

A Report

On

“Industrial Visit”

For the Students of Mechanical & Automobile Engineering Department.
(Semester – III)

On 12th to 15th October 2018.

- **Objective:** “Training and Exposure on the various aspects of production and machines and its technology related to the Manufacturing Process-1 subject in Sem III.”
- **Venue:** “AMBICA POLES PVT LTD, NAVAPURA, Ahmedabad.
- **Number of Students:** 205(III semester, Mechanical & Automobile Engineering)
- **Head of the Department:** Ms. Prexa H. Parikh
- **Faculty Coordinator’s:**
 1. Mrs. Prexa Parikh (Asst. Prof. Mechanical Engg. Dept.)
 2. Mr. Ankitsinh Rajput (Asst. Prof. Mechanical Engg. Dept.)
 3. Mr. Vivek Parikh (Asst. Prof. Mechanical Engg. Dept.)
 4. Mr. Sagar Choksi (Asst. Prof. Mechanical Engg. Dept.)
 5. Mr. Chintan Morsiya (Asst. Prof. Mechanical Engg. Dept.)
 6. Mr. Hiren Makwana (Asst. Prof. Mechanical Engg. Dept.)
 7. Mr. Hardik Shah (Asst. Prof. Mechanical Engg. Dept.)
 8. Mr. Tushar Thakar (Asst. Prof. Mechanical Engg. Dept.)

OVERVIEW

1.1 Ambica Poles Pvt Limited

For the past 29 years, we have been known as a prominent manufacturer and supplier of Electric Poles, Junction Box and Brackets in Gujarat. Our range comprises 85 Watt Solar Street Light, Swan Neck Pole, Double Swan Neck Pole, Street Light Poles (SLP01), Street Light Poles (SLP04), Street Light Poles (SLP03), PCC Poles and many more. Furthermore, our organization hold expertise in developing a wide set of Spot Light Poles, Tubular Poles, Steel Tubular Poles, Mild Steel Tubular Poles and Tubular Steel Poles. Our products are highly appreciated for their longer functional life, easy installation and resistance to corrosion. We have used optimum quality steel and technically advanced manufacturing techniques to develop these products. These products are suitable to be used for lighting purposes on the roads, parks, hotels and many more sectors. We have created a huge clientele such as BRTS Ahmadabad, GIDC, Railway, AUDA, Ahmadabad Municipal Corporation and many more.

On 12th to 15th October 2018, the Mechanical & Automobile Engineering Department (III-Sem), L.J.I.E.T arranged an **Industrial Visit for the students.**

The main focus of this program was to enable the students to know about the various aspects of the latest production techniques and machineries.

ORGANIZATIONAL STRUCTURE OF THE VISIT

The number of students who attended the visit was 205 accompanied by 8 faculty members. On first the day of visit, 65 students and 4 faculties, then on second day of visit, 71 students and 4 faculties, then on third day of visit 69 students and 4 faculties have gone for the visit faculties left the college campus at around 10:00 am and reached the venue at 10:30 am. The students as well as faculty travelled by their own vehicle and reach the place accordingly on time. On first day a brief overview was given by Mr. Vivek Parikh to the students, their attendance was taken. Same procedure was followed on remaining days and students were informed about it by Mr. Ankitsinh Rajput, Mr. Chintan Morsiya.

VISIT OUTLINE

After reaching the venue, Admin person gave a brief overview and arranged three instructors and make team of 20 to 25 students each for visit. Instructors emphasized on the importance of Practical Knowledge in the field of Production.

They Shows activities performed and services offered by company which are:

1. CNC Plasma Cutting:

In this machine basically cutting of Mild Steel sheets were done. A high frequency voltage was passed to generate the plasma which was used to cut the sheet upto 16 mm thickness. It was fully automated and program was inserted by running through different soft wares in computer If thickness is more then 16 mm gas cutting was used in which LPG and Oxygen gas were used for cutting.



2. CNC bending Machine:

This machine was used for bending of the sheets which were cut by plasma cutting machine. Here marking were made on sheets and V-shape bending was done 4 times on the sheet at different point to get octahedral structure. Pressure was applied automatically. And after bending there was space remaining in

between two edges. Which will be further filled with the help of welding techniques.



3. **Submerged Arc Welding:**

To fill the gap between edges SAW technique was used. It was also fully automatic machine in which copper electrode was used to join a metal. A laser beam was there due to which we can come to know the arc zone of the welding after adjustment the machine was started and the automatic welding procedure took place. The flux were added externally through hopper to save welding from atmosphere contamination. At the ends of the poles welding was not done to avoid breakage.



4. MIG welding:

This welding was done at the ends of the pole. For joining the edges manual MIG welding was done by taking copper electrode and Argon as shielding gas and after welding edges finally the poles were ready.



5. Straitening of the Poles:

After MIG welding if there is bending of the poles were found then straightening of the poles were done on the automatic straightening machine. In this machine one end is kept stationary in a grip and then the pole is given external pressure from machine to make it straight enough.



Some glimpses of visit are as under



FINAL PRODUCT OF THE POLES.

L. J. INSTITUTE OF ENGINEERING AND TECHNOLOGY – AHMEDABAD.
MECHANICAL/AUTOMOBILE ENGINEERING DEPARTMENT



VISIT ON DAY-1 (12TH OCTOBER, 2018)



VISIT ON DAY-2 (13TH OCTOBER, 2018)



VISIT ON DAY-3 (15TH OCTOBER, 2018)

CONCLUSION

The visit ended around 1:00 pm. The overall response of the students was positive – below are listed feedbacks of few of the students

1. Interesting Experience seeing live production
2. Kindly arrange a visit in more Industries.

ACKNOWLEDGEMENT

The coordinators are grateful to the College authorities, Management and the Vice President – Dr. Manish Shah (LJK Trust) for supporting them to carry out such a program and for providing the support. Secondly, the coordinators would like to thank Dr. A.C. Suthar – Director (L.J.I.E.T.), who encouraged the coordinators for this program. Also, the coordinators extend their gratitude to the Head of the Department – Ms. Prexa H. Parikh, who has played a major role by being there at the time of need. The Owner of the company **Mr. Mayur Mehta** without whom the visit was not possible and also the manager **Mr. Shubh Mehta**. Last but not the least; the students did a wonderful job and the coordinators are proud of each of their students.