

## R. H. Sapat College of Engineering, Management Studies and Research Prin. T. A. Kulkarni Vidyanagar, Nashik-5



# Department of Electronics and Telecommunication Engineering

AY 2024-25, Second Term

**Industrial Visit Report** 

Mithsagar Electronicss Systems Pvt. Ltd., Bhosari, Pune

Date of Visit: 28th February 2025

Organized by: Department of Electronics & Telecommunication Engineering

**Participating Students: TE & SE (E&TC)** 

#### 1. Introduction

The industrial visit to Mithsagar Electronicss Systems Pvt. Ltd., Bhosari, Pune was organized for students to gain practical insights into the manufacturing and automation processes in the industry. The visit provided exposure to real-world industrial practices, including the manufacturing of instrument control panels, mimic control panels, motor control centres, high-tension (HT) and low-tension (LT) panels, analytical skids, SCADA panels, and switchyards.

## 2. Aims and Objectives

The primary aims and objectives of the visit were:

- To bridge the gap between theoretical knowledge and practical applications.
- To understand the complete process of custom electrical and instrument control panel manufacturing.
- To gain knowledge about industrial safety standards and regulations.
- To observe the latest automation and quality control techniques used in HT/LT panels, MCC panels, and SCADA systems.
- To interact with industry professionals and understand career prospects.

#### 3. Outcomes of the Visit

After the industrial visit, students achieved the following outcomes:

- Gained exposure to real-world industrial processes in electrical automation and control panel manufacturing.
- Understood various stages from raw sheet metal processing to ready-to-use automation panels.
- Learned about automation technologies such as PLC programming, SCADA systems, relay protection, and power control panels.
- Enhanced their knowledge of safety procedures and industry standards (IP55, IP65, CPRI certifications).
- Developed an understanding of career opportunities in automation, power distribution, and electrical control systems.



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### 4. CO-PO Mapping

The visit contributed to the following Course Outcomes (COs) and Program Outcomes (POs):

- CO1: Understand the basic concepts of industrial automation and electrical control systems. (PO1, PO5)
- CO2: Apply theoretical concepts to real-world industrial manufacturing settings. (PO2, PO4)
- CO3: Develop problem-solving and analytical skills related to control panel design and production. (PO3, PO9)
- CO4: Enhance teamwork and communication skills through interaction with industry professionals. (PO6, PO10)

### 5. Information about Industry

Mithsagar Electronics Systems Pvt. Ltd., located in Bhosari, Pune, is a leading Manufacturer, Supplier, and Exporter of custom electrical and instrument control panels. The company specializes in HT/LT panels, motor control centers (MCC), SCADA systems, analytical skids, purge control panels, bus ducts, and switchyard solutions. With a 20,000 sq. ft. state-of-the-art facility, the company provides end-to-end solutions in fabrication, assembly, wiring, programming, and testing for industrial automation and power distribution systems.

### 6. Technical Knowledge Received by Students

During the visit, students gained valuable technical knowledge in:

- Sheet Metal Fabrication: Cutting, bending, and assembling MS and SS panel enclosures.
- Control Panel Assembly and Wiring: Component placement, circuit integration, and busbar wiring.
- Testing and Quality Assurance: High voltage testing, IP55/IP65 compliance checks, relay protection testing.
- PLC & SCADA Systems: Understanding automation programming, sensor integration, and HMI operation.
- Power Distribution & Switchyard Setup: Learning about HT/LT panels, transformers, and substation design.

#### 7. Information about Staff

The visit was guided by:

- Mr. D M Raut
- Mr. P N Kathar
- Mr. A S Patel



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#### 8. End Note

The industrial visit to Mithsagar Electronics Systems Pvt. Ltd. was an enriching experience for students, allowing them to gain practical exposure to electrical automation, control panel design, and power distribution systems. The visit not only helped students understand industrial processes but also motivated them to explore career opportunities in automation, control engineering, and power management. The knowledge acquired will be instrumental in their academic and professional growth.

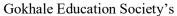
### 9. Student Feedback

Students found the visit highly informative and engaging. They appreciated the opportunity to witness real-world applications of their theoretical knowledge and interact with experts in the field.

#### 10. Acknowledgment

We extend our sincere thanks to:

- The HoD E&TC, Principal & Management for their support.
- Mithsagar Electronics Systems Pvt. Ltd. Authorities for hosting and guiding the visit.
- Faculty Coordinators & Staff Members for organizing the event.
- Students for their active participation and enthusiasm.





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