



zentrak DERAILMENT DETECTION

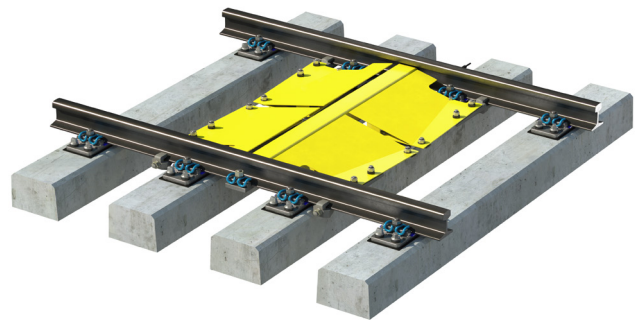
Infrastructure Protection

Description

Rails and turnouts are the most important components in railway operation and therefore need extraordinary attention. Maintenance have to be planned with a lot of preparatory work and scheduled in operations.

Failure, unplanned maintenance, but also train accidents causes a lot of additional effort since neither the manpower is available, nor the train schedule is adapted. For the customer it means in the best cases train delay or even worse cancellation of service.

As a serious danger for rail vehicles derailed wheels cause considerable damage to railway infrastructure. The zentrak Derailment Detection function (DRD) is designed to detect derailed wheels and informs the dispatcher instantly to minimize defects on the infrastructure and even worse personal injuries.



DRD
Derailment
Detection

System advantages

- » Safety management of railway operations
- » Human and asset protection
- » Alarming and intervention
- » Simple sensor design
- » Easy installation with rail clamps
- » False alarm prevention due to dragging equipment protection
- » Self-monitoring
- » Low life cycle cost thanks to low-maintenance sensor design



SIMPLE SENSOR DESIGN

The DRD function detects reliably derailments. For an easy installation the sensor is clamped between the rails and protected by deflector plates against dragging equipment to minimize false alarms. A derailed wheel destroys the deflector plates and triggers the sensors, so that an alarm is sent to the dispatcher immediately. For

an automated system supervision the system can differ between a derailment and other the function influencing issues like defective cables. This enables the maintainer to establish a condition based maintenance strategy.

Technical Specification	
Train speed	>0km/h
Cable length	Up to 8km
Weight of sensor	44 kg
Weight of protection plates	4x 5.75kg
Environment	-40 to +70°C

Options and variants



Video



Train
Talker



Solar