

## Plant – Designated plant

12.02.07

## Installation of tower cranes &gt;

The purpose of this information bulletin is to set out the requirements that must be undertaken prior to erection of and the use of tower cranes.

**General**

Tower cranes are classified as designated plant under Schedule 1 of the [Workplace Health and Safety Regulations](#). This means that tower cranes must be registered with NT WorkSafe and inspected by a designated plant inspector – DPI - (registered third party crane inspector). A full listing of inspectors can be found in NT WorkSafe information bulletin [12.02.02](#).

**Tower crane registration**

Tower cranes must be registered with NT WorkSafe in advance of the proposed erection date. Refer information bulletin [12.02.18](#).

**Design registration of crane base**

The concrete footing (crane base) must be designed by a competent person and the design submitted to NT WorkSafe prior to the commencement of excavation. The design shall comply with the requirements of Australian Standard [AS1418.4](#) - Cranes - Part 4: tower cranes.

To simplify this procedure, a **Crane Base Summary** sheet has been developed – [FM114](#). This sheet should be completed by a competent person (recognised by the Institution of Engineers Australia) and verified by a competent person who has not been involved in the actual design operation. The design registration document must specifically detail calculations in regard to wind loadings.

Pursuant to Regulation 88 (2)(a) and (b) of the Workplace Health and Safety Regulations the design verifier must not have been involved in any part of the design of this plant. If the designer and design verifier are employed by the same person, the design verifier must show that he/she uses a quality system to undertake the design of items of plant and the system has been certified by a body accredited or approved by the [Joint Accreditation System of Australian and New Zealand](#) (commonly known as JAS-ANZ).

The geotechnical report number is to be referenced on the application to register the tower crane concrete base.

**Use of Overseas Design Standards**

When applying for Design registration of plant which has been designed using a standard other than the applicable Australian Standard listed in Schedule 10 of the Northern Territory the Workplace Health and Safety Regulations, the design verifier must include a written statement that the item of plant produced using this standard has been assessed against the relevant Australian Standard and the design will produce an item of plant that provides at least an equivalent level of safety as would the Australian Standard.

**Site & tower crane inspection**

A copy of the registered crane base drawing will be passed on to the nominated crane inspector who then will check that the location of the crane base, the excavation, reinforcements, starter legs, etc. are in accordance with the registered design. On completion of all tests and if acceptable and safe to use, the crane inspector will endorse the **Record of Plant Inspection**.

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## High wind preparedness

Details of installation, erection and securing/dismantling procedures, including procedures in the event of a cyclone watch or warning, are to be provided to NT WorkSafe upon submitting FM114 – Application to register design - tower crane concrete base, and kept in the Cyclone Plan on site, including evidence of arrangements made with appropriate persons to conduct the work during cyclone watch.

## Periodic inspections

Tower cranes shall be inspected at the time of a new installation and, when in service, every 12 months by the crane inspector.

Inspections are carried out in accordance with [AS 2550.4](#) - Part 4: Safe use of tower cranes.

## Documentation

Part of maintaining the tower crane in a safe condition at all times is to ensure that the records of all inspections and tests are kept. Records should be kept for the life of the tower crane.

These two documents must be kept near the plant and be readily available to Designated Plant Inspector or WorkSafe Officer on request:

- current ***Certificate of Registration***; and
- current ***Record of Plant Inspection***.

The following documents must also be kept and maintained by the owner:

- the manufacturer's technical data and operating instructions;
- a copy of the crane erection and dismantling procedures;
- rope certificates for all ropes;
- inspection reports and details of repairs.

## NT WorkSafe >

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