



Before

After



## Signal & Structure Renewals

### The Challenge

Network Rail, LNE Route, identified a number of signals and structures that they wanted to replace. There were multiple challenges:

They wanted a new signal with:

- A long and predictable life
- Very low maintenance requirements
- No risks of working at height
- Quick and easy installation with no maintenance regime.

This change out would need to be cost effective, so that the operational benefits, gained over the life of the new signal and structure, would provide a low life cycle cost.

### The Solution

The Route team identified the key factors that would meet the challenge, these included:

- Lightweight Signal and Structure
- Tilting Structure, without the need for additional plant and equipment.
- Signals with plug coupled connections, for reliability and fast installation.
- A system that could be adjusted and sighted from ground level.
- A signal with "Maintenance Free" designation by Network Rail.

The Unipart Dorman integrated Lightweight Signal (iLS) with the Assisted Lift Trunnion (ALT) was identified, as it provided all the required needs.

## The Service

Unipart Dorman work closely with the LNE team to assess the site specific requirements for each signal, including:

- Signal Configuration
- Post Height, from top of foundation
- Additional furniture, ID plates, speed boards etc
- Wind loading and deflection calculations

Once the details are checked and verified by LNE, Unipart Dorman manufactures the products and deliver the package, to allow quick and easy installation, to the LNE team for installation.

## The Result

**£11,000 in whole life benefits costs** is the estimated savings when installing a new iLS structure. This achievement is by reducing the maintenance regimes and an annual saving of **£750 per signal per annum**.

LNE have used Dorman's products and services to replace over 20 signals and structures per annum, utilising the Maintenance and Minor Works team. The replacement programme, uses fold-down structures could increase by **50%** with the launch of the **Heavy Duty Assisted Lift Trunnion** later in 2019, which will allow them to replace larger, more complex signal heads.

A **40%** cost saving when renewing traditional signal structures to Dorman fold-down signal solution.

A **60%** (utilising existing base) and a **30%** (new base) reduction in changeover time for signal and structure installation has allowed the LNE route to handover all possessions on time.

Furthermore the solution **Reduces Health and Safety risk** to workers as they will reduce lineside track time and working at height.

### Delivering value through:



**Increased  
Performance**



**Optimised  
Cost**



**Increased  
Safety**



**Reduced  
Risk**

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