

FABRICATION OF AUTOMATIC PVC PIPE CUTTING MACHINE

INTRODUCTION

Cutting the tools or the materials of finite length by manually will not yield a good result. So we have designed and developed the system which will cut the material automatically of finite length according to our requirements. We mainly concentrate on PVC cutting Machine for which we have designed the system.

The block diagram consists of the following components such as IR transmitter, IR receiver, LCD display, Microcontroller, keypad, Relay driver circuit, relay, and the cutter.

The IR sensor is placed on the PVC machine where the final output PVC comes out of the machine. The IR sensor senses the Length of the PVC and the corresponding length at that particular instant is displayed.

The target length is fixed in the keypad. The IR sensor which is placed near the product senses and sends the electrical output signal to Microcontroller. The current length is continuously displayed on the display.

Now the Microcontroller compares the sensed signal and the target value and sends the corresponding signal to the relay driver circuit .If both the sensed value length the microcontroller delivers the corresponding signal to the relay driver circuit. The relay driver circuit enables the relay which in turn connected to the cutter. Now, the cutting tool cuts the PVC of finite Target length, what we desired.

According to the length what we design the cutting tool, cuts the PVC automatically. This type of cutting machine can be used anywhere, where we find the application of cutting the materials of finite length automatically .it results in very accurate value. This is applicable to all type of industries.