



## Case Study | GER

# Dillinger Hütte

## Innovative Switching Solution

### Requirements

Due to insufficient parking tracks in the steel plant, the operators of Dillinger Hütte decided to build a new ladder track leading to new sidings. Great attention has been given to optimising the layout of the dead end tracks so as to improve the efficiency of traffic operations in the whole depot.

### Solution

Hanning & Kahl implemented 16 power operated, locally controlled points (EOW). A SIL3 proven control ensures safe, flexible and efficient operation. The Frauscher axle counting system FAdCi in combination with the wheel sensor RSR180 guarantees reliable train detection, while Frauscher Diagnostic System (FDS) provides diagnostic data to the higher level control system.

### Benefits

The FAdCi system allows a simple implementation of the Frauscher Diagnostic System (FDS), which enables the collection and analysis of data from all over the system. The clear/occupied status can be seen at a glance. The analysis of the diagnostic data makes it possible to optimise maintenance and perform preventive measures.



## Project Details

### FADci provides train detection for the EOW

The FADci system scores with its functional modularity and easy scalability and can be connected to the higher-level system either with a hardware or software interface. Dillinger Hütte benefits also from the individual reset options, counting head information, counting head control functionality and comprehensive diagnostic facilities.

### FDS - Frauscher Diagnostic System

At Dillinger Hütte the FDS is accessible on a website and through a XML-interface. The XML-interface is also used to integrate the diagnostic data into the higher level control system. Thanks to the FDS maintenance staff is provided with diagnostics tools and a virtual track representation of the entire depot area, showing the clear/occupied status of the track sections. With the help of touchscreens in the two control rooms, processes can be monitored and displayed in a transparent way, failures are registered and process data is properly archived and analysed. On that basis, irregularities can be identified at an early stage, before coming to expensive breakdowns. This enables staff to perform condition-based maintenance, making the regular scheduled maintenance a thing of the past. Thanks to these measures the overall costs can be significantly reduced.

Furthermore, the diagnostic pages of the Frauscher Diagnostic System (FDS) were integrated in the depot control system menu. The staff is now able to see at a glance how many axles are located on a specific track section.



Frauscher Diagnostic System

## Key Facts

<b>Operator</b>	AG der Dillinger Hüttenwerke	<b>Application</b>	Train detection
<b>Partner</b>	Hanning & Kahl GmbH	<b>Axle Counter</b>	FADci with Frauscher Diagnostic System (FDS)
<b>Country</b>	Germany	<b>Wheel Sensor</b>	RSR180
<b>Segment</b>	Industrial Line	<b>Scope of project</b>	12 Track sections, 38 Counting heads