

# Too much, too late?



Knowing the weight at which your vans and trucks run seems a blindingly obvious necessity, not just a sensible choice. Robin Dickeson looks at the equipment and the arguments



**W**hen you're trying to do the job in the teeth of fierce competition and even fiercer bureaucracy, against a backdrop of minimal margins, the last thing you need is a ticket for overloading. Yet the line between overloading and under-loading is expensively thin. Some cut corners, cross the line, overload and risk the consequences. For most others, caution rules. But this can prove expensive, too.

The obvious solution is to monitor each vehicle's (and axle's) weight and stick to the rules – as increasing numbers of truck and even more van operators are finding. The technology is readily available and, although it varies from large, expensive fixed-plate weighbridges to portable versions, weigh pads and on-board systems, there is almost certainly something for everyone.

One point: virtually all on-board systems measure suspension movement to give a 'load indication', rather than a precise vehicle or axle weight. Often that is enough, and many also link with a vehicle's telematics to warn the traffic office before an overladen vehicle leaves even a remote site. Stuart Richardson, at vehicle weighing specialist Red Forge,

says this proves very valuable. He cites the example of muck-away tipper operators, where site managers may pressure drivers to run with illegal loads. Telematics, coupled to vehicle and axle weight data, can save the day.

At the other end of the on-board scale, sophisticated load cell systems between bodywork and chassis can be accurate enough to comply even with the Weights and Measures Act. Generally, only firms handling bulk or fluids, and needing to prove delivery quantities, go to this expense.

#### Indication only

That said, most truck makers now offer some factory-fitted load indication as a relatively low-cost option. Daf's system, like the vast majority, measures air suspension deflection, and a tractor coupled to a suitably equipped trailer can also link to its systems, giving a gross combination weight indication, too.

However, interest and orders vary. Volvo reckons some 50% of its customers specify its load indicator systems on new trucks. Tony Pain, outgoing UK marketing director at Daf Trucks, says that between 5–10% of his customers request the option. "The real breakthrough will come with a simple, on-board

**Left: Avery Weigh-Tronix load pads**  
**Above: Red Forge advises that telematics, coupled to vehicle and axle weight data, can certainly save the day**



**More operators are now taking an interest in van weight, particularly those running mixed fleets of light and heavy vehicles. "Most worry about light vehicles, where there is a greater risk of a 30% overload," says Colin Smith, Avery Weigh-Tronix**

Weights and Measures Act compliant system," he muses. But that's a distant dream. "Present systems need calibration and most are sensitive to the effects of moving a sliding fifth wheel," warns Pain, explaining that suspension hysteresis (or stiction) gets in the way of accuracy. "But you get a level of accuracy sufficient to help prevent you being done for overloading," he says.

But it's a different story with vans: apparently, without exception, no van maker offers any weight indication, either with factory-fitted options or dealer-arranged retrofits. Which is odd: their stance flies in the face of vehicle weighing equipment makers' sales figures. Virtually all say that they sell more to van fleets than any other. Most also say operators running mixed van and truck fleets often find it more important to know their van running weights than those of their trucks. Truck drivers mostly have a fair idea when their wagons are near the load limit, they say. But van drivers seem to need help.

### Van worries

Many vehicle weighing equipment makers suggest that van makers and bodybuilders don't want load indicators on the vehicles they supply, because they might reveal embarrassingly small payloads. It's certainly true that this is a risk when vans have retrofitted tail lifts, racking systems etc.

True or false, for many van operators, the loading principle is to stuff things into the back until they're full, then close the doors, hope for the best and go. This is fine with a low-density load, but not with anything heavy. VOSA (the Vehicle and Operator Services Agency) recalls one 3.5 tonne van it stopped after it crossed a prototype weigh-in-motion sensor. The driver said the van was only three-quarters full of double-glazing material, so it couldn't be overloaded. But it was: it grossed at 10.5 tonnes.

Admittedly, that's an extreme example, but, had the van run in a mixed 'O' licence-controlled fleet, the operator would have suffered. And note: VOSA says it is now running a campaign targeting van drivers and operators – albeit mostly because of their appalling maintenance records, with 50% of vans failing their MoT tests.

Note also that recent figures from VOSA reveal

that in 2012–13, more than 60% of van 'offences for prosecution' involved overloading. Also note that, although VOSA's effectiveness report shows just 5% of checks aimed at vans, the agency's vehicle targeting policy is changing. Asked to comment recently, VOSA stated that there is nothing to stop it from weighing vans. Indeed, it is happy to do so. "We find that overloading is one of the more common issues with this sector," said a spokesperson. Sounds like a warning.

That said, while vehicle weight checks can save accidents, your reputation and your 'O' licence, reducing incidences of underloads is also important. Vehicle weighing systems specialist Axtex's Derek Hack remembers one waste haulier, based south of London and near a public weighbridge, which tried too hard to avoid overloading offences. When it installed the Axtex weighbridge kit that VOSA itself uses, it quickly discovered that it was routinely under-loading by about a third.

Hack also talks of fitting eight dynamic weighbridges at Hanson Building Products production sites, along with Axtex's fleet management software, which stores axle and gross vehicle weight limits of every truck and trailer in a fleet. Hanson now uses this data to calculate payload efficiency for each of the 55,000 vehicles it weighs every year. Hack reckons the payback was two to three months, not the two or three years Hanson expected.

Awareness – albeit from a low level – is growing. Paul Moody, of Solent Scales in Chichester, says growing awareness of the risks of overloading has pushed its axle pad systems up to the best seller slot, with van sales overtaking those of truck operators. "People don't believe how much weight they've got on board and are horrified when they find out," comments Moody. <sup>15</sup>

## Fixed penalties, or worse

The DfT's (Department for Transport) new overloading penalties bit on 16 August 2013. Fixed penalties span from £60 to £200 for overloads up to 30%. Overload above 30% and you're virtually certain to receive a court summons. "This should alert operators, who also fret about related health, safety and liability risks. Compliance is the key word now," says Avery Weigh-Tronix's Colin Smith.

Smith also says that underloading, once a secondary worry, is now being seen as more important. Like many of his peers, he is critical of van makers, their dealers and some bodybuilders. No operator risks a fine for underloading, he notes. But the lost revenue may be worse than a few fines for overloading.