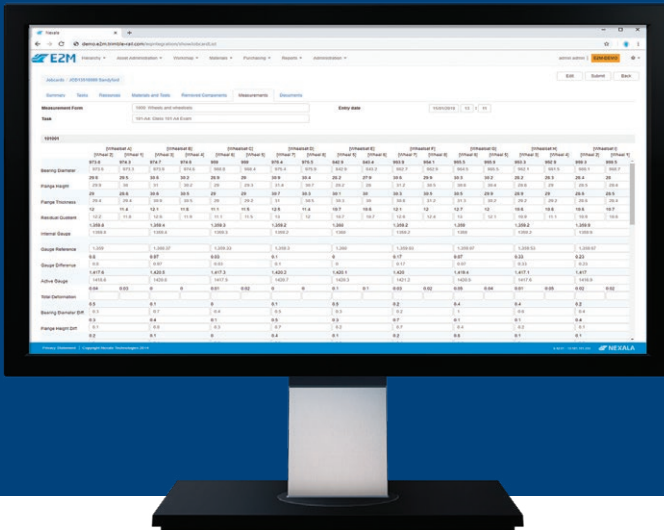




# E2M System

## FREIGHT ROLLING STOCK ASSET MAINTENANCE MANAGEMENT



Maintain, manage, and optimize the cost effectiveness of freight rail assets

Trimble® E2M freight rolling stock asset maintenance management system, manages and tracks freight rail assets and components, streamlines parts and materials usage, optimizes resources, and procurement.

### DESIGNED BY RAIL EXPERTS FOR FREIGHT OPERATORS

Designed specifically for the rail freight sector Trimble E2M manages and tracks locomotives and wagons to streamline freight rolling stock maintenance management. It allows freight operators to maintain and manage the cost effectiveness of rolling stock by improving asset reliability, resource and capacity planning, and work utilization while reducing operating costs. Managing freight assets such as locomotives and wagons with Trimble E2M enables the effective planning of maintenance across engineering depots, resources, and material requirements.

### MANAGEMENT & TRACEABILITY OF FREIGHT ROLLING STOCK

The E2M system allows freight operators to control the preventative and corrective maintenance of locomotives and wagons to maximize and extend asset life. E2M gives a single view to aid the management of components, stock, and suppliers, and efficiently handles warranty management. It interfaces to existing systems for end-to-end streamlined maintenance workflows and for efficient future maintenance planning. Unifying freight maintenance management in Trimble E2M minimizes errors as all stakeholders work with the same baseline system, rules, and related actions.

### STREAMLINED TRACKING OF FREIGHT ROLLING STOCK MAINTENANCE DATA & WORK STATUS

With data consolidated in E2M, maintenance work can be carried out efficiently and with a complete trail of what work has been done and when. As well as being a repository for vast quantities of measurement data the Trimble E2M rules engine automatically processes large datasets to maximize data usage. User-defined rules trigger action when maintenance is required. Using the Trimble E2M system improves operational efficiency, reduces costs, and gives better visibility into operations to maximize productivity.

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### BENEFITS

- ▶ **Traceable status of locomotive and wagon maintenance**  
Clear overview of maintenance work status for locomotives and wagons. Interfaces with existing systems for streamlined end-to-end workflows.
- ▶ **Reduce and streamline labor costs**  
Reduce repeat defects by identifying the true cause of defects minimizing costly rework. Monitor defect history over time against each asset to prevent repeat defects making assets unavailable for service.
- ▶ **Optimize maintenance planning**  
Plan maintenance to identify opportunities and not exceed engineering depot resource capacities. Ensure assets maintained on time in accordance with the maintenance schedule.
- ▶ **Increase asset and stock availability**  
Safeguard asset and stock availability by monitoring usage over time with Trimble E2M. Automatically define re-order levels against each part to make certain stock levels meet demand. Control centralized procurement by defining central stores to manage stock for satellite stores.
- ▶ **More successful warranty claims**  
Every warranty claim raised in E2M shows the fitment and receipt date, serial number, and complete history ensuring fewer contested warranty claims.
- ▶ **Improve safety**  
Effective control of safety critical work minimizes safety issues by driving reliability and mitigating failures.
- ▶ **Flexible mobile workflows**  
Trimble E2M Workshop app puts E2M functionality in the hands of depot workforce wherever they need to be. The Trimble E2M Defect Reporting app means staff can send reports direct to the Trimble E2M system from a phone or tablet.

### FEATURES

- ▶ Plan and manage maintenance for locomotives and wagons across engineering depots, resources, and material requirements
- ▶ Report defects and track defects for locomotives and wagons over time, analyze repeat defects, categorize faults by system, fault codes, and report source
- ▶ Set up campaigns and special checks
- ▶ Plan and define maintenance exams against locomotives and wagons to suit availability
- ▶ If required group work to schedule maintenance of locomotives and wagons from a formation at the same time
- ▶ Estimate and schedule labor hours and manage competencies
- ▶ Record work completed using Start and Stop functionality on tasks
- ▶ Rules engine triggers automated generation of work reports or tasks or sends emails to specified users
- ▶ Consolidate manual and measurement device (handheld or wayside) measurements
- ▶ Customize reports
- ▶ Swap and track components and wagons across assets
- ▶ Manage and procure stock with full stock check and component history support
- ▶ Manage suppliers and warranties
- ▶ Manage tools
- ▶ Interface to finance and rolling stock resource allocation systems

#### EUROPE

Ground Floor, Fenward House  
Arkle Road  
Sandyford, Dublin 18  
IRELAND  
+353-1-539-8700 Phone  
+44-203-290-9350 Phone

#### NORTH AMERICA

10368 Westmoor Dr  
Westminster CO 80021  
USA  
+1-716-9895-981 Phone

#### EMAIL & WEBSITE

rail@trimble.com  
rail.trimble.com  
www.trimble.com/hexala