

ROMIS System

Mobile Maintenance System



The safe workshop on wheels

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ROMIS System. Designed for all work processes.

- Re-railing and renewal of insulated rail joints up to 15 m including stressing and welding
- Maintaining and changing of insulated rail joints
- Renewal of small track components, e.g. rail pads and fastenings
- Track geometry repairs with vertical tampers
- Spot re-sleeping and re-ballasting of slurried wet beds
- Switch and crossing works including full unit exchange
- Inspection of balise or other track based equipment
- Rail joint maintenance work including the option to rail end straighten
- and many more



DISCOVER TV
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Interested in a digital visit of a construction site?
Work assignments in the Mobile Maintenance System as 360° videos on www.ROBEL.tv!



ROMIS Work

Two hoist modules with a total lift capacity of 5 t transport plant and material over the top of the track.
With extended sidewalls, the work range of the hoists gradually expands outwards.



ROMIS Work Mobile Maintenance Unit

The workhouse of the system

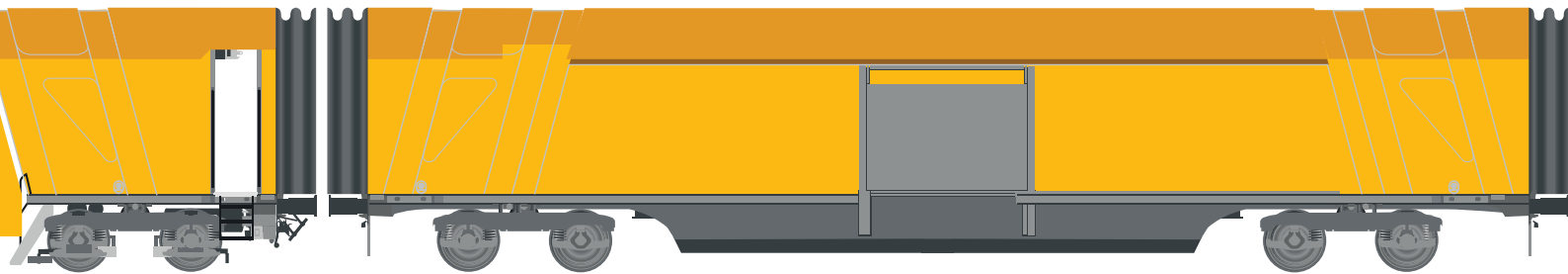
The heart of the Mobile Maintenance System with direct access to the track.

- Optimized processes for high work quality and safety
- Control desk to coordinate work functions (creep mode, sidewalls, blinds, side protection etc.)
- Platform to drive the system in creep mode (from 0 to 5 km/h finely adjustable)
- Movable sidewalls to increase workspace to 4,4 x 17 m
- Full worksite lighting at any time
- Up to 6 fully integrated electric, hydraulic and pneumatic power supply ports
- Closed sidewalls to minimize worksite noise and light pollution for lineside neighbours
- High performance extraction system to permit rail welding, cutting and grinding
- CCTV monitors and laser protection systems to permit sidewall opening with adjacent line open
- Proximity lightbeam sensors to protect workers when operating in creep mode



ROMIS Store

total length of the work unit ROMIS Work and the storage unit ROMIS Store.

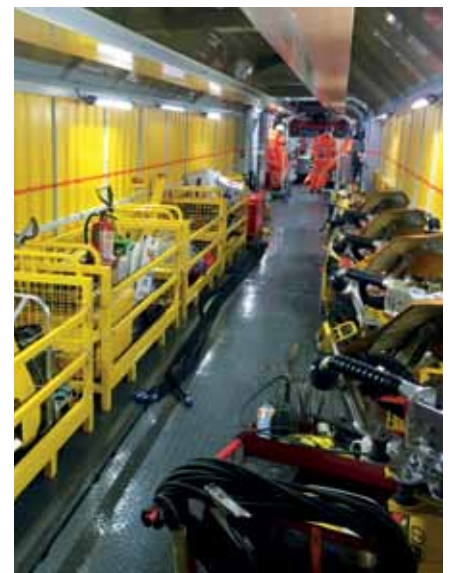


ROMIS Store Intermediate Car

The storehouse of the system

The intermediate wagon for optimum storage of all machines and material, features depending on customer demand.

- With a storage capacity of 60 m² and total payload of 20 t there is space for everything needed in one shift
- Hydraulic lifting platforms with a capacity of up to 1,5 t facilitate loading and unloading
- Fully lifting sidewalls allow complete access to the storage unit
- Readily available welding gas bottle storage (oxygen, propane, acetylene)
- Under-floor containers for additional storage
- Purpose built, ergonomically designed stillage and securing brackets to allow fast and easy access to plant and material



ROMIS Supply



ROMIS Supply Traction and Supply Unit

The powerhouse of the system

The supply unit provides tractive power, generates the energy for the whole system and allows plenty of room for staff welfare.

- Storage and workshop facility
- Staff room with kitchenette, benches and tables
- Toilet, washroom and changing room
- Noise insulated generator for the energy supply of the entire train
- Design and layout is tailored to precisely meet customer requirements



ROMIS. One maintenance system for all fields of application.

Possible Train Variants:



ROMIS Compact, length 23 m



Unit ROMIS, length Europe 49.8 m, length UK 45.7 m



Unit ROMIS, length Europe 70.5 m, length UK 69.5 m



ROMIS Flexi, length approx. 92 m

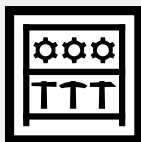


ROMIS Flexi, length approx. 112 m

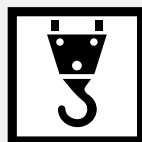
Optional functions:



Track maintenance



Store



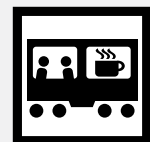
Crane



Drive transfer



Drive work



Transport and comfort

TECHNICAL SPECIFICATIONS

Maximum speed	100 km/h
Motor	2x 600 kW Diesel Motor
Hydrostatic traction drive	for work drive 0-5 km/h, adjustable
Maximum payload ROMIS Store	20 t
Maximum storage capacity	60 m ²
Maximum axle load	18-22.5 t
Maximum working area	4.4 m x 17 m
Maximum hoist SWL	2.5 t single/5 t tandem
Maximum lifting platform SWL	1.5 t
Wheel diameter	730-920 mm
Structure Gauge	G1 and G2 according to EBO, W6A
Wheelslip protection and sanding	

Dimensions and weights approximated. We reserve the right to modify in the course of technical development. Copyright secured.

How **ROMIS** changes track maintenance

The perfect Work Environment for delivering Quality Maintenance

All operations on track take place within the ROMIS System. The all-round protection in the work area provides security and allows the operator to concentrate on delivering work to the maximum quality.

ROMIS does not only improve working conditions but also minimizes the logistic effort. Lengthy transport of staff and material to the worksite no longer applies. There is a clear reduction in setup time, the site is instantly secured, lighting and power supply is taken care of: Plenty of extra time for maintenance work. The vehicle concept is configurable according to the required task: From ROMIS Compact for tunnel works to the multi-purpose system with crane and transport wagon for assignments on commuter lines and in environmentally sensitive urban areas.

THE TARGET

Maximum security, increase in productivity and cost reduction.



- efficient work processes
- integrated power supply and transport aids
- user friendly machines and tools
- anti-glare illumination of working environment
- reduced worksite noise and light pollution
- no emissions in work area

- workers protected by an all round physical barrier
- staff transported direct to site
- instant worksite protection
- protected from other trains and overhead lines
- work not influenced by weather and time of day

- fit for every worksite operation
- suitable for difficult access locations such as tunnels, urban areas etc.
- short setup and shut down times
- increased operating speed due to semi-automatic processes
- no additional measures for worksite safety
- reduces possession times
- adjacent line stays open

- one system for all track maintenance work
- precise work sequences due to custom-made machines and tools
- machines, material and power available at any time
- comfortable welfare facilities to ensure staff are well rested and fit for work



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Customer statements from latest project.
What has Network Rail to say on...



...Safety

“The weather is a big factor on safety which must be constantly re-assessed during the works. This is not the case in the ROMIS.”

Andrew Southgate, Manager Wakefield MMS



...Productivity

“With ROMIS we have completed 171 rail defects in 172 shifts. This would take over 700 shifts with conventional methods.”

Mark Smith, acting Manager Basingstoke ROMIS



...Profitability

“For rail changing the ROMIS offers a 31% reduction in units cost compared to conventional methods, saving over £ 4000 per defect.”

James West-Beard, Section Manager



...Availability

“ROMIS increases available working time by up to 50%, as we don't need to load materials and we can avoid lengthy transits to sites within possessions.”

Mark Rowan, Manager Wakefield MMS

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