

SAFETY ALERT (ALT-003)

All-Round Awareness for Plant Operators



BACKGROUND

Over recent years, numerous incidents have occurred where mobile plant has come into contact with pedestrians. In some instances the pedestrian has escaped with minor injury, while in others a major injury, or even fatality, has occurred.

The causes of such incidents include:

- poor safety control measures on site;
- inadequate (or lack of) additional aids and devices to increase all-round awareness (such as mirrors, radar, sonar, or rear view cameras); and
- operator inexperience and / or fatigue.

The risk of plant / pedestrian contact must be controlled and part of this control will embrace operator all-round awareness (ARA).



PRACTICAL GUIDANCE

Only trained and competent operators should operate plant. The nationally recognised qualification for competence in Britain is a Scottish / National Vocational Qualification (S/NVQ) Level II Plant Operations.

When conducting a risk assessment for plant with a visibility blind spot (such as caused by a boom on a rough terrain telescopic handler), the extent of any such problem should be determined and appropriate remedies set in place. Plant operators must be able to see around their machines, regardless of size or configuration. The industry best practice standard for risk assessment is 1m x 1m.

The plant item to be operated should be suitable for the work intended. Additional devices such as sonar, radar, convex mirrors or rear view cameras may be required to suit a particular work environment.

Pencil beam (flat mirrors) that have been fitted to a plant item by the original equipment manufacturer (OEM) should not be removed. Any other ARA devices fitted (such as convex mirrors) should be in addition to – and not in place of – OEM visibility aids.

Wherever possible, the need for reversing should be eliminated, or otherwise minimised. This may be achieved, for example, by changes in the design of the work process or by specifying an alternative item of plant (such as a side tipping, instead of forward tipping, site dump truck).

Plant should be maintained so that it is working safely and efficiently and a machine inspection should be conducted by the operator at the start of each shift and an appropriate record maintained. Any maintenance or inspection should follow guidance as laid out by the OEM. Operators must check that any additional ARA devices are working correctly and are not damaged in any way. If any safety devices or visibility aids are found to be damaged or faulty, then the plant item must not be operated until the damage or fault has been corrected.

Site personnel should be excluded from the 'operational area' of any plant item. This can be achieved by using designated vehicle transport routes and other plant / pedestrian segregation control measures such as physical barriers, traffic light systems, zebra crossings and signage.

All personnel on site should wear appropriate personal protective equipment, including high visibility vests or jackets which incorporate reflective material.

IN SUMMARY: use competent workers, in safe plant, with adequate aids to enhance all-round awareness and segregate plant and pedestrians as far as is practically possible.

Under PUWER 1998, Regulation 17 concerns the control of work equipment. Regulation 17(3) (a) of the HSE booklet L22 states that: "So far as is reasonably practicable, the operator of any control is able [should be able] to ensure from the position of that control that no person is in a place where he would be exposed to any risk to his health and safety as a result of the operation of that control."

Regulation 28[e] considers the driver's field of view. This Regulation applies when mobile work equipment is about to move, or when it is travelling: "Where a driver's direct field of vision is inadequate to ensure safety, then visibility aids or other suitable devices should be provided so far as is reasonably practicable."

Additional guidance can be found in the OPERC publication 'A Practical Guide to Enhancing the All-Round Awareness of Plant Operators', which is available through the OPERC on-line bookshop at: www.operc.com.

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