

FABRICATION OF AUTOMATED CONVEYER FOR QUALITY CONTROL

ABSTRACT

Now a days, quality control plays a vital role in all the industries. Here is a project check the quality of the product automatically. It is very essential in the industry to find the good and bad quality products as soon as possible to reduce the time consuming of the production. Here we are using a load sensor to check the weight of the product. The good and bad products are separated through the motor control, which is controlled by the electronic control board. In this project we are using the motor to rotate the conveyor in both directions. The direction of the motor can be controlled according to the weight of the product placed in it.

The motor can be driven through the motor direction control unit. Thus by using this project we can find out the good and bad products easily and reduce the time consumption in the industry.

INTRODUCTION

Every product of a Company requires a minimum quality assurance before being sent to the market. If the production is large it is not possible to inspect each and every product manually, and hence arises the need for an automatic system that does the job.

The whole system is highly automated, The user can just pick the bad packages and re weight it. The perfect packages can be sent to packaging directly. It reduces huge human efforts and time used in quality check. This system can be used in large scale. Well suitable for manufacturing industries, Packaging Industries etc.

MAJOR ADVANTAGES OF THE PRODUCT:

- Alternative to expensive sensor based systems
- Highly Accurate
- Easy to implement (simple structure) and maintain
- Fully Automatic
- Highly useful when the number of samples to be tested is large.
- Versatile: Can be used for a variety of products (like PCBs)
- Use of open source system and libraries
- Designing of a simple and cheap conveyor
- Portable and lightweight system