

Annual Achievements of FY 2024-25

Mechanical Department

Danapur Division

1. Installation of 02 Hot Axle Box Detector (HABD) system in DNR division.

02 No. of Hot Axle Box Detector (HABD) system have been installed at MKA and ZNA in DNR division on 27.05.2024 and 19.06.2024 respectively. This machine detects the Hot Axle in running trains at the speed up to 110 kmph by using an infrared temperature sensor and two proximity sensors. The system stores the data on cloud storage and the data can be viewed and monitored through computer, smart TV as well as through mobile phone. The system has capability to detect hot axle temperature timely and communicate to central control at Carriage Control office via alarm as well as to authorize person via SMS.



2. Inauguration of bio-toilet effluent testing lab:-

Bio-toilet effluent testing lab which has been converted from condemned coach, at DNR Depot was inaugurated by PCME/ECR on 28.09.24. The bio toilet lab is being used for testing of samples for pH value, COD & FC-FC.



3. Inauguration of newly installed double roller ironer machine at mechanized laundry DNR:-

Newly installed double roller ironer machine was inaugurated on 28.09.24 by PCME/ECR at Mechanized laundry, Danapur and is being used for ironing purposes efficiently.



4. In house development

i. In-house conversion of BRN wagon into PQRS BFR rake relaying service:-

Total 24 nos. of wagons have been in-house modified from BRN wagon into PQRS BFR rake relaying service at sick line DNR for assisting in process of removing old rail and replacement by new rail.

ii. In house model for Vent & Vacuum Valve testing Developed at DNR coaching Depot.

A model for vent and vacuum valve attach in 30 liter water tank of LHB coaches is developed in- house, it will be used in demonstration and maintenance of vent and vacuum valve.



5. Kumbh Special trains run by Danapur Division during period of 10.01.2025 to 27.02.2025

- Scheduled originating/Terminating trains – 61
- Un Scheduled originating/Terminating trains – 423
- Trough passing trains – 67

6. Installation and commissioning of machines

- **Procurement and commissioning of 03 nos. of UST measuring device at DNR depot:-**

For proper measurement of CBC stiffener plate 03 nos. of ultrasonic thickness gauge (UST) of make “ACCUPLUS” have been procured and commissioned.

- **Commissioning of hydraulic press machine:-**

Hydraulic press machine of 200T capacity commissioned at DNR depot on date 13.11.24. It is being utilized in assembling of silent block in control arm or spheroelastic bush in CBC.

- **Commissioning of the Forklift Truck for material handling at Depot:-**

A CE make forklift truck has been commissioned at depot for material handling in the month of Apr'24.

- **Commissioning of hydraulic press machine:-**Hydraulic press machine of 200T capacity commissioned at DNR depot on date 13.11.24. It will be utilized in assembling of silent block in control arm or spheroelastic bush in CBC.

- **Procurement of CBC gauge for sick line at DNR Depot**

05 sets of CBC gauge for freight stock is procured from *Ganpati Industries*, Chennai to be used in sick line at DNR depot.

7. Provision of compressed air pipeline in pit line:-

Compressed air pipeline throughout maintenance pit of DNR depot is installed for under gear cleaning of coach under frame, bogie and air brake pipeline.

8. Installation of water level sensor in AC coaches of train no. 22351 at DNR depot:-

Hydrostatic pressure sensor in under slung water tank of 10 LHB AC coaches of train no. 22351 has been installed by firm Logic Looms Innovation LLP, Hazaribagh Jharkhand o. It will help in providing real time level of water in tanks of coaches' enroute on CMM portal and will also help in proper monitoring of water level in coaches.

9. Environmental, Cleaning drive or Beautification work in Danapur and ARA depot:-

Mini gardens in front of depot offices are being created to enhance Eco-friendly and Healthy work environment for staff.

10. Fitment of EPPF System in LHB coaches at DNR depot:-

To maximize water delivery force to clean the lavatory with single flush electro pneumatic pressurizes flushing system is being installed by two firms CEMCON and

SPAC from 20.01.24 and 08.03.24. In Apr-24 total 13 sets of EPPFS fitted in coaches at DNR depot and now cumulative no. of EPPFS fitted in coaches at DNR depot is 123.

11. Provision of compressed air pipeline in pit line:-

Compressed air pipeline throughout maintenance pit of DNR depot is installed for under gear cleaning of coach under frame, bogie and air brake pipeline.

12. Centennial celebration on 31st January 2025

I. Vintage rail car renovation for centenary celebration of DNR Rail division on 31.01.25:-

Model of Rail Car-04, Built year 1925 was put on display during centenary celebration of DNR Rail division on 31.01.25 at Jagjivan stadium, which was refurbished, designed, decorated to restore original design features to reflect the finest craftsmanship of that era by mechanical C&W team.



II. Souvenir Shop

Souvenir shop was also installed at Jagjivan Stadium in which different items such as Brass wheel model, Railways logos, magazines, t-shirts, coffee mugs and other items were sold as centennial celebration symbols.



13. On the occasion of **Swachhata Pakhwada 2024**, various activities were carried out over Danapur division regarding lessons given by **Mahatma Gandhi and Lal Bahadur Shastri Gayanti** by EnHM wing/DNR in presence of Hon. DRM/DNR and other Branch Officers which are:-

- Swachhta Pledge and Public awareness programs at DRM building and station premises.
- Nukar Natak based on swachhata was organized at RJPB Station.
- Plantation has been done by Hon'ble GM/ECR, AGM/ECR with PHOD's at PRP Digha Colony
- Shramdan by officers and staff.