



## OBJECT HANDLING – Guidance Note      February 2007

### **Application of the loading control requirement of the Machinery Directive (98/37/EC Annex I clause 4.2.1.4) – to excavators**

With an increase in the use of excavators for handling suspended loads, in-part due to the Manual Handling Operations Regulations 1992, as amended in 2002, the CEA is drawing attention to the relevant requirements to enable excavators to be used for this purpose.

EN 474-1 and EN 474-5 requires that excavators used in object handling operation and with a rated object handling capacity equal or greater than 1 000 kg, or an overturning moment greater than 40 000 Nm, be equipped with a boom lowering control device, and with an acoustic or visual warning device to indicate when the rated object handling capacity/corresponding load moment is reached, and a load capacity chart.

Note: the rated object handling capacity is the maximum handling capacity (machine performance) determined in the most favourable condition. The rated object handling capacity of a machine cannot be limited by specific components i.e. the rating of a shackle.

Object handling is: the application of earth-moving machinery comprising lifting, lowering and transporting of a load by use of a lifting accessories, whereby the assistance of a person or the operator of the machine is required for hooking, unhooking or stabilising (whilst transporting) the load

Note: If the load is picked-up by a self-acting device and no assistance of a person is required for hooking, unhooking and stabilising the load, this work is considered as usual earth-moving application.

To comply with the standard, excavators designated by the manufacturer as being suitable for object handling operation, should, where the rated object handling capacity is equal to or greater than 1 000 kg, or where the overturning moment is greater than 40 000 Nm, be fitted with:

1. **Boom safety valve** (Lowering control device)
2. **Acoustic or visual warning device** (Load indicator)
3. **Load table/Diagram** (warning sign) to be placed in cabin of machine concerned.

Note: the boom lowering control device is only required on the excavator boom. There is no requirement, at this time, to fit a dipper stick with a lowering control device.

Lifting hooks, shackles or other devices requiring assistance of a person should not be fitted to an excavator without the above items of equipment being fitted also (unless the rated object handling capacity is less than 1 000 kg).

*This information is provided by CEA as guidance to its members (manufacturers) and is not intended to replace the requirements of the standard or those relevant parts of the Machinery Directive, as implemented in the UK by the Supply of Machinery (Safety) Regulations. For compliance the harmonised CEN standards, EN 474-1 and EN 474-5, and the Machinery Directive must be consulted.*

With this information, all prior guidance from the CEA concerning the Lifting Operations and Lifting Equipment Regulations (LOLER) is withdrawn.

**For more information contact:**      Tim Faithfull, Director of Member Services  
e-mail: [cea@admin.co.uk](mailto:cea@admin.co.uk) web site: [www.coneq.org.uk](http://www.coneq.org.uk)