

**DEPARTMENT OF ELECTRONICS & COMMUNICATION
ENGINEERING**

Submitted,

Sub: Report on Industrial Visit to M-plastics and Toys Engineering Limited.

DATE/TIME: - 19-01-2023/11:00 am to 1:30 pm

DURATION: - 1 Day

The Department of Electronics and Communication Engineering had organized an Industrial visit to M-plastics and Toys Engineering Limited for a Group of 60 students (1st Year) to impart knowledge on how toys are manufactured in large scale.

INDUSTRY NAME: -

MPPL (Micro Plastics and Toys Engineering Private Limited)

LOCATION: -

The Engineering Division of MPPL is located at Anekal near Electronic city, Bangalore.

They manufacture the Toys and other plastic products for automotive, tool kits, electrical and electronic tools etc. and the process is as follows; design of the product, manufacture of molds, choosing of right materials for the products. Different products have different applications; therefore they choose the materials according to the needs of their customers and the products. Some of the commonly used materials are PVC (Polyvinyl chloride), Polycarbonate, and Thermo Plastics Rubber- Santoprene Poly Acetal etc.

After choosing the right materials, color etc... These materials are melted to be molded again into a new form of plastic products. They dump the plastics that are in the form of small beads into the feeder of the molding machine; the machine melts the plastic and then molds it into the required shape (according to the mold). There were three types of molding process that were explained to us,

- Blow molding
- Injection molding
- Roto molding

The Total Toys manufactured by the company is about 1 lakh Toys/month. The peak season on the consumer end, in the toys sector is during Christmas and new year. Hence for the toys to reach the US, UK nations the export should be done before 50 days as it takes about roughly 30-40 days for the container to reach US and UK Nations after all the checking and protocol.

PHOTOS





Inference: -

During this Industrial visit we noticed that all the molding machines and metal Cutting machines are “Imported from Foreign countries” and the reason behind this being, The machines imported are Cost effective and are High in precision of cutting/shaping the metals. **India** on the other hand is yet evolving in this sector and we as engineering students are to discover new ways to put **India** Ahead in this new emerging global production sector too.

IV Coordinator

Head of the Department