ABSTRACT

Indonesian fisherman use traditional equipment like an independent machine to roll the net, so the weight of ship and operational cost will be increase. Because of that fisherman needs alternative technology to minimalize that factor. From this problem final project will design a purse seine net hauler hydraulic model who use shaft rotation of main engine as prime mover.

Shaft rotation of main engine is coupled with gear pump use a gear box. Gear pump will press the fluid and will move the net hauler. Liquid send to switch valve to control the liquid movement. Switch valve complete by flow control to can control the flow of liquid. From the switch valve fluid send to motor hydro to rotate the net hauler. Motor hydro is a component to change pressure energy to mechanic energy.

Rotation of main engine can be used to turn on the hydraulic system to move the net hauler as auxiliary equipment in fishing vessel. it can roll the net who 481,673 N with a power of pump 7,2 kW and rotation of winch 35 rpm. More of this model can be used as experience method to improve alternative technology in the ocean.

Key words: hydraulic, hauler, main engine