

HAZARD & RISK ASSESSMENT – MVA / MVO SERIES MASTLIFT**Issue 1 – 11/11/2021**

MVA / MVO Series Electric Self Propelled Mastlift.

Operator Requirements

Operator(s) must be trained and competent to use equipment safely

Purpose For Which Equipment Is Designed

For safely elevating men, materials and tools, to work at height not exceeding the manufacturer's design lift capacity of the platform, For use on slab, smooth terrain and in zero wind environments only.

Hazards and Risks Of Operating This Type Of Equipment

The hazards and risks detailed here are generic for this type of equipment and are intended to give the user a brief summary before operating this type of equipment. For any model specific hazards and/or further user information, reference should be made to the operating instructions and/or other information supplied with the equipment.

Hazards & Risks**Machine not used in a serviceable condition.****Suggested Control Measures**

Prior to daily use, the operator is to refer to the logbook on the machine and perform "Operator Daily Safety Checks", as detailed.

Hydraulics lowering without warning.

Can cause serious crush injuries or death.

- (i) Never work under raised hydraulics unless they are fully supported by a correctly positioned and approved support device.
- (ii) If there is work to be conducted underneath the raised hydraulics and they cannot be supported by an "approved support device" a full assessment (ie JSA) must be undertaken to identify all risks and specified control measures (in order to complete the work safely) MUST be implemented prior to the work being commenced.

Crush Hazards.

Being crushed between the plant and fixed structures.
Being crushed by material falling off the machine.

- (i) NEVER exceed the rated operating capacity of the man lift or it's attachments. Check the "Load Capacity" of the particular machine and any load chart(s) for the machine and any of it's attachments BEFORE operating.
- (ii) Always check area is clear before operating or driving.
- (iii) Always check area is clear before raising or lowering.
- (iii) NEVER lift a load over a person.
- (iv) At no time stand behind the machine, out of operator's view.
- (v) Do NOT allow any personnel to work or walk under the manlift while it is raised.
- (vi) Barricade the work area as necessary.
- (vii) Always carry loads low to the ground at a safe speed.
- (viii) Know the weight and handling capabilities of the material to be lifted.
- (ix) Always lift and transport the load correctly positioned in the attachment and secured by the ratchet straps.
- (x) Ensure the machine is level before raising the load.

Crush injuries while raising or lowering the man lift.	Clear personnel from work area before raising or lowering the attachments.
Danger of man lift to not be able to be slowed or stopped safely.	Operate at a speed appropriate for the ground conditions and do not exceed the gradeability of the machine either going up or down a hill.
Being trapped between the machine and/or materials or fixed structures. Parts of the plant collapsing.	<ul style="list-style-type: none"> (i) Avoid congested work areas. (ii) NEVER get on or off a moving machine. (iii) Ensure sufficient clearance between the mast and any overhead or other obstructions. (iii) Keep clear of any obstructions that could interfere with the raising or lowering of the mast and watch for overhead obstructions that can impact with the load being carried. (iv) NEVER overload the machine (v) Maintain and check the lifting mechanism. (vi) Keep personnel clear when loading, unloading and during transportation of the machine.
Running into bystanders or unexpected movement of man lift.	<ul style="list-style-type: none"> (i) Ensure all audible and visual alarms are operational. (ii) Clearly define the work area. (iii) Keep all other personnel clear of the work area.
Striking or coming into contact with overhead objects.	<ul style="list-style-type: none"> (i) Be alert and always look up as well as down.. (ii) Allow sufficient safe clearance from any protruding hazards.
Man lift tipping or rolling over or operator being ejected.	<ul style="list-style-type: none"> (i) NEVER exceed the rated loads or limits of the Man lift and/or attachments as shown on the manufacturer's load charts. (ii) Ensure the load is evenly distributed on the attachment. (iii) Only drive the Man lift on a stable, level surface, capable of supporting the machine's weight plus payload. (iv) Be aware of all potholes and soft spots. (v) Never "tie off" the machine to any fixed structure or plant or use the machine as an anchor point for attaching rope, wire, cable, chain etc. (vi) Never use the machine to lift, steady or pull any materials, structures or other objects. (vii) Always drive the Man lift at a safe speed taking into regard the terrain and working environment. (viii) Use extra caution when cornering and also when driving across any rough ground with potholes and/or loose dirt. (ix) Always use ratchet straps to secure load before moving. (x) Always operate within the design limitations of the machine. (xi) Always carry loads close to the ground. (xii) If driving near the edges of formations, drop offs or back filled areas, firstly assess that it is safe to do so and then constantly scrutinise the ground for possible soft spots. (xiii) When going up or down an incline whilst loaded, keep the attachment low to the ground and drive forward up the incline and in reverse down the incline. (xiv) ALWAYS drive directly up or down a slope, NEVER drive across it at an angle. (xv) If the Man lift becomes unstable and starts to tip over DO NOT attempt to manually steady the machine. Doing so may result in death or serious injury, but rather move away from the likely point of impact.

Electrocution from overhead powerlines.	<ul style="list-style-type: none"> (i) Maintain mandatory minimum distances from powerlines as defined by Regulatory Authorities. (ii) Insulate all “live” powerlines within the work area. (iii) Barricade the work area and provide appropriate signage. (iv) Always remember to “Look Up And Live” whilst elevating.
Man lift coming into contact with “live” wires.	<ul style="list-style-type: none"> (i) If the Man lift does come into contact with “live” wires DO NOT touch or move the machine. (ii) Keep bystanders away from the area and ensure the power to the electrical line is turned off before touching or trying to move the machine. (iii) Drive the machine away from the hazard if it is safe to do so.
Entanglement. Becoming entangled in moving parts of Man lift.	<ul style="list-style-type: none"> (i) Keep personnel clear during machine operation. (ii) Barricade off designated work area. (iii) Wear appropriate dress (ie no loose clothing). (iv) Ensure all long hair is tied back and out of harm’s way.
Unexpected and sudden movement of Man lift.	<ul style="list-style-type: none"> (i) NEVER wear loose fitting clothing that can catch on the control levers of the machine. (ii) When not in use, park on firm level ground. (iii) Never leave the Man lift unattended without first lowering the attachment to the ground, shutting down and then turning off the machine. (iv) During loading and unloading procedures the Man lift must be stationary and not in the drive mode.
Water near electrical equipment.	<ul style="list-style-type: none"> (i) Use weatherproof equipment and fittings outside. (ii) When cleaning the machine, do not use pressurised water near the control box or other electrical components.
Equipment not in use. Unauthorised use.	<ul style="list-style-type: none"> (i) Remove the ignition key and lock all doors (if fitted) when leaving the Man lift unattended. (ii) NEVER leave the Man lift elevated whilst unattended. (iii) Lower the attachment to the ground and ensure that the emergency stop is activated and the machine shut down.
Explosion. Explosion of gases, dust, vapours, liquids or other substances. Explosion during battery charging.	<ul style="list-style-type: none"> (i) Charge the batteries in a clear, well ventilated area. (ii) Never charge the batteries near fire, flame or any other source of heat (as the batteries produce highly flammable and potentially explosive hydrogen gas during charging). (iii) 240V power must be turned off when plugging in or removing leads from the battery charger to minimise any possible explosion risk. (iv) Ensure there are NO naked flames or ignition sources near the machine during charging.
Inclement weather.	NEVER operate the machine in bad weather conditions, ie high winds, heavy rain, thunder and lightning etc.
Parts of the machine collapsing. Boom or hydraulics collapsing	<ul style="list-style-type: none"> (i) Ensure NO personnel are working under the raised hydraulics. (ii) Ensure NO personnel are working underneath the attachment. (iii) NEVER walk or work underneath raised hydraulics.

Shearing or cutting of body or limbs.	Never put any part of your body through or under raised hydraulics unless it is absolutely necessary to do so and an approved manufacturer's safety prop is in place.
Slipping, tripping or falling.	<ul style="list-style-type: none"> (i) Ensure that you have a clear view of the entire area when walking behind the machine during travel. (ii) Only move the machine on a firm, stable surface, capable of supporting the weight of the machine plus payload. (iii) Wear the appropriate footwear during travel.
Striking or hitting. Striking or hitting bystanders during travel.	<ul style="list-style-type: none"> (i) Ensure audible and visual travel alarms working correctly. (ii) Barricade work areas and place appropriate warning signs. (iii) Ensure operators are correctly trained and aware.
Suffocation. Exposure to fumes.	<ul style="list-style-type: none"> (i) Use confined space procedures, where applicable. (ii) Use equipment in well ventilated areas, where possible. (iii) If working in poorly ventilated areas, monitor any fumes at regular intervals.
Noise. Exposure to noise.	Wear appropriate hearing protection.
UV exposure. Excessive exposure to sunlight.	Take precautions that reduce the exposure of the skin to sunlight, such as: wearing a hat, long pants, long sleeves and regularly applying sunscreen to skin that is exposed to the sun.
Personal Protective Equipment (PPE). Eye or lung injuries possible.	Take precautions and wear the appropriate equipment for the type of environment you are working in i.e. using safety glasses and a particle mask if working in dusty conditions.
Ductlift & Pipelift attachments.	<ul style="list-style-type: none"> (i) Only use attachments that have been approved for use with the specific Man lift you are operating (non-approved attachments may cause the machine to become unstable and even tip over). (ii) NEVER exceed the rated capacity of the Man lift and/or the attachment being used. (iii) Always refer to the "Load Capacity Chart" for the design parameters of the specific attachment being used. (iv) Ensure the Man lift is level before raising the load. (v) NEVER travel across a slope with a load attached to the attachment. (vi) Never drag a load horizontally. (vii) Accelerate, travel, turn and stop slowly to prevent the load from swinging. (viii) NEVER leave an elevated load unattended.

Additional Hazards & Risks

As per manufacturer's operating handbook (supplied with each machine).

Note: This Hazard & Risk Assessment has been produced as an aid to workplace safety and is a combination of information from OH&S authorities, equipment manufacturers, suppliers, the industry and end users. It has been set out in this format as a user friendly, quick reference document. Each machine has a specific and more detailed explanation of the hazards and risks contained in the manufacturers operating handbook provided in the weatherproof container on the platform.

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