

Operating manual

Rondostar 3000

SFS6115, SFS6115C, SFS6117,
SFS6117C, SFS6117H, SFS6117DD
SFI6117, SFI6117H

Edition BC523201

Technical specifications subject to change without notice

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EC Declaration of Conformity

We Seewer AG, Heimiswilstrasse 42, CH-3400 Burgdorf

declare under our sole responsibility, that the product

Model :	Dough sheeters	Rondostar 3000
Typ:	Rondostar 3000	SFS6115
	Rondostar 3000	SFS6117 SFS6117H SFI6117 SFI6117H
	Rondostar-Compound 3000	SFS6117DD
	Rondostar-Cutomat 3000	SFS6115C SFS6117C

to which this declaration relates correspond to the relevant basic safety and health requirements of the following Directives EEC:

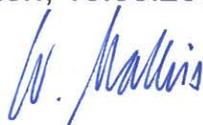
Directive for machines	98/37/EC
Directive	73/23/EEC
Directive EMC	89/336/EEC

For the relevant implementation of the safety and health requirements mentioned in the Directives, the following standards have been respected.

EN12100-1, EN12100-2, EN294, EN954-1, EN 60204, EN1674

Name: Mathis
First name: WErner
Function: Masch. Ing. HTL

Burgdorf, 16.06.2005



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Hint for operating manual: The numbers of the illustrations (Ex. — 1) are numbered chapterwise.

1 Safety Information

1.1 Explanation of Symbols

All the sections in this Operating Manual containing safety instructions which absolutely must be observed are marked with this symbol  and with a number.



1.2 Explanation of Warning Signs

Sign indicating Prohibited Activity

Reaching under the safety guard is prohibited!



Instruction and Information Signs

Make sure to disconnect the plug before opening!



Danger Warning Sign

Danger Warning



High-voltage Warning Sign

Warning against electrical shock
Disconnect mains plug before opening.



1.3 Safety Elements

1.3.1 Safety Guard

Operation

The safety guards fulfill a dual purpose:

1. They protect the operator from inadvertent contact with the rollers and the cutting rollers.
2. By lifting up the safety guard the machine stops immediately. Raising the safety guard even just slightly will stop the machine from continuing to operate. By closing the safety guard the machine mustn't start by oneself.



1.4 Safety Instructions and Information which Must be Followed

- Rondo-Doge's dough sheeters are built for the food industry exclusively for sheeting, booking, final sheeting and cutting (Cutomat) of dough.
- Rondo-Doge's flour duster is made exclusively for continuous dusting of dough sheets with flour.
- Any other use of these units is not in accordance with the purpose for which they are built. Therefore, the manufacturer will not be liable for any accidents or damage resulting from unauthorized use; the risk in any such instance will be borne solely by the user.



- Authorized use also means that the user must follow all instructions prescribed by the manufacturer in respect of operation, maintenance and service.



- Any work on the electrical components of the machine, in particular the correct professional mounting of the mains plug, may only be carried out by qualified personnel who are familiar with the relevant safety instructions.
Defective cables and main plugs must be immediately replaced by qualified personnel.



- Protective covers over the electrical controls and the mechanical moving parts may only be removed by professionally qualified personnel and must be remounted before the machine is put back into operation.



- Any unauthorized changes made to the machine, and in particular, to the safety devices on the machine will automatically exclude any liability on the part of the manufacturer for accidents or damage sustained as a result of such changes.



- The machine may only be connected to the mains using the mains plug! No permanent electrical installation may be made using, for example, terminal screws.



- The machine may only be connected to the mains once it has been fully assembled.
In particular, operation with removed machine tables is prohibited.



- Before beginning any repair, service or cleaning work on the machine, the electricity supply to the machine must be disconnected (pull out mains plug).



- Safety devices on the machine may not be adjusted, by-passed or expanded.



- Operation of the machine when any of the safety devices is out of order is prohibited.



- Defective safety devices must be immediately replaced with new original parts from Rondo-Doge.



- Machine parts located in the areas in which the dough is being processed, and whose surface coating becomes worn (e.g. chromium-plate worn off), must be replaced.



- When transporting the machine, it may not be lifted on the machine base. The machine should be fastened on a pallet without table for transport. Fasten the safety guard in the upper position.



- Reaching under the closed safety guard is prohibited!



- Never reach in the delivery roller of a moving flour duster with either hands or any other object!



- Do not deposit any loose objects such as knives, tools or articles of clothing, etc. in the area where the dough is processed.



- In order to guard against respiratory tract difficulties and flour dust allergies, we recommend to equip the machine with an automatic flour duster. Limit the use of flour to a minimum.

- The use of compressed air for cleaning the machine is not permissible.

- The use of a dust extraction system in the bakehouse is recommended.



- Check periodically to ensure that there are no loose screws in the area where the dough is processed.



- The machine may not be operated without its scrapers fitted in place.



- The automatic reeler is a device starting automatically by the electrical control.
Attention when handling it!
Do not reach into the stationary or running device!



- Cutting rollers must only be lowered with safety guards closed.



- Cutting rollers must be changed cautiously and correctly. Cutting rollers that are not in the cutting station must be stored in a safe place.



- Any disposal of the installation must be carried out in accordance with environmentally-accepted practices. The operators are fully responsible for ensuring that such practices are followed.

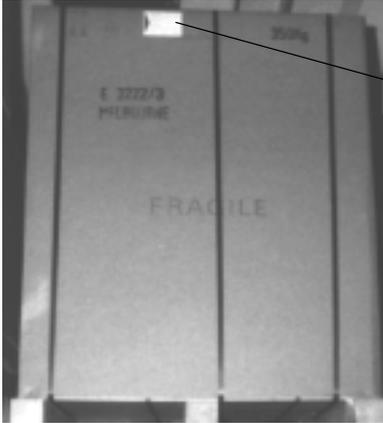


- This machine is not designed to be used in explosive ambient.



2 Transporting, Setting up, Connecting, Dismounting and Storing the Machine

2.1 Machine Delivery



The machine is delivered in its original packaging.

- Report any claims for damage caused as a result of transportation directly to the freight handlers (see the packaging: the delivery documentations are contained on the outside of the packaging)

2.2 Transportation



When being transported, the machine must be fastened onto a pallet. The tables must be dismantled and the safety guards fixed in the upper position.

The machine must not be tipped over.
(For machine weight, see Technical Data, Pages 090-1/2/3/4)

2.3 Unpacking the Machine

The machine must be set up on a level, even floor surface.

For further information regarding the ambient conditions required for the machine, see General Information, Page 030 - 1

- Unpack table and attachments
- Check all items received against the delivery slip for completeness

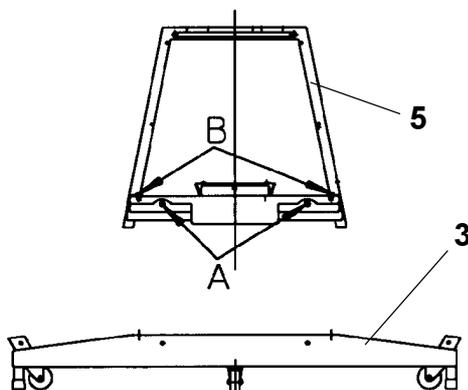
Dismount the supports from the machine base (model SFD)

If machine doesn't pass through small passages (doors), the support (3) has to be dismantled from the machine base (5) as follows:

- Dismount two screws (A) on each side (front and rear) and one screw (B) (left and right) on the machine base
- Lift off the machine base from the support (2 persons required)

Caution when lifting by crane (danger of tipping)

Remount it in reverse order.

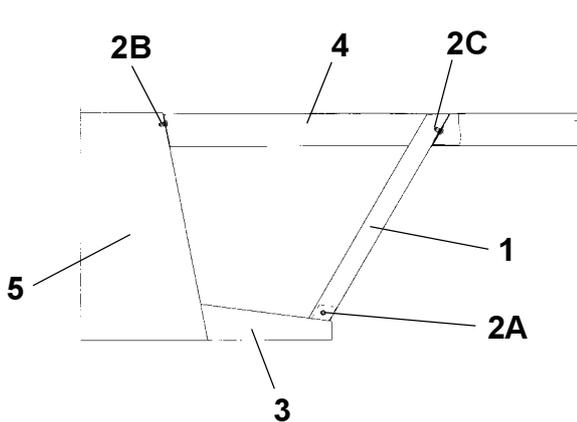


2.4 Setting up the machine

Two people are required to set up the machine.

2.4.1 Mounting the table supports to the support (model SFI)

- Mount the table supports (1) using a hexagon screw (2A) (each support) to the support (3)



Do not yet tighten the hexagon screws (2A), after mounting the table supports.

2.4.2 Mounting the lower tables (model SFI)

- Lay the lower tables (4) on the machine base (5) and the table supports
- Mount the lower tables to the machine base using three hexagon screws (2B) (each lower table)
- Mount the lower tables to the table supports using two screws (2C) (each lower table)

- Do not yet tighten screws (2A/B/C)!

- Adjust the lower table

- Tighten all the screws of the mentioned connections:
 - Machine base - Lower tables
 - Lower tables - Table supports
 - Table supports - Support

2.4.3 Installing the Machine Tables

- Remove all protective foil on the stainless steel sections of the machine
- Lift the machine table with the aid of a second person
- Guide the center of the machine table's driving roller to the spring bolt (6) at the rear of the housing (7)
- Push the table towards the rear, use pressure
- Center the catch of the machine table's driving roller in the receiver (8) in the front section of the housing

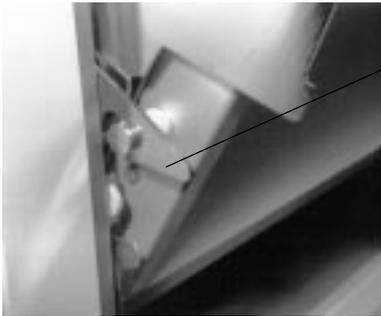
In order to snap the machine table into place, proceed as follows:

- Tug lightly on the conveyor belt until the catch snaps into place
- Raise the table bolt (9) (it is used to prevent the unintentional unhinge of the table)

- Lift the table up



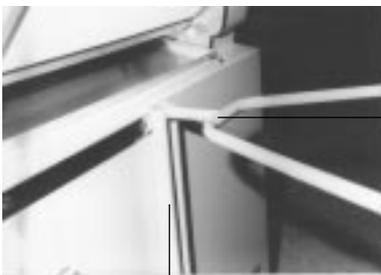
- When lifting up the table, either push in or remove the dough catch pan



10

- Attach table hook (10)
The machine table is now secured.

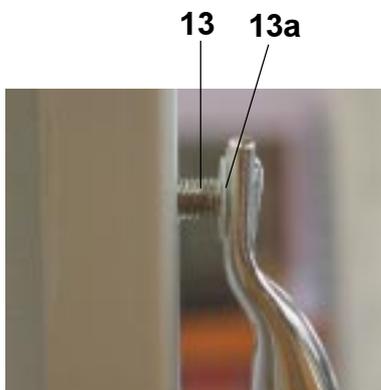
2.4.4 Mounting the forked supports



11

12

- Push forked support (11) into the support guide (12)



13

13a

- Insert catch plug (13) of the forked support, with fitted washer (13a), into one side of the table

11



- Bend up the forked support (11) and secure it to the opposite side of the table (washer fitted on the catch plug)

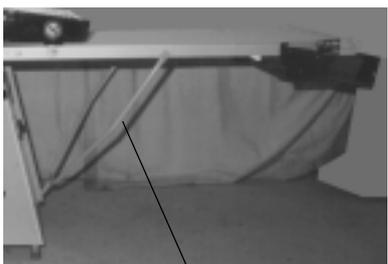
13b



- Fit the second washer on both sides on the inside, afterwards screw down the cap nut (13b)



Attention: The conveyor belt has to be placed below the cap nut.



Position of the forked support when the machine table is hinged down.

11

**What to watch out for when mounting the
forked supports on machines equipped with the
"Cutomat" cutting device:**



14

The foot (14) of the forked support must be set in such a manner that the table stands level. This is the only way to ensure optimal functioning of the safety guard.

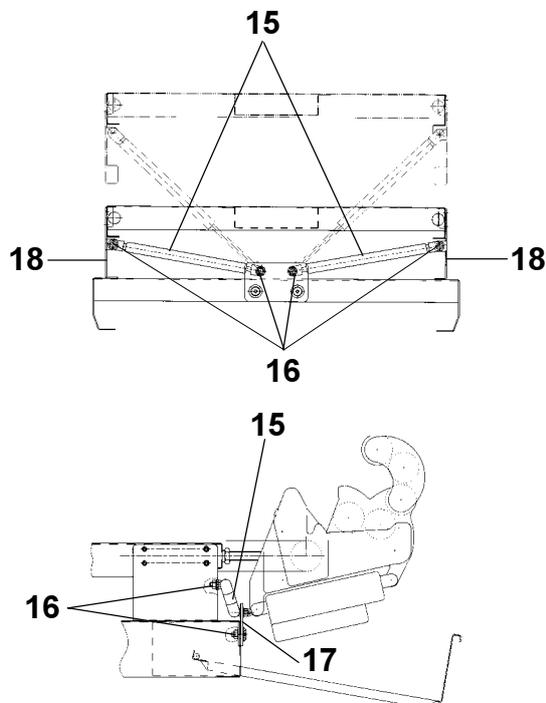
**2.4.5 Mounting the pneumatic springs
(model SFI)**

Table with automatic reeler:

- Mount pneumatic springs 0200N

Table without automatic reeler:

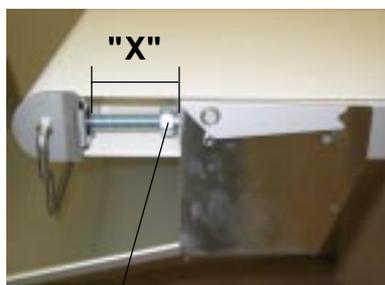
- Mount pneumatic springs 0100N
- Mount pneumatic springs (15) onto the holding device (17) and support plates (18) using ribbed lock washers and hexagon nuts (16)

2.4.6 Tightening the Conveyor Belts

Tighten the conveyor belt so that the heaviest dough piece, with maximum 15 kg, is driven without slipping. Overtightening is to be avoided.

Proceed as follows:

- Retighten the left and right tension nut (19) evenly and parallel
- Remeasure Distance "X" on both sides using a millimeter measuring instrument
The distance "X" must be exactly equal on both sides
- Switch on the machine (See Starting the Machine, Page 050 - 3)
- Observe running movement of the conveyor belt in both directions

**19**

If the belt runs off towards one side, proceed as follows:

- Loosen the tension nut on the opposite side
or
- Retighten tension nut on the side where it runs off
- Monitor the belt and, if necessary, correct it until it runs exactly in the middle of the table

If necessary, repeat this procedure several times. Routinely monitor the belt during the initial hours that the machine is operational and, if necessary, correct it again.

**Tighten and adjust the conveyor belts with
patience!**

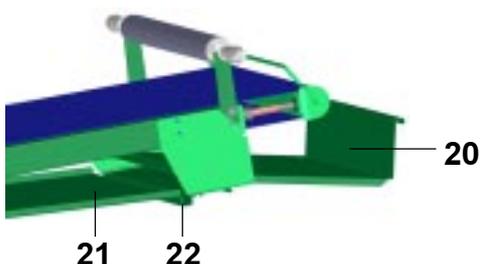
Prior to carrying out each further correction, allow the machine to run for at least 30 seconds.

Before putting the machine into operation, the conveyor belts must be lightly rubbed with flour in order to prevent the dough from sticking to the belt.

Attention:

A gap can develop between the synthetic conveyor belt and the idle roller if the belt is worn on the edge or is damaged. If this is the case, the belt must be replaced.

Reason: Risk of injuries to fingers in the area of the idle roller.

**2.4.7 Mounting the dough catch pan**

- Remove the protective foil on the dough catch pan (20)
- Push in the dough catch pan on both sides

Option:

- Attach the flour catch pan (21) to the holder (22)

2.4.8 Mounting the Automatic Flour Duster

25



23



- Remove the protective foil on cover plate (23)
- Position flour duster (24) on the cover plate to which it belongs

24



- Guide the flour duster into both openings (25) in the cover plate

- Push the flour duster backwards

26



- Turn the delivery roller (27) till the catch (26) can be guided into the receiver and the flour duster locks into place on the swelling bracket of the cover plate.

27



29

28

- Insert the flour dust protection (28) and guard plate (29) into the proper position

2.4.9 Electrical Connection of the Automatic Dough Reeler (by models SFS 6117H/ SFI 6117H)



- Connect the reeler cable to the Linak-Motor plug

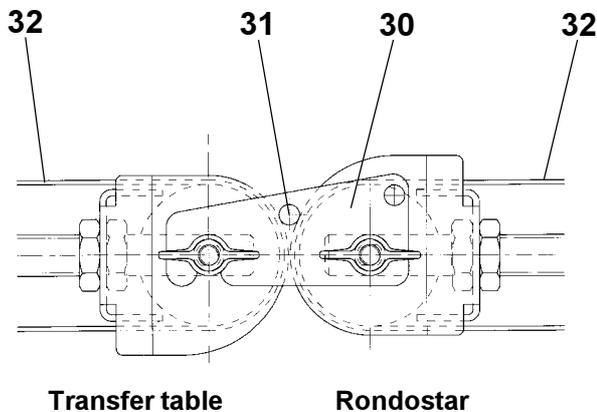


- Fix connector cable with plastic pipe and screws at the machine table



- Fix connector cable to the table sheet using cable clamps (model SFI)

2.4.10 Compound operation with a transfer table PTT150/PTT250



The Rondostar and the transfer table have to be connected together with the butt plates (30).

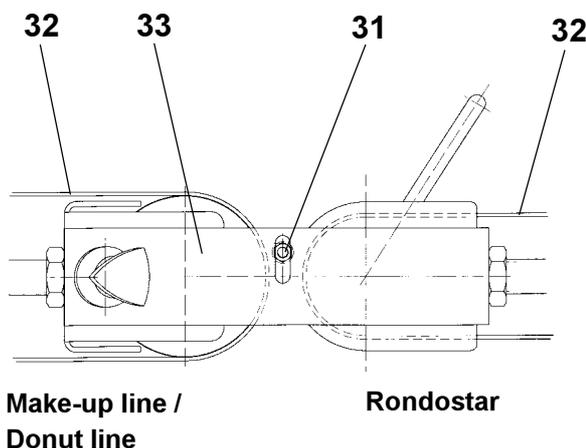


The space between the protection bar (31) and the conveyor belts (32) must not be more than 3 mm.



It is prohibited to use the compound operation without a correct mounted protection bar.

2.4.11 Compound operation with a make-up line / donut line



The Rondostar and the make-up line have to be connected together with the bow (33).



The space between the protection bar and the conveyor belts must not be more than 3 mm.



It is prohibited to use the compound operation without a correct mounted protection bar.

**2.5 Requirements for Putting the Machine
into Operation**

Power supply and frequency at the mains circuit to which the machine is connected must be in accordance with specifications contained on the sign "Electrical connected loads" (This sign is found on the cable lead-through on the machine base).



Direct connection to the mains without a plug is prohibited!



Any work on the electrical components of the machine, in particular the correct professional mounting of the mains plug, may only be carried out by qualified personnel who are familiar with the relevant safety instructions.

(An electrical schematic is delivered with every machine. It is to be found next to the electrical control in the machine base).



- Connect the machine plug to the mains

- For starting the machine, the tables must be correctly mounted (see Installing the Machine Tables, Page 020 - 3)

**2.5.1 Ground fault interrupter is actuated
when inverter is started**

Leakage current flows through the inverter.

The inverter performs internal switching. Therefore, a leakage current flows through the inverter. This leakage current may actuate the ground fault interrupter, shutting the power off.

Use a ground fault interrupter with a high leakage-current detection value (sensitivity amperage of 200mA or more, operating time of 0,1 s or more) or one with high-frequency countermeasures for inverter use.

Reducing the carrier frequency value in n46 is also effective. In addition, remember that a leakage current increases in proportion to the cable length. Normally, approximately 5 mA of leakage current is generated for each meter of cable.

2.6 Moving Direction Test

After the power has been turned on (See Preparing for Operational Readiness, Page 040 - 1), the machine automatically checks the running direction when first starting up (moving direction of roller adjustment drive).

2.7 Moving the Machine



34

- On the operator's side of the machine, lift the safety rail (34)
Front transport castor will snap down.

The machine can now be moved on the castors without problems.

Once the machine's permanent location is reached:



35

- Hold the safety rail tightly using both hands, gently lift up the machine
- Using one foot, push the pedal (35) at the front transport castor
- Gently ease the machine back down to the ground, when so doing, do not let it "fall" back down

3 General Data about the Machine

3.1 General Information

3.1.1 The Machine's Applications



The machine is suitable for sheeting, booking, final sheeting and cutting of dough for the food industry. This product is a technical working tool which is designated to be used exclusively for work.

Booking

Through folding in fat, butter, margarine, through sheeting to a thickness of approx. 6-11 mm and subsequent folding of the dough, there is a resulting formation of layers of fat and dough. A repetition of this process yields many thin layers.

Final Sheeting

This entails sheeting the dough to the final thickness required for further processing.

Cutting

Cutting of the sheeted dough band by means of cutting rollers.

3.1.2 Purpose of the Flour Duster



This is used to ensure that the dough sheets are automatically dusted with flour when necessary.

Recommended Flour type: No. 550 (Use only flour which is clean)

3.1.3 Noise Values

The emission value at place of operation is smaller than "70 dB(A)", according to EN1674.

3.1.4 Temperatures

The ambient temperatures permissible for the machine:
+5° to +40°C

Permissible temperatures for storage of the machine:
-25° to +55°C, for brief periods up to +70°C

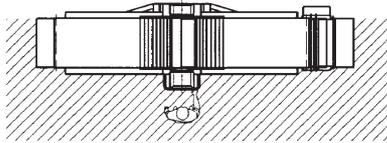
3.1.5 Ambient Humidity

The admissible ambient humidity for the machine lies in the area of 30% - 95%, relative humidity, uncondensed, resp. max. 60% for the dusting flour in the automatic flour duster.

3.1.6 Machine Weight

Total weight = approx. 220 - 360 kg, depending on model
(Compare with Technical Data, Page 090 - 1/2/3/4)

3.1.7 Operating Personnel Work Area



The hatched area shows the work area designated for the operating personnel.

3.2 Prerequisites

In order that dough can be sheeted by the machine, the following prerequisites must be met:

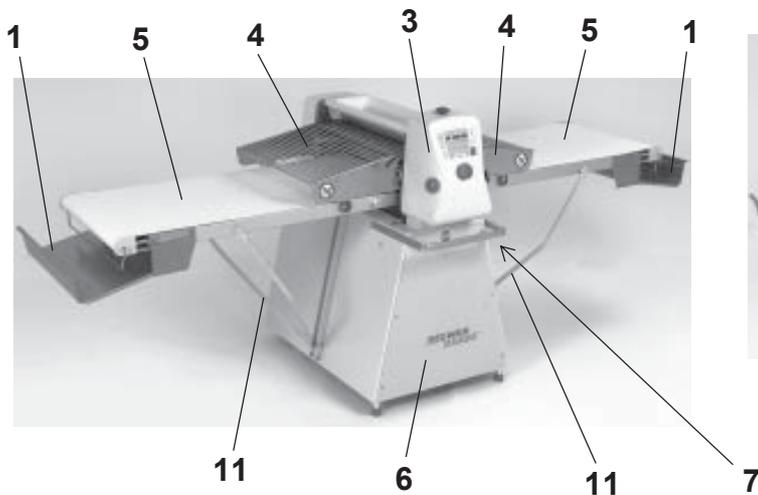
- Dough piece must not exceed 15 kg
- Flour the dough pieces
This will prevent the dough from sticking to the rollers and scrapers.



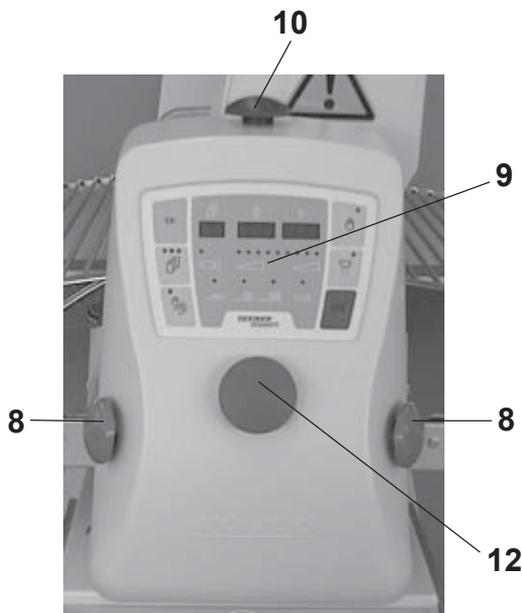
In order to avoid flour dust build-up, it is recommended to equip the machine with an automatic flour duster.

3.3 Full View of the Machine

SFS6115

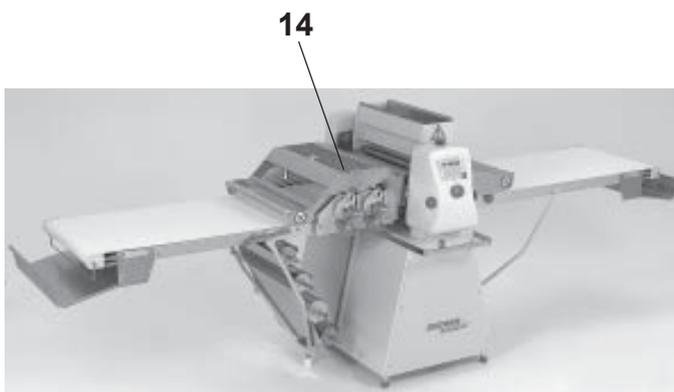


SFS6117



- 1 Dough Catch Pan
- 2 Flour Duster (Option)
- 3 Roller Head
- 4 Safety Guard
- 5 Machine Table
- 6 Machine Base
- 7 Main Switch
- 8 Black Push Button for Starting
- 9 Control Panel
- 10 Red Push Button for Stopping
- 11 Forked Support
- 12 Turning knob for data input
- 13 Automatical Dough Reeler (Option)
- 14 Cutting Station (Option)

SFS6115C / SFS6117C



SFS6117H



SFI6117



16

17

15

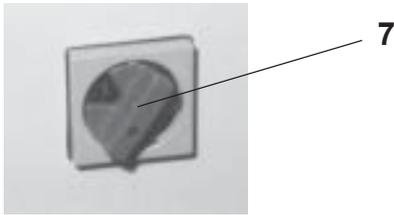
17

SFI6117H

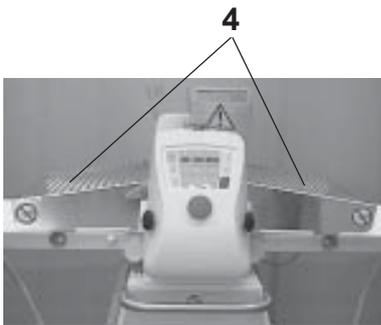


13

- 13** **Automatic Dough Reeler (Option)**
- 15** **Support**
- 16** **Lower table**
- 17** **Forked supports**

3.4 Operating Elements**3.4.1 Main Switch**

The main switch (7) interrupts the supply of electrical current.

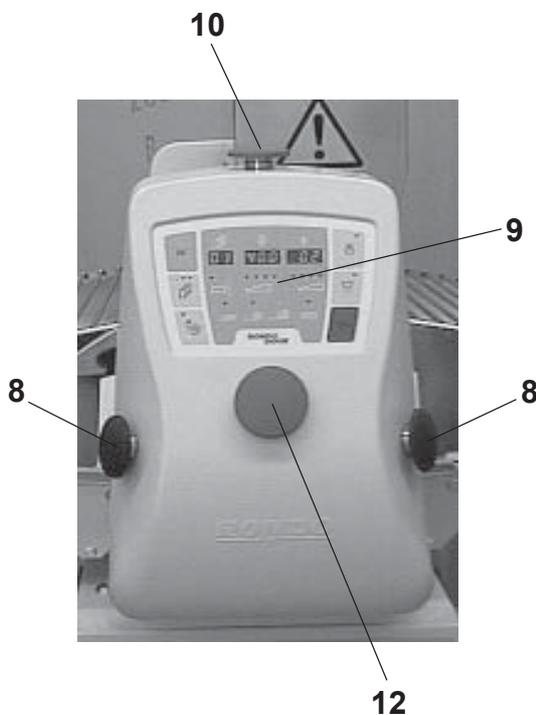
3.4.2 Safety guards

The safety guards (4) protect the operator from inadvertently coming into contact with the rollers and the cutting rollers.
If the safety guard is lifted during the sheeting process, the machine will stop.

3.4.3 Push Buttons

The black push buttons (8) (located on the side of the housing) serve to start the machine.

The red push button (10) serves to stop the machine.

**3.4.4 Control Panel**

The control panel (9) is used to operate and program the machine (See control panel, Page 050 - 2)

3.4.5 Turning knob for data input

The turning knob (12) serves to input data (See control panel, Page 050 - 2)

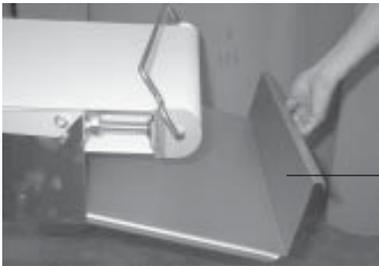
3.4.6 Flour duster: Dosing slides**18**

The desired dusting width can be adjusted using the slides (18). The maximum dusting width is 630 mm.

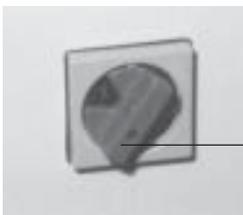
By using this adjustment to regulate the actual dusting width necessary, dusting flour consumption can be significantly reduced.

4 Starting the Machine

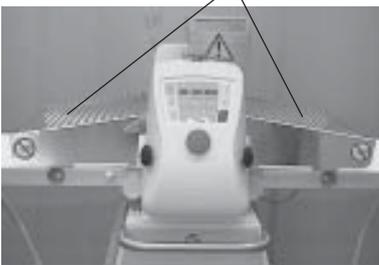
4.1 Preparing for Operational Readiness

**1**

- Pull out the dough catch pans (1) on both sides

**2**

- Turn the main switch (2) on the machine to "ON"

**3**

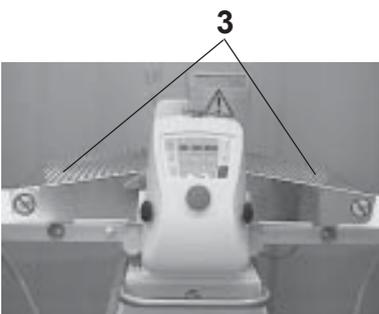
- Bring down both safety guards (3)

4.2 Starting/Stopping the Machine

**5****4****4**

Starting

- Press the black push button (4) on the side on which the dough has been placed (see also general indications, Page 050 - 4)

**3**

Stopping

- Press the red push button (5)
- or
- Lift the safety guard (3)

5 Operation

5.1 General operation description for RONDOSTAR



The dough sheeter RONDOSTAR is computer controlled and suitable for sheeting and booking doughs in the following working modes:

Automatic working mode "Auto"



Automatic sheeting of the dough.
By easy programming, 50 automatic programs can be set and memorized. Multi programs with 2 or 3 loops are possible.

Manual automatic working mode "Manual/Auto"



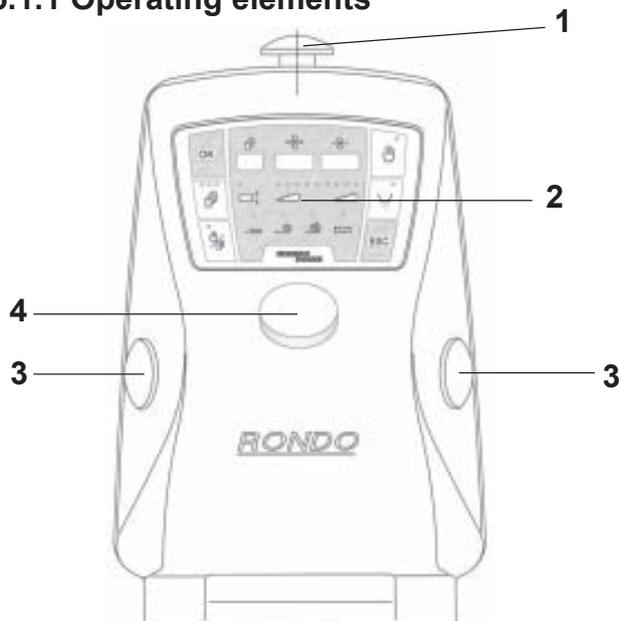
The "Manual/Auto" working mode signifies that a dough piece is first sheeted in manual working mode. After the sheeting, the values used are memorized by pressing the OK-key. A "Manual/Auto" program is therewith established, which can be run to any extent desired (see programming in working mode "Manual/Auto", page 050 - 16). These programs are especially suitable for delicate dough-qualities. Nine Manual/Auto programs can be memorized.

Manual working mode



The sheeting is similar to the working with a conventional dough sheeter, i.e. operated by means of the push buttons, and manual selection of the reduction steps.

5.1.1 Operating elements

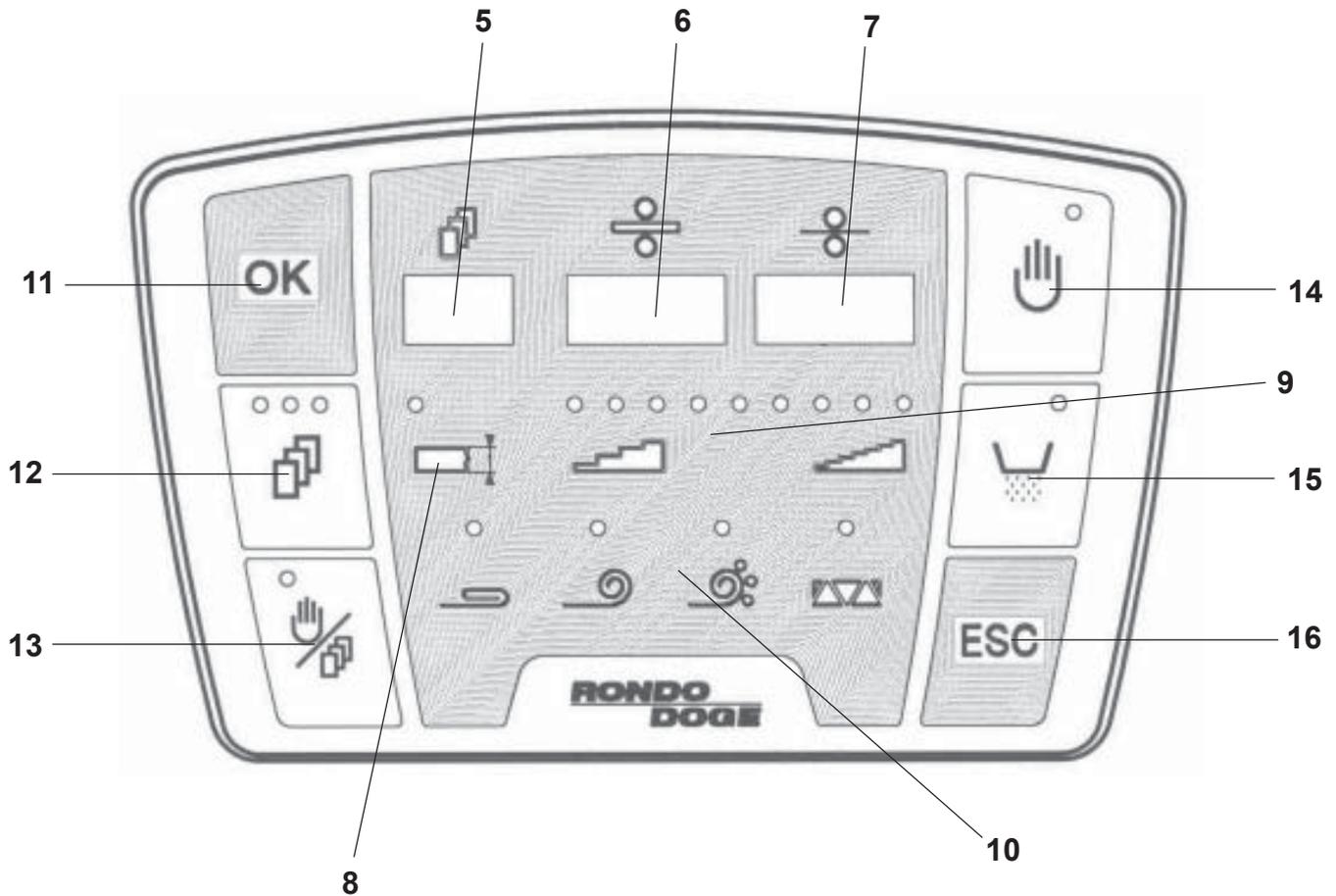


- Red push button (1) for stopping

- Control panel with data-display-panel (2) and keys for selecting the working mode

- Black push button (3) to start the machine up (left and right)

- Turning knob (4) for data input

5.1.2 Control Panel**Data display panel (grey area)**

- 5 Indication of the program number
- 6 Indication of the initial roller gap
- 7 Indication of the final roller gap
- 8 Pre-sheeting to a width
- 9 Indication of the chosen reduction steps big to fine (9 possibilities)
- 10 Indication of the end of program with the possibilities:
 - stop for folding
 - stop for manual reeling
 - automatic reeling if available (option)
 - stop for cutting (option Cutomat)

Function keys

- 11 Confirmation key for data input
- 12 Key for automatic operation
- 13 Key for manual-automatic operation
- 14 Key for manual operation
- 15 Start-. Stop-key for flour duster
- 16 Breaking off a program

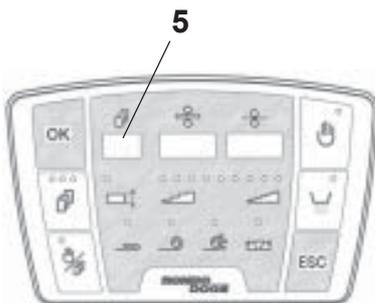
5.2 Operating instructions

Before setting the machine into action, make sure that:

- it is made ready for operation as described in chapter 4.1.
- no loose objects, such as knives, dough scrapers, reelers or others are on the machine tables.

When leaving the factory, all 50 program spaces are fed with the same data. They can be changed in a very easy way, as described in the chapter "programming".

5.2.1 Starting the machine



When switching on the main switch located on the base, the machine switches into the automatic-program Number 01. In the indication window of the programm number (5) appears the indication 01 and the other indication windows show the initial roller gap, the final roller gap, pre-sheeting to a width, the reduction steps and the chosen program-end.

The machine is ready to start in program 01.

5.2.2 General indications

Selecting working mode



The desired working mode can be selected by pressing the relevant key.

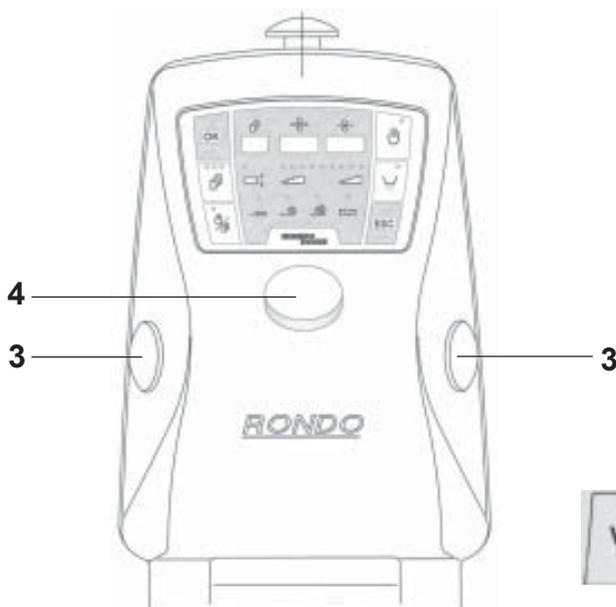
The red light-emitting diode indicates which working mode has been selected. As long as the automatic sheeting of a dough block has not been completed, the red light-emitting diode keeps flashing.

Selecting a program number



- Press key "Auto" resp. "Manual/Auto"

As long as the program number flashes, the desired number can be selected by turning the turning knob (4).



Push button

For starting the machine, the black push button (3) has to be pressed, and this on the same side as the dough block has been placed on the conveyor table.

Flour duster



When the belts are in motion, the flour duster can be switched on resp. off by pressing the key "flour duster".

If the preselection of the flour duster is switched on, the LED in the key "flour duster" lights up.

In this way, the flour duster can be programmed in the working mode "Auto" and "Manual/Auto".

The flour duster only runs when there is dough between the rollers.

Breaking off a program



A unfinished program can be broken off by pressing the key ESC. The key ESC is only effective, when the belts are not in motion.

5.2.3 Sheeting in working mode "Auto" with normal program

For automatic sheeting of a dough block, proceed as follows:

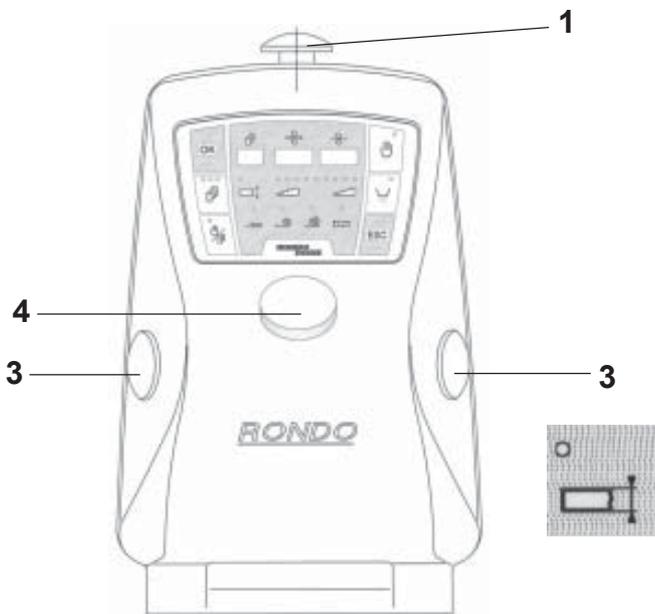


- **Selecting working mode**
 - Press key "Auto"
 - Program-number-indication starts to flash for 5s.



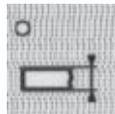
- **Selecting a program**
 - As long as the indication is flashing, select desired program number with turning knob (4) (program numbers 01 - 50)

- **Placing dough block**
 - The dough block should be approx. 5 mm thicker than the initial roller gap



- **Starting the sheeting process**
 - Press one of the black push buttons (3) (on the same side as the dough block). The rollers open to the initial roller gap, then the belts start running

- **Pre-sheeting to a width**
 - When the piece of dough is sheeted to the width, the machine stops automatically. (roller gap "width")
 - Turn the piece of dough
 - To start push either one of the black push buttons (3)



- **Switching on, resp. off the flour duster**
 - Press key "flour duster" when belts are running.
 - If the preselection of the flour duster is switched on, the LED in the key "flour duster" lights up.
 - The flour duster is switched on for one passage.
 - Press key "flour duster" to switch off the flour duster



- **Interrupting the sheeting process**
 - Press the red push button (1) or lift one of the safety guards
 - To continue the sheeting process, press one of the black push buttons (3)

- **At the end of the program, the dough sheet:**
 - will be automatically reeled
 - or
 - will be stopped so that a hand reeler can be positioned. (After the hand reeler has been positioned, start up the machine for reeling by pressing the black push button)
 - or
 - will be placed in an ideal position for folding
 - or
 - will be stopped on the machine table without cutting station, allowing to release manually the dough sheet from tension, prior to cutting (see sheeting with subsequent cutting of the dough sheet, page 050 - 7)

After the conveyor belts stop automatically, the rollers open up again to the initial roller gap. The sheeting program is not finished until the rollers have returned to the initial roller gap.

The machine is ready to begin the sheeting process again.

5.2.4 Sheeting in working mode "Auto" with a multi program

In a multi program, up to 3 sheeting subprograms can be linked together. They are executed one after another (program loops).

The sheeting process takes place in the same way as in a normal program.

The 3 LED's in the key "Auto" indicate, if the shown program is a normal program or a multi program:



One LED lights up: normal program

Two LED light up: multi program with 2 loops

Three LED light up: multi program with 3 loops

At the end of a sheeting subprogram, the machine switches automatically to the next program loop.

Indication of the program loop:

left LED lights up: 1. program loop

middle LED lights up: 2. program loop

right LED lights up: 3. program loop



The program loops can be switched over manually by pressing twice the key "Auto" ("double click") (example: to change a program).

5.2.5 Sheeting in the working mode "Auto" with subsequent cutting of the dough sheet (Cutomat)

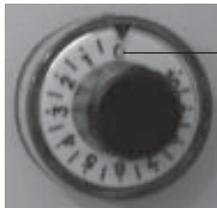
The function Cutomat is always activated when the program has been ended with "Stop for Cutting". (See end of program, page 050 - 12)

Sheeting

The sheeting function is identical as described under sheeting in a normal programm, page 050 - 5. At the end of a sheeting program the dough sheet stops automatically as soon as it has left the rollers. The dough sheet is then laying on the machine table opposite to the cutting station. The operator can - if required - prior to cutting, manually release possibly remaining tension from the dough.

Cutting

- Press one of the two black push buttons
- The rollers open automatically 5 mm, allowing the dough sheet to pass through the rollers without pressure
- Both conveyor belts start running at cutting speed. The belt speed can be adjusted by potentiometer (17) between 2,5 and 8 m/min
- For operating the cutting station (see cutting device, page 050 - 23)



17

Stopping / restarting

- To stop press the red push button or lift one of the two safety guards
- To start press one of the two black push buttons

Ending the cutting operation

- To stop press the red push button or lift one of the two safety guards
- Press key "ESC"



The machine is ready for sheeting

5.2.6 Sheeting in working mode "Manual/Auto"

For automatic sheeting in "Manual/Auto" procede as follows:

- **Selecting working mode**
 - Press key "Manual/Auto"
Program-number-indication starts to flash for 5s.
- **Selecting a program**
 - As long as the indication is flashing, select desired program number with turning knob (4) (program numbers H1-H9)



The further procedure is identical as for working mode "Auto".

5.2.7 Sheeting in working mode "Manual"

The sheeting is done step by step, similar to the sheeting on a conventional machine.



The individual reduction steps are set by the turning knob (4).

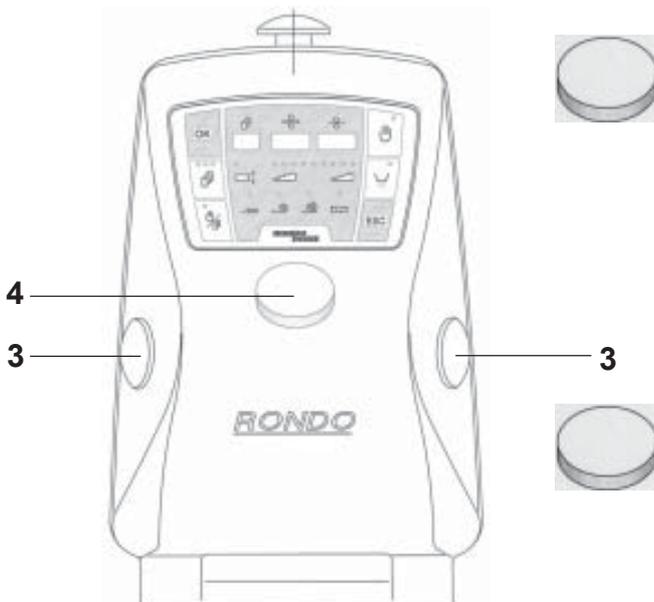
The actual roller gap is indicated as "initial roller gap" (6) on the display.

The roller gap for the next step is indicated as "final roller gap" (7) on the display. The conveyor stops automatically after each passage, as soon as the dough band is no more between the rollers.



For sheeting a dough block, proceed as follows:

- **Selecting working mode**
 - Press key "Manual"
 - "initial roller gap"-indication (6) starts to flash.
- **Placing dough block**
- **Set the initial roller gap**
 - The initial roller gap should be approx. 5 mm smaller than the thickness of the dough block.
 - The initial roller gap is set to the desired value by the turning knob (4)
- **Starting the sheeting process**
 - Press black push button (3) (on the side where the dough block has been placed). The rollers open to the initial roller gap and then the table drive starts.
- **Selecting the next roller gap**
 - By turning knob (4)
 - The set value appears in the indication window "Final roller gap" (7).
 - The next roller gap can already be set while the dough is still being sheeted.
 - After each passage, the machine stops automatically.
- **Starting for proceeding**
 - Press one of the black push buttons (3)

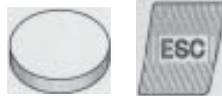


This procedure is repeated until the desired end thickness has been reached.



- **Switching on, resp. off the flour duster**
 - Press key "flour duster" when belts are running.
If the preselection of the flour duster is switched on, the LED in the key "flour duster" lights up.
The flour duster is switched on for one passage.
 - Press key "flour duster" to switch off the flour duster

- **Manual reeling**
 - If the dough band has reached the middle of the outfeed table in the last sheeting passage, stop the machine by pressing the red push button
 - Place the reeler and fold in the tip of the dough band
 - Press one of the black push buttons until the dough band is reeled up on the reeler

**Sheeting process finished**

- Setting the desired initial roller gap by turning knob (4) for the next dough block
- or
- Press key "ESC"

5.2.8 Simultaneous sheeting of several small dough pieces, with photo cell

If several small dough pieces (Pizza bases) have to be sheeted simultaneously the black push button has to be kept pressed until the last piece has passed through the rollers.

The machine stops when the black push button is released.

5.2.9 Simultaneous sheeting of several small dough pieces, without photo cell



In the working mode "Manual", the photo cell can be deactivated.

(See also working mode "Manual" with / without photo cell, page 050 - 18)

Working without photo cell can be required if:

- The dough pieces must be sheeted in one direction only.
- The photo cell is defective and a normal functioning is not possible any more.

When working without photo cell, the operating is as follows:

- To start, press the black push button on the side where the dough block is laying (no automatic reversing)
- Stopping by red push button or the safety guard

The working modes "Auto" and "Manual/Auto" are not influenced by the **working mode "Manual" without photo cell.**

If the photo cells are defective these working modes are not possible any more.

5.2.10 Working mode "compound operation with a transfer table"

Using the Rondostar and a transfer table PTT, the fully sheeted dough band can be automatically transferred to a make-up line.

Function:

If there is no dough band on the transfer table, the fully sheeted dough band is automatically transferred onto the transfer table. With the Rondostar, the next dough band can be sheeted in preparation.

If the transfer table is still occupied by a dough band, the Rondostar stops in the position "place manual reeler" (see general indications, page 050 - 12). When the transfer table is free, the dough band is automatically transferred.

Programming:

Enter a program in the working modes "Auto" or "Manual/Auto" with the function **manual reeling.**

Important:

"Side manual reeling" on the side with the transfer table! (See side folding / manual reeling, page 050 - 17)

5.2.11 Working mode "compound operation with a make-up line / donut line"

Using the Rondostar type SFS6117DD, the dough band can be transferred directly from the sheeting machine to a make-up line.

Function:

The fully sheeted dough band stops automatically at the end of the table.

If the release is given by the make-up line, the dough band is transferred to the line at the "transfer speed". When the preset transfer time has expired, the Rondostar stops automatically and is ready for dough sheeting.

Programming:

Enter a program in the working modes "Auto" or "Manual/Auto" with the function **Cutomat**.

In addition to the programming, the following settings must be made:

- Transfer speed

The transfer speed of the Rondostar can be matched to the speed of the make-up line with the potentiometer 17 (see sheeting in the working mode "Auto" with subsequent cutting of the dough sheet (Cutomat), page 050 - 7).

- Stop position of the dough band at the end of the table

(Waiting position for transfer)

The position can be set by parameter PA 2.

(Indication in 0,1 s)

- Time for transferring the dough band

The transfer time is dependent upon the transfer speed.

When the transfer time has expired, the Rondostar stops automatically and is again ready for dough sheeting. The time can be set by parameter PA 3. (Indication in 0,1 s)

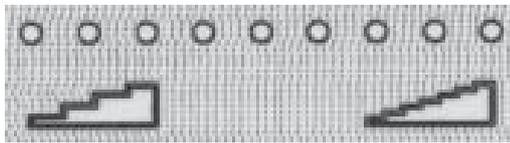
Setting the parameters is carried out in exactly the same way as described under chapter 5.4 special functionings.

5.3 Programming, modification of programs

5.3.1 General indications

Reduction steps, working mode "Auto"

Depending on the dough type, a block has to be sheeted either with a **few large reduction steps** or with a **number of small reduction steps**.



large ← ————— → fine

With RONDOSTAR, 9 graduations of reduction steps (from large to fine) can be selected by means of the turning knob (4)

Program end

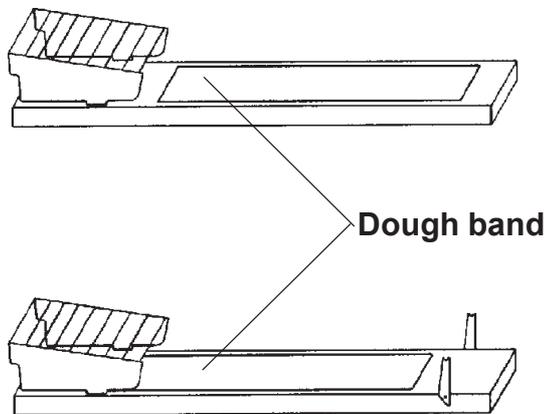
With RONDOSTAR, in the working modes "Auto" and "Manual/Auto", there are 4 different ways to finish.

They are as follows:

Stop for folding

On the last passage, the dough band is stopped once the end has left the safety guards.

The dough band is thus in an ideal position for folding.

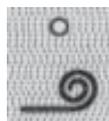


Stop for manual reeling

On the last passage the machine stops when the tip of the dough band is in an ideal position for placing the manual reeler.

The reeler can be applied and the tip of the dough band wrapped round.

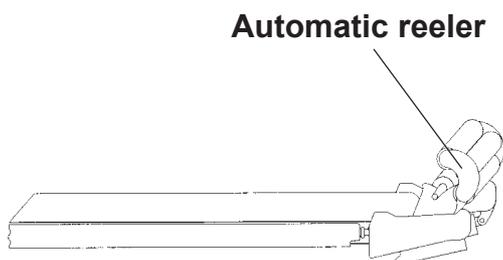
By pressing one of the black push buttons, the dough band is reeled up and the sheeting process is finished.

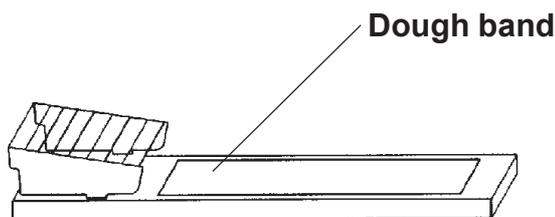


Automatic reeling (option)

This function can only be selected if the machine is equipped with an automatic reeler (See also "Automatic reeler unit", page 050 - 21).

In the last passage, the dough band is automatically reeled up onto the reeler which was previously placed in the reeling device.





**Stop for cutting the dough band
(Option Cutomat)**

This function can only be selected, if the Rondostar is equipped with a cutting station.
During the cutting process the rollers will open and the belts are running with reduced speed.



**5.3.2 Working mode "Auto"
Programming of a normal program**

By RONDOSTAR flashing light-emitting diodes guide you through the programming. The flashing light-emitting diode indicates which values or functions can be modified by the turning knob.

For programming, procede as follows:



- **Selecting working mode**
 - Press key "Auto"
 - Program-number-indication starts to flash for 5s.



- **Selecting program**
 - As long as the indication is flashing, select desired program number with turning knob (program numbers 01 - 50)



- **Selecting programming function**
 - Press key "Auto" for at least 3 seconds until the indication "initial roller gap" (6) starts to flash.



- **Set the initial roller gap**
 - Set the desired initial roller gap with turning knob



- **Press key "OK"**
 - The indication in "final roller gap" (7) starts to flash.



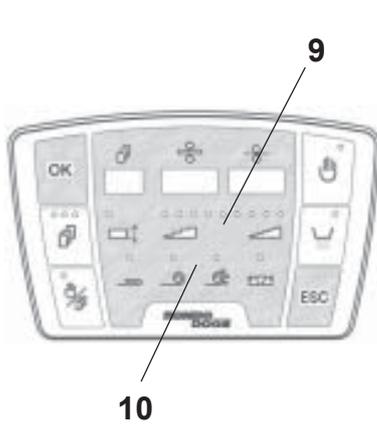
- **Set the final roller gap**
 - Set the desired final roller gap with turning knob



- **Press key "OK"**
 - Now the LED in the indication field "width" is flashing, indication "initial roller gap" indicates "off".



- **Pre-sheeting to a width, set yes / no**
 - The indication can be changed into "on" by the turning knob.
 - on:** width control is switched on
 - off:** width control is switched off
 - The roller gap "width" is defined by the first sheeting process. (See programming of a multi program, chapter 5.3.3)



- **Press key "OK"**
One of the light-emitting diodes in the window "reduction steps" (9) starts to flash
- **Selecting the graduation of the reduction steps**
 - By means of turning knob the desired reduction steps graduation can be selected
- **Press key "OK"**
One of the light-emitting diodes in the window "Program end" (10) starts to flash
- **Selecting function stop for folding, manual reeling, automatic reeling or Cutomat**
 - Select the desired function by means of the turning knob

The functions "automatic reeling" and "Cutomat" are available as an option.



- **Press key "OK"**
Now the LED in the key "Auto" is flashing
If no multi program should be created, press the key "OK" again (multi program, see chapter 5.3.3).
- **Break off the programming with key "ESC"**
The programming can, at any time, be broken off by pressing the key "ESC"
When the programming is broken off, the old data are kept in the program with the key "ESC".

5.3.3 Working mode "Auto" Programming a multi program

When creating a multiprogram, the 1. program loop is programmed in the same way as a normal program (see programming in the working mode "Auto", chapter 5.3.2)

To program a multi program, proceed as follows:



- after the selection stop for folding, manual reeling, automatic reeling or Cutomat (in 1. program loop) **press the key "OK" once**
The left LED in the key "Auto" is flashing
- **choose 2. program loop by turning knob**
(middle LED in the key "Auto" is flashing)
- **Press key "OK"**
(Indication "Initial roller gap" is flashing)
- **programming the 2. program loop**
- **at the end of the 2. program loop** choose 3. program loop by turning knob or stop programming by pressing key "OK".
(multi program with 2 loops)
- **programming the 3. program loop**
- **after the 3. program loop** press key "OK" again

5.3.4 Working mode "Auto" Programming the roller gap for "width"

If during the programming the function "pre-sheeting to a width" is selected, the dough has to be sheeted to the desired length (width) by the first sheeting process. The roller gap is reduced step by step (entered by turning knob) until the dough has reached the desired length.

Proceed as follows:

- **Place the dough and start sheeting process** as by the automatic sheeting. The piece of dough passes now two times the rollers then the machine stops.
- Measure the dough length and set the new roller gap by turning knob. Start the machine with one of the two black push buttons. The piece of dough passes again two times the rollers.
- **Repeat these steps** until the desired length (width) is reached. Turn the piece of dough. **Don't change the roller gap again.** This roller gap will be stored as "roller gap for a width".
- **Start the machine**
The piece of dough will now be sheeted according to the sheeting program.



Pre-sheeting to a width is now programmed.

The automatic sheeting program runs now as follows:

- According to the desired graduation of the reduction steps it will be sheeted automatically to the roller gap "width". Machine stops. **Turn the piece of dough and start the machine with one of the two black push buttons.** The piece of dough will be sheeted according to the program.

5.3.5 Working mode "Auto" change normal programs

When changing a program, the data of the program can be changed individually.

To change a program proceed as follows:

- **Select "change program"**
Press key "OK" twice shortly (double click)
Indication "Initial roller gap" is flashing
- **Change data**
Data can be changed by turning knob.
Data, which should not be changed, confirm with the key "OK".

If pressing "ESC" while changing a program, you will jump back to the start and the "old values" remain stored.

**Attention: Never change a program with the function "programming".
Change by "double click" on key "OK".**



5.3.6 Working mode "Auto" change a multi program

Multi programs can be changed in exactly the same way as normal programs.

Before selecting the function "changing program" that loop of the multi program has to be selected in which the change should take place. ("double click" on key "Auto").

- Changing in the selected loop (1, 2 or 3) by "double click" on key "OK".



5.3.7 Programming in the working mode "Manual/Auto"

For programming, a dough block is sheeted as in the mode "Manual". At the end of the sheeting process, the manually set reduction steps are memorized in a "Manual/Auto" program.

9 "Manual/Auto" programs (H1 - H9) can be memorized.

For programming, procede as follows:

- **Selecting working mode**
 - Press key "Manual/Auto"
Program-number-indication starts to flash for 5s.
 - **Selecting program**
 - Select desired program number with turning knob
(program numbers H1 - H9)
 - **Selecting programming function**
 - Press key "Manual/Auto" for at least 3 seconds until the indication "initial roller gap" (6) starts to flash.
 - **Sheeting a dough block**
 - Sheet a dough block in the same way as described under working mode "Manual".
 - **Memorizing a program**
 - Press key "OK" after the last sheeting pass.
With this, the manually set reduction steps are memorized.
 - **Selecting function stop for folding, manual reeling, automatic reeling or Cutomat**
 - Select desired function with turning knob
The selected function will be carried out automatically by the next sheeting process.
- The functions "automatic reeling" and "Cutomat" are available as an option.**
- Press key "OK"
The programming is completed
The machine is ready for sheeting



Individual values of a "Manual/Auto" program cannot be modified. If a modification becomes necessary, the whole program - as described above has to be re-established from the beginning.

5.4 Special functionings**5.4.1 Side folding / manual reeling**

By changing the parameters PA 0 or PA 1 respectively, it can be selected between:

PA 0 = 0 Side folding not defined

PA 0 = 1 Folding on right table

PA 0 = 2 Folding on left table

PA 1 = 0 Side manual reeling not defined

PA 1 = 1 Manual reeling on right table

PA 1 = 2 Manual reeling on left table

Example:

The dough should now be reeled with the manual reeler on the left instead of the right table.

For changing parameter "1", proceed as follows:



- Select working mode "Auto"



- Press key "OK" for 10 s till indication **FU 0**



- Select Function 1 by turning knob indication **FU 1**



- Press key "OK" for 3 s till indication **PA 0 1**
indication "0" in the middle is flashing



- Select parameter "1" by turning knob indication **PA 1 1**
indication "1" in the middle is flashing



- Confirm parameter "1" by key "OK" indication **PA 1 1**
indication "1" on the right is flashing



- Set PA 1 to 2 by turning knob (manual reeling on left-hand table)
indication "2" on the right side is flashing



- Confirm the input by pressing key "OK" indication **PA 2 0**



- Press twice key "ESC" indication **Auto-program 1**

5.4.2 Working mode "Manual" with / without photo cell

Normal working mode: Working with photo cell (see Simultaneous sheeting of several small dough pieces, with photo cell, page 050 - 9)

Special working mode: Working without photo cell (see Simultaneous sheeting of several small dough pieces, without photo cell, page 050 - 10)

When delivering the machine, the working mode "Manual" with **photo cell** is programmed.

For switch off the function of the photo cells, procede as follows:



- Select working mode "Manual"



- Press key "Manual" for 3 s till the three LED's in the middle of the window "reduction steps" light up. These LED's indicate, that the function of the photo cells is switched off.

To switch on the function of the photo cells, proceed as follows:



- Change to the working mode "Auto" or "Manual/ Auto"
- or
- Press key "Manual" during 3 s till the three light-emitting diodes are reset

5.4.3 Diagnosis program

With the diagnosis program, the functioning of the keys, the turning knob, the photo cell etc. can be checked.

For select the diagnosis, procede as follows:



- Select working mode "Auto"



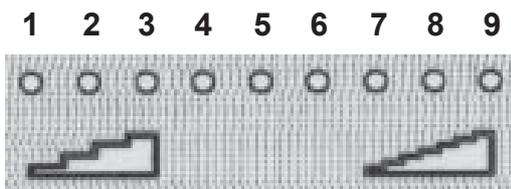
- Press key "OK" during 10 s till indication **FU 0**



- Select Function 2 by turning knob indication **FU 2**



- Press key "OK" till indication **d.**



With the 9 light-emitting diodes (LED) of the roller reduction steps, the following functions are shown:

- LED 1: has to light if the control power of the processor is o.k.
- LED 2: has to light if the general control voltage is o.k.
- LED 3: has to light if the right push button is pressed
- LED 4: has to light if the left push button is pressed
- LED 5: has to light if the safety guards are closed and one of the black push buttons is activated. (supervision main contactor)
- LED 6: has to light if the safety guards are closed and one of the black push buttons is activated. (supervision frequency converter)
- LED 7: has to light on/off if the turning knob is **slowly** turned.
- LED 8: has to light if the photo cell is covered, i.e. if dough is between the rollers. Must not light if photo cell is free; i.e. if no dough is between the rollers.
- LED 9: Turning direction supply, not of interest

Quit the diagnosis program:



- Press twice key "ESC" indication **Auto-program 1**

5.4.4 Compound operation

The Rondostar can be used in compound operation together with one or two make-up lines. Precise description to the compound operation is included in the service manual.

(See service manual, chapter 4.4 Parameter and chapter 6. Compound operation with a make-up line)

5.5 Flour duster**General informations**

(Switch flour duster on and off, see chapter 5.2.2 General indications)

The programmable automatic flour duster provides a regular dusting of flour onto the dough band, without distributing the dusting flour into the atmosphere.

Please observe the regulations for the use of the unit and of the flour dust protection appliances supplied with it.

Description of functioning

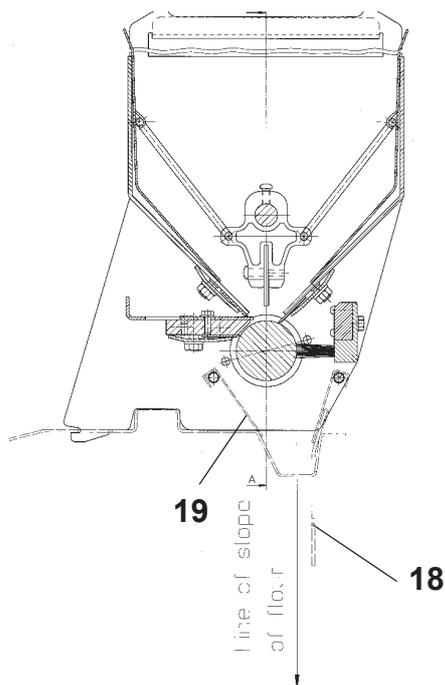
From the flour container, the flour runs onto a rotating distributing roller, from which it is stripped off by a brush and distributed onto the dough band.

Various loosening aids are installed inside the hopper, to avoid an unwanted compression of the flour.

One flour dust protection (18) and one protection plate (19) are hinged-up underneath the container.

The flour duster must not be used without the flour dust protection appliances!

For the best delivery use wheat flour, type Nr. 550.

**Adjusting the dusting width**

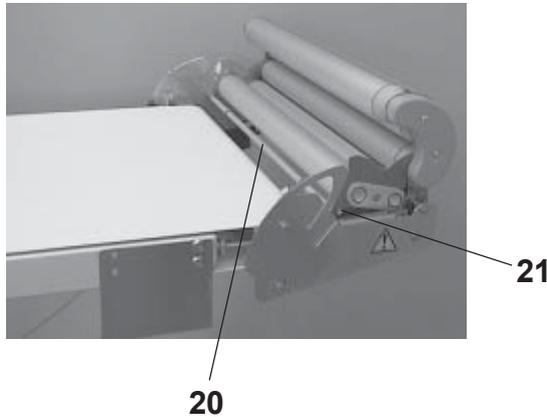
The dusting width is adjusted by opening, respectively closing the slides to the required width.

5.6 Automatic Reeler unit

Function of the automatic reeler unit



The automatic reeler is a device starting automatically by the electrical control. Attention when handling it! Do not reach into the stationary or running device!

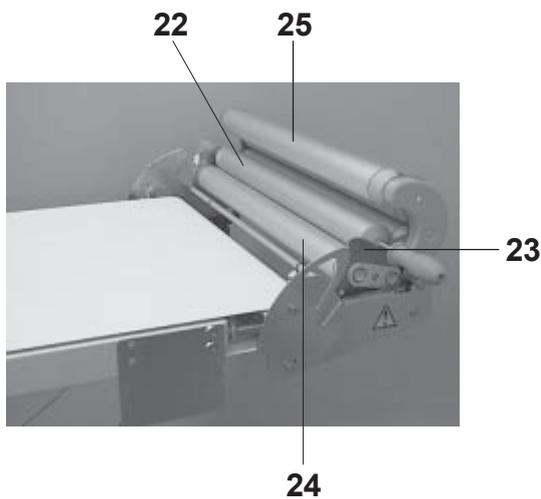


Initial position of the automatic reeler unit (open)

Dough retention bar (20)

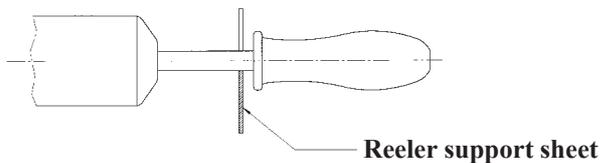
If, when sheeting large dough blocks, the dough band does not slide through the opening between the machine table and the reeling device, but pushes against the dough retention bar (20), this bar can be removed

- Loosen and take off the plastic screw (21)



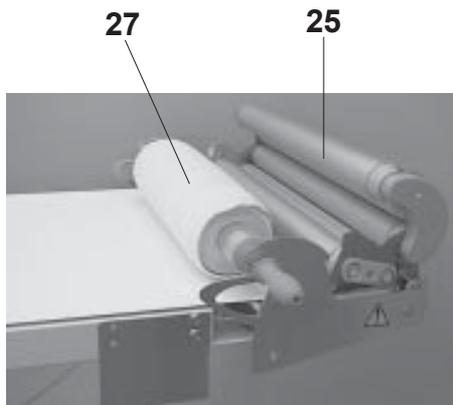
Reeler support (23)

- Insert reeler (22) correct in reeler support (23)



Working position of the automatic reeler unit (closed)

Before the last dough passage in a program with activated reeler, the reeler unit (26) will be closed automatically. Whole device fold downwards, reeler is supported by lower rollers (24) and upper rollers (25).

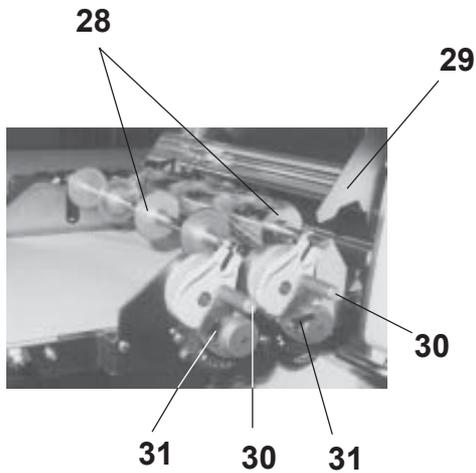


Doughband will be reeled, therefore the upper rollers (25) swing upwards.

On the end of the reeling operation the device will swing back into initial position.

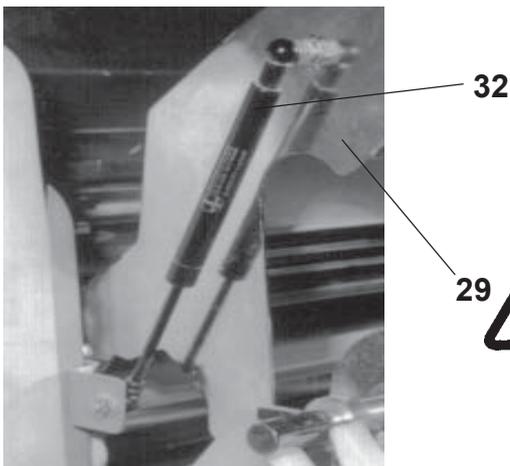
The finished reeled doughband (27) remains on the machine table.

5.7 Cutting device



- 28 Cutting rollers
- 29 Safety guard
- 30 Tension lever
- 31 Locking lever

Safety guard



A safety guard (29) is covering the cutting device.

**A defective pneumatic spring (32) on the safety guard (29) must always be replaced immediately!
Reason: In order to avoid danger of injury should the safety guard fall down!**

Types of cutting rollers



Docking Roller



Length Cutter



Cross Cutter



Zig-zag Cutter



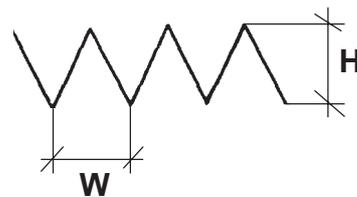
Form Cutting Roller



Tandem Cutter

Standard dimensions for zig-zag cutters in stainless steel version for triangles.

W	H	Number of rows
120	105	5
140	180	3
180	140	4
*180	100	5



* Also available in plastic

Lifting the table with cutting device



A defective stopping lever (33) must always be replaced immediately!
Reason: In order to avoid danger of injury should the table fall down!



33

- Lift the table by hand up till the stopping lever (33) blocks up



33

Table in set-up-position

Letting down the table with cutting station

- Hold the table
- Push up the stopping lever (33) and let down the table at the same time

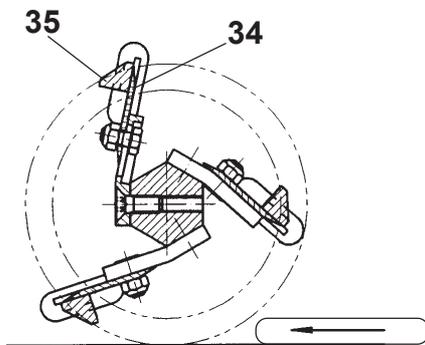
Inserting the Cutting Rollers

Danger of injury on the sharp cutting edges of the cutting rollers!

The cutting rollers must be inserted in the following sequence:

a) For Squares/Rectangles

First Length cutter, than Cross cutter



In order to ensure uninterrupted operation of the cross cutter, the cutter must be positioned in the cutting direction in such a way that the dough sheet is first cut by the cutting knife (34) and then afterwards ejected by the ejector (35).

b) For Triangles:

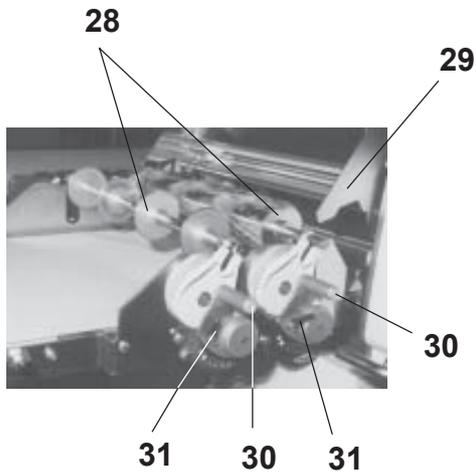
First Zig-zag Cutter, than Length Cutter



Cutting rollers not in use must be stored in the location provided for this purpose.

Reason: In order to avoid damage to the cutting knives.

In order to avoid injury to operators.

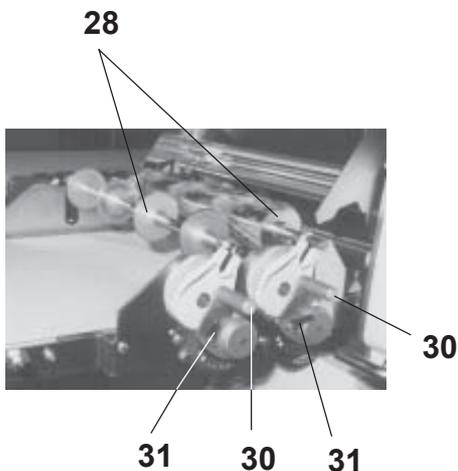
Letting down the Cutting Rollers

- Close the safety guard (29)
- Lift up the tension lever (30) lightly and turn the locking lever (31) anti-clockwise up to the limit stop
- Let down the tension lever (30) at stages up till the Cutting Roller (28) is on the conveyor belt

The deeper the tension lever (30) is let down, the more the cutting pressure is applied.

When using Length Cutters remark the following:

As soon as the Length Cutter touches the conveyor belt, let down the gripping lever max. two stages, otherwise the conveyor belt can be cut.

**Lifting up the Cutting Rollers**

- Push the tension lever (30) lightly down
- Turn the locking lever (31) clockwise up to the limit stop
- Discharge tension lever (30) and lift it up to the limit stop

6 Cleaning

6.1 Cleaning



Before cleaning the machine, pull out the mains plug.

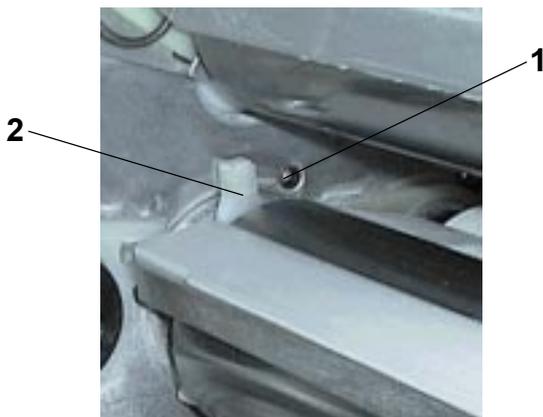
The machine must never be cleaned using spray water, high-pressure cleaner, steam-cleaning machine or any similar cleaning methods.

6.1.1 General Information

Cleaning the photoelectric barrier

(See also Trouble shooting, Page 080 - 3)

The photoelectric barrier (1) built into the machine is automatically cleaned by a mechanical cleaning device (2).



If the conveyor belts are moving in only one direction (i.e. not reversing), whilst the flour duster is also in operation, an undesirable flour build-up will be produced (scraper/conveyor belt), which in turn can cause problems for the functioning of the photoelectric barrier.

- From time to time, remove any flour build-up by hand



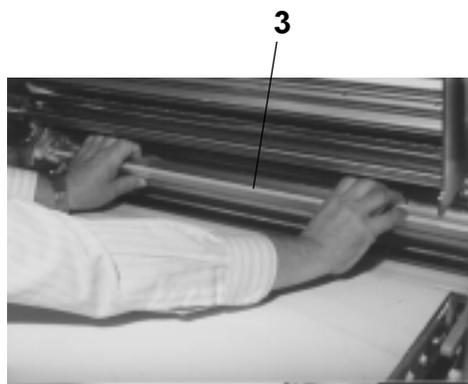
Never clean the photoelectric barrier while the machine is in operation!

Changing the rubber ductor

- Pull off the old ductor, mount the new ductor, the wiper blade rubber must be positioned against the photoelectric barrier

Dismounting the scraper unit

- Close the rollers in the working mode "Manual" to approx. 20 mm
- Lift safety guard into the upper position



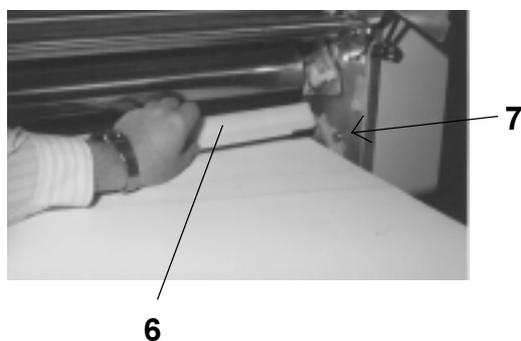
Dismount the upper scraper as follows:

- Take the upper scraper (3) with both hands and push it downwards to the limit stop (4), then pull out the scraper simultaneously on both sides



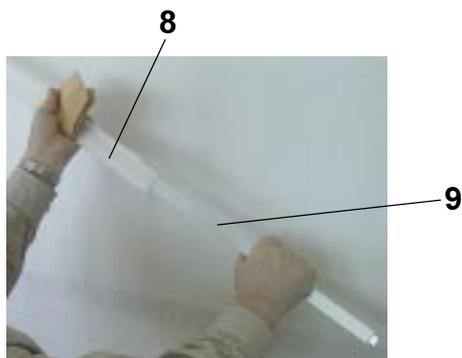
Dismount the lower scraper as follows:

- Push downwards simultaneously the levers (5). Remove the lower scraper (6) from the fixing (7)



- Clean the scraper (see Care, Page 060 - 5)

Exchanging of scraper blades



- Pull out the blade (8) of the fixing (9) with the hand and push new one over the fixing

Attention

For protection of the fingers, use a cloth. The edges of the blades are sharp and there is danger of cutting oneself.

Mounting the Scraper Unit

- To remount the scraper unit, carry out the dismantling instructions in reverse order

Removing of the Machine Table and Conveyor Belts



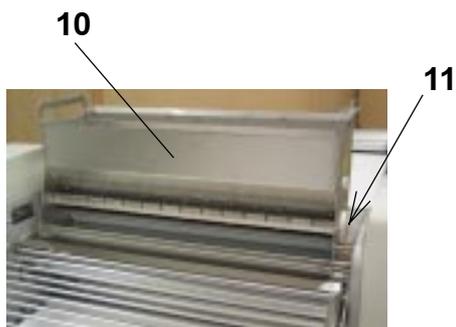
- Dismount the machine table (See Installing the Machine Tables, Page 020 - 3)
- Loosen both tension nuts on the idling side of the table (See Tightening the Conveyor Belts, Page 020 - 7)
- Loosen conveyor belt

- Place table sideways
- Remove conveyor belt

- Clean conveyor belt (See Care, Page 060 - 5)

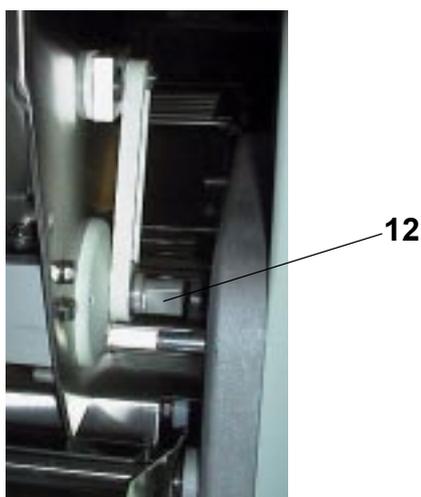
Assembly of the Machine Tables and Conveyor Belts

- To reassemble the machine tables and conveyor belts, follow the removing instructions in reverse order (See Installing the Machine Tables, Page 020 - 3/ Tightening the Conveyor Belts, Page 020 - 7)

Cleaning the flour duster

Dismount the flour duster as follows:

- Gently lift the flour duster (10) on the right side at the front



- Pull the flour duster over the cam (11) until the catch (12) has been guided out of the receiver



- Guide the flour duster out of the openings (13) and remove

Then clean flour duster as follows:

- Empty the flour duster by completely dumping out its contents
- Beat out any remaining flour in the flour duster
- Brush clean the delivery roller using a dry brush



There should be no flour between the flour container and the movable side plates.



Do not use any solvents!

- Remount the flour duster
(see Mounting the flour duster, page 020 - 8)

6.1.2 Care

Part	See	daily see legend	weekly see legend
Roller head and Machine base	Page 030 - 3		A
Scraper	Page 060 - 2	A	
Synthetic conveyor belt	Page 060 - 3	B	C
Dough catch pans	Page 020 - 7, 030 - 3	B	
Flour catch pan	Page 020 - 7	B	
Driving roller	Page 020 - 3		D
Idle roller	Page 020 - 7		D
Flour duster	Page 060 - 4	B	
Automatic dough reeler	Pages 050 - 21, 050 - 22	A	



Alcohol, solvents and cleaning agents which exceed a ph-value of 8 must not be used for cleaning purposes! Only those cleaning agents approved for use in the food industry may be used.

Legend

- A Damp clean using cloth and soapy water.
- B Dry clean using a brush.
- C Wet clean using a brush.
- D Remove excess dough using a brush and plastic scraper.

7 Maintenance

7.1 General Information for Maintenance of the Machine



For a competent maintenance of the machine, a service contract is recommended. Your dealer will be happy to inform you about the various possibilities.



Any defects or damage on the machine must be repaired by an authorized customer service representative.

7.2 Maintenance List

Part	Activity	daily working time 4 - 8 h	daily working time more than 8 h
Conveyor belts	check, if necessary: replace check the belt run	W	W
Brush (Flour duster)	check if necessary: adjust or replace	M	M
Scraper blade (Dough sheeter)	check if necessary: replace	2 J	J
Automatic Reeler	check O-rings if necessary: replace	J	1/2 J
Spindle in the front housing of the roller adjustment	grease by the after-sales service	J	1/2 J

Legend

W	weekly
M	monthly
1/2 J	semi-annually
J	annually
2 J	every 2 years

7.3 Replacement Parts List

The use of replacement parts not delivered by Rondo-Doge can lead to premature wear or to destruction of machine parts.

Item-no.	Description	Dimensions	Application
125954	Scraper complete		all types
134823	Scraper complete (blue)		SFI 6117, SFI 6117H
122775T03	Scraper blade		all types
133577T03	Scraper blade (blue)		SFI 6117, SFI 6117H
105467	Synthetic conveyor belt (67)	3280 x 640 mm	SFS 6117, SFS 6117C, SFS 6117H, SFS 6117DD, SFI 6117, SFI 6117H
121344	Synthetic conveyor belt	3570 x 640 mm	SFS 6115C, SFS 6117C
121344T02	Synthetic conveyor belt (65)	2680 x 640 mm	SFS 6115, SFS 6115C
135341	Synthetic conveyor belt (blue)	3280 x 640 mm	SFI 6117, SFI 6117H
8935	Fuse 2,0 AT	2,0 AT slow ø 5 x 20 mm	all types
50495	Fuse 0,63 AT	0,63 AT slow ø 5 x 20 mm	all types
50466	O-rings	47,3 x 2,62 mm	Automatic dough reeler
50048	Pneumatic spring	100 N	SFI 6117, SFI 6117H
50485	Pneumatic spring	200 N	SFI 6117, SFI 6117H
126084	Rubber ductor		all types
126088	Wiper		all types

8 Trouble Shooting

Symptom	Cause / Defect	Remedy / Repair
1. No indication on display	Mains plug not plugged in. Mains switch not switched on. Power Supply existing? Mains plug defective? Power Supply wrong? Fuse F1, F2, F3 in basic module not o.k.?	Plug in mains plug Switch on mains switch. To check by an electrician: - Check Power Supply (all 3 phases) - Check connections in plug - Supply must be according the information on the sign "Electrical connected loads" of the machine - Plug out the mains plug and check the fuses
2. Indication o.k., machine can not be started	Safety guard closed? Machine in programme mode? Support of safety guard misadjusted?	Close safety guard. Press key "ESC" and start the machine. Adjust the excenter. Limit switch must not be adjusted.
3. Error messages:		Reset the error messages by switching off the mains (mains switch)
Error 1:	Control voltage of the microprocessor too small	Inform the after-sales service.
Error 2:	Control voltage is missing: - Defective Fuse F2 (2,0 A) in base module. - Defect in the base module	The fuse is to be checked by an electrician. Inform the after-sales service.
Error 3:	Roller adjustment is during too long.	Inform the after-sales service.
Error 4:	No reaction of the value transmitter roller gap: - Power supply: 1 phase missing - Value transmitter is not o.k.	The power supply is to be checked by an electrician. (all 3 phases) Inform the after-sales service.
Error 5:	Inexact operation of the roller adjustment.	Inform the after-sales service.
Error 6:	Main contactor has bonded.	Replace main contactor
Error 7: *	Error frequency inverter or contactor K2M	Inform the after-sales service.
Error 8: *	Error frequency inverter during the operation	Inform the after-sales service.
Error 9: *	Error by switching off the machine	Inform the after-sales service.

* Only by the models SFS6115C, SFS6117C, SFS6117DD

Symptom	Cause / Defect	Remedy / Repair
4. Machine runs intermittently, stops.	- Support - Excenter (for safety guard) is misplaced. - Loose wires (Intermittent contact).	Adjust the excenter. By electrician: Adjust wires correctly.
5. Main drive motor runs, rollers and conveyor belts stand still.	- Ribbed belt defective.	Remove rear cover of machine base and roller head, if necessary replace ribbed belt.
6. Conveyor belts slide, motor and rollers run.	- Belt tension too weak. - Driving roller dirty.	Tighten the conveyor belts (see Tightening the conveyor belts, page 020 - 7). Clean driving roller (see Care, page 060 - 5)
7. Infeed conveyor belt stands still or pulls in lean/not, rollers run o.k. (By machine types SFS6115 / SFS6117 / SFS6117H)	- Conveyor belt tension too weak. - Electromagnetic clutch is inoperative. - Toothed wheel of table drive defective.	Tight conveyor belt (see Tightening the conveyor belts, page 020 - 7). Replace clutch. Replace defective part.
8. Discharge conveyor belt stands still or jerks.	- Conveyor belt tension too weak.	Tighten conveyor belt (see Tightening conveyor belts, page 020 - 7).
9. Conveyor belt runs over to one side, tears at the edges.	- Irregular conveyor belt tension. - Driving roller dirty.	Tighten conveyor belt (see Tightening the conveyor belts, page 020 - 7). Clean driving roller (see Care, page 060 - 5)
10. Dough piles up in front of the rollers or passes under the roller between scraper and infeed conveyor.	- Scraper mounted incorrectly. - Scraper blades are worn out.	Mount scraper correctly (see page 060 - 2/3). If necessary replace scraper blades or the complete scraper.

Symptom	Cause / Defect	Remedy / Repair
11. Flour duster does not operate.	Flour duster only runs when there is dough between the rollers. - Flour duster not locked in correctly. - Connection motor shaft - catch deficient. - Flour duster motor stands still.	Lock in correctly (flats of flour duster shaft must fit into slot for catch). Check connection. Call after-sales service.
12. Light barrier does not operate.	Light barrier eye dirty, the light barrier eyes are not cleaned any longer because of: - Ductor defect or lost. - Light barrier defective. - Wiper worn-out	Check cleaning device, replace faulty parts. Call after-sales service. (When opening the safety guards for cleaning the light barrier the programm flow is not disturbed). Replace the ductor. Check the light barrier (see Diagnosis programme, page 050 - 19). Replace the wiper.
13. All other errors/failures.		Inform nearest "Rondo-Doge" after-sales service giving as much information as possible.

Attention:

Always open the safety guard in order to clean the light barrier.

Never reach under the closed safety guards with hands or any other object.

Opening the safety guard and cleaning the light barrier does not interfere with the operation of a dough-sheeting program.

9 Technical data

9.1 Technical data Rondostar 3000

Technical Data	SFS 6115	SFS 6115C
Machine base	fork supports	fork supports
Automatical Dough Reeler	without	without
Automatical Flour duster	option	option
Cutting station	without	with
Width of conveyor belt	640 mm	640 mm
Usable width	600 mm	600 mm
Table length overall	2720 mm	3170 mm
Roller length	660 mm	660 mm
Clearance of safety guard	90 mm	90 mm
Roller gap	0,2 - 45 mm	0,2 - 45 mm
Roller adjustment, motor operated, according to program	Yes	Yes
Speed of discharge conveyor	85 cm/s	85 cm/s
Compound operation with a transfer table	option	without
Compound operation with a make-up line or a donut line	without	without
Rated power	2,0 kVA / 1,2 kW	2,0 kVA / 1,2 kW
Supply voltage	3 x 200 - 460 V, 50/60 Hz	3 x 200 - 460 V, 50/60 Hz
Req. floor-space in working position, catch pans extended	1130 x 3200 mm	1130 x 3650 mm
Req. floor-space in resting position	1130 x 1440 mm	1130 x 1650 mm
Total Machine weight without flour duster	220 kg	245 kg
Weight of the flour duster	20 kg	20 kg

Technical specifications subject to change without notice.

Technical Data	SFS 6117	SFS 6117C
Machine base	fork supports	fork supports
Automatical Dough Reeler	without	without
Automatical Flour duster	option	option
Cutting station	without	with
Width of conveyor belt	640 mm	640 mm
Usable width	600 mm	600 mm
Table length overall	3320 mm	3470 mm
Roller length	660 mm	660 mm
Clearance of safety guard	90 mm	90 mm
Roller gap	0,2 - 45 mm	0,2 - 45 mm
Roller adjustment, motor operated, according to program	Yes	Yes
Speed of discharge conveyor	85 cm/s	85 cm/s
Compound operation with a transfer table	option	without
Compound operation with a make-up line or a donut line	without	without
Rated power	2,0 kVA / 1,2 kW	2,0 kVA / 1,2 kW
Supply voltage	3 x 200 - 460 V, 50/60 Hz	3 x 200 - 460 V, 50/60 Hz
Req. floor-space in working position, catch pans extended	1130 x 3800 mm	1130 x 3950 mm
Req. floor-space in resting position	1130 x 1700 mm	1130 x 1780 mm
Total Machine weight without flour duster	230 kg	255 kg
Weight of the flour duster	20 kg	20 kg

Technical specifications subject to change without notice.

Technical Data	SFS 6117H	SFS 6117DD
Machine base	fork supports	fork supports
Automatical Dough Reeler	with	without
Automatical Flour duster	option	option
Cutting station	without	without
Width of conveyor belt	640 mm	640 mm
Usable width	600 mm	600 mm
Table length overall	3505 mm	3320 mm
Roller length	660 mm	660 mm
Clearance of safety guard	90 mm	90 mm
Roller gap	0,2 - 45 mm	0,2 - 45 mm
Roller adjustment, motor operated, according to program	Yes	Yes
Speed of discharge conveyor	85 cm/s	85 cm/s
Compound operation with a transfer table	without	without
Compound operation with a make-up line or a donut line	without	with
Rated power	2,0 kVA / 1,2 kW	2,0 kVA / 1,2 kW
Supply voltage	3 x 200 - 460 V, 50/60 Hz	3 x 200 - 460 V, 50/60 Hz
Req. floor-space in working position, catch pans extended	1130 x 3820 mm	1130 x 3800 mm
Req. floor-space in resting position	1130 x 2705 mm	1130 x 1700 mm
Total Machine weight without flour duster	245 kg	230 kg
Weight of the flour duster	20 kg	20 kg

Technical specifications subject to change without notice.

Technical Data	SFI 6117	SFI 6117H
Machine base	fork supports	fork supports
Automatical Dough Reeler	without	with
Automatical Flour duster	option	option
Cutting station	without	without
Width of conveyor belt	640 mm	640 mm
Usable width	600 mm	600 mm
Table length overall	3320 mm	3505 mm
Roller length	660 mm	660 mm
Clearance of safety guard	90 mm	90 mm
Roller gap	0,2 - 45 mm	0,2 - 45 mm
Roller adjustment, motor operated, according to program	Yes	Yes
Speed of discharge conveyor	85 cm/s	85 cm/s
Compound operation with a transfer table	without	without
Compound operation with a make-up line or a donut line	without	without
Rated power	2,0 kVA / 1,2 kW	2,0 kVA / 1,2 kW
Supply voltage	3 x 200 - 460 V, 50/60 Hz	3 x 200 - 460 V, 50/60 Hz
Req. floor-space in working position, catch pans extended	1130 x 3820 mm	1130 x 3820 mm
Req. floor-space in resting position	1130 x 3300mm	1130 x 3505 mm
Total Machine weight without flour duster	345 kg	360 kg
Weight of the flour duster	20 kg	20 kg

Technical specifications subject to change without notice.

9.2 Additional information

All sheeters from Rondo-Doge have the following quality features:

- The conveyor belts made of plastic material:
All plastic coated conveyor belts used on our machines are approved for coming into contact with food stuff and correspond with the requirements of the FDA (Food and Drug Administration, USA).
- The conveyor belts made of cotton:
The fabric consists of 100 % cotton and has a non-toxic finish.
- The rollers are hard-chrome plated. This coating is approved for coming into contact with food stuff.
- The scraper blades are made of POM-C plastic material. This material is approved for coming into contact with food stuff and corresponds with the requirements of the "Bundesgesundheitsamt BGA", Germany.
- The dough catch pans are made of stainless steel (chromium nickel steel, DIN Mat. no. 1.4301). This material is approved for coming into contact with food stuff.
- The rollers of the manual and the automatic dough reeler that are touching the dough are made of aluminium, anodised colourless and are approved for coming into contact with food stuff.
- The knives of the cutting rollers that are touching the dough (Cutomat-types) are made of stainless steel (chromium nickel steel, DIN Mat. no. 1.4301). This material is approved for coming into contact with food stuff.
- Flour duster with Inox container:
The container is made of stainless steel (chromium nickel steel, DIN Mat. no. 1.4301, 1.4016), the delivery roller is made of aluminium, anodised colourless, the bristles of the brush are made of plastic material (PA). These materials are approved for coming into contact with food stuff.
- Flour duster with plastic container:
The container is made of plastic material (PS-TSG), the delivery roller is made of aluminium, anodised colourless, the bristles of the brush are made of plastic material (PA). These materials are approved for coming into contact with food stuff.
- Flour container:
The flour container is made of plastic material (ABS). This material is approved for coming into contact with food stuff.