

# Case Study Heathrow Airport – Condition monitoring of all baggage assets in T1 and T2

## Customer Background :

Heathrow is one of the world's busiest airports, with an automated baggage system spanning over 30 miles made up of over 100k maintainable assets. As part of a terminal performance stabilisation project carried out on Terminals 1 and 2, an analysis was required of the baggage equipment performance and reliability over the past two years to identify areas of opportunity and concern.

## Challenges :



SML were approached to create a graphical representation of the complete T1 and T2 baggage system driven by the SCADA equipment error logs (circa 8,000 a day). Our review included the data cleansing process to ensure only representative and relevant information was used to identify actual downtime within the operational window.

## Solution :



- Applied a 12 step cleansing process to identify and remove 'dirty' asset SCADA alarms
- Integrating data from the operational logs and asset SCADA alarms
- Created an interactive heat map on the routing layout of the system in a BI tool, which allowed the user to have a single consolidated view of system performance

## Business Impact :



- The business was able to clearly identify under-performing conveyor routes based on the failure types allowing them to focus on improving system availability
- The tool allowed the business to track ongoing performance and carry out root cause analysis based on the failure symptoms

## Customer Feedback:



*“It was a brilliant piece of work bringing two data sets together to allow us to analyse the system performance. The detailed report allowed us to monitor and track improvements as we implemented changes to the system and performed additional maintenance activities.”*

**Site Supervisor**