kapal *tanker* memiliki fungsi untuk mendistribusikan bahan bakar minyak ke berbagai wilayah. Penelitian ini mengenai perancangan kapal *tanker* 14000 DWT dengan rute pelayaran "Cilacap - Jakarta".

Dalam melaksanakan penelitian ini dilakukan beberapa tahapan perancangan yaitu perhitungan ukuran utama, membuat rencana garis, rencana umum, analisa hidrostatik, analisa stabilitas dan analisis olah gerak kapal, serta pemilihan perlengkapan kapal dan mesin induk berdasarkan hasil perhitungan daya motor dan analisa hambatan yang dialami kapal. Ukuran utama kapal didapatkan dengan menggunakan metode regresi linier, penulis mengambil data sampel yang di dapat dari *Bureau Veritas* (BV) dalam langkah mencari ukuran pokok kapal. Hasil perancangan kapal *Tanker* 14000 DWT ini berupa gambar rencana garis, gambar rencana umum, analisa hidrostatik, analisa stabilitas serta olah gerak kapal.

Kata Kunci : Tanker, Transportasi Laut, Regresi Linier, Ukuran Utama

THE 14000 DWT TANKER VESSEL DESIGN SERVICE SPEED 12 KNOTS WITH SHIPPING ROUTE TANJUNG INTAN CILACAP – TANJUNG PRIOK JAKARTA

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Abstract

Indonesia as a maritime country has a very strategic position in the world shipping lane. This make the need for ships increasing. Including tanker ships because tanker ships have a high economic values. The function of tanker ships is to distribute fuel oil to various regions. This research is about designing a 14000 DWT tanker with shipping route "Cilacap - Jakarta".

Carrying this research, several stages of design are carried out, namely the calculation of the main dimensions, making a lines plan, general arrangement plan, hydrostatic analysis, stability analysis and analysis of ship's motion, then the selection of ship main engine and equipment based on the calculation of motor power and analysis of the resistances experienced by the ship. The main dimensions of the ship are obtained by using a linear regression method, the author takes sample datas obtained from Bureau Veritas (BV) to find the main dimensions of the ship. The results of the design of the 14000 DWT tanker ship are in the form of line plan drawings, general arrangement plan drawings, hydrostatic analysis, stability analysis and ship movement.

Key Word : tanker, oceanic transportation, linear regression, main dimension