

## **Field Trips/Study Tours**

### **Visit to Engipress Industries Pvt Ltd**

DATE = 14-MAY-2022

Duration :1day

The Department of Civil and Mechanical Engineering has organized a one day industrial visit to "Engipress Industries Pvt Ltd, Sanichara Road, Morena, M.P. " (Sleeper Plant) dated on 14, May 2022. 40 students and 4 faculty members, Dr. Rajendra Singh Rajput, Dr. R.K. Jain, Mr.Nikhil Nandwani & Mr. Arun Singh Kushwah departed from college at 9:30 AM with a moto to learn each and every technical aspects involved in pre or post tensioning of sleepers, various types of it, manufacturing process and material testing etc.

The concrete sleepers are being manufactured by using pre-stressed cement concrete of M60 grade and 16 wires in each sleeper for reinforcement. One bench has eight moulds at a time with oiled inner faces and inserts fixed for the fastening of rails. The wires are inserted into holes and pre-tensioned by hydraulic jacks. Then the concrete is filled into the moulds and the benches are sent for curing. First, they are cured by hot steam at a temperature of 750 Celsius for 12 hours. Thereafter, they are cured in water tanks continuously for 15 days. The testing to destruction is performed batch-wise in a separate digitized flexural testing machine. There are other testing equipment installed in the plant laboratory-like Slump cone, Aggregate impact test apparatus, Sieve shakers, Flexural testing machine, Proctor mould, and Cube vibrating machine, Compression testing machine, Oven and different gauges etc. Most of the tests are computerized and their record is maintained digitally.

The students were happy and very excited during the visit. They got satisfactory answers to their questions from the plant engineers and staff. Snacks was also offered after the visit by the company. The visit was very well managed by the company and its staff. Interactions between students and the industry people may also be beneficial for students.



**Learning Outcomes:**

- Students were able to understand the working and importance of Sleepers in Railway Lines
- Students were able to understand the IS Codal Provisions and Norms of Industry followed in the Manufacturing of Sleepers
- Students learned the concept of curing of heavy structures and their processes.
- Students got the exposure of Industrial experts and understand the working of Factory

# VISIT TO SUPREME INDUSTRIES

DATE = 30-MAY-2022

Duration :1 day

Industrial Visit Mentor= Nikhil Nandawani, Shanshak Gupta

Industry Guide= Sharad Yadav

Products: Polystyrene & Polymer

INDUSTRY: Plastic Processing

Headquarters: Mumbai Maharashtra, India

## Aim of Industrial Visit

Industrial Visit is considered as one of the tactical methods of teaching. the man behind we can know things practically through Interaction, working methods. It gives exposure from academic point of view. Industrial visit provide us information about practical working environment

Name of The Industry: The Supreme Industries Pipes and Fittings, Malanpur

ABOUT: The factory registered in 30-Jan-2014

INTRODUCTION: The company manufacturer industrial and engineering molded furniture product, storage and material handling crates, multi-layer sheet, multi-layer films packaging films, expanded polyethylene form, PVC Pipes and fitting, molded furniture, sataranj mats, disposable EPS container.

OUR EXPERIENCE: At entrance of industry we were told to submit the mobile phones. Than we were first taken to Air conditioned small auditorium where briefing was given using ppt presentation by Sharad Yadav Sir from Supreme. Which was very helpful. Later we were taken for visit and shown various coloured pipes with different application as per temperature, sanitary appliances, Water tanks, sewage tanks etc and how they are manufactured. Plastic is future of country and world. Students got hands on experience. At the end snaks and cold drink was offered to students. We got to know varities available even in plastics. 9:30am we left University and 2:30pm we reached back University from Malanpur.



**Learning Outcomes:**

- Students were able to understand the different colour compositions of Plastic according to their uses and temperature resistance
- Students were able to understand the flow of water supplies and the different combinations of joints for best possible flow of water and sewage.
- Students got the exposure of Industrial experts and understand the working of Factory
- Students were able to comprehend different theories related to plastic work and making.