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BERNARD HUNTER CRANE HIRE

























LIFTING OPERATIONS

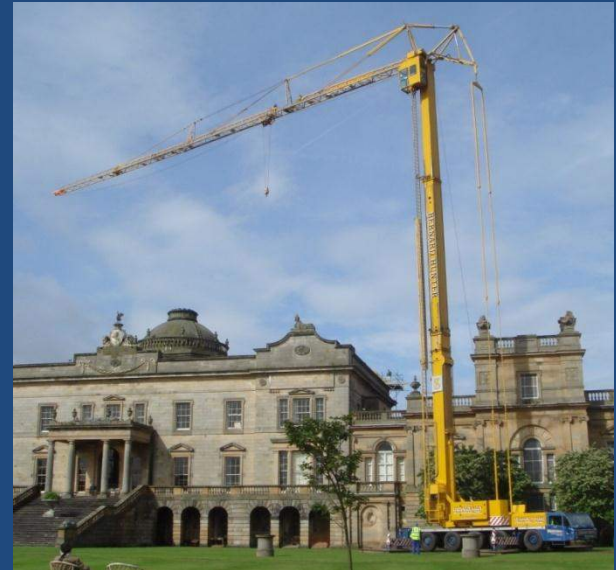
- ❖ Three steps for a successful Lift
- ❖ Contract Lift vs. CPA Crane Hire
- ❖ Crane Outrigger Loadings
- ❖ Crane Outrigger Pads





THREE STEPS TO A SUCCESSFUL LIFT

- ❖ Planning
- ❖ Managed
- ❖ Controlled





PLANNING A LIFT

❖ Legal Requirements for Lifting Operations

Health & Safety legislation requires that safe systems of work are in place for all lifting operations. The particular references for the requirement to provide a safe system of work for lifting activities are: -

- ❖ Health & Safety at Work etc Act 1974 (HSWA)
- ❖ Management of Health & Safety at Work Regs 1999 (MHSWR)
- ❖ The Lifting Operations & Lifting Equipment Regs 1998 (LOLER)
Guidance from Code of Practice for Safe use of Cranes BS7121
- ❖ The Construction (Design & Management) Regs 2007 (CDM)
- ❖ Provision and Use of Work Equipment Regulations 1998



PLANNING A LIFT

❖ Appointed Person

An appointed person is an individual with the training, practical and theoretical knowledge and experience required to create a method statement, risk assessment and lift plan for the desired lifting operation.





PLANNING A LIFT

❖ Appointed Person

- ❖ Establish a **SITE / LIFT SPECIFIC** Method Statement / Risk Assessment & Lift Plan
- ❖ Selection of the Crane & Lift Team
- ❖ Consideration of the location of the operation
- ❖ Selecting appropriate lifting accessories
- ❖ Ensuring that the crane and lifting accessories are thoroughly examined and tested
- ❖ **Briefing** all persons involved in the lifting operation to ensure that the safe system of work described in the method statement is understood.



MANAGING A LIFT

❖ Crane Supervisor

The crane supervisor should be competent to direct & supervise the lifting operation, ensuring that these are carried out in accordance with the method statement.





MANAGING A LIFT

❖ Crane Supervisor

The Crane Supervisor should be:

- ❖ Fully conversant with the duties of all persons involved in the lifting operation.
- ❖ Able to give clear, unambiguous instructions to all other members of the team
- ❖ Able to assess danger to the lifting operation, from changed circumstances on site, and to call a halt to the operation if the risk becomes unacceptable, so that the appointed person should be referred to for further instructions



CONTROLLING A LIFT

❖ Slinger / Signaller

The slinger / signaller is responsible for attaching and detaching the load to and from the crane and using the correct lifting accessories and equipment in accordance with the lift plan. The slinger / signaller will be responsible for directing the movement of the crane and load.





CONTROLLING A LIFT

❖ Slinger / Signaller

The Slinger / Signaller(s) should be:

- ❖ Trained & experienced in relation to the complexity of the lift
- ❖ Able to select the appropriate lifting accessories and check that they are in a suitable condition
- ❖ Able to give clear and precise verbal and/or hand signals to the crane operator to direct the safe movement of the crane and load



CRANE HIRE OPTIONS

**CPA CRANE HIRE
VS.
CONTRACT LIFT**





CPA CRANE HIRE

Under the terms of a standard CPA Crane Hire, the crane and its operator will work to the customer's instructions. The Customer will PLAN the lift, select a suitable crane, specify the slinging and signalling arrangements, supervise the lift and be responsible for the lifting operation.

The **Crane Owner** must supply a competent operator and a crane fit for the intended purpose.

The **Crane Owner** has a duty to provide on request, certain technical information about the crane such as outrigger loadings and duty charts to assist the Customer with their planning.



CPA CRANE HIRE

Bernard Hunter Crane Request Form

Has the lifting operation & safe access route to the set-up position, been planned by a competent person?	YES	NO
<i>If 'Yes' please give name:</i>		
Will you have a competent person who will supervise the lifting operation?	YES	NO
<i>If 'Yes' please give name (if known at this time of enquiry):</i>		
Will there be a competent slinger and signaller on site to attach, guide and detach the load?	YES	NO
Can you confirm that a risk assessment of the lifting operation has been carried out & documented?	YES	NO
Will a written lifting plan, including a drawing showing where the crane is to be positioned in relation to the load and other relevant site features be prepared?	YES	NO
Can you confirm that the written lifting plan (method statement & risk assessment) will be briefed to the crane operator before the lifting commences?	YES	NO



CPA CRANE HIRE

Bernard Hunter Crane Request Form

Insurance Cover			
Can you confirm there is relevant insurance to cover the lifting operation (see below)	<table border="1"><tr><td>YES</td><td>NO</td></tr></table>	YES	NO
YES	NO		
<p>Insurance to cover the following:</p> <ul style="list-style-type: none">a) Loss of or damage to our crane/vehicle/equipment whilst on siteb) Continuing hire charges whilst the crane/vehicle/equipment is off the road for repairs following damagec) Injury to driver/operator or our other employees on sited) Injury to other parties, including damage to their property arising from the crane operationse) Loss or damage to the goods being lifted			



CONTRACT LIFT

Under the terms of a **Contract Lift**, the crane, operator and all personnel supplied with the crane are the responsibility of the **Crane Owner**.

The **Crane Owner** is responsible for all aspects of the planning and execution of the lift.

The **Customer** has a duty to provide information, such as ground bearing capacity and the weight of the load to be lifted, to the Crane Owner to assist them with their planning.

As the customer is in control of the site and has access to the expertise required to assess the ground on which the crane will stand, they are responsible for assessment and preparation of the ground.



HYBRID LIFTING OPERATION

A Hybrid Lifting Operation is an arrangement somewhere between a **Contract lift** and a **CPA Crane hire**.

This would apply when a CPA Crane Hire (Customer's Appointed Person) is in place with the Crane Owner supplying the Lift Supervisor

WHO IS RESPONSIBLE FOR THE LIFTING OPERATION?



HYBRID LIFTING OPERATION

The HSE's Ian Simpson, HM Specialist Inspector has commented on such Hybrid arrangements and warned that the Crane Owner and the Customer requiring the lift will have deviated from the guidance contained with the BS7121 series.

As such they will no longer be able in court to claim compliance with the BS7121 series and the onus will be on them to demonstrate that the route they have chosen provides an **equal or better level of safety**.

In the event of an accident the inspector will in particular be looking to identify the person in charge of the lifting operation. In a Contract Lift or Crane Hire this person is relatively easy to identify. In a hybrid lift the Inspector, and for that matter a court in the event of a prosecution, will have to make that decision themselves.



CRANE OUTRIGGER LOADINGS

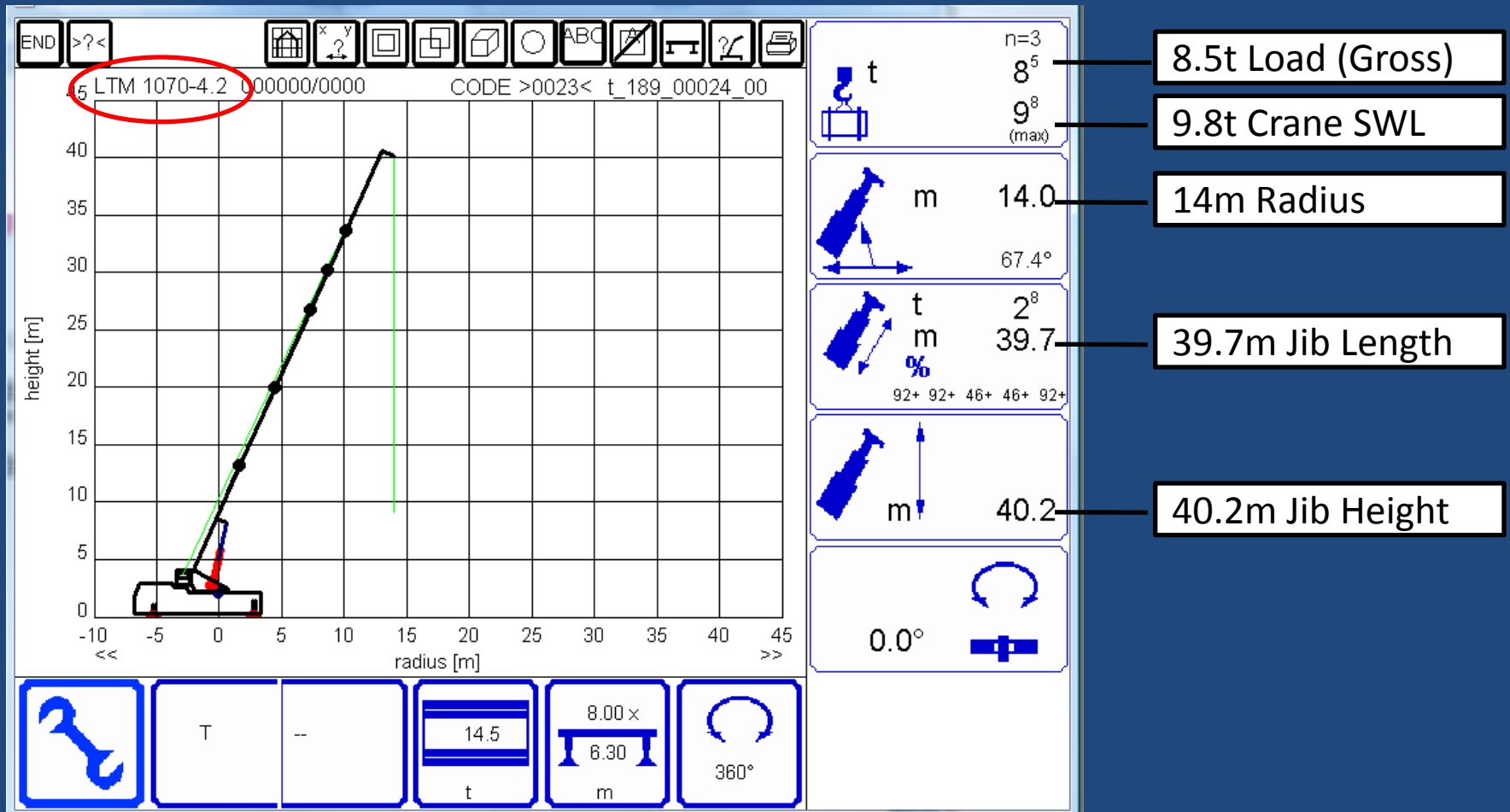
Ground conditions are very important regarding the set-up and operation of the crane. Accurate crane loadings are supplied by the Crane Company for both a CPA Crane Hire & Contract lift to assist with the planning of the lift and the client's preparation required for the lifting position





CRANE OUTRIGGER LOADINGS

LIEBHERR LICCON PLAN





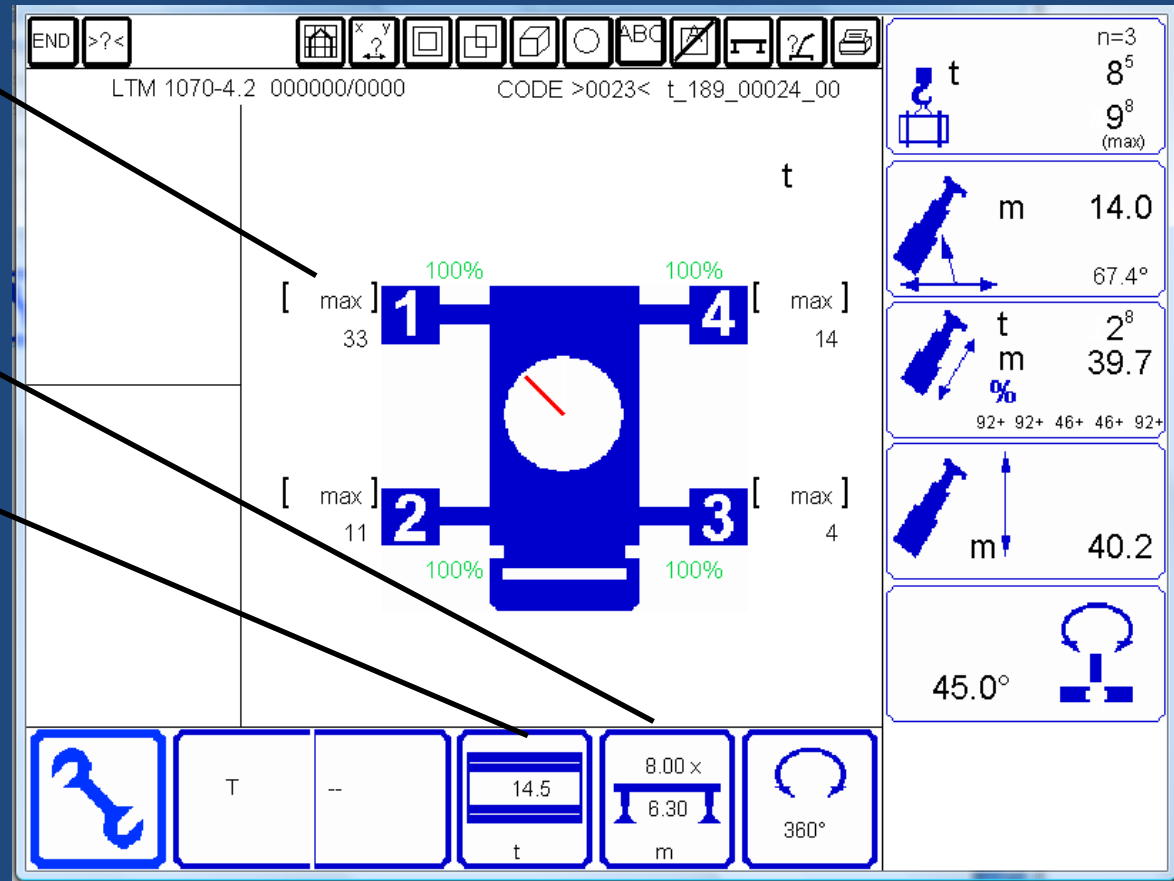
CRANE OUTRIGGER LOADINGS

LIEBHERR LICCON PLAN

33t max point load

Crane Footprint configuration

14.5t Ballast

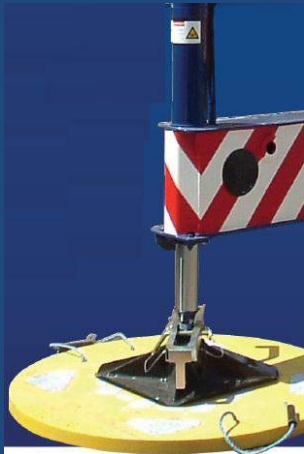




CRANE OUTRIGGER PADS

Various outrigger pads can be supplied to decrease the crane loadings

Nylacast Pads –
Standard on all cranes
Size: up to 1m x 1m





CRANE OUTRIGGER PADS



Spierings 2m x 1m
Crane Pads



CRANE OUTRIGGER PADS

Timber & Nylacast
Timber = 5m x 1m
Nylacast = 0.9 x 0.9





CRANE OUTRIGGER PADS



Steel Pads
2m x 2m



Steel Pads
1.34 x 3m



CRANE OUTRIGGER PADS

Timber & Steel
Timber = 5m x 3m
Steel = 3.5m x 2.4m



Timber & Steel
Timber = 5m x 2m
Steel = 2m x 1m





Summary

- ❖ **Communication & information** between Crane Owner and Customer must be transparent, free flowing and precise
- ❖ The Lift Team must be **experienced** & have the appropriate knowledge with regards to the complexity of the operation
- ❖ The hire option must be right for the customer and they are aware of the **responsibilities** regarding the crane hire
- ❖ Site AND Lift Specific Lift Plan, **NEVER Generic**
- ❖ Assessment of the **ground conditions** and the selection of **suitable outrigger pads**
- ❖ If in doubt, ask for assistance.



Lifting can be fun!!
Sometimes we have a Whale of a time!

