



ATTREZZATURE PER EDILIZIA
EQUIPMENT FOR BUILDING INDUSTRY

SIRICUT

CUTTING MACHINE FOR LARGE TILES

Art. 6380
ORIGINAL INSTRUCTIONS



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1 Introduction

IMPORTANT

BEFORE DOING ANY WORK ON THE MACHINES, ALL OPERATORS AND TECHNICIANS ASSIGNED TO WORK ON THE MACHINES MUST READ THE INSTRUCTIONS LAID OUT IN THIS MANUAL (AND THOSE IN THE ATTACHMENTS) WITH GREAT ATTENTION AND FOLLOW THEM WHEN CARRYING OUT WORK. IF ANY DOUBT ARISES AS TO THE CORRECT INTERPRETATION OF THE INSTRUCTIONS, PLEASE CONTACT OUR ASSISTANCE SERVICE FOR THE NECESSARY CLARIFICATIONS.

1.1 GENERAL INFORMATION ON USING THE MACHINE

This instruction manual refers to:

TYPE OF MACHINE: CUTTING MACHINE FOR LARGE TILES

SERIES AND TYPE: **SIRICUT 3**

YEAR OF CONSTRUCTION: **20****

This operating manual contains the most important information regarding storage, handling, installing, using, looking after and servicing the machine. This manual is an integral part of the machine and must be kept carefully until it is dismantled so that future updates can be referred to.

If the copy of the manual you have is damaged to the extent it is illegible, you can ask:
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>

A MEMBER OF EXPO-MODENA CONSORTIUM

for another copy specifying the type of machine and serial number on the machine's data plate.

The official language chosen by the manufacturer is: Italian

The manufacturer does not accept any responsibility for translations in other languages that do not conform to the original meaning.

This manual reflects the state of the machine at the time of its supply and cannot be deemed inadequate only because of subsequent updates based on new know how and expertise. **SIRI srl** reserves the right to update the drawing up of manuals without any obligation to update previous manuals and without any obligation to inform users of machinery supplied at earlier dates. Advising of possible updates to the manual and/or machines is however considered a form of courtesy.

The customer assistance service will, upon request, provide information about updates made to machines by **SIRI srl**.

SIRI srl considers itself relieved of any and all responsibilities in the case of an incorrect use of the machine, for example:

- a) improper use of the machine or if used by untrained personnel;
- b) use contrary to specific standards;
- c) incorrect installation;
- d) serious lack of maintenance;
- e) unauthorised interventions or alterations;
- f) use of non-original spare parts or not specific for the model;
- g) total or partial non-observance of the instructions;
- h) exceptional events.

The purpose of this manual is to provide the user with a general knowledge of the machine and the instructions for its maintenance deemed necessary for it to work properly.

Read this manual carefully before starting to install, service and repair the machine; it contains all the information needed to ensure correct use of the machine and to avoid accidents.

The frequencies for checking and servicing the machine specified in this manual are the minimum necessary to guarantee a long life to it and that it works efficiently and safely; it must be constantly monitored and any malfunctions that may occur must be seen to immediately.



CAUTION

If the machine and/or its safety devices are altered or tampered with in any way without the manufacturer's authorisation means that the manufacturer is no longer liable in terms of the warranty and safety.

1.2 GENERAL PRECAUTIONS REGARDING USE OF THE MACHINE

These indications are included in the normal conduct workers must have when using the machinery and hence, in the design and construction of the machinery the manufacturer has considered them as being known to the operator.

It is the user's job to inform and train the operators working on the machine, making them fully aware of all such indications.

- Do not let unauthorised personnel work on the machine.
- Before using the machine make certain that any condition that can be dangerous for safety has been properly dealt with and eliminated.
- Make sure that all guards and other protections are in place and that all the safety devices are also in place and working efficiently.
- Ensure that there are no foreign objects in the area where the operator is working.
- Whenever there is a possibility of being hit by flying or falling solid parts or the like, wear safety goggles with side pieces, hardhats or gloves, if necessary.
- Individual protective gear must be worn whenever and wherever prescribed.

1.3 PICTOGRAMS REGARDING THE OPERATOR'S JOB

The meanings of the symbols recurring in this manual are given below. When such symbols are at the beginning of a paragraph it indicates the type of person it is intended for but nonetheless everyone using the machinery and those who intend doing anything at all on it must be FULLY AWARE of all the contents of this manual.



Labourer: worker with no specific skills, capable of carrying out only simple tasks following the directions of skilled technicians.



Hoisters and handlers: workers skilled at using material and machinery hoisting and handling means (scrupulously following the manufacturer's instructions), in compliance with the laws existing in the country where the machine is used.



Mechanical maintenance engineer: qualified mechanic who can use the machine under normal conditions, make it work with hold-to-run control and with the guards/protections disabled, work on mechanical parts, make adjustments and do the necessary maintenance and repair work. Typically, this person is not qualified to work on live electrical systems.

1.4 PICTOGRAMS REGARDING SAFETY

The safety pictograms used on the machine and/or in this manual are given below.



Sliver hazard: This informs the people involved that the operation described, if not carried out in compliance with the safety regulations, does mean there is a risk of being hit by slivers.



Mandatory to wear ear protectors: When this symbol is shown by the side of the description it means that the operator must wear ear protectors as there is a sure risk of acoustic pollution.



Mandatory to wear protective clothing/gear: When these symbols are shown by the side of the description it means that the operator must wear protective goggles and accident prevention gloves.

2 Presentation of the machine

2.1 INTENDED USE



SIRICUT has been designed and made to cut large porcelain stone tiles. Referring to the figure above, the machine is made up of the following groups:



Fig. 2.1 Machine components.

- 1)** Siriguide: an aluminium guide is necessary for using Siricut 3 system (see table 2.2), but it does not come with product code 6380.
 - 2)** Siricut 3: sliding support (carriage) with a Widia wheel;
 - 3)** separating grippers (manual);
- The machine is intended for industrial use in normal environmental conditions as defined in chapter 4.
 - Use of the machine must be entrusted to a person to whom the machine's features have been explained and who knows what the contents of this manual are.
 - The machine works manually.

2.2 TECHNICAL DATA

Technical Data	SIRICUT
Linear cut	depending on the guide used (see Table 2.2)
Type of material	porcelain stone
Minimum width	300mm
Maximum length	depending on the guide used
Tile thickness	from 3mm to 10mm MAX
Weight	4 Kg
Overall dimensions	320x300x350 mm

		Siri FLEX CUT	SiriCUT CUT	Guide lenght		nr. Suction cups	
SINGLE GUIDES		mt	mt	mt			
		Inches	Inches	Inches			
17151F		1,21	1,36	48"	54"	59"	2
17201F		1,51	1,66	59"	65"	71"	3
MODULAR GUIDES							
17270GC		2,7	2,85	106"	112"	118"	5
16301GC		3,3	3,45	130"	136"	142"	6

Table 2.2

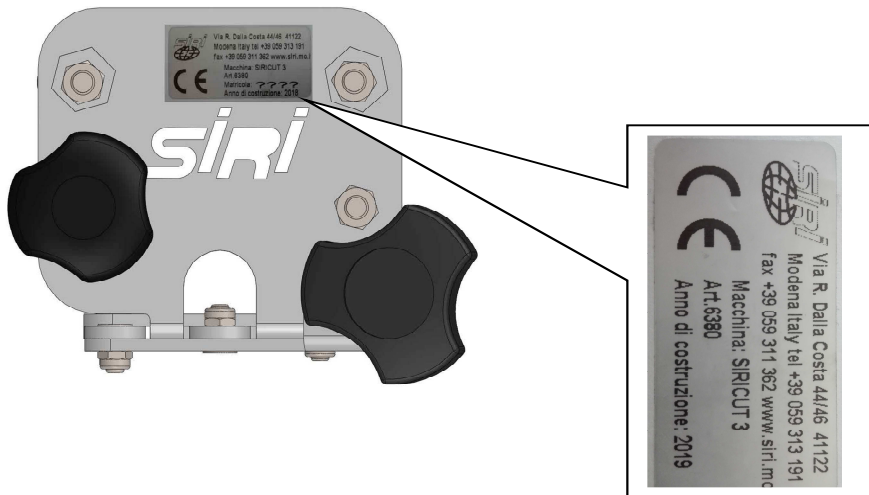
2.3 IDENTIFICATION PLATES



The machine is built complying with the requirements of the Machine Directive 2006/42 EC.

By giving the exact **Model**, **Serial number** and **year of construction** will make it easier for our Customer Assistance Service to give quicker and accurate answers. These data can be found on the plate installed on your machine.

It is forbidden to alter or remove these plates.



The following data are given on these plates:

- Manufacturer's data
- Type of machine, series and model, serial number
- **CE** mark and year the machine was built



CAUTION

Only Siri-guides must be mounted on the machine.

It is absolutely forbidden to use the machine for uses other than those described in this manual. S.I.R.I. SRL will not be held responsible under any circumstances for incorrect use of machine.

Use of the machine other than those specified will cause the warranty to be invalidated immediately; S.I.R.I. is relieved from any liabilities for accidents caused by improper use.

3 Residual risks



The possible residual risk of material falling is intrinsic when the tiles are moving so **it is mandatory to wear accident prevention footwear.**

It is possible to be hurt by slivers of the worked tiles so **it is mandatory to wear proper and specific gloves.**



As machining dust can be inhaled, **it is mandatory to wear a dustproof mask.**

The operator must have his/her whole body covered (if necessary wear work overalls) so as to avoid abrasions caused by residual material being ejected from the machine while working.

There is a risk of machining slivers being projected towards the operator. It is therefore **mandatory to wear specific eye protecting goggles when working with the machine.**



4 General



As regards to the characteristics of the materials being handled, before doing any work on the machine it is necessary to read the operating manual from cover to cover, paying particular attention to this chapter. The instructions given in this chapter must be made known to all those who will be working on the machine and displayed accessibly and visibly in the workshop.

The machine was designed and built in compliance with the **Machine Directive 2006/42 EC** taking into account the normal use and the reasonably foreseeable incorrect use.

4.1 GENERAL RECOMMENDATIONS

- Operators, maintenance engineers and everyone who will be working and/or transiting near the machine, must not wear clothes with wide, loose sleeves, laces or belts that could be a source of danger. Long hair must be gathered in a cap so it cannot be a source of danger.
- The machine must be kept and used following the instructions given here and as suggested each time.
- The people who are going to work on the machine must be suitably informed (training and refresher courses).

4.2 RECOMMENDATIONS FOR USE



The machine must be used for the purpose intended by the manufacturer. **In particular it is forbidden to use the machine, even partially, in any of the following conditions:**

- if it has not been installed correctly;
- in an explosive atmosphere or in places where the danger of fire exists;
- in conditions of danger or malfunctioning of the machine;
- improper use of the machine or if used by untrained personnel;
- use contrary to specific standards;
- after unauthorised interventions or alterations;
- total or partial non-observance of the instructions;
- with materials and tools different from those foreseen by the manufacturer.

The use of the machine in any of the following conditions is not intended:

- in environments where the average temperature in 24h is higher than +35°C;
- where relative humidity is higher than 95%;
- at altitudes higher than 2000 m above sea level.

If, when using the machine, potential hazardous situations for the operator arise, the employer must inform SIRI srl immediately in writing.

IMPORTANT

For exceptions to the above, a specific written declaration from S.I.R.I. srl is necessary. All modifications that are not authorised by the manufacturer, which alter the intended functions, modifying the risks and/or generating additional ones, will be under the full responsibility of whoever makes such alterations and changes. Such modifications, if carried out without the manufacturer's authorisation, will also invalidate all forms of warranty issued and invalidate the declaration of conformity as established by the Machine Directive 2006/42/EC.

5 Installation and start-up of the machine

5.1 HANDLING THE MACHINE



The machine can be handled manually.

One operator is enough to lift and transport the machine provided care is taken not to drop or tilt it.

If transporting by truck, the various packs will be secured temporarily to a pallet.



Packaging:

O – standard cardboard;

O – **Siri bag** (OPTIONAL) for guides;

O – Siri case;

NB Tick the O based on the products supplied

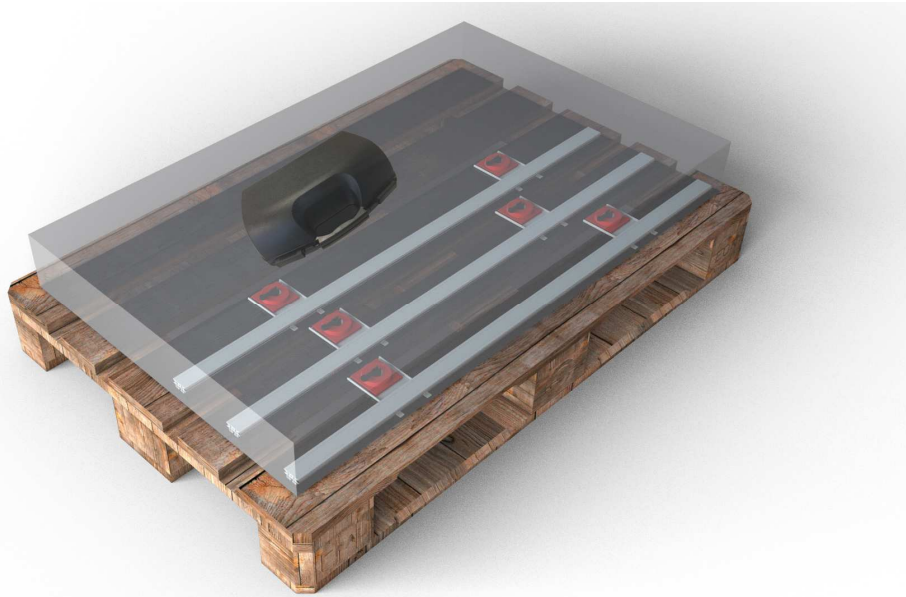


Fig.5.1.1 Packaging

5.2 STORAGE

If the machine is to be stored when not in use, it must be kept in a sheltered place away from the weather and where there are no particularly aggressive chemicals.

The machine must be kept in an environment where the ideal temperature ranges between +2 to +45°C and relative humidity max. 70% (not condensed).

Check that the surface on which the machine stands (it must not be in direct contact with the ground) can bear its weight; more important still do not put any boxes, crates or heavy equipment on top of the machine.

Do not put the machine near any flammable materials.

Use plastic sheeting to cover the components as protection against dust and damp.

5.3 PREPARING THE WORK AREA



It is the user's responsibility to prepare the working area. In this regard, the user must ensure that the following conditions are met in the working area:

- the room where the machine is to be installed must meet the local existing standards pertaining to health and safety in the work place.
- natural and/or artificial lighting must guarantee good visibility in all points of the machine with absolutely no dangerous reflections and stroboscopic effects. An average illumination of 300-500 Lux/m is recommended.

The machine must be positioned to comply with the minimum clearances specified in figure 6.1 "necessary clearance".

The floor must be perfectly even, level and not slippery.

6 Using the Machine

6.1 NECESSARY CLEARANCE



The machine must be installed in an area which allows the operator's freedom of movement when in use. To this end, a position with a clearance on all 4 sides of the machine of at least 1 metre is considered suitable. When using the machine, the operator must move along the guide (see fig.6.1), holding the cutter knob in one hand and placing the other on top of the carriage (see fig.6.3).

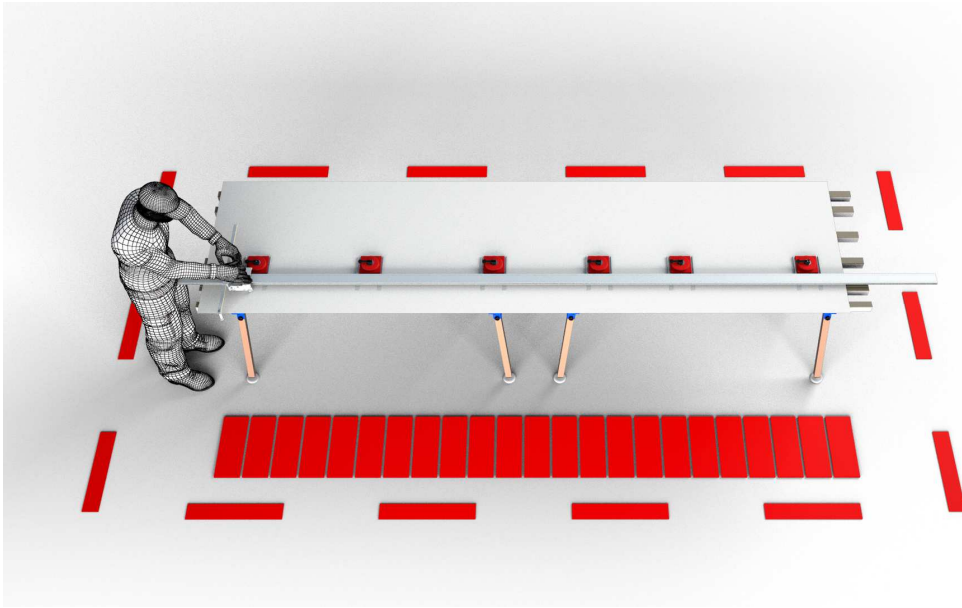


Fig. 6.1 Operator's working area

6.2 FIRST START-UP

Once the machine has been installed it is necessary to do a few preliminary checks before actually using it.

Prior to the first start-up procedure, and if the Customer intends doing it himself, it is first necessary to read this manual.

6.3 OPERATION



By using the machine you can make a linear cut parallel to one of the tile sides.

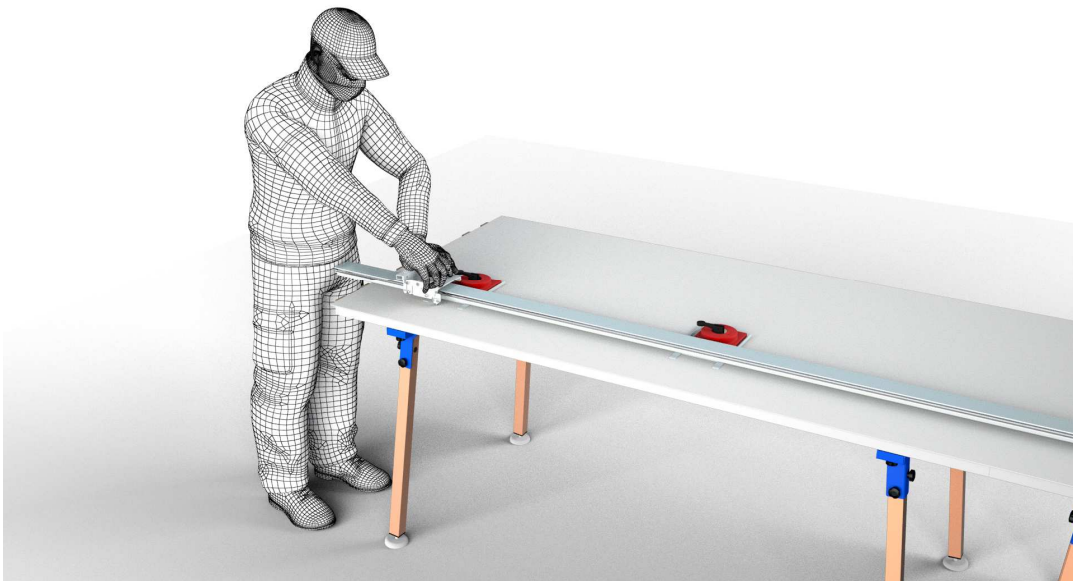


Fig. 6.3 Machine operation



6.3.1 Linear cut

Proceed as follows:

1. The tile must be positioned stably on the workbench.
2. Assemble the aluminium Siri-Guide with suction pads, on the tile (from 1 to 2 pieces to assemble based on tile length).
3. Clean the surface of the tile to cut thoroughly as well as the rubber of the suction pads before starting to cut.
4. Install Siricut 3 on the guide; make certain that the guide juts out 14 cm on the left side, orthogonal to the one to cut, at the end part of the tile (see fig.6.3.1.1).
5. Measure the piece to cut with a measuring tape or stick (see fig.6.3.1.2):
6. Now measure from the edge of the tile to the middle of the cutting wheel or beside the guide adding 30 mm to the necessary distance. Then fix the first suction cup.

7. Move Siricut 3 to the end of the guide and repeat step 5 described above;
8. Slide Siricut 3 back and forth, along the whole length of the guide, checking that the cutting wheel is at the distance wanted from the edge;
9. Fix all the suction pads to the tile and remove the measuring stick if used for measuring.
10. Cut quickly and constantly, pressing on the knob with one hand and on the carriage with the other, as shown in fig.6.3.
 - Do not press too hard if the tile is the smooth surface type but, if the tile has a rough surface then you will need to press a little harder on the knob.
 - To ensure a correct engraving, move the carriage to about 2 cm from the beginning of the engraving, press and engrave towards edge A; it is now possible to start engraving again, moving Siricut until it is flush with pre-cut edge A and finishing the cut by sliding Siricut right to the end of the opposite side (edge B in fig.6.3.1).

11. Once the cut is done, take Siricut 3 out of the guide.
12. Take hold of the guide to move the engraved part of the tile away from the edge of the workbench.
13. With the help of a second operator if the tiles are long (one operator splits the tile at one end while the other operator supports the cut piece at the opposite end).
14. Now separate the engraved piece with the grippers:
 - Put the splitting part of the grippers on the tile surface. Tighten the knob until it touches the bottom part of the tile (see fig.6.3.1.3 a)
 - the cutting line must go through the middle of the grippers (see fig.6.3.1.3 b)
 - Press on the gripper arms to split the tile, first at the end of one side and then at the other end.
15. Remove the pieces of the cut tile.
16. Release the suction pads and remove the guide.
17. If this is the first time of use, check that the pulleys are adhering well to the guide otherwise, adjust the eccentric screw with a 19mm spanner and fix it so the carriage can slide smoothly and easily but with no sideways swing (see fig. 6.4.1).

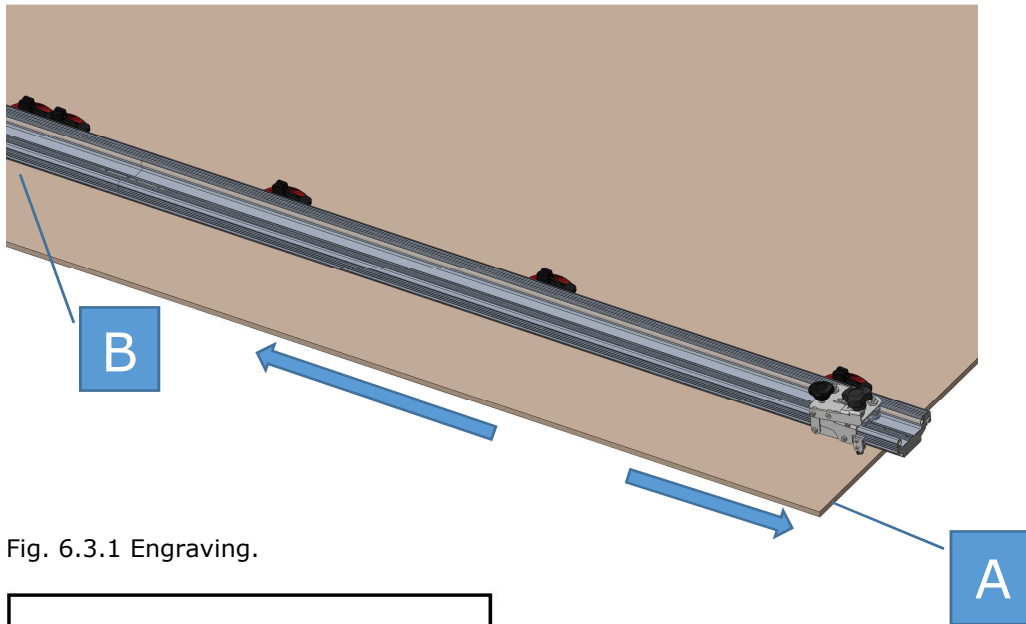


Fig. 6.3.1 Engraving.

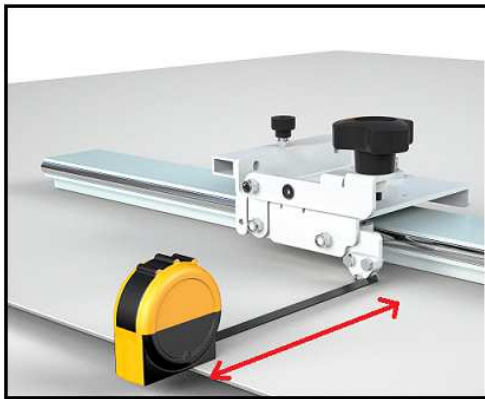


Fig.6.3.1.2 measuring with a tape measure



Fig.6.3.1.3 grippers

6.4 Adjustment

If this is the first time of use, check that the pulleys are adhering well to the guide otherwise, adjust the eccentric screw with a 19mm spanner and fix it so the carriage can slide smoothly and easily but with no sideways swing (see fig. 6.4.1).

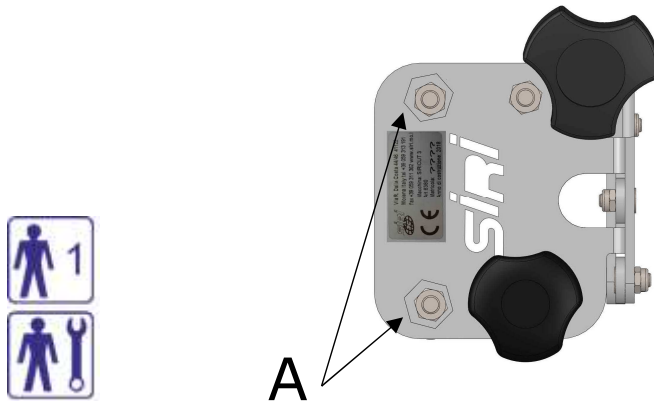


Fig. 6.4.1 Adjusting screw between guide and Siricut.

6.5 Assemblaggio guide:

- Remove piece A (protection)
- Join the 2 guides
- fasten B screws to fix the guides together



Fig.6.4.3

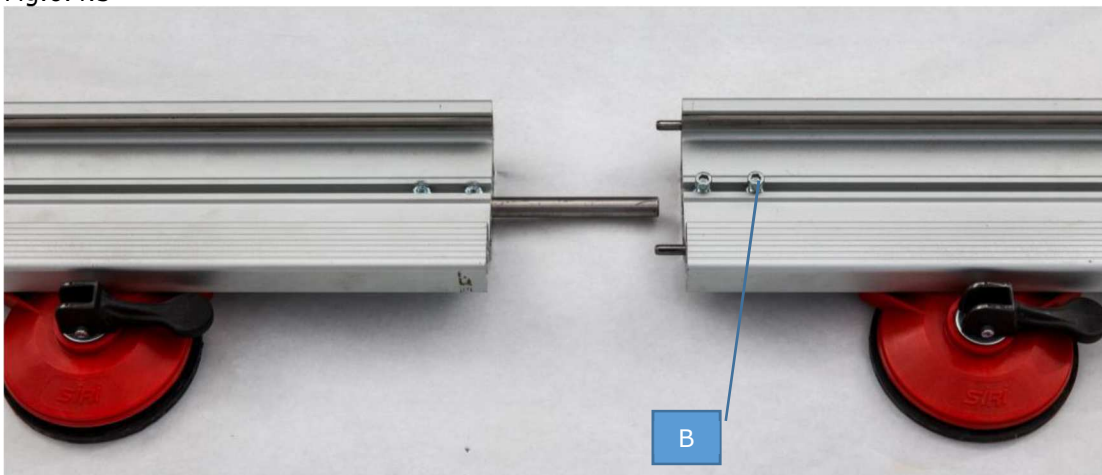


Fig. 6.4.2 Guide mounting

7 Maintenance and Cleaning

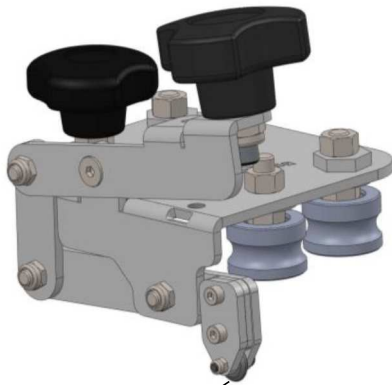
7.1 RECOMMENDATIONS FOR MACHINE MAINTENANCE



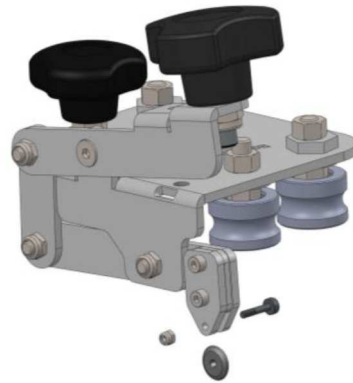
Only specialized and specifically trained personnel should be allowed to access the machine for maintenance work.

Correct maintenance ensures that the machine is always perfectly efficient. Besides routine maintenance, it is advisable to keep the machine and the surrounding area where it is used clean at all times.

- 1 Keep the cutting wheel lubricated with spray oil.
- 2 Replace the wheel and pin if the wheel is chipped or no longer sharp.
- 3 Keep the guide clean, where the pulleys of the carriage slide , using a cloth soaked in spray oil. Do not use grease or oils with high viscosity because dust or tile chips may stick to it.



LUBRICATE



SPARE CUTTING WHEEL WITH SCREW
ART. 148BLI

7.2.1 Routine cleaning



- To clean the workbench at the end of each work shift:
 - wear specific gloves, manually remove all tile fragments that could have been left after cutting;
 - use a lubricant (e.g. Svitol) only for the guide;
(Note: do not use any type of oil or grease to avoid problems when working).
- 18. When working, between one tile cut and the next:
 - remove any dust that may have accumulated with compressed air;
(Note: this will ensure greater precision when cutting the tile!).

8 DECOMMISSIONING, SCRAPPING AND DISPOSAL

The machine is neither a pollutant nor is it dangerous for the environment but during installation, maintenance or decommissioning waste is produced which, if not disposed of correctly, could be dangerous for the environment.

It is essential to ensure maximum protection of the environment.

Packaging materials can be disposed of with urban waste without creating any danger for man or for the environment (e.g. straps, cardboard, plastic....).

Degraded or obsolete machinery or equipment is special waste to be disposed of according to the type

WEEE

9 ATTACHMENTS



ATTREZZATURE PER EDILIZIA
EQUIPMENT FOR BUILDING INDUSTRY

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