## **ABSTRACT**

Petra Wisnu Indiana, 2018, NIT: 50134791.N, "Analysis of shrinkage load during loading / unloading on MT. Martha Tender", Essay of Nautical Department, Diploma IV Program, Politeknik Ilmu Pelayaran Semarang, Lecture I: Ir. Boedojo Wiwoho, S.J., M.T. and Lecture II: Nita Setyaningsih, S.Pd., M.Hum.

Oil-loaded tankers are very risky with the occurrence of the problem of losses. Cargo depreciation may occur in the process of loading, unloading and hauling activities. The main objective in a tanker cruise is to deliver an oil load (to the port of destination with the smallest possible shrinkage. To achieve this, it can be accurately reflected on the factors that cause the shrinkage of payloads, how to minimize shrinkage, and the amount of shrinkage.

The foundation of this theory explains the definition of depreciation, the charge duty service during the loading and unloading process, measurement system, measurement, ship counting, land side calculation, agreement of both parties.

The method used by researchers to solve the problem is qualitative descriptive method, so that researchers can explain the results of the research obtained. Data collection through documentation and observation. Researchers make direct observations on board the MT. Martha Tender during the loading and unloading process, the researchers also took pictures to support the validity of research data.

The results showed: the factors that influence the shrinkage of the physical depreciation such as evaporation, pump leakage, pipe leakage, shrinkage such as measurement errors, and charge load errors. The way to minimize the occurrence of shrinkage is by carrying out loading and unloading procedures. Large shrinkage of naphta MT. Martha Tender dismantled in Balongan exceeds the tolerance limit set by PT.Pertamina (Persero) is 0.1%.

From the results of the study it can be concluded that the shrinkage of payload that occurred in MT.Martha Tender caused by several factors that must be minimized to the limit of tolerance determined by a shipping company.

Keywords: Losses, Unloading, Load.