

THE SPECIALIST IN INNOVATIVE EQUIPMENT FOR INSULATION

USER MANUAL







ISOL INTERNATIONAL®

9 - 15 rue du Renouveau - 78700 Conflans Sainte Honorine 01 39 72 72 72











SUMMARY

| Contacts | P.3 |
|---|------------|
| Precautionary measures | P.3 to 6 |
| 1. General information | |
| 2. Security | |
| 2.1 Symbols and signals | |
| 2.2 Staff qualification | |
| 2.3 Danger if instructions are not followed | |
| 2.4 Safety instructions for the user | |
| 2.5 Modificationof the machine and use of non-approved spare pa | |
| 3. Unauthorized modes of use | |
| 4. Transport and storage | |
| 4.1 Transport | |
| 4.2 Storage | |
| 5. Guarantees | |
| Technical sheet | P.7 |
| Machine performance table | P.8 |
| Commissioning the machine | |
| 1. Technical details of the electrical box | P.9 to 10 |
| 2. Loading the product | P.11 |
| 3. Settings | P.12 |
| 4. Interview | P.13 to 14 |
| Pinion factory | P.15 |
| Pairing the remote control | P.16 |
| Radio repeater pairing | P.17 |
| Electrical panel | P.18 |
| Electrical components | P.19 |
| Troubleshooting | P.20 |
| Technical sheet | P.21 |



CONTACTS

ISOL INTERNATIONAL®

9 - 15 rue du Renouveau - 78700 Conflans Sainte Honorine www.isolinternational.com

SECRETARIAT:

+33 (0)1 39 72 72 72 secretariat@isolinternational.com

SALES SERVICE: Mr. Julien Hazera +33 (0)1 39 11 69 46

commercial@isolinternational.com

PRECAUTIONARY



PLEASE READ THIS DOCUMENT UPON RECEIPT OF YOUR MACHINE BEFORE PUTTING IT INTO SERVICE.

THIS IS ESSENTIAL BEFORE IT IS PUT INTO SERVICE.

YOUR MACHINE HAS UNDERGONE NUMEROUS OPERATIONAL TESTS IN OUR WORKSHOPS, AND ACCORDING TO INTENSIVE STANDARDS.

IT IS EASY TO HANDLE AND HAS A HIGH PERFORMANCE.

DEPENDING ON THE PRODUCTS USED, THE MECHANICAL VARIATOR ADJUSTMENT ALLOWS FLOW RATES OF UP TO 30 Kg/min.



NEVER TOUCH ROTATING PARTS WITH YOUR HANDS OR ANY OTHER PART OF YOUR BODY – NEVER STAND ON THE MACHINE WHILE IT IS RUNNING UNDER ANY CIRCUMSTANCES.

1. GENERAL INFORMATION

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

The user manual is an integral part of the machine and must always be available near your device at all times. Strict compliance with these instructions is a necessary condition for the proper installation and use of the equipment.

The wording of this document and the commissioning instructions correspond to the version of your device and the safety standards in force on the date of its printing.

NOTES: We strongly recommend that this guide be read by the relevant managers and supervisors, as well as maintenance personnel, so that they can assist your employees who use the equipment every day. Be sure to follow all instructions mentioned in this manual..

2. SECURITY

This manual contains essential instructions that must be followed during use. It is therefore essential that the installer and operator of the equipment read them before proceeding with commissioning.

The instructions to be followed are not only those of general safety in this chapter, but also those of specific safety which appear in the following chapters, accompanied by a danger symbol.

SYMBOLS AND SIGNALS



2.1

General hazard symbol



Instructions relating to electrical risks

HAZARD != the user is subjected to an extremely dangerous situation which involves (serious) bodily harm when the indication is not followed.

ATTENTION! = there is a risk of damaging organs in the system (example: polyurethanes).



2.2 STAFF QUALIFICATIONS

It is important to ensure that the personnel who will be using the equipment are qualified.

2.2 DANGERS IF INSTRUCTIONS ARE NOT FOLLOWED

Failure to comply with safety instructions may pose a danger to property and people. It may also result in the suspension of any warranty claim.

More specifically, the dangers involved may be as follows:

- Danger to people from electrical and mechanical influences
- Failure of prescribed maintenance and repair process
- Material damage

2.4 USER SAFETY INSTRUCTIONS

The instructions must be followed to prevent any risk of accidents. The user must be a qualified specialist who has read the contents of the user manual. All installation operations must only be carried out when the corresponding components are switched off.

2.5 MODIFICATION OF THE MACHINE AND USE OF NON-APPROVED SPARE PARTS

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

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

3. UNAUTHORIZED MODES OF USE

The values indicated in the user manual or technical data sheet must not be exceeded under any circumstances, either as a maximum or a minimum. The operational safety of the delivered machine is only guaranteed if the requirements specified in this document are respected.

4. TRANSPORT AND STORAGE OF THE MACHINE

4.1 TRANSPORT

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



4.2 STORAGE

We recommend storing your machine in a dry place away from the elements.

5. **GUARANTEES**

ISOL INTERNATIONAL® machines are guaranteed for 24 months from the invoice date. This warranty does not include wear parts (motor carbon brushes, polyurethanes, casters, feed brushes, etc.).

CAUTION! Risk of material damage! In case of removal, improper transport and incorrect storage may cause material damage to the machine.

The equipment is CE standardized in accordance with European directive 2006/42/EC.

The TWISTER MAX blowing machine is designed for blowing, insufflating and spraying glass fibers, rock, cellulose, and low-density products.

A 15KVA generator is required on a 400v three-phase construction site.





TECHNICAL SHEET

| Features | TWISTER MAX | |
|---------------------------------------|--|--|
| Dimensions (m) | L=1.75 W=1.01 H=1.75 | |
| Weight (kg) | 500 | |
| Air (m³/h) | 250 to 1000 | |
| Air (millibar) | 100 to 350 | |
| Voltage | 400 V – 50/60 Hz | |
| Sound level | 87 Db | |
| Engines | - Carding motor: 1.5 kW- Air motors (4): 4.5-6 kW- Motor variator: 1.1 kW | |
| Electrical protection | 24 volt AC control, protected by 6A fuse Motor power supply, protected by 30mA differential. Separate thermal protection of the motors. | |
| Pipe diameter (mm) | Ø 100 | |
| Maximum pipe length (m) | 100 | |
| Maximum drop (depends on pipe length) | 40 m | |
| Air volume at zero pressure (m3/h) | 400 | |
| Food | 15 KVA generator set | |
| Settings | - Air: by decompression valve, by the air+/air- button on the TV radio, and by the selector on the electrical panel - Wool: by mechanical variator and by feed drawer | |
| Speed | Rock wool: up to 1.5t/hGlass wool: up to 1.2t/hCotton woolCellulose wadding | |
| Variator | With an adjustment range of 1 to 7. The variation is done either when stopped or in operation. | |



MACHINE PERFORMANCE TABLE

| Materials | Machine flow rate in kg/h | Machine yield in m2/h in R7 |
|----------------------|---------------------------------|--------------------------------|
| ROCK WOOL | Up to 1500 | Up to 218 |
| GLASS WOOL | Up to 1200 | Up to 315 |
| CELLULOSE WADDING | Up to 1800 | Up to 225 |



COMMISSIONING THE MACHINE



Connecting the machine requires special attention for safety reasons and to avoid damaging the equipment. CHECK that the voltage of the mains power outlet CORRESPONDS to that of the machine, and that the permissible amperage is at least EQUAL to 10 Amps in 400 Volts three-phase. If the voltage DOES NOT CORRESPOND or if there is any DOUBT, consult the site electrician.

IF THE MACHINE IS CONNECTED TO A GENERATOR (15 KVA), CONNECT THE GENERATOR'S EARTH STICK, OTHERWISE ISOL INTERNATIONAL® CANNOT GUARANTEE CORRECT OPERATION OF THE MACHINE.

ATTENTION!

When the red light is on, it means that the machine is not rotating in the correct direction.

If the machine does not rotate in the correct direction, reverse 2 phases at the 400v power supply socket on the machine's electrical cabinet.

The ISO 300 N machines are manufactured by ISOL INTERNATIONAL®. They are easy to maintain and handle.

1. TECHNICAL DETAILS OF THE ELECTRICAL BOX

- Connect the machine to the 400 Volt three-phase mains supply
- Disconnect the emergency stop (red button on the front of the panel) by turning the knob (1/4 turn) to the right. The power indicator light, just below, should light up when you press the black power button on the electrical panel.

Otherwise:

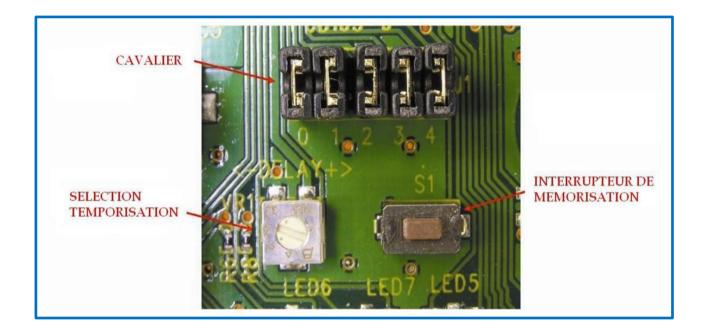
- 1. There is no electricity coming to the machine
- 2. The circuit breaker needs to be reset.
- 3. The indicator lamp is defective



Operate the remote control to turn the motors:

- 1. The ON button turns on the air motors.
- 2. The AIR+/AIR- button
- 3. The FIBRE button starts the carding motor and then, 1 second later, via a timer, the product distribution

The jumpers are engaged and disengaged by a small jumper cap located on the pinhead.





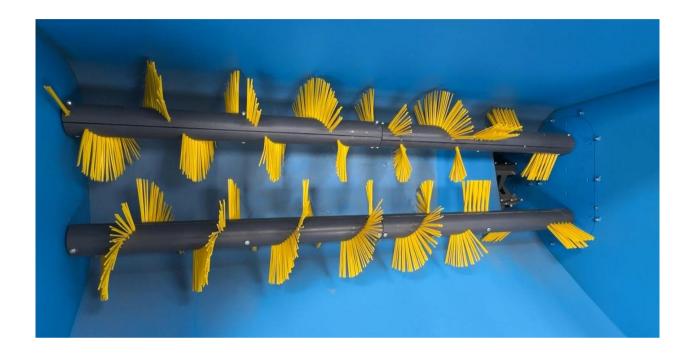
2. LOADING THE PRODUCT

Now it's your turn to BLOW!

Open the bag lengthwise as shown below.

Allow the product to fall by itself towards the feed screws (do not overload).

Then close the safety cover.



Proceed with blowing

To stop the engine in an emergency, a stop button is located on the side of the machine next to the loading deck.





3.SETTINGS

A. DIMMER

The variator can be adjusted while the machine is stationary or running. Graduated from 1 to 7, it allows the machine's flow rate to be varied up to 58 kg/min. Operation is done by turning the handwheel to the left (-) or to the right (+).





- 1. RFIBER FEED SPEED ADJUSTMENT (DIMMER)
- 2. RAIR PRESSURE ADJUSTMENT (RELEASE VALVE)

B. DRAWER

The drawer is adjusted using the knurled nut in the third photo, depending on the type of product used; for example, for rock wool or glass wool, the drawer can be wide open; however, for products such as cellulose, cotton, and wood fiber, close the drawer at least halfway.









4. MAINTENANCE

SEALING FLAP (polyurethanes):

To change the sealing flaps:

They are changed by opening the card box:

- Remove the screws on the rotor plates
- Remove the clamping plate, replace the defective polyurethane
- Position the speed controller at slow speed and rotate the lock by pulse to place the next blade to be changed in front of you.
- Position the polyurethane on the lock rotor to ensure the distributor seals with the air propulsion supplied by the turbine.
- For ease, remove a card bar.

Always stop the machine with the emergency stop before touching rotating parts!

LOCK ROTOR

To change or disassemble it:

Disassembly

- Remove the front cover
- Remove the lock card drive chain
- Loosen the pinion set screws at the end of the rotor and the bearing clamping screws on the shaft
- Remove the sprockets
- Unscrew the front plate of the lock (screw 8)
- Remove the front plate and rotor from its housing
- Remove the sealing flaps

Reassembly

- Reverse direction of disassembly
- After reassembling the rotor without the sealing flap and the lock plate, check that the rotor turns freely without forcing, otherwise adjust the bearings.



DAILY MAINTENANCE

- Machine cleaning
- Dust removal at engine level
- Cleaning the turbine suction filter by vacuuming or dusting it
- Check the pressure gauge on the machine to see if there is significant oscillation (sealing problem: defective sealing flaps, etc.).

MAINTENANCE EVERY 200 HOURS

- Check the chain tension
- Check for leaks
- Disassemble the casings, grease the bearings and chains
- Check the tightness of the pressure fittings on all the gears



GEAR MILL

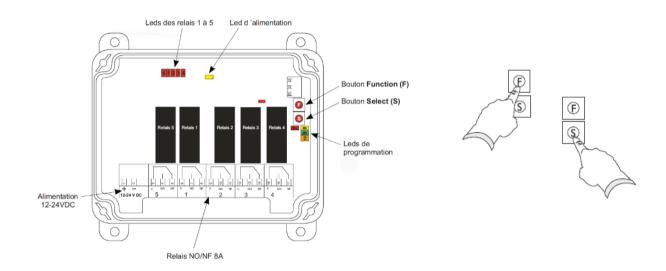




PAIRING THE REMOTE CONTROL

ERASE ALL TRANSMITTERS IN THE RECEIVER

- 1. In the receiver, press the Function button (F). The red LED 7 lights up.
- 2. Press and hold the Select (S) button. All relay LEDs will light up.
- 3. Hold down until the relay LEDs turn off.



REGISTER THE TRANSMITTER IN THE RECEIVER

- 1. In the receiver press the Function button (F). LED 7 lights up.
- 2. Then press the Select (S) button. All LEDs light up.
- 3. On the transmitter, press and hold buttons 1 and 2 until the relay LEDs flash 3 times.







RADIO REPEATER PAIRING

DIAGNOSTIC LIGHT LED Alimentation LED Réception/Emission Sortie de câble radial

The power LED is solid green when the product is powered on.

The 2 Reception/Transmission LEDs flash with each Reception/Transmission of a radio frame.

PAIRING PROCEDURE



The repeater must be powered off.

Check that the switch on the back of the product is in the [I] position.



If you have an ON/OFF function, turn on the remote control.

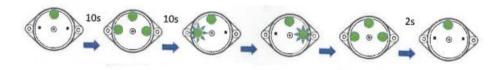
Press the pairing buttons on the product. Typically, these are buttons 1 and 2 or 1 and 3 if you have an ON/OFF function on button 2.

If you have a special program, consult the program sheet to identify the product pairing buttons.

Hold down throughout the repeater startup phase below.



Power on the repeater.

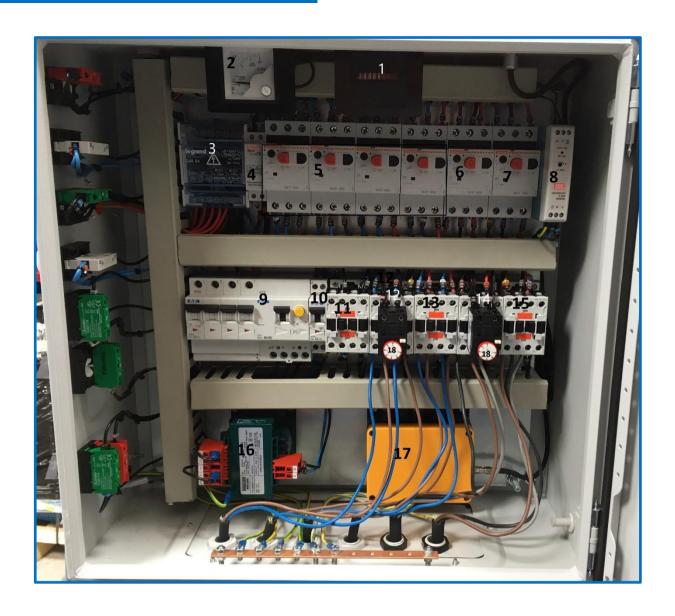




Release the pairing buttons.



ELECTRICAL PANEL







ELECTRICAL COMPONENTS

- 1. Hour meter
- 2. Voltmeter
- 3. Phase splitter
- 4. Phase order detector
- 5. Motor circuit breaker (air)0650
- 6. Motor circuit breaker (card)0650
- 7. Motor circuit breaker (motor variator)0400
- 8. 230 VAC/24 VDC transformer
- 9. Differential circuit breaker25A 30mA
- 10. Magneto-thermal circuit breaker (control circuit)C6
- 11. Self-maintaining contactor (control circuit)24V
- 12. AIR 1 and 2 motor contactor 230V
- 13. AIR 3 and 4 motor contactor 230V
- 14. CARDE motor contactor 400V
- 15. Motorbike variator contactor 400V
- 16. 400 VAC/24 VAC transformer
- 17. Wireless remote control receiver
- 18. Timeout



TROUBLESHOOTING

| ANOMALY | RESOLUTION | |
|--|--|--|
| The power indicator light does not light up | The machine is not plugged in The machine or power supply's differential circuit breaker is tripped The bulb is broken The power cable is broken Emergency stop is engaged | |
| One or more air motors are no longer working | Checking air motor circuit breakers Is the air motor selector switch in the correct position? The differential circuit breaker is tripped | |
| An engine expels air instead of sucking it in | The motor is not receiving electrical power or is out of service | |
| The mill and/or screws no longer turn | The motor-variator circuit breaker is tripped The drive chain may be loose or damaged. The variator motor is broken | |
| The product rises into the tank | The mill's polyurethanes are defective Check the pressure gauge for significant oscillations. | |
| The machine clicks in the Fiber position of the remote control | - A chain is loose - Check the chain tension | |

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 department is available to resolve the anomaly with you and help you use your equipment in optimal conditions.

WORKSHOP CONTACT:

+33 (0)1 39 72 72 72

atelier@isolinternational.com

Depending on the case, we can offer you troubleshooting via video assistance.



