

**NANDHA ENGINEERING COLLEGE, ERODE- 638 052**  
**(Autonomous)**  
**Department of Electrical and Electronics Engineering**  
**INDUSTRIAL VISIT**

Second year EEE students had visited **TRACO Cable Company Ltd**, Cochin, Kerala on 22<sup>nd</sup> February 2019.

**Total Strength:** 55 students and 2 Faculty members.

**Year/ Branch:** II / EEE

**Semester:** IV

**Date of Visit:** 22-02-2019

**Name of the Industry:** TRACO Cable Company Ltd, Cochin, Kerala

**Field Visit:** Cables and Conductors

**Outcome:**

**PO CO and PSO Mapping:** PO3, PO5, PO6, PO7, PO9, PO12 and PSO1, PSO4

**Plants:**

The students were separated into three batches and they are allowed to visit the company work areas

- Weatherproof cables
- XLPE ground cables
- Control cables
- ACSR conductor

**Weatherproof cables:**

The salient features of weatherproof cables are high-grade raw material, highly conductive, with proper insulation.

- 1) Single Core from 25 sq.mm to 185 sq.mm PVC Insulated and Sheathed Aluminium Wires.
- 2) 2 x 2.5 sq.mm and 2x6 sq.mm Flat Twin PVC Insulated and PVC Sheathed Cables

**XLPE ground cables**

XLPE UG cables upto 11 KV. Sizes upto 3 x 300 sq.mm Aluminium wires. As per IS 7098 Part II

**Control Cables:**

Control cables comprises of Tinned copper wires with sizes ranging from 2 x 2.5 sq.mm to 19 x 2.5 sq.mm and 2 x 4 sq.mm to 19 x 4 sq.mm with PVC insulation, Armoured and PVC sheathed as per IS 1554.

**ACSR Conductor:**

Conductor types are Dog, Raccoon, Weasel, Rabbit, Panther, Squirrel, Voltage capacity upto 400 KV line conductor size upto 574 sq.mm current carrying capacity from 70 Amp to 890 Amp Certification BS As per IS 398 Part II for Overhead lines for both Distribution and Transmission purposes

**Students Feedback:**

The students gain knowledge in the cables and conductors manufacturing process.



**Industrial Visit photo**

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**INDUSTRIAL VISIT**

Second year EEE students had visited **SMEC**, Trivandrum, Kerala on 31<sup>st</sup> August 2019.

**Total Strength** : 58 students and 2 Faculty members.

**Year/ Branch** : II / EEE

**Semester** : IV

**Date of Visit** : 31-08-2019

**Name of the Industry**: SMEC, Trivandrum, Kerala

**Field Visit**: Marine Electrical & Automation, Integrated monitoring and alarm system, Generator Controllers, Electro mechanical and digital control

**Outcome:**

**PO CO and PSO Mapping**: PO3, PO5, PO6, PO7, PO9, PO12 and PSO1, PSO4

**Plants:**

In morning session, they had taught about below mentioned areas. Afternoon session, the students were separated into three batches and they are allowed to visit the work areas

- Main engine control system
- Generator controllers
- Integrated alarm monitoring
- Industrial electrical and marine services
- Rig Electrical, Automation and Electrical service

**Main engine control system:**

Main engine control system's behavior is first observed carefully to locate the problem then the fault is identified and rectified. System consists of electro mechanical and digital controls for start, stop, speed control, shut down, slow-down, safety, and alarm systems are repaired and tested.

**Generator controllers**

The primary function of Generator controller is to manage and protect the generator in preference to the engine, which is not a direct concern. GC can be used in applications where engine management or protection is not required or in cases where the generator is powered by another source such as a turbine controlled by an external PLC. The controller is suitable for use in Land Based and Marine applications.

**Integrated alarm monitoring:**

Integrated alarm monitoring and alarm system dedicated to improving ship operations via increased safety and reliability. Machinery alarm and monitoring for every type of vessel. Integrated or stand-alone cargo alarm system for tankers.

**Industrial electrical and marine services:**

Secure your investment and take advantage of innovations with SMEC Strategic decisions surrounding the future of automation technology are a key factor in sustaining your competitive edge.

**Rig Electrical, Automation and Electrical service:**

SMEC Automation has extensive experience in automating and mechanizing drilling and workover rigs. These automated and semi-automated drilling systems have been built for the Norwegian sector of the North Sea, Arctic rigs on the north slope of Alaska, desert rigs in Oman, slant drilling rigs in China and mobile trailer rigs in Brazil.



**Industrial Visit photo**