

INDUSTRIAL VISIT "MOOG INDIA TECHNOLOGY CENTER PVT LTD" (6TH December 2024)

INDUSTRIAL VISIT TO

MOOG INDIA TECHNOLOGY CENTER PVT LTD

Department of Mechanical Engineering, MVJ College of Engineering, organized an industrial visit to *Moog India Technology Center Pvt. Ltd.* located at Plot 1, 2, 3, Phase 1, Electronic City, Bangalore – 560100. Mr. Chethan Kumar G A, Manager- CA, Test and Facilities, Moog India Technology Center Pvt. Ltd., was the point of contact from Industry for the Industrial Visit.

Overall, 40 students of 3rd and 5th semester along with Faculty coordinator- Mr. Shiva Kumar H D and Mr. Vinothkumar G reached the company premises at 10:30 a.m. All the company safety protocols were submitted at the company reception and students marched with discipline and in queue into the company's lounge along with the visitor ID cards provided by the company authorities.

The students along with the faculty member were received by Mr. Chethan Kumar G A, Manager- CA Test and Facilities, *Moog India Technology Center Pvt. Ltd.*, and were briefed about the day's agenda by Mr. Ambuj Madhav.

The students and faculty members then assembled at the Ganga Conference Hall and Do's and Don'ts in the company

premises were briefed to the students followed by the introduction of the company by Mr. Chethan Kumar G A. A video about the MOOG and its international operations was shown to the students.

The Managing Director of the company, Mr. Shyam addressed the gathering in the conference hall. All the department heads of the company were introduced to the students and each one of them had briefed their departments.

- Mr. Lakshman briefed about the new group that has been introduced in the organization and named as "Growth and Innovation Engineering" and briefed the ongoing projects and their vision.
- Ms. Manjushree briefed us about the Flight Control Software Engineering.
- Mr. Vivek Chaturvedi briefed the Commercial Vehicle Test Center Process.
- Mr. Yogesh briefed the Test Equipment Systems Engineering.
- Mr. Sripada briefed the Systems Engineering group and the process carried out.
- Mr. Dilip H G briefed about the High Lift Systems.
- Mr. Diwakar S gave an overview of the Flight Control Software Engineering department.
- Mr. Thiruvarul Alagan gave an overview of the Flight Control Electronics and Hardware Engineering.
- Mr. Shiju S gave an overview of the Test System Software Engineering department.

• Mr. Venkata Ramanna gave an overview of the Commercial Actuator Test Department.

Mr. Dinesh briefed about the safety protocols and all safety tools were issued to the students before visiting the company facilities. The visit to company facilities started at 11:30 a.m. The students and the faculty members were taken to Quality Laboratory by Mr. Venkat and Mr. Raju. All the equipment, facilities and technicalities of the system were described and displayed to our students. Then the students and faculty members were taken to the Integration Laboratory by Mr. Siddesh and Mr. Chetan and the process of operations were detailed to our students.

The company had arranged lunch for all the students and the faculty members from 01:30 to 02:00 pm. All the students along with the coordinator and company staff had lunch followed by meaningful interactions in the canteen lounge area.

Post lunch, the industrial visit started at 2:00 pm. The students and faculty members were taken to Industrial Group Laboratory and TPI division. The students were briefed about all the tools and equipment in the department and the process of testing was explained by the department engineers. This was followed by the visit to the New Product Development and Rapid Prototyping division. The engineers explained about the Product development and the Rapid Prototyping Machines at the division.

At 3:45 p.m. the students and faculty members and the departmental heads gathered back at Ganga Conference Hall for Question-and-Answer session, followed by feedback. The students

were elated and expressed their gratitude. The Industrial visit provided a great insight into the technical and process machinery and testing equipment's.

On behalf of the college, Prof. Shiva Kumar H D conveyed thanks to the company officials for the Industrial Visit.

The Industrial Visit concluded with a group photo at the reception area of the company premises followed by high tea in the cafeteria. Finally the students and faculty members departed from the company to the college and then dispersed to their respective homes.



Photograph 1: Students and Faculty Members with Departmental Heads of MOOG India Technology Centre Pvt. Ltd.

Outcomes of the Industrial Visit:

- The students were able to understand the design and manufacture of critical motion control components and the ability to build and integrate entire systems.
- The students had an overview of the design and development center involved in several critical projects focused on the design of actuation systems and components for aircraft applications.
- They were also exposed to the process of establishing a state-of-the-art qualification laboratory for testing actuators and components for all types of aircraft.
- The students' interaction with the test engineers involved in qualification testing, data reduction and analysis, test engineering environment software, legacy test software conversion, build-to-print systems, and support and simulation provided an insight into the latest research avenues.
- The servo actuators test facilities gave an in-detailed overview of the information generated by computers and precision motion control using robotics.
- The students were given demonstration on the electrohydraulic servo control system consisting of six major elements viz., the control electronics, microprocessor guidance system, servo-amplification system and process to an actuation element such as a piston and cylinder which positions the device being controlled; and a power supply, generally an electric

motor and pump, which provides the flow of hydraulic fluid under high pressure.



Photograph 2: Students with Faculty Member at the entrance gate of Moog India Technology Center Pvt. Ltd.