

7-12-18-25-38-50/SN
12-18-25-38-50/CN
12-18-25-38-50/FN



SPIRAL KNEADER

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Purpose of this manual

This manual has been written by the Manufacturer to make an integral part of the machine standard equipment. During the design and construction phases, special care has been devoted to any aspects which might endanger the safety and health of the people interacting with the machine. In addition to the applicable safety legislation, all “good construction practice” rules have been adopted. The purpose of these information notes is to make machine users aware that special care should be applied to prevent any risks. The biggest asset to this end, however, is precaution. Safety is also the responsibility of all the operators who interact with the machine. Keep this manual in a suitable place, where it can be conveniently reached for consultation. In order to highlight some parts of the text, the following symbols have been used:

 **DANGER – CAUTION:** it indicates hazards likely to cause severe injury ; caution is requested.

 **INFORMATION:** technical indications of special interest.

This manual comes with the following annexes:

- a guarantee certificate containing the guarantee conditions prescribed by the Manufacturer.
- documents certifying compliance with the applicable safety and personal health legislation in force.

To request After-sales service, submit inquiries or order spare parts, contact your Authorised dealer.

Manufacturer and machine Identification

Manufacturer Identification	→					←	Mark of Compliance
Serial number	→	Serial Nr		Manufactured		←	Year of construction
Machine model	→	Model					
Specifications	→	V	~	W			
		Hz	IP	Kg			

Kneader description

Mod."SN"

The spiral kneader mod."SN" is a machine meant for professional use by bread bakers and pizzerias. The different versions of the machine (7-12-18-25-38-50 Kg. of kneaded product) cater for a vast range of production needs, allowing various types of dough to be obtained (suitable above all for soft dough for pizza and bread). The assortment is made up of 6 different counter models:

7/SN (7 Kg. mix capacity)

12/SN (12 Kg. mix capacity)

18/SN (18 Kg. mix capacity)

25/SN (25 Kg. mix capacity)

38/SN (38 Kg. mix capacity)

50/SN (50 Kg. mix capacity)

The machine structure has a scratch-proof painted finish which makes for it easy to clean.

It has safety features compliant with the applicable European Directives.

Mod."CN"

The spiral kneader mod."CN" is a machine meant for professional use by bread bakers and pizzerias.

The different versions of the machine (12-18-25-38-50 Kg. of kneaded product) cater for a vast range of production needs, allowing various types of dough to be obtained (suitable above all for soft dough for pizza and bread). The bowl is removable to allow it to be washed in hot running water or a dishwasher.

The assortment is made up of 5 different counter models:

12/CN (12 Kg. mix capacity)

18/CN (18 Kg. mix capacity)

25/CN (25 Kg. mix capacity)

38/CN (38 Kg. mix capacity)

50/CN (50 Kg. mix capacity)

The machine structure has a scratch-proof painted finish which makes for it easy to clean.

It has safety features compliant with the applicable European Directives.

Mod."FN"

The spiral kneader mod."FN" is a machine meant for professional use by bread bakers and pizzerias.

The different versions of the machine (12-18-25-38-50 Kg. of kneaded product) cater for a vast range of production needs, allowing various types of dough to be obtained (suitable above all for soft dough for pizza and bread). The assortment is made up of 5 different counter models:

12/FN (12 Kg. mix capacity)

18/FN (18 Kg. mix capacity)

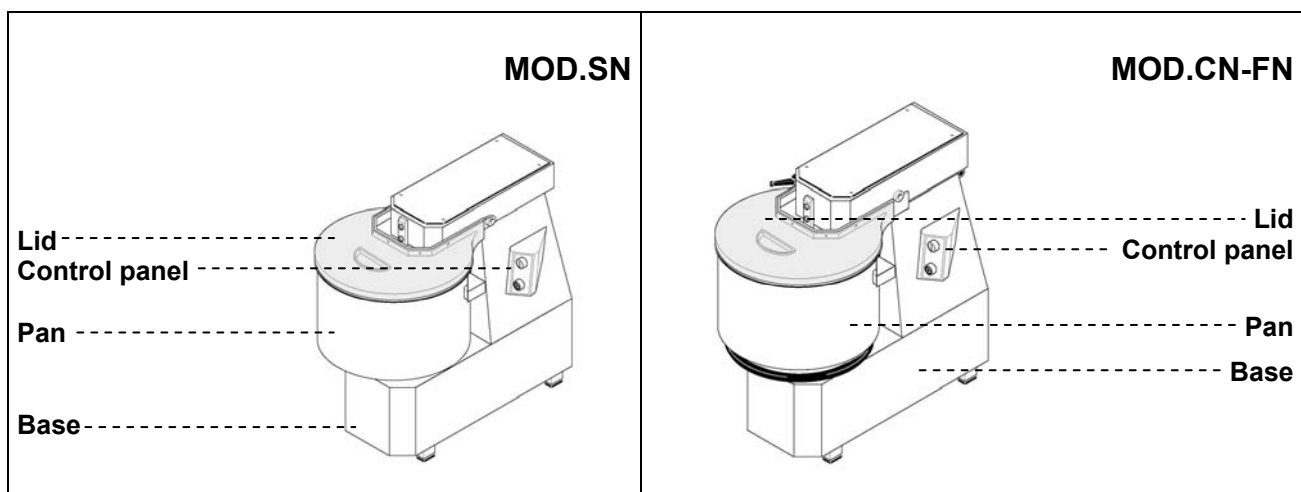
25/FN (25 Kg. mix capacity)

38/FN (38 Kg. mix capacity)

50/FN (50 Kg. mix capacity)

The machine structure has a scratch-proof painted finish which makes for it easy to clean.

It has safety features compliant with the applicable European Directives.



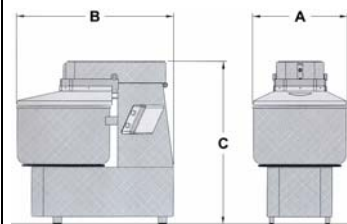
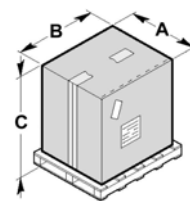
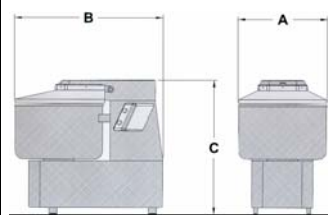
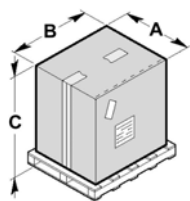
Specifications

Description	Unit of measure	7/SN	12/SN	18/SN	25/SN	38/SN	50/SN
Electric power input	V Hz Ph	230V 50Hz 1Ph 230/400V 50Hz 3Ph					230/400V 50Hz 3Ph
Power	kW (HP)	0.37(0.5)	0.75 (1)	0.75 (1)	1.5 (2)	1.5 (2)	2.2 (3)
Dough per batch	kg	7	12	18	25	38	50
Net weight	kg	39	58	59	93	105	175
Packaged weight	kg	46	65	66	100	112	195
Noise		Lower than 70 dB(A)					
Installation		On the floor					
Protection class		IPX3					
Electric shock protection		Class I					
Compliance with directives and regulations		73/23/CEE - 93/68/CEE - 89/336/CEE – 89/109/CEE - 98/47/CEE					

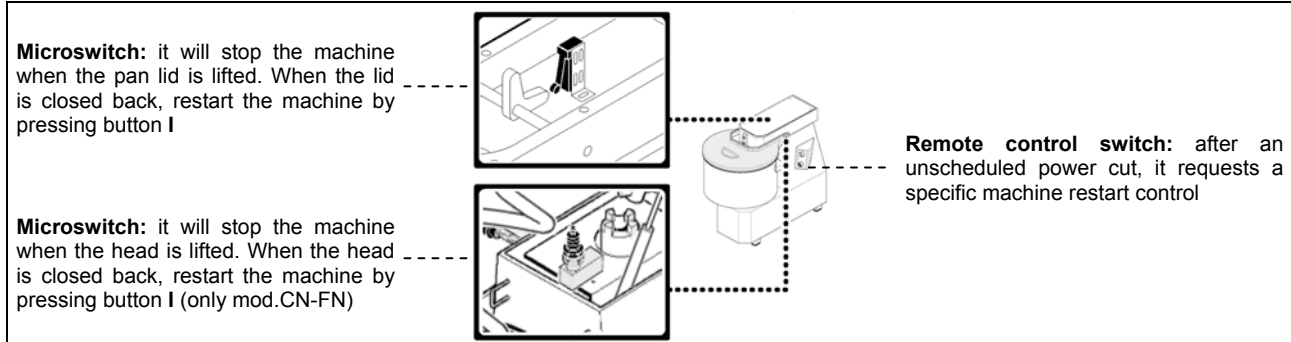
Description	Unit of measure	12/CN-FN	18/CN-FN	25/CN-FN	38/CN-FN	50/CN-FN
Electric power input	V Hz Ph	230V 50Hz 1Ph 230/400V 50Hz 3Ph				230/400V 50Hz 3Ph
Power	kW (HP)	0.75 (1)	0.75 (1)	1.5 (2)	1.5 (2)	2.2 (3)
Dough per batch	kg	12	18	103	38	50
Net weight	kg	65	66	110	115	206
Packaged weight	kg	72	73	112	127	230
Noise		Lower than 70 dB(A)				
Installation		On the floor				
Protection class		IPX3				
Electric shock protection		Class I				
Compliance with directives and regulations		73/23/CEE - 93/68/CEE - 89/336/CEE – 89/109/CEE - 98/47/CEE				

Overall dimensions

MOD.SN				MOD.CN-FN			
mm	A	B	C	mm	A	B	C
7	450	700	720	12	450	700	870
12	450	700	870	18	450	700	870
18	450	700	870	25	550	850	970
25	550	850	970	38	550	850	970
38	550	850	970	50	600	950	1150
50	600	950	1150				
mm	A	B	C	mm	A	B	C
7	280	560	560	12	350	650	620
12	350	650	600	18	390	670	620
18	390	670	600	25	430	730	710
25	430	730	690	38	480	800	730
38	480	800	710	50	530	910	940
50	530	910	920				



Safety devices



Safety information

- It is of the greatest importance to carefully read this manual before carrying out installation and use operations. Consistent compliance with the instructions contained in this manual will guarantee personal and machine safety.
- Do not tamper with the safety devices for any reason.
- We recommend that industrial safety regulations issued nationally by the appointed organisms be strictly respected.
- The manufacturer declines all responsibility for injuries to persons or damages to property, resulting from failure to comply with these safety rules.
- Correct machine setting, lighting and workshop cleanness are pre-conditions for personal safety.
- Do not expose the machine to atmospheric agents.
- The machine connection and start-up should only be executed by skilled engineers.
- Check that the plant mains ratings correspond to the specifications printed on the machine data plate.
- Make sure that the machine is connected to a grounding system.
- The work area around the machine should always be kept clean and dry.
- Wear the work attire prescribed by the industrial accident-prevention regulations.
- This machine should always be used for its recommended uses ; any other use is deemed improper and therefore dangerous.
- Check the suitability and weight of the products to work ; do not overload the machine to exceed its capacity.
- It is forbidden to introduce any objects, tools or hands in the dangerous parts.
- Keep the machine out of children' s reach.
- Unplug the machine from the mains when not in use.
- In the event of breakdowns and/or malfunctioning, do not carry out any repair yourselves, apply to your Authorised dealer.
- Order original spare parts only.
- Before carrying out machine cleaning, unplug it from the power mains.
- Do not clean with high-pressure water jets.

Residual risks

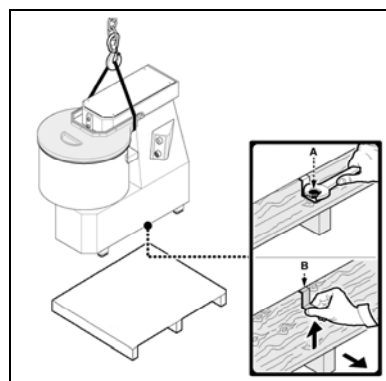
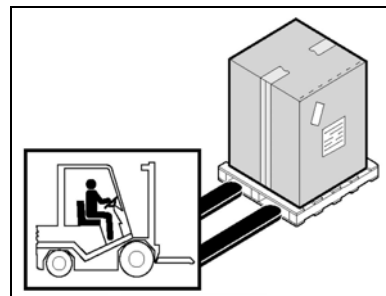
In accordance with point 1.7.3 "Warnings regarding residual risks" of the Machine Directive 89/392 and following amendments, it is noted that the guards applied, in accordance with said Directive, do not totally eliminate risks of burns to the upper limbs.

INSTALLATION 2

Packing and unpacking

The machine will come packaged in a carton with foamed polyester inserts to guarantee perfect safety during transport.

- Handle the carton in compliance with the instructions.
- Open the carton and make sure that all components are intact. Keep the carton for any future machine removal.
- Remove screws **A** and lift machine from pallet.
- Remove bars **B**.
- Lift the machine according to the instructions and place it in its selected setting for installation.



Installation area

The selected machine work setting must be sufficiently lit and have an electric power outlet. The worktop must be sufficiently large, perfectly level and dry. The machine should be installed in non-explosive environments. In any case, installation should be carried out by taking into account any applicable industrial safety regulations in force.

Environmental Condition Table

Descriptions	Values
Working temperature	0÷35 °C (32÷95 °F)
Storage temperature	-15 to +65 °C (from -6.8 to +149 °F)
Relative humidity	Maximum 80% at an ambient temperature of 20 °C Maximum 50% at an ambient temperature of 20÷60 °C
Ambient dust	Lower than 0.03 g/m ³

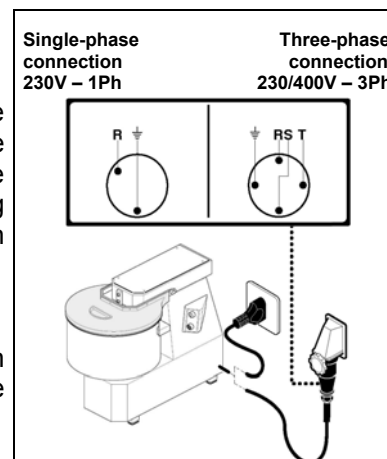
Electric connection

⚠ DANGER – CAUTION: Electric connection to the power mains should be executed by skilled engineers.

Check for the perfect efficiency of the plant grounding system. Make sure that the line voltage (**V**) and frequency (**Hz**) correspond to the machine ratings (refer to the machine identification plate and wiring diagram). The machine comes equipped with an electric cable to which a multipolar plug should be connected. Plug the machine into a main wall switch with differential.

Three-phase connection

Start the machine for just a few seconds and check that the beater turns in the right direction. If this is not the case, disconnect power and exchange two of the three phase wires in the plug.



OPERATION AND CLEANING 3

Control descriptions

1) Start button "I"

Press this button to start the machine. The start button will only be enabled when the lid is down and the pan is in place.

2) Stop button "0"

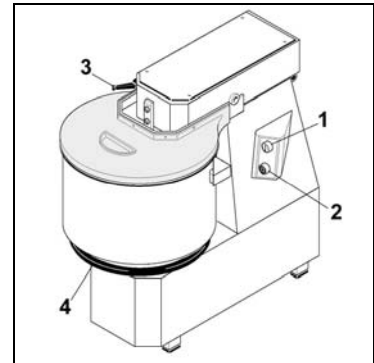
Press this button to stop the machine.

3) Locking hand lever for the head (only mod.CN-FN)

Rotate the hand lever to lift the head (clockwise) or to block it (anti-clockwise). The start button will only be enabled when the head is down and blocked.

4) Locking flange for the pan (only mod.CN)

Rotate the flange to lock the pan (anti-clockwise) or to release it (clockwise).



Kneader Operation

- Lift the pan lid and put the required mix ingredients into the pan.
- Close the pan lid.
- Tighten the locking hand lever of the head for mod.CN-FN.
- Lock the pan by means of the flange below for mod.CN.
- Start the machine by pressing the start button "I"; machine start can only be controlled if the lid is down.
- After operation completion, press the stop button "0".
- Lift the lid to empty it of the processed product.
- After any operation cycle has been completed, wash the pan and spiral by hot water and soap.
- Wipe inner face of the lid with a damp sponge.

2-speed version

- Lift the pan lid and put the required mix ingredients into the pan.
- Close the pan lid.
- Tighten the locking hand lever of the head for mod.CN-FN.
- Lock the pan by means of the flange below for mod.CN.
- Rotate the speed selector to position 2.
- Start the machine by pressing the start button "I"; machine start can only be controlled if the lid is down.
- When the dough becomes a rather compact mixture (about 5 minutes later) stop the machine by pressing the stop button "0" and rotate the speed selector to position 1.
- Restart the machine by pressing the start button "I", until the required consistency is achieved.
- After operation completion, press the stop button "0".
- Lift the lid to empty it of the processed product.
- After any operation cycle has been completed, wash the pan and spiral by hot water and soap.
- Wipe inner face of the lid with a damp sponge.

Operation tips

Every litre of the water used for the mix requires about 2Kg. of the flour. The exact quantities will depend on the type of product to be obtained and the flour being used. The water should always be poured into the pan before the flour is added.

Capacity production:

Mod.7/SN: Mix capacity 7 Kg.

Pour 2.5 litres of water into the pan and add 2 Kg. of flour
After 1-2 minutes of kneading, add another 2.5 Kg. of flour.

Mod.12/SN-12/CN-12/FN: Mix capacity 12 Kg.

Pour 4 litres of water into the pan and add 4 Kg. of flour
After 1-2 minutes of kneading, add another 4 Kg. of flour.

Mod.18/SN-18/CN-18/FN: Mix capacity 18 Kg.

Pour 6 litres of water into the pan and add 6 Kg. of flour
After 1-2 minutes of kneading, add another 6 Kg. of flour.

Mod.25/SN-25/CN-25/FN: Mix capacity 25 Kg.

Pour 8 litres of water into the pan and add 8 Kg. of flour
After 1-2 minutes of kneading, add another 9 Kg. of flour.

Mod.38/SN-38/CN-38/FN: Mix capacity 38 Kg.

Pour 13 litres of water into the pan and add 12 Kg. of flour
After 1-2 minutes of kneading, add another 13 Kg. of flour.

Mod.50/SN-50/CN-50/FN: Mix capacity 50 Kg.

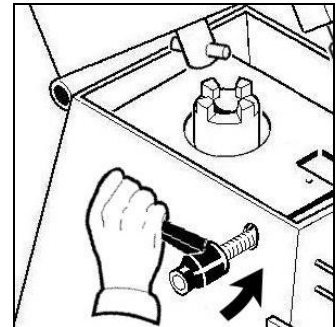
Pour 17 litres of water into the pan and add 16 Kg. of flour
After 1-2 minutes of kneading, add another 17 Kg. of flour.

End-day cleaning

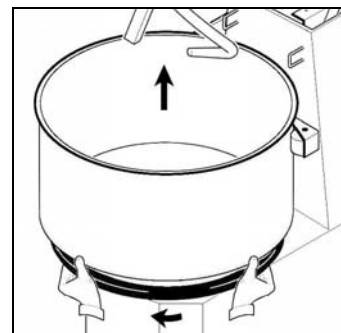
- At the end of a work day, unplug the machine from the power mains.
- Thoroughly clean the machine using neutral detergents.
- Wipe the machine outer parts with a damp sponge.
- Do not use steel wool or abrasive cleaning products.

Removal of the removable parts mod."CN"

- Lift the head by rotating anti-clockwise the hand lever (mod.CN).



- For removing the pan rotate the lower flange clockwise and lift the pan upwards (mod.CN).



INFORMATION: Before every operating cycle always check that the removable parts are well locked to the machine. Lock the pan by rotating anti-clockwise the lower flange.

Long periods of inactivity

If the machine is to be left idle for long periods of time, turn off the main wall switch, thoroughly clean the machine and cover it with a sheet to protect it from dust.

TROUBLESHOOTING RECYCLING 4

Foreword

In the event of breakdowns or malfunctioning, turn off the main wall switch and contact your local Dealer's After-sales service. Do not disassemble any internal machine parts.

The Manufacturer declines all responsibility for any tampering !

Troubles, causes and remedies

Trouble	Cause	Remedy
The machine will not start	Main switch is off	Turn the main switch on to "I"
	No voltage input to power line	Apply to your local Dealer's After-sale service
	Logic board protective fuse is blown	Apply to your local Dealer's After-sale service

Disposal and recycling

The machine has been designed to operate for an average duration of 10.000 work hours. At the end of the machine work life, comply with your national disposal and recycling regulations. Please contact your authorised environment protection bodies or authorities.