

ABSTRACT

PT.XYZ is one of the egg distributors in South Sulawesi which is a distributor for several snack food companies that require eggs as raw material for their products. Currently, the company can only meet about 60% of the egg demand of the target per day. One of the causes of not being able to meet the target is the egg quality selection process which takes a long time. The main problem in the company is the difficulty of choosing egg quality, workers still have difficulty distinguishing the condition of chicken eggs (fit for consumption or not). Because the eggshell texture is not much different between viable eggs and rotten eggs. This of course can harm consumers from the company if there are rotten eggs that pass the selection. The selection process carried out by workers is still done manually, namely by looking at eggs with a flashlight/lamp. This manual selection process on a large scale has a low level of accuracy. With the rapid development of automation, this problem can be overcome by using conveyors for egg quality selection using light sensors to detect egg quality. In this study, the design of an automatic egg quality selection tool based on ESP-Now was designed. The results of the study showed that the accuracy of this tool was 83%.

Keywords— *Egg, ESP-Now, Automation, Conveyor*