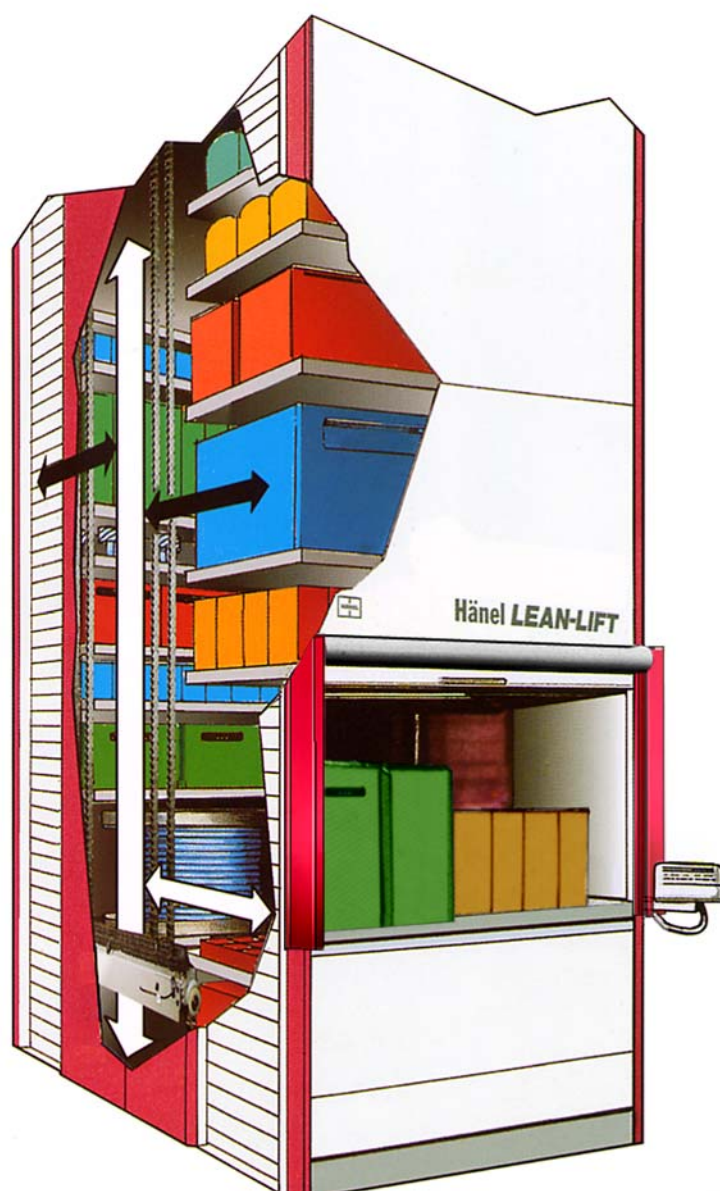




## User Guide for the Lean-Lift





# User Guide for the Lean-Lift

## Contents

Section	Subject	Page
0.	Guide	3
1.	Intended use and safety instructions	5
2.	Safety signs on the lift	9
3.	Operating elements	15
4.	Switching the lift on and off	17
5.	Storing and retrieving articles	21
6.	Maintenance and faults	25
	Keyword index	27



### Tip!

Refer to the following for additional information:

- "User Guide for the Microprocessor Control System MP Lean-Lift"
- "Lean-Lift Operating Manual" and
- The optional Supplementary Descriptions.



# User Guide for the Lean-Lift

## 0. Guide

### Contents

This section contains basic information about this manual.

### Target group of this manual

This manual has been written for instructed and trained operators who use the lift for their day-to-day work in standard operating mode.

### Classification of the signal words and colours used

The signal words and colours used have the following meanings:

#### Signal word and colour

(Warning sign)



- Safety instruction
- Preventive measure

#### Meaning

##### High risk of danger

Safety alert symbol with the keyword "DANGER". High risk, warning of fatal injuries in the event that instructions/requirements are not observed.

White text on red background.

A specific symbol to explain the danger appears in the box to the left.

(Warning sign)



- Safety instruction
- Preventive measure

##### Moderate risk of danger

Safety alert symbol with the keyword "WARNING". Moderate risk, warning of possible severe to fatal injuries in the event that instructions/requirements are not observed.

Black text on orange background.

A specific symbol to explain the danger appears in the box to the left.

(Warning sign)



- Safety instruction
- Preventive measure

##### Low risk of danger

Safety alert symbol with the keyword "CAUTION". Moderate risk, warning of possible minor to moderate injuries in the event that instructions/requirements are not observed.

Black text on yellow background.

A specific symbol to explain the danger appears in the box to the left.

# User Guide for the Lean-Lift

## 0. Guide (continued)

### Symbols

The following symbols are used in this manual. These abbreviations are used:

#### Symbol

#### Meaning



Notes with this symbol warn you of possible severe injuries, possibly including fatal injuries.



This symbol warns you of a hazard to life and health caused by electrical voltage.



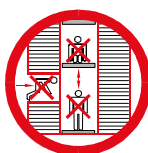
This symbol warns you of a hazard to life and health caused by explosive materials or explosive atmospheres.



This symbol warns you of a hazard to life and health caused by moving machine parts.



This symbol warns you of a hazard to life and health caused by aggressive or corrosive materials.



This symbol informs you that the following are prohibited:

- Entering the lift via the access point.
- Sitting or standing inside the access point or underneath the extractor.
- Riding on the extractor.



#### Tip!

Here you will find important information about the lift, instructions, and tips to make using the lift easier.

# User Guide for the Lean-Lift

## 1. Intended use and safety instructions

### Contents

This section describes which activities can be carried out using the lift and which are prohibited, even if the application seems possible.

### Intended use

Hänel lifts are intended exclusively for storage and warehousing purposes in offices and industrial facilities.

The following points also require compliance:

- The containers are loaded and unloaded via the access opening only.
- For standard lifts, the permitted ambient temperature range is from +5 °C to +40 °C (+41 °F to +104 °F).
- The maximum permitted load carrying capacity of the lift and the containers, which is stamped on the type plate, must not be exceeded. The owner/operator is responsible for ensuring the correct load.
- When performing service or repair work and before entering the inside of the lift, switch off the main switch and secure it from being switched on again using a padlock. Only trained and authorised personnel may enter the lift.
- When the service door is open, the actuator latch for the safety switch must be secured on the service door and the main switch using a padlock.

### Misuse

The following points or activities shall be deemed by us to be prohibited use:

- Installing or operating the unit outdoors.
- Operating the unit without protection from external forces such as loads from wind and snow.
- In earthquake zones outside of Germany, using those lifts that do not have the special construction required or have not been certified by a specialised engineering office from the USA for use in earthquake zones (also refer to the order confirmation and Declaration of Conformity).
- Storing hazardous or explosive materials in solid, liquid or gas form (packaged or unpackaged).
- Operating the lift in an explosive, aggressive or corrosive environment.
- Storing unpackaged foodstuffs in standard lifts. For lifts in which storing packaged foodstuffs is permitted, additional information about cleaning, disinfection and detergent procedures is provided in a supplement to the operating manual.
- Storing articles that exceed the interior height of the containers.

# User Guide for the Lean-Lift

## 1. Intended use and safety instructions (continued)

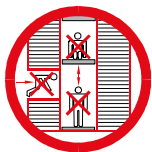
### Misuse (continued)

- Storing transparent articles or articles with a diameter or edge length of less than 5 mm (0.2 in), as these articles are not detected by the article height detection.
- Storing articles that are not packed such that they cannot tip over or that are not protected from tipping over when they are put into storage. These articles can fall out or damage the lift.
- Loading using robots or similar automated systems is not permitted without suitable supplementary equipment coordinated with the manufacturer.
- Operating the unit with modifications that have not been approved by us or failing to comply with the service intervals and regulations.
- Operating the unit from workstations other than those permitted.
- Transporting humans or animals.
- Climbing into the lift through the access opening.
- Use of a lift that is or was exposed to rain, water or non-negligible vibrations.

### Keep in an accessible place as a complete document

- This User Guide is a part of the lift and must be stored in a location that is accessible to the employee at all times.
- Pages may never be removed from this User Guide. If the User Guide or any of its pages are lost or missing, they must be replaced immediately.

**Follow these safety instructions at all times in order to prevent harm to your health from the hazards listed below.**



**DANGER**

Fatal crushing injuries from moving machine parts  
For persons who are inside the lift for service work or to clear fallen articles, there is an acute risk of fatal injury from machine movements.  
Therefore, only trained personnel, following special safety precautions, may enter the lift.

- Never climb inside the lift through the access point, even when the lift is switched off or for cleaning purposes.
- Do not transport persons or animals in the lift.
- Notify plant technicians whenever stored articles have fallen or other faults occur.  
Do not enter the lift under any circumstances.



# User Guide for the Lean-Lift

## 1. Intended use and safety instructions (continued)



### DANGER

#### Electrical hazard

The lift operates at high voltage and correspondingly high amperages.

Even an amperage as low as 44 mA can be fatal.

- Ensure that the openings and other means of access to the electrical supply units remain closed at all times. Operation with open electrical devices is prohibited.
- Beware of damaged electrical leads and connections. Before the unit is put into service, an electrician must first repair any damaged electrical leads and connections.



### DANGER

#### Hazard from explosive materials and atmospheres

The lift is not suited for storing explosive or combustible hazardous materials, or for being operated in an explosive atmosphere; these are all prohibited. Solid materials and aerosols can accumulate in gaps inside the lift.

- Do not store any explosive or combustible materials or materials that can create an explosive atmosphere.
- Before switching on the lift, remove all explosive and combustible materials from the danger zone of the lift.



### WARNING

#### Crushing injuries from moving machine parts

When articles are put into storage or removed from storage, there is a danger of severe crushing injuries from the containers and extractor.

- Do not reach into the lift while it is running.
- Do not remove any locks or warning signs that secure the lift from being switched on. These usually indicate that someone is working inside the lift.



### WARNING

#### Hazard from aggressive and corrosive materials

It is prohibited to store hazardous materials in the lift. Stored hazardous materials can be harmful to the health of the operator and cause property damage to the lift or stored articles.

- Do not store any aggressive, corrosive or otherwise hazardous materials.
- If the lift is flushed with gas, nitrogen is the only gas approved by the manufacturer.

# User Guide for the Lean-Lift

## 1. Intended use and safety instructions (continued)



## CAUTION

Hazard from overload of the lift

The load of the containers and the lift is not monitored automatically. Overloaded containers can cause one-sided loads or overloads of the lift or falling of stored articles.

Excessive differences in the load of a container over its width will cause one-sided loading of the lift and thus lead to damage and/or premature wear.

- After loading a container, check to make sure that the total weight of the stored articles does not exceed the permitted maximum.
- Load all containers uniformly over the container width.
- The owner/operator is responsible for monitoring the correct load.
- Refer to the type plate and load sign for the permitted load per container and for the entire lift.

[illegible]

Maximale Containerbeladung \_\_\_\_\_ kg  
 Zulässige durchschnittliche Containerbeladung  
 von \_\_\_\_\_ kg bei maximal \_\_\_\_\_ Container  
 oder \_\_\_\_\_ kg bei maximal \_\_\_\_\_ Container  
 Maximale Gesamtbeladung \_\_\_\_\_ kg  
 Eintragungsmaterial ist ein abgegebener Ausdruck

# User Guide for the Lean-Lift

## 2. Safety signs on the lift

### Contents

This chapter provides an overview of the safety signs and, where applicable, specifies the location of additional information in the User Guide.

### Safety signs

Signs with instructions for safe use of the lift are attached at various locations of the machines. The signs may vary depending on the lift version (standard/order-specific); refer to the document "SiSchi-LL" in the documentation folder.

Always follow the instructions. Signs that are missing or illegible must be replaced immediately!

### Safety signs on the lift

#### Sign

#### Additional information

#### Sign

#### Additional information



Chapter 1

(Short operating instructions;  
standard;  
07 100 171/1)



Chapter 1, 6

(Safety instructions for standard  
model service door;  
standard;  
07 100 396/1)



Chapter 0, 1, 4, 5, 6

(Climbing into the lift prohibited;  
standard;  
07 100 313)



Chapter 0, 1, 4, 5, 6

(Access prohibited for  
unauthorised persons and  
prohibition sign for access point  
and extractor;  
standard;  
07 100 418)

# User Guide for the Lean-Lift

## 2. Safety signs on the lift (continued)

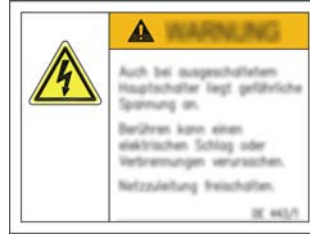
### Sign



### Additional information

See Lean-Lift Operating Manual  
(Voltage at terminal block;  
standard;  
07 100 399)

### Sign



### Additional information

See Lean-Lift Operating Manual  
(Electricity warning arrow for  
mains power line;  
standard;  
07 100 443)



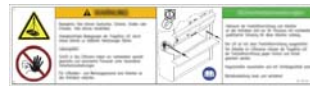
See Lean-Lift Operating Manual  
(Safety instructions for drive;  
standard;  
07 100 260)



See Lean-Lift Operating Manual  
(Electricity warning arrow;  
standard;  
07 100 419)



See Lean-Lift Operating Manual  
(Outside panelling;  
standard;  
07 100 414)



See Lean-Lift Operating Manual  
(Safety instructions for locking  
device;  
standard;  
07 100 441)

# User Guide for the Lean-Lift

## 2. Safety signs on the lift (continued)

### Sign

### Additional information



See Lean-Lift Operating Manual  
(Manufacturer's Declaration;  
order-specific;  
07 100 400)

### Sign

### Additional information



See Lean-Lift Operating Manual  
(Safety instructions for service  
door in special height;  
order-specific;  
07 100 312)



Hänel Lean-Lift Operating  
Manual  
Operating Manual for Remote-  
Controlled Lift Operation  
(Remote-controlled lift  
operation;  
order-specific;  
07 100 397)



See Lean-Lift Operating Manual  
(Weighing device;  
order-specific;  
07 100 402)



See Lean-Lift Operating Manual  
(Safety rope;  
order-specific;  
07 100 421)



See Lean-Lift Operating Manual  
(Interconnected Lean-Lift;  
order-specific;  
07 100 310)

# User Guide for the Lean-Lift

## 2. Safety signs on the lift (continued)

### Sign

### Additional information



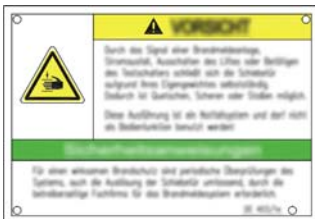
See Lean-Lift Operating Manual  
(Forklift loading  
prohibited/permited;  
order-specific;  
07 100 395)

### Sign

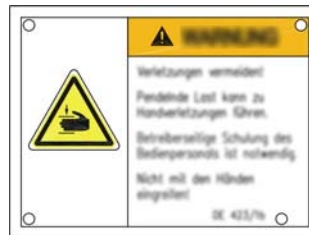
### Additional information



See Lean-Lift Operating Manual  
(Openings in the housing;  
order-specific;  
07 100 411)



See Lean-Lift Operating Manual  
(Automatically closing door;  
order-specific;  
07 100 403)



See Lean-Lift Operating Manual  
(Automatic container ejector  
with side access protection;  
order-specific;  
07 100 423)



See Lean-Lift Operating Manual  
(Antistatic earthing;  
order-specific;  
07 100 401)



See Lean-Lift Operating Manual  
(Automatic container ejector  
with safety slider;  
order-specific;  
07 100 422)

# User Guide for the Lean-Lift

## 2. Safety signs on the lift (continued)

### Sign



### Additional information

See Lean-Lift Operating Manual  
(Safety instructions for wire  
mesh;  
order-specific;  
07 100 372)

### Sign

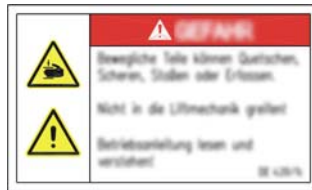


### Additional information

See Lean-Lift Operating Manual  
(Enlarged access point;  
order-specific;  
07 100 417)



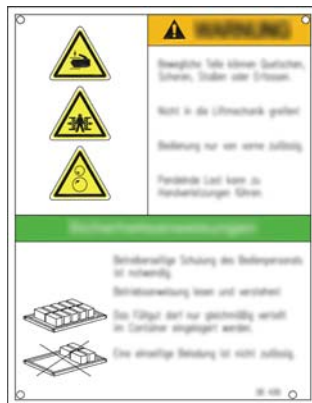
See Lean-Lift Operating Manual  
(Example: Transporter  
operation;  
order-specific;  
07 100 319)



See Lean-Lift Operating Manual  
Automatic container ejector –  
hand injury warning  
order-specific;  
07 100 420)



See Lean-Lift Operating Manual  
(Safety instructions – non-EU  
order-specific  
07 100 427)



See Lean-Lift Operating Manual  
(Automatic container ejector  
2860, 3060, 3260  
order-specific  
07 100 430)



See Lean-Lift Operating Manual  
(Sticker for frequency converter;  
order-specific  
07 100 442)





# User Guide for the Lean-Lift

## 3. Operating elements

### Contents

This chapter provides an overview of the operating elements you need for standard operation.



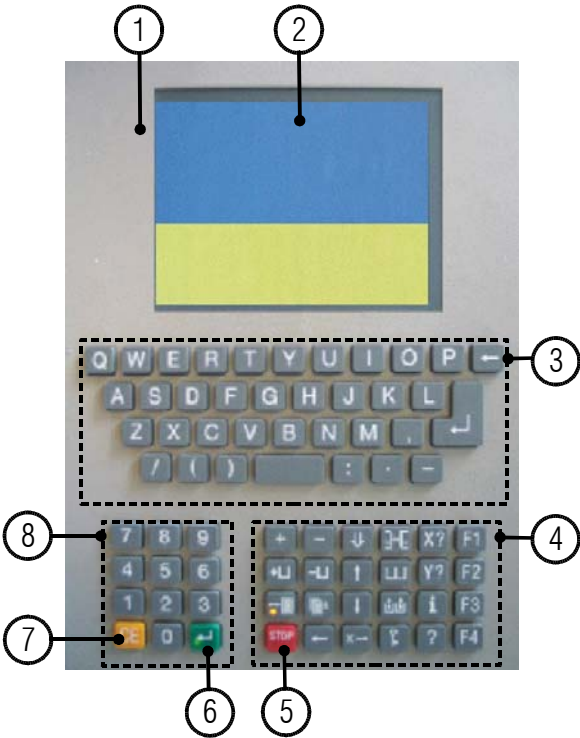
#### Tip!

Refer to the following for additional information:

- "User Guide for the Microprocessor Control System MP Lean-Lift" and
- "Lean-Lift Operating Manual"

### Overview of operating elements

Item	Name and function
1	Main operating panel for controlling all machine functions.
2	Display
	<b>Note:</b> Optionally, a green monochrome display can be installed by request.
3	Main key block for entering characters and letters.
4	Function keys for calling up individual functions and navigating in input fields. You can see which keys have been assigned on the display.
5	"Stop" key for stopping the lift immediately. The integrated red LED signals that the safety system is not set or that an operating fault is pending.
6	"Return" key for confirming entries and setting the safety system. The integrated green LED signals that the safety system is set.
7	"CE" key for clearing entries
8	Number block for selecting a container and entering article numbers, quantity, article names etc.



# User Guide for the Lean-Lift

## 3. Operating elements (continued)

Item	Name and function
9	Safety light curtain with emergency stop function as safety guard
10	Emergency stop button
11	Container for holding the stored articles
12	Main switch with emergency stop function for switching the mains supply on and off 0 = Off I = On

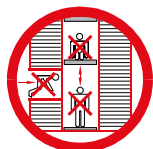


# User Guide for the Lean-Lift

## 4. Switching the lift on and off

### Contents

This section explains how to switch the lift on and off.



#### **DANGER**

- Never climb into the lift through the access point.
- Do not transport persons or animals in the lift.



#### **DANGER**

- Whenever you switch on the lift, first make sure that no one is working in or on the lift.
- Do not switch on the lift if this is prohibited by warning signs or the service door is open.



#### **DANGER**

Before switching on the lift, remove all explosive or combustible materials from the lift and the surrounding area.

### Before you begin

#### Lifts with one or more access points

Unlock the door and, using the handle, open the sliding door of the access point all the way.

# User Guide for the Lean-Lift

## 4. Switching the lift on and off (continued)

### Switching on the lift

Proceed as follows when switching on the lift:

Step	Task
------	------

- |   |   |
|---|---|
| 1 | Switch the main switch to the "I" position. |
|---|---|

**Note:**

For lifts with multiple access points, the main switch is at the first access point.



- |   |  |
|---|--|
| 2 | Wait for the control system to start up. Once the control system has started up, the following appears on the display: |
|---|--|

- The control system type (MP)
- The version No. of the control system
- The "Return" symbol (↵).

- |   |  |
|---|--|
| 3 | Press the green "Return" key to start the safety system self-test. |
|---|--|

Following the test, the red LED in the "Stop" key goes out and the green LED in the "Return" key is illuminated.

The lift is now ready for operation.

**Note:**

- Disengage the "Emergency stop" button if a message appears on the display indicating that this button is locked.
- Acknowledge the interruption via emergency stop by pressing the "Return" key.
- If during operation, you again interrupt the safety light curtain and thus the safety circuit, you have to acknowledge the interruption by pressing the "Return" key.



# User Guide for the Lean-Lift

## 4. Switching the lift on and off (continued)

Step	Task
4	The following prompt is displayed. The lift is now ready for input.

The screenshot shows a web browser window with a yellow background. At the top, there is a blue banner with the text "ENTER ARTICLE NUMBER OR" followed by a list of allowed characters: "0-9/X/Y/Z/i/l". Below the banner, there are three icons of storage lifts labeled 1, 1, and 7. The main content area is divided into two tabs: "Article data" (selected) and "Order recommendation". Under the "Article data" tab, there is a section titled "Match code search in article master data for" with a dropdown menu labeled "Article name". Below this, there is a text input field with the placeholder text "Please enter search term" and a question mark icon. To the right of the input field are two buttons: "Search" and "List settings". On the left side of the interface, there is a vertical menu with buttons for "Article", "Requisition", "Job", "Journal", and a red button with a question mark.

### Switching off the lift

To switch off the lift, all you need to do is move the main switch to the "0" position. If applicable, first end the lift run.

If the lift will not be used any more, close and lock the sliding door at the lock.

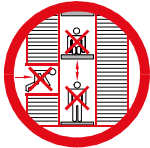


# User Guide for the Lean-Lift

## 5. Storing and retrieving articles

### Contents

This chapter tells you how to select a container and how to store and retrieve articles.



#### DANGER

- Never climb into the lift through the access point.
- Do not transport persons or animals in the lift.



#### WARNING

Do not store any aggressive, corrosive or otherwise hazardous materials in the lift.



#### DANGER

Do not store any explosive or combustible materials in the lift.



#### WARNING

There is a danger of severe crushing injuries on the moving parts. Therefore, do not reach into the moving parts of the lift.

### Before you begin

Before you can store or retrieve articles, you must switch on the lift and start up the control system.

# User Guide for the Lean-Lift

## 5. Storing and retrieving articles (continued)

### Retrieving stored articles:

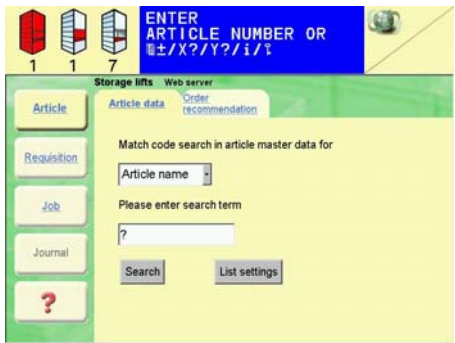
You can retrieve stored articles as follows:

- | Step | Task  |
|------|---|
| 1    | Using the function keys, select the "Get shelf" function by pressing the ↓ key. |

**Note:**  
For other functions, refer to the "User Guide for the Microprocessor Control System MP Lean-Lift".



- |   |  |
|---|--|
| 2 | Enter the number of the desired container on the number block.<br>The number you enter appears on the display. |
|---|--|





# User Guide for the Lean-Lift

## 5. Storing and retrieving articles (continued)

Step Task

- 3 Press the "Return" key to confirm your input.  
This starts the lift and drives the selected container to the access point.



- 4 Wait until the selected container is all the way in the access point. You can now retrieve articles from storage or store new articles.

### Extremely important!

Follow these points when putting articles into storage:

- The stored articles must not protrude over the edge of the container.
- Transparent objects or objects with a diameter or edge length 5 mm (0.2 in) may not be put into storage. These objects are not detected by the article height detection system.



# User Guide for the Lean-Lift

## 5. Storing and retrieving articles (continued)

### Storing articles

You can store articles as follows:

- | Step | Task  |
|------|---|
| 1    | Using the navigation keys, select the "Store shelf" function by pressing the ↓ key. |



- |   |   |
|---|---|
| 2 | Press the "Return" key to confirm your input. This starts the lift and stores the selected container. |
|---|---|

**Note:**

After the container is put into storage, the lift automatically comes to a stop. You can now select another container or switch off the lift.

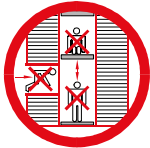


# User Guide for the Lean-Lift

## 6. Maintenance and faults

### Contents

This chapter provides information about regular visual inspections and how to correct faults.



#### **DANGER**

Risk of fatal injury from the moving machine parts of the lift! Therefore, do not under any circumstances:

- Climb into the lift through the access point
- Sit or stand inside the access point or underneath the extractor
- Ride on the container/extractor



#### **WARNING**

- Damage can be safety-related even if it does not appear to be at first glance. Therefore, notify your plant technicians or the Hänel service department whenever you find damage.
- Repairs that are carried out improperly can cause accidents. Therefore, all other faults may be corrected by technicians only.



Before beginning the visual inspections or cleaning tasks, switch off the main switch(es) and secure them from being switched on again using a padlock.

### Regular visual inspections

Each time the machine is started up, and to the extent possible from the outside, visually check the following:

- Whether the service openings are closed properly and not damaged.
- Whether there is any damage to the extractor, containers or housing parts.

If you find damage, notify your plant technicians or the Hänel service department immediately.

# User Guide for the Lean-Lift

## 6. Maintenance and faults (continued)

### Cleaning the lift

For cleaning, always use a soft dry cloth first.

You can wipe away clinging dirt using a damp cloth, along with a pH-neutral cleaner where necessary.

Do not use any basic or acidic substances. In particular, metallic powder finishes are sensitive to this.

If you need to use special cleaners for certain kinds of dirt, first test the cleaner on a hidden location.

### Correcting faults

All faults in the inside of the lift, the control system or the electrical system may be corrected only by specially trained and authorised personnel (e.g. Hänel after-sales service) following special safety instructions.

Never enter the lift through the access point.

**For instructions on workplace safety and eliminating faults, refer to the "Lean-Lift Operating Manual" and the User Guide for the "Microprocessor Control System MP Lean-Lift".**

Once they have been corrected, all faults must be acknowledged by pressing the "Return" key.



#### Tip!

- The standard term "shelf" is used by all microprocessor control systems. For the Lean-Lift, "shelf" corresponds to a container.

# User Guide for the Lean-Lift

## Keyword index

### A

Articles, transparent.....6

### C

CE key.....15

Cleaners.....26

Cleaning.....26

Correcting faults.....26

### E

Emergency stop button.....16

### F

Function keys.....15

### I

Intended use.....5

### M

Main operating panel.....15

Main switch.....16, 18

Maintenance.....25

Misuse.....5

### O

Operating elements.....15

### R

Retrieving stored articles:.....22

### S

Safety instructions.....6

Safety signs.....9

Standard lifts.....5

Stop key.....15

Storing articles.....24

Storing foodstuffs.....5

Switching off the lift.....19

Switching on the lift.....18

Symbols.....4

### T

Target group of the manual.....3

### U

Use, prohibited.....5

### V

Visual inspections, regular.....25