

**PERANCANGAN KAPAL *CONTAINER VESSEL* 5850 DWT  
DENGAN KECEPATAN 12 KNOT UNTUK RUTE  
PELAYARAN JAKARTA-MAKASSAR**

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**Abstrak**

Kapal *Container Vessel* adalah jenis kapal yang khusus dirancang untuk mengangkut barang seperti barang mentah, barang siap pakai maupun barang hasil produksi. Kapal *Container Vessel* menjadi solusi yang terbaik untuk pendistribusian penambat rel, yang digunakan untuk mendukung proyek pembangunan rel kereta api "*Trans Sulawesi*" di pulau Sulawesi. Untuk itu, penulis merancang kapal *Container Vessel* 5850 DWT bermuatan penambat rel dengan rute pelayaran Jakarta - Makassar. Perancangan kapal ini dikerjakan dengan menggunakan beberapa metode, yaitu metode kapal pembanding, metode rumus pendekatan, dan metode analisa grafik. Dengan itu, maka didapatkan ukuran utama kapal ini, yaitu Panjang Keseluruhan Kapal (LOA) = 115.49 m, Panjang Garis Air (LWL) = 113.61 m, Panjang Perpandikular (LPP) = 110.30 m, Lebar (B) = 14.18 m, Tinggi (H) = 8.36 m, Draft (T) = 6.45 m, CB = 0.77, CM = 0.98, CW = 0.85, CP = 0.78, dan Kecepatan Dinas = 12 knot.

**Kata Kunci : Kapal *Container Vessel*, Penambat Rel, Jakarta, Makassar**

# **A DESIGN OF CONTAINER VESSEL 5850 DWT WITH 12 KNOTS SPEED FOR SEA ROUTES JAKARTA – MAKASSAR**

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## **Abstract**

Container vessel is a type of ship specifically designed to transport a container contains goods such a raw goods, ready stocks, as well goods produced. The container vessel is the best solution for the distribution of rail fastener, which is used to support the “Trans Sulawesi” railway development project in Sulawesi island. Therefore, the author designed a Container vessel 5850 dwt with rail fastener payload and shipping routes from Jakarta to Makassar. The design of this ship was done by using several methods, that is the method of comparison vessel, method of approach formula, and graphical analysis methods. With that, author got the main dimensions of this ship, that is Length Over All (LOA) = 115.49 m, Length Water Line (LWL) = 113.61, Perpendicular length (LPP) = 110.30 m, Width (B) = 14.18 m, Height (H) = 8.36 m, Draft (T) = 6.45 m, CB = 0.77, CM = 0.98, CW = 0.85, CP = 0.78, and Service Speed = 12 knots.

***Keywords: Container Vessel, Rail Fastener, Jakarta, Makassar***