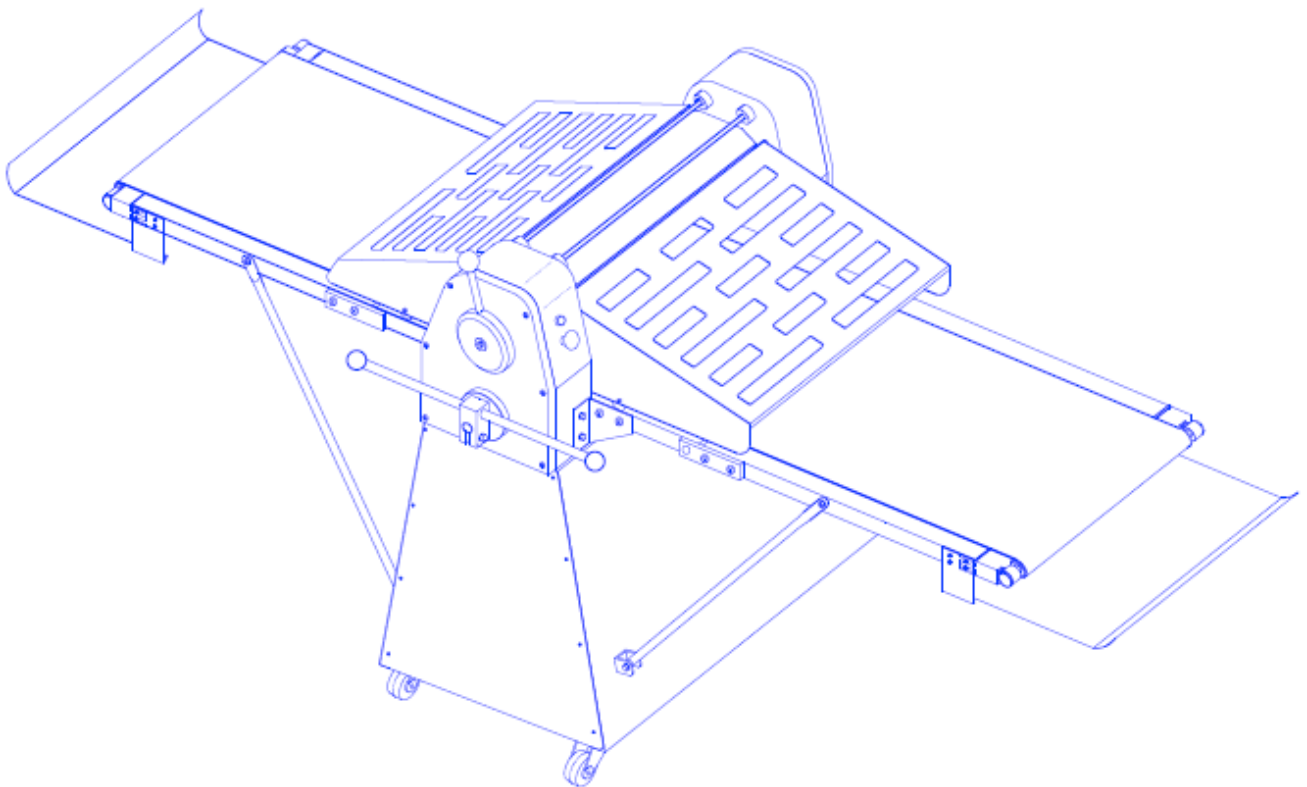


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# Reversible Sheeter Instructions

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**TMK520L**  
(Original instructions)



**GGM gastro international GmbH**

Weinerpark 1648607 Ochtrup German

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# Chapter 1 General information.

## 1.1 Documentation supplied

- Instruction manual (this booklet)
- Spare parts catalogue.

### ***Other documentation***

- Wiring diagrams

## 1.2 This manual

### ***Details about manual***

Instruction manual:

Model:

- Edition:
- Year and month of printing:

### ***Addressees***

- Carrier.
- Installer.
- End user.
- Maintenance engineer.

## 1.3 Information property rights

This manual contains copyright information. All rights are reserved.

No part of this manual can be reproduced or photocopied without the prior written permission of the manufacturer. Permission to use this documentation has only be given to the customer to whom the manual has been supplied as part of the machine's equipment and only for the purpose of installation, operation and maintenance of the machine to which the manual refers.

The manufacturer declares that all the information contained herein is in accordance with the technical and safety specifications of the machine to which the manual refers. The manufacturer will not be held responsible for direct or indirect damage or injury to persons, objects or animals resulting from the use of this documentation or the machine in nonstandard conditions.

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The manufacturer reserves the right to introduce technical modifications or improvements both to the documentation and to the machines without prior notice. Modifications and improvements may also concern other machines of the same model described in this manual, but which have a different serial number.

## 1.4 Conventions

### ***Linguistic conventions***

- On the left, on the right: when speaking of such, we refer to the operator's position when facing the control panel.
- Qualified workers : all those persons who thanks to their training, experience, education as well as their knowledge of standards, regulations, safety precautions and operation conditions, have been authorised by the person in charge of plant safety to carry out any necessary action and are capable of identifying and avoiding possible danger.

### ***Printing conventions***

*Text in italics*: this indicates the title of a chapter, a section, a subsection, a paragraph, a table or a drawing in this manual or other reference document.

PSE : Personal Safety Equipment.

### **NOTE**

Notes contain important information and are highlighted separately from the text to which they refer.

### **BEWARE**

Beware indications describe the procedures the partial or total nonobservance of which can cause damage to the machine or to devices connected to it.

### **DANGER**

Danger indications describe the procedures the partial or total nonobservance of which can injure or harm the operator's health.

## 1.5 Guarantee

### ***General conditions***

1. This machine (with appropriate serial number) is guaranteed for 12 months after the date of actual delivery.

This guarantee is, however, subject to the claim being made by means of registered letter,

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within 8 days after discovery of any faults or defects providing that prior confirmation and acknowledgement is obtained from the manufacturer.

2. The guarantee covers the replacement or repair of the faulty part (component, machine or part of the machine) but does not cover the cost of dismantlement, re-assembly or shipping.

3. The replacement of any part does not bring about the renewal of the guarantee period for the entire machine, unless the entire machine is replaced.

Therefore, in no circumstances shall the manufacturer be liable for compensation of whatever type and the purchaser shall relinquish any claim for damage, loss or expense, even to third parties, arising from machine stoppage.

4. This guarantee does not cover the electrical parts and the parts subject to normal wear and tear or deterioration due to external atmospheric or environmental agents nor does it cover any defects arising from the failure to carry out maintenance or insufficient or incorrect maintenance, nor does it cover use by unqualified personnel, misuse, abuse or improper use, unauthorised alterations or repairs or tampering of any kind.

5. The validity of the guarantee is subject to the performance of correct maintenance as described in *Chapter 6 Maintenance* of the instruction manual supplied with the machine.

6. The guarantee is not valid if payment conditions have not been observed.

7. As far as parts supplied by other manufacturers are concerned, said parts are guaranteed in accordance with the terms of the said manufacturer's warranty.

8. Any controversy shall be governed directly by the court of Competent Jurisdiction.

#### **NOTE**

In the event of repairs performed at the place of machine installation, the machine guarantee certificate must be presented to the service engineer and the guarantee is valid only if fully completed.

Special guarantee conditions will be explicitly stated in the sales contract.

#### **The guarantee will expire in the following cases:**

- Improper machine use (see *Improper use* on part 1.7).
- Use of equipment different from the equipment specified in *Chapter 6 Maintenance*.
- Assembly of the machine in conditions different from those specified in *Chapter 4 Installation*.
- Connections which fail to comply with the specifications given in *Chapter 4 Installation*.
- Use of non-original spare parts or parts not specified by the manufacturer.

#### **Claiming under guarantee**

##### **Method**

Requests for spare parts or service visits under guarantee must be made to the manufacturer or to your authorised dealer as soon as possible after having encountered the defect which is covered by the *General conditions* on part 1.5.

#### **BEWARE**

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We recommend the use of original spare parts.

Always state the type, model and serial number of the machine when requesting spare parts under guarantee. This information can be found on the name plate of the machine.

**NOTE**

Failure to comply with the instructions contained herein will release the manufacturer from any liability in the event of accidents to persons and/or objects, or machine malfunctioning.

***Requests for spare parts***

When requesting spare parts please state the following information:

- Type of machine.
- No. of production order marked on the relevant label.
- Year of manufacture.
- Reference number of the required part which can be found on attachments spare parts given in the spare parts catalogue.

## **1.6 Use of the manual**

Read the following chapters carefully: Chapter 1 General information, Fig. 1.1 Overall view of machine, Chapter 2 Machine Specifications, Chapter 3 Operator Interface.

Consult the relevant chapter before attempting installation, operation, maintenance or dismantlement.

**NOTE** This manual should be kept in good condition for the whole of the life of the machine and should be stored where it can be easily found when required. The manual should be handed over to the purchaser of the machine if this is sold to someone else.

## **1.7 Description of the machine**

### ***Intended use***

#### **Intended operations**

The machine has been built and designed to sheet dough to the thickness required by the operator.

#### **Conditions of intended use**

The machine has been designed and built to operate in a closed environment, protected from atmospheric agents.

#### **Intended use of power**

The machine is driven by electric energy, which is converted into mechanical energy for the intended operations.



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## ***Improper use***

Improper use means any operation not expressly stated in the *Intended use*, in particular:

- Operating the machine in an explosive environment.
- Operating the machine in a flammable environment.
- Washing the machine control area with jets of water.

## ***Machine structure***

This section describes the main machine components and their function within the production cycle.

### **Main machine components**

The machine is composed of the following principal components:

1. Base
2. Control Panel
3. Conveyor Belts
4. Sheeting cylinders
5. Scrapers
6. Handle for selecting pastry thickness
7. Pastry tray

*Fig. 1.1 Overall view of machine*



During the design and construction of this machine the manufacturer has adopted the criteria and devices needed to satisfy the essential safety requirements imposed by the Machinery Directive 2006/42/EC and subsequent amendments, by the Low Voltage Directive 2014/35/EU and subsequent amendments and by the Electromagnetic Compatibility Directive 2014/30/EU and subsequent amendments.

The careful analysis of risks carried out by the manufacturer has eliminated most of the risks (predicted or reasonably predictable) linked to the machine operation conditions.

The complete documentation of safety measures taken is contained in the technical brochure of the machine kept at the manufacturer.

The manufacturer strongly recommends careful observation of the instructions, procedures and recommendations contained herein as well as strict observation of the current safety regulations regarding the work environment. This also applies to the use of both the correct personal safety equipment and machine protection devices.

**DANGER**

Do not wear loose clothing, ties, chains, or watches that could get caught in the moving parts of the machine.

**NOTE**

The manufacturer will not be liable for any damage or injury to persons, animals or things caused by non-observance of the safety rules and/or recommendations given in the documentation supplied.

### 1.8 Qualifications of personnel

Stage in the technical life of the machine	Qualification of operator in charge
Transport	Refer to part 4.3
Installation	Qualified electrician and qualified mechanic informed of : <i>Fig. 1.1 Overall view of machine,</i> <i>Chapter 2 Machine Specifications,</i> <i>Chapter 3 Operator Interface</i> <i>Chapter 4 Installation.</i>
Operation	Trained worker informed of : <i>Fig. 1.1 Overall view of machine,</i> <i>Chapter 2 Machine Specifications,</i> <i>Chapter 3 Operator Interface,</i> <i>Chapter 5 Machine operation.</i>
Maintenance	There are three different types of workers who can carry out interventions on the machine: <b>•Mechanical maintenance engineer:</b> qualified engineer able to operate the machine in normal conditions and with the machine guards open. Able to carry out adjustments, maintenance and repairs on

	<p>mechanical parts. This worker should not be assigned to electrical interventions on live parts.</p> <ul style="list-style-type: none"> <li>• <b>Electrician:</b> qualified engineer able to operate the machine in normal conditions and with the machine guards open. Able to carry out electrical adjustments, maintenance and repairs. This worker can be assigned to electrical interventions on live parts inside the electric control box.</li> <li>• <b>Manufacture's engineer:</b> qualified engineer put at customer's disposal by the manufacturer to carry out complicated repairing in special conditions, according to the agreements taken with the customer.</li> </ul>
Scrapping	<p>Qualified mechanic informed of:  <i>Fig. 1.1 Overall view of machine,  Chapter 7 Machine scrapping.</i></p>

**NOTE**

The manufacturer will not be liable for damage or injury to persons, animals or things resulting from the action of unqualified operators.

## 1.9 Safeguards

**DEFINIZIONE**

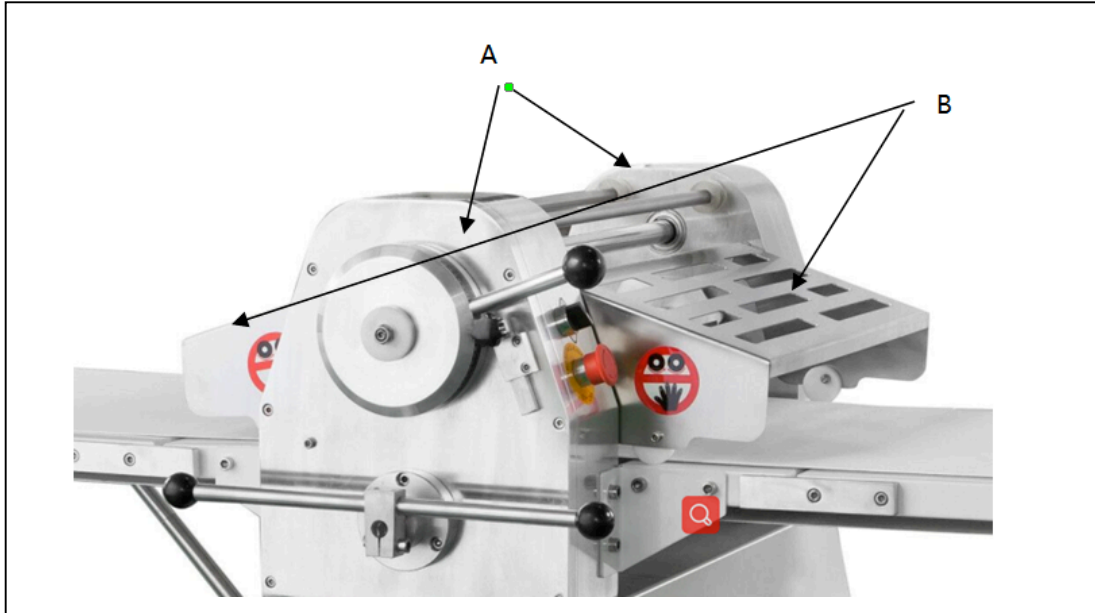
*Safeguards are any safety measures which involve the application of specific technical mechanisms (guards, safety devices) to protect people from dangers which cannot be made sufficiently harmless through design.*

### **Fixed and moveable guards**

- All power transmission components are shielded by screw-fastened guards, in compliance **A**, with the EN 953 standard.
- All moving parts are protected by the metal safety grille **B**.

*Fig. 1.2 Fixed and moveable guards*

*Fig. 1.2 Fixed and moveable guards*



## **Passive safety devices**

### **DEFINIZIONE**

*Passive safety devices are those devices or safeguarding techniques which eliminate or reduce potential hazards for the operator without the operator having to actively intervene.*

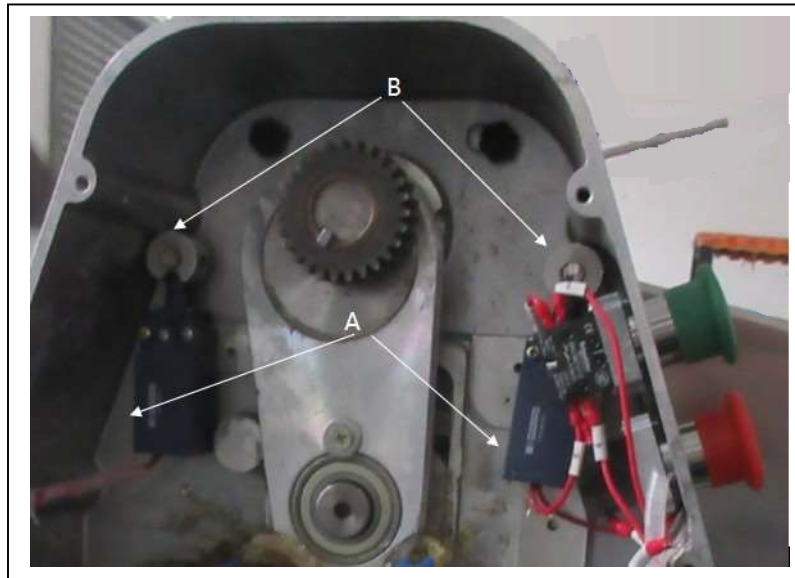
### **Limit switch devices**

The machine is equipped with two limit switch micro switches A (*Fig. 1.3*).

These are energised by means of two cams B which are in turn fixed to the safety grille (*Fig. 1.2 Fixed and moveable guards on part 1.9*).

If the operator raises the protection grille the cams turn and energise the relevant micro switch which controls a Machine Stoppage.

*Fig. 1.3 Micro switch*



## **Active safety devices**

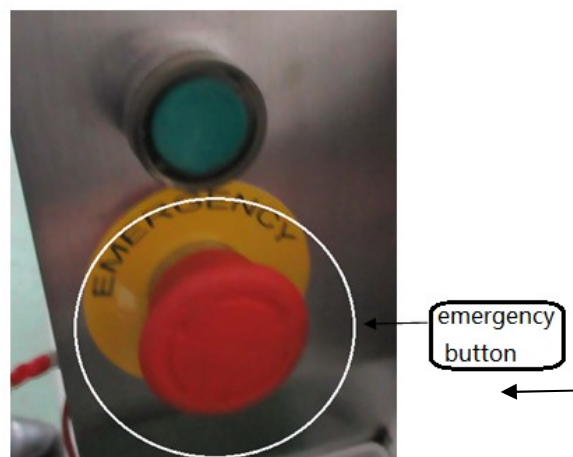
### **DEFINIZIONE**

*Active safety devices are those devices or safeguarding techniques which eliminate or reduce potential hazards and which require active and conscious intervention by the operator in order to activate their accident preventative action.*

### **Emergency stop**

The emergency button is located on the main control panel of the machine and allows the operator to stop the machine in an emergency.

*Fig. 1.4*



## **Safeguarding**

- The electrical equipment offers protection against personal injury caused by electrical discharge due to direct and indirect contact in compliance with the CEI EN 60204-1 standard.
- All the electrical power parts and those with dangerous voltage are contained in the electrical box protected, in compliance with the CEI EN 60204-1 standard. Moreover both

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these lines are protected against short-circuiting and accidental contact to earth.

**DANGER**

Tampering with safety devices creates hazards for the machine operators and other exposed persons.

**NOTE**

The manufacturer will not be liable for injury or damage to people, animals or things caused by tampering with the machine's safety devices.

## 1.10 Hazardous areas and residual risks

**DEFINIZIONE**

*A hazardous area is any area inside or in the vicinity of the machine which would constitute a risk for the health and safety of an exposed person.*

This manual indicates all the procedures during which residual risks for the operator are present. The residual risks can be eliminated by carefully following the procedures indicated in this manual and by using the recommended personal safety equipment.

- 1, Protective gloves must be worn.
- 2, Protective footwear must be worn.

Handling area of the packed or unpacked machine. The following risks are present here:

- Impact hazard for operator.
- Crushing hazard.

*The following PSE must be used by the operator:*

- Protective footwear.
- Protective gloves.

**DANGER**

The manufacturer will not be liable for damage or injury to persons, animals or things resulting from non-compliance with the safety rules or from the recommended PSE not being worn.

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# Chapter 2 Machine Specifications

## 2.1 Technical specifications

Article#	TMK520L
Dimension	2950x880x1170mm
Weight	220kg
Power	0.75kW
Voltage	380V3~/50Hz
Current	2.0A
Short circuit rating	2000A
Belt speed	27m/min
Roller dimension	φ 88x520mm
Conveyor dimension	500x2000mm
Gap between Roller	0.3-35mm
Closed dimension	810x880x1580mm

### Tolerances of the electrical power supply

#### Voltage

Running voltage:  $\pm 10\%$  of rated voltage.

#### Frequency

$\pm 1\%$  of rated frequency in continuous running

$\pm 2\%$  of rated frequency for a short working period.

#### Harmonics

The harmonic distortion, for the sum of harmonics from the second to the fifth, should not exceed 10% of the total voltage with effective value between live conductors. A further distortion of 2% for the sum of the harmonics from

#### Unbalance of the three-phase power supply voltage.

Neither the inverse sequence component, nor the zero sequence component should exceed 2% of the direct sequence component of the voltage.

#### Voltage pulses.

These must not last longer than 1.5 ms with a rise/descent time between 500 ns and 500 ms and a peak value not greater than 200% of the effective value of the rated power supply voltage.

#### Breaks in voltage.

The power supply should not be broken or the voltage must not drop to zero for more than 3ms, regardless of the instant of the supply wave. More than 1 s should elapse between two

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consecutive breaks.

**Voltage drops.**

Voltage drops should not exceed 20% of the peak voltage of the power supply for more than 1 cycle. More than 1 s should elapse between two consecutive voltage drops.

**Liability**

**NOTE**

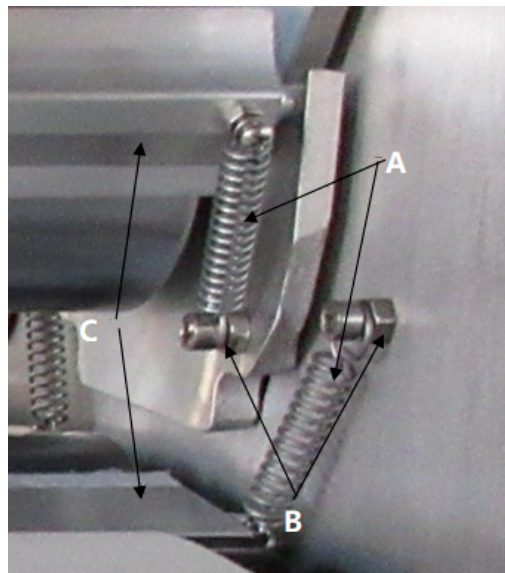
The manufacturer will not be liable for defects, breakdowns or malfunctioning arising from the non-compliance with the power supply values stated.

**Other Technical Details**

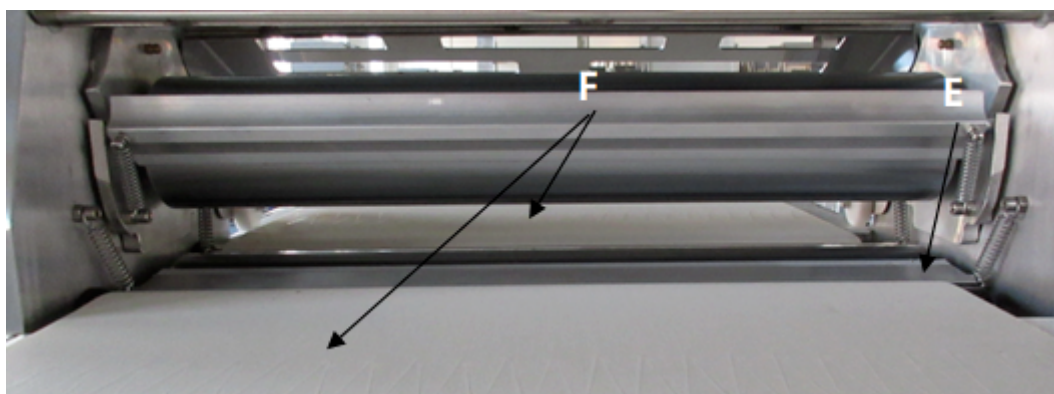
**Scraper.**

How to remove the Scraper:

- remove the spring (A) from the fixing screw (B).
- remove the scraper (C).



The scraper (E) facilitates the movement of the dough from one conveyor belt to the other (F).





# Chapter 3 Operator Interface

## 3.1 Controls

### Controls

Symbol	Description	Functions controlled
1	Red mushroom button on a yellow background	EMERGENCY button. When pressed, this stops the machine completely by cutting off the voltage to the electric circuits.
2	ON /OFF button	When On is pressed power is supplied to the machine's motor.
3	Manually operated handle to alter the direction of the belts.	When pushed it changes the direction of the conveyor belts, and when the handle is restoration, the motor will stop.
4	Handle for dough thickness selection	When turned it increases or reduces the distance between the sheeting cylinders.

Fig. 3.1 Controls



---

# Chapter 4 Installation

## NOTE

When reading this chapter refer to the pictures of the control panels given in *Chapter 3 Operator Interface*.

## 4.1 Hazardous areas and residual risks during installation

Protective gloves must be worn.

Protective footwear must be worn.

Handling area of the packed or unpacked machine. The following risks are present here:

- Impact hazard for operator.
- Crushing hazard.

The following PSE must be used by the operator:

- Protective footwear.
- Protective gloves.

## DANGER

When unloading. Hoisting and handling the machine, personnel must wear the appropriate PSE, such as gloves, boots, helmet and use the appropriate tools.

## 4.2 Qualifications of operator

The installation of the machine should only be carried out by trained, qualified and authorized personnel after having read and understood the information given in this manual.

## 4.3 Transport

The instructions given in this section should be carefully followed when transporting the machine. This operation may include the following situations:

- Storage of the machine.
- Initial installation of the machine.
- Re-location of the machine.

### ***Transport conditions***

The machine and its equipment can be transported in the following ways, according to the customer's requirements:

- **Carton on pallet**
- **Wooden crate**
- **Pallet**
- In each of these cases, before transport or handling, the various accessories must be

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packed and fastened to the machine.

## **NOTE**

Follow standard precautions to avoid collisions and tipping over.

### **Symbols on the machine packing**

The following symbols are shown on the machine packing:

- Handle with care.
- Centre of gravity.
- Hooking point.
- Store in a dry place.
- This side up.
- CE marking.

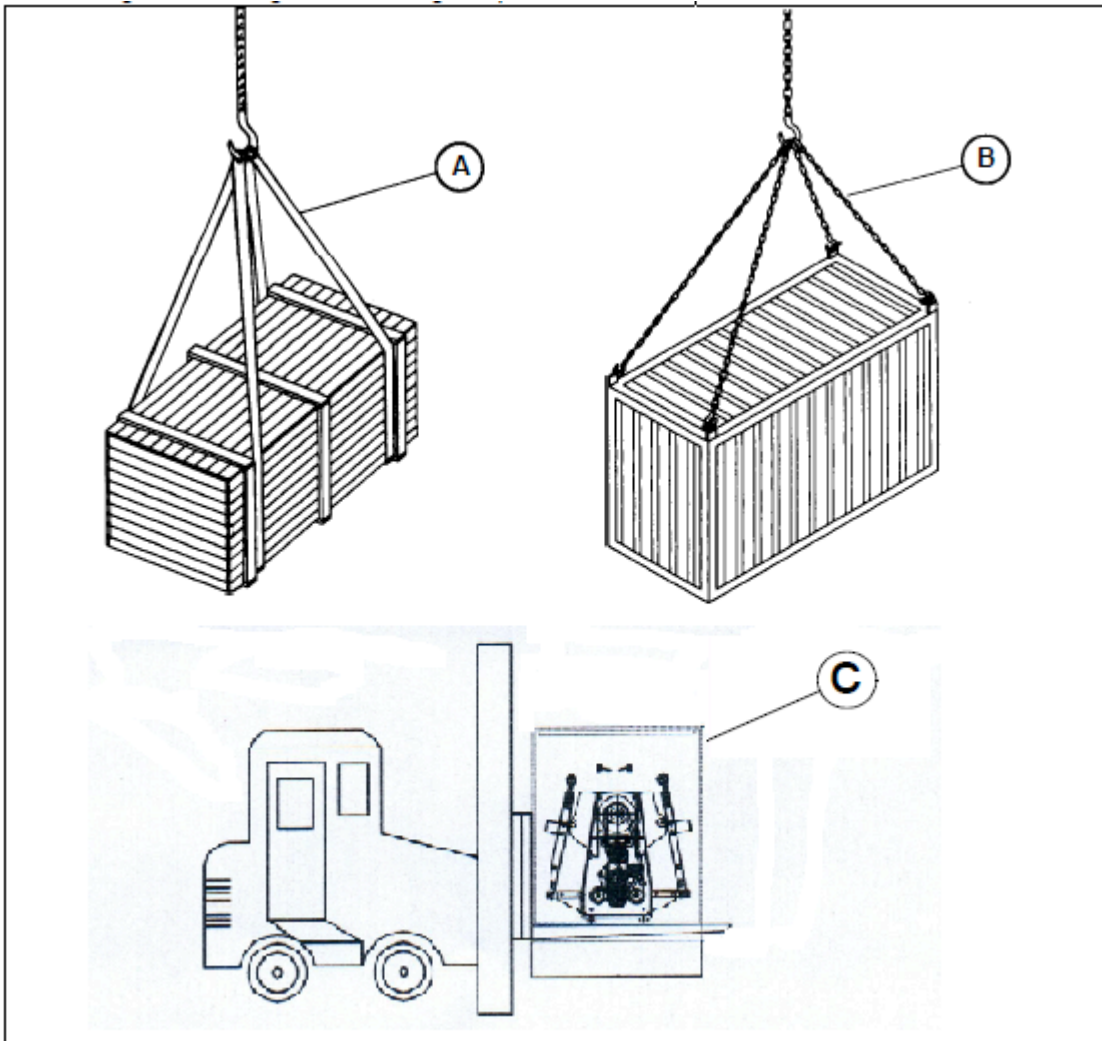
### ***Lifting***

#### **DANGER**

- It is forbidden to climb onto the machine and/or its packing or stop and/or pass under the machine during handling.
- Access to the lifting and handling area is denied to all personnel except those directly involved in the operations.
- All operators should remain at a safe distance in order to avoid being hit by the machine or any of its parts which may accidentally fall.
- Before starting the lifting operations the whole of the machine handling area, including the parking area for the means of transport and the machine installation area, should be identified and inspected in order to detect any potentially hazardous areas.
- Use a bridge crane, a crane or a forklift truck with adequate lifting capacity. The use of inadequate lifting equipment may cause damage to the machine or injury to personnel.

## Lifting and handling the packed machine

Fig. 4.1 Lifting and handling the packed machine



### Wooden crate on the vehicle platform

The crate/container should be unloaded from the vehicle using a forklift truck ○,C or using lifting equipment in the following way:

1. Insert the cables or ropes ○,A under the box pallet and attach them to the hook of the crane/bridge crane. If the machine is packed in a container insert the hooks of the chains ○,B into the appropriate brackets.
2. Lift the box pallet /container just enough to be able to unload it.
3. Position the box pallet /container in the planned position.

### Wooden crate on the ground

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The crate/container should be unloaded from the vehicle using a forklift truck ○,C or using lifting equipment in the following way:

1. Insert the cables or ropes ○,A under the box pallet and attach them to the hook of the crane/bridge crane. If the machine is packed in a container insert the hooks of the chains ○,B into the appropriate brackets.
2. Lift the box pallet/container just enough to be able to handle it.
3. Position the box pallet/container in the planned position for unpacking.

#### **Equipment for hoisting and handling the packed machine**

- The following equipment is required to hoist the machine.
- Crane / bridge crane with adequate lifting capacity.
- Forklift truck with adequate lifting capacity.

#### **BEWARE**

If the machine has been damaged during transport, inform the manufacturer immediately. The manufacturer should also be informed if there are differences between the "Packing list" and the goods actually delivered.

#### **BEWARE**

The machine and its equipment should be protected from external atmospheric agents. In particular water and damp can cause certain machine components to rust, causing irreversible damage.

## **4.4 Preliminary operations**

### ***Check if the machine has been damaged during transport***

Check the condition of the machine taking a close look at the outside and the inside. Any deformation of the visible parts indicates that the machine has been hit by something during transport. This could lead to malfunctioning.

Check the tightening of screws, bolts and fittings.

#### **If damage has occurred:**

Damage caused by transport should be attributed to the carrier and the manufacturer or its agent should be informed immediately of the situation.

### ***Cleaning the machine***

- Remove the dust and dirt deposited on the surface during transport.
- Carefully clean and dry each part (varnished or unvarnished) using soft, clean, dry cloths.

#### **BEWARE**

It is strictly forbidden to climb onto the box pallets and/or to stow them one on top of the

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other.

- Should the box pallets remain outdoors for some time, waiting to be transported inside the building, these box pallets should be covered with adequately-sized waterproof tarpaulins.
- If storage exceeds 3 months the box pallets should be stored inside, sheltered from bad weather and protected from excessively high or low temperatures.
- If the machine is unpacked, it should be covered in order to prevent the build-up of dust and dirt.

## 4.5 Installation

### ***Features of the installation site***

A suitable installation site should be chosen considering the overall dimensions of the machine supplied in *2.1 Technical specifications* on part 2.1 and in compliance with the following rules:

- The power supply source, in compliance with the *Power Supply Details* on part 2.1, should be near the installation site.
- Nothing should hinder the free movement of the operator around the machine. The machine should be situated at least 1 meter from the nearest wall or object.
- Cabinets should be accessible at all times and the doors should open wide without obstacle.
- Make sure there is sufficient space for machine operation and maintenance and also for any other additional equipment.

### **Protection against external atmospheric agents**

The machine should be installed in a covered building, shielded from direct contact with atmospheric agents.

### **Lighting**

Adequate lighting is necessary to carry out both normal operation and servicing of the machine in a safe way. The machine has no built-in lighting system.

A well-lit environment prevents hazards due to areas in shadows.

### ***Acceptable environmental conditions for the installation site:***

- Temperature: from 5° C to 40 °C with the average temperature not exceeding 35°C over a period of 24 hours.
- Relative humidity: from 50% at a temperature of 40°C up to 90 % at a temperature of 20°C.

### **NOTE**

The temperatures limits have been established taking into account the electrical equipment of the machine.

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## 4.6 Preparation for start-up

### **Connections**

#### **Electrical connections**

The machine has only one connection to the mains electricity supply.

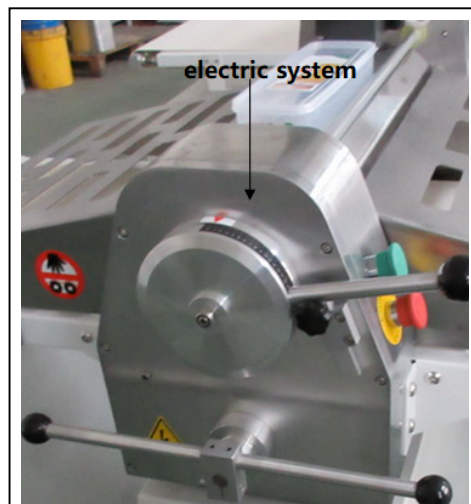
#### **DANGER**

Make sure that the values of your mains electricity supply comply with the power specifications of the machine.

Electrical hazards. Make sure the machine is adequately earthed before making any other connection to the mains power supply.

## 4.7 Electric system

*Fig. 4.2 Electric system position*



## 4.8 Testing

Before delivery the machine is tested at the manufacturer's works where the following operations are carried out:

- General setting of the machine, of the auxiliary equipment and of the installed safety devices.
- Running test to check all the adjustments carried out (correct rotation of motors, tightness of pneumatic systems, effectiveness of safety devices and of limit switches).
- Performance of test cycles under safe conditions.

#### **Checking the safety devices**

---

Before starting the machine, the safety devices should be checked according to the following procedure:

1. Correct operation of the emergency stop button 1 (*Fig. 3.1 Controls* on part 3.1); while the machine is operating, press the emergency buttons: the machine should stop immediately.

**NOTE**

If the machine does not stop immediately, the emergency buttons must be checked and/or replaced.

1. Should a problem arise, when the machine is running, for which no instructions are given in this manual, please contact the Technical After Sales Service.

## Chapter 5 Machine operation

**NOTE**

When reading this chapter refer to the pictures of the control panels given in *Chapter 3 Operator Interface*.

### 5.1 Qualifications of operator

The machine should be operated only by trained, qualified and authorised personnel who have read and understood the information contained in this manual.

### 5.2 Work station

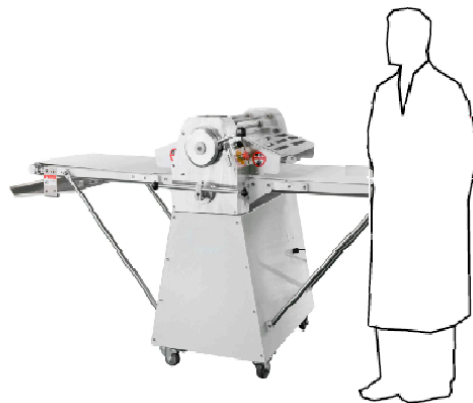
*The below Work station* shows the working positions in which the operator can operate the machine safely.

The control station of the machine is located in front of the control panel. From this position the operator controls all the working parameters.

**NOTE**

While the machine is running, access to the working area of the machine is strictly forbidden.

*Work station*





---

## 5.3 Operating modes

The machine operates in manual mode following the instructions given in 5.6.

## 5.4 Machine switching on

To switch the machine on proceed as follows:

1. Turn the knife-switch situated upstream from the outside power supply cable to position I.

## 5.5 Tooling, adjustments and setting up

### ***Adjustment warnings***

1. All adjustment, checking or cleaning operations must be carried out with the machine at a standstill and the electric control box off. The pneumatic shut-off valve must be closed. Any operation carried out while the wiring system is live can cause serious injuries.
2. Pay special attention to the moving parts of the machine.
3. Take special care when activating the start buttons and only activate these after making sure that persons or things are in no danger.
4. If the guards or safety barriers have been removed, make sure they are correctly reinstalled before using the machine again.
5. Do not rest tools or other objects on the machine, either when operating or off.

## 5.6 Starting

For routine machine operation, proceed as follows:

1. Push the on-off switch 2 one time.
2. Press the handle 3 to one side (*Fig. 3.1 Controls*).

## 5.7 Routine stopping of machine

Stopping procedure:

1. Make sure the work cycle is finished.
2. Reset the handle to the balance position.

## 5.8 Emergency stop

To stop the machine in an emergency, press the EMERGENCY button 1 (*Fig. 3.1 Controls*).

- The machine stops.
- The mushroom-head button will remain blocked.

## 5.9 Starting the machine again after a manual emergency stop

1. Eliminate the cause of the emergency stop.
2. Release the EMERGENCY button 1 (*Fig. 3.1 Controls*).

---

3. The machine is now ready to be used again.

## 5.10 Switching off the machine

To switch the machine off:

1. Put the plug off from the power line directly.

### NOTE

Always clean the machine and the working area at the end of the working cycle.

# Chapter 6 Maintenance

## DANGER

Risk of electric shock and unexpected movements during maintenance.

Isolate the machine from electric and hydraulic power sources.

Dissipate and/or limit residual energy (see *Chapter 5 Machine operation*).

## 6.1 Routine maintenance

Any operation that can be carried out by the user is considered routine maintenance. It includes operations of cleaning, inspection and prevention carried out to ensure safe operation of the machine.

### NOTE

In the event that the machine vibrates, the scrapers must be carefully checked to ensure that they have not become bent at a different angle. In the event that this should happen then the scrapers should be manually bent back to their original shape.

### ***Qualifications of operator***

To carry routine maintenance safely, the user should first read carefully and understand the instructions and recommendations given in this section.

### ***Clean***

## DANGER

Cleaning operations should only be carried out with the machine switched off and disconnected from the electric and hydraulic power supplies.

Regular cleaning of your machine will ensure its good working order. We recommend the following:

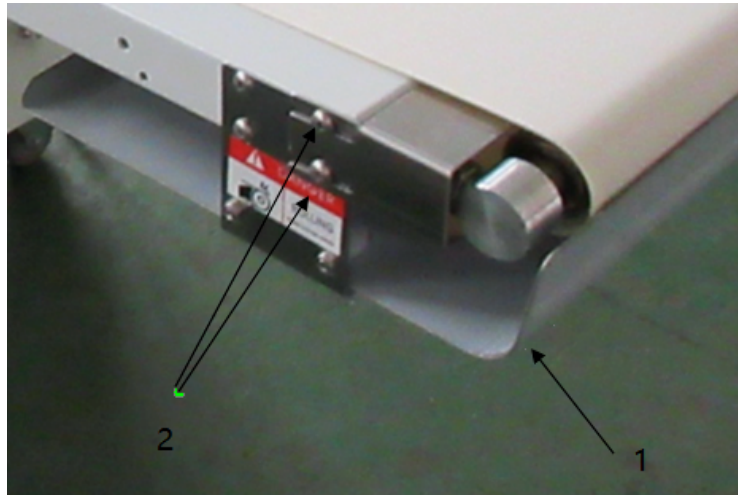
- Clean the machine at the end of each shift.
- The cleaning of the machine keeps the most delicate parts in good working order and helps

to spot any loosening of parts and any abnormal wear and tear.

**NOTE**

The machine is equipped with a drawer, which is situated beneath the conveyor belts and allows any waste material which has been scraped to be collected. This drawer is fixed in place with a knob. By unscrewing the knob it is possible to clean the drawer. (*Fig. 6.1 Drawer for collecting waste.*)

*Fig. 6.1 Drawer for collecting waste.*



**BEWARE**

Do not use jets of water to clean the control panels and the electric control box.

***Suitable cleaning tools and products***

**Cleaning method**

**BEWARE**

Do not use solvents which could damage the paint and the synthetic materials. Avoid especially petrol, nitro-perchlorate thinners and trichloroethane.

**Parts to be cleaned Method and tools**

<b>Parts to be cleaned</b>	<b>Method and tools</b>
Painted steel	Use warm water and food-friendly degreaser. Dry with a clean cloth.
Stainless steel	Clean with water, dry with a clean cloth.
Control panels	Clean with a soft dry cloth.
Electrical parts	Clean using a vacuum cleaner.

---

## Frequency of cleaning

Frequency	Parts to be cleaned
Weekly	Control panels
Monthly	Motors
Monthly	Electrical components
Monthly	Steel structural work parts

## 6.2 Scheduled servicing

Any operation which can only be carried out by authorised personnel is considered scheduled servicing. It includes regular and preventative inspections and machine interventions carried out to ensure safe operation of the machine.

### ***Qualifications of operator***

Scheduled servicing can only be carried out safely by trained and qualified personnel who know how to operate, set-up and service the machine and who have carefully read and understood the instructions and recommendations given in this section.

### ***Regular inspections***

#### **Regular checks and adjustments**

Name of parts to be checked and adjusted	Frequency	Method
Emergency stop button	Every 40 working hours	Check the correct operation

# Chapter 7 Machine scrapping

## 7.1 Qualifications of operator

Qualified mechanic who has read and understood *Fig. 1.1 Overall view of machine* and *Chapter 7 Machine scrapping*.

## 7.2 Disconnecting the machine

At the end of its technical and working life the machine has to be disconnected. Even though de-commissioning has taken place and the machine is no longer suited to the purpose for which it has been designed and built, it must still be possible to re-cycle the raw materials from which the machine was built.

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## **NOTE**

The manufacturer will not be liable for any damage or injury to persons, animals or things caused by the re-use of individual parts of the machine for operations or assemblies other than those for which they were originally designed.

## **7.3 Disconnection procedure**

### **DANGER**

The machine disconnecting and scrapping operations must only be carried out by trained and appropriately equipped personnel.

1. Switch off the machine, as described in part *5.10 Switch off the machine*.
2. Disconnect all the power supplies. The power connections and the instructions for carrying out the operation are the same as described in *Chapter 4 Installation*.
  - a. Electric power supply. Disconnect the power supply cable from the terminal board of the electric control box.
3. Remove the following parts:
  - a. Electrical and electronic components.
  - b. Non-metallic parts and components.
4. If the machine is moved to another location, refer to part *4.3 Transport*.

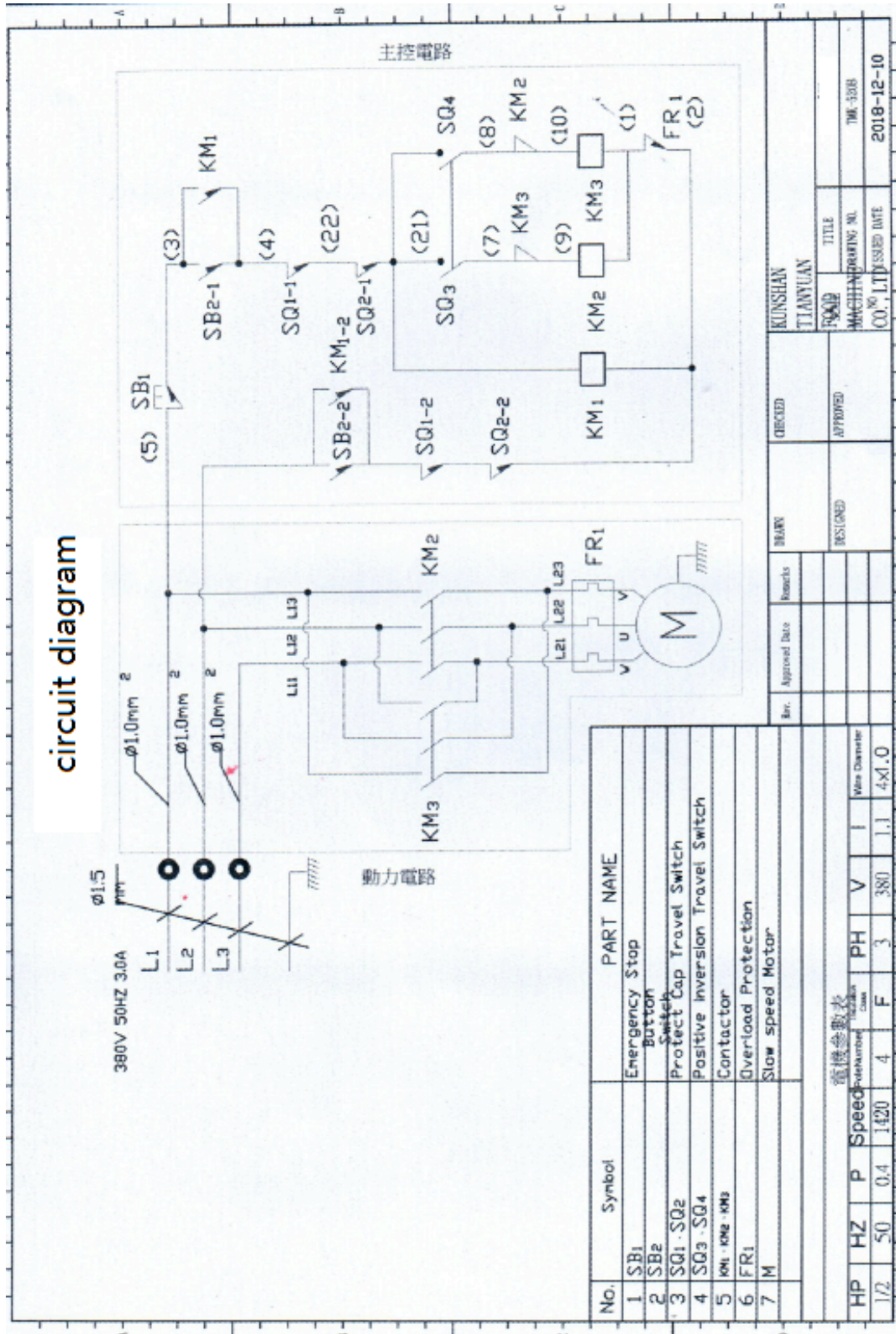
## **7.4 Residual risks after machine disconnection**

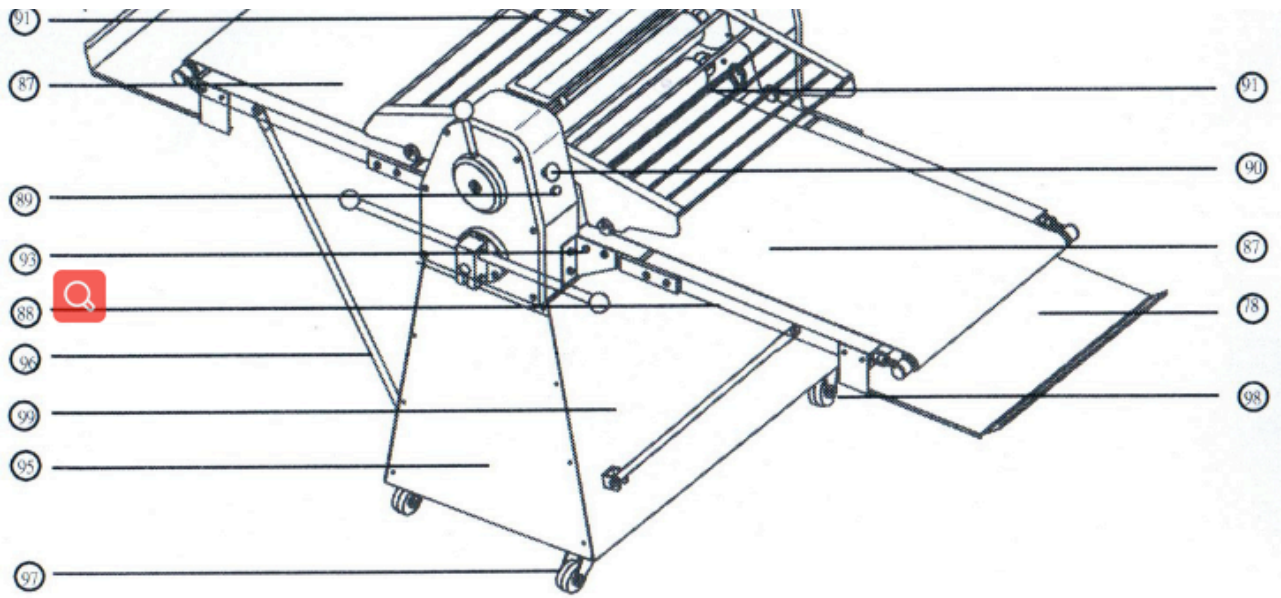
Provided the instructions given in part *7.2 Disconnect the machine*, have been followed carefully, there are no residual risks after the machine has been disconnected.

### **BEWARE**

The materials used for building the machine are non-biodegradable. The machine must therefore be taken to an authorised scrap yard for disposal.

# Chapter 8 Attached documentation





## ■ PARTS LIST

1 THICKNESS HANDLE	26 GEAR 10T	51 CAM HOUSING #2	76 LOCK WASHER
2 SHAFT	27 LOCK WASHER	52 ACTIVE ROLLER	77 SCREW M12
3 SCREW	28 SCREW M10	53 BEARING 30203 ZZ	78 PRODUCT TRAY
4 WASHER	29 LOCK WASHER	54 BEARING HOLDER	79 SCREW
5 LOCK WASHER	30 BEARING 6205 ZZ	55 LOCK WASHER	80 SCREW
6 ADJUSTER #1	31 NUT M10	56 GEAR 20T	81 SCREW
7 HOLD PLATE	32 GEAR HOUSING	57 CASING	82 HOUSING
8 ADJUSTER #2	33 GEAR 24T	58 GEAR 18T	83 GEAR
9 BALLS	34 TABLE HOLDER	59 GEAR 18*2T	84 BEARING 6202 ZZ
10 SPRING	35 FLOUR RECEIVING DISH	60 CASING	85 LOCK WASHER R35
11 ADJUSTER #3	36 FLOUR TRAY	61 HOLDER	86 LOCK WASHER S15
12 CASING	37 SHAFT	62 LOCKWASHER	87 CONVEYOR
13 BEARING 6205 ZZ	38 SHAFT	63 NUT	88 SHAFT (HANDLE)
14 PIN	39 GEAR 15T	64 TOP SCRAPER	89 POWER SWITCH
15 GEAR 15T	40 UPPER PRESS HOLDER	65 BOTTOM SCRAPER	90 STOP SWITCH
16 GEAR 21T	41 ROLLER	66 HOLDER	91 SAFETY GUARD
17 CAM HOUSING #1	42 LOWER PRESS ROLLER	67 SPRING	92 HOLDER
18 CAM	43 BEARING 6206 ZZ	68 SPRING	93 PLATE
19 SCREW M8	44 PIN	69 TABLE	94 FOOT SWITCH
20 WASHER	45 PIN	70 PLATE	95 COVER
21 GEAR 15T	46 BEARING 6004 ZZ	71 UPPER	96 SUPPORT
22 GEAR 27T	47 SHAFT	72 NUT	97 WHEEL
23 BEARING 51108 ZZ	48 HOLDER	73 TABLE SUPPOR	98 WHEEL
24 HOLDER	49 BEARING 6203 ZZ	74 ROLLER COMPLE	99 BASE
25 SHAFT	50 HOLDER	75 SHAFT	100



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## **Chapter 9** EC declaration of conformity

### **9.1 EC declaration of conformity**

*See Enclosure 1 EC declaration of conformity.*