



RAILWATCH

VOSSLOH CONNECT

SOLUTION DESCRIPTION



Compact cabinet with optical, acoustic and other high-end technology to monitor rolling stock traffic.



Set up within one to two days, involve no approval effort and no installation in or above the track (following to feature)



The pulsars are set up to a maximum of 8 m next to the track and detect trains travelling at full speed of up to 200 km/h.



Need for technical operation a standard 230 V / 16 a mains connection. Data transmission to the cloud usually takes place via LTE or 5G.



Pulsar



Mobile Pulsar

HOW IT WORKS

1

Work with high-resolution cameras, as well as powerful microphones and RFID antennas. This gives a first-class data basis for internal detection networks.

2

Passing freight wagons are captured at 200 images per second and then evaluated using computer vision techniques. In addition to process data such as UIC wagon numbers, wagon sequence, external views, hazardous goods and graffiti and record condition data such as brake block and wheelset damage.

3

The collected information from the overall system is captured using artificial intelligence and processed and checked in the cloud. After extensive quality assurance, the data is made available to the customers in edited form via a web portal.



Optical sensors:
Detection of UIC Numbers, Signage, brake blocks and more.



Acoustic sensors:
Detection of potential flat pots and wheel damage by capturing noise signals



RFID sensors:
UIC Number detection via RFID sensors.



MAIN FEATURES



Graffiti detection



Wheel condition & Wheel damage (flatspot)



Dangerous Goods detection



Brake block thickness



UIC-number detection



Wagon signage & print



Hot brakes / hot axle detection (prototypes)

RAILWATCH PORTAL



Fleetcheck

Traincheck

Dashboard

MAIN FEATURES – WIM & WHEEL PROFILE MEASUREMENT

PROTOTYPES - UNDER INDUSTRIALIZATION



Weight in motion add on (photos 1)

- ✓ Axle load measurement
- ✓ Weight distribution (left/right)

Wheel Profile Measurement add on (photos 2&3)

- ✓ Flange thickness
- ✓ Thread hollowing
- ✓ Flange height
- ✓ Rim thickness
- ✓ Flange slope (qR)
- ✓ Wheel profile

* These add on are under industrialization under way (final feature, track integration and other details are to be finalized)



PRODUCT BENEFITS



Proof of liability for trains



Avoidance of track damage and safe tracks



Possible new stream of revenue by selling data to fleet owners



Decreasing down times and ease maintenance



Faster & more efficient management of incoming trains



Switch to
highest track availability
and **efficiency**

