

Banaras Locomotive Works Varanasi

DATE: 03rd MAY, 2023

HEAD, MED

PROF. K. N. PANDEY

FACULTY MEMBERS:

- DR. SHANTANU SRIVASTAVA
- DR. TEJ PRATAP
- DR. SWASTIK ACHARYA

STUDENTS VISITED

- M. TECH ,PDD (II SEM)

Introduction

Diesel locomotives play a crucial role in the transportation industry, providing efficient and reliable power for trains. This report aims to provide an in-depth analysis of various components and systems found in diesel locomotives. By examining key elements such as the engine bougie couple, diesel engine camshaft, compressed air cylinder for brakes, drum brake assembly, terminals of a transformer used in electric locomotive, bougie base structure, wheel assembly with gear and bearing, crankcase, ports for air intake for uniflow scavenging, cam shaft assembly section, pantograph, stroke diesel locomotive engine with alternator, stroke cylinder liner assembly, electronic controller, air compressor, cam shaft in diesel engine, firing order for locomotive diesel engine, main journal bearing support, and turbocharger, this report aims to provide a comprehensive overview of diesel locomotive technology.



Compressed Air Cylinder for Brakes



Drum Brake Assembly

Banaras Locomotive Works Varanasi Unit



Bogie Base Structure



Cam Shaft Assembly Section



Banaras Locomotive Works Varanasi Unit



Group photograph of students and faculty coordinator going to Banaras Locomotive Works
Varanasi

Meja Thermal Power Station, Meja, Prayagraj

DATE: 02nd MAY, 2023

HEAD, MED

PROF. K. N. PANDEY

FACULTY MEMBERS:

- DR. J. C. MOHANTA
- DR. RAHUL DEV
- DR. M. K. GUPTA

STUDENTS VISITED

- M. TECH.
- B. TECH.

Introduction

Meja Urja Nigam Private Limited (MUNPL) is a 50:50 joint venture between NTPC Limited and Uttar Pradesh Rajya Vidyut Utpadan Nigam, which was established in 2008. The company owns the Meja Thermal Power Station, a 2×660MW coal-based thermal power plant. It was very interesting visit for learning the concepts, limitations, hurdles of thermal power generation to whole visiting team including students and faculty coordinators.



Group photograph of students and faculty coordinator going to Meja Thermal Power Station, Meja, Prayagraj, Uttar Pradesh.

Meja Thermal Power Station Works Unit Meja, Prayagraj



An interaction of students and representatives of Meja Thermal Power Station, Meja, Prayagraj, Uttar Pradesh.



A monitoring of power generation and grid (demand/supply) at Meja Thermal Power Station, Meja, Prayagraj, Uttar Pradesh.



A photograph of turbine and generator assembly at Meja Thermal Power Station, Meja, Prayagraj, Uttar Pradesh



Representative of Meja Thermal Power Station is explaining the functioning of various equipments of the power station to the students

Industrial Visit

IFFCO PHULPUR, PRAYAGRAJ

DATE: 28TH MARCH, 2023

HEAD, MED

PROF. K. N. PANDEY

FACULTY MEMBERS:

- DR. J. C. MOHANTA
- DR. MANOJ KUMAR GUPTA
- DR. JITENDRA N. GANGWAR
- DR. ROSHAN KUMAR SOTA

STUDENTS VISITED

- B. TECH, ME (VI SEM)
- M. TECH ,THERMAL (II SEM)



पूर्णतः सहकारी स्वामित्व
Wholly owned by Cooperatives

Introduction to IFFCO Phulpur

- It is the largest producer and marketer of fertilizer in India with a membership of 32,276 cooperative societies and it turn 50 million farmers.
- It manufacturers Ammonia and Urea and commissioned its first unit in the year 1980 with a production capacity of 900 MPTD of Ammonia and 1500 MPTD of Urea.
- Over the years, Phulpur plant has adopted new and more energy efficient technologies to increase production capacity while reducing the energy consumption.
- Today, it has two units with a combined production capacity of 2955 MPTD of Ammonia and 5145 MPTD of Urea.



IFFCO Phulpur plant

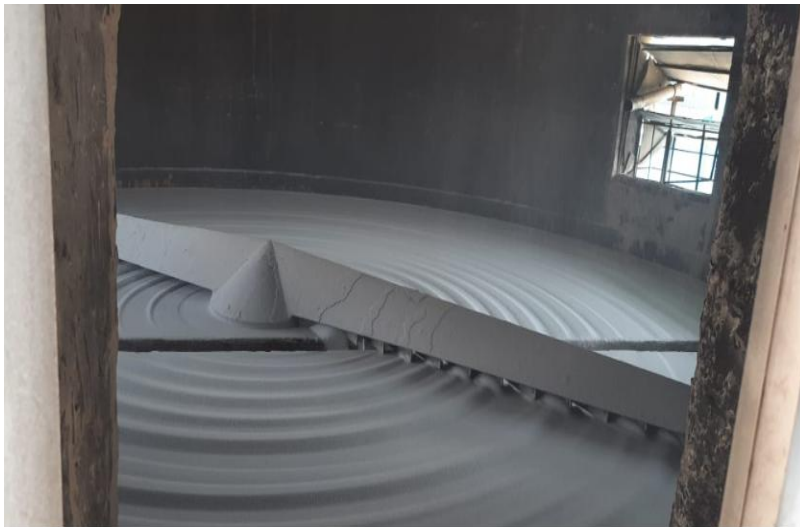


Visiting team in-front of the recovery unit of the IFFCO Phulpur unit

IFFCO PHULPUR UNIT



Recovery Unit at the IFFCO Phulpur Unit



Inside view of the Prilling tower

#IFFCONanoUrea



ग्रामिण-संगठन द्वारा संचालित
Wholly owned by Cooperatives

IFFCO NANO UREA LIQUID



Introducing World's First Nano Urea for Farmers

- Reduces Input Cost
- Increases Farmers' Income
- Environment-friendly
- Enhances Crop Productivity
- Improves Nutritional Value
- Cheaper than Conventional Urea



The advertisement features a central image of a white plastic bottle with a green cap, labeled 'IFFCO Nano Urea Liquid'. The bottle is surrounded by icons representing the benefits listed: a bar chart for cost reduction, a person with a bar chart for income increase, a globe with a plant for crop productivity, a leaf for environmental friendliness, a plant with a bar chart for nutritional value, and a downward arrow for cost savings. The background is a light green gradient with a sunflower illustration at the bottom right.

Nano urea liquid

Kisan Shahkari Cheeni Mill Ltd, Sultanpur, U.P., India

DATE: 02ND MARCH, 2021

HEAD, MED

PROF. H. S. GOYAL

FACULTY MEMBERS:

- DR. SWASTIK ACHARYA
- DR. R. PRABHU SEKAR

STUDENTS VISITED

- RESEARCH SCHOLAR
(ONE)

Introduction to Kisan Shahkari Cheeni Mill Ltd, Sultanpur

Kisan Sahkari Chini Mills Ltd in Sultanpur, Azamgarh Road, Basuri Kni, Sultanpur is known to satisfactorily cater to the demands of its customer base. The business came into existence in 2010 and has, since then, been a known name in its field. It stands located at Sultanpur, Azamgarh Road, Basuri Kni-228001.



A photograph of storage in visiting Kisan Shahkari Cheeni MillLtd.

Kisan Shahkari Cheeni Mill Ltd



A photograph of jaws used for unloading the tractor carrying



A photograph of pile of sugarcanes

Sodha Energy Research Park, Ballia, Uttar Pradesh, India.

DATE: 08TH FEBRUARY, 2021

HEAD, MED

PROF. H. S. GOYAL

FACULTY MEMBERS:

➤ DR. RAHUL DEV

DESCRIPTION

Dr. Rahul Dev visited Sodha Sodha Energy Research Park, Ballia, Uttar Pradesh, India on date 08/02/2021. Prof. G.N. Tiwari (Retd., Centre from Energy Studies, IIT Delhi) had organized a seminar SERP-2021. Inauguration of Sodha Energy Research Park on birthday of Prof. M.S. Sodha (Padmshri) was held. Various solar energy applications have been shown and explained to the distinguished guests and village kids.



A photograph of PV-T Solar Greenhouse



Prof. G.N. Tiwari explaining about Floating type biogas plant

Sodha Energy Research Park UNIT



Dr. Rahul Dev with village kids in front of solar passive building and solar distillation units



Glass-glass PV module installed at roof of Solar Greenhouse

Prayagraj Power Generation Company Limited BARA, Prayagraj, Uttar Pradesh, India.

DATE: 30TH JANUARY, 2021

HEAD, MED

PROF. H. S. GOYAL

FACULTY MEMBERS:

- PROF. MUKUL SHUKLA
- PROF. A K DUBEY
- DR. (MRS.) V. AGARWAL
- DR. RAHUL DEV
- DR. B. PAUL
- DR. P. K. KUNDU
- DR. S. ACHARYA
- PROF. S. J. PAWAR (AMD)
- DR. A. R. PAUL (AMD)
- DR. A. RAWAT (AMD)
- DR. A. MISHRA (AMD)

STUDENTS VISITED

- MR. A. GUPTA (AMD)
- MR. Y. K. BAGHEL (AMD)

DESCRIPTION

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MNNIT team visiting PPGCL, Bara, Prayagraj,
U.P., India



Visiting team ready with safety devices for
visit.

Prayagraj Power Generation Company Limited, BARA



A group photograph before departure from PPGCL



A photograph of cooling tower installed in PPGCL

Industrial Visit

IFFCO PHULPUR, PRAYAGRAJ

DATE: 22ND FEBRUARY, 2020

HEAD, MED

PROF. H. S. GOYAL

FACULTY MEMBERS:

➤ DR. R. PRABHUSEKAR

➤ DR. VINEED NARAYANAN

STUDENTS VISITED

➤ M. TECH (ALL BRANCHES)

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Packing unit for Urea in the IFFCO Plant



A photograph of Cooling Tower and Urea Plant

IFFCO PHULPUR UNIT



Entrance gate of Administrative building



Computerized monitoring of IFFCO Plant

Kisan Shahkari Cheeni Mill Ltd, Sultanpur, U.P., India

DATE: 16TH FEBRUARY, 2020

HEAD, MED

PROF. H. S. GOYAL

FACULTY MEMBERS:

- DR. RAHUL DEV
- DR. SKYLAB P BHORE

STUDENTS VISITED

- M. TECH (ALL BRANCH)
- RESEARCH SCHOLAR

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A photograph of visiting team before departure from MNNIT Allahabad to KSCML, Sultanpur.



Cutting of sugarcane into small pieces in KSCML, Sultanpur.

Kisan Shahkari Cheeni Mill Ltd, UNIT



Crushing machine for juice of sugarcane in KSCML, Sultanpur



Three different grades of sugar produced in KSCML, Sultanpur



Packaging of sugar produced in KSCML, Sultanpur

Kisan Shahkari Cheeni Mill Ltd, Sultanpur, U.P., India.

DATE: 08TH FEBRUARY, 2020

HEAD, MED

PROF. H. S. GOYAL

FACULTY MEMBERS:

- DR. BIRESWAR PAUL
- DR. ASHWINI KR YADAV

STUDENTS VISITED

- B. TECH, ME (VI SEM)

Introduction to Kisan Shahkari Cheeni Mill Ltd, Sultanpur

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A photograph of steam turbine with generator installed for power generation at KSCML,



A photograph of steam turbine with generator installed for power generation at KSCML, Sultanpur



Kisan Shahkari Cheeni Mill Ltd, UNIT



A photograph of students and faculty coordinators in steam turbine room. in KSCML, Sultanpur



Packaging of sugar produced in KSCML, Sultanpur