

Complete depot solutions

Guaranteed availability of your trains

siemens.com/turnkey-rail-solutions

Trains sometimes need a time-out, too

A trouble-free rail service is one of the most important preconditions for satisfying the growing demands for mobility. The operational and technical availability of all components within the rail system depends on the guality and efficiency of the depot, workshops, and the mainline service fleet. Our answer to this challenge: complete depot solutions.

Mobility never stands still.

Modern trains are subject to considerable stress. It is essential that they undergo periodic inspection, servicing, cleaning, and maintenance, so they can withstand the harsh operating conditions on the track. Other important tasks, such as work on the tracks, are an added problem. This is why everything must be optimally coordinated and executed with absolute reliability. Only then can trouble-free rail operation – rightly expected by today's passengers – be ensured at all times.

Experience is key to success.

This is achieved by state-of-the-art rail depot solutions that are based on a detailed analysis of operating data and maintenance plans of all the system components. The complex requirements associated with this demand extensive expertise and first-class project management. Siemens Mobility has implemented integrated solutions for rail operators worldwide - on schedule, cost-effectively within budget, and with high quality.

Single-source coordination delivers reliably.

The depot represents a demanding project within the planning and construction of every transportation system as it is based on various planning parameters and interfaces. Regardless of whether you are planning a new depot or upgrading an existing installation to meet changing demands: with complete depot solutions, Siemens Mobility provides comprehensive support for rail operators.



Perfect whatever the scale

From analysis and planning to outstanding project management and reliable service, Siemens Mobility offers needs-based support for the creation of an integrated depot for all rail systems.

Modern rail depots are highly specialized inspection and maintenance facilities. To satisfy the stringent requirements in practice, the optimal solution must be found for each rail system. Siemens Mobility is ideally

qualified for this: comprehensive system know-how and the relevant project experience ensure that the best possible solution is found and implemented. Whether an automated people mover (APM), light rail transit,

Scope of services

 \sim

Maintenance concept

Maintenance planning, incl. human resources and materials, preventive maintenance (servicing) such as regular inspections and corrective maintenance (repairs), e.g. in the event of sudden damage, accidents, or vandalism.

Design and layout incl. BIM

The functional layout of a depot is based on a comprehensive analysis of the operating data and maintenance plans for all system components. Using the method Building Information Modeling (BIM) to create the digital representation of the depot, the project can be executed in less time and at lower cost

Seamless professional support throughout

Requirement analysis >

- Basic data of the trans-
- portation system
- Operating concept
- Maintenance strategy
- System components
- planning Track layout Signaling system
- Power supply
- Building planning

Depot concept

Personnel concept

Project schedule

• Space requirement

Maintenance concept

- Material flow planning
- Quality planning
- Specification of
- operating equipment
- Special construction

a metro, or mainline transportation, Siemens Mobility offers rail operators support from expert consulting to delivery, commissioning, and committed service.

Coordination

Coordination of all the work disciplines involved in the project as well as the customers' and personnel responsible for maintenance and operation to ensure all the contractually agreed goods and services.

Equipment

Making available professional depot and workshop equipment, special tools, and spare parts as well as maintenance vehicles. Constructing tracks and implementing signaling and power supply systems.

Project management

- Interface clarification management
- Materials procurement
- Quality surveillance
- Schedule supervision
- Installation
- Commissioning

Additional services

- Personnel training
- Documentation
- Service for depot equipment

Tailor-made complete depot solutions

Minimizing the maintenance time of trains: depot solutions are implemented so that the rail operator gets maximum efficiency for all operational sequences.

Already in the layout, trimmed for maximum efficiency.

In each depot, a variety of tasks must be performed in perfect harmony in a confined space. The smooth interoperation of all those involved in the work process requires the shortest possible paths to permit efficient execution of the tasks at hand. This must all be taken into account early on when creating the layout of a depot.

Each cog meshes perfectly with the next.

Materials and equipment must be available at all times. Only then can maintenance and repair tasks be performed reliably and to schedule. This is done by the perfect arrangement of inspection tracks and the specialized workshop areas. Siemens Mobility has a profound knowledge of the underlying work processes and of course also supplies the necessary specialist tools, handling equipment, and maintenance documents.









The layout of an LRT depot. The work areas are optimally coordinated. For mainline railways and metros there are other layouts, tailored to the specific requirements.















International know-how for local solutions

About 35 successful complete depot solutions projects all over the world are the proof of Siemens Mobility's track record in this field.

First-class references for success.

Numerous integrated package depot solutions around the globe underline Siemens Mobility's expertise in the field of complete depot solutions. Siemens Mobility assumes the bundled overall responsibility and ensures that the services of local companies, with special regard for the cultural peculiarities, are completed to schedule and in high quality.

Complete depot solutions for rail operators worldwide.



Factors for sustainable success

There are many good reasons why you should implement your complete depot solution with Siemens Mobility - here are the most important at a glance:

1. 100% tailored to your needs.

Each and every depot is different, because the framework, maintenance strategy, and environment vary. We fit depot solutions to your needs.

2. Solutions for all rail transportation systems.

We offer tailor-made solutions for automated people movers, light rail transit, metros, and mainline transportation, answering the specific needs of each location - no matter if for a new depot or extending an existing depot.

3. Ultramodern equipment and the latest digital planning.

Quality services come from guality equipment. We provide ultramodern and reliable workshop equipment and service vehicles. BIM-compliant planning eases the overall project execution.



4. All from a single source.

We take care of the entire project management and are also available as a consortium leader, working jointly with all the subcon-

5. Sustainable solutions.

tractors.

We implement solutions that are environmentally friendly, energy-efficient, sustainable, and safe for the service personnel at the highest level.

Published by Siemens Mobility GmbH 2018

Otto-Hahn-Ring 6 81739 Munich Germany

contact.mobility@siemens.com

The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

