

# KinetiX

Inspection  
Technologies



## TrainView®

### FULL SCALE TRAIN IMAGING & INSPECTION

The TrainView system uses high-speed and high-definition digital imaging together with specially designed illumination sources to produce multiple high resolution images of side and top of every car (wagon).

For reliable automatic inspections and to capture all externally visible components, multiple imaging scanner units are employed in the TrainView system. The number and configuration of the scanner boxes can be adapted to the specific site and customer requirements.



## TRAINVIEW SYSTEMS

Acquired images are processed by a set of image processing algorithms to assess the condition of the cars (wagons) and report defects. For viewing and analysis, the system utilizes multiple sensors and algorithms to pinpoint axle position, car (wagon) beginning and end positions. The system automates the inspection of car (wagon) components such as safety appliances, hand brake wheels, car (wagon) identifiers, reflectors, load securement conditions, etc.

Processed data and images from the TrainView system are integrated into the 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. TrainWatch™ software can also be utilized for the virtual train inspection by using the generated images.

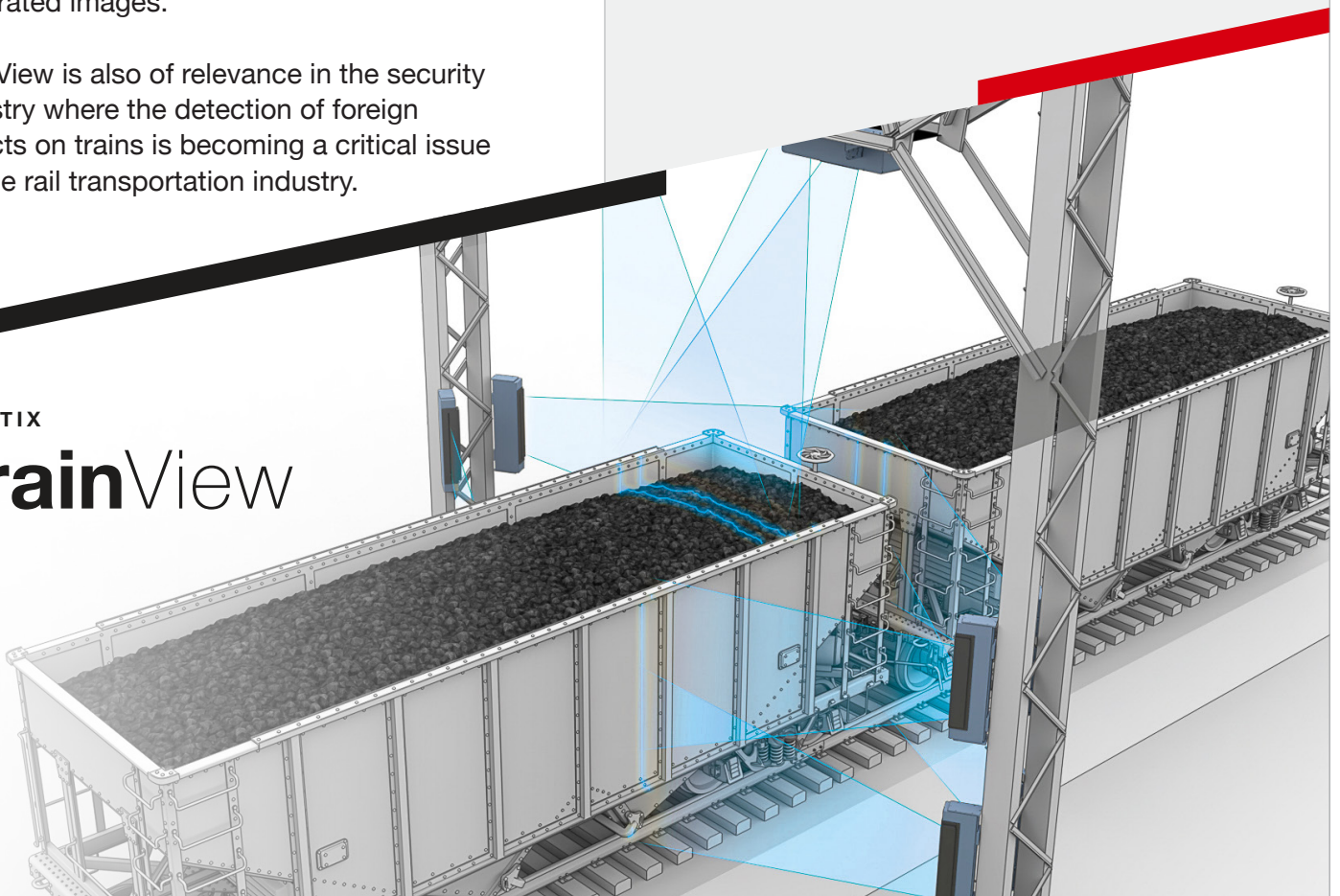
TrainView is also of relevance in the security industry where the detection of foreign objects on trains is becoming a critical issue for the rail transportation industry.

## MEASUREMENTS

- Car (wagon) tag identification
  - Missing/damaged reflective decals detection.
  - Missing label holder detection
  - Missing brake wheel detection
  - Missing/broken shedding shields detection
  - Bent top chord detection
  - Car (wagon) body sides
  - Car (wagon) body ends
  - Car (wagon) roof
  - All safety appliances
  - Doors
- Depending on the rolling stock types and requirements, the system's measurement outputs may require optimization or customization.

KINETIX

# TrainView



## 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

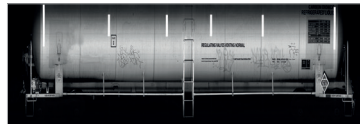
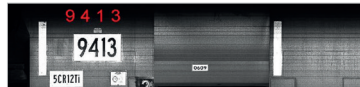
Digital image acquisition/processing

AEI (RFID) integration

Automatic reporting

Web-based database/visualization (with CMMS™ (Condition Monitoring Management System) or TrainWatch™ software)

Remote monitoring/control



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