



Client

Serco (www.serco.co.uk)

Country

United Kingdom

Location

London

Delivery date

February 2008

Project summary

Condition monitoring of:

- 11 Point machines
- 52 Axle counters
- Wireless communication of the data
- Real-time access to the information by web interfacing
- Installation of hardware & software
- Commissioning and testing
- Maintenance consultancy

POSS Docklands Light Railway

Docklands in London is an office and residential area built on the old East End docks of the Port of London.

Public transport in this area is provided by Docklands Light Railway, a driverless rail system, connected to the London Underground at the stations of Bank and Tower Hill. A connection to London City Airport was opened at the beginning of 2006.

The Docklands Light Railway (DLR) is operated and maintained by Serco Docklands Ltd. The DLR system has 40 stations and is still expanding. It carries almost 70 million passengers a year.

The first POSS system was commissioned in February 2005 at Canary Wharf station in the well-known Canary Wharf Offices Area (see pictures above).



Strukton
Systems

www.possinfo.com info@struktonsystems.com

serco

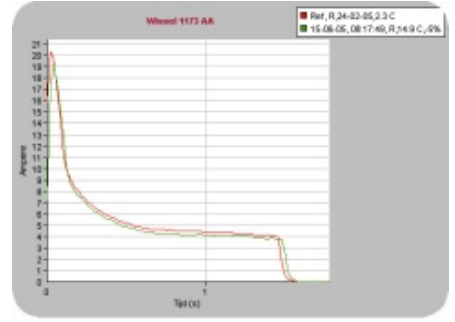
www.serco.co.uk



HW on movable frog

POSS monitors 3 points, 2 of which are equipped with movable frogs. The blades are equipped with clamp lock drives and movable frogs with HW drives (see pictures on the left)

Due to the short headway of the trains the point movements are highly frequent; approx. 300 times a day. The clamp lock and the HW are both powered by 136 VDC.

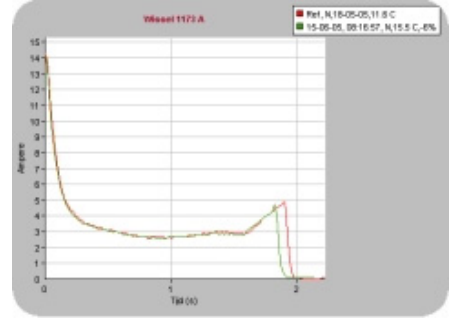


Typical HW POSS Graph



Clamp Lock

POSS measures the motor current of the point drives, the direction of the runs and the outside temperature. This data is sent via GPRS to the POSS server in the Netherlands. The Serco maintenance engineers have real-time access to the data via a web interface on their pc or mobile devices.



Typical Clamp Lock POSS Graph

Royal Mint Street Junction

A second POSS system has been in service at Royal Mint Street Junction since January 2008. This system does not only monitor the 6 points of the junction but also the Alcatel axle counter system.

The axle counter data is connected to the local POSS equipment over Ethernet. Through the POSS internet site, the service technicians are alerted in case of an axle counter fault. POSS also gives them information about the specific problem so that they can go directly to the right location with the right tools and spare parts. According to Serco's Program Manager Signalling and Systems, Derek Frend, this reduces the MTTR substantially.

Serco foresees a major rise in the importance of condition monitoring. POSS helps them prevent failures and reduce the MTTR. This is an important issue for the year 2012, when Docklands Light Railway will be the backbone of the public transport in the area of the Olympic Games.

For further information please contact:

Rob Redeker, tel. +31 (0)6 53 17 80 47,
e-mail rob.redeker@strukton.com

