



AUTOMATIC DISPENSING SYSTEM USING IoT AND ELECTRO-PNEUMATICS

- A prototype for an industrial conveyor system was created and the logic required for assembly line fitted with different sensors and electro-pneumatic was designed on GX Works 3 and burned on Mitsubishi plc.
- The start signal for the whole process to be initiated can be given by the user through a remote server (in our case laptop connected to raspberry pi via Wi-Fi router). This signal was received by raspberry pi to send a start signal to plc via wires connected between plc and Raspberry-pi.
- The ac motors running the conveyor belt were connected with SMPS (Switching mode power supply). A person has to manually reduce the motor velocity by SMPS (this is done to imitate the reduction of motor speed in industries due to friction between various parts which signifies that motor is not working properly).
- The rotary encoder (connected to raspberry pi) detected the change in velocity of the motor. This raspberry pi then sends this information to a remote server which informs the user about the improper functioning of the motor.