



Success Story

Thales Axle Counter System Az LM on the busiest railway line in the United Kingdom

In 2010 Network Rail commenced the modernization of the Great Western Main Line. The Great Western Main Line links a number of thriving business towns and cities – from the might of London to the important regional economies of Oxford, Bristol and Exeter. It also connects to Heathrow as well as Gatwick Airport for business travellers and to some of Britain’s best loved tourist destinations in Bath, St. Ives and Newquay.

In the past 10 years a journey growth of 40% has occurred on the Great Western Main Line. The forecast of Network Rail is a growth of passenger numbers around London Paddington of 51% and around Bristol of 41% in 10 years. It is expected that 100 million passengers a year will be travelling on the Great Western Main Line in 2019.



Rail contact Sk30H

Being today the second busiest freight corridor into London, freight traffic on the Great Western Main Line is predicted to rise further.

Network Rail is investing in a transformational 10-year programme for the Great Western Main Line to meet these challenges including:

- *New electrification supporting high speed electric trains*
- *Major redevelopment of Paddington station*
- *Removal of track bottlenecks*
- *Modernisation of signalling system along the length of the line*

Reliability is the primary requirement to the signalling system. Therefore **Network Rail has chosen the Thales Axle Counter System Az LM as the main train detection system for the Great Western Main Line.** Thales Axle Counter System Az LM was introduced in the United Kingdom in 2002. Since then more than 8,000 of Thales’ rail contacts have been put into service on the tracks of Network Rail, the majority of them on the West Coast Main Line.

The West Coast Main Line is the busiest mixed-traffic railway route in Europe, and Britain’s most important rail backbone in terms of population served. It is connecting Greater London, the West Midlands, the North West, North Wales and the Central Belt of Scotland. Thales has acquired the contract for the Great Western Main Line against fierce competition, providing the best offer of a proven, reliable system, which due to

Thales constant investment into R&D is at the forefront of innovation of track occupancy detection systems.

The modernisation of the Great Western Main Line is one of the biggest orders of Thales Axle Counter Systems in recent years. Thales has already deployed 1,200 Axle Counter Systems Az LM rail contacts of the successful model Sk30H for the Great Western Main Line. These will be complemented by additional Axle Counter Systems Az LM equipped with 1,200 rail contacts of the newest model Sk30K, with the first deliveries imminent.

The rail contact Sk30K is mounted using 2 bolts through the web of the rail, a highly reliable and maintenance free method with no influence on the mechanical properties of the rail. It does not require any mechanical adjustment during the lifetime of the rail.



Rail contact Sk30K