ABSTRACT

During this process of loading and unloading of fish catches fisherman done manually. There is a weakness if done manually, which requires a long time and involve many workers. This is due to lift a maximum load of a human adult of 70 kg - 80 kg was comparable with catches reaching 16 tons. Based on these problems required a lifting crane that can help accelerate the process of loading and unloading of fish, so the process of loading and unloading of fish at the fishing boats can run more efficiently.

Dimensions obtained from lifting cranes lift loads of a ton. By knowing the maximum load lifting crane lifting the design, construction cranes and components can be designed and calculated. Lifting crane is used to power the motor of 2 HP is transmitted using the pivot and change direction of rotation by the warm gear in order to move the drum to attract or playing steel strings.

Results obtained from testing showed that the process of lifting cranes loading and unloading of fish faster than was done using this tool manually. Loading and unloading time is needed when using a lifting crane is 10 min / ton, whereas if it is done manually can reach 40 min / ton.

Keywords: lifting crane, motor, and warm gear.