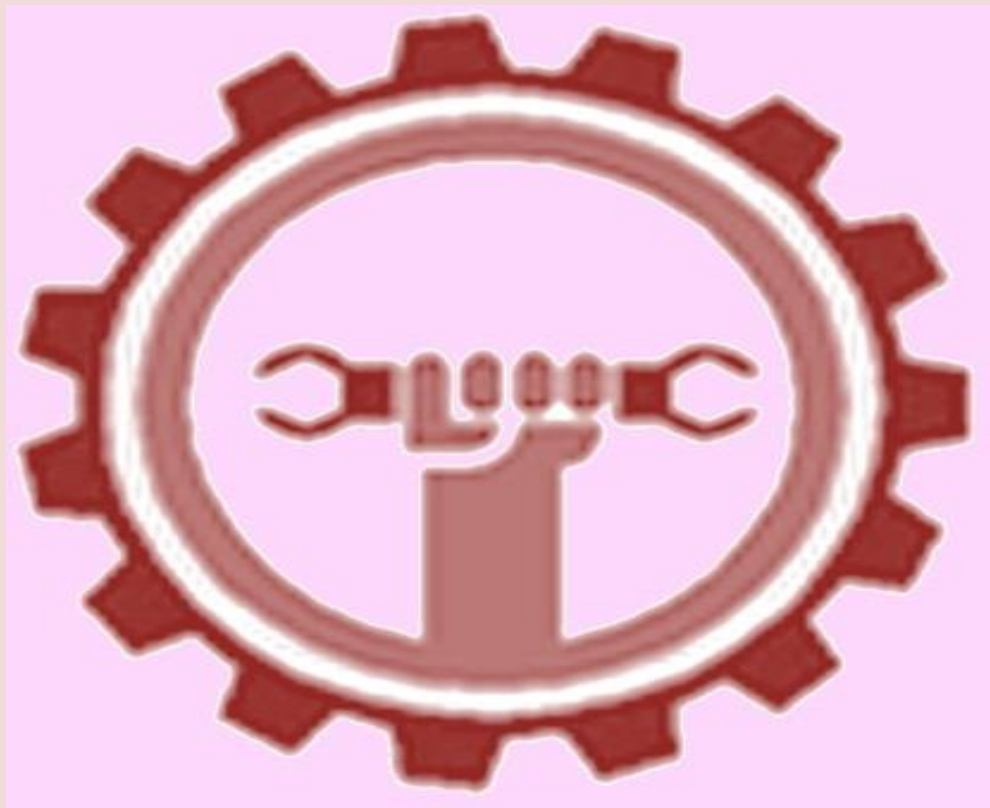


Mechanical Engineering Department

MECHANICAL ENGINEERING STUDENTS' ASSOCIATION

M.E.S.A

Activity Report 2023-24



MESA Faculty Advisor: - Prof. H. S. Salave

**Modern Education Society's
WADIA COLLEGE OF ENGINEERING, PUNE-01**

MECHANICAL ENGINEERING STUDENTS ASSOCIATION (MESA)

MESA is MESCOE Mechanical Student Association. The MESA was formed to bring about the technical development of students by organizing seminars, workshops and other activities and also to improve non-technical abilities of students by engendering good communication skills, managerial abilities, presentation skills and team work.

Objectives

- To Promote the interaction between academia and industry by organizing industrial visits, special lectures and facilitate in industrial training
- Promoting the interests of students in various technical areas pertaining to mechanical engineering
- To encourage students of the mechanical Engineering department to develop their personal skills, like event management & time management by organizing inter & inter Collegiate Events
- To bring about the technical development of students by organizing seminars, workshops and other activities.

Outcomes:

The students will be able to

- Develop their technical and non-technical competitive skill
- Develop their communication skills, managerial abilities, presentation skills and team work.
- Put forth their ideas

Role of the Faculty Coordinator:

- The faculty coordinator will be responsible for team selection.
- Faculty coordinator have all rights to terminate any non performing member in the committee.
- All purchases for event conduction must be processed through faculty coordinator.

- All events should be conducted under the guidance of respective coordinator as well as respective event coordinators.

Team Selection Policy:

- Academic result is considered for the post of President and Vice-President
- All interested students for committee members are called for interview.
- The interview is conducted by faculty coordinator, Senior faculties and President in Semester II and charge is handed over to new President and committee members

Industrial Visit at Nashik Thermal Power Plant

Day & Date : Wednesday, 22/02/2024

Venue: Nashik Thermal Power Plant, Eklahare Nashik

Faculty Co-ordinator: Prof. H. S. Salave , Prof. S. P. Gadewar and Dr. K. A. Mahajan

Introduction

The Industrial Visit is **organized** by **Mechanical Engineering Student Association (MESA)** of M. E. S. Wadia College of Engineering; Pune for B. E. Mechanical students on 22th Feb. 2024 **at Nashik Thermal Power Plant, Eklahare Nashik.**

Nashik Thermal Power Plant is located at [Eklahare](#) village near [Nashik](#) in [Maharashtra](#). The power plant is one of the [coal](#) based power plants of [Maharashtra State Power Generation Company \(Mahagenco\)](#)

Nashik Thermal Power Station has an installed capacity of $140 \times 2 + 210 \times 3 = 910$ MW. The first unit was commissioned in 1970. the cost of unit including civil works was Rs 56.5 crores. and the second unit also commissioned with the same cost under the first stage. the second stage consists of three units of 210 MW each was commissioned in the later years. the power station campus includes self-contained township with all amenities. The entire land consists of 474 hectares. The power plant has got ISO Certification in April 2002. The first head of the Power station was Sri Karanjkar assisted by Sri CL Gupta and Sri Sen Gupta. Sri Sen Gupta was assisted in Boiler Maintenance department by Sri C.N.Swamy and the Turbine maintenance department was headed by Sri Agashe.

The Second stage of Power station 3×210 MW was started in April 1976. Sri C.N.Swamy was appointed as the first Project Manager to oversee the construction and commissioning of power plant. The first unit was commissioned in 1980.

Installed Capacity:

[Maharashtra State Power Generation Company \(Mahagenco\)](#) is planning to deploy 660 MW super-

critical unit at the same location just like the current plant. This project will be stationed adjacent to the existing stage-I plant (2 x 140 MW) site at village Eklahare. Land requirement for the proposed project is about 36.6 hectares. The coal sources will be from Mahanadi coal blocks by MahaGuj Collierie[2] s. The total cost of the project is around Rs 4,390 crore, 20% contribution will be by the State Government amounting to Rs 878 crore. The remaining funds will be supported from several lending institutions.

Transport

It is on the [Bhusawal–Kalyan section](#) of [Central Railway](#). Coal-based thermal power stations consume large quantities of coal.[4] The Nasik Thermal Power Station consumed 4,626,000 tones of coal in 2006–07.[5] Around 80 per cent of the domestic coal supplies in India are meant for coal based thermal power plants and coal transportation forms 42 per cent of the total freight earnings of Indian railways

Proofs:







Industrial Visit at Solar Steam System Shirdi

Day & Date : Wednesday, 21/02/2024

Venue: The Shri Sai Baba Sansthan Trust has world largest solar steam system, Shirdi Ahamadnagar

Faculty Co-ordinator: Prof. H. S. Salave , Prof. S. P. Gadewar and Dr. K. A. Mahajan

Introduction

The Industrial Visit is organized by **Mechanical Engineering Student Association (MESA)** of M. E. S. Wadia College of Engineering; Pune for B. E. Mechanical students on 21st Feb. 2024 **at the Shri Sai Baba Sansthan Trust has world largest solar steam system.** It was constructed at the Shirdi Shrine at an estimated cost of Rs. 1.33 crore, Rs. 58.4 lakh of which was paid as a subsidy by the renewable energy ministry. The system is used to cook 50,000 meals per day for pilgrims visiting the shrine, resulting in annual savings of 100,000kg of cooking gas and has been designed to generate steam for cooking even in the absence of electricity to run the feed water pump for circulating water in the system. The project to install and commission the system was completed in seven months and the system has a designed life of 25 years.

The Sai Baba Temple in Maharashtra's Shirdi town has gone green as 'Prasadam' in the temple kitchen are prepared through solar-steam cooking system for thousands of devotees. The main goal of the Shri Sai Baba Sanstha was to reduce the use of LPG by 50 percent.

Shirdi is the third spiritual centre after Andhra Pradesh's Tirupati temple and Brahma Kumari Spiritual trust in Mount Abu. A mountain peak in Rajastan to have solar system for cooking 'Prasadam' for devotees

Machinery used in Shirdi Prasadalaya

- 73 Solar panels of 16 sq ft each are installed which provide steam for all the cooking in the Shri Saiprasadalaya.
- LPG Gas project is instructed with the capacity of 20 tone Thermal Fluid Heating System, which is used for making the Prasad laddoo's, due to which 30% gas is saved.
- For the arrangement of pure drinking water to devotees R.O. Plant having capacity of 2500 liter/hour is implemented.
- For dishwashing two imported dishwashing machines are used.
- For cutting of vegetables two imported machines are used.
- To wash the rice, vegetables, legume's three imported machines are used.
- For grinding flour online mill unit is sated up.
- For cooking rice steam cooker is used.
- The readymade material of flour, spices, turmeric, coriander powder etc are not used. They are made through pulverizing or grinding machines using raw materials.
- The cold storage facility is available for vegetables & dry foods.
- Chapati Making Machine are also used.
- Various small Machines are used to automate the process and reduce the manual touch to food and keeping hygienic atmosphere.

Proofs:



