

# MANUAL SHEETER | SB/ ST/ SF SERIES

## USE AND MAINTENANCE MANUAL

### TABLE OF CONTENTS

<b>CHAPTER 1</b>	GENERAL INFORMATION .....	27
<b>CHAPTER 2</b>	INSTALLATION AND COMMISSIONING.....	32
<b>CHAPTER 3</b>	CONTROL AND SAFETY DEVICES.....	34
<b>CHAPTER 4</b>	USE .....	36
<b>CHAPTER 5</b>	MAINTENANCE .....	45
<b>CHAPTER 6</b>	DEMOLITION OF THE MACHINE.....	46
<b>CHAPTER 7</b>	AFTER SALES SERVICE .....	46

### Preface

This manual is directed towards those who install, operate and maintain the mixers so that they can take advantage of the characteristics of the product in the best way. It is important that this manual is kept and remains with the machine if it is moved or if ownership changes so that it can be consulted under all circumstances and therefore the necessary information is available to operate it within safe conditions.

The manufacturer does not take upon themselves the obligation to give notice of possible successive modifications of the product. Furthermore, under the terms of law, this document remains the property of the manufacturer, and tampering, reproduction or transmission to a third party are prohibited without their consent.

In order to highlight certain parts of the text, the following symbols have been used:

**⚠ ATTENTION:** indicates situations of danger in which it is necessary to pay particular attention.

**i INFORMATION:** refers to technical details of particular importance.

# CHAPTER 1 | GENERAL INFORMATION

---

## 1.1 Warranty

The warranty period is two years and begins on the date of the invoice or tax receipt issued at the time of purchase. Within that period replacements and repairs of items, that for well established and unambiguous reasons are defective in manufacture, will be free of charge and only ex our facility, except for electrical components and those subject to wear.

Shipping and labour costs are not included in the warranty.

The warranty expires in cases where it is established that the damage was caused by: transport, improper or inadequate maintenance, operator inexperience, tampering, repairs carried out by unauthorised personnel, non-compliance with the requirements of the manual. Any recourse against the manufacturer is excluded for direct or indirect damages resulting from the period of time that the machine remains inactive due to: failure, wait for repairs, or however relating to the non-physical presence of the equipment.

## 1.2 Machine features

The manual sheeters are designed and built for exclusive use in foodstuffs for the reduction of puff pastry to the thickness desired to use in the pastry industry.

Manual sheeters consist of:

- Basic structure stove-enamelled with epoxy powders, mounted on wheels for easy movement
- A dashboard for operation, a lever for the selection of the rolling direction, for speed adjustment (optional) and machine shutdown
- A pair of dough rolling rollers
- A pair of conveyor belts of the product to be rolled
- Two pairs of scrapers to clean the rollers
- A handle to select the rolling thickness
- A flour tray
- Closing case for the transmission bodies in thermo-moulded ABS
- Two pastry containers

## 1.3 Technical specifications

Model	Cylinder length	Cylinder diameter	Table length	Belt speed	Volt	Power	Weight
SB500-50	mm 500	mm 60	mm 500	1	400/50/3	kw 0,55	kg 150
SB500-70	mm 500	mm 60	mm 700	1	400/50/3	kw 0,55	kg 160
SB500-100	mm 500	mm 60	mm 1000	1	400/50/3	kw 0,55	kg 170
SB500-120	mm 500	mm 60	mm 1200	1	400/50/3	kw 0,55	kg 180
SB500P-50	mm 500	mm 60	mm 500	Variable	230/50/1	kw 0,55	kg 150
SB500P-70	mm 500	mm 60	mm 700	Variable	230/50/1	kw 0,55	kg 160
SB500P-100	mm 500	mm 60	mm 1000	Variable	230/50/1	kw 0,55	kg 170
SB500P-120	mm 500	mm 60	mm 1200	Variable	230/50/1	kw 0,55	kg 180
ST500-50	mm 500	mm 60	mm 500	1	400/50/3	kw 0,55	kg 180
ST500-70	mm 500	mm 60	mm 700	1	400/50/3	kw 0,55	kg 190
ST500-100	mm 500	mm 60	mm 1000	1	400/50/3	kw 0,55	kg 200
ST500-120	mm 500	mm 60	mm 1200	1	400/50/3	kw 0,55	kg 210
ST500P-50	mm 500	mm 60	mm 500	Variable	400/50/3	kw 0,55	kg 180
ST500P-70	mm 500	mm 60	mm 700	Variable	400/50/3	kw 0,55	kg 190
ST500P-100	mm 500	mm 60	mm 1000	Variable	230/50/1	kw 0,55	kg 200
ST500P-120	mm 500	mm 60	mm 1200	Variable	400/50/3	kw 0,55	kg 210
SF600-85	mm 600	mm 80	mm 850	1	400/50/3	kw 0,75	kg 250
SF600-100	mm 600	mm 80	mm 1000	1	400/50/3	kw 0,75	kg 250
SF600-120	mm 600	mm 80	mm 1200	1	400/50/3	kw 0,75	kg 260
SF600-140	mm 600	mm 80	mm 1400	1	400/50/3	kw 0,75	kg 270
SF600P-85	mm 600	mm 80	mm 850	Variable	400/50/3	kw 0,75	kg 250
SF600P-100	mm 600	mm 80	mm 1000	Variable	400/50/3	kw 0,75	kg 250
SF600P-120	mm 600	mm 80	mm 1200	Variable	230/50/1	kw 0,75	kg 260
SF600P-140	mm 600	mm 80	mm 1400	Variable	400/50/3	kw 0,75	kg 270

Model	Dimensions mm						
	A	B	C	D	E	F	G
SB500-50	500	500	1120	-	380	700	920
SB500-70	500	700	1520	-	380	700	920
SB500-100	500	1100	2370	2700	380	700	920
SB500-120	500	1300	2770	3100	380	700	920
ST500-50	500	500	1120	-	580	1380	920
ST500-70	500	700	1520	-	580	1380	920
ST500-100	500	1100	2370	2700	580	1380	920
ST500-120	500	1300	2770	3100	580	1380	920
SF600-85	600	966	2070	2585	620	1163	1055
SF600-100	600	1116	2370	2885	620	1163	1055
SF600-120	600	1316	2770	3285	620	1163	1055
SF600-140	600	1516	3170	3685	620	1163	1055

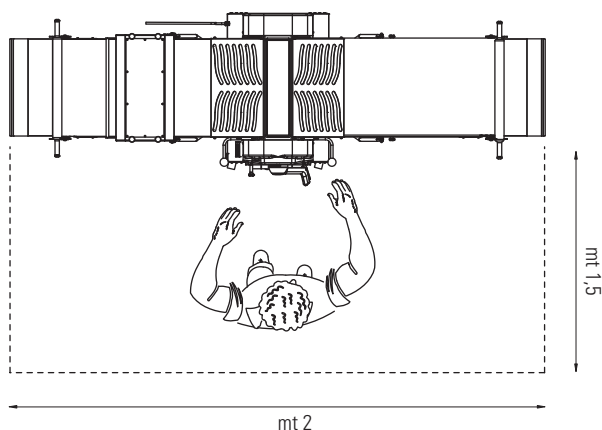
## 1.4 Electrical diagrams

For electrical diagrams refer to page 135-138.

## 1.5 Area occupied by the operator

Under normal operating conditions and for optimal use of the machine's capacities, the operator requires the area outlined in FIG. 1.

FIG. 1



## 1.6 General safety warnings

The machine, whilst conforming with safety requirements according to electrical, mechanical and sanitary laws, can constitute a danger:

- If used for purposes and in conditions different from the ones foreseen by the manufacturer.
- Due to tampering of its protections and safety devices
- Failure to comply with the instructions for the installation, operation, usage and maintenance.

### **i** INFORMATION

**All installation and maintenance operations must be carried out by qualified personnel who are authorised by the manufacturer. The manufacturer declines any responsibility arising from erroneous installation or tampering.**

## 1.7 Safety warnings

### INFORMATION

Read these instructions carefully before using the machine.

### ATTENTION

In order to prevent dangerous conditions and/or possible injuries caused by electrical currents, mechanical parts, fire or of a sanitary nature, the following safety warnings must be observed:

- A) Keep the place of work tidy. Untidiness can contribute to danger or accidents.
  - B) Evaluate environmental conditions. Do not operate the machine in a damp, wet or insufficiently lit environment or in the vicinity of flammable liquids or gasses.
  - C) Keep children and unauthorised personnel away. Do not allow them to come near to the machine or the place of work.
  - D) Operate the machine within its power rating for its permitted usage. It will operate better and in a safer fashion if not overloaded.
  - E) Dress in a suitable manner. Do not wear loose fitting clothes or dangling accessories that could get caught in the moving parts. Use anti-slip footwear. For sanitary as well as safety reasons, cover long hair with a suitable net and wear gloves.
  - F) Protect the power cable. Do not tug the cable to disconnect the supply plug. Do not expose the cable to elevated temperatures, sharp corners, water or solvents.
  - G) Avoid unstable positions. Find the most suitable position that always ensures equilibrium.
  - H) Always pay maximum attention. Observe your own work. Do not operate the machine when distracted.
  - I) Disconnect the power supply at the end of operation, before cleaning and maintenance operations, and before moving the machine.
  - L) Extension leads must not be used in the open air.
  - M) Check that the machine is not damaged. Before operating the machine, carefully check the efficiency of the safety devices. Check that the moving parts are not blocked, that there are no damaged components, that all of the parts are correctly fitted, and that all conditions that could influence the regular operation of the machine are optimal.
  - N) The machine should be repaired by qualified personnel. The repair operations must be carried out exclusively by qualified people using original replacement parts only.
- Failure to observe these precautions can constitute an element of danger for the operator.

## CHAPTER 2 | INSTALLATION AND COMMISSIONING

### 2.1 Duties which are the responsibility of the user

The environmental conditions in the place where the machine is installed must have the following characteristics:

- Must be without humidity
- Must have sources of water and heat at an adequate distant
- Must have suitable ventilation and lighting which reflect the sanitary and safety regulations according to the current legislation. The floor must be flat and compact in order to favour adequate cleaning. Obstacles of any nature which could effect normal ventilation must not be placed in the immediate vicinity of the machine.

#### INFORMATION

**The electrical supply must be fitted with a differential circuit breaker, with characteristics which are adequate for the machine, in which the aperture distance between the contacts is at least 3mm. In particular, it is essential that an efficient ground point is provided.**

#### ATTENTION

**Verify that the voltage supply and the frequency of the plant are compatible with the values listed both in the technical details (1.3) and on the plate located on the back of the machine.**

### 2.2 Installation procedure

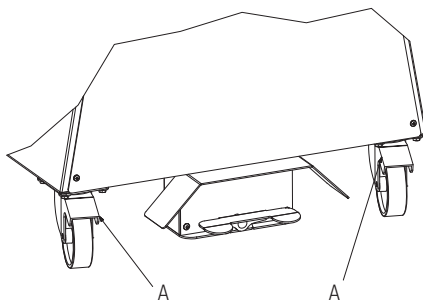
#### SF/ST SERIES

The SF/ST series machines are supplied on wooden pallets on which they are secured with metal brackets. In addition to the machine, the packaging contains the instructions for use and the EC declaration of conformity according to the machinery directive. The machine must be unloaded from the transport means by lifting it with the proper equipment.

Use a wheeled cart with proper capacity to transport the machine to the place of installation. After removing the packaging and the plastic protection, unscrew the two metal brackets that secure the machine to the pallet with a special wrench. With the aid of appropriate capacity belts placed under the base of the machine and a suitable lifting means (manual or powered), lift the machine, remove the underlying pallet, place it in the location foreseen, taking care to leave a free space of approximately 50 cm around the machine in order to facilitate use,

cleaning and maintenance operations of the machine. For machines equipped with wheels, make sure they have been braked by pressing down until lever A is locked (FIG. 2).

**FIG. 2**



## **SB SERIES**

SB series machines are supplied in cardboard boxes on wooden pallets. After removing the packaging and the plastic protection, with the aid of appropriate capacity belts placed under the base of the machine and a suitable lifting means (manual or powered), lift the machine, remove the underlying pallet, place it in the foreseen location, taking care to leave a free space of approximately 50 cm around the machine in order to facilitate use, cleaning and maintenance operations of the machine.

**Note: All items relating to the packaging must be disposed of according to the laws in force.**

## **2.3 Electrical connection**

The Y-type connection of the machine to the power supply is made using a mains cable that comes with a plug in single-phase version only. For three-phase power supply machines, it is essential to fit a normalised and polarised plug at the end of the cable (the distinction between phase and neutral must be clear), and verify the correct direction of movement of the conveyors.

## **2.4 Positioning of the machine**

The mains socket should be easily accessible and must not require any displacement. The distance between the machine and the socket must be such as not to cause tension of the power supply cable. Furthermore, the said cable should not be below the support feet of the machine.

## CHAPTER 3 | CONTROL AND SAFETY DEVICES

The machines are fitted with the following operation and safety devices: (FIG. 3-4):

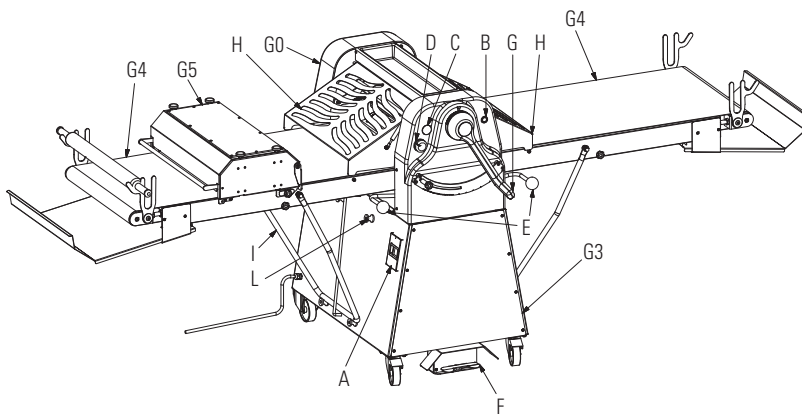
### OPERATION DEVICES

- A - MAIN CIRCUIT BREAKER
- B - START BUTTON
- C - STOP BUTTON
- D - CONVEYOR SPEED ADJUSTMENT (OPTIONAL) "P" VERSIONS
- E - CONVEYOR REVERSE MANUAL CONTROL LEVER
- F - CONVEYOR REVERSE MANUAL CONTROL PEDAL
- G - DOUGH THICKNESS ADJUSTMENT LEVER
- G0 - MECHANICS UNIT
- G3 - BASE
- G4 - CONVEYOR BELT ARM
- G5 - CUTTING UNIT

### SAFETY DEVICES

- H - ROLLING ROLLERS PROTECTION

**FIG. 3**





## CHAPTER 4 | USE

Before starting each work cycle make sure that the machine is perfectly clean, particularly the conveyors and rolling cylinders that should be treated with detergents compatible with foodstuffs. If necessary, clean in accordance with the methods in 5.1.

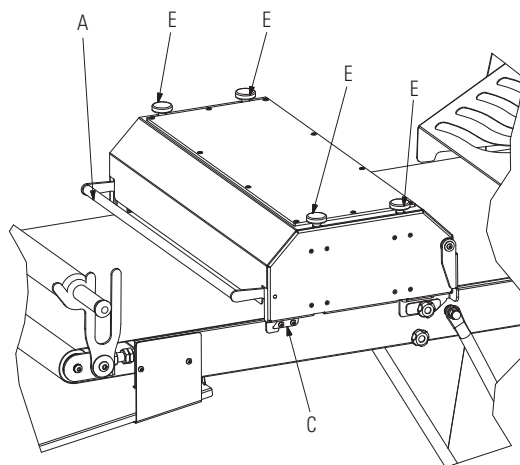
### COMMISSIONING AND USE OF THE MACHINE

1. TURN THE MAIN SWITCH "A" ON 1
2. OPEN THE DOUGH THICKNESS ADJUSTMENT LEVER "G"
3. PRESS START BUTTON "B"
4. OPERATE LEVER "E" OR PEDAL "F" AND START ROLLING
5. REVERSE THE DIRECTION OF THE CONVEYORS AT EACH STEP, SELECTING THE THICKNESS BY MEANS OF LEVER "G" ACCORDING TO NEEDS
6. ADJUST THE SPEED OF THE CONVEYORS USING KNOB "D" IN MACHINES EQUIPPED WITH VARIABLE SPEED CONTROL (OPTIONAL)
7. IN CASE OF OPENING OF THE PROTECTION GRID "H" THE MACHINE STOPS. TO RESTART, CLOSE THE GRID AND PRESS START BUTTON "B" AGAIN
8. TO STOP THE MACHINE POSITION LEVER "E" AT THE CENTRE OR REMOVE YOUR FOOT FROM PEDAL "F".
9. FOR EMERGENCY STOP, PRESS THE EMERGENCY STOP BUTTON "D"

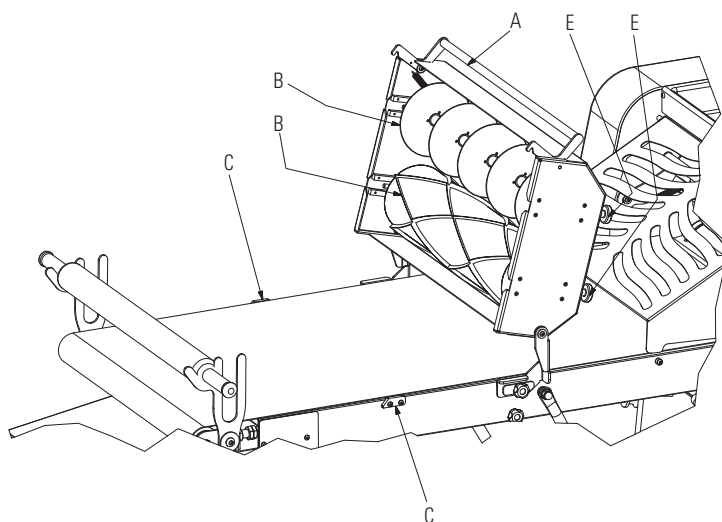
### USING THE CUTTING UNIT (FIG.5-6)

1. ASSEMBLE THE CUTTING UNIT ON THE LEFT SIDE OF THE MACHINE USING THE SCREWS PROVIDED.
2. USE LEVER "A" TO LIFT THE CUTTING UNIT
3. FIT THE DESIRED CUTTING TOOLS "B"
4. LOWER THE CUTTING UNIT ON THE CONVEYOR UNTIL THE SAME LOCKS IN THE SPECIAL HOOKS "C"
5. START MACHINE OPERATION, ADJUST THE DESIRED SPEED USING KNOB "D" IN FIGURES 3/4, ADJUST THE PRESSURE OF THE TOOLS USING KNOBS "E" UNTIL A PERFECT PASTRY CUT IS OBTAINED

**FIG. 5**

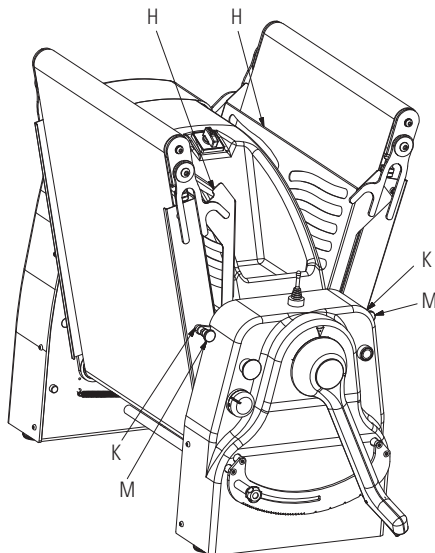


**FIG. 6**



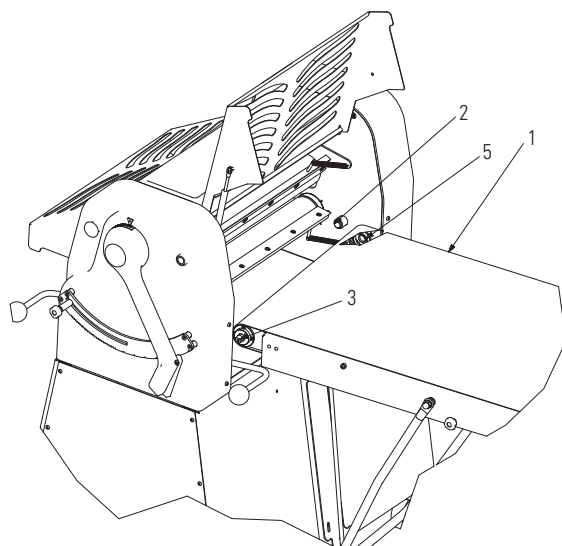
**SB SERIES (FIG. 9)**

Before lifting the conveyors allow the pasta collection slides "S" (if provided) on the left and right of the tops to recess, raise the roller protections "H". Raise one top at a time; make sure that the fastening knob "M" does not engage in hole "K" placed on the side of the conveyor top. To lower the tops perform the operation in reverse order.

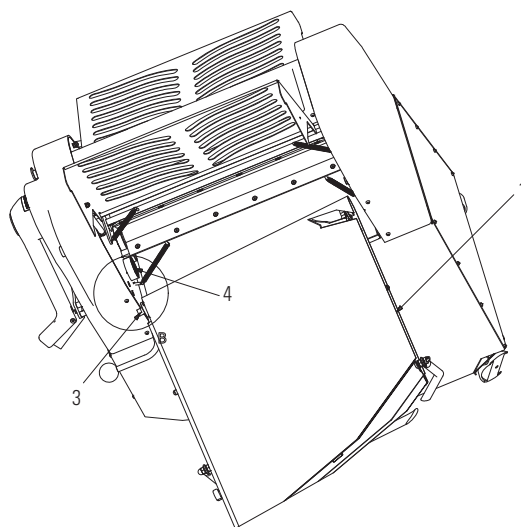
**FIG. 9****ASSEMBLY/DISASSEMBLY OF THE CONVEYORS - SF SERIES (FIG. 10-11)**

- 1 . FETCH THE ARM SHOWN IN POS. 1 OF FIGURE 11 AND DRAW THE SUPPORT INDICATED NEAR TO POSITION 5 AT POSITION 2 OF THE ELASTIC ELEMENT , WITH A SLIGHT TILT, AS SHOWN IN FIGURE 1
- 2 . PUSH THE ARM FORCEFULLY AGAINST THE ELEMENT INDICATED IN POSITION 2 OF FIGURE 1, UNTIL THE ELASTIC ITEM HAS RETURNED IN ITS HOUSING.
- 3 . INSERT THE ROLLER DRAGGING DEVICE POSITION 3 OF FIGURE 2 AND 3 IN THE RELEVANT SUPPORT POSITION 4.

**FIG. 10**



**FIG. 11**



## DOUGH SCRAPER ASSEMBLY/DISASSEMBLY

### SF SERIES (FIG. 12-13)

#### A) DOUGH SCRAPER UPPER ROLLER

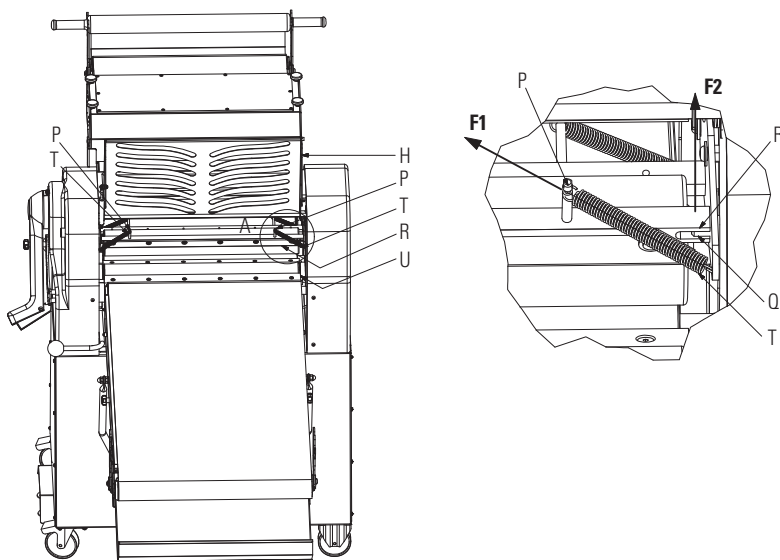
#### DISASSEMBLY

1. LIFT THE ROLLER PROTECTION FIG. 12 POSITION H.
2. GRASP THE SPRING POSITION T AND PULLING IT IN THE F1 DIRECTION, FIG. 12 UNHOOK IT FROM PEG POSITION P.
3. GRASP THE DOUGH SCRAPER POSITION R AND MOVE IT IN THE F2 DIRECTION FIG. 12, UNTIL RELEASING IT FROM PEG POSITION Q.
4. LASTLY, REMOVE THE SCRAPER.

#### ASSEMBLY

Repeat the disassembly procedure in reverse order.

FIG. 12



## B) DOUGH SCRAPER BOTTOM ROLLER

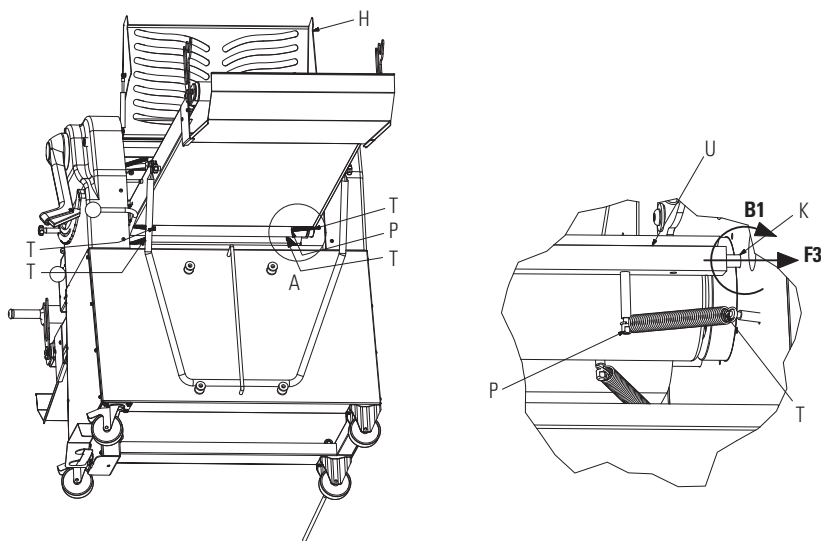
## DISASSEMBLY

1. REMOVE THE SPRINGS POSITION T FIG. 13 AS DESCRIBED IN PARAGRAPH 2 FOR THE UPPER ROLLER.
2. LIFT THE ROLLER PROTECTION FIG. 13 POSITION H.
3. GRASP THE SCRAPER POSITION U, FIG. 13 AND MOVE IT IN THE F3 DIRECTION UNTIL THE ROTATION OF THE SCRAPER IS ACHIEVED, IN THE B1 DIRECTION, IN THE HOLE POSITION K.
4. PULL THE SCRAPER OUT IN THE OPPOSITE DIRECTION TO F3.

## ASSEMBLY

Repeat the disassembly procedure in reverse order.

FIG. 13

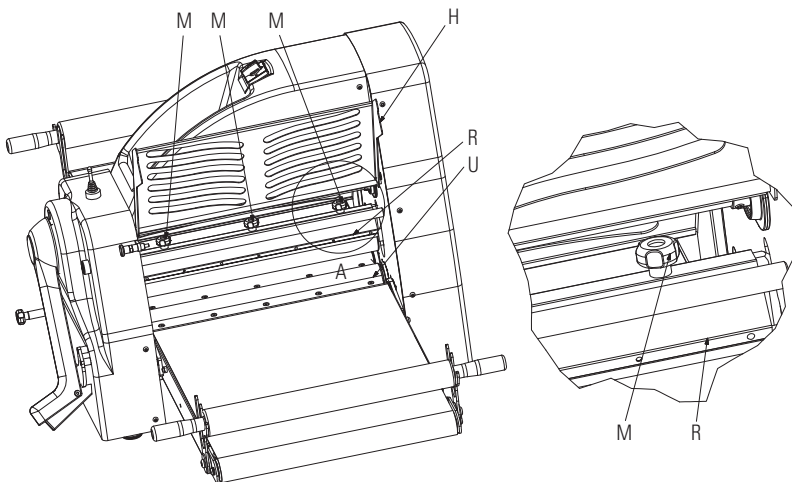


**ST/SB SERIES (FIG. 14-15)****A) DOUGH SCRAPER UPPER ROLLER****DISASSEMBLY**

1. LIFT THE ROLLER PROTECTION POSITION H FIG. 14.
2. UNSCREW THE FLYWHEELS POSITION M.
3. REMOVE THE SCRAPER POSITION R.

**ASSEMBLY**

Repeat the disassembly procedure in reverse order.

**FIG. 14**

## B) DOUGH SCRAPER BOTTOM ROLLER

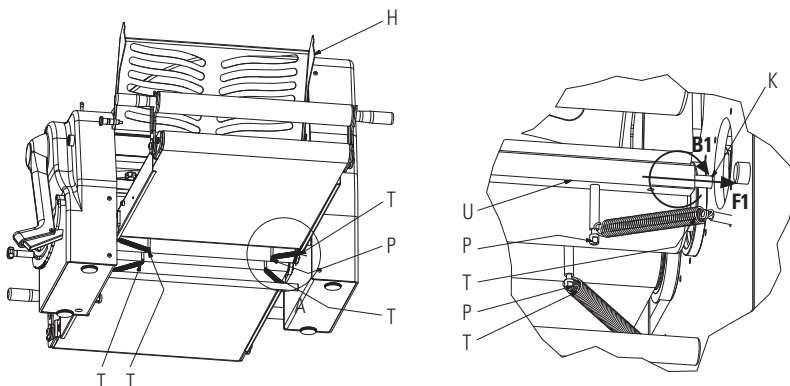
## DISASSEMBLY

- 1 . REMOVE THE SPRINGS POSITION T, FIG. 15 AS IN STEP 2 OF THE UPPER ROLLER OF THE SF SERIES.
- 2 . LIFT THE PROTECTION POSITION H.
- 3 . GRASP THE SCRAPER POSITION U, FIG. 15 AND MOVE IT IN THE F1 DIRECTION UNTIL THE ROTATION OF THE SCRAPER IS ACHIEVED, ACCORDING TO THE B1 DIRECTION, IN THE HOLE POSITION K.
- 4 . PULL THE SCRAPER OUT IN THE OPPOSITE DIRECTION TO F1

## ASSEMBLY

Repeat the disassembly procedure in reverse order.

FIG. 15





## CHAPTER 5 | MAINTENANCE

---

### **⚠ ATTENTION**

**Disconnect the plug from the electricity supply before carrying out any maintenance or cleaning interventions. In case of the malfunctioning or breakdown of the machine, contact only the assistance centres authorised by the manufacturer.**

### **5.1 Cleaning**

Cleaning should be done at the end of each usage in compliance with hygiene requirements and to protect the functionality of the machine.

With the aid of a suction machine, remove all residues of flour and dough. Remove the dough scraper before cleaning the cylinders (Fig. 12/13 for SF) and (Fig. 14/15 for SB/ST).

Remove residues of dough and flour using a soft sponge and warm water, dry with absorbent paper for food, then first go over the areas mentioned, and then the whole machine with a soft, clean cloth moistened with specific disinfectant for food machines.

### **⚠ ATTENTION**

**It is recommended not to use non-food abrasive or corrosive chemicals in any case. Absolutely avoid using water jets, various tools, rough or abrasive means such as steel scouring pads, sponges, etc. that may damage the surfaces and above all compromise the safety from a sanitary standpoint. To maintain both performance efficiency and the safety of the machine, it is essential to carry out periodic maintenance of the following items (at least once every 6 months).**

## CHAPTER 6 | DEMOLITION OF THE MACHINE

---

In case of dismantling and demolition of the machine, the parts that compose it do not present a hazard degree requiring the adoption of specific precautions. To facilitate recycling of materials, all parts that make up the electrical system must be separated from the machine.

## CHAPTER 7 | AFTER SALES SERVICE

---

### 7.1 Spare parts

For the request of spare parts please refer to FIG. 20-30.

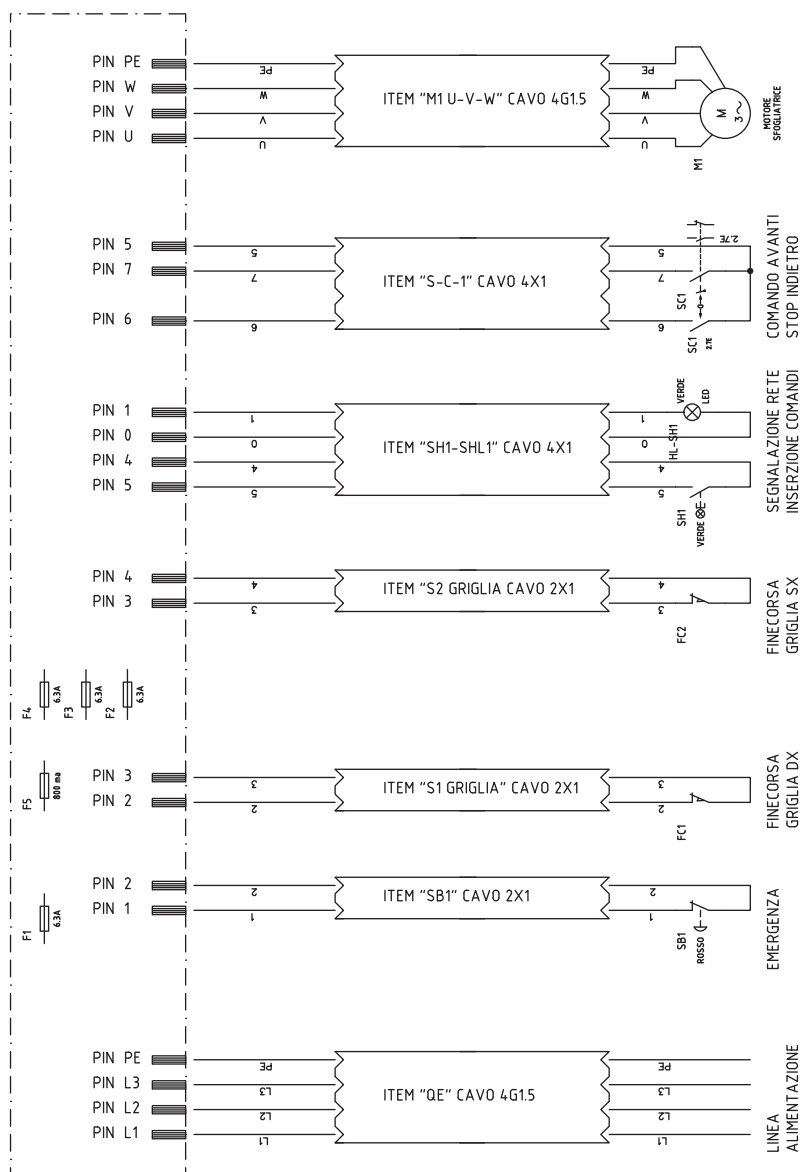
#### **ATTENTION**

**We recommend using only original spare parts.**

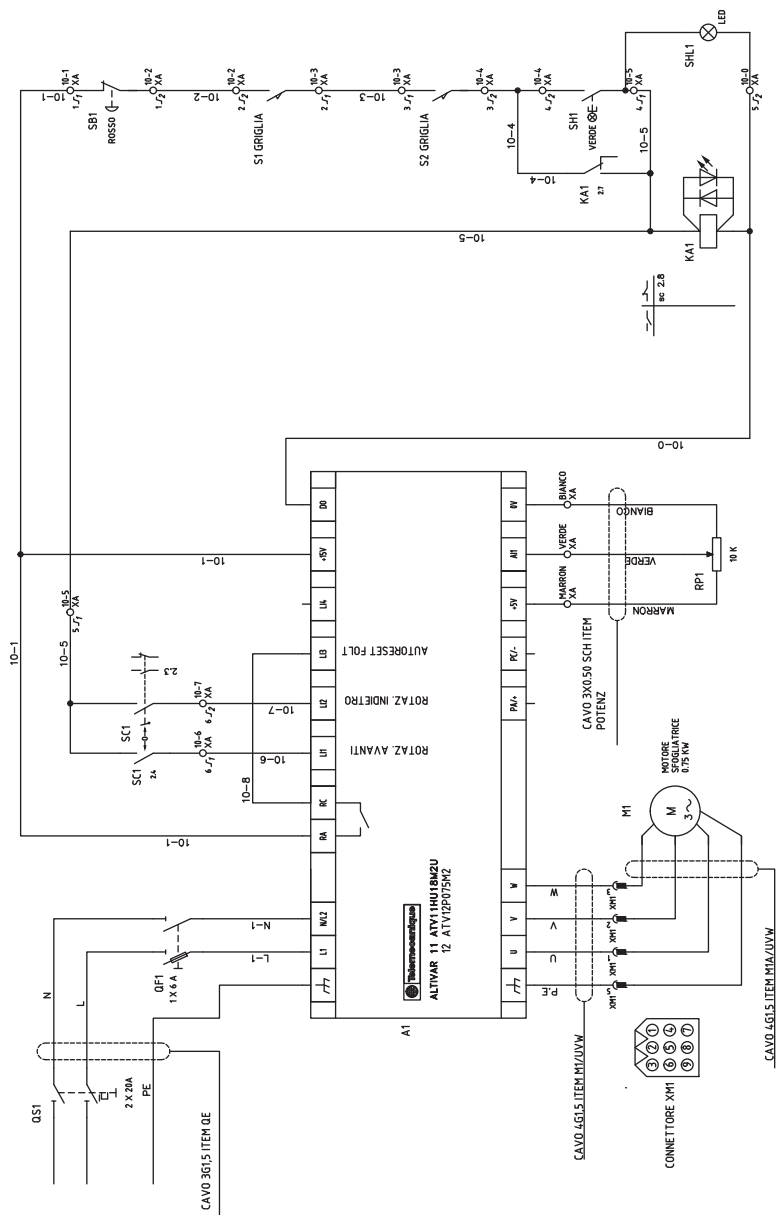
**The European Union states:**

Contact your dealer only.

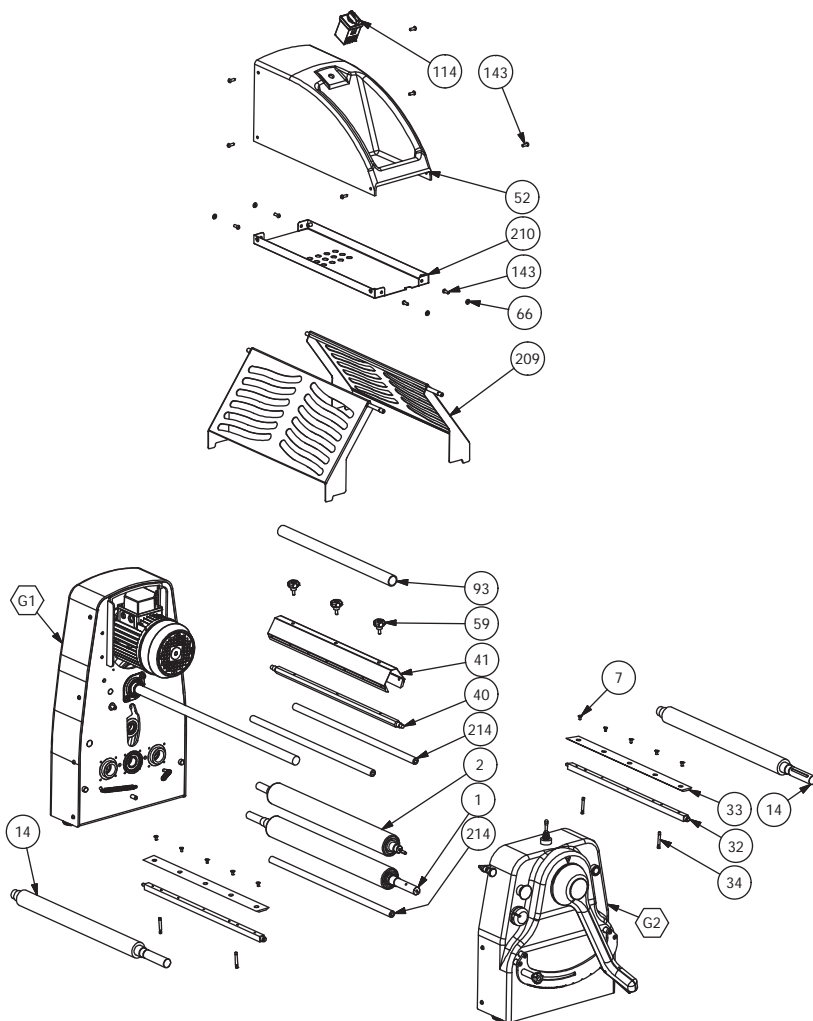
**FIG. / ABB. / PИC. 16 - SB500-ST500** Schema elettrico / Electrical diagram / Schemas électriques / Diagramas eléctricos  
 Elektro Schaltpläne / Электрические схемы



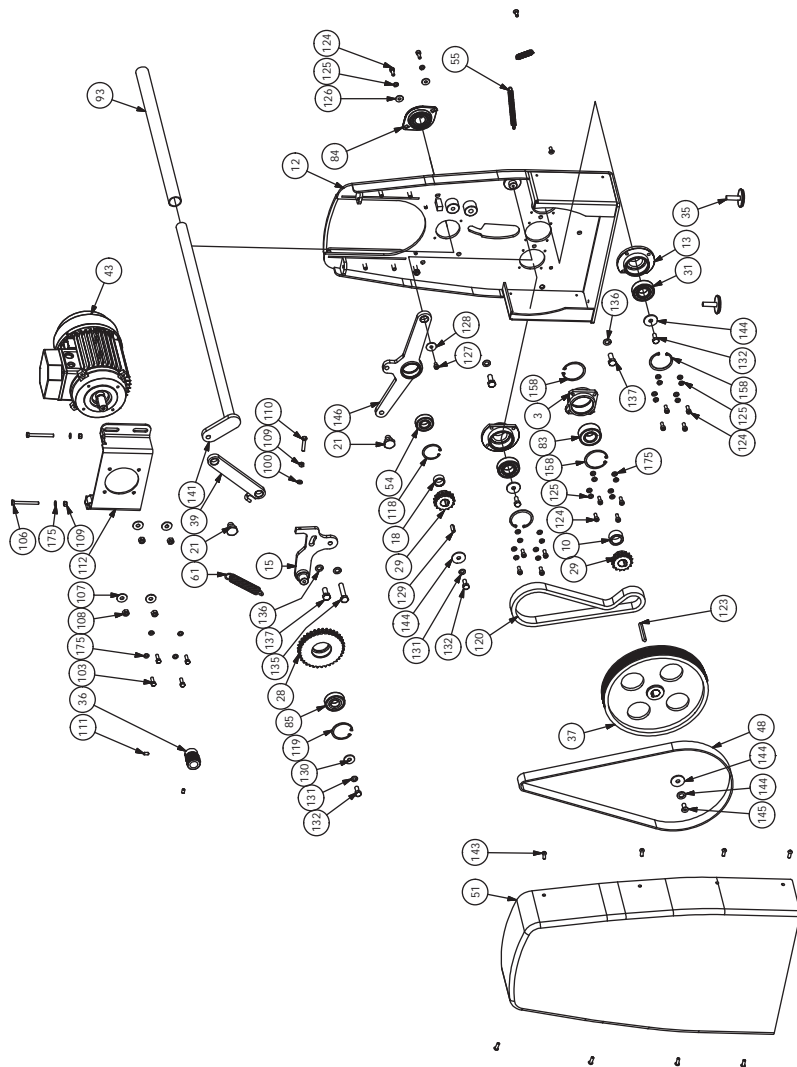
**FIG. / ABB. / РИС. 17 - SB500P** Schema elettrico / Electrical diagram / Schémas électriques / Diagramas eléctricos  
 Elektro Schaltpläne / Электрические схемы



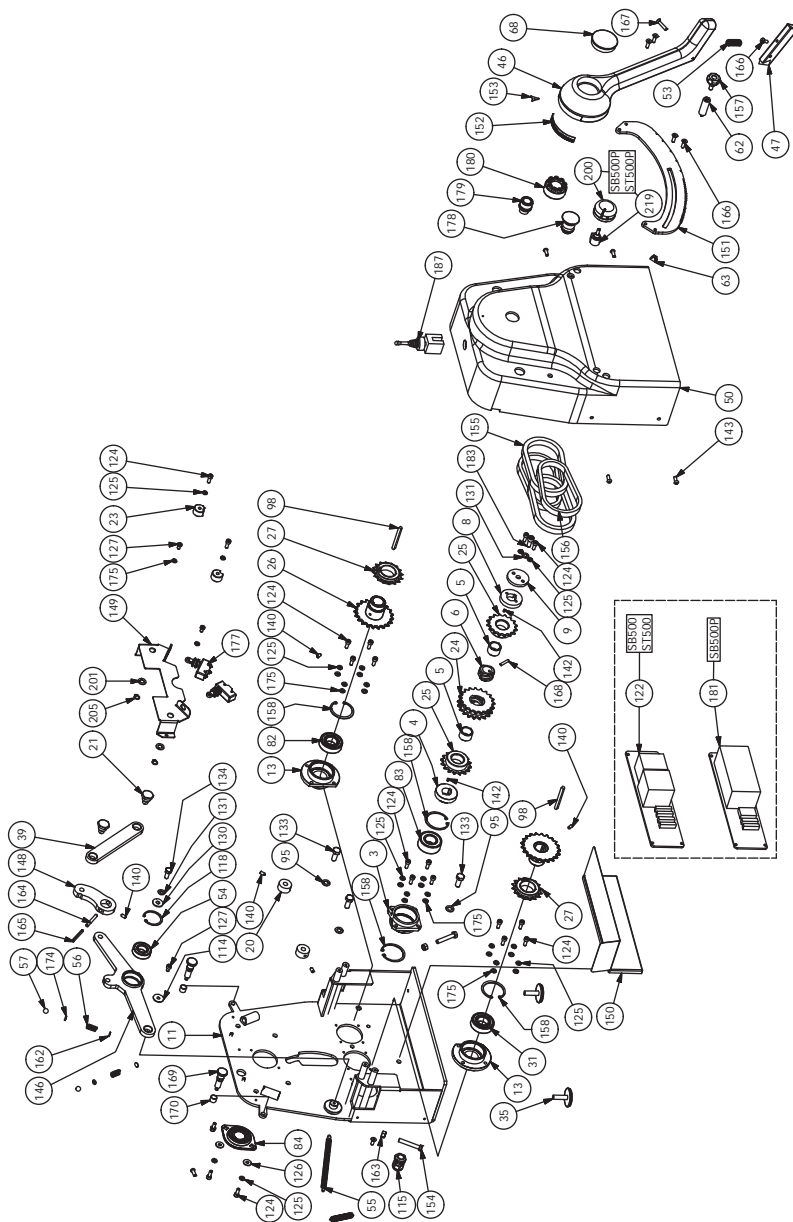
**FIG. / ABB. / PИC. 20 - SB500-ST500** Parti di ricambio / Spare parts / Pieces de rechange / Repuestos / Ersatzteile / Запасные части



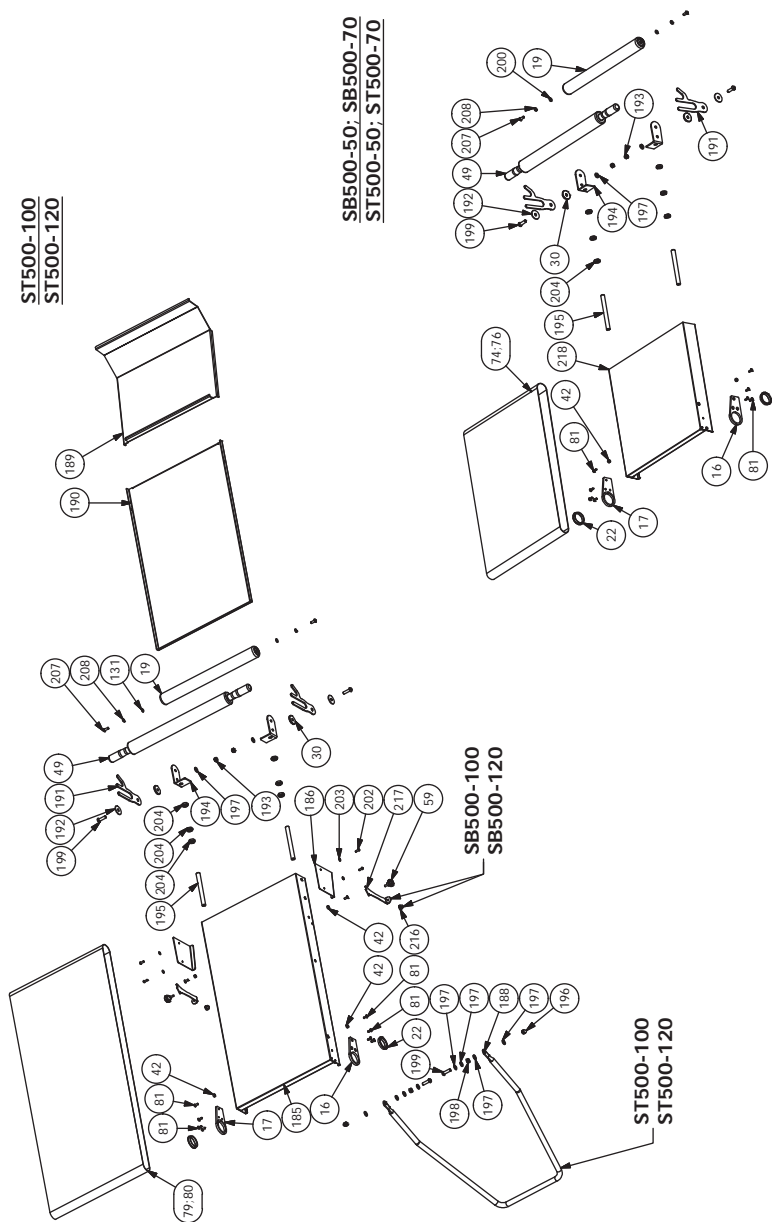
**FIG. / ABB. / PИC. 21 - SB500-ST500** Parti di ricambio / Spare parts / Pieces de rechange / Repuestos / Ersatzteile / Запасные части



**FIG. / ABB. / PИC. 22 - SB500-ST500** Parti di ricambio / Spare parts / Pieces de rechange / Repuestos / Ersatzteile / Запасные части



**FIG. / ABB. / PИC. 23 - SB500-ST500** Parti di ricambio / Spare parts / Pieces de rechange / Ersatzteile / Запасные части





**FIG. / ABB. / PИC. 24 - SB500-ST500** Parti di ricambio / Spare parts / Pieces de rechange / Repuestos / Ersatzteile / Запасные части

