

**Continuous Flow Filterless Centrifuge
BM058**

Impact Test Equipment Ltd
www.impact-test.co.uk & www.impact-test.com

User Guide
User Guide
User Guide

**Impact Test Equipment Ltd.
Building 21 Stevenston Ind. Est.
Stevenston
Ayrshire
KA20 3LR**

T: 01294 602626

F: 01294 461168

E: sales@impact-test.co.uk

Test Equipment Web Site

www.impact-test.co.uk

Test Sieves & Accessories Web Site

www.impact-test.com

Contents

Chapter 1	GENERAL INFORMATION
1.1	GENERAL FEATURES
1.2	IDENTIFICATION
1.3	APPLICATIONS
1.4	STRUCTURE AND OPERATING OF THE MACHINE
Chapter 2	SAFETY INFORMATION
2.1	GENERAL SAFETY STANDARDS
2.2	SAFETY SYSTEMS
2.3	DANGEROUS PARTS AND RESIDUAL RISKS
2.4	NOISE
Chapter 3	INSTALLATION
3.1	LIFTING
3.2	UNPACKING
3.3	INSTALLATION
3.4	ELECTRIC CONNECTIONS
Chapter 4	MACHINE FEATURES
4.1	DIMENSIONS AND MASS OF THE APPLIANCE
Chapter 5	OPERATOR INTERFACE
5.1	CONTROLS AND MESSAGES
Chapter 6	USE
6.1	WARNINGS
6.2	SWITCHING ON OF THE APPLIANCE
6.3	TOOLING UP
6.4	SPECIMENS POSITIONING
6.5	TEST STARTING
6.6	EMERGENCY STOP
6.7	RESTARTING AFTER AN EMERGENCY STOP
6.8	SWITCHING OFF
6.9	FIRST TRIAL SWITCHING ON
6.10	EXAMPLE OF OPERATING
Chapter 7	MAINTENANCE
7.1	ROUTINE MAINTENANCE
7.2	SPECIAL MAINTENANCE
7.3	PERIODICAL INSPECTIONS AND OPERATIONS
Chapter 8	DIAGNOSIS
8.1	DIAGNOSIS
Chapter 9	SCRAPPING
9.1	SETTING ASIDE
9.2	SCRAPPING
ENCLOSURES	
A	GENERAL VIEW OF THE APPLIANCE
ELECTRICAL DIAGRAMS	
S	VIEW OF THE ELECTRIC DIAGRAM

Chapter 1 | GENERAL INFORMATION

1.1 | GENERAL FEATURES

- **This manual is addressed** to the carrier, the installer, the user, the maintenance operator, the scrapping 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	It shows the procedures that can damage seriously the machine if they are not followed carefully.
------------------	---

DANGER	It shows the procedures that can be dangerous to the operator if they are not followed carefully.
---------------	---

1.2 | IDENTIFICATION

MANUFACTURER IDENTIFICATION: See the cover page
MACHINE IDENTIFICATION: See the plate on the machine where the complete identification data and the electrical features are to be found.

1.3 | APPLICATIONS

The centrifuge extractor has been designed to separate the filler from the bitumen or other mixtures having sediments in suspension (cement, soil and clay) using the method of continuous flow centrifuge extraction.

This appliance is made for the aim, which it has been conceived for.
Any other uses are not allowed.

ATTENTION	The appliance is made to work only with non-flammable and non-explosion solvents. The use of the appliance with materials and solvents that are flammable and/or explosion type is a source of danger and risk of fire or explosion. The machine can be used only and exclusively with non-flammable and non-explosion solvents. The manufacturer assumes no liability for any damages to people and things due to a lack of observance of these instructions.
------------------	--

ATTENTION	The instructions given in this operating manual are only made for the right use of the appliance. To carry out the test in the right way, the user must refer to the specific standards in force for the test itself.
------------------	---

1.4 | STRUCTURE AND OPERATING OF THE MACHINE

The continuous flow centrifuge extractor is made by a metal frame (A1 and A2) holding the container of the rotating group (A9) and its propeller (A14). The feeding of the centrifuge extractor is made through a funnel (A4) in cast aluminium; the drain is made through a collector (A5) and its drain pipe (A7).

The appliance is delivered complete with an aluminium beaker and two sieves having a mesh opening of 0,149 and 0.074 mm. As you can see from the description this centrifuge extractor is a continuous flow extractor; this means that quite a big quantity of solution can be centrifuged in order to have a maximum of 100 g filler kept into the test tube.

The solution that has to be centrifuged and having solid parts to be separated in suspension (filler) is transferred into the beaker of the centrifuge extractor when this is already rotating through the funnel (A4).

Thanks to the centrifuge force given by the beaker rotation at 11500 revolutions per minute, the solution staying on the bottom of the beaker (A6) goes up along the walls and is expelled outside against the collector

walls (A5). The collector has an inclined base and drains the liquid through the pipe (A7); the liquid is collected in a tray.

During this operation the parts in suspension will adhere to the inside walls of the beaker and we shall have only the liquid coming out. The suspension particles that are eventually taken by the liquid are kept by the inside upper edge of the beaker.

The centrifuge operation is finished when no more liquid is coming out from the drainpipe.

Chapter 2	SAFETY INFORMATION
------------------	---------------------------

2.1	GENERAL SAFETY STANDARDS
------------	---------------------------------

- **The use, lifting, installation, maintenance and scrapping 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, which the machine could be eventually equipped with. The safety devices will have to be kept always assembled and to be daily checked.
The manufacturers offer training and assume 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 damages caused to people, things and animals in case the general safety standards or if the instructions of this manual are not followed.

2.2	SAFETY SYSTEMS
------------	-----------------------

MEANING: Safety devices are all the safety measures using specific technical equipment (guards, cages etc.) to protect the operator from any danger that couldn't be avoided when the appliance was planned.

DANGER	The removal of the safety devices or any tampering of the machine could cause risks to the operator or to any other people.
---------------	---

The manufacturer assumes no liability for any damages to people, things or animals due to the tampering of the safety devices.
--

- **ACTIVE SAFETY DEVICES**
All those devices avoiding or reducing the risks for the operators are active safety devices. These devices require an active and aware intervention to be operated.
The switchboard has a main switch that can also be used as an emergency switch.

2.3 DANGEROUS PARTS AND RESIDUAL RISK

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.

ATTENTION

In case the Manufacturer does not do the machine installation, employ only skilled operators particularly trained for the lifting of heavy machinery.

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.**
- Pay attention to the risk of electric shocks both for direct or indirect contact, due to unforeseen failure to the electric system.
- Do not subject the equipment to violent shocks.
- Do not expose the equipment 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

- In order to grant the max. safety levels for the operator, it is recommended not to touch any moving components during the test execution and always use the proper safety means.
- During the test execution always pay attention to the possibility of hands, fingers or body squeezing, cutting or trapping caused by the moving parts of the container.
- **Do not wear large clothes, ties, watches, rings or others, which could entangle into the moving parts of the appliance.**
- Never remove the funnel (A4) during the working of the centrifuge extractor.

LIFTING

- During the lifting take care that the machine is conveniently held and secured and that it cannot slide.
- 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	FORESEEN SAFETY MEASURE
FINGER OR HANDS SQUEEZE	REINFORCED GLOVES
ABRASIONS – CUTTINGS	REINFORCED GLOVES
DAMAGES TO THE EYES CAUSED BY MATERIAL EJECTIONS	GLASSES

The manufacturer assumes no liability for any damages to people and things due to a lack of observance of the instructions and the use of the 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 levels of the operator are 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 L_{aeq} at 1 mt. distance	62 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.</p> <p>If the daily exposure of the operator is equal or higher than 85 dB(A), Safety Devices as headphone are suggested to be worn.</p> <p>If the daily exposure is equal or higher than 90 dB(A), the use of the Safety Device is compulsory.</p> <p>For further information consult the standards of the country where the machine has been installed.</p>
---------------	--

Chapter 3 | INSTALLATION

DANGER	Consult DANGEROUS PARTS AND RESIDUAL RISKS before proceeding
---------------	---

3.1 | LIFTING

The operating instructions must be respected during the moving of the appliance and particularly in the following phases:

- The lifting and the storing
- The first installation
- The further installations

The machine is usually packed in a wooden case or in a carton that allow the easy moving of the same. The machine must be moved by a forklift truck suitable for the weight indicated on the plate on the machine.

The moving of cases with lifting devices must be made with all cautions required and following the indications given on the packing. Never use chains to lift the cases.

ATTENTION	The moving of cases with lifting devices must be made with all cautions required and following the indications given on the packing. Never use chains to lift the cases. Pay attention to avoid impacts and turnovers
------------------	---

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 far from children. They must be thrown away in a proper collection centre.
---------------	--

ATTENTION	Pay attention to avoid impacts and turnovers.
------------------	---

ATTENTION	Before throwing away the package, pay attention that any accessory, manuals, documents, spare parts are not inside.
------------------	---

3.3 | INSTALLATION

- The machine has to be placed in an environment suitable for the aim it has been conceived for (laboratory protected by any 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. MAXIMUM HEIGHT	1000 m

GENERAL RECOMMENDATIONS

- 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.
- The machine must be placed on a desk in order to be able to work at a proper height for the user.
- The machine must be placed in a place properly aired in order not to accumulate any noxious gas.

3.4 ELECTRIC CONNECTIONS

DANGER	Skilled operators must arrange the electric connections.
---------------	--

DANGER	Before connecting, see the attached electric diagram and the plate on the machine for the information about the voltage, the frequency, etc.
---------------	--

DANGER	Connect the ground by the terminal PE (yellow-green) before making any other connections.
---------------	---

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 and following the machine features.
---------------	---

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.

Chapter 4 MACHINE FEATURES

4.1 DIMENSIONS AND MASS OF THE APPLIANCE

	B014
LENGTH	350 mm
WIDTH	600 mm
HEIGHT	720 mm
WEIGHT	60 kg
REVOLUTION SPEED	11000 rev. per min.
CENTRIFUGING STRENGTH	4700 G
EXTRACTION CAPACITY	550 ml/min.

Chapter 5 | OPERATOR INTERFACE

5.1 | CONTROLS AND MESSAGES

A1 | FRAME

The frame holds the container of rotating system and the motor.

A2 | PROTECTION CASE

Together with the frame it is the main structure of the centrifuge extractor.

A3 | BEARINGS

The bearings hold the rotating basket.

A4 | FUNNEL

The funnel is placed over the receiver with special release locks.

Once the solution that has to be centrifuged has gone through the sieves, it is hold inside the funnel.

The solution stays into the funnel up to the moment when the tap is opened. This allows the test to be started.

A5 | COLLECTOR

It allows collecting the liquid coming out from the aluminium beaker thanks to the centrifuge energy.

The collector has the bottom inclined in order to allow the liquid coming out from the drainpipe.

A6 | ALUMINIUM BEAKER

It allows collecting the solution that has solid parts in suspension to be separated and allows its centrifuging.

A7 | DRAIN PIPE

It allows the liquid coming out from the collector.

A8 | ANTI-VIBRATION FEET

They allow the appliance being stable on the surface it is installed.

A9 | CONTAINER OF THE ROTATING SYSTEM

It contains the shaft of the rotating basket.

A10 | ROTATING BASKET

It contains the aluminium beaker.

A11 | TAP

The opening of the tap allows the solvent coming out from the tunnel to the beaker of the centrifuge extractor.

A12 | FLAT BELT

It allows transmitting the movement from the electric motor to the basket multiplying the revolutions.

A13 | MOTOR BLOCKING STIRRUP

They are installed in order to block the motor in its position after having put in tension the belt.

A14 | ELECTRIC MOTOR

It allows the rotation of the basket.

Chapter 6	USE
------------------	------------

DANGER	Consult DANGEROUS PARTS AND RESIDUAL RISKS before proceeding.
---------------	--

6.1	WARNINGS
------------	-----------------

Before starting the normal use of the equipment it is recommended to verify that it is in good working conditions with no defective or damaged parts.
If necessary proceed with the required maintenance operations

6.2	SWITCHING ON OF THE APPLIANCE
------------	--------------------------------------

Turn the main switch on "I".

6.3	TOOLING UP
------------	-------------------

Here under we describe some "standard procedures" allowing even to an operator without a wide experience to tool up properly the appliance.

POSITIONING OF THE BEAKER

Remove the loading funnel by opening the release locks, introduce the beaker inside the rotating basket by centring it properly in order not to have any blocking; to make this operation easy put some grease on the outside surface of the beaker.

POSITIONING OF THE LOADING FUNNEL

Place the tunnel over the collector and block it using the release locks.

POSITIONING OF THE SIEVES

Place the sieves over the loading funnel and block them using the release locks.

ATTENTION	Place the appliance on a flat surface properly levelled.
------------------	--

ATTENTION	Before arranging any tooling up of the appliance pay attention and check that the main switch is on position "0".
------------------	---

ATTENTION	Before proceeding with the normal use of the appliance check that all the parts are properly tooled up and are suitable for the test that has to be effected.
------------------	---

6.4	SPECIMENS POSITIONING
------------	------------------------------

The positioning of the material that must be tested can be made in many different ways that are depending from the kind of test that must be arranged. To arrange a right specimen preparation and positioning we kindly ask to check the standards referring to the test that must be made.

ATTENTION	The continuous flow centrifuge allows centrifuging quite a big quantity of solution up to a maximum value of 100 grams of filler retained by the specimen. The only operation is the weighing of the solution before starting the test.
------------------	---

6.5	TEST STARTING
------------	----------------------

Put the main switch on "I" and wait some seconds so that the appliance reaches the normal rotating speed.

6.6	EMERGENCY STOP
------------	-----------------------

In case of emergency the test execution can be stopped immediately by positioning the main switch on position "0".

ATTENTION	It's always worth reminding that the test interruption could give wrong results of the centrifuge test.
------------------	---

6.7 RESTARTING AFTER AN EMERGENCY STOP

DANGER	Before starting the appliance again, find and eliminate the problem, which caused the need for an emergency stop.
---------------	---

To start again the appliance just turn the main switch on position "I", this will start again the normal working of the centrifuge extractor.

6.8 SWITCHING OFF

Once the cycle of tests is finished follow the instructions given here below to turn off the appliance:

1. Turn off the appliance by turning the main switch on position "0" and wait for some seconds in order to have the machine completely stopped.
2. Lift the load funnel (A4) remove the beaker (A6) up, paying attention not to misshape its upper part.

6.9 FIRST TRIAL SWITCHING ON

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.

6.10 EXAMPLE OF OPERATING

DANGER	Proceed as per following example of operating only after having entirely read and understood all the indications given in this manual.
---------------	--

Here under we describe some "standard procedures" allowing even to an operator without a wide experience to complete a correct centrifuging operation:

1. Tool up the centrifuge extractor properly in all its parts as explained in the charter "TOOLING UP" of this manual.
2. Ensure that the beaker (A6) is properly introduced in the rotating basket (A10).
3. Close the tap (A11) and pour the solution to be centrifuged over the sieves of the load funnel (A4).
4. Turn the main switch on "I" and wait for some seconds in order to have the appliance turning at the normal working revolution speed.
5. Open slowly the tap (A11) in order to let the solution drop into the beaker (A6).

DANGER	<p><u>The correct opening of the stopcock, have to be studied considering the kind of solvent used and the quality of bitumen mixture contained; this matter is really important, because just in case you over-fill the container, this will overflow, get dirty and damage all internal mechanism of the machine.</u></p> <p>We suggest to make some practical trials before using the machine, in order to know in advance the correct opening of the stopcock.</p>
---------------	---

1. Collect in a tray the liquid that has been centrifuged and that has come out from the drain pipe (A7).
2. Let the centrifuge extractor work for some more minutes after the test is finished in order to let evaporate the traces of solution that may be inside the beaker. To obtain a drain filler without having to introduce the beaker in a drying oven leave the appliance working for some minutes.
3. Once the centrifuge operation is finished turn the handle of the switch on "0" and wait for some seconds in order to have the machine completely stopped.
4. Lift the load funnel (A4) and remove the beaker (A6) paying attention not to misshape its upper part.
5. Remove the filler from the beaker (A6) by means of a flexible spatula or with something similar paying attention not to damage the internal walls and the internal border that is on the upper part of the beaker.
6. Once the filler has been totally removed wash the loading and collecting accessories using clean solvent.

For other tests pls. follow above procedure.

Chapter 7	MAINTENANCE
------------------	--------------------

DANGER	Consult " DANGEROUS PARTS AND RESIDUAL RISKS " before proceeding.
---------------	--

DANGER	All the maintenance operations must be carried out with the machine turned off and unplugged from the knife switch.
---------------	---

DANGER	Skilled operators instructed about the purposes the machine is made for must carry any kind of maintenance operations concerning the components of the machine and of the electric components, even those that may seem very simple.
---------------	--

DANGER	Only original spare parts are allowed. The Manufacturer assumes no liability in the event that non – original parts are used.
---------------	---

7.1	ROUTINE MAINTENANCE
------------	----------------------------

In order to maintain good working of the machine for a long time, clean periodically all the parts and oil the parts that are not painted.

After each test, check that all the parts of the appliance are not damaged. In case something is damaged get in touch with the After Sales Service.

Ensure that all procedures described in the Chapter "**PERIODICAL INSPECTIONS**" and "**PERIODICAL OPERATIONS**" are correctly and punctually executed. This care will help preventing failures and dysfunctions.

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	PERIODICAL INSPECTIONS AND OPERATIONS
------------	--

Ensure that all procedures described in this Chapter are correctly and punctually executed. This care will help preventing failures and dysfunctions.

OPERATION	CONTROL OF THE BELT
PROCEDURE	Check periodically the proper tension of the belt (A12) acting on the screws closing the motor blocking stirrups (A13) and moving left the motor slide until you reach the proper tension that corresponds to about 10 kg, made in the centre of the conducting side. In case the resetting of the proper tension must be made too frequently, replace the belt.
FREQUENCY	EVERY SIX MONTHS OF USE

OPERATION	CLEANING OF THE BEAKER
PROCEDURE	The beaker must be cleaned from any rest of filler.
FREQUENCY	AFTER EVERY TEST

OPERATION	REPLACEMENT OF THE GASKETS OF THE COVER AND OF THE BEAKER SIT
PROCEDURE	Remove the used gasket using a fine screwdriver, clean its seat and install a new gasket. The gaskets must be made in VITON .
FREQUENCY	ONLY WHEN THE GASKETS ARE USED AND START HAVING SOME CRACKS.

Chapter 8	DIAGNOSIS
------------------	------------------

8.1	DIAGNOSIS
------------	------------------

Some easy to solve and simple problem, 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 out by skilled operators instructed about the functions and working procedures of the appliance.
------------------	---

PROBLEM	POSSIBLE CAUSE	CURE
After the activation of the Main switch, the centrifuge doesn't start	No supply	Check that the plug is properly plugged to the main.
	Damage to the motor	Contact the After Sale Service
	Damage to the electric installation	Contact the After Sale Service
When the shaft is moving the bearings are noisy	Bearings worn out	Contact the After Sale Service for the proper replacement of the bearings.

ATTENTION	Contact the After Sale Service for any other problem not listed in the above table or in case the problem continues after the operator intervention following the modes given in the above table.
------------------	---

Chapter 9	SCRAPPING
------------------	------------------

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. Lubricate with some oil the parts not painted of the appliance. It's recommended to cover the machine against the dust.

9.2	SCRAPPING
------------	------------------

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

- Disconnect the feeding cable.
- Cover/destroy all the parts which may be dangerous as cutting, projecting or sharpened ones.
- Disassemble the machine and scrap it as per the actual laws.

Recycling notice for the disposal of electrical and electronic devices



This symbol, placed on the device or on the package and/or on the documentation, suggest that the device shouldn't be dispose together with other home garbage at the end of its life cycle. To avoid further environment, or health-care damages, caused by the unsuitable disposal of garbage, we kindly recommend the user to separate this device from other different types of garbages and to recycle it in a responsible way to avoid the arguable reuse of material resources. Indeed users must take care at the disposal of the equipment that have to be discarded, taking them away to the next recycling site for the appropriate recycling treatment for electrical and electronic devices. Gathering and Recycling deplete devices allow the preservation of natural resources and grant for them the adequate treatment respecting health and environment.

For further information about your local recycling site please contact your local city hall or city waste treatment department. The developer, as producer of electrical and electronic devices, will provide to finance the recycling and treatment services for deplete devices that will come back through these recycling site accordingly the local statement.



