

BrakeView

Disk

Automatic Wayside Brake Disk Inspection System



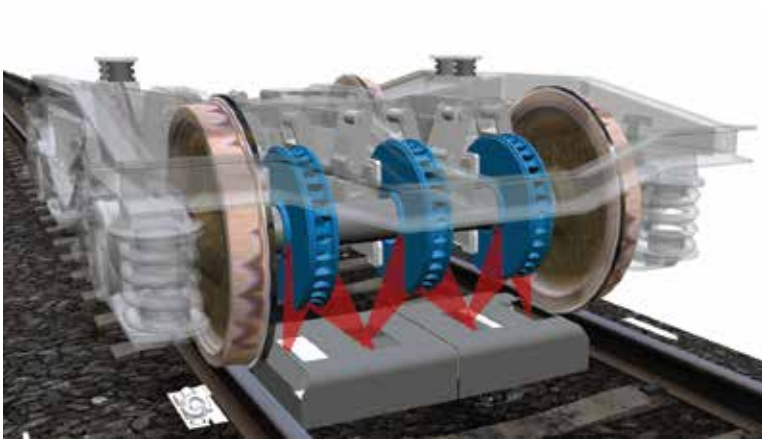
BrakeView-Disk is an automatic wayside brake disk inspection system designed to operate on passing trains at normal track speeds. BrakeView-Disk is a machine vision system which uses a high speed digital imaging system to acquire images of every brake disk for inspection and measurement.

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

Brake disks 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-Disk systems. One is designed for axle mounted disks 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

- › Disk Profile Measurement
- › Disk Thickness in 3 Positions
- › Alarm on Disk Thickness Levels
- › Alarms on Unequal Wear of Disks
- › Visual Image of the Disk 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

