

A BRIEF REPORT
ON
THE INDUSTRIAL VISIT
by
5TH SEMESTER STUDENTS' OF
MECHANICAL ENGINEERING DEPARTMENT, JEC
TO
ONGC SIVASAGAR
Assam, India
3rd, October, 2018



“ The only source of knowledge is experience”- said Albert Einstein. Mere theoretical knowledge can last for a year or two but knowledge gained from experience becomes immortal in our heart and mind. Keeping this thought in mind TEQIP (Technical Education Quality Improvement Program) with the support of our Jorhat Engineering College organized an Industrial visit program to ONGC, Sivasagar to give us a realistic view of machines and systems that we are going to tackle in years to come.



Grabbing this opportunity, we the students of 3rd year, Mechanical Engineering (Sec-B) gathered in the college campus at around 7:15 AM to get on the bus as earlier informed by our teachers. Enthusiasm and excitement of exploring a new venture was evident on our faces. The bus started off from the college at about 7:30 AM. We were accompanied by our beloved and most honorable teachers who not only spared their valuable time for us but also tried their best to make the visit fruitful. I would like to express my humble gratitude to Dimpi Bora ma'am, Debarupam Gogoi Sir and Rupanjali Nath ma'am for their selfless effort. The bus stopped at the food shop at around 8:30 am for the breakfast. After done we continued our journey towards Sivasagar. After travelling for about 3 hours we reached our destination. My heart pounced as the bus crossed the main gate. After reaching there our teachers went to the office for taking permission for the visit from the authority and other verification purpose, while we sat back and chatted with our fellow mates. Some of us also went down in view of exploring the campus and stood in front of the central workshop. By 11:15 am we were granted permission and we entered the workshop area. We were divided in two groups and allotted a technical guide to assist us during the visit and explain to us the parts and parcel of the workshop. We got honorable Ashish Barman sir as our guide who before leading us to the workshop enlightened us a little on the entire drilling process so as to familiarized us to the process. There were a total of 6 different shop which we later explored. Here I would like to share little bits of the things that we got to see. 6 workshops were as follows:-

1. **ENGINE SECTION:-** Caterpillar type of engine namely 'CAT 3512B' is used in the section where 'CAT' stands for Caterpillar, '3' is code of caterpillar, '5' is the series no. , '12' refers to the number of cylinder used and 'B' means it includes both mechanical work and electronics.

The sub-section included here were:

- a) Cylinder head section b) Turbocharger section. c) Lube oil section.
- d) Vibration decomposer section. e) Fuel section. f) Radiation section.

2. **ELECTRICAL SECTION:-** Works included in this section are:-

- a) Rewinding of AC-DC motor.
- b) Rewinding of alternator.

3. **RABRICATION SECTION:-** the process included here are :-

- a) Cutting
- b) Wielding, etc

4. **COMPRESSOR AND TORQUE CONVERTOR:- (TC SHOP):-** This shop uses screw compressor

5. **MACHINE SHOP :-** It includes all machine operation.

6. **HEAVY REPAIR SHOP :-** this shop includes midpump (1700 pt) IRD (speed regulation gear box), rotary table, travelling stocks, blow out preventer, crane hook (for lifting), crown block pneumatic clutch and air winch.

During the visit to every shop, guide sir explained to us the functioning of each and every machine in great details. In spite of our visit hours been the time of his lunch break he came forward to assist us. Our teachers also got divided into groups and stood with us like a firm support in the unfamiliar environment. In a single day we gained a lot of practical knowledge and got to see things which were earlier just parts of our books and notes. It not only help us gained knowledge but also boosted our moral and made us dream of a future in such an organization. The day was fruitful in every senses as we explored the dream hub of every to be mechanical engineer. The food provided to us in form of lunch on our way went hand in hand – a perfect blend of taste and hygiene.

To end, I would really like to thank TEQIP, JEC and our teachers for giving us such a wonderful opportunity to explore a sector like ONGC. This day would always remain as a memory and serve as a milestone towards our journey of becoming a successful engineer.

