DESIGN MODIFICATION AND ANALYSIS OF DANCER MECHANISM FOR SIDE SEALING MACHINE

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ABSTRACT

At present, there are many kind of process technologies that can be used in the field of packaging. This project aims to developed such a mechanism which is used in the side sealing machine. Dancer is the part of side sealing machine, used for transfer the plastic materials from one roller to another roller. A plastic material is passed through the different roller, during this process tension is very important for any packaging machine. The load acting on the dancer mechanism is different for all the rollers. In packaging machine sealing process is not continuous, there is a small change in the time of sealing due to this the dancer mechanism is very important for transferring the plastic material and maintaining tension on the web. A rubber roller which is mounted on the dancer mechanism gives the direction of the web. A proximity sensor is fitted between the dancer roller and rubber roller gives signal to the rubber roll to passing the plastic material. A gusset mechanism is used when plastic material is passed from unwinder to folding machine and then dancer mechanism.