

# That's another storey!

Looking to get more productivity from your bog standard trailers? A man in Luton just might have the answer for you. **Peter Shakespeare** reports on an innovative new idea

## FREIGHT RACK

Costing anything from £25,000 to over £70,000 for a full power deck, double-deck semi-trailers deliver a substantial financial and environmental benefit when compared with the single-deck alternative.

Of course, as with most types of equipment used in the road transport industry, it is a case of horses for courses and if your operation is based around moving 26 one-tonne pallets a single-decker is the answer.

Double-deck trailers are most commonly seen in pallet network hubs and behind tractor units delivering stock to retail outlets. Their operators utilise their capacity to carry numerous lighter weight pallets on a daily basis, so the additional capital outlay of the higher trailer with a second deck is soon recovered through the inherent efficiencies they benefit from.

But spare a thought for the haulier whose operation runs perfectly well using single-deck trailers, but who periodically would benefit from a double-decker. Hiring one in is easy and costs around £50 per day. But over a year or two, expenditure could mount up if, for example, the periodic requirement is ongoing.

The MD of Luton-based UK Plant and Machinery Movements Ltd, Dave Nelson, has spotted a gap in the market and has come up with a solution.

Nelson says that the idea for his Freight Rack was conceived after the haulage contractor removing industrial plant from one of his client's premises said they could reduce the number of truck miles required if they had a method of double-stacking on



their semi-trailer. As they didn't normally have a requirement to do this, running a double-deck trailer wasn't economically viable.

Nelson, an experienced engineering fitter, came up with the idea of a removable frame which can be secured to the deck of a trailer or flatbed. Constructed from welded box section steel and cross-braced, the frame has a hinged top rack which can be locked in place to form a second deck, or can be locked in the vertical position to allow taller loads to be placed on the trailer bed.

The frames are secured to the bed using standard ratchet straps connected to securing eyes on the frame uprights. Pallets can then be secured to the frames or the loadbed itself. Weighing 300kg each, the frames can be lifted on and off the trailer or flatbed with a forklift truck and are fitted with fork guides for stability and security purposes.



The frame has a hinged top rack and can form a second deck (above) or be lowered into the vertical position (right)



Nelson says: "I had the idea while on holiday and when I returned I set about producing some drawings and then built a prototype. We then asked a consultant engineer to research the implications in terms of load security, legality, health and safety, etc. He could not find any barriers to what I proposed."

Three racks are required to equip the full bed of a 13.6m semi-trailer, but the advantage of the system is versatility. Nelson continues: "Where a non-standard load might need to be carried alongside palletised goods, one or

two racks could be used to carry 12 or 24 pallets with the non-standard load in the remaining space. Using the racks the loadspace can be configured in a number of ways."

Each rack has a top deck safe design weight of three tonnes, but Nelson says they can be built more substantially if required. So far the Freight Rack has not gone into production, but Nelson says his prototype is now ready to demo and is ready to go into production.

● For more information go to: [www.freight-rack.com](http://www.freight-rack.com)