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Abstract

The purpose of this thesis. The retrofit of the injection molding machine. The repair and improve the performance of the controller. Of control using relays (Relay) to be controlled by the PLC (Programmable Logic Controller : PLC) to control the process of injection molding machines and injection molding machines can be moved to a user-defined steps. The third mode is the first mode of operation 1). Mode command manually (Manual) 2). Semi-automatic mode (Semi-Auto) and 3). Automatic mode (Auto).

The experiment will be divided into three types according to the mode of operation of the injection molding machine. Injection experiment in the first mode is the mode by itself mode, the second is a semi-automatic mode mode and the third mode is automatic.

Result of the retrofit of plastic injection molding machines. Injection molding machines that could move the steps that the user has defined. You can select the mode of operation of the three mode plastic injection machine with PLC controls the process of injection molding machines and injection into parts according to user needs. So the control system using PLC control system is better than using a relay. Because of its ability the use of PLC is more such as the size of the system is smaller. Reduce the time to design and install. Stability and better control the relays.