

## Application of Linear Sensor in Moulding Machine

Injection moulding is a manufacturing process for producing parts by injecting molten material into a mould. The mould is placed into the Injection Moulding Machine (IMM). The moulding machine closes the mould and, due to the clamping tools, the mould stays closed during the plastic injection moulding.

The plastic is fed into the IMM in the form of granules or pellets. The moulding machine heats the plastic until it melts. The nozzle of the injection moulding machine then injects the melted plastic into the mould (injection pressure). The cavity of the mould is now filled with the plastic liquid. This will then cool down to form a solid product. Finally, ejectors push the cooled product out of the machine as a finished part. In the course of operating an Injection Moulding Machine, it is necessary to have accurate data concerning the position of various machine components. Considering specifically the position of the moving platen, for example, there are several aspects of operation where precise control is important. As the moving platen changes position to open/close the mould, precision is very important in this case.

To achieve this precision, Linear Sensors are used in the moulding machine to control mould open & closing, determine the location of feed screws, and track position of part ejectors.

