

USER MANUAL

Simpro Eurostacker



Copyright © 2021 Simpro Handling Equipment Ltd.

No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Simpro Handling Equipment Ltd.

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:

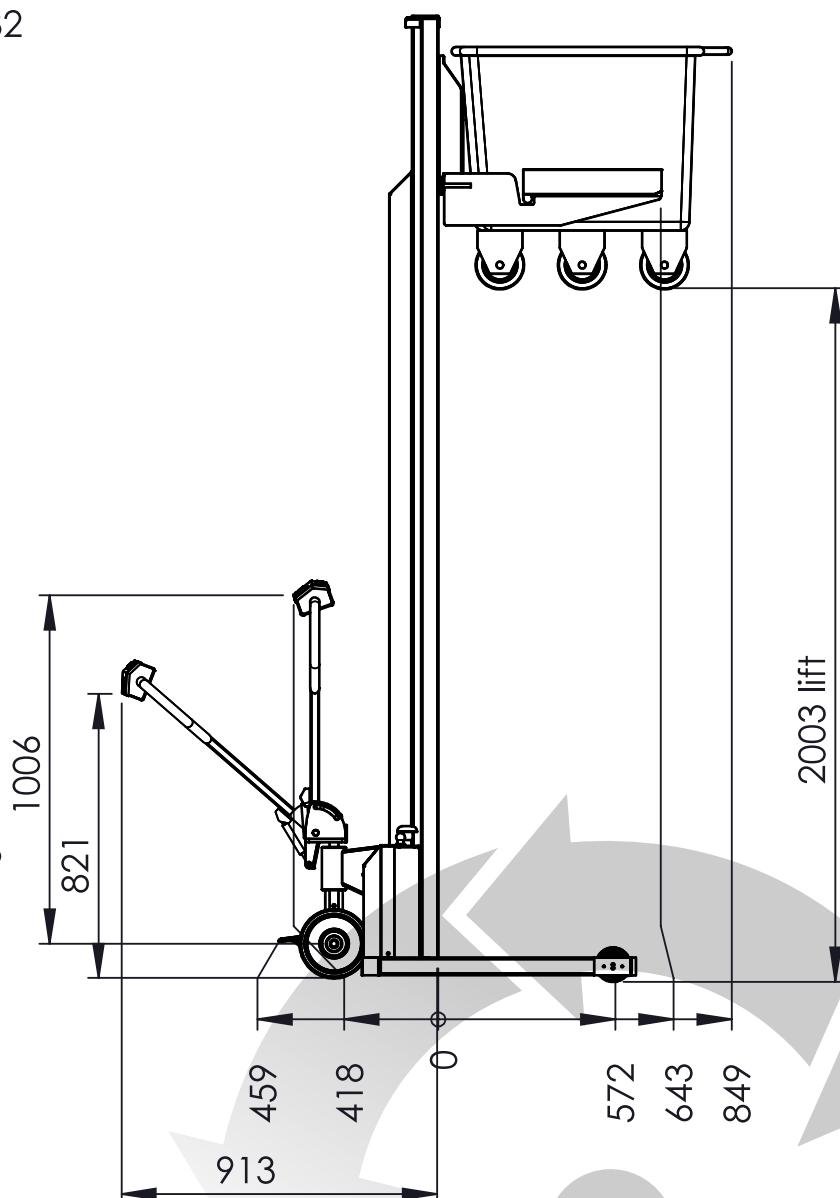
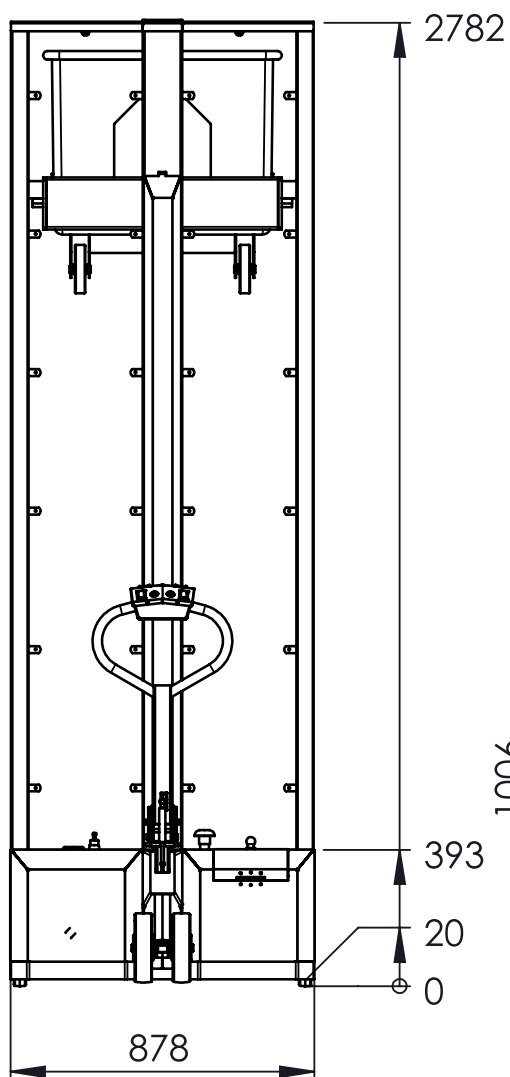
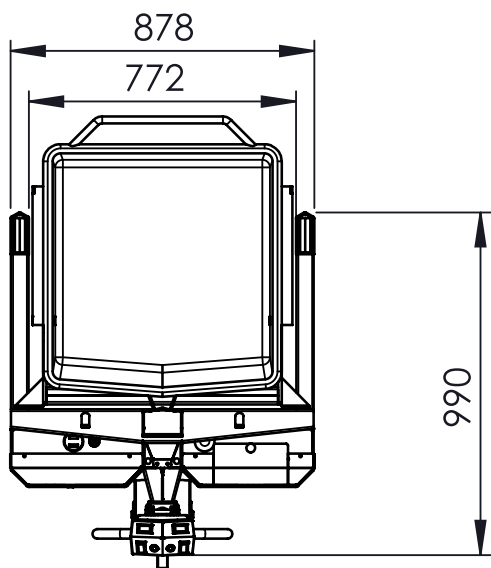


Text in GREEN indicates a point of interest.



Text in RED indicates a point of warning or a safety hazard.

Errors in this document should be reported by email to info@simpro.world



I. Contents

1. Contents.....	3
2. Product Overview	5
2.1 Key features	5
2.2 Construction.....	5
2.3 Mechanism.....	5
2.4 Safe Working Load	6
2.5 Duty cycle	6
2.6 Intended operational life	6
2.7 Noise emissions.....	6
2.8 Environmental restrictions.....	6
2.9 Ingress protection	7
2.10 Notes	7
3. Safety Assessment	9
3.1 Safety features	9
3.2 Reasonably foreseeable misuse	9
3.3 OH&S specifying requirements.....	9
3.3.1 The ISO 13849-1:2015 safety model.....	10
3.3.2 Specifying to achieve the required Performance Level	11
3.4 Hazard and Risk Assessment Guide	11
3.4.1 ISO 12100:2010 risk assessment model	12
3.4.2 Identified Hazards.....	13
3.4.3 Residual Hazards.....	16
3.5 Safety Norms.....	17
4. Operating Instructions	19
4.1 Before using the Eurostacker	19
4.2 Identification of controls.....	19
4.2.1 EMERGENCY STOP	19
4.2.2 KEY SWITCH	19
4.2.3 BATTERY INDICATOR and hour-meter (if fitted)	19
4.2.4 RAISE/LOWER rocker switches	20
4.2.5 BATTERY SAVER button	20
4.2.6 SAFETY SOUNDER button	20
4.2.7 PARK BRAKE	20
4.3 Basic operation	21
4.3.1 Turning on the power	21

4.3.2	Moving and steering	21
4.3.3	Lifting and moving Eurobins	21
5.	Care and Maintenance	23
5.1	Quick Troubleshooting Guide	23
5.2	Cleaning.....	24
5.3	Carriage jams	24
5.3.1	Bin carriage jams while raising	24
5.3.2	Carriage jams while lowering.....	24
5.4	Electrical System	25
5.4.1	AGM battery	25
5.4.2	Lithium-ion battery	26
5.4.3	Emergency Stop	27
5.4.4	Master circuit breaker	27
5.5	Hydraulic System.....	27
5.5.1	Powerpack	27
5.5.2	Control valves	27
5.5.3	Lift Ram.....	28
5.5.4	Open Ram	28
5.5.5	Hydraulic fluid.....	28
5.5.6	Maintenance.....	28
6.	Assembly, Handling, Transport & Storage	29
6.1	Assembly	29
6.2	Moving	29
6.3	Lifting	29
6.4	Transportation	29
6.5	Storage	30
7.	Safety Inspections	31
7.1	Pre-inspection checklist	31
7.2	Monthly inspection	31
7.3	Annual inspection	33
8.	Spare Parts	35
9.	Warranty	37
9.1	Definitions.....	37
9.2	Coverage	37
9.3	Exclusions.....	37
9.4	End User claim procedure.....	38
9.5	Agent claim handling procedure.....	38

2. Product Overview

Congratulations on your purchase of a **Simpro Eurostacker** electro-hydraulic pedestrian Eurobin stacker.

Produced from food-grade SAE304 stainless steel, the Eurostacker features a two-metre lift height and lifting arms specifically designed to hold DIN9797-standard Eurobins (commonly used in food processing). This allows Eurobins to be lifted, stored, stacked, transported, and loaded onto trucks – quickly and safely.

The Eurostacker's reliable electro-hydraulic system does all the lifting, allowing one person to effortlessly handle Eurobins weighing up to 300kg. This allows Eurobins to be stored in racking up to three high, maximising use of floorspace in the 'hygiene zone'.

The Eurostacker has a tiny footprint and is easy to manoeuvre, but is also very rugged and built to withstand years of rough handling. Like all Simpro products, it is almost maintenance-free and exceptionally reliable.



2.1 Key features

Key features of the Eurostacker include:

1. A very compact footprint, allowing Eurobins to be placed close together.
2. A lightweight design which is easy to move and steer, with a 3-point 'stability triangle'.
3. A standard weight capacity of 250kg (optionally increased to 300kg).
4. A reliable, low-maintenance design.
5. A frame and lifting carriage entirely product from SAE304 stainless-steel.
6. IP65 ingress protection, suitable for high-pressure washdown.
7. A modular lifting carriage which can be exchanged or modified to suit a wide range of food-grade bins and containers.

2.2 Construction

The Eurostacker consists of an SAE304 stainless-steel frame with a central mast and two stabilizing legs; a lifting carriage with two contoured lifting arms; a hydraulic ram, a 24VDC AGM or Lithium-ion battery, a hydraulic powerpack with an electric motor, pump and reservoir, a manual tiller with operating switches; electronic control circuits; two large steered wheels and two roller wheels.

2.3 Mechanism


When both RAISE buttons are pressed, an electrically-operated pump forces hydraulic fluid into the ram, causing it to extend. This movement is transmitted through a chain to the lifting carriage, which travels vertically in the mast.

When both LOWER buttons are pressed, a valve is opened which allows the hydraulic fluid to flow out of the ram back into the reservoir, causing the lifting carriage to descend. This action is not directly powered; the carriage is lowered by gravity alone.

2.4 Safe Working Load

The Safe Working Load of the Eurostacker is **250 kilograms (550lb)**.

 The Eurostacker can be optionally specified to lift 300kg.

 Never attempt to lift objects that weigh more than the factory-specified Safe Working Load of the machine.

2.5 Duty cycle

The figures given below are estimates only.

Power Supply	Throughput	No. of Eurobins equivalent (average ~150kg each)	Units
24V/21Ah AGM Battery	7,500kg to 1.0m	50 Eurobins	per charge
24V/20Ah Lithium-ion Battery	10,000kg to 1.0m	65 Eurobins	per charge

2.6 Intended operational life


The intended operational life of the Eurostacker is as follows:

Average Weight of Load	Intended Operational Life
< 100kg	200,000 raise/lower cycles
100kg – 200kg	150,000 raise/lower cycles
200kg – 250kg	100,000 raise/lower cycles

2.7 Noise emissions

The noise emissions of the Eurostacker in standard operation have been assessed as not exceeding ~60 dB(A) at the operator's ear.

Operators are not required to wear hearing protection but are recommended to do so if using the machine on a constant basis.

 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.

2.8 Environmental restrictions

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

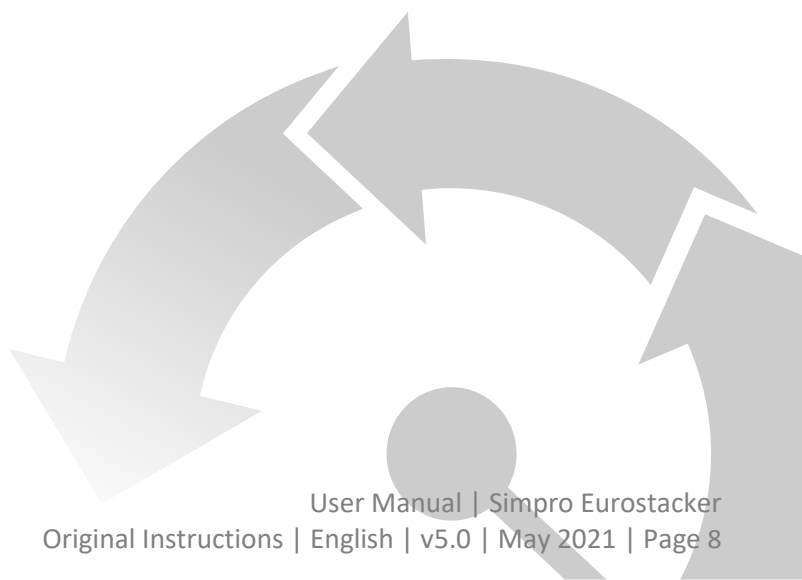
1. Height above sea level not more than 1000m;
2. Ambient temperature not higher than +40°C and not lower than -10°C;
3. At ambient temperatures above 35°C, the relative humidity should not exceed 50%; at lower temperatures, higher relative humidity is permitted;
4. Never operate in flammable, explosive, corrosive, acidic or alkaline environments.

2.9 Ingress protection

Item	IP Rating
Push buttons, switches and lamps	IP66
Clamp-arms interlock	IP66
Coded magnetic switch	IP66
Motor	IP54 (additional protection provided by covers)
Overall	IP65 (optionally upgraded to IP66 or IP69K)


2.10 Notes

1. This User Manual describes approved procedures for the operation, maintenance, and routine inspection of the Eurostacker pedestrian Eurobin stacker.
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 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. Errors in this manual should be reported by email to info@simpro.world.



3. Safety Assessment

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

 A Hazard and Risk Assessment should be undertaken before the Eurostacker is used for the first time, as described in [Section 3.4](#).

3.1 Safety features

The safety features of the standard Eurostacker design are as follows:

1. A dual-hand control system, which prevents the operator from moving their hands away from the control panel while using the machine.
2. Two full-height perspex panels to provide the operator with a clear view of operations while preventing access to the lifting mechanism.
3. A prominent EMERGENCY STOP button to instantly disable the machine.
4. A lifting action which maintains the mass of the bin within the machine footprint.
5. A pressure-compensating lowering valve, which automatically regulates the lowering speed regardless of the weight of the bin.
6. Covers to prevent unauthorised personnel from accessing internal electrical and hydraulic components.

3.2 Reasonably foreseeable misuse

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




1. Attempts to use the machine by untrained operators;
2. Attempts to lift bins that the arms are not specifically designed to hold;
3. Attempts to bypass the two-hand controls, emergency stop or other safety systems;
4. Attempts to clean the machine without following proper procedures.
5. Service or repairs carried out by unqualified personnel

3.3 OH&S specifying requirements

Companies in most jurisdictions (including Australia, NZ, UK, USA, Canada and the EU) are required by law to provide a safe workplace for their staff, including ensuring that all new and existing machinery is safe to operate.

Although the particulars of safety legislation differ, most countries accept that machinery is 'safe to operate' if it can be demonstrated to **comply with ISO 13849-1:2015 (or a regional equivalent thereof)**.

ISO 13849-1:2015 may call for additional guarding and safety features, depending on the particular circumstances in which a machine is to be used. The purpose of this section is to assist potential Eurostacker owners to determine whether special safety features may be required on their machine.

-  ISO 13849-1:2015 is a machinery-safety standard issued by the International Standards Organisation. It provides safety requirements and guidance on the principles for the design and integration of safety-related parts of control systems (SRP/CS), including the design of software.
-  ISO 13849-1 has been modified for local conditions and reissued under different terminology by some national standards authorities. In Australia and New Zealand the equivalent (almost identical) standard is called AS/NZS 4024.1:2014.
-  In the USA, ANSI standards are commonly used to demonstrate the safety of machinery, rather than ISO 13849-1. 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 or exceeded their H&S obligations.

3.3.1 The ISO 13849-1:2015 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 is, 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 **PL(a)** (lowest performance) to **PL(e)** (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)**.

3.3.1.1 Determining the Performance Level required (PLr)


As defined by the ISO 13849-1:2015 safety model, the minimum acceptable PLr for any given safety function is based on three input 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	PL(a)
		Scarcely possible	PL(b)
	Frequent to continuous and/or long exposure time	Possible under specific conditions	
		Scarcely possible	
Serious injury or death (irreversible)	Seldom to quite often and/or short exposure time	Possible under specific conditions	PL(c)
		Scarcely possible	PL(d)
	Frequent to continuous and/or long exposure time	Possible under specific conditions	
		Scarcely possible	PL(e)

To demonstrate compliance with ISO 13849-1:2015, the minimum acceptable PLr of the safety functions must be assessed **for each identified hazard in the specific conditions in which the machine is to be used.**

 The safety function PLr may be assessed as part of the regular Hazard and Risk Assessment described in [Section 3.4](#). Although this assessment includes all hazards intrinsic to the Eurostacker design, other safety functions may be necessary to address hazards specific to your intended conditions of use. These can be assessed in the blank spaces provided.

3.3.2 *Specifying to achieve the required Performance Level*

As standard, all hazards intrinsic to the Eurostacker design are addressed by safety functions **with a minimum performance of PL(c).**

Therefore, additional or customised safety systems are only required in the following cases:

1. The customer's assessment identifies that hazards exist which have been addressed in the standard Eurostacker design, but which, due to conditions specific to their intended conditions of use, require safety function performance of PL(d) or PL(e).
2. The customer's assessment identifies that hazards exist which are entirely specific to their intended conditions of use, and which have therefore not been addressed in the standard Eurostacker design.
3. The customer is subject to corporate policies, union contracts, OSH regulations or other external factors which demand safety function performance of PL(d) or PL(e), irrespective of the ISO 13849-1:2015 safety model.


In any of these cases, information about the required safety function PLr should be provided to Simpro before placing an order. Simpro will then propose additional or uprated systems to achieve the PLr in compliance with ISO 13849-1:2015. This may include any or all of the following:


- Upgrade of safety system architecture to Category 3 or Category 4
- Additional guarding panels
- Upgraded control systems
- Training of personnel
- Signage and floor markings

3.4 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 complete site-specific Hazard and Risk Assessment, but an assessment of the risk factors that are intrinsic to the Eurostacker design. Blank template spaces are provided for additional site-specific hazards.

 The procedure for carrying out a Hazard and Risk Assessment is normally 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 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 described in [Section 3.4.3](#).

3.4.1 ISO 12100:2010 risk assessment model

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

3.4.1.1 Determine the Risk Factor

The Risk Factor associated with any given hazard may be calculated using the following table, with 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	-	-	-	-	-	-

3.4.1.2 Evaluate the Risk

Once the Risk Factor is determined, the hazard 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 Eurostacker 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
	Operation of the Eurostacker requires the operator to have both hands on the control buttons. The operator cannot reach any moving parts while operating									
Other persons	LO:	1	FE:	4	DPH:	1	NP:	1	Risk Factor:	4
	The operator has a good view of the carriage while lifting and lowering and can simply stop all movement by removing either hand from the control button if any other persons approach the carriage while moving.									
Control measures	Operators are responsible to obey warning signs fitted to the machine and instructions, regarding keeping himself and others clear of all moving parts.									
Comments	The Eurostacker is carefully designed so that trapping hazards are minimized. Both hands are required to operate the machine.									
Crushing due to unauthorized rapid descent of carriage										
Operator	LO:	0.5	FE:	4	DPH:	2	NP:	1	Risk Factor:	4
	The operator is protected from the carriage by the frame and guarding during operation. There is nothing to stop an operator or other person moving under the carriage while it is elevated. Significant safety margins ensure that the probability of failure of any steel, hydraulic, or control parts failing is low.									
Other persons	LO:	0.5	FE:	4	DPH:	2	NP:	1	Risk Factor:	4
	As above.									
Control measures	Operators are required to obey warning signs fitted to the machine regarding keeping himself and others away from the area under the carriage when raised. The machine must be regularly maintained, and all faults repaired promptly.									
Comments	A hydraulic flow-control valve limits the lowering speed in normal operation.									
Operator or others being hit by falling or flying debris										
Operator	LO:	1	FE:	4	DPH:	0.5	NP:	1	Risk Factor:	2
	The operator is protected from the operating area by the frame and guarding during operation. The Eurostacker is not required to invert or tilt bins, so the likelihood of any material falling is low.									
Other persons	LO:	1	FE:	4	DPH:	0.5	NP:	1	Risk Factor:	2
Control measures	Operators are required to obey all instructions and warning signs regarding keeping themselves and others away from the machine while in use. Operators must not attempt to lift non-standard Eurobins, or any type of bin which the Eurostacker was not specifically designed to handle.									
Comments										

Crushing due to machine falling over										
Operator	LO:	2	FE:	4	DPH:	8	NP:	1	Risk Factor:	64
	Moderate risk when the Eurostacker is lifting heavy bins to its full height, or when operating around low doorways.									
Other persons	LO:	2	FE:	1	DPH:	10	NP:	1	Risk Factor:	20
	As above.									
Control measures	When moving heavy bins, operators are required to lower the lifting carriage to below 500mm. The carriage should only be raised higher than this immediately prior to placing or removing bins from racking. Operators are required to remain watchful for and avoid overhead hazards such as low doorways and light fittings. The Eurostacker must not be operated on soft or uneven ground, or on ground with a slope ratio higher than 1:12.									
Comments										
Electrocution or electric shock										
Operator	LO:	0.5	FE:	4	DPH:	15	NP:	1	Risk Factor:	30
Other persons	LO:	0.5	FE:	4	DPH:	15	NP:	1	Risk Factor:	30
	As above.									
Control measures	All power sockets used to recharge the Eurostacker must be fitted with a Residual Current Device (RCD). All leads and power cables should be regularly checked and tagged by a registered electrician.									
Comments										
Contamination from lifting toxic powder and liquid										
Operator	LO:	2	FE:	4	DPH:	1	NP:	1	Risk Factor:	8
	Great care should be taken when lifting Eurobins containing powder or liquids. If the product could cause any harm whatsoever to the operator or other personnel, all persons in the vicinity must wear appropriate PPE.									
Other persons	LO:	2	FE:	4	DPH:	1	NP:	1	Risk Factor:	8
	As above.									
Control measures	All operators must wear appropriate Personal Protective Equipment (PPE). Where possible, persons other than the operator should be kept clear of the operating area.									
Comments	Toxic materials which cannot be controlled by the use of appropriate PPE must not be handled with the Eurostacker. Alternative methods should be used.									
Damage to skin when used in extreme environments										
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:	4	DPH:	1	NP:	1	Risk Factor:	8
	As above.									

Control measures	All personnel must wear appropriate Personal Protective Equipment (PPE) when operating equipment in extreme environments.									
Comments	See Section 2.8 for Eurostacker 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										
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										

3.4.3 Residual Hazards

As with all powered industrial equipment, some 'residual hazards' may be present despite any guarding or safety measures implemented by the manufacturer.

The machinery owner has a legal responsibility to identify and assess these residual hazards, and to take **all reasonable precautions** to eliminate, isolate, or minimize them. Such precautions may include any or all of the following:

- ⚠ Taking steps to monitor and enforce the training of operators.
- ⚠ Design and implementation of Standard Operating Procedures.
- ⚠ Using disciplinary measures to ensure the Standard Operating Procedures are followed.
- ⚠ Posting signage, floor marking, or other warnings as deemed appropriate.
- ⚠ Taking steps to develop a culture of safety and open communication among staff.

3.5 Safety Norms

The following safety norms must be observed for the safe use of a Eurostacker.

Only trained and authorised personnel may use the machine.

Operators must read and obey all instructions and warning signs on the machine and elsewhere.

Never transport bins with the lifting carriage raised more than 500mm from the ground

Never operate the machine on soft, uneven or sloping ground.

Never operate machine near to the edge of an elevated dock or platform.

Never operate machine with any covers or guards removed.

Never attempt to lift bins for which the machine was not specifically designed.

Ensure persons other than the operator are at least 2 metres clear while operating the machine.

Always keep feet and hands well clear of the lifting carriage and bins while operating.

Do not place feet or foreign objects underneath the lifting carriage while it is raised.

Do not lift over-filled or overflowing Eurobins.

Before connecting the machine to a power supply to charge the battery, ensure the voltage and frequency correspond with that listed on the rating plate.

Do not attempt to charge the machine if the power cable or insulation is damaged.

Do not connect to a damp power socket.

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

Ensure there is complete continuity between the machine and an effective earthing system which complies with local and national regulations. The manufacturer cannot be held liable for the consequences of an inadequate earthing system.

4. Operating Instructions

4.1 Before using the Eurostacker

Before using the Eurostacker, you should do the following:


1. Read and understand the User Manual;
2. Review and understand the safety hazards associated with the Eurostacker as per [Section 3.4](#), and your responsibilities to prevent harm as per [Section 3.5](#);
3. Check that the Eurostacker is correctly configured to work with the Eurobins at your site.

4.2 Identification of controls




4.2.1 EMERGENCY STOP

Press this button DOWN to instantly cut all power to the machine. Pull UP to reset.

 The Emergency Stop also functions as a heavy-duty battery isolator switch.

4.2.2 KEY SWITCH

Turn the key CLOCKWISE to turn on the power. An LED ring light will illuminate on the BATTERY SAVER button when the machine is successfully powered on.

 If the machine does not power on, check that the Emergency Stop is pulled UP.

4.2.3 BATTERY INDICATOR and hour-meter (if fitted)

Eurostacker models with AGM batteries are fitted with a digital battery indicator and hour-meter. The level of charge in the battery is shown by a LED bar sequence. When the battery indicator shows one or two bars of charge, the machine should not be used, and should be placed on charge immediately ([Section 4.12.1](#)).




The hour-meter shows the accumulated run time of the machine.

4.2.4 RAISE/LOWER rocker switches

Press the UPPER part of both switches (U1+U2) to raise the bin carriage.

Press the LOWER part of both switches (D1+D2) to lower the bin carriage.

The carriage will stop moving when either toggle switch is released, or when it reaches the maximum travel extent.


-  When the arms reach the top of the mast, the lift ram comes up against a stopper. If the RAISE switches are held on after the maximum height is reached, the motor will continue to run, and hydraulic fluid will bypass through a pressure-relief valve. Although this causes no harm in normal operation, extended operation of the motor when the arms are not moving causes the hydraulic fluid to heat up and may eventually result in damage. The RAISE switches should not be held on longer than necessary.
-  The pressure-relief valve limits the maximum weight that the machine can lift. If an attempt is made to lift more than the factory-set maximum (normally 250kg) the motor will run but the arms will not lift. If this occurs, DO NOT keep trying to lift the Eurobin. Remove some material from the Eurobin and try again.
-  A flow-control valve is fitted to govern the lowering speed, which can be adjusted by a qualified technician.

4.2.5 BATTERY SAVER button

A blue LED light around this button indicates that the Eurostacker is powered on and ready to use. If the machine is left idle for several minutes, the power will be cut out automatically to maximise battery life. Pressing this button will re-awaken the machine.


4.2.6 SAFETY SOUNDER button

Press this button to sound an electronic warning tone.

-  The horn should be regularly used when the Eurostacker is moving through busy warehouses and dispatch zones, or when approaching corners.



4.2.7 PARK BRAKE

Lift the pedal with your foot to apply the park brake, and press down on the pedal to release the park brake. Both rear wheels are locked when it is applied.

-  The park brake is not a service brake; it should not be used to slow the machine while moving down a ramp, or to bring the machine to a stop.

4.3 Basic operation

This section provides an overview of basic operation of the Eurostacker.


-  The Eurostacker does not require a license to operate. However, before using the machine in a production context, operators should be given the opportunity to familiarise themselves with its use in a safe, supervised and low-pressure environment.
-  Becoming a skilled Eurostacker operator requires time and practice. Although the machine may feel clumsy at first, with frequent use it will soon become intuitive.

4.3.1 Turning on the power

1. Insert the KEY into the KEYSWITCH and turn it clockwise to power up the machine.
 - a. The EMERGENCY STOP button may also need to be pulled out. This large red button instantly cuts power to all of the machine's systems, and also functions as a battery isolator switch.
2. If a BATTERY INDICATOR is fitted, it will now light up so you can check the level of charge.
 - a. If the indicator shows only one or two bars, the Eurostacker should not be used right now and should be plugged in overnight to recharge the battery.
 - b. If the indicator shows two or more bars, the Eurostacker is good to go.


4.3.2 Moving and steering


1. Release the park-brake by pressing it down with your foot.
2. Take hold of the tiller with both hands. By pressing forward on the tiller and turning it, you will find the machine moves and turns easily.

-  When operating the stacker around other people, you can make them aware of the machine by pressing the SAFETY SOUNDER button to emit an electronic warning tone.


4.3.3 Lifting and moving Eurobins

1. Press both LOWER buttons to lower the carriage until it reached ground level.
2. Move the stacker towards a Eurobin. The bin should be approached squarely from either the front or the rear, so that the lifting arms pass beneath its trunnions and securely embrace it.

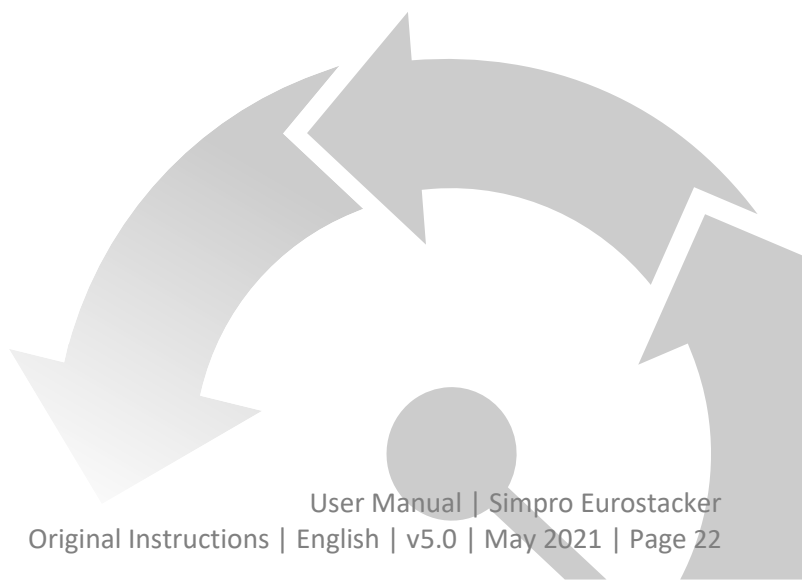
-  'Trunnions' is a technical term for the small metal wings which project from either side of a DIN9797 Eurobin. The size, shape and position of these wings are defined by the DIN9797 industry standard, allowing manufacturers to produce interoperable handling equipment.

-  The Eurobin must be positioned square, central and firm against the carriage backplate before being lifted. Badly aligned Eurobins may not be secured properly, and may fall out at any time.

3. Press both RAISE buttons until the Eurobin is lifted a short distance off the ground, then press forward on the tiller to start transporting the bin.
4. Once the destination (such as racking) is reached, press both RAISE buttons until the Eurobin is lifted to the appropriate height, then slowly move the stacker forward until the bin is above the desired position.


-  If the racking has wheel chocks to prevent bins from moving, ensure that the Eurobin's wheels are correctly aligned with the chocks before lowering it.


5. Press both LOWER buttons until the the Eurobin has been deposited, and the lifting arms have disengaged. The Eurostacker can now be withdrawn.




5. Care and Maintenance

The Eurostacker is designed to give many years of service with minimal maintenance. In the event a fault or malfunction does occur, refer to the [Quick Trouble Shooting Guide in Section 5.1](#) before contacting your agent for service.

 Contact your agent if repair or service work is required.

 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.


5.1 Quick Troubleshooting Guide

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

Problem	Possible Causes	Remedy	Reference
The machine will not lift Eurobins, and the motor does not run	Flat Battery	Recharge the battery.	5.4.1.2 5.4.2.2
	Tripped master circuit breaker	The master circuit-breaker may be tripped if the machine is operated with a flat battery, or a short-circuit occurs, but it is designed automatically reset after a short delay.	5.4.4
	Tripped secondary circuit breaker	Some machines are supplied with an EL20_C Lithium-ion battery pack, which includes an integrated circuit breaker. If tripped, this can be reset by simply pressing the BATTERY SAVER button.	5.4.2
	Faulty raise/lower buttons or wiring	Check and rectify.	
	Faulty raise relay	The relay contactor should click when the 'up' button is pressed – if not, contact your agent.	
The machine will not lift Eurobins, although the motor runs	Eurobin too heavy	Manually remove material from the Eurobin to reduce the weight. The Eurostacker is designed to lift 250kg max (optionally 300kg).	2.4 5.3.1.1
	Pressure-relief valve set too low	Contact your agent for instructions on how to adjust the pressure-relief valve.	5.5.2.2
Carriage will not come down from the fully raised position	Carriage sticking in masts	Spray lubricant inside of masts. Lubricate the roller arms at top of carriage.	5.3.2
	Lift ram jamming	Contact your agent for support.	5.3.2
	Faulty switch, wiring, or lowering valve	The lowering valve should click when the button is pressed – if not, check the switch, wiring and electro-magnetic coil.	5.3.2


5.2 Cleaning


The machine can be washed down using water and an appropriate food-grade cleaning agent. Avoid directing high-pressure water jets at the controls or powerpack enclosure.

 For IP ratings of the machine and various subcomponents refer to [Section 2.9](#).

5.3 Carriage jams

Occasionally the bin carriage may become jammed at some point. This is normally a minor issue which can be easily rectified.

 The bin carriage is not powered down – it is lowered by gravity alone.


 Refer to [Section 5.5](#) for details of the hydraulic system.

5.3.1 Bin carriage jams while raising

If the carriage jams while raising the cause may be either an overweight Eurobin, or a mechanical fault, such as a bent mast or misaligned sliding block.

5.3.1.1 Overweight bin

1. Lower the bin carriage to ground level.
2. Remove some material from the Eurobin, then try again.

 If the pressure-relief valve is adjusted incorrectly, the Eurostacker might stall even when lifting Eurobins that are within the machine's Safe Working Load (250kg/300kg) – see [Section 5.5.2.2](#).

5.3.1.2 Mechanical fault

1. If possible, lower the carriage to ground level and remove the Eurobin.
2. Attempt to visually identify the cause of the jamming. The most likely causes are:
 - a. The mast may have been bent or damaged.
 - b. Lack of lubrication.
3. With the carriage lowered, rectify the problem by straightening and/or realigning the mechanical components as required. If the mast is bent, you may need to contact your agent for support.
4. Carry out several complete lifting cycles to ensure the problem is fully resolved.


5.3.2 Carriage jams while lowering

If the carriage jams on the way down, or has jammed on the way up but will not come down, it may be due to a hydraulic, electrical, or mechanical fault.

5.3.2.1 Hydraulic or electrical fault

When the LOWER button is pressed, the lowering valve should emit a 'click' sound as it opens. If it does not, the problem may be either a hydraulic or electrical fault.

1. If the lowering valve is receiving a signal but not opening, it may simply need to be cleaned. This can be carried out by any technician with a knowledge of electro-hydraulic systems:
 - a. Provide support for the bin carriage with a sling attached to a forklift truck or crane.

 Never place any part of your body underneath the bin carriage unless it is securely supported.

- b. Isolate the battery by pressing the EMERGENCY STOP button, and remove the covers from the powerpack enclosure.

- c. Remove the lowering valve coil from the valve stem.
 - d. Unscrew the lowering valve cartridge.
 - e. Clean the cartridge with compressed air.
2. Replace the lowering valve by reversing the above procedure.
3. Release the bin carriage, power on the machine and carry out several lift/lower cycles to ensure the problem has been properly resolved.
4. If the lowering valve still does not operate correctly even after being thoroughly cleaned, it may need to be replaced – contact your Simpro agent.

5.3.2.2 Mechanical fault

If the lowering valve is operating correctly (emits a 'click' sound when the LOWER button is pressed), the problem may be a mechanical fault.

1. Isolate the battery by pressing the EMERGENCY STOP button.
2. Provide support for the carriage and Eurobin with a sling attached to a forklift truck or crane.

 **Never place any part of your body underneath the carriage unless it is securely supported.**

3. Attempt to visually identify the cause of the jamming. The most likely causes are:
 - a. The mast is bent or damaged.
 - b. Lack of lubrication.
 4. Rectify the problem by straightening, realigning, and/or lubricating the components as required. If the mast is bent, you may need to contact your agent for support.
 5. Release the bin carriage, power on the machine and carry out several lift/lower cycles to ensure the problem has been properly resolved.
 6. If the bin carriage still does not lower, contact your Simpro agent for support.

5.4 Electrical System

The Eurostacker operates on 24VDC electric current provided by an onboard battery. This current is used to power the control circuits, as well as the series-wound 0.75kW electric motor which drives the hydraulic pump.


The electric motor only runs when both RAISE buttons are pressed; the bin carriage is lowered by gravity alone. As a rule, one full charge is sufficient to lift about 50 Eurobins to 1000mm, but this is dependent on the lifting height and the condition of the battery.


5.4.1 AGM battery

The SME-spec Eurostacker is fitted with two maintenance-free 12V/21Ah AGM VRLA batteries, connected in series to deliver 24VDC nominal, and an onboard charger.

5.4.1.1 AGM battery indicator and hour meter

Some Eurostacker models are fitted with a battery indicator, mounted on the body of the machine. This instrument also contains an hour meter.

 **When the indicator is showing one or two bars of charge, the machine should not be used and should be placed on charge as soon as possible.**

 **Attempting to operate a machine with flat battery may trip the master circuit breaker (see [Section 5.4.4](#)). It may also damage the battery.**

5.4.1.2 AGM battery charging

To recharge the AGM batteries, simply plug one end of the supplied IEC C13 power lead into the socket on the machine, and the other end into a standard 1-phase mains power outlet.

A full charge from flat should take around 6 hours.


The onboard smart charger automatically adapts to different input currents, manages the charging cycle to maximise battery life, and prevents overcharging.

5.4.1.3 AGM battery care

The batteries are maintenance-free and designed to last up to five years. However, battery life is dependent on several factors, including the number of charge/discharge cycles, the depth of discharge and environmental conditions.

To maximize the life of AGM batteries, observe the following rules.

- Recharge the batteries regularly.
- Do not leave the batteries in a discharged state for more than 24 hours.
- Do not attempt to operate the machine when the batteries are flat.
- Do not expose the batteries to extremes of temperature.

 AGM batteries are supplied with a 12-month manufacturer's warranty, separate from the warranty on the rest of the machine.

5.4.1.4 AGM battery charger

The SME-spec Eurostacker is fitted with an onboard smart charger which accepts input current of 84-264VAC 50/60 Hz and has a maximum draw of 3 Amps. The charger delivers an output of 27.2VDC with continuous current up to 5.9 Amps for a maximum power output of 160 Watts.

The charger uses an IEC C13 power lead, with one end plugging into the IEC C14 socket on the side of the machine and the other into an ordinary 1-phase mains outlet. IEC C13 leads are often used for computer accessories, and are widely available from electronics retailers.

The charger is in an enclosed plastic case and is protected against short-circuit, current overload, over-voltage and over-temperature.

5.4.2 Lithium-ion battery

The PRO-spec Eurostacker is fitted with an EL20_C 24V/20Ah Lithium-ion battery in a removable carry case, and an external charger.

Additional EL20_C battery packs can be placed on charge and exchanged as they run flat, allowing the PRO-spec Eurostacker to operate 24/7. The Lithium-ion batteries are not as susceptible to damage as AGM batteries, and automatically cut out when the charge level drops too low.

5.4.2.1 Lithium-ion battery indicator and hour meter

Some Eurostacker models are fitted with a battery indicator, mounted on the body of the machine. This instrument also contains an hour meter.

5.4.2.2 Lithium-ion battery charging

To recharge the Lithium-ion battery, simply open the cover, lift the battery out by its carry handle, and place it into the charger.

A full charge from flat should take around 2 hours.


The smart charger automatically adapts to different input currents, manages the charging cycle to maximise battery life, and prevents overcharging.

5.4.2.3 *Lithium-ion battery care*

The Lithium-ion battery is maintenance-free and designed last up to 3000 charge/discharge cycles. However, battery life is dependent on several factors, including the depth of discharge and environmental conditions.

To maximize the life of the Lithium-ion battery, observe the following rules.


- Recharge the battery regularly.
- Do not leave the battery in a discharged state for more than 24 hours.
- Do not expose the battery to extremes of temperature.

 **Liithum-ion batteries are supplied with a 12-month manufacturer's warranty, separate from the warranty on the rest of the machine.**

5.4.2.4 *Lithium-ion battery charger*

The Eurostacker is supplied with an external smart charger, with a moulded wall-mountable case designed to hold the EL20_C battery. The charger accepts input current of 100-240VAC 50/60 Hertz and has a maximum draw of 4 Amps. The charger delivers an output of 24VDC with continuous current up to 10 Amps for a maximum power output of 240 Watts.

The charger plugs into an ordinary 1-phase mains outlet.

 **The charger is in an enclosed plastic case and is protected against short-circuit, current overload, over-voltage and over-temperature.**


5.4.3 *Emergency Stop*

The Eurostacker is fitted with a heavy-duty Emergency Stop button which also functions as a battery-isolation switch. This disconnects the battery from the electrical systems and should be pressed if the machine is to be placed in storage, or if the powerpack cover needs to be removed.

5.4.4 *Master circuit breaker*

The Eurostacker is fitted with an auto-resetting circuit breaker on the battery cable. The breaker is triggered by excessive current draw and helps prevent potential damage caused by operating the machine with a flat battery, or by an internal short-circuit.

The circuit breaker will automatically reset a short time after it has been tripped.

 **Because the current draw of the motor increases as the battery voltage drops, operating the machine with a flat battery may trigger the circuit breaker.**

5.5 Hydraulic System

5.5.1 *Powerpack*

The hydraulic powerpack is supplied as a complete unit. The motor, pump, oil tank, and all control valves are mounted into the centre manifold.

5.5.2 *Control valves*


The hydraulic system has four primary control valves.

5.5.2.1 Check valve

This is a one-way valve which prevents oil from flowing back through the pump when the motor is stopped.

5.5.2.2 Pressure-relief valve

This is a spring-loaded valve which allows oil to flow back into the reservoir when the hydraulic pressure exceeds its rated limit – usually from lifting an overweight Eurobin, or from operating the machine when the carriage is already at the top of the cycle.

 If this valve is adjusted incorrectly, the Eurostacker might fail to lift bins that are within the machine's Safe Working Load (250kg/300kg). Should this occur, contact your Simpro agent for instructions on how to adjust the pressure-relief valve.

5.5.2.3 Lowering valve

This is a solenoid-operated valve which opens when the LOWER button is pressed and allows oil to flow back to the reservoir, lowering the carriage.

5.5.2.4 Lowering-speed valve

This is a pressure-compensating valve which limits the maximum flow rate of oil passing back to the reservoir through the lowering valve – thus regulating the descent speed of the carriage (regardless of the weight of the Eurobin).

5.5.3 Lift Ram

The lift ram is a single-acting displacement type, very robust and reliable, but easy to maintain should the need arise. A hydraulic line runs from the powerpack to the lift ram.

5.5.4 Open Ram

The open ram is a single-acting displacement type, very robust and reliable, but easy to maintain should the need arise.


A flexible hydraulic line runs up the mast from the powerpack to the open ram.


5.5.5 Hydraulic fluid

The hydraulic system is designed to use mineral oil-based hydraulic fluid with a viscosity grade of 22 (ISO VG22). Fluid with a higher viscosity grade may be used, but will reduce the lowering speed of the carriage and increase the likelihood of jams.

The hydraulic fluid should have physical lubricating and chemical properties as specified by:

- Mineral Oil Based Hydraulic Fluids HL (DIN 51524 part 1)
- Mineral Oil Based Hydraulic Fluids HL P (DIN 51524 part 2)

 Ensure the carriage is completely lowered before replacing the hydraulic fluid.

 The hydraulic reservoir has markings showing the recommended fill level. Do not fill beyond this level unless specifically advised to do so by the manufacturer.

5.5.6 Maintenance

As the pump only runs while the carriage is lifting, it can take more than 500 cycles to reach one hours' run time of the powerpack. The oil should be replaced, and the suction filter cleaned after 12 months, then after every 100 hours of run time. The lowering valve should also be removed and cleaned at this time.

6.Assembly, Handling, Transport & Storage

6.1 Assembly

The Eurostacker is usually delivered fully assembled.

6.2 Moving

When the machine is standing upright it may be easily moved on its wheels, using the steering tiller. To ensure stability, the lifting carriage should be positioned just off the ground when moving the machine.


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

6.3 Lifting

If the machine needs to be lifted for any reason, carry out the following procedure:

1. Confirm the weight of the machine on the rating plate and check that the lifting equipment that is to be used has sufficient capacity.
2. Affix a lifting sling or chain around the top frame cross-member (or to the lifting lugs if provided).
3. Use one person to operate the lifting equipment, and at least one other person to watch for obstructions and hold the machine steady if required.
4. Lift, move and lower the machine into place, ensuring it always remains upright.

 The Eurostacker weighs between 200kg and 250kg. Always verify the weight of the machine on the rating plate, and check the lifting equipment that is to be used has sufficient capacity.

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

6.4 Transportation

Carry out the following procedure to prepare the machine for transport:

1. Apply the brake and press the Emergency Stop.
2. Use appropriate lifting equipment to place the machine onto a wooden pallet, and securely strap it into place. If necessary, the Eurostacker can be laid over onto its left or right side before being strapped down.

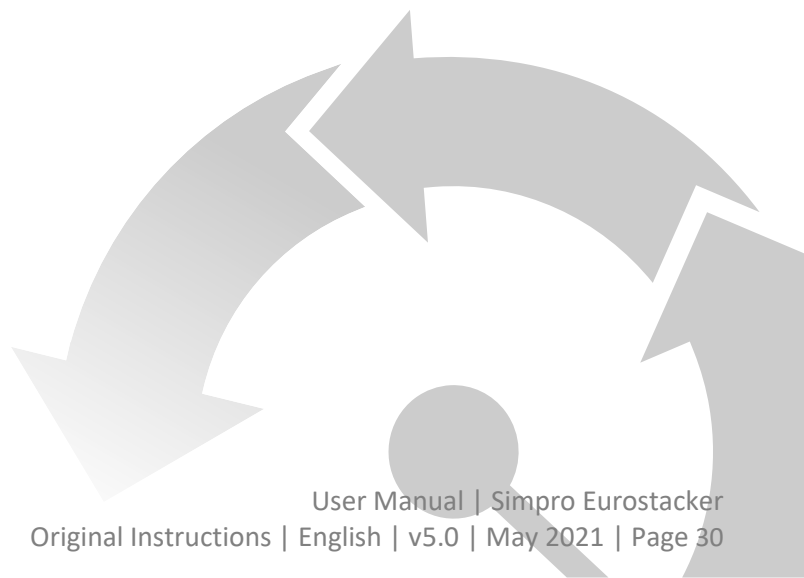
To prevent oil leaks and frame damage, do not lie the machine onto its front or back for transport.

3. Load the pallet onto the truck or trailer.
4. Tie the pallet and machine into position using only marked tie-down points and straps rated to at least 1000kg. Ensure it is fastened against lateral forces from any direction.

6.5 Storage

If the Eurostacker 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 procedures:


1. Clean the machine thoroughly.
2. Carry out several full lifting cycles, then lower the carriage to the ground.
3. Apply a thin layer of silicone lubricant to exposed surfaces of moving parts.
4. Charge the battery and apply a suitable contact oil to the electrical contacts.
5. Depress the Emergency Stop.
6. Remove the key and store in a safe location.




7. Safety Inspections

It is recommended to conduct regular scheduled inspections of the Eurostacker. This helps to ensure operator safety and extend the service life of the machine.

The inspection schedule is divided into two parts: monthly inspections and annual inspections. The inspection procedures are described in the following pages, along with logs for recording the results.

 It is strongly recommended that that regular scheduled inspections be carried and recorded as described in this section.

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

7.1 Pre-inspection checklist

1. Wear suitable Personal Protective Equipment (PPE), including safety boots and protective eyewear.
2. Ensure there are no ignition sources nearby.
3. Lower the cradle and remove bin.
4. Turn off the key switch and unplug the charging lead.
5. Remove the powerpack cover.
6. Clean the powerpack and electric circuitry with compressed air.
7. Always use height safety equipment when servicing elevated areas.

7.2 Monthly inspection

The following inspection should be carried out monthly, and the results recorded in the log.

Monthly Inspection Checklist			
Category	No.	Item	Check
General	1	Entire machine	Visually inspect for dented or broken parts. Conduct a complete lifting cycle and check for any faults or abnormal behavior.
Hydraulic systems	2	Hydraulic ram	Check there are no oil leaks.
	3	Oil reservoir	Check the level of hydraulic fluid and top up if necessary, in accordance with specs in Section 5.5.5 .
Safety systems	4	Dual-hand controls	Check that dual-hand controls operate correctly, and machine stops instantly when one button is released.
Mechanical systems	5	Inside mast	Lightly lubricate with silicone spray.
	9	Wheels	Check that the wheels are running smoothly and the footbrake is working correctly.

7.3 Annual inspection

The following inspection should be carried out annually, and the results recorded in the log.

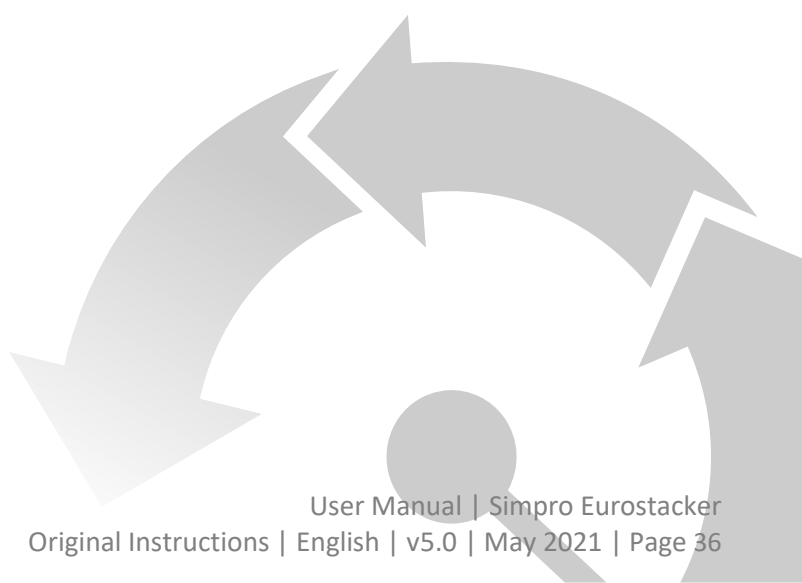
Annual Inspection Checklist			
Category	No.	Item	Check
General	1	Entire machine	Visually inspect for dented or broken parts. Conduct a complete lifting cycle and check for any faults or abnormal behaviour.
Hydraulic systems	2	Hydraulic ram	Check there are no oil leaks.
	3	Oil reservoir	Drain and replace the hydraulic fluid, in accordance with the specifications in Section 5.5.5 . Clean the oil suction filter.
	4	Lowering valve	Remove and clean.
Electrical systems	5	Charging lead	Check that the charging lead is in good condition, with no frayed or damaged insulation.
Safety systems	6	Dual-hand controls	Check that dual-hand controls operate correctly, and machine stops instantly when one button is released.
	7	Safety Labels	Check that all warnings labels, guides etc are attached and clearly legible.
Mechanical systems	8	Mast, lifting carriage and arms	Not twisted or damaged. No cracked or broken welds.
	9	Inside mast	Lightly lubricate with silicone spray.
	13	Wheels	Check that the wheels are running smoothly, and the park brake is working correctly.

Date	Service Person	Location	Checks complete	Notes on repairs or maintenance required	Parts and materials used

8. Spare Parts

The following table includes only the most common Eurostacker spare parts as at the time of publication.

[illegible]



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 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 battery is for 6 months only. Information on maximising the life of your battery may be viewed here: <https://simpro.world/connect/blog/deep-cycle-battery-watts-it-all-about>

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 has it been giving trouble over some time?
 2. Was the machine being used at the time?
 3. Is the fault intermittent?
 4. Are the battery fully charged?
 5. If repair is urgent, and the Agent cannot be contacted, the End User may contact Simpro direct.

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.

 Simpro has been manufacturing and retailing smart lifting solutions for over thirty years.


From humble beginnings as a small engineering firm in Auckland, New Zealand, the company has grown to become a leading supplier of handling equipment for niche applications – such as bin-lifting, tipping and handling machines, Eurobin stackers and goods lifts.


Simpro products play an unobtrusive but essential role for thousands of companies around the world, in industries as diverse


as waste management, food processing, resource extraction and pharmaceutical manufacturing. They are available through a network of agents which spans the globe, and are backed by a sophisticated in-house design and fabrication capability.

Simpro is a family-owned company, registered with the New Zealand Companies Office as Simpro Handling Equipment Ltd, company no. 1827916.

The products in this document may contain intellectual property, including design elements registered to or licensed by Simpro Handling Equipment Ltd.

 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](https://www.linkedin.com/company/simpro-world)

 [@SimproWorld_Lifters](https://www.youtube.com/channel/UCQmKjKjKjKjKjKjKjKjKjKj)

