Progress Rail presentation

Progress Rail inspection & information systems

Overview

Bad Dürkheim, February 2012
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2 Portfolio / Overview
    - Hot Box Control
    - Cross Guard
    - Monitoring of gauge clearance loading
    - Dragger (Static & Paddle Dragger)
    - Checkpoint

3 Experience in the field of railway

4 References
We are world’s leading manufacturer of construction and mining equipment, diesel and natural gas engines and industrial gas turbines.
1.2 Company overview / our organization

Company from the Caterpillar concern, where Progress Rail Service is parent company of Progress Rail Inspection & Information Systems GmbH.
1.3 Company overview / our organization

Where are the locations of Progress Rail:

- 31 representations in the USA
- Head offices in Canada, Mexico, Brazil, UK, Italy and Germany
- Worldwide more than 149 locations
- More than 4,300 employees
1.4 Company overview / our organization

Progress Rail inspection & information systems

Allocated on three places in Europe:
- Bad Dürkheim (Germany)
- Florence (Italy)
- Berlin (Germany)
Monitoring system for railway rolling stock

HOA: Micro HBD Micro Hot Bearing Detector

FBOA: Scanner Hot Wheels

FUES HBD/HWD

CG: Cross Guard

Dispatcher system (RAD)

Event Analyzer

DED: Dragging Equipment Detector

HWL: High Wide Load Detector System

11. Dezember 2012
Progress Rail FUES EPOS, is the latest generation of the product serie FUES. This system distinguishes with extreme modularity, very high functionality, high performance and easy to use.

The installation has all the experience gathered from the previous systems, based on the latest technologies and reliable participant in the future safety.

This generation of FUES EPOS dispose of additional ports, which contribute for engaging the additional functions in the period of use.
Progress Rail Cross Guard is a system, which is used to identify closed in the area of the level crossing vehicles (cars & trucks) at crossings with barrier system.

The aim is to prevent accidents and damages in the rolling stock. To ensure this, the system is developed as SIL 4 product.

Technically the system is based on microwave rays and allow after successful detection to change automatically respectively the signaling.
High Wide Load Detector System (HWL)

- Detecting Out-of-Gauge rolling stock
- Available for single and two-track railway
- Adaptable (tunneling profile)
- Can be integrated in FUES EPOS (optional)
- Adapted to prevent the damages to tunnels, rolling stock and freight.
- Offen assemblies:
  - On routes with mixed traffic
  - Before tunnels and bridges
Products

Dragging Equipment Detection (DED)

- Detecting dragging equipment under moving trains
- Available in two variants, adjustable „Paddle Dragger“ or static „Static Dragger“ (without adjustable parts)
- It is possible direct integration in FUES EPOS (Option)
- Adapted to prevent damages to the sleepers, Eurobalises, rolling stock and other components from upper construction
- Offen assemblies:
  - On routes with mixed traffic
  - Before tunnels and bridges
Progress Rail’s Checkpoints integrated in FUES EPOS

- **EPOS Unit**
- **Wheel Sensor**
- **FUES HBD/HWD**
- **Power supply 1…4**
- **PC**
- **I/O**
- **T° channel**

**Dragging Equipment Detector**

**HWL Detector**

**Tunneling input control system**

**Remote monitoring & Control**