

LEARNER WORKBOOK



Trainer's Marking Guide with model answers

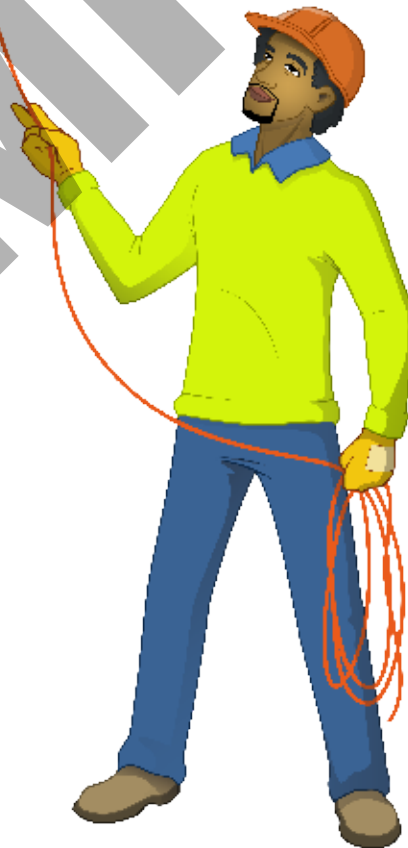
CPCCLDG3001

Licence to perform dogging

Dogging

LICENCE

SAMPLE



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**National Licence
RTO-VET Learning Materials**

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Learning and Practical Tasks

If you can, train with other learners. Learning is more powerful when you other learners share ideas and experiences. Below is a brief explanation of how you can use the training tasks in this workbook. Your trainer will advise you if you are to fill in tasks on your own at home or do them in class.



Theory training tasks

These tasks help you understand the underpinning knowledge to safely perform dogging. To help complete these tasks you can use the Information Book and speak to other learners and your trainer.



Thinking questions

Thinking questions train you to think for yourself. For example, the Information Book does not directly state the answer.



Practical training tasks

These tasks help you acquire the practical skills to safely perform dogging. The tasks use high-risk equipment or machinery. Only a licensed operator/trainer can supervise your practical training tasks.



Review

At the end of each element in the workbook, you get to review your training. The review gives you a chance to talk with classmates and the trainer about what you have learned. Sharing their learning experiences with others helps you learn.

What is dogging?

Dogging work is defined as work that includes slinging loads, selecting and inspecting lifting gear and/or directing a crane operator in the movement of a load when the load is out of view of the crane operator.

The dogger is responsible for inspecting the lifting equipment.



Plan task



This element covers performance criteria:

- 1.1. Review task instructions, consult with relevant persons to seek clarification as required, and obtain relevant workplace information.
- 1.2. Obtain and interpret information, including safe work method statements (SWMSs), required to ensure that activities are performed in compliance with workplace-specific and safe work requirements.
- 1.3. Obtain and interpret information required to ensure that equipment inspection, use, maintenance and storage complies with manufacturer requirements.
- 1.4. Identify workplace and task-specific hazards and determine required risk controls and safety measures and equipment, including signs and barricades, personal protective equipment (PPE), and fall prevention and fall arrest equipment.
- 1.5. Calculate load weight, dimensions and centre of gravity.
- 1.6. Determine lifting and slinging points.
- 1.7. Calculate derated working load limit (WLL) of lifting equipment resulting from selected slinging techniques.
- 1.8. Establish required communication methods with plant operator.

Performance Criteria: 1.1

Find out about the site

Before you start working on a new worksite you need to get information about the site. Talk to your supervisor and workmates, and read any information to find out about the site.



Theory Training Task 1

Performance Criteria: 1.1

Before starting any job on a worksite it is important you talk to appropriate people to find out about any site rules, procedures or policies that may affect the way you carry out the work.

a) List three people you may need to check with about site hazards and issues related to working on a site.

- 1) • **WHS/OHS Representatives**
- **Safety Officers**
- 2) • **Workmates**
- **Authorised managers**
- 3) • **Site supervisors**
- **Engineers**



b) List three (3) local conditions you should check a site for.

1) **Answer may include but is not limited to:**

- **Access (entry) and egress (exit) points for traffic**
- 2) • **Ground conditions**
- **Site-specific hazards**
- 3) • **Safe work method statements (SWMS)**

Performance Criteria: 1.2, 1.4

Hazards

A hazard is anything that can hurt you or others while you work. You need to know (identify) workplace hazards before you start work. Look for hazards. Look above you, look around you, and check the ground below you.





Theory Training Task 2

Performance Criteria: 1.2, 1.4

A dogger should know what hazards to look for in the workplace and the kinds of situations that may cause them. You should be aware of possible hazards above head height, between ground and eye level and below ground level.

a) Give examples of hazards you should look for before you begin work

Answers —

May include but not limited to:



Above head height

- powerlines and transmitters
- trees
- buildings
- clearance heights
- other obstructions
- bridges
- strong wind
- other equipment

Ground level to eye level

- machinery/plant
- people and pedestrians
- things in the path of travel
- spills or wet conditions
- facilities like toilets or first aid station
- dangerous chemicals
- tripping hazards
- not enough light to see the job properly

Ground level (and below)

- stable/level surface
- debris and rubbish
- open/recently filled trenches /excavations
- soil conditions
- underground services
- surfaces such as suspended floors or ground that will not take the weight of either the crane or load



b) Tick any of these hazards you may have come across in past/present workplaces.

Trainers: Encourage your learners to place a tick beside hazards they have seen in their past or present places of employment.



Theory Training Task 9

Performance Criteria: 1.4

Give an example of why you might wear each of the following Personal Protective Equipment (PPE).

To protect a
 person's feet
 from falling or
 rolling objects
 and to protect
 from standing
 on things.

Safety shoes



To protect a
 person's head
 from falling
 objects.

Hard hat



To protect
 a person's
 hearing when
 working in
 noisy
 environments.

Ear protection



Should be worn
 when working
 outdoors in
 the sun.

Long-sleeve top



Face mask



Safety glasses



Sunglasses



Safety gloves

To protect a
 person's lungs
 when they are
 required to
 work in a dusty
 area or with
 toxic chemicals.

To protect a
 person's eyes
 from flying
 particles or
 other objects.

Should be worn
 when sunlare
 is interfering
 with visibility.

To protect a
 person's hands
 and fingers
 from all kinds
 of workplace
 scenarios.



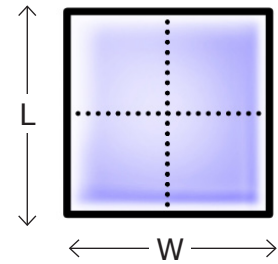
Theory Training Task 16

Performance Criteria: 1.5

Calculate the area of a square. A square is flat. The area is how much space the square covers.

Formula: $A^2 = L \times W$

L = length W = width A = area (m²)



a) Calculate the area of a square:

L = 95 mm W = 95 mm

$A^2 = L \times W$

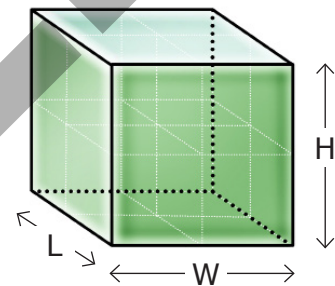
$A^2 = 95 \times 95$

$A^2 = 9025.0 \text{ mm}^2$

Calculate the volume of a cube. A cube is a 3D box. Volume is how much the cube can hold.

Formula: $V^3 = L \times W \times H$

L = length W = width H = height



b) Calculate the volume of a cube with these measurements:

L = 62 mm W = 62 mm H = 62 mm

$V^3 = L \times W \times H$

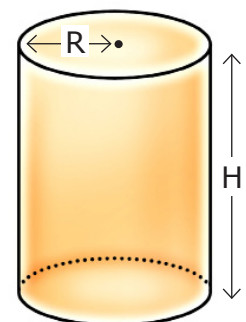
$V^3 = 62 \times 62 \times 62$

$V^3 = 238328 \text{ mm}^3$

Calculate the volume of a cylinder. An example of a cylinder is a pipe. Volume is how much space is inside the cylinder.

Formula: $V^3 = \pi \times R \times R \times L$

$\pi = 3.14$ R = radius L = length V³ = volume



c) Calculate the volume of a cylinder with these measurements:

R = 1.6 m L = 5 m

$V^3 = \pi \times R \times R \times L$

$V^3 = 3.14 \times 1.6 \times 1.6 \times 5$

$V^3 = 40.192 \text{ m}^3$

(Round up to 1 decimal place)

= 40.2

Alternative formula

V³ = diameter in metres

× diameter in metres

× 0.79 × height in metres

$V^3 = 3.2 \times 3.2 \times 0.79 \times 5 = 40.448 \text{ m}^3$

Rounded up to 40.5 m³



Theory Training Task 17

Performance Criteria: 1.5

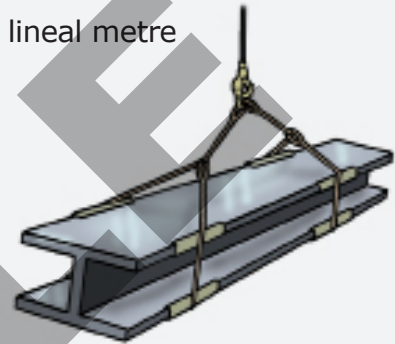
You may need to calculate the weight of an unmarked load.

For example:

You have to sling and move a five metre length of the steel RSJ.
The weight of the steel RSJ is 175 kgs per lineal metre.
What is the total weight of the length of steel RSJ?

Answer:

Total weight of steel RSJ = length of steel RSJ x weight per lineal metre
Total weight of steel RSJ = 5 x 175
Total weight of steel RSJ = 875 kg



a) Find the total weight of a 7.5 m length of steel RSJ. The weight of the steel RSJ is 175 kgs per lineal metre. Show all calculations.

Total weight of steel RSJ = length of steel RSJ x weight per lineal metre

Total weight of steel RSJ = 7.5 x 175

Total weight of steel RSJ = 1312.5 kg



b) Find the total weight of a 9 m length of steel RSJ. The weight of the steel RSJ is 175 kgs per lineal metre. Show all calculations.

Total weight of steel RSJ = length of steel RSJ x weight per lineal metre

Total weight of steel RSJ = 9 x 175

Total weight of steel RSJ = 1575 kg



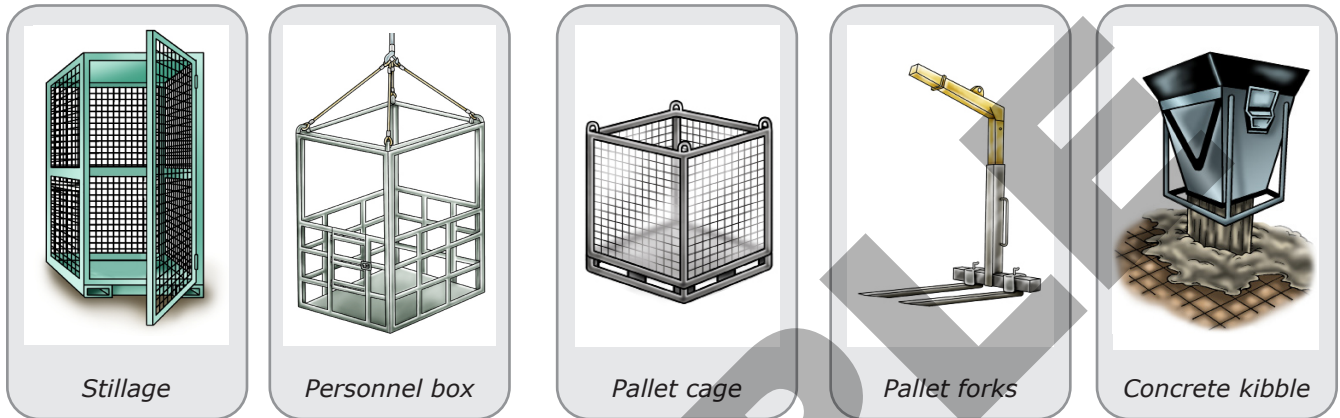
Theory Training Task 24

Performance Criteria: 1.6

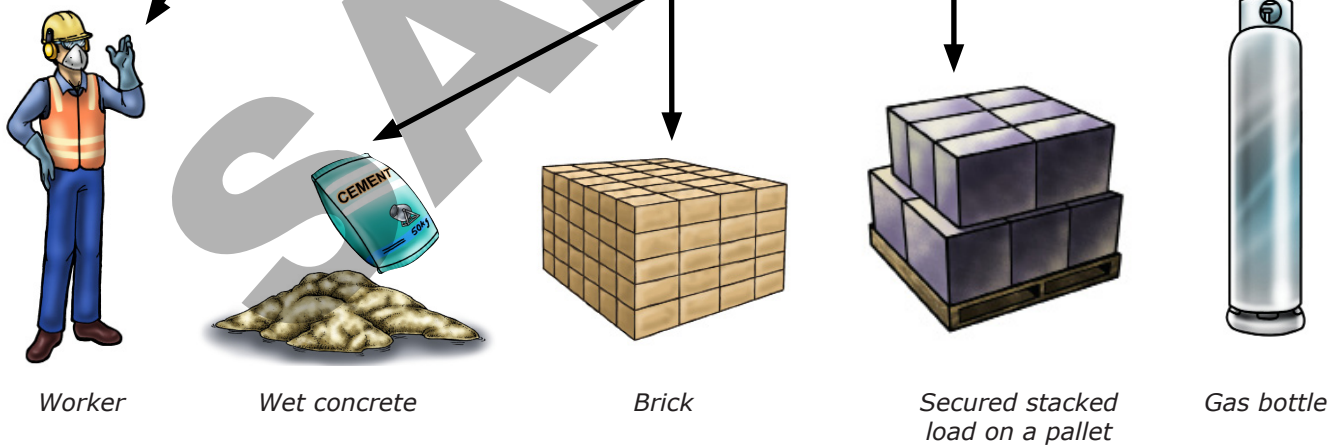
You will need different lifting equipment to lift different loads.

a) Draw a line to match the correct lifting equipment with the load that needs to be lifted.

Equipment



Loads



b) Can you lift a worker in a stillage or pallet cage?

No

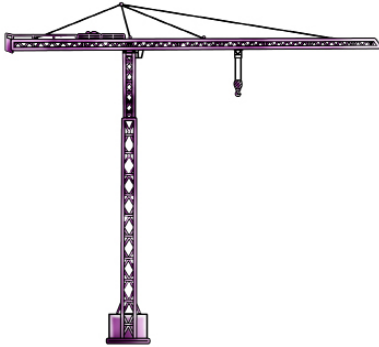


Theory Training Task 25

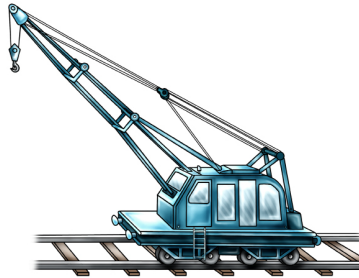
Performance Criteria: 1.6

As a dogger it is likely that you will work with many different types of cranes.

a) Below are pictures of different types of cranes. Label them with their correct names.



Hammerhead tower crane



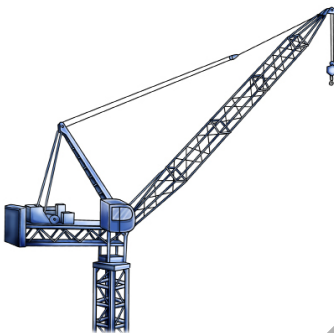
Locomotive crane



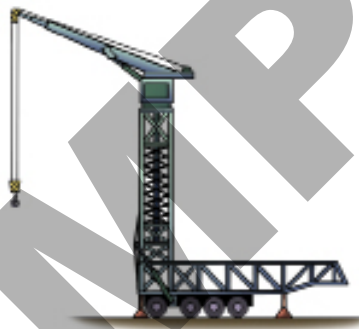
Non-slewing mobile crane



Vehicle loading crane



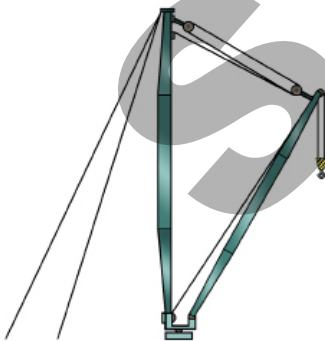
Luffing boom crane



Self erecting tower crane



Mobile slewing crane



Derrick crane



Portal boom crane



Telehandler

b) Which of the above cranes is used for the self-loading and unloading of its truck?

Vehicle loading crane

Select and inspect equipment



This element covers performance criteria:

- 2.1. Select risk controls and equipment, including fall prevention and fall arrest equipment, and check that it is working and fit for purpose.
- 2.2. Select and check PPE.
- 2.3. Select lifting equipment and gear, inspect for defects, and isolate, tag out, report and record defective items.
- 2.4. Select communication equipment and check that it is working and fit for use.

Performance Criteria: 2.3

Choose lifting equipment

It is your (the dogger’s) job to choose the right lifting equipment for the load. Each piece of lifting equipment has different capabilities and a different Working Load Limit (WLL). Check that all equipment is available before you start work.



Theory Training Task 31

Performance Criteria: 2.3

You can find the Safe Working Load (SWL) of lifting equipment by:

- Checking the tag
- Checking to see if it is marked on the sling

How else could you find the Safe Working Load (SWL) of synthetic webbing slings?



Check the colour of a synthetic webbing sling.

.....

.....

.....



Theory Training Task 32

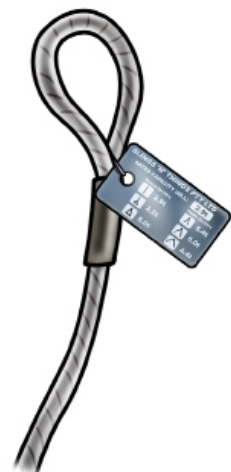
Performance Criteria: 2.3

a) You are using two slings to lift a load. What are three things you would consider when finding the capacity and length of the slings needed?

- 1) **Weight of load**
- 2) **Reeve factors (method of slinging the load)**
- 3) **Angle factors (included angle between the slings)**
- 4) **Shape of the load**

b) Name three pieces of information that should be shown on a sling tag?

- 1) **WLL**
- 2) **Reeve factors**
- 3) **Angle factors**





Theory Training Task 33

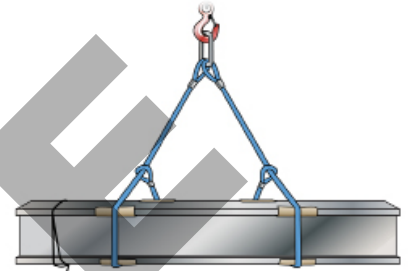
Performance Criteria: 2.3

What is the minimum size diameter for the following types of ropes used in dogging? (Fill in the blank spaces with the correct answers)

- a) The minimum diameter for natural fibre rope used for lifting is 12 mm



- b) The minimum diameter for natural fibre rope used as a tagline is 16 mm



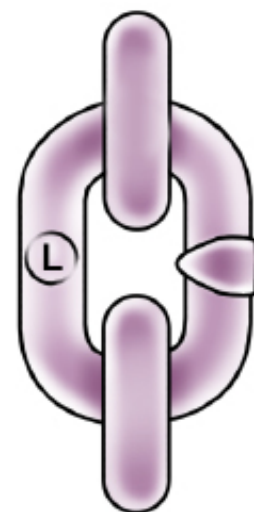
- c) The minimum diameter for flexible steel wire rope (FSWR) is 5 mm



- d) The minimum diameter for high tensile grade 80 lifting chain (T) is 6 mm



- e) The minimum diameter for Grade 30 lifting chain (L) is 8 mm






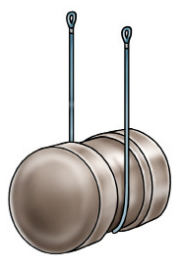
Theory Training Task 37

Performance Criteria: 2.3, 1.7

A dogger has to make sure that the slings used in a lift can take the weight of the load.

Lifting Capacity for Different Sling Configurations

The way you sling a load will have an effect on the capacity of the slings you are using. The table below shows how the slinging method changes the lifting capacity of a sling.

Sling Configuration	Diagram	Sling capacity reduction
Choke hitch around a circular load		Capacity is reduced by 25% or $\frac{1}{4}$ or one quarter. (load factor=0.75)
Choke hitch around a square load		Capacity is reduced by 50% or $\frac{1}{2}$ or half. (load factor=0.5)
Basket hitch around a circular load		Capacity is doubled. (load factor=2)
Basket hitch around a square load		Capacity stays the same. (load factor=1)

Use the load factors and reverse rule of thumb formula for flexible steel wire rope (FSWR) to find the diameter of FSWR needed to lift the load.

For example:

A concrete kibble contains 0.8 m³ of concrete with a combined weight of 2100 kgs. This is attached to a lifting beam by 2 FSWR slings.

Since the kibble is supported by 2 vertical FSWR slings divide the total weight to be lifted by 2 (load factor).

Working Load Limit = Load ÷ Load Factor

$$2100 \div 2 = 1050 \text{ kg}$$

Now you can work out the diameter of either FSWR sling using the reverse formula for FSWR.

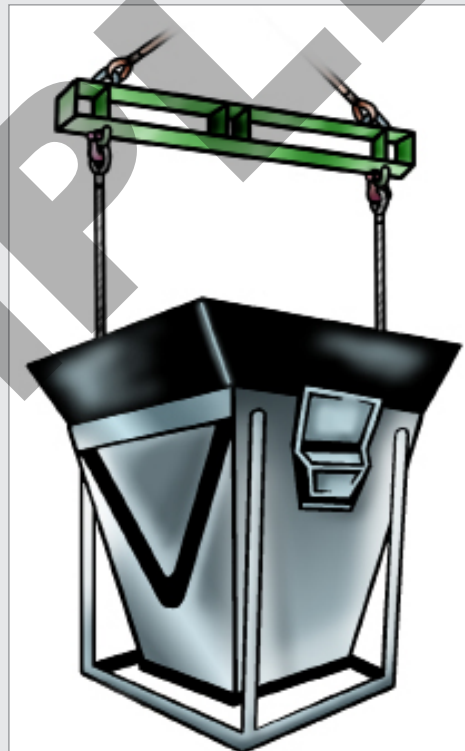
$$\text{Diameter} = \sqrt{\text{WLL} \div 8}$$

$$\text{Diameter} = \sqrt{1050 \div 8}$$

$$\text{Diameter} = \sqrt{131.25}$$

$$\text{Diameter} = 11.456 \text{ mm}$$

Round up this answer to the nearest whole millimetres = 12 mm



Continued



- a) A concrete kibble contains 1.5 m^3 of concrete with a combined weight of 4000 kgs. This is attached to a lifting beam by 2 FSWR slings.

Calculate the minimum diameter of FSWR slings required to lift the load (round up answer to the nearest whole millimetre).

Show all calculations.

Since the kibble is supported by 2 vertical FSWR slings divide the total weight to be lifted by 2 (load factor).

Working Load Limit = Load \div Load Factor

$$4000 \div 2 = 2000 \text{ kg}$$

Now you can work out the diameter of either FSWR sling using the reverse formula for FSWR.

$$\text{Diameter} = \sqrt{(WLL \div 8)}$$

$$\text{Diameter} = \sqrt{(2000 \div 8)}$$

$$\text{Diameter} = \sqrt{250}$$

$$\text{Diameter} = 15.81 \text{ mm}$$

Round up this answer to the nearest whole millimetres = 16 mm



- b) A concrete kibble contains 2 m^3 of concrete with a combined weight of 5300 kgs. This is attached to a lifting beam by 2 FSWR slings.

Calculate the minimum diameter of FSWR slings required to lift the load (round up answer to the nearest whole millimetre).

Show all calculations.

Since the kibble is supported by 2 vertical FSWR slings divide the total weight to be lifted by 2 (load factor).

Working Load Limit = Load \div Load Factor

$$5300 \div 2 = 2650 \text{ kg}$$

Now you can work out the diameter of either FSWR sling using the reverse formula for FSWR.

$$\text{Diameter} = \sqrt{(WLL \div 8)}$$

$$\text{Diameter} = \sqrt{(2650 \div 8)}$$

$$\text{Diameter} = \sqrt{331.25}$$

$$\text{Diameter} = 18.2 \text{ mm}$$

Round up this answer to the nearest whole millimetres = 19 mm



Theory Training Task 38

Performance Criteria: 2.3, 1.7, 1.1

A dogger has to make sure that the slings used in a lift can take the weight of the load.

Use the angle factor and the diameter of the grade 80 (T) chain to find the maximum load that can be lifted (SWL) rounded down to the nearest 10th of a tonne.

For example:

- A sand box with 4 lifting lugs is to be lifted, as shown.
- The included angle between the diagonally opposite sling legs is 90 degrees
- The chain slings are Grade 80 (T)
- The chain diameter is 10 mm

Working Load Limit (WLL) = $D^2 \times 32$ (Grade 80 chain) (T)

Working Load Limit (WLL) = $10 \times 10 \times 32$

Working Load Limit (WLL) = 3200 kg

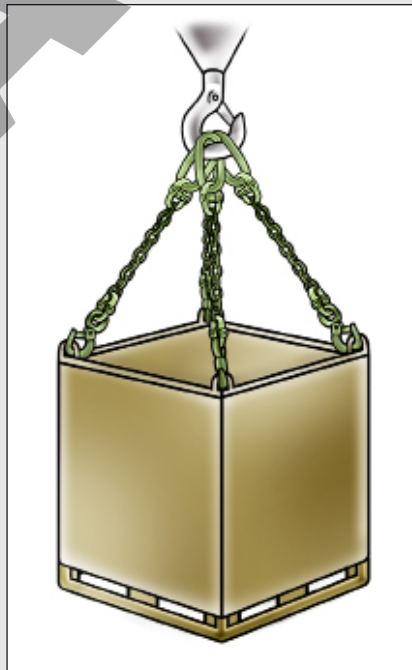
Safe Working Load (SWL) = WLL \times Load Factor

Safe Working Load (SWL) = 3200×1.41 (90° Angle)

Safe Working Load (SWL) = 4512 kg (divide by 1000 to convert to tonnes)

Safe Working Load (SWL) = $4512 \div 1000 = 4.512$ tonnes

Safe Working Load (SWL) = 4.5 tonnes
(Rounded down to the nearest 10th of a tonne)



Continued



- a) A sand box with 4 lifting lugs is to be lifted, as shown. The included angle between the diagonally opposite sling legs is 90 degrees.

The chain slings are Grade 80 (T)

The chain diameter is 6 mm

Calculate the maximum load that can be lifted (rounded down to the nearest 10th of a tonne). Show all calculations.

$$\text{Working Load Limit (WLL)} = D^2 \times 32 \text{ (Grade 80 chain) (T)}$$

$$\text{Working Load Limit (WLL)} = 6 \times 6 \times 32$$

$$\text{Working Load Limit (WLL)} = 1152 \text{ kg}$$

$$\text{Safe Working Load (SWL)} = \text{WLL} \times \text{Load Factor}$$

$$\text{Safe Working Load (SWL)} = 1152 \times 1.41 \text{ (90° Angle)}$$

$$\text{Safe Working Load (SWL)} = 1624.32 \text{ kg (divide by 1000 to convert to tonnes)}$$

$$\text{Safe Working Load (SWL)} = 1624.32 \div 1000 = 1.62432 \text{ tonnes}$$

$$\text{Safe Working Load (SWL)} = 1.6 \text{ tonnes}$$

(Rounded down to the nearest 10th of a tonne)



- b) A sand box with 4 lifting lugs is to be lifted, as shown.

The included angle between the diagonally opposite sling legs is 90 degrees.

The chain slings are Grade 80 (T)

The chain diameter is 7 mm

Calculate the maximum load that can be lifted (rounded down to the nearest 10th of a tonne). Show all calculations.

$$\text{Working Load Limit (WLL)} = D^2 \times 32 \text{ (Grade 80 chain) (T)}$$

$$\text{Working Load Limit (WLL)} = 7 \times 7 \times 32$$

$$\text{Working Load Limit (WLL)} = 1568 \text{ kg}$$

$$\text{Safe Working Load (SWL)} = \text{WLL} \times \text{Load Factor}$$

$$\text{Safe Working Load (SWL)} = 1568 \times 1.41 \text{ (90° Angle)}$$

$$\text{Safe Working Load (SWL)} = 2210.88 \text{ kg (divide by 1000 to convert to tonnes)}$$

$$\text{Safe Working Load (SWL)} = 2210.88 \div 1000 = 2.21088 \text{ tonnes}$$

$$\text{Safe Working Load (SWL)} = 2.2 \text{ tonnes}$$

(Rounded down to the nearest 10th of a tonne)

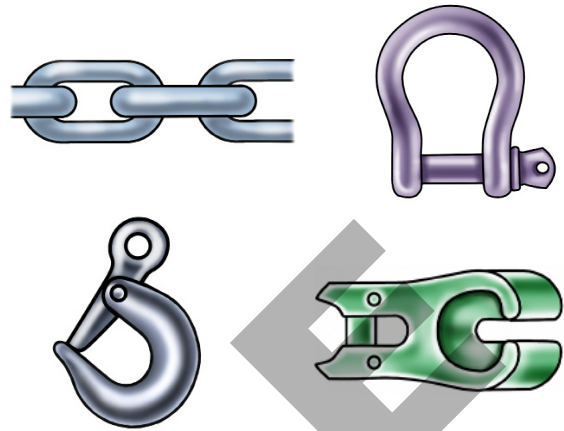


Theory Training Task 44

Performance Criteria: 2.3

What is the percentage of wear that would condemn the following lifting equipment?

- Shackles 10 %
- Chains 10 %
- Crane sling shorteners 10 %
- The bite of a hook 10 %



Note to trainer:
 Check % sign is shown
 for all answers

.....

Performance Criteria: 2.3

Faulty equipment

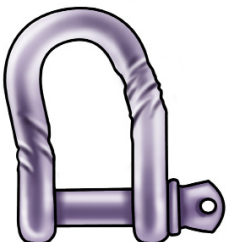
If you find any faulty equipment when you are doing your checks, you need to follow the tag-out procedure.



Theory Training Task 45

Performance Criteria: 2.3

What would you do if you found an item of damaged lifting equipment whilst doing an inspection?



- **Tag and separate**
 - **Report the defects**
 - **Have the damaged item repaired or destroyed**
-



Theory Training Task 46

Performance Criteria: 2.3

Who is allowed to remove a danger tag? (Tick the correct answers)

- Anybody involved in the work
- Anybody with a dogging licence
- The person who signed the tag
- The supervisor of the person who signed the tag (if allowed in site procedures)



Performance Criteria: 2.4

Choose communication methods

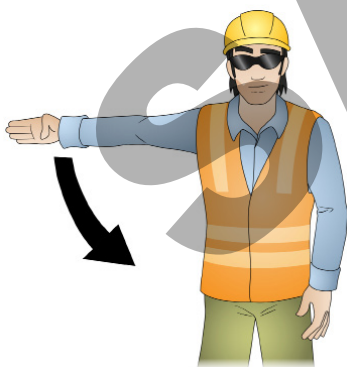
You need to choose the communication method you will use before you start slinging the load. How you will communicate depends on if you can see the crane operator or not.



Theory Training Task 47

Performance Criteria: 2.4

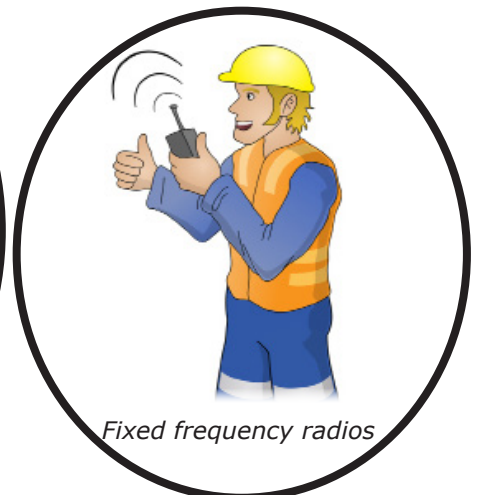
a) Which of the following communication methods should you use when you can't see the crane operator? (Circle one or more of the following)



Hand signals



Whistles



Fixed frequency radios

b) Why do you need to use these communication methods when you can't see the crane operator?

You must be able to communicate with the crane operator at all times. If the crane operator can't see you, they must stop all movements until communication is restored either by the dogger into the view of the crane driver or another communication method is used.

Set up task



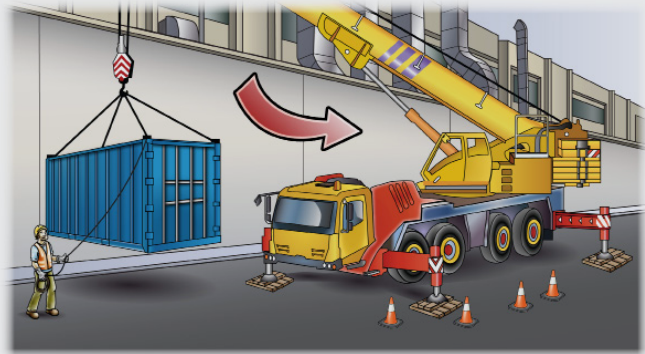
This element covers performance criteria:

- 3.1. Establish and maintain communication with relevant persons to ensure lift plan and risk controls are communicated clearly, including any impact on other workplace activities.
- 3.2. Ensure risk controls and safety measures and equipment have been put in place.
- 3.3. Prepare lifting equipment and gear for safe use.
- 3.4. Consult with relevant persons to ensure that the load destination is stable, able to bear the load and prepared for safe access and landing.
- 3.5. Attach and secure lifting equipment and gear to the plant-designated lifting point.

Performance Criteria: 3.2

Apply hazard controls

Before you start working, you need to set up the hazard controls you chose earlier.



Theory Training Task 50

Performance Criteria: 3.2

How would you control the following hazards?

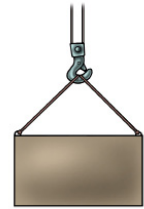
a) Loads lifted over people's heads

Answer may include but is not limited to:

Isolate the area

Fit suitable hoarding

Direct the load on an alternative path



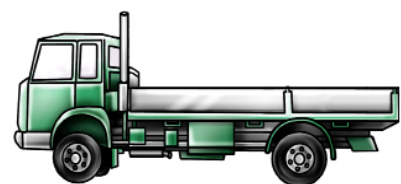
b) Hazardous materials

Remove the hazardous materials



c) Vehicles in the area

Move the vehicles or use traffic controls



Performance Criteria: 3.3

Choose the right slinging method

Choose the right slinging method to suit the weight, shape and other special requirements of the load. The slinging techniques will be different for each kind of load.



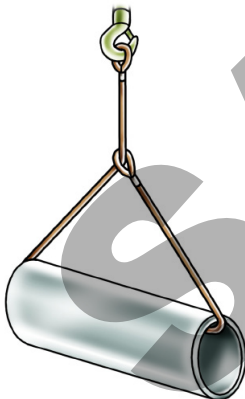
Theory Training Task 51

Performance Criteria: 3.3

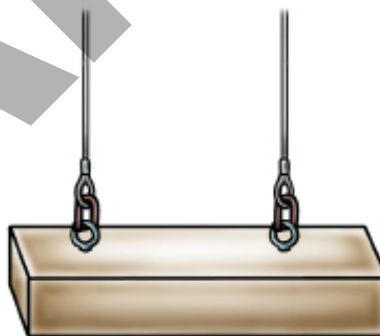
There are three (3) basic ways of attaching a sling or slings to a load:

- straight lift
- choke hitch
- basket hitch.

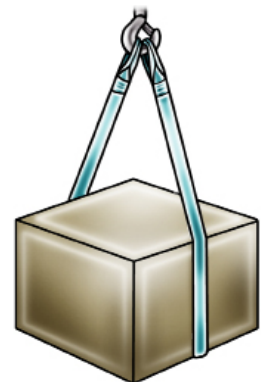
Label the sling configurations pictured below with their correct names.



Choke hitch



Straight lift



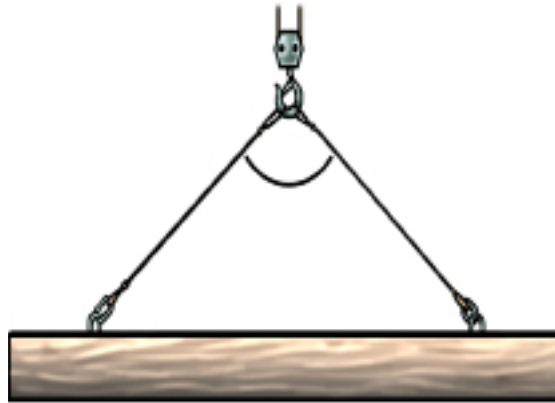
Basket hitch



Theory Training Task 52

Performance Criteria: 3.3

Fill in the gaps in the statements below with the correct answers.



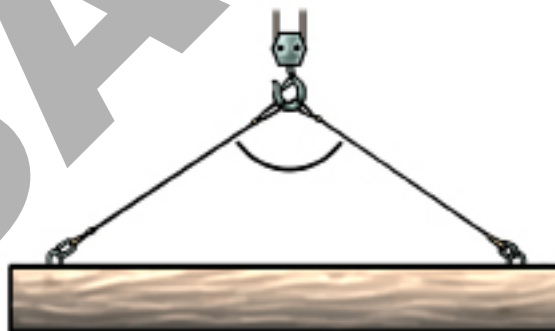
- a) The recommended safe angle between two legs of a sling is 60 degrees.
- b) The load factor for this angle is 1.73



Theory Training Task 53

Performance Criteria: 3.3

Fill in the gaps in the statements below with the correct answers.



- a) The recommended maximum safe angle between two legs of a sling is 90 degrees.
- b) The load factor for this angle is 1.41

Perform task



This element covers performance criteria:

- 4.1. Direct plant designated lifting point/hook, over the load's centre of gravity.
- 4.2. Attach and secure lifting equipment and gear to the load using slinging techniques.
- 4.3. Attach and secure tag line as required to guide the load.
- 4.4. Use signals and radio communication methods to direct the load movement, both in and out of sight of the plant operator.
- 4.5. Conduct test lift to check the security of the slings and the stability of the load, lifting equipment and gear.
- 4.6. Direct the movement of the load in accordance with lift plan, including lowering and landing.
- 4.7. Disconnect lifting gear from the load and direct the positioning of crane or hoist for next task.

Performance Criteria: 4.2

Attach the lifting gear to the hook

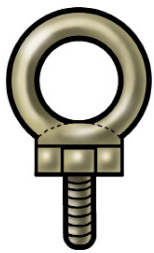
You need to use the right methods to attach and secure the lifting gear to the hook. There are special procedures to follow.



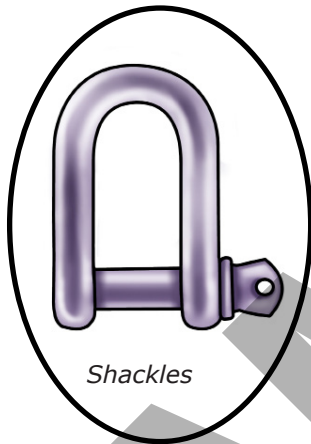
Theory Training Task 59

Performance Criteria: 4.1, 4.2

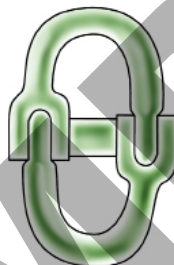
Which of the following two (2) pieces of equipment would you use to secure slings to the hook of a crane? (Circle the correct answer)



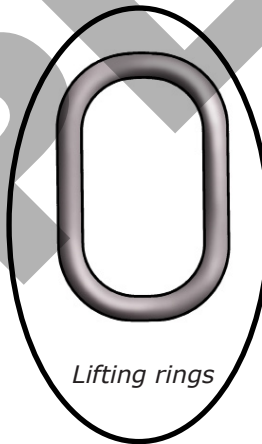
Eyebolts



Shackles



Hammerlocks



Lifting rings



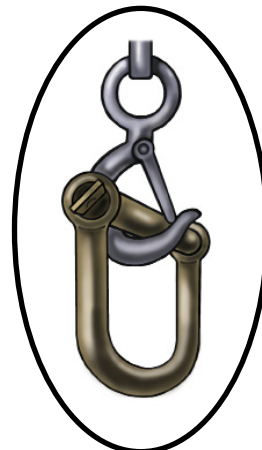
Beam clamps



Theory Training Task 60

Performance Criteria: 4.2

Should the shackle pin or the shackle itself rest on the crane hook? (Circle the correct answer)





Theory Training Task 61

Performance Criteria: 4.2

What should be fitted to a crane hook to stop the slings from coming off?

A safety latch (catch)

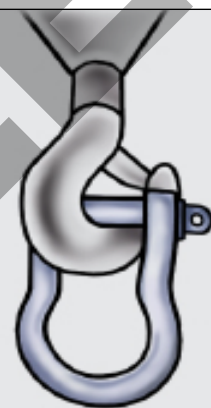
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Performance Criteria: 4.1

Set up the hook above the load

Set up the lifting hook above the load’s centre of gravity.
This helps to control the load.



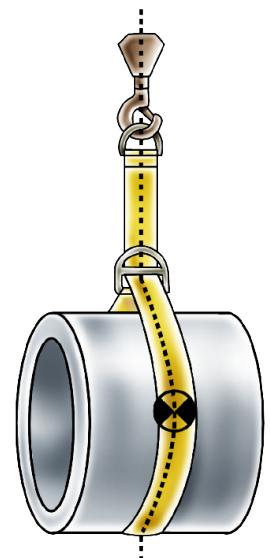
Theory Training Task 62

Performance Criteria: 4.1

Once the lifting gear has been attached to the crane hook, you will need to position the hook above the load centre of gravity. Why is this important?

- **To avoid load swing (which could damage the crane or cause a hazard to workers and the load)**
- **To stop the load being dragged or snagged**

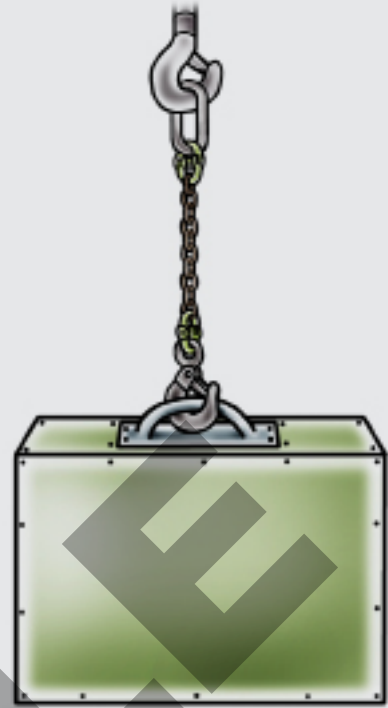
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Performance Criteria: 4.2

Attach the lifting gear to the load

Now you need to attach and secure the load to the lifting equipment in a way that will keep it stable. There are special procedures to follow when you are using eye bolts and lifting lugs.



Theory Training Task 63

Performance Criteria: 4.2

Name three (3) things you should check for when selecting the right lifting/ slinging points?

1) **Security of slings**

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.....

2) **Centre of gravity/load balance**

.....

.....

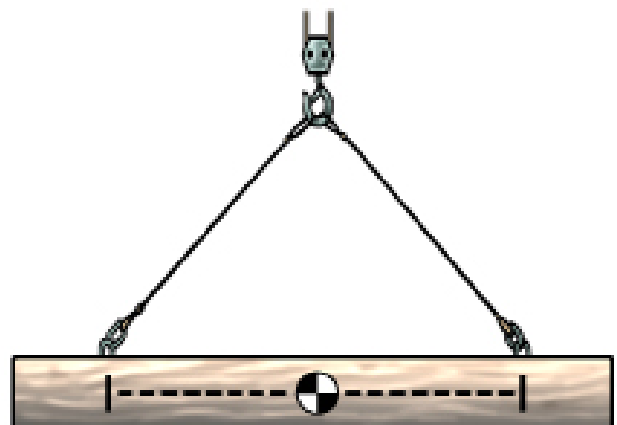
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3) **Reeve and angle factors**

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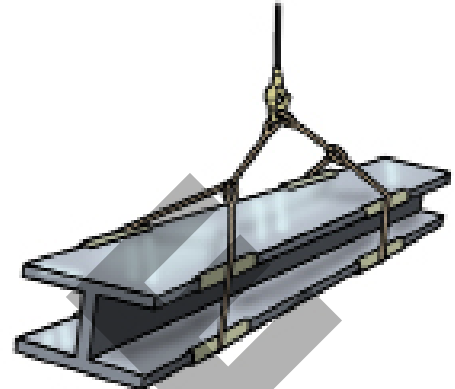
Theory Training Task 64

Performance Criteria: 4.2

Why should you use packing, padding, lagging, corner pads or edge protection when slinging a load with sharp edges?

To protect the lifting gear and load from damage.

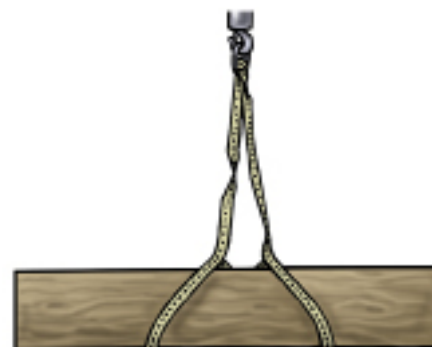
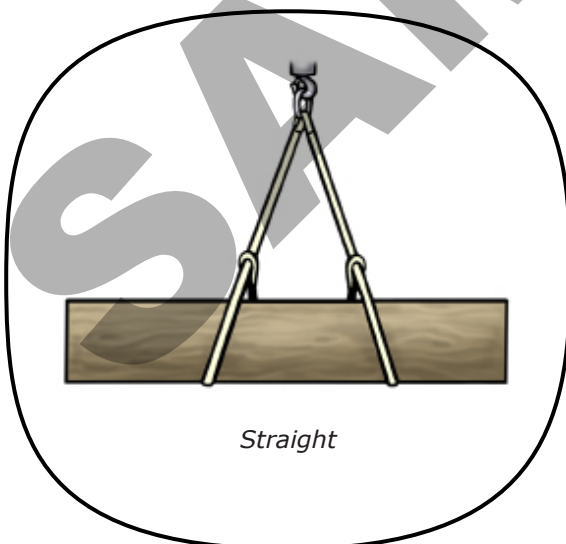
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Theory Training Task 65

Performance Criteria: 4.2

a) Should synthetic web slings be used to lift loads in a straight or twisted formation? (Circle the correct answer)



b) Why?

A twisted sling will reduce the WLL

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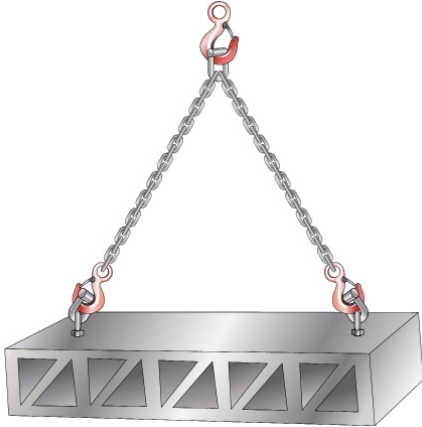


Theory Training Task 66

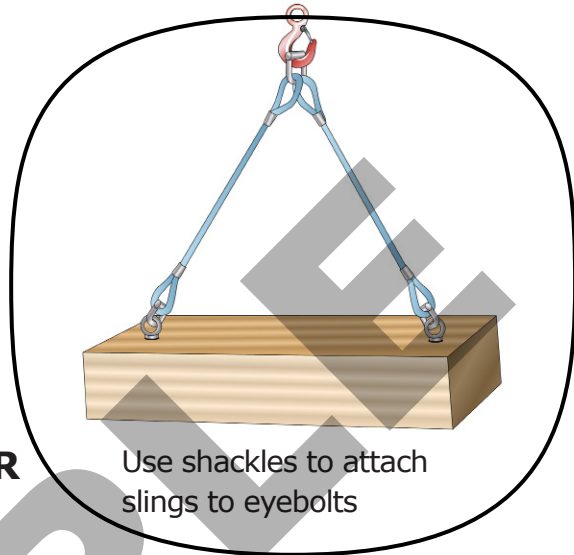
Performance Criteria: 4.2

It is important to use eyebolts correctly when using them to connect slings to a load.

Circle the correct use of eyebolts in the following examples.

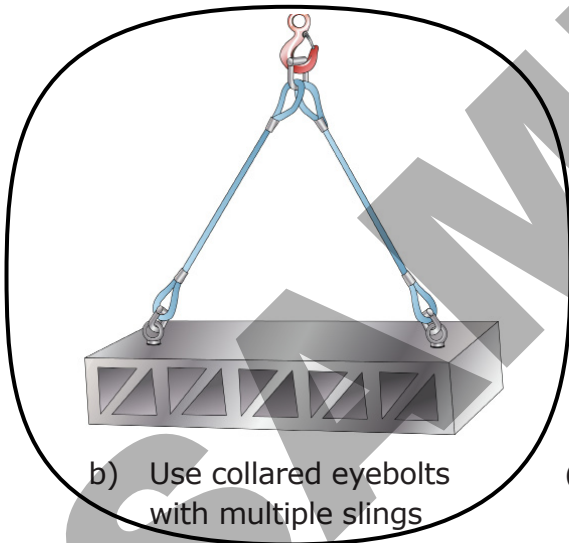


a) Use hooks to attach slings to eyebolts



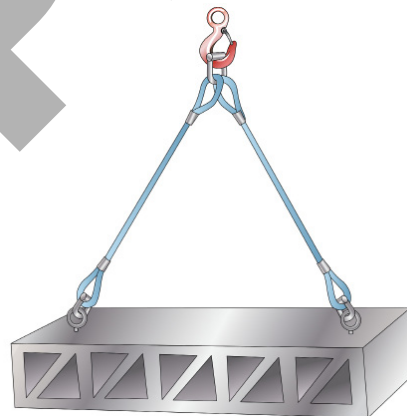
OR

Use shackles to attach slings to eyebolts

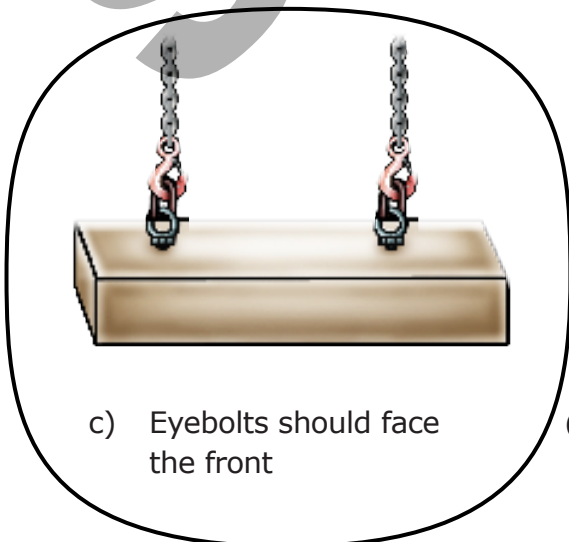


b) Use collared eyebolts with multiple slings

OR



Use uncollared eyebolts with multiple slings



c) Eyebolts should face the front

OR



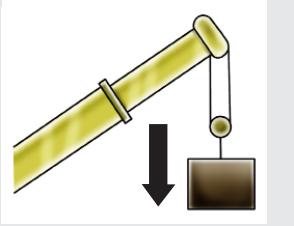



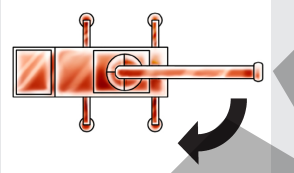


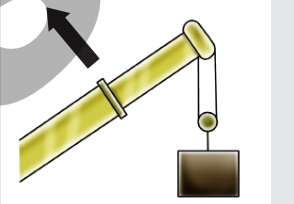

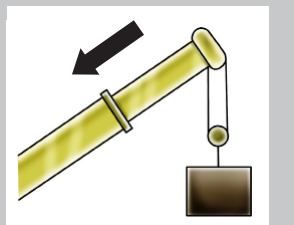

Eyebolts should face each other



Theory Training Task 77

Performance Criteria: 4.4

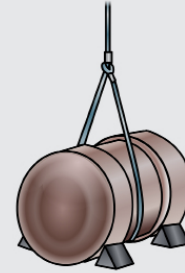
Match the crane boom motion on the left with the hand or whistle signals on the right.

<p>Hoisting down</p> 	
<p>Stop</p> 	 <p>1 long</p>
<p>Slewing right</p> 	
<p>Slew left</p>	
<p>Luffing boom up</p> 	 <p>1 long, 2 short</p>
<p>Telescoping boom retract. Jib-trolley in.</p> 	

Performance Criteria: 4.6

Land the load

You have landed the load. Make sure it is stable and secure and can't move by itself. Round loads should be secured with chocks.



Theory Training Task 78

Performance Criteria: 4.6

a) How should a kibble load of concrete be unloaded onto formwork? (Tick the correct answer)

- In one spot
- Evenly over the whole area

b) Why?

Dumping the load in one place may over load or damage the form work.

c) How should round loads be landed?

Round loads will need to be blocked or chocked to stop them rolling away.



Performance Criteria: 4.7

Remove the lifting equipment

After you have landed the load, you need to remove the lifting gear from the load. After removal, prepare the equipment for the next job or put it away.



Theory Training Task 79

Performance Criteria: 4.7

Why would you place a load on dunnage or blocks?

To make it easier to remove the lifting equipment.

To prevent damage to lifting gear.

.....
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Practical Training Task 5

Element 4—Perform Task



Bends, knots and hitches

Using a length of fibre rope (not less than 10 mm in diameter) provided by your trainer, demonstrate the following bends and hitches.

Bend and Hitches	Competent	Not yet competent
Clove hitch		
Rolling hitch		
Bowline		
Single sheet bend		
<i>(Performance Criteria 3.3)</i>		

SAMPLE

Element 4: Competent

Not yet competent

Signature (licensed operator/trainer) Date.....

Practical Training Task 6

Element 4—Perform Task



Communication

Demonstrate the hand and whistle signals used for the following crane movements:

Your trainer will ask you to demonstrate each signal.

Crane Movement	Competent	Not yet competent
Stop		
Hoist up		
Hoist down		
Luff boom down		
Luff boom up		
Slew left		
Slew right		
Telescope out		
Telescope in		
<i>(Performance Criteria 4.4, 2.4)</i>		

Element 4: Competent

Not yet competent

Signature (licensed operator/trainer) Date.....

Practical Training Task 7

Element 4—Perform Task



Conduct a test lift

Your trainer will decide on a dogging job for you to perform. It will involve slinging a selected load and guiding a crane operator to move it to a specified location. You will be provided with a worksite or simulated work area and the necessary equipment for the task.

Before you conduct a test lift make sure you have:

- Identified and controlled all hazards in your work area
- Examined and selected the lifting equipment
- Decided on a slinging method.

Task	Competent	Not yet competent
A Attach the lifting equipment to the hook of the crane provided by your trainer. <i>(Performance Criteria 4.2)</i>		
B Correctly position the hook over the load's centre of gravity. <i>(Performance Criteria 4.1)</i>		
C Attach the lifting equipment to the load chosen for you to move. Make sure you have correctly identified the lifting/slinging points. <i>(Performance Criteria 1.6/4.2)</i>		
D Attach and secure a tagline with one of the bends, knots or hitches you used in Practical Training Task 4. <i>(Performance Criteria 4.3)</i>		
E Conduct a test lift by lifting the load slightly from the ground. Make sure that the load is safely slung and stable. Lower the load to the ground and re-sling if it is unstable. <i>(Performance Criteria 4.5)</i>		

Element 4: **Competent**

Not yet competent

Signature (licensed operator/trainer) Date.....

Pack up and clean up



This element covers performance criteria:

- 5.1. Remove excess materials from work area.
- 5.2. Inspect lifting equipment and gear for defects, and isolate, label and report defective items.
- 5.3. Store lifting equipment and gear in accordance with workplace requirements.
- 5.4 Remove risk controls and safety measures and equipment.

Performance Criteria: 5.2

Inspect the lifting equipment again

You have finished using the lifting equipment. You should inspect (check) the equipment again because it might have been damaged during the lift.



Theory Training Task 80

Performance Criteria: 5.2

a) Why would you check the lifting gear after you have used it?

To make sure it is not damaged and is safe for the next operator to use.

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b) What should you do if you find damaged equipment?

- **Tag it**
- **Report the damage/fault**
- **Remove the equipment out of service**

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Performance Criteria: 5.2

Isolate defective equipment

You have found some faulty or damaged lifting equipment. Isolate the bad equipment from the good equipment so it can't be used by accident.

