Molinari Rail Systems GmbH

Company profile
Dessau, Germany
Molinari Rail Systems is a specialized service provider for the whole railway industry: OEMs, Operators and all producers of systems and components.

The portfolio of MRS includes for any material such as steel, stainless steel, aluminum:

- Cutting, bending, trimming of parts and components
- Welding of parts, components, car bodies, bogie frames, etc.
- Painting of parts, components, car bodies, bogie frames
- Fitting and assembly of trams, passenger coaches, EMU, DMU, etc.
- Testing and commissioning of trams, EMU, DMU, locomotives, passenger coaches
- Maintenance, repair, refurbishment and modernization of all kind of rail vehicles
«Railway Site»
Dessau is a historic railway site and has a long history in the development and production of railway vehicles.

«Located in the heart of Europe»
Dessau is very well connected to major highways and railway lines. With Leipzig a major cargo airport is close by.
«Railway in our DNA»

The factory was designed for the production of railway vehicles.
The premises cover about 100’000 m² and the shop floor is about 30’000 m².
The access and the connection by rail and to the railway lines is operational and allows an easy access of material and vehicles for repair and overhaul.
Car Body and Parts


Project plans based on your requirement

• Materials: steel, stainless steel, aluminum
• Integration of individual components

Production of the car body or components:

• Finished, with thermal and acoustic installation
• Including electrical, air-conditioning, water systems, including complete brake systems
• Draw and buffer equipment
• Complete inner paneling and interior fittings
• Including windows and doors
Bogies


References in the area of bogie manufacturing:
• Flexible framework of H-type with two crossbeams
• Wheelsets with monoblock wheels with a diameter of 760 mm
• Wheelset guidelines with levers including the wheelset bearings
• Power transmission of longitudinal and lateral forces via push-pull
• Double stage suspension via steel and air springs
• Drive mechanism via two forced ventilated asynchronous motors transversally arranged
Molinari Rail Systems
Portfolio

Driver Cabs

Our Expertise in the area of driver cabs:

• Project planning of your design requirements
• Self-supporting or partially load-bearing design
• Material choice: steel, aluminum, metal/plastic and plastic laminate
• Integration of individual components (interior, exterior fittings)
• Static and dynamic calculation including side wind tolerance
• Implementation of the electrical plans
• Minimization of interfaces
• Determining puncture resistance
• Operation licenses and approvals
Traction Systems

Expertise in the area of traction systems:
- Engineering and Design of complete propulsion systems
- Engineering and design of the control and electrical system
- Selection of adequate combustion engine
- Design and production of frames and housing
- Design and production of piping and tanks
- Testing of propulsion system
- Delivery as »ready to install«
- Spare parts management
Door Systems
Expertise in the area of door systems:
• Plug-and-play-solution ready for immediate installation
• Simple integration of the modular system
• Minimization of interfaces to the car body
• Simple in setting and adjustment work
• Low-maintenance
• High reliability

MRS is able to deliver door modules for all types of vehicles
Maintenance / Repair / Service

- Repair, maintenance, inspection, modification and refurbishment of vehicles
- Materials: steel, stainless steel, aluminum, material combinations
- Assessment of existing welded components with regard to all aspects of design, production method and execution
- Build Supervision and Testing
- Design and production of jigs and fixtures
- Non-destructive testing material applications
The »Metropolitan« has been designed and produced in Dessau and is a passenger coach unit for push-pull operation with up to seven carriages, at the speed of 230 km/h.

The carriages are connected to each other by central buffer couplings, screw couplings and buffers (to UIC Standard).

The pressure-tested carriages have a framework construction made out of steel.

 PROTOS® was designed and produced in Dessau and is in operation in the Netherlands. The vehicles is electrically or diesel-electrically powered low-floor EMU/DMU regional train with a top speed of 160 km/h. The size of the PROTOS® multiple unit train can vary, based on the number of cars. The individual PROTOS cars are independent of one another an each car has its own powered bogie. The very long low-floor section enables many configuration ideas to be implemented without barriers.
«Railway in our DNA worldwide» Technology and manufacturing Know-how transfer to India and Kazakhstan.
Molinari Rail Systems
Our customer landscape

«Our customers at the center of our activities»
MRS as local, regional, national and international company is aiming at being a active corporate citizen with social engagement and commitment.

MRS supported junior football team of Herta BSC at Allianz Cup in Dessau in January 2017.

MRS is supporting the education of new talents in Sachsen-Anhalt.

MRS is safeguarding EHS policies, environmental friendly production processes and sustainability in all aspects of its operations.
TECHNOLOGIES FOR THE MOST SUSTAINABLE MODE OF TRANSPORT. MADE BY MOLINARI.

«A passion for railway solutions»