

Forward Thinking

A spate of fatal accidents involving forward tipping site dumpers has prompted a review of how to make them safer. Nick Johnson reports.

The spotlight is now on the safety of the larger sizes of forward tipping site dumpers following six deaths and a number of serious injuries last year.

Three of the fatalities resulted from dumpers overturning and crushing their operators and the other three involved people being struck by machines.

This tragic tally has galvanised the industry into action. Meetings involving contractors, hire companies, dumper manufacturers, the HSE (Health & Safety Executive) and other interested parties have been hosted by the CPA (Construction Plant-hire Association) to formulate plans to make site dumpers and their operation on site safer.



Does the Wacker Neuson Dual View concept with its swivelling seat and front cab signal the future for big site dumpers?

A contributory factor in some fatal dumper accidents involving the crushing of operators has been the non-use of seat belts. Too many dumper operators do not wear their seatbelts often because they are continually getting on and off their machines due to the need to dismount during loading.

A matter of debate at the meetings has been the HSE report RR1066 entitled the Use and Non-Use of Seatbelts in Forward Tipping dumpers that was published in 2015. This report concluded that site dumper operators often do not wear their seat belts because of low levels of trust in the combined seat belt/roll over protection system (ROPS), the seat belt getting dirty or damaged or it being seen as inconvenient and uncomfortable.

The HSE report stated that better dumper design could improve the wearing of seatbelts.



Tonic Construction is busy trialling forward tipping site dumpers with fully protected cabs and extra safety features.

It recommended consideration of the fitting of integral cabs, the provision of more advanced restraint systems and the use of retractable seat belts with better interlock mechanisms.

To encourage seatbelt wearing and better dumper operational practice, the CPA is to produce new Safe-use

Guidance. There will be parts covering Do's and Don'ts for dumper drivers, the provision of better underpinning knowledge (including Toolbox Talks) and detailed advice for site supervisors and managers. One recommendation expected to be included is that site dumpers should not travel onto stockpiles as this can be dangerous.

Gold Level Spec?

Future meetings with dumper makers are likely to result in having a minimum specification for dumpers. There is the possibility of devising Bronze, Silver and Gold specification levels to formalise improvements in safety and visibility. One of the champions of this new movement is

Swindon-based Tonic Construction which, after experiencing a fatal dumper accident, is now trialling dumpers fitted with properly protected cabs. Front safety guards allow the dumper operator to remain in his seat during loading. The machine also has full seatbelt restraint, a seatbelt use beacon, proximity sensors and reversing cameras.

Highways England has a work stream looking at site dumper safety with particular emphasis on forward visibility when the larger models are fully loaded. The problem of large loads in front of operators is set to be addressed by dumper maker Wacker Neuson which is busy developing new Dual View designs with a front mounted cab and a 180° swivelling seat and controls.

Wacker Neuson is planning to introduce a range of DualView dumpers with payloads of 5.0 tonnes and much greater. Could such a concept set the Gold standard for site dumper specifications in the future?

i For more information on the CPA site dumper safety initiative use the reader enquiry number below

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