

Dogman Study Activity

- You have 60 days to apply for your licence.
- Your licence will be cancelled 12 months after expiry date.
- You can carry out high risk work if you are enrolled and being supervised by someone licensed.
- You have a duty of care to protect yourself and others from harm.
- If you work unsafely your licence will be suspended or cancelled.
- You must provide High risk licence upon request to your employer etc.
- A dogmans responsibilities are:
 - **W**eights of loads
 - **I**nspecting lifting gear
 - **S**linging techniques
 - **O**perator communication about capabilities
 - **D**irecting crane operator

If a decision is required to any of these than you must have a dogmans ticket or be enrolled and under supervision

- You need to consult with. others about hazards for example (SOS) Safety officer, Other workers, Supervisors. You consult about site specific hazards, policies and procedures.
- Common hazards:
 - Looking Up are powerlines, weather, buildings.
 - In line of sight are plant, vehicles & pedestrians.
 - Looking Down & below are underground services, uneven ground, trenches.
- Planning considerations are:
 - Permits **P**
 - Location **L**
 - Access **A**
 - Communications **C**
 - Equipment **E**
- Hierarchy of control
 - Elimination **Every**
 - Substitution **Saturday**
 - Isolation **I**
 - Engineering **Eat**
 - Administration **Apple**
 - PPE **Pie**

- PPE & communications must be inspected before use.
- Hazard controls need to be in place before work and as they arise.
- Remove excess gear ASAP.
- Safe minimum distance from power lines for QLD 3m, 6m, 8m. To work closer than that you need to isolate or insulate.
- Find out voltage contact electrical authority.
- Tiger tails are a visual aid only to highlight powerlines.
- Working around power lines taglines must be a minimum 16mm DRY non-conductive rope.
- Dangers caused by wind are load swing & spin if affected lower load & make safe.
- Landing heavy loads touch down load then slowly boom down to minimise upward boom.
- Hazards & controls working mobile slew crane being struck or crushed by crane or load use exclusion zones.
- Do not lift over others as it could cause death or injury.
- Adequate lighting must be provided at night.
- Decide on right path of movement in the planning stages.
- Find out weights of loads Delivery docket, Marked on it, Calculate (**DMC**).
- Dogman is responsible for finding weight of load and inspecting gear.
- Only use hand signals when in clear line of sight.
- Use whistles when within hearing range and out of sight.
- Use radios when out of sight as they are more effective and efficient.
- In an emergency you must communicate What & Where the emergency is & Who is involved. (**WWW**) Alert everyone.
- It is important to ensure equipment is safe to use.
- You would need to condemn gear if it shows signs of being:
 - **H**eat affected
 - **O**verloaded signs
 - **W**ear
 - **C**ut
 - **A**cid effected
 - **N**o Tag
- A synthetic web slings capacity will reduce if it is twisted
- You cannot rely on sling colour to find out WLL. Only the tag
- You can find grade on the chain and tag

- Water weighs 1L = 1kg
- Concrete weighs 2.4t per cubic meter
- Steel weighs 7.85t per cubic meter
- Consult manufacturers specifications about unique loads.
- On a sling tag you can find WLL, angle & reeve factors.
- Only an authorised person can remove a danger tag or the person who put it on.
- You must use a bow shackle to lift multiple legs slings.
- Collared eyebolts can be used when the pull is at angle or vertical.
- A safety latch must be fitted to a crane hook.
- WLL will be found on the shackle not the pin.
- Defects to condemn a hook could include more than 10% wear & no WLL.
- A lifting beam must have the TARE, WLL and Serial number written on it. **(TWS)**
- A brick cage must be used to lift anything that sits inside pallet and weight limits
- A plate clamp can be used to lift plate.
- A gas bottle must be in an approved cage.
- The recommended angle is 60 degrees between two legs.
- The maximum allowable legs for directly attached chain is 120 degrees.
- The greatest angle is the diagonally opposite legs.
- You can only assume 2 legs are taking the weight of a four leg lift.
- An increase in angle decreases capacity.
- A round reeve has a reeve factor of 0.75.
- When using lugs you need to inspect condition and WLL.
- When choosing slinging points, you have considered Weight, Angle, Reeve & centre of gravity.
- When deciding what length and capacity slings need to be **(WARS)** Weight of load, Angle factor, Reeve Factor, Size of load.
- You use timbers or dunnage to apply and remove lifting gear. Also to protect load and slinging gear.
- To stop a round load rolling away you need to chock it.
- Store lifting gear away from sunlight, machinery, chemicals, vermin & damp areas.
- If anything is faulty or a tag is illegible or missing you must **S**top use, **T**ag, **I**solate, **R**ecord, **R**eport **(STIRR)**.
- You must watch the load movement to identify and control hazards.
- Keep hook above centre of gravity to stop load swing, dragging or snigging.
- You can figure out centre of gravity by calculating it & conducting a test lift.

- Dogman must be in the certified workbox at all times.
- Use a tagline to control the load.
- Conducting test lift can ensure stability & security of crane and load if there is a problem lower and fix problem. **Secure load, Stable load, Centre of gravity, Hitchhikers (SSCH)**

$$WLL = D^2 \times MF \times AF \times RF$$

$$DIA = LOAD \div MF \div AF \div RF = \sqrt{\quad}$$

$$WEIGHT \ OF \ PIPE = (OD^2 - ID^2) \times L \times 1/4 \ Pi \ (.79) \times UW$$

$$MF = 8 \ FSWR, \ 32 \ G80$$

$$AF = 0^\circ (2), \ 60^\circ (1.73), \ 90^\circ (1.41), \ 120^\circ (1)$$

$$RF = \blacksquare 0.5, \ \bullet 0.75$$

1. Dogmans Responsibilities:

W
I
S
O
D

2. Hierarchy Of Controls:

E
S
I
E
A
P

3. Planning Considerations:

P
L
A
C
E

4. Reasons for a test lift

S
S
C
H

5. Consult With:

S
O
S

6. How To Find Out Weight:

D

M
C

7. Emergency Communications:

W
W
W

8. Inspect Gear For:

H
O
W
C
A
N



9. Lifting Beam Info Needed:

T
W
S

10. Faulty Gear

S
T
I
R
R

11. Maths

MF =
AF = 0° 60° 90° 120°
RF =  
SWL =
Dia =
Weight of pipe =
500ml of water =
1m³ of concrete =

12. Dogmans Responsibilities:

W
I
S
O
D

18. Emergency Communications:

W
W
W

13. Hierarchy Of Controls:

E
S
I
E
A
P

19. Inspect Gear For:

H
O
W
C
A
N

14. Planning Considerations:

P
L
A
C
E

20. Lifting Beam Info Needed:

T
W
S

15. Reasons for a test lift

S
S
C
H

21. Faulty Gear

S
T
I
R
R



16. Consult With:

S
O
S

22. Maths

17. How To Find Out Weight:

D
M
C

MF =
AF = 0° 60° 90° 120°
RF =  
SWL =
Dia =
Weight of pipe =
500ml of water =
1m³ of concrete =
1m³ of steel =