

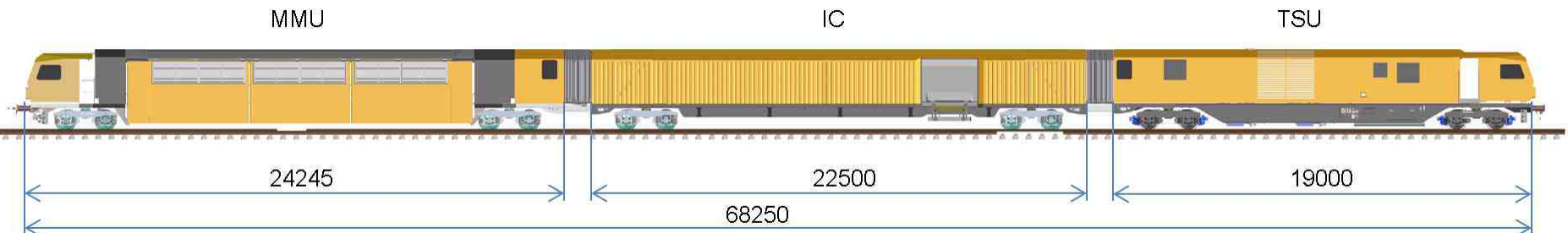
# Mobile Maintenance Train (MMT) Overview



ROBEL 69.70

# MMT Overview

- Basic concept is to move staff, materials and equipment safely, swiftly, and directly to the worksite, where work can begin in minutes
- Comprises of Mobile Maintenance Unit (MMU 69.50), Intermediate Car (IC 69.45) and Traction & Supply Unit (TSU 69.40)
- MMU provides a 16m x 3m working area, has a longitudinal beam for the hoists and extendable side walls
- IC provides a large storage area for tools, materials etc
- TSU provides welfare facilities
- System can travel up to 60mph



# MMU

- Provides an enclosed static or rolling worksite separated from trains and providing protection from the elements
- Side walls extendable from 2m width to 3.2m
- Provides excellent site lighting for night time working
- Initial work activities to include:
  - ▶ Defect removal & repair
  - ▶ IBJ replacements & repair
  - ▶ Replacement of pads and insulators
  - ▶ Replacement of base plates
  - ▶ Jointed track hot weather preparation
- Hydraulic, Electric and pneumatic power supply provided throughout the MMU
- Two 2,5 T hoists



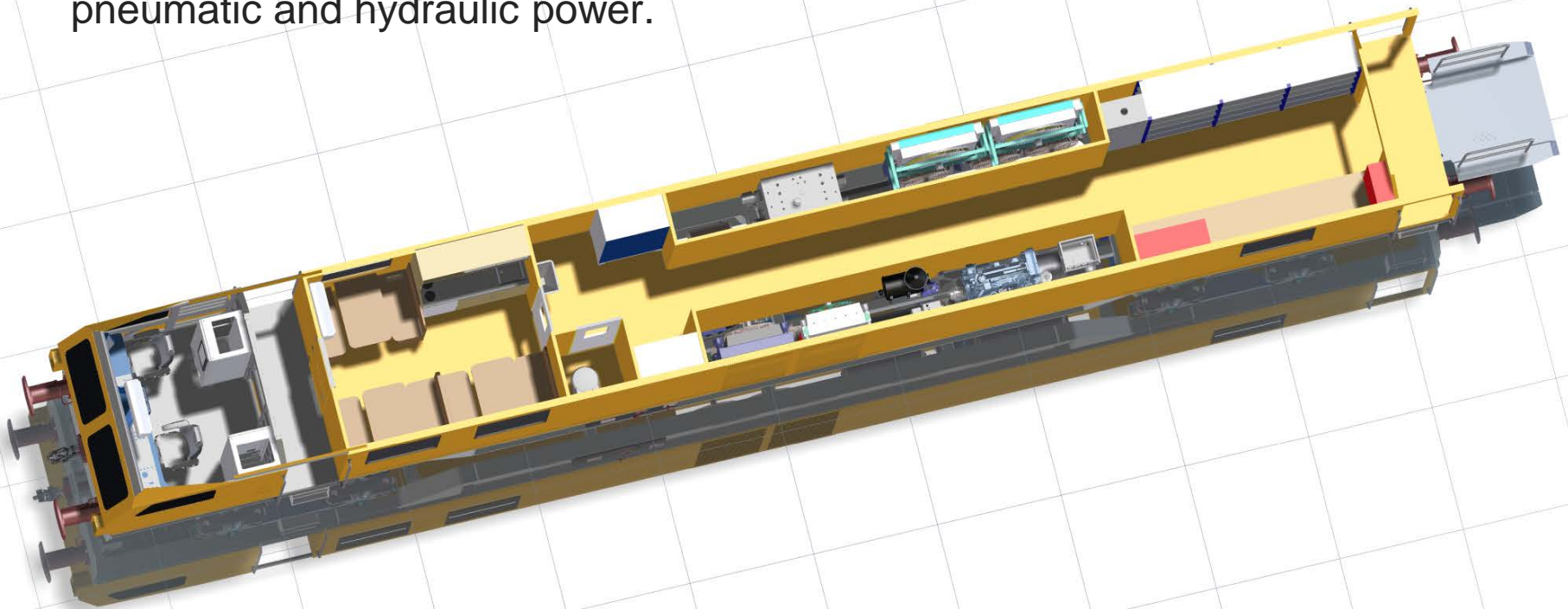
# IC

- Provides the storage and loading area
- With hydraulic lift gates on each side allowing access onto ballast level for loading and unloading of plant and materials
- Hoists extends into this area for moving large plant and materials into the MMU
- Also area for storage of scrap materials avoiding the need for a second shift
- Rail stored under the floor, 6 x 45 ft



## TSU

- Provides staff messing facilities including washing and toilet facilities
- Area for completing and storing of paperwork and lockers
- Workshop area
- Traction power supplied via two 500kw Deutz engines.
- These drive all four axles hydrostatically
- Working mode power is supplied by a 140kw generator – supplying electrical, pneumatic and hydraulic power.



# Benefits

## Safety:

- ▶ Workers travel to and from site in a protected environment
- ▶ Protected during work from adjacent line and OLE
- ▶ Reduced manual handling, slips and trips
- ▶ Electric, pneumatic and hydraulic powered tools – reduced noise and vibration
- ▶ Protection from the weather

## Cost savings

- ▶ Optimal use of possession, adjacent line open working, etc.
- ▶ Material and equipment transported to site and powered from vehicle
- ▶ Prep, clear up shifts reduced
- ▶ Reduced setup time, more productive working time

## Quality

- ▶ Better working environment produces a better quality job
- ▶ All tools and equipment to hand for the job at all times

## ***Benefits continued***

### Environmental protection

- ▶ Reduced vehicle usage – material, equipment and staff all transported to site on the night in one efficient vehicle
- ▶ Reduced fuel usage for portable tools
- ▶ All scrap carried away from site with the vehicle – clean site

### Network Availability :

- ▶ Fewer possessions required
- ▶ Safe adjacent open line working
- ▶ Job done in one shift – fewer temporary speed restrictions

### Improved public perception

- ▶ Reduced noise and light pollution during work
- ▶ Disruption caused by work reduced

*Thank you for your time...*

