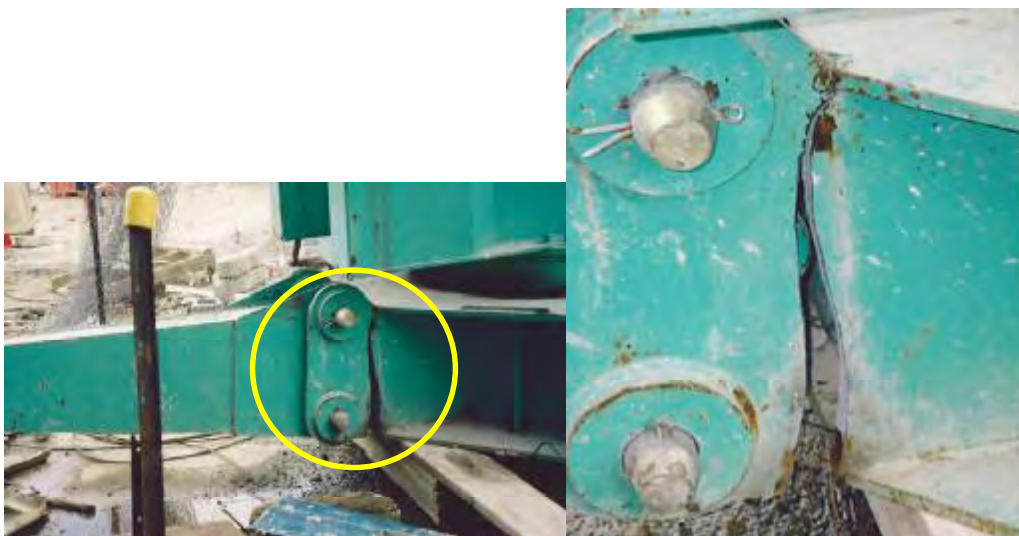


SAFETY ALERT

BASE FAILURE IN SELF-ERECTING TOWER CRANE

November 2007

This safety alert is for all owners or controllers of self-erecting tower cranes and is published following the near collapse of a self-erecting tower crane. The crane almost collapsed when one of the vertical metal plates of the base structure, close to the locating pins for the outriggers, suddenly failed over the full depth of the plate. This crack started approximately 15 mm from the end of a weld run, and it would appear from the corrosion around the crack that the plate had begun to crack prior to the day of the incident.



OCCUPATIONAL HEALTH AND SAFETY REQUIREMENTS

The *Occupational Health and Safety Regulation 2001* (OHS Regulation) requires that cranes operated in NSW meet the requirements of the relevant parts of the AS 1418 series of Australian Standards that apply to cranes, hoists and winches. Employers must ensure that inspections and maintenance are carried out by a competent person having regard to procedures recommended by the designer and/or manufacturer or developed by a competent person.

RISK CONTROLS

As a precautionary measure, owners and operators of self-erecting tower cranes should have a competent person undertake an immediate inspection of their cranes for potential metal failures in the base and outrigger assemblies, with particular regard given to the crane base immediately adjacent to the outrigger assemblies.

Depending on the crane's age and usage, and other observations, consideration should be given to non-destructive testing of outrigger components and supporting structures. Repairs, if required, should be carried out by a competent person and certified before the crane is returned to service.

Practical guidance on the safe use of self-erecting tower cranes, including planning, selection, siting installation, maintenance, inspection, repair, operation and records, is provided in AS 2550.20-2005. The designers's and/or manufacturer's instructions regarding operation and maintenance should also be observed.

FURTHER INFORMATION

Further information is available in chapter 5 of the OHS Regulation, which refers to plant.

The following Australian Standards are also relevant:

- AS 1418.1, *Cranes, hoist winches, Part 1: General requirements*
- AS 1418.4, *Cranes (including hoists and winches) Part 4: Tower cranes*
- AS 2550.1, *Cranes, hoists and winches- Safe use, Part 1: General requirements*
- AS 2550.4, *Cranes, hoists and winches – Safe use Part 4: Tower cranes*
- AS 2550.20, *Cranes, hoist and winches – Safe use, Part 20, Self-erecting tower cranes*

Further information can be obtained from the *Code of practice for technical guidance*.

Information is also available at www.workcover.nsw.gov.au or from the WorkCover Assistance Service on 13 10 50.

Disclaimer

This publication contains information regarding occupational health, safety, injury management or workers compensation. It includes some of your obligations under the various workers compensation and occupational health and safety legislation that WorkCover NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate Acts.

This publication may refer to WorkCover NSW administered legislation that has been amended or repealed. When reading this publication you should always refer to the latest laws. Information on the latest laws can be checked at www.legislation.nsw.gov.au or contact (02) 9238 0950 or 1800 463 955 (NSW country only).



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