



SC 2 - User manual



ELITE SC 2 User manual

Version March 2023



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1. FIRST STEPS

Congratulations on your purchase of the ELITE model SC 2 bandsaw and circular saws sharpening machine.

Read this guide before you start.

The SC 2 is a bandsaws and circular saw blade automatic sharpening machine with low maintenance. For straight tooth and spaced straight tooth sharpening and setting in band saws from 10 up to 70 mm wide (0,4" to 2-3/4")

It also allows to sharpen steel or CV circular saw blades from 110 up to 600 mm (4-1/3" to 25,5")

This manual introduces you to the main functions of the grinder in order to avoid risks to your health or that may cause a breakdown or premature wear of the machine.

In case of any doubt, please contact us or one of our authorized distributors.

Informative Note: *The use described in the manual of this circular saw blade sharpening machine described therein may present some variations in use as our machinery is subject to possible construction modifications, depending on the incorporation of technological advances in our sharpening equipment.*



2.SAFETY

2.1.Safety regulations

Carefully observe and apply the following safety rules, not respecting these rules may cause personal injury or damage to the machine itself.

The installation and maintenance of the machine described in this manual must be carried out only by operators who are familiar with its operation and have sufficient technical knowledge.

The ELITE sharpening machines of the SC 2 model range have been designed for the sharpening of band and circular saw excluding any other type of operation.



DANGER HIGH VOLTAGE



DANGER OF ACCIDENT



DANGER DUE TO SPARK PROJECTION



WEAR PROTECTIVE SHOES



DANGER FROM SHARP TOOLS



USE HEARING PROTECTORS

These warnings do not include all possible risks that improper use of the machine could cause. For this reason, the operator must proceed with prudence and observing the rules.



2.2. Use and storage of the instruction manual

This instruction manual must be read and understood by all personnel who come into contact with the machine.

This manual is for:

- Indicate the correct use of the machine according to the type of work to be carried out.
- Provide the necessary instructions for the transport, adjustment and maintenance of the machine.
- Facilitate the ordering of spare parts and information of risks.

Limits of use of the manual:

The machine is intended for professional use and therefore the experience of the operator is required and of vital importance.

Importance and conservation of the manual:

This manual must be considered part of the machine and must therefore be attached to it until the end of its use.

Additional information and clarifications:

The user, owner or maintenance person can contact the manufacturer to request any additional information on the use of the machine and possible modalities for maintenance and repair intervention.

Expiration of responsibility:

The manufacturer is considered exempt from any liability in the event of:

- Improper use of the machine
- Use of the machine by untrained persons
- Serious failures in scheduled maintenance
- Unauthorized interventions or modifications
- Use of non-original spare parts.



2.3.Declaration of conformity

The company hereby **Elite Sharpening Machines, SLU**
C/Joan Oró, 27
ES-08635 Sant Esteve Sesrovire

declares that the product indicated below, based on its conception and construction, as well as the version put on the market by our company, complies with the mandatory basic health and safety requirements of the CE directive.

This declaration loses its validity in the event of unauthorized modifications to the product.

Product name: ***ELITE model SC 2***

Product type: ***Automatic band and circular saws sharpening machine***

Serial No.: _____

EC Directive Competences:

- **EC Machinery Directive (2006/42/EC)**
- **European directive on electromagnetic compatibility (2014/30/EU)**
- **The protection purposes of the CE low voltage directive (2006/95/CE) were fulfilled according to annex I, nr. 1.5.1 of the machinery directive 2006/42/EC**

The technical documentation was compiled by Legal representative of the documentation:

Sergi Valls Gramunt
Joan Oró, 27
ES-08635 Sant Esteve Sesrovires

Date / manufacturer - Signature: _____

Signatory data: **Sergi Valls Gramunt, CEO**



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3. TECHNICAL DATA

In the following information table, find the list of technical specifications of the sharpening machine described in this manual.

TECHNICAL DATA	ELITE SC 2
Band saw width	From 10 to 70 mm. (0.39" to 2.75")
Band saw thickness	From 0.5 to 1.5 mm. (0.019" to 0.06")
Tooth pitch	From 5 to 30 mm. (0.19" to 1.18")
Tooth profile	Straight and spaced straight
Working speed	54 teeth/minute. Optionally available with electronic speed regulator from 10 to 60 teeth/minute.
Grinding wheel RPM	Aprox. 3000 RPM
Grinding wheel motor	0.55 kW
Saw blade diameter	From 110 to 600 mm. (4.3" to 23.6")

AVAILABLE VERSIONS		
Model	Packing Size (mm)	Weight (kg)
SC 2	980 x 810 x 1710	122
SC 2 + TR 2	980 x 810 x 1710	150
SC 2 + TR 3	980 x 810 x 1710	180



4. TRANSPORT

The SC 2 is delivered packed in a wooden crate.

During all transport and transfer, the machine must be kept in its original vertical position, any variation in this position may lead to the loss of the guarantee.



Machine model	Dimensions (mm)	Weight (kg)
SC 2	980 x 810 x 1710	122

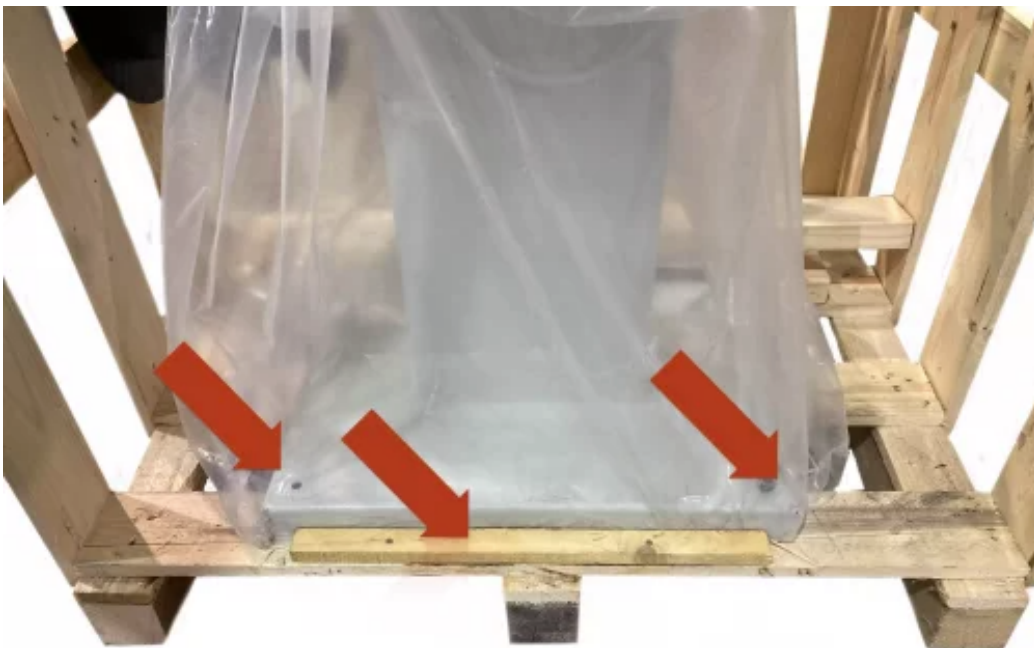


4.1. Instructions for unpacking and setting up

Take special care when lifting the load: The load may not be centered!

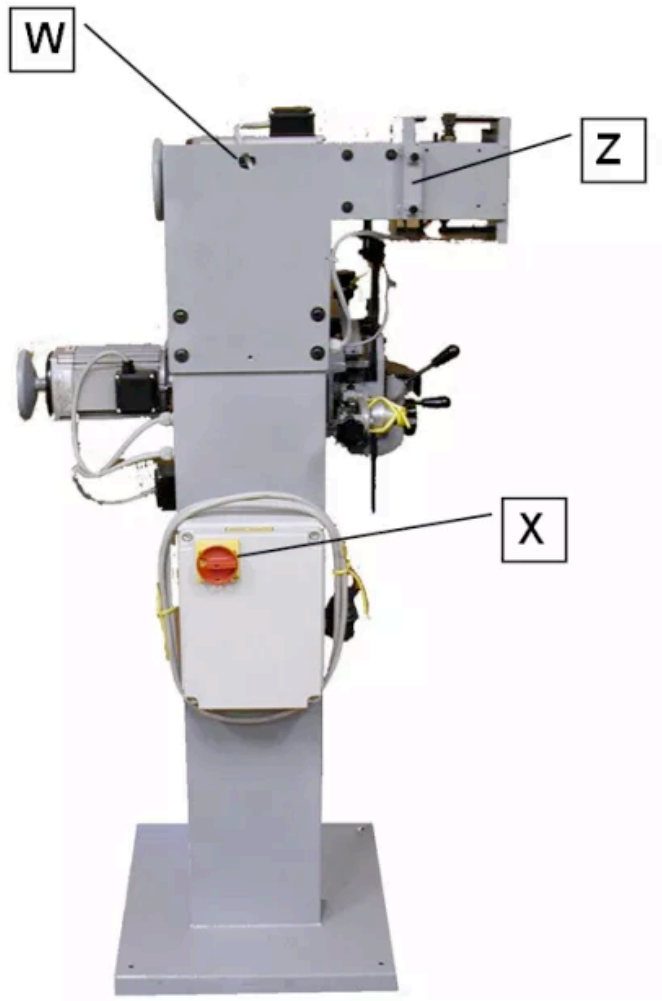
To lift or move the load, use a forklift with blades long enough to support the machine, taking into account the width and depth of the machine when calculating the weights to be lifted.

To unpack, first remove the front panel. Remove the wooden blocking pieces or the fixing screws on the feet of the machine.





Backside description

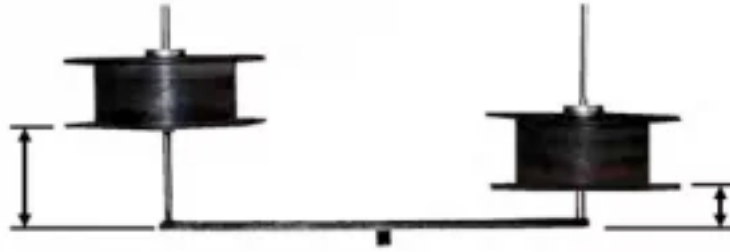


- W Ring for transporting the machine without packaging
- Z Height-adjustable rod holder for rolls
- X Main switch (yellow - red)

At the rear there is a ring (W) for transporting the machine. Once the machine has been transferred to its final work destination, **you must fix the machine to the ground using the 4 screws placed on the base support of the machine.** If this is not done, there is a high risk of the machine tipping over and causing serious injury to personnel and the machine itself.

Once the machine is in its final location, you can also remove the protective film and other protections from the components, which secure and prevent the machine from moving.

Insert the rod with the rolls in its vertical place (Z) on the back side of the machine. Move the rolls so that they can keep in place the ring of the blade during setting and sharpening operations. Block the lower end of the support using the bolts that you can find in the housing. Each roll is used for a specific operation.



The roll for SETTING must be positioned 3-4 cm. from the horizontal rod. The roll for SHARPENING must be positioned 15-20 cm from the horizontal rod.





5. INSTALLATION

5.1. Machine placement

Before any work make sure that the machine is well aligned and does not oscillate at any of its ends, in which case it must be wedged to avoid movements. For its correct level it is necessary to use a leveling tool. This check must be carried out both longitudinally and transversally.



Poorly levelling the machine can cause unwanted vibrations and premature wear of the linear guides.



WARNING: The machine must not be used under any circumstances by unqualified or unauthorized personnel.



5.2. Electrical connection



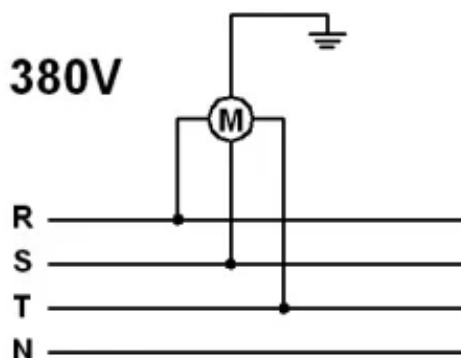
DANGER HIGH VOLTAGE!

The electrical connection of the machine must be carried out by qualified technical personnel only at the voltage indicated in the machine order / machine identification plate.

For any doubt about the voltage, consult the manufacturer before the connection.

Any claim for an incorrect connection will be out of warranty.

The machine is equipped with plug CE and must be connected with a three-phase network** (380V): this is written on the label on the back side of the machine.



Only the earth cable can be connected with the yellow-green cable in the middle (earthing).

Note:

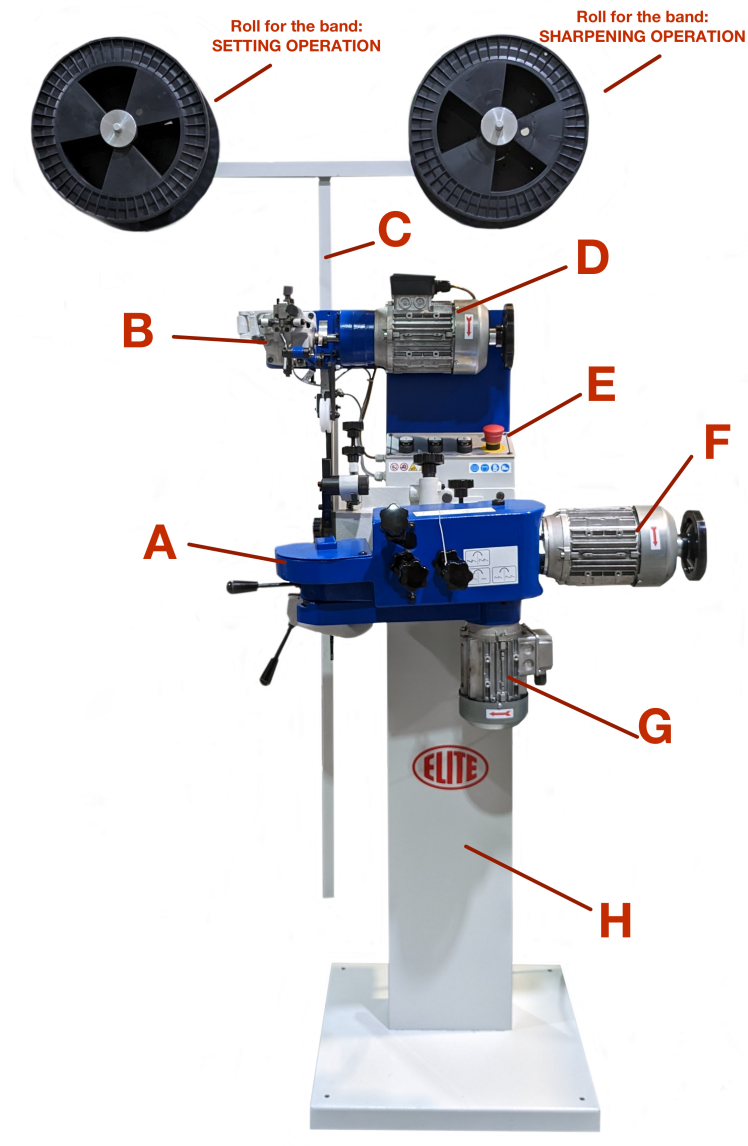
- The machine can work also with 220V three-phase. In this case you must modify the configuration of the clamp set. This change can be demanded at the moment of the order.
- On request, the machine can be prearranged for being connected with a single-phase network (220V).

ELITE does not assume any responsibility in case of a wrong electric connection that may cause not only a bad performance of the machine, but also damages to people, animals, things.

Remember: Before connecting the machine, remove any guards the machine may have to protect the components during transport.



5.3. Main components of the machine



- A. Grinder unit
- B. Setter unit (optional)
- C. Rod of rolls for bandsaw
- D. Motor and reduction unit of setting machine (optional)
- E. Control panel
- F. Driving motor of grinder unit
- G. Motor for grinding wheel rotation
- H. Base



5.4. Control panel



Buttons description:

- o: Button START / STOP grinding wheel rotation
- p: Power indication lamp
- q: Emergency STOP button
- r: Button START/ STOP feed of grinder unit
- s: Button START / STOP setter motor (optional)



For sections 6 to 8 of this manual, as well as for more up-to-date information and useful videos on the operation of the machine, please refer to our website

www.elite.es



www.elite.es/en/support/manuals/sc-2



9.ACCESSORIES AND CONSUMABLES

9.1.Grinding wheels

The machine is equipped with a grinder type:

abrasiTEC ref. 5211-A - Grinding wheel \varnothing 150X6x \varnothing 20 mm.



Corundum grinding wheel

To substitute the wheel, follow this procedure:

- Turn the machine off
- Push the emergency button (or disconnect the machine)
- Remove the grinder cover, using a key 20 loosen the bolt which is at the centre of the grinder clockwise, then substitute it and tighten the bolt Counter-Clockwise
- Disconnect the emergency button (or connect the machine)



9.2 Equipment

Additional equipment of the machine

9.2.1 Variable speed drive

Machine could be equipped with a variable speed to grind slowly for a better surface quality and easy setting up. The variable speed drive doesn't need any maintenance.

9.2.2 Setting device

The machine can be equipped with the setting device model **ELITE TR 2** or **ELITE TR 3**



www.elite.es/en/support/manuals/sc-2

For more updated information and helpful videos on how to operate the machine, check our website www.elite.es