

## ENOLOGICAL EQUIPMENTS

# OPERATING INSTRUCTIONS AND TECHNICAL MANUAL

## DESTALKING – CRUSHING MACHINE MODEL JOLLY 60 REVERSE

**ENGLISH** 

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#### ATTENTION:

This manual must be leave near the machine in a dry place.

The user of the machine and the maintance staff must be sure of the location of this manual.

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#### 1. CONTENTS OF THE MANUAL

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.

This volume is intended for: the establishment or department managers, staff involved with the installation, the machine operator staff, maintenance personnel



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

## **ENOITALIA** s.r.l.

Via Prov. Pisana, 162 - Cerreto Guidi (Fi)

#### **EC DECLARATION OF CONFORMITY**

(AII.IIA DIR.2006/42/CE)

ENOITALIA s.r.l. Via Prov. Pisana, 162 Cerreto Guidi (Fi) P.iva 03987590480

declares, in sole responsibility, that the following product:

### **JOLLY 60 REVERSE**

**YEAR OF CONSTRUCTION: 2023** 

Referred to in this declaration conforms with the following directives and standards

- 2006/42/CE and subsequent amendments and national provisions implementing
- 2014/35/CE and subsequent amendments and national provisions implementing
- 2014/30/CE and subsequent amendments and national provisions implementing.

The machine also complies Harmonised Standards

UNI EN: 349; 954/1; 1050; 547-1-2-3; 894-1-2-3; 953; 981; 1005-1-2-3-4-5; 1037.

UNI EN ISO: 3744; 7000; 12100-1-2; 11202; 11205; 11688-1-2; 14121-1; 13857;

**UNI EN ISO 1186.** 

Standards and technical specifications CEI EN 60204/1.

Standards and technical national specifications UNI ISO 1819; UNI ISO 7149;

UNI 7544; 45020; 60447; 60447.

Declare the machine is made in stainless steel AISI 304 18/10, and all the component are certified foodstuff use (including pipe, valve, flow meter, fitting) in conformity to D.M. of 21/03/1973 and D.M. nr.220 of 26/04/1993 and following modifications.

Cerreto Guidi 09/11/2021

The Production Manager

Stefano Menichetti

#### 2. 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 regolamentation 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

Enoitalia s.r.l. decline any responsability in case of :

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

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

#### 2.1 **DESCRIPTION**





#### 2.1. 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.

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.

#### 3. STICKERS ON THE MACHINE AND SAFETY PROTECTION



Label with name and serial numeber

The machine is provided with protections for the motors and for all the gears, to avoid the direct contact with harm or fingers.

The machine is also provided with an upper safety box to install over the hopper to avoid the accidental possibility to touch the screw. This safety protection dosen't protect with the intentional introduction of the harm inside the hopper ,because must allow the loading of the grape inside the machine.

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 / attention mechanical moving parts







Use safety shoose

To crush or top cut harm and fingers	Loading screw Destemmer shaft Transmission gears	Don't remove the safety protection 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 (see the point 6.2)
Electrocution by contact with parts supplied with electricity. Fire danger	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

**TABELLA 1: general risk** 

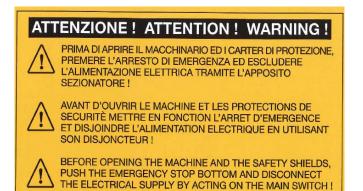


Caution: Do not change the height of the loading grape / not remove the stalks not fallen to the ground

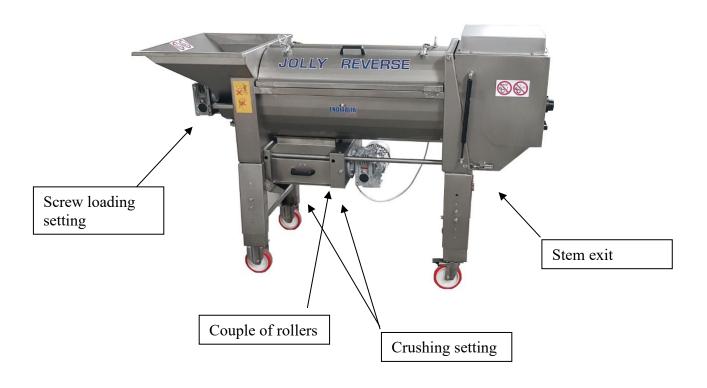


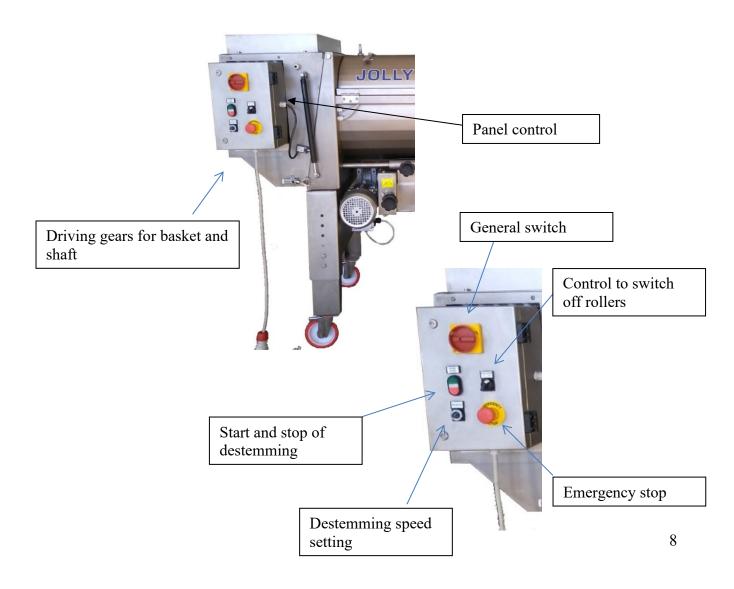
Lubrication point





### **4.TECHNICAL DRAWING**





#### 5. USE OF THE MACHINE

The machine you have purchased, Model JOLLY 60 REVERSE, is designed exclusively for the purpose of destalking and crushing grapes.

The constructor cannot be held responsible for any damage to the electrical or mechanical parts of the machine caused during transportation. You are therefore invited to check the condition of the packaging when the machine is delivered.

The constructor declines any responsibility in case of accidents to people or damage to things and/or the machine, caused by the operating staff's failure to strictly follow the instructions contained in this manual or from their having tampered with the machine.

Before starting the machine it is crucial that the user knows how to carry out all the operations described in this manual and to apply them whenever necessary.



All the changes in the use, in the products used, in the type of the operations, are value as a new installation of the machine and Enoitalia srl decline any responsibility.

#### 6. DESCRIPTION

Below a list of machine components:

- 1) **Infeed hopper:** contains a spiral conveyor that drives the grapes inside the destalking basket. The screw is equipped with a motor speed variator HP 0,5
- 2) **Destalking basket:** separates the berries from the stems with the simultaneous rotation of the basket and of the shaker provided with rubber vanes. A screw feeder made in rubber and steel is fixed to the destalking basket, which conveys the berries towards the crushing rollers.
- 3) **Roller unit:** consisting of two rubber rollers that crush the berries. The crushing can be adjusted as required by using the wheels provided. Rollers are fixed on bearings that allow to remove the roller unit if crushing is not required. This unit can be removed from the machine and install in a sorting line. There is one motor speed reducer HP 2
- 4) **Stalk outlet:** the stalks fall out of the end part of the machine. Remove only the stalks that have fallen on the ground. To remove the stalks that may have dropped on the machine's unloading plates, stop the machine, then extract the stalks.

#### THIS OPERATION MUST NEVER BE CARRIED OUT WHILE THE MACHINE IS ON

- 5) **Electric panel:** it is the panel control of the destemmer, composed of a CE plug, emergency stop, start and stop button, speed variator, switch for crushing system. The panel control is connected to several safety switch to stop the machine at the opening of protection 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
- 6) **Engine for destemming basket and shaft:** it is composed of a speed reducer and a frequency inverter
- 7) **Hopper safety protection :** this device has to be install over the loading hopper, to avoid any part of the body touch the internal screw.

#### 7. INSTALLATION AND CLEANING

#### 7.1 FIRST CONTROL

The destemmer JOLLY 60 REVERSE is supplied on pallet. Inside there is : n°1 manual instruction; n°1 assembled destemmer crusher with motor

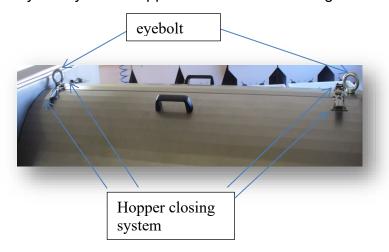
The hopper safety protection is supplied in a separate cartoon.

Remove machine from packaging and dispose of the latter in compliance with law regulations.

Check the machine is complete, perfect and there are no evident defect. Advice immediately the company Enoitalia srl in 15 day, about all the defects

Check the machine is similar to the order one

Lift the machine by the eyebolts supplied as seen from the figure below:



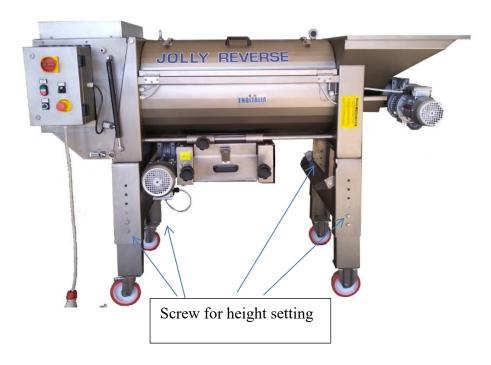
Transport the machine to the place it is to be installed in and ensure that all the wheels rest perfectly on the ground. Block the front wheels with the brakes provided.

We suggest to make an evaluation of the adequancy of the place where install the machine: the machine must be easy to access from any side, and in particular the emergency stop: it is a safety device install on the motor which stops the machine when the cover is lifted; the space free around the machine must be more than one meter; the machine dosen't hamper the passage of elevator or other vehicle; the floor must be strong enough to support the weight of the machine and with a slooping less than 10%; all the user must be exposed to the noise in similar way, in respect of the law limits; the temperature the humidity and the magnetic area have not to cause dangers to the machine; the light must be suitable for a safety and correct work

#### 7.2 CLEANING

Remove machine from packaging and dispose of the latter in compliance with law regulations.

Adjust the legs height by the telescopic system.



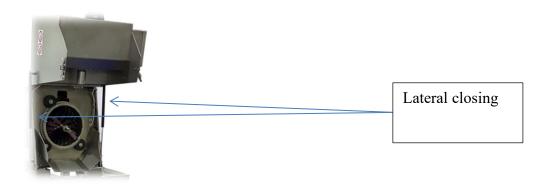
Wash machine thoroughly to eliminate any residue and any dust on its surface. Take care of the engine, cord and plug.

To wash the machine proceed as following:

1. Open the two top cover by unlocking the 4 closing system and drive the cover down by the handle



2. Open the front cover by unlocking the 2 closing system  $\,$  .



## First to proceed with the next points see the attach n°1 OPENING AND REMOVE OF BASKET AND SHAFT

- 3. Pull out the shaft without any rotation
- 4. take out the destemming basket: move up a little to separate by the 2 plastic wheels, and turn the basket making care the screw is driven trough the opening like in the next photo:



- 5. Unlock the roller unit, and open .
- 6. Carry out the washing, remove all residues and dust collected on the surface, taking care not to wet the electrical parts and holding the power cord disconnected from the line..
- 7. At the end assemble all the components, taking care the basket is well fixed on the driving gear.
- 8. Install the safety hopper protection.

Check the correct working of all the safety switch:

- Test all the safety switch to avoid anything is blocking their function
- Test the emergency stop: press and unlock the button (with a rotation as indicate by the arrow)



It is obliged install on the motorized machine the safety box over the hopper. This box is a component of the machine, and a standard feature of the safety system

When the machine is installed, complete with the safety box, the height from the ground of the box must be more than 1600mm



System to fix the upper safety box

#### 8. FUNCTION

The machine is designed to destalk the bunches of grapes that are loaded into the loading hopper. A screw feeder conveys the bunches towards the rotating cage were the destalking takes place. The speed of loading can be adjust by using the gear speed variator install on the hopper.

ATTENTION: do not use the wheel of the speed-adjustment drive unit when the engine is off as this would cause the wheel to break).

The destalking speed is set by the potentiometer install on the frontal panel control (the speed is shown in the video on the panel control). Stalks are eliminated through the stalk outlet, whereas the berries are conveyed towards a separate outlet. If crushing is required the rollers may be fitted under the outlet. The roller system can be easily removed from the machine body for installation downstream of a possible selection belt: in this case it is sufficient to install an extension plug (of adequate dimension) to be able to connect to the control panel of the destemmer .

The destalked berries are then conveyed to the collection opening of a marc pump or in the collection tray to which a self-priming pump is connected.

#### 9. 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

#### 10. START UP

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 well away from the stalk outlet opening and from the inside of the box.

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

Make sure the direction is correct, otherwise provide for a reverse phase into the power plug of the machine (to check the correct direction of rotation simply turn on the machine and check inside the hopper the direction of rotation of the loading screw, and check the rotation of the roller inside the crushing unit). Before start-up remember to check the oil level of the speed-adjustment drive unit and to top it up if necessary. It is important that this unit never runs dry as this would cause it break.

To start the machine, proceed with the electrical connection which must be carried out by a qualified technician. Avoid wetting the plug and socket. Should the rollers be required, plug roller unit into the electrical panel of the machine before connecting machine to the mains.

To start the machine press the start button, to stop it press the red stop button or the red emergency button (figure 2). Once the red emergency button has been pressed, to start the machine again rotate this button in the direction indicated by the arrow.

Once start-up has been completed, place the grapes inside the loading hopper and set the destalking capacity by using the wheel located on the speed-adjustment drive unit (do not use the wheel of the speed-adjustment drive unit when the engine is off as this would cause the wheel to break)

Working on the potentiometer of the panel control is it possible to set a more soft or hard type of destalking ..

The amount of bunches to be destalked depends on the screw feeder on the hopper and cannot be changed by pushing the bunches through the inlet



#### this operation is of no use and should not be carried out as it is extremely dangerous.

Should a self-priming pump be used, fit the collection tray before starting the machine. Make sure this is secured.

Should it be necessary to access the inside of the machine (in case of blockages or foreign bodies), proceed as follows:-

- 1. Turn off and unplug the machine.
- 2. Remove item from the inside of the machine by using a suitable tool and if necessary open the machine.
- 3. Close any open parts and repeat all start up operations.

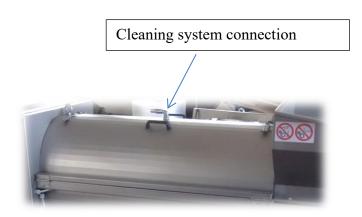
During machine operation the user must check that there are no skins or berries still attached to the stalks at the outlet, and that there are not too many stalk fragments inside the berries collection tank. If there are stalks inside the tank, usually all that is required is to reduce the speed. If berries are still attached to the stalk at the outlet, increase the speed.

Finding the correct speed depends largely on the experience of the user as he shall have to adjust it depending on the type of grapes, on their degree of ripeness and on the type of processing these will subsequently undergo.

#### 11. WASHING AND MAINTENANCE

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

To perform a daily washing, the machinery is equipped with a system of internal rinsing which is accessed by connecting the water network to the quick coupling installed on the top of the machine: once the connection is initiated and open the water supply, the destemmer must start and leave running as long as the output water is without of processing residues



To wash the machine correctly, open it, and eliminate any residue inside it. To remove all residue from the rollers, these should be open and washed from the top and from the bottom (see the Attach number 2).

For cleaning we suggest hot pressure water, taking care not to wet the electrical components (safety switches, electric motors, control panel).

It is possible to use neutral detergent, taking care in rinsing.

ATTENTION: lubrication maintenance must be performed every 20 hours of work, and each time the machine is put to rest for long period. Failure to do so could result in mechanical failures and downtime

#### Look at Attach n°1 Lubrication and maintenance, to see all the point to lubricate and verify

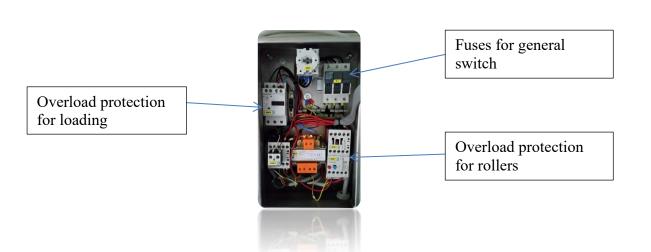
Proceed as follows:-

- Open the front carter that protects machine gear. Grease all chains, internal gear, greasing points, and bearing supports
- Pull out the shaft: look at all the rubber plate, and support bearing
- Check the oil level of the speed-adjustment drive unit
- Check the wear of the rubber screw drive install on the basket
- Check the wear of rollers and lubricate all the bearing
- Close all carters and the hopper making sure that the support shaft is secured to the inside retainer.

To polish the machine's metal surface, use vaseline oil.

## 12. POSSIBLE CAUSES OF MALFUNCTION

PROBLEM	REMEDY	
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 and that the	
	safety microswitch is not active.	
	Check that the machine cover is closed and	
	secured with the fixing screws.	
	Check the emergency stop is unlocked	
	Check the fuse inside the panel control.	
Crushing system dose not start .	Make sure machine is plugged in and that the	
	safety microswitch is not active.	
	Check the switch of roller on the panel control	
	is on zero	
	Check the fuse inside the panel control	
Loading screw dose not start	Make sure the plug of the motor speed	
	variator is well fixed	
	Check the fuse inside the panel control	
Some berries are still attached to the stalks at Turn off the machine, open and clean inside		
the outlet.	Reduce the speed od destalking	
	Modified the inclination of the plate on the	
	destemming shaft	
Some green part is inside the berry at the exit	Increase the destalking speed	
	Modified the inclination of the plate on the	
	destamming shaft	
The speed variator is too noisy	Check the oil level inside the speed variator	
The destemmer is too noisy	Open the destemmer and check the correct	
	installation of the shaft and the basket	
	Make sure there are no extra parts inside the	
	machine body	
	indonino body	



#### 13. GENERAL PREVENTION RULES

- 1. The user must scrupulously follow the accident prevention regulations in force in the various countries and the instructions contained in this manual.
- During maintenance and repair operations, remember to interrupt the electrical power connection by switching off the mains and by unplugging the machine. This operation <u>must</u> be carried out to avoid accidentally starting the machine which could cause injuries to people and damage to the machine.
- 3. Avoid moving the machine while it is in operation.
- 4. 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.
- 5. We recommend that rubber gloves, boots and an apron be worn by the user while using the machine.

#### 14.PROTECTIONS

The machine is designed in such a way as to ensure that the movement of the transmission gear and of the motor are protected by carters to prevent direct contact with such parts. The machine is also provided with an anti-accident box which must be installed to avoid any involuntary contact with the rotating element (screw) and to allow the voluntary introduction of hands or tools as it has to permit the passage of the product.

#### Do not put hands or tools inside the machine when it is in operation.

The roller unit is provided with a protection grid allowing optimum product conveyance. This grid must be sufficiently wide to allow the product to pass through and to prevent the accidental contact of hands with the rollers.

The producer cannot be held responsible for any damage resulting from the tampering with or removal of the carters and of the anti-accident box.

#### 15. TECHNICAL FEATURES

Engine loading hopper: 0,37 kw / Engine crushing unit: 1,5 kw / Engine destemmer 3,2 kw

Hourly production 4000-6000 kg/h

Dimension: 2010x830x1340 mm

Weight: 160 kg

Noise level: weighted Leq A 78,9-83,8 db. (measured outdoors in normal working conditions, in compliance with the methods indicated in UNI 7712).

#### 16. CONDITIONS OF GUARANTEE

The guarantee covers the machinery for the first twelve months from its activation. Should the machine not be used immediately insurance coverage is guaranteed for up to eighteen months from the date of delivery and expires thereafter.

The guarantee does not cover machine transportation for which the buyer is responsible. The guarantee is not applicable in case the machine is not used in accordance with the instructions contained in the manual.

Any repair work is understood as being ex our factory in Cerreto Guidi (FI), transportation is at the buyer's expense.

The guarantee does not cover any defects due to the following reasons and entailing the termination of all our obligations:-

- Incorrect installation
- Tampering with the machine
- Lack of experience, failure to carry out maintenance operations, failure to promptly notify us of any defects.
- Failure to follow the instructions contained in the manual
- Repair work carried out by personnel not authorized by Enoitalia Srl.
- Transportation damage that cannot be attributed to manufacturing or packaging defects.
- Machine installation and electrical connections carried out in ways other than those indicated in the manual and on the plate located on the engine.
- Transportation expenses and risks in case the machinery is sent to authorized assistance centres.
- Electrical components
- Consumables and ordinary maintenance costs contained in the above-mentioned manual.

The guarantee does not extend to the obligation of covering damages to individuals or things deriving from the use of our product also when broken or defective.

We decline our obligations in case the payment conditions agreed are not respected.

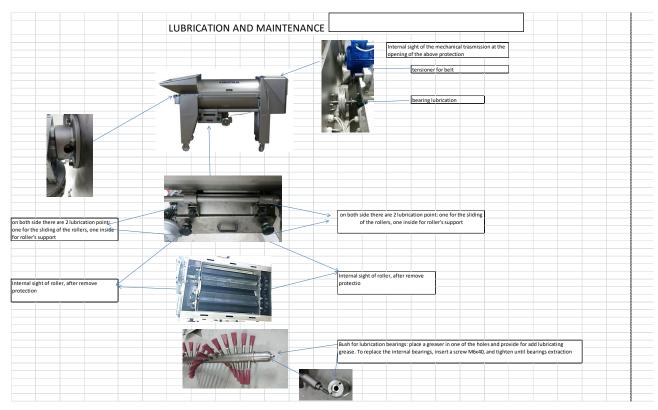
Any complaint should be made in writing by the buyer to ENOITALIA Srl within 8 days from the date of purchase.

**Conditional sale:** pursuant to articles 1523-1524 of the code of civil practice, the property of the goods sold is transferred to the buyer only once the goods have been paid in full as agreed.

Any controversy shall be referred to the place of jurisdiction of Florence. Any controversy is

disciplined by the Italian law even if goods are acquired by a foreign Italian citizen or if goods are supplied to a company abroad.

#### **ALLEGATO 1**



#### **ALLEGATO 2**

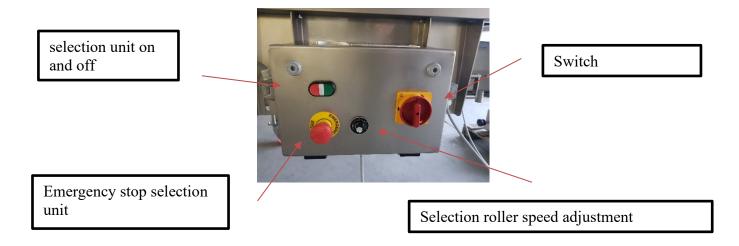


#### **INTEGRATION: Selection and refinement rollers**

The JOLLY REVERSE destemmer in the 820 configuration is equipped with a motorized roller table in PVC with differentiated spacing, which has the function of perfecting the cleaning of the destemmed product, selecting the grains and eliminating the green (part of stem, seeds, leaves).

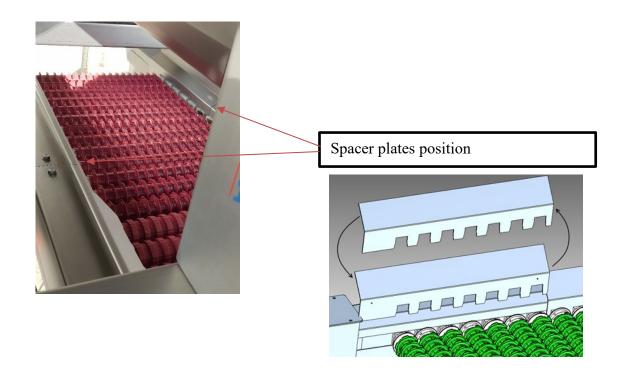
The destemming machine is installed on a stainless steel frame with telescopic legs: to adjust the height at which to position the destemmer, it is necessary to lift the machine using the special lifting eyebolts (see paragraph 7.1) and adjust the legs with the special key tool included with the machine

The machinery, in addition to the control panel of the destemmer, has a further general panel installed on board the selection unit:

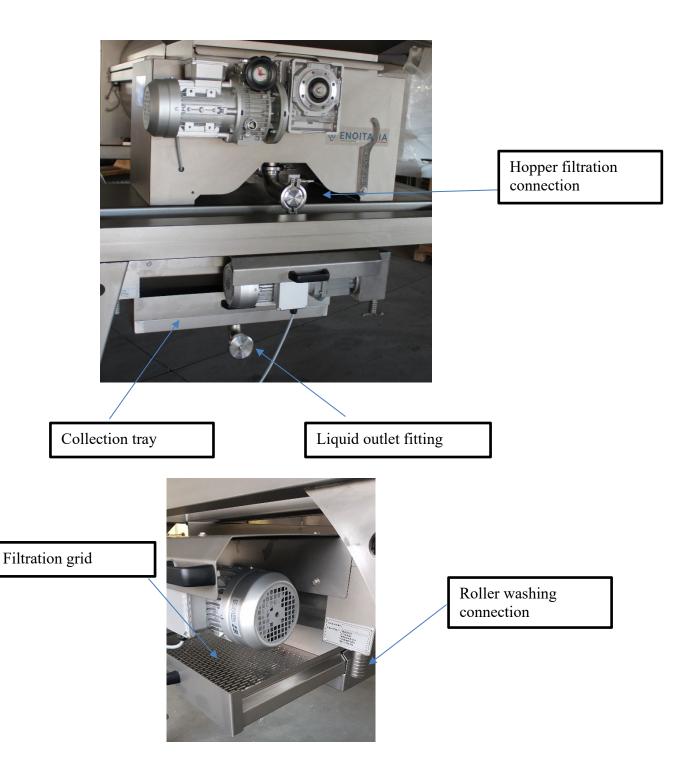


The selection system is equipped with spacer plates in addition to those supplied as standard, to adapt the machinery to different types of grapes.

To replace the spacer plates, simply remove the locking handwheels and pull them out.

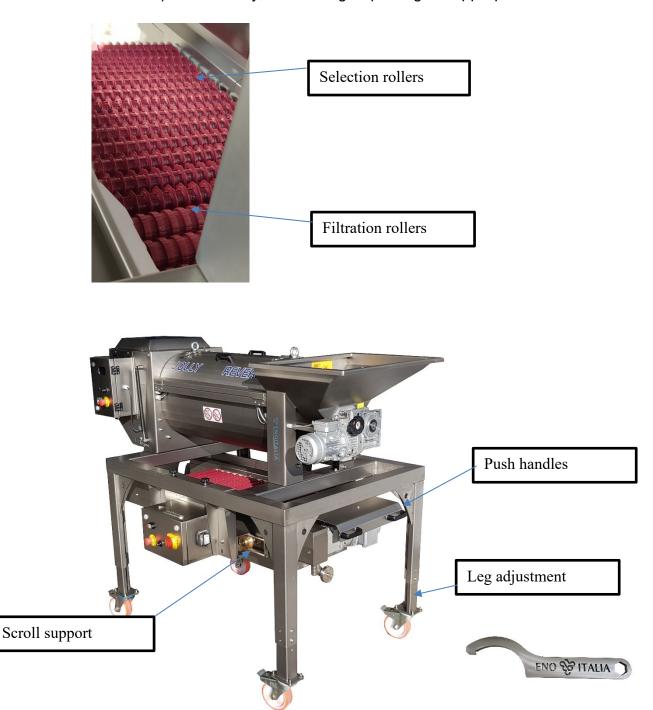


The first part of the roller group is equipped with a removable collection tray with a filtration grid. Connect a suitable flexible pipe to the outlet of the fitting to collect the product deposited in the tray



The machine is supplied ready for use.

Check that the destemmer discharge outlet is positioned on the first part of the selection group (area with filtration rollers). if necessary, move the group using the appropriate handle



During use, the possibility of adjusting the rotation speed of the rollers allows to optimize the cleaning and efficiency of the machinery. Ensure that berries don't run over the middle part of the sorting roller. If there are parts of greenery at the grape discharge, the rotation speed must be increased.

Conversely, if some whole grains are discarded, the rotation speed must be reduced, or eventually proceed to adjust the spacing.

Below the machine there is a conveyor hopper which allows the installation of both a pressing unit and collection containers or elevator belts

To clean the machine, it is sufficient to wash it directly on the machine without removing it from the machine. The two lateral channels with washing connection allow the discharge of the liquid