



## Measurement technology – Pantograph and Catenary: **DB Overhead Equipment (OHE)**

### **Measurement Systems**

- Force Measurement System (FM)
- Optical Wire Geometry and Wear Measurement System (WGW)
- Auxiliary Systems

Our DB Overhead Equipment Measurement Systems are high quality products for measuring the overhead equipment. Thanks to our deep knowledge of the rail system and our high standards our products can be used for acceptance tests of new overhead lines and monitoring of existing overhead lines. If you're looking for a solution driven partner, DB Systemtechnik is your first contact for:

- Reduction of costs associated with repairs and train line outages.
- Avoidance of accidents, damages to the infrastructure and vehicles, blockages of the network by early detection of vulnerabilities of the catenary.
- Ensuring a perfect technical condition of the catenary infrastructure.
- Reduction of operational expenditures thanks to robustness and proven longevity of the system and by the possibility of unmanned operation on regular trains.
- Overall state detection of the catenary system by monitoring the entire network.
- Acceptance by official bodies thanks to current international standards and compliance with national directives for due diligence maintenance (e.g. for Deutsche Bahn).

# Measurement technology – Pantograph and Catenary: **DB Overhead Equipment (OHE) Measurement Systems**

## Technical Data

### Force Measurement System (FM):

- Forces/accelerations between pantograph and contact wire
- Detection of contact losses
- Detection of hard spots
- Detection of horn contacts
- Height and stagger of contact wire (dynamic)
- System complies with standard DIN EN 50317

### Optical Wire Geometry and Wear Measurement System (WGW):

- Static height and stagger of contact wire
- Wear of contact wire

## Auxiliary Systems

### Video System:

- Visualization of the interaction between pantograph and catenary
- Direct correlation with data measured by FM and WGW
- Visual inspection of general condition of OHE system (hangers, clamps, ...)

### Speed and Mileage System:

- Determination of vehicle position (distance measurement and GPS)



Our knowledge: **Your Success**

**Kontakt: Robert Lanzl**

Robert.Lanzl@deutschebahn.com

Phone: +49 (0) 89 1308-7522

www.db-systemtechnik.de