

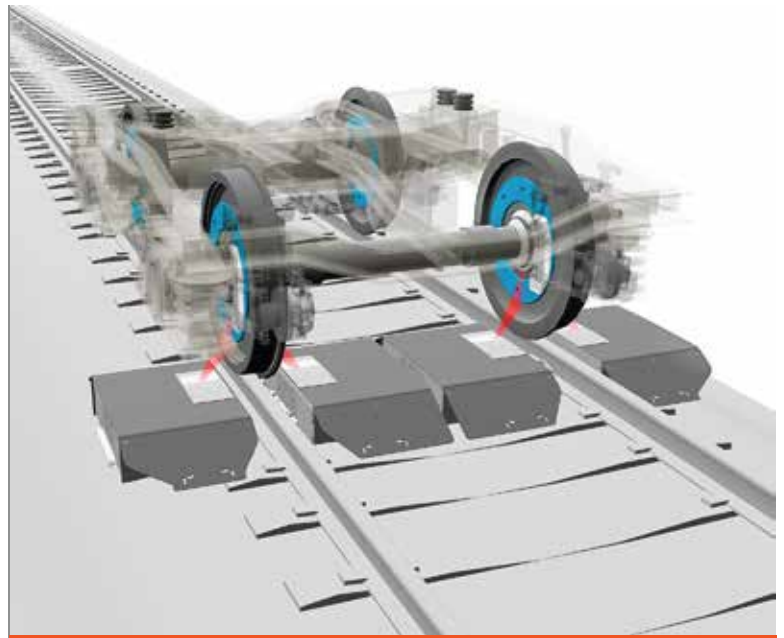
BrakeView™ (Disc)

Automatic Wayside
Brake Disc Inspection System



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

BrakeView-Disc 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 discs 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 times equally well.

There are two kinds of BrakeView-Disc systems. One is designed for axle mounted discs 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

- Disc Profile Measurement
- Disc Thickness for up to 4 Discs per Axle
- Alarm on Disc Thickness Levels
- Alarms on Unequal Wear of Discs
- Visual Image of the Disc 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