

M46

DOUGH DIVIDER + ROUNDER



1. GENERAL INFORMATION AND SAFETY SPECIFICATIONS

The dough divider M46 + rounder has been designed and manufactured to cut and round pizza and some types of bread dough portions (at room temperature).

The dough is extruded through an auger, cut by a knife and then rounded.

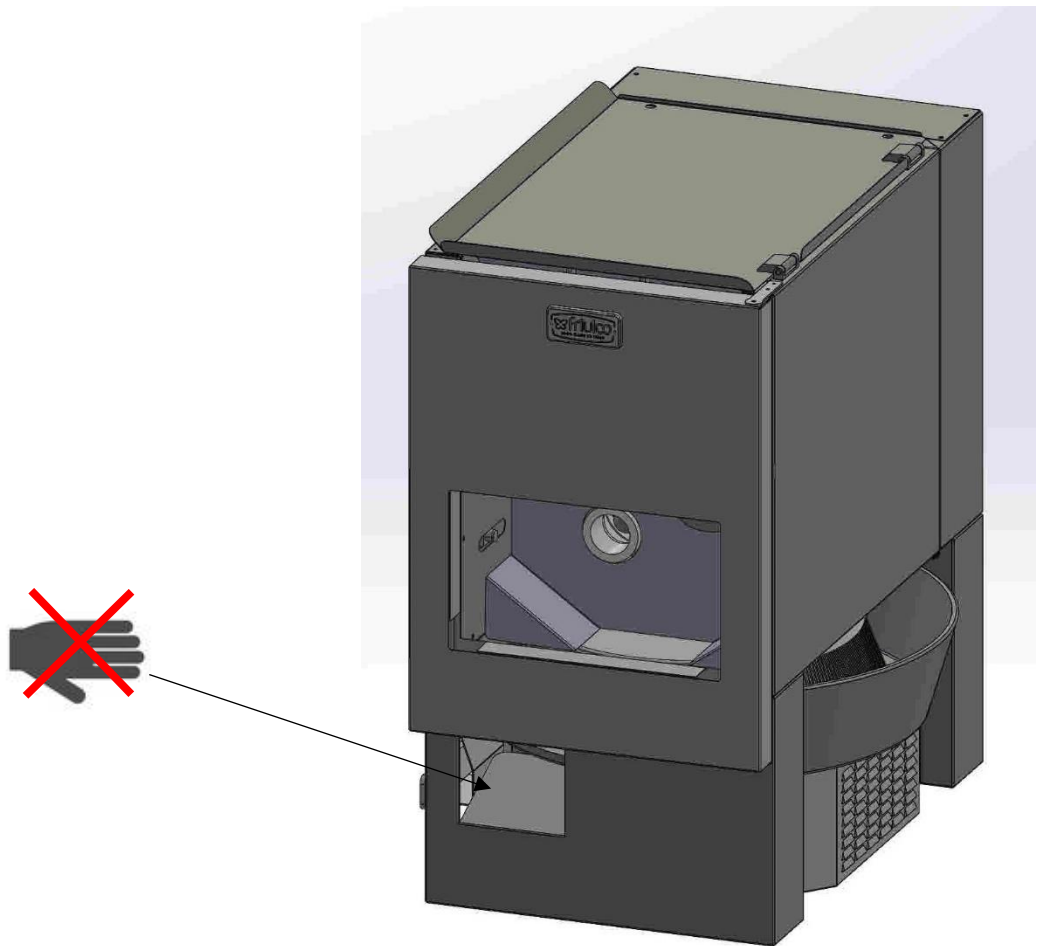
This machine must be used **ONLY** after having carefully read this manual.

The protection covers and doors of the M46 prevent any possibilities of reaching dangerous or moving parts.

2. INDICATION OF DANGEROUS POINTS, OF RESIDUAL RISKS AND OF THE PRECAUTIONS TO BE TAKEN

CAUTION: through the exit dough hole you can reach a dangerous part of the machine with your hand, i.e. the knife.

DO NOT introduce your hand in this hole.



Always place the machine on an even (level) flooring.

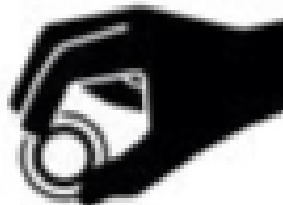
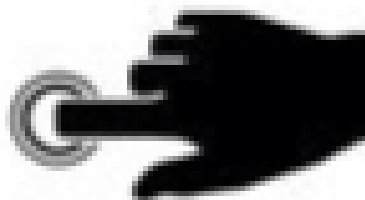
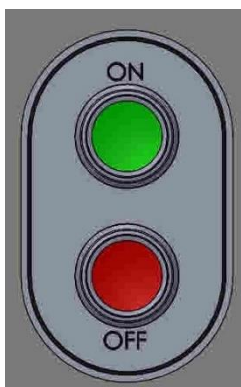
In order to ensure a correct ventilation of the motors which are placed at the back, make sure to leave at least twenty centimetres clearance between the machine and the wall or other equipment.

3. DESCRIPTION OF THE CONTROL DEVICES AND OF THEIR FUNCTION

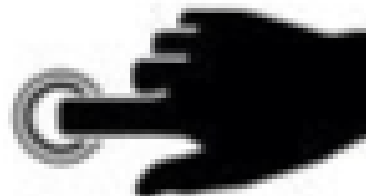
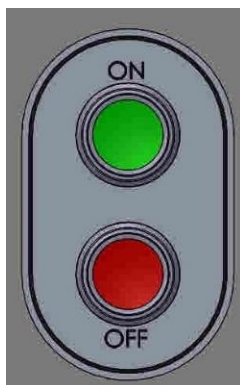
The machine has an emergency push button (Ref.37), a start push button (Ref.38), a stop push button (Ref.39), a selector (Ref.40) and a weight regulation knob (Ref.41).



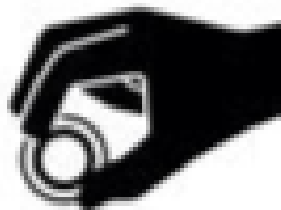
To start the machine, press on the green start push button and turn the selector to position 1 (towards right) in order to operate.



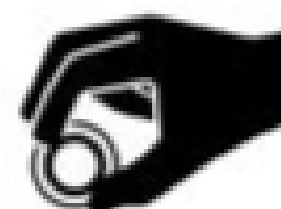
To stop the machine, press on the red push button.



The weight regulation knob (Ref.41) is used to increase or decrease the portions weight but if turned beyond the minimum point(-), it can work as a “reset” device: the knife is brought back to its original position, if displaced.



The emergency push button (Ref.37) must be used ONLY in case of emergency. If activated, it must be unblocked turning it clockwise.

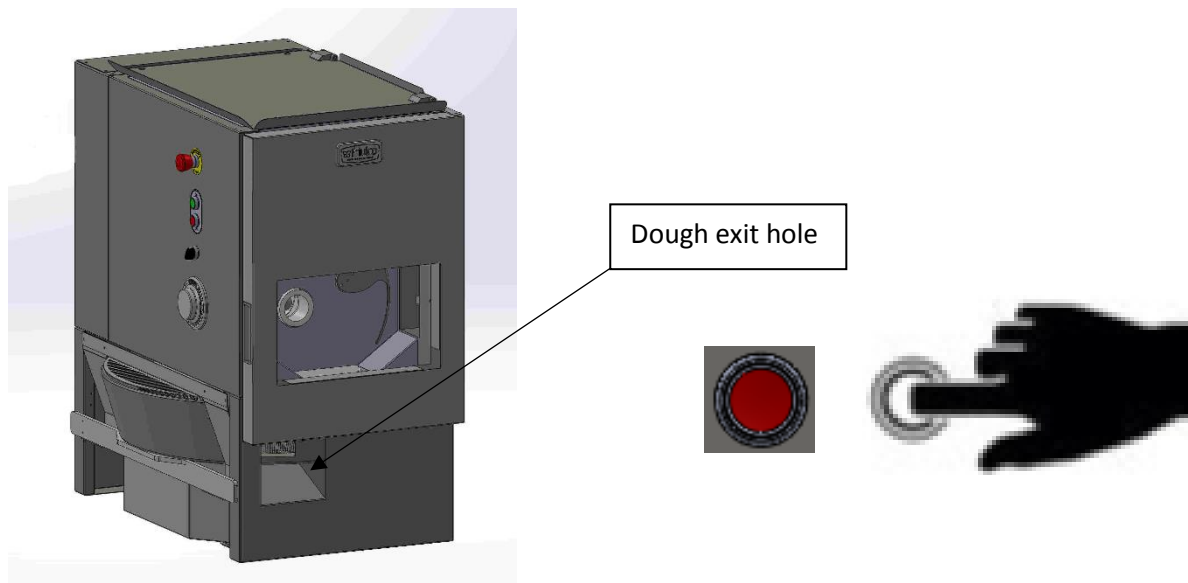


4. FORBIDDEN USES AND REASONABLY FORESEEABLE INCORRECT USES

WARNING: do not introduce into the machine frozen, half frozen dough or other products which are not foreseen in this manual.

Should there be one or more dough balls accumulated thus blocking the dough exit hole, do not take them away while the machine is on. Always turn off the machine before proceeding with the cleaning. Open a door or unplug it.

DO NOT wash the machine with water jets.



5. TRANSPORT, LIFTING AND INSTALLATION

5.1. The machine is placed on a wooden pallet, fixed onto it with iron angles and plastic band. It is then closed from above with a cardboard box without bottom and strapped to the pallet. Each cardboard box contains a complete machine, its operating and maintenance manual with declaration of conformity.

5.2. To extract the machine out of its packing, you need to cut the straps and lift the cardboard box up.

CAUTION: two persons are necessary to take away the dough rounder (lower part of the machine) from the pallet.

These two persons can then take away the upper part of the machine (dough divider) from the pallet. Place again the dough rounder under the dough divider and plug it into the socket of the divider.

CAUTION: in order to ensure a correct ventilation of the motors which are placed at the back, make sure to leave at least twenty centimetres clearance between the machine and the wall or other equipment.

Before connecting the machine, plug the dough rounder into the divider socket (Ref.24) placed underneath.

CAUTION: The dough rounder must be correctly coupled with the divider.

The machine is provided with three motors and a regulatory “Schuko” plug.

Make sure that the tension and the frequency correspond to those indicated on the machine data plate and that the intake is grounded and properly protected against overloading.

N.B. The protection grade is I.P.55.

Place the machine far from any heat sources, the temperature around the machine should never be higher than 55° C.

6. CLEANING AND SANITATION

Before using the machine for the first time, wash all the parts that come into contact with food with a sponge, warm water and liquid detergent.

CAUTION: DO NOT wash the machine with water jets.



7. REGULATION

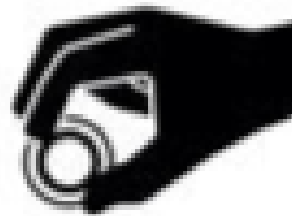
The best regulation for the M46 is done by steps since it should suit the different types of dough.

7.1. The M46 can prepare dough portions from 70 to 250 grams.

7.2. For more accuracy in the regulation of the weight, use the knob ref.41.

7.3. Weigh the first dough balls, if they are smaller than foreseen, turn the knob “Weight” towards +, if they are bigger, turn the knob towards -.

7.4. Repeat this operation until you get the required weight.



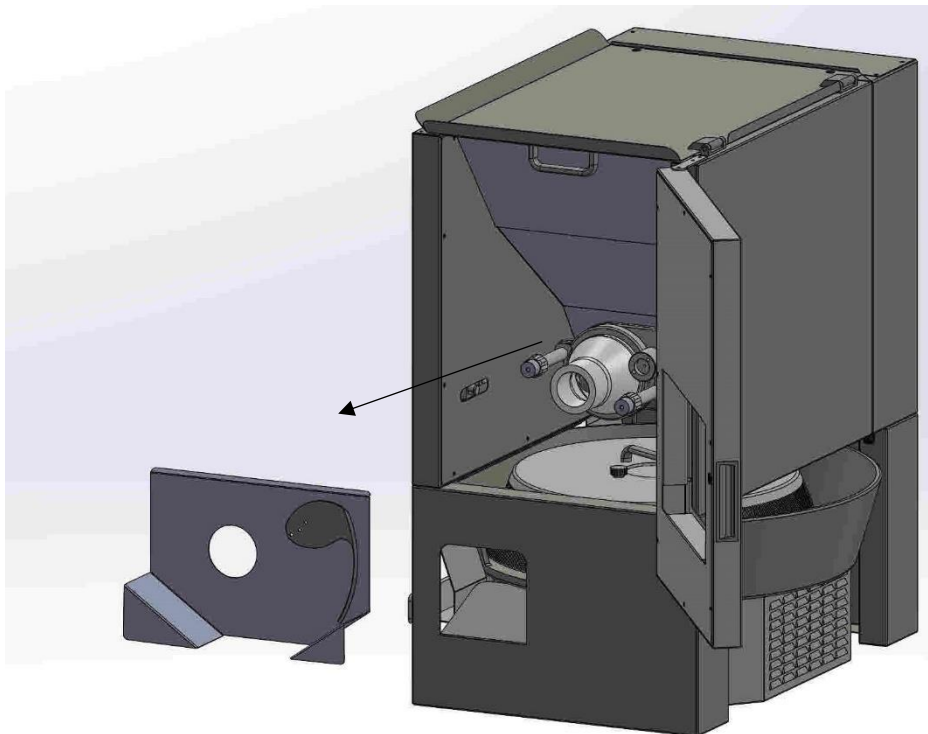
8. USE

- 8.1. Prepare the dough with a normal spiral mixer.
- 8.2. The mixing time should be 5 – 10% less than for a manual dough portioning and rounding.
- 8.3. IMMEDIATELY place the dough just prepared into the divider hopper without adding flour or oil.
- 8.4. Begin at once the cutting and rounding operation of the dough without stopping the machine until the dough hopper is empty. DO NOT leave part of the dough inside the hopper.
The above suggestions are to prevent the rising process of the dough.
- 8.5. Press on the green push button to connect the machine. Turn the black selector to start the machine.
- 8.6. Take the portions from the chute and place them into their proving drawers.
- 8.7. Stop the machine turning the black selector and disconnect it completely pushing on the red push button.

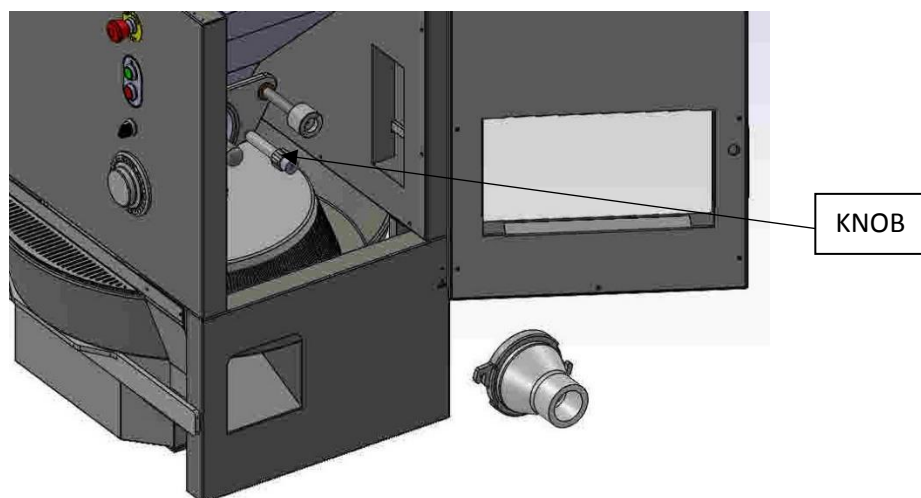
9. DISASSEMBLY AND CLEANING

DOUGH DIVIDER

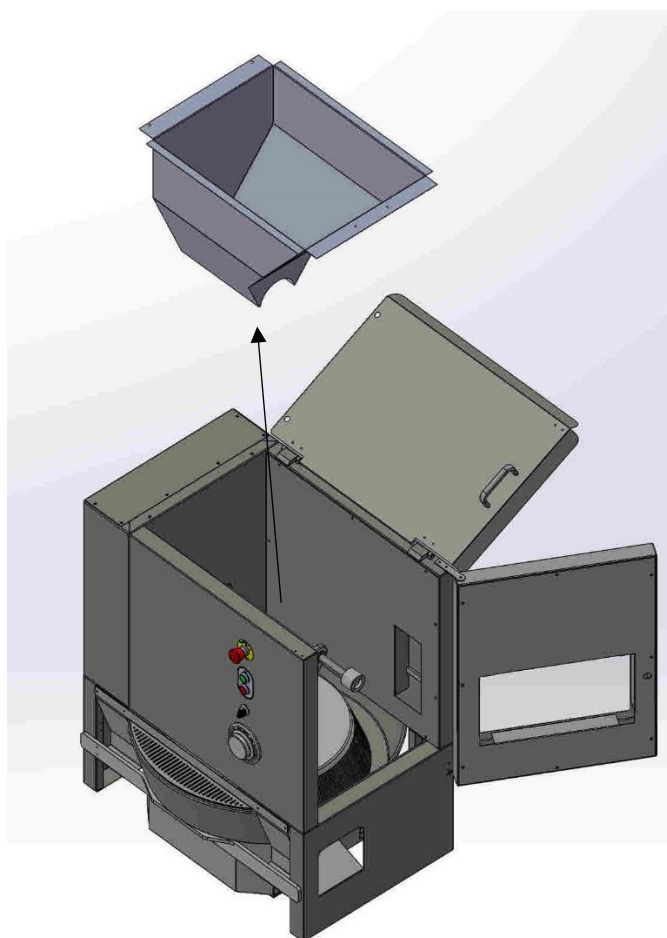
- 9.1. **WARNING:** before opening any part of the machine, switch the machine off and pull the plug.
Before opening or disassembling any part of the machine, be sure that the motors are off.
- 9.2. Open the front door (Ref.1).
- 9.3. Seize the knife protection plate (Ref.2) together with the knife (Ref.8) and pull them outwards.



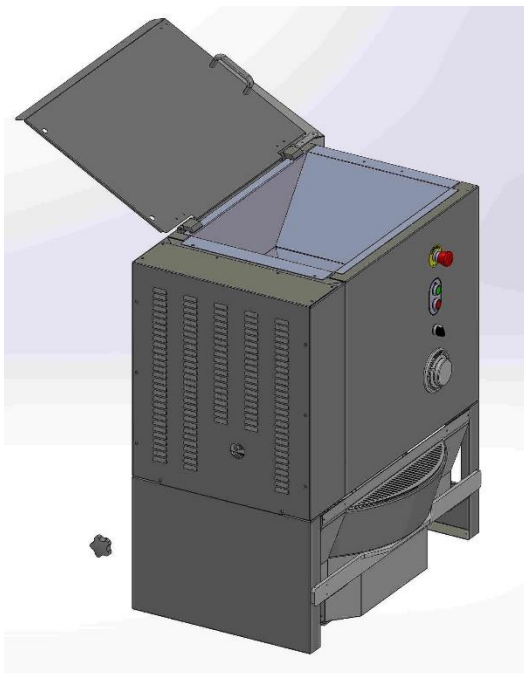
9.4 Loosen the knobs (Ref.3) in order to free the cone (Ref.4), turn it slightly (clockwise) and take it out of its place.



9.5 Open the cover (Ref.33) and take away the dough hopper (Ref.34) lifting it.

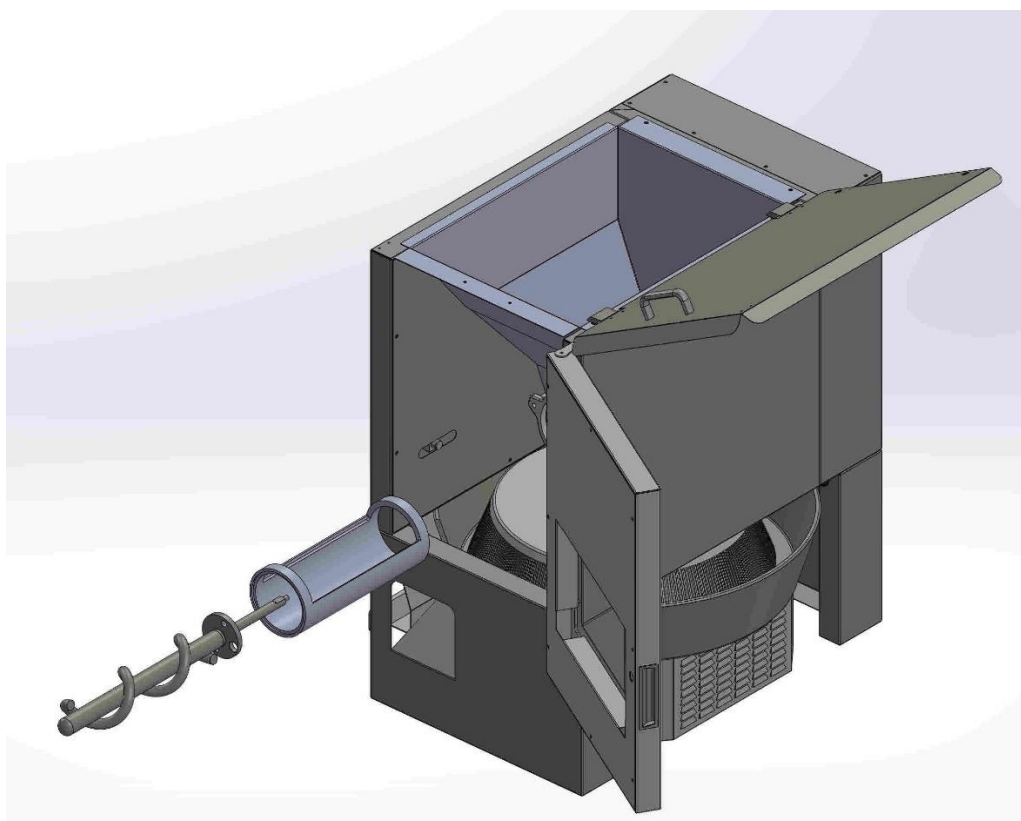


9.6 Unscrew the knob (Ref.29) placed at the back of the machine.



9.7 Take out the oval section bar (Ref.6) and the auger (Ref.5).

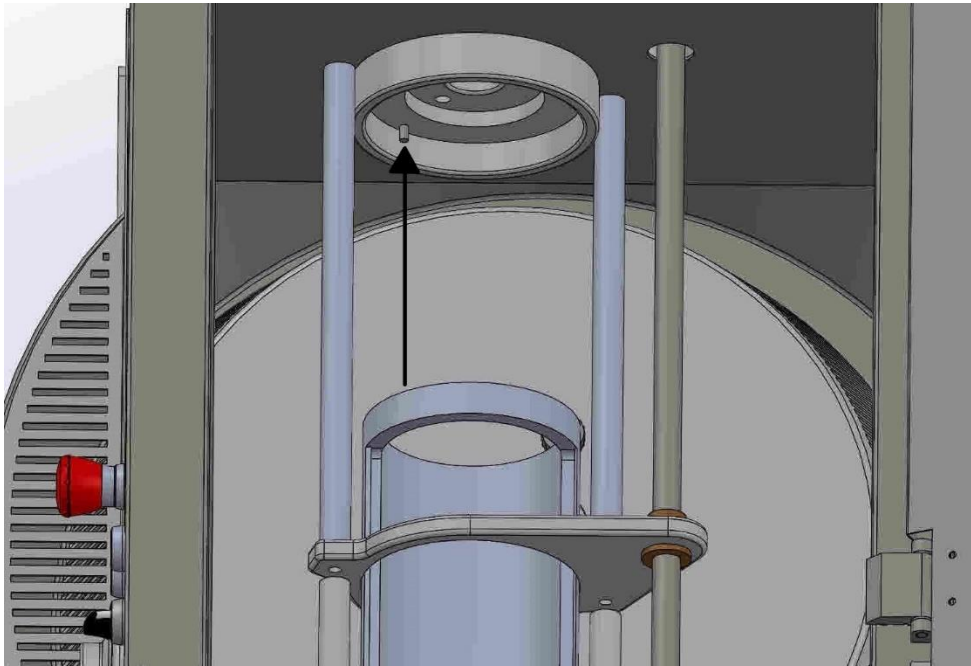
9.8 Take away the body (Ref.7) from the auger.



9.9 Clean the sensor (Ref.43) with a soft cloth.

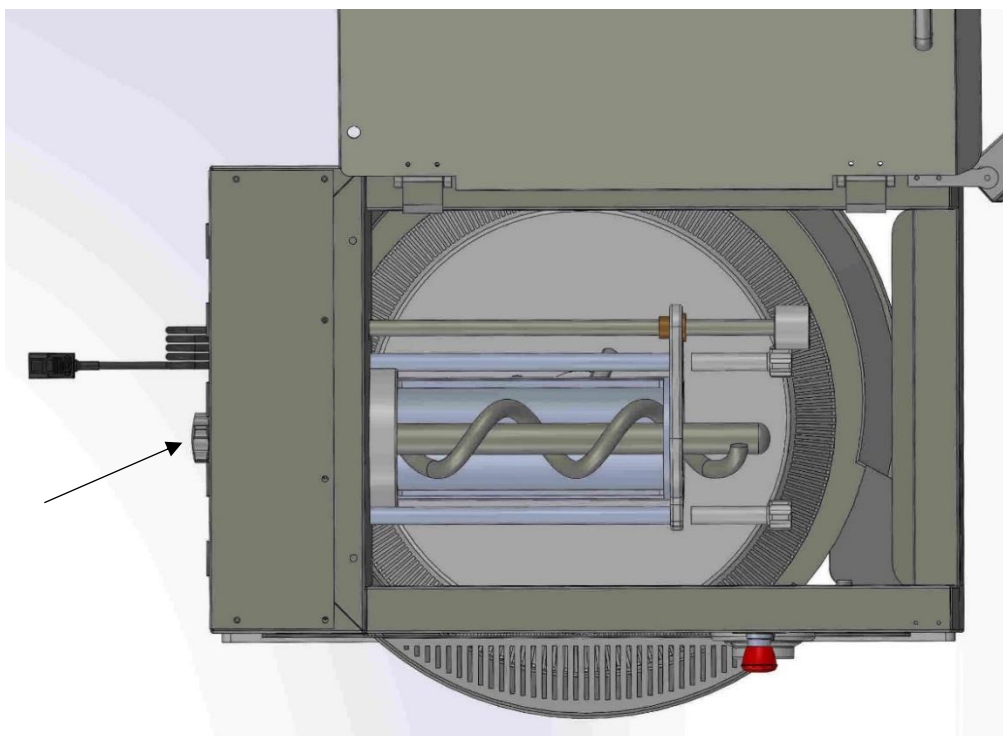
9.10 Clean everything and before reassembling, remove possible dough remains from the interlocking areas.

9.11 Reposition the auger body (Ref.7) making sure that its reference slot matches the reference pin.

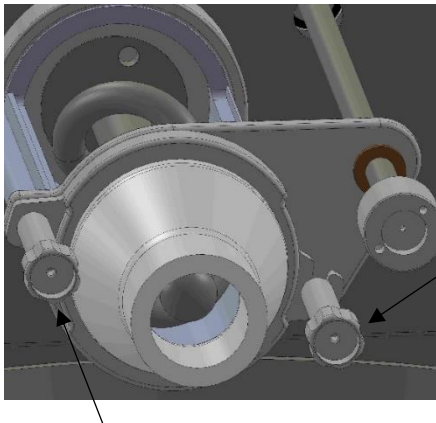


9.12 Reposition the central bar (Ref.6) inside the auger (Ref.5) which must fit at the two pins of the flanged shaft support (Ref.32).

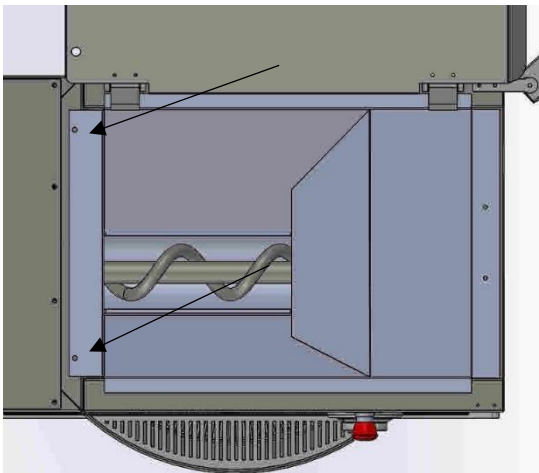
9.13 Make sure that the central bar is correctly fitted in the groove of the reducer bridge (Ref.30) and fix everything with the knob (Ref.29).



- 9.14 Insert the cone (Ref.4) and tighten it with the two knobs (Ref.3).

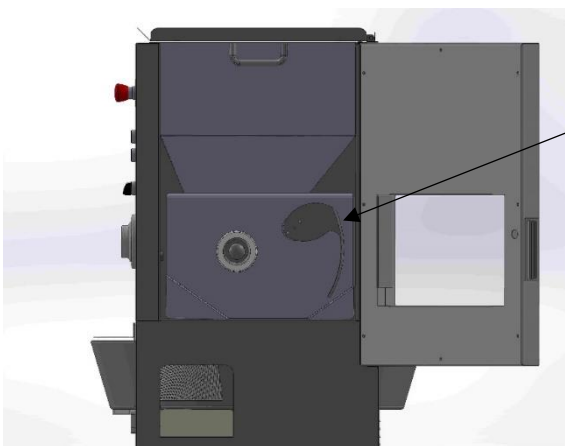


- 9.15 Reposition the hopper (Ref.34) making sure that the back centring holes match the pins on the machine body.



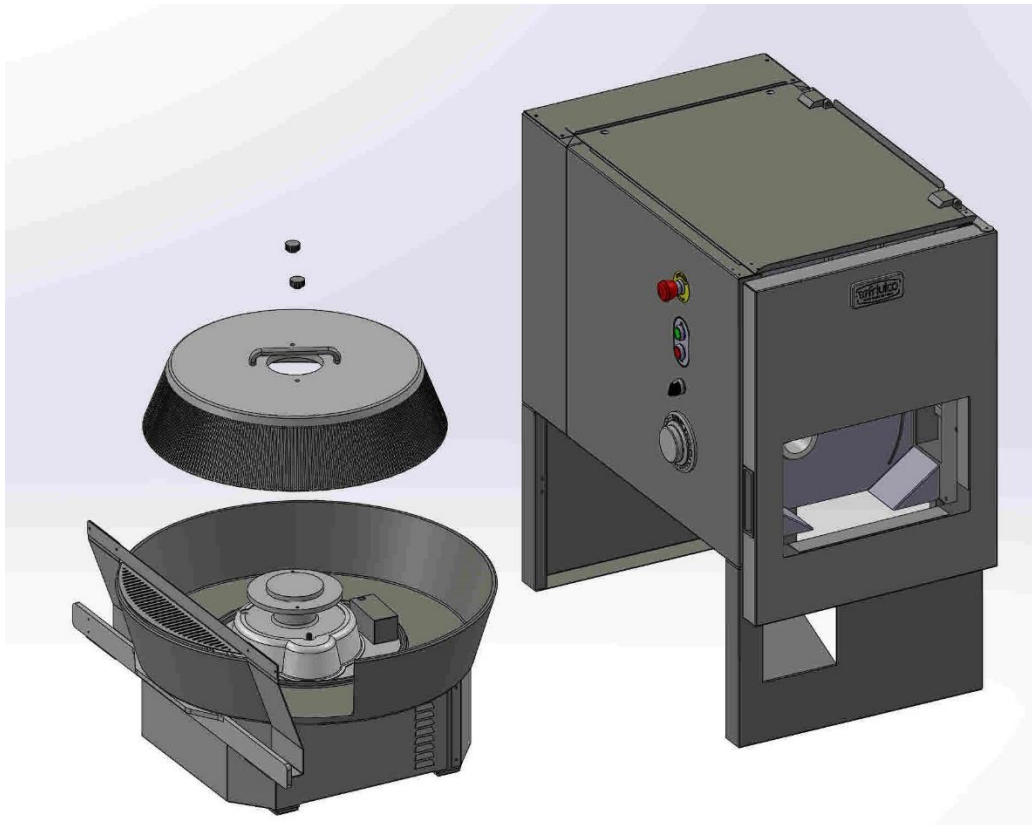
- 9.16 Position the knife protection plate (Ref.2) matching it with the spacers (Ref.3).

- 9.17 Position the knife (Ref. 8) and make sure that it is correctly placed flat.



DOUGH ROUNDER

- 9.18 Pull the plug (Ref.24).
- 9.19 Pull the machine out in order to take out the central cone (Ref.3).
- 9.20 Unscrew the two knobs (Ref.1) and take out the central cone (Ref.3) by its handle (Ref.2).



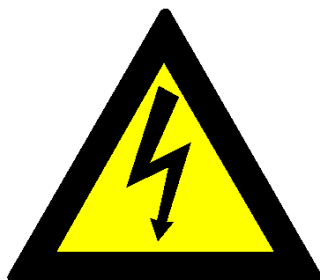
WARNING: this part is very heavy.

- 9.21 The central cone (Ref.3) and the base (Ref.14) may be cleaned with a damp cloth with water and food sanitizer.
- 9.22 The reassembly is in reverse of the disassembly.

Always remember to try the machine without dough after each cleaning.

As far as the cleaning of the housing is concerned, a daily dry cleaning of all dough and flour remains is sufficient. We remind you that the housing of the machine should NEVER be washed with sodium hypochlorite-based solutions or with abrasive detergents since these could damage the external parts of the machine.

WARNING: do not wash the machine with water jets for safe working.



10. REGULAR MAINTENANCE

The machine does not need any peculiar lubrications and maintenance.

Regularly check the good state of the mains cable.

Turning the weight regulation knob beyond the minimum point (beyond the sign -), the knife (Ref.12) goes back to its original position.

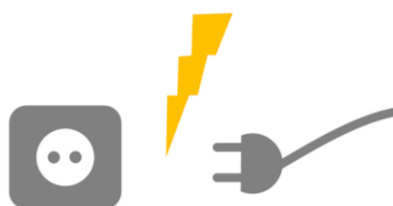


11. REPAIR

For repairs, controls or replacement of damaged parts, we suggest you to apply directly to the manufacturer or to replace the damaged parts with equivalent materials, especially as far as safety is concerned:

- power cord with plug(2 phases + ground)
- switch (push button)

Before any mechanical or electrical maintenance, it is compulsory to switch the machine off and to pull the plug.



WARNING: the repairs are to be carried out by qualified people.

Regularly check that the emergency push button is correctly working and check the good conditions of the power cord and plug.

12. LOUDNESS

The pondered equivalent continuous level of acoustic pressure A produced by the machine while operating under load is under 70 decibels(A) and that the maximum pondered instantaneous value of acoustic pressure C is under 130 decibels.

13. ESSENTIAL REQUIREMENTS

All our machines have been designed and manufactured strictly in compliance with the current national and international norms, more particularly:

UNI EN ISO 7010: 2015.

UNI EN ISO 12100: 2010.

UNI EN ISO 13849-1: 2016.

UNI EN ISO 13857: 2008 + EC1: 2010.

UNI EN ISO 14119: 2013.

UNI EN ISO 14120: 2015.

CEI EN 60204-1: 2006 + EC1: 2010.

UNI EN 1672-2: 2009.

Once assembled and before being packed, all our machines undergo a checking test to control:

Earth continuity

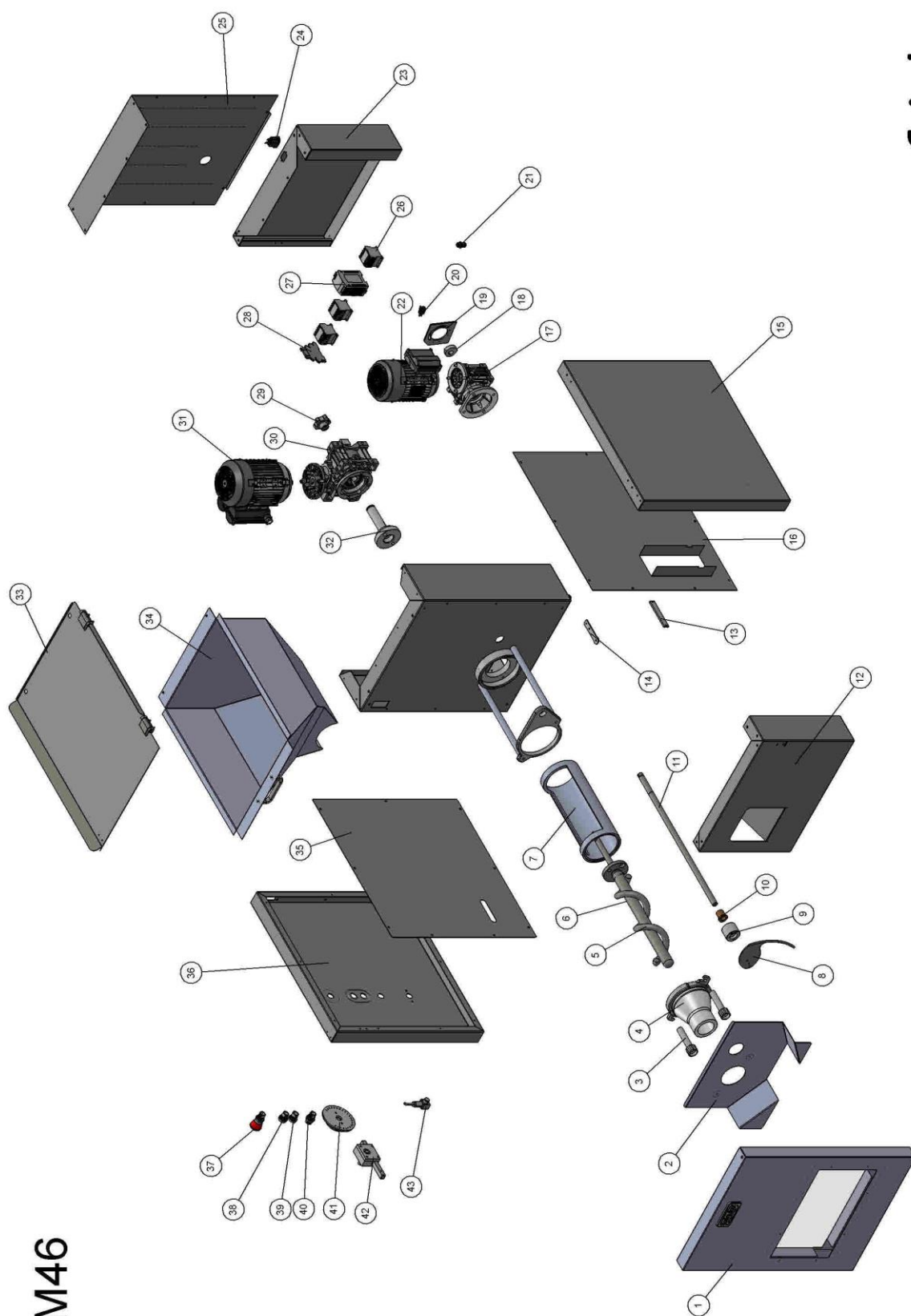
Dielectrical rigidity

Insulation

Starting of the machine empty, recording: the absorbed power, the applied tension, absorbed Ampères.

REFERENCE	CODE	DESCRIPTION	QUANTITY
1	C.200.502.0	DOOR ASSEMBLY	1
2	C.200.501.0	PROTECTION PLATE ASSEMBLY	1
3	C.602.509.0	PROTECTION PLATE SPACER	2
4	A.602.225.0	CONE	1
5	P.602.003.0	AUGER	1
6	P.602.004.0	CENTRAL SHAFT	1
7	C.602.501.0	AUGER BODY	1
8	C.600.019.0	KNIFE	1
9	C.602.021.0	KNIFE SUPPORT BLOCK	1
10	X.802.0046	FLANGED BRONZE BUSHING	1
11	C.602.503.0	KNIFE GEARBOX SHAFT	1
12	C.600.514.0	FRONT LEG SUPPORT	1
13	X.803.0150	REFLECTOR	1
14	C.600.014.0	DOOR CLAMP	1
15	C.600.510.0	INSIDE RIGHT PANEL	1
16	C.600.502.0	RIGHT PANEL	1
17	X.802.0211	GEARBOX	1
18	C.602.505.0	MICRO OPERATING CAM	1
19	A.602.118.0	MICRO SUPPORT	1
20	X.803.0020	MICROSWITCH	1
21	X.803.0019	CABLE GLAND PG9	1
22	M.005.006.0	KNIFE MOTOR 230 V 50 HZ	1
22 B	R.005.001.0	KNIFE MOTOR 115V 60 HZ	1
23	C.600.515.0	REAR LEG SUPPORT	1
24	X.803.0124	IEC SOCKET	1
25	C.600.506.0	REAR PANEL	1
26	X.803.0050	REMOTE CONTROL SWITCH	3
27	X.803.0168	FEEDER	1
28	X.803.0175	RELAY	1
29	X.802.0209	KNOB	1
30	X.802.0166	GEARBOX	1
31	P.005.000.5	MOTOR 230 V 50 HZ	1
31B	P.005.003.1	MOTOR 750 WATT	1
32	P.686.002.1	FLANGED SHAFT	1
33	C.200.503.0	COVER ASSEMBLY	1
34	C.600.503.0	HOPPER	1
35	C.600.509.0	INSIDE LEFT PANEL	1
36	C.600.501.0	LEFT PANEL WITH CONTROL DEVICES	1

37	X.900.0001	EMERGENCY PUSH BUTTON	1
38	X.900.0003	GREEN PUSH BUTTON/ON	1
39	X.900.0004	RED PUSH BUTTON/OFF	1
40	X.900.0006	BLACK SELECTOR	1
41	A.602.407.0+A.602.406.0	WEIGHT REGULATION KNOB+GRADUATED RING	1
42	C.200.500.0	PHOTOCELL ASSEMBLY	1
43	X.803.0165	PHOTOCELL	1



M46

REFERENCE	CODE	DESCRIPTION	QUANTITY
1	X.802.0225	S/S KNOB	2
2	R.601.010.0	CONE HANDLE	1
3	R.681.004.0	CENTRAL CONE	1
4	R.900.001.0	GEARS PROTECTION	1
5	R.606.012.0	CONE DRIVE FLANGE	1
6	R.606.013.0	COUNTERFLANGE	1
7	R.200.003.0	GEARS ASSEMBLY	1
8	X.801.0010	BEARING	2
9	R.606.009.0	FLANGE SPACER	2
10	R.600.006.0	COUNTERWEIGHT	1
11	R.606.003.0	DRIVING FLANGE	1
12	X.801.0008	BEARING	2
13	R.600.011.0	REAR PANEL	1
14	R.681.003.0	LARGE CIRCULAR BASE	1
15	R.606.001.1	PULLEY	1
16	R.606.000.3	GEARBOX SUPPORT CLAMP	1
17	M.005.006.0	MOTOR 230 V 50 HZ	1
17 B	R.005.001.0	MOTOR 115 V 60 HZ	1
18	X.802.0171	GEARBOX SW 050 1:7.5	1
19	R.601.000.0 + R.606.002.0	SUPPORT SPOKE	1
20	R.600.012.0	PROTECTION BOTTOM	1
21	R.650.011.0	FOOT	4
22	X.802.0212	BLOCKING INSERT	4
23	R.600.013.0	FRONT PANEL	1
24	X.803.0009	CABLE WITH SCHUKO PLUG	1
24B	X.803.0010	CABLE WITH UL USA PLUG	1
25	X.802.0006	TRAPEZOIDAL BELT	1
26	C.602.510.0	BLOCKING ROD	1
27	C.600.517.0	GUARD	2
28	C.600.518.0	PROTECTION GRID	1
29	R.200.002.0	REMOTE SWITCH POWER CORD	1

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