Industrial visit report 04/10/2019

Elecon Engineering Company Ltd. - Gear Unit

GIDC, V. U. Nagar.

In time: 10:30 a.m.

Out time: 12:45 p.m.

It was a pleasant morning for the students of the third year Mechatronics department. The department had organized an industrial visit to the "Elecon Engineering Company Ltd" - Gear Unit, GIDC, V. U. Nagar.

On reaching the plant we were welcomed graciously by their delegates. Soon we were escorted to their gear manufacturing unit. We were divided into two batches and started our tour from there onwards. Firstly, we were briefed about the power distribution throughout the entire plant. Then, we proceeded towards the main manufacturing unit. In the beginning, we saw the various raw materials on which various manufacturing processes is to be carried out. We were also explained about all the processes involved in gear manufacturing. Moving ahead, in the first workshop, we saw the conventional vertical boring machines which were used by the company before automation took over. These conventional machines were more rigid and sturdy compared to the CNCs. On the other side of this workshop there was a dispatch area where the finished goods are packed and dispatched. Moving on to the second workshop, it was one which had all the machines required. There were vertical turning lathes (VTL), milling machines, gear hobbing machines, grinding machines etc. We were all surprised by the size and number of machines. There was also a special room for checking the accuracy of the products by using coordinate measuring machines (CMM). The third workshop had equipment for heat treatment processes like furnace and shot blasting machines. Some of the machines were also Industry 4.0 enabled, meaning they could be monitored and controlled remotely.

This visit gave us a great insight in how the industries work and the processes required in the gear manufacturing process. We would like to extend our thanks to the Company as well as Mechatronics Department, the faculty involved and the college for making this visit possible.