

**DESAIN KONSTRUKSI BUS AIR
BENGKALIS – SUNGAI SELARI BERBAHAN DASAR *FIBERGLASS***

Nama Mahasiswa : Wawan Kurniawan
Nim : 1103201187
Dosen Pendamping : Muhammad Ikhsan, M.T

ABSTRAK

Konstruksi adalah suatu kegiatan pembangunan sarana maupun prasarana. Selain itu konstruksi juga dapat diartikan sebagai bangunan maupun satuan infrastruktur dalam satu atau beberapa area. Konstruksi sangat dibutuhkan pada suatu bangunan apalagi pada bangunan bergerak seperti kapal contohnya karena sangat berpengaruh bagi kekokohnya. Pada tugas akhir Windah Natarida dengan judul Desain Bus Air Bengkalis – Sungai Selari penulis telah membuat desain Bus Air tersebut. Penulis sebelumnya telah mendesain *lines plan* dan *general arrangement*. Adapun hasil dari penelitian ini adalah mendapatkan perhitungan konstruksi dan ketebalan dari tiap – tiap komponen dari Bus Air Bengkalis – Sungai Selari yaitu : *Transverse Frame* 50 x 75 x 65 ketebalan 5 mm, *Side Longitudinal* 60 x 90 x 65 ketebalan 5 mm, *Bottom Longitudinal* 60 x 90 x 75 ketebalan 5 mm, *Beam* 50 x 75 x 65 ketebalan 5 mm, *Deck Girder* 50 x 75 x 65 ketebalan 5 mm, lebar dan tebal *Keel* 542,1 x 12mm, ketebalan *side shell* 5,4 mm, ketebalan *bottom shell* 5,7mm, ketebalan *Superstructure* 4,32 mm, ketebalan *deck* 5,15 mm, Ketebalan *Center Girder* 8,308 mm, ketebalan *side girder* 7,481 mm, tinggi dan tebal *floor* 68,75 x 3,332 mm. selanjutnya mendapatkan gambar konstruksi dan detail gambar konstruksi secara 3D pada Bus Air Bengkalis – Sungai Selari.

Kata Kunci: Perhitungan Konstruksi, Gambar konstruksi, Bus air.

**WATER BUS CONSTRUCTION DESIGN BENGKALIS – RIVER SELARI
FROM FIBERGLASS BASED**

Author Name : Wawan Kurniawan
Student Of Number : 1103201187
Supervisor : Muhammad Ikhsan, M.T

ABSTRACT

Construction is an activity of building facilities and infrastructure. In addition, construction can also be interpreted as a building or infrastructure unit in one or several areas. Construction is needed in a building, especially in moving buildings such as ships, for example, because it is very influential for its robustness. In Windah Natarida's final assignment with the title Bengkalis – Sungai Selari Water Bus Design, the author has made the Water Bus design. The previous author has designed the lines plan and general arrangement. The results of this study are to obtain construction calculations and the thickness of each component of the Bengkalis - Sungai Selari Air Bus, namely: Transverse Frame 50 x 75 x 65 with a thickness of 5 mm, Side Longitudinal 60 x 90 x 65 with a thickness of 5 mm, Bottom Longitudinal 60 x 90 x 75 thickness 5 mm, Beam 50 x 75 x 65 thickness 5 mm, Deck Girder 50 x 75 x 65 thickness 5 mm, Keel width and thickness 542.1 x 12 mm, side shell thickness 5.4 mm, bottom thickness shell 5.7 mm, thickness Superstructure 4,32 mm deck thickness 5.15 mm, center girder thickness 8.308 mm, side girder thickness 7.481 mm, floor height and thickness 68.75 x 3.332 mm. then get construction drawings and detailed 3D construction drawings on the Bengkalis – Sungai Selari Water Bus.

Keywords: Construction Calculations, Construction drawings, bus air.