ABSTRACT

PT. Abbott Indonesia has 5 warehouse space and 45 engines that have a different address so that the transport process on each machine to the warehouse has a high activity. By activity in the production process of PT. Abbott Indonesia is very high of course necessary material handling fast and precise to handle the movement of goods. Determining the shortest route is calculated to avoid losses. Difficulties in determining the shortest route arises because there is more than one path that exist in each region. It required the shortest route search.

Dijkstra algorithm is used to find the shortest path on a journey to adopt a greedy search system, which searches through the results of the smallest amount of weight from one point to another. At AGV algorithms are run in conjunction with other programs at the line follower for the shortest route information so that the AGV can be run in accordance with the shortest route.

After calculating the shortest route with dijkstra algorithm, the shortest route from the starting position to the rack is a rack A1 and B1 with a distance of 215 cm. The next shelf is a rack A2 and B2 with a distance of 230 cm. Last Skenaro is rack A3 and B3 with a distance of 265 cm. The time required to complete the entire simulation process of moving goods is for 450.8 seconds.

Keywords: Robotino, Automated Guided Vehicle, Dijkstra Algorithm