AGV Robots: Purpose And Impact

What is an AGV robot?

An AGV robot stands for an automatic guided vehicle. It is also described as an industrial truck, the AGV robot is an automated vehicle which means that it can lead its directions and doesn't need to have a driver like others. The AGV robot travels on the wires on the floor it also uses radio waves, vision cameras, magnets and lasers for navigation and also for safety. It is a computer programmed load carrier that runs on floors or pavement that follows wires and lines. The AGV is also an efficient way of transporting materials. The robot carries different goodies to and from places. It is also used to move materials or deliver them.?AGV robots have human abilities such as adjusting to their surroundings.

What is the purpose of these robots?

It states on the newspaper where it has been highlighted that they are very important as each one of the 25 robots they make 72 trips approximately every day carrying heavy packages, in Royal Adelaide Hospital there are 25 AGV robots and they make 1800 trips a day. Could humans carry the half of that? The point of them was to make life easier for humans and it helps humans from getting injured/permanently injured it is also a health risk to humans as it could hurt their backs.AGV ‘s reduce the workload of people and minimize work injury and hazards, it improve the occupational health and safety of the employees and it is also cost-effective than employing many people for a particular job. So the purpose of these robots is to have an efficient way of transportation and also to decrease the chance of the employees getting hurt.

How are they impacting society?

The AGV robots are life-saving robots as they help humans in various ways like helping humans in a way that they won't get hurt, carry heavy carries and delivering things. It makes our lives much easier as it is very quick and it doesn't get tired quickly. The robot can also carry a lot of weight as it is a machine. They play an important role, for example, will people be able to carry this many things and go up all the wards to reach a specific ward. As they move along with the wires they also stop when there is an obstacle that makes the AGV robot stop, so they won't hit anything and themselves won't get damaged. These robots also increase productivity and reduce overall cost and that is a big thing that is impacting our society. They are also able to do many other jobs so they can be used for many reasons.

What is an AGV robot job?

AGV's job or work is to deliver surgical, medical supplies, linen, waste, sterling, drugs, and food to different workplaces and customers. They carry all these products to different wards to the patients. They deliver what is needed for the patient if they need to take their medicine they give it and it is also an efficient way of making deliveries. The vehicle has to move materials to various wards. Also, they transport parts/tools and waste for recycling. The AGV robots have a particular lift that they can access. Also, robots can hold a weight of 3000 kilograms. They can

also be used for shipping, hospitals, delivering services and for other various reasons. These robots are used because they are driverless essential machines as they have safety elements such as emergency stop, status indicator, obstacle sensor, an audible signal, flasher and many more. This makes work easier as they can access specific lift that take them to different wards. They can navigate through the automatic door.

How is an AGV robot controlled?

Have you wondered how the AGV robot is coordinated or controlled? AGV robots are pre-programmed with instructions so that they can follow different steps to carry out a specific job. For example, AGV is used to carry food and then it is programmed to go to the kitchen and the food will be placed in the trolley and transferred to the AGV machine and the machine will carry the food from the kitchen to different wards through the lift. There is certain staff that is trained about their function so they can use the AGV and it needs to be charged and programmed with data or information. It is assigned tasks and when the machine is assigned it follows the directions and completes the task. They got controls and different buttons for different functions. The AGV robots have a specific lift that they can travel on to get to each ward they can communicate to the lift. The tasks are manually assigned. After they finish their task then they will come back to the station to be parked.

Interesting facts

- The new RAH knew as the New Royal Adelaide Hospital have the AGV robots in their hospital they have 25.
- These robots are now popular in the 20 century.
- There the full name of an AGV robot is Automatic guided vehicle, Automated guided vehicle and automatically guided vehicle.