

Industrial Visit to Solar Power Plant , Shirdi

College Name :- Sandip Institute of Engineering and Management,Nashik

Department Name:- Mechanical Engineering.

Title Of Event :- Visit to solar power plant, Shirdi

Date Of Event :- 18.07.2014

Time of event:- 10. Am to 5 pm

Concerned person- Mr A.G. Jagtap

(Asst. Supervisor.)

Description of event-

The solar power plant at Shirdi is one of the very advance power plant of its kind. The power plant is a fully automatic & requires very less maintenanace. The parabolic collectors are used for the collection of the sun rays which are concentrated at a disc. The temperature of the collected rays is about 700 to 800 degrees celcius which are further used to generate steam. The steam is used to make and process food in the Bhojnalay area which is situated downstairs of the building. The food items processed are dals, vegetables, rice etc. The bhojnalay also consists of an automatic chapati maker which automatically cuts the dough in small rounds which are further pressed into fulkas.

The parabolic collectors are automatically turned according to the position of sun using electronics and special gearing arrangement. This power plant is operated only in summer seasons when the availability of sun rays is maximum. The power plant generates 13MW of energy at peak hours. The intensity of heat by sun rays is so high that, it can burn a wooden block in time span of 10 seconds. The whole system is controlled and maintained via control room which is at the top floor of the building.

This measure was taken by the Shirdi sansthan in order to reduce the intake of the gas which is LNG. This step of Shirdi sansthan has acted as a boon to the saving of natural source on a very large scale. This project has received many certifications and ISO 14000 grants. Shirdi power plant has given a learning lesson to the society and also proved that how the solar energy available in abundant can be utilized. This visit helped us a lot in understanding the use and utilization of solar energy and its productive outcomes.