

# LEARNER GUIDE

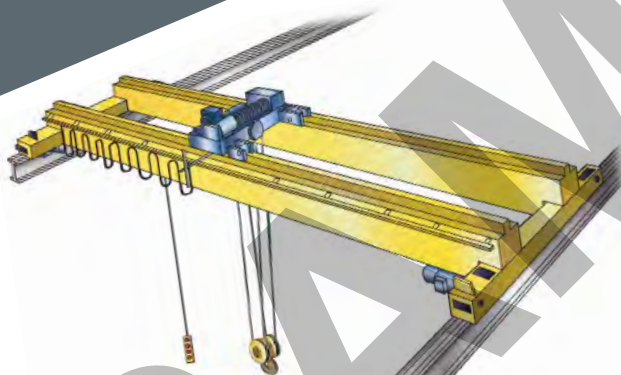


e-book



## Overhead Crane (Remote operated)

RII COMPETENCY



Training support material for:

RIIHAN305D –  
Operate a gantry or overhead crane  
(Remote operated)

Produced by:



Includes question/answer and practical training records

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# Plan and prepare for gantry/overhead crane operation

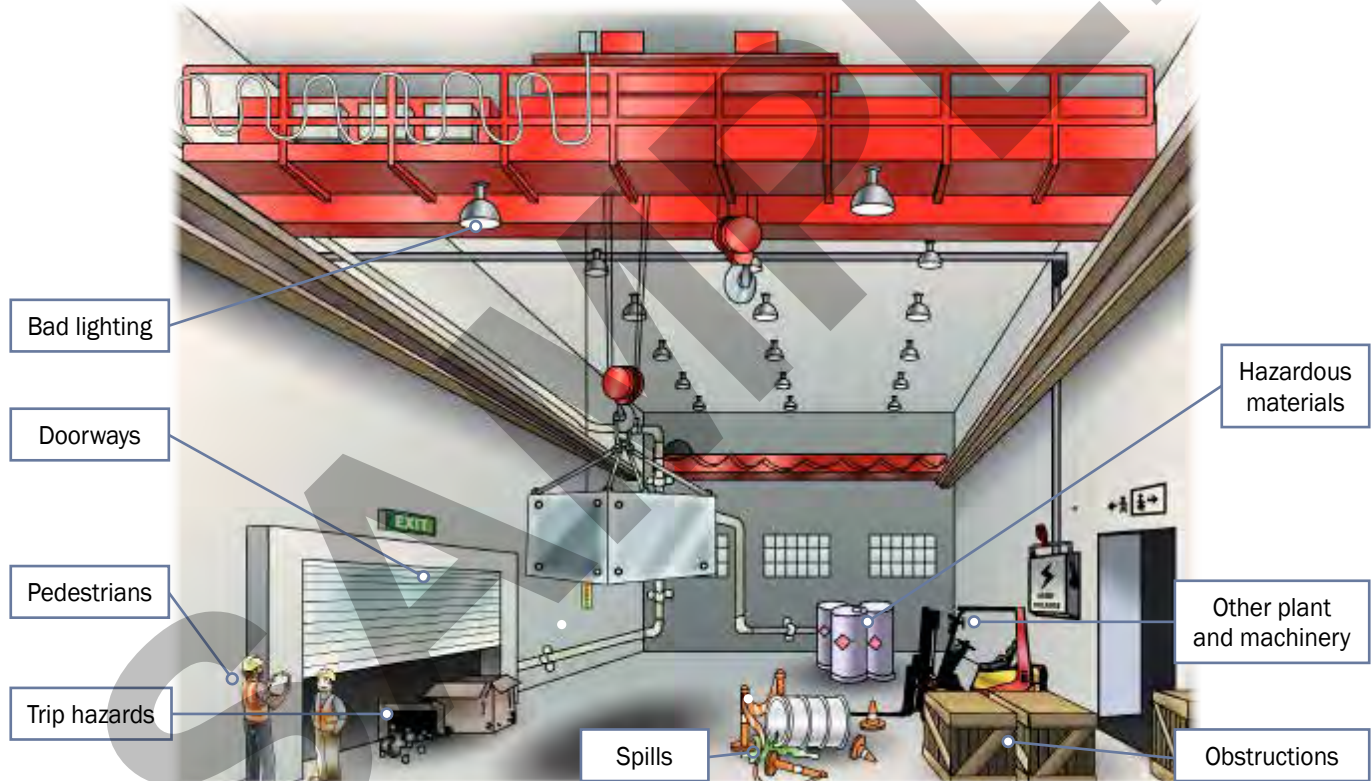
## Element 1



## Indoor hazards

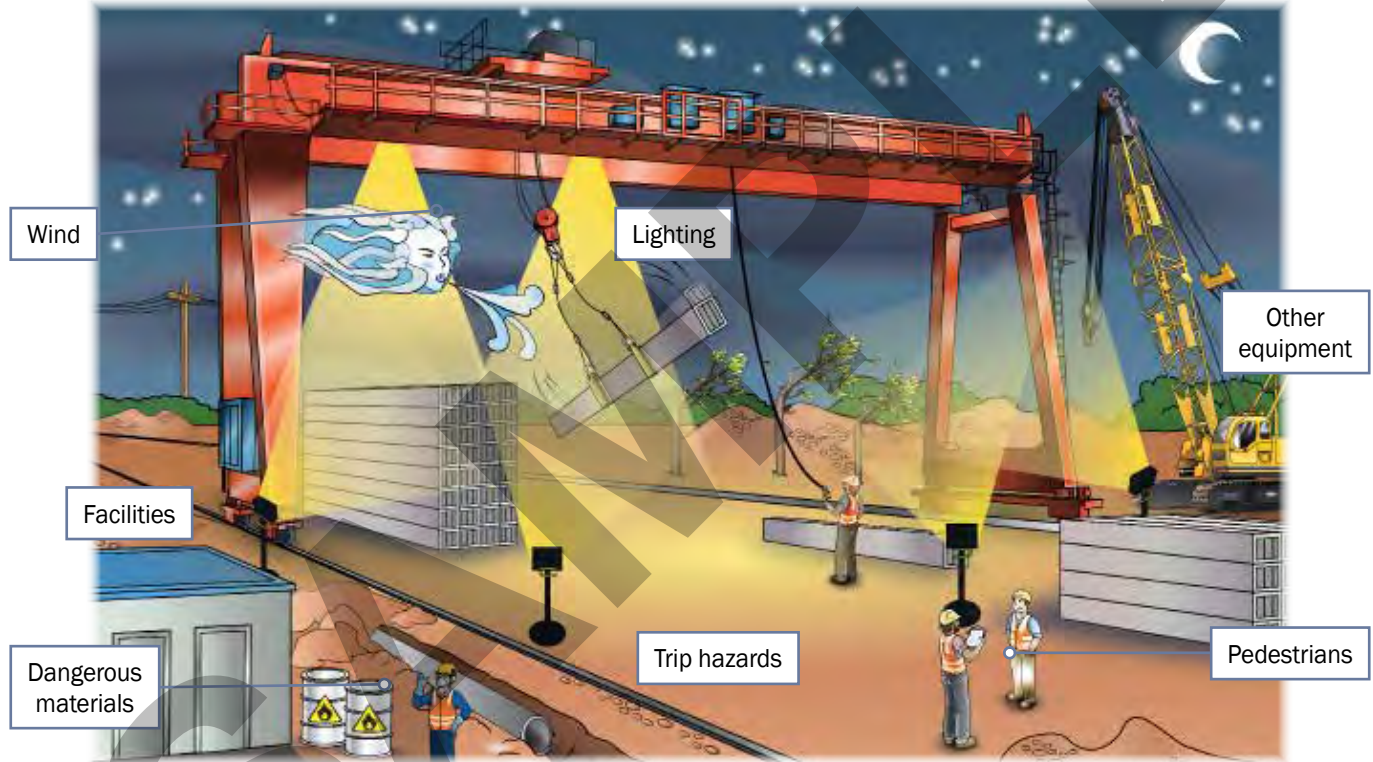
Before operating the crane you must make sure that any potential risks, hazards and environmental issues have been identified. You should check ground level, ground to eye level and above head height.

Some hazards you might find indoors can include:



## Outdoor hazards

Some hazards you might find outdoors can include:



# Operate gantry/overhead crane

Element 2





## Prepare load for lift (crane capacity)

Before attempting to move a load with the crane you must know the capabilities of the crane. Information on the cranes capabilities and limits can be found in the operator's manual. The crane should also have a Safe Working Load or maximum capacity marked on it. This tells you the maximum weight the crane can lift. You will find this:

On the cranes data plate



Do not attempt to lift a load which is heavier than the cranes SWL or maximum capacity.





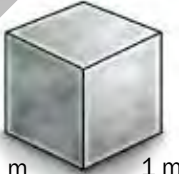



Marked on the body of the crane



## Prepare load for lift (load weight)

The load that is being moved (including hook and slings) must be less than the SWL or maximum capacity of the crane. The load weight should be marked on the load. If the load weight is not marked on the load it may be found:

<p>In manufacturer's information</p> 	<p>On an invoice or weighbridge document</p> 	<p>By asking experienced workmates</p> 
<p>By calculating</p>  <div data-bbox="204 885 472 1016" style="border: 1px solid black; padding: 5px;"> <p><math>20 \text{ kg} \times 10 = 200 \text{ kgs}</math>  Pallet weighs 15 kgs  <math>200 + 15 = 215 \text{ kgs}</math></p> </div>	<p>By estimating using common load weights</p> <div data-bbox="587 751 722 835" style="border: 1px solid black; padding: 2px;"> <p>Concrete block</p> </div>  <div data-bbox="587 927 1007 1016" style="border: 1px solid black; padding: 5px;"> <p><math>1 \text{ m} \times 1 \text{ m} \times 1 \text{ m} = 1 \text{ m}^3</math>  <math>1 \text{ m}^3 \times 2400 = 2400 \text{ kg or } 2.4 \text{ tonne}</math></p> </div>	<p>By weighing the load</p> 



**QUESTION 18**

What should you use to help you with your pre-start and start-up checks?

This will also make your checks compliant.

You should use a daily inspection checklist, completed and signed pages should be kept in a safe place on site.

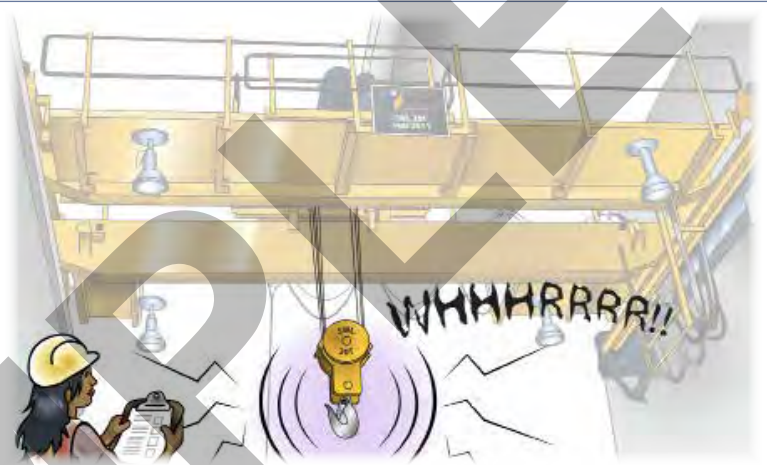


**QUESTION 19**

You are operating the crane and notice a strange noise and a vibration.

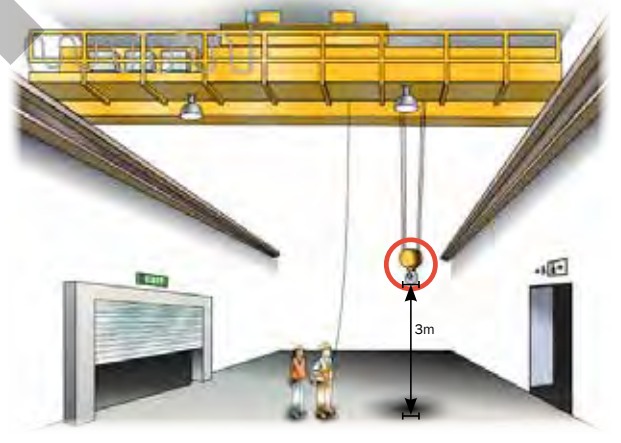
What could this mean?

This could indicate that there is a fault with the crane. You should bring the load to ground if it is raised and stop operation immediately.

**QUESTION 20**

How should the crane hook be positioned when you have finished for the day?

The crane hook should be left so it is approximately 3 m off the ground. The hook should not be left in a position where it is a hazard.



**QUESTION 21**

You are about to use the crane and there is a possibility that other vehicles could enter the cranes travel path.

What should you do?

A vehicle exclusion zone should be set up using signs, barriers and flashing lights.

**QUESTION 22**

The hierarchy of hazard control shows the steps you can take to control hazards in your work area.

List the steps from most effective to least effective.

- Eliminate,
- Substitute,
- Isolate,
- Engineering controls,
- Administrative controls
- Personal protective equipment (PPE).

