BrakeView® - Shoe wayside measurement system inspects brake shoes (blocks) at mainline operational speeds. This system is vision-based and uses a multi-camera high-speed imaging unit to take multiple images of every brake shoe for inspection and measurement.

BrakeView-Shoe provides a complete and reliable assessment of the brake shoe (block) condition by highlighting obvious shoe defects. The system is fully automated and can operate in extreme conditions—indoors and out. Enclosures are installed on two short towers, one on each side of the track, mounted on two concrete or steel footings. Cameras and illumination systems are installed at a safe distance from the center of the track. Since each brake shoe is viewed by two cameras, a complete and reliable assessment of the brake shoe condition is provided.

Brake shoes are viewed from top and bottom perspectives. Acquired images are processed by a set of sophisticated image processing algorithms. The imaging system and processing algorithms are insensitive to ambient light conditions and can operate day or night.

Brake shoe data is easily integrated into the Trimble WISE data management system which gives web-based access to data including images.
BrakeView—SHOE
Wayside Brake Shoe (Block) Measurement System

Inspections & Measurements
► Shoe detection
► Shoe thickness in top and bottom positions
► Shoe wear profile
► Shoe position with respect to the wheel surface
► Shoe securement such as key inspection
► Obvious shoe breakage
► Brake application status with thermal imaging of brake shoe & wheel contact area (optional)

Features
► Speeds of 0 to 85 mph (140 km/h)
► Operating temperature: −40°C to 55°C
► Capable of operating in extreme environments
► Installed on trackside with no track interference
► Easy maintenance
► Automatic alarm generation

Software Features
► Remote monitoring/control
► Digital image acquisition/processing
► Web-based database/visualization
► Automated reporting
► AEI (RFID) integration

Specifications subject to change without notice.