

# USER MANUAL

SIMPRO EZI-MT®



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For the purpose of standards compliance and international conformity, this document uses Système International (SI) units. These may be converted to their Imperial equivalents as follows:

1 kilogram (kg) = 2.2 pounds (lb)

1 metre (m) = 1000 millimetres (mm) = 1.09 yards (yd) = 39.37 inches (in)

The following stylistic conventions are used throughout this document:

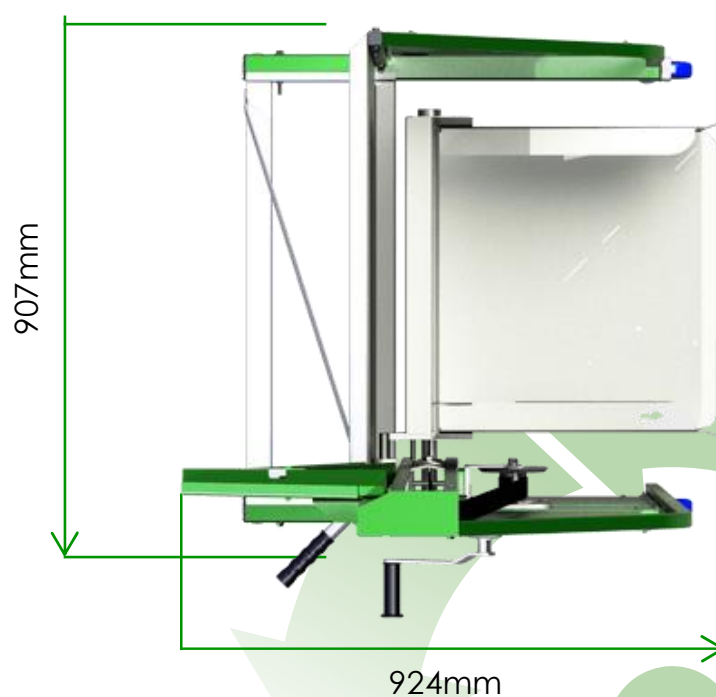
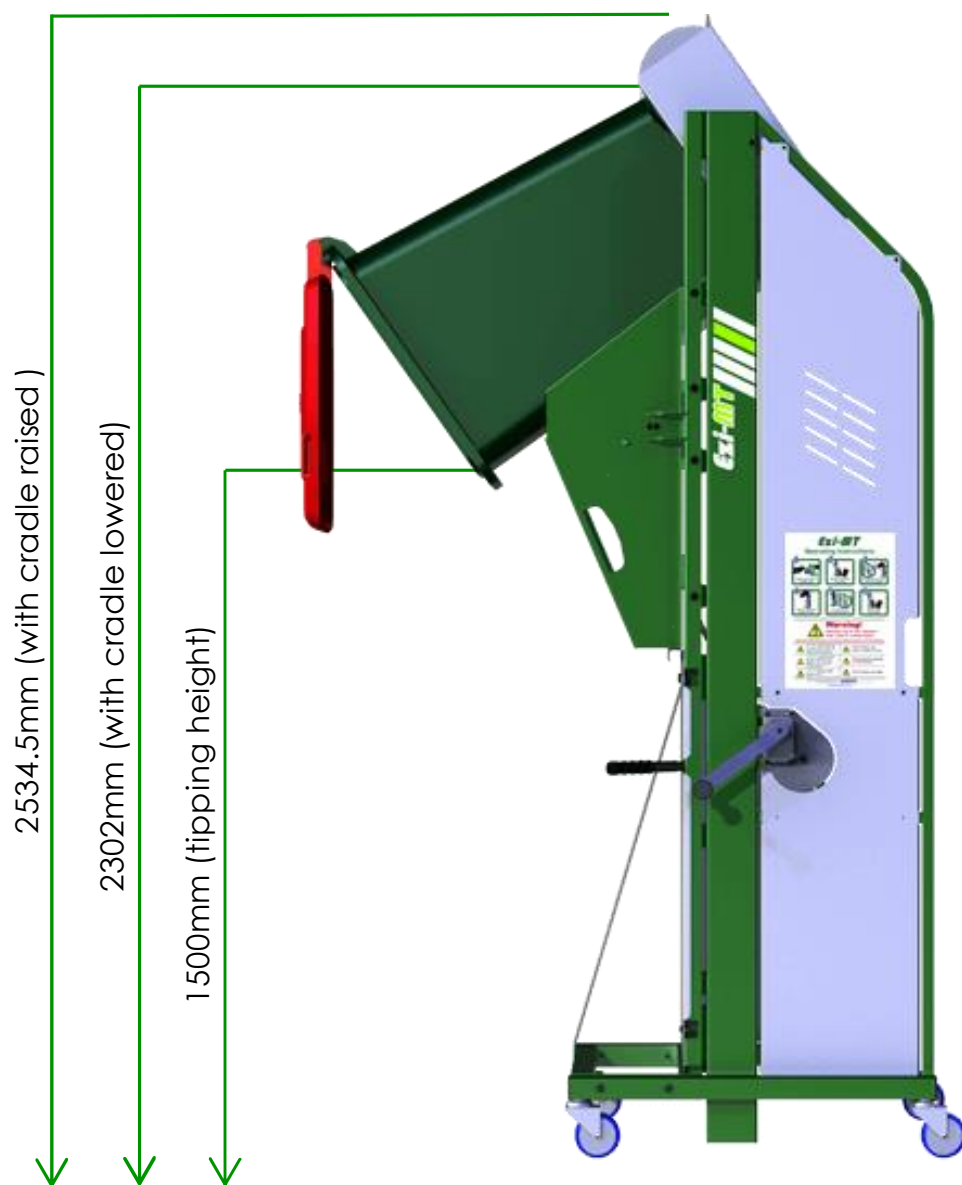
 Point of interest

 Safety hazard

§ Section reference (hyperlink in PDF edition)

 Simpro partcode (hyperlink in PDF edition)

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## I. Product Overview

Congratulations on your purchase of an Ezi-MT bin-tipping machine from Simpro. Ezi-MT is a light-duty manual bin tipper, designed for low volume users. It is environmentally friendly and perfect for those on constrained budgets, such as schools, cafes, small businesses, and local councils.

Ezi-MT uses the same reliable tipping action found on other Simpro products, but with a difference: it is powered by renewable energy, supplied by the user! The innovative hand-cranked design allows full workplace safety compliance, with no expensive hydraulic machinery.

Like other Simpro tipper, Ezi-MT always keeps the weight of the bin within the footprint of the machine to ensure stability. It can empty wheelie bins and carts weighing up to 65kg.

Whole-of-life environmental impact was considered from the start of the Ezi-MT design process, to create a truly eco-friendly product. The unique single-mast design uses 50% less steel than competing products, and is shipped flat-packed to reduce carbon emissions from shipping. The Ezi-MT has no powered components, generates no electronic waste, and is completely recyclable.

Yet the Ezi-MT is also remarkably durable and can be used outdoors for many years with little or no maintenance.



As workplace safety becomes ever more important, the Simpro Ezi-MT means there is no longer any excuse for lifting your heavy bins by hand!

## 1.1 Key Features

Key features of the Ezi-MT include:

1. A unique tipping action whereby bins are lifted straight up, and then gently rolled forward around the lip of the container being emptied into. This allows for a small floor 'footprint' yet very high stability.
2. The ability to safely lift bins weighing up to 65kg.
3. A reliable, maintenance-free design.
4. Castor wheels and grab-handles for ease of movement.
5. A powder-coated frame and zinc-plated cradle for corrosion protection.
6. A modular cradle architecture which can be easily adapted to suit different bins, and does not require clamping or fastening – simply place the bin into the cradle and lift.

## 1.2 Construction



The Ezi-MT machine consists of a steel frame with one vertical mast, a bin cradle, sheet-metal guarding, one braked winch, one grab handle, bracing and four castor wheels.


## 1.3 Mechanism

When the winch handle is turned clockwise, a nylon lifting strap is pulled through a roller to raise the bin cradle. The cradle moves vertically in the mast and is inverted at the appropriate height by a 'follower roller' running in a 'guide track'. The winch is geared and has an automatic brake which applies as soon as the handle is released. This allows the operator to raise and lower the bin in a controlled manner.

## 1.4 Safe Working Load

The Safe Working Load of the standard Ezi-MT is **65 kilograms (140 lb)**.


-  Safe Working Load (SWL) is a gross figure, referring to the weight of the bin, its contents, and any other objects placed on the cradle.
-  Custom machines may be specified with different Safe Working Loads. The rating plate should be the first point of reference when determining SWL on any given machine.

 **Never attempt to lift bins that are heavier than the factory-specified Safe Working Load.**

## 1.5 Duty cycle

Because the Ezi-MT is winch-operated, its duty cycle is limited by human factors such as the age, health, and fitness of the operator. The figures given below are estimates only.

Power Source	Throughput (net tipped material)	No. of bins equivalent (average ~50kg each)	Units
Single Human Operator	200kg	4 bins	Per hour
	400kg	8 bins	Per day

 **Do not exceed the Ezi-MT duty cycle, as this can cause a Repetitive Strain Injury.**


## 1.6 Service life

The nominal service life of the Ezi-MT is as follows.

Average Gross Bin Weight	Intended operational life
< 40kg	25,000 cycles
40kg – 65kg	10,000 cycles
> 65kg	5,000 cycles

## 1.7 Noise emissions

In normal conditions, the noise emissions of the Ezi-MT are assessed as not exceeding ~40 dB(A) at the operator's ear. Hearing protection is not required.

 ISO standards for machinery safety specify that noise emissions are to be measured in A-weighted decibels (dB(A)), a unit of volume which is adjusted to reflect the sensitivity of human hearing. The measurements are taken at a point 1.6 metres above the ground at the operator's working position.

## 1.8 Environmental restrictions

The Ezi-MT may be used indoors or outdoors. However, the following restrictions apply:

1. A minimum floor area of two square metres, with a clear passage to exits;
2. Height above sea level not more than 1000m;
3. Ambient temperature not higher than +40°C and not lower than -10°C;
4. At ambient temperatures above 35°C, the relative humidity should not exceed 50%; at lower temperatures, higher relative humidity is permitted;

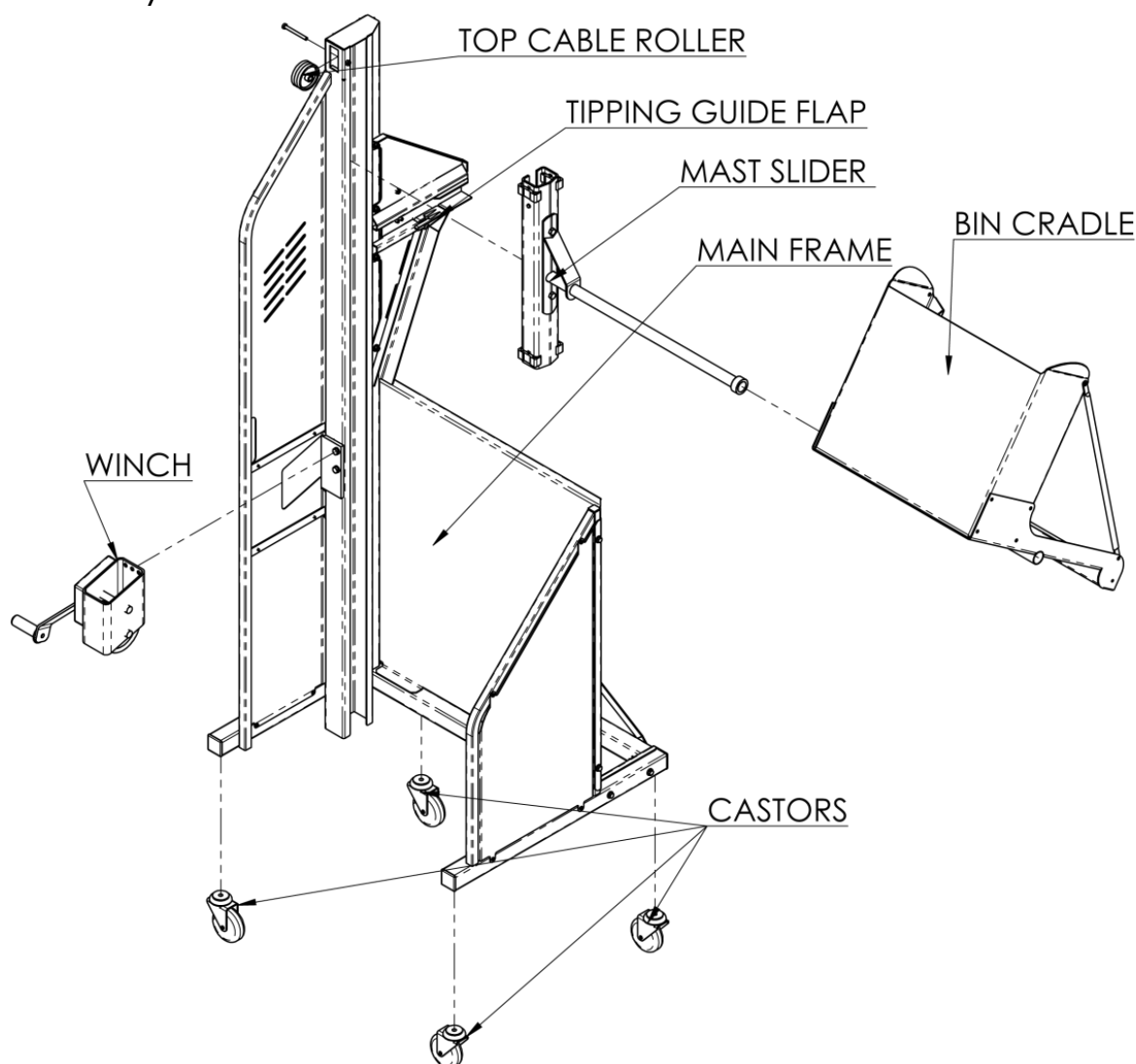
 Never operate the machine in flammable, explosive, corrosive, acidic or alkaline environments.

## 1.9 Ingress protection

Item	IP Rating
Overall	IP56



## 1.10 Layout of Parts



## 1.11 Notes

1. This User Manual describes approved procedures for the operation, maintenance, and routine inspection of the Ezi-MT bin-tipping machine.
2. This manual is written in English, and is to be considered the 'Original Instructions' for the purposes of Machinery Directive 2006/42/EC.
3. Operator(s) must read and understand this manual before using the machine.
4. If the machine is to be leased, then this manual shall accompany the machine.
5. This is a generic manual. Simpro reserves the right to change the design of our products at any time without notification. In cases where the manual does not correspond with the actual product, use the manual as a reference guide only, and contact your authorized Simpro agent for assistance if required.
6. Contact your authorized Simpro agent if you encounter any problems or faults with the machine.
7. Any errors in this manual should be reported by email to [info@simpro.world](mailto:info@simpro.world).

## 2. Operating Instructions

**⚠ Before the machine is used for the first time, a site-specific Hazard and Risk Assessment should be completed as per §5.3.**

### 2.1 Before operation

Before operating a Ezi-MT, check that the machine is stable and safe to use as follows:

1. Machine is on level ground, with a slope of 1:12 or less.
2. All covers and safety guards are in place.
3. The lifting strap is not visibly torn or frayed.
4. Both wheel brakes are applied.
5. All personnel other than the operator are well clear of the machine.
6. The cradle is fully lowered.


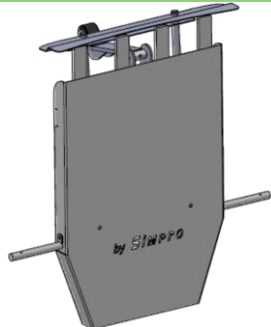
### 2.2 Emplacing and removing bins

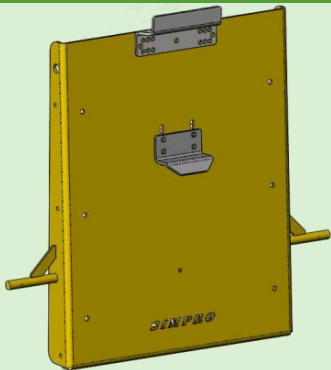
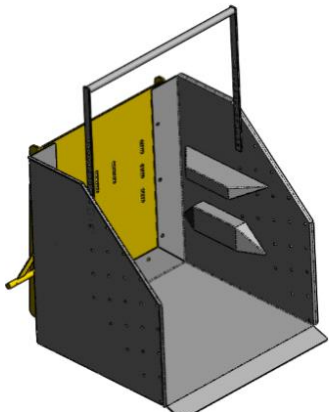
The Ezi-MT cradle is designed to allow bins to be emplaced and removed easily, while also holding them securely throughout the tipping cycle.

**⚠ It is important to understand how to correctly place bins onto the cradle, as improper placement may result in bins falling out of the machine when inverted.**

#### 2.2.1 Cradle identification

A range of different cradles may be fitted to the Ezi-MT, depending on the bins it will be emptying. Use the following table to identify the correct instructions for your machine.


Cradle	Usage	Bin Compatibility		Cradle Image	See
Type-E (EN840 base-lift cradle)	Standard waste and recycling applications in EU, UK, AU, NZ, Asia, Africa, and parts of South America	EN840 mobile garbage bins (wheelie bins)	- 60L - 80L - 120L - 140L - 240L		§2.2.2
Type-C (EN840 comb-lift cradle)	Specialised waste and recycling applications (primarily with 360- litre bins) in EU, UK, AU, NZ, Asia, Africa, and parts of South America		- 60L - 80L - 120L - 140L - 240L - 360L		§2.2.3

Cradle	Usage	Bin Compatibility		Cradle Image	See
Type-A (ANSI bar-lift cradle)	Standard waste and recycling applications in USA, Canada, and parts of South America	ANSI Z245.60 (Type-B) Trash Carts	<ul style="list-style-type: none"> <li>- 32 gal</li> <li>- 48 gal</li> <li>- 64 gal</li> <li>- 96 gal</li> </ul>		§2.2.4
Type-A with base (ANSI bar-lift cradle with base)	Specialised waste and recycling applications in USA, Canada, and parts of South America	BRUTE® Bins 205L Drums Plastic Tubs Customs Bins	<ul style="list-style-type: none"> <li>- 10 gal</li> <li>- 20 gal</li> <li>- 28 gal</li> <li>- 32 gal</li> <li>- 40 gal</li> <li>- 44 gal</li> <li>- 55 gal</li> </ul>		§2.2.5

## 2.2.2 Type-E Cradle (standard)

### 2.2.2.1 Emplacing bins

Place the wheelie bin onto the cradle. For full-size 240L bins, both wheels are retained by catches on either side of the cradle. For smaller bins such as 60L, 80L, 120L and 140L, only the left-hand wheel needs to be retained. Once the bin is correctly emplaced, walk to the operating position beside the winch.

 The wheel catches are designed to work with standard EN840 wheelie bins from leading brands such as Europlast, Sulo, ESE, Weber, Craemer, OnePlastics and Trident.



### 2.2.2.2 Removing bins

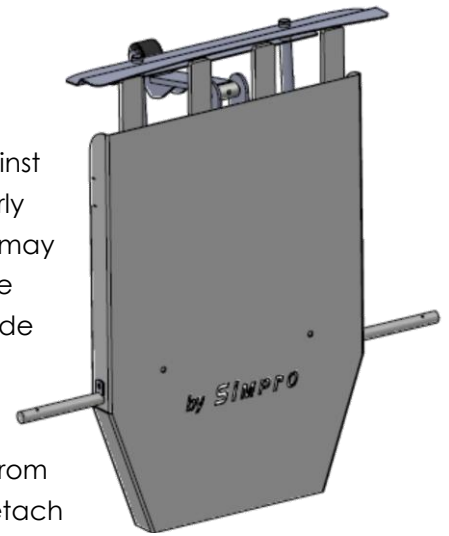
Using the grab-handle provided, gently remove the wheelie bin from the cradle.



## 2.2.3 Type-C Cradle

### 2.2.3.1 Emplacing bins

Place the wheelie bin into the machine, positioned centrally against the cradle backplate. Take care that the cradle teeth are properly engaged with the bin combing; smaller bins such as 60L and 80L may need to be tilted or lifted slightly to ensure a proper 'catch'. Once the bin is correctly emplaced, walk to the operating position beside the winch.



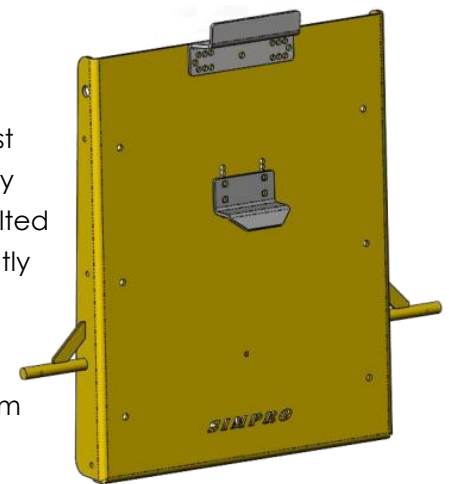
### 2.2.3.2 Removing bins

Using the grab-handle provided, gently remove the wheelie bin from the cradle. Some bins may need to be tilted or lifted slightly to detach them from the cradle teeth.

## 2.2.4 Type-A Cradle

### 2.2.4.1 Emplacing bins

Place the trash cart into the machine, positioned centrally against the cradle backplate. Take care that the lifting hooks are properly engaged with the front of the cart; some carts may need to be tilted or lifted slightly to ensure a proper 'catch'. Once the bin is correctly emplaced, walk to the operating position beside the winch.



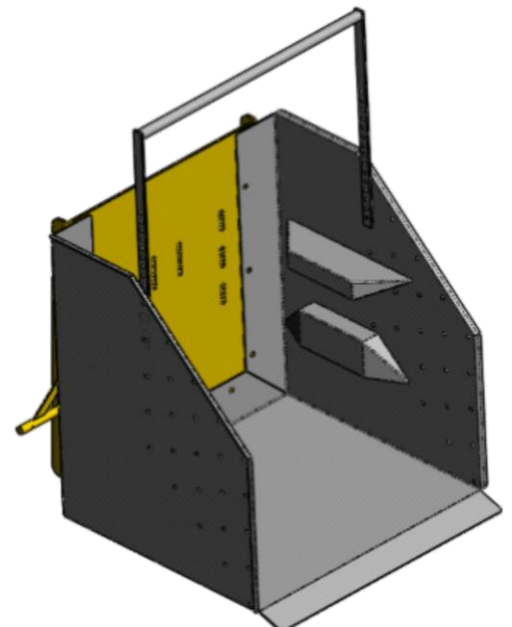
### 2.2.4.2 Removing bins

Using the grab-handle provided, gently remove the trash cart from the cradle. Some carts may need to be tilted or lifted slightly to detach them from the lifting hook.

## 2.2.5 Type-A Cradle with base

### 2.2.5.1 Emplacing bins

Place the bin, drum, or container onto the cradle, positioned centrally against the backplate. Once the bin is correctly emplaced, walk to the operating position beside the winch.



- ⚠ When moving heavy non-wheeled containers, it is recommended to use a dolly, hand truck or forklift attachment.
- ⚠ The catch arm(s) should be positioned to hold the top edges of the bin, with a maximum free travel of 25mm (1 inch). The arm(s) can be unbolted and repositioned to allow emptying bins of many different sizes.

### 2.2.5.2 Removing bins

Holding the upper lip of the bin, drum, or container, gently remove it from the cradle.



## 2.3 Emptying bins

1. Before operation, check that the machine is stable and safe to use as per §2.1.
2. Place the full bin on the cradle, taking care that it is correctly positioned as per §2.2.
3. Brace your body by holding the grab-handle on the Ezi-MT mast with your left hand. Use your right hand to turn the winch handle in a clockwise direction until the bin reaches the inverted position.
4. When the contents of the bin have emptied, turn the winch handle in an anti-clockwise direction until the cradle rests on the ground.
5. Remove the empty bin, and repeat from step 2. as required.

- ⚠ When using an Ezi-MT with a standard base-lift cradle to empty EN840 wheelie bins (60L/80L/120L/140L/240L), only the left-hand wheel of the bin needs to be placed into a catch channel. The cradle is designed to hold bins securely using only the left wheel.
- ⚠ The cradle can be stopped at any point by simply releasing the winch handle.



## 2.4 Safety Norms

The following safety norms must be observed for the safe use of an Ezi-MT bin lifter.

Only trained and authorised personnel are permitted to use the machine.

Operators must read and obey the instructions displayed on the machine.

Never operate the machine on soft ground, or ground with a slope ratio greater than 1:12.

Never operate the machine on the edge of a raised loading dock or platform.

Never operate the machine with any covers or guards removed.

Never attempt to empty over-filled bins, or bins weighing more than 65kg.

Never attempt to empty the contents of closed-top drums or bins.

All persons other than the operator must keep at least 2 metres clear while the machine is in use.

Always keep hands and feet well clear of the bin and cradle when operating.

Never place limbs, feet or foreign objects under or through the guarding panels.

## 3. Care and Maintenance

The Multi-Tip is designed to give many years of service with minimal maintenance. In the event a fault or malfunction does occur, refer to the Quick Troubleshooting Guide in §3.1 before contacting your Simpro agent for support.

- ⚠ Contact your Simpro agent if repair or service work is required.
- ⚠ All repair and service work must be carried out by qualified personnel.
- ⚠ Replacement parts must be supplied by Simpro or an authorized Simpro agent, and must be of the same design and specification as the original parts.
- ⚠ A detailed Service Manual giving specific testing and repair instructions is available on request from Simpro.

### 3.1 Quick Troubleshooting Guide

Refer to the Quick Trouble Shooting Guide below before contacting your agent for service.

Problem	Possible Causes	Remedy	See also
Winch will not turn	Bin too heavy	Remove material from bin to reduce the weight.	§1.4 §3.3.1
Winch turns but cradle does not lift	Winch faulty or broken	Repair or replace winch.	§3.4 ✎ Winch 1000000422
	Lifting strap broken	Replace lifting strap.	§3.4 ✎ Strap 1000000424
Cradle will not come down from the fully raised position	Mast blocks jamming in mast	Lightly lubricate inside of mast with silicone spray. Lubricate follower roller.	§3.3.2 ✎ Mast block 0090120001 ✎ Follower roller 0090120000
	Winch faulty or broken	Repair or replace winch.	§3.4 ✎ Winch 1000000422
Cradle jams part way down	Mast bent or damaged	Check and rectify; contact your agent if necessary.	§3.3.2
	Tip guide flap sticking or damaged	Check and rectify; contact your agent if necessary.	§3.3.2 ✎ Tipping guide flap 0230040001

### 3.2 Cleaning

The machine may be cleaned with a low-pressure water jet, a microfiber cloth and a mild cleaning solution. Cleaning should be carried out with the cradle in the fully-lowered position.

- ⚠ Do not clean the machine with a high-pressure water jet or waterblaster.


- ⚠ See §1.9 for IP ratings of the machine and major subcomponents.



### 3.3 Cradle jams

Occasionally the bin cradle may become jammed at some point in the tipping cycle. This is usually a minor issue which can be easily rectified.

 The cradle is not pulled or powered down – it is lowered by gravity alone.

 Never place any part of your body underneath the raised cradle, unless it is securely supported by a hoist, forklift, or other suitable arrangement.





#### 3.3.1 Cradle jams while raising

If the cradle jams while being raised, the cause is usually due to the bin being too heavy, or all the weight being at the bottom of the bin (rather than evenly distributed).

1. Lower the cradle to ground level if possible.
2. Remove some of the product manually, then try again.
3. If the cradle jams even with a light bin or no bin at all, attempt to identify the cause, and rectify with reference to the Service Manual (available on request from Simpro).

#### 3.3.2 Cradle jams while lowering


If the cradle jams while lowering, or jams while raising but will not come down, the cause will most likely be a mechanical fault. Use the following procedure to rectify the problem:

1. Manually empty the bin if there is any product remaining in it.
2. Attempt to identify the cause of the jamming. The most likely causes are:
  - a. The tipping guide flap  0230040001 may not be working correctly. When lowering, a small pin on the cradle should lift the flap just before the follower roller reaches the flap. If not, check that the pin has not been bent or broken.
  - b. The shaft collar  0250060016 holding the cradle onto the axle may have slipped, allowing the follower roller  0090120000 to come out of the 'tipping guide' track.
  - c. The mast may have been bent or damaged, causing the mast blocks  0090120001 to jam or seize.
  - d. Lack of lubrication in the mast.
3. Once the problem has been identified, rectify it, then lower the cradle to the ground.
4. Raise and lower the cradle several times with no load to ensure the problem has been properly resolved. Then also test with a full load.
5. If there are no further problems, the machine may be returned to service.

### 3.4 Winch and strap Winch complete 1000000422 Strap 1000000424 Handle 0950040044

The Ezi-MT is fitted with a high-quality industrial braked winch and a black nylon lifting strap. The winch uses an internal reduction gear arrangement, allowing the user to lift heavy bins.



The winch and lifting strap are suitable for outdoors use and require no regular maintenance.

 If the winch is damaged or malfunctioning, or the lifting strap is visibly frayed, it should be replaced. Contact your agent for a replacement strap.









## 3.5 Preventative Maintenance Inspections

It is recommended to conduct regular preventative maintenance inspections (PMIs) of the Ezi-MT. This helps to ensure operator safety and extend the service life of the machine.

PMI procedures are described in the following pages, with logs for recording the results.

-  Simpro strongly recommends that safety inspections are carried out according to the schedule described in this section.
-  Operators should immediately stop using the machine and request an inspection if any fault or abnormal operation is observed.

### 3.5.1 Monthly inspection checklist

Monthly Inspection Checklist			
Category	No.	Item	Check
General	1	Entire machine	Visually inspect for dented or broken parts. Conduct a complete tipping cycle and check for any jams, faults, or abnormal behaviour.
	2	Cradle	Intact and securely fixed.
Safety systems	3	Guard Panel	Intact and securely fixed.
	4	Winch  1000000422	Check that the winch does not allow the cradle to descend without operator input, even with a full bin.
	5	Safety labels and markings	All warnings labels, guides etc are attached and legible.  Wheel location guide 0090170085  Operation guide 1000000424  Hazard label 0250170001
Mechanical systems	6	Inside of mast	Lightly lubricate with silicone spray.
	7	Follower Roller  0090120000	Lightly lubricate with silicone spray.
	8	Cradle Axle	Lightly lubricate with silicone spray.
	9	Tipping Guide Flap  0230040001	Undamaged and moving freely.
	10	Castor Wheels	All castors  Braked 0250040090  Unbraked 0250040087 running smoothly and both brakes working correctly.




## 4. Assembly, Handling, Transport & Storage

### 4.1 Assembly

The Ezi-MT is usually delivered fully assembled.

### 4.2 Moving

When the Ezi-MT is standing upright it can be easily moved on its castor wheels, using the grab-handle provided. To ensure stability, the cradle should be positioned approximately 100mm off the ground when moving.


 An accessory is available from Simpro which enables a directional lock on the castor wheels. This can make the machine easier to manoeuvre on sloping ground.


 Extra care should be taken when moving the machine on sloping ground.

### 4.3 Lifting

If the Ezi-MT needs to be lifted for any reason, carry out the following procedure:

1. Check that the lifting equipment is in good condition and rated to lift at least 250kg.
2. Affix a sling or chain to the lifting lug at the top of the mast.
3. Use one person to operate the lifting equipment, and at least one other person to hold the machine steady and watch for hazards.
4. Lift, move and lower the machine into position, ensuring it remains upright at all times.

 The standard Ezi-MT weighs approximately 110kg. Never attempt to lift the machine using equipment with insufficient lifting capacity.

 Never stand or reach underneath the machine while it is being lifted.

### 4.4 Transportation

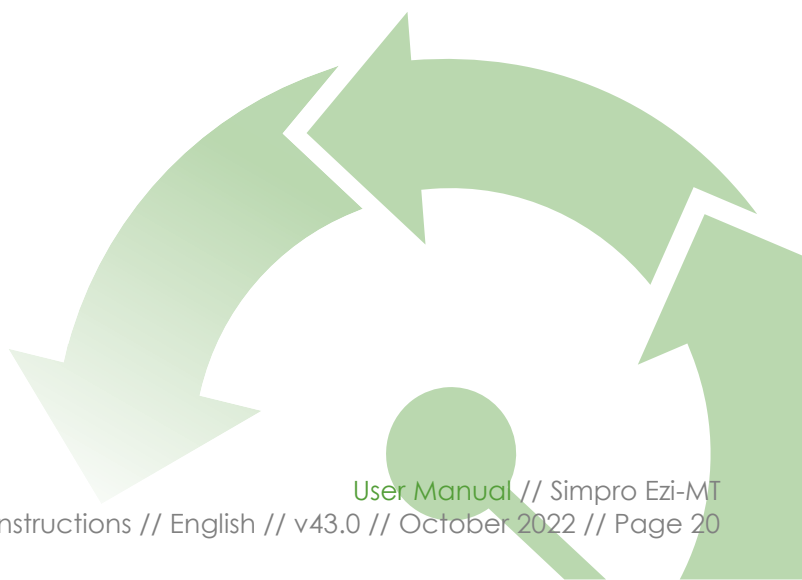
If the machine needs to be transported, observe the following procedure:

1. Apply both foot-brakes.
2. If possible, use lifting equipment to lie the machine onto its side on a wooden pallet, and securely strap it into place.
3. Use a forklift to load the pallet onto the truck deck.
4. Tie the machine into position using marked tie-down points and stops rated to at least 1000kg. Ensure it is fastened against lateral forces from any direction.

## 4.5 Storage


If the machine is not to be used for a period of two months or more, it should be stored in a clean, dry place with good ventilation, at temperatures not below 0°C. Before placing the machine into storage, carry out the following procedure:

1. Lower the cradle to the ground.
2. Clean the machine thoroughly as per §3.2.
3. Using a silicone spray, lightly lubricate the winch mechanism and inside of the mast.
4. Use a bicycle lock to secure the machine against theft and vandalism. For maximum security, the chain should be passed through the welded grab handle on the front of the mast, and around the winch handle.



## 5. Safety Assessment

The Ezi-MT has been designed to be as safe as possible without restricting the ease-of-use and versatility of the machine.

 Before the machine is used for the first time, a site-specific Hazard and Risk Assessment should be completed as per §5.3.

### 5.1 Safety features

The safety features of the Ezi-MT are as follows:

1. A geared, braked winch which requires operator input both to raise and lower the cradle, and which immediately stops all movement as soon as the handle is released.
2. A sheet metal guard panel which physically prevents the operator from accessing moving parts while using the machine.
3. A tipping action which keeps the weight of the bin within the machine footprint at all times to ensure stability.

### 5.2 Reasonably foreseeable misuse


The reasonably foreseeable misuse considered in the Ezi-MT design is as follows:


1. Use of the machine by untrained operators;
2. Failure to follow correct operating procedures;
3. Tipping bins that the cradle is not specifically designed to hold;
4. Use of the machine with a frayed strap, faulty or ineffective winch brake, or other items worn, missing, or out of adjustment.

### 5.3 Hazard and Risk Assessment Guide

Most jurisdictions require machinery owners to conduct a Hazard and Risk Assessment for their equipment, which considers all relevant factors such as the area it is used, the skill and training of operators, the proximity of other persons, frequency of use, etc.

The following section is not a comprehensive site-specific Hazard and Risk Assessment, but an assessment of the risk factors that are intrinsic to the Ezi-MT design. Blank template spaces are provided for additional site-specific hazards.

 The procedure for carrying out a Hazard and Risk Assessment is typically defined with reference to ISO 12100:2010, issued by the International Standards Organisation. This standard describes procedures for identifying hazards and estimating and evaluating risks during relevant phases of a machine life cycle.

 As with all powered lifting equipment, certain *residual hazards* may be present despite any safety measures that can be implemented by the manufacturer and/or owner. It is

essential that operators are aware of these *residual hazards* and what they must do to prevent harm to themselves and to others, as set out in §5.3.3.

### 5.3.1 The ISO 12100 risk assessment model

In the ISO 12100:2010 risk assessment model, each identified hazard is given a **Risk Factor**, from which is derived a **Risk Evaluation**. These parameters are determined as follows.

#### 5.3.1.1 Determining the Risk Factor

The Risk Factor associated with any given hazard may be calculated from the following table, using the formula: **Risk Factor = LO x FE x DPH x NP**


LO	Likelihood of Occurrence	FE	Frequency of Exposure	DPH	Degree of Possible Harm	NP	Number of Persons at risk
0.1	Impossible, or possible only in extreme circumstances	0.1	Infrequently	0.1	Scratch or bruise	1	1 – 2 persons
0.5	Highly unlikely though conceivable	0.2	Annually	0.5	Laceration, mild ill-health	2	3 – 7 persons
1	Unlikely but could occur	1	Monthly	1	Break minor bone or illness (temporary)	4	8 – 15 persons
2	Possible but unusual	1.5	Weekly	2	Break major bone or illness (permanent)	8	16 – 50 persons
5	Even chance – could happen	2.5	Daily	4	Loss of 1 limb or eye/serious illness (temporary)	12	51 or more persons
8	Probable – not surprised	4	Hourly	8	Loss of 2 limbs or eyes/serious illness (permanent)	-	-
10	Likely, only to be expected	5	Constantly	15	Fatality	-	-
15	Certain, or beyond doubt	-	-	-	-	-	-

#### 5.3.1.2 Evaluating the Risk

Once a Risk Factor has been calculated, the risk can be evaluated using the following table:

Risk Factor	0-1	2-5	6-10	11-50	51-100	101-500	501-1000	1001 +
Evaluation	Negligible	Very Low	Low	Significant	High	Very High	Extreme	Unacceptable

The following hazards have been identified that are intrinsic to the Ezi-MT design. For each hazard a full Risk Evaluation has been completed and control measures described.

 Blank template spaces are provided at the end for machinery owners to identify, assess and control additional site-specific hazards.

Entanglement or amputation of fingers or limbs in moving parts										
Operator	LO:	0.5	FE:	4	DPH:	1	NP:	1	Risk Factor:	2
	It is difficult for the operator to access moving parts while using the machine.									
Other persons	LO:	1	FE:	4	DPH:	1	NP:	1	Risk Factor:	4
	The operator has a good view of the cradle while lifting and lowering, and can instantly stop all movement by releasing the winch handle if any persons approach the cradle while moving.									
Control measures	Operators are responsible to obey all instructions and warning signs regarding keeping themselves and others clear of moving parts.									
Comments	The Ezi-MT is designed so trapping hazards are minimized, and both hands are needed to easily operate the machine.									
Crushing due to unauthorised rapid descent of cradle										
Operator	LO:	0.5	FE:	4	DPH:	1	NP:	1	Risk Factor:	2
	The operator is protected from the cradle by the frame and guarding during operation. There is nothing to stop an operator or other person moving under the cradle while it is inverted. Significant safety margins ensure that the probability of failure of any component is very low.									
Other persons	LO:	1	FE:	4	DPH:	1	NP:	1	Risk Factor:	4
	As above.									
Control measures	Operators are responsible to obey all instructions and warning signs regarding keeping themselves and others away from the area beneath the cradle while it is raised. The machine must be regularly maintained, and all faults repaired immediately.									
Comments	The braked winch limits the maximum speed of descent in normal use.									
Operator or others being hit by falling or flying debris										
Operator	LO:	2	FE:	4	DPH:	0.5	NP:	1	Risk Factor:	4
	The operator is protected from the cradle by the frame and guarding during operation. There is some risk if product such as broken glass is being tipped.									
Other persons	LO:	1	FE:	2	DPH:	0.5	NP:	1	Risk Factor:	1
	There is some risk if product such as broken glass is being tipped.									
Control measures	Operators are responsible to obey all instructions and warning signs regarding keeping other persons away from the machine while in use. If tipping items such as glass, metal or liquids, glasses and gloves should be worn.									
Comments										



Crushing due to machine falling over										
Operator	LO:	1	FE:	4	DPH:	8	NP:	1	Risk Factor:	32
	Low risk as the machine is very stable and the bin centre of gravity remains well within the machine's footprint throughout the tipping cycle.									
Other persons	LO:	1	FE:	1	DPH:	8	NP:	1	Risk Factor:	8
	As above.									
Control measures	Do not operate the machine on soft or uneven ground, or ground with a slope ratio greater than 1:12. Never attempt to empty liquids from closed-top drums.									
Comments										
Illness caused by tipping toxic powder and liquid										
Operator	LO:	1	FE:	4	DPH:	1	NP:	1	Risk Factor:	4
	The operator may be exposed to liquids or powders being tipped, especially in windy conditions. If the product could cause any harm whatsoever to the operator or to any other person, all persons must wear suitable Personal Protective Equipment.									
Other persons	LO:	0.5	FE:	4	DPH:	1	NP:	2	Risk Factor:	4
	As above.									
Control measures	The operator is responsible to wear appropriate Personal Protective Equipment, and ensure that all other persons are well clear of the area. Powder should only be tipped in calm conditions, or a wind shield should be installed.									
Comments	Toxic substances that cannot be protected against with PPE should not be dumped using an Ezi-MT. Alternative methods should be used.									
Repetitive Strain Injury (RSI) caused by excessive winch operation										
Operator	LO:	2	FE:	2.5	DPH:	4	NP:	1	Risk Factor:	20
	The operator may feel pressured to use the machine excessively to keep up with higher-than-normal waste flows.									
Other persons	LO:	0.1	FE:	0.1	DPH:	1	NP:	1	Risk Factor:	0
	Little or no risk									
Control measures	Operators must be trained in safe operating procedures, including duty cycle limitations, before being authorised to use the machine.									
Comments	See §1.5 for Ezi-MT duty cycle limitations.									
Damage to skin when used in extreme weather conditions										
Operator	LO:	2	FE:	4	DPH:	1	NP:	1	Risk Factor:	8
	If the machine is to be used in extreme cold or heat, the operator must wear gloves and other suitable Personal Protective Equipment.									
Other persons	LO:	2	FE:	2	DPH:	1	NP:	1	Risk Factor:	4
	As above.									
Control measures	Operators are responsible to wear Personal Protective Equipment suitable for the environment in which the machine is being used.									
Comments	See §1.8 for Ezi-MT environmental restrictions.									

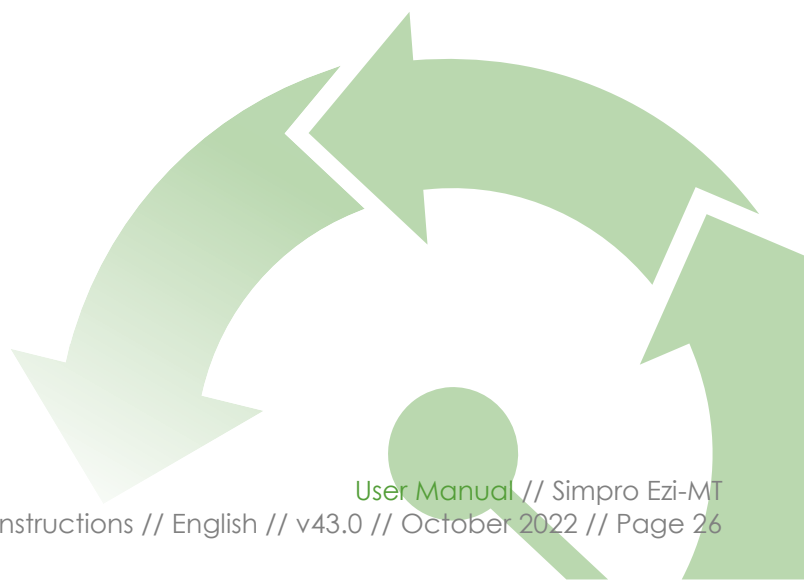
Site-specific hazard:										
Operator	LO:		FE:		DPH:		NP:		Risk Factor:	
Other persons	LO:		FE:		DPH:		NP:		Risk Factor:	
Control measures										
Comments										
Site-specific hazard:										
Operator	LO:		FE:		DPH:		NP:		Risk Factor:	
Other persons	LO:		FE:		DPH:		NP:		Risk Factor:	
Control measures										
Comments										
Site-specific hazard:										
Operator	LO:		FE:		DPH:		NP:		Risk Factor:	
Other persons	LO:		FE:		DPH:		NP:		Risk Factor:	
Control measures										
Comments										
Site-specific hazard:										
Operator	LO:		FE:		DPH:		NP:		Risk Factor:	
Other persons	LO:		FE:		DPH:		NP:		Risk Factor:	
Control measures										
Comments										

### 5.3.3 *Residual Hazards*

As with all industrial lifting equipment, some **residual hazards** may be present despite any interlocks, guarding or other safety functions that can be fitted to the machine.

The machinery owner has a legal responsibility to take **all reasonable precautions** to eliminate, isolate, or minimize these residual hazards. This may include:

- Monitoring and enforcing the training of operators
- Design and implementation of Standard Operating Procedures
- Using rewards and/or disciplinary measures to encourage safe behaviours
- Posting signage, floor marking, or other warnings as appropriate
- Encouraging a culture of safety within the workplace



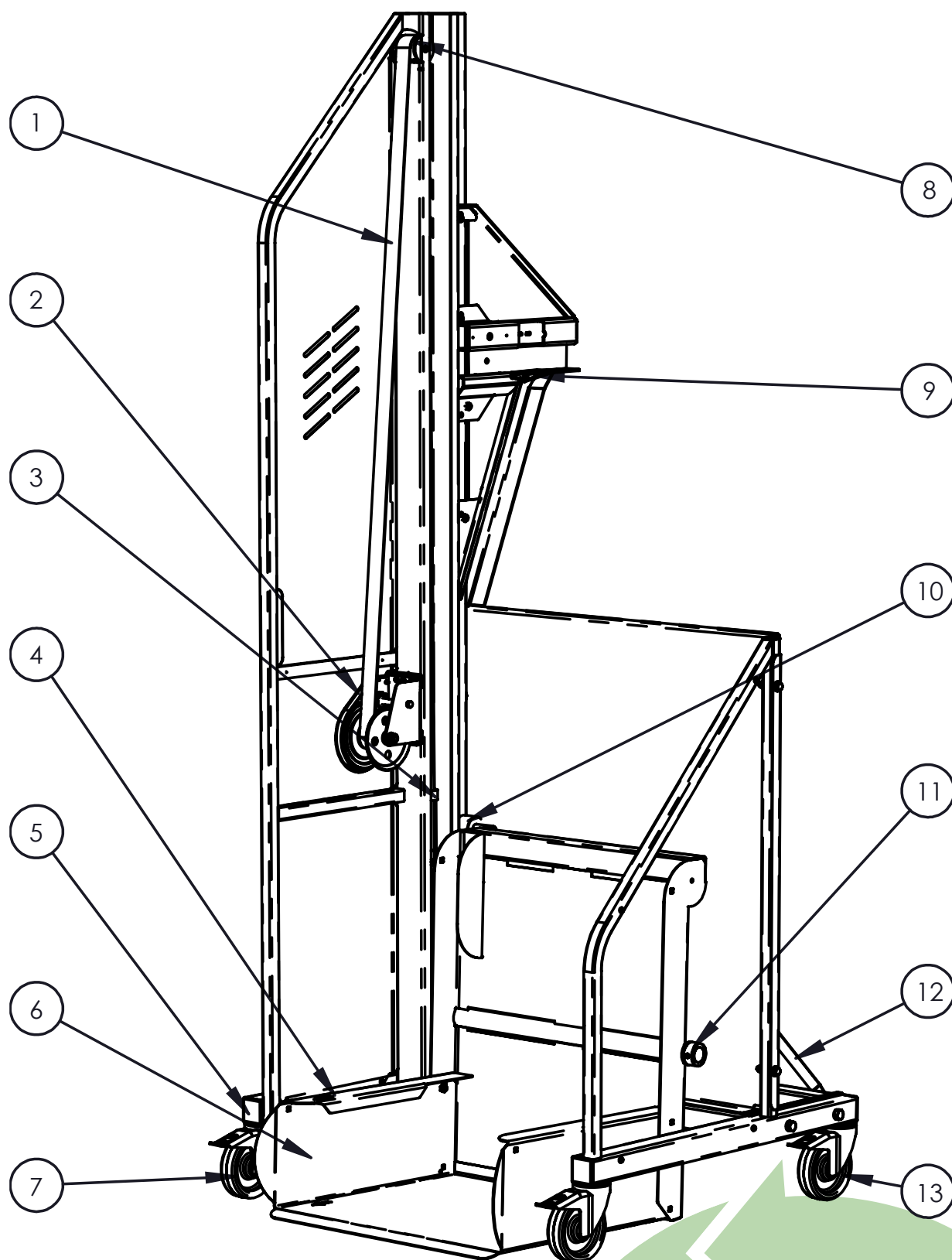
## 6. Spare Parts

The following table includes only the most common Ezi-MT spare parts as at the time of publication. Additional parts, accessories and prices may be viewed at the following web address: [simpro.world/ezi-mt-spare-parts](http://simpro.world/ezi-mt-spare-parts).

Ref	Partcode	Description	Qty*	BSK**
1	1000000424	Winch Strap, 47mm wide x 6m long, black nylon	1	✓
2	1000000422	Winch Assembly, complete with handle and strap	1	
	0950040044	Winch Handle Only, galv steel, with black plastic handgrip	1	
3	0090120001	Mast Block, nylon	4	
4	0090170085	Wheel Alignment Guide Decal	1	✓
5	0000020014	End Cap, black plastic	2	✓
6	1000000155	Cradle base pressing (Type-E cradle only)	1	
7	0250040090	Castor, 125mm, braked	2	
8	1000000177	Top Roller, Ø37-42mm x 60mm, med galv pipe	1	✓
	0040010006	Top Roller Bearing, 6301 2RS	2	✓
	0440120003	Top Roller Nylon Washer, Ø13-54mm x 4mm	2	✓
9	0230040001	Tipping Guide Flap	1	
	0060010001	Steel Bush for tipping guide flap	1	
10	0090120000	Follower Roller, Ø16-50mm x 35mm	1	✓
11	0250060016	Shaft Collar, 30mm, zinc-plated	1	
12	1000000164	Frame Brace, 3.0mm PGI strip pressing	1	
	1000000179	Frame Brace Tension Nut	1	
13	0250040087	Castor, 125mm, unbraked	2	
-	0250190453	Gas Strut, 80mm stroke, 300N (installs to top of mast)	1	✓
-	0000020019	Plastic handgrip for grab handle	1	✓
-	0950170001	Decal, EZ Operation Guide	1	✓
-	0950170002	Decal, EZ Winch Directional Arrow	1	✓
-	0250170001	Decal, Generic Hazard Label (pinch point and head impact)	1	✓
-	1000000387	Decal, EZ Mast Cover, with chevrons and 'Ezi-MT' text	1	
-	0970000003	User Manual	1	

\* Quantity per machine

\*\* Basic Spares Kit



## 7. Warranty

### 7.1 Definitions

1. "Simpro" means Simpro Handling Equipment Limited, [New Zealand Company No. 1827916](#).
2. "Agent" means a person or company authorized by Simpro to sell a Product.
3. "Service Agent" means a person or company authorized by Simpro to repair a Product.
4. "End User" means the first purchaser of a Product from a Sales Agent authorised by Simpro to sell the Product.
5. "Warranty" means the commitment that Simpro has to guarantee the workmanship and componentry to any End User of Products manufactured and sold by Simpro.
6. "Warranty Claim" means an application from an Agent to Simpro to be reimbursed for expenses relating to repairs done to remedy a fault with a Simpro Product.
7. "Warranty Period" means the length of time that Simpro undertakes to guarantee a Product.
8. "Back to Base" means that the costs associated with the transporting of a Product between the Service Agent and the End User is the End Users responsibility.
9. "Standard Products" means any Product displayed as a standard product on the Simpro website, [simpro.world](#).
10. "Part" and "Parts" refer to components of a Product.
11. "Minor Fault" means a fault or defect that requires less than one hour to rectify
12. "Instruction Handbook" means a document so titled that provides brief information and guidance on the operation of the Product for commonly performed functions.
13. "Service Manual" means a document so titled that provides comprehensive information and guidance for service, repairs, and maintenance.
14. "Warranty Registration Process" means the process of an End User registering their product with Simpro. This may be done using the web form here: [simpro.world/warranty-registration](#)
15. "Application for Warranty Consideration Form" means the system used to file a Warranty Claim with Simpro. This may be done using the web form here: [simpro.world/warranty-claim](#).

### 7.2 Coverage

1. Simpro provides a 12 month Back to Base Warranty on all Standard Products unless alternative terms have been agreed to in writing.
2. The Warranty terms and conditions on custom-built and non-standard machines are generally specified on quotations, and placing an order implies acceptance of the Warranty terms. If no specific Warranty details have been provided, the standard terms and conditions will apply.
3. The 12-month Warranty period shall be taken from the date the machine first leaves the Agent's premises, whether sold or just supplied for trial. The Agent shall keep accurate records of the date of all machine trials, sales, etc.
4. Simpro will, at its option, repair or replace any items that fail or prove defective within the Warranty period.
5. Simpro's liability under the terms of this Warranty shall be limited to remedying any fault that occurs on machines it has manufactured or supplied, and shall not cover any consequential loss or damage.
6. The Warranty on batteries is for 12 months only, and is distinct from the warranty on the rest of the machine.

### 7.3 Exclusions

1. Simpro will not recognise a Warranty Claim against a machine where payment to Simpro for that machine is outstanding. If a Warranty Claim is made before payment is due, the full payment must be made on the due date. The Warranty Claim, if accepted, will be credited at a later date.
2. Warranty Claims may not be recognized unless the [Warranty Registration Process](#) has been completed. If not done at the time of sale, this should be done at the time of the Warranty Claim. If warranty registration has not been completed, proof of purchase may be required.
3. Damage caused or contributed to by misuse, abuse, accident, unauthorised repairs or modifications, or failure to use the machine in accordance with instructions is specifically excluded.

4. Travelling time and mileage are specifically excluded from the Simpro warranty coverage. However under certain circumstances Simpro at its discretion may contribute to these costs. Authorisation must be obtained from Simpro prior to any such Warranty Claim. This does not prohibit an Agent offering more extensive Warranty cover, outside of this Warranty, as negotiated between the Agent and the End User.

## 7.4 End User claim procedure

1. Where a fault or breakdown appears to have occurred the End User should, if applicable, first consult the Quick Troubleshooting Guide section of the User Manual provided with each machine, to ascertain the cause of the fault and remedy if possible. This information may also be accessed on the Simpro Support website: [support.simpro.world](https://support.simpro.world).
2. If the fault is not able to be remedied, the End User should contact the Agent who sold the machine, and explain as fully as possible the fault, including all relevant factors such as:-
  1. Did the fault occur suddenly, or develop over a period of time?
  2. Was the machine being used at the time?
  3. Is the fault intermittent?
  4. Are the batteries fully charged?
3. If repair is urgent, or the Agent cannot be contacted, the End User may contact Simpro directly.

## 7.5 Agent claim-handling procedure

1. Upon receiving notification of a fault, the Service Agent should attempt to determine the cause and a course of action before going to see the machine.
2. The Service Agent should contact Simpro for assistance in identifying the fault, if it is not apparent. This step is important, so that if a site visit is necessary, the correct tools and spare Parts can be taken. It is also important to establish whether there may have been any negligence, misuse or an accident that contributed to or caused the fault.
3. Parts requiring replacement will be supplied by Simpro free of charge; in some cases, it may be necessary to source Parts locally if needed urgently, but Simpro must authorize this if the cost of the item exceeds \$50.00 and is to be charged to Simpro.
4. If the fault is not a Minor Fault, the Agent must notify Simpro and receive authorization to proceed before the repair work is done. Simpro will assist in every way possible, including discussing the problem directly with the End User if necessary, to determine the best method of effecting the repair in the shortest time possible.
5. Upon completion of the repair to an acceptable standard, the Agent shall complete the [Application For Warranty Consideration Form](#) and include copies of any invoices for labour, and any Parts supplied.
6. The cost of Warranty repairs is not to be deducted from any payments due to Simpro, unless Simpro issues a credit note clearly stating the amount and which invoice it relates to.
7. Simpro undertakes to be reasonable in respect of all Warranty repairs undertaken by Agents, but reserves the right to decline payment for:-
  1. Work done or materials replaced that were not authorized in advance by Simpro.
  2. Work not done to an acceptable standard.
  3. Work taking an unduly long time, due (in part or in full) to the lack of knowledge or skill of the serviceman or the Agent. The time allowed for repair work will be based on Simpro's assessment of what a reasonably skilled technician would take. A detailed Service Manual is available on request from Simpro, and all service visits should be conducted with this document at hand.

This warranty shall be interpreted according to the laws of New Zealand, and the parties agree to submit to the jurisdiction of the Courts of New Zealand.

## 8. EC Declaration of Conformity



### DECLARATION OF CONFORMITY

#### ORIGINAL

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**Business Name and Full Address of Manufacturer**

Simpro Handling Equipment Ltd  
66 Rangī Road, Takanini 2105  
Auckland, New Zealand

---

**Name and Address of Authorised Representative**

As above

---

**Name and Address of the Person in Community Authorised to compile the Technical File (if different to above)**

Safe Machine Limited  
DBH Business Centre, Coxwold Way, Billingham, Tees Valley TS23 4EA UK

---

**Description of product (Commercial Name)**

Simpro Ezi-MT

---

**Function, Model, Type, Serial Number**

Function: Bin Tipper  
Type: Winch operated

Model: EZ1500  
Serial No:

---

**Standards Used**

EN 349 1993, EN 953 1997, EN ISO 12100 2010, EN ISO 13849-1 2006, EN ISO 13857 2008

---

**Place of Declaration**

66 Rangī Road, Takanini 2105  
Auckland, New Zealand

---

**Date of Declaration:**

13 December 2019

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**Declaration**

I declare that the machinery fulfils all the relevant provisions of the following Directives:- Machinery Directive 2006/42/EC.

---

**Person Empowered to Draw Up Declaration**

Name: Daniel Craig Currie

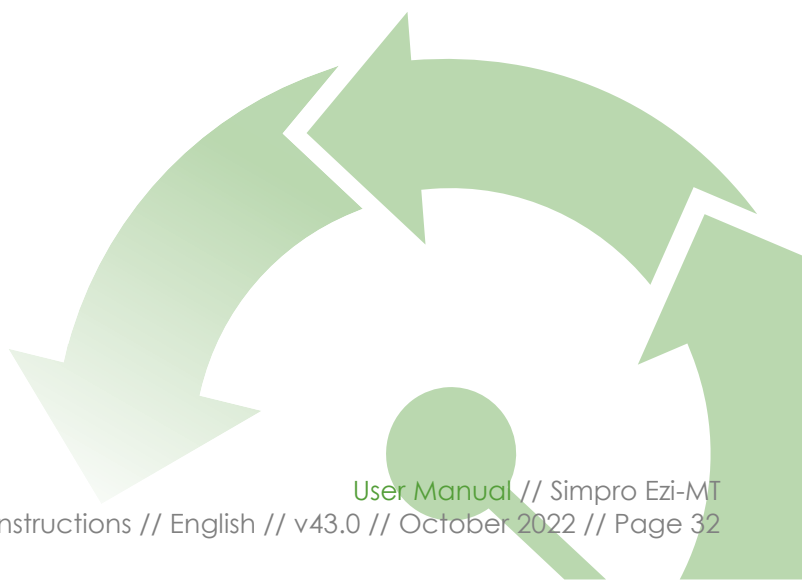
Position: General Manager

Signature:

**Declaration No: 008**

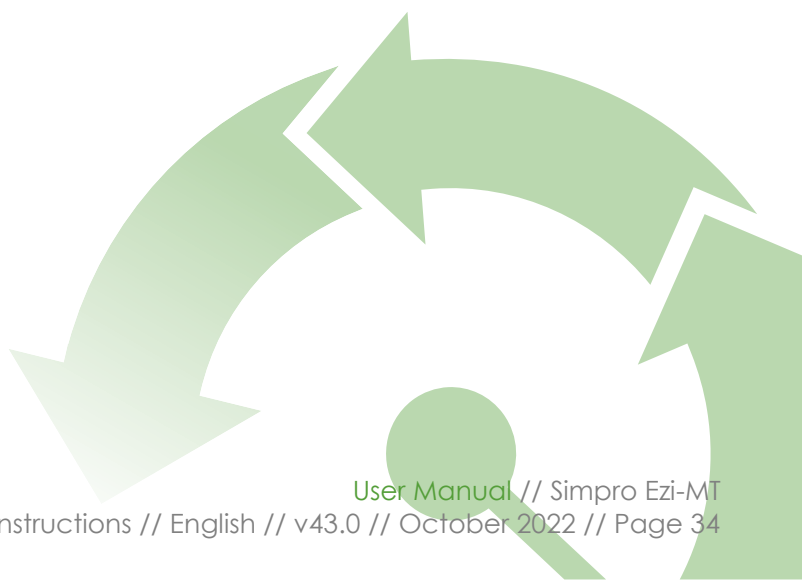






## *9. Notes*





With business activities including design, manufacture, import, export, wholesale and retail, Simpro products now play a quiet role for thousands of companies around the world. Customers range from SMEs to bluechips, operating in sectors as diverse as warehouse logistics, food processing and waste management.

Simpro is a family company, based in Auckland and registered with the New Zealand Companies Office as Simpro Handling Equipment Ltd (1827916).

This document may contain intellectual property belonging to Simpro, including patents, trademarks and/or registered designs.



66 Rangi Road  
Takanini 2105  
Auckland, New Zealand



PO Box 74  
Takanini 2245  
Auckland, New Zealand



+64 9 634 7445



sales@simpro.world



shop.simpro.world



@simpro.world



@Simproworld Lifters

