

# Safety and health alert

## 36/00 Wrong length jib pendant wire ropes cause tower post and tower jib collapse

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### Incident

On 16 February 2000 an 80 tonne crawler mobile crane was set up in tower configuration with a 34 metre jib section. The crane operator was alerted that a section of the tower post appeared to be deformed. The area at the rear of the construction site was cleared of personnel and barricaded off. When the crane operator attempted to lower the tower jib down at the rear of the construction site for closer inspection the tower post failed which allowed the tower jib to free fall hitting the tower boom.

### Factors

- The tower jib pendant wire ropes supplied to site were not the correct length for the crane configuration.
- Because the jib pendant wire ropes that were supplied to site and fitted to the crane were longer than the specified lengths, as the tower jib luffed up this allowed the rear legs of the tower post assembly to make contact with the tower boom head causing a deformation in the legs.
- Whilst lowering for inspection, the increased loading on the deformed legs of the tower post assembly resulted in sudden failure.
- The length of tower jib rope pendants are critical as they control the position and movement of the tower post assembly and provide clearance at all times from the tower boom head.

### Recommendations

Crane owners and erection personnel must always inspect and check that the jib pendant wire ropes provided and fitted are in accordance with the manufacturer's and designer's specifications for length and size for the particular crane configuration.

### Further Information

Further information can be obtained from the WorkSafe internet site [www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au), or by contacting customer service on 1300 307 877 or email: [safety@docep.wa.gov.au](mailto:safety@docep.wa.gov.au).

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