ABSTRACT

PT. Indoneptune Net Manufacturing is a manufacturing company that produces fish nets. One of the products produced is MT type fishing nets. The process that is the focus of this research is the sewing process of fishing nets in the netting department. There are several defects in suturing fishing nets, but the biggest defect is a single defect which is caused by the operator accidentally doing the part hikikagi process because there is no warning around hikikagi. This results in the number and position of the mesh ties in the fishing nets not suitable. Therefore, the repair service provider is in the form of an alarm device design using the Reverse Engineering method.

Reverse engineering is a process where an object is deconstructed to reveal the design and new way of working of the object. Reverse engineering is carried out based on the needs of the user which becomes the technical character information. Where the use of the Reverse Engineering method in this study is a method of repair design for the cause of damage to the single department network in the sewing process of MT type fish.

The result of the design of the alarm device using the Reverse Engineering method is a design concept with a value concept assessment of 3.77. The C design concept has components in the form of an limit switch sensor, arduino atmega2560, an indicator light with 5 watts of power, and a buzzer with a sound intensity target specification of 100db.

Keyword : Sewing Process, Defect, Single, Hikikagi, Reverse Engineering