ABSTRACT

Kastriman, 2018, NIT: 51145478 T, "*The cargo crane cause analysis can not lift loads in accordance with safe working load (SWL) on MV vessels. Jupiter Charm* ", thesis Teknika Study Program, Diploma IV Program, Polytechnic of Semarang Shipping Sciences, Advisor I: H. Amad Narto, M.Pd., M.Mar. E., Advisor II: Dr. Capt. M. Suwiyadi, M.Pd., M.Mar,

 Cargo crane is hydraulic pump that serves to drain hydraulic oil and together other components cause hydraulic pressure, electric motor serves as a source of hydraulic pump, hydraulic motor serves as a motor drive luffing, hoisting or slewing on *cargo cranes*. This cargo crane serves to raise the cargo on board or lower the load from ship to shore, converting electric power into motion power to drive hydraulic pump. Problems arise in *cargo cranes* where *cargo cranes* can not lift loads on safe working loads. As a result of the incident the ship should have finished loading the goods within a few days backwards and the company had to pay additional fees for the incident.

 The impact of the lack of *cargo cargo* lifting the load on the safe working load has greatly affected the shipping business as it is related to the time and material loss of the shipping company concerned. Given the importance of *cargo cranes* in order to lift the load according to *safe working load* then the existence of *cargo cranes* on the ship must be treated properly. In this case the writer use approach of fishbone method and *fault tree analysis*, where *fishbone* method to identify causal factors of *cargo crane* can not lift load according to *safe working load* and effort that must be done when the occurrence of the problem is discussed in *fault tree analysis*.

 By knowing the causal factors of *cargo crane* can not lift the load and efforts to overcome the problem is expected handling on *cargo crane* more directed and down time *cargo crane* smaller and not disturbing process of loading and unloading and operation of ship itself so that activity of shipping can run smoothly and the company does not experience losses caused by disruption of ship operations, at the end of the author's thesis section presents conclusions and suggestions.

Keywords: *Cargo crane*, *safe working load*, *fish bone* and *fault tree analysis*