

## Presentation Instructions

### Who is this presentation for?

The trainer and learners.

### What is in this Presentation?

- Course information that matches the Learner Guide content.
- Review questions and model answers.
- Slides contain summarised content, with full notes and information for the trainer, visible when the slide show is shown in "Presenter View" (see instructions on next slide).
- Use this presentation to support and reinforce the training information from the Learner Guide.

### What do you need to do before you use it for the first time?

1. Rebrand the presentation.
2. Review the presentation as part of your validation process.

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## Instructions for Viewing in Presenter View

**NOTE:** This view is only applicable when the computer is connected to a second screen or a data projector.

Once the second screen/projector is connected make sure that the "Use Presenter View" box is ticked.

This is found in the "SLIDE SHOW" tab as shown below.



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# EPCHT400

LICENCE TO OPERATE A  
TOWER CRANE



## Training Presentation Sections

Click on a box to go to that section.



Section 1:  
Plan for Crane  
Operations



Section 2:  
Prepare for Crane  
Operations



Section 3:  
Operate a Crane

EPCC1400

Section 1:  
Plan for Crane Operations



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## 1.1 Introduction

This training course is based on the National High Risk Licence Unit of Competency **CPCCLTC4001 Licence to Operate a Tower Crane.**

The National Standard for Licensing Persons Performing High Risk Work aims to facilitate the operation of a nationally uniform, competency-based licensing system for persons performing certain types of high risk work.



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## 1.1 Introduction

Throughout these materials you will learn about:

- ◆ Planning the job.
- ◆ Conducting routine checks.
- ◆ Transferring the load.
- ◆ Shutting down and securing the crane.

Upon successful completion of this course participants will be eligible to be assessed for a National High Risk Work Licence.



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### 1.1.1 What is a Tower Crane?

A tower crane is a jib or boom/jib crane mounted on a tower structure. They can be demountable or permanent and can have a horizontal or a luffing jib.

Note: Self-erecting tower cranes are not covered in these materials.



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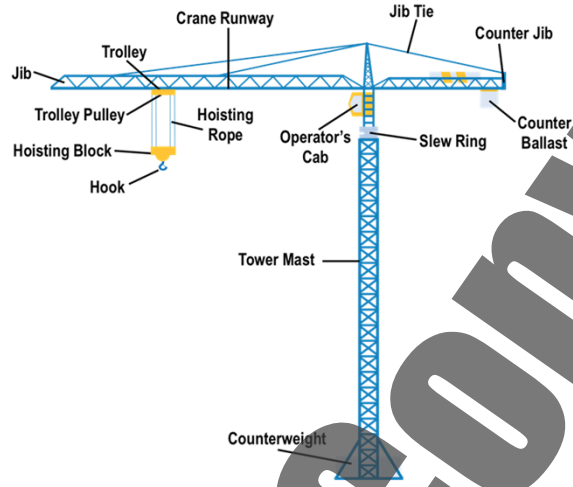
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### 1.1.1.1 Parts of a Tower Crane

The following diagram outlines the general parts of a horizontal/hammerhead type tower crane:

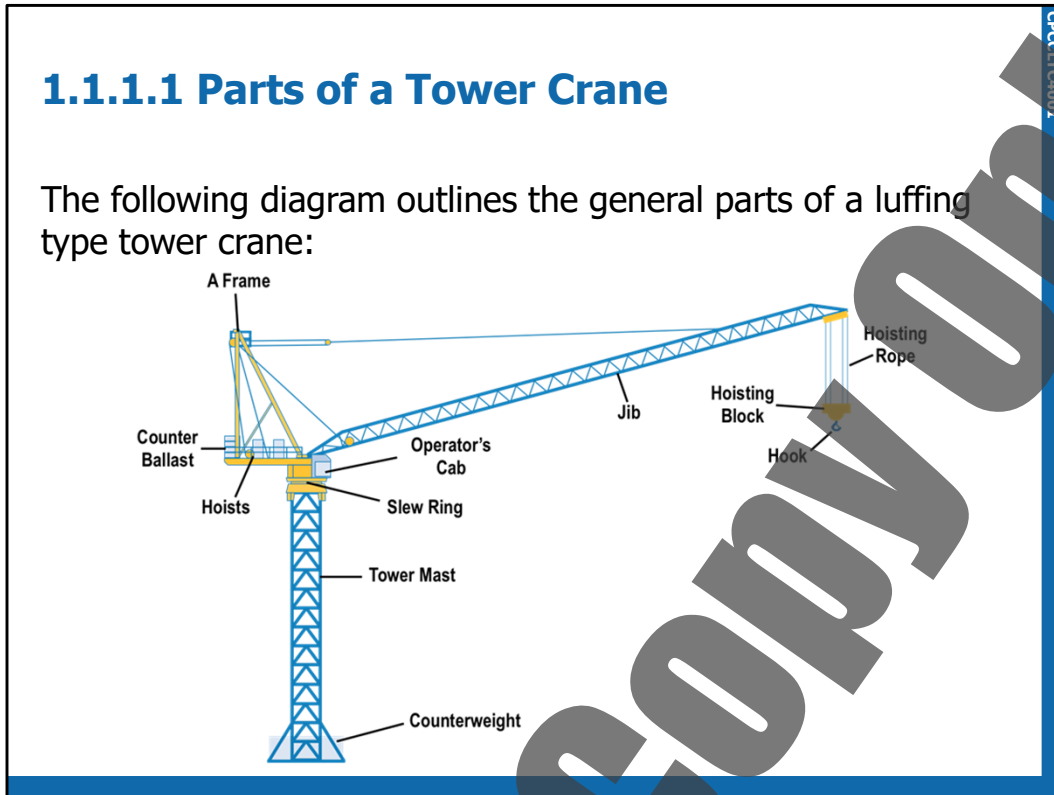


The following diagram outlines the general parts of a horizontal/hammerhead type tower crane:

**See image.**

### 1.1.1.1 Parts of a Tower Crane

The following diagram outlines the general parts of a luffing type tower crane:



The following diagram outlines the general parts of a luffing type tower crane:

**See image.**

### 1.1.1.2 Crane Movements

Crane movements that you may use when shifting loads include:

- ◆ **Trolleying** – The movement of the trolley towards and away from the tower of the crane along the boom/jib.
- ◆ **Hoisting** – The raising and lowering of the hook block using the hoist rope.
- ◆ **Slewing** – The horizontal rotation of the crane and boom/jib.
- ◆ **Travelling** – Mobilising the crane along rails (if fitted with a travelling base).



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### 1.1.1.2 Crane Movements

- ◆ **Luffing** – The up and down movement of the boom.
- ◆ **Hoisting** – The raising and lowering of the hook block using the hoist rope.
- ◆ **Slewing** – The horizontal rotation of the crane and boom/jib.
- ◆ **Travelling** – Mobilising the crane along rails (if fitted with a travelling base).



The diagram illustrates a crane with various movement indicators: a blue arrow pointing up and down for luffing, a green arrow pointing up and down for hoisting, a purple circular arrow for slewing, and a yellow double-headed arrow for travelling. A legend to the right of the crane lists these movements with corresponding colored arrows: Luffing (blue), Hoisting (green), Slewing (purple), and Travelling (yellow).

Luffing  
Hoisting  
Slewing  
Travelling

- ◆ Luffing – The up and down movement of the boom.
- ◆ Hoisting – The raising and lowering of the hook block using the hoist rope.
- ◆ Slewing – The horizontal rotation of the crane and boom/jib.
- ◆ Travelling – Mobilising the crane along rails (if fitted with a travelling base).

## 1.1.2 When is a High Risk Licence Needed?

A high risk work licence allows you to lawfully work with certain high risk equipment and plant such as forklifts, cranes, hoists, elevating work platforms, scaffolding, rigging and pressure equipment. Competence in this unit does not in itself result in a licence. A licence is obtained after competence is assessed under applicable Commonwealth, state or territory work health and safety (WHS) regulations.



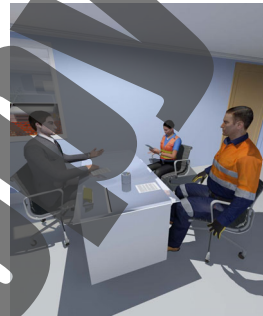
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### 1.1.3 High Risk Work Licence Requirements

Once you pass your assessment you will have 60 days to apply for your licence.

You must renew your licence within 12 months of its expiry otherwise:

- ◆ Your licence can't be renewed.
- ◆ You need to repeat the course and re-apply for your licence.
- ◆ You need to enrol in the course again and be supervised by somebody who has a current licence for the same class.



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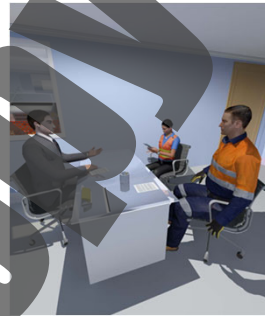
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### 1.1.3 High Risk Work Licence Requirements

You can still do high risk work without a licence as long as:

- ◆ You are enrolled in a high risk course for the class, and
- ◆ You are being supervised by somebody who has a licence for the same class.



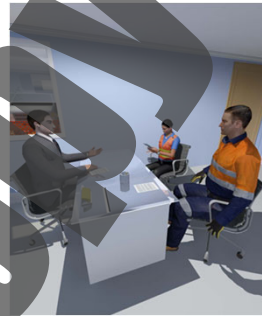
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### 1.1.3 High Risk Work Licence Requirements

As part of their legal duty of care, licensed workers must take reasonable steps to make sure the way they work does not impact on the safety of themselves or any others on site. Failing to work safely can result in the health and safety regulator:

- ◆ Suspending or cancelling your licence.
- ◆ Refusing to renew your licence.
- ◆ Ordering that you are reassessed to ensure you are competent.
- ◆ Taking action to prosecute.



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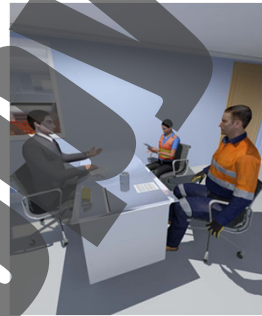
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### 1.1.3 High Risk Work Licence Requirements

Your employer should ask you for evidence that you have a high risk licence before you start any high risk work. You can show them:

- ◆ Your licence.
- ◆ Proof from the training company that you have passed your assessment.
- ◆ Proof that you are currently completing a course for high risk work.



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EPCC17400

## Section 1 Review Questions

1. Provide a description of each of the following crane movement terms:

- a) Trolleying.
- b) Hoisting.
- c) Slewing.
- d) Luffing.



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## Section 1 Review Questions

1. Provide a description of each of the following crane movement terms:

- a) Trolleying.
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- c) Slewing.
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Answer should include:

- a) Trolleying: The movement of the trolley towards and away from the tower of the crane along the boom/jib.

*Continued...*

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## Section 1 Review Questions

1. Provide a description of each of the following crane movement terms:

- a) Trolleying.
- b) Hoisting.
- c) Slewing.
- d) Luffing.

*...Continued*

Answer should include:

- b) Hoisting: The raising and lowering of the hook block using the hoist rope.

*Continued...*



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