

# Sarvajanik College of Engineering & Technology, Surat.

## **Department of Electrical Engineering:**

A Brief Report on Industrial visit

To



#### **INDUSTRIAL PROFILE:**

**Company name:** ABB (ASEA Brown Boveri)

Address: Maneja Village, Bank Of Baroda Road,

JD Nagar, Maneja, Vadodara,

Gujarat.- 390013

ABB is a Swedish-swiss multinational corporation headquatred in zurich, Switzerland, operating mainly in robotics, power, heavy electrical equipment and automation. ABB is a leader in power and automation technologies that enable utility and industry customers to improve performane while lowering environmental impact.

#### **♣** REPORT ON INDUSTRIAL VISIT AT ABB

On 27<sup>th</sup> july,2018 department of Electrical engineering of Sarvajanik college of engineering and technology arranged an industrial visit at ABB, Vadodara.

There were 54 students along with 2 faculty members Prof. Chinmay naik and Prof. Siddhi Patel.

The main motive of this visit was to let us know how the protective equipment's used in power system operates and to view various new technologies that are developed by ABB and their operation.

We reached the ABB, Vadodara at around 1.00pm. We first went to the seminar hall where briefing was held about the protection and protective measures one must take while working in the field.

After the seminar the students were divided in two groups and are taken to visit the company and to observe various protective devices and equipment's used in power system for the protection purpose.

After that, a question answer session is conducted. We are really satisfied with the answers given by the Harsh Ramaiya sir.

#### Products

- > Products that we have seen in ABB are:
- Disconnecting circuit breaker (DCB)- 72.5 to 550Kv.
- Live tank circuit breaker (LTB)- 72.5 to 170Kv.
- Disconnecting circuit breaker with fiber optic current sensor- 420 to 550Kv.
- Current transformer 72.5 to 800Kv.
- Capacitor voltage transformer.
- Traction transformer.
- Surge arrestor from medium to high voltage (gas insulated).
- HVDC converter transformer.
- Generator step-up transformer.
- Traction motor (slip ring and squirrel cage induction motor).
- Mobile capacitor bank.
- Vacuum circuit breaker and SF6 based circuit breaker.
- Hybrid switchgear 72.5 to 550Kv

The hybrid design makes use of traditional air insulated bus bars to connect with other equipment's in the substation like circuit breaker, combined disconnector and earthing switches, voltage transformers and voltage sensors, current transformers and fast earthing switch options enclosed in a single-phase gas-insulated housing.

ABB offers the widest range of products for the protection, control, measurement and supervision of power system. Also we have seen different types of relays i.e. directional relays, numerical relays etc.

ABB offers a comprehensive range of reliable and high efficiency motors and generators for all applications.

### Our experience from industrial visit.

- Practical knowledge of various protective equipment's that helps in enhancing our knowledge.
- They are strictly following quality and safety aspects.
- During industrial visit, we are very much satisfied by the information given by the faculty members and the sir that are guiding us throughout the visit.
- The industrial visit helps us to translate theoretical knowledge into practical.
- Also while going through the industrial visit, the co-operation is found to be very well organized, developed & most ideal industry in every walk of its production, administration & management aspects.

We extend our heartiest thanks to ABB for making 27<sup>th</sup> July 2018 a day to cherish for some of the lucky students who are honored with your humble gesture to get an opportunity to visit such an esteemed organization.

