

CASE STUDY

Detect and localize leaks in brake systems



To ensure safety on the tracks, the maintenance technicians pay special attention to the braking system. The centralized pneumatic brake system is used to keep pressure on the system continuously and to ensure the brake shoes remain open. As soon as the pressure drops, the brakes engage and start causing undesired friction on the axles. A tricky, tiny leak in the compressed air system can lead to system malfunctions, which activate the brakes. These errors must be corrected as soon as possible.

Location

Railways maintenance site in Germany

User/department

Service and maintenance technicians, maintenance-technical management, process and work preparations, wagon and locomotive maintenance

Application

- Locating leaks in brake systems
- Valves in the ventilation system
- Vehicle components such as sanding system, pantograph and lubrication of the wheels

Time savings

Greater than 80 %

Why use the Fluke ii900 Sonic Industrial Imager?

- Ease-of-use
- Quick localization
- Versatile application
- Report generation
- Time saving



Today's practice

In practice, the maintenance centers demand a high level of safety and efficiency. Vehicles that come in for maintenance or repair must be put back on the tracks as quickly as possible. A tricky leakage in the compressed air network can completely mess up the service center's planning but also that of the 'customer', which can lead to high costs. The classic search methods such as hearing, exclusion steps, soapy water, etc. can take hours or even days to locate the leak.

Downtime costs are pre-programmed!

Our solution

The Fluke sound camera enables technicians to quickly and easily locate leaks in the compressed air system. The sound source (leakage point) is visualized and precisely localized on the display using 64 ultrasonic sensors and a digital camera. A short tour around the locomotive is enough to get a good "picture" of the situation.

We asked a maintenance leader from a German railway operator: **"Why did you choose the Fluke ii900?"**

"This innovative technology has excited me from the moment I first heard about it! The imager was primarily purchased for troubleshooting the trains' pneumatics. We have already seen enormous time savings with complex leakages."

"After just a few tests, we found how reliable the system is and the versatile ways it can be used."

"We are very pleased to see the high level of acceptance amongst our service technicians—the ii900 has immediately become a standard tool for us."