

Safe System of Work – Overhead Travelling Crane (OHTC)

Lifting operations by their nature have the potential to be extremely dangerous. We have introduced this safe system of work to ensure that all lifts are carried out without injury to personnel or damage to the load, crane or lifting accessories.

Following the systems below will ensure that all necessary considerations have been made to ensure a safe, successful operation.

YOU MUST NOT OPERATE THIS EQUIPMENT IF YOU HAVE NOT ATTENDED THE APPROPRIATE TRAINING COURSE.

Pre-Operation

Personal Safety

➤ **What is the task?**

Make sure you have thought through exactly what any new task involves before you start.

➤ **Do I understand how to do the task correctly?**

- Have I been trained?
- Am I competent?
- Is it a familiar task – or a one-off that I may not be able to tackle?

If you are sure you are trained and competent then carry on. If not **STOP** and refer to your supervisor.

➤ **Do I have the right tools and equipment?**

Make sure you use the right kit in the right way:

- Is it in good condition or is it damaged?
- Is it up to the job?

If the equipment is ok, then carry on. If not, **STOP** and refer to your supervisor.

➤ **Do I know who or what may be harmed?**

- Am I aware of the hazards?
- Am I aware of other people in the area?

If you aren't aware of what could hurt you or your colleagues, how will you protect yourself and them? If you are not sure, **STOP** and refer to your supervisors.

➤ **Are controls in place?**

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If you know what the hazards are, what controls are there in place to minimise the risks?

- Guards
- Procedures
- PPE
- Exclusion zones
- Inspections

If you do know what the controls are make sure they are in place. If they are not, **STOP** and refer to your supervisor.

Pre-use checks

Pre-use checks need to be completed to ensure the equipment is safe and to identify any defects present.

- Ensure that the Daily First use check sheet has been completed.
- Always complete a visual check each time you use the equipment

Pre-use checks for the Pendant controller.

- Check to ensure that there is no obvious damage to the casing of the control unit.
- Check the pendants umbilical cord is free from obvious damage, including cuts

Operation

- Before picking up a load, ensure that you are familiar with the particular controller and that the controller is fully operational by carrying out movements throughout the cranes full range of operation.

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DO IT RIGHT FIRST TIME!

1. COMMUNICATE
2. ASSESS THE LOAD
3. SELECT THE LIFTING ACCESSORIES
4. ESTIMATE THE LOAD CENTRE OF GRAVITY
5. FIT THE SLINGS
6. CARRY OUT A TRIAL LIFT
7. LIFT AND MOVE THE LOAD
8. SET DOWN THE LOAD
9. RELEASE THE SLINGS
10. CLEAR UP

Lift plan

Following the system below will help to ensure that all the necessary considerations have been made to ensure a successful operation.

- Communicate with others
 - Colleagues involved with the lift
 - People operating in the area
- Assess the load
 - Determine the weight. Do not make the lift if you are in any doubt about the weight of the load
 - Know your load and its material to ensure the correct selection and fitting of lifting accessories.
- Select the lifting accessories
 - Use the correct sling or attachment for the required SWL and load material
 - Inspect the equipment prior to and after use in line with LOLER requirements and reference to the Manufacturers Instructions for Pre-Use. (Available from the Office)
- Estimate the load centre of gravity
 - Take account of the shape of the load and the materials involved
 - Ensure the centre of gravity is directly below the lifting point.
- Fit the slings
 - Remember in normal circumstances the angle of the sling should not exceed 45 degrees.
 - Avoid having the sling legs too close together
 - Ensure the crane hook is directly above the centre of gravity and that the master link rides freely on the crane hook.
 - If the load has any sharp edges use packing to avoid sling damage

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- Carry out a trial lift
 - Avoid shock loading as this can result in the SWL being exceeded
 - Check that the load is free to lift – not bolted down before proceeding
 - Be aware of trapping points and ensure that nobody is standing in or has any part of their body in a trapping position.
 - Check that the load is level and stable by hoisting gently until nearly all of the slack is taken from the sling leg(s)
 - Check that there is the same amount of slack left on leg so that the when the load lifts it will lift on a level plane. Reposition the slings to achieve this as required
 - When satisfied that all the slings are correctly positioned take up the remainder of the slack so that all the legs become taut
 - Check all around to make sure it is still safe to make the lift.

If the load is not lifting level in a stable manner, lower it back down and reposition the slings or the crane hook as required. Never side pull a load

- Lift and move the load
 - Ensure you communicate to everyone working in the area of the lifting operation is aware of what is happening
 - Ensure the intended route is clear from danger i.e. obstacles, pedestrians or anything that would generally cause obstruction
 - The slinger of the operation needs to ensure that nobody will get into a trapping position during the whole process
 - If operating alone the slinger would normally walk behind the load, unless the load obstructs vision.
 - If operating as part of a team the slinger will walk in front of the load
 - Ensure that the load is at a sufficient height to clear all obstacles in its path.
 - Ensure the speed is consistent with the load and working conditions
 - Use tag line/s to control the load if required. **Don't use fingers which could become trapped**
 - **Never leave a suspended load unattended**
 - **Never work on a suspended load**
 - **Never move a load over people**

- Set the load down
 - Before lifting the load ensure the area it is to be set down is clear and suitable
 - Ensure the area is strong enough to support the weight and the dunnage is in place so the load isn't set down on the slings
 - **Be aware of trapping points whilst lowering the load!** The load may 'settle' once rested so don't allow it to 'settle' on your fingers or feet!
 - Ensure the load is secure and stacked safely and correctly
 - **Do not allow the slings to be trapped under the load**

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- Release the slings
 - Ensure the load is stable before releasing the slings
 - Ensure there is no tension in the slings
 - Be aware of additional trapping points – keep fingers and toes out of the way
 - Use appropriate PPE when removing the slings and do not drag them using the crane as this may dislodge/damage the load and/or slings
- Clear up
 - Park the crane correctly ensuring that it is not causing an obstruction
 - Remove accessories from the crane hook and position the hook above head height
 - Switch the crane controller off and place in a position of safety so it does not present an entanglement hazard to pedestrians or machinery
 - Inspect all lifting accessories used before storing away in its designated location
 - Remove any damaged equipment from service and report using the fault reporting system
 - Remove debris from site to ensure good housekeeping

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