

SAFETY ALERT

The below information has been issued on behalf of the FPS to raise awareness of the potential risks when undertaking lifting operations using the auxiliary winch of a driven piling rig to offload precast units or steel tube from the delivery vehicle, or move them around site.

To maintain the piling rig's stability it is important that:

1. The piling rig is set up and used in accordance with the operator's manual.

It is important that the tracks on the rig are fully extended for all lifts. And, if a rig is fitted with a counterweight, this must be fully extended

Some rigs have the mast fitted to a horizontal slide, whose position will have a significant impact on the lift capacity. In these circumstances the duty chart is based on this slide not being extended further than 300mm

During lifting the hammer must be positioned in accordance with the best practice procedure set out in the rig manual.

Piling rigs must not undertake lifts with wind speeds exceeding that stated in the operator's manual

Piling rigs currently do not have Automatic Safe Load Indicators fitted due to the variations in mast inclination, sideways angle, hammer weight etc. Line load indicator can be retro-fitted to some rigs (if they are not already fitted). These provide the operator with a true reading of the weight of the load being lifted. Some rigs have inclinometers which will provide a visual or audible alarm if the mast reaches a specified angle.

2. The site set up and platform is considered

The lifting operations plan must take into consideration any variations in ground level between where the rig is positioned in relation to the delivery vehicles (split level sites) It is also important to note that some trailer beds are 1.5m in height. One manufacturer specifies that the load is not lifted higher than 4 metres from the ground.

The rig's duty chart is based on the rig being positioned on firm level ground. Any incline can result in the lift radius increasing and the safe working load being exceeded

3. The rigs position and orientation in relation to the delivery vehicle is considered

Lifts should only be carried out with the mast angle not exceeding that identified in the duty chart

Ideally, the rig should be positioned close to the side of the trailer with the tracks perpendicular. This will allow the initial lift to be completed with the rig having its greater lift capacity.

The lift plan should take into account any clearances required between the rig and delivery vehicle to safely offload.

If lifting is to be carried out whilst the rig is slewing, the lift plan must consider the duty charts referring to 360° operations as the lifting capacity can be greatly reduced during these operations

4. Information for the operator

The rig operator must have all relevant information to hand. This will include a copy of the lift plan, the operator's manual, and a duty chart displayed within the cab.