

**Electromagnetic Sieve Shakers
SV005, SV007, SV008**

Impact Test Equipment Ltd
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User Guide
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ENCLOSURE LIST	
A	COMPLETE APPLIANCE
B	FRAME
C	CONTROL PANEL

ELECTRICAL LAYOUTS	
S1 – 1	GENERAL VIEW OF THE APPLIANCE
S1 – 2	POWER DIAGRAM
S1 – 3	POWER DIAGRAM
S1 – 4	CLAMP BOARD

EEC CONFORMITY DECLARATION (ONLY FOR EEC COUNTRIES)

The operating manual as well as the above mentioned issues are an important part of the appliance and can be referred only to the appliance they are sold with.

Chapter 1 GENERAL INFORMATION

1.1 GENERAL FEATURES

- This manual is addressed to the carrier, the installer, the user, the maintenance operator, and the disposal operator.
- Please read it carefully because it informs you about the operating of the machine in safety conditions.
- This manual has to be considered a part of the product and concerns only the machine it is delivered with.
- Keep the manual in order during the whole life of the appliance to consult it for any needs.
- In case of sale, the manual and its enclosures should be given together with the machine.
- The manufacturer assumes no liability for any damages caused by a misuse of the machine.
- The manufacturer has the right to modify this technical literature as well as the machines this refers to without any previous notice.
- Messages meaning:

ATTENTION	This warning refers to all those procedures that have to be carefully followed to avoid any damage to the machine.
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DANGER	This warning refers to all those procedures that could present some risks for the operator if not carefully followed.
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1.2 IDENTIFICATION

MANUFACTURER IDENTIFICATION: See the cover page
MACHINE IDENTIFICATION: See the plate on the machine where you can find complete identification data as well as electrical features

1.3 APPLICATIONS

Electromagnetic sieve shakers have been developed for sieving tests on fine and wet materials.

This appliance has to be used only for the aim it has been projected and manufactured for. Any other use of the machine is not permitted.

ATTENTION	The instructions given in this operating manual are only for the right use of the appliance. To carry out test correctly, the user must refer to the specific standards in force for the test itself.
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1.4 STRUCTURE AND OPERATING OF THE MACHINE

The equipment is basically formed by a plate holder for specimens (**B5**). This is supported by springs (**B12**) and is activated by electromagnetic impulses (**B13**). The sieves are subjected to a double vibrating action: vertical and rotational.

For further information please contact the Manufacturer or the Seller.

Chapter 2	SAFETY INFORMATION
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2.1	GENERAL SAFETY STANDARDS
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- **The use, lifting, installation, maintenance and disposal of the machine are allowed only to qualified staff.** Qualified staffs are composed by people who are authorised by the safety responsible to do any activities due to their experience and acknowledgement of the operating of the machine and of the standards, rules and actions.
 The user must be carefully taught about the operating of the machine to avoid any misuse of it and about the safety devices that the machine could be eventually equipped with. The safety devices will have to be kept always assembled and to be daily checked.
 The manufacturer offers training and assumes no liability for any damages due to a misuse of the machine by an unskilled staff.
- The manufacturer recommends following carefully the instructions and procedures of the operating manual and the safety standards concerning the safety devices and the general rules of the work environment.
- Verify the accordance of the machine to the standards in force in the State where the machine has to be installed.
- The operating manual must be carefully read by the safety responsible, by the operators and maintenance engineers. It must always be kept near the machine in order to be able to read it any times it will be necessary.
- Any tampering or modifications of the machine (electric, mechanical etc.) that are not allowed by a written agreement of the manufacturer must be considered as not permitted and the manufacturer will not accept to be charged for any damages.
- The removal or the tampering of the safety devices will be an infringement to the EEC Safety Standards. The manufacturer assumes no liability for any damages.
- The machine has to be installed in places safe from fire and explosions.
- We do recommend using only original spare parts and accessories; on the contrary the manufacturer assumes no liability.
- Be careful that any dangerous situations won't happen during the working; stop immediately the machine in the event that it will not work properly and ask the manufacturer or the Authorised Service Staff of the dealer at once.

The manufacturer assumes no liability for any damage to people, animals or things caused by the non-observance of the above given instructions.

2.2	SAFETY GUARDS
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MEANING: Safety devices are all the safety measures which consist of the use of specific technical equipment (guards, cages etc.) to protect the operator from any danger that couldn't be avoided when the appliance is planned.

DANGER	<p>The removal of the safety devices or any tampering of the machine could cause risks to the operator or to any other people.</p> <p>The manufacturer assumes no liability for any damages to people, things or animals due to the tampering of the safety devices.</p>
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ACTIVE SAFETY DEVICE.

Active safety device are the ones that eliminate or reduce the risks for the operator. They need a direct and aware action to be activated.

On the Control Panel **(C)** there's the Main Switch **(C1)** also acting as Emergency Switch.

PASSIVE AND MOVABLE SAFETY DEVICE.

A Guard (optional) can be installed on the machine. This does not allow the operator to touch any moving part of the machine during the test execution. The guard is formed by a wooden box and by an electronic blocking device that disconnects the sieving unit whenever the box is opened during the test running.

2.3 DANGEROUS PARTS AND RESIDUAL RISKS

The dangerous place is the space inside and around the machine where the operator could be wounded or damaged.

During some procedures the operator could face some risks of danger. The risks can be eliminated following carefully the procedures written in this manual and using suitable safety devices.

GENERAL INFO

- Before starting the standard use of the equipment, ensure that all the components are in good working conditions check there are no defective or damaged parts. If necessary repair or replace any damaged part.
- **In order to avoid any problem to the operator, do not touch any moving part of the equipment during the test execution and always wear the suitable security devices**
- The lifting of specimens having an excessive weight could injure the operator.
- Pay attention to the risks of electric shocks either for direct or indirect contact, due to an unforeseen failure in the electric system.
- Do not subject the appliance to violent shocks.
- Do not expose the appliance to fire, extreme temperature or weld splatters.
- Avoid corrosive substances to come in touch with the equipment.
- Never wash the appliance using water sprays.

DURING THE USE

- During the use neither touch nor stand close to the moving components of the appliance.
 - During test execution pay attention to the finger squeeze and to the eventual fall down of pieces on the operator's feet.
 - **Do not wear large clothes, ties, watches, or anything else that could entangle into the moving parts of the machine.**

LIFTING

- During the lifting take care that the machine is conveniently held and secured and that it cannot slide.
- Never subject the cylinders or cross bars to any stress.
- Do not stand in a direct line with the application of force. Do not allow people entrance under loads that are no conveniently supported by mechanical means.

RISK OR DANGER	SAFETY DEVICE
TRAPPING FINGERS OR HANDS	REINFORCED GLOVES
ABRASIONS OR CUT INJURIES	REINFORCED GLOVES

The manufacturer assumes no liability for any damages to people and things due to a lack of observance of these instructions and incorrect use of personal safety devices (See laws against the accidents in force).

2.4 NOISE

The indicated levels of noise are not necessarily safety levels for the operator. The exposure level of the operator is obviously related to the emission levels of the appliance, but other factors influence the exposure levels as the time of exposure, the environment, and other appliances installed near to the appliance etc. The exposure levels permit to value the damages that could be caused by the noise.

Acoustical pressure level equivalent Laeq at 1 m. distance	59 dB(A)
Acoustical power emitted by the appliance LWA	67 dB(A)
Standard above data are referred	EN ISO 3746

DANGER	<p>The continuous use of the machine together with other noisy appliances could cause a high level of exposure to the noise. If the daily exposure of the operator is equal or higher than 85 dB(A), It is highly recommended to wear Safety Devices as headphone. If the daily exposure is equal or higher than 90 dB(A), the use of the Safety Device is compulsory. For further information consult the standards of the country where the machine has been installed.</p>
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Chapter 3 | INSTALLATION

DANGER Consult chapter “**DANGEROUS PARTS AND RESIDUAL RISKS**” before proceeding.

3.1 | LIFTING

The operating instructions must be respected during:

- Lifting and the storing
- First installation
- Further installations

The machine is usually supplied packed in a wooden case to be moved by a forklift. We recommend the greatest care during the lifting operations; always ensure to respect the instructions written on the labels.

If possible use forklift or crane, fastening the appliance with straps and ropes. Avoid chains.

ATTENTION Move the case with the utmost care and respect the instructions written on the labels. **Pay attention to avoid impact and turning over.**

ATTENTION Protect the machine from the atmospheric agents. Water and humidity could oxidise it, damaging it seriously.

3.2 | UNPACKING

After removing the package, check that any parts of the machine are not damaged. In case of doubt, **DO NOT USE THE MACHINE** and ask the manufacturer.

DANGER The materials used for the package (plastic, polystyrene, screws, nails, wood etc.) have to be kept away from children. They must be disposed of correctly.

ATTENTION Before throwing away the package, check that any accessories, manuals, documentation or spare parts are not left inside.

3.3 | INSTALLATION

The machine has to be placed in an environment suitable for the aim it has been conceived for (in a laboratory protected by the atmospheric agents). Skilled operator must do the installation.

ALLOWED TEMPERATURE	FROM +5°C TO +40°C
ALLOWED HUMIDITY	FROM 30% TO 95%
O.S.L. MAX. HEIGHT	1000 m

GENERAL WARNINGS:

- The machine must be installed so that it is free from each side in order to be able to carry out easily the maintenance operations.
- No authorised people and no dangerous objects must be near the machine.

ATTENTION If the appliance has to be used in a room having a temperature that differs from the one the machine is calibrated for, we recommend you to re-calibrate it. In fact this temperature change could provoke a false data measurement during the tests.

3.4	ELECTRIC CONNECTIONS
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DANGER	Skilled operators must arrange the electric connections.
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DANGER	Before connecting, see the attached electric diagram and the plate on the machine for the information about the voltage, the frequency, etc.
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DANGER	Connect the ground by the terminal PE (yellow-green) before making any other connections.
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DANGER	Apply a knife switch at the top of the connecting cable of the machine to the power system. The knife switch must be combined with a safety device against the overload with a differential switch (safety switch). The technical features of the safety device must be in accordance with the standards in force in the country where the machine has been installed.
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ELECTRIC TOLERANCES:

- Real voltage $\pm 10\%$ of the nominal one
- Frequency: $\pm 1\%$ of the nominal one in a continuous way $\pm 2\%$ of the nominal one for a short period
- The harmonic distortion of the sum from the second to the fifth harmonics not more than 10 % of the total voltage as a real value between the conductors. A further distortion of 2% is accepted for the sum from the sixth to the thirtieth harmonics of the real total value between the conductors.
- With reference to the tension unbalance of the three-phase voltage, the inverted sequence component and the zero sequence component must not be more than 2% of the direct sequence component of the voltage.
- The voltage pulses must not last more than 1,5 ms with an up/down time between 500 ms e 500 μ s and a peak value not higher than 200 % of the real value of the nominal tension.
- The electric feeding must not be interrupted or zeroed for more than 3 ms. Between two interruptions it must not take more than 1 s.
- The interruptions must not overcome 20 % of the tension peak for more than one cycle. Between two interruptions it must not take more than 1 s.

The manufacturer assumes no liability for any damage caused to persons or property caused by the non-compliance to the above instructions.
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CHAPTER 4 MACHINE FEATURES

4.1 DIMENSIONS AND MASS

	A059-01	A059-02	A059-03	A059-04
LENGTH	320	380	430	480
WIDTH	380	440	460	500
HEIGHT	850	1080	1150	1150
MASS	40 Kg	65 Kg	80 Kg	85 Kg

4.2 CALIBRATION

The appliance is tested and calibrated at the factory using a device that is periodically checked by National Institutes.

ATTENTION	The actual standards foresee the checking of the calibration after each moving of the machine. After installing it and setting it at work, a checking of the calibration must be done by a National Institute before carrying out official tests.
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CHAPTER 5 OPERATOR'S INTERFACE

5.1 DESCRIPTION OF PARTS – ENCLOSURE B – SIEVE SHAKER

	CONTROL	DESCRIPTION
B1	BLOCKING KNOBS	They secure the upper bar (B2) to the sieves, blocking them firmly to the receiver (B5).
B2	BAR	It secures the sieves to the specimen receiver (B5).
B3	THREADED BARS	They allow to regulate the bar height (B2).
B4	FIXING NUTS	They fix the threaded bars (B3) to the specimen receiver.
B5	SIEVE HOLDER	It can hold several sieves according to the operator's needs.
B6	ADJUSTMENT SCREWS	They allow to fix and to adjust the specimen receiver (B5) to the electromagnet (B13). In this way, the vibrations produced by the electromagnet are transferred to the sieves placed on the receiver (B5).
B7	FIXING SCREWS	These screws fix the springs (B12) to the support columns (B8).
B8	SUPPORT COLUMN FOR SPRINGS	It allows connecting the base to the specimen receiver (B5) by means of the springs (B12).
B9	CABLE FIXING DEVICE	It fixes the feeling cable to the sieve shaker base, avoiding its incidental pull during the normal working procedures.
B10	GUARD	It allows reaching the inside components of the sieve shaker base. The guard is fixed to the base by some screws.
B11	SUPPORTING FEET	They allow laying the sieve shaker steadily on any surface.
B12	SPRINGS	They transfer the vibrations from the electromagnet (B13) to the specimen receiver (B5).
B13	ELECTROMAGNET	It generates the vibrations, which are necessary for a sieving test. Using the Control Panel (C) it is possible to modify the vibrating intensity according to the user's needs. (See Chapter "USE" of this manual for further details).

5.2 DESCRIPTION OF PARTS ENCLOSURE C – CONTROL PANEL

	CONTROL	DESCRIPTION
C1	MAIN SWITCH	It allows switching on and off the machine.
C2	"SELECTION" BUTTON	By pressing this key it is possible to select one by one the figures on the right of the numeric display (C8).
C3	"MODE" BUTTON	By pressing this key it is possible to select the working mode of the sieve shaker. This mode is shown by the first figure of the numeric display (C8); See the Chapter " OPERATING MODE " of this manual for further details.
C4	"INCREASE" BUTTON	By pressing this key it is possible to increase the figure shown on the numeric display (C8) in that moment.
C5	LED "SIEVING WORKING"	The lighting of this led means that the machine is vibrating.
C6	LED "CONTINUOUS SIEVING"	The lighting of this led means that the sieve shaker is vibrating in the "continuous mode". For further details, see Charter " SETTING UP " of this manual.
C7	LED "DATA STORING"	The lighting of this led means that the data shown by the display is being modified (C8). Once the data is stored, the led stops lighting.
C8	NUMERIC DISPLAY	Using this display it is possible to see all the information referred to the sieve shaker working procedures and also to modify the operating parameters; See the Chapter " USE " of this manual for further details.
C9	"DECREASE" BUTTON	By pressing this key it is possible to decrease the figure shown by the numeric display in that moment (C8).
C10	"STOP" BUTTON	By pressing this key, the sieving procedure is stopped.
C11	"START" BUTTON	By pressing this key, the sieving procedure is activated according to the setting up made by the operator.

CHAPTER 6 USE

DANGER	Consult the Chapter “ DANGEROUS PARTS AND RESIDUAL RISKS ” before proceeding.
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6.1 WARNINGS

Before beginning the standard use of this machine, check its perfect working conditions and verify that there are no defective parts. Eventually replace the defective or broken components.

6.2 OPERATING MODE

The working mode of the sieve shaker is visualised on the numerical display (**C8**) as specified in **figure 6.3-I** (for the decoding of the visualised value consult the list here below).

MODE	DESCRIPTION	SETTABLE VALUES
L	Indication of the remaining time to the end of the test	---
T	Indication or selection of the sieving time	1 – 999 min.
H	Indication or selection of the vibrating intensity	0 – 99
F	Indication or selection of the ON time	1 – 999 sec.
C	Indication or selection of the sieving mode	0 = Intermittent 1 = Continue

6.3 TOOLING UP

We give here the right procedures in order which allow to an inexperienced operator tooling up the sieve shaker properly:

INSTALLATION OF THE THREADED RODS

If they were not already screwed, screw the threaded rods (**B3**) to the sieve holder (**B5**) paying attention to following instructions:

1. Insert the rods (**B3**) in their places that are on the sieve holder (**B5**).
2. Block the threaded rods (**B3**) using their blocking nuts (**B4**).
3. Position the bar (**B2**) at the wished height on the rods and block using the handles (**B1**).

REPLACEMENT OF THE SPRINGS

If one or more than one of the springs (**B12**) breaks, replace it paying attention to following instructions:

1. Turn off the appliance and disconnect it from the main.
2. Disassemble the threaded rods (**B3**) used to fix the sieves from the sieve holder (**B5**).
3. Open the cable-fixing device (**B9**) and push it inside for about 5-10 cm.
4. Turn upside down the sieve shaker (180°), leaning it on the sieve holder.
5. Disassemble the feet (**B11**) from the base and unscrew the screws fixing the frame (**B10**).
6. Disassemble the frame (**B10**) and let it slide along the cable in order not to have it disturbing the following operations.
7. Assemble the feet (**B11**) directly on the base and turn it again upside down (180°) paying attention to lean it on the feet.
8. Unscrew the fixing screws (**B7**) and remove the damaged springs.
9. Install the new springs (**B12**) and fix them as the previous ones, paying attention to close strongly all the screws.
10. Install again the carter (**B10**) following the operations described above here from the end to the beginning.

SIEVES PREPARATION

Depending from the model the appliance can be used with mesh and perforated plate sieves with following diameters Ø200/250/300/315mm and 8” and 12”. The sieves must be placed as follows:

1. Introduce the sieve holder (receiver) (**B5**) in the space foreseen on the sieve shaker base.
2. Add the other sieves, paying attention to start on the bottom with the sieves having the smallest openings and continue with the bigger ones.
3. At the end add the cover (lid) and fix the series of sieves strongly using the upper blocking bar (**B2**) introduced in the two bars fitted on the vibrating plate.

The system to fit the sieves and the upper bar of the sieves, allows also fitting a lid and receiver for wet tests.

ATTENTION	Before proceeding to the normal use of the appliance be sure that all the parts are properly tooled up and are suitable for the test that has to be made.
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6.4 SWITCHING ON THE APPLIANCE

ATTENTION	Before switching on the appliance, ensure that the sieve shaker is connected to the feeding net. (Consult the chapter “ELECTRIC CONNECTIONS” of this manual).
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ATTENTION	Never work with an empty sieve shaker, but use at least 1 kg. Load. This is necessary because of its big vibrating intensity.
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To switch on the machine follow these instructions:

- Put the Main Switch (**C1**) on the “0” position.

At this step the sieve shaker is ready for the set up and for the use; on the display (**C8**) the operator will see for a few seconds the code referred to the machine model and then following picture **6.3-I**.

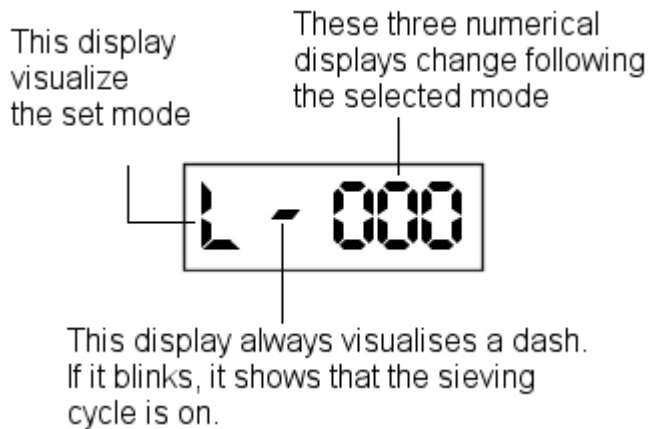


FIGURA A059.F01.IN.01

When the machine is switched on, the program opens in L mode and on the numeric display (**C8**) the operator must enter the set up values used during the latest effected test.

In case these values are not proposed again or the above picture is not shown after the switching on, please contact immediately our After Sale Service, since this could represent a bad working of the sieve shaker.

6.5 SPECIMEN POSITIONING

ATTENTION	Before starting a test, ensure that the sieves on the machine are convenient for the specimen you are going to test. (See chapter “ TOOLING UP ”).
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The material positioning can be done in many different ways depending on the kind of test you want to perform.

For a correct specimen preparation and positioning, please read carefully the standards in force for the kind of test you wish to perform.

6.6 EMERGENCY STOP

Whenever it is necessary the operator can stop the test immediately by positioning the Main Switch (**C1**) on “**0**”.

ATTENTION	Remind that the test interruption causes its complete cancellation.
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6.7 STARTING AFTER AN EMERGENCY SWITCH

DANGER	Before starting the machine up again, find and solve the problem, which led to an emergency stop.
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To start the machine, put the Main Switch (**C1**) on the “**I**” position. This will reset the appliance to its standard functions.

6.8 STOP CONTROLLED BY SAFETY SYSTEMS

The test execution can be interrupted by the safety systems in particular conditions. The appliance is equipped with the following security disposals:

SAFETY GUARDS

The Sieve Shaker can be equipped with a safety system (**OPTIONAL**) formed by a wooden box and by a micro switch that is activated by the box opening. As soon as the micro switch is activated an electronic device disconnects the feeding to the electromagnet (**B13**). In this way the machine is stopped.

6.9 PROGRAMMING

DANGER

Do not try to operate the appliance without having carefully read and learnt this manual in all its parts.








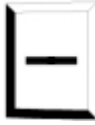


The sieve shaker has been studied in order to satisfy any operator's need by means of its easy and accurate setting procedures. The parameters that can be modified are:

- Sieving intensity
- Sieving time
- Sieving mode

For a correct set up please follow with great care our instructions:














SIEVING INTENSITY

The Sieving intensity can be varied entering a value from 0 to 99 on the display.

1. Press several times the key  until on the numeric display (**C8**) appears the letter **H** (set up mode referred to the sieving intensity).
2. Press the key . The middle dash of the numeric display (**C8**) will start lighting.
3. Press the key  to increase the value or the key  to decrease it. The led  is now blinking showing that the value is under modification.
4. Press the key  until the figure on the right is blinking.
5. Press the key  to increase the value or the key  to decrease it.
6. Press several times the key  until you come back to mode **L** (residual time to end the test). Confirming the data storing, the led  will stop blinking.

SIEVING TIME

Setting up a value from 1 to 999 minutes can vary the sieving period on the display.

1. Press several times the key  until on the numeric display (C8) appears the letter t (indicating the sieving time or the possibility to select it).
2. Press the key . The figure on the left of the display (C8) will start blinking.
3. Press the key  to increase the value or the key  to decrease it. The led  is now blinking, showing that the value is under modification.
4. Press the key  until the middle figure of the display (C8) starts blinking.
5. Press the key  to increase the value or the key  to decrease it.
6. Press the key  until the figure on the right of the display (C8) starts blinking.
7. Press the key  to increase the value or the key  to decrease it.
8. Press several times the key  until you come back to mode L (residual time to end the test). Confirming the data storing, the led  will stop blinking.














SIEVING MODE

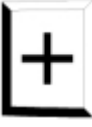








The sieving procedure can be selected either in intermittent or continuous way.

INTERMITTENT SIEVING


Every pause lasts 2 seconds (OFF time).


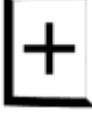




The vibration period between two pauses (ON time) can be varied by setting on the display a value from 1 to 999 seconds:

1. Press several times the key  until on the numeric display (C8) appears letter C (showing present sieving mode or possibility to select it).
2. Press the key . The figure on the numeric display (C8) shall blink.
3. Press the key  to increase the value or the key  to decrease it.
The led  is now blinking, showing that the value is under modification.
4. Press several times the key  until you come back to mode L (residual time to end the test). Confirming the data storing, the led  will stop blinking.
5. Press several times the key  until on the numeric display (C8) appears the letter F (showing ON time or the possibility to select it).
6. Press the key ; the figure on the left of the display (C8) will start blinking.
7. Press the key  to increase the value or the key  to decrease it.
The led  is now blinking, showing that the value is under modification.
8. Press the key ; the figure in the middle of the display (C8) will start blinking.

9. Press the key  to increase the value or the key  to decrease it.
The led  is now blinking, showing that the value is under modification.
10. Press the key ; the figure on the right of the display (**C8**) will start blinking.
11. Press the key  to increase the value or the key  to decrease it.
The led  is now blinking, showing that the value is under modification.
12. Press several times  until you come back to mode **L** (residual time to end the test). Confirming the data storing, the led  will stop blinking.

CONTINUOUS SIEVING

Press several times the key  until on the numeric display (**C8**) appears the letter **C** (showing the present mode or the possibility to select it):

1. Press the key . The figure on the numeric display (**C8**) shall blink.
2. Press the key  to increase the value or the key  to decrease it and to set up the value 1. The led  is now blinking, showing that the value is under modification.
3. Press several times the key  until you come back to mode **L**. Confirming the data storing, the led  stops blinking.

NOTE

In the intermittent mode, the total sieving period includes the pauses too.
If the user selects a sieving time of 10 minutes, the appliance will stop working after 10 minutes, either in the intermittent or in the continuous mode.

6.10 SWITCHING OFF

At the end of a test cycle, follow these instructions in order to switch off the appliance:

1. Remove all the sewers and thoroughly clean the appliance from any possible specimen residual.
2. To switch off the appliance, put the Main Switch (C1) on the "0" position.

6.11 TRIAL STARTING

Before beginning the standard use of this machine, check its perfect working conditions by performing at least a complete trial cycle according to the instructions given up to this point. In case of problems during this test cycle, see Chapter "DIAGNOSIS".

If neither the instructions given in this manual are not able to solve the problem, please contact our After Sale Service.

6.12 EXAMPLE OF OPERATING


Hereunder we describe a standard-procedure that allows even to an operator without a wide experience to use the Sieve Shaker in a correct way:

1. Tool up the Sieve Shaker in a proper way, as suggested in the chapter "TOOLING UP" of the present manual.




2. Use the key  to select the mode L.


NOTE

The key  can be activated only in L mode.



3. Start up the appliance, acting on key . On the numeric display (C8) the count down for the residual sieving time is shown.
4. During the working it is possible to verify the selected values for each parameter:



- Press the key  until on the display (C8) appears the desired mode. At this step the operator can read the corresponding values.

NOTE




or



, even if the machine is working.

At the end of the selected sieving time, the appliance stops working and the program gets ready for a new test, keeping the same parameters used for the previous test. In any moment,



using the key  the operator can interrupt the test and the program gets ready for a new one, keeping the same parameters used for the broken test.

CHAPTER 7 MAINTENANCE

WARNING See chapter “**DANGEROUS PARTS AND RESIDUAL RISKS**” before proceeding.

WARNING All maintenance operations must be done after switching off the machine and disconnecting the feeding cable.

WARNING All maintenance operations concerning parts of the machine and of the electric system must be arranged by skilled operators.

7.1 ROUTINE MAINTENANCE

In order to maintain the efficiency of the machine, clean and oil periodically all non-painted parts.
 Avoid the use of solvents which damage the painted parts as well as parts made by synthetic materials.

DANGER Only original spare parts are allowed. The manufacturer assumes no liability in case of use of non-original spare parts.

7.2 SPECIAL MAINTENANCE

In case of special maintenance operations (repairs, replacement of parts and any other operation not described in this manual) ask directly to the manufacturer.

7.3 CALIBRATION

Proceed with a check of the calibration by officially recognised institutes following the standards in force.

Chapter 8 | DIAGNOSIS

Some easy to solve and simple problems, which can happen during the working of the appliance, are introduced in this chapter.

ATTENTION	All maintenance, checking, control and repairing operations of each part of the machine or of the electric system, must be carried by skilled operators instructed about the purposes the machine is made for.
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FAILURE	POSSIBLE CAUSE	CURE
After operating the Main Switch, The machine does not start.	No supply	Verify the correct use of the Main Switch (C4) Verify the Main in the control panel
	Fuses are broken	Replace the fuses with the new fuses having the same capacity. The fuses are on the electronic card inside the switch board.
After a correct set up of the sieve shaker, pressing the button (C11) the electro magnet does not work	Failure to the electric system	Check if the wires and the connections of the electric circuit are interrupted.
	Failure to the electromagnet	Contact our After Sale Service

ATTENTION	Get in touch with the after sales service for any other problem that is not listed in the above table or in case the bad working continues after the intervention of the operator as from above mentioned operations.
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Chapter 9 | STORAGE & DISPOSAL

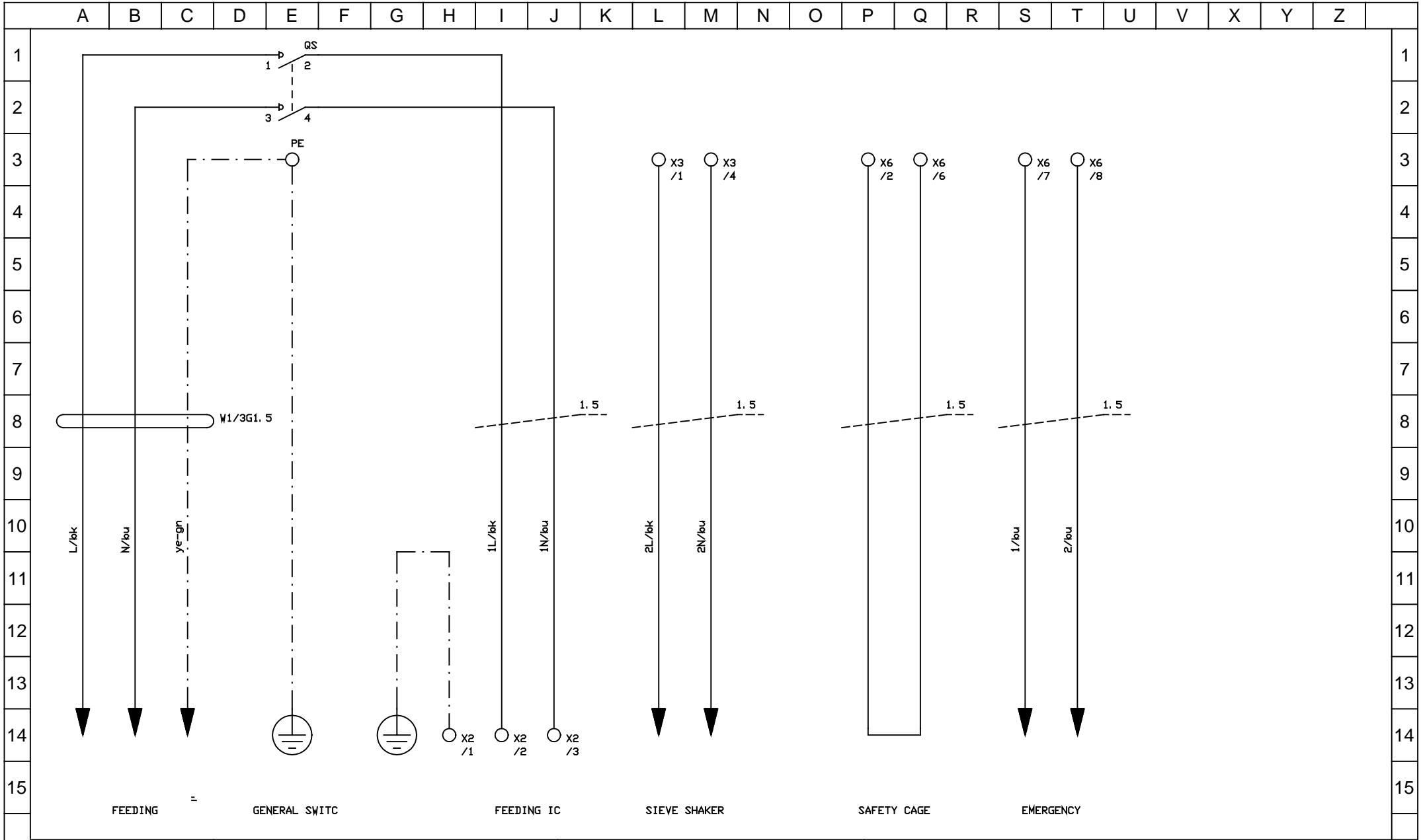
9.1 | SETTING ASIDE

In case of setting aside for a long time it is necessary to disconnect the electric feeding.
Execute all the maintenance operations.
Oil the parts that are not varnished and cover the machine against the dust.

9.2 | DISPOSAL

When the machine is not used anymore, it is recommended:

- To disconnect the cable of the feeding
- Cover/destroy all the parts which may be dangerous as cutting, projecting or sharpened ones.
- Disassemble the machine and dispose of it according to local laws.



ok	NERO	or	ARANCIO
bn	MARRONE	gy	GRIGIO
bu	BLU	rd	ROSSO
gn	VERDE	wh	BIANCO
ye	GIALLO	vi	VIOLA

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CONTROL PANEL FOR ELECTRO AGNETIC SIEVE SHAKER			
	: 23.07.03	DIR:	
		DIR:	