

Railway electrification

Advising. Planning. Delivering. Realising. Maintaining.



Systemprovider for Railway Electrification

As a leading provider of electrical equipment for track-guided transport systems with electrical traction, Rail Power Systems provides its share of efficient and sustainable solutions with its products and services.

Globalisation of the economy, population growth in conurbations and limited fossil fuel resources require high-performance and energy-efficient transport systems. Whether it's high-speed railways lines, metro and city train systems, electrically- powered bus networks or special trains: Rail Power Systems' components, systems and services are used in all these systems.

Innovative technical solutions by Rail Power Systems, both for the traction systems of alternating and direct current railways and for all types of electrical line installations, have a hand in making rail-guided transport high-performance and also competitive compared with other means of transport.

A great deal of attention is paid to terms such as interoperability, sustainability, reliability, availability, maintainability and safety during the development and implementation of our products and services. There are decades of experience behind each contact line section and substation. The use of modern technologies, taking current standards into account, quality monitoring, absolute professionalism and passion result in the perfect result for the user and justify their trust. The consistent focus on the wishes and requirements of our customers, combined with the ideal combination of standardisation and flexibility guarantees individual solutions with the highest level of efficiency.

Experience you can trust.





EXPERTISE FROM OVER
130 YEARS OF EXPERIENCE

Our Claim: The ideal partner at your side!

We as the system provider take overall responsibility for planning, realising and commissioning your project.

Throughout all phases of planning and realisation, our teams concentrate on the optimum system and interface integration and the on-schedule implementation of individual systems.

Success requires close cooperation based on partnership and mutual understanding for the objective, the budgets, the project requirements and the system capacities.

The numerous successfully executed projects around the world prove that Rail Power Systems knows how to realise the complex relationships in this kind of project.



Portfolio: Quality - Efficiency - Delivery Reliability

Advice

Planning

Production

Realisation

Commissioning/
supervision

Maintenance

What makes Rail Power Systems special

- Long-term, successful partnership for optimum collaboration.
- Decades of experience in Germany, Europe and worldwide.
- Expertise throughout the entire life cycle of electrified rail-guided transport systems.
- Complete technological depth from the feasibility study to in-house product development and maintenance concepts.

Planning and Engineering services

- Planning competence for all electrical railway systems.
- The combination of sound knowledge of railway electrification and comprehensive practical experience.
- Covering all life cycle phases from conceptual design and feasibility studies to design, planning, realisation, commissioning and maintenance.
- Independent advice services including expert reports, simulations and software tools such as TracFeed® Catmos, TracFeed® Catlife, TracFeed® OSSCAT.

Project realisation

- Technical competency in realisation and commissioning.
- Core competencies in the implementation of railway electrification projects with worldwide references.
- Our own components, systems and software tools.
- Open to collaborating with local partners.

Contact line

Earthing and return circuit

Power supply

Protection and
control technology

Auxiliary power systems

Telecommunication

Product development and
manufacturing

System Design



Major Projects

2020

Seoul, South Korea (MRT):

DC- Switchgears for Silim Line

Molnby, Sweden (MRT):

Depot, Rigid Catenary equipment

Beijing, Chine (MRT):

Metro Line 17, Supply of DC substation components

Zwickau, Germany (MRT):

Framework contract for supply, installation and commissioning of six compact DC substations

Oldenburg-Wilhelmshaven Line-Upgrade, Germany

(ML): Construction of a switching post, Substation Rastede and two auto-transformer stations

ESTW Ruhland, Germany (ML):

New construction of a LED track field lighting

Leipzig, Rosa-Luxemburg-Straße, Germany (MRT):

Dismantling and new construction of Catenary system including earth works

San Francisco, USA (ML):

Supply Catenary equipment

New Taipei City, Taiwan (MRT):

Supply DC switchgears Angkeng Line

Tainan, Taiwan (ML):

Supply Rigid Catenary system, TRA underground line



2021

Weimar, Germany (ML):

Construction of a photovoltaic plant for direct feed into the 16.7 Hz Catenary network

ESTW Altenburg, Germany (ML):

Layout-Design of the Catenary system and dismantling of existing Catenary

Ylivieska-Iisalmi, Finland (ML):

Supply of Catenary components, Electrification of the 150 km line

Oldenburg-Rastede, Germany (ML):

Electrification of the 11.3 km line

Aalen Substation, Germany (ML):

Design, supply, installation and commissioning of a feeder substation 110 kV and 15 kV, 16.7 Hz, dismantling of existing system

2022

Berlin - Rummelsburg, Germany (ML):

ICE maintenance facility, extension of the automatic grounding and disconnection system (TracFeed® AEA) on 5 tracks with each 4 segments including RFID access control

Wendlingen-Ulm, Germany (ML):

Supply and Installation of 58 km of high speed OCS (Re 250 / Re 330) including a rigid catenary section and OCS emergency tunnel earthing systems TracFeed® OLSP

Hanko-Hyvinkää, Finland (ML):

Supply of Catenary components, Electrification of the 150 km line

South Korea (MRT):

Supply of Power Blocks for rectifiers

Norway (ML):

Supply of 15 kV switchgears of TracFeed® TAA type

Jade-Weser Port, Germany (ML):

Electrification of the connecting line (4 km) and the receiving yard (16 tracks)

Übersee -Traunstein, Germany (ML):

Catenary renewal between stations of Übersee and Traunstein including Rumgraben cross over

Munich, Germany (ML):

Second commuter rail trunkline, phase 2-4.2 West;
Catenary modifications west of Munich main station
between Obermenzing junction and Donnersberger Brücke

Augsburg, Germany (MRT):

Supply and Installation of Rigid Catenary in the tunnel of
the MDA project

Düsseldorf, Germany (MRT):

Renewal equipment DC substation Lörick

Cologne Braunsfeld, Germany (MRT):

Renewal power supply of depot West including erection
of a separate island operated substation
BA1: Depot substation
BA2: Substation for revenue line

Düsseldorf, Germany (MRT):

Renewal of DC substations Universität and Reeser Platz

Frankfurt am Main, Germany (MRT):

Design, supply, installation and commissioning of the
feeder substation Rödelheim, 110 kV and 15 kV, 16.7 Hz,
dismantling of existing system

Schleswig-Holstein, BEMU charging substations in Heide, Husum and Tönning (ML):

Planning, delivery, installation & commissioning of
three 15 kV BEMU charging substations 5 MVA, 16.7 Hz
for Heide, Husum and Tönning

2023

Electrification of the Ahr Route (Route 3000, Lot 1)**Remagen-Walporzheim (ML):**

Electrification of the Ahr Valley Railway, (Route 3000
Remagen-Adenau), Reconstruction of the Ahr Route
after the flood disaster in 2021

Übersee-Traunstein, Renewal route 5703 (ML):

Renewal of the overhead contact line system on route
5703 between the stations Übersee and Traunstein incl.
intersection at Rumgraben

Railway junction Halle (award package 100), Electronic Interlocking (external unit) Reußen, Region Peißen-Reußen (ML):

Renewal of the overhead contact line system at stations
Peißen and Reußen, Route 6345

Electronic Interlocking Bremen (ML):

Extension of the electronic interlocking Bremen,
Reconstruction of the overhead contact line system on
routes 1740 Bremen main station to Oldenbüttel station,

1423 Bremen-Burg to Bremen-Vegesack and 9145 Bremen-
Vegesack to Bremen-Farge

Reconstruction of Bad Schandau Ost station (ML):

Renewal of the overhead contact line system in section
Schöna (border Germany/Czech Republic) to Bad Schan-
dau Ost station, Route 6240

Leipzig, Wiedebachstr./Arno-Nitzsche-Str. between Bornaische Str. and Frohburger Str. (MRT):

Renewal of the overhead contact line system

Hamburg, Rothenburgsort and Kornweide rectifier substations (MRT):

Planning, delivery, installation & commissioning of two
DB Energie rectifier substations for the Hamburg suburban
railway

Frankfurt am Main, Grießheim MSV and AEA control system (ML):

Renewal of the Control system and adaptation of the mul-
ti-voltage power supply at the ICE depot in Grießheim

Stuttgart, „S21“ OLSP systems (ML):

Planning, delivery, installation & commissioning of the
OLSP systems (tunnel emergency earthing systems) for
the Stuttgart railway junction

Cologne, Deutz rectifier substation (MRT):

Planning, delivery, installation and commissioning of a
rectifier substation with two DC switchgears for work-
shop and line supply as well as line coupling switchgears

Magdeburg, Service Depot North rectifier substation (MRT):

Planning, delivery, installation & commissioning of three
DC switchgear systems for line substation and depot,
incl. substation building

Würzburg, Heidingsfeld switching station (ML):

Planning, delivery, installation and commissioning of a
15 kV switching station with photovoltaic system for
auxiliary power supply

Norway (ML):

Supply of 15 kV switchgears of TracFeed® TAA type

South Korea (MRT):

Supply of power Blocks for rectifiers

Manila, Philippines (MRT):

Renewal of secondary equipment incl. TracFeed® DCP3
for 9 traction power supply substations (Line 1)

MRT = Mass Rapid Transit

ML = Main Line



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The specifications set out in this document apply to conventional applications. They do not represent performance limits. This means that divergent specifications may be attained in specific applications. The contractually agreed specifications alone shall apply. We reserve the right to effect technical modifications.

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