

Warning on the Dangers of Lifting of Persons Using Hydraulic Excavators

The Health and Safety Executive has recently expressed serious concern that excavators are being used to lift man-riding cages or carriers to provide, for example, below ground access to excavations. This is an extremely dangerous practice as excavators are primarily designed for excavating with a bucket and consequently have the following features that are undesirable for lifting:

- They are capable of operating speeds which make them totally unsuitable for the lifting of persons.
- Even for a skilled operator it is very difficult to prevent horizontal movement of the load as it is raised and lowered when suspended from an excavator boom tip. This presents crushing hazards in confined areas such as in an excavation.

Safe temporary access can be provided by passenger/goods hoists, Mobile Elevating Working Platforms (MEWPS) (downward reaching MEWPS for excavations), secured ladders, ladder towers, or in exceptional circumstances cranes with man-riding baskets. The means chosen should take into account the need to evacuate in the event of an emergency and this is particularly important for excavations.

Equipment which is specifically designed for the lifting of people must comply with Section 6 of Schedule 3 of the *Supply of Machinery (Safety) Regulations 1992 (as amended)*. Excavators designed to the harmonized European Standard *BS EN 474-5:2006 - Earth-moving machinery — Safety — Part 5: Requirements for hydraulic excavators*, do **not** meet these requirements. Similarly cranes are not generally designed for the lifting of persons but under exceptional circumstances, cranes are sometimes used in the UK for man-riding following specific risk assessment and putting in place strict control measures which are detailed in Clause 23.1 of *BS 7121:2006 - Code of practice for safe use of cranes – Part 1: General. Even under exceptional circumstances, these requirements cannot be met by standard hydraulic excavators.*

The Approved Code of Practice to Regulation 5 of the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) states that:-

“The raising and lowering of people by work equipment which is not specifically designed for the purposes should only be undertaken in exceptional circumstances, when it is not practicable to gain access by less hazardous means. Where it is necessary to use such work equipment then you should ensure that all necessary precautions are taken to ensure safety, including appropriate supervision.”

Guidance on the use of excavators for lifting goods only is given in the CPA publication *Guidance on Lifting Operations in Construction When Using Excavators* produced jointly by the Construction Plant-hire Association, the Construction Confederation, the Construction Equipment Association and the Health and Safety Executive. The document may be downloaded without charge from the CPA's website at www.cpa.uk.net or the UK Contractors Group website at <http://www.ukcgc.org.uk>



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