MIXING PUMP OPTIMIX 10

MANUAL INSTRUCTIONS

ORIGINAL INSTRUCTIONS
Revision n…… of ……

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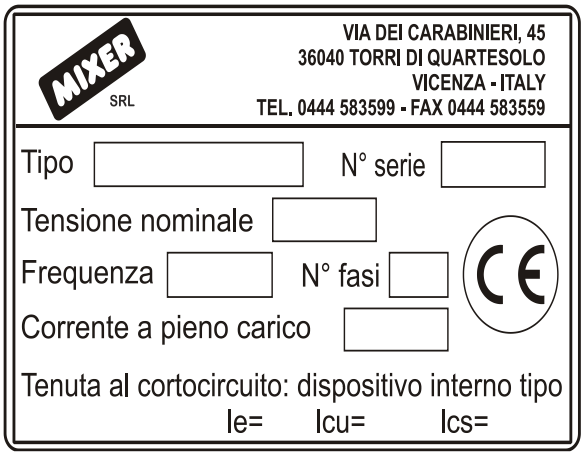
CE MARKING



FINAL TESTING AND COMMISSIONING

(by the Manufacturer or the authorized Dealer)

The machine is already tested at the Manufacturer's premises.

The commissioning of the machine at the client is carried out by Manufacturer or the Authorized Dealer.

At the end of the testing, the Manufacturer or Authorized Dealer fills in the testing and commissioning certificate, which is signed by the testing technician, the operator in charge (or any other authorized operator), and by the safety manager, who shall certify the positive result of the same.

RESERVED RIGHTS

The contents on this manual can’t be reproduced and disclosed (totally or partially) without written authorization of the Manufacturer.

TECHNICAL DATA

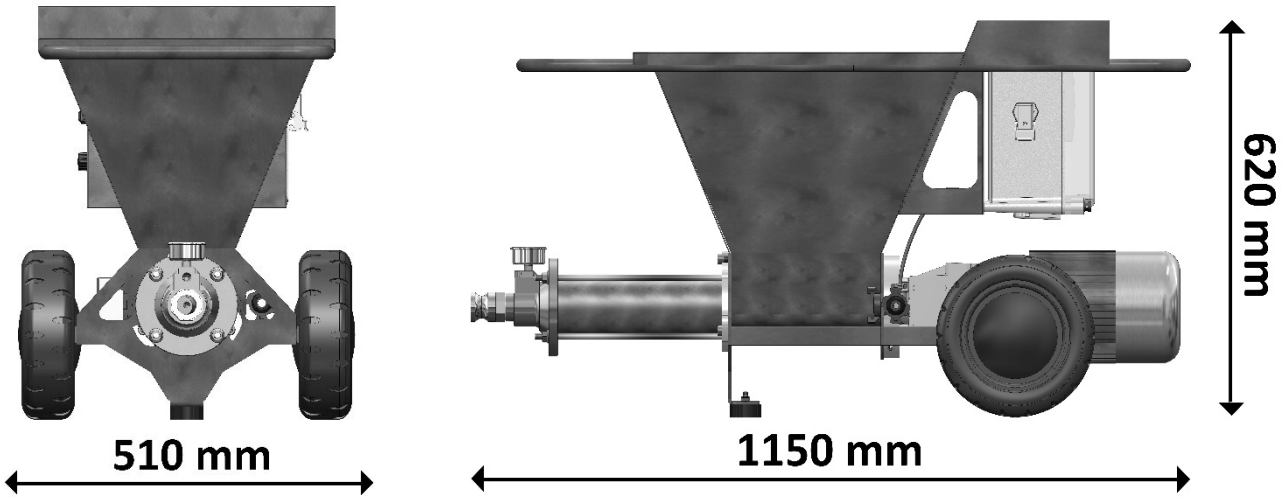
The models available of the machine: **MIXING PUMP OPTIMIX 10**

MODELS	POWER SUPPLY	MOTOR POWER
FOR ADHESIVES	230 V 50 Hz	2,2 kw
FOR MORTAR	230 V 50 Hz	2,2 kw

Protection grade of switchboard: IP44
Flow rate: 8-26 litres /min
Hopper capacity: 70 litres
Max. served distance: 40 meters (*)
Weighted noise pressure level "A": 92 Db

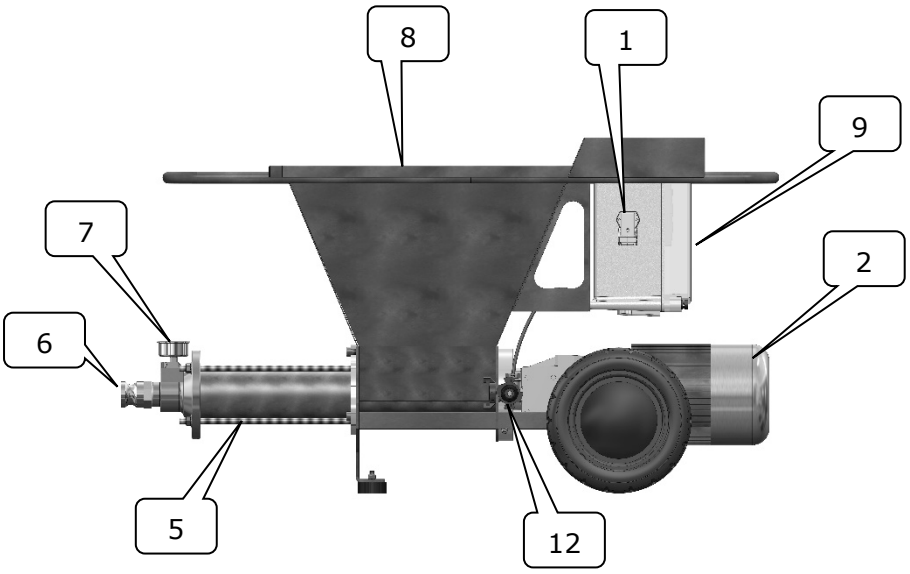
(*) depending on the characteristics of the product used, the stator, the rotor, the diameter and length of the hose, the spraying height and the ambient temperature.

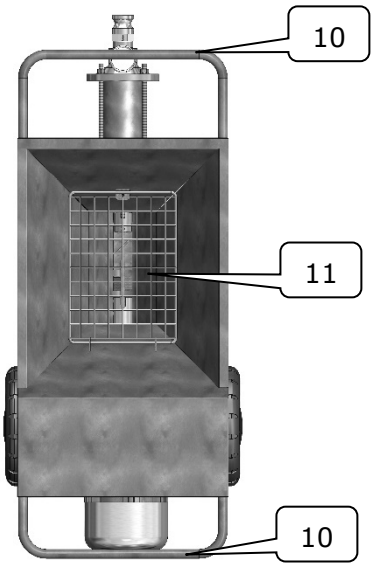
DIMENSIONS OF THE MACHINE



PARTS LIST

1. Plug for lance for glue cable
2. Gear motor
3. Wheel
4. Supporting feet
5. Stator
6. Flange
7. Pressure gauge
8. Hopper
9. Electrical panel
10. Lifting handles
11. Security grid
12. Connection air hose





PACKAGING

Usually the machine is packaged by the Manufacturer on wooden pallet, fastened with straps and wrapped with a film.

List of supplied components:

No. 1 Mixer;
No. 1 Rotor;
No. 1 Stator;
No. 1 Spraying nozzle;
No. 1 Material conveying tube (L= 15 m) with couplings;
No. 1 Air tube (L= 16 m) with couplings (for mortar version);
No. 1 Lance cable (for adhesives version);
No. 1 Adapter + Geka coupling (for mortar version).

No. 1 Instructions for use and maintenance;
No. 1 "Anti-grip" liquid bottle with sprayer;
No. 1 Screwdriver;
No. 1 Fixed wrench (17 mm);
No. 1 Fixed wrench (13 - 10 mm);
No. 2 Small foam rubber balls to clean the material conveying tube;

UNPACKING

1) Remove the protective film;
2) With a proper tool, cut the straps paying attention not to be hit by the same due to their elasticity;
3) With the help of a second operator, let the machine carefully get off the pallet lifting it using the proper handles positioned on the machine sides;

USE DESTINATION

The use destination of the machine is to use in building sector for the Mixing and spraying of pre-mixed products having a max. granulometry of 3 mm, suitable for plastering.

Can be used for the processing: Pre-mixed plasters, dry or in silo, having as base: plaster, plaster lime, cement lime, finishing plasters, stoppers, coloured plasters, gluing agents in general, foundation for floors and mortars.

Any other different use is potentially inappropriate.

DISPOSAL

At the disposal time of the machine, compulsorily observe the provisions of the regulations in force.

Separate the parts making up the machine according to the different construction materials (plastic, copper, iron, etc...).

Lubricant liquids and any other fluids shall not be dispersed in the environment.

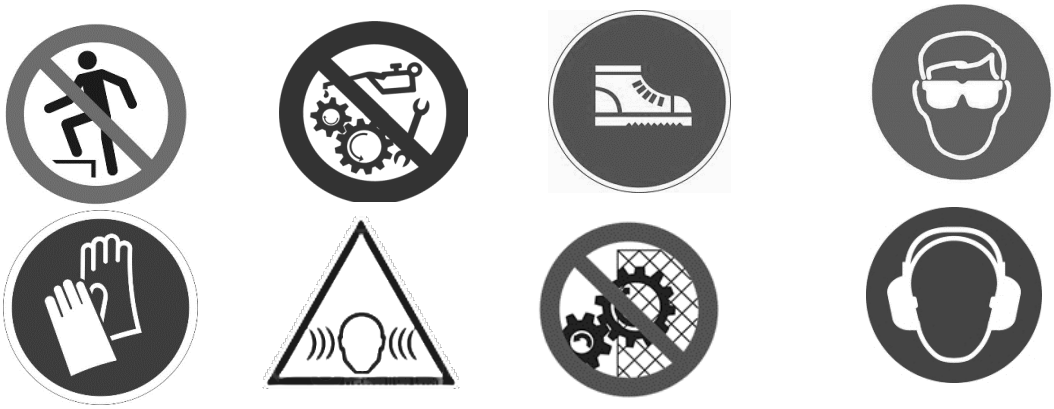
These products, deemed polluting and hazardous, shall be compulsory disposed entrusting companies authorized and specialized for the different types of product.

MACHINE TRANSPORT

Use the lifting handles No.10 indicated in the chapter PARTS LIST, at pages 6, for transportation and lifting.

SAFETY INSTRUCTIONS

1. The machine use is only reserved to qualified and trained staff in according to the safety provision law.
2. Always remove the voltage, turning off master switch, before to do any operation on the machine.
3. The master switch has also the stop emergency function in case of necessity.
4. Conform to use destination of the machine described in the in the specific chapter.
5. The disconnection of the material conveying tube, it is compulsory to done only with pressure at zero of pressure gauge.
6. Consult the instructions of pre-mixed products, before to use the machine
7. The machine is not suitable to use in environments with potentially explosive atmospheres (Atex)
8. Only one operator at time on the machine
9. The machine has not been conceived for to transport and/or lift persons and things.
10. Pay attention to transport the machine on slopes, danger to be run over
11. It is absolutely forbidden to tamper, disconnect and/or remove any safety device existing in the machine.
12. For the safe use of the machine are recommended the following personal protective equipment: safety footwear, protective gloves from chemicals, goggles or face shield, earmuff.
13. Don’t introduce objects thought the hopper protection grating. Don’t use the machine with the open grating.
14. It is absolutely forbidden to tamper the calibration of pressure reduction valve.
15. Don’t step or pull tubes and the electrical connections.



RESIDUAL RISKS

The machine was designed and produced to compliance with current legislation at state of art.

However, the machine presents residual risks, risks that can't be eliminated at the source and involving a training and the operator's attention.

ZONE	RESIDUAL RISKS	DANGER	PREVENTIVE MEASURES
Material conveying tube	hazard to be hit by the ejection of material subject to pressure.		Education, training. The tubes disconnection only in the absence of pressure indicated in gauge.

FORESEEABLE INCORRECT USE

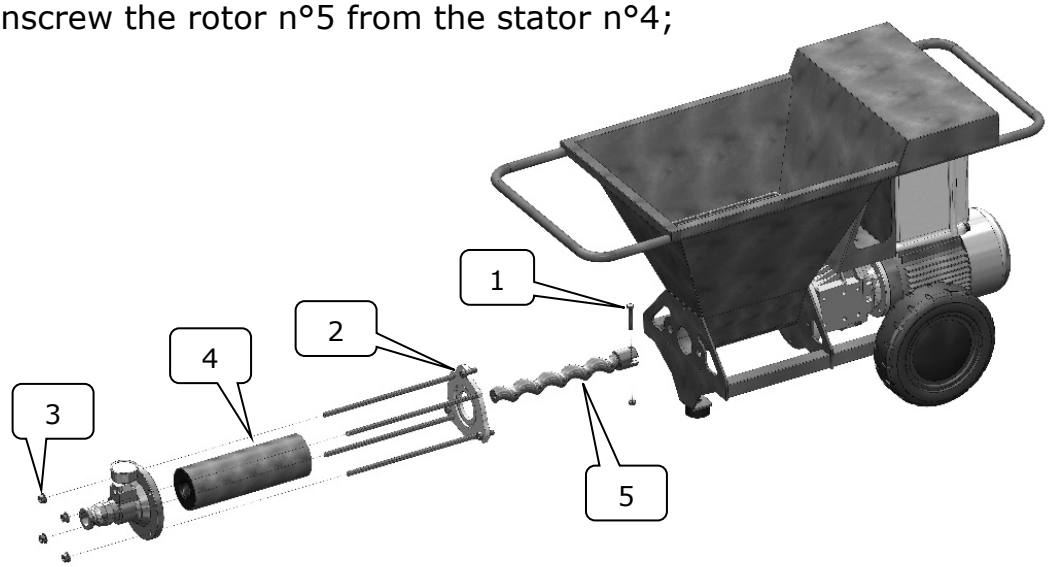
Don't use different products from the Antigrip, supplied, for danger of malfunctions of the machine.

Don't throw foreign body in hopper (gravel, stones, etc….) for danger of machine breakdown and dangerous projection.

DIASSEMBLING OF ROTOR AND MIXER

Carry out the operations by following the letters in succession:

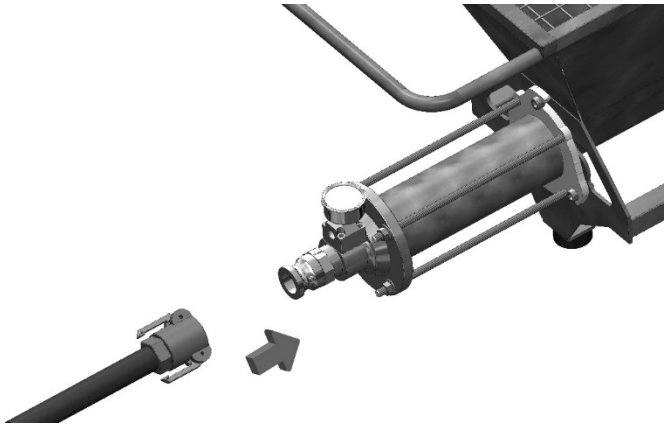
1. Remove the voltage to the electrical panel;
2. Unscrew the screw no. 1;
3. Unscrew the three screws no.2;
4. Remove the pump unit (flange with pressure gauge, stator, fixing flange and rotor from the hopper);
5. Unscrew the rotor n°5 from the stator n°4;



Attention:

Spray the Antigrip on the rotor BEFORE install in the stator.

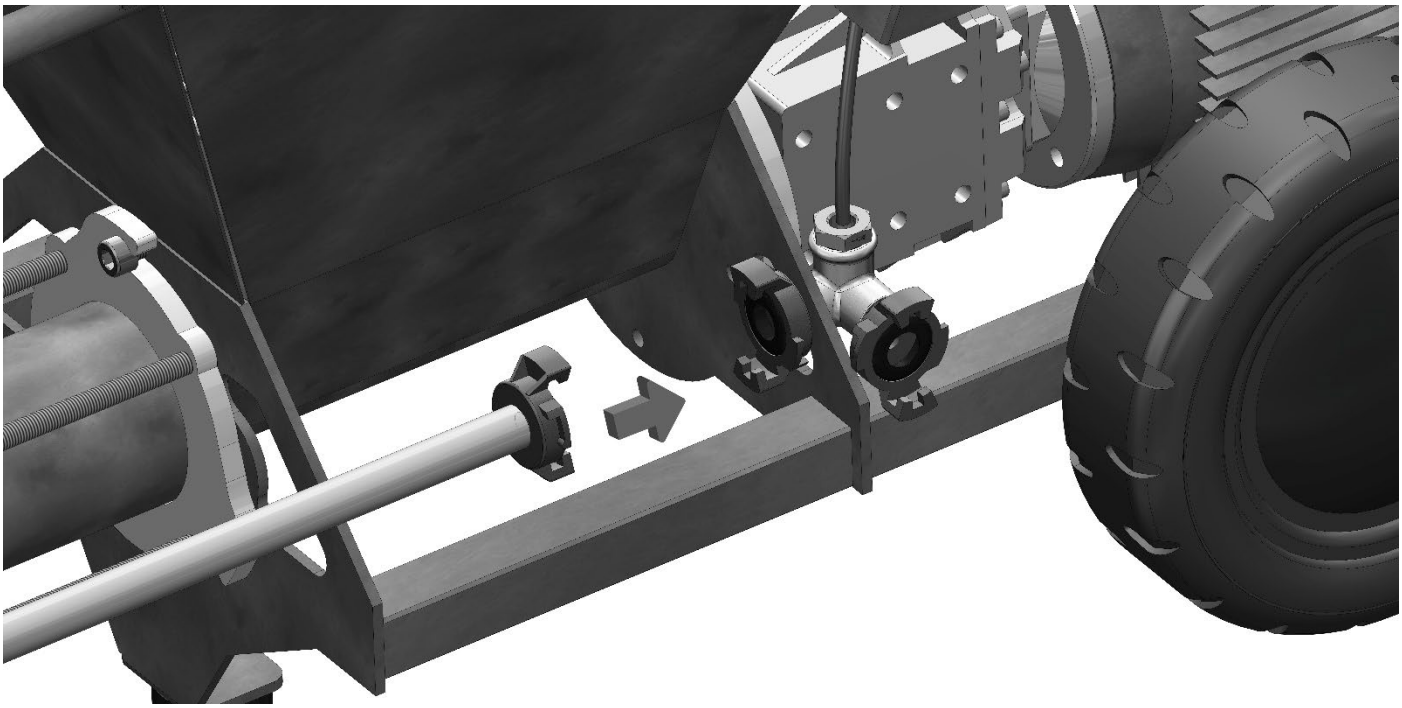
CONNECTION OF THE MATERIAL CONVEYING TUBE



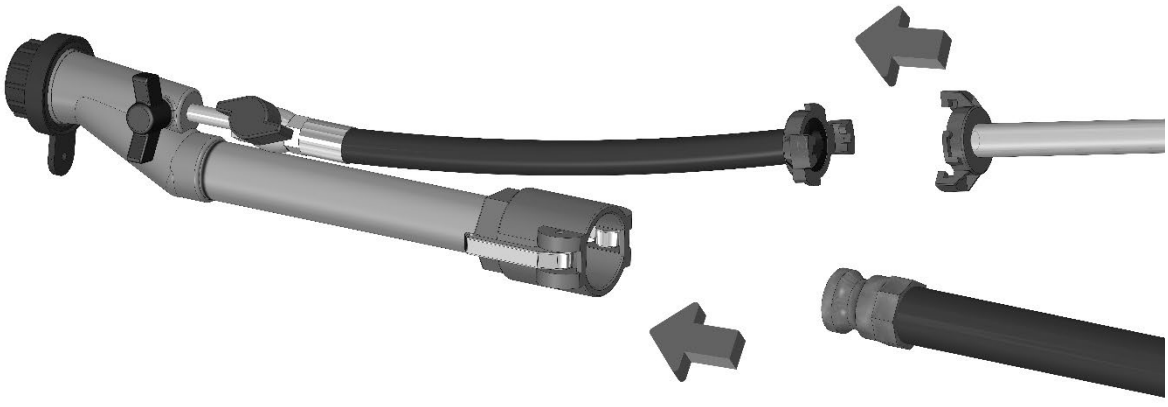
Attention:

Performing the disconnection only in the absence of pressure indicated in gauge.

CONNECTION OF THE AIR TUBE TO THE MACHINE

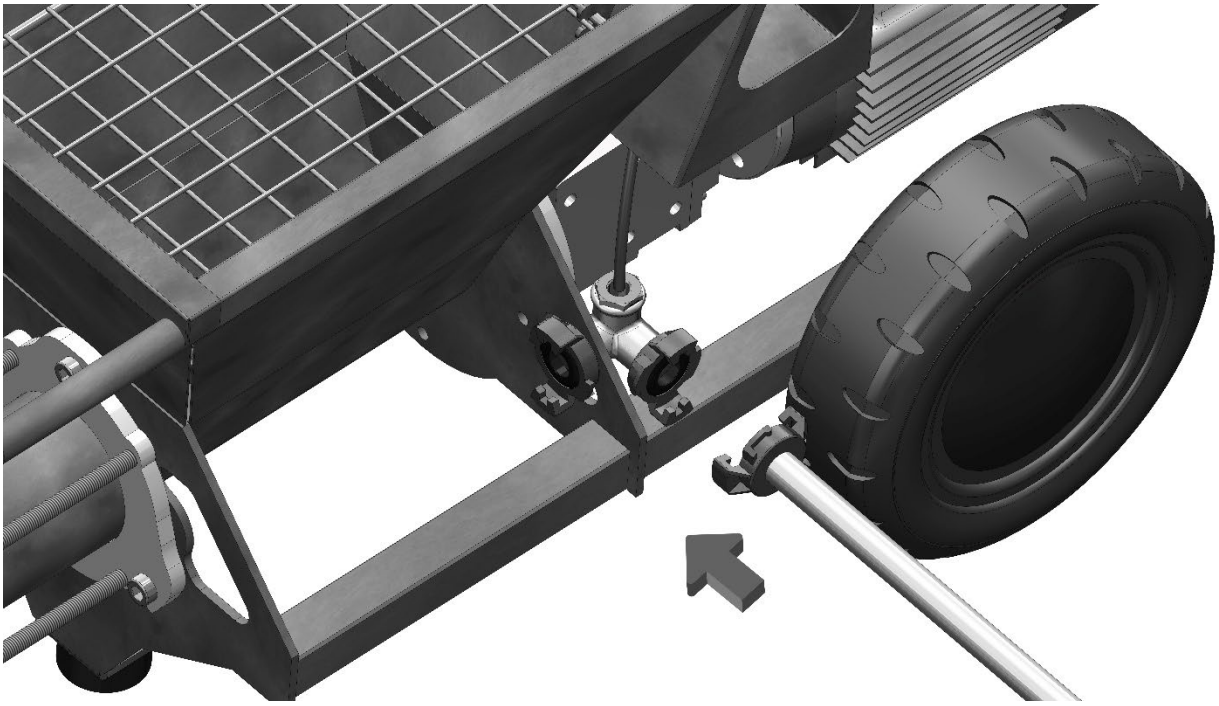


CONNECTION OF THE MATERIAL CONVEYING AND AIR TUBES TO THE SPRAYING NOZZLE



CONNECTION OF COMPRESSOR

(Only for the MORTAR version)



ELECTRICAL CONNECTIONS

Verify that the starter electrical connections, is complies to the legislation in force in electrical connections safety area (marking CE).

The machine is not suitable to connect to power supply outlets of house systems.

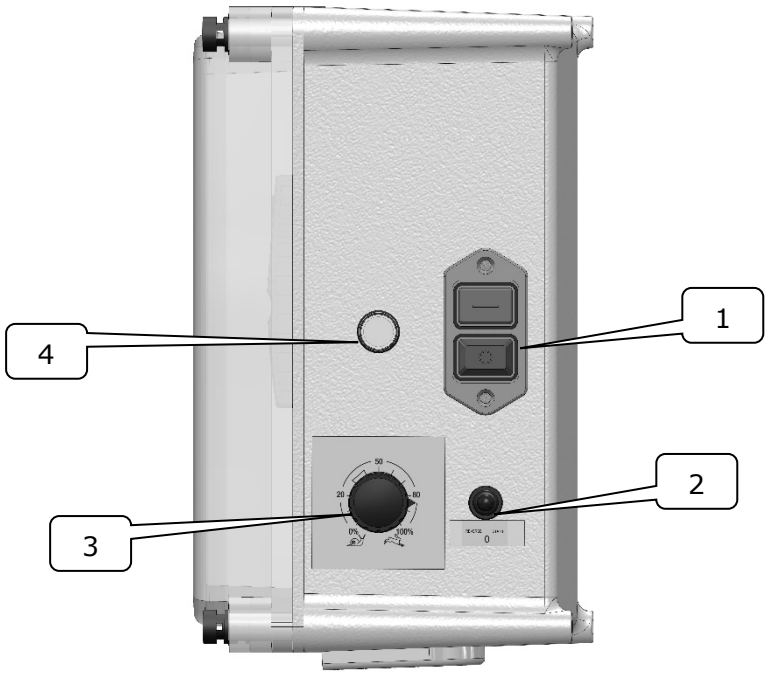
Verify to provide voltage and power appropriate to the machine.

Verify that thermal magnetic circuit breaker protection and residual current protection (life saver) is installed.

All the electrical connections (plugs - sockets) must be CEE industrial type with protection degree IP67.

The use of extension cords is admitted only if made in safety standards (cross-section of conductors, insulation, earthing, etc.)

CONTROL PANEL



REF.	COMMAND	FUNCTION
1	Machine Start/Stop	O: Stop the machine I: Start the machine
2	3-position selector	DX: Reverses the direction of mixer rotation 0: Return of the selector SX: Direction of rotation for the pumping phase
3	Potentiometer	Adjusts the motor speed
4	Voltage led	On indicates the presence of voltage in the panel

CHECKS BEFORE SWITCHING ON

1) Make sure that there are not any non-authorized persons close to the machine.
2) Make sure that the machine is positioned and in horizontal plane.
3) Make sure that all components are properly installed.
4) Make sure that the safety devices are integral, properly installed and working.
5) Make sure that all shelves are correctly closed.
6) Make sure that the plug of the power supply cable is connected to the plant supplier and that the main electric switch is off.
7) Make sure that the air, water and material conveying tubes are well stretched avoiding any constriction.
8) Use the compulsory personal protective devices provided by own employer.
9) Verify the filter presence, if the water isn't being drawn from water supply.

MACHINE PREPARATION

1. Pour about 10 litres of clean water into the hopper with a suitable container and / or hoses;
2. Move the gearmotor speed variator to pos. 50%;
3. Start the machine by turning the selector to pos. "March";
4. When the water level in the hopper reaches the mixer, stop the machine by turning the selector to pos. "Stop";

LOADING MATERIAL IN THE HOPPER

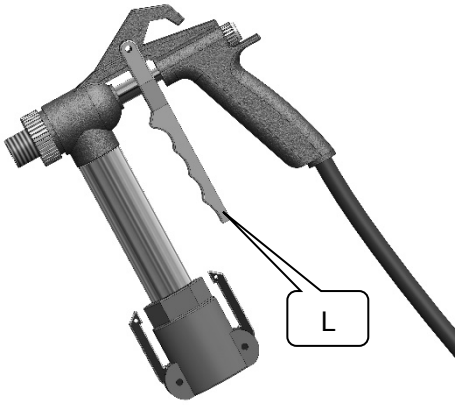
Load the material inside the hopper according to the available equipment (Ex: shovel, wheelbarrow, mixer machine for like "Betomix, Mixer 35, etc ...").

N.B.: IT IS STRICTLY FORBIDDEN TO LOAD PRODUCT WITH A GRANULOMETRY BIGGER THAN 2.5 mm.

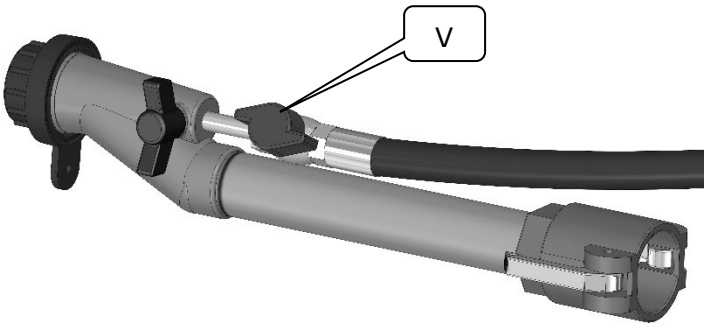
N.B.: IT IS STRICTLY FORBIDDEN TO INTRODUCE, THROUGH THE PROTECTION GRID, ANY OBJECT AND / OR TOOL IN THE HOPPER.

SPRAYING OF THE MATERIAL

1) Hold the spraying nozzle and direct it against the surface to be worked;
2) Open (+) the valve "V" (Fig. B) on the spraying nozzle, or, press the lever "L" (Fig. A) of the lance for glues;
3) For the mortar lance adjust the spraying of the material moving forwards and/or backwards (+ or -), the air tube acting on the screw and blocking it in the correct position;
4) To minimize the deterioration of stator/rotor group, avoid useless stops and restarts of spray;
5) During work breaks less than 15 minutes, close the valve on the spraying
6) In case of clogged of material conveying tube, enabling the mixer reverse run selector for the time needed;



(Fig. A)



(Fig. B)

MACHINE SWITCHING OFF

1) Closing the valve on the lance mortar spraying nozzle or releases the lever for lance for glues;
2) After every shutdown, carry out the machine cleaning;

RESEARCH OF MALFUNCTIONS

The operations of research and remove of malfunctions must be done only by competent and experienced staff.

All the intervention operations must be done in the absence of voltage.

NR	ANOMALIES	CAUSES	SOLUTIONS
1	The machine does not start.	Power supply	Verify the connections of outlets and plugs
2	The gearmotor does not start.	1) tap of the spraying nozzle closed; 2) nozzle of the spraying nozzle clogged;	1) open the tap of the spraying nozzle; 2) carefully clean the nozzle of the spraying nozzle;
3	The compressor stops – thermal protection tripping	1) mechanical break of the compressor (with rod malfunction); 2) clogged suction filters; 3) cable or plug damaged.	1) visible from outside (request technical assistance); 2) replace the filters; 3) check cable and plug and replace, if necessary.

ROUTINE MAINTENANCE

The operations of routine maintenance must be done only by competent and experienced staff.

The replacement of the machine components must be carried out only with original spare parts.

FREQUENCY	AREA	INTERVENTION
Every 10-15 hours of work	Rotor (screw) stator (plenum chamber) used with cement products.	Replacement
Every 30-40 hours of work	Rotor (screw) stator (plenum chamber) used with gaseous products.	Replacement
Every 100-150 hours of work	Mixer	Replacement
Daily	Safety devices	Functional verification
	Material conveying tube, air tube and power supply cable.	Visual inspection of tear status.
Weekly	Gearmotor.	Visual inspection and, if necessary, topping up with oil type BERGOIL "BERGOFLUID 1000" or equivalent.
	Compressor filter.	Cleaning
Six-monthly	Compressor filters.	Replacement
	Grease gun on flange gearmotor.	Adding grease
Biennial	Material conveying tube	Replacement

WARRANTY

1) Within the limits set forth by this warranty, the undersigned manufacturer undertakes to repair all possible construction damages that may arise during the warranty period of 12 (twelve) months for a daily use of 8 (eight) working hours. Such term shall elapse as follows:

a) From the delivery date *(Ref. transport document and sale invoice)*, if the machine is sold directly to the Customer;

b) From the date given on the "Testing and Commissioning Certificate", if the Manufacturer or the Authorized Dealer performs the testing and commissioning of the machine;

c) From the date of sale *(Ref. transport document and sale invoice)*, if the machine is sold directly by an Authorized Dealer on a "sale or return" basis; The obligations resulting from the warranty decay in case of suspension or modification of the payment terms agreed upon.

2) The warranty decays, if the purchaser does not duly observe the provisions described in the "Instructions for Use and Maintenance" of the machine.

3) Remain excluded from the warranty: Failures and defects due to the normal tear of those parts, which for their nature are subject to rapid and fast tear; electric equipment; failures resulting from the use of tools and accessories not directly supplied by the manufacturer.

4) In order to be able to exercise the warranty right, the purchaser has to inform the manufacturer in case of defect detection immediately and, in any case, not later than 8 (eight) days from the detection date; moreover, it has to allow, if deemed necessary by the same, the performance of the related inspections and repairing interventions.

5) The shipment of the faulty part, covered by the warranty, to the manufacturer for the repairing or replacement of the same is at purchaser's charge. The warranty obligations, as foreseen by this clause, are deemed fulfilled with the delivery to the purchaser of the part duly repaired or replaced.

6) During the warranty period set forth by clause 1) labour costs, for the exclusive duration of the intervention, are at manufacturer's charge.

Should the repairing or replacement procedures be carried out where the machine is installed, travel and lodging expenses of the personnel are at purchaser's charge.

7) Remain in any case excluded from the warranty, all faults caused by wrong manoeuvre, negligence, fortuitous event or in any case all faults imputable to the user, in person or through third parties, or when the purchaser has carried out modifications or repairing interventions without the written consent of the manufacturer, independently from the connection of such modifications or repairing interventions with the detected faults.

8) It is explicitly agreed upon, that the manufacturer shall not be held responsible for any liability following any possible damages that the purchasers may suffer resulting from loss of or diminished production due to possible construction defects subject to this warranty.

Thank you for choosing our product

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