VISIT AT SARDAR SAROVAR

The students of SY and TY mechanical and production from BVM Engineering College visited SARDAR SAROVAR on January 21, 2018 under TEQIP, the guidance of Prof. P. G. Choksi and Prof. U. B. Chaudhari with the group of 39 students.

The day start with morning breakfast & tea at 6:00 am. Bus of CVM (Charutar Vidhya Mandal) take all the students to SARDAR SAROVAR. Before visiting the site the permission was taken from SSNL, Gandhinagar through FAX. The Sardar Sarovar Dam is one of the world's largest gravity dam, on the Narmada River near Navagam, Gujarat. Four Indian states, Gujarat, Madhya Pradesh, Maharastra and Rajasthan, receive water and electricity supplied from the dam.

The main purpose of this visit is to aware students the technologies used in preparing very large hydraulic structure, huge mechanical-civil structure and practically understand how the power is being generated from water.

The permission was given to us for visiting RBPH, CHPH and Dam site. We reached the Sardar Sarovar at 10:30 am and after issuing gate pass we visited above mentioned sites.

CHPH (Canal Bed Power House):

Part of water used for irrigation through main canal via four turbine units of 50 MW each. It is located near to ground level so its discharge is used for irrigation. The main canal is very long and it supplies water to several regions of Saurashtra and Kutch. The turbines used here are Kaplan having low head and high discharge.

RBPH (River Bed Power House):

We first visited RBPH by their bus through a very huge tunnel. Various informative photos were kept there showing various information regarding RBPH such as plant layout, turbine cross section, path of water showing right starting entry from river to final destination. RBPH contains six units of reversible francis turbine each having capacity of generating 200 MW power. The max and min head of turbine working is approximately 160 m and 130 m respectively, while the design head id 100 m. The running speed of the turbine very low @ 135 rpm, because of its huge structure (around 50 tonnes). The flow of water is 200 m^3/s. The height of turbine below the ground level was approx. 17 meter and the draft tube (where water is discharged) is still below 10 meter than turbine

Dam site:

Finally we visited a huge dam site collecting very large quantity of water. Dam t is 1.75 km in length and it can hold water upto 163 m height.

Finally after taking having lunch at canteen we departed to VV Nagar at 4:30 pm and reached BVM at 8:00 pm. The visit was fruitful and it has increased our knowledge regarding fluid power area.

We are very much thankful to CVM for their support and providing bus. We are also thankful to Principal I. N. Patel sir, HOD P. M. George sir and I.E. Convener B. S. Patel sir for motivation and support. Also we are very much thankful to TEQIP III, BVM for granting the expenses.