

Parshvanath Charitable Trust's A. P. SHAH INSTITUTE OF TECHNOLOGY (Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai) (Religious Jain Minority)

INDUSTRIAL VISIT

Subject :- Design and Drawing of Steel Structures

Year/Sem :-III rd year/ VI sem

Site visit date :- 05/04/2019

Site :- Industrial shed, Kalwa

Site Address :- Ferrous Engineering Chaphekar Compound, beside T.M.T bus depot, opposite shivaji hospital, kalwa, thane

No.of students :- 119

Staff Member:

- 1. Prof.Preeti S Kalburgi
- 2. Prof.Umesh Vazurkar

As per the curriculum of University of Mumbai, students of third year of Civil Engineering having **Design and Drawing of Steel Structures** subject required to visit a site as a part of termwork to understand the practical application of the theory learnt in their curriculum

A visit was arranged to Industrial shed, Kalwa.

About the visit :-

- The objective of the site visit was to provide students with the practical knowledge of the various mechanisms involved in making of steel structure thereby leading to better understanding of the subject.
- Students were addressed by the professional worker in the site. They gave a brief explanation about the various machines used for various processes like detailed overview and working of machines like drilling machine, hand grinder, bar bending machine etc. was given. The workers also explained about the various components and safe handling of the machine with the working. They also gave a brief description of the various sizes and types of drilling bits and their uses, for example type of drill used for 25mm hole.
- The students were taught various techniques of welding used for various orientation of jobs(structures), they were also given an onsite experience of welding, students under the supervision of the professional tried welding and drilling. A new instrument used for levelling of steel section was also introduced to the students, the instrument can show vertical, inclined and horizontal levels and accordingly adjustments to the section can be made. They also explained the reason behind the selection of particular type of member (sections) used in structures present there.
- The entire shed had a truss roofing of span 40 feet with only supported at the end, professors explained the reason behind the selection of hollow rectangular rolled section instead of conventional double angle and single angle in order to decrease the self-weight of the structure thereby increasing the moment of inertia in turn helping the structure to be more stable.

Thus, students were benefited by the site visit, they not only gained practical knowledge of the subject but also the gap between theoretical knowledge and site knowledge was bridged. Students also learned welding, drilling and various methods of bending the section in the site visit.

Vision :- To enhance a strong fundamental knowledge of students.

Mission :- To make technical sound Engineers.

IMAGES:



1. Drilling Machine



2. Welding





3. Levelling



