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

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

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

- Reducing costs associated with repairs and train line outages
- Avoiding accidents, damages to the infrastructure and vehicles, blockages of the network by early detection of vulnerabilities of the catenary
- Ensuring the health of the catenary infrastructure
- Cost saving in application thanks to robustness and proven longevity of the system and by possibility of unmanned operation on regular trains
- Overview of the whole catenary system by monitoring the entire catenary system
- Acceptance by official bodies thanks to compliance with directives for due diligence maintenance, e.g. for German DB Netz AG directive Ril 997
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
- Uplift of contact wire (2 consecutive measurement runs, one with uplifted pantograph)

**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:**
- Positioning by distance measurement and GPS

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**Our knowledge: Your Success**