



IIoT BASED INTEGRATED PACKAGING SYSTEM

In IIoT based integrated packaging system there is a plant in which the packaging of boxes is to be done. The entire process is described below:

- The process is started by giving a command to the controller, in the plant some boxes are categorized by placing QR code on them (QR scanner or any kind of identifiable images can also be used), which are placed at input station and are arranged in a vertical storage system.
- These boxes are fed to the conveyor by an external force provided by a single-acting cylinder. During this process detection of boxes will occur by proximity sensor which perceives boxes and give the command as an input to the user (confirming the availability of box inside a station).
- Then it will move towards the vision sensor that identifies the boxes as per the image processing technology used in automation technology. There is checking and sorting application, in which it selects boxes (user demand), segregates the required boxes, and forward it by the conveyor in a single platform (collection of boxes).
- After that boxes are collected in the platform as a combination of boxes. Now by pick and place method using gripper (robotic arm) boxes are carried from one position to another position inside a setup. This combination of boxes is collected and packed into a bigger box (container).