

## **Good work done in the year 2024-25**

### **1. In-house Development of Battery operated portable backpack-type garbage litter collector:**

A portable backpack-type garbage litter collector consists of a motor with a battery, a blower, blower casing, PVC inlet pipe, flexible pipe, and a garbage collector has been developed in-house for use in cleaning activity. One switch operation starts suction. Trash like paper, glass, plastic, tetra packs, cloth, aluminum foils, and wrappers can be picked. It is useful for effective waste management.

#### **Specification and function of components used:**

1. Cordless angle grinder motor,
2. Re-chargeble battery of 20V,
3. Speed range 3000-8000 RPM
4. Connecting shaft to connect cordless angle grinder with blower.
5. The shaft is fitted with ball bearing.
6. Flexible & PVC pipe – One end of the flexible pipe is connected to basket and other end is connected to PVC pipe.
7. Blower: It create suction which is used for picking garbage. Its shape is circular with 30 no of blades and its diameter 5”.

#### **Benefits:**

1. Easy to carry
2. Liner for use with disposable garbage bags
3. One Switch Operation For Litter Collection Directly Into Garbage Bags
4. No Dispersion Of Dust Particles Into The Environment Unlike In Manual Broom Cleaning
5. Faster – Efficient Cleaning
6. Simple To Use & Operate
7. Save Time – Save Money



## 2. Transformation of NG 'retired' old NG NDM1 Locomotive into selfie point at Wadibunder Coaching Complex:

After covering thousands of miles and ferrying passengers to their destinations safely, a 'retired' old NG NDM1 Locomotive converted in to steam locomotive is renovated and put on display in Coaching complex Wadibunder. This has been made a selfie point at Wadibunder to encourage the spirit of preservation of rich Heritage of IR amongst the people.



Before Renovation



After Renovation



### 3. Virtual Reality (VR) Training Module at C&W Basic Training Center at WB

- The integration of a Virtual Reality (VR) training alongside class room training to improve the training experience and skill of technicians.



### 4. Provision of Protective Cover over Passenger Emergency Alarm Pull Box (PEAPB) in LHB Coaches

-To protect the Pull Box from this unintentional operation, a transparent cover of polycarbonate hinged to the panel over PEAPBs of LHB Coaches.



### 5. Hand held portable vacuum cleaner used in Vande Bharat coaches:





## 6. Development of State of the arts Model room at C&W BTC Wadinder:

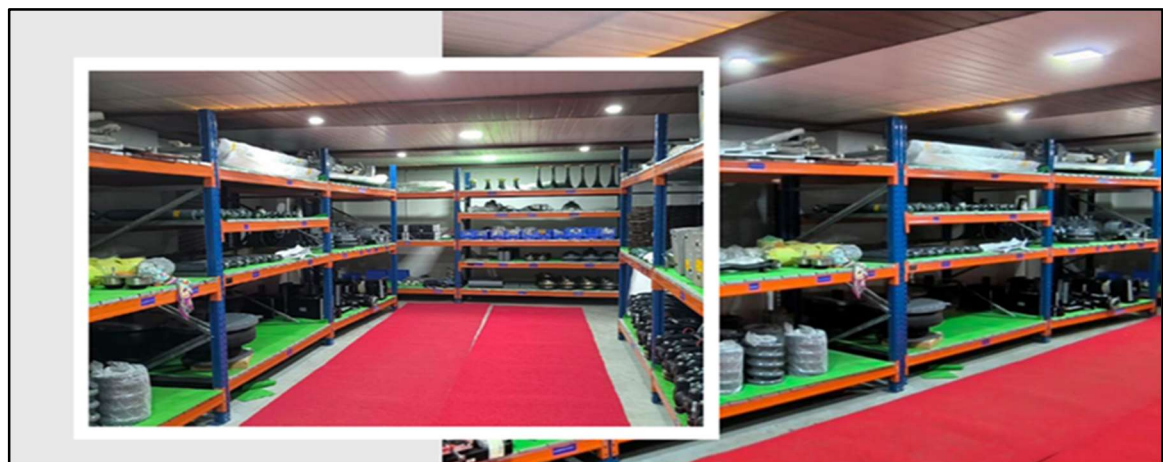
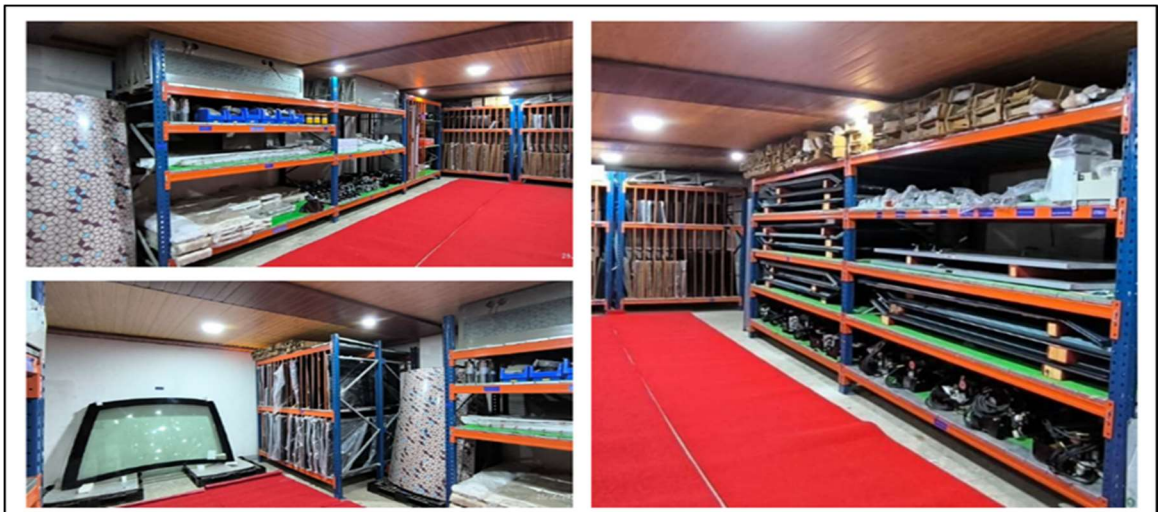


S.no.	Display in model room	S.no.	Display in model room
1	CBC Gauges	11	Wheel Slide Protection Device
2	Distributor Valve	12	Air Spring used in Mainline coaches
3	Air Spring for Vande Bharat	13	Primary and second, suspension
4	Wheel and Wheel defects	14	Vacuum Circuit breaker for Vande Bharat coaches
5	Dampers	15	Semi-Permanent coupler
6	Cartridge Taper Roller Bearing	16	Automatic Internal Door arrangement
7	Alarm Chain Pulling Apparatus	17	Brake cylinder with Spring actuator ( Parking brake)
8	Brake Calliper Unit	18	Single arm Pantograph for Vande Bharat
9	Bio Vacuum Toilet System	19	Adjustment of Clearance between Brake Disc and Brake Pad
10	Pressurized flushing System	20	Fire and Smoke detection system

## 7. Upgradation of Material storage Facility at Wadi Bunder & LTT



**Material storage system at LTT Coaching Depot**



**Material storage system of Vande Bharat Trains at WB Coaching Depot**