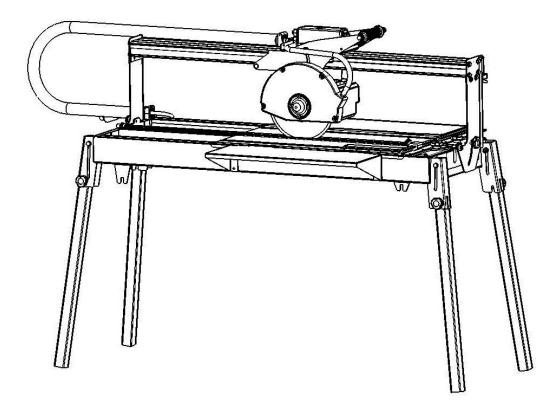


ATTREZZATURE PER EDILIZIA EQUIPMENT FOR BUILDING INDUSTRY since 1975

S.I.R.I s.r.l. Via R.Dalla Costa, 44/46 41122 MODENA (ITALY) Tel. 059/313191 - Fax 059/311362 Email: info@siri.mo.it http//www.siri.mo.it

MaxiBellaTop 120 2 Hp Motor

Operating and maintenance manual



Contents

1	INTRODUCTION
1.1	General information 4
1.2	General information concerning machine use5
1.3	General precautions concerning machine use
1.4	Pictographs concerning the "Operator qualification level"
1.5	Pictographs relating to safety 6
2	MACHINE PRESENTATION
2.1	General 8
2.2	General notes9
2.3	Airborne noise emission
2.4	Technical data9
2.5	Identification plates 10
2.6	Type of discs usable 11
3	SAFETY COMPONENTS AND RESIDUAL RISKS12
3.1	Mechanical safety devices 12
3.1.1	Disc guard 12
3.2	Electrical safety devices
3.2.1	Magnetothermal switch 12
3.3	Residual risks 13
3.3.1	Risk of cuts 13
3.3.2	Risk to the eyes 13
3.3.3	Risk to hearing 13



4	INSTRUCTIONS FOR USE AND MAINTENANCE
4.1	Introduction 14
4.2	Permitted use 14
4.3	Required personal protection devices 14
4.4	General warnings 14
4.5	Warnings on use 15
4.6	Warnings on machine maintenance 16
5	MACHINE INSTALLATION AND STARTUP
5.1	Handling the machine 17
5.2	Preparing the working area 18
5.3	Assembling the machine
5.3.1	Material provided 19
5.3.2	Fitting the legs 19
5.3.3	Releasing the carriage 20
5.4	Connecting to the mains 21
5.5	Filling the cooling water tank 22
5.6	Turning on the machine 22
5.6.1	On/off switch 22
5.6.2	Adjusting the water flow 23
6	MACHINE USE
6.1	Basics for machine use 24
6.2	Operation 24
6.2.1	Activation of power supplies 25
6.2.2	Water pump 25
6.3	Machine stop 25
6.4	Machine working 25
6.4.1	Linear cut 26
6.4.2	Diagonal cut 27
6.4.3	Jolly cut 28
6.4.4	Angle cut



7	7	MACHINE MAINTENANCE AND SPARE PARTS
7	7.1	Warnings on machine maintenance 30
7	7.2	Periodic maintenance schedule 30
	7.2.1	Daily maintenance 30
	7.2.2	Weekly maintenance 30
	7.2.3	Monthly maintenance 31
	7.2.4	Half-yearly maintenance 32
7	7.3	Scheduled maintenance summary table 32
7	7.4	Troubleshooting
	7.4.1	Insufficient cooling water flow
	7.4.2	Difficult carriage sliding 32
	7.4.3	Poor cutting performance 33
7	7.5	Placing the cutter out of service
7	7.6	Exploded drawings and list of spare parts 34
0	DECLA	RATION OF CONFORMITY



1 Introduction

IMPORTANT

BEFORE CARRYING OUT ANY OPERATIONS ON THE MACHINES, THE TRAINED OPERATORS AND TECHNICIANS MUST CAREFULLY READ THE INSTRUCTIONS CONTAINED IN THIS MANUAL (AND IN THE ATTACHED DOCUMENTS) AND FOLLOW THEM WHILE CARRYING OUT THE VARIOUS OPERATIONS.

IF YOU HAVE ANY DOUBTS CONCERNING THE INTERPRETATION OF THESE INSTRUCTIONS, CALL OUR TECHNICAL SERVICE FOR HELP.

1.1 GENERAL

This instruction manual refers to: MACHINE TYPE: **MAXIBELLA TOP 120** SERIES AND TYPE: YEAR OF MANUFACTURE: **2015**

This manual contains the main information on storage, transport, installation, use, supervision and maintenance of the machine. This manual forms an integral part of the machine and must be kept throughout its lifetime for future consultation.

If your copy of the manual becomes unreadable, ask the manufacturer for a new copy: SIRI SRL Via R. Dalla Costa 44/46 41122 MODENA (ITALY) Tel. 059/313191 - Fax 059/311362 E-mail: info@SIRI.mo.it - http//www.SIRI.mo.it MEMBER OF THE EXPO CONSORTIUM - MODENA

specifying the machine type and the serial or order number printed on the machine identification plate.

THE OFFICIAL LANGUAGE CHOSEN BY THE MANUFACTURER IS ITALIAN.

The manufacturer shall not be held liable for translations into other languages which do not match the source language and meaning.

This manual reflects the machine status at the time it is supplied and cannot be considered inadequate if updated following new experience. **SIRI** reserves the right to update the manuals without any obligation to update earlier versions or to informusers of machines supplied previously. All proposed updates to the manual and/or the machines shall be considered provided for information purposes only.

Should you need any information on machine updates, SIRI Customer Service will gladly help you.

SIRI is relieved of all responsibility for improper use of the machine, for example:

- a) Use by untrained staff
- b) Use not in compliance with the regulations in force
- c) Incorrect installation
- d) Power supply defects
- e) Poor maintenance i) eventi eccezionali.
- f) Unauthorised modifications or operations
- g) Use of non-genuine spare parts or not specifically for the model
- h) Total or partial inobservance of the instructions
- i) Exceptional events.



1.2 GENERAL INFORMATION ON MACHINE USE

The aim of this manual is to provide the user with general knowledge of the machine as well as maintenance instructions to ensure its good functioning.

Before starting any installation, maintenance and repair operations, carefully read this manual. It contains all the necessary information for proper use of the machine and to prevent injury. \cdot

The frequency of the checking and maintenance operations described in this manual is the minimum necessary to ensure efficiency, safety and a long life of the machine in normal operating conditions. Nonetheless, you should constantly monitor the machine and promptly take action in the event of faults.

All routine maintenance operations, checks and lubrication must be carried out with the machine off and disconnected from the energy supplies (electrical and other).



Any unauthorised modification or tampering with the machine and its safety systems relieves the manufacturer of all responsibility in terms of warranty and safety.

1.3 GENERAL PRECAUTIONS REGARDING MACHINE USE

This machine has been designed and constructed to be used according to the standard rules of conduct when working with machines; the manufacturer therefore takes for granted that the machine operators are knowledgeable with these rules.

The user is responsible for informing and training the operators and ensuring that everyone that will be operating on the machine read these instructions.

- Where a safety key selector or safety key lock is provided, the maintenance technician or the operator must remove the key and personally pocket it or put it in safe place where unauthorised staff cannot access it.
- Do not allow unauthorised staff to operate on the machine.
- DO NOT START THE MACHINE IF IT MALFUNCTIONS IN ANY WAY
- Before using the machine, make sure that any dangerous condition has appropriately been eliminated.
- Make sure that all the guards and other protections are in place and that all the safety devices are present and in working order.
- Make sure that there are no foreign objects in the operating area.
- When there is a risk of being hit by projecting or falling solid parts or similar, wear goggles with side shields, a hard hat and gloves if necessary.
- Personal protection devices must be used where prescribed.



PRECAUTIONS REGARDING ELECTRICAL EQUIPMENT

Connection, startup, maintenance, measurements and adjustments of the electrical equipment or its components may only be carried out by qualified electricians. When working on live electrical components, strictly observe the regulations in force.

1.4 PICTOGRAPHS RELATING TO OPERATOR QUALIFICATION

The meaning of the symbols used in this manual is given below. These symbols are shown at the beginning of a paragraph to indicate the staff the paragraph addresses, it being understood that the contents of this MANUAL MUST BE FULLY READ and therefore MUST BE KNOWN TO all the machine users and everyone that will be performing any type of operation on it.



Generic worker: operator with no specific skills capable of carrying out only simple tasks on instructions of qualified technicians.



Hoisting and handling means driver: operator qualified for use of material and machine lifting and transport means (strictly following the instructions of the manufacturer), in compliance with the laws in force in the country of use.



Mechanical maintenance technician: qualified technician capable of running the machine in normal conditions, operating it using the hold-down buttons with the guards deactivated, and operating on mechanical devices to carry out adjustments, maintenance or repairs. A mechanical maintenance technician is normally not qualified to operate on live electric systems.



Electrical maintenance technician: qualified technician capable of running the machine in normal conditions, operating it using the hold-down buttons with the guards deactivated, and operating on electrical devices to carry out adjustments, maintenance or repairs. The electrical maintenance technician is qualified to operate on live electric systems in electric cabinets and junction boxes .



Manufacturer's technician: qualified technician made available by the manufacturer and authorised to carry out complex operations in particular conditions or in any case as agreed with the user. The manufacturer's technicians have mechanical and/or electrical skills.



1.5 PICTOGRAPHS RELATING TO SAFETY

Below are the safety pictograms used on the machine and/or in this manual.



Risk of cuts: Warns the operators that if the operation described is not carried out according to the safety rules, there is a risk of cutting the hands.



Risk of electrocution: Warns the operators that if the operation described is not carried out according to the safety rules, there is a risk of electric shock.



Risk of projecting fragments: Warns the operators that if the operation described is not carried out according to the safety rules, there is a risk of being hit by projecting fragments.



Wear a protective headset: Warns the operators that a headset must be worn as there is an implicit risk of damage to hearing.



Wear protective clothing: Warns the operators to wear protective goggles and gloves to prevent injury.

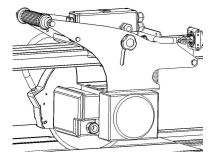


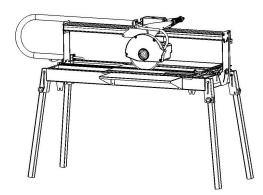
2 MACHINE PRESENTATION

2.1 GENERAL

The **MaxiBella** cutter has been designed and constructed to make linear, diagonal and 45° angle cuts in ceramic, marble, granite, porcelain stoneware, Klinker and terracotta tiles. The diamond disc supplied with the machine is only suitable for cutting ceramic tiles; for all other materials, use specific discs.







Referring to the figure above, the cutter is made up of the following units:

- 1) Sliding motor unit (tiltable for 45° angle cuts)
- 2) Motor
- 3) Universal diamond disc; MaxiBella = Ø 250 mm
- 4) Sliding unit supports
- 5) Tank
- 6) Power cable
- 7) Folding legs
- 8) Support table





2.2 GENERAL NOTES

- The machine is intended for industrial use in normal environmental conditions as defined in point 4.4 of EN 60204-1. These conditions refer to machine use.
- The machine may only be used by specifically trained staff and who have read the contents of this manual.
- The machine is manually operated.

2.3 AIRBORNE NOISE EMISSION

The sound pressure level was measured in the normal operator working position, i.e. 20cm from the short side of the machine where the tile positioning squares are located. The value indicated in the table below refers to the machine operating with a continuous crown disc.

Measurement	Sound pressure (dB)		
	$O_{0} \in d\mathbb{R}$ (veferging to O_{0} upp)		
Sound pressure level	90.5 dB (referring to 20µµPa)		
Sound power level	97 dB (referring to 1pW)		

The measurements were made in accordance with ISO 11201 and ISO 3744.

The sound pressure level generated by the machine is such that anti-noise protection must be used (headset or ear plugs).

2.4 TECHNICAL DATA

The table below lists the technical data of the machine.

Parameter	Value MaxiBella Top 120
Electrical power supply	230 V - 50 Hz
Power	1.5 Kw
Absorption	9.7 A
Motor RPM	2800
Motor condenser capacity	30 Uf
Degree of protection	lp 55
Insulation class	F
Maximum cutting length	130 cm
Maximum length for 45° angle cut	130 cm
Maximum tile sides for 45° cut	tile 90x90 cm
Maximum cutting height	5,5 cm
Diamond disc type	250 continuous perimeter
Weight	90 Kg
Dimensions	170x55x60 cm

The operating temperature must be between 0 and 45°C



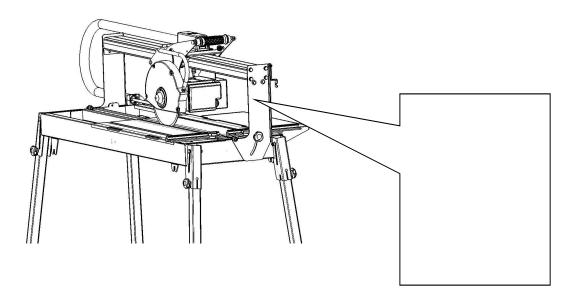
2.5 IDENTIFICATION PLATES



The machine has been constructed in compliance with the requirements of Machine Directive 2006/42/EC and Electromagnetic Compatibility Directive 2004/108/EC. The declaration of conformity is attached to this manual.

When contacting Customer Service, exactly quote the **model**, **serial number** and **year of manufacture** of the machine to facilitate fast and precise replies. This data is found on the identification plate installed on your machine.

The machine and motor unit identification plates are positioned on the outside of the right-hand side upright as shown in the figure. It is prohibited to alter and remove these identification plates.



The identification plates bear the following data:

- Manufacturer's name and address
- Machine type
- Serial number
- -CE marking and year of manufacture of the machine.
- Power voltage in volts and frequency in Hz
- Maximum absorption in amperes

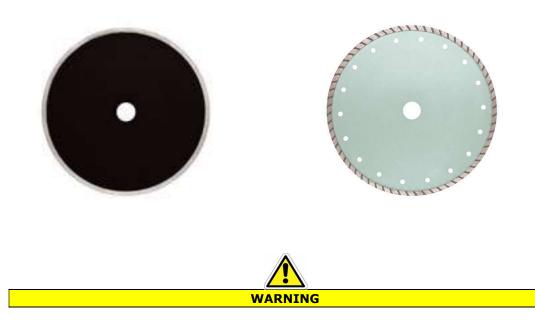




2.6 TYPE OF DISCS USABLE

The machine may only be used with the cutting discs listed and shown below:

- A) Continuous crown disc for ceramic and porcelain stoneware tilesB) Turbo disc for terracotta, ceramic and marble tiles



Mount only safety continuous crown or turbo discs on the cutter. It is strictly prohibited to use toothed discs normally used for cutting wood, iron or similar. SIRI declines all responsibility for improper disc use.



3 Safety components and residual risks



3.1 MECHANICAL SAFETY DEVICES

3.1.1 Disc guard

The cutting disc is protected by a plastic guard that prevents access to the largest part of its circumference excluding the lower area where the material is cut. The guard is made up of two parts (internal and external) joined to each other with four screws; the internal part is fastened to the motor unit. The external part may be removed only and exclusively when the machine is disconnected from the mains, when you need to replace the cutting disc.

As well as providing protection against contact with the blade, it performs the function of directing the cooling water flow down into the collection tank.



WARNING

It is strictly prohibited to start the machine when the external part of the guard is not in place.

3.2 ELECTRICAL SAFETY DEVICES

3.2.1 Magnetothermal switch

The cutter is equipped with a magnetothermal press switch with a minimum voltage disconnecting switch. The switch is open (i.e. machine off) when it is in position "0" and closed (i.e. machine started) when it is in position "1". If the power fails when the switch is in position "1", it is automatically switched to "0". This prevents the machine from restarting when the power is restored until the switch is pressed back into position "1". The switch also has the function of protecting the motor, automatically switching to "0" following a short-circuit or prolonged use in overload conditions. If the switch trips due to an overload, before restarting the machine, wait a few minutes to allow the thermal device incorporated in the switch to cool down.





3.3 RESIDUAL RISKS

Despite the safety devices adopted, there are some residual risks intrinsic to cutting operations.

3.3.1 Risk of cuts

There is a risk of being cut by the cutting blade in the arched section where it cannot be protected by the guard. It is therefore strictly prohibited to come close to the cutting disc with any part of the body, both when the machine is off and operating. All the machine operators and anyone that passes close by or might be passing close by the machine must be informed of this risk and how to behave.



It is strictly prohibited to come close to the cutting blade with the hands and the face when the machine is connected to the mains.

3.3.2 Risk to the eyes

There is a risk of the cooling water splashing or fragments projecting onto the hands and face. It is therefore obligatory to wear goggles during machine operation



It is strictly prohibited to use the machine without wearing protective goggles.

3.3.3 Risk to hearing

The sound level reached during operation is such that it will damage hearing in the event of prolonged exposure. It is therefore obligatory to wear an anti-noise headset during machine operation.



WARNING

It is obligatory to wear an anti-noise headset during machine operation.



4 Instructions for use and maintenance



In relation to the characteristics of the materials cut, before carrying out any operations on the machine, carefully read the entire operating manual paying particular attention this section. All the operators that will be working on the machine must read the instructions contained in this section and they must be easily accessible and clearly visible.

4.1 INTRODUCTION

The machine has been designed and constructed in compliance with the requirements of Machine Directive 2006/42/EC taking into account normal and reasonably foreseeable improper use.

4.2 PERMITTED USE

The **Maxibella** cutter has been designed and constructed to make linear, diagonal and 45° angle cuts in ceramic, marble, granite, porcelain stoneware, Klinker and terracotta tiles. The diamond disc supplied with the machine is only suitable for cutting ceramic tiles; for all other materials, use specific discs.

4.3 REQUIRED PERSONAL PROTECTION DEVICES

It is obligatory to wear protective goggles and an anti-noise headset. These devices are at the expense of the customer.



Wear a protective headset

Wear protective goggles

4.4 GENERAL WARNINGS

- Operators, maintenance technicians and anyone who is to operate and/or come close to the machine may not wear clothes with wide sleeves nor laces or belts that may pose a risk to safety. Long hair must be tied up and a cap worn so that it cannot pose a risk.
- The working area must be kept clear of any foreign objects and the floor must be treated with a non-slip coating (at the expense of the customer). Alternatively, non-slip mats may be used.
- The machine must be used and maintained according to the instructions contained in this manual and the procedures described case by case.
- The operators that are to work on the machine must be adequately trained through training and refresher courses.
- The machine connections (and any accessory devices) must be earthed for electrostatic discharge.



- It is strictly prohibited to operate on any part of the machine before it has come to a complete halt and only after pulling the plug from the power socket. Only following this operation may the mechanics and workers carry out maintenance or repair procedures.
- Do not deactivate the safety devices or ignore the warnings and alarms, be they automatically communicated or given on labels fixed on the machine.
- Do not operate the machine when the guards have been removed.



4.5 WARNINGS ON USE

The cutter must be used only for the intended use declared by the manufacturer. In particular, it is prohibited to use the cutter, even partially, in one of the following conditions:

- With the guards removed and/or with the safety devices deactivated, faulty or missing
- If the cutter has not properly been installed
- In explosive atmospheres or in places where there is a risk of fire
- In dangerous conditions or when the cutter is malfunctioning
- Improper use of the cutter by untrained personnel
- Use not in compliance with the specific regulations
- In the event of power supply defects
- After unauthorised modifications or operations
- Total or partial inobservance of the instructions
- With materials and tools different from those specified by the manufacturer.

The machine is not intended for use in one or more of the following conditions:

- Environments with an average temperature higher than +35°C in a period of 24 hours
- Environments with relative humidity higher than 95%
- At altitudes of over 3000 m above sea level.

If finding potentially dangerous situations for the operator during machine use, the employer is obliged to immediately inform SIRI S.r.l. thereof in writing.

IMPORTANT

Any deviation or departure from the above mentioned rules requires a specific written declaration by SIRI S.r.l. Any modification not authorised by the manufacturer which alters the machine functions affecting the risks and/or generating additional risks, shall be the sole responsibility of the person who made the said modifications. Modifications made without the manufacturer's authorisation shall lead to forfeiture of the warranty and invalidate the declaration of conformity issued in accordance with Machine Directive 2006/42/CE.



4.6 WARNINGS ON MACHINE MAINTENANCE





All the routine and extraordinary maintenance operations must be carried out with the machine off.

Disconnect the machine from the mains by pulling the plug from the power socket.

- Only specialised and specially trained staff should be allowed access to the machine for any maintenance operation.
- It is not permitted for any reason whatsoever to modify, tamper with or alter the machine structure and/or the devices fitted.



5 Machine installation and startup

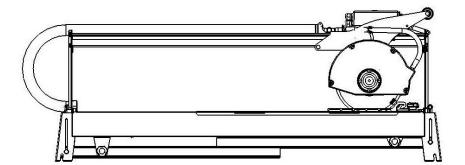
5.1 HANDLING THE MACHINE

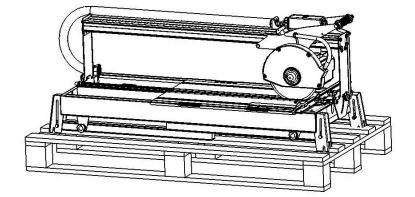


The machine can be handled manually or with a pallet transporter. Two persons are required for manual handling, gripping the machine standing in front of the short sides of the tank. Before any type of machine handling operation, lock the motor carriage using the locking hook provided to prevent the cutting head from sliding during transport. Be careful during lifting and transport to prevent the machine from falling or overturning.

If handling the machine with a pallet transporter, position in front of one of two long sides, insert the forks and make sure that they completely engage the containment tank until emerging on the opposite side. Also make sure that the symmetry axis of the forks is on the same vertical as the barycentre of the machine with the motor unit locked using the hook provided.

Some machine versions are equipped with two legs with castors. In this case, the machine can be moved by one person lifting it from the opposite side (feet side, without rollers) and pushing it in the desired direction.











5.2 PREPARING THE WORKING AREA

The working area must be prepared by the user creating the following conditions:



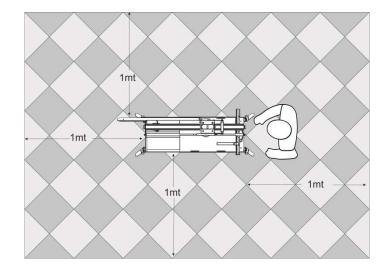
- Prepare the place of installation as required by the local regulations in force on health and safety in the workplace

- Prepare suitable natural and/or artificial lighting in order to guarantee good visibility at any point of the machine and without dangerous reflections and stroboscopic effects. It is advisable to provide for an average lighting of 500 Lux

- Prepare the electric power supply in compliance with the regulations in force in the place of installation as well as an efficient earthing system.

- Prepare a disconnecting switch with automatic protection against short-circuits, discharges to earth and leakage between the electric power line and the machine (differential magnetothermal switch)

The machine must be positioned in such a way that the minimum spaces indicated in the figure are respected. The floor must be perfectly level and not slippery. The same figure shows the position of the one operator required to operate the machine.





5.3 Assembling the machine



The machine must be installed by qualified staff who have carefully read and understood the information contained in this manual. In case of doubt, consult the manufacturer. The user is responsible for ensuring that the installation complies with the relative regulations in force.

5.3.1 Material provided

The following tools are provided with the machine, which are useful for machine adjustments and disc replacement:

- 1) 30mm socket wrench
- 2) 10mm-13mm monkey spanner
- 3) 8mm Allen wrench

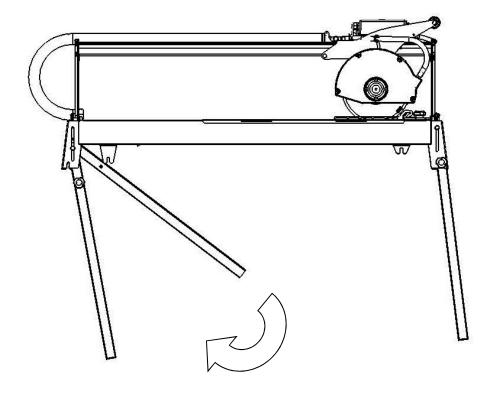
A tank plug is also provided

5.3.2 Fitting the legs

The machine is supported on four square tubular legs.

To open the legs loosen the knob and rotate legs until they stop against the frame of the machine. Then slide up legs within its housing and tighten the locking knob. Repeat for all the legs as shown in the figure.

To transport the machine it is advisable to proceed with the closure of the legs. For a correct closure of the legs before proceeding with the operator's side. Loosen the knobs, lift the machine, lower and rotate the legs at the operator's side until they are locked in a horizontal position relative to the body of the same. Repeat the same operation for the other legs.



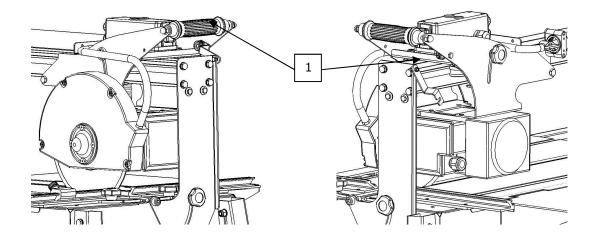


5.3.3 Releasing the carriage

After fitting the four legs and checking that the machine is stable, fit the flexible corrugated tube from the inside of the tank and let it drop to the outside so that it can move freely.



Then release the carriage held in place at the end of travel by means of a hook-shaped tab that ties the carriage to the rear upright of the track preventing it from moving during the machine movement operations. Then loosen the bolt (which may also be the butterfly type) positioned on the cutting head and slightly turn the hook around the bolt that fastens it to the track upright as shown in the detail in the figure. In so doing, the carriage will be free to move along the track.





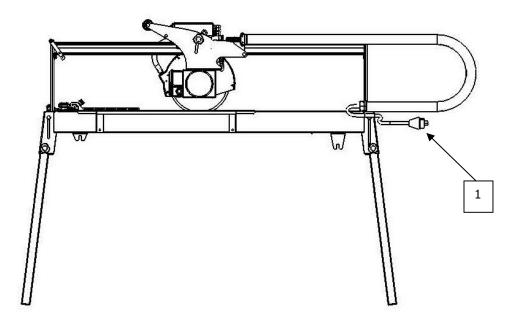
5.4 CONNECTING TO THE MAINS





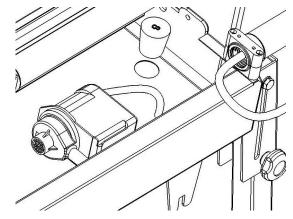
All the connections to the mains must be made with the power line disconnected and by qualified and expressly authorised staff in full compliance with the regulations in force

Check that the mains voltage and frequency correspond to those indicated on the machine identification plate or in the wiring diagram. Check that the mains power supply is equipped with an automatic protection switch to safeguard the operator from insulation leaks and/or direct contacts (differential magnetothermal switch). After checking all the above, connect the electrical plug of the cutter to the power socket.



5.5 FILLING THE COOLING WATER TANK





The machine is equipped with a tank to contain the water used for cooling the diamond disc. A pump positioned and completely immersed in the tank draws the water from the tank and pushes it through a flexible hose onto the cutting blade. The water will fall back into the tank by gravity. The tank is equipped with a draining hole and a tapered rubber plug provided with the machine: to empty out the tank before moving the machine, pull out the rubber plug.

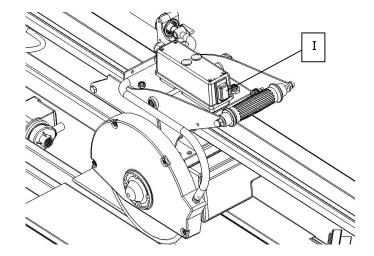
The tank must be filled before use. To this end, check that the plug is securely

inserted in the drain hole and then pour in water until the pump is completely submerged. Finally, check that the flexible water delivery hose is securely fitted, one end to the water outlet point of the pump body and the other end to the hosetail union on the front of the disc guard. During use, check that the water level in the tank is always such that the pump remains submerged and top up with water if necessary. The pump and hence water delivery is activated when the machine is turned on.

5.6 TURNING ON THE MACHINE

5.6.1 On / off switch





The on/off switch is positioned on the carriage of the cutting head facing the operator. To turn on the machine, press the switch on the side showing the number "1". To turn off the machine, press the switch on the side showing the number "0".

When there's no voltage the electrical switch automatically moves to position "0". When power is restored the motor will not start without notice, but only by returning the switch to position "1".



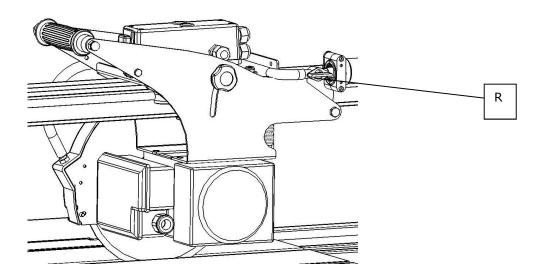
The switch has also the function of protection of the engine; in case of a stop in the rotation of the diamond blade when the machine is working, it will automatically switch in "0" position, preventing the engine to go into overload. The machine is also equipped with a thermal device, at 130 ° C stops the motor avoiding overheating; after this you will need to wait a few minutes for the engine cooling: in fact, the machine will not restart until it has reached the optimum temperature.



Access to operational commands are allowed only to authorized personnel.

5.6.2 Adjusting the water flow

The cooling water flow rate can be adjusted. A plastic tap is positioned on the upper part of the cutting head, which can be used to adjust the water flow rate.

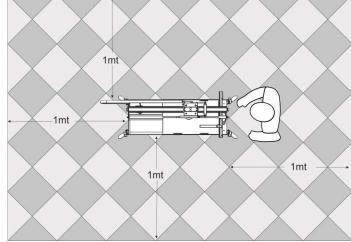




6 Machine use

6.1 BASICS FOR MACHINE USE





The machine must be positioned in a dedicated area that allows the operator to move freely during use. A suitable position is when there is a free space around the machine of at least one metre from each of the four sides of the machine, as shown in the figure. During use, the operator must stand in front of the shortest side of the machine so that he faces the gripping knob on the cutting head. Standing in this position, the cutting head

sliding track will be on the right-hand side of the machine. The machine must be connected to an electric power supply corresponding to the data shown on the machine identification plate.





It is obligatory to wear an anti-noise headset and protective goggles when using the machine.

After the installation of the machine you need to do some preliminary checks before use.

Before the first start you must have read this manual carefully.

If the Purchaser intends to proceed independently performing the operations described below, is required a prior reading of this manual to get a correct understanding of the purpose and effect of the required commands.

Efficiency of the safety check

Check at the beginning of each work shift that the safety devices are in place, wellestablished and efficient.

The safety features of the machine are described in Chapter 3.



6.2.1 Switching power supplies

Electric energy:

- Turn on the main power supply by pulling the lever of the main switch to position 1 (ON).

- Insert the machine plug into the electrical socket.

Check that all guards are in place and effective.

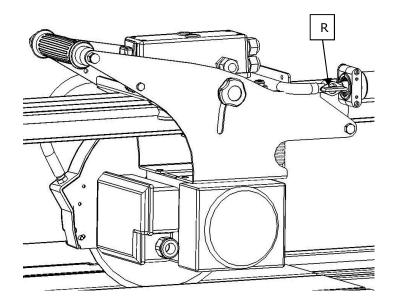
When there's no voltage the electrical switch automatically moves to position "0". When power is restored the motor will not start without notice, but only by returning the switch to position "1".

6.2.2 Water pump

Pour in water into the tank until the pump is completely submerged.

Check that the water in the tank is always clean for the proper functioning of the machine.

The cooling water flow rate can be adjusted. A plastic tap (R) is positioned on the upper part of the cutting head, which can be used to adjust the water flow rate.



6.3 MACHINE STOP

To stop the machine turn the switch in $0^{\prime\prime}$ position.



6.4 OPERATION

The Italy 100 cutter can be used to make linear cuts parallel to one of the sides of the tile, diagonal cuts, and 45° angle cuts for tiles to be laid in corners.



25



6.4.1 Linear cut

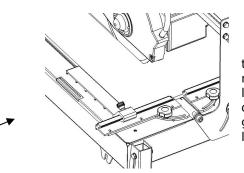
A linear cut is used to make cuts parallel to the sides of the tile. This type of cut is made in five distinct steps described and illustrated below.



Step 1) Push the sliding carriage to the side opposite the operator until it reaches the end of travel.

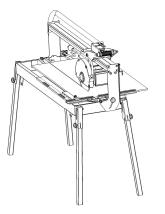


Step 2) Position the tile to be cut on the metal cutting surface.



Step 3) With the orientable guides in horizontal position (at the end of goniometric travel), loosen the knob C that locks the removable square in place (in this case, parallel to the cutting line) and move it into a suitable position to cut the tile to the desired size using the special rules positioned on the orientable guides. Then retighten the knob C that fastens the square to the left-hand orientable guide.

Step 4) Set the on/off switch to 1 to activate the disc. Then slowly pull the motor carriage in the direction of the tile. Modulate the carriage translation speed in such a way that the blade has time to cut the tile.



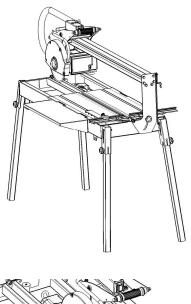
Step 5) Once the tile has been cut, turn off the motor by setting the on/off switch to 0. **Wait until the disc has come to a complete stop and then push the carriage back to the opposite side to the tile position.** Remove the cut tiles and any residual fragments on the table.



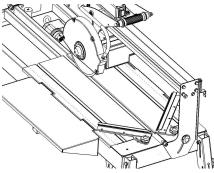


6.2.2 Diagonal cut

A diagonal cut is used to make a cut not parallel to any of the four sides of the tile. Described below is the sequence of operations to be carried out for this type of cut.



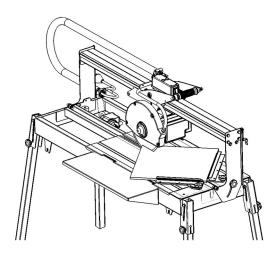
Step 1) Push the sliding carriage to the side opposite the operator until it reaches the end of travel.



Step 2) Loosen the knob C and remove the movable square (green arrow in the figure) **Step 3)** Loosen the knob A and position the left-hand adjustable square at the desired angle using the marker I as pointer and the graduated goniometric scale -on which the pointer slides- as gauge.

Step 4) Repeat step 2 for the right-hand orientable square in such a way that the right- and left-hand squares form a right angle.

P.S. If you want to make a diagonal cut not coinciding with the diagonal of the tile but parallel to it, refit and fasten the movable square (the one removed in step 2) along one of the two orientable squares in such a way as to create a right angle up against which to place two orthogonal sides of the tile. That way, the tile will undergo a translation which will allow making a diagonal cut along a line parallel to the diagonal, and you will have the certainty of two matching sides rather than only one side, guaranteeing greater cutting precision.



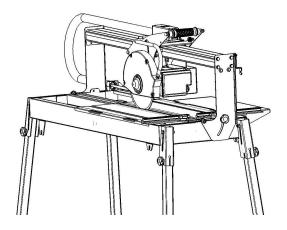
Step 5) Position the tile between the guides, then continue as described in the procedure for the linear cut.



6.4.3 Angle cut



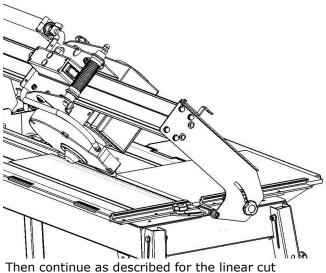
An angle cut allows bevelling one tile edge to 45° so that it can be tightly fitted against another tile likewise with an angle cut so as to make a corner with an invisible edge, which you could not achieve if the tiles were simply placed end to end without an angle cut.



Step 1) Loosen the front knob (A) and the rear knob (B) that lock the sliding bar support uprights in place.

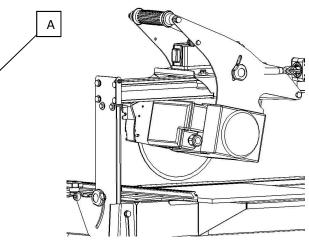
Step 2) Turn the motor unit around the axis running through the two just loosened knobs. Once you have reached a 45° rotation around the vertical, the movement will arrive at the end of travel. Check that the rotation is complete, i.e. that the sliding slot in the uprights touches the pin of the knobs previousl unscrewed at the point opposite to the one where it touched the same knob when the arm was in vertical position. To check this, continue applying force to make the arm rotate; if it does not move, it means that rotation is complete as it has reached the end of travel.

Step 3) Securely retighten the two knobs loosened in step 1.

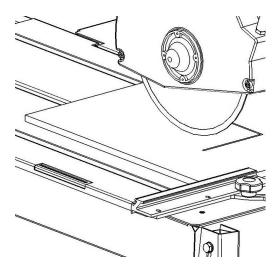




6.4.4 Rectangular cut

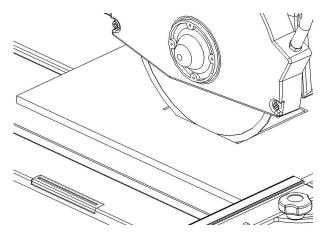


Step 1) Loosen the locking knob (A) on the motor support, it allows to pivot the disc.



Step 2) Place the tile against the square with the glaze face down;

Step 3) With the machine off put the diamond blade on the tile in the position where we want to get the rectangle;



Step 4) Start the motor and drive slowly down to cut through the tile at one of the sides of the rectangle;

Step 5) Repeat the cut for the remaining three sides of the rectangle.



7 Machine maintenance and spare parts

7.1 WARNINGS ON MACHINE MAINTENANCE



All the routine and extraordinary maintenance operations must be carried out with the machine off and disconnected from the mains by pulling the plug from the power socket.

- Only specialised and specially trained staff should be allowed access to the machine for any maintenance operation.
- Before any maintenance operation, wait at least 5 minutes after turning off the machine to allow the electric motor to cool down.

Correct maintenance will ensure that the cutter is always in perfect working order. Apart from routine maintenance, it is recommended to always keep the cutter and the surrounding area clean.

7.2 PERIODIC MAINTENANCE SCHEDULE

Listed below are the maintenance operations to be carried out divided by frequency of execution.

7.2.1 Daily maintenance

- Clean the work table: After every work shift, remove any tile fragments/scraps produced during cutting.
- Clean the tank and replace the water: Empty the tank by pulling out the plug at the bottom of the tank and clean out all the cutting waste and residues. Fill the tank with clean water until the pump is submerged.

7.2.2 Weekly maintenance

- Using a vacuum cleaner and a brush, remove any dirt, fragments or dust that have deposited in the compartments.
- Check the integrity of all the machine cables.
- Carefully lubricate the guide and all the sliding parts with the special lubricant provided with the machine.





7.2.3 Monthly maintenance

• Replacing the cutting disc:

The cutter may only be used with the following types of cutting disc:

- A) Continuous crown disc for ceramic and porcelain stoneware tiles
- B) Turbo disc for terracotta, ceramic and marble tiles





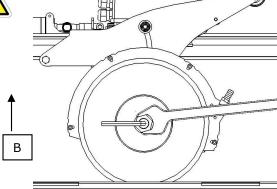
Mount only safety continuous crown or turbo discs on the cutter. It is strictly prohibited to use toothed discs normally used for cutting wood, iron or similar. S.I.R.I. accepts no liability for incorrect use of the discs.



Operate as follows to replace the cutting disc:

- a) Disconnect the machine from the mains.
- b) Remove the cover of the disc guard by undoing the 4 screws.
- c) Position the monkey spanner B on the disc fastening nut and the socket wrench A in the hole on the drive shaft as shown in the figure.
- d) Hold the socket wrench A firm with one hand and with the other hand turn the monkey spanner B positioned on the nut until is fully unscrewed.
- e) Remove the disc fastening flange and then remove the disc





f) Thoroughly clean the flange and the counter flange

g) Fit the new disc, paying particular attention to the rotation direction indicated by an arrow engraved on the disc.

h) Refit the disc fastening flange, screw the nut **back on and securely** tighten it again using the monkey spanner and the socket wrench, holding the socket wrench firm and turning the monkey spanner anticlockwise (the nut is left-hand)

i) Then refit the coverof the disc guard and tighten all 4 screws fastening the fixed guard.



Using cutting discs different from those indicated will lead to immediate forfeiture of the warranty and relieves SIRI of any responsibility for injury caused by improper use.

7.2.4 Twice-yearly maintenance

- Check the continuity of the machine power circuit in accordance with EN 60204-1. This check must also be carried out after operations involving the machine power circuit.
- Check the condition of the electrical equipment and assess whether it will reliably operate until the next check.
- Check that the switch is in perfect working order

7.3 SCHEDULED MAINTENANCE SUMMARY TABLE

Type of operation	Frequency			
	Daily	Weekly	Monthly	Half-yearly
Cutter cleaning	X			
Tank cleaning and water replacement	X			
Sliding guide lubrication		X		
Thorough cleaning with vacuum cleaner		X		
Electrical cable check		X		
Carriage pulley wear check			x	
Electrical equipment check				X
Power circuit continuity check				X
Electrical contacts check				X
On/off switch check				X

7.4 TROUBLESHOOTING



7.4.1 Insufficient cooling water flow

If the cooling pump does not deliver water to the diamond disc, carry out the following operations:

- Pull the plug from the power socket.
- Check that the adjustment tap on the cutting head is open.
- Check that the water in the tank completely covers the pump.
- Check that the tube leading from the pump to the disc guard is not obstructed.
- Check that there are no fragments obstructing the pump filter.
- Check that the fan is not jammed and clean off any dirt residues.
- If the fan is jammed, start it by hand when turning on the machine.

7.4.2 Difficult carriage sliding

The head carriage has two eccentric screws positioned on the right-hand side of its upper face as shown in the figure. If after lubricating the pulleys and the guide, there should be excessive carriage sliding friction or oscillation during its movement, adjust the eccentric screws to reach the right friction coefficient.

Turning these screws, you can slightly decrease or increase the distance between the two movable pulleys (on the right-hand side) and the two fixed ones (on the left-hand side) with the result that you can vary the force with which the pulley races tighten on the sides of the fixed guide and ultimately the carriage sliding friction.



32

N.B. The eccentric stroke is obtained with only one turn of the screws. Therefore, making more turns is pointless. Turn the cams by making several "to and fro" movements along the transverse line of the carriage to find the right adjustment. If you cannot find the right adjustment even if turning the cam to the maximum, replace the pulleys.

Poor cutting performance



In some cases, a disc may partially become less sharp even though it is not completely worn out; in these cases the disc must be sharpened.

To sharpen the cutting disc using the **SIRI disc sharpening stone**, turn on the cutter and bring the stone in contact with the diamond crown of the disc, then turn off the cutter and wait until the disc stops rotating.

Alternatively, you can make a few cuts on one of the materials listed below, which will sharpen the disc, however, not perfectly:

Serena stone Refractory stone Pumice stone Abrasive discs

During sharpening, cool the disc with water as for any other cut.

7.5 PLACING THE CUTTER OUT OF SERVICE

The cutter is not polluting or harmful to the environment, however, during installation, maintenance or decommissioning, waste is produced, which, if not disposed of properly, is harmful to the environment.

Always aim at protecting the environment.

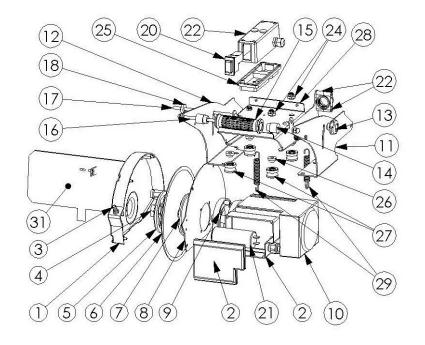
Packaging: this is household waste that can be disposed of at dumping grounds without creating a major risk to man and the environment (e.g. wrappers, cardboard boxes, plastic, etc.)

Deteriorated or obsolete machinery and equipment: this is special waste to be disposed of separately by type.



7.6 EXPLODED DRAWINGS AND LIST OF SPARE PARTS

Cutting head





Machine body

45 (46) (43)(42)44 (37 (30)(51)(23)(40)54 13 (38) 47 36 (13)35) (33) 0-(13)(33)(34) (32)(49 (19)(41)(48 (50) (39



N.	Pcs	Description	MaxiBella 120
1	1	Blade guard	107006
2	1	Capacitor box	1025SC
3	1	Water pipe connection	7014
4	1	Blade fixing nut	1025DS
5	1	Blade fixing flange	1025SP
6	1	blade Ø250	103
7	1	Blade holding flange	1025FL
8	1	Blade guard support	107002
9	1	Blade guard spacer	28-71
10	1	Motor V110/50	5-0124
10	1	Motor V120/60	5-0125
10	1	Motor V220/60	5-0123
10	1	Motor V230/50	5-0020
10	1	Motor V240/50	5-0242
11	1	Right motor support	61915
12	1	Left motor support	61920
13	6	knob D.50 M8	12-32
14	2	Distanziale manopola	107099
15	1	Manopola	573-01
16	1	Tie-rod for handle	12-46
17	1	Tie-rod fixer	12-40
18	1	Plastic anti-rotation plaque	12-24
19	1	knob D.20 M6x15	19-31
20	1	switch V110/50 - V120/60	505-13
20	1	switch V220/60 - V230/50 - V240/50	505-KJ
20	1		104112
21	1	Capacitor V110/50	104112
		Capacitor V120/60	
21	1	Capacitor V220/60 - V230/50 - V240-50	730
22	1	Switch box cover	471INT
23	1	Carriage stop	61950
24	2	Eccentric pin	12-45
25	1	Switch box base	471RET
26	4	Pulley spacer	12-29
27	4	Complete pulley	108128
28	1	Sliding motor carriage	61910
29	1	Traction spring	5-0101
30	1	Water tap	28-40
31	1	Rear rubber water seal	5-0108
32	1	Water tray cm 120	7500
33	4	Supports	7295
34	4	Plasic cap for foot	12-33
35	1	knob D. 50 M8x15	1058
36	1	Right side support	61925
37	1	Left side suuport	61930
38	1	Right square support	120185
39	1	Right square	120074
40	2	knob D.40 M6x15	979
41	1	square	120179
42	1	Right / Left cutting table	5-0084
43	1	Guaina porta cavi	12-85
44	4	Morsetti bloccaggio guaina	107140
45	1	Motor guide	51330
46	1	Water pump V110/50 - V120/60	734SPE
46	1	Water pump V220/60 - V230/50 - V240/50	734
47	1	Rubber plug	1041
48	1	Left square support	5-150
49	1	Side extension (OPTIONAL)	7292
50	1	Left square	120072
51	1	knob M6	833
54	2	Guide fixing support	107145



DECLARATION OF CONFORMITY

We, SIRI S.r.I. - Via R. Dalla Costa, 44/46 - 41122 MODENA (ITALY) Tel. 059/313191 - Fax 059/311362 - www.siri.mo.it - info@siri.mo.it

declare that the following machine:

Description: Electric water-cooled cutter for the building trade with diamond disc for cutting ceramic, marble, granite and porcelain stoneware tiles, complete with water pump for disc cooling.

MODEL Maxibella Top 120SERIAL NUMBER

is in conformity with Directives 2006/42/EC and 2004/108/EC and in accordance with the harmonised technical standards: UNI EN ISO 12100; CEI EN 60204-1 UNI EN 12418; CEI EN 61029-1

It is furthermore declared that the manufacturer SIRI S.r.l. has drawn up the technical file in accordance with Directive 2006/42/EC, Annex VII, letter A.

Modena,



Il legale rappresentante





ATTREZZATURE PER EDILIZIA EQUIPMENT FOR BUILDING INDUSTRY since 1975

S.I.R.I s.r.l. Via R.Dalla Costa, 44/46 41122 MODENA (ITALY) Tel. 059/313191 - Fax 059/311362 Email: info@siri.mo.it http//www.siri.mo.it

