

Q&A: vehicle weighing

Keith Gresham, managing director at **Axtec**, answers some key questions around commercial vehicle weighing systems



Q: What's the most important issue affecting the industry in terms of vehicle weight?

A: Safety. There was a report last year commissioned by Volkswagen that discovered that over half of vans on the road in the UK were overloaded. That equates to three million vehicles and growing at a rate of 24 per cent per year. The DVSA stop around 10,000 vans a year and find that about 93 per cent of them are overloaded.

Overloading affects all the major components of the vehicle – steering, braking, clutch, suspension, tyres – and increases fuel consumption. It can be highly dangerous, as well as having a negative effect on productivity, not to mention the penalties for breaking the law.

Q: What can be done?

A: More weighing facilities need to be introduced, because there's a huge shortage of them presently. There are still some plate weighbridges around, but a dearth of publicly available axle weighbridges. Axtec Dynamic can be stamped as a public weighbridge, allowing other hauliers and operators to be charged for using it.

The one at our Runcorn site generates between £6-£10,000 per year. A weighbridge could be paid for in three years, after which a profit can be made. Almost every week we receive calls from hauliers desperate to weigh their vehicles' axles and asking where they can get it done.

Q: What advantages does a dynamic weighbridge offer?

A: They're essential for multi-axle vehicles. They drive slowly over the platform to avoid the weight transfers between compensating axles caused by stopping and starting, which can lead to errors. Axtec's dynamic weighbridge can produce results to within ± 0.5 per cent accuracy in less than 40 seconds.

There's an initial outlay, of course, but costs can be quickly recouped. Maximising payload on vehicles is essential – one Axtec customer, for example, found they could install axle weighbridges and the improved efficiency meant they were paid for in less than three months and, thereafter, they were making additional profit. We also offer an AIM (Axtec Install & Maintain) scheme to help spread the cost.

The importance of correct installation cannot be overstated. Calibration at the factory is only part of the procedure; testing on site is essential to take into account of the site conditions, concrete levels etc. Our weighbridge test vehicle is designed specifically for on-site calibration of axle weighbridges, and our directly-employed construction teams specialise in perfectly flat concrete approaches to achieve optimum accuracy.

We are the sole contractor to the Driver & Vehicle Standards Agency (DVSA) for their national network of axle weighbridges, but anyone who operates any



sort of commercial vehicle can benefit. From light vans to the largest artics, an axle weighing system can improve safety, vehicle performance and profits.

Q: What other weighing solutions are available?

A: No single type of axle weighing system will solve every problem. For example, vehicles on multi-drop work could be weighed at the depot, but what happens when the load changes during the day? How does the driver know that when he's made his first drop from the back of the vehicle, that the front axle hasn't become overloaded? What about vehicles which collect rather than, or as well as delivering?

Weighpads are widely misunderstood. They have an important role to play but are fairly limited in what they can do. Ideally, they are best for occasional weighing of two-axle vehicles but need managing correctly. It's essential they're positioned correctly and used on flat, level ground to optimise accuracy. They are a very useful tool for carrying out surveys or training under supervision, but not really a practical solution for a driver out on the road.

The Axtec OnBoard Axle

Load Indicator can be fitted to vehicles from 2 to 44 tonnes and more, providing the driver with instant, axle, gross and train weights. As well as protecting the vehicle, operator and driver from overloads, it ensures the vehicle's full weight capacity can be confidently used. It can also be linked to reversing and nearside cameras, store overload data automatically, and connect to tracker systems.

With 25 years' experience in the industry, Axtec provides the full range of systems – dynamic, static, on-board and portable – and specialises exclusively in axle weighing. We work with operators to find out if there is a problem to solve, lend or hire equipment to evaluate, and advise on the best technical solution – and are regularly called as an expert witness in contentious judicial cases, such as where overloading is involved.

From our Runcorn manufacturing facility, huge investment goes into research and development of new technologies, software testing, fabrication, construction and installation. Regardless of fleet size, we can provide a full support service.

www.axtec.co.uk

Weighing innovations from Intercomp

Among the products suitable for commercial vehicles available from weighing specialist Intercomp is the Low-Speed Weigh-in-Motion (LS-WIM) system, which functions as either an unattended or manned weigh station.

The LS-WIM scales incorporate NTEP-certified strain gauge load cell technology – the same type used in static truck scales. The system is minimally invasive when compared to large, in-ground platform truck scales, claims the company, and will increase the flow of trucks through any type of entry/exit gate to meter loads coming in or going out.

The installation of Intercomp's LS-WIM In-Ground Weigh-In-Motion Scales, in place of older static in-ground truck scales that require drivers to stop on the scales to manually receive a weight, will increase overall efficiency, claims the company – avoiding the need for drivers to wait in line until the scale becomes available, while also helping to reduce maintenance costs.

In addition, the small footprint of Intercomp's LS-WIM scales means installation can be completed in a few days, keeping downtime to a minimum, says the firm, which also cites reduced overall and installation costs as key advantages.

The LS-WIM Scales can be integrated with printers, overhead displays and traffic lights, along with cameras, audio integration, RFID and cloud-based software for remote viewing and data recording.

Intercomp's complete line of Weigh-In-Motion (WIM) equipment has been field-tested for a wide variety of sectors. System capabilities range from Low-Speed WIM to High-Speed WIM applications, for high-volume data collection and

screening for direct enforcement with Virtual Weigh-In-Motion Systems.

Aaron Van Heel, marketing manager at Intercomp, said: "WIM is an exciting solution to streamline weight gathering operations."

As a manufacturer of portable wheel load scales, Intercomp has also recently announced an update to its most popular wheel load scale models in the form of a solar charger built into the scale indicator – which allows the scales to operate continuously without requiring direct power charging.

This solar boost eliminates the need to recharge batteries in-between uses, says the firm.



"Battery life is a top consideration for many customers, and the ability to operate without having to manually recharge just makes weighing that much easier and reliable," said Eric Peterson, VP of sales, marketing and customer service.

"By building solar chargers into the indicators, we're able to offer unprecedented battery life for our solar-equipped products and eliminate the need to manage charging and replacement of batteries – which not only benefits our customers, but the environment as well."

The solar charging technology will be standard on all PT300, PT300DW, LP600 and LP600-15T wheel load scales moving forward. Charging cables will no longer be included, but are still available to be ordered if desired.

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