

# Spikefast filler brings new life to old sleepers



Removing screw from a sleeper  
(Tube Lines)

**T**ube Lines' Change Challenge Cup programme continues to encourage employees to question age-old industry standards and seek out new and better ways of working underground.

This has led some employees to invent new equipment or modify designs of existing products. Others have gone out to the marketplace in search of products that will enable them to carry out their work more cost effectively.

The 2009 Quarter 2 winning team did just that and came back with Spikefast – a fast-drying polymer compound which is injected into sleepers to extend their lifespan, reducing the 2009 budget for these works by 20%.

Carrying out track lowering works – which often involves replacing aged wooden sleepers and track chairs – can place a lot of wear and tear on the sleepers. Replacing them is expensive, time consuming,



Gavin Silvey

labour intensive and not always necessary.

Breaking out just one sleeper that is set in concrete and replacing with new can take a team of nine around two hours to complete.

Because the work is slow and manual a weekend closure is often required to complete the replacement of multiple sleepers.

However, an injection of Spikefast into the sleeper which sets in just 20 minutes means that the sleeper can be re-drilled as new which extends its life and several sleepers can be completed during the four hours

at night when the Tube is closed to passengers.

Employees at Tube Lines are committed to finding better, more efficient and cost effective ways of working that contributes to continuously improving levels of safety and reliability on the Tube.

The Tube Lines team, led by Gavin Silvey, estimates that, by using Spikefast, 30% of the sleepers once identified as life expired and in need of replacement can now be safely reused.

This will allow Tube Lines to make significant efficiencies between now and mid June 2010. The team further estimates that, by continuing to use Spikefast during the second phase of the 30-year contract with London Underground, the cost and effectiveness of the work can continue to be improved.

Furthermore, by using this solution Tube Lines is keeping the amount of manual handling

to a minimum and reducing its carbon emissions as less wastage is generated and less new materials need to be manufactured and transported to site.

Commenting on the win, Gavin Silvey said:

“That well known saying, ‘if it ain’t broke, don’t fix it,’ doesn’t really apply here at Tube Lines because we are always being asked to challenge traditional working practices and to think about how we can achieve the same or improved levels of safety and reliability in a more efficient way.

“We probably would never have gone looking for a product like Spikefast if we weren’t encouraged to innovate the whole time. But when you see the results of innovation in terms of safer working conditions for the staff, speedier working and lower project costs then it just spurs you on to go out and find your next improvement.”