Train detection

Vostochny Port

FAdCi® and RSR180

Country
Russia

Segment
Industrial & Mining

Application
Train detection

Project start
2013

CASE STUDY | EN

Requirement:

In 2013, Vostochny Port JSC decided to modernise their railway system by equipping it with a new logistic management system. The modernisation should enable them to automatically allocate their coal waggons onto different tracks depending on the quality of coal loaded.

Solution:

Together with our partner, Automated Systems and Complexes (ASC), it was decided to go for the axle counting system FAdCi in order to achieve the goals.To provide their internal logistics system with the required data for controlling rolling stock, two protocols were implemented. The transmission of vital data is realised with the Frauscher Safe Ethernet (FSE) protocol. The FMP protocol provides diagnostic data to the supervisory logistic management system.

Benefit:

The implementation of the axle counting system FAdCi, together with the FSE and FMP protocol, led to a noticeable optimization of the flow of rolling stock. Results are reduced turnaround times and an improvement of loading indicators. The operating personel is now able to optimize maintenance procedures and to perform preventive measures which leads to a decrease in maintenance costs.

FRAUSCHER
SENSOR TECHNOLOGY

Train detection

Vostochny Port

FAdCi® and RSR180

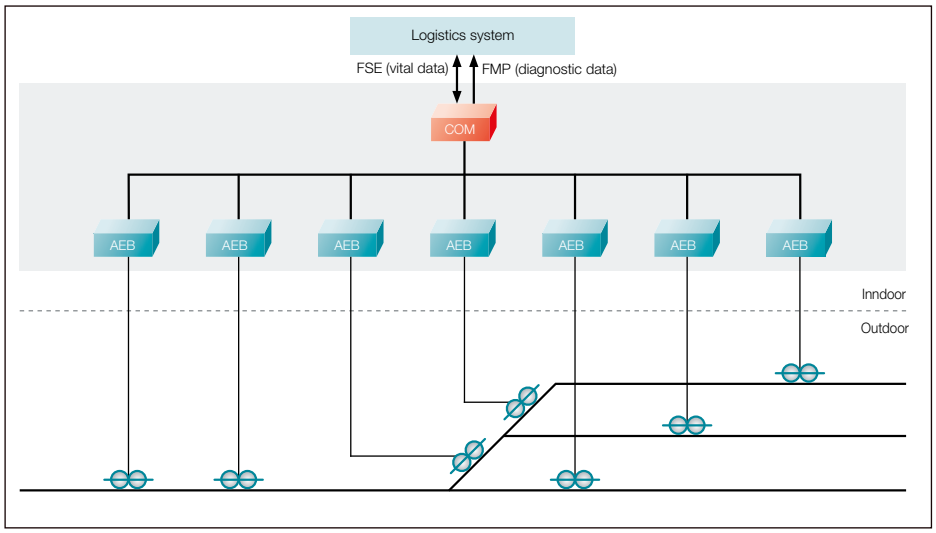
Unloading of a coal waggon

Loading of coal onto ships

FAdCi

Project details:

In 2013, our partner ASC implemented the new generation of axle counting systems FAdCi in part of the station in Vostochny Port (Primorsky region, Vrangel, Russia). In addition to the usage of the main Frauscher Safe Ethernet protocol for the transfer of vital track section status data, they also used the diagnostic protocol to obtain information about the number of axles from the axle counting system and the individual counting heads. With the FAdCi system it is now possible to get all information from one system. In addition, the new axle counting system does not need I/O hardware and makes extensive wiring obsolete. The FAdCi also stands out by minimized time efforts for design and implementation as well as the flexibility in interfacing other systems. The usage of this solution results in a higher cost-effectiveness on the initial project and decreases overall life-cycle-costs.



Frauscher - Best Connected

The Frauscher FSE and FMP protocol provide the supervisory logistics system with vital and diagnostic data. This information enables the software to locate the position and direction of all waggons and to automatically allocate them onto the right track, depending on the quality of coal within the waggons. This contributes to a reduction of turnaround times and to an improvement of unloading indicators. In addition the information can be also used by the operating personel to optimize maintenance and allows preventive measures.

Operator	Vostochny Port JSC
Client / Partner	Automated Systems and Complexes (ASC)
Scope of Supply	Delivery of components
Scope of Project	24 counting heads, 19 track sections
Axle Counting System	FAdCi with FSE and FMP protocol
Wheel Sensor	RSR180

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