

# SLEWING MOBILE CRANE (20T) SAFETY AND LICENCE GUIDE



Training support material for:

TLILIC0022

Licence to operate a slewing mobile crane  
(up to 20 tonnes)



Produced by:



# Introduction to Slewing Mobile Crane (up to 20 tonnes)

## What is a slewing mobile crane

A slewing mobile crane is a powered crane which features a boom or jib that can slew from front to back. The crane is mounted on a vehicle.

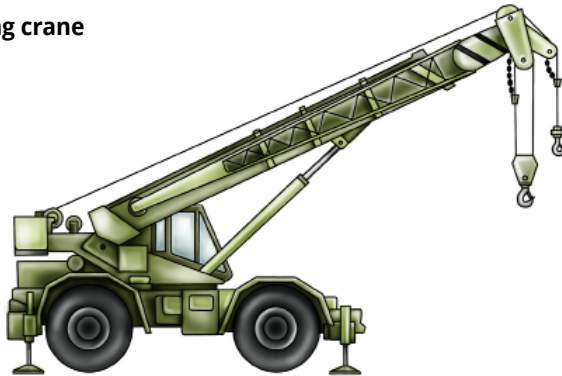
**Slewing mobile crane**



**Crawler crane**

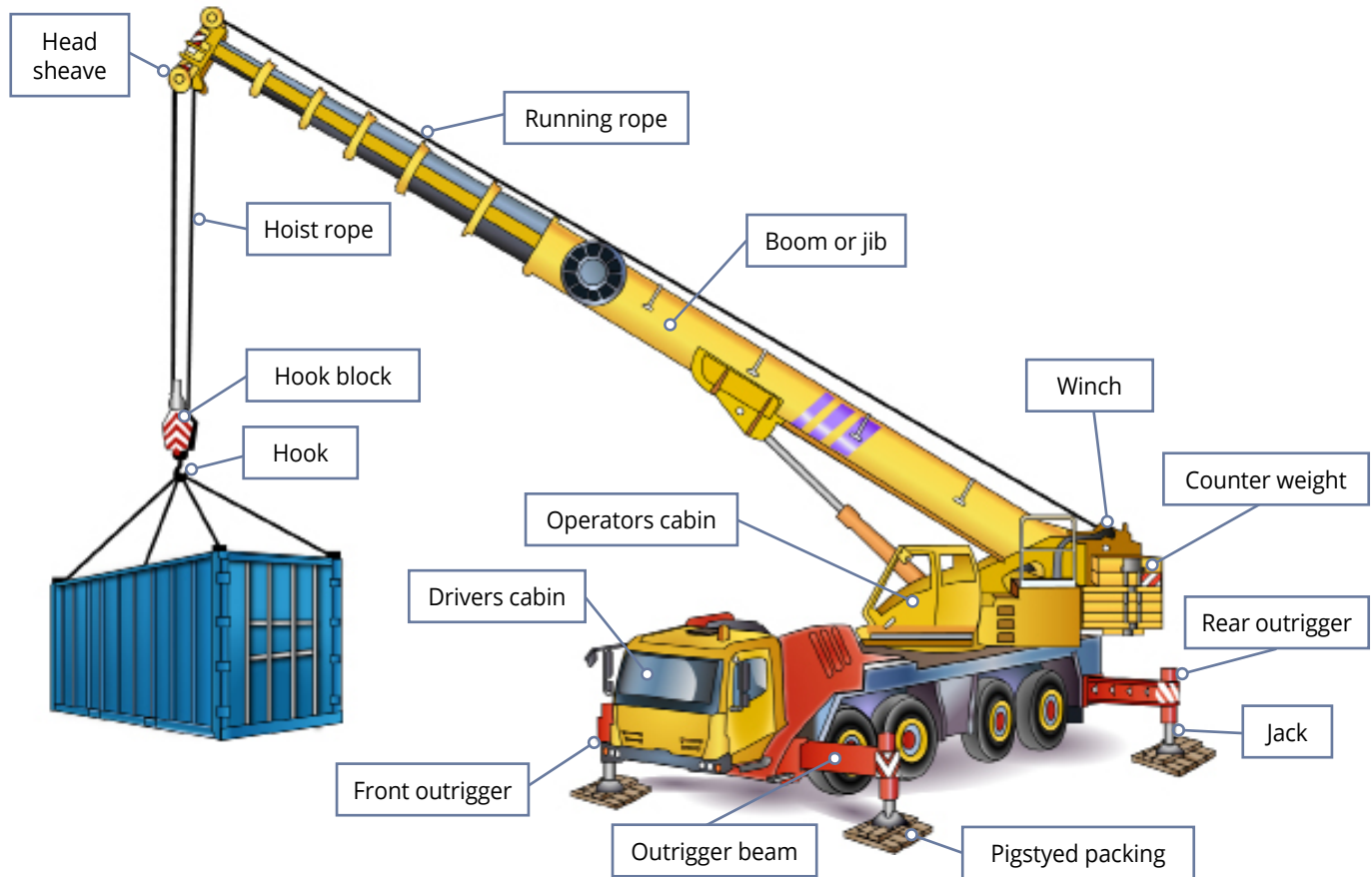


**Rough terrain slewing crane**



This learner resource does not cover front-end loader, backhoe, excavator or similar equipment when configured (arranged or set up) for crane operations.

## Parts of a slewing mobile crane



# Element 1 – Plan work / task

## Set up the crane for the task

The configuration (set up) of the crane determines how much you can lift.

Set up the crane so the load will **never** be more than the Safe working load (SWL) of the crane.

### Setting up the crane includes:

- Positioning the boom/ over the load correctly  
– boom length and radius
- Working out the centre of gravity
- Looking at the load chart to see if the crane can support the load
- Checking the rated capacity of the crane
- Setting up the counterweights to keep the crane balanced.

### Note:

A licenced dogger is responsible for selecting, inspecting and setting up the lifting gear.



## Hazard versus risk

### What is the difference?

Different hazards and risks emerge constantly—sometimes instantly.

#### Hazard

A hazard is any thing or any situation which could injure or harm you.

In other words, it is anything that can hurt you.



#### Risk

A risk is the chance of a hazard causing harm such as injury, illness or even death.

In other words, how likely it is that somebody or something may be harmed by the hazard.



## Permits

You may need permits for some work areas. Sometimes you might need a permit because of zoning or traffic control. You will also have to check if there are any rules for using a crane, and where to set it up.

For example, if you set up a crane in a busy street, you may need to call the local council to get a permit so you can put up traffic signs. Check if exclusion zones are needed.

You may need to set up pedestrian exclusion zones.

Check if there are any underground services you need to be aware of.





**QUESTION 13**

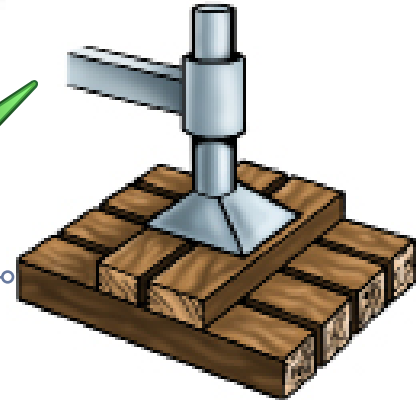
You will work in an area with soft, wet ground. The crane might sink.

How can you make the crane stable?

You can use hardwood packing or steel plates (cribbing or pigstyng).



Pigstyng



**QUESTION 14**

What does uneven ground do to the capacity of a crawler crane?

Uneven ground **reduces** the capacity of a crawler crane.

