ABSTRACT

The aim of this final project is to develop a concept design method for small LPG / Ammonia Tanker. Starting with survey literature from many sources, and continued with mathematical models also develop computer software. Then a case study for small LPG / Ammonia tanker with 6,000 m$^3$ in capacity owned by PT PUSRI is applied into software.

From the mathematical model based on survey literature, calculation upon ship principal dimension, tank dimension, ship weight, engine power, freeboard and stability, and ship cost are done. All calculations in the mathematical model can be solved with a computer program created using Microsoft Excel.

After survey literature, mathematical model and computer program have been undergone, an output in ship principle dimension, lines plan and general arrangement are obtained. Those outputs are chosen based on analytical investment that covers the biggest value NPV and IRR.

Key words: concept design, LPG, Ammonia