Heating, Ventilation and Air Conditioning Systems

APPLICATIONS
High-Speed Trains | Light Rail Vehicles | Locomotives | Metros | Passenger Coaches | Regional and Commuter Trains | Special Vehicles
MERAK designs, manufactures, installs, and supports high quality HVAC systems for all rail applications. Service-proven throughout the world for over 50 years, more than 70,000 units guarantee passenger comfort every day, even in the toughest climatic conditions.

Our presence in the 5 continents and wide experience in project management and system integration allows us to offer our customers a unique combination of global knowledge and outstanding local support. This also enables Merak to customize standardized modules to a system that responds to almost any specific requirement.

Merak’s leadership in the field of HVAC systems is based on close cooperation with operators and carbuilders:

- Local value-added powered by a global team
- High performance technology for all technical challenges
- Worldwide service network
CUSTOMER BENEFITS

Local value-added
- Customized solutions to exactly suit our customer’s needs
- Technical support provided locally
- Major facilities located in Australia, China, Spain, USA and the UK

High performance technology
- Extreme conditions operation: temperatures from +55 °C down to -45 °C, dust and sand, ice and snow, etc.
- Specific standards and norms: NFF, GOST, EN, ASHRAE, AS, DIN, VDV, etc.
- Efficient energy consumption
- Enhanced technology and upgrades available
- Environmentally friendly design

Worldwide service network
- Close to our customers
- Support available throughout the entire life cycle of the product
- Experienced and highly skilled after sales teams including field technicians
- Overhaul, refurbishment and upgrade services

SCOPE OF SUPPLY

We supply the complete HVAC system for all railway applications. When required, additional elements can be supplied such as:
- Energy saving solutions
- Sand filtration systems
- Pressure wave detection and protection systems
- Auxiliary power inverters, etc.

As well as a full range of validation test and analysis like:
- Duct network design
- Computational Fluid Dynamics (CDF) analysis of a duct, system or a complete coach
- Finite Element Modelling (FEM) calculations
- HVAC noise and vibration analysis, etc.