

## HSE safety alert on the use of tower cranes

The HSE is issuing a safety alert to the construction industry to remind those working on projects where tower cranes are in use of the importance of the safe erection, operation, maintenance and dismantling of such cranes. This alert has been prompted by a number of serious incidents involving tower cranes in recent years.

Those responsible for the management of tower cranes on site should ensure that:

1. Tower cranes are erected and dismantled by competent people who have the necessary training and experience. Companies should draw up written procedures for each type of tower crane and these procedures should be based on the manufacturers instructions. These procedures should be available on site and those involved in the work be familiar with them;
2. A thorough examination of the crane is undertaken after its erection by a competent person who is sufficiently independent and impartial and is not involved in the erection process;
3. Only competent people are allowed to operate the crane;
4. Pre-use checks are carried out by the crane operator at the start of each shift to ensure that the crane has not suffered any damage or failure and is safe to be used;
5. In-service inspections are carried out by the crane operator, generally at weekly intervals, and records kept of these inspections;
6. A properly planned maintenance system is established and used. Competent people should undertake this maintenance at intervals specified by the manufacturer and records kept of the work completed including any parts that have been replaced. In general the original manufacturers parts should be used. Where parts are sourced from suppliers other than the original manufacturer a competent engineer should assess that the parts selected meet the original manufacturers specification and are fit for purpose. Any parts replaced should be installed in accordance with the manufacturers instructions;
7. Further thorough examinations are carried out by a competent person at specified intervals, after major alterations or repair or after the occurrence of exceptional circumstances which are liable to jeopardise the safety of the crane; and
8. Lifting operations are properly planned and appropriately supervised.

Detailed information on all these issues can be found in:

- [“Safe Use of Work Equipment” - Lifting Operations and Lifting Equipment Regulations 1998 Approved Code of Practice and Guidance;](#)
- BS7121 “Code of Practice for safe Use of Cranes” Part 1: General;
- BS 7121 “Code of Practice for safe Use of Cranes” Part 2: Inspection, testing and examination;

- BS 7121 “Code of Practice for safe use of Cranes” Part 5: Tower Cranes. (This was revised in February 2006);
- [CIRIA publication C654 “Guide to Tower Crane Stability”](#); and
- [The Construction Plant-hire Association’s Tower Crane Interest Group Technical Information Notes](#).

HSE has worked closely with industry to revise BS7121- Part 5 and to produce the CIRIA publication and the CPAs Technical Information Notes mentioned above. As a result of this new guidance being available to the industry HSE Construction Division has an ongoing programme of visits to tower crane companies incorporating site visits and head office visits to discuss health and safety management of the supply, erection, operation and dismantling of tower cranes. This work will be continuing in light of the recent tower crane collapse at Battersea and we will expect companies to be able to demonstrate compliance with relevant legislation and industry best practice.