Instruction handbook

Electric treatment chair from SUNTEC

CHANGE

Original instruction handbook

Manufacturer:	SUNTEC	Revision:	02
Description:	CHANGE patient chair	Review date:	29-01-2024

Preface and reading instructions

This document is the original instruction handbook for the Change treatment chair (subsequently referred to as the machine).

The instruction handbook applies for the models:

- CHANGE 3, CHANGE 3+1, CHANGE 3+2, CHANGE 4, CHANGE 4+1, CHANGE 4+2, CHANGE 5,

The instruction manual has been prepared in accordance with the *Machinery Directive 2006/42/EC* and *Medical Devices Regulation 2017/745/EU* and is the manufacturer's original instruction manual for the machinery.

The objective by this instruction handbook is to provide the user with the information necessary for the safe and efficient use of the machine during the life cycle of the machine. General safety instructions and conditions are described in a single section of the instruction handbook.

The instructions are for all users of the machine, where content is subdivided according to the user's function and interaction with the machine. Safety-related information and instructions appear at specific machine related tasks or as general information for all users.

It is the responsibility of the machinery owner to ensure that all user groups who are to install, operate, service, maintain, repair, or disassemble the machinery, have read the instruction manual or at minimum the parts relevant to their tasks. See user groups below.

In addition, user companies can allow peer-to-peer training or other form of training, in order to prepare employees working on and surrounding the machinery.

User groups

The information and instructions in the instruction handbook are divided according to user groups. These are derived according to the user interface and tasks related to the use of the machinery. There are three general user groups, a short description of the user groups is listed below.

Title	Description	Figure
Operator	Operators are personal who primarily operate the machine during normal operation.	
Technician	Technicians are personal who primarily performing maintenance.	
Cleaning personnel	Cleaning personnel are considered as primary personal cleaning the machinery and its surroundings.	

The above illustrations are provided through the instructions with reference to information that is useful for the user group to understand. Detailed explanation can be found in Appendix A – user groups and qualifications.

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1 Safety

The objective of this section is to inform user groups about general dangers and risks associated with the machinery. The users will be acquainted with the safety conditions, interpretation of signs, procedure during emergencies, and correct use of safety functions. Furthermore, user groups are warned about residual risks that the manufacturer has not been able to mitigate or regulate in the design.

Safety depends on the intended use. There is risk of personal injury if the use of the machinery deviates from the intended purpose.

If changes are made to the machinery, the instruction handbook and the risk assessment must be reviewed and corrected, if necessary.

1.1 Description of symbols

Symbols are used throughout the instruction manual to inform and/or warn about dangers related to operation of the machinery. The symbols are as followed:

Symbol	Description of symbols
	Attention Attention required. Indicates required action, for establishment of safe working conditions or use.
	Reference to documentation Refer to relevant information in this or other instruction handbook or safety data sheet.
	Warning Attention required. Warns potential dangers. (Description of hazard sources, safety measures, etc. appears accordingly)
	Prohibition signs Important prohibit relevant to the current topic.

Renewal of safety symbols, -signs and pictograms

- Damaged or missing safety symbols, warning, instruction signs and designations must be replaced and placed on the original location.
- Never remove warnings, instruction signs and designations from the equipment, as these may relate important safety-related information.

1.2 Emergencies

Dangerous situations may occur during operation, such as airborne noise emissions from machinery parts, fire, or other inappropriate situations, where immediate action will be required. If such a situation arises, the following procedures must be followed.

1.2.1 Accidents, breakdown, or airborne noise

In case of abnormal airborne noise emissions from the machinery or machinery parts, a hazardous situation, or a personnel injury the machinery must be stopped immediately.

Depending on the situation, people might be evacuated, or the machinery error must be corrected before the machinery can be restarted and operation can continue.

In the event of accidents or breakdowns, personnel and users of the equipment must:

- Assess the danger and sources of danger associated with the accident or breakdown, e.g., tearing of equipment, ejection/dropping of parts, etc. escape routes must be used, when personnel are exposed to immediate danger.
- Assess the extent of the damage.
- Contact emergency services in the event of serious accidents.

1.2.2 Fire

In case of smoke, flames or other indicators of fire stop the machinery immediately. The user company is expected to make suitable fire extinguishers accessible around the site in which the machinery is installed.

Type A)

Common flammables.

Type B)

Flammable liquids.

Type C)

Electrical installations.

Additionally, all persons in the immediate vicinity of the machinery are expected to aid with the fire hazard.

Warning!

Never store flammable liquids near electrical components.

Smoking is prohibited, and there must be no flares, open flames, or other sources of ignition in the vicinity of flammable materials.

1.3 Hazardous situations in case of accidents or inappropriate use

The functionality of the machinery is limited to its intended use. Limited functionality eliminates or reduces the possibility of people using the machinery Inexpediently.

The following risks depend on human behaviour, and are expected to be problematic only in the case of inexpedient behaviour:

Warning!
Serious injuries can occur because of inexpedient behaviour.
Inexpedient behaviour can lead to contact with moving parts, electrical parts, or danger of tripping.

Inexpedient behaviour concerning integrated safety precautions
Tampering with the control system to allow functionality of the machinery without the use of the integrated safety precautions is considered misuse. Do not tamper with the control devices or in any other way circumvent the safety precautions.

Warning!
Do not tamper with the control devices or in any other way circumvent the safety precautions.

Inexpedient behaviour concerning maintenance and cleaning
In the event of unexpected or sudden liquid spillage, etc., the spillage must be removed as soon as possible. If spilled liquids are left behind, there is a risk of slipping and falling. Additionally, these products may affect safety components in case of contact.

Warning!
If spilled liquids are left behind, there is a risk of slipping and falling.

Inexpedient behaviour concerning improper use of surfaces
It is not permitted to stand or climb on the machinery. Furthermore, the surfaces of the machinery must not be used for storage, etc.

Permitted to use the surfaces of the machinery as an access route
It is not permitted to stand or climb on the machinery.

1.4 Residual risks

The following residual risks have been identified for the machinery:

Risk of electric shock

The machine contains dangerous voltage levels. Contact with dangerous voltages can result in serious injury or death.

Risk of crushing

There is a risk of crushing during operation, due to moving parts

2 Machinery overview

The objective of this section is to provide an overview of the machinery's structure and functions as well as clarify technical specifications.

2.1 Manufacturer

The equipment is manufactured by:

Company name:	SUNTEC ApS
Company address:	Østergade 33, 3200 Helsinge - Denmark
Tel. No.:	Phone: +45 86 78 68 32
Email:	sales@suntec.dk
Website:	https:// www.suntec.dk/

2.2 Machinery designation and intended use

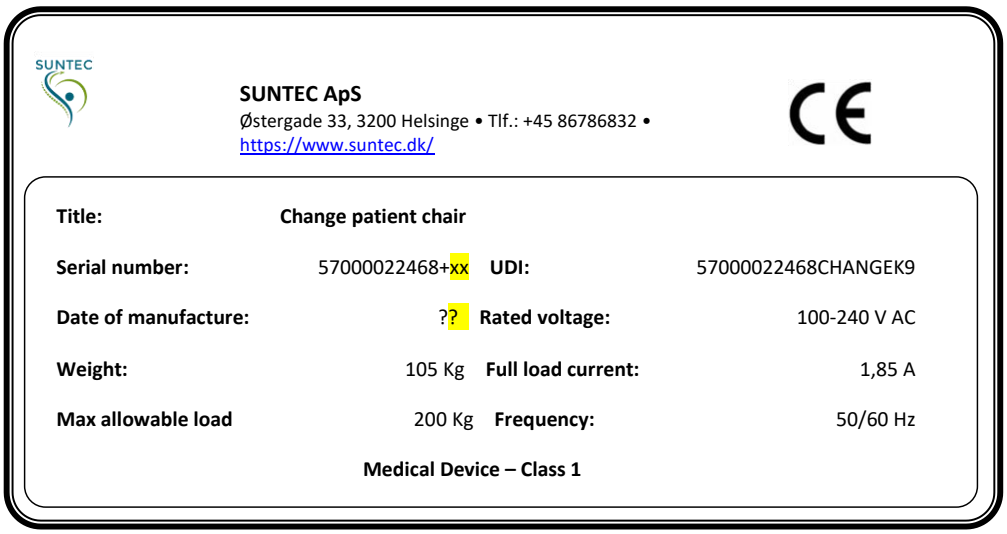
The machine's full designation is: CHANGE patient chair

The machine is intended as an electric treatment chair for facial and body treatments

The functionality of the machinery is limited to the intended use.

2.3 Nameplate

The machinery is CE certified in accordance with the Machinery Directive 2006/42/ EC and 2017/745/EU, Medical Devices Regulation and is provided with a sign as shown below:



2.3.1 Component layout

The machinery consists of:

Illustration	Description
	Item 01. 1 pc. electric treatment chair
	Item 02. 1 pc. Bluetooth hand-held remote control
	Optional items Electric neck and leg extension Foot pedal Autodrive – creates automatic driving of memory positions

2.4 Functional description

The electric treatment chair is designed to support and position the patient for facial an body treatment and therefore provided with a range of movement.

Machine control

The electric treatment chair is controlled via a Bluetooth hand-held remote control. Foot pedal and autodrive are optional additional equipment.

Phases
The machine is expected to be operated, dismantled, discarded, and scrapped by the user company according to the instructions in this instruction manual.

2.5 Operating modes and intervention procedures

The following operating modes and intervention procedures have been identified on the machine:

Normal operation – Manual operation

The machine is operating when an operator initiate start from the hand-held remote control or foot-pedal.

Starting and operation is done under the following conditions:

- Operations are initiated and monitored by trained personnel.
- The machine can be stopped at the operator´s control panel.
- The components of the unit are guarded.

Intervention – Maintenance and repair

When service is required either by break-down or maintenance intervals – the technician shall ensure, that maintenance is done under the following conditions:

- Before starting work, technicians and maintenance personnel must be instructed in hidden hazards, such as trapped energy hazards and crushing hazards.
- In operating situations in which personnel have disassembled parts of the machinery, or are handling spare parts or tools, instructions to exercise special care with moving parts or the like, must be related.

Intervention – Troubleshooting

Troubleshooting may require active energy sources in these cases focused awareness and additional means of safety may be considered:

Depending on the kind of work, the worker shall be instructed or skilled, and be specially trained to the job.

Electrical live work must be carried out in accordance with requirements and recommendations specified in national requirements and practices, including:

- Undertake an appropriate risk assessment before the work and implement necessary protective measures.
- Ensure to safeguard isolation levels during the work e.g., by using a robust insulation material.

- The workplace must be stable, and the worker must have both hands free.
- Use suitable and adequate personal protective equipment. (Don’t wear metallic items e.g., jewelry and watches, if it may pose a hazard).

2.6 Location of operator positions

The chair is used for treatments, support, and positioning of the user. The main operator position is by the head rest, as it is mainly intended for facial treatments.

During maintenance and repair:

The workplace is on and around the entire chair where the need arises.

2.7 Machinery limitations

2.7.1 Space limits

The following space limits are mentioned for the purpose of general safety for all personnel. Space limits are intended for improving emergency egress and ergonomics.

Space requirements for persons interacting during operation or maintenance
Personnel interacting with the machinery on a daily basis shall be provided with enough space to stand upright during operation. Furthermore, a clear width of minimum 800 mm between the machinery and any other fixed part / wall shall be provided.

Where maintenance tasks require work at floor/ground level and thereby kneeling, increased free space of 1000 mm must be provided.

In situations where it is not possible to maintain this free space, the End User shall in other ways ensure that the operators or technicians does not have to place himself in awkward/harmful positions. Each of such situations shall be dealt with in a risk assessment.

Machine power-supply interface
The user shall provide enough space around the machine for the electrical isolation devices to be installed, without breaking any of the abovementioned space requirements. The location of the isolating device can be either at the place of the intervention or along the access route.

2.7.2 User area and personnel

The machine must only be operated in clinics and treatment rooms.

The machine shall only be operated by professional operators and technicians. Any disabilities and handicaps do not necessarily exclude users – but each case must be revised by a user appointed safety manager.

2.7.3 Life expectancy of the machinery

Lifetime of machinery and/or components taking intended and unintended use into account
The machinery is expected to run indefinitely. However, inspection and regular maintenance is a prerequisite for safe use throughout the lifetime of the machinery.

Parts and components integrated in the safety-related parts of the control system are determined and expected to have a lifetime of 20 years.

After 20 years all safety related parts must be replaced with parts with identical performance level and function if the machine it to be in continuing operation.

Recommended service interval
It is a prerequisite for the lifetime of the machinery, that the service intervals and inspection criteria for all components are maintained in accordance with the supplier's datasheets, and this instruction manuals.

2.8 Technical specifications

2.8.1 Physical specifications

The machinery will operate in an indoor clinic or treatment room.

Property	Value and unit if applicable
Height	59 – 103 cm
Length	182 – 222 cm
Width	85 cm
Weight	105 kg
Max. Load	200 kg

2.8.2 Energy supply

Electrical energy	Value and unit
Voltage:	100-240 V AC
Frequency:	50/60 Hz
Full load current:	1,85 A

For technical data, see the nameplate/user manual on the individual components.

2.8.3 Environmental limits

The machinery will operate in an indoor industrial area / non-domestic.

Property	Value and unit if applicable
Permitted temperature range	5 °C - 40 °C
Permitted relative humidity range	min. 20 % - max. 80 %
Atmospheric pressure	800 hPa to 1000 hPa
EMC-environment	A

Illumination	Value and unit if applicable
Normal operation	Min. 200 lux
Repair and maintenance	Min. 500 lux In case of repair and maintenance, sufficient light must be provided, if necessary, to complete the task.

2.8.4 Noise emission

The machinery emits acoustic noise on a level below 75 dB (A) when operating. Thus, no hazards associated with noise of the machinery.

3 Safety measures

3.1 Safety precautions

The chair is controlled with a Bluetooth hold-to-run hand-held remote with memory functions that control height, back, legs and Trendelenburg (tilt) (not on 3 motors units).

The hand-held remote and actuators are well-tried LINAK components.

All operating methods are wireless.

3.2 List of safety functions

The reliability of the safety functions is mentioned below. This is to maintain the level of performance during setup or replacement of components.

This allows technicians/subcontractors to maintain the performance level of the safety functions by complying with the requirements:

Safety function	Explanation	Performance Level	Safety category
Hold-to-run operation	Movement under continuous action on the controls.	c	1

3.2.1 Test of Safety functions

If testing intervals are exceeded, the safety function may no longer be considered active and may not protect users from machine hazards.

- The safety functions must be tested more than once a year.

4 Transportation and handling

This section describes how the machinery is to be handled prior to installation. To prevent accidents, all safety instructions must be observed.

Warning – Crushing hazard

There is a risk of crushing when installing the equipment.

Warning!

It is prohibited to stand below a lifted load at any time!

4.1 Transportation and handling

The nature of the machine means that lifting equipment must be used for handling. The following general instructions must be used for handling / transport.

- Smaller parts must be transported on standard euro pallets, where they must be fastened to. Positioning on the pallet must be done so that the centre of gravity is in the middle of the pallet.

General:

The following precautions must be followed during transport of loads:

- Exercise caution when transporting loads.
- Establish a full overview of the moving parts and the immediate area.

Pallet jack:

Safety shoes

The pallet jack driver shall wear safety shoes.

5 Assembly, installation, and commission

This section describes instructions for assembling, installing, and commissioning the machine. Waste from the assembly and installation process must be disposed of in accordance with applicable national and regional regulations. See section Disposal, destruction, and recycling.

5.1 Safe assembly and installation

The following precautions apply when installing the equipment:

- The machine must be set-up in compliance with the space requirements listed in section “Machinery limitations”.
- Working conditions must be ensured in accordance with the environmental limits.
- Establish safe working environments where necessary (e.g., warnings, fencing, etc.)
- Establish an overview of the connection and disconnection processes for the machine before installation begins.
- When the equipment is connected to the supply – unintentional start-up must be prevented by using padlocks.

Warning!

Improper installation and assembly can cause damage to the machine and endanger surrounding personnel.

The CHANGE chair is delivered, assembled in a cardboard box (only armrests and headrest still need to be attached). Please check the outside of the box for visible damage and open it as carefully as possible so as to not accidentally damage the upholstery.

Carefully lift the chair out of the box and make sure that the chair is not lifted out of the box in the plastic cover. Grasp the chair by the foot sections to lift the chair out of the box and/or to transport the chair.

- The chair must be placed horizontally after installation. Adjust the feet by screwing them in or out until they are at the correct height to support the chair, so that it cannot tilt and/or tip over.
- If the chair is equipped with brakeable wheels, the following points must be observed: When there are customers on the chair, the chair must always be braked with the 4 external wheels. The customer must not sit on the chair when rolling.
- The chair can be raised or lowered electrically using the buttons on the control element, and the back and leg section(s) as well as seat tilt can also be adjusted via remote control.

  The remote control has 2 memory options and 1 preset for entry.
- Armrests and headrests have not yet been fitted due to the space-saving transport option. To assemble, insert armrests and headrest into the openings on the back of the chair.

What should be considered before using the product for the first time?

- Carefully remove the protective film from the chair, being careful not to damage the upholstery.
- If necessary, all screws are checked and tightened before use.
- Is the chair in a safe position? - if necessary, post-adjustment of the feet.
- Are all alignment functions working properly?
- Electric height adjustment
- Electrical adjustment of the back area.
- Electrical adjustment of the leg part(s).
- Electric seat tilt adjustment (not for 3-motor models)
- Electric headrest and food support (additional equipment)

In case of irregularities on the chair, always contact our service staff. Do not use the chair or stop using it if something is damaged on it.

Assembly of armrests. Move the back part up to the almost vertical position. Then take the armrests and insert them into the corresponding holders, which are located on the side (right and left) of backrest. The armrest should point backwards and stand in a horizontal position relative to the seat part of the bed.

After inserting the armrest into this position, fold the armrest forward. The armrest is now mounted. Please note the location of the sides of the armrest. Each armrest can only be mounted on one side.

6 Operation

In this section, information on safe and proper operation of the machinery will be provided.

6.1 General procedures

The chair is offered with a Bluetooth hand-held remote control with memory functions that control height, back, legs and Trendelenburg (tilt) (not on 3 motors units).

As optional additional equipment a foot pedal can be purchased.

The chair comes with electric neck and leg extension as an option. These functions are controlled from a small control panel which is in the immediate vicinity of the neck and/or the footrest.

As an option autodrive can be used to create automatic driving of memory positions. Once the module is installed, the chair can be moved to the desired position with just one press of the remote control or the foot pedal. The autodrive function can be stopped at any time by pressing the remote control or the foot pedal.

Settings and features:

The height is adjusted using a remote control, The chair can be raised or electrically lowered using the 2 buttons on the control. NOTE: In order for the customer to get in or out of the chair, and to avoid accidents, it must always be in entry height (This can be done by pressing R down once).

For adjustment of the back and leg section, as well as seat tilt, they are used other buttons.

Programming memory:

Set the chair in the desired position.

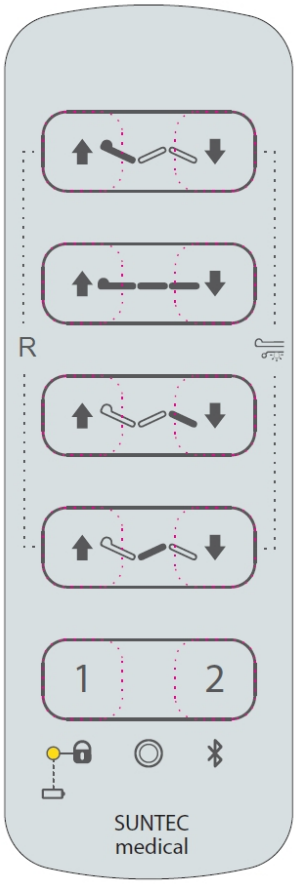
Press down the 1+2 buttons for 1 sec, then press 1 until 2 beeping sounds are heard. Memory 1 is now set. Same procedure is repeated for memory 2.

Headrest including "face neckline" can be pulled out or adjusted via motor or completely removed. If the user is lying on the stomach, the user can place the face in the cutout.

The foot part of the chair can be pulled out or adjusted via motor.

Swinging armrests:

The armrests are attached to the back of the chair in such a way, that they adapt to the respective backrest adjustment. Swinging armrest can be purchased as an extra option.



Safety instructions:

Do not sit on the Backrest or footrest.

The user must only sit on the middle section (seat) of the chair in accordance with the purpose of the treatment chair. The backrest and footrest are only intended for support of the upper body and legs.

The operator must at all times supervise the room when a user is in the chair.

Getting in or out should be done from the side. Before doing this, the operator must move the armrest. The operator must supervise the user while getting in and out of the chair.

When the chair is completely horizontal, the slope of the middle section of the chair must not be tilted backwards, as this may cause the user to slide out of the chair, thereby risking injuries.

The user instructions must be kept in close proximity of the chair.

7 Cleaning

The objective of this section is to describe the procedures when cleaning the machine. These procedures describe the intended method and use of cleaning agents. Proper procedure and article use are necessary to be able to perform cleaning safely.

7.1 Cleaning - Introduction

Cleaning of the machine is recommended to perform after maintenance.

Properties of general cleaning agents:

- Suitable for cleaning surfaces.
- Washable with ordinary domestic water and must not leave residue on the surface.

Appropriate protective equipment must be used in accordance with the given cleaning task to be performed. Additionally, the instructions regarding personal protective equipment for the cleaning agents must be observed, as well as the required protective equipment when using tools, auxiliary equipment, etc.

Cleaning agents: Protective equipment

Use all protective equipment described in the safety data sheet for the given cleaning agent(s).

7.2 Cleaning – Procedures

During cleaning and normal machine use:

- Always keep the area around the machine tidy and free of items.
- In the event of a spillage, identify and remove spillage immediately.

Component/ machine part	Cleaning frequency	Procedure
Surfaces	between each user and otherwise as needed	Use cleaning agents and disinfectants recommended by the manufacturer. The user is referred to the associated user documentation.

VYVA FABRICS APPROVED CLEANERS

Manufacturer	Lysoform Dr. Hans Rosenkranz	Laboratoire Anios	Laboratoire Anios	Antibac AS	Schülke & Mayr	Hartmann	Ecolab	Sealed Air Diversey Care	Schülke & Mayr	Dr. Schumacher GmbH	GAMA Healthcare	Guest Medical	Cosmed	Dacomed – Dr. Trippen	Dürr Dental	Dürr Dental
Product / Cleaner	Aldasan	Amisurf Citron	Amisurf ND Premium	Antibac	Antifect plus	Bacillol AF	Brial*	Bryta Washing Up Liquid 1:1500*	Buraton rapid	Cleansept wipes	Clinell Spray	Chlor-Clean	Cosmed 5%	Dacomed Rapid	FD 360*	FD 366
AVANTGARDE™						✓				✓	✓					
BELUGA	✗			✗	■	✓	✓		✓	✓	✓		✓	✓	✓	✓
CARBON FIBER	■			✓	■	✓	✓		✓	✓	✓		✓	✓	✓	✓
CHRONOS™	✓				✓	✓	✓		✓	✓	✓			✓	✗	✓
DAKAR	■			✓	■		✓		✓	✓				✓	✓	✓
DELTA-A	■			✓	■		✓		✓	✓				✓	✓	✓
DIAMONDS	■			✓	■	✓	✓		✗	✓	✓	✓	✓	✓	✓	✓
CABANA					✓	✓	✓		✓	✓	✓		✓	✓	✗	
LIENZO	■			✓	■		✓		✓	✓				✓	✓	✓
MAGLIA™	■			✓	■	✓	✓		■	✓	✓	✓	✓	✓	✓	✓
MARLIN	✗			✗	■	✓	✓		✓	✓	✓		✓	✓	✓	✓
NAUTILUS	■			✓	■		✓		✓	✓	✓		✓	✓	✓	✓
PEGASUS	■			✓	■		✓		✓	✓	✓		✓	✓	✓	✓
PIRAMIDE	■			✓	■		✓		✓	✓				✓	✓	✓
POLARIS	■			✓	■		✓		✓	✓	✓		✓	✓	✓	✓
RACING	■			✓	■		✓		✓	✓				✓	✓	✓
RALLY	■			✓	■		✓		✓	✓				✓	✓	✓
SILVERGUARD	■			✓	■	✓	✓		✗	✓	✓	✓	✓	✓	✓	✓
SILVERGUARD BI	■			✓	■	✓	✓		✗	✓	✓	✓	✓	✓	✓	✓
SILVERGUARD C5	■			✓	■	✓	✓		✗	✓	✓	✓	✓	✓	✓	✓
SKYLINE®	■			✓	■	✓	✓		✗	✓	✓	✓	✓	✓	✓	✓
HITCH®	■			✓	■	✓	✓		✗	✓	✓	✓	✓	✓	✓	✓
HITCH® C5	■			✓	■	✓	✓		✗	✓	✓	✓	✓	✓	✓	✓
TWISTER	■			✓	■		✓		✓	✓				✓	✓	✓
VALENCIA™	■	✓	✓	✓	■	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
VALENCIA™ BI	■	✓	✓	✓	■	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
VALENCIA™ C5	■	✓	✓	✓	■	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
VENTURA	■			✓	■		✓		✓	✓				✓	✓	✓
LEGEND	■			✓	■		✓		■	✓	✓			✓	✓	✓
ZANDER	✗			✗	■	✓	✓		✓	✓	✓		✓	✓	✓	✓

*This product only has cleaning properties. If looking for disinfectants, select options without an asterisk (*).

✓ Appropriate cleaner for this product | Limpiador apropiado para este producto | Desinfektionsmittel, die zur Reinigung unserer Produkte empfohlen werden | Nettoyant approprié pour ce produit | Detergente appropriato per questo prodotto | Odpowiedni środek czyszczący dla tego produktu.

■ Suitable for cleaning in 0,50% dilution, as recommended by the supplier | Indicado para usar con una disolución del 0,50%, como aconseja el fabricante | Die Oberfläche darf ausschließlich mit einer 0,50% Verdünnung gereinigt werden, nach Empfehlung des Lieferanten | Convient pour le nettoyage dans une dilution de 0,50%, tel que recommandé par le fabricant | Adatto per la pulizia diluito al 0,50%, come raccomandato dal fornitore | Nadaje się do czyszczenia w rozcieńczeniu 0,50%, zgodnie z zaleceniami dostawcy.

● Suitable for cleaning in 0,25% dilution, as recommended by the supplier | Indicado para usar con una disolución del 0,25%, como aconseja el fabricante | Die Oberfläche darf ausschließlich mit einer 0,25% Verdünnung gereinigt werden, nach Empfehlung des Lieferanten | Convient pour le nettoyage dans une dilution de 0,25%, tel que recommandé par le fabricant | Adatto per la pulizia diluito al 0,25%, come raccomandato dal fornitore | Nadaje się do czyszczenia w rozcieńczeniu 0,25%, zgodnie z zaleceniami dostawcy.

✗ Not appropriate cleaner for this product | Limpiador no apropiado para este producto | Desinfektionsmittel, die zur Reinigung unserer Produkte nicht geeignet sind | Nettoyant non-approprié pour ce produit | Detergente non appropriato per questo prodotto | Nieodpowiedni środek czyszczący dla tego produktu.

VYVA FABRICS APPROVED CLEANERS

Manufacturer	Ecolab	Ecolab	Ecolab	KillerClean Oy	Hartmann	Hartmann	B.Braun	Schülke & Mayr	DuPont	Schülke & Mayr	Laboratoire Anios	Laboratoire Anios	Laboratoire Hubert's International	DuPont	Wet Wipe A/S
Product / Cleaner	Incidin OxyWipe	Incidin Plus 3%	Klerocide 60/40°	Klorit®	Kohrsolin	Kohrsolin Extra 4%	Meliseptol foam Pure	Microzid	PeraSafe	Perform	Surfanios Premium	Surfa'Safe Premium	Unicrosan	Virkon	Wet wipe
AVANTGARDE™										✓	●	●	✓		
BELUGA					✖	✖	✖	✓			●	●	✓		✓
CARBON FIBER					✓	✓	✓	✓		✓	●	●	✓		✓
CHRONOS™	✓				✓	✓	✓	✓		✓	●	●	✓		✓
DAKAR					✓	✓	✓	✓			●	●			✓
DELTA-A					✓	✓	✓	✓			●	●			✓
DIAMONDS	✓	✓	✓	✓	✓	✓	✓	✓			●	●	✓	✓	✓
CABANA	✓	✓			✓	✓		✓	✓	✓	●	●	✓	✓	
LIENZO					✓	✓	✓	✓			●	●			✓
MAGLIA™	✓	✓	✓	✓	✓	✓	✓	✓			●	●	✓	✓	✓
MARLIN					✖	✖	✖	✓			●	●	✓		✓
NAUTILUS					✓	✓	✓	✓		✓	●	●	✓		✓
PEGASUS					✓	✓	✓	✓			●	●	✓		✓
PIRAMIDE					✓	✓	✓	✓			●	●			✓
POLARIS					✓	✓	✓	✓		✓	●	●	✓		✓
RACING					✓	✓	✓	✓			●	●			✓
RALLY					✓	✓	✓	✓			●	●			✓
SILVERGUARD	✓	✓	✓	✓	✓	✓	✓	✓			●	●	✓	✓	✓
SILVERGUARD BI	✓	✓	✓	✓	✓	✓	✓	✓			●	●	✓	✓	✓
SILVERGUARD C5	✓	✓	✓	✓	✓	✓	✓	✓			●	●	✓	✓	✓
SKYLINE®	✓	✓	✓	✓	✓	✓	✓	✓			●	●	✓	✓	✓
HITCH®	✓	✓		✓	✓	✓	✓	✓			●	●	✓	✓	✓
HITCH® C5	✓	✓		✓	✓	✓	✓	✓			●	●	✓	✓	✓
TWISTER					✓	✓	✓	✓			●	●			✓
VALENCIA™					✓	✓	✓	✓	✓		●	●		✓	✓
VALENCIA™ BI					✓	✓	✓	✓	✓		●	●		✓	✓
VALENCIA™ C5					✓	✓	✓	✓	✓		●	●		✓	✓
VENTURA					✓	✓	✓	✓			●	●			✓
LEGEND	✓	✓		✓	✓	✓	✓	✓			●	●	✓	✓	✓
ZANDER					✖	✖	✖	✓			●	●	✓		✓

* This product only has cleaning properties. If looking for disinfectants, select options without an asterisk (*).

✓ Appropriate cleaner for this product | Limpiador apropiado para este producto | Desinfektionsmittel, die zur Reinigung unserer Produkte empfohlen werden | Nettoyant approprié pour ce produit | Detergente appropriato per questo prodotto | Odpowiedni środek czyszczący dla tego produktu.

■ Suitable for cleaning in 0,50% dilution, as recommended by the supplier | Indicado para usar con una disolución del 0,50%, como aconseja el fabricante | Die Oberfläche darf ausschließlich mit einer 0,50% Verdünnung gereinigt werden, nach Empfehlung des Lieferanten | Convient pour le nettoyage dans une dilution de 0,50%, tel que recommandé par le fabricant | Adatto per la pulizia diluito al 0,50%, come raccomandato dal fornitore | Nadaje się do czyszczenia w rozcieńczeniu 0,50%, zgodnie z zaleceniami dostawcy.

● Suitable for cleaning in 0,25% dilution, as recommended by the supplier | Indicado para usar con una disolución del 0,25%, como aconseja el fabricante | Die Oberfläche darf ausschließlich mit einer 0,25% Verdünnung gereinigt werden, nach Empfehlung des Lieferanten | Convient pour le nettoyage dans une dilution de 0,25%, tel que recommandé par le fabricant | Adatto per la pulizia diluito al 0,25%, come raccomandato dal fornitore | Nadaje się do czyszczenia w rozcieńczeniu 0,25%, zgodnie z zaleceniami dostawcy.

✖ Not appropriate cleaner for this product | Limpiador no apropiado para este producto | Desinfektionsmittel, die zur Reinigung unserer Produkte nicht geeignet sind | Nettoyant non-approprié pour ce produit | Detergente non appropriato per questo prodotto | Nieodpowiedni środek czyszczący dla tego produktu.

CARE AND CLEANING GUIDE

The vinyl should be cleaned periodically in order to maintain its appearance and prevent build-up of dirt and contaminants.

Any stain, spills, or soiling should be cleaned up promptly to prevent the possibility of permanent staining.

Use soft soapy solutions or special cleaning products for vinyl fabrics to remove stains on the surface of the material. Remove only with a damp white cloth.

Lacquers, strong cleaners, detergents, xylene-based solutions, acetone, or MEK cause immediate damage and contribute to the deterioration of the material. The use of such cleaners is at the owner's risk.

Certain clothing and accessory dyes (such as those used on denim jeans) may migrate to lighter colours. This phenomenon is increased by humidity and temperature and is irreversible. Vyva Fabrics will not assume responsibility for dye transfer caused by external contaminants and possible permanent staining caused by this phenomenon.

PFLEGE- UND REINIGUNGSANLEITUNG

Das Material sollte in regelmäßigen Abständen gereinigt werden, um das Aussehen zu erhalten und ein Ansammeln von Schmutz und Verunreinigungen zu vermeiden. Je nach Nutzungshäufigkeit und Beanspruchung ist eine häufigere Reinigung notwendig.

Flecken, Schmutz und jegliche Substanzen, die auf das Material gelangen, sollten unverzüglich entfernt werden, um eine permanente Verschmutzung zu vermeiden.

Verwenden Sie mildes Seifenwasser oder speziell für Vinylstoffe/Kunstleder empfohlene Produkte zur Reinigung und Entfernung von Flecken auf der Oberfläche. Benutzen Sie zur Reinigung lediglich ein weißes, feuchtes Tuch.

Lacke, aggressive oder chemische Reinigungs- und Waschmittel, xylolhaltige Flüssigkeiten, Aceton oder MEK verursachen sofortigen Schaden und tragen zu einer Materialermüdung bei. Der Gebrauch solcher Mittel erfolgt auf eigene Verantwortung des Benutzers.

Die Farbstoffe bestimmter Textilien und Accessoires (z.B. Jeans) können auf hellere Oberflächen abfärben. Dieser Effekt nimmt mit steigender Feuchtigkeit und Temperatur zu und ist irreversibel. Vyva Fabrics haften weder für das Abfärben durch externe Stoffe oder verunreinigende Substanzen, noch für eine eventuell dadurch entstehende permanente Verschmutzung / Verfärbung.

PULIZIA E MANUTENZIONE

Il vinile deve essere pulito regolarmente per mantenere integro l'aspetto e prevenire la formazione di depositi di sporco e di agenti contaminanti.

Eliminare prontamente qualsiasi macchia o sporco per evitare che macchie dimenticate non vengano più via.

Pulire la superficie del tessuto utilizzando soltanto un panno bianco inumidito e saponi o detergenti neutri specifici per tessuti in vinile.

Vernici, detergenti aggressivi, liquidi a base di xilene, solventi come acetone, diluente o metiletilchetone (MEK) possono causare un danno immediato al tessuto, contribuendo così al suo deterioramento. Pertanto, la scelta e l'utilizzo di tali sostanze è a proprio rischio e pericolo.

Determinate coloranti di vestiti o di accessori (come quelle utilizzate nei jeans denim) possono migrare verso colori più chiari. Questo fenomeno è incrementato dall'umidità e dalle temperature ed è irreversibile. Vyva Fabrics non si assume alcuna responsabilità per il trasferimento di colorante causati da contaminanti esterni e possibili macchie permanenti causati da questo fenomeno.

GUÍA DE MANTENIMIENTO Y LIMPIEZA

El vinilo se debe limpiar periódicamente para mantener su apariencia y evitar la acumulación de contaminantes y mugre.

Toda mancha, derramamiento o suciedad se debe limpiar con rapidez para evitar un manchado permanente.

Use soluciones jabonosas suaves o productos de limpieza especiales para telas vinílicas para eliminar las manchas de la superficie del material. Limpie solamente con trapos blancos humedecidos.

Las lacas, los limpiadores fuertes, los detergentes, los líquidos a base de xileno, la acetona y el MEK causan un daño inmediato y contribuyen al deterioro del material. El uso de estos limpiadores es bajo su propia responsabilidad.

Ciertas prendas de vestir y tintes de accesorios (como los utilizados en los pantalones vaqueros) pueden migrar a superficies más claras. Este fenómeno se ve incrementado por los efectos de la humedad y la temperatura; es irreversible.
Vyva Fabrics no asumirán ninguna responsabilidad ante reclamos de transferencia de color originados por contaminantes externos ni ante reclamos de manchas permanentes causadas por este fenómeno.

ENTRETIEN ET GUIDE DE NETTOYAGE

Le vinyle devra être nettoyé périodiquement pour conserver son aspect et prévenir le dépôt de saletés et d'impuretés.

Toutes les taches, renversements ou salissures doivent être nettoyés rapidement pour empêcher la formation de taches permanentes.

Utilisez des solutions savonneuses douces ou des produits de nettoyage spéciaux pour tissus vinyles afin d'ôter les taches sur la surface du matériau. Utilisez uniquement un tissu blanc et humide.

Les laques, les produits de nettoyage agressifs, les détergents, les produits à base de xylène, l'acétone ou la MEK peuvent causer des dégâts immédiats et contribuer à la détérioration du produit. L'utilisation de tels produits de nettoyage est au risque du propriétaire.

Les pigments/teintures de certains vêtements et accessoires (telles que celles utilisés pour les jeans) peuvent déteindre sur des surfaces plus claires. Ce phénomène s'accroît avec l'humidité et la température, et est irréversible. Vyva Fabrics n'assument aucune garantie ni responsabilité, ni pour la migration de ces pigments/-teintures ni pour l'encrassement permanent causé par ces vêtements / substances.

PIEL GNACJA I INSTRUKCJA CZYSZCZENIA

Winyl należy okresowo czyścić, aby zachować jego wygląd i zapobiec gromadzeniu się brudu i zanieczyszczeń.

Wszelkie plamy, zacieki lub zabrudzenia należy niezwłocznie usunąć, aby zapobiec możliwości trwałego zabrudzenia.

Używaj łagodnych mydeł lub specjalnych środków czyszczących do tkanin winylowych, aby usunąć plamy z powierzchni materiału. Stosuj wyłącznie wilgotną białą szmatkę.

Lakiery, silne środki czyszczące, detergenty, roztwory na bazie ksylenu, aceton lub MEK powodują natychmiastowe uszkodzenia i przyczyniają się do pogorszenia jakości materiału. Korzystanie z takich środków czyszczących odbywa się na ryzyko użytkownika.

Niektóre barwniki stosowane w odzieży i akcesoriach (takie jak te stosowane w jeansach) mogą migrować do jaśniejszych kolorów. Zjawisko to jest spotęgowane przez wilgotność i temperaturę i jest nieodwracalne. Vyva Fabrics nie ponoszą odpowiedzialności za transfer barwnika spowodowany zanieczyszczeniami zewnętrznymi i za ewentualne trwałe zabarwienie spowodowane tym zjawiskiem.

Note | Nota | Bitte beachten Sie | Note | Nota | Uwaga:

The matrix shows which cleaners are approved or not for cleaning and disinfecting Vyva Fabrics upholstery materials. These classifications are based on the results of an extensive series of tests on the listed products. Vyva Fabrics can not be held responsible for any changes in the formulation of disinfectants by the manufacturer. | La table montre les produits approbados y no aprobados para la limpieza y desinfección del material de tapizado de Vyva Fabrics. Estas clasificaciones están basadas en los resultados de una extensiva serie de pruebas de los productos incluidos en la tabla. Vyva Fabrics no se hace responsable de ningún cambio que el fabricante realice en los limpiadores y/o desinfectantes. | Diese Tabelle zeigt, welche Desinfektionsmittel für die Reinigung Ihres Vyva Fabrics Produktes geeignet sind oder nicht. Vyva Fabrics kann nicht für Veränderungen der Formulierungen durch den Hersteller verantwortlich gemacht werden. | La tableau indique les produits d'entretien approuvés ou non pour le nettoyage et la désinfection des matériaux Vyva Fabrics. Ces classifications sont basées sur les résultats d'une large série de tests des produits énumérés. Vyva Fabrics ne peut être tenu responsable de tout changement de la formulation des désinfectants par le fabricant. | La tabella mostra quali detergenti sono approvati o meno per la pulizia e la disinfezione dei materiali di rivestimento Vyva Fabrics. Queste classificazioni si basano sui risultati di una vasta serie di test sui prodotti elencati. Vyva Fabrics non può essere ritenuta responsabile per eventuali modifiche nella formulazione dei disinfettanti da parte dei produttore. | Matryca pokazuje, które środki czyszczące są zatwierdzone lub nie są zatwierdzone do czyszczenia i dezynfekcji materiałów tapicerskich Vyva Fabrics. Klasyfikacje te oparte są na wynikach szerokiej serii testów wymienionych produktów. Vyva Fabrics nie ponosi odpowiedzialności za jakiekolwiek zmiany w składzie środków dezynfekujących przez producenta.

PRODUCTS WITH PERMABLOK[3®], & PERMAGUARD®

Some of Vyva Fabrics products are in its majority protected by PERMABLOK3® or PERMAGUARD®, two of the most effective defence systems against germs, stains and abrasion. Two impermeable barriers to safeguard your investment. For optimum care and cleaning please read the following instructions and recommendations.

Disinfectant Use:

The information published in this care guide refers to the performance of PERMABLOK[3®] and PERMAGUARD® products in specifics tests conducted under laboratory conditions. Results may vary under actual conditions.

- AsepticareTB + II
- Antifect (in 0.5 % dilution)
- Caviwipes XL Packed
- CleaniseptWipes
- Clorox Healthcare Bleach Germicidal Wipes
- Coverage Plus Germicidal Wipes
- Desomed rapid
- FD 366
- Hydrogen Peroxide Cleaner Disinfectant Wipes
- Instrunet Anionsurf
- Lysol Foaming Disinfectant Cleaner
- Microzid
- Oxivir TB Wipes
- Oxycide Diluted – 3 oz/glin water
- PDI Sani-cloth bleach wipes
- Sanicloth AF 3
- Sodium Hypochlorite Disinfectant / Bleach cleaner - Dilution: 1:10 mix of bleach and water
- Surfanios Premium
- (in 0,25% dilution) Surfa'Safe Premium
- (in 0,25% dilution)
- Super Sani-cloth
- Virex II 256 (1:256 Dilution)
- Virox 5 Rtu
- Wet wipe
- Wex Cide 128 (1:128 dilution)

Vyva Fabrics is not sponsored by, affiliated with, or endorsed by the above trademark owners. Additionally, any use by Vyva Fabrics of any third-party trademark does not constitute any endorsement by Vyva Fabrics of such third parties.

Rinse the area with clean water, then dry with a clean, lint-free cloth after using any disinfectants and cleaners.

Cleaning After Disinfection:

The coated fabric should be cleaned periodically in order to maintain its appearance and prevent build-up of dirt and contaminants. Any stain, spills, or soiling should be cleaned up immediately to prevent the possibility of permanent staining. Use a mixture of liquid soap (neutral pH) and water or **our approved cleaning products for coated fabrics** to remove stains on the surface of the material. Remove only with a damp white cloth. Lacquers, strong cleaners, detergents, xylene-based solutions, acetone, or ketone (MEK) cause immediate damage and contribute to the deterioration of thematerial. The use of such cleaners is at the owner's risk.

Daily Cleaning

1. Clean the entire surface using a mixture of 1:1 liquid soap (neutral pH) and water. Do not use soap or cleaning solutions that contain alcohol, ketones, xylene, acetates or solvents (mineral/whitespirits).
2. Completely remove excess cleaner with a white, clean, damp cloth.
3. Dry the surface.

Cleaning methods to remove tougher stains

- Step 1: Coffee, juice, red wine, sauces, chocolate, grease, crayon and suntan lotion
  Remove excess spill with a damp cloth. Clean with a 1:1 mixof neutral liquid soap and water. Next, rinse with clean waterand dry.
- Step 2: Make-up
  Use a straight application of neutral PH soap. Wipe with a clean white cloth or soft brushrinse with clean water, and dry.
- Step 3: Blood, urine, feces and all other tough stains
  Use a 1:10 mix of Isopropyl alcohol and water. Rinse thoroughly with clean water and dry.

Note: For cleaning use a soft white cotton cloth saturated with the recommended cleaning agent and rub the stain in circles 10 times. Pat dry with another soft white cotton cloth and check the results. Do not use steel bristle brushes, abrasive scouring pads or metal, these cause permanent damage to the fabric.

Methods 2 & 3 are not recommended for everyday cleaning!

After cleaning, rinse the area with clean water, then dry with a clean, lint-free cloth. Failure to remove chemical the residue will cause discoloration of the coated fabric surface to manifest earlier in the life cycle of the product.

Resources:

Click here to discover our PERMABLOK[3®] Coated Fabrics

Click here to discover our PERMAGUARD® Coated Fabrics Coated Fabrics suitable for Healthcare Applications

All other products:

For products other than PERMABLOK[3®] & PERMAGUARD® follow the steps of Cleaning after disinfection as mentioned above but avoid the use of Isopropyl alcohol (as mentioned in Step 3).

The information published in these care guides refer to the performance of Vyva Fabrics products in specific tests conducted under laboratory conditions. Results may vary under actual conditions. This information is not a guarantee and does not relieve the user from the responsibility of the proper and safe use of the product and all cleaning agents. The use of certain agents can be harmful to the surface appearance and lifespan of coated fabrics. To promote a long product life, it is recommended that the Vyva Fabrics cleaning and maintenance protocol be employed regularly. Vyva Fabrics, its agents and assigns assume no responsibility resulting from the use of such cleaning agents to the coated fabric. Inclusion in this document does not imply "fit for use." Customers should first determine if products are appropriate for use on their surfaces. Vyva Fabrics cannot be held responsible for failure to follow proper cleaning protocol, or the use of improper cleaners that result in surface damage or colour change. Certain clothing and accessory dyes (such as those used on denim jeans) may migrate to lighter colours. This phenomenon is increased by humidity and temperature and is irreversible. Vyva Fabrics will not assume responsibility for dye transfer caused by external contaminants and possible permanent staining caused by this phenomenon.

8 Troubleshooting and repair

The objective of this section is to provide the user groups with insight into potential errors that may occur during the use of the machinery. Additionally, instructions are given for restoring and repairing these errors.

Errors, indications known by the machinery, are listed in the next section. For error that require repair of the machinery, this is also specified.

In the event of an unexpected or unknown error, the manufacturer must be contacted and informed of the given error.

8.1 Troubleshooting

8.1.1 General error identification

When irregularities are detected during operation of the machinery, an inspection must be carried out as soon as possible. By rapid intervention and correction of the irregularities, a dangerous situation may be prevented, as well as avoiding unnecessary wear and strain on the machinery.

In the event of a malfunction or operation due to an unknown error, an overall inspection of the machinery is performed.

8.1.2 Errors / Error indications

A list of possible errors for the machinery can be found here:

Fault message/ Error indication	Fault	Possible cause or procedure for detecting fault	Solution	Performed by
No power to the machine	1. Blown fuse 2. Tripping of RCD	1. Check fuse 2. Check RCD	Change/reconnect fuses. Reconnect RCD	All users Persistent fault → contact maintenance personnel.

9 Inspection, testing, and maintenance

The objective of this section is to describe the procedures to be performed in connection with maintenance. These procedures describe the intended method and use of the article. Proper method of operation and use of articles is necessary to be able to perform maintenance safely.

Inspection, testing and maintenance of individual machinery

The manufacturer's inspection and testing intervals for the individual machinery must be complied as specified in this instruction handbook.

Drawings and diagrams essential for maintenance, troubleshooting and repair.

Before starting work, technicians and maintenance personnel must be instructed in hidden hazards, such as trapped energy hazards and crushing hazards.

Before starting repair or maintenance the machinery must be disconnected, this prevents unintentional starting and contact with live parts.

In operating situations in which personnel have disassembled parts of the machinery, or are handling spare parts or tools, instructions to exercise special care with moving parts or the like, must be related.

Warning!

Improper maintenance can be dangerous and in the worst-case lead to death!

Maintenance/inspection of the chair is to be performed by a SUNTEC specialist every two years. Please note that failing to do so may result in the warranty being invalid.

9.1 Safe execution of maintenance

The following precautions apply to the machinery:

- Bring additional lighting during maintenance where necessary to ensure proper working conditions.
- Establish a safe working environment where necessary (e.g., signs, barricades, etc.).
- Establish an overview of the connection and disconnection processes for the machinery before starting maintenance.
- Familiarize yourself with and observe the prescribed setting, service, and inspection activities, including information on replacing parts.

Appropriate protective equipment must be used in accordance with the forthcoming maintenance task. Furthermore, work equipment / auxiliary equipment used during the work may place additional demands on personal protective equipment.

General requirements for personal protective equipment in connection with maintenance are as follows:

Safety footwear

Wear safety shoes where there is a risk of objects falling and where feet are generally exposed.

Protective gloves - Nitrile

Wear protective gloves during dismantling, disabling, and scrapping, and when hands are exposed to hazards

Eye protection

Wear eye protection when eyes are exposed to hazards.

9.1.1 Electrical maintenance

Warning - Live parts

Contact with dangerous voltages could result in serious injury or death.

Only trained professionals may perform electrical maintenance on the machine.

The following instructions must be followed before electrical work is started:

- Before starting work on electrical cabinets, check the de-energized state with a reliable instrument.
- Personnel must be certified to work with live parts during inspections where it is necessary to work with live parts according to EN 50110.
- Only qualified professionals may carry out work on live parts and/or work near live parts.
- Always have another person at the work site when working with live parts, who can quickly intervene in the event of an accident when working with live parts.
    - This person does not need to be an expert or certified in working with live parts but must know how best to intervene in the event of an accident before work is commenced.

9.2 Energy control procedures

9.2.1 Isolation and locking

Danger of unexpected start

Dangerous situations can occur if the supply is switched on unexpectedly or unintentionally while people are working on the machinery. This can cause serious injury or death.

Emergency stop must never be used as supply disconnecting device to prevent accidental starts.

Before accessing the hazardous parts for repair or maintenance, the supply must be disconnected and considered.

Isolation of energy supply

Before repair, maintenance, etc., energy sources must be disconnected.

Disconnect the electrical supply.

9.2.2 Reconnection

After maintenance, cleaning, or other task is completed, energy sources must be reconnected. Before reconnecting the energy sources, make sure that:

- There are no people in hazardous areas.
- There are no tools, equipment, or other objects that could damage the machinery.

Once the machinery has been inspected and approved, energy sources can be switched on.

9.3 Maintenance schedule

Component/ machinery part:	Frequency:	Method:	Acceptance/ Non-acceptance:	Action:	I/T/M I = Inspection, T = Testing. M = Measuring
Safety relevant inspection, testing, and maintenance:					
Safety symbols and pictograms	Yearly	Inspect machinery symbol according to their location.	Symbols must be visible, legible, and undamaged.	Symbols must be replaced if missing, damaged, or illegible markings.	I
Electrical: General inspection, testing and maintenance					
Cables and electrical enclosures	Yearly	Visual inspection of wires and enclosures.	Damaged insulation/enclosures for electrical equipment.	Insulation must be restored or completely replaced while in de-energized condition.	I
Isolating device	Yearly	Check that the device can be locked in its OFF-position, and that it can isolate the energy supply. The machine must not be able start while the energy supply is isolated.	The isolating device must be lockable and capable of isolating the machine by disconnecting the energy supply.	In the event of a failure or fault, the machine must be taken out of operation until the fault has been rectified, after which the function must be tested again.	I/T
Electrical marking	Yearly	Visual inspection	Missing, damaged or illegible marking.	Marking must be replaced / restored in accordance with electrical documentation	I
Supplementary protective bonding	Yearly	Inspect the protective bonding in its entirety and at termination points. Measure continuity.	Measurement must not deviate significantly from the recorded continuity at machine commissioning.	Optimal protective bonding must be re-established before continuing machine operation.	I/M

Mechanical: General inspection, testing and maintenance					
Welds	Yearly	Visual inspection Possibly ultrasonic inspection.	Fractures or signs of cracks.	Defective welds are removed and re-welded.	I
Screws and bolts	Yearly	Visual inspection and tensioning.	Missing/damaged screws/bolts. Loose screws/bolts	Replaced in case of shortage or need. Tighten.	I/T
Actuators	Daily	Audio inspection	Anomalous noises	Replace component	I

When performing inspections, testing and maintenance, this must be noted (e.g., in a log). The document must be easily accessible and located in a place known to all users of the machinery.

10 Dismantling, disabling, and scrapping

The objective of this section is to describe the procedures to be performed to disassemble and scrap parts of the machinery. These procedures are necessary to ensure the safety of the employees performing these tasks.

10.1 Disassembly planning

Before disassembling the machinery, a plan for disassembly must be prepared. The plan must include a risk assessment for the work, as well as for the disposal of machinery and machinery parts.

The risk assessment must include the following aspects:

- Disconnection of all energy sources.
- Hidden dangers (e.g., potential energy).
- Sequence for disassembly.
- Sorting of machinery parts.
- Proper disposal/recycling.

The plan and risk assessment must be prepared in accordance with current rules and regulations at the time of dismantling.

If the switchboards contain components that retain a dangerous residual voltage, work must be started after the specified time. This is because the dangerous residual voltage of the frequency converter has passed after the supply has been interrupted.

Prior to disassembly, a de-energized state must be verified using appropriate measuring equipment.

10.2 Disposal, destruction, and recycling

It is the owner's responsibility to ensure that waste is disposed of and recycled properly.

When disposing of the materials, sorting must be done thoroughly:

- Machinery frame and all mechanical plant and machinery components consist of steel, light metal, and plastic. These materials must be returned for recycling. This also applies to non-metals, composite materials, and consumables.
- Problematic substances such as batteries, accumulators, cables, electronic waste, and printed circuit boards must be handed in at places that accept this type of waste.
- Drainage of liquids: e.g., refrigerants, oils and greases must also be handed in at sites that accept this type of waste.

When disposing of waste and used parts, always comply with applicable national and regional health, safety, and environmental regulations.

The machinery is dismantled, sorted, and disposed of in categories as required by applicable environmental requirements at the time of scrapping.

The product is subject to directive 2012/19/EU on waste electrical and electronic equipment (WEEE).

The product must not be disposed of with unsorted household waste. Use local WEEE collection points for disposal of this product and ensure compliance with all applicable regulations.

Appendix A – User groups and qualifications

The objective of this appendix is to illustrate the various user groups referred to in the preface of this manual.

Operator

Tasks, instructions, etc. addressed to operators are symbolized by:

Operators are people whom:

- Physically interacts with the machinery and/or its control system during normal operation.
    - Such as operating the machinery and its controls.
- Uses the machinery under management and with the consent of the owner of the machinery.
- Are qualified in professional education or in training that equates them with this.
- Can make general adjustments, rearrangement, etc.

Operator requirements and qualifications

Operators must be trained/instructed in the use of the machinery based on the following requirements:

- Expected to have read the sections regarding operation and intervention procedures of the instruction manual as well as any attached instructions, safety instructions, etc.
- Operators are expected to have received an instruction on the safety functions of the machinery including emergency-stop functions, interlocking switches, light curtains, and resetting. This may be achieved by employee-by-employee training, or by reading the instruction manual as well as any attached instructions, safety instructions, etc.
- Trained and/or instructed in the use, handling, etc. of the machinery.

Maintenance

Tasks, instructions, etc. addressed to maintenance personnel are symbolized by:

Maintenance are people whom:

- Are tasked with remedying and correcting errors and defects on the machinery.
- Are tasked to ensure that the machinery is in a proper and safe condition, including that all safety precautions regarding the machinery always are functional.
- Maintains and services the machinery according to the manufacturers' instructions and the instructions in this manual.
- Expected to have a degree in a mechanical or electrical profession, e.g., blacksmith, electrician, etc. or by training that equates them with it.

Maintenance personnel requirements and qualifications

Maintenance personnel must be trained/instructed in the use of the machinery based on the following requirements:

- Expected to have read the instruction manual as well as any attached instructions, safety instructions, etc.
- Expected to understand the machinery functions and safety conditions. This may be achieved by peer-to-peer training, or by reading the instruction manual as well as any attached instructions, safety instructions, etc.

Cleaning personnel

Tasks, instructions, etc. addressed to cleaning personnel are symbolized by:

Cleaning personnel are people whom:

- Are tasked with cleaning the machinery and its surroundings.
- Are qualified in professional education or in training that equates them with this.

Cleaning personnel requirements and qualifications

Cleaning personnel must be trained/instructed in the use of the machinery based on the following requirements:

- Expected to have relevant sections of the instruction manual as well as any attached instructions, safety instructions, etc.
- Expected to understand the machinery functions and safety conditions. This may be achieved by employee-by-employee training, or by reading the instruction manual as well as any attached instructions, safety instructions, etc.
- Educated and/or instructed in cleaning the machinery.
- Must have read and understood safety data sheets for all chemicals used during cleaning.

Appendix B – Documentation

Copy of the EC declaration of conformity

SUNTEC	**EC declaration of conformity** 2006/42/EC appendix II A **2017/745/EU** appendix IV	CE

Manufacturer and collector of the technical dossier

SUNTEC ApS

Østergade 33, 3200 Helsinge

Denmark

https://www.suntec.dk/

Hereby declare that,

CHANGE 3, CHANGE 3+1, CHANGE 3+2, CHANGE 4, CHANGE 4+1, CHANGE 4+2, CHANGE 5,

Medical device – Class 1

UDI-DI: 57000022468CHANGEK9

In accordance with the following Community Directives;

2017/745/EU, Medical Devices Regulation

2006/42/EC, the Machinery Directive

2004/30/EU, the EMC Directive

This declaration is only valid if the equipment is stored and maintained in accordance with the instructions in the user manual for the equipment.

Jens Pries

Jens Pries

Helsinge – 26-01-2024

SEO

Copy of the LINAK EC declaration of conformity

CE

LINAK
WE IMPROVE YOUR LIFE

DECLARATION OF CONFORMITY

LINAK A/S
Smedevænget 8

DK - 6430 Nordborg

hereby declares that LINAK Actuator System composed of:

Control Box CO6+*9421**9200

(The '*' in the product description can either be a character or a number, thereby defining the variation of the product)

And

Linear Actuators BL1, LA20, LA23, LA27, LA29, LA31, LA34, LA40, LA43, LA44, LC1 series

And

Controls ACx, FPP, FS3, FSE, HB100, HB200, HB3x, HB400, HB4x, HB7x, HB8x, HD8x, HL400, HL7x, HL8X series

And

Accessories BA16, BA19, BA21, BA22, CCM, DJB, MJB, PJ2, PJB4, QLCI2, SLS, UBL2 series

CO61 series (Wired control)
complies with the EMC Directive 2014/30/EU according to following standards:
EN 55011:2016+A1:2017+A11:2020+A2:2021, EN IEC 61000-3-2:2019+A1:2021,
EN 61000-3-3:2013+A1:2019+A2:2021
EN 61000-4-2:2009, EN IEC 61000-4-3:2020, EN 61000-4-4:2012, EN 61000-4-5:2014+A1:2017,
EN 61000-4-6:2014, EN 61000-4-8:2010, EN IEC 61000-4-11:2020+AC:2020

complies with Low Voltage Directive 2014/35/EU according to the standard:
EN 60601-1:2006+A1:2013

CO61 Bluetooth® Low Energy series (Wireless control)
complies with the Radio Equipment Directive (RED) 2014/53/EU according to following standards:
EN 300 328 V2.2.2
EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4
EN 62368-1:2014+A11
EN 62479:2010
EN 50663:2017

complies with the RoHS2 Directive 2011/65/EU according to the standard:
EN IEC 63000:2018

Additional information:
The system does also comply with the standard:
EN 60601-1:2006+A1, Medical electrical equipment – Part 1: General requirements for basic safety and essential performance.
EN 60601-1-2: 2015+A1, Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic compatibility - Requirements and tests
EMC requirements of:
EN 60601-2-52:2010 Medical electrical equipment - Part 2-52: Particular requirements for basic safety and essential performance of medical beds.

Nordborg, 2023-08-29

John Kling

LINAK A/S
John Kling, B.Sc.E.E.
Regulatory Affairs Manager
Authorized to compile the relevant technical documentation

This declaration of conformity is issued under the sole responsibility of the manufacturer.
Original Declaration

Copy of the LINAK UKCA declaration of conformity

UK CA

LINAK®
WE IMPROVE YOUR LIFE

DECLARATION OF CONFORMITY

Imported by
LINAK UK Limited
Smethwick, B66 1RJ

hereby declares that LINAK Actuator System composed of:

Control Box CO6+*9421**9200
(The '*' in the product description can either be a character or a number, thereby defining the variation of the product)

And

Linear Actuators BL1, LA20, LA23, LA27, LA29, LA31, LA34, LA40, LA43, LA44, LC1 series

And

Controls ACx, FPP, FS3, FSE, HB100, HB200, HB3x, HB400, HB4x, HB7x, HB8x, HD8x, HL400, HL7x, HL8X series

And

Accessories BA16, BA19, BA21, BA22, CCM, DJB, MJB, PJ2, PJB4, QLCI2, SLS, UBL2 series

CO61 series (Wired control)
complies with the EMC Directive 2014/30/EU according to following standards:
BS EN 55011:2016+A1:2017+A11:2020+A2:2021, BS EN IEC 61000-3-2:2019+A1:2021,
BS EN 61000-3-3:2013+A1:2019+A2:2021
BS EN 61000-4-2:2009, BS EN IEC 61000-4-3:2020, BS EN 61000-4-4:2012, BS EN 61000-4-5:2014+A1:2017,
BS EN 61000-4-6:2014, BS EN 61000-4-8:2010, BS EN IEC 61000-4-11:2020+AC:2020

complies with Low Voltage Directive 2014/35/EU according to the standard:
BS EN 60601-1:2006+A1:2013

CO61 Bluetooth® Low Energy series (Wireless control)
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EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4
BS EN 62368-1:2014+A11
BS EN 62479:2010
BS EN 50663:2017

complies with the RoHS2 Directive 2011/65/EU according to the standard:
BS EN IEC 63000:2018

Additional information:
The system does also comply with the standard:
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BS EN 60601-1-2: 2015+A1, Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic compatibility - Requirements and tests
EMC requirements of:
BS EN 60601-2-52:2010 Medical electrical equipment - Part 2-52: Particular requirements for basic safety and essential performance of medical beds.

DK-6430 Nordborg, 2023-08-29

John Kling

LINAK A/S
John Kling, B.Sc.E.E.
Regulatory Affairs Manager, Group Headquarters
Authorized to compile the relevant technical documentation

This declaration of conformity is issued under the sole responsibility of the manufacturer.
Original Declaration

List of spare parts

When replacing components, carriers, and equipment, etc. these must at least have the same strength / load-bearing capacity as the original ones.

In case a section of these operating instructions does not provide adequate information for a specific underlying machinery or component of the machinery, please refer to the respective section in the user documentation for each machinery.

E.g., for the section "Maintenance", see the corresponding section in the associated user documentation.

Associated user documentation

For technical details and information, see the instruction handbook for the respective underlying equipment or component.

The following existing user documentation is available:

Type:	Description:	File designation:
CO61	Control box	https://www.linak.com/products/control-boxes/co61/
LA40	Actuator	https://www.linak.dk/produkter/lineaere-aktuatorer/la40/
LA23	Actuator	https://www.linak.dk/produkter/lineaere-aktuatorer/la23/
Surface material	Silverguard	https://vyvafabrics.nl/en/collection/silverguard/silverguard
Foam	Lexan Resin HF1130R	https://www.sabic.com/en/products/polymers/polycarbonate-pc/lexan-resin