Abstract

Needs for currently fast vessels began to increase, the ship for security areas, such as ships - warships, patrol and the ship to chase. Quick ship design to achieve the desired speed. In the manufacture of a ship Tekhno always take the side of the economy, which in addition to parameters, design parameters are also planned considered side of the economy.

To overcome the problems a rising from the achievement of the ship's speed, which is used a lot of ways to make changes or modifications to the engine, hull and propulsor. One way the hull is to design modifications Step Hull. The principle of using the Step Hull is to reduce the surface area wet (weted surface area) due to the emergence of turbulence under the hull, and will add power and above board press (lifting force), so that by itself would reduce the resistance and increasing the efficiency of it will generate more speed high with a smaller engine power and needs less fuel.

Based on the above, then at the end of this task will be testing the optimization step position on a patrol boat Hull (FRP) 36 m, which will get more accurate results on the patrol boat design (FRP) using the approach Computational Fluid Dynamics analysis (CFD).

Keyword : Ship Patrol, High Speed Boat, Lifting Force, Step Hull, CFD.