PUMP THE BRAKES

Mobile brake testers are helping some companies save money compared to using in-ground versions, but not everyone is sold on them. Ben Spencer learns more

testers. How

obile brake testers are proving popular at Totalkare due to a range of benefits that are off-limits to their static counterparts. Field service engineer Luke Simmons says that operators can transport a brake tester between different sites via a trailer and potentially save between £5,000 and £10,000, depending on the groundwork requirements.

He says: "A company opting for an in-ground brake tester would probably need at least £5,000 to get the frame sunk into the ground; plus you have additional costs associated with groundworks and an electrician. Alternatively, you can plug in and use a mobile brake tester, as long as you have a power supply."

A mobile brake tester may be the only option for companies in rented facilities, who would need permission from the landlord for the necessary excavation for an in-ground product. What's more, when the company moves premises it can take the mobile unit along.

Simmons confirms that Totalkare's BM and VTEQ ranges of mobile brake testers (BM units pictured, lower and upper right) can test fully-loaded HGVs and trailers, as well as vans and cars, as long as the wheel can touch the gritted roller and turn the middle roller. He notes that width is not an issue, as Totalkare offers different roller lengths for its BM solution of 1-1.5m; special builds are available on request to suit customer requirements.

Totalkare also offers in-ground

do the features differ between mobile and in-ground brake testers? Simmons confirms that both products have the same software, roller lengths and axle weight options, but the power supply can be different. "We offer a variety of power options for the mobile brake tester, for example 50A or 32A single-phase options, and 16A up to 63A versions. The power supply could be a factor if you are transporting a mobile

Totalkare provides on-site training to customers for its mobile brake testers, which it offers for sale ex-stock.

Another supplier of in-ground and

brake tester between sites."

mobile brake testers is VL Test Systems. It offers a mobile brake tester that is unloaded from a 7.5-tonne truck with a hooklift (pictured above, inset). The Mobile Roller Brake tester (VLT16233/M5P/4) has a roller diameter of 260mm, said to make it suitable for official inspection of vehicles. Its testing width ranges from 800–3,000mm so that it can

test cars, vans, trucks, lorries, buses and trailers. It is said to be able to fit any wheel or tyre, including offroad tyre types with deep block treads.

The all-in-one unit includes attached ramps, which deploy automatically using hydraulics, controlled by remote control. (See pp17-18 for a profile of a similar unit used for roadside enforcement.)

FLATTENING OUT

Generally speaking, brake tests need to be situated on a level piece of ground in order to be effective, according to VL Test Systems director Brian Beacon.

"If the roller brake tester is not level crossways or longitudinally, then you will get inaccurate measurements in brake





force bind and imbalance, as the weight will be transferred from side to side or front to rear."

While not an issue for in-ground brake testers - which, as their name implies, are recessed into the ground - this limitation could pose a problem for mobile brake testers, whose rollers sit on top of the ground, and so require ramps for access. Beacon adds: "It is good practice for it [the vehicle] to be level, but that is normally impossible [for mobile brake testers] because you have to use ramps to access it."

In response, Simmons contends that extension ramps can be used to get the vehicle level. But Beacon disagrees, insisting that the results will be incorrect if the vehicle is not tested on a level plane. "The only way to overcome this issue would be to have ramps for the length of the vehicle. This is not feasible for a 17m artic, because the ramps would need a 34m-plus run-up."

Turning to set-up, one worker can deploy a mobile brake tester single-handed by moving it into position, folding out the ramps, removing the wheels, setting up and adjusting the feet and turning the power on for the brake tester and PC. A helper and a pallet truck

may be required for heavier ramps, which can vary in weight from approximately 20kg up to 45kg in aluminium. Steel ramps can weigh as much as 100kg.

WIDER TRENDS

After the potential pros and cons of mobile brake testers were brought to light, the conversation turns toward DVSA requirements. Is it using internet connectivity to monitor the test results? Beacon clarifies that this arrangement currently only applies to Class 4 and Class 7 vehicles (cars and vans with up to eight passengers, and light vans between 3-3.5gvw), but could extend to HGVs in the future.

DVSA recommends that brake tests are carried out on vehicles loaded with a minimum 65% total axle vehicle weight, at least four times a year. However, Simmons predicts that the required testing frequency will increase in future, as operators are increasingly carrying out brake tests at vehicle inspections every six weeks (or eight times a year).

Are owners carrying out brake tests more than service providers? Simmons

MAINTENANCE TIPS

VL Test Systems offers its care advice:
• Safety first: technicians cleaning

- Safety first: technicians cleaning a roller brake tester should use the approved equipment and follow the correct processes
- Properly trained staff are essential to the longevity of a brake tester. Make someone the RBT champion to take ownership of the equipment; then they will look after it
- Regularly clean out the roller brake tester trays
- Check for even wear across the rollers and make sure that rollers are clean, in good condition and well-gritted
- Where needed, ensure the cover plate bolts and the chains are greased
 - Check that the bottom of the pit is dry
 - Do not dump oils, hydraulic fluids or antifreeze over the roller brake tester
 - Before testing a vehicle, ensure that there is no tyre damage, other than reasonable wear
 - Ensure the vehicle is balanced correctly before testing it
 - Always follow the service and calibration schedule.

says that the 65% loading requirement means that the truck must take a fully-laden and -secured (and see also feature, pp20-21) trip to a main dealer test location, so those who own their own brake testers can save time and fuel. He adds: "Independent companies have become busier since the coronavirus pandemic and are buying more equipment."

However, Beacon argues that the increase in sales of brake testing equipment is not due to a new trend of operators looking to do testing themselves. He says: "It moves in cycles, with some people wanting to do their own in-house maintenance and then going back to leasing a vehicle with all-in maintenance. A lot of operators have been able to invest in more mobile brake testing equipment since the government made loans available to them during COVID-19, but the cycle seems to change as the years go on."