

Tyre handling workshops

Carrying tyres



Photo courtesy of Kwik-Fit GB Ltd

The problem

All tyres can be awkward to hold and carry. Carrying regular-sized car tyres by hand is a low to moderate risk activity. But, for larger commercial and agricultural tyres, there is a serious risk. Potential risks include:

- carrying distances exceeding 10 m;
- loads up to 20 kg for two typical van tyres;
- bad weather leading to wet and slippery floors;
- steps or uneven ground to negotiate.

The solution

Handling aids can avoid the need to repeatedly carry tyres and reduce the handling-related injury risks. Think about how these will best fit with your storage methods. Large-based sack barrows are useful, especially if you stack polo style. These protect your back, they allow you to move more tyres safely at once.

Three-sided roll cages or trolleys are useful, especially if you then handle into racking. Delivery of tyres in roll cages can mean the difference between repetitive unloading and carrying single tyres and a single trip pushing the roll cage. Remember to keep handling aids well maintained and sensibly loaded, so they work efficiently and safely.

Using suitable handling equipment may also have efficiency gains.

Risk assessment

A typical assessment of the manual handling risks, using HSE's Manual Handling Assessment Chart, is shown below.

Load weight/frequency A4	The load handled can be up to around 10-18 kg for a car/van/4x4 tyre. The frequency of handling varies according to the position of the vehicle in relation to the drop-off point, with rates being faster when the two are closest together. Two tyres every 30 seconds to a minute is typical.
Hand distance from lower back A3	There is often some trunk twisting during the carry.
Asymmetrical trunk/load G0/A1	The trunk can be symmetrically loaded when carrying two similar tyres. When carrying one, and/or when negotiating obstacles, there can be trunk asymmetry.
Postural constraints G0/A1/R3	There can be no postural constraints, some constraint, such as a narrow doorway, or severe restriction on posture, such as reduced headroom working.
Grip on the load G0	The grip on the tyres is good, as they are new, undamaged and dry.
Floor surface G0/A1	Although usually flat and even, the ground can be uneven, have tyre debris on it, be wet, or even icy.
Other environmental factors G0/A1/R2	Hot in summer, cold in winter. There is little or no protection from the elements. Lighting inside the vehicle can be dim.
Carry distance A1/R3	Carry distances can exceed 10 m.
Obstacles en route A2	This operation is partly performed outside the building, the floor conditions at retail premises are usually good, but can be wet or even icy. There is repeated climbing in and out of the delivery vehicle.
Overall score	10-19

Notes

- 'Asymmetric trunk' means the body is symmetrically loaded when carrying two similar tyres. But when carrying one, and/or when negotiating obstacles, there can be trunk asymmetry.
- Grip on load – 'The grip on the tyres is good when they are new, undamaged and dry'.
- Carry distance – 'Carry distances can exceed 4-10 m'.