

Maintenance

depot , work , tech .

Maintenance facilities are equipped with ;

1. A wide workshop hall
2. Tracks (floor level tracks with a pit provided between the rails & elevated tracks with or without pits)
3. Roof maintenance platforms (access platforms)
4. Underfloor wheel-set lathe
5. Wheel-set changing system (track bridges)
6. Track mounted lifting devices , cranes , bogie and car jacks (synchronised jacks are used for lifting the whole train-set)
7. Fork lifters
8. Wheel-set load measuring device
9. Wheel-set diagnostic device
10. 3D printers for creating spare parts
11. Local power supply plugs AKA “ Shore Supply “ (3 ac , 400 v , 50 Hz)
12. Local catenary line (movable overhead rail)

Maintenance process

1. paper or paperless management
 1. paper based (old style)
 1. Employees receive work orders and all the information they need for repair or maintenance in paper notepads .
 2. paperless (modern)
 1. Crew members have tablets where they have all the details sent by the manager in charge of maintenance or repair .
2. Preventive & Corrective maintenance
 1. Preventive maintenance (PM)
 1. Wheel-set diagnostic including axle defectoscopy (detecting structural damage)
 2. Vehicle Inspection
 1. Visual Inspection (VI)
 2. Inspections that include light to heavy preventive maintenance , replacing of some parts . (I-1 ... I-6)
 3. Revision (RV) includes overhauling most systems of a train .

2. Corrective maintenance (CM)
 1. Repair works or replacement of defected components
 2. Wheel-set re-profiling

Maintenance Facility / Depot consists of :

1. Storage areas
2. Car cleaning areas (buildings)
 1. A chemical wash
 2. A water wash
3. De-Icing area (for northern countries)
4. Inspection and light maintenance sheds
5. Heavy maintenance shop
6. Toilet discharge facility

A typical depot layout designed primerey for EMU's

Maintenance.jpeg