




USE GUIDE PLUCKING MACHINE DIT 65

CONTROL PANEL

The machine is equipped with a control panel, as the pictures show:

PHOTO	
	<p>The control panel is composed of the following elements:</p>
	<p>MECHANICALLY HELD EMERGENCY STOP PUSHBUTTON</p> <p>Press it to stop the machine. Unscrew it to let the machine go out of the stop phase.</p>
	<p>ON-OFF POWER SWITCH</p> <p>The machine turns on with the "I" switch and off with the "O" switch.</p>
	<p>WHITE CONNECTION INDICATOR</p> <p>It indicates that the machine is supplied with electricity (between the two power switches).</p>

Some important points:

1. The disk on the bottom turn easily
2. During the processing operation open the water valve to facilitate the removal of feathers
3. After every cycle open the water valve and make 3-4 turns to facilitate the removal of feathers
4. The outlet feather mouth must not be obstructed with feathers – check it regularly

At the end of work


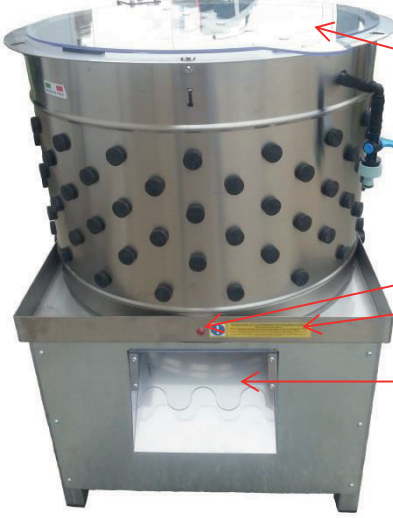

1. Open water and make 9-10 turns to remove all feathers
2. Clean deeply the turning disk
3. Remove the drum to clean under the disk
4. Clean the drum
5. Re-assembly of the drum make sure that the vertical rod located on the rear hinge is correctly re-inserted in its place at the bottom (interswitch system area)
6. During the washing do not spray water on the electric parts, motor and wiring inside the machine


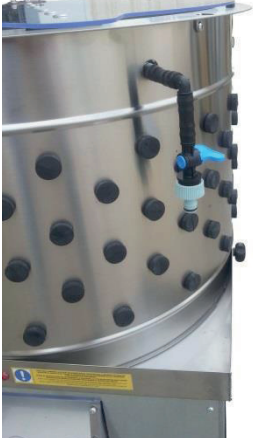

TECHNICAL DATA OF THE MACHINE

MAIN TECHNICAL DATA

DIMENSIONS	LENGTH (CM) 64 x WIDTH (CM) 64 x HEIGHT (CM) 95
PLUCKING TIME	FROM 9 TO 12 SECONDS DEPENDING ON THE QUANTITY AND TYPE OF PROCESSED ANIMALS
SUPPLY VOLTAGE	220V
SECONDARY LOW VOLTAGE	24V ON CONTROL CIRCUITS
FREQUENCY	50 HZ
POWER CONSUMPTION	1100 W
PNEUMATIC PRESSURE	ABSENT
HYDRAULIC PRESSURE	0.5bar MAX
OPTICAL INDICATIONS	WHITE CONNECTION INDICATOR It indicates that the machine is supplied with electricity.
ACOUSTIC INDICATIONS	ABSENT
MACHINE WEIGHT	75Kg
MINIMUM WEIGHT/ QUANTITIES THAT CAN BE PLUCKED	1Kg
MAXIMUM WEIGHT/ QUANTITIES THAT CAN BE PLUCKED	7Kg
MAIN COLOUR/S OF THE MACHINE	STEEL
MATERIAL OF THE MACHINE	STEEL AISI 304
METAL SHEET THICKNESS	From 1.5 to 2.5mm

PHOTO GALLERY:

N°	PHOTO	DESCRIPTION
1		<p>OVERALL VIEW PHOTO 1</p> <p><i>Pole of the interlock system placed at the basis of the machine</i></p> <p><i>Position of the identification plate (shown below)</i></p>
2		<p>OVERALL VIEW PHOTO 2</p> <p><i>Top lid</i></p> <p><i>Red safety screw</i></p> <p><i>Safety pictogram (the second pictogram is placed at the basis of the machine, not shown by the picture)</i></p> <p><i>Drain outlet with comb-shaped protection</i></p>
3		<p>INTERNAL VIEW OF THE MACHINE</p> <p><i>(with raised lid)</i></p> <p><i>Two different types of rubber fingers alternate</i></p>

N°	PHOTO	DESCRIPTION
4		<p>CONTROL PANEL</p> <p>Emergency stop pushbutton</p> <p>On-off power switch</p> <p>Connection indicator</p>
5		<p>WATER INLET WITH TAP</p>
6		<p>IDENTIFICATION PLATE</p>

INSTALLATION

Check that the machine has not undergone any damage or physical shock during transportation.

The machine is not equipped with its own lighting system, since good lighting (200-300Lux recommended) in the place where it is installed is enough to guarantee all the working and maintenance procedures. For this reason, it is forbidden to install the machine in shady areas.

In order to install the machine, make the electrical connection through the power cord and the plug supplied (2-pole+ground SCHUKO PLUG TYPE F+E); in case of Italian typical large plug type L, use a suitable adapter to ensure correct power supply and connection to the electrical grounding system.

Check that the machine is stable and parallel to the surface on which it is installed (unless otherwise specified); for this purpose, align a spirit level on a structural element of the machine that is exactly parallel to the floor.

If the machine is not stable, register its height and properly fix it to the floor so that it will be stable enough to avoid overturning, falling or uncontrolled movements during transportation, assembly, dismantling, use and all the other activities related to the machine.

Assemble the four rubber supports provided, to guarantee the correct adherence to the surface on which the machine is installed and to avoid excessive vibration and increase in the level of noise emitted.

The machine is an electrical device, so make sure not to touch it with wet hands or not to be barefoot.

Use the machine in dry places, away from possible external water jets and never outdoor in the rain, to avoid electric shock.

Never leave the machine switched on when it is unattended.

Since the machine is equipped with a swivel plate, never introduce your hands into the cylinder or in the drain, while it is switched on. Keep your hands and feet always away from the drain.

Be very careful not to put metallic parts, hard objects, fabrics, plastic materials, etc. on the swivel plate, because they might damage its movement permanently or cause serious damage to the user, third parties or the environment.

The machine must only be used for plucking and any other different use is forbidden, because the rotary elements cannot be protected and might become seriously dangerous.

CAUTION

Check that the machine is connected to single-phase 230V supply circuit, with:

- Adequate grounding system;
- Thermal magnetic/differential circuit breaker with $I_{dn} \leq 30\text{mA}$;
- 6A thermal magnetic circuit breaker.

If you use extension cables, make sure that they are suitable for the power consumption of the machine, by raising the connection between the machine plug and the extension cable, in order to avoid risk of electric shock in case of wet floor conditions.

INSTALLATION INSTRUCTIONS

The proper functioning of the machine must be checked by authorized personnel that is informed and trained on the proper checking operations.

To install the machine, follow these instructions.

1. **Before switching the power supply on**, check that:
 - the electrical connections are properly fastened;
 - the power cord is in good working condition (if damaged, make sure to have it replaced by specialized technical staff);
 - the mechanically held emergency stop pushbutton works properly;
 - the micro interlock switch connected to the top lid works properly (interlocked protection);
 - there are no objects or materials inside the basket which are not allowed;
 - all the protective devices and safety systems are positioned correctly and work properly;
 - the water supply tube has no water leaks and the water tap beside the machine is closed.
2. **After switching the power supply on**:
 - turn the machine on by pressing the “I” switch and make sure that the power connection indicator is lit;
 - test that the emergency button and the micro interlock device connected to the top lid work properly;
 - check for proper functioning of all the machine components and safety systems;
 - perform an empty run to check that the machine works properly.

PREPARATORY PHASE AND ANIMAL PROCESSING

Slaughter the animal according to current regulations, make sure that the blade is as thin as possible and is used in its throat or neck. The cut should not exceed 0.5 cm max in length.

This is aimed at tearing the animal's skin only minimally and preventing it from further damage during the defeathering process.

Keep the animal hung head down for complete bleeding.

Immerse the animal in hot water at a temperature of 63°/68°C for approximately 18/25 seconds, being careful not to burn yourself and the animal skin.

Wear rubber gloves when handling the animal.

As far as the web-footed animals are concerned, immerse the animal and rub both its back and its breast vertically using a soaking rake. Raise the feathers to let water penetrate between them, in order to guarantee a uniform soaking phase.

During the soaking phase, for both poultry and web-footed birds, shake the animal several times and verify that the feathers are easily removed.

After soaking the animal, put it into the plucking machine, close the lid and switch the machine on.

Let it rotate for 9/10 seconds (plucking time).

Longer times may damage the animal's skin.

IMPORTANT!

Small residuals feathers are normal, do not insist on plucking the animal beyond the specified time, in order not to damage it.

If the animal is stuck in the internal rubber fingers, stop the machine and put it again in the centre, in order not to damage it.

AT THE END OF THE PLUCKING PHASE, PROCESS OR STORE THE MEAT, ACCORDING TO THE REGULATIONS IN FORCE.

SWITCHING ON

Connect the machine to the power outlet through the plug supplied;
Check that the white connection indicator is lit (see picture of the control panel above);
Turn the machine on, by pressing the ON (I) power switch;
If needed, gradually open the water supply tap on the connection point of the system, then open the tap beside the machine, in order to let the feathers come out of the drain outlet easily.

HYDRAULIC SUPPLY

The machine is equipped with a water spraying system inside the basket, which includes a rubber perforated tube with water stop valve.

The machine can be hydraulically connected only with clean tap water at maximum pressure of 0.5 bar approximately.

The hydraulic connection must be made with a flexible tube for food use and provided with appropriate connections; there must be a stop valve at the water inlet.

PLUCKING PHASE

Before using the machine, clean it accurately in its inside, using suitable non-aggressive and non-corrosive detergents and disinfectants and keeping the machine disconnected from the power supply. Carefully remove any residual detergent and disinfectant used.

In case of accumulated dirt, accurately clean the external surface of the machine using a damp cloth and non-aggressive disinfectant.

Connect the machine to the electrical system.

Manually put the slaughtered animal into the basket through the top lid, following the instructions described in the chapter “PREPARATORY PHASE AND ANIMAL PROCESSING”.

If needed, gradually open the hydraulic supply tap on the connection point of the system, then open the tap beside the machine, in order to let the feathers come out of the drain outlet easily.

After plucking, when the machine has been disconnected from the power supply, it is necessary to **clean** the whole equipment **accurately**, in order to prevent the formation of bacterial colonies; for this purpose, make sure that the feathers are removed also from the drain pipe (clean without inserting your hands into the drain outlet in the lower part of the machine).

If the animal is stuck in the internal rubber fingers, stop the machine and put it again in the centre, in order not to damage it.

CAUTION!

ALWAYS USE APPROPRIATE TOOLS TO FACILITATE THE DRAINAGE OF FEATHERS FROM THE OUTLET; NEVER USE YOUR HANDS!

Do not use aggressive or acid substances for cleaning or disinfecting, to prevent the machine from being corroded or damaged.

SWITCHING OFF

1. Press the OFF (O) switch;
2. Wait for the machine to stop;
3. Disconnect the machine from the power outlet;
4. To disconnect the machine from the hydraulic supply system, close the water tap on the connection point of the system and wait a few seconds to close the tap beside the machine, in order to let the water drain off easily between the connection point of the machine and the perforated tube in the basket. If necessary, disconnect the connection tube between the machine and the attachment point of the system.

CAUTION!

Turn the machine off using the main power switch, never pull the power cord from the outlet.

NEVER SWITCH THE MACHINE OFF BY JUST OPENING THE TOP LID.

Emergency switching off and switching back on

By pressing the emergency stop pushbutton, the machine stops in few seconds. To switch it back on, unlock the same button by unscrewing it in the direction shown by the arrows.

If you open the interlocked top lid, the machine will stop in few seconds and will not be switched back on until the lid is closed again.

CAUTION!

IN CASE OF JAM OR EMERGENCY, PRESS THE EMERGENCY PUSHBUTTON AND DO NOT OPEN THE LID.

WAIT FOR THE MACHINE TO BE COMPLETELY STOPPED BEFORE OPENING THE LID.

SAFETY AND CONTROL SYSTEMS

TECHNICAL DATASHEET OF THE MAIN SAFETY COMPONENTS AND SIGNS

Type	Photo
<p>Emergency stop pushbutton</p> <p>There is a mechanically held emergency stop pushbutton on the control board.</p>	In the photo gallery
<p>Fixed protective casing</p> <p>The machine is equipped with fixed casing (corresponding to the mounting structure), safety comb-shaped protection on the drain outlet and fixed metal grid positioned under the engine.</p>	In the photo gallery
<p>Safety screw</p> <p>On the drain side, there is a safety round edge screw (to avoid manual opening) which locks the basket to the mounting structure.</p> <p>The screw must always be fastened and tightened, to make sure that it can be unscrewed only with an Allen wrench.</p> <p>The safety screw can be removed only for cleaning the basket, according to what explained in the chapter "BASKET CLEANING / DISMANTLING AND ASSEMBLY".</p> <p>CAREFULLY FOLLOW THE INSTRUCTIONS GIVEN IN THE ABOVE-MENTIONED CHAPTER.</p>	In the photo gallery
<p>Interlocks</p> <p>A micro interlock device is connected to the top lid.</p>	In the photo gallery
<p>Control systems</p>	Absent

GENERAL MAINTENANCE AND SETTING

Rubber fingers replacement

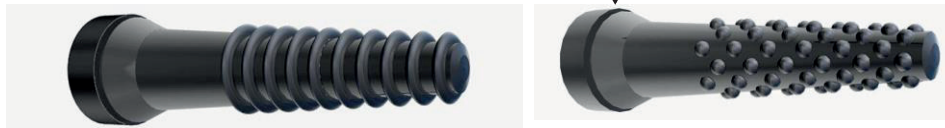
To replace the rubber fingers, only use those provided by the manufacturer.

Disconnect the machine from the power supply;

Clean the machine (see chapter “Machine cleaning”);

Use proper personal protective equipment to prevent any risk of cutting and cut the external rubber part of the fingers with a razor blade knife, then remove the worn out or broken finger and insert a new one by pushing it inwards and, simultaneously, pulling it from the inside with the other hand.

Make sure that the circular body fits inside the groove of the finger and that it remains well-fixed to the circular mounting structure.



MACHINE CLEANING

To clean the inside and outside of the machine, proceed as follows.

Electrically and pneumatically disconnected:

Proceed according to the following procedures for cleaning and sanitizing to ensure the sanitary - hygienic of the machinery.

ACTIONS

In general:

The generic term "**sanitisation**" provides that an area is clean:

- physically - remove all visible dirt;
- chemically - remove, through the wash, all the products used in the cleansing or disinfection;
- biologically- reduce to an acceptable level, the number and the type of microorganisms.

A surface can be considered clean when:

- it is free from traces of contaminants, both when it is dry and when it is wet;
- it isn't greasy to the touch;
- does not smell unpleasant odors;
- it doesn't turn black a white paper slithering on surface;
- the water poured on the surface flow without forming drops.

The sanitizing procedures must ensure the absence of organic residues and contamination indicators.

Identify dangers

The sanitation of the machine must be carried out with the utmost care and attention because, incorrect cleaning procedures can give rise to problems.

Basically the dangers of an insufficient sanitisation are classified as biological and chemical nature:

Biological dangers: insufficient cleaning procedures can not remove the microorganisms on the surface, or at least, not reduce them to an acceptable level. It 'always good to remember that even if a surface may look clean does not necessarily acceptable microbiologically.

This, in particular happen if:

1. Detergents and disinfectants are not used in the right concentrations, if are not respected times and contact temperatures;
2. Recontamination of surfaces, if the material used for cleaning is poor conditions.

Chemical dangers: wrong cleaning procedures (in particular insufficient washing operations) cause a chemical contamination of surfaces. The presence of residues leads to organoleptic, technological and toxicological problems. In addition the right sanitisation is important to checkup any cross-contamination from allergens. It's important to train properly the staff in order to avoid:

1. Wrong preparation of the disinfectant (too high concentration)
2. Insufficient drainage;
3. Lack of knowledge of the machinery;
4. Incorrect monitoring.

Take the following steps:

- a. Staff should be familiar with the best systems to dismantle, clean and repair any equipment, noting that parts of the machine can be dismantled to perform the cleaning operations best;
- b. For each detergent or disinfectant product, staff must be aware of the concentration of use, time of action, water temperature and rinsing modes; The specifications for the use of the products described in the relevant technical sheets must be affixed to the premises where the line is installed;
- c. The sanitizing process is carried out according to the following standard procedures:

Preliminary cleaning

It consists of the "physical" removal of more coarse dirt. It is generally removed dry or with only lukewarm water. Preliminary dry cleaning is particularly suitable for hygroscopic products which, by reacting with water, may form deposits of difficult removal (powders, dried extracts, etc.). Without a complete "physical cleansing" there can be no "microbiological hygiene" as the dirt does not allow proper disinfection.

Detergency

Water alone makes a very limited dirt removal activity. The most recognized effect is the ability to mechanically remove coarse residues without tensile adhesion to the surfaces. It consists in the mechanical removal of organic matter and dirt from objects and surfaces and is generally carried out with the use of water, with detergents..

Disinfection

It is an operation that involves the use of all the means that reduce the number of microorganisms present on objects and surfaces; Such means may be chemical, that is, substances / compounds called disinfectants, or physical means such as heat. Disinfection must be preceded by proper sanitation.

PREPARATIVE PROCEDURES FOR SANIFICATION

For pre-operative sanitisation procedures are all those procedures that take place before and after the work is started. The following sanitation procedures are carried out by the staff according to the following modes and frequencies:

a. machine

The machine must be cleaned before the start of each work if the preoperative control is not properly sanitized. It must also be cleaned at the end of each working day, at each change of work or whenever it becomes necessary.

b. hands

Hand sanitization is of utmost importance to avoid contamination of the product. This must be done before entering the production area and frequently during the processing, returning from the toilet or whenever get into the production area; Alternatively you must use disposable gloves.

Before starting a new plucking process and after each plucking process, clean the machine following the instructions below:

Before using the machine (disconnected from the hydraulic and power supply):

Make sure that there are no residues from the previous plucking process or possible mold;
Clean thoroughly using a damp cloth soaked in detergent and generic sanitizer, non-aggressive, **for food use**. Wipe off accurately with a cloth moistened with water, following the instructions specified on their packages;
Let the machine dry completely before using it again.

After using the machine (wait a few minutes, with the machine disconnected from the hydraulic and power supply):

Manually remove any large residues from the plucking process;
Clean thoroughly using a damp cloth soaked in detergent and generic sanitizer, non-aggressive, **for food use**. Wipe off accurately with a cloth moistened with water, following the instructions specified on their packages;
Let the machine dry completely;
Close the top lid and protect the machine from dust and possible external agents that might damage it.

- !** Before using any products, carefully read the instructions labelled on the products, which explain the proper use, dangers involved, P.P.E. to be used, possible tools to employ, contact times and compatibility with the materials to disinfect.
- !** Comply with all the measures required by the current regulations, especially those concerning principles of food hygiene.

BASKET CLEANING / DISMANTLING AND ASSEMBLY

If you want to clean the basket of the machine, it can be dismantled, following the instructions below:

BASKET DISMANTLING AND CLEANING

- Disconnect the hydraulic supply;
- Press the OFF switch on the control panel;
- Disconnect the machine from the power supply;
- Press the mechanically held emergency pushbutton;
- Unscrew the safety screw on the feathers drain side (using the hexagonal Allen wrench provided) and the three knobs on the lower edge of the basket;
- Remove the basket (together with another operator);
- Start the cleaning process in accordance with the instructions of the chapter above "MACHINE CLEANING";
- Let dry.

BASKET REASSEMBLY

- Make sure that the basket is completely dry;
- Insert the basket (together with another operator);
- Connect the hydraulic supply;
- Tighten the safety screw on the feathers drain side (using the hexagonal Allen wrench provided) and the three knobs on the lower edge of the basket;
- Make sure that the vertical pole placed on the back hinge of the machine is reinserted in its lower housing (interlock system);
- Connect the machine to the power supply;
- Unscrew the emergency pushbutton to unlock it.

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