RONDO
Dough-how & more.

Operating manual

Ecomat

STM615
SSO614
SSO615
SSO617
STM615C
SSO615C
SSO617C

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www.rondo-online.com

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RONDO
Dough-how & more.

EC Declaration of conformity for machinery

(Machinery Directive 2006/42/EC, Annex II., sub. A)

Manufacturer: RONDO Burgdorf AG
Address: Heimiswilstrasse 42, 3400 Burgdorf, Switzerland

Name and address of the person authorised to compile the technical file:
RONDO Burgdorf AG, Heimiswilstrasse 42, 3400 Burgdorf, Switzerland

Herewith we declare that the dough processing machine:

Dough sheeter	Ecomat
Bench model	STM61
Bench model Cutomat	STM61C
„A" framed base model	SSO61
„A" framed base model Cutomat	SSO61C

- is in conformity with the relevant provisions of the Machinery Directive (2006/42/EC)
- is in conformity with the provisions of the following other EC-Directives:
  - Directive EMC 2004/108/EC.

And furthermore, we declare that

- the following (parts/clauses of) European harmonised standards have been used:
  - EN 1674: Food processing machines – Safety and Hygiene requirements
  - 1935/2004: Materials, intended to come into contact with food
  - EU 10/2011: Plastic materials and articles intended to come into contact with food
  - EN 60204-1: Safety of machinery – Electrical equipment – Part 1
  - EN 12100-1: Safety of machinery – General principles – Part 1

Burgdorf, 29.01.2016

Werner Mathis
Manager R&D

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.

All the sections in this operating manual containing information which absolutely must be observed are marked with this symbol.

1.2 Explanation of warning signs

Sign indicating prohibited activity

Reaching under the closed safety guard is prohibited!

Instruction and information signs

Make sure to disconnect the mains 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 guards

Operation

The safety guards fulfill a dual purpose:

1. The safety guards protect the operator against inadvertent contact with the rollers.
2. The machine is stopped by lifting up the safety guard. Raising the safety guard even just slightly will cause the machine to discontinue operation.

1.4 Safety instructions and information which must be followed

Read the operating manual before operating the machine.

The dough sheeters of RONDO are built for the food industry exclusively for the sheeting, booking, final sheeting and cutting (using the Cutomat) of dough pieces.

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 arising as a result of 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 prescribed safety instructions.
Defective cables and mains 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 electricity using the mains plug! No permanent electrical installation may be carried out using, for example, terminal screws.

The machine may only be connected to the mains using the plug once the machine has been fully assembled.

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

Safety devices on the machine may not be adjusted, shorted-out or expanded.

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

Defective safety devices must be replaced immediately with new original parts from RONDO.

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

The machine may not be lifted on the machine base (SSO) when being moved. The machine should be fastened and transported on a pallet. The safety guard should be fastened in the upper position.

Reaching under the closed safety guard is prohibited!

The machine may only be operated with the machine tables mounted!

Ensure that conveyor belt tension is correctly adjusted!

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

Table models (STM) must be placed so as to rest properly over the whole work table!

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

The machine may not be operated without the use of a scraper.

Flour dust can cause respiratory tract difficulties and allergies. 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.

Cutomat: The safety guard must always be closed when the cutting rollers are let down.

Cutomat: The replacement of the cutting rollers must be carried out carefully and professionally. Cutting rollers located outside the cutting area must be placed in the holding device located underneath the machine table.

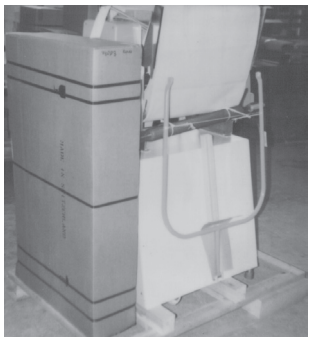
Any disposal of the machine must be carried out in accordance with environmentally-accepted practices. The operators are fully responsible for ensuring that such practices are followed.

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

RONDO accepts no liability in the event of non-compliance with any of the above safety instructions.

2 Transporting, setting up, connecting, dismounting, storing

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 documentation is found on the outside of the packaging)

2.2 Transportation

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

STM

SSO

The machine must not be tipped over.
(For machine weight, see 9.1 Technical data Ecomat)

2.3 Unpacking the machine

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

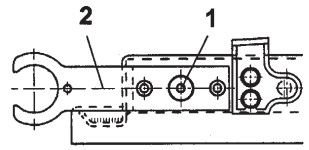
For further information regarding the ambient conditions required for the machine, see 3.1 General information

- Unpack tables and attachments
- Check all items received against the delivery slip to ensure completeness

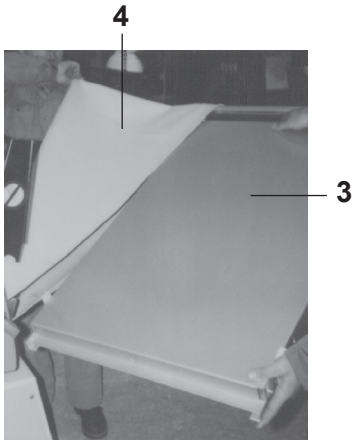
2.4 Setting up the machine

Two people are required to set up the machine!

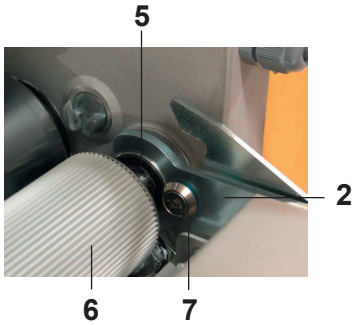
2.4.1 Installing the machine tables



- Unscrew the screws (1) using a hexagon socket screw key
- Dismount the front and rear lateral bracket (2) on the machine table



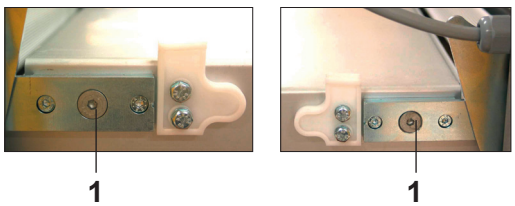
- Lift the machine table (3) with the aid of a second person
- Put the machine table (3) between the conveyor belt (4)



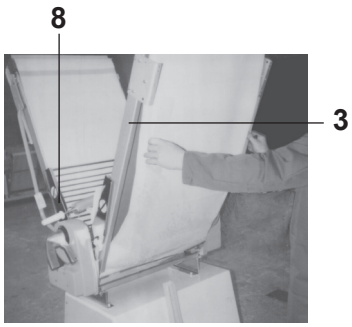
- Place the lateral brackets (2) on the supports (5) of the roller drive (6)

Lateral bracket with lock nut (7) must absolutely be at the rear!

front side **rear side**



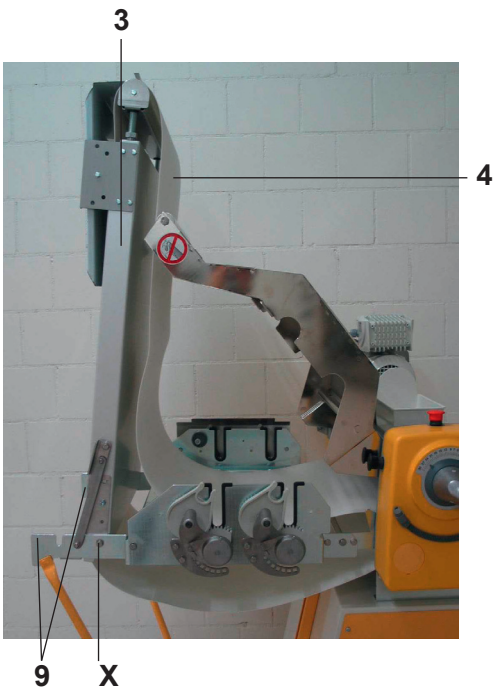
- Mount the lateral brackets (2), tighten the screws (1) using a hexagon socket screw key
  (Allen key SW5 is delivered within)



- Lift table (3) up until it is inserted into the safety guard (8)
  The machine table is now secured.

2.4.2 Mount cutomat table (only by machine with cutting station Cutomat)

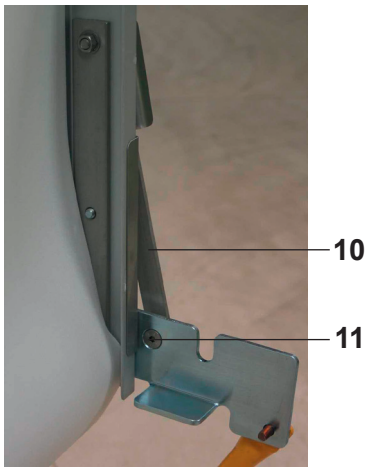
State at time of delivery (after dismounting the packaging)



- Insert the machine table (3) between the belt (4) in such a way that the machine table and the lateral plates (9) fit in the hole X

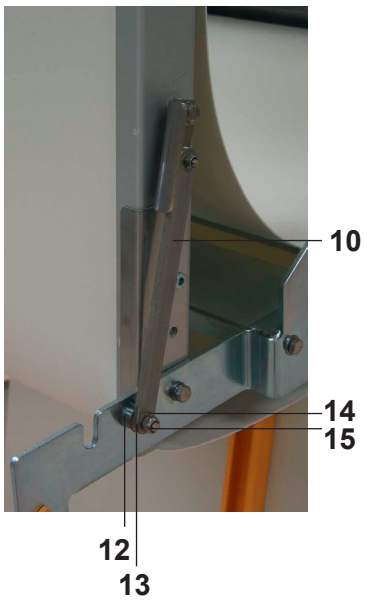
- Plug the bush on the back and on the front (with collar against the outside) in the hole in the lateral plate, afterwards screw down the hexagon screws including the disk

- Lift the machine table



- Position the stopping lever (10) by means of the countersunk screw (11)

- Guide the hub (11) and the disk (13) from the outside over the countersunk screw

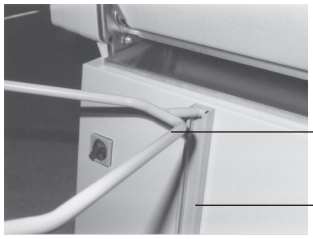


- Fix the stopping lever (10) and the washer (14) by means of lock nut (15)
  Tighten the lock nut in such a way that the stopping lever can still be moved easily.

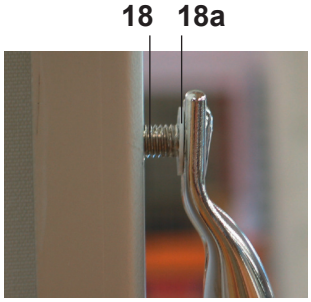
Carry out an operational check.

- Lift the table until the limit stop
- Withdraw the table, check that the stopping lever prevents the table from falling down
- Lower the table (see 5.3.1 General information)

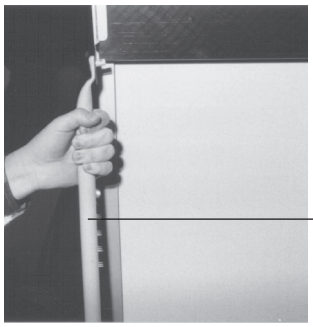
2.4.3 Mounting the forked supports (SSO)



- Push forked support (16) into the support guide (17)



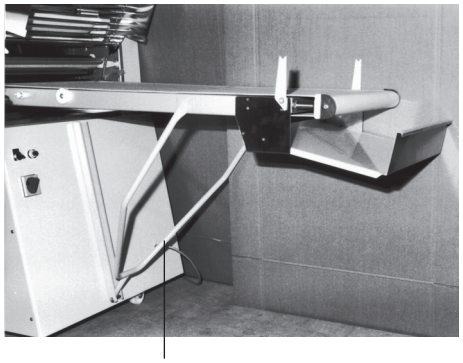
- Insert catch plug (18) of the forked support, with fitted washer (18a), into one side of the table



- Bend up the forked support (16) and secure it to the opposite side of the table (washer fitted on the catch plug)

- Fit the second washer on both sides on the inside, afterwards screw down the cap nut (18b)

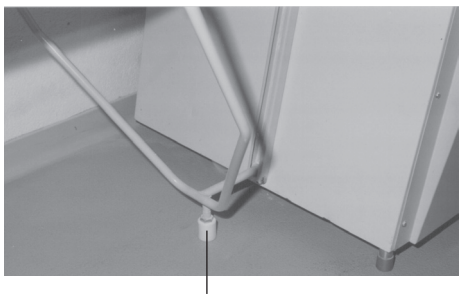
Attention: The conveyor belt has to be placed below the cap nut.



16

Position of the forked supports (16) when the machine table is hinged down.

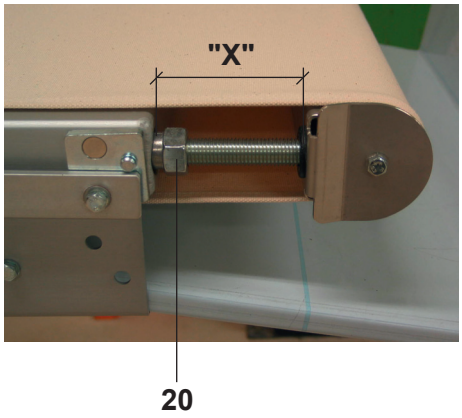
What to watch out for when mounting the forked supports on machines equipped with the “Cutomat” cutting device:



19

The foot (19) 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.

2.4.4 Tensioning the conveyor belts



Tense the conveyor belts only enough so that the heaviest pieces of dough (max. 10 kg) can still be moved along the belt without the conveyor belt dragging.

Proceed as follows:

- Retighten the left and right tension nuts (20) so that they are even and parallel
- Remeasure distance “X” on both sides using a millimeter measuring instrument
  Distance “X” must be identical on both sides.
- Switch on the machine (see 4 Putting the machine into operation, 3.5.4 Start push-button)
- Observe both the left and right running movement of the conveyor belt

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

- Retighten the side where it runs off using a tension nut

or

- Loosen on the opposite side using a tension nut
- Monitor the belt, and if necessary, correct it until it runs exactly in the middle of the table

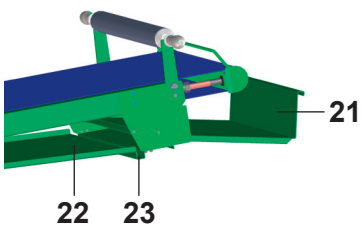
Repeat this procedure several times, if necessary. Routinely monitor the belt during the initial hours that the machine is operational, and if necessary, correct again.

Tensioning and adjusting the conveyor belts demands 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 rubbed lightly with flour in order to prevent the dough from sticking to the belt.

2.4.5 Mounting the dough catch pan (SSO)



- Remove the protective foil on the dough catch pan (21)
- Push in the dough catch pan on both sides

Option:

- Attach the flour catch pan (22) to the holder (23)

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 without a plug is prohibited! Ensure that the connection is made by professionally qualified personnel and that it is carried out in accordance with local regulations (An electrical schematic is delivered with every machine and it is to be found next to the electrical control in the rear of the machine housing).

- Connect the machine plug to the power supply

The machine may only be operated with tables mounted.

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 leakagecurrent 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

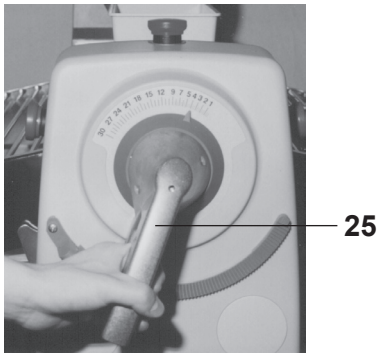
Monitor to ensure that the belts are properly tensioned.

- Press the Start push-button (24) (only impulse)
  The conveyor belts must move from left to right.

If the belts are moving in the wrong direction:

- Exchange two phases in the plug

2.7 Moving the machine (SSO)



- Lift the machine on the roller gap adjusting mechanism (25)

  The front conveyor (26) will snap down.

Once the machine's permanent location is selected:

- Using both hands, tightly grip the roller gap adjusting mechanism (25)
- Gently lift up the machine
- Using one foot, push the pedal for the front conveyor belt (26)
- Gently lower the machine to the floor surface, do not let it "drop"

3 General data about the machine

3.1 General information

3.1.1 The machine's applications

The machine is suitable for sheeting, booking and final sheeting of dough pieces for the food industry.

This product is a technical working tool which is designated to be used exclusively for work.

Booking

Booking in fat. Through sheeting to a thickness of approx. 6 - 11 mm and a 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

Includes sheeting the piece of dough to the necessary final thickness required for further processing.

Cutting

Cutting of the sheeted dough band by means of cutting rollers. (Only possible by the models Cutomat).

3.1.2 Noise values

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

3.1.3 Temperatures

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

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

3.1.4 Ambient humidity

The ambient humidity permissible for the machine lies in the area of 30 % - 95 %, relative humidity, uncondensed (for the dusting flour in the flour container, the relative humidity should not exceed 60 %).

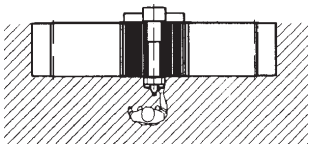
3.1.5 Machine weight

Total weight = approx. 95 - 210 kg, according model

(Compare technical data, 9.1 Technical data Ecomat)

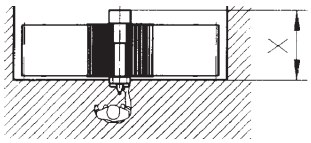
3.1.6 Working area for the operating personnel

SSO



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

STM



On the STM model, the machine must cover the whole width of "X" on the work table!

3.2 Machine models

3.2.1 STM 615

Table model

(see 9.1 Technical data Ecomat)

3.2.2 SSO 614 / SSO 615 / SSO 617

Socle model

(see 9.1 Technical data Ecomat)

3.2.3 STM 615C / SSO 615C / SSO 617C

Ecomat Cutomat models are equipped with a cutting station Cutomat to cut the sheeted dough. The sheeting and cutting speed can be set continuously variable.

(see 9.1 Technical data Ecomat)

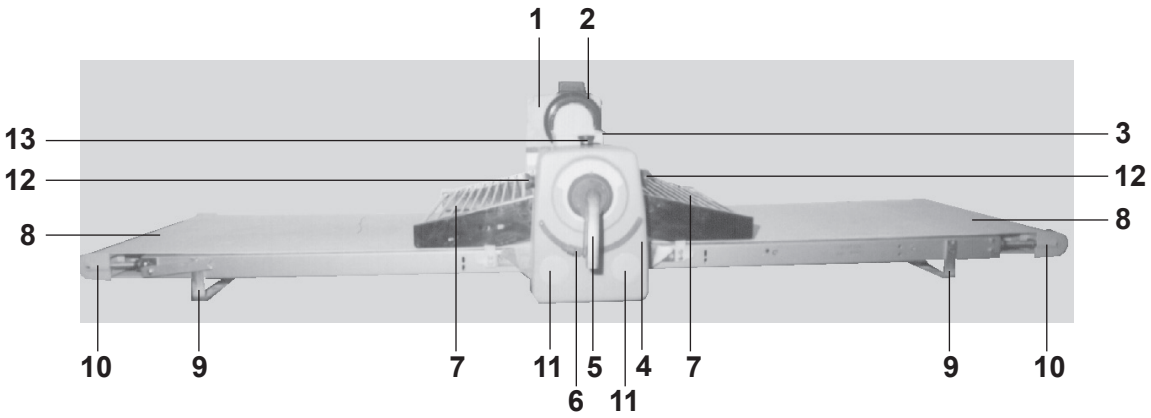
3.3 Prerequisites

In order for the dough to be sheeted by the machine, the following prerequisites must be fulfilled:

- Max. dough piece weight 10 kg
- Flour the dough pieces

  This will serve to prevent the dough from sticking to the rollers and scrapers.

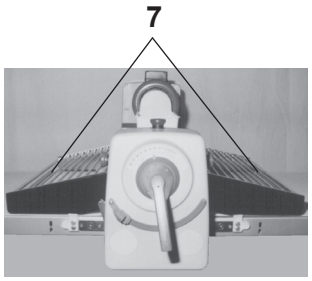
3.4 Complete view of the machine



1 Rear housing
2 Motor
3 Flour container
4 Front housing
5 Roller gap adjusting mechanism
6 Roller gap limit stop
7 Safety guard
8 Conveyor belt
9 Forked support
10 Idle roller
11 Cover
12 Start push-button
13 Stop push-button
14 Machine base
15 Dough catch pan
16 Cutting station Cutomat

3.5 Operating elements

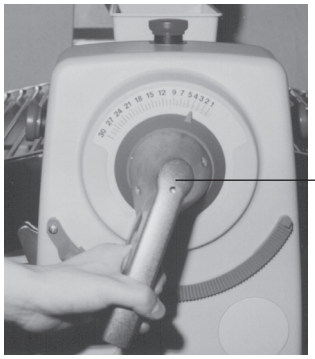
3.5.1 Safety guards



The safety guards (7) protect the operator against inadvertent contact with the rollers.

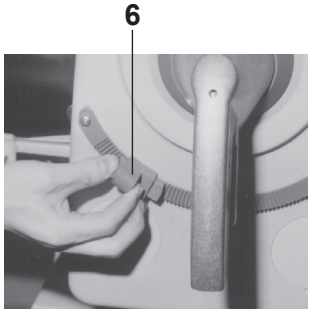
By raising the safety guards (7) the machine can also be stopped

3.5.2 Roller gap adjusting mechanism



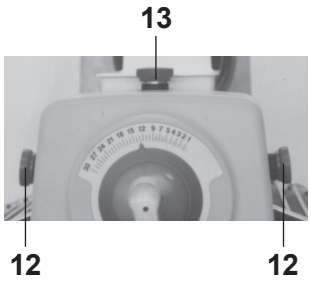
The desired roller gap is set using the roller gap adjusting mechanism (5). (see also 5.1.1 Sheeting)

3.5.3 Roller gap limit stop



The roller gap limit stop (6) serves for mechanical Adjusting of the roller gap (repeatly sheeting)
(see also 5.1.1 Sheeting)

3.5.4 Start push-button

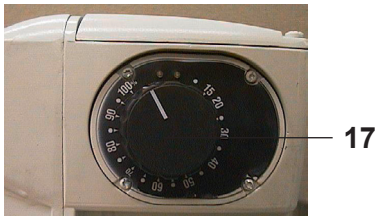


Both start push-buttons (12) (two push-buttons on the side of front housing) serve to start the machine.
(see also 4.2 Starting/Stopping the machine)

3.5.5 Stop push-button

The stop push-button (13) (push-button at the top of front housing) serve to stop the machine.
(see also 4.2 Starting/Stopping the machine)

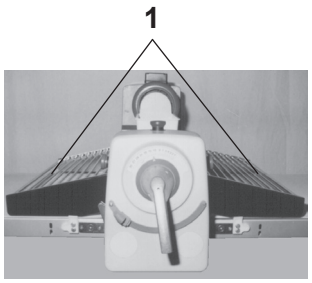
3.5.6 Turning knob



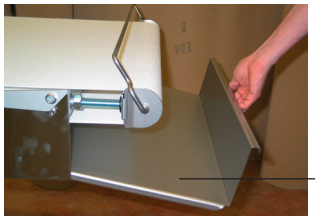
By the models Cutomat the machine speed can be set continuously variable. The speed setting takes place with the turning knob (17).
(see 4.3 Set the machine speed)

4 Putting the machine into operation

4.1 Preparing for operational readiness



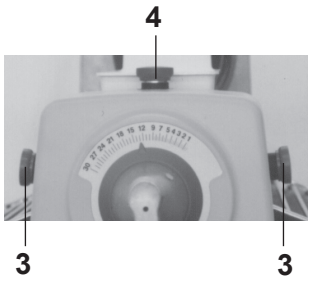
- Close both safety guards (1)
  (see 3.5.1 Safety guards)



On the SSO model:

- Pull out the dough catch pan (2) on both sides

4.2 Starting/Stopping the machine



In order to start up the machine:

- Briefly press the left Start push-button (3)
  The conveyor belts begin to move from left to right.

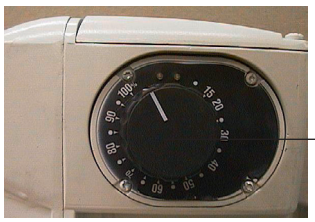
or

- Briefly press the right Start push-button (3)
  The conveyor belts begin to move from the right to the left.

In order to stop the machine:

- Press the Stop push-button (4)

4.3 Set the machine speed



The machine speed can be set continuously variable with the turning knob (5).

- For sheeting: Position 100
- For cutting: Position 15 - 30

5 Operation

5.1 Operating instructions

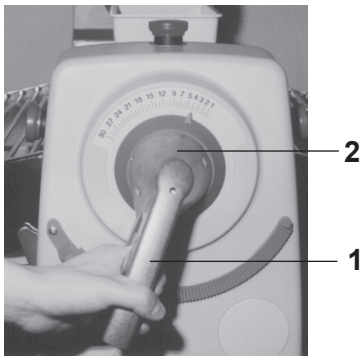
Reaching under the safety guard when it is closed is prohibited!

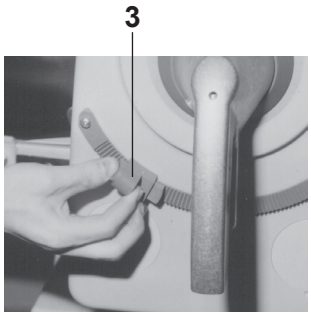
Never leave loose objects such as knives, tools, articles of clothing, etc. lying in the area where the dough is located.

5.1.1 Sheeting

The machine is designed to accommodate dough pieces with a maximum weight of 10 kg!

- Set desired roller gap (maximum 30 mm/ minimum 0.5 mm) as follows:
  - Push lever (1) towards the roller gap adjusting mechanism (2), do not release
  - By way of the roller gap adjusting mechanism (2) set the roller gap desired (Scale)
  - Release lever (1)
    Lever (1) must lock into place
  - Compress roller gap limit stop (3) and push it against the lever (1) and release it

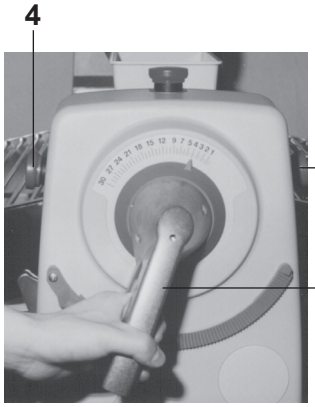




- Place the dough piece (max. 10 kg) on the machine table (do not “throw” it on the table!)
- Start up the machine as follows:
  - On the dough’s infeed side, briefly press the Start push-button (4) (see 4.2 Starting/Stopping the machine)

Once the dough piece has fully cleared the rollers:

- Press Stop push-button (5)
  The machine stops
- Manually set the next roller gap (depending on type of dough being processed)
  (see 5.1.1 Sheeting)
- Release lever (1)
  Lever (1) must lock back into place



- On the dough's infeed side, briefly press the Start push-button (4)
  (see 4.2 Starting/Stopping the machine)

Once the dough piece has fully cleared the rollers:

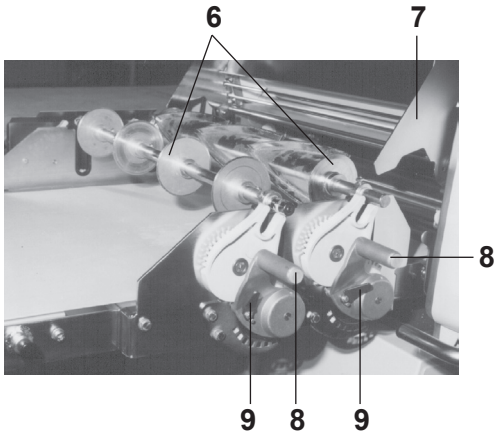
- Press Stop push-button (5)
  The machine stops
- Repeat this procedure until the desired final thickness of the dough has been obtained

5.2 Sources of errors in the sheeting process

Fault finding	Cause / Defect	Remedy / to remove
1. Dough piece sticks, tears under neath.	Dough too moist. Dough piece rubs against scraper bar.	Flour dough piece more. Mount scraper properly (see 6.1.1 General information)
2. Dough piece piles up (ripples).	Reduction steps too big.	Select smaller reduction steps: Let down the roller in smaller steps (see 5.1.1 Sheeting)
3. Dough sheet tapers.	Reduction steps too small.	Select bigger reduction steps: Let down the roller in bigger steps (see 5.1.1 Sheeting)

5.3 Machine type Cutomat with cutting station

5.3.1 General information

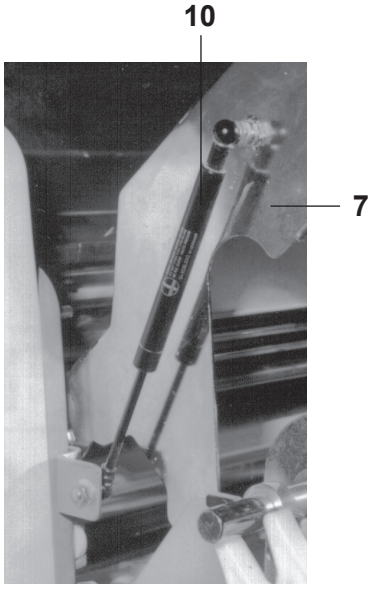


6 Cutting rollers

7 Safety guard

8 Tension lever

9 Locking lever



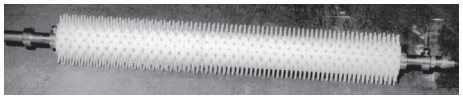
Safety guard

A safety guard (7) is covering the cutting device.

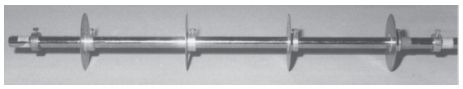
A defective pneumatic spring (10) on the safety guard (7) must always be replaced immediately!

Reason: In order to avoid danger of injury should the safety guard fall down!

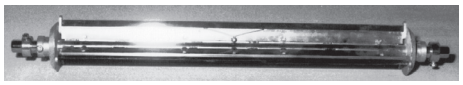
Types of cutting rollers



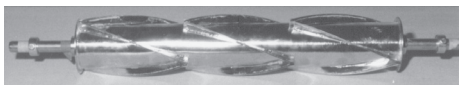
Docking roller



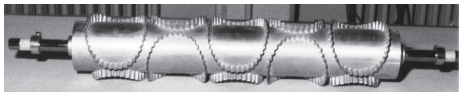
Length cutter



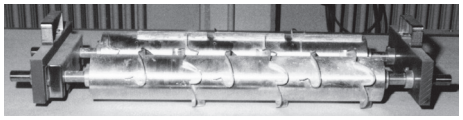
Cross cutter



Zig-zag cutter

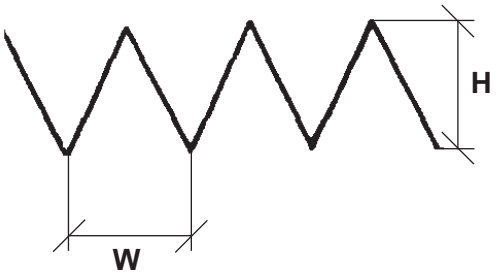


Form cutting roller



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 station

A defective stopping lever (11 must always be replaced immediately!

Reason: In order to avoid danger of injury should the table fall down!

- Lift the table by hand up till the stopping lever (11) blocks up

Table in set-up-position.

Letting down the table with cutting station

- Hold the table
- Push towards the rear the stopping lever (11) and 11 let down the table at the same time

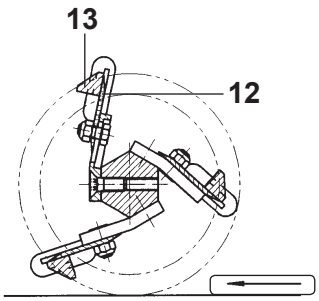
5.3.2 Inserting the cutting rollers

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 (12) and then afterwards ejected by the ejector (13).

b) For triangles

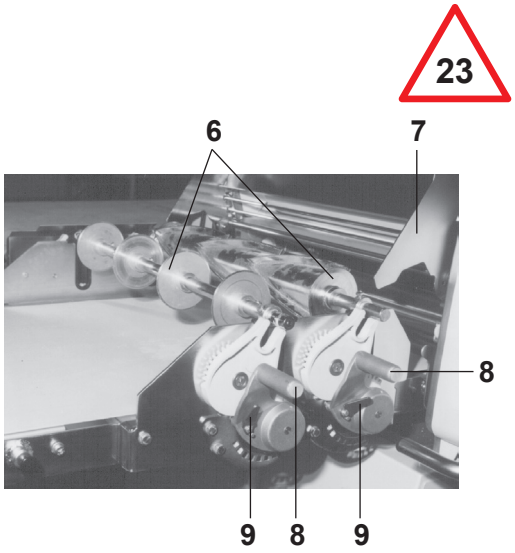
First Zig-zag Cutter, than Length Cutter

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.

5.3.3 Letting down the cutting rollers



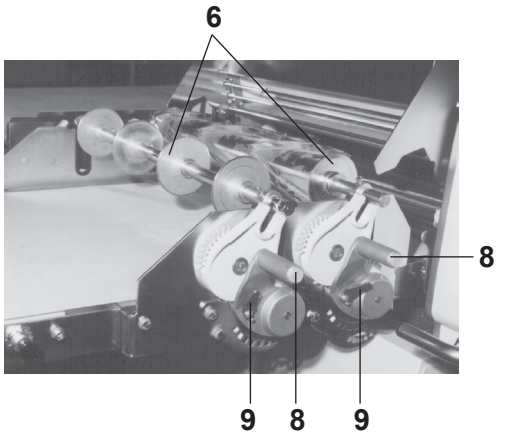
- Close the safety guard (7)
- Lift up the tension lever (8) lightly and turn the locking lever (9) anti-clockwise up to the limit stop
- Let down the tension lever (8) at stages up till the Cutting Roller (6) is on the conveyor belt

The deeper the tension lever (8) 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 tension lever max. two stages, otherwise the conveyor belt can be cut.

5.3.4 Lifting up the cutting rollers



- Push the tension lever (8) lightly down
- Turn the locking lever (9) clockwise up to the limit stop
- Discharge tension lever (8) and lift it up to the limit stop

5.3.5 Cutting

The width of the dough sheet must correspond to the length of the cutting roller to be used plus approx. 1 - 2 cm on either side.

The cutting takes place by reduced speed (Position 15 - 30 of the turning knob).

Running direction

It can be cut in both directions. We recommend to cut from left to right. (The dough sheet is placed before cutting on the machine table with the cutting station).

Starting / Stopping the machine the same way as by sheeting

(see 5.1.1 Sheeting)

6 Cleaning

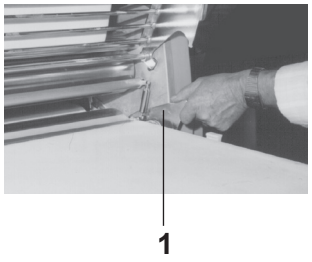
6.1 Cleaning

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

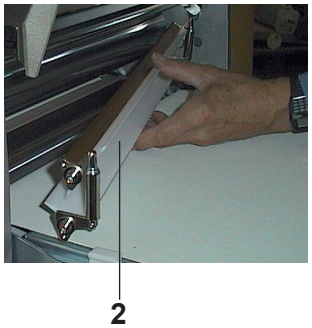
6.1.1 General information

Dismounting the scraper

- Open rollers fully
- Lock the safety guard into the upper position

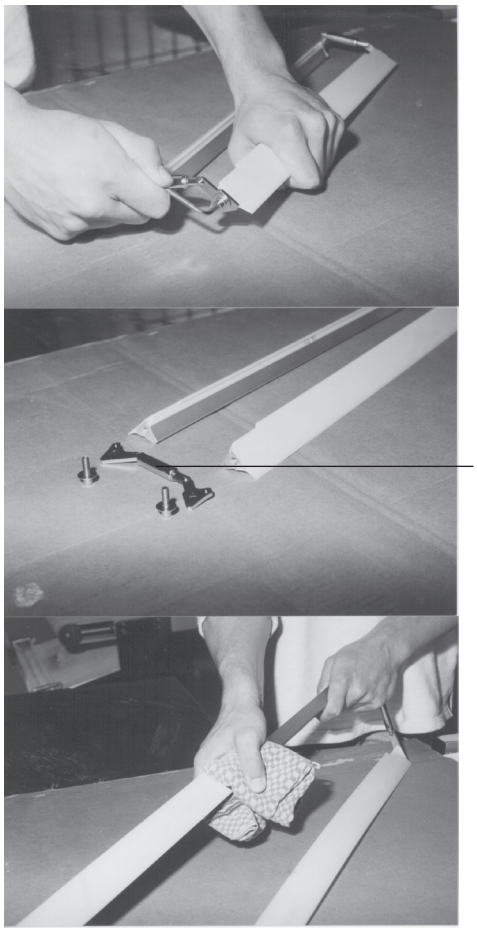


- Using the thumb, push the front and rear scraper blade (1) downwards



- Lift the scraper (2) out of the scraper mounting
- Pull out the scraper (2)
- Clean the scraper (see 6.1.2 Care)

Exchange of scraper blades



Required tool: Allen key No. 4

Exchange of scraper blades:

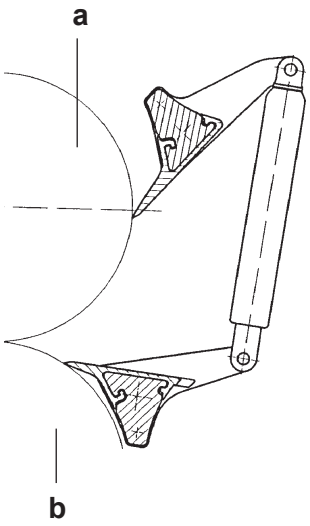
- disassemble the spring clamp (3) on the left or right hand side

- slide the scraper blade off

Attention

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

- Assemble the new scraper blades in reverse order
- Assemble the spring clamp in reverse order



Mounting the Scraper

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

a upper roller

b lower roller

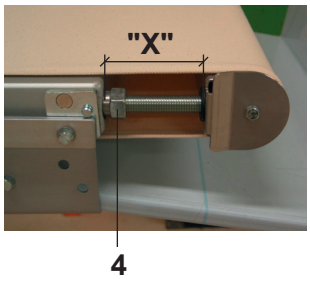
16

Dismounting machine tables / conveyor belts

In order to dismount the machine tables and conveyor belts, proceed as follows:

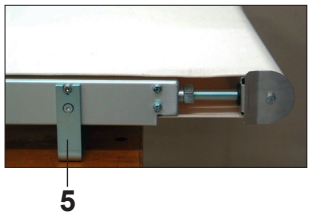
9

- Pull out the mains plug
- Lift up the safety guards



- Loosen the tension nuts (4) parallel, in order to retighten the conveyor belt

- Dismount the forked supports (only on SSO)
  (To remount forked supports, proceed in reverse order, see 2.4.3 Mounting the forked supports (SSO))

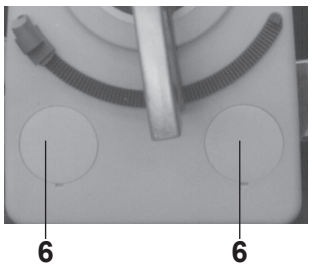


- Dismount the forked supports (5) (STM)

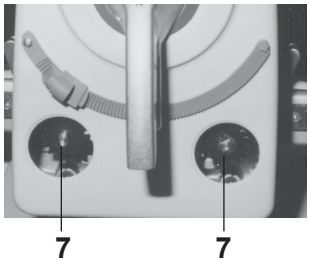
- Dismount tables (To dismount, follow machine table mounting instructions in reverse order, see 2.4.1 Installing the machine tables)

In order to dismount the conveyor belts, proceed as follows:

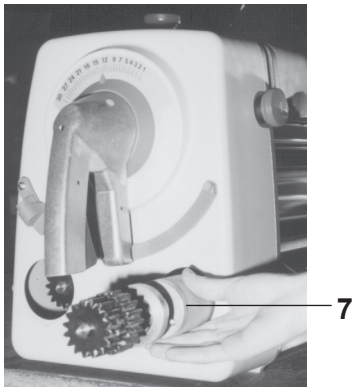
- Dismount the scraper (see 6.1.1 General information)



- Remove covers (6) with aid of a screw driver



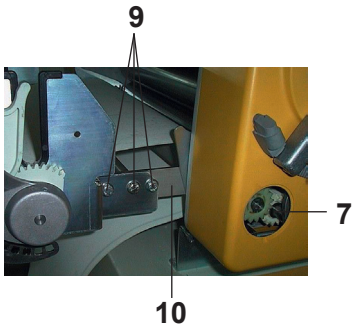
- Remove the drive rollers (7) towards the front out of the machine head



- Remove the conveyor belt

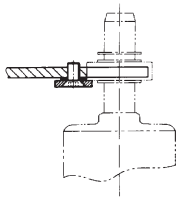
Dismount the cutomat table / conveyor belt

- Remove the machine table
- Remount machine tables and conveyor belts by proceeding in reverse order of the instructions for dismounting them (see 2.4.1 Installing the machine tables)

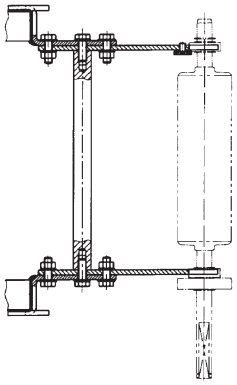


- Loosen the screws (9)
- Remove the bracket (10)
- Remove the cutting station (8)
- Dismount the drive rollers (7)
  (Scraper bow is pressed fully down)
- Push the table support (11) completely to the top and remove

Drive roller with cutting station



Lateral bracket with lock nut must absolutely be at the rear!
(see 2.4.1 Installing the machine tables)



- The conveyor belt can now be cleaned or replaced (see 6.1.2 Care / 7.3 Replacement parts list)

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Mounting the Machine Tables and Conveyor Belts

Make absolutely sure that you do not confuse the left and right driving rollers or the left and right machine tables!

- Remount machine tables and conveyor belts by proceeding in reverse order of the instructions for dismounting them

6.1.2 Care

Part	see	daily see legend	weekly see legend
Machine head and socle	3.4 Complete view of the machine		A
Scraper	6.1.1 General information	A	
Cotton belt	6.1.1 General information	B	(E)
Synthetic belt	6.1.1 General information	B	C
Dough catch pan	2.4.5 Mounting the dough catch pan (SSO)	B	
Flour catch pan	2.4.5 Mounting the dough catch pan (SSO)	B	
Driving roller	2.4.1 Installing the machine tables		D
Idle roller	2.4.4 Tensioning the conveyor belts		D
Cutting rollers	5.3.1 General information	A	
Flour container	3.4 Complete view of the machine	B	

Only use cleaning agents with a ph-value of 6 to 8! Only cleaning materials approved for use in the food industry may be used.

Legend

A Wet clean using a cloth and soapy water

B Dry clean using a brush

C Wet clean using a brush

D Using a brush and plastic scraper, remove any remaining pieces of dough

E Wash cotton belt monthly as follows:

- Water temperature must not exceed 40 ºC
- Once belt has been washed, hang it over a rod and weight it down with a weight of approx. 10 kg

7 Maintenance

7.1 General information on maintenance of the machine

Any defects on the machine must be repaired by an authorized customer service representative!

7.2 Maintenance list

What/Part	Activity	daily working time less than 4 h	daily working time 4 - 8 h	daily working time more than 8 h
Conveyor belts	check If necessary: replace	M	W	W
Scraper blade (Dough sheeter)	check If necessary: replace	M	W	W
Table drive and roller adjustment mechanism in the front housing	grease according to the Service manual	3 J	2 J	J
Roller drive and adjustment in the rear housing	grease according to the Service manual	3 J	2 J	J

Legend

W weekly

M monthly

J annually

2J every 2 years

3J every 3 years

7.3 Replacement parts list

The use of conveyor belts not supplied by RONDO can lead to premature wear or destruction on machine parts (coupling, drive rollers).

Item-no.	Description	Dimensions	Application
122773T01	Scraper complete	-	STM615, STM615C, SSO614, SSO615, SSO615C, SSO617, SSO617C
122775T01	Scraper blade	-	STM615, STM615C, SSO614, SSO615, SSO615C, SSO617, SSO617C
05251	Cotton conveyor belt	3200 x 608 mm	SSO617, SSO617C
05261	Cotton conveyor belt	2320 x 608 mm	STM615, STM615C, SSO615, SSO615C
120750T05	Cotton conveyor belt	1900 x 608 mm	SSO614
121344T24	Synthetic conveyor belt	3570 x 604 mm	STM615C, SSO615C, SSO617C
121344T28	Synthetic conveyor belt	1980 x 604 mm	SSO614
121344T29	Synthetic conveyor belt	3280 x 604 mm	SSO617, SSO617C
121974	Synthetic conveyor belt	2390 x 604 mm	SSO615, SSO615C, STM615, STM615C
8934	Fuse 1,0 AT	1,0 AT slow ø 5 x 20 mm	all types

8 Trouble shooting

Fault finding	Cause / Defect	Remedy / To remove
1. Machine stands still after assembly.	Main switch not/not correctly plugged in.	Plug in the main switch.
	Safety guard not closed.	Close safety guard.
	Right or left Start push-button not pressed.	Press the desired Start push-button.
	Machine tables not level.	Put the machine tables in a even level position.
2. When pressing the right Start push-button the conveyor belts move to the right.	Sense of rotation reverse (mains).	Moving direction test (see 2.6 Moving direction test)
3. Machine runs intermittently, stops, rattles.	Safety guard limit switch incorrect.	Readjusting by an expert.
	Support for safety guard incorrect. Loose cables, wires.	Adjust supporting eccentric. Adjust loose wires, cables.
4. Main drive motor runs, rollers and conveyor belts stand still.	Belt drive defective.	Call after-sales service! Remove rear cover of machine base and roller head, replace belts or toothed belts if necessary.
5. Conveyor belts loops up, motor and rollers run.	Belt tension too weak.	Tension conveyor belt equally. (see 2.4.4 Tensioning the conveyor belts)
	Driving roller dirty.	Clean driving roller (see 6.1.2 Care)
6. Machine only runs to one side.	Defective motor contactor.	Call specialist (electrician). Replace motor contactor.

Fault finding	Cause / Defect	Remedy / To remove
7. Discharge conveyor belt stands still or jerks.	Table drive defective	Call after-sales service.
	Belt tension too weak.	Tension the belt equally (see 2.4.4 Tensioning the conveyor belts)
8. Dough piles up before the roller or passes under the roller between scraper and infeed conveyor belt.	Scrapers inserted uncorrectly.	Close the scraper levers properly (see 6.1.1 General information) Check and if necessary adjust scraper levers by means of eccentric (center of motion).
	Scraper blades worn out.	If necessary replace scraper blades or the complete scraper.
9. Conveyor belts run to one side, tear at the edges.	Incorrect belt tension.	Tension conveyor belt (see 2.4.4 Tensioning the conveyor belts)
	Drive roller dirty	Clean drive roller (see 6.1.2 Care)
10. Cotton conveyor belts too short after washing.	Washing temperature too high.	Washing temperature max. 40° C. Hang washed conveyor belt over a rod and weigh it down below with approx. 10 kg.
11. Red LED-indication on the turning knob illuminates.	Malfunction Cutomat motor.	Open safety guard completely. When the red LED-indication stops illuminating, close safety guard and start the machine. If the red LED-indication illuminates again, contact the nearest “RONDO” after sales service.
12. All other errors/failures.		Inform nearest “RONDO” after-sales service giving as much information as possible.

9 Technical data

9.1 Technical data Ecomat

Technical Data	STM 615 Ecomat	STM 615C Ecomat Cutomat	SSO 614 Ecomat
Machine base	No (table model)	No (table model)	Socle
Belt width	605 mm	605 mm	605 mm
Table width	620 mm	620 mm	620 mm
Total table length	2420 mm	3020 mm	2030 mm
Req. floor-space: in working position	1072 x 2420 mm	1072 x 3020 mm	1072 x 2510 mm (dough catch pans extended)
in resting position	1072 x 1240 mm	1072 x 1638 mm	1072 x 905 mm
Roller length	633 mm	633 mm	633 mm
Roller gap	0,5 - 30 mm	0,5 - 30 mm	0,5 - 30 mm
Sheeting speed of discharge conveyor	50 cm/sec	10 - 50 cm/sec	55 cm/sec
Rated power	1,0 kVA / 0,6 kW	1,0 kVA / 0,6 kW	1,0 kVA / 0,6 kW
Supply voltage	3 x 200 - 420 V, 50 / 60 Hz 1 x 200 - 230 V, 50 Hz 1 x 200 - 230 V, 60 Hz	3 x 380 - 420 V, 50 / 60 Hz 1 x 200 - 230 V, 50 / 60 Hz	3 x 200 - 420 V, 50 / 60 Hz
Machine weight:	approx. 95 kg	approx. 135 kg	approx. 140 kg

Subject to technical changes without notice.

Technical Data	SSO 615 Ecomat	SSO 615C Ecomat Cutomat
Machine base	Socle	Socle
Belt width	605 mm	605 mm
Table width	620 mm	620 mm
Total table length	2420 mm	3020 mm
Req. floor-space: in working position in resting position	 1072 x 2900 mm (dough catch pans extended) 1072 x 1240 mm	 1072 x 3500 mm (dough catch pans extended) 1072 x 1638 mm
Roller length	633 mm	633 mm
Roller gap	0,5 - 30 mm	0,5 - 30 mm
Sheeting speed of discharge conveyor	50 cm/sec	10 - 50 cm/sec
Rated power	1,0 kVA / 0,6 kW	1,0 kVA / 0,6 kW
Supply voltage	3 x 200 - 420 V, 50 / 60 Hz 1 x 200 - 230 V, 50 Hz 1 x 200 - 230 V, 60 Hz	3 x 380 - 420 V, 50 / 60 Hz 1 x 200 - 230 V, 50 / 60 Hz
Machine weight:	approx. 160 kg	approx. 205 kg

Subject to technical changes without notice.

Technical Data	SSO 617 Ecomat	SSO 617C Ecomat Cutomat
Machine base	Socle	Socle
Belt width	605 mm	605 mm
Table width	620 mm	620 mm
Total table length	3320 mm	3470 mm
Req. floor-space: in working position in resting position	 1072 x 3800 mm (dough catch pans extended) 1072 x 1630 mm	 1072 x 3950 mm (dough catch pans extended) 1072 x 1833 mm
Roller length	633 mm	633 mm
Roller gap	0,5 - 30 mm	0,5 - 30 mm
Sheeting speed of discharge conveyor	50 cm/sec	10 - 50 cm/sec
Rated power	1,0 kVA / 0,6 kW	1,0 kVA / 0,6 kW
Supply voltage	3 x 200 - 420 V, 50 / 60 Hz	3 x 380 - 420 V, 50 / 60 Hz 1 x 200 - 230 V, 50 / 60 Hz
Machine weight:	approx. 165 kg	approx. 210 kg

Subject to technical changes without notice.

9.2 Additional information

All sheeters from RONDO 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 directives EU 10/2011 as well as 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 directives EU 10/2011 as well as the FDA (Food and Drug Administration, USA).
- 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.