



AHView



TRIMBLE AHVIEW SYSTEM

BRAKE AIR HOSE INSPECTION

Trimble® AHView™ is an automatic brake air hose inspection system that inspects brake air hose arrangements at mainline operational speeds.

Trimble AHView system uses high-speed and high-definition imaging to provide high resolution images of every brake air hose arrangement for inspection and measurement. For reliable automatic inspection, every brake air hose is viewed from two angles at each side of the track.

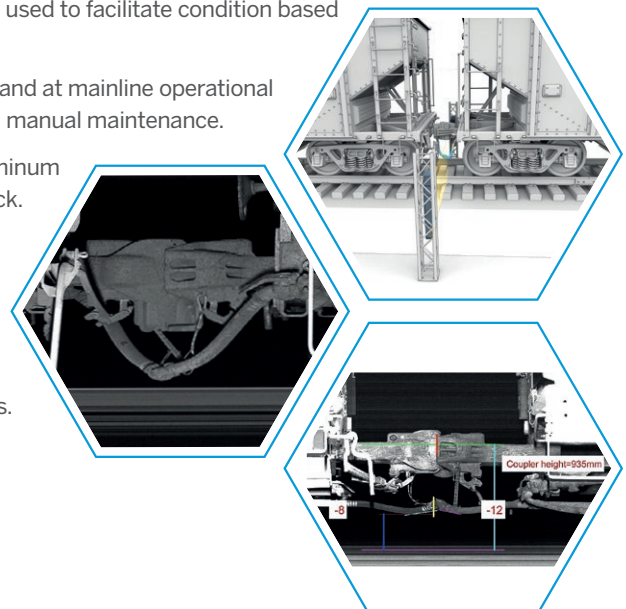
Acquired images are processed by a set of image processing algorithms to assess the brake air hose arrangement condition and to report measurements and defects. The AHView imaging system and processing algorithms are designed to operate in all ambient light and weather conditions.

Processed data and images from the Trimble AHView system are integrated into the Trimble CMMS™ (Condition Monitoring Management System) software to provide web-based access for data visualization, alarm management, and data analytics. Automated alarms on the identified defects can be used to facilitate condition based maintenance workflows.

AHView's rugged design enables operation in harsh rail environments and at mainline operational speeds. The system is designed for continual operation with minimum manual maintenance.

The system's scanner boxes are installed on specifically designed aluminum truss towers, that are mounted on foundations on each side of the track. The AHView is installed at a safe distance from the center of the track. System installation does not require any major track modifications or extended closures.

Brake air hose arrangements and their diagnosis is complex and an automated system is highly beneficial for rail operators as brake air hose separation is a potential cause of interruptions in train operations.





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INSPECTIONS & MEASUREMENTS

Trimble AHView system inspections and measurements include:

- ▶ Air hose orientation.
- ▶ Air hose angle.
- ▶ Air hose height from top of rail.
- ▶ Glad-hand angle.
- ▶ Alarm on peaked and horizontal coupling.
- ▶ Air hose support inspection.
- ▶ Coupler shank movement.
- ▶ Coupler height.

Depending on the rolling stock types and requirements, the system's measurement outputs may require optimization or customization.

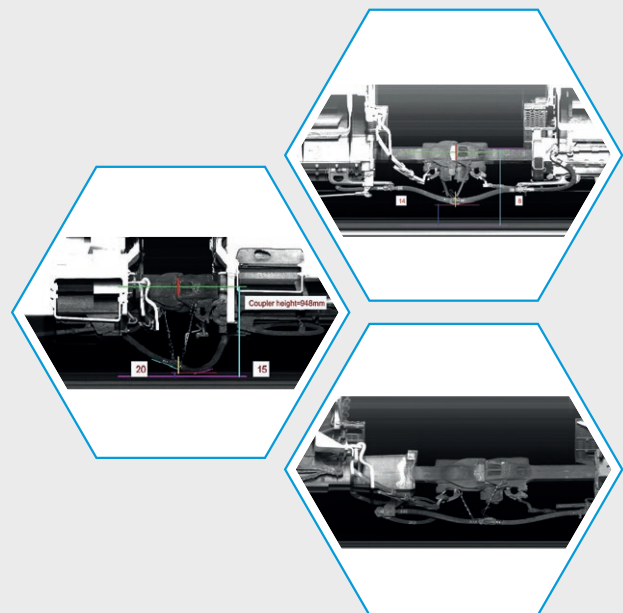
FEATURES

System Features

- ▶ Bi-directional system.
- ▶ Inspection and measurement at mainline operational speeds.
- ▶ Operates in extreme environments.
- ▶ Installed off track on tower or pole (concrete or steel base) with no track interference.
- ▶ Easy maintenance.
- ▶ Automatic defect reporting.

Software Features

- ▶ Digital image acquisition/processing.
- ▶ AEI (RFID) integration.
- ▶ Automatic reporting.
- ▶ Web-based database/visualization (with Trimble CMMS™ (Condition Monitoring Management System) or TrainWatch™ software).
- ▶ Remote monitoring/control.



Specifications subject to change without notice.