



# Flat hunting

A new European Standard for warehouse floors is at the discussion stage. Will the new standard enable warehouse operators to make more efficient use of their materials handling equipment or simply create an unwelcome expense for those considering using VNA equipment? **Lloyd Arkill** reports

Traditionally British warehouse floors have been produced to the standards laid down in the Concrete Society's Technical Report 34 (TR34). However, TR34 was recently upgraded to include a method known as "Appendix C". These changes have caused controversy and confusion in the flooring industry and among certain suppliers of very narrow aisle (VNA) lift trucks.

Based on a system that has been used in the United States since the 1970s and very similar to the one that the Germans have operated for over 20 years, the upgraded TR34 is designed to ensure that a warehouse floor's impact on the stability and efficiency of a VNA truck is taken into account when storage systems are designed.

At the moment the revision to the TR34 standard on floor flatness is not mandatory – the requirement to consider the centre wheel 'track' when preparing warehouse floors for VNA machines, was introduced as an 'alter-

native' to the existing guidance. However, a new European Standard is now being drawn up and, if adopted, it will make attention to the rear wheel track compulsory.

The wording of the new standard is due to be laid before various special interest groups in the coming months. Some parties – representatives from the forklift truck industry and the flooring sector in particular – are known to be trying to challenge the proposed changes.

Essentially, the revised version of TR34 specifies that the floor area over which VNA trucks have to travel within an aisle should achieve a set level of flatness in the 'tracks' where both the outer (ie, the front) wheels and the inner (ie, the back) wheels of a truck travel. Previously the specification only recommended that the truck's outer (or front) wheel 'tracks' had to meet the required standard of flatness.

Of course, the majority of VNA trucks used



in the UK and Europe are of three-wheel configuration and feature centrally positioned single or close-coupled rear wheels. At present the effect of these wheels on the performance of a truck is not considered when a warehouse floor's flatness in relation to the operation of VNA machines is being assessed.

#### Remedial

However, although new floors can be built to meet the requirements without grinding, in order to comply with the new standard, many existing sites where VNA installations are being considered could now require some form of remedial grinding in the 'tracks' where the trucks' central rear wheel travels.

"If a VNA truck's rear wheel moves over an uneven floor area the truck has a tendency to 'nod' as it goes along and this 'nodding' motion slows the trucks down," explains Tony Hulett from leading industrial flooring specialists FACE Consultants.

To counter this 'nodding' effect and also to prevent the trucks from going off-wire, many VNA machines are forced to operate at much reduced speeds. Indeed, it is not uncommon for VNA trucks to be down-rated – or 'under-run' – by as much as 40 per cent of their potential full speed.

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– sold in the UK every year, if the new flooring standard results in a dip in sales of, say, 10 per cent, the ramifications for their bottom lines could be significant.

It is perhaps not surprising then that, although it has been designed to improve truck efficiency and safety, many truck suppliers have publicly doubted the need for the amended standard.

However, it is not just the truck makers who are seemingly a little twitchy about the changes. Some flooring contractors and surveyors have been critical about what they perceive as an unnecessary and unwelcome intrusion that will change the way they are forced to operate.

Tony Hulett concludes: "In my opinion the proposed new European Standard will, if it is accepted, enable warehouse users to make the most efficient use of their materials handling equipment. I am certain that it is essential that the voice of the warehousing community is heard when the new standard goes to the public consultation stage."

*For further information about this issue contact UKWA at Walter House.*