



CHOCKS AWAY!

The humble wheel chock can be found in garages, distribution centres and ports across the country, but how many of us really know how to use them correctly, or even how to choose the right one in the first place?

Lucy Radley finds the answers



Anyone who has undergone an IRTE Workshop Accreditation audit will know that health and safety provisions are key. It is vital that vehicles are immobilised properly while technicians are at work, and sometimes the most obvious measures – engaging the parking brake and taking control of the keys – aren't practical, or enough on their own.

There is, in fact, such a thing as a DVSA-approved wheel chock, so the first place to go is, naturally, to DVSA itself. The DVSA recommended specification is for wheel chocks used in authorised testing facilities (ATFs). It is used widely when carrying out ATF site checks. If the ATF is not using appropriate chocks, they can be suspended or have their ATF contract terminated.

As DVSA points out, there is no such thing as a 'standard' wheel chock. It is the wheel chock which must comply with the standard. This was developed by DVSA health and safety and policy teams, with input from external stakeholders. As well as the trade unions, this included industry organisations such as the Road Haulage Association, Logistics UK, and the Garage Equipment Association.

TESTS

Several types of wheel chocks were tested by DVSA to ascertain their effectiveness, and establish which type is the safest to use during annual testing. The recommendation is that a chock of

solid rubber should be used, conforming to SAE AIR4905. This is an international standard originally developed for aircraft wheel chocks, and reaffirmed by SAE International in 2011. The chock should also have a curved front, as DVSA has concluded that chocks of this kind offer "the best mitigation to risk and considerably lower the chance of injury".

In testing, these chocks were the least likely to flip or move, were difficult to drive over or squash, and were "the best fit to the tyre". Plastic and metal wheel chocks are not recommended as they are too lightweight, very likely to move, and are especially poor on concrete. Plastic chocks can also crack and break easily. Chocks with metal inlays pose a higher risk of injury should

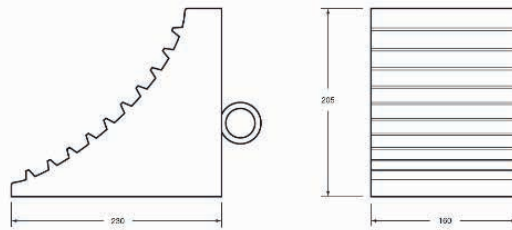
they move, so are not recommended either – these would also be unsuitable for a dangerous goods environment, due to the additional safety measures associated with hazardous loads.

ADVICE ABOUT USING CHOCKS

A guide written by US tyre service equipment manufacturer ESCO offers advice based on the Occupational Safety and Health Administration specifications used in the USA. As with the UK HSE, these rules are centred around the use of chocks on loading docks, but ESCO also gives more widely applicable guidance, including:

- Always chock wheels at the centre point of the wheel, never to one side or at an angle
- Always position the wheel chock against the wheel so that it is making contact
- Always use a minimum of two wheel chocks
- For vehicles with two or more axles, which are being chocked on a level gradient, the front tyres should be chocked in both the front and rear position
- Improper chocking can lead to the chock not working correctly, and/or could lead to damage to the vehicle, or even possible injury/death.

The full guidance, available via www.is.gd/izawej, covers both road vehicles and those used off-road and in mines and quarries, with a payload of up to 250 US tons (approximately 227t).



PIT SAFETY ADVICE

Chocks may be used once vehicles are parked over workshop inspection pits. When manoeuvring vehicles into place, the right measures need to be in place to create a safe working environment, warns supplier Totalkare. Just like any other workshop equipment, a pit is only as safe as the people who use it.

To guard against the risk of vehicle accidents, Totalkare advises that workshops where staff are manoeuvring vehicles around or over an inspection pit should have:

- Highlighted pit edges (approximately 150mm wide) as a guide for drivers
- Carefully placed mirrors around the pit to help drivers see their own wheels
- A clean and tidy area around the pit (with no tools or parts lying around)
- A competent and fully trained driver – don't let just anyone drive on to a pit
- A designated, trained marshal – to instruct and guide the driver, and watch for other vehicles or workers nearby.



ramps and docks. It mentions that chocks are mandated under ADR rules when filling tanks of vehicles that carry combustible fuel. ADR vehicles also must carry at least one wheel chock.

“Chocks should be suitable for both the type of vehicle they are expected to restrain, and the ground conditions, and a robust safe system of work that covers the use of wheel chocks is important to ensure the safety of those putting the chocks in place and removing them, especially if FLT's and other vehicles are operating in the same area.”

Rubber product manufacturer Polymax offers advice on chock choice in a blog post (www.is.gd/apohic). As well as covering shape and material – both of which were covered by DVSA – there is also a section covering wheel chock size. This advises that the height of the chock should be “at least a quarter of the height of the wheel” where it is to be used on level ground. If any kind of slope is involved, that height

should be increased. It also advises checking the maximum load of the wheel chock – some have a hollow core, which will lower the price and weight, but “will also reduce the weight it is able to hold”. [ITE](#)

The chock shown in the standard (drawings pictured at top) has a 230mm base, a height of 205mm and a width of 160mm. However, DVSA says that the chock used should be specific to the type of wheel being supported – a chock sized for a lorry, for example, would be too large for use with a minibus. DVSA does not recommend specific models or a specific supplier, but indicates that the Garage Equipment Association can provide advice. Other standard markings to look out for are SAE J348 and DIN 76051, both of which are recognised worldwide.

HSE ADVICE

While wheel chocks are mentioned in the Health and Safety Executive's motor vehicle repair guidance, this is only to advise their use, rather than specifying the chocks themselves. Specific guidance received from HSE is angled more at applications around loading



WARNING

Wheel chocks should be sized to suit the width of the wheel they are used with. Chocks that are too narrow might not safely immobilise a vehicle