

Solar Powered Automatic Pick and Place System

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Abstract: *Concept of object pick-and-place and Line follower robot which will be functioned following a particular line may help an industry to attenuate the labor cost or may be alternatives of the labors. Nowadays the industries are following the concept of automation and for this purpose robots are the best alternatives. Single type of robot is most commonly used in industry is a robotic manipulator or simply a mechanical arm. It is an open or closed kinematic mechanism chain of rigid links interconnected by movables joints. We have pile up a mechanical arm with a line follower robot which will be able to pick an object from a certain place then carry it to the defined place by following a predefined line. A robotic system that is capable of both picking up and releasing micro-objects with high accuracy, high precision, reliability and speed.*

Pick and place capabilities are commonly used in manufacturing plans. In today's advanced technology man power are critical constrains for completion of task in large scales. The automation is playing vital role to save human efforts in most of the regular and frequently carried works. One of the major and most commonly performed works is picking and placing of jobs from source to destination. These moves of objects on a specified path to pick the components from one location and place them on desired locations. Basically, the object carrying robot is a microcontroller-based mechatronic system that finds out the object from the particular place, picks the object from location and places at a specific destination. A robotic arm is a robot manipulator configuration, usually using a sequence of function by the controlled program, with resembling functions to a human arm. The robot arms can be self- explanatory or operated manually and can be used to perform different tasks with great accuracy.

Keywords: Solar

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