

# PRESSURE TESTING

Keeping up with tyres and running gear is a problem for many operators. Steve Banner talks to Thamesdown Transport

Irregular or half-hearted tyre pressure checking can cost operators a packet, as well as compromising safety. Begbroke, Oxfordshire-based WheelRight believes it has the answer, with a pressure monitoring system that can be fitted flush to a depot floor. And bus operator Thamesdown Transport agrees – which, given its cautious approach to new technology, has to be a tribute to the system's capabilities.

The device calculates tyre pressures on vehicles driven over the monitoring strip at up to 15mph. It displays pressures on all tyres and flags up colour-coded alerts if there are problems, and emails or texts are sent automatically to the fleet manager in near real time. Thamesdown's depot, which it shares with Howard Tenens in Swindon, is one of five so far on the installation list and reckons it is achieving annual savings of around £33,000. Not bad for an 88-strong bus fleet, mainly single-deckers, covering 3 million miles and carrying 9 million passengers annually.

"That's £375 per bus, per year," comments WheelRight chief executive John Catling. How? Fewer tyres have to be replaced; the cost of having to check pressures manually has been eliminated; and fuel costs, along with CO<sub>2</sub> emissions, are down, he explains. "The saving on fuel and tyre expenditure works out at around 0.75% and 8% respectively, and that's without any labour saving," he says.

## Staying regular

In his case, the strip was installed just before the bus wash, so vehicles drive over it every night prior to being cleaned. Regular pressure monitoring, he says, has also led to improved braking performance and a significant reduction in the risk of sudden tyre blow-outs, with punctures now being spotted at a rate of four per month before buses leave the depot.

"This has also reduced the number of instances where we've had to attend vehicles at the roadside," says head of engineering Dave Spencer. "That, in turn, has cut disruptions to our services." And note, Thamesdown's tyres have to work hard. "We've got a lot of roundabouts in Swindon and, like all urban bus fleets, we get a certain amount of kerbing and scuffing," he observes – adding that it can also highlight pressure anomalies, such as rear tyres wrongly inflated to the pressure for front tyres.

What does the system cost? "It has to be installed in a flat,



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concreted area and the civil works – which include digging a trench – typically cost £3,000–5,000," answers Catling. "We would charge an operator running from 60–80 vehicles £1,000 a month for the package on a three-year deal," he adds. "We hope to have the system in service at 40 locations within a year."

And he's not stopping there. "We've developed a tyre temperature sensor that we are trialling with Thamesdown," he says. Automatic tread depth checking will be next, along with sidewall inspection. A weigh-in-motion package is already available for axle weights.

For Thamesdown, this project has been a success to mirror that of its depot, which also boasts rainwater harvesting that feeds the bus washing facilities (the water is stored in a 200,000-litre underground tank), 432 solar panels to keep electricity costs down, and a busy ATF (Authorised Testing Facility). "That's open Monday to Friday and we're pulling in business from quite a wide area," says Spencer. "The fact that the ministry testing station in Calne has now closed has helped." 