



PIT YOUR WITS

Maintenance pits can be dark and dingy places, and even treacherous working environments. A deep clean, with upgraded lighting and safety equipment, can be transformational, finds Brian Wall

The modern maintenance pit has had to overcome the negative press that plagued its forebears, much in the way that engineering has fought to shake off its 'oily rag' image. True, there's been a lot to overcome: maintenance pits made from concrete or brick were not the most wholesome places in which to work, with bad light and cracks allowing water in, as well as being hard to keep clean. Not only dark and dingy, pits that have seen active duty over many years can also pose 'slip and trip' hazards to unwary technicians.

Certainly, there are ways to improve that working environment, such as performing a deep clean, installing upgraded lighting, matting and safety equipment, for example, to make pits safe and comfortable workplaces. One key benefit is that such modifications can be carried out with minimum downtime and without any construction work.

Going a step further, pit renovation is also something to be considered.

According to Matt Dille, marketing manager, Premier Pits, a prefabricated steel pit is the way forward. "They are easy to keep clean and watertight. In older workshops, concrete pits are still in use. However, they are fast becoming a thing of the past, not only due to structural or health and safety issues, but more often than not because they are simply the wrong dimensions for the types of vehicles being worked on, particularly in the bus industry, where low floor buses are now commonplace. And when it comes to the building of new workshops, installing a prefabricated steel pit can be up to 70% quicker than in situ concrete pits." (A recent Premier Pits installation at RH Commercials is pictured above.)

PIT REFURBISHMENT

Premier Pits has installed more than 4,000 units over the last 40 years, he says. "These are hardwearing and built for everyday use. Yes, over time they are bound to look a little worn and dirty, but,

unlike pits built from reinforced concrete or bricks, a prefabricated steel pit lends itself to a cost-effective refurbishment - making them look as good as new. As with any tool in the workshop, if you look after it, it will look after you."

Typically, a pit will require refurbishment after between 12 and 15 years. In terms of cleaning, the general consensus is that this should be done once or twice a month. A pit refurbishment from Premier Pits includes cleaning, shot blasting and repainting, along with light replacement, if needed. "There is also the option to update the pit with health and safety features, such as pit covers, handrails, painted floors and Skipper barriers," adds Dille. "Our pit painters visit the site and will work to a schedule that limits downtime and disruption to the workshop. The result is a pit that is back to its original condition and a better environment to work in."

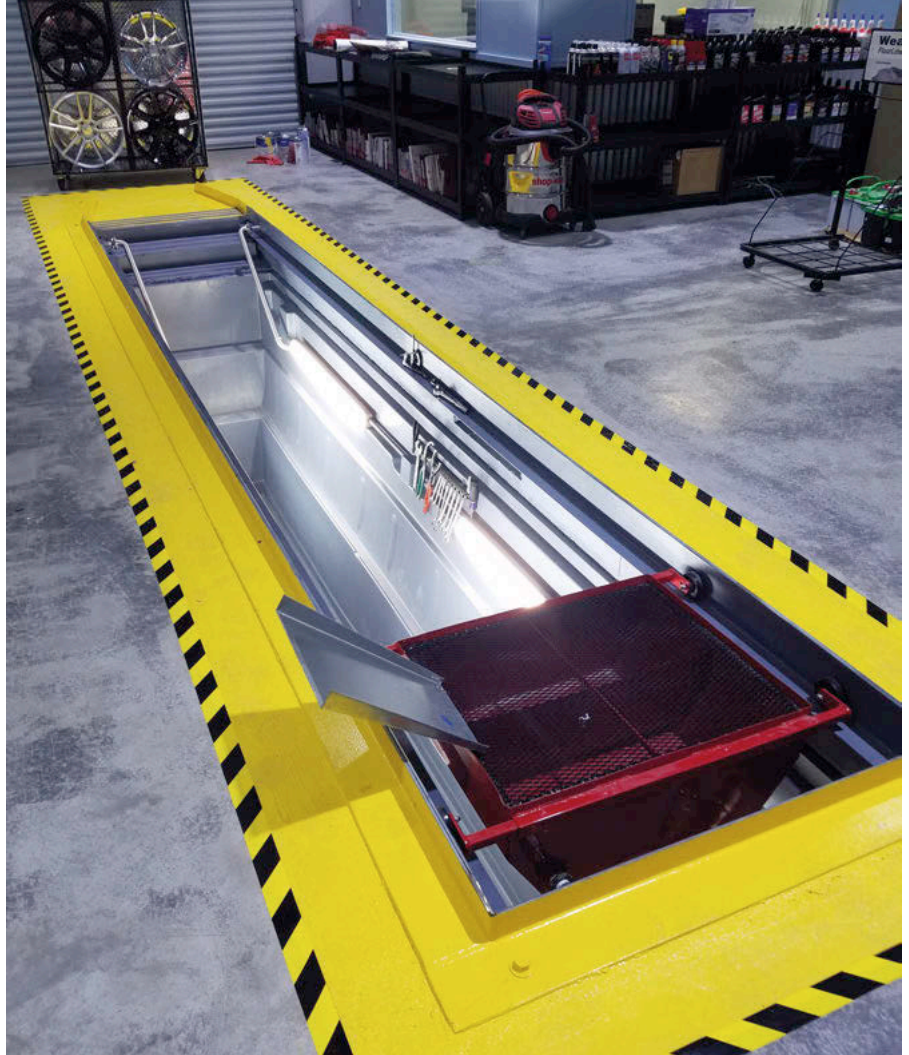
Apart from workshop or garage pits often being oily, greasy and generally dirty places to work, says

Mike Marczynski, chief executive of Checkpoint Safety, "many take in groundwater, depending on the quality, or lack, of construction, be they concrete or brick, whereas GRP is a complete barrier to any groundwater ingress".

Checkpoint Safety, through its sister company, offers the Mech-Mate Motorpit (pictured, right) as an alternative choice featuring washable, non-absorbent white GRP. "These can be fitted out with power sockets, CO detectors, tool trays, sliding seats, low-level fume extraction, ladders and non-slip flooring surfaces. This should be a far nicer environment than concrete or brick, which, once grubby or oily, is difficult to clean, he claims.

"Where operators do not have the luxury of headroom in a workshop, precluding the use of vehicle ramps, the alternative we'd suggest is to fit a Mech-Mate Motorpit. Having both a ramp and a pit means work on a vehicle – for example, the drivetrain – can be carried out simultaneously with work to the cab, body or other mechanicals, such as brakes and bearings."

What about the economics when comparing the cost of pits versus hydraulic vehicle lifts? "Each pit is made to a certain size, depth, width and these factors govern the price," states Marczynski. "The smaller they are, of course, the less expensive. For cars, we start at about £1,250 and go to around £4,000. A recent quote for a 10-metre length pit at typical car widths, was around £9,000, but new moulds are being created specifically for goods vehicles, in view of the wider track of trucks over cars. Prices are being calculated. It's the same for vehicle lifts. You can go for the cheaper stuff on eBay or buy higher quality engineered products. Direct price comparisons on pits versus ramps are not really valid, as there are so many variables involved that influence this."



PITS OR LIFTS?

Of course, pits are not the only accepted means for garage operators to carry out vehicle maintenance and inspection; vehicle lifts enjoy a strong following, too.

Dilley contends that while lifts used to be the most popular, the pendulum has swung toward vehicle testing pits. Why? "First, initial set-up costs tend to be lower for lifts, although that does depend on the length of the vehicle pit, installation conditions, accessories fitted and so

on," states Dilley. "That said, lift costs depend upon the type and quality of lift installed, as some kinds of underground lifts are more expensive. Then there is roof height where vehicle pits have a distinct advantage, as they can be used in buildings with lower roofs."

Where vehicle pits win hands down, he adds, is on running costs. "Once installed, a pit can last forever. Lights and safety covers may need to be replaced from time to time, but, other than a respray, the new steel prefabricated pits have very few other running costs. Lifts need constant maintenance and replaced parts. On top of this, they have a finite life." Lifts can also lead to cracked floors. "The strength of the floor has to be considered," he points out. "Also, unless large well-bolted bases are incorporated into the posts, constant use can lead to concrete floors deteriorating – and poor-quality floors can lead to unstable lift posts."

That said, a point very much in the favour of lifts is that they can be moved easily to a new location, at relatively low cost. Once a pit has been installed, attempting to relocate it is not only difficult, but uneconomical. **TE**

AVOIDING THE PITFALLS

As a maintenance pit is technically an open hole in the ground, it is down to employers to protect their staff from possible falls ('slips and trips') and the HSE has issued comprehensive guidance (www.is.gd/yatija) to help keep their workforce safe. Inspection pits, states the HSE, "present particular hazards and are a common cause of accidents, not only to those unfamiliar with the premises, but also to employees who momentarily forget the presence of an unfenced pit, or who slip or trip and fall into them".