

BrakeView | Pad

Automatic Wayside Brake Pad Inspection System



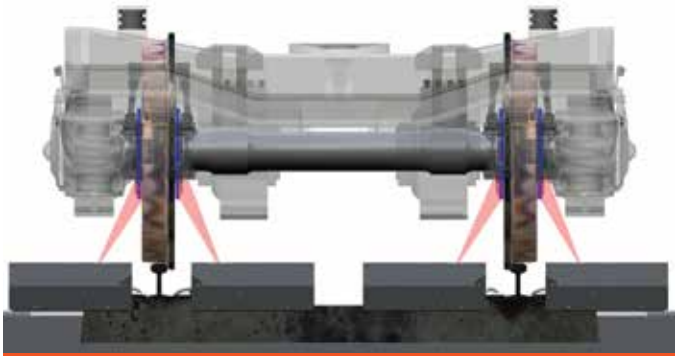
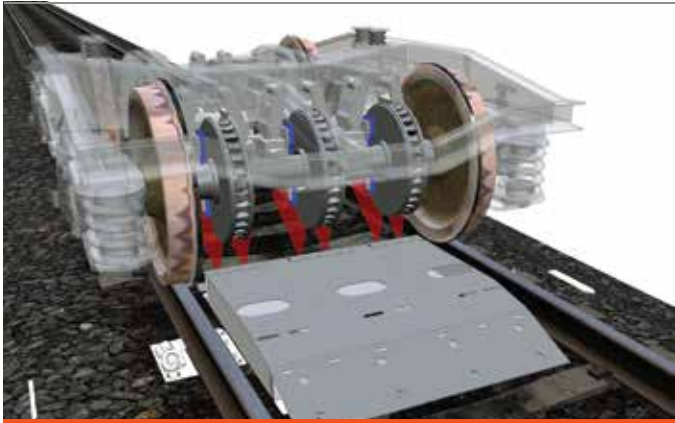
BrakeView-Pad is an automatic wayside brake pad inspection system designed to operate on passing trains at normal track speeds. BrakeView-Pad is a machine vision system which uses a high speed digital imaging system to acquire images of every brake pad for inspection and measurement.

The BrakeView-Pad system is installed on steel tie (sleeper) provided by Beena Vision. Cameras and illumination systems are installed in sealed enclosures installed on the system tie.

Brake pads are viewed from the bottom and the acquired images are processed by a set of sophisticated image processing algorithms. The imaging system and processing algorithms are designed to be insensitive to ambient light conditions and can operate in both day and night time conditions.

There are two kinds of BrakeView-Pad systems. One is designed for axle mounted pads and the other is for wheel mounted ones. Number of cameras and detailed design will depend on the rolling stock to be inspected. System utilizes both laser based structural light and other illumination to produce several images concurrently for reliable measurements.

The system is fully automated and can operate in extreme conditions, indoors and outdoors.



Measurements

- › Pad Detection
- › Pad Thickness in 3 Positions
- › Alarm on Pad Thickness Levels
- › Alarms on Unequal Wear of Pads
- › Visual Image of the Pad and Surrounding Area

Features

- › Speeds up to 85mph (140 km/h)
- › Capable of Operating in Extreme Environments
- › Operating Temperature: -40°C to 55°C
- › Integrated AEI Interface

Software Features

- › Monitoring/Control Software
- › System Management Software
- › Digital Image Acquisition/Processing
- › Calibration Software
- › Web-based Database/Data Search Software
- › Database Interface Software
- › Automated Reporting Software
- › AEI (AVI) Integration

