Trimble® BrakeView®-Disc automatic wayside brake disc inspection system operates on passing trains at mainline operational speeds. It is a machine vision system which uses a high-speed digital imaging system to acquire images of every brake disc for inspection and measurement. The system is fully automated and can operate in extreme conditions—indoors and out.

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

Brake discs are viewed from the bottom and 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.

There are two versions of the BrakeView-Disc system—one for axle mounted and one for wheel mounted discs. The number of cameras and exact design will depend on the rolling stock to be inspected.

The system utilizes both laser based structural light and other illumination to produce several images concurrently for reliable measurement and inspection.
BrakeView–DISC
Wayside Brake Disc Profile Measurement System

Inspections & 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 of 0 to 85 mph (140 km/h)
► Operating temperature: –40°C to 55°C
► Capable of operating in extreme environments
► Installed on custom steel tie (sleeper)
► 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.