

# VEHICLE LOADING CRANE SAFETY AND LICENCE GUIDE

Training support material for:

**TLILIC0024**

**Licence to operate a  
vehicle loading crane**

(capacity 10 metre tonnes and above)



Produced by:



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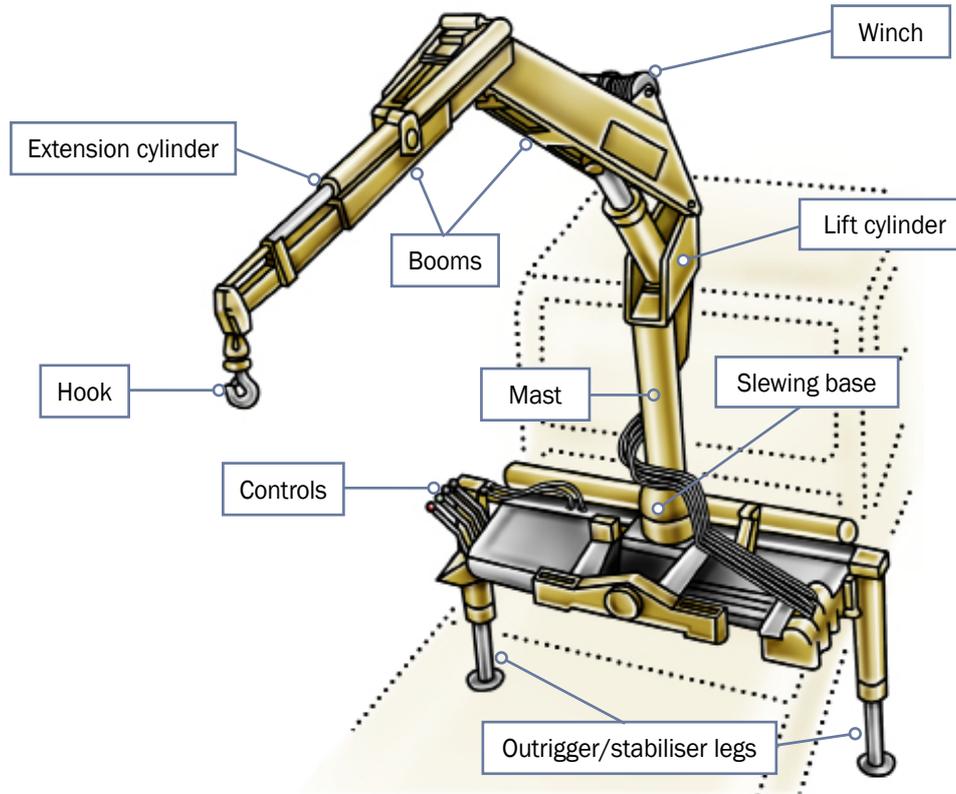
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# INTRODUCTION TO VEHICLE LOADING CRANE



## What is a vehicle loading crane?

A vehicle loading crane is a crane which is mounted to a vehicle for loading and unloading. Vehicle loading cranes have hydraulic booms with power supplied from the vehicles engine through a PTO (power take off).



## 10 metre tonnes

A High Risk Work licence is needed when the vehicle loading crane has a capacity of 10 metre tonnes or more. The metre tonnage of a vehicle loading crane is a number which is worked out by multiplying the lifting capacity by the working radius of the boom for that lifting capacity.

### To calculate 10 metre tonnes

#### **MULTIPLY THE SWL × THE WORKING RADIUS FOR THAT SWL = METRE TONNES**

from the centre line of slew to the centre line of hook. This calculation must be done for each Safe working load (SWL) on the load chart.

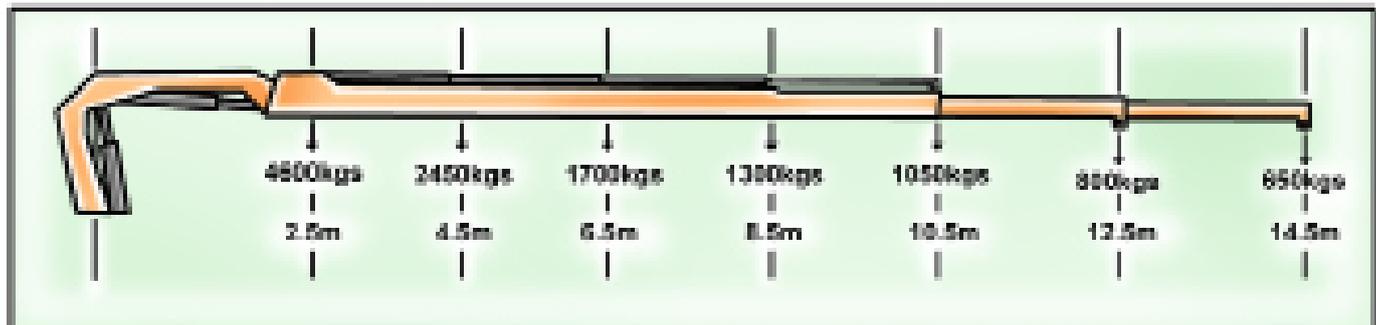
If any one calculation amounts to 10 metre tonnes lifting capacity or greater, the crane operator will require the appropriate High Risk Work Licence.

#### **For example**

The load chart below indicates the crane can lift 1300 kilograms at 8.5 metres.

$$1300 \text{ kg} \times 8.5 \text{ m} = 11,050$$

– as this is greater than 10,000 a HRW Licence is required to operate the crane.



## Types of packing

Types of packing you may use include:

Steel plates



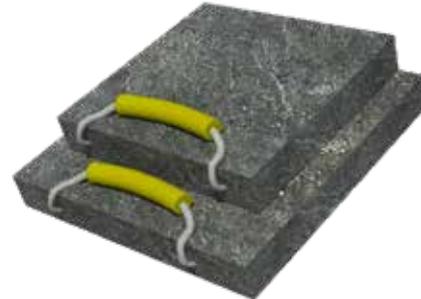
Hardwood packing



Sleeper mats (matting)



Concrete rafts



# PREPARE FOR WORK / TASK

## Element 2



**QUESTION 56****...CONTINUED FROM PREVIOUS PAGE**

What are some defects that would make a hook unsafe to use?

Has been exposed to high heat. For example 280° degrees Celsius.



Hook swivel not working



Rated capacity not marked on hook.



Obvious damage (eg safety latch broken or missing)



**QUESTION 57**

Why must all labels, charts and signs be readable and in the correct place on the crane?

Labels and signs tell you about the crane's capacity and capabilities. Capacity is how much weight the crane can support (SWL). Capability is what the crane can do. For example, how far the boom can reach.



**QUESTION 58**

What is the minimum licence you need to check and choose slings for a job using a VLC?

The minimum licence you need is a dogging licence. Holders of a vehicle loading crane, dogging or rigging high risk work licence can exercise judgment on the load and slinging method and select and inspect the lifting equipment when operating a VLC.

