Department:ME|Date:May,23,2023

A REPORT ON INDUSTRIAL VISIT

TO

Integral Coach Factory(ICF)
On

23/05/2023

for the

STUDENTS OF (IIIB.TECH, II SEMESTER,

A SECTION, MECHANICAL

ENGINEERING)

SREE VIDYANIKETHAN
Engineering College
(Autonomous)

DEPARTMENT OF MECHANICAL ENGINEERING

SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)

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Following is the report on industrial visit to Integral Coach Factory on 23/05/2023.

There were a total of 55 students and 1 Staff member for the Industrial visit. The students started their journey at 6.00 am from the main gate of college. Before the start of the bus, the students were given clear cut instructions with respect to travel, safety and other issues. The students were made to sit comfortably in the bus. The students reached Integral Coach Factory(ICF), Perambur, Chennai by 9.45 am. ICF`s security authority verified the ID`s of students and staff at GATE 1 and allowed to passed through the GATE 1. The students and staff are instructed to deposit their electronic gadgets and after that ICF allotted guide. All students are then allowed to sit in the rail museum and viewed a short movie on the ICF`s history and developments. After that, Students and Staff guided to visit. At GATE 2 the students and Staff have undergone security checks andthe officials of ICFgaveinstructionsregarding the safety proceduresto be strictly followed in the plant and explained the working and administration of various departments in Integral Coach Factory(ICF),Perambur, Chennai-600011 Tamilnadu,India.

Integral Coach Factory, Chennai, is a premier Production Unit of Indian Railways manufacturing passenger coaches. ICF is the first of its kind to be established after Independence for the manufacture of light weight, all steel and all welded Integral railway passenger coaches. The factory was set up in 1955 with Swiss collaboration. ICF continues to experiment with design & development of new type coaches such as self propelled and other special type coaches.The Maintenance and Construction Organisation is headed by Chief Electrical General Engineer. Chief Electrical Engineer/Quality Control and Commissioning is responsible for Inspection and Quality Assurance of the components.

The Electrical Design Wing is responsible for evolving new designs of coaches, equipments and sub systems, drawings and specifications for components and assemblies. The Design Wing is also responsible for issuing necessary interfaces for electrical equipments for incorporation in the Shell design and inputs required for Production Wing. This wing is also responsible for developing expertise in design of new generation self-propelled coaches, EMUs, DEMUs, Air-conditioned, Non Air-conditioned coaches and Luxury Trains for user Railways.The Production Wing is responsible for manufacturing of harness, installation of electrical equipments, wiring and complete electrical furnishing of the various types of coaches. The Production wing has developed the expertise in handling of different types of self-propelled coaches including 3 phase AC DC EMUs, EMUs, DEMUs, Ac & non AC coaches including luxury trains for RTDC & IRCTC.The Inspection Wing is responsible for Quality assurance of electrical components and systems used for manufacturing of the coaches. This Wing is also responsible for undertaking prototype inspection of newly developed components/equipments. This Wing is also responsible for testing and commissioning of self-propelled coaches and AC coaches to ensure quality and reliability.

The Maintenance Wing is responsible for maintenance of Plant & Machinery including numerically controlled & CNC machines, EOT cranes etc. This Wing is also responsible for maintaining power supply for Factories, ie. Shell & Furnishing, D&D Wing, Hospital, Colony etc. The construction activities associated with new projects, safety works and replacement works of Plant & Machinery are also undertaken by this Wing. This Wing also is undertaking number of green energy projects such as installation of Wind Mill and Solar energy systems ICF has diversified having established its expertise and skill in this field.

Figure : Students and Staff at the Entrance of the ICF

Impact of Industrial Visit:

- Theindustryexposurehelpsalotinpersonalitydevelopmentofthestudents.They are also exposed to industry culture and learnt to communicate with their industry mentors and perform tasks assigned with in the given time frame in an industrial setting.
- Also this visit helps the students to get inspired from ICF personnel's and motivates them to learn and gain knowledge on Railway Department.
- With the exposure of industry and its practices to the students, the attainment of Pos and PSOs becoming more relevant. The PEOs set as Learning out comes, Employability and Entrepreneurship are achieved better with industry institute interaction.
- Student feedback is collected at the end of academic year and efforts will be made to have sustained industry interaction.

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