
USER MANUAL

SIMPRO EUROVER



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

1 kilogram (kg) = 2.2 pounds (lb)

1 metre (m) = 1000 millimetres (mm) = 39.37 inches (in) = 3.28 feet (ft) = 1.09 yards (yd)

The following stylistic conventions are used throughout this document:

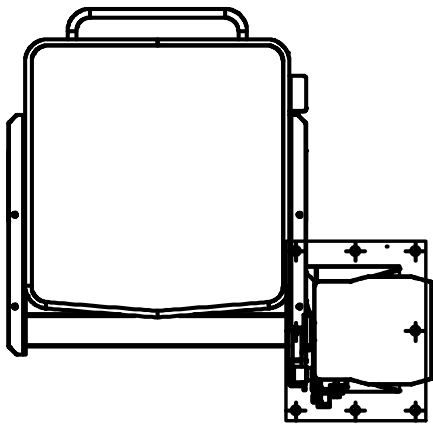
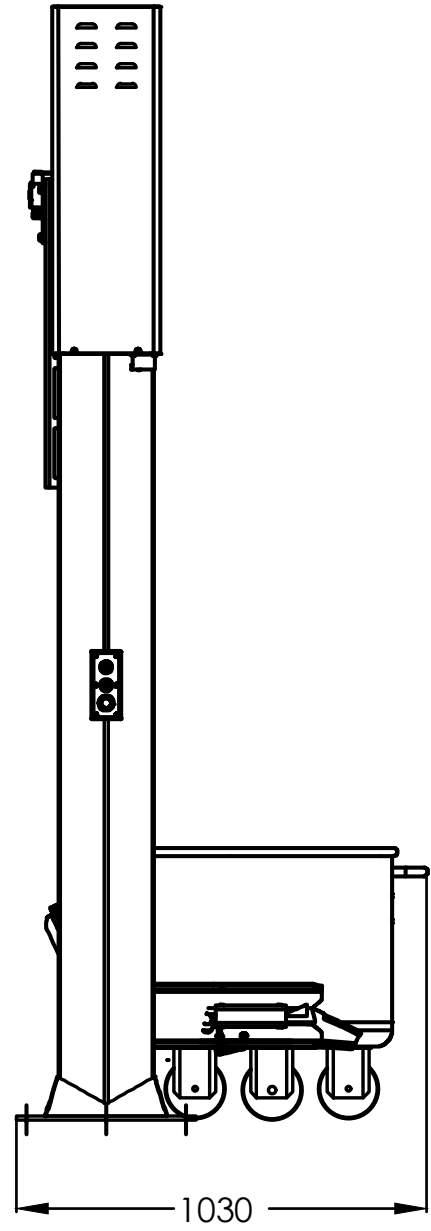
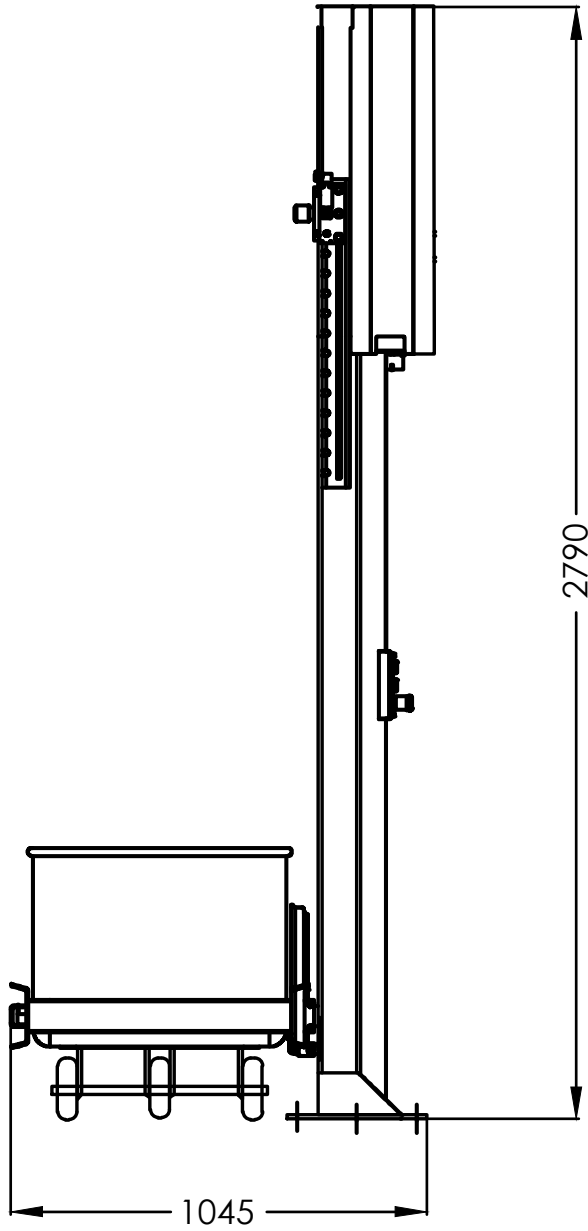
 Point of interest

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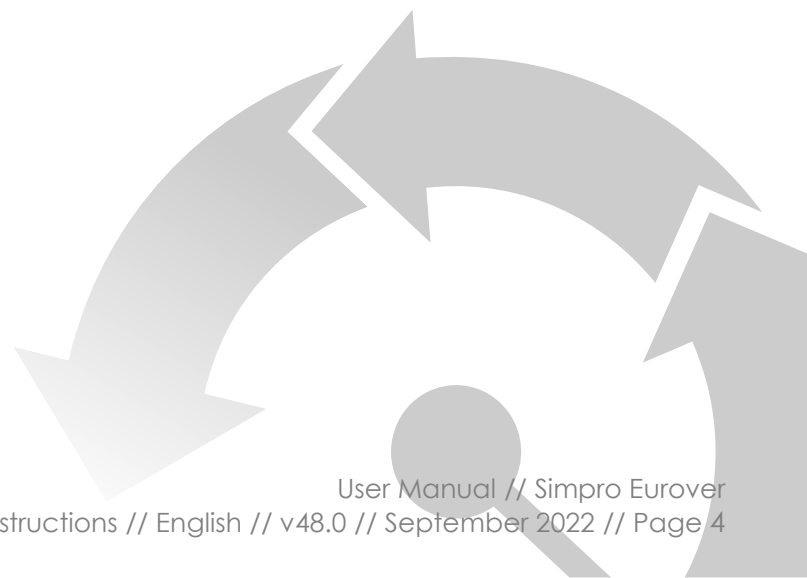


EO2200 Standard Layout

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1. Product Overview

Congratulations on your purchase of a Eurover column lifter from Simpro. These machines are ideal for food production areas, with a simple, safe design and minimal maintenance requirements

Eurover tippers are manufactured from SUS304 stainless steel, with food-grade welding and componentry. They are designed for easy cleaning, with a highly accessible single-mast design and stainless-steel covers to all components.

Eurover employs a direct chain-drive mechanism which can safely lift bins weighing up to 350kg, backed up by a failsafe brake system. This allows for an adjustable tip height, with various models tipping in ranges from 1.2m up to 2.5m.

The Eurover quick-hitch retaining system allows bins to be secured simply by rolling them into place, with no clamping required. At the end of the tipping cycle, pressing down on a foot catch allows the bins to be instantly released. The system is compatible with a range of international standard Eurobins and trolleys, also available from Simpro.

Like all Simpro products, Eurover is designed to be exceptionally reliable and suitable for intensive production applications.

1.1 Key Features

Key features of the Eurover include:

1. A tipping action whereby bins are lifted straight up, and then gently rolled forward around the lip of the container being emptied into. Benefits of this design include a small floor footprint, high stability, and an adjustable tipping height.
2. 304-grade stainless steel construction, suitable for hygiene-critical applications.
3. A direct chain-drive lifting mechanism, with a capacity of 350kg.
4. A failsafe braking system to protect against chain failure.
5. A DIN9797 trunnion-lift bin retaining system, suitable for use with industry standard Eurobins (also available from Simpro).
6. Upper and lower limit switches to prevent overload damage.
7. An extremely reliable, low-maintenance design.

1.2 Construction

The Eurover consists of a 304-grade stainless steel mast, covers, bolt-down base and bin cradle with spring-loaded latch mechanism, a heavy-duty lifting chain, a sealed enclosure containing an AC electric motor, gearbox and electronic systems, operator controls, and a 3-phase power lead.

1.3 Mechanism

When the RAISE circuit is activated, an AC electric motor shaft rotates a sprocket wheel via a gearbox. The sprocket teeth pull on the lifting chain, causing the sliding block to move vertically in the mast. The bin cradle moves with the sliding block, and is inverted at the appropriate height by a fixed roller running in a tipping track.

When the LOWER circuit is activated, the motor is reversed, causing the bin to be lowered back to ground level. Electronic control systems allow the operator to raise or lower the bin in a controlled manner.

1.4 Safe Lifting Capacity

The Safe Lifting Capacity of the standard Eurover is **350kg (770lb)**.

Some machines may be specified with different lifting capacities. Refer to the rating plate to verify the Safe Lifting Capacity of any given machine.

⚠ Safe Lifting Capacity is a gross figure, referring to the weight of the bin, its contents, and any other external objects which have been placed on the cradle.

⚠ Never attempt to lift bins heavier than the machine's rated Safe Lifting Capacity.

1.5 Duty cycle

The duty cycle of the Eurover depends on various environmental factors and the manner in which the machine is used. The figures given below are estimates only.

Duty Cycle (tipping ~250kg per bin at 2200mm)		
Net throughput	Number of bins	Units
7,500kg	30 bins	Per hour


1.6 Service life

The nominal service life of the Eurover is as follows:

Average Gross Bin Weight	Intended operational life
< 200kg	100,000 cycles
200kg – 300kg	75,000 cycles
300kg – 350kg	50,000 cycles

1.7 Noise emissions


The noise emissions of the Eurover do not usually exceed ~60 dB(A) at the operator's ear. Hearing protection is recommended if operating the machine for extended periods.

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

1.8 Environmental restrictions

The Eurover may be used indoors or outdoors. However the following restrictions apply:

1. Minimum floor area 4 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 Eurover in explosive, corrosive, acidic or alkaline environments.

1.9 Ingress protection

Item	IP Rating
Push buttons, switches, and lamps	IP66
Microswitches	IP66
Appliance inlet	IP44
Motor	IP54 (additional protection is provided by covers)
Overall	IP56 (optionally upgraded to IP66 or IP69)

1.10 Notes

1. This User Manual describes approved procedures for the operation, inspection, and maintenance of the Simpro Eurover bin-tipping machine.
2. This manual is written in English, and is to be considered the 'Original Instructions' for the purposes of EU 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, sold, or otherwise transferred, 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. In cases where a discrepancy exists between the manual and the actual product, the manual is to be used as a reference only.
6. Contact your authorized Simpro agent if any problems or faults are encountered with the machine.
7. Errors in this manual should be reported by email to info@simpro.world.

2. Operating Instructions


2.1 Before use

Before operating a Eurover, the following points should be checked to ensure the machine is stable and safe to use:

1. If being used with a mobile base unit, check that:
 - a. The machine is correctly positioned beside the destination receptacle.
 - b. The operating surface is hard and flat with a slope no greater than 1:12.
 - c. The brakes on both castor wheels are applied.
2. Check that all covers and guarding panels are in place.
3. Check that the power lead is undamaged and firmly connected.
4. Check that all personnel other than the operator are clear of the machine.
5. Check that the EMERGENCY STOP button is released.
6. Check that the cradle is lowered to the ground.

2.2 Emptying bins

1. Wheel a full Eurobin into the cradle, taking care that it is properly positioned, and the quick-release catch is engaged.
2. Press the RAISE button, holding it down until the Eurobin reaches the inverted position.
3. Wait for 10-20 seconds while the contents of the Eurobin are emptied.
4. Press the DOWN button, holding down until the Eurobin rests on the ground.
5. Press the quick-release bin catch with your right foot and remove the empty Eurobin.
6. Repeat from step 1) as required.

 The cradle may be stopped at any time by either releasing the RAISE/LOWER button or pressing the EMERGENCY STOP button.



2.3 Safety Norms

The following norms must be observed for the safe use of the Eurover.

Only trained personnel should be authorised to operate the machine.

Operators must read and comply with all instructions and warning labels.

The machine must only be operated on hard, level concrete or steel surfaces.

The machine must only be used to empty DIN9797-compliant trunnion-lift Eurobins.

The machine must not be used to empty over-filled or overflowing Eurobins.

The machine must not be operated with covers or guarding removed.

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

Hands and feet must be kept well clear of the bin, cradle and lifting mechanism during operation.

Foreign objects must not be inserted behind the covers or into the lift mechanism during operation.

Before connecting the mains power supply, ensure the voltage and frequency correspond with that listed on the machine's rating plate.

Ensure the power socket is fitted with a residual current device.

Do not operate the machine if the power lead is damaged or frayed.




Do not connect the machine to a damp power plug or socket.

Do not connect the machine to mains power using an extension lead longer than 10 metres.

Ensure there is complete continuity between the machine and an effective earthing system which complies with local and national regulations.







3. Care and Maintenance

The Eurover 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. Common spare parts are listed in §7.

-  Contact your agent in the first instance 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.

3.1 Quick Troubleshooting Guide

Refer to the Quick Troubleshooting Guide below before contacting your agent for support.

Problem	Possible Causes	Remedy	See also
The machine will not lift bins, and the motor does not run	Triggered circuit breaker	Open the electronics enclosure inside the powerpack cabinet and press the reset button on the circuit breaker	 Circuit breaker 0250190660
	Faulty power lead or plug	Check and rectify; contact your agent if necessary	 Appliance inlet 0250190674
	Faulty motor contactor	The motor contactor should emit a 'click' sound when the RAISE button is pressed – if not, check and replace if necessary	 Contactor 0250190664
	3-phase polarity mis-match	Swap any two of the phase wires in the power plug	§4.1.3
	Bin weighs more than 350kg	Manually remove material from the bin to reduce the weight.	§3.4.1.1
Cradle will not come down from the fully raised position	Faulty motor contactor	The motor contactor should emit a 'click' sound when the LOWER button is pressed – if not, check and replace if necessary	 Contactor 0250190664
Cradle jams part way down	Mast bent or damaged	Check and straighten the mast. Contact your agent for support if necessary	§3.4.2.2  Mast 0250190603
	Mast rollers jamming	Spray inside of mast and mast rollers with silicone lubricant. Contact your agent for support if necessary	§3.4.2.2  Mast rollers 0250190678

3.2 Adjusting the tipping height

The Eurover cradle is inverted at the desired height by a static tipping roller, which is mounted along with the top limit switch onto an adjustable 'tipping bracket'. This bracket can be moved up or down to quickly adjust the Eurover tipping height, as set out below.


1. Lower the cradle to the ground and, if necessary, remove the Eurobin.
2. Depress the EMERGENCY STOP button and disconnect the power lead.

3. Using a spanner, loosen the three 16mm bolts holding the tipping bracket onto the adjustment track. The outer part of the bracket can now be pulled backwards, disengaging the two deadbolts, and allowing the bracket to move up and down.
4. Reposition the bracket on the adjustment track as required. The track has holes predrilled at 50mm centres for engaging the deadbolts.
5. With the bracket at the desired height, push the outer part forward to re-engage the deadbolts. Take care that both deadbolts are fully inserted.
6. Re-tighten the three 16mm bolts to lock the bracket into its new position.
7. Carry out a complete tipping cycle to check that the cradle is inverted at the desired height, and the top limit switch operates correctly.

3.3 Cleaning

The Eurover should be cleaned with a water jet, a microfiber cloth, and a suitable food-grade cleaning agent. Cleaning should be carried out with the cradle lowered.

 Do not direct high-pressure water jets at the powerpack enclosure or controls.

 Refer to §1.9 for the IP ratings of the machine and various subcomponents.

3.4 Cradle jams

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

3.4.1 Cradle jams while raising

There are two types of problem which can prevent the cradle from lifting when the RAISE button is pressed: **overload** and **mechanical** faults.

3.4.1.1 Overload fault

If the motor does not operate at all when the RAISE button is pressed, it is likely that the overload circuit breaker has been triggered by trying to empty an overweight bin. Observe the following procedures to rectify the problem.

 The Eurover is not designed to lift bins weighing more than 350kg.

1. Remove the covers from the powerpack enclosure.
2. Press the red RESET button on the circuit breaker, then replace the covers.
3. Lower the bin to the ground.
4. Manually remove some material from the bin to lighten it.
5. Try to empty the bin again.

3.4.1.2 Mechanical fault

If the cradle starts to move but jams, the problem may be a mechanical fault. Observe the following procedures to rectify the problem.

1. If possible, lower the cradle to ground level and remove the bin.
2. Attempt to visually identify the cause of the jamming. The most likely problems are:


- a. The mast being bent or damaged, jamming one of the mast rollers.
 - b. Part of the tipping track being bent or misaligned, interfering with the correct movement of the tipping roller.
 - c. A worn or misaligned tipping roller.
 - d. Lack of lubrication of the rollers or mast sliding block.
 - e. Poorly lubricated or broken lifting chains.
3. With the cradle lowered, rectify the problem by lubricating, straightening and/or realigning the mechanical components as required. If the mast or another major component is bent, you may need to contact your agent for support.
 4. Test the machine to see if the cradle now lifts correctly. Run the machine through several complete tipping cycles to ensure the problem has been fully resolved.
 5. If the machine is still not operating correctly, contact your agent.

3.4.2 Cradle jams while lowering

There are two types of problem which can prevent the cradle from lowering when the LOWER button is pressed: **electrical** and **mechanical** faults.

3.4.2.1 Electrical fault

When the LOWER button is pressed, the motor contactor should emit a 'click' sound. If it does not, the problem is likely be an electrical fault. Observe the following procedures to rectify the problem.

 This procedure should only be carried out by an authorized, certified electrician, following 3-phase electrical safety procedures.

1. Open the control cabinet cover.
2. Using a multimeter, check that the motor contactor is receiving an electrical signal. If not, check the wiring and repair any breaks.
3. Test the machine to see if the cradle now lifts correctly. Run the machine through several complete tipping cycles to ensure the problem has been fully resolved.
4. If the machine is still not operating correctly, contact your agent.

3.4.2.2 Mechanical fault

If the cradle starts to move but jams, the problem may be a mechanical fault. Observe the following procedures to rectify the problem.

1. If possible, lower the cradle to ground level and remove the bin.
2. Attempt to visually identify the cause of the jamming. The most likely problems are:
 - a. The mast being bent or damaged, jamming one of the mast rollers.
 - b. Part of the tipping track being bent or misaligned, interfering with the correct movement of the tipping roller.
 - c. A worn or misaligned tipping roller.
 - d. Lack of lubrication of the rollers or mast sliding block.
 - e. Poorly lubricated or damaged lifting chains.
3. With the cradle lowered, rectify the problem by lubricating, straightening and/or realigning the mechanical components as required. If the mast or another major component is bent, you may need to contact your agent for support.

4. Test the machine to see if the cradle now lifts correctly. Run the machine through several complete tipping cycles to ensure the problem has been fully resolved.
5. If the machine is still not operating correctly, contact your agent.


3.5 Electrical System


The Eurover is driven by a 3-phase 2-pole electric motor, which is connected to the lifting chain via a gearbox. A transformer provides 24VDC correct to the control circuits.

The motor runs only when the cradle is lifting or lowering.

3.5.1 International conformance


The specifications of 3-phase machines may differ depending on the standard voltage and frequency of 3-phase mains power in the intended country of use. In regions where 3-phase/~400VAC/50Hz power is standard (primarily in Europe, Australasia, and Asia) the Eurover motor is driven directly by the 3-phase current in delta configuration.

 A list of 3-phase power standards in different countries and territories may be viewed here: <https://www.worldstandards.eu/three-phase-electric-power/>.

 Connecting the Eurover to a power supply for which it is not designed may damage the motor and electronic components. Consult an electrician if you are unsure.

3.5.2 Appliance inlet

The Eurover is fitted with a 3P+N+E 16Amp appliance inlet with IP44 ingress protection. This allows the machine to be operated using a regular 3-phase extension lead.

 The Eurover is fitted with a phase-rotation relay, so it will not operate if the AC phase polarity of the input power is inverted. This can be corrected by switching two of the phase wires in the power plug as set out in §4.1.3.

3.5.3 Emergency stop

The Eurover is fitted with an EMERGENCY STOP button on the control panel. It is engaged by depressing the red button, and disengaged by pulling the button outwards.

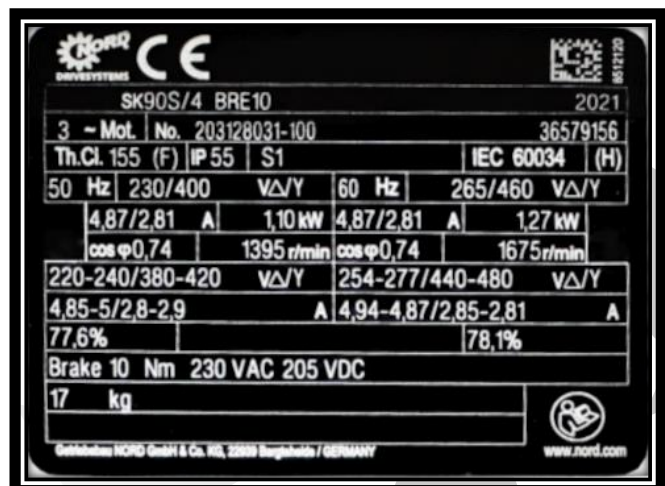
When engaged, the EMERGENCY STOP isolates all of the machine's electrical circuits from the power supply. It should be engaged, and the mains power lead disconnected, before any covers are removed from the machine.

3.5.4 Motor

The Eurover is fitted with a NORD 1.1kW AC electric motor, which drives the lifting chains through a gearbox.

The motor accepts a variety of different input voltages and frequencies.

 The motor rating plate is shown at right.



3.6 Preventative Maintenance Inspections

Regular preventative maintenance inspections (PMIs) should be carried out on the Eurover. This helps ensure operator safety and extend the service life of the machine. The inspection procedures and log sheets are provided in the following section.

⚠️ Operators should immediately stop using the Eurover and request an inspection if any abnormal operation or fault is observed.

⚠️ In the United Kingdom, the Lifting Operations and Lifting Equipment Regulations 1998 specifies that all workplace lifting equipment be subjected to 'thorough inspection' on regular basis. These are sometimes known as LOLER checks. The following schedules and logs may be used to demonstrate conformance with UK LOLER regulations.

3.6.1 Pre-inspection checklist

1. Wear suitable Personal Protective Equipment (PPE), including safety boots, protective eyewear, and height safety equipment when servicing elevated areas.
2. Ensure that there are no ignition sources nearby.
3. Lower the cradle to the ground and, if necessary, remove the Eurobin.
4. Depress the EMERGENCY STOP button and disconnect the power lead.

3.6.2 Monthly inspection

The following inspection should be carried out every month, and the results recorded in the log sheet on the following page.

Monthly Inspection Checklist			
Category	No.	Item	Check
General	1	Entire machine	Thoroughly clean the machine as per §3.3. Visually inspect for dented or broken parts. Conduct a complete tipping cycle and check for faults or abnormal behaviour.
Electrical systems	2	Power lead	Check that the lead, insulation, power plug, and socket are all in satisfactory condition.
Safety systems	3	Controls	Check that controls operate correctly, and the cradle stops instantly when the RAISE/LOWER button is released, or the EMERGENCY STOP button depressed.
	4	Safety Labels	All labels, guides etc are attached and legible.
Mechanical systems	5	Motor and gearbox	Open the motor cabinet and clean the motor, gearbox and electronics with compressed air.
	6	Lubrication	Spray the chain, mast block and tipping roller with silicone lubricant.
	7	Base unit castor wheels (if fitted)	Check that the castor wheels are running smoothly and the brakes working correctly.

4. Installation, Handling & Storage

- ⚠ Installation, handling, and storage tasks should only be conducted by authorized personnel in accordance with the following procedures.
- ⚠ The Eurover weighs 350-400kg and should be handled with care at all times.

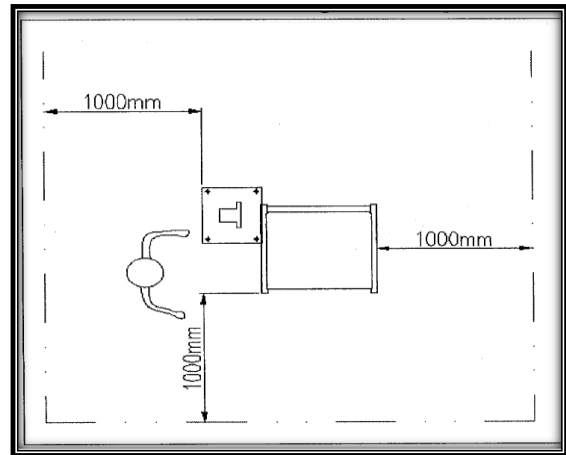
4.1 Installing

The Eurover is usually delivered fully assembled. Machines with a mobile base can be operated immediately, but bolt-down machines must first be installed and commissioned in accordance with the following procedures.

4.1.1 Before installing

Before installing a bolt-down Eurover, ensure that the following requirements are met:

1. An install location with a hard flat 40MPa concrete floor at least 150mm thick, and 1000mm of clear space in three directions as shown by the diagram at right.
2. Mobile lifting equipment (such as a forklift truck or crane) with a safe working load of at least 500kg, which can be operated at the install location.
3. A power drill with a 20mm concrete bit.
4. Six M16 x 100-150mm sleeve anchors (Dynabolt™ or similar). For optimum longevity in wet environments 304 stainless-steel anchors should be used.



4.1.2 Erecting the mast

Carry out the following procedures to erect the Eurover mast.

1. Connect a chain or sling from the lifting equipment to the lifting eye at the top of the Eurover mast.
2. With one person operating the lifting equipment, and another watching for obstructions and steadying the load, slowly lift the Eurover until the mast is upright, with the base a short distance off the ground.
3. Transport the Eurover to the install location, taking care not to strike any obstacles.

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

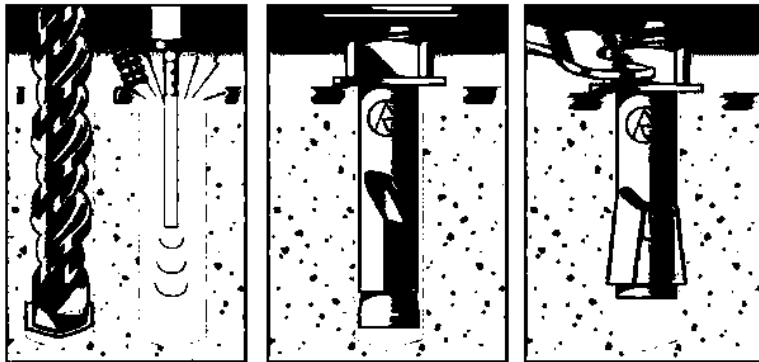
4. Carefully set the Eurover onto the ground in the install location.
5. Use a spirit level to ensure the mast is oriented at exactly 90° degrees vertical. Adjust the position and orientation of the Eurover as required.
6. Using the bolt-down base as a template, drill six \varnothing 20mm holes into the concrete floor for the sleeve anchors. Clean the holes with compressed air.

7. Fix the Eurover into position with six M16 x 100-150mm sleeve anchors, in accordance with the fixing manufacturer's instructions.

⚠ Dynabolts™ should be fixed in accordance with the instructions below:

INSTALLATION GUIDE

1. Drill or core a hole to the recommended diameter and depth using the fixture as a template. Clean the hole thoroughly with a hole cleaning brush. Remove the debris with a hand pump, compressed air, or vacuum.
2. Insert the DynaBoit™ Plus through the fixture and drive with a hammer until the washer contacts the fixture.
3. Tighten the DynaBolt™ Plus, allowing the sleeve to twist and pull down the fixture firmly onto the substrate. For optimum performance, a torque wrench should be used.



8. The Eurover is now installed, and can be detached from the lifting equipment.

4.1.3 Connecting the power


- ⚠ Electrical work should only be carried out by a certified electrician.**
- ⚠ The recommend power supply for the standard Eurover is ~415VAC 50Hz 3-phase (±5% voltage and ±1% hertz) with nominal capacity of at least 6 Amps.**
- ⚠ For complete electrical specifications refer to the rating plate on the motor (see §3.5.4).**

1. Depress the EMERGENCY STOP button.
2. Connect the power plug to the socket at the base of the powerpack enclosure.
3. Release the EMERGENCY STOP button.
4. Press the RAISE button. If the cradle does not move, it is likely that the AC phase polarity of the input current is inverted. The Eurover is fitted with a phase-rotation relay, so it will not operate if the phasing is incorrect. Observe the following procedures to rectify this problem:
 - a. Depress the EMERGENCY STOP button
 - b. Disconnect the power
 - c. Have a **qualified electrician** switch over any two of the phase-wires in the power plug.
 - d. Repeat the process from step 2 above.
5. Once machine is operating normally, proceed with commissioning.

4.1.4 Commissioning


Once the machine has been installed and connected to the power, it should be tested to check for any operating faults or problems.

1. Without loading a bin into the machine, press the RAISE button on the control panel. The cradle should begin to lift.
 - a. If the cradle does not move, it is likely that the AC phase polarity of the input current is inverted. Carry out the procedure in §4.1.3 to rectify the problem.
2. Insert a 200L Eurobin into the cradle and carry out a complete tipping cycle to check that the upper and lower limit switches are adjusted correctly. The motor should stop at the top of the cycle when the bin is at about 40° degrees, and at the bottom of the cycle when the bin touches the ground.
 - a. If the motor does not stop in the desired position, adjust the position of the two limit switches as necessary.
3. Conduct another tipping cycle with an empty Eurobin, closely observing the roller and tipping track for jamming, unusual sounds, or misaligned operation. Adjust or realign components as necessary.
4. Conduct a tipping cycle with a full bin to validate the installation. The complete tipping cycle should take approximately one minute. If the bin does not completely empty, the top limit switch can be adjusted to change the tipping angle, per step 2.

 Once all checks are complete, the Eurover may be placed into service.

4.2 Moving

The Eurover with mobile base unit can be easily moved using the grab-handles provided. To ensure stability the cradle should be positioned 100mm off the ground when moving.


 On a hard, flat surface, the mobile Eurover can be moved by a force of approximately 100 Newtons at a height of 1.6 metres.

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

4.3 Lifting

Carry out the following procedures when lifting the Eurover:

1. Check that the lifting equipment is in good condition and has a safe working load of at least 500kg.
2. Connect a chain or sling from the lifting equipment to the lifting eye at the top of the Eurover mast.
3. With one person operating the lifting equipment, and another watching for obstructions and steadying the load, slowly lift the Eurover until the base is a short distance off the ground.
4. Move the machine to the desired location and lower it into position. If the machine is being laid over for storage or transport, place it onto its side with the mast lowermost.

 Standard Eurover models weigh 350-400kg. Always verify the weight of the machine on the rating plate, and check that the lifting equipment to be used has sufficient capacity.

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

4.4 Transporting

Carry out the following procedures when transporting the Eurover:

1. Lower the cradle, apply both brakes (if fitted) and disconnect the power.
2. Use suitable lifting equipment to place the machine onto its side on a wooden pallet, with the mast lowermost. Securely strap it into place.
3. Load the pallet onto the truck deck using a forklift of at least 1-tonne capacity.
4. Tie the pallet into place using marked tie-down points and strops rated to at least 1000kg. Ensure it is fastened against lateral forces from any direction.

⚠ Never lie the Eurover onto its front or back as this may damage the cradle and guarding.


4.5 Storing

If the Eurover is not to be used for a period of six months or more, it should be stored in a clean, dry place with good ventilation, at temperatures not below 0°C. Carry out the following procedures when placing the Eurover into storage:

1. Conduct two complete tipping cycles, then lower the cradle to the ground.
2. Depress the EMERGENCY STOP button and disconnect the power.
3. Clean the machine thoroughly as per §3.3.
4. Apply a thin layer of silicone lubricant to exposed surfaces of moving parts.
5. If a key-switch is fitted, remove the key and store it in a safe location.

5. Safety Assessment

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

 An application-specific Hazard and Risk Assessment should be completed before the Eurover is used for the first time, as set out in §5.3.

5.1 Safety features

The safety features of the Eurover are as follows:

1. A slow 0.12m/s operation speed, which minimises the entanglement risk to personnel.
2. A geared lifting mechanism which lifts and lowers at the same speed regardless of the weight of the bin.
3. A failsafe brake system which prevents the cradle from rapid unauthorised descent in the event of a failure of the motor, gearbox or lifting chain.
4. Controls located on opposite side of machine to the lifting mechanism and cradle.

5.2 Reasonably foreseeable misuse


The reasonably foreseeable misuse considered in the Eurover design is as follows:


1. Use of the machine by untrained operators;
2. Attempts to lift bins that the cradle is not specifically designed to hold;
3. Personnel accessing areas underneath the cradle without following proper procedures;
4. Attempts to clean the machine without following proper procedures.

5.3 ISO12100 Hazard and Risk Assessment Guide

As set out in §5.4, organisations seeking to demonstrate ISO13849 conformance must assess the safety of their machinery **in the intended conditions of use**, considering all relevant factors such as the area the machine is to be used, the training of operators, the proximity of other persons, frequency of use, etc.

The following section uses the **ISO12100:2010 risk assessment model** to assist prospective Eurover owners in carrying out this process. Hazards intrinsic to the Eurover design are pre-filled, while blank spaces are provided to assess application-specific hazards.

 ISO12100:2010 'Risk assessment and risk reduction', is a standard issued by the International Standards Organisation. It describes procedures for identifying hazards and estimating and evaluating risks during relevant phases of a machine life cycle.

 As with all powered industrial equipment, some hazards will remain despite any precautions undertaken by the manufacturer or owner of the machine. It is essential that

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

5.3.1 The ISO12100 risk assessment model

In the ISO12100 risk assessment model, each identified hazard is given a **Risk Factor**, from which is derived a **Risk Evaluation**. These parameters are assessed 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, no doubt	-	-	-	-	-	-

5.3.1.2 Determining the Risk Evaluation

Once the Risk Factor has been calculated, the Risk Evaluation of the hazard can be determined from 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

⚠ Risks evaluated as Very High, Extreme or Unacceptable are likely to require additional or updated safety functions as set out in §5.4. These must be specified at the time of order.

5.3.2 Identified Hazards

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

Blank template spaces are also provided to identify, assess, and describe control measures for application-specific hazards.

Entanglement or amputation of fingers or limbs in moving parts										
Operator	LO:	1	FE:	4	DPH:	2	NP:	1	Risk Factor:	8
	Operation of the Eurover requires the operator to stand on the opposing side of the machine from the lifting mechanism.									
Other persons	LO:	1	FE:	2.5	DPH:	2	NP:	1	Risk Factor:	5
	The operator has a good view of the cradle while lifting and lowering, and can simply stop all movement by releasing the control button if any other persons approach the cradle while moving.									
Control measures	Operators are responsible to obey all warning signs and instructions regarding keeping himself and others clear of all moving parts. The Eurover has a slow 0.12m/s operation speed, minimising the entanglement risk to personnel.									
Comments	The Eurover is designed so trapping hazards are minimized.									
Crushing due to unauthorized rapid descent of cradle										
Operator	LO:	0.5	FE:	4	DPH:	2	NP:	1	Risk Factor:	4
	There is nothing to stop an operator or other person moving under the cradle while it is inverted. A failsafe lock system prevents the cradle from descending even in the event of a mechanical failure. Significant safety margins ensure that the probability of failure of any steel, hydraulic, or control parts failing is very low.									
Other persons	LO:	0.5	FE:	2.5	DPH:	2	NP:	1	Risk Factor:	2.5
	As above.									
Control measures	Operators are responsible to obey warning signs and instructions regarding keeping themselves and others away from the area beneath the cradle. The machine must be regularly inspected, and any faults promptly repaired.									
Comments	In regular operation the gearbox restrains the maximum travel speed of the cradle to approximately 0.12m/s.									
Operator or others being hit by falling or flying debris										
Operator	LO:	1	FE:	4	DPH:	0.5	NP:	1	Risk Factor:	2
	Operation of the Eurover requires the operator to stand on the opposing side of the machine from the lifting mechanism, where they are partially shielded by the mast. There is some additional risk if tipping into poorly designed chutes or receptacles.									
Other persons	LO:	1	FE:	4	DPH:	0.5	NP:	1	Risk Factor:	2
	Some risk if tipping into poorly designed chutes or receptacles.									
Control measures	Operators are responsible to obey all warning signs and instructions regarding keeping himself and others away from the machine while in use. Appropriate PPE should always be worn when operating the Eurover.									
Comments										

Crushing if the machine falls over										
Operator	LO:	0.5	FE:	4	DPH:	2	NP:	1	Risk Factor:	4
	Minimal risk when the Eurover has been properly installed, as the machine is either bolted down or affixed to a large, stable mobile base unit.									
Other persons	LO:	0.5	FE:	2.5	DPH:	2	NP:	1	Risk Factor:	2.5
	As above.									
Control measures	The Eurover must be installed by authorised, qualified personnel in accordance with the procedures set out in §4.1. The mounting anchors must be fixed into a flat 40MPa concrete surface at least 150mm thick. When fitted with a mobile base, the Eurover must not be operated on surfaces with a slope greater than 12%.									
Comments										
Electrocution or electric shock										
Operator	LO:	1	FE:	4	DPH:	15	NP:	1	Risk Factor:	60
	Some risk is always present with mains power leads, especially in wet environments.									
Other persons	LO:	1	FE:	2.5	DPH:	15	NP:	1	Risk Factor:	37.5
	As above.									
Control measures	Electrical work must only be carried out by a qualified electrician. All power sockets must be fitted with a Residual Current Device (RCD). All power leads must be checked and tagged by a registered electrician at regular intervals. Damaged leads must be promptly repaired or replaced.									
Comments	The Eurover is earthed and complies with AS60204.1 wiring standards.									
Contamination from tipping toxic powder and liquid										
Operator	LO:	2	FE:	4	DPH:	1	NP:	1	Risk Factor:	8
	When tipping powder or liquid, some exposure to the product being tipped is unavoidable.									
Other persons	LO:	2	FE:	4	DPH:	1	NP:	1	Risk Factor:	8
	As above.									
Control measures	Appropriate PPE must be worn when operating the Eurover. The operator is responsible to ensure that all other persons are well clear of the working area. Powder should only be tipped in calm environments without wind.									
Comments	Substances of a toxicity that cannot be protected against with PPE should not be emptied with a Eurover. Alternative methods should be used.									

Application-specific hazard:										
Operator	LO:		FE:		DPH:		NP:		Risk Factor:	
Other persons	LO:		FE:		DPH:		NP:		Risk Factor:	
Control measures										
Comments										
Application-specific hazard:										
Operator	LO:		FE:		DPH:		NP:		Risk Factor:	
Other persons	LO:		FE:		DPH:		NP:		Risk Factor:	
Control measures										
Comments										
Application-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 powered lifting equipment, some 'residual hazards' may be present despite any interlocks, guarding or other safety systems that may be implemented.

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

5.4 ISO13849 (AS/NZS4024) Conformance Guide

In most countries, Workplace Health and Safety legislation imposes a statutory duty on employers to provide a safe workplace for their staff, including machinery that is safe to operate. To determine whether machinery is legally '**safe to operate**' many jurisdictions use and accept an ISO standard named **ISO13849** (or a local equivalent such as AS/NZS4024).

Underpinning the ISO13849 standard is the concept that no matter what safeguards a manufacturer may provide, it is not possible to produce a machine that will be safe in every possible condition. Each unique application may introduce unique hazards, calling for unique safeguards to ensure the safety of personnel.

Therefore, to demonstrate ISO13849 conformance, employers must assess the safety of their machinery **in its intended conditions of use**. Application-specific hazards must be assessed and if necessary, addressed by custom guarding, interlocks, or other safety functions, before the machinery is placed into service. The following section is intended to assist prospective Eurover operators in carrying out this process.

⚠ ISO13849-1:2015 'Safety of machinery' is a standard issued by the International Standards Organisation. It has been reissued with local modifications by some national standards authorities. In Australia and New Zealand, the equivalent standard is AS/NZS 4024.1:2014.

⚠ In the United States, ANSI standards are commonly used to demonstrate the safety of machinery. However, since the US model relies largely on 'best practise' and 'liability' to enforce workplace H&S norms, US companies who demonstrate machinery safety using ISO 13849-1 may be considered to have met their statutory H&S obligations.

5.4.1 The ISO13849 functional safety model

Unlike the *system architecture* model used by earlier safety standards, ISO 13849-1:2015 uses a *functional safety* model of machinery safety. That means it takes account of the reliability of parts as well as other factors to create a comprehensive measure of the risk reduction achieved by a safety function – an indicator called **Performance Level (PL)**.

The standard defines five Performance Levels, ranging from **PLa** (lowest performance) to **PLe** (highest performance).

The standard also defines the Performance Level that a given safety function must achieve to reduce the risk to an acceptable level – a value called **Performance Level required (PLr)**.

5.4.2 Identifying the required safety functions

To identify the safety functions required for a given machine, an application-specific hazard and risk assessment should first be completed as set out in §5.3. Any hazards that cannot be manually avoided must be addressed by an appropriate safety function.

5.4.3 Determining the required Performance Level of safety functions

As defined by the ISO13849 safety model, the minimum acceptable PLr for any given safety function is based on three parameters:

1. Severity of injury expected from the associated hazard
2. Frequency and/or duration of exposure to the associated hazard
3. Possibility of manually avoiding the associated hazard

The following table may be used to determine the acceptable PLr from these parameters.

Safety Function PLr Determination Table			
Severity of injury expected from hazard	Frequency and/or duration of exposure to hazard	Possibility of manually avoiding the hazard	Minimum acceptable PLr
Slight injury (reversible)	Seldom to quite often and/or short exposure time	Possible under specific conditions	PLa
		Scarcely possible	PLb
Serious injury or death (irreversible)	Frequent to continuous and/or long exposure time	Possible under specific conditions	
		Scarcely possible	
Slight injury or death (irreversible)	Seldom to quite often and/or short exposure time	Possible under specific conditions	PLd
		Scarcely possible	
Serious injury or death (irreversible)	Frequent to continuous and/or long exposure time	Possible under specific conditions	PLe
		Scarcely possible	

5.4.4 Achieving the required Performance Level

Because all hazards intrinsic to the Eurover design are addressed by safety functions with **PLc** performance, alternative or upgraded safety functions are only required if an application-specific risk assessment identifies any of the following:

- Hazards requiring safety functions not provided for in the standard Eurover design.
- Hazards which are sufficiently serious and/or frequent as to require safety functions with **PLd** performance or above.
- Corporate policies, union contracts, OSH regulations or other external factors which require all safety functions to have **PLd** performance or above.

In this case, information about the risk assessment and required safety parameters should be provided to Simpro before placing an order. Simpro can then specify alternative or upgraded safety functions, such as:

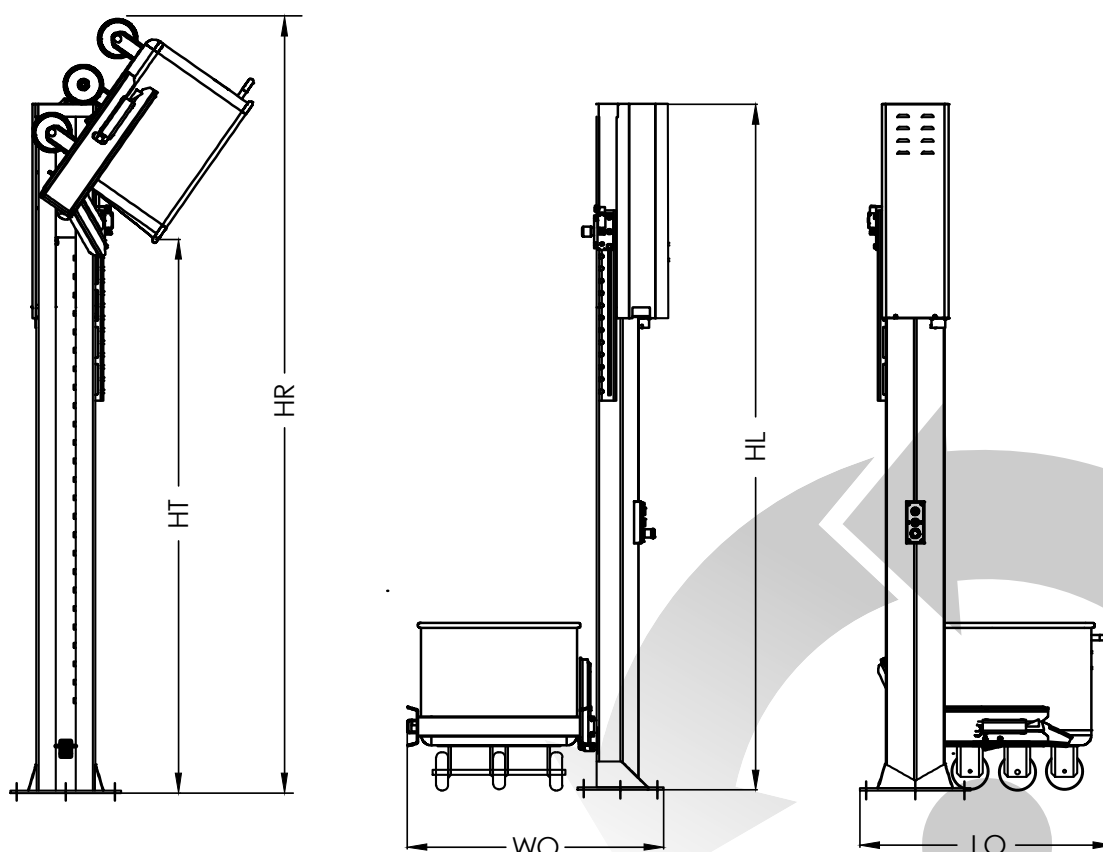
- Full cage guarding
- Interlocked safety door
- CAT3 or CAT4 monitoring system
- Remote controls
- Training of operators
- Signage and floor markings

6. Technical Data

The Eurover is available in four primary models, with maximum tipping heights of 2200mm or 2500mm and left- or right-handed orientation. Mobile base units are available for all models.

Parameter	EO2200	EO2200R	EO2500	EO2500R
Mast orientation	Left-hand	Right-hand	Left-hand	Right-hand
Height, lowered (HL)	2790mm		3090mm	
Height, raised (HR)	3160mm		3460mm	
Height, tipping (HT)	1500-2200mm		1900-2500mm	
Length, overall (LO)	1030mm			
Width, overall (WO)	1045mm			
Weight, overall	350kg		400kg	
Lifting capacity	350kg			
Cradle compatibility	DIN9797-compliant trunnion-lift 200L/300L Eurobins			
Bin throw	~300mm (from bolt-down base, with 200L Eurobin)			
Power specifications*	~400VAC 50/60Hz 3-phase mains input, max draw ~3 Amps, output 1.1kw			
User interface	RAISE button, LOWER button, EMERGENCY STOP button			
Ingress protection	IP56 overall			
Cradle travel speed	0.12m/s			
Tipping cycle duration	<50 seconds		<60 seconds	
Noise level at operator's ear	≈ 60dB(A)			
Construction	304 stainless steel			
Mounting	6x M16 x 100-150mm sleeve anchors (mobile base unit also available)			
Applicable standards and certifications	ISO9001, Conformité Européene (CE), DIN9797:1988-10, AS/NZS4024, ISO 13849-1, IEC 62061, EN 349 1993, EN 574 1996+A1:200, EN 953 1997, EN ISO 4413 2010, EN ISO 12100 2010, EN ISO 13849-1 2006, EN ISO 13857 2008, EN 60204 2006+A1 2009, EN61000-6-2 2005, EN61000-6-4 2007, Machinery Directive 2006/42/EC, Electromagnetic Compatibility Directive 2004/108/EC			

* Power specifications may vary depending on the input voltage and frequency, and the motor configuration



7. Accessories


A range of accessories and complementary products are available for the Eurover, a selection of which are listed below.



















Model Code	Part Code	Description
EO-BASE	♻️ 0250190530	Eurover Mobile Base Unit, left-handed, with castor wheels and guard rails
EO-BASER	♻️ 0250190547	Eurover Mobile Base Unit, right-handed, with castor wheels and guard rails
EB120	♻️ 0250190524	Eurobin 120L meat cart, with bevel face and 4x nylon wheels, 304 stainless steel
EB120F	♻️ 0250190542	Eurobin 120L meat cart, with flat face and 4x nylon wheels, 304 stainless steel
EB200	♻️ 0250190527	Eurobin 200L meat cart, with bevel face and 4x nylon wheels, 304 stainless steel
EB200F	♻️ 0250190522	Eurobin 200L meat cart, with flat face and 4x nylon wheels, 304 stainless steel
EB200D	♻️ 0250190541	Eurobin 200L Dropaway-Base meat cart, base and bin complete, 304 stainless steel
EB300	♻️ 0250190520	Eurobin 300L meat cart, with bevel face and 4x nylon wheels, 304 stainless steel
EB300F	♻️ 0250190521	Eurobin 300L meat cart, with flat face and 4x nylon wheels, 304 stainless steel
EB-LID	♻️ 0250190538	Eurobin Flat Lid, with grab handle and lapped rim, 304 stainless steel
EB-LIDS	♻️ 0250190533	Eurobin Split Lid, with grab handle and hinged split, 304 stainless steel
EB-STACK	♻️ 0250190545	Eurobin Stacking Frame, for use with flat lid, 300kg capacity, 304 stainless steel
EB-HANDLE	♻️ 0250190539	Eurobin Push Handle, detachable, 304 stainless steel
EW300	♻️ 0250190531	EuroWeigh 300kg scaleset for DIN9797 Eurobins
ES2000	♻️ 0530190011	Eurostacker 2000mm Eurobin stacker, semi-electric, 250kg capacity, 304 stainless steel

8. Spare Parts

The following table includes the most common Eurover spare parts as at the time of publication. Additional parts may be viewed at the following web address:

shop.simpro.world/category/1243-spare-parts-explorer

 Where a part has been introduced or discontinued, the Date Of Manufacture (DOM) period is noted in brackets. The DOM can usually be found on the machine's rating plate.

Ref.	Qty.	Part Code	Description
	1	 0250190611	Cabinet Outer Cover, 304 stainless steel
	1	 0250190627	Electronics Enclosure, 304 stainless steel
	1	 0250190679	Roller Chain, 1" BS Simplex, full length
	4	 0250190678	Mast Roller, Ø100mm, white nylon
	1	 0250190675	Tipping Roller, Ø40mm, white nylon
	2	 0250190665	Microswitch, long-arm (Eaton LSM-11S)
	1	 0250190674	Appliance Inlet, 3P+N+E 16A, IP44
	1	 0250190670	Phase-Rotation Relay
	1	 0250190671	Transformer, 380-415VAC/24VDC
	1	 0250190660	Overload Circuit Breaker
	1	 0250190664	Motor Contactor
	1	 0250190613	Motor, 3-phase 1.1kW (NORD SK90S/4 BRE10)
	1	 0250190672	Gearbox (NORD SK12063VF-90S/4 BRE10)
	2	 0250190666	Up/Down Pushbutton, complete with N/O contact block
	1	 0250190673	Emergency Stop, complete with N/O contact block
	2	 0250190676	Castor Wheel, Ø150mm, white nylon, braked (mobile base unit only)
	2	 0250190677	Load Wheel, Ø85mm, red PU (mobile base unit only)
	1	 0250190655	Spring for quick-release bin catch

9. Warranty

9.1 Definitions

1. "Simpro" means Simpro Handling Equipment Limited, [New Zealand Registered 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, <https://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: <https://simpro.world/support/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: <https://simpro.world/support/warranty-claim>.

9.2 Coverage

1. Simpro provides a 24-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 24-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. Information on maximising battery life is provided in the User Manual.

9.3 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.

9.4 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: <http://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 did it develop over a period of time?
 2. Was the machine being used at the time the fault first occurred?
 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.

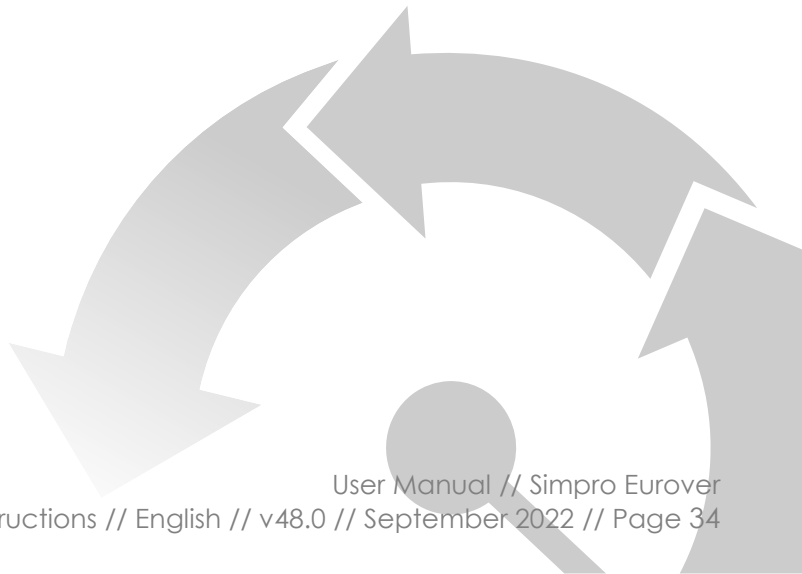
9.5 Agent claim handling procedure


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 tradesman would take. Full Service Manuals are available on request at any time from Simpro and all service visits should be conducted with a Service Manual 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.

10. Notes






 Simpro has been supplying Smart Lifting solutions for over 30 years. Founded in 1986 as a light engineer, the company has since built a unique position in the supply chain for specialist materials-handling equipment - from bin lifters and crate stackers to Lithium-ion forklifts.


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's OEM products are now sold around the world through a distribution network covering most large economies. The product range continues to evolve thanks to a policy of continuous R&D, new ideas and new partnerships.

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.

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