LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
(An Autonomous Institution since 2010)
Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada
L.B. Reddy Nagar, Mylavaram, NTR District, Andhra Pradesh - 521230

DEPARTMENT OF MECHANICAL ENGINEERING

A.Y: 2026-27

Report on

INDUSTRIAL VISIT TO "Dr. NARLA TATA RAO THERMAL POWER STATION (Dr.NTTPS), IBRAHIMPATNAM"

Event Type : Industrial Visit of B.Tech V Semester A Section Students

Date / Duration : 13.10.2026 for one day

Name of Industry : Dr. Narla Tata Rao Thermal Power Station (Dr.NTTPS), Ibrahimpatnam

Faculty Accompanied : Dr. V. Dhana Raju, Associate Professor,
Mr.Mallikarjuna Rao Dandu, Sr. Asst. Professor

NT staff – Mr. G. Ravindra Reddy, Technician

Total no of students : 37

Objective of the event : To provide students with practical industrial exposure to thermal power plant operations, equipment, and maintenance systems, and to bridge the gap between theoretical knowledge and practical applications.

Outcome of event : To gain practical knowledge of thermal power plant operations, understand the working of boilers, turbines, generators, and cooling systems, and relate theoretical concepts to real-world industrial applications.

Description / Report on Event:

The III B.Tech-V Semester Students of Mechanical Engineering accompanied with three staff members (including 2 teaching & 1 non-teaching) visited Dr. Narla Tata Rao Thermal Power Station (Dr.NTTPS), Ibrahimpatnam on 13-10-2026. The main objective of the visit is to bridge the gap between industry and academia. These industries mainly focus on coal handling, storage, transportation, crushing, and pulverization; water treatment and purification; boiler operation; steam generation; turbine and generator operation; electricity generation; cooling systems; ash handling; pollution control; and equipment maintenance.

After arriving at Dr.NTTPS, Ibrahimpatnam, the students were taken to the seminar hall, where the plant in-charge explained the history, establishment, and overall working principles of the thermal power station. He also described the major processes involved in electricity generation, including coal handling, water treatment, boiler operation, steam generation, turbine operation, and power generation. The students were briefed on the safety precautions and guidelines to be followed inside the plant. Later, the students were divided into groups and assigned supervisors, who guided them through the plant and explained the functioning of various equipment and industrial processes.

The industry consists of two units, namely casting unit & machine shop. The casting unit consists of various processes includes pattern making, mould preparation, melting of metals, pouring of metals in to the mould cavity, solidification process, and fettling. The companies using sand with silica as additive for mould preparation. Using silica the sand stables for high temperatures.

Photographs: Dr. Narla Tata Rao Thermal Power Station (Dr.NTTPS), Ibrahimpatnam.






SILENT MODE
GPS Map
Camera Lite
B COLONY CENTER, 6-4, Malkapuram, Kondapalli, Andhra Pradesh 521456, India
Latitude
16.60788°
Longitude
80.535528333333333°
Local 11:19:43 AM
GMT 05:49:43 AM
Altitude 38 meters
Tuesday, 13.10.2026







Conclusion: The industrial visit to Dr.NTTPS, Ibrahimpatnam provided students with valuable practical knowledge of thermal power plant operations, coal handling, water treatment, steam generation, and electricity production. The visit helped students relate theoretical concepts to real-world industrial applications and understand the importance of equipment maintenance, safety precautions, and efficient power generation.

In-Charge HoD, ME