

INSTRUCTION MANUAL

ISO 50 INJECTION



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CAUTION



THANK YOU FOR READING THIS DOCUMENT AND THE RECEIPT OF YOUR MACHINE BEFORE ITS COMMISSIONING.

YOUR MACHINE HAS BEEN SUBJECT TO MANY OPERATION TESTS IN OUR WORKSHOPS, AND ACCORDING TO INTENSIVE STANDARDS.

ITS HANDLING IS EASY AND ITS EFFICIENCY IS HIGH

DEPENDING ON THE PRODUCTS USED, THE ADJUSTEMENT OF THE MECHANICAL VARIATOR ALLOWS FLOWS OF UP TO 10 kg/min.

THE MATERIAL IS STANDARD IN ACCORDANCE WITH EUROPEAN DIRECTIVE 2006/42/CE

NEVER TOUCH THE ROTATING ELEMENTS WITH HANDS OR ANY OTHER PART OF THE BODY- UNDER NO CIRCUMSTANCE NEVER GET ON THE MACHINE

1. GENERALITY

About this document- Read this entire manual carefully before installing or using the machine.

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The assembly and operating instructions are an integral part of the equipment and must always be available near the product at all times. Strict adherence to these instructions is a necessary condition for the correct installation and use of the equipment.

Writing the assembly instructions and commissioning corresponds to the hardware version and the security standards in force on the date of printing

Note – We strongly recommend that this guide be read by relevant managers and administrators, as well as maintenance personnel, so that they can assist those who use the equipment on a daily basis. Be sure to follow all instructions mentioned in this manual.

2. SECURITY

This manual contains essential instructions which must be observed during assembly and use. It is therefore essential that the installer and the operator of the equipment become aware of it before proceeding with assembly and commissioning.

The instructions to be observed are not only those for general safety in this chapter, but also those for particular safety which appear in the following chapters, accompanied by a danger symbol

2.1 SYMBOLS AND SIGNALS

SYMBOLS



: General danger signal



: Instructions on electrical hazards

SIGNALS

- ✓ **DANGER!** = The user submits to an extremely dangerous situation which involve bodily injury (major) if the indication is not followed.
- ✓ **CAUTION!** = there is a risk a damaging system component (example: polyurethane)
« **Caution** » signal instruction whose non-observance may cause damage to the equipment and its operation.
- ✓ **NOTE** = useful note on handling the product. She points out the possible difficulties.

2.2 PERSONNEL QUALIFICATION

Care should be taken to ensure that the personnel required to use the equipment are qualified

2.3 DANGER IN CASE OF NON-COMPLIANCE OF THE INSTRUCTIONS

Failure to observe the **safety instructions can constitute a danger to property and people**. It may also result in the **suspension of any warranty claim**.

More specifically, the dangers involved may be the following:

- a. Danger to people due to electrical and mechanical influences
- b. Failure of the prescribed maintenance and repair process
- c. Property damage

2.4 INSTRUCTIONS OF SECURITY FOR THE USER

The instructions should be observed to exclude any risk of accident. The user must be qualified specialist who has read the contents of the manual. All installation operations must only take place if the corresponding components are stopped.

2.5 MACHINE MODIFICATION AND USE OF UNAPPROVED SPARE PARTS

Any modification of the machine can only be carried out with the prior authorization of the **ISOL INTERNATIONAL®** brand. The use of original spare parts and accessories authorized by the manufacturer guarantees.

The use of other parts releases the company from any liability.

3. UNAUTHORIZED MODES OF USE

The values mentioned in the user manual or the technical data sheet should under no circumstances be exceeded, both maximum and minimum. The operational safety of the delivered machine is only guaranteed if the requirements specified in this document are met.

4. TRAVEL AND STORAGE

4.1 TRAVEL

According to European directive 2006/42 of May 17, 2006, you must ensure the stabilization of the machine during your transport with suitable fixings (straps, support bars...)

4.2. STORAGE

We recommend that you store your machine in a dry place away from bad weather.

5. GUARANTEES

ISOL INTERNATIONAL® machines are guaranteed for 24 months from the date of invoice. The warranty does not include wearing parts (wear plate, fan blades, fan disc...)

CAUTION! Risk of material damage! In case of moving, incorrect transport and storage will result in material damage to the device.

The **ISO 50** machine is intended for the projection and the insufflation of glass fibers, rock, cellulose, ceramics, and sprayable products of low density: vermiculite, etc. It is constructed from mechanically welded sheet metal and is mounted on casters to facilitate its movement on construction sites.

DATA SHEET



FEATURES	ISO 50
Dimensions (m)	L=1,50 l=0,67 H=1,55
Weight (kg)	385
Ablity blending (litre)	400
Propulsion Air	1 turbine
Pressure Air (millibar)	0 to 400
Pipe diameter (mm)	60 Ø
Length pipe maxi (m)	60
Drop maxi (m)	15
Engine power (kW)	• Variator engine : 1.1 • Turbine engine : 5.5 • Carding engine : 1.5 • Mixer reducer : 0.75
Variator mechanical	Dimmer with an adjustment range of 1 to 7, the variation being done when stopped or in operation
Remote control Two positions	• On / Off + Air • Air + Product
Power supply	400 V, 16 A
Electrical protection	• 24V AC control, protected by a thermal magnetic circuit breaker • Electrical panel, protected by 2 differential 30 mA • Separate thermal protection of the motors

STARTUP THE MACHINE

VERY IMPORTANT

The connection of the machine requires special attention for reasons of safety and damage to the equipment. **CHECK** that the voltage of the mains power socket **CORRESPONDS** to that of the machine, and that the allowed amperage is at least **EQUAL** to 16 Amps in 400 Volts three-phase. If the voltage **DOES NOT MATCH** or if there is a **DOUBT**, consult the site electrician.

WARNING

The machine is equipped with a phase detector, which makes it possible to ensure that the direction of rotation of the machine is correct:

When the machine is plugged in,

- if the red light next to the 400v socket is on, the direction of rotation is not correct, the machine does not work.

In this case, the phase must be reversed at the machine's electrical outlet.

- if the light is off, everything works, the direction of rotation is correct.

ISO 50 INJECTION machines are manufactured by the company ISOL INTERNATIONAL.
They are easy to maintain and manipulation.



A) Electric operation

- connect the machine to the three-phase 400 Volts sector
- connect the remote control to the machine's electrical panel
- disconnect the emergency stop (red button on the front of the switchboard) by turning the button (¼ turn) to the right. The power on indicator light, just below, should light up when the black power button on the electrical panel is pressed.

Otherwise :

1. there is no electricity coming to the machine
2. the indicator lamp is defective

- operate the remote control to run the motors:

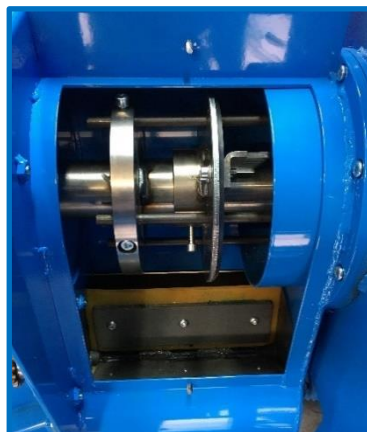
1. The left button activates the turbine drive motor, a few seconds later the card motor starts up. It is possible to change the switching on time of the card motor from 0.1 to 30 s. by turning the blue timer knob, located inside the cabinet, on the turbine control.

2. The right button engages the inverter motor and turns the feed screw, as well as the distributor. If nothing happens, reset the thermal relay by pressing its red button. Repeat the start-up operation.

B) Settings

Card

- Move the carding disc towards the feed screw to obtain fine carding
- Be careful not to put the disc and the feed screw in contact.
- move the disc backwards, gradually, to obtain a more ventilated nodule



Dimmer

The drive is adjusted when stopped or in operation. Graduated from 1 to 7, it allows the machine to flow from 0.8 kg / min to 15 kg / min. The manipulation is done by turning the steering wheel on the left side of the machine.



PRESSURE SWITCH

- 1) Press the button until you reach « SP »
- 2) Enter a value between 120 and 150
- 3) Press again the middle button until you reach the zero row

Now it's up to you to fill in the machine!

Open the half bag lengthwise as shown below.

Drop the product on its own towards the 2 feed screws (do not overload).

Then close the safety cover.



Proceed with the flocking.

To stop the engine in an emergency, a stop button is located on the side of the machine under the loading platform

C) MECHANICAL TECHNICAL DETAILS OF MACHINE ELEMENTS

1. FRAME:

In mechanically welded, folded sheets of 4 mm. All the mechanical elements are positioned on this plate.

2. CASE:

In 30 / 10th sheet metal supporting the lock at the end of the box. The body is connected to the frame by 4 x 8 screws.

3. LOCK BODY AND CARD:

The most important part of the machine in sheet 2 and 4 mm thick, made of mechanically welded, comprising a carding part and a sluice part.

4. SAFETY COVER :

Made in 15 / 10th thickness, serving to protect the rotating elements and to ensure safety in use.

D / MAINTENANCE

Sealing flaps



Position on the lock rotor to seal the distributor with the air propulsion supplied by the turbine.

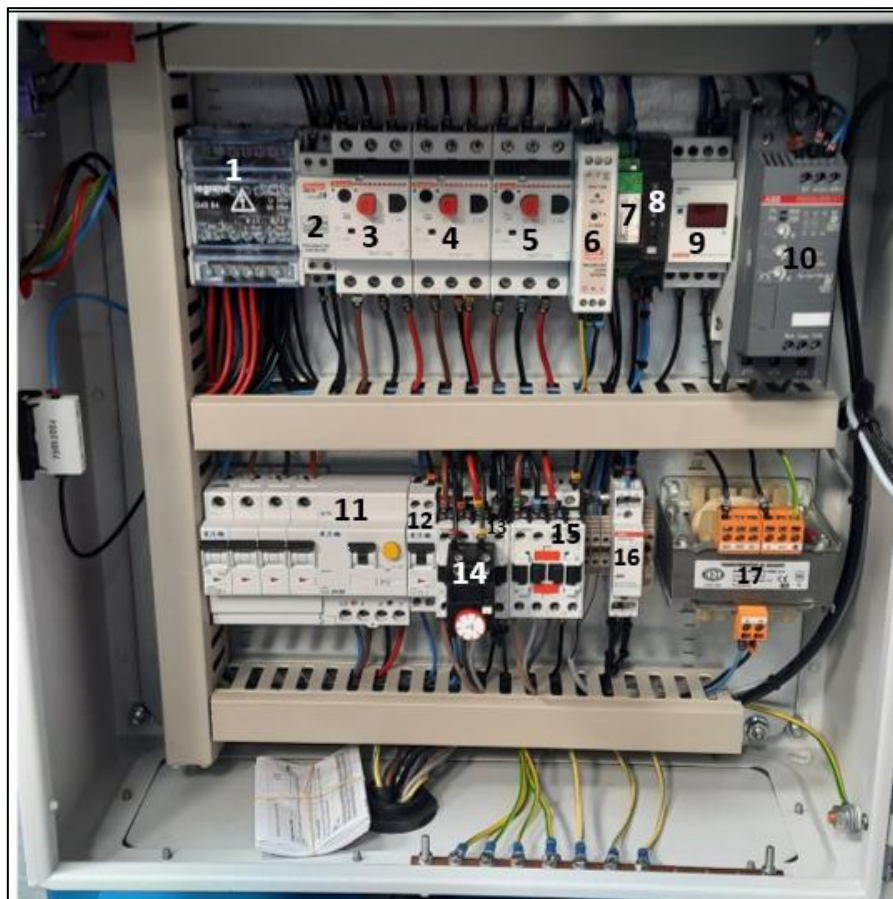


To change them:

They are changed by opening the cardboard box:

- Remove the 8 screws on the rotor plates
- Remove the clamping plate, change the defective polyurethane
- Position the variator at slow speed and turn the lock by pulse to place the next blade in front of you to change

SWITCHBOARD



ELECTRICAL COMPONENTS

1. Phase distributor
2. Phase detector
3. Magneto thermal circuit breaker (air motor 1)
4. Magneto thermal circuit breaker (card motor)
5. Magneto thermal circuit breaker (motor drive)
6. Transformer 230 VAC / 24 VAC
7. Relay
8. Hour counter
9. Voltmeter
10. Soft starter
11. Differential circuit breaker
12. Circuit breaker C6 24V
13. Carding motor contactor
14. Timer
15. Variator contactor
16. Self-holding
17. Transformer

MAINTENANCE

DAILY MAINTENANCE

- CLEANING THE SUCTION FILTER
- CLEANING THE AIR MOTORS BY DEDUSTING THEM
- CHECK THE TENSION OF THE BELTS

MAINTENANCE EVERY 200 HOURS

- CHECK THE BELTS AND THEIR TENSION
- DISASSEMBLE THE CASINGS, LUBRICATE THE BEARINGS AND CHAIN
- CHECK THE FIXATION OF THE PULLEYS ON THEIR SHAFT
- CHECK THE TIGHTENING OF THE STOP SCREWS ON ALL THE PINIONS

TROUBLESHOOTING

ANOMALY	RESOLVE
The machine clogs at the level of the card.	Check the tightness of the polyurethanes slice
The product comes out irregularly.	The card adjustment disc may be too tight
The air flow at the machine outlet has decreased	Check the condition of the turbine air filters
The machine slams	Check the state of the turbine belt tension
There is a hissing sound when starting the machine	Check the tightness of the polyurethanes mill
There is a significant oscillation at the level of the manometer, maximum pressure = 400g	Check the chain tension
The pump is no longer sucking water	Check the tension of the belts
One or more valves no longer hold	Check the condition of the sealing parts
The manometer is jerking loudly	Check the seats and valves and clean it
The pump may be sucking air or the air may not be exhausted	Check the suction pipe
The water outlet is irregular. The air bell is deflated	Run the pump with the discharge valve and the taps open

Before any intervention, we advise you to take a photo before any intervention in order to facilitate the reassembly of the equipment.

In the event of a problem, our technical service is at your disposal to resolve the anomaly with you and help you use your equipment in optimal conditions.

CONTACT :

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Depending on the case, we may be asked to offer you the option of troubleshooting by Visio-assistance.

