

Instructions for use of grape crusher

We thank you for choosing our machine and have pleasure in enclosing this use and maintenance manual to allow you to make the best use of the machine thus extending its service life.

This volume contains all the information accompanied by drawings and/or diagrams necessary for installation, operation and maintenance of the crusher-destemmer. It also establishes safety standards that staff must respect the machine.

FAILURE TO RESPECT THESE INSTRUCTIONS IS DANGEROUS AS IT MAY CAUSE INJURIES TO PEOPLE AND DAMAGE TO THE MACHINE.



It is forbidden operation and repair of the machinery by persons who have not read and assimilated the safety precautions contained in this manual. The manual is part of the machinery, and it must be made available for an easy and fast consultation.

The manual must be stored in a suitable place, which does not adversely affect the conservation status of the manual particularly.

In particular :

- Place in a clean, and dry location, and communicate this place to all staff.
- It is forbidden to write part of the manual.

1. SAFETY RULES



FAILURE TO RESPECT THESE INSTRUCTIONS IS DANGEROUS AS IT MAY CAUSE INJURIES TO PEOPLE AND DAMAGE TO THE MACHINE.

Before to use the machine is necessary to read this manual, and it is obliged to integrate these indication with all the valid regulamentation about safety and accident prevention.

The driving gear may cause accident . It is necessary to use caution when the machine is working,

Furthermore, the positioning of the crusher-destemmer in a wet location constitute a risk to accidental electric shocks caused by the electrical contacts of the motor.

Decline any responsibility in case of :

- Inadequacy of the electrical system used for the machine.
- Inadequacy of the location where the machine is installed.
- Not respect of the indication for installation, use and maintenance, as indicated in this manual.
- Use of the machine by not qualified operator.
- Not allowed modification to the machine.

The only use of the machine is the one indicate in this manual. We decline all the responsibility for any different use of the machinery.

ADVICES:



- The crusher must be used exclusively for the processing of the product described in this manual
- Don't start to install or to use the machine before the reading of this manual
- Don't start the machine if there are missing labels
- Don't start the machine if there are not safety protection or abnormal vibration, or if the safety protection are not installed

- Do not start the machine if the electrical motors and/or the structure of the machine are damaged.
- At least once a year ensure that the various machine components are secured and if necessary tighten any loose nuts/bolts.
- Ensure that the circuit tension to which the engines' control panel is connected is the same as that of the engine cabling.
- Don't use the machine if the motor is overheating. Wait till the motor is became cold.
- Use only experienced personnel to put in operation, clean and do maintenance on machinery.
- Do not start engines if the rotating elements are prevented from rotating freely.
- When using slings to lift the machine, make sure these are suitable to the weight to be lifted.
- Wash and clean the machine only with no-toxic products.
- This book let must always accompany the machine. Any reproduction including partial reproduction of the same is forbidden.

2. GENERAL DATE

2.1 Description of the machine

This machine can be used only for pressing and destemming grape, suitable to be used by small winery or family use.

The models referenced in this manual are as follows:

- 1) LM-50: electric grape crusher destemmer (painted)
- 2) LM-50SS: electric grape crusher destemmer (hopper in inox)

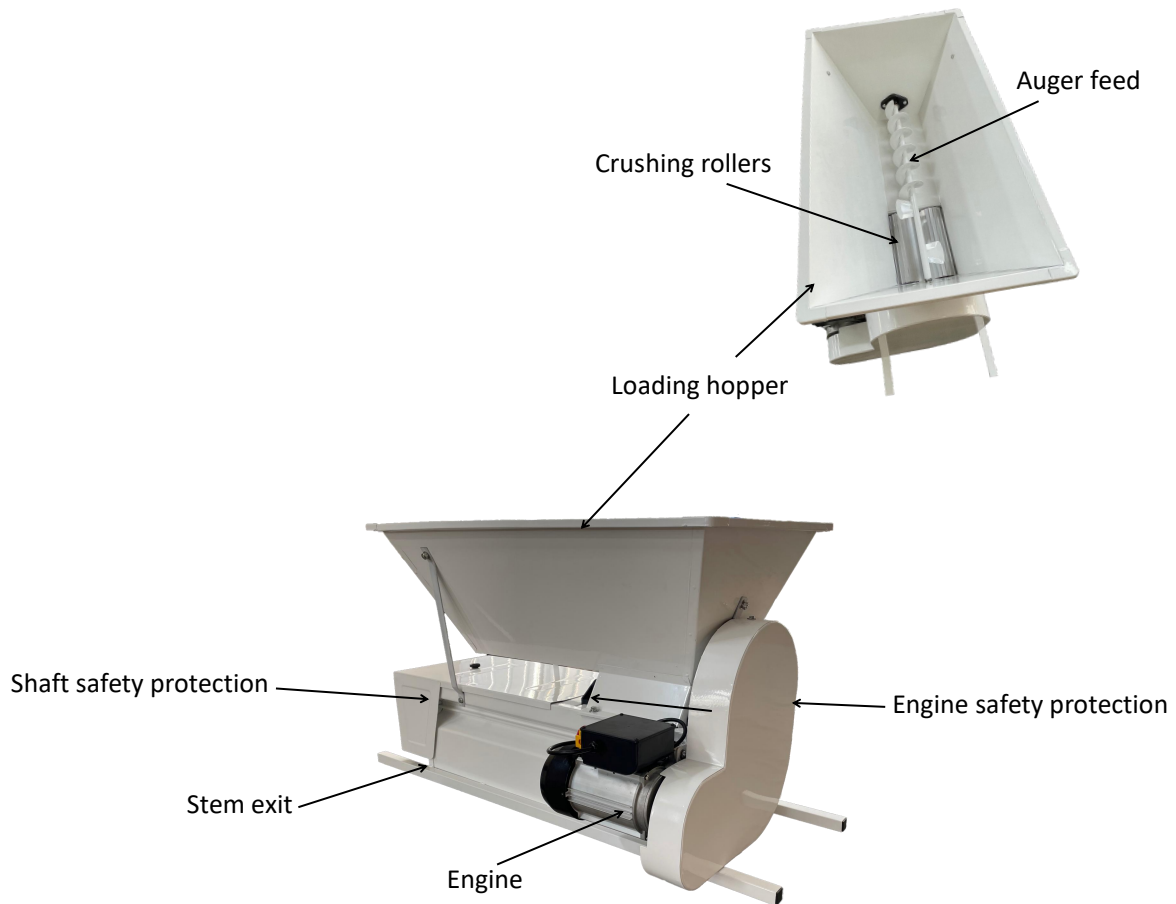


All the models mentioned in this manual are only different in dimension, the material used and hourly production, but they work all the same.

Main parts of these machines:

- 1) **Hopper for loading grapes:** inside there is an auger feed .
- 2) **Crushing rollers:** made of Aluminum. They are installed on supports. The distance between the two rollers can be adjusted by a bolt.
- 3) **Basket:** separate the berries from stems, by means of rotation of the shaft. Juice and berries are collected in a container placed under the machine.
- 4) **Stem exit :** the stems are removed by gravity in the terminal part of the machine. Only the fallen stems should be removed, and not those eventually deposited in the sheet of the machine.
- 5) **Engine:** It is necessary that the circuit tension and the system of the user is conformed to the regulation , and must be suitable compare with the label of the motor.

Description: Model LM50, Model LM50SS



2.2 Technical data

Model	Power	Voltage supply	Hourly Production	Weight
LM-50	750W	See machine's date sheet	1500 kg/h	38.5kg
LM-50SS	750W		1500 kg/h	39 kg

N.B. The date in the tables is not binding. The manufacturer reserves the right to make changes without duty of notification.

The machine must be installed over a collection tank.



Please note the installation of equipment on a stable surface is a prerequisite for the safe use of the product. It is recommended to proceed with extreme caution in the installation of machinery and its lock on the selected container, which must have features:

- Rigidity
- Stability
- Robustness (the weight of the machine at full load is about 130 kg)
- Adequate size

We suggest to install the machinery over the appropriated stand, But if there is no stand, it should be installed over a collection tank.



3. SECURITY GUARDS

3.1 General note

The motorized machine are provided with protections for the others and for all the gears, to avoid the direct contact with harm or fingers.



Do not carry out introduction of body part or instruments, or maintenance work while the machine is in operation.

The employer, or the company responsible for the user of the machine, are obliged to ensure that all the user of the crusher-destemmer are informed of the safety regulations regarding the use of machinery, and must provide all information necessary to ensure a safe use.

In particular, must check that:

- tampering or modifications are not carried out on the machine
- The machine is used for the intended use of this manual
- that the machine complies with the original configuration
- compliance with the safety regulations provided by law and those specified elsewhere in this manual

From an analysis of the risks associated with the use of the crusher-destemmer it was found that the most important are the following:



Don't make any maintenance while the machine is working



Don't remove the safety protection

3.2 General risk

To crush or top cut hands and finger	Agitator Roller	Stop the machine and disconnect the motor's plug by the net before to start any repair or maintenance. Don't repair the machine while it is working
To crush leg and feet	Fall down of the machine	Use safety shoes Be sure of the installation of the machine, in particular about the installation over the collection tank
Electrocution. Fire	Engine	It is important that the user's electrical system complies with the law regulations in force and that its maximum power absorption is taken into account. Check the cord and the plug if they are new and good Prevention of humidity Only specialized person have to work on the electrical panel

3.3 Emergency stop

This is the machine's controls panel consisting of a cable and plug, an emergency-stop device and of a machine start button.



1) STOP RED BUTTOM

2) START GREEN BUTTOM



3) Emergency RED

4. INSTALLATION

The crusher is supplied in a cartoon box. Check that the machine is complete, perfect and there are no evident defect. Check the crusher is similar to the order one.



To take out the crusher from the cartoon box it is possible to use automatic lift system: be sure to balance the weight. Or manual, taking the machine by the tubular.

5. CLEANING AND WASHING FIRST INSTALLATION.

Wash machine thoroughly to eliminate any residue and any dust on its surface. Take care of the engine, cord and plug. If the electrical component are wet, wait till they are dry before to start.

6. WIRING CONNECTION

To start the machine, proceed with the electrical connection which must be carried out by a qualified technician. Avoid wetting the plug and socket.

Check the label on the motor and the adequacy with user's electrical system.



The safety of this crusher is valid only if there is an user's electrical system complies with the law regulations in force and that its maximum power absorption is taken into.

If it is necessary to use extension or multi-socket, use only material conformed to the law regulation in force and respect the limit of maximum power absorption. We suggest to use a cord wide 1,5 mm for extension till 20mt, and wide 2,5 for longer distance.

7. START AND STOP



Important: before starting the machine, ensure that there is nothing that prevents the mechanical parts from moving freely and, above all, that nobody is close to the moving parts of the machine. More specifically, hands, arms and other body parts must be kept away from the inside of the box.

Ensure that the engine voltage corresponds to the voltage of the mains.

Avoid moving the machine while it is in operation. Machine start-up must not be carried out barefoot, with bare or soaking wet hands. Check that both plug and socket are in working order. We recommend that rubber gloves, boots and an apron be worn by the user while using the machine.

Check the correct installation of the safety protection

Check the emergency stop of the motor work good.

If there are no problem during this control, proceed as following:

- Press start bottom, and the machine will start to work
- Load the grape or the fruit inside the hopper
- The grape will start to be pressed by the roller and destemmer by the shaft
- To stop the machine press the safety stop
- To start again, open the safety switch and press again the green bottom

If it is necessary to repair the machine (obstruction or foreign body), make like this:

- stop and disconnect the motor from the main;
- Remove item from the inside of the machine by using a suitable tool and if necessary open the machine
- close the machine, and check to have all the protection install



Do not carry out introduction of body part or instruments, or maintenance work while the machine is in operation.

8. CLEANING AND MAINTENANCE

After using the machine and in any case at the end of each working day, unplug the machine from the main and wash thoroughly to eliminate any residue.

During maintenance and repair operations, remember to interrupt the electrical power connection by switching off the mains and by unplugging the machine. This operation must be carried out to avoid accidentally starting the machine which could cause injuries to people and damage to the machine.

To wash the machine correctly, open it , remove the basket and eliminate any residue inside it. To remove all residue from the rollers, these should be washed from the top and from the bottom.

During washing pay attention to the motor.

For washing use hot pressure water and neutral detergent.

Once washing is completed, if the machine is not to be used for a long period of time, proceed as follows:

- Open the carter that protects machine gear.
- Grease all chains, internal gear, supports.
- Grease the roller and the agitator support.

To polish the machine’s metal surface, use vaseline oil on the inox surface, or detergent for alimentary use on the painted surface.



Any maintenance must be attend my specialized and qualified worker. Use suitable lubricants to come in contact with foodstuffs.

It is not possible disassemble the engine. If it is necessary ask before to the reseller.

In the event of any repairs you need to use original spare parts directly contacting the dealer or Manufacturer.



To use not original spare parts or not allowed, is reason of decline of the warranty and of the Declaration of Conformity.

9. PROBLEM SOLVING

INCONVENIENTI	RIMEDI
The machine has difficulty in starting.	Check that machine is receiving the correct line voltage. Do not use extension leads that are too short as this could cause a voltage reduction. Check the tension of the transmission belts with the register provided.
The machine doesn't start	Make sure machine is plugged in. check the capacitor inside the engine.
The screw or agitator doesn't move	Verify that the transmission gears are intact and well locked on the shaft of the roller. Adjust the distance between the rollers with the appropriate screw placed on the support.
Some berries or fruit are not pressed	Check the transmission gear are working good, and well fixed on the roller shaft. Adjust the distance between the roller and make for strong the support.