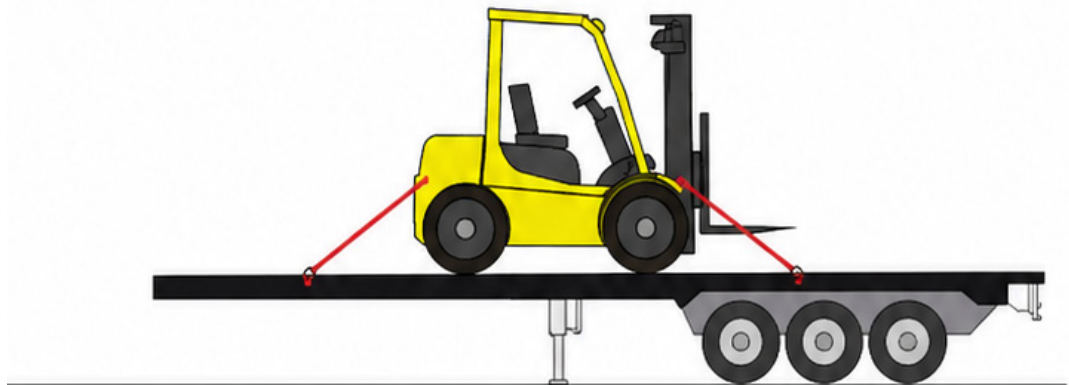


Appendix 7

Loading and Unloading Guide

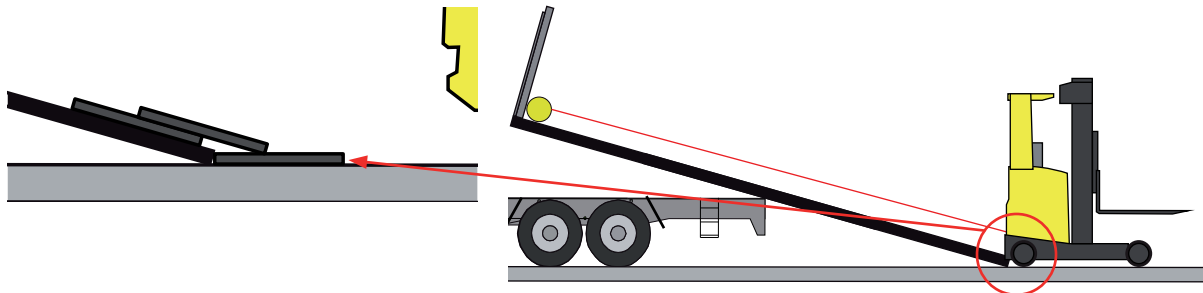


This guideline:

- Applies to counter balance forklifts up to 9,500kg, Combilift forklifts up to 8,000kg, Aisle-Master forklifts up to 7,300kg, Dingli scissor lifts up to 2,000kg, Haulotte scissor lifts up to 4,000kg and boom lifts up to 7,600kg.
- Is a Loading and Unloading Guide to align with the Risk Assessment relating to this activity.
- Participants to have the relevant licences and training to operate the Mobile Plant and the tilt tray including:
 1. Load and Unload Mobile Plant Training
 2. Appropriate licences (HR licence, EWP yellow card, forklift licence, etc.)

1 Planning and Task Preparation

- ✓ Tilt tray must have a maximum allowable payload (Gross Vehicle Mass minus Tare Weight) greater than that weight of the machine/s being loaded.
- ✓ PPE consisting of high-visibility clothing, safety glasses, safety gloves, steel-capped boots must be worn when completing this task. Use sun protection when necessary.



- ⚠ Rubber can be used on tray tip to avoid damage to low clearance machines. Some machines may have insufficient ground clearance to avoid damage even when using rubber. Additional measures, such as using a forklift trailer or removing panels, may be necessary to avoid damage.
- ✓ Winching equipment such as winch hooks, lifting slings, chains, etc. must match the tension expected to be achieved by the winch. Refer to table 1 for the attachment requirements based on the weight of the winched machine.

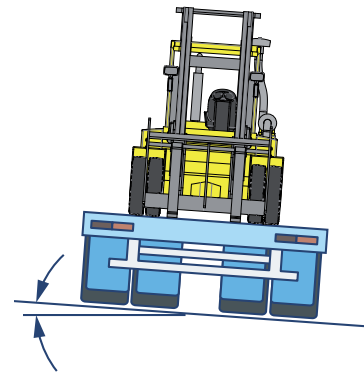
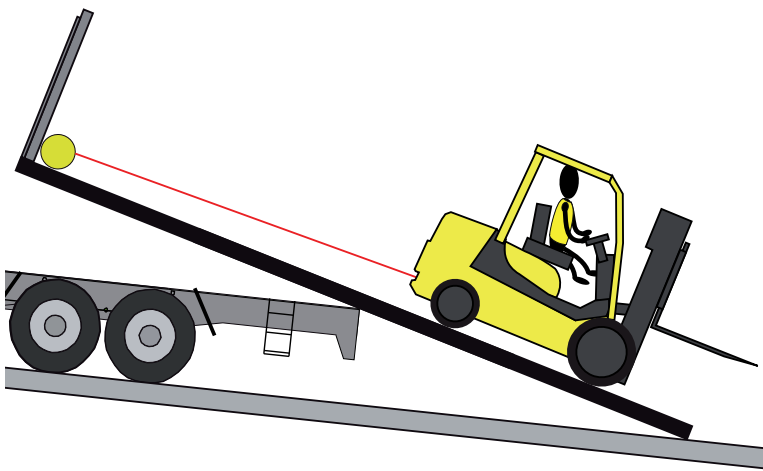
Table 1: Required winch attachment rating

Machine Weight (kg)	Required Attachment Rating (kg)*
0 to 5,000	3,750
5,001 to 10,000	7,000

*for chains and hooks the rating can be a lashing capacity (LC) or working load limit (WLL). For webbing slings the rating must be a working load limit (WLL).

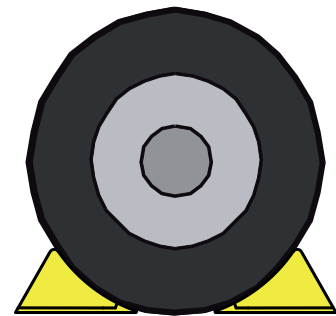
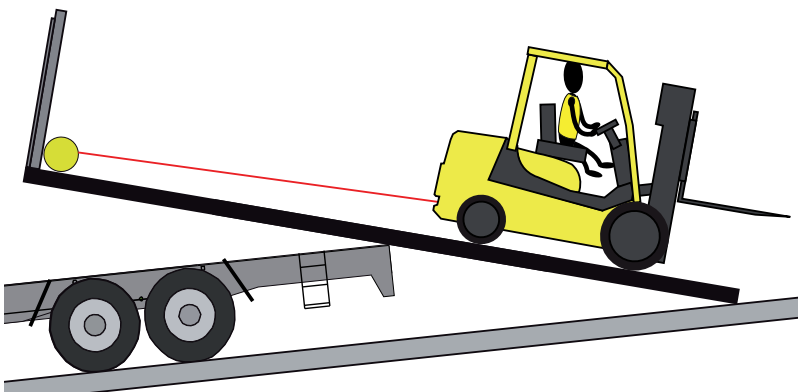
2 Establish suitable area and equipment for the Loading or Unloading activity

- ✓ Firm compacted or sealed surface for the truck and machine travel paths.
- ⚠ No loading or unloading on uncompacted soft ground, grassed or loose dirt surfaces are not suitable.
- ✓ Gravel surfaces are acceptable and may need timber pads under ramps to maximimise ramp stability.
- ✓ Confirm pre-start check completed on the vehicle, winch and the machine.
- ✓ Confirm no overhead obstructions are in proximity to the vehicle prior to loading.
- ⚠ Loading must not be attempted onto a tray without a suitable winch.



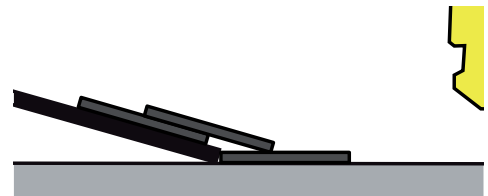
- ✓ Max cross fall for loading of 3 degrees (typical maximum roadway cross fall)

⚠ Max slope for loading uphill is 4 degrees



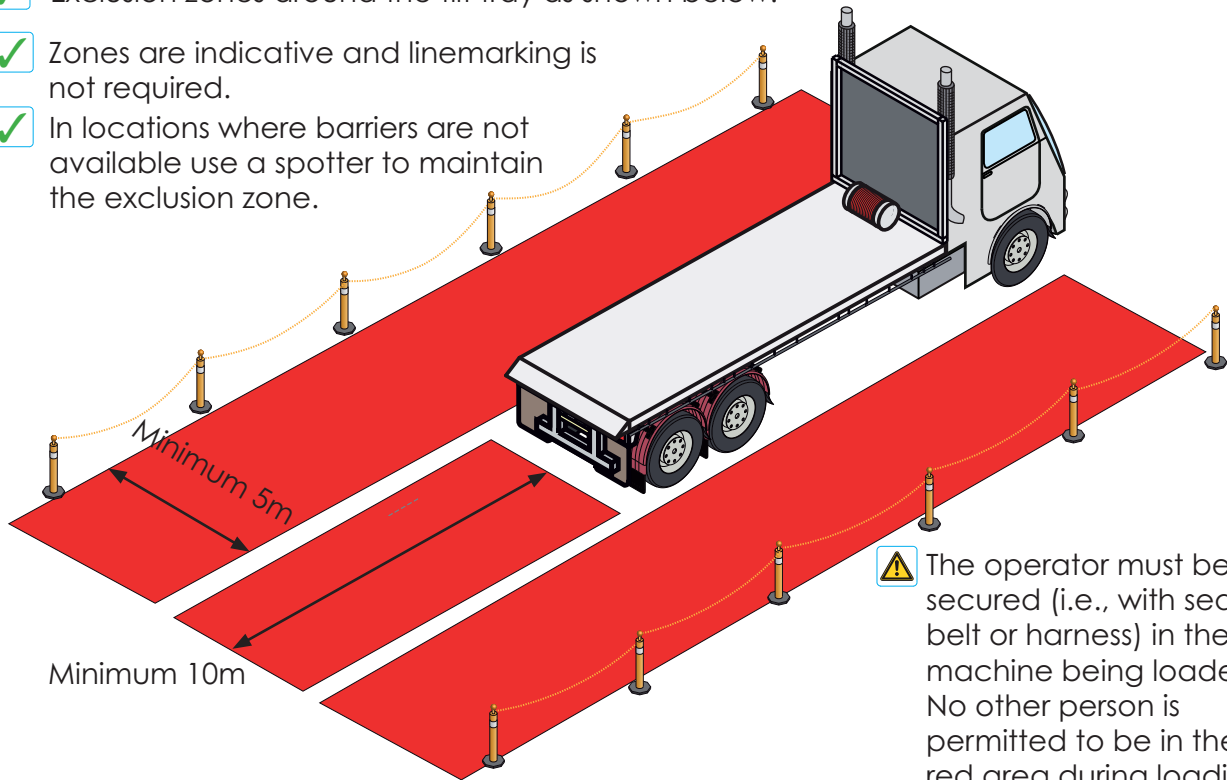
- ✓ Chock tilt tray wheel

⚠ Max slope for loading downhill is 8 degrees

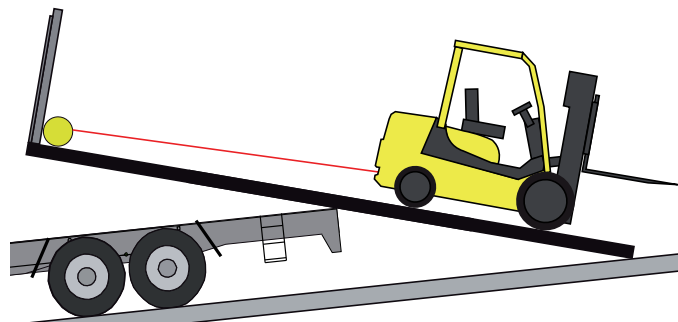


- ✓ Rubber can be used on tray tip to avoid damage to low clearance machines

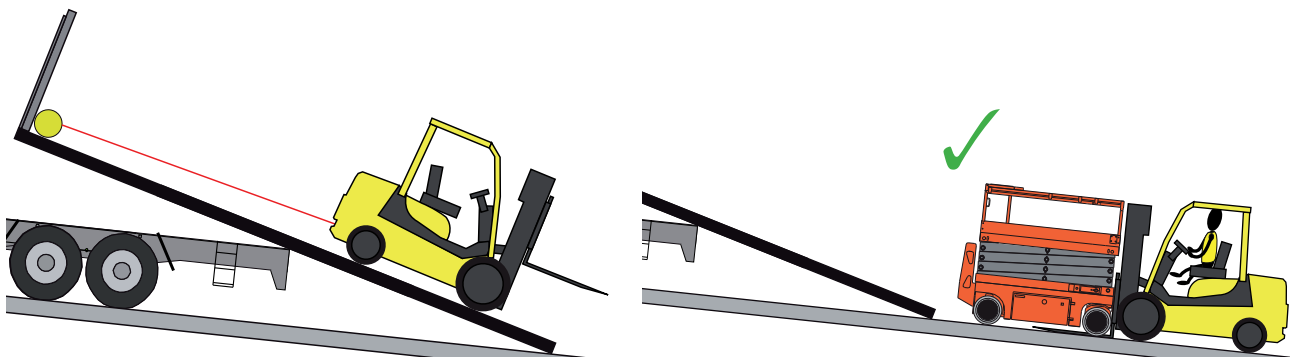
- ✓ Exclusion zones around the tilt tray as shown below:
- ✓ Zones are indicative and linemarking is not required.
- ✓ In locations where barriers are not available use a spotter to maintain the exclusion zone.



Dead Machines (No Operator in Cab) - Special Requirements



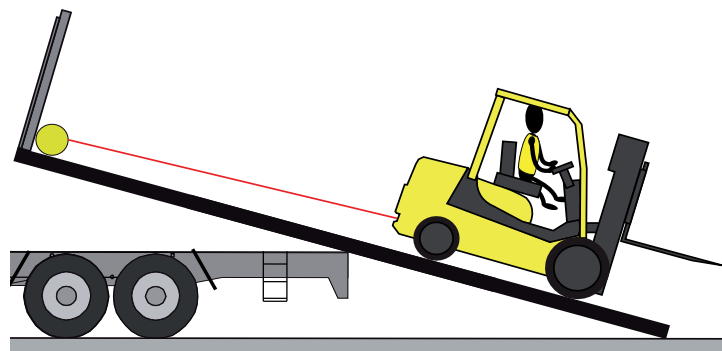
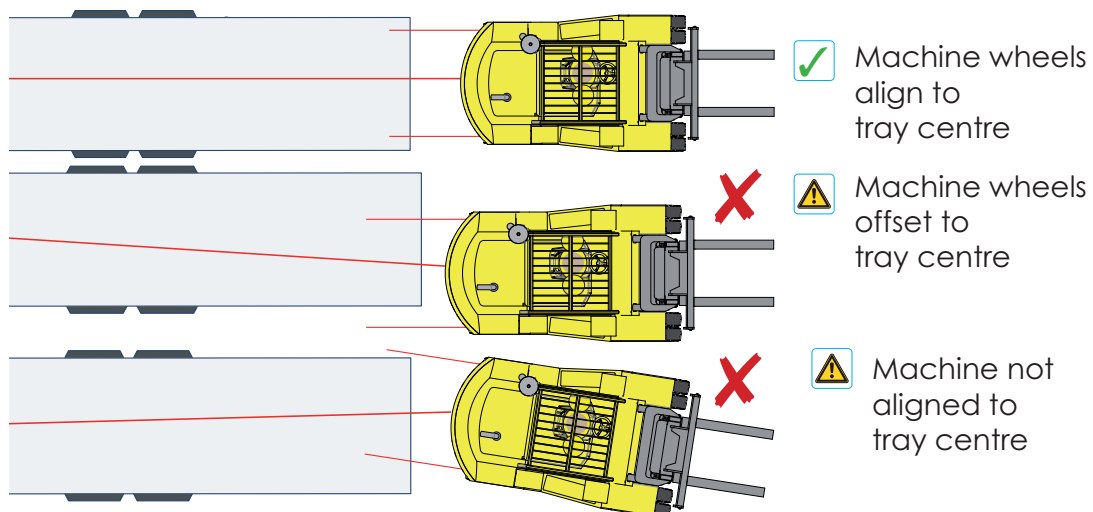
- ✗ Dead machines must not be loaded on a downhill slope.



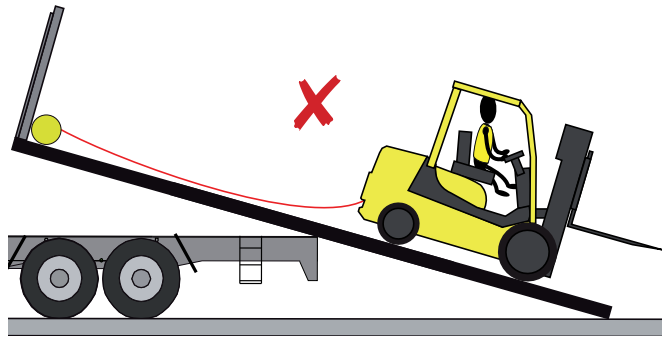
- ⚠ Max slope for loading uphill is 4 degrees. Dead machines may only be loaded uphill if they can be prevented from rolling (i.e., by using another machine, a wall or similar) until the winch is connected.

3 Loading Machine:

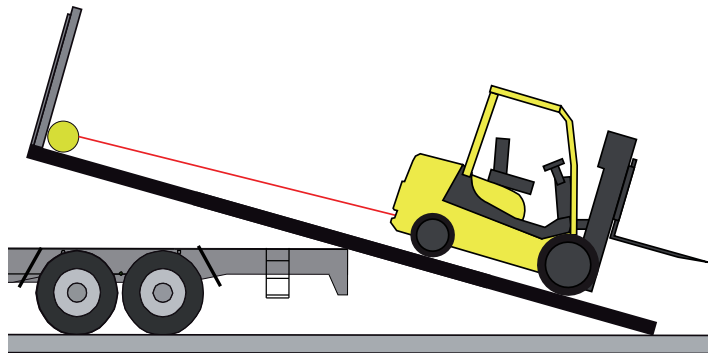
- ✓ All plant must be winched onto the tilt tray. If the plant cannot be winched onto the tray then it must not be loaded.
- ✓ Operator to access tray using the access ladder and extend the winch cable so it can be accessed from the ground.
- ✓ Lower the tilt tray.
- ✓ Align the machine centre to the centre of the tray and park the machine.
- ✓ Attach the winch cable to the machine (slings may be required for machines which do not have a central tow point).
- ✓ Operator to secure him/herself in the machine cab.
- ✓ Release the machine's park brake.
- ✓ Commence winching the machine up the tray at a slow speed.
- ✓ Once the machine is in the desired location, ensure the winch is locked out and unable to 'free spool'.
- ✓ Lift the tray back to a flat position.
- ✓ Operator to exit cab and use access ladder to leave tray.



- ✓ Operator must remain in the machine cab with seatbelt/restraint gear fastened while it is being winched

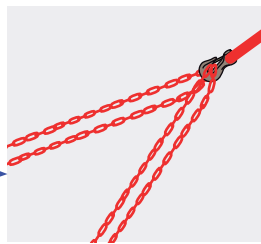
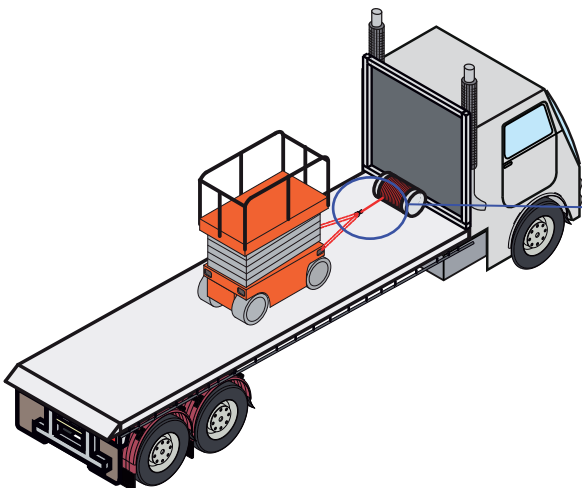


⚠️ Ensure the winch cable remains under tension during loading.

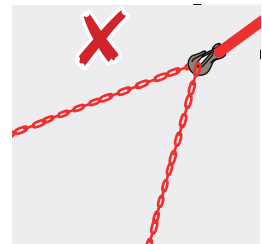


⚠️ Only dead machines should be winched without the operator in the cab.

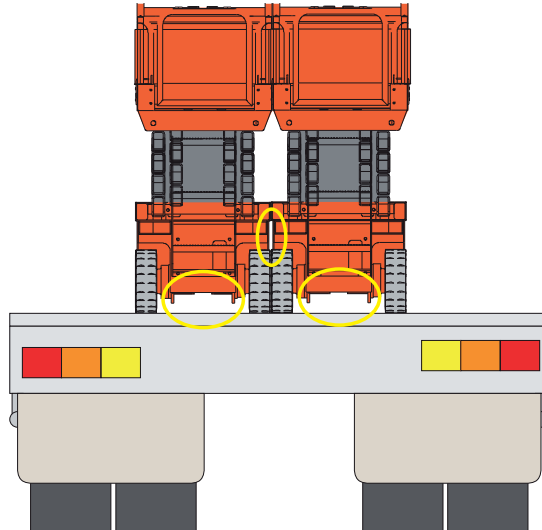
✅ Machine must be winched from a central point (e.g. tow point). If no central point is available to hook onto, use a sling/s.



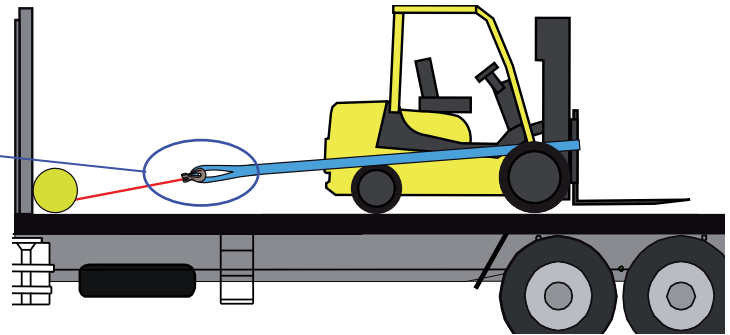
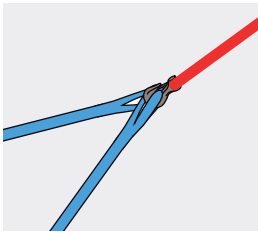
✅ Slings method if using chain - use two independent chain loops



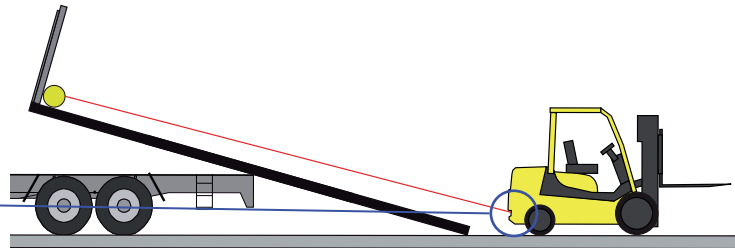
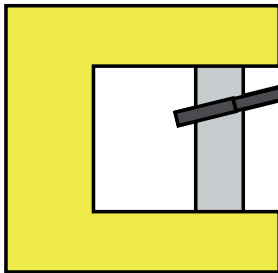
❌ Do not use single chain for slinging continuous chain for slinging



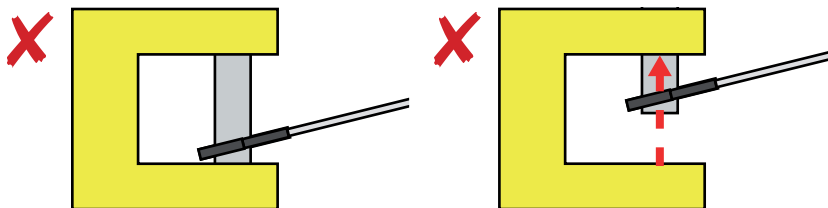
- ✓ Where multiple machines are being loaded on the tray, pass the winch cable under or between the machines loaded at the front of the tray to allow additional machines to be winched.



- ✓ Slings method if using lifting sling with eyelets - wrap sling around machine using a location it cannot slip down



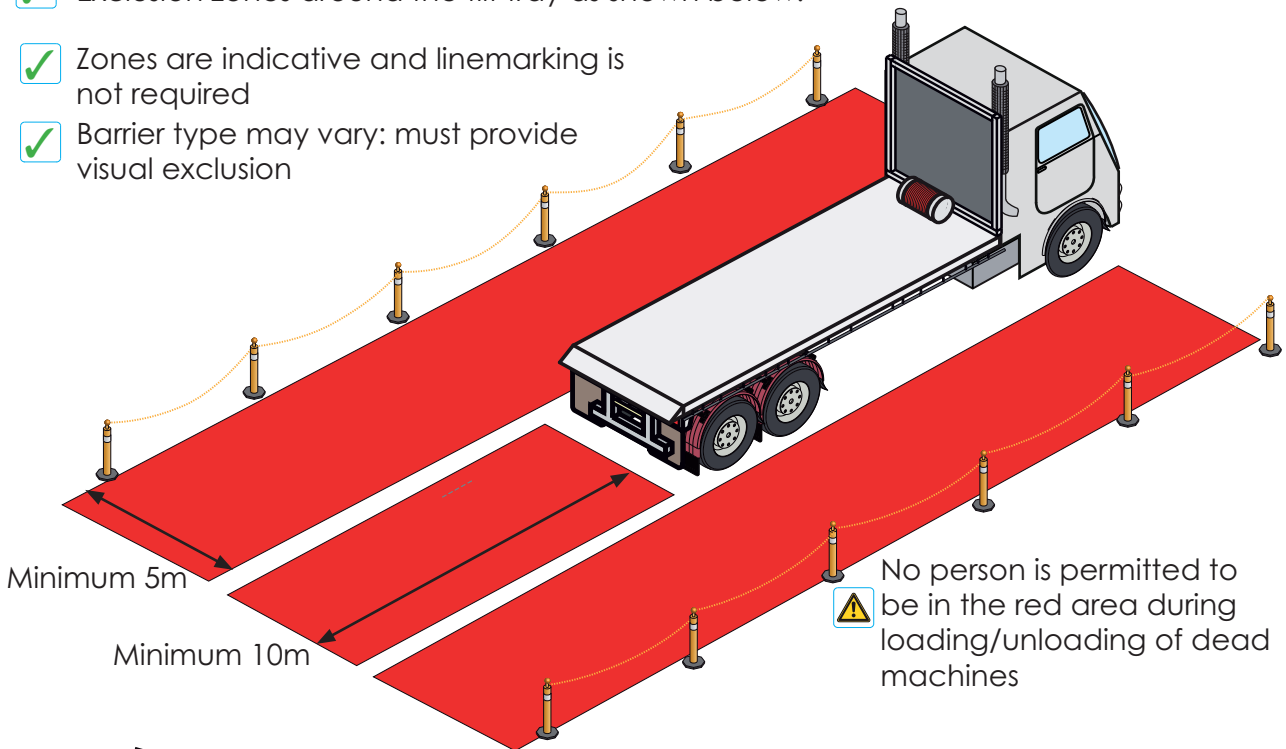
- ✓ Keep tension on the winch cable to ensure the winch hook stays at the top of the tow pin.



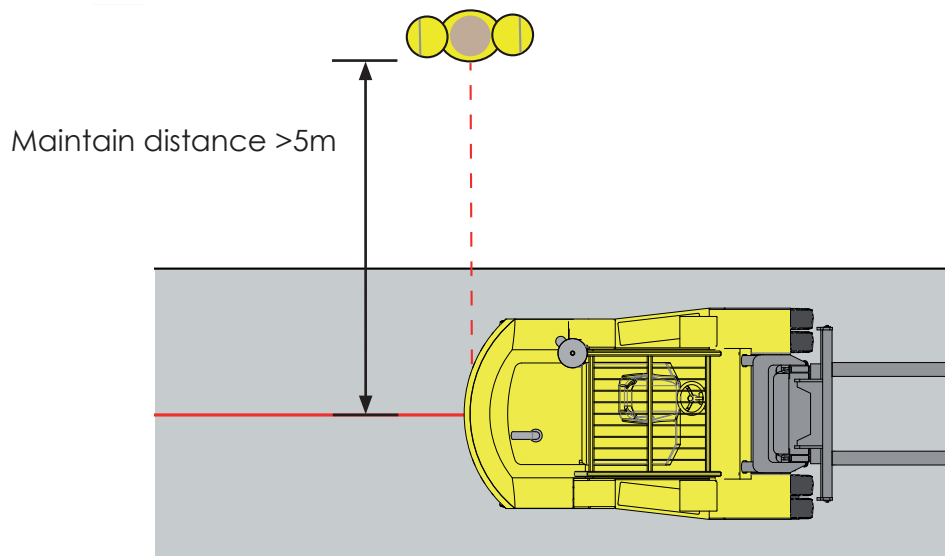
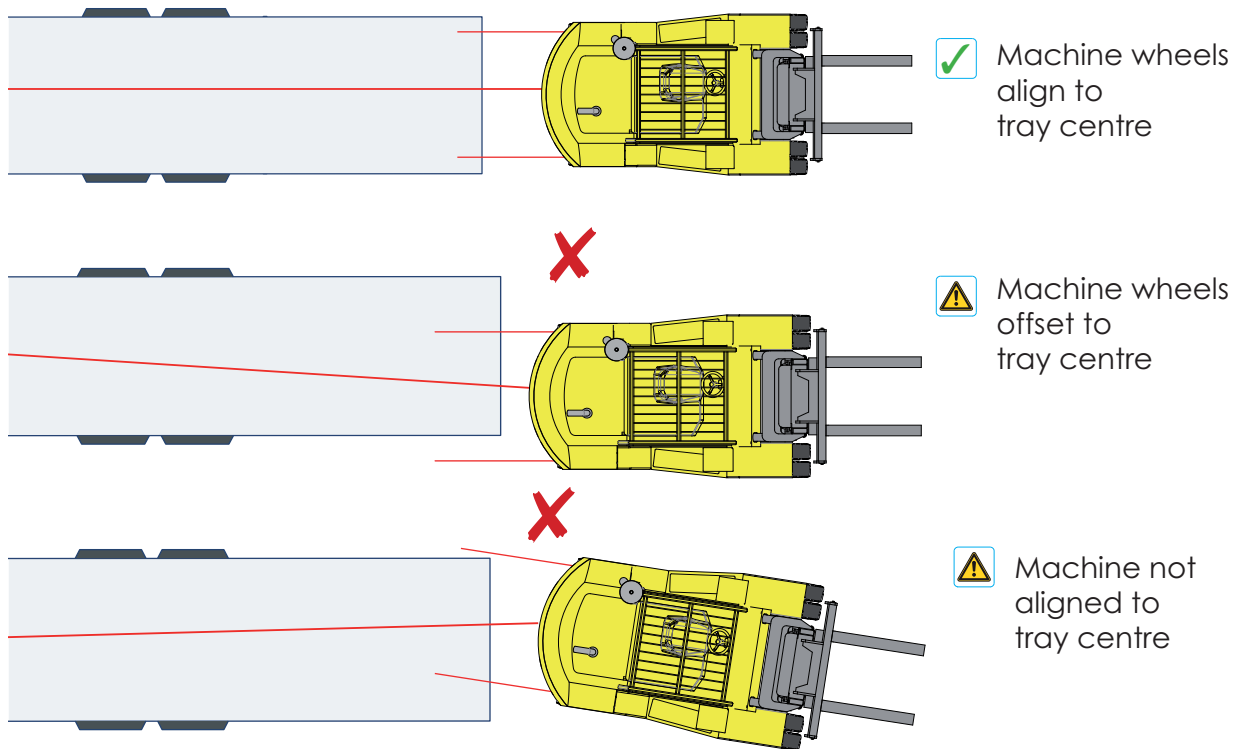
- ⚠ Winch hook can lift the tow pin if placed at the base of the pin.

Dead Machines (No Operator in Cab) - Special Requirements

- ✓ Operator to access tray using the access ladder and extend the winch cable so it can be accessed from the ground.
- ✓ Lower the tilt tray.
- ✓ Position the machine centre and parallel to the centre of the tray, and straighten the wheels.
- ✓ Attach the winch cable to the machine (slings may be required for machines which do not have a central tow point).
- ✓ Release any park brake the machine has. Ensure the winch cable is attached and tight before releasing the brakes.
- ✓ Commence winching the machine up the tray at a slow speed.
- ✓ Once the machine is in the desired location, ensure the winch is locked out and unable to 'free spool'.
- ✓ Lift the tray back to a flat position.
- ⚠ Loading must not be attempted onto a tray without a suitable winch.
- ⚠ Maximum one machine per tray when loading dead machines.
- ✓ Exclusion zones around the tilt tray as shown below:
- ✓ Zones are indicative and linemarking is not required
- ✓ Barrier type may vary: must provide visual exclusion



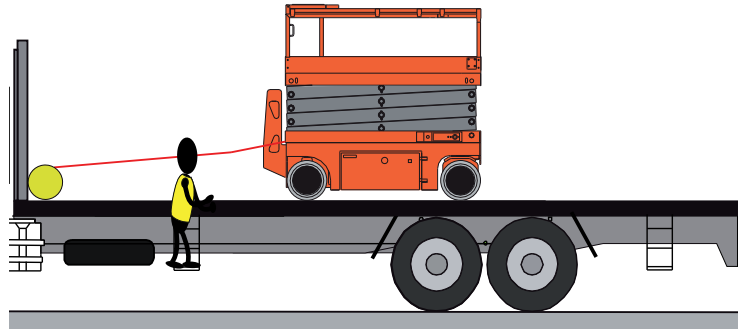
Dead Machines (No Operator in Cab) - Special Requirements



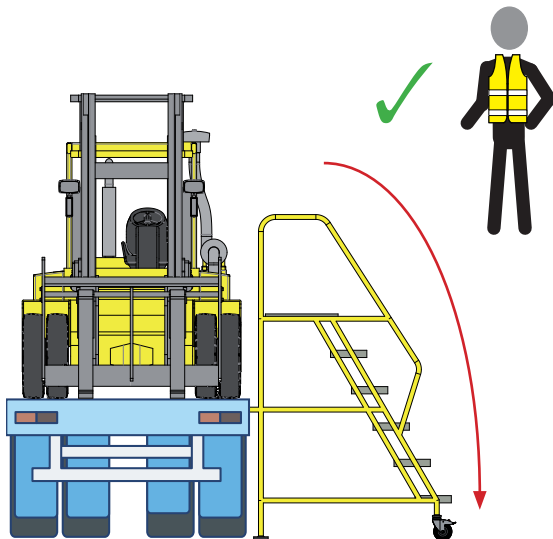
- ✓ Winch operator should stay in line with the winch hook when loading. This will be the safest place in the event of a winch failure.

4 Setting up tilt tray for transport

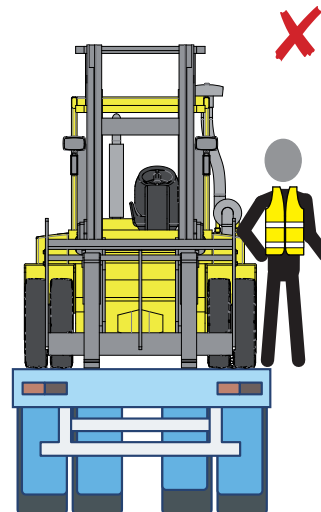
- ✓ When the machine has been winched to its desired position the operator must apply the park brake and return the tray to a flat position before exiting the machine.
- ✓ Restrain the machine for transport.
- ✓ If only a single machine is being transported on the tray, leave the winch cable attached. If multiple machines are being loaded, ensure the winch cable is detached and left in a position accessible from the ground before tilting the tray to load the next machine.



- ✓ Use the tilt tray ladder to access the tray, only access when flat.



- ✓ Where there is less than 300mm of clear space between the machine and the tray edgeplatform ladder for access.



- ✗ Do not attempt to walk around machines on the tray unless there is sufficient clearance.

Dead Machines (No Operator in Cab) - Special Requirements

- ⚠ Dead machines and machines without park brakes will need to be restrained before bringing the tray to an upright position. Ensure additional precautions are taken to avoid slipping down the tray. E.g., ensuring the tray is dry to avoid slips, ensuring three points of contact are maintained, etc.

5 Unloading Machine

- ✓ Establish unloading zone as indicated in parts 1 and 2 of this guideline.
- ✓ Operator to access tray and remove load restraints, disengage machine park brake (if applied) and attach winch cable (if not left attached during transport).
- ✓ Operator to access machine cabin using tilt tray ladder or mobile platform (when there is less than 300mm of clear space to access the machine) and secure seatbelt/harness.
- ✓ Operator to remotely lower the tilt tray while in the the machine, then winch the machine off the tray.
- ✓ Operator to apply parking brake and exit cab.
- ✓ Operator to detach the winch cable from the machine and lift the tray back to a flat position.
- ✓ Operator to access tray and secure the winch cable.

Dead Machines (No Operator in Cab) - Special Requirements

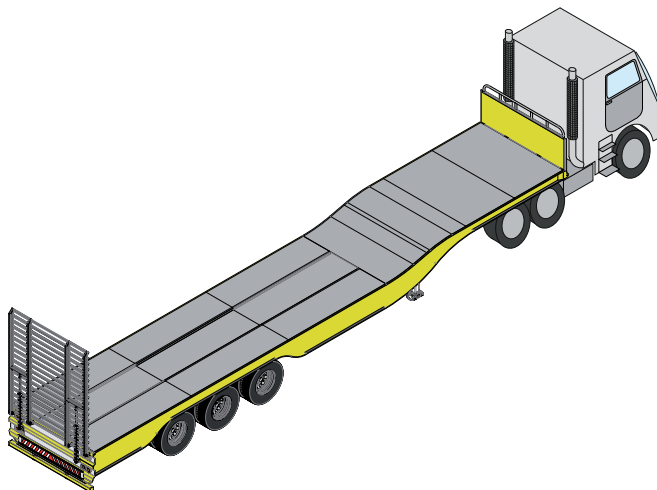
- ✓ Operator to access tray and remove load restraints, disengage machine park brake (if applied) and attach winch cable (if not left attached during transport).
- ✓ Operator to get down from the tray using the access ladder and stand in a safe area in line with the winch hook.
- ✓ Operator to lower the tilt tray, then winch the machine off the tray.
- ✓ Operator to ensure machine cannot roll, either by chocking or other means.
- ✓ Operator to detach the winch cable from the machine and lift the tray back to a flat position.
- ✓ Operator to access tray and secure the winch cable.

This guideline:

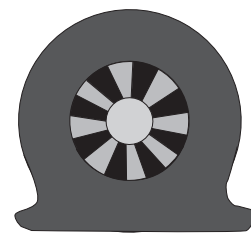
- Applies to counter balance forklifts up to 9,500kg, Combilift forklifts up to 8,000kg, Aisle-Master forklifts up to 7300kg, Dingli scissor lifts up to 2000kg, Haulotte scissor lifts up to 4,000kg and boom lifts up to 7,600kg.
- Is a Loading and Unloading Guide to align with the Risk Assessment relating to this activity
- Participants to have the relevant licences and training to operate the Mobile Plant and the Trailer ramps including:
 1. Load and Unload Mobile Plant Training
 2. Appropriate licences (HC licence, EWP yellow card, forklift licence, etc.)

1 Planning and Task Preparation

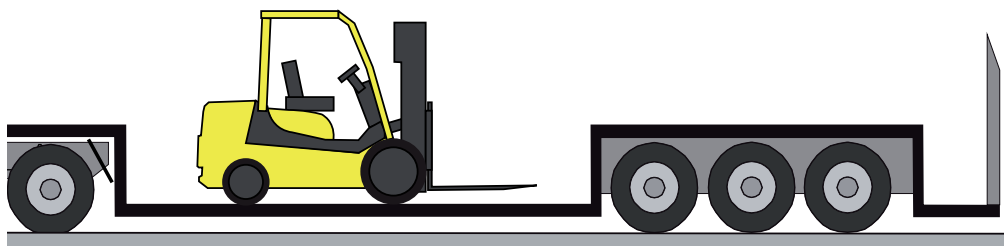
- ✓ PPE consisting of high-visibility clothing, safety glasses, safety gloves, steel-capped boots must be worn when completing this task. Use sun protection when necessary.
- ✓ Machines can be transported with a low loader or a forklift trailer.
- ⚠ Machines with low clearance must only be transported with a forklift trailer.
- ⚠ If traction is an issue (e.g., low loader ramp is too steep, wet conditions, etc.) use a forklift trailer in lieu of a low loader
- ✓ It is recommended trailers have a ramp which extends the full width of the trailer.
- ⚠ Trailers with separation between the two ramp tracks can be used provided the machine being loaded has four wheels and the track width of the machine matches the track width of the ramp
- ✓ Load capacity rating of the ramp must be equal or more than the machine mass



✓ Full width ramp preferred



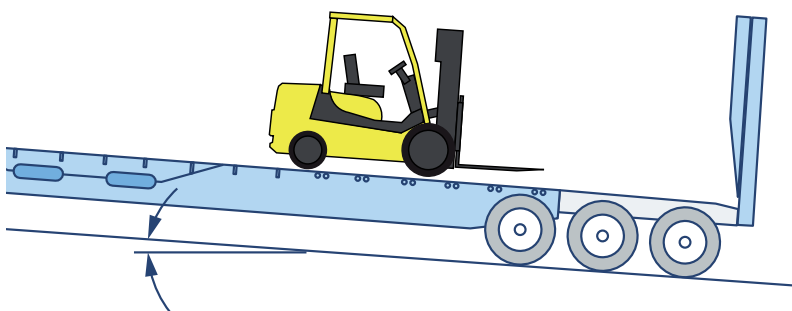
⚠ Check tyres for low pressure



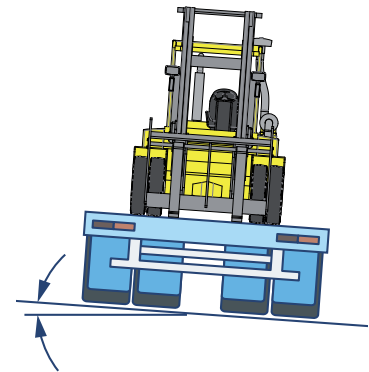
✓ Forklift trailer

② **Establish suitable area and equipment for the Loading or Unloading activity**

- ✓ Firm compacted or sealed surface for the trailer and machine travel paths
- ⚠ No loading or unloading on uncompacted soft ground, grassed or loose dirt surfaces are not suitable
- ✓ Gravel surfaces are acceptable and may need timber pads under ramps to maximimise ramp stability
- ✓ Confirm pre-start check completed on the trailer, this includes ensuring the rear axle tyre pressure is suitable and the tyres appear undamaged, and the machine.
- ✓ Confirm no overhead obstructions are in proximity to the trailer prior to loading

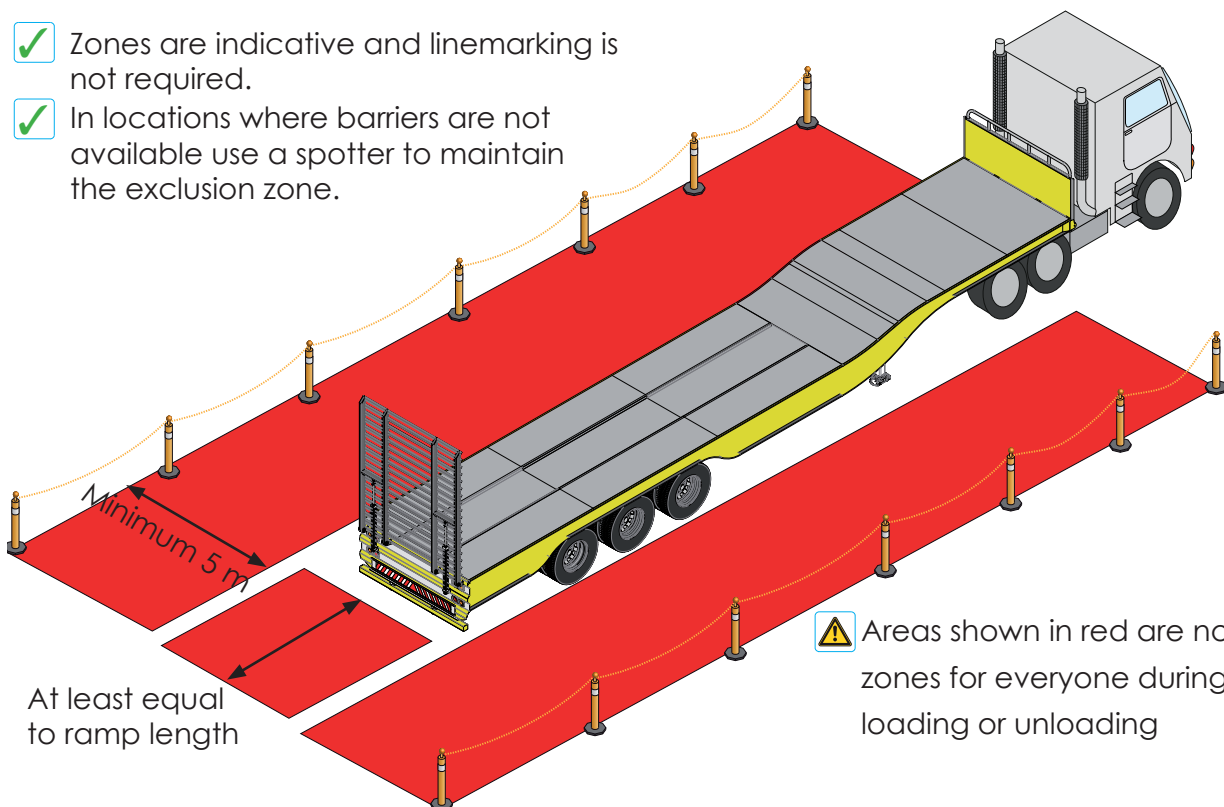


✓ Max slope for loading of 5 degrees



✓ Max cross fall for loading of 3 degrees (typical maximum roadway cross fall)

- ✓ Exclusion zones around the tilt tray as shown below:
- ✓ Zones are indicative and linemarking is not required.
- ✓ In locations where barriers are not available use a spotter to maintain the exclusion zone.



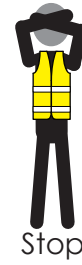
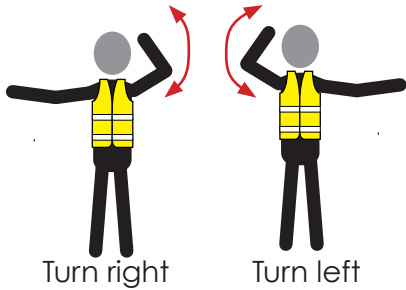
Minimum 5 m

At least equal to ramp length

⚠ Areas shown in red are no go zones for everyone during loading or unloading

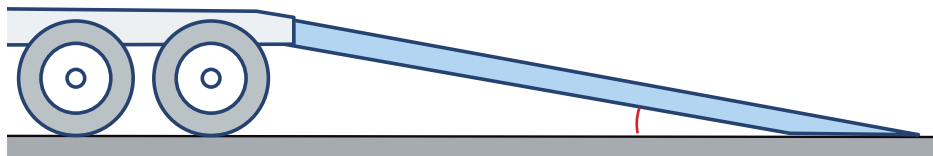
3 **Establish communications between people, key considerations are:**

- ✓ Spotters may be required if machine width is close to 2.5m or visibility is poor.
- ✓ Ensure plant operator and spotter have a two way radio
- ✓ Establish clear instructions, i.e steer right, steer left
- ✓ Use hand signals to indicate the direction of turn by observers

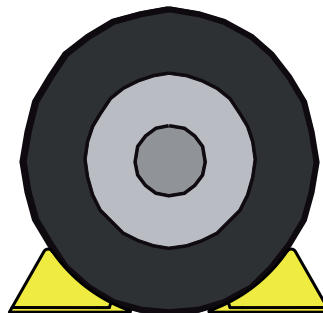


4 **Setup Trailer**

- ✓ Lower suspension of trailer where possible
- ⚠ Ensure no person in potential ramp fall area during lowering of ramp
- ✓ Use hardwood timber pads under ramp if required to minimise ramp angle
- ✓ Maximum packing height under ramps should be 100mm



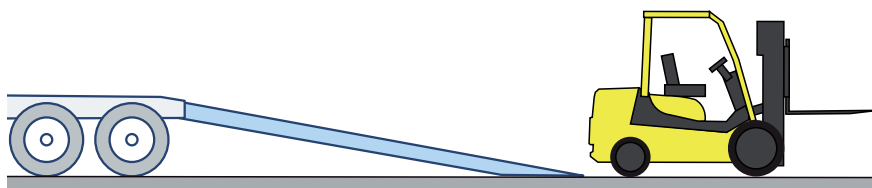
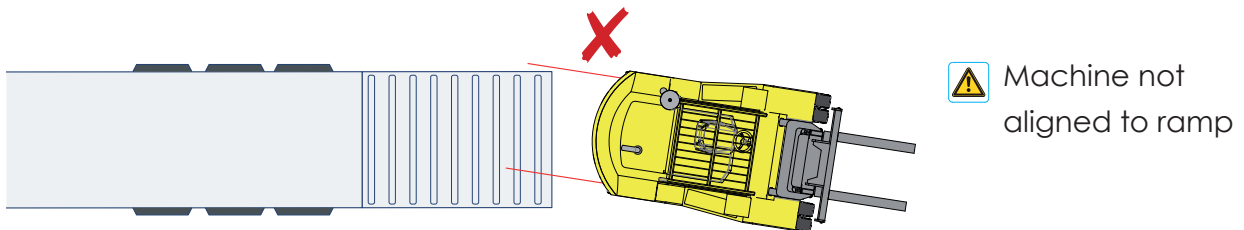
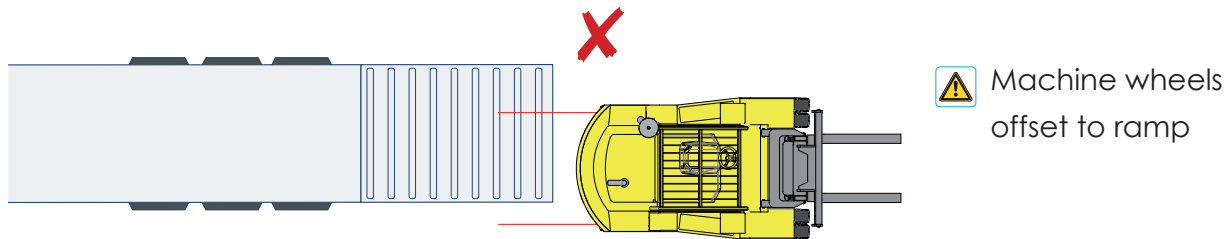
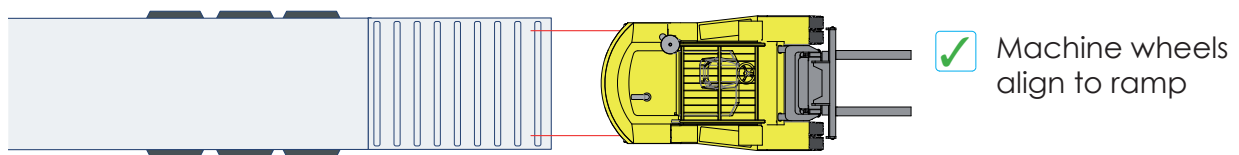
- ⚠ If low ramp angle is too steep traction and clearance will be an issue



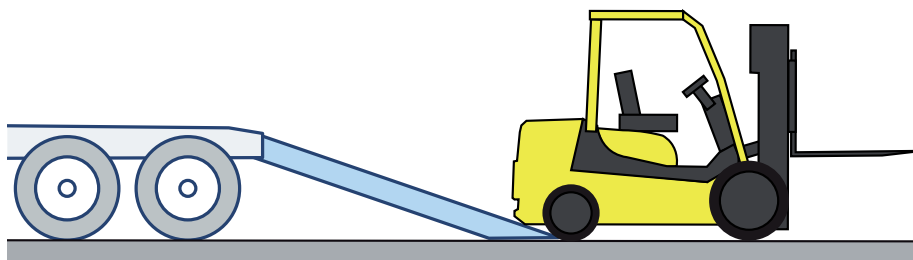
- ✓ Chock trailer wheel

5 Loading machine:

- ✓ Operator to access machine cabin and secure seatbelt
- ✓ Place spotters outside exclusion zones, do not access trailer deck or side of trailer zone
- ⚠ Machine must be loaded at low speed
- ✓ Align wheels of machine to ramp and center steering
- ✓ Spotter (if required) to provide clear feedback to operator on location of wheels on ramp
- ✓ Operator to adjust steering as needed with small adjustments, minimising speed of the machine
- ✓ Operator to check position of wheels with rearview mirrors as needed



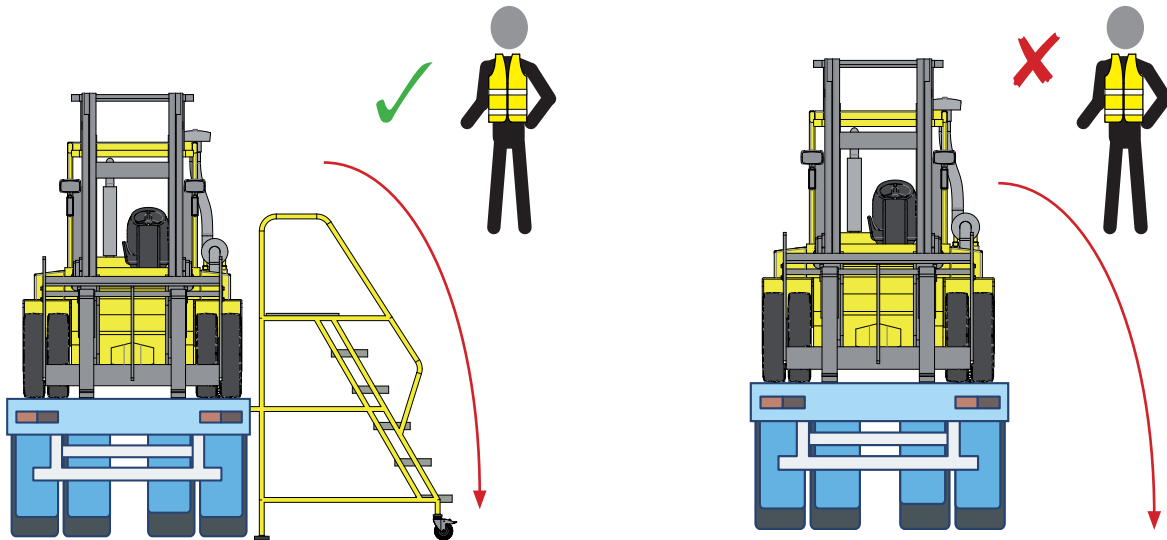
- ✓ Ensure forklift tyres are raised before loading onto the trailer



- ⚠ Ensure machine does not bottom out on ramp

6 **Machine isolation and operator egress**

- ✓ Machine operator to isolate machine and secure any loose objects
- ✓ If the machine is more than 1.8m wide use a mobile platform or similar to exit to minimise fall from height risk.
- ✓ Use 3 points of contact when using appropriate platform ladder to reach ground level



7 **Unloading machine from trailer:**

- ✓ Establish unloading zone as indicated in parts 1 and 2 of this guideline
- ✓ Drop trailer to loading height (if equipped with suspension that can do so)
- ✓ Operator to access machine cabin using mobile platform (not required for forklift trailers) and secure seatbelt
- ✓ Place spotters (if required) in safe zones, do not access low loader deck or side of trailer zone
- ✓ Align wheels of machine to top of the ramp and centre steering
- ✓ Spotter to provide clear feedback to operator on location of wheels on ramp
- ✓ Operator to adjust steering as needed with small adjustments, minimising speed of the machine
- ✓ Operator to check position of wheels with rearview mirrors as needed
- ✓ Minimise fall from height risk when exiting machine and use 3 points of contact