

Dynamic Pantograph & Overheadline Interaction

Accredited Lab with Advanced Measurement Technology

With our accredited test laboratory and railway-proven measurement technology, we support you in ensuring the safe, efficient, and compliant operation of pantographs and overhead contact line (OCL) systems.

We offer a comprehensive portfolio of services – from precise overhead line inspections and approval-related measurements to customized measurement solutions tailored to your specific requirements.

Whether you are a manufacturer or an operator, we support you from analysis through to compliance verification. Our particular strength lies in tackling challenging projects, including measurements under real operating conditions and during test runs.



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Our services

- Dynamic measurements: interaction pantograph–overhead contact line at high speeds (>350 km/h)
- Approval and conformity assessments in accordance with TSI requirements
- Execution of certified measurement runs, including acceptance testing
- High-precision measurement methods (contact force, arcing, uplift) under real operating conditions
- Test-rig-based validation, simulation, and optimization of pantograph/OCL systems

Reference projects

- Overhead contact line systems of DB InfraGO AG (routine inspection and acceptance runs, including high-speed lines and Stuttgart 21)
- Overhead contact line systems in Switzerland (Gotthard and Ceneri Base Tunnels), Denmark, Sweden, and Hungary

Your advantages

- Maximum safety through accredited testing and laboratory services
- Tailor-made measurement solutions for individual requirements
- Realistic testing at speeds exceeding 350 km/h
- Reliable approval and compliance measurements
- Fast optimization of rolling stock and infrastructure
- Efficient fault identification and root cause analysis
- High measurement accuracy through advanced sensor technology
- Precise OCL and pantographs analysis
- Vehicle approvals across Europe for single and multiple-unit operation of platforms including Velaro, Vectron, ICNG, Coradia, TRAXX, FLIRT, KISS, and many others.

Your contact

Bernd Nagler

Bernd.B.Nagler@deutschebahn.com



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