

Hazard & Risk Assessment – HIAB VLC

Hazards & Risk assessment information

Reference number: HIAB XS	Date:
Brand: HIAB	Site location: All
Conducted by: Jonathan Toye (Engineering Manager) Peter Spencer (National HSE Manager)	

Description of plant being assessed HIAB vehicle loading crane truck mounted.

Background information

People at risk (please tick):	<input checked="" type="checkbox"/> Employees	<input checked="" type="checkbox"/> Contractors	<input checked="" type="checkbox"/> Customers
	<input type="checkbox"/> Visitors	<input type="checkbox"/> Other, please specify:	

Operator Requirements

You must have studied the Operator's Manual for your HIAB vehicle loading crane carefully and hold a competency level suitable for the operation of the HIAB vehicle loading crane. Note this may require a high risk work licence, refer to state safety regulator website for more information.

Never operate the equipment when you are sick, tired, under the influence of medicines, alcohol or other drugs

Generic Hazards & Risks – For this type of Equipment

The hazards and risks detailed here are generic for this type of equipment and are intended to give principal contractors and users a quick summary of the hazards and risks involved before putting it to use. For details of any additional model specific hazards and user information, reference should be made to the operating instructions/other information supplied with the equipment. In addition to this instruction a demonstration is also available from our trained staff.

Hazards & Risks
Hydraulics can lower without warning and cause serious crushing/shearing injuries to body/limbs or death

- | Suggested Control measures |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i. Never work under or near a suspended load attached to the hook. |
| ii. Never walk under the crane boom while in operation. |
| iii. Do not put any part of your body into a trapping space. |
| iv. If the work to be conducted under raised hydraulics cannot be fully supported by an approved support device, an assessment must be undertaken to identify the risks and the specified control measures (to conduct work safely) MUST be implemented prior to the work being conducted |

CRUSHING

Being crushed between the plant and materials, or fixed structures when operating the plant

- i. At all times stand clear of the load being moved into position
- ii. Never position a load over the top of the operator or other persons.
- iii. If the view of the load or final position of the load is obstructed, then a person holding the appropriate high risk work licence should be engaged to guide the crane operator and the load
- iv. Ensure that telescopic arms are clearly labeled with warning decals displaying the potential crushing hazard associated with scissor type plants.
- v. When reversing the truck ensure that a spotter is provided when views are obstructed
- vi. Ensure that area is isolated from persons walking into the path of the reversing truck
- vii. When placing outriggers into position correct manual handling processes should be undertaken.
- viii. Ensure the vehicle is secure through the application of the vehicle park brake.

Tools or material falling

- i. Isolate the lifting area
- ii. Ensure that all loose items are removed from any operating surface to prevent objects falling
- iii. Clear all persons from the area before raising or lowering.
- iv. Where necessary consider appropriate barricading of the lifting area.

Body or limbs can be crushed if not kept clear of operating parts

- iii. Clear all persons from the area before raising or lowering.
- iv. Where necessary consider appropriate barricading of the lifting area.
- i. Ensure that any and all inspection and maintenance procedures is done in accordance with the procedures manual
- ii. Ensure that all fitted warning decals are placed on the plant, and safe operating procedures are placed in the manual and kept on the machine as reference.

Coming in contact with moving parts during testing, inspection, operation and maintenance, cleaning and repair

- i. Ensure that any and all inspection and maintenance procedures is done in accordance with the procedures manual
- ii. Ensure that all fitted warning decals are placed on the plant, and safe operating procedures are placed in the manual and kept on the machine as reference.

Plant tipping over while in operation, testing or maintenance

- i. Ensure the load is within the charted reference as fitted to the crane.
- ii. After operator assessment of ground conditions, ensure the use of suitable footpads if required.
- iii. Ensure the crane is not illegally overloaded
- iv. Ensure the ground is not soft or unstable. (if in doubt obtain information on point loading in the area of operation)
- v. Ensure the environment does not present strong winds (10m/s recommended)
- vi. Ensure that where the crane is intended to operate on pneumatic tyres, attention shall be given to the condition of the tyres.
- vii. Never move the vehicle while the crane has a suspended load.
- viii. The tyres shall be free from defects and inflated to the correct pressure

Being trapped between the plant and materials, or fixed structures while in operation, testing or maintenance

- ix. Vehicle fitted with air suspension, the factory instructions must be followed when lifting, loading or unloading.
- x. The air suspension must be fully deflated before operating crane.
 - i. Avoid congested work areas
 - ii. Remain outside of the working area of the crane and its load
 - iii. Ensure sufficient clearance between the load and obstructions
 - iv. Ensure that any and all inspection and maintenance procedures are done in accordance with the procedures manual
 - v. Ensure that where the crane is intended to operate on pneumatic tyres, attention shall be given to the condition of the tyres.
 - vi. The tyres shall be free from defects and inflated to the correct pressure

ELECTRICAL

Electrocution from overhead power lines?

- i. Maintain mandatory minimum clearances from overhead power lines as define by Regulatory Authorities. Remember the golden rule “Look up and Live”

The plant contacting live electrical conductors?

- i. Ensure that the operator is to take safety measures to avoid all hazards in the work area prior to machine operation.
- ii. This machine is not insulated and does not provide protection from contact or proximity to electrical current.
- iii. Ensure that the operator maintains a safe distance from electrical lines, apparatus, or any energized (exposed or insulated) parts according to the Minimum Safe Approach Distance (MSAD) Refer Operators Manual
- iv. The operator should when conducting an assessment of the task should allow for machine movement and electrical line swaying

Water near electrical equipment?

- v. If using electrical items outdoors, they must be weather proof. If cleaning machine do not use pressurized water near control boxes or electric/electronic components

REMOTE CONTROL (where fitted)

Being crushed between the plant and materials, or fixed structures when operating the plant

- i. While using remote, be aware of your surroundings.
- ii. Never use the remote while undertaking tasks other than manoeuvring the load with the crane.
- iii. Misuse of the remote may result in harm to persons or property

Changing of battery

- iv. Charging of the battery should be as per operators manual
- v. Never use batteries that are not recommended for use in the operators manual

ENTANGLEMENT

Becoming entangled in moving parts

Equipment Not in Use

Plant tipping over when unattended

Unauthorised use

- i. Keep personnel clear
- ii. Isolate work area from other persons
- i. Do not leave the boom fully extended and unattended as it could be exposed to wind loads and other risks such as collision with vehicular traffic
- ii. Remove operational power from crane
- iii. Use E stops to isolate operation

HIGH PRESSURE FLUID

Contact with fluids under high pressure, due to plant failure or misuse of the plant?

- i. Ensure that all hydraulic hoses used have a bursting pressure of three times the working pressure
- ii. Ensure that the provision of relief valves is used to prevent over pressurising the hydraulic system. Holding valves prevent unsafe descent in the advent of failure.

FALLS

Falling from heights

- i. The operator should never stand on the frame of the truck unless a risk assessment has been completed and suitable controls put in place to prevent injury
- ii. Operator should never stand on top of a load being lifted or when the load is on the ground or on the truck

ENVIROMENT

Poor lighting and reduced visibility

- i. Operator must ensure that where lighting is requested, positional spotlights are fixed to mounts

Excessive Noise

- ii. Operator must ensure that where fitted around the motors a shroud should be in place and the shroud should assist in reducing the noise problems that may exist or if not possible, wear suitable hearing protection. (reference AS 1270)
- iii. Where noise is considered excessive level testing should be done to AS1055.2 & AS1269

MAINTENANCE

Exposure to circuits, vapours, gases and acids during battery charging

- I. The truck incorporates a battery charging, which has the ability to produce hydrogen gas, this is flammable, consideration should be given when undertaking maintenance in a workshop for suitable ventilation.
- II. The truck generates exhaust gases, which has the ability to cause harm to persons if the work is not carried out in a facility that supports adequate ventilation

UV Exposure

Excessive exposure to sunlight while operating the equipment

- I. Take precautions that reduces the exposure of the skin to direct sunlight, e.g. wear hat, long pants, long sleeves, and apply sunscreen

Additional Hazards & Risks

These are additional hazards and risks of using this equipment which we know about which are not shown in the manufacturers operating instructions/other information supplied with the equipment

Only trained and competent operators should carry out load lifting, shifting and other safe operations of the VLC

Additional accessories are available for individual units, where required by the customer a separate risk assessment should be attached.

Acknowledgement.

Hazard information sheets have been produced as an aid to workplace safety after an extensive review of the requirements on the National Standard for Plant and its adoption in each State. It is a combination of information from OH&S authorities, manufacturer, suppliers, the industry and users, and has been set out in the format in response to industry requests for a quick reference useful user friendly document

Disclaimer:

In fulfilment of its statutory obligations, the company has taken what it considers to be all reasonable precautions and exercised due diligence to ensure that it has provided all relevant information on the safe use of the plant. However, except as required by law and only to the extent so required, the company does not make any representation, warranty or undertaking, express or implied, as to, or accept any responsibility or liability for, the accuracy or completeness of, or any errors in or omission from this hazard information sheet