

ABSTRACT

Automatic guided vehicle is one of the tools that facilitate the process of distributing goods in the field of industry. In the operation of AGV required some subsystems composing AGV performance one of them is line follower system. In addition to the AGV tool that is often encountered during the goods distribution process is Conveyor. Conveyor is a tool used to transport / move goods from one place to another. Although the process of distributing goods has been supported by sophisticated tools, there are still errors such as damaged goods when distributed as a result of human error.

In this Final Project will be discussed how the process of distribution of goods automatically without using human labor, but using diverting conveyor system on AGV. Conveyor diverting system will direct the goods when above AGV adjusts to the command given by RFID signal. In addition, AGV is programmed to stop automatically at the goods terminal.

Then from the tests that have been done, the end of the movement has been able to follow the line until it stops at the goods terminal. To know the type of terminal goods is used RFID cards tags that will be detected by RFID reader that have been installed on the AGV. When the process of receiving goods conveyor diverting system will act to move goods from the terminal goods to AGV until the LDR sensor detect the presence of objects. Then when the delivery process is holding, the sensor will detect the size of the goods. If both sensors detect it's mean the size of good is high and if only sensor 0 that detects the size of the good is short.

Keywords: Automatic Guided vehicle, Conveyor Diverting System, Goods Distribution