ABSTRACT

Selection of materials on the construction of a chemical tanker cargo hold in generally, the company or owner is able to provide an estimate of where the material that will be used in the construction of a chemical tanker cargo hold by considering price and technical work process. Technical considerations paint job (coating) as well as technical troubles such as the fabrication process, sub-assembly and assembly process, and the erection of the use of each material needs to be done. To facilitate estimation where better material used in the construction of a chemical tanker cargo hold needs to be done a comparison of the two materials as a base a more accurate selection of materials for the company or owner of ships. In the final project, to do analysis the technical and economical comparison of construction work of a chemical tanker cargo hold taking duplex stainless steel materials with the construction work of a chemical tanker cargo hold that use carbon steel materials ranging from the process of fabrication, sub-assembly and assembly, erection, and technical considerations paint job (coating). From the results of the comparative analysis conducted found the construction of the chemical tanker cargo hold with carbon steel material used to pay IDR. 17,845,423,698.69 and for the construction of a chemical tanker cargo hold using duplex stainless steel material of IDR.43,626,992,911.24. So it can be concluded that the needs of the costs incurred for the construction of cargo hold using duplex stainless steel materials increased by 244.47% compared to using carbon steel material.

Keywords: Duplex stainless steel, chemical tanker, carbon steel, cargo hold.