



# SEE-SAW

Two truck fleets test-drive a simple, low-cost tool that improves drivers' direct vision of the truck near side.

Will Dalrymple speaks to them

Originally invented 200 years ago for use in lighthouses, Fresnel lenses bend light by virtue of their structure: they are made of concentric rings, each a miniature prism. This provides the benefit of being flatter and lighter than other sorts of lenses. These days, they are often made as flat plastic sheets.

Stuck on the inside of a window in a bus, coach, truck or van, such lenses offer drivers a semi-circular external view of the outside of the vehicle not otherwise visible. In trucks, they are commonly fitted in the centre bottom of the near-side window, to help reduce the risks of the truck to cyclists and other vulnerable road users.

So much so, in fact, that they can be used to comply with requirements of FORS (Fleet Operator Recognition Scheme), that focuses on minimising trucks' blind spots "through a combination of active and operational direct and indirect vision aids and driver audible alerts" (FORS Silver, requirement S4: <https://is.gd/owodoz>).

To see how well they work in road

operations, two fleet companies agreed to share their experiences with free samples of the £10+VAT Hi VU model supplied by Lens-Tech (although other brands are available).

As it happens, one - KBC Logistics - was already a user of Fresnel lenses, and the other - Nagel Langdons - was a newcomer. The experiences of both were broadly positive (see boxes below for specifics).

KBC Logistics fitted the new lenses to a few of the 140 tractor units that it uses for transporting containers. It started fitting Fresnel lenses in 2012, because of the risk of near-side blind spot incidents involving vulnerable road users such as cyclists, as well as the risk to truck bumper and stairs damage caused by

## KBC LOGISTICS

- The A5 size suits drivers better than A4 Fresnel lenses because it blocks less of the view out of the window.
- The placement of adhesive - in strips around the edge, rather than across the entire sheet - improves visibility.

collisions with posts when manoeuvring, according to transport director David Ashford.

Meanwhile, food distributor Nagel Langdons, part of the Nagel-Group, ran a month-long trial of lenses in a Mercedes Actros long-distance tractor, a Scania G-cab distribution tractor, and a Scania 26-tonne rigid.

Engineering manager Tyrone Lanaway says that he had seen the lenses used in the rear window of buses, adding: "I hadn't considered them before for trucks; I do now."

He passed on a story from the Actros tractor driver, who was travelling in London and managed to spot a red car in the lens that was not visible in the truck's mirrors.

Lanaway says: "It's certainly something I see as a benefit, and I didn't realise how much until I actually sat in the driver's seat and saw the difference [that] it makes. I would say it should be a necessity; it should be fitted within the window." **TE**

## NAGEL LANGDONS

- The mirror can catch the sun, focusing it to a bright white moving point inside the cab, which can be distracting to the driver.
- The lens smudged the window; although its adhesive proved strong enough to stick the lens in place even when the window was rolled up and down, the driver had to clean off smears on the window above the lens, suggesting that some of its adhesive had migrated on to the rubber, and then on to the glass.