



# RISK ASSESSMENT

## MIKASA FORWARD PLATE COMPACTOR ALL MODELS



Version 3.0 (July 2024)

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# EQUIPMENT RISK ASSESSMENT



INFORMATION	
Equipment description:	Forward Plate Compactor
Make / manufacturer:	Mikasa
Model number/s:	MVC-40H, MVC-F60H, MVC-F80H, MVC-88GH, MVC-T90H, MVC-98D, MVC-T100D, MVC-e60
Assessment date:	First review: November 2023 Last review: July 2024
Version:	3.0
Link for manuals:	<a href="http://flextool.com.au">flextool.com.au</a>
Additional information	<p>Flextool 1956 Dandenong Road Clayton VIC 3168</p> <p>Ph: 1300 353 986</p>



## WARNING

To reduce the risk of injury, all operators and maintenance personnel must read and understand this risk assessment before transporting, operating, changing accessories or performing maintenance on this power equipment. The most important safety device for this or any equipment is the operator. Care and good judgement are the best protection against injury. All possible hazards cannot be covered in this risk assessment, but we have tried to highlight some of the important items. Risks associated with the use of equipment may vary based on jobsite and environmental factors and operators should assess these prior to each use. Operators should look for and obey Caution, Warning and Danger labels placed on the equipment. You should read this risk assessment and the corresponding equipment and engine (if applicable) operating instructions carefully and consider the information in the context of how the product will be used. Even if you have previously used similar equipment carefully check out each machine before you use it, get the "feel" for it and know its capabilities, limitations, potential hazards, how it operates, and how it stops. This risk assessment summarises our best knowledge of the product, based on the information available at the time. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem Construction Supplies does not accept any liability either directly or indirectly for any losses suffered in connection with the use of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

This equipment risk assessment has been undertaken in accordance with the Plant Regulations of 2007 and 2011 and Australian Standards AS 4024 for Safe Guarding of Machinery and ISO 31000:2009 Risk Management Standards.

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## HAZARDS ASSOCIATED WITH THIS EQUIPMENT

Hazards: Potential to cause harm to people, property or the environment. Tick the applicable hazards.

<b>ENTANGLEMENT</b>		<b>EXPLOSION</b>	
Can anyone's hair, clothing, gloves, necktie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of the plant, or materials in motion?	Y	Can anyone be injured by explosion of gases, vapours, liquids, dust or other substances, triggered by the operation of the plant or by the material handled by the plant?	Y
<b>CRUSHING</b>		<b>SLIPPING, TRIPPING OR FALLING</b>	
<i>Can anyone be crushed due to:</i>		<i>Can anyone using the plant or in the vicinity of the plant, slip, trip or fall due to:</i>	
Material falling off plant?		Uneven or slippery work surfaces?	Y
Uncontrolled or unexpected movement of the plant or its load?	Y	Poor housekeeping?	
Lack of capacity for the plant to be slowed, stopped or immobilised?	Y	Obstacles being placed in the vicinity of the plant?	Y
The plant tipping or rolling?	Y	Other factors not mentioned	Y
Parts of the plant collapsing?		<i>Can anyone fall from a height due to:</i>	
Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair?	Y	Lack of work platform?	
Being thrown off or under the plant?		Lack of proper stairs or ladders?	
Being trapped between the plant and materials or fixed structures?	Y	Lack of guard rails or other suitable edge protection?	
Other factors not mentioned?	Y	Unprotected holes, penetrations or gaps?	Y
<b>CUTTING, STABBING AND PUNCTURING</b>		Poor floor or walking surfaces, such as, the lack of a slip resistant surface?	Y
<i>Can anyone be cut, stabbed or punctured due to:</i>		Steep walking surfaces?	Y
Coming in contact with sharp or flying objects?		Collapse of the supporting structure?	
Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair?	Y	Other factors not mentioned?	Y
The plant, parts of the plant or work pieces disintegrating?		<b>ERGONOMICS</b>	
Work pieces being ejected?		<i>Can anyone be injured due to:</i>	
The mobility of the plant?		Poorly designed seating?	
Uncontrolled or unexpected movement of the plant?		Repetitive body movement?	Y
Other factors not mentioned?	Y	Constrained body posture or the need for excessive effort?	Y
<b>SHEARING</b>		Design deficiency causing mental or psychological stress?	
Can anyone's body parts be sheared between two parts of the plant, or between a part of the plant and a work piece or structure?	Y	Inadequate or poorly placed lighting?	
<b>FRICTION AND ABRASION BURN</b>		Lack of consideration given to human behaviour?	Y
Can anyone be burnt due to contact with the moving parts of surfaces of the plant, or material handled by the plant?	Y	Mismatch of the plant with human traits and natural limitations?	
<b>STRIKING</b>		Other factors not mentioned?	Y
<i>Can anyone be struck by moving objects due to:</i>		<b>SUFFOCATION</b>	
Uncontrolled or unexpected movement of the plant or material being handled by the plant?		Can anyone be suffocated due to lack of oxygen, or atmospheric contamination?	Y
The plant or parts of the plant or work pieces disintegrating?		<b>TEMPERATURE / THERMAL COMFORT OR FIRE</b>	
Work pieces being ejected?		Can anyone come into contact with objects at high or low temperature that are likely to cause burns, scalds or other injuries (hot or cold)?	Y
Mobility of the plant?	Y	Can anyone suffer ill-health due to exposure to high or low temperature work environment?	
Other factors not mentioned?	Y	Can anyone be injured by fire?	Y
<b>HIGH PRESSURE FLUIDS</b>		<b>MATERIAL AND SUBSTANCES</b>	
Can anyone come into contact with fluids under high pressure, due to plant failure or misuse of the plant?		<i>Can anyone be injured or suffer ill-health from exposure (inhalation or direct contact) to:</i>	
<b>ELECTRICAL</b>		Chemicals or harmful fluids (incl. batteries)	Y
<i>Can anyone be injured by electrical shock or burnt due to:</i>		Toxic gases, vapours, fumes dust or mists	Y
The plant contacting live electrical connections?	Y	Biological or microbiological hazards	Y
The plant working in close proximity to electrical connections?	Y	<b>OTHER HAZARDS</b>	
Overload of electrical circuits?	Y	<i>Can anyone be injured or suffer ill-health from exposure to:</i>	
Damaged or poorly maintained electrical leads and cables?	Y	Noise – Hearing loss or other physiological disorders?	Y
Damaged electrical switches?	Y	Vibration – Hand held power equipment / whole body vibration?	Y
Water near electrical equipment?	Y	Radiation – Radio frequency, infrared, UV, x-rays, lasers?	
Lack of isolation procedures?	Y	Other factors not mentioned?	Y
Other factors not mentioned?	Y		

# RISK ASSESSMENT

HAZARDS DESCRIPTION	IMPACT DESCRIPTION	LIKELIHOOD	CONSEQUENCE	RISK RATING	RISK CONTROL MEASURES TO ELIMINATE / REDUCE RISKS
<b>STORAGE AND TRANSPORT</b>					
Lifting and manual handling when manoeuvring equipment from transport vehicle and around the job site	Equipment could tip or fall due to unbalanced loads resulting from the use of the wrong or unsafe lifting points  Muscular strain, back injury and crushing	D	3.2	Medium	<ul style="list-style-type: none"> <li>Only use designated lifting handles for manual handling and designated crane points for mechanical lifting.</li> <li>Always use certified and tested lifting slings and chains.</li> <li>Regular inspection by competent person of lifting and crane points for damage or material fatigue.</li> <li>Always follow correct manual handling techniques.</li> <li>Always use 2 or more people when manually lifting.</li> <li>Wearing of PPE (steel cap boots and gloves).</li> <li>Manual handling training.</li> </ul>
Transporting the equipment	Equipment not suitably restrained during transport  Damage to equipment or other property due to loss of load from vehicle	C	3.2	Medium +	<ul style="list-style-type: none"> <li>Ensure all equipment is restraint according to the NVHR load restraint guidelines. For more information visit <a href="http://www.nhvr.gov.au/road-access/mass-dimension-and-loading/loading">www.nhvr.gov.au/road-access/mass-dimension-and-loading/loading</a></li> <li>Inspect straps and ropes for damage prior to use.</li> <li>Secure equipment using suitable tie down points on both equipment and vehicle.</li> </ul>
Storage of batteries and chargers  (Battery models only)	Explosion and fire	C	3.2	Medium +	<ul style="list-style-type: none"> <li>Do not store batteries and chargers where temperatures may exceed 50°C such as direct sunlight, inside vehicles and storage facilities.</li> </ul>
<b>OPERATION</b>					
Unexpected movement of equipment with or without operator	Bystanders and operator being struck	E	3.1	Low	<ul style="list-style-type: none"> <li>'On / Off" switch is installed and is operational.</li> <li>Only trained operators are allowed to operate the equipment.</li> <li>Wearing of PPE steel capped boots is mandatory.</li> <li>Maintain a safe working distance of approx. 3 metres from bystanders.</li> <li>Place the equipment on firm level ground when not in use and prior to starting.</li> <li>Develop a Safe Work Method Statement for the operation of the equipment.</li> </ul>

HAZARDS DESCRIPTION	IMPACT DESCRIPTION	LIKELIHOOD	CONSEQUENCE	RISK RATING	RISK CONTROL MEASURES TO ELIMINATE / REDUCE RISKS
Mechanical failure of equipment	Serious injury	C	2	Medium	<ul style="list-style-type: none"> <li>Complete service and maintenance as scheduled in the equipment and engine owners' manuals.</li> <li>Complete a prestart checklist prior to use.</li> <li>Report faults to management for repair. Do not use unsafe equipment.</li> </ul>
Exposure to fumes / engine exhaust gases <i>(Engine models only)</i>	Suffocation due to lack of oxygen	E	4.1	Medium	<ul style="list-style-type: none"> <li>Use in well-ventilated open spaces.</li> <li>Not to be used in confined or restricted areas without detailed risk assessments being carried out in line with Confined Spaces Procedures.</li> </ul>
Vibration exposure (through handle to operator)	Personal injury to hands and arms through over-exposure to machine vibration	C	2	Medium	<ul style="list-style-type: none"> <li>Operator to take regular breaks when required to operate equipment over a long continuous period.</li> <li>Stop using equipment if any discomfort, tingling sensation or pain occurs and seek medical advice before resuming use.</li> <li>Complete service and maintenance as scheduled in the equipment and engine owners' manuals to ensure equipment is operating correctly.</li> </ul>
Noise exposure	Loss of hearing	C	2	Medium	<ul style="list-style-type: none"> <li>Wear PPE hearing protection.</li> <li>Complete service and maintenance as scheduled in the equipment and engine owners' manuals.</li> <li>Replace damaged or missing warning decals requiring the use of hearing protection.</li> </ul>
Dust and flying particles	Eye injury and respiratory problems	C	2	Medium	<ul style="list-style-type: none"> <li>Ensure appropriate PPE is ALWAYS worn in line with jobsite conditions.</li> <li>Inspect the worksite for loose debris that could cause injury.</li> </ul>
Hot equipment and engine parts (engine exhaust etc.)	Risks of burns to body	C	2	Medium	<ul style="list-style-type: none"> <li>Replace damaged or missing warning decals highlighting hot surfaces.</li> <li>Do not touch engines, engine exhausts or other parts such as gear boxes that generate heat during or immediately after operation.</li> <li>Wait for engine and equipment to completely cool down prior to commencing repairs or maintenance.</li> </ul>
Exposure to vibrating plate	Injury to feet	C	3.2	Medium +	<ul style="list-style-type: none"> <li>Wear PPE (steel cap boots).</li> <li>Keep hands and feet clear of vibrating base plate during operation.</li> </ul>

HAZARDS DESCRIPTION	IMPACT DESCRIPTION	LIKELIHOOD	CONSEQUENCE	RISK RATING	RISK CONTROL MEASURES TO ELIMINATE / REDUCE RISKS
Operator slipping or tripping on obstruction during equipment operation.	Loss of control of equipment, personal injury, damage to equipment	C	3.2	Medium +	<ul style="list-style-type: none"> <li>Always operate the equipment with two hands on the handlebar for maximum control.</li> <li>Assess work area prior to operating equipment and cover any stick ups or protrusions that could cause injury or impale operator if fallen on, with an approved device.</li> <li>Never operate in reverse without looking first.</li> </ul>
Crushing or damaging underground services	Exposure to services such as gas, water and electricity	D	4.1	Medium +	<ul style="list-style-type: none"> <li>Contact Before You Dig (<a href="http://byda.com.au">byda.com.au</a>) to complete an underground services assessment prior to operating any equipment,</li> <li>Ensure all underground services have been identified by depth and type prior to operating any equipment.</li> <li>ALWAYS display extreme caution when operating around services and assets.</li> <li>If you suspect damage has occurred to a service, immediately discontinue operation of equipment, create an exclusion zone and contact the relevant service authority.</li> </ul>
<b>MAINTENANCE AND REFUELLING / CHARGING</b>					
Refuelling engine <i>(Engine models only)</i>	Fire or explosion Chemical burns (fuels and oils)	C	3.2	Medium +	<ul style="list-style-type: none"> <li>Smoking or use of mobile phone is not permitted while refuelling.</li> <li>When refuelling ensure nozzle is in contact with the machinery (grounded).</li> <li>Switch off engine before refuelling.</li> <li>Keep fuel away from sources of ignition.</li> <li>Always use fuel container nozzle to reduce risk of spilling fuel.</li> <li>Clean up any fuel spills immediately.</li> <li>Always carry first aid facilities.</li> <li>Refuel on an impermeable surface away from drains / water courses in a well-ventilated area.</li> <li>Re-cap fuel container after use and store in appropriate area.</li> <li>Always wear PPE when refuelling engine (gloves and glasses) to reduce risk of fuel meeting hands and eyes.</li> <li>Replace damaged or missing warning decals.</li> </ul>

HAZARDS DESCRIPTION	IMPACT DESCRIPTION	LIKELIHOOD	CONSEQUENCE	RISK RATING	RISK CONTROL MEASURES TO ELIMINATE / REDUCE RISKS
Recharging battery <i>(Battery models only)</i>	Electrocution	E	4.2	Medium +	<ul style="list-style-type: none"> <li>• Only use genuine and recommended batteries and chargers.</li> <li>• Inspect ALL batteries, charging units and cables for exposed wires, cuts and damage prior to charging – If damages are identified isolate equipment and have repaired immediately by a licensed electrician.</li> <li>• Do not use battery pack or charger in rain, snow, damp or wet locations.</li> <li>• Do not use battery pack or charger in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials) as sparks may be generated when inserting or removing battery packs, possibly causing fire.</li> </ul>
Maintenance and repair	Cuts and burns (heat) Entanglement of clothes, hair etc. Chemical burns (fuels and oils)	C	3.2	Medium +	<ul style="list-style-type: none"> <li>• Only trained and competent personnel to undertake maintenance and repair on equipment.</li> <li>• Complete service and maintenance as scheduled in the equipment and engine owners' manuals.</li> <li>• Use only genuine parts and accessories to ensure correct compatibility and safe use of equipment.</li> <li>• Remove spark plug from engine and disconnect battery (when fitted with a battery) prior to conducting maintenance to eliminate unexpected starting of equipment.</li> <li>• Always ensure guards, safety switch and any other safety mechanisms are free from damage and installed prior to testing and returning product to service.</li> <li>• Always wear PPE when servicing and repairing equipment (gloves, glasses and steel cap boots) to reduce risk of cuts, burns, crushing, eye injuries, skin exposure to fuels and oils, etc.</li> <li>• Never work underneath equipment suspended by lifting device.</li> </ul>

# RISK RATING MATRIX

LIKELIHOOD OF HAZARD OCCURRING				CONSEQUENCE IF HAZARD OCCURRED			
CATEGORY		EXPLANATION		CATEGORY		EXPLANATION SAFETY AND HEALTH	EXPLANATION ENVIRONMENT
A.	Almost Certain	It is expected to occur in most circumstances		Cat 1.	Notable Event	Minor injury – first aid injury	Very minor pollution
B.	Very Likely	Has occurred in some circumstances (known to have occurred)		Cat 2.	Significant Event	Single MTI	Minor local pollution
C.	Likely (Possible)	Might have occurred at some time but details not known		Cat 3.1.	Highly Significant	Single LWC or multiple MTI	Evident pollution local concern
D.	Unlikely	Could occur but has not at yet happened		Cat 3.2.	Serious Event	Permanent disability or multiple LWC	Significant local pollution
E.	Very Unlikely	Has occurred somewhere (heard of it happening)		Cat 4.1.	Extremely Serious	Single fatality	Major local pollution
F.	Extremely Unlikely	Could theoretically occur but not aware of any instances		Cat 4.2.	Catastrophic	Multiple fatalities	Extremely severe pollution

  

		CONSEQUENCE						RISK LEVEL CLASSIFICATION		
		Cat 1	Cat 2	Cat 3.1	Cat 3.2	Cat 4.1	Cat 4.2			
LIKELIHOOD	A	Medium +	Medium +	High	High	High	High	High	Unacceptable	Job must stop and not proceed without resolving this risk issue, for example by adding more risk controls or substituting existing controls with more effective ones.
	B	Medium	Medium +	Medium +	High	High	High	Medium +	Tolerable	Job may proceed if further risk reduction is not practicable. Take action to reduce risk where possible.
	C	Medium	Medium	Medium +	Medium +	High	High	Medium	Acceptable	Job may proceed if further risk reduction is not practicable. Review risk on subsequent jobs to determine whether further action is appropriate.
	D	Low	Low	Medium	Medium	Medium +	High	Low	Negligible	Job may proceed. Further risk reduction should always be considered but may not be practicable.
	E	Low	Low	Low	Low	Medium	Medium +			
	F	Low	Low	Low	Low	Low	Medium			



**END OF ASSESSMENT**



## **Flextool**

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