SOFTWARE PROCESS AND SIMULATION FOR LOADING-UNLOADING SYSTEM USING RFID IN LIVESTOCK VESSEL FOR OPTIMIZING TIME AND PERFORMANCE QUANTITY

Student Name : Zefri Christyandi Sembiring
NRP : 4208 100 517
Department : Marine Engineering FTK – ITS
Advisor : R.O. Saut Gurning, ST, M.Sc, Ph.D
          : Indra Ranu K, ST, M.Sc

Abstract

Livestock vessel is a specialized vessel that transporting live animals, where animals that will be transported is cattle. Radio Frequency Identification (RFID) is one of kinds autodetection technology. In this research we want to apply it on livestock vessel for optimizing time and performance quantity while the loading-unloading process.

By implementating RFID system in the ship, will affect the compartment of the cargo, so the design for the cargo of livestock vessel was done by using auto CAD, where this research will be known about the using of RFID affected for the performance quantity and based on the analysis will be known the time during the loading-unloading process of the ship, which will done by using ARENA 5.0 software.

Key word : livestock vessel, Radio Frequency Identification, Auto Cad, Arena 5.0