

SRM Institute of Science and Technology
Tiruchirappalli Campus



School of Electrical and Electronics Engineering

Industrial Visit Report

Kerala Electrical and Allied Engineering Company Limited

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TRACO Cable Company Limited

19 & 20th September 2025

INDUSTRIAL VISIT: I - KEL-COCHIN

Introduction

On 19th September 2025, 30 students and 3 Faculties of III-year B. Tech, ECE & EEE visited KEL (Kerala Electrical and Allied Engineering Ltd.) for an industrial visit. The purpose of the visit was to enhance the knowledge about the operations, manufacturing processes, and industrial practices of KEL. This report furnishes a synopsis of the visit and highlights key observations and takeaways from KEL Kochi, including insights into transformer production, and quality control measures.

Location

The KEL company is situated about 17 km east of Cochin city Centre, 10 km south of Kakkanad, 20 km North of Piravom, and approximately 25 km west of Muvattupuzha.

KEL, spans approximately 1.5 km in length and covers an area of about 50 acres. The facility houses multiple production lines for transformers, alternators, switchgear, and structural components. The plant operates with a production capacity of up to 600,000 kVA annually and manufactures transformers up to 25 MVA and 132kV class.

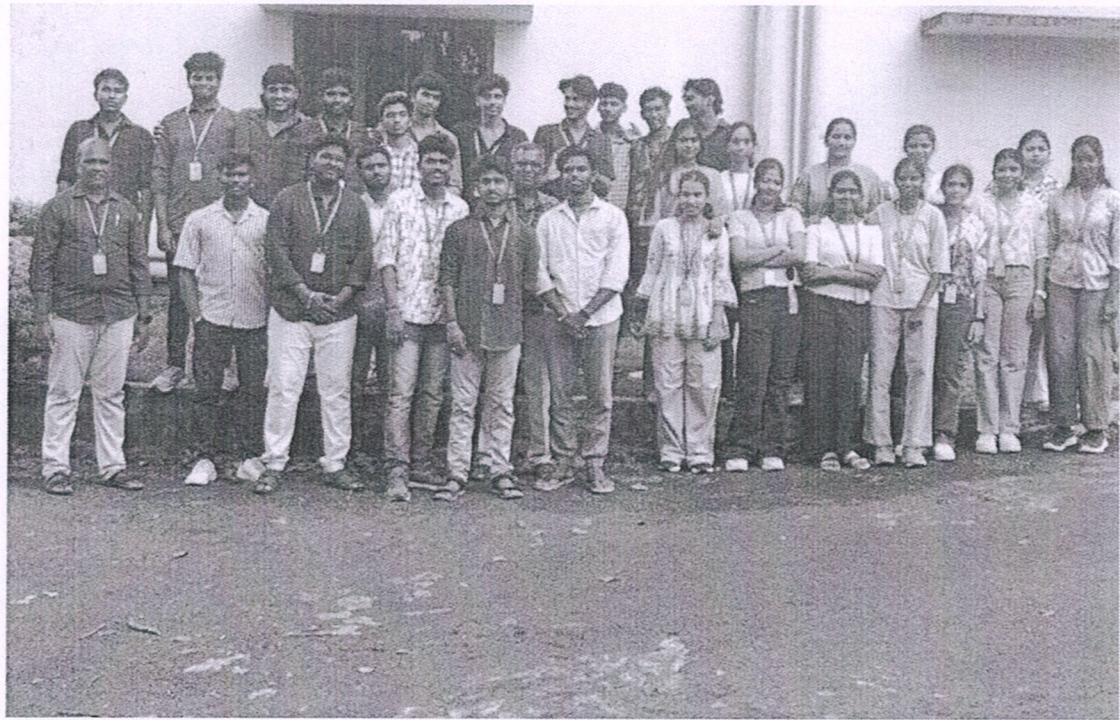
KEL Background

The Kerala Electrical & Allied Engineering Co. Ltd. (KEL) was established in 1964 as a public sector undertaking by the Government of Kerala. The company was set up with technical collaboration from AEG, Germany, to manufacture electrical equipment for various industrial and infrastructure sectors. Over the decades, KEL expanded its operations by establishing multiple production units across Kerala, focusing on transformers, switchgear, structural engineering products, and railway equipment. It has played a significant role in supporting the state's industrial and power distribution needs since its inception.

Established in 1964, KEL was set up to manufacture electrical and allied engineering products to support the industrial and infrastructural growth of the state. It has multiple units across Kerala, including the Mamala Unit in Kochi, the Unit in Kollam, and divisions in Palakkad and Malappuram. KEL produces transformers, alternators, switchgear, and structural components, serving sectors such as power, railways, defence, and space research.

Industrial Visit Details

The visit began with a brief introduction to Kerala Electrical & Allied Engineering Co. Ltd. (KEL) and its history. Groups of 30 students were on a tour of the Mamala Unit, Kochi, where we were shown the various production sections of the factory. We visited the Transformer Division, where the staff explained the manufacturing processes of transformers. The production capacities, technical specifications, and quality control measures were demonstrated practically. The KEL team elaborated on how the company supports sectors such as power distribution, railways, defence, and space research providing insights into industrial operations, safety protocols, and technological innovations.



INDUSTRIAL VISIT II- TRACO CABLES COMPANY LTD, COCHIN

Introduction

On 20th September 2025, 30 Students and 3 Faculties of III-year B. Tech ECE & visited Traco Cable Company Limited for an industrial visit to further understand the industry's operations, procedures, and technologies, a visit was made. The visit is summarised in this report, which emphasises significant findings and lessons learned.

Location

TRACO Cable Company mainly manufacturing unit is situated about 12 km east of Kochi city centre, on Seaport Airport Road, Cochin.

TRACO Cables Background

TRACO Cable Company Ltd. is a prominent public sector undertaking (PSU) based in Kochi, Kerala, India. Established in 1960, the company specializes in manufacturing a comprehensive range of electrical cables and conductors, including power cables, control cables, building wiring cables, and bare conductors. With over six decades of experience, Traco Cable has established itself as a trusted name in the electrical manufacturing industry. These facilities are equipped with advanced technologies and have a combined installed capacity of 9,000 metric tonnes for aluminium wire rod conversion. Traco Cable's infrastructure supports the production of high-quality cables and conductors that meet national and international standards.

TRACO Cable's product offerings cater to diverse sectors, including power distribution, telecommunications, and infrastructure development. The company's clientele comprises various state electricity boards, Indian Railways, BSNL, and electricity supply companies across India. As an ISO 9001 certified company, Traco Cable is committed to delivering products that adhere to stringent quality standards. The company's dedication to innovation, quality, and customer satisfaction has solidified its position as a leading manufacturer in the Indian electrical industry.

Industrial Visit Details

The visit started with a brief overview of the company and its background. Students were then introduced to the company objectives and its commitment to providing high-quality electrical cables and allied products for power distribution, telecommunications, and infrastructure projects. During the visit, the processes of cable manufacturing, were demonstrated, allowing students to understand the operational workflow and industrial standards followed in producing reliable electrical cables.



CONCLUSION

The industrial visits offered a valuable opportunity to gain first-hand insight into the functioning of large-scale electrical manufacturing units, including the production of transformers, cables, and other allied equipment. Observing the workflow, machinery, and quality assurance measures allowed us to understand the practical aspects of engineering that go beyond classroom learning. These visits highlighted the significance of organized operations, technical expertise, and innovation in ensuring the efficiency and reliability of industrial production. The exposure to real-world processes helped us connect theoretical concepts with practical applications and broadened our perspective on the electrical engineering industry. We sincerely thank our institute, the SRM Institute of Science and Technology, Tiruchirappalli, for facilitating these visits and providing us with such a valuable learning experience. Experiences like these inspire us to pursue deeper knowledge and prepare us for future professional challenges in the field of engineering.

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