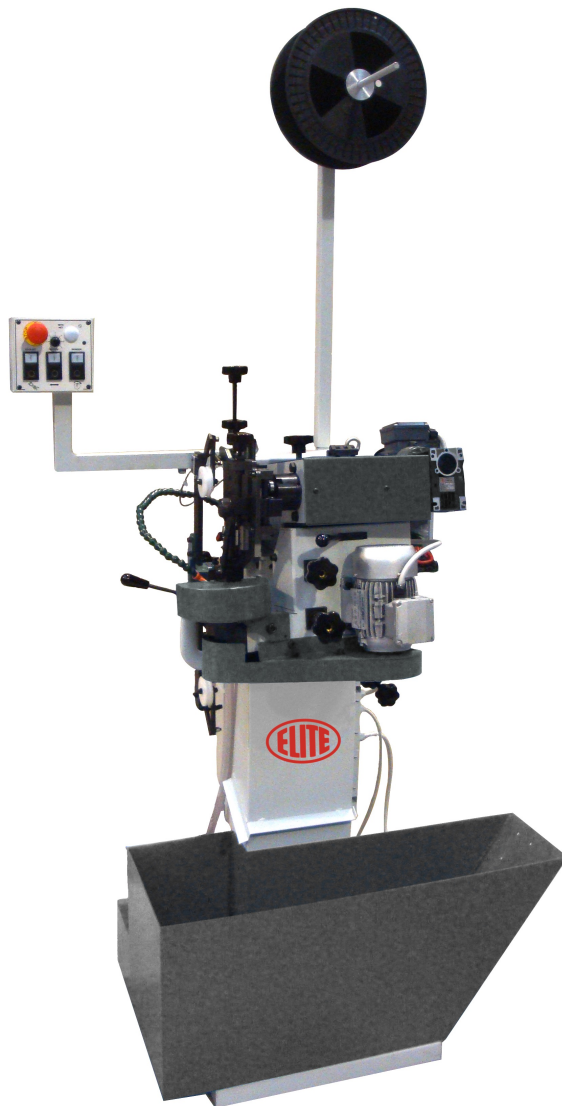




SC 3 - User manual



# ELITE SC 3 User manual

Version February 2024



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# 1.FIRST STEPS

Congratulations on your purchase of the ELITE model SC 3.

**Read this guide before you start.**

The ELITE model SC 3 can sharpen a lot of different type of teeth shape allowing the independent adjustments of the feed pitch, grinding wheel working depth and the entry/exit speed. It has up to 5 cams that allow different tooth profiles to be created.

The SC 3 is adequate for sharpening of straight, spaced and curved tooth in band saws from 10 up to 60 mm wide (0,4" to 2-1/4")

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 3 model range have been designed for the sharpening of band saws 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 3***  
Product type: ***Automatic sharpening machine for circular and band saws***  
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 3
Sharpening angle	From 0° to + 18°
Teeth profile	Triangular, triangular spaced and curved
Band saw thickness (min-max)	0.5 - 1.5 mm. (0.019" to 0.059")
Tooth pitch (min-max)	5 - 26 mm (0.19" - 0.10")
Grinding speed	14 - 56 teeth/minute
Forward motor power	1 x 0.18 kW
Grinding wheel motor power	1 x 0.25 kW
Wheel grinder diameter (Ø Ext x Int x Thickness):	150 x 20 x 6 mm
Net weight	130 kg
Machine dimensions	800 x 1300 x 2600 mm



## 4. TRANSPORT

The SC 3 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	Packing size (mm)	Weight (kg)
SC 3	950 x 1500 x 1800	260

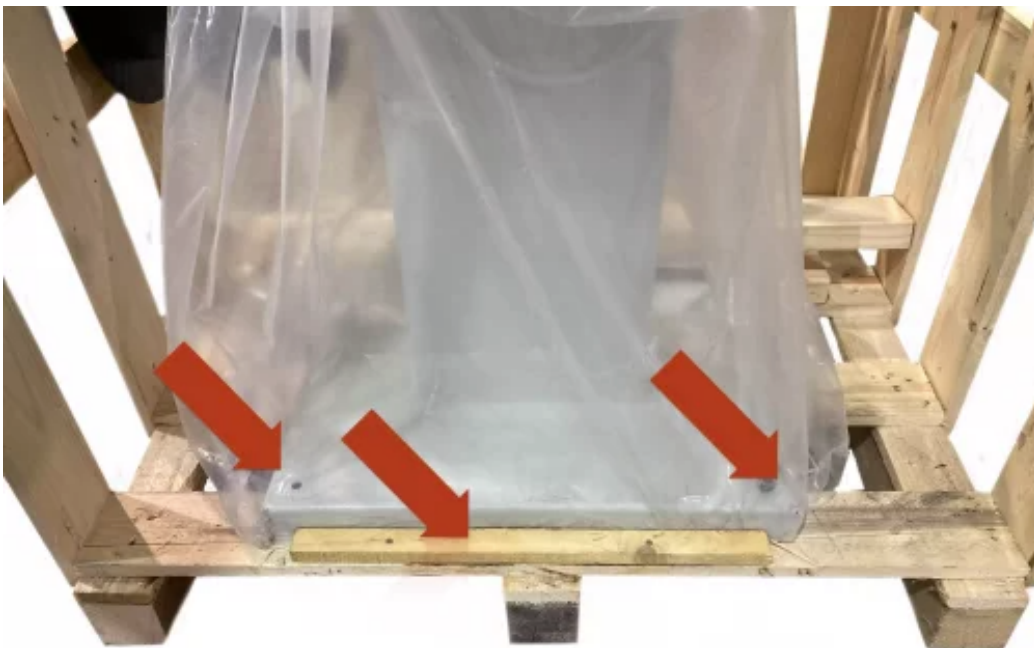


## 4.1. Instructions for unpacking and setting up

**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.



Once the machine is moved to its final working destination, you must fix the machine to the floor by means of the 4 screws placed in the machine base stand.

If this is not done, there is a high risk to dump the machine and to cause serious injuries to the personnel and 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.



## 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.**

The machine must be positioned into a right space considering a working area of minimum 1 meter around it.

The operator during operation should place in front of the machine maintaining a safe distance that prevent the achievement of dangerous areas with upper and lower limbs.

The area in which the machine will be placed must have a degree of light enough to carry out the activities of work and maintainance.



## 5.2. Electrical connection



**HIGH VOLTAGE DANGER !**

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.

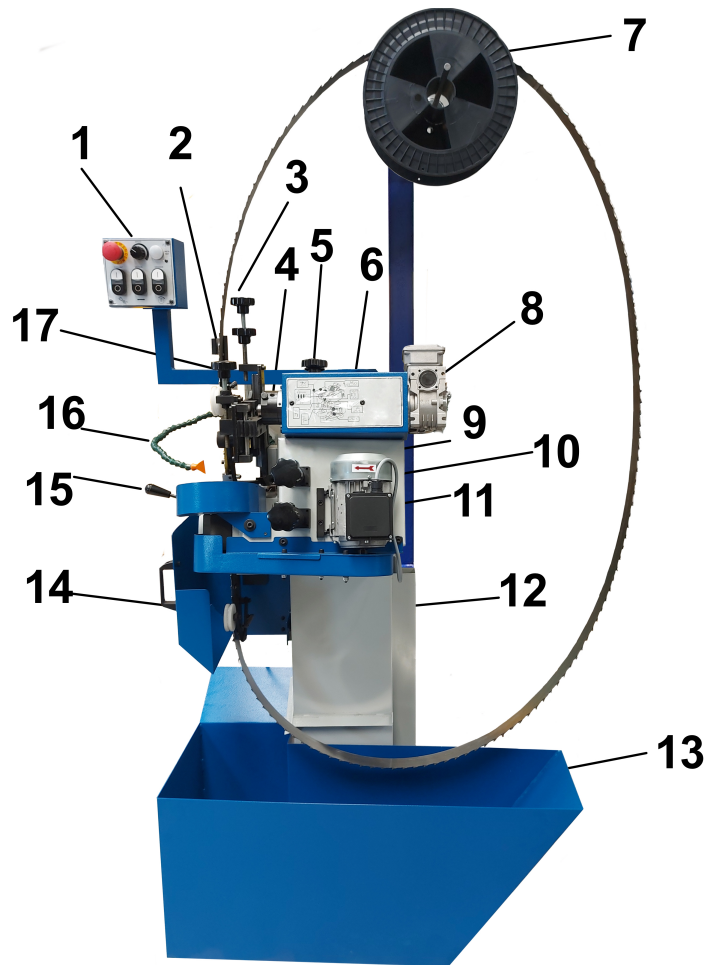
The machine is equipped with plug CE and must be connected to the voltage at which it was ordered: this information is written on the label on the back side of the machine.

### **Note:**

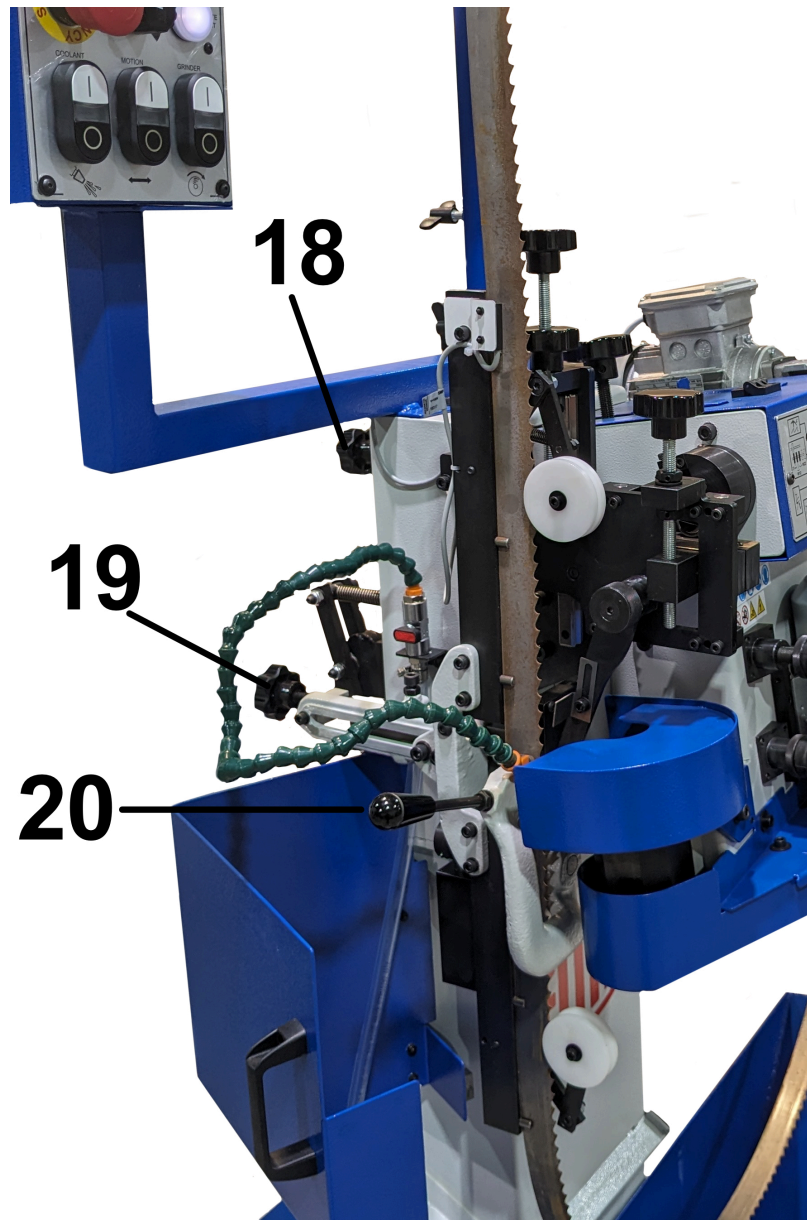
Remember: Before connecting the machine, remove any guards the machine may have to protect components during transport.



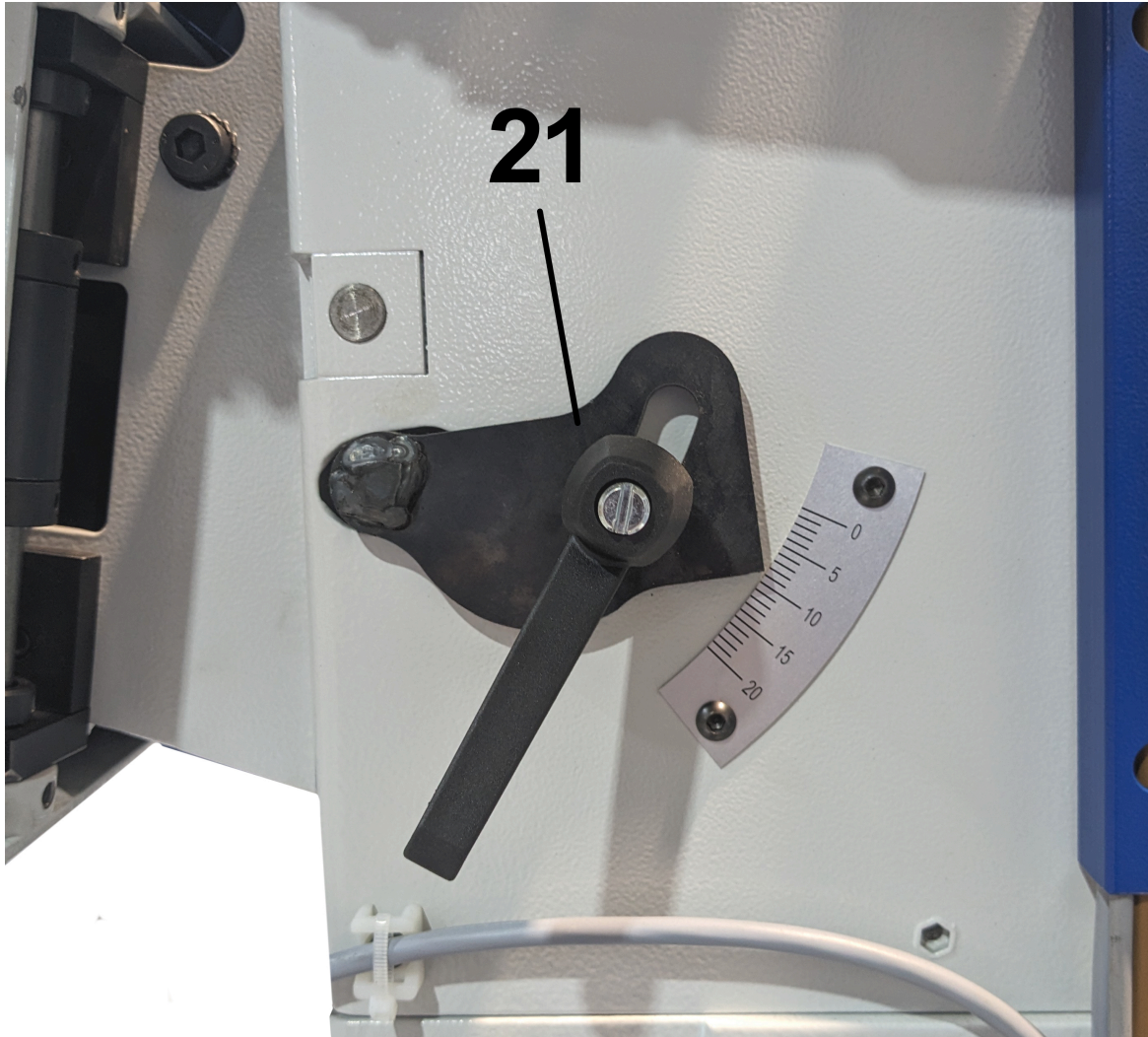
### 5.3.Main components of the machine



- 1.Control panel
- 2.Limit switch sensor for automatic sharpening stop
- 3.Sharpening load on tooth face
- 4.Curved tooth curve adjustment
- 5.Tooth height adjustment
- 6.Cam settings indicator plate
- 7.Band saw support
- 8.Sharpener unit
- 9.Tooth spine slope adjustment
- 10.Sharpener rotation motor
- 11.Tooth throat flat part adjustment
- 12.Machine base
- 13.Coolant tank
- 14.Anti-splash lid
- 15.Lever for opening and closing the jaw
- 16.Coolant hose
- 17.Tooth pitch

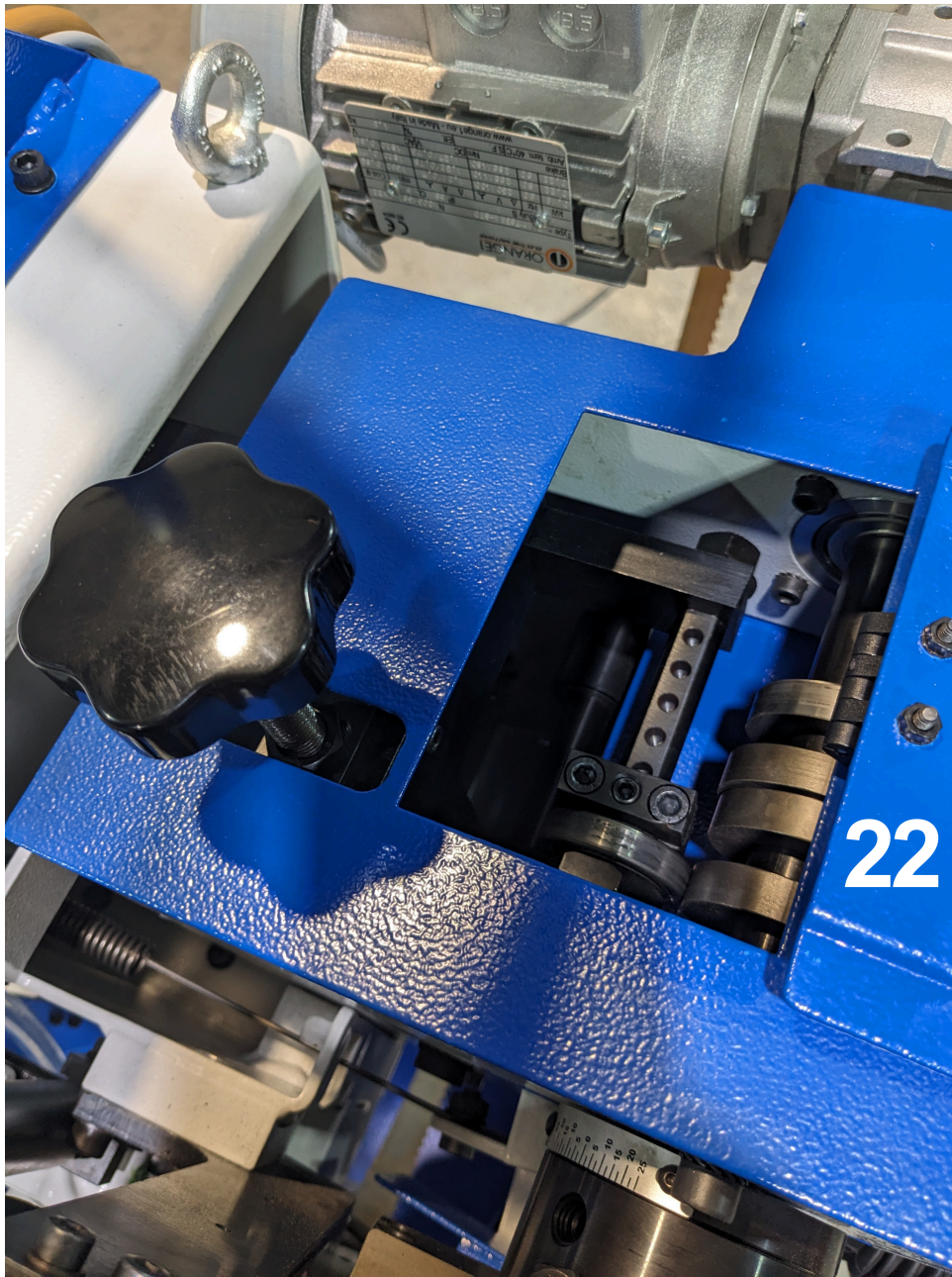


- 18.Lever for saw approach
- 19.Lever for activating the sharpening charge
- 20.Tooth load angle adjustment



21.Tooth load angle positioning brake and angle indicator

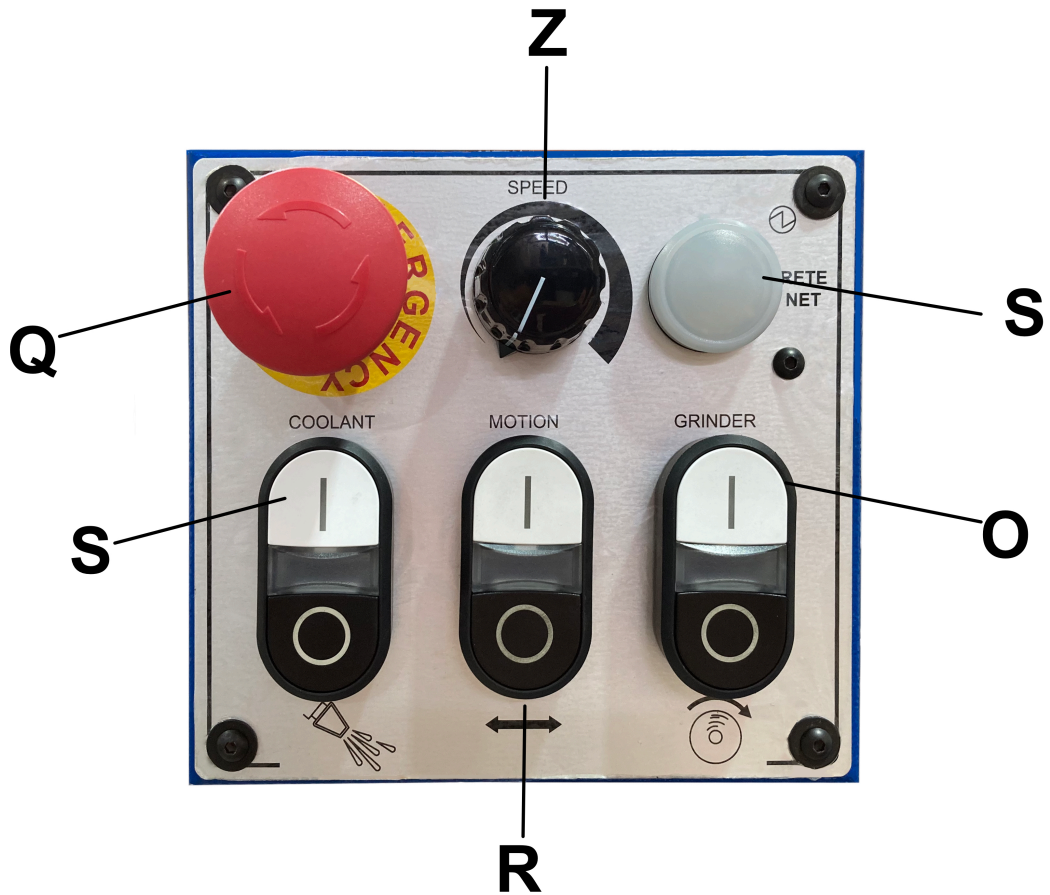




22. Gate for sharpening cam selection according to required tooth shape



## 5.4. Control panel



### *Buttons description:*

- o: Button START / STOP grinder rotation motor
- p: Electrical network lamp
- q: Emergency STOP button
- r: Button START/ STOP feed of grinder unit blade
- s: Button START / STOP cooling pump
- z: Speed variator



**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](http://www.elite.es)**



[www.elite.es/en/support/manuals/sc-3](http://www.elite.es/en/support/manuals/sc-3)



## 9.ACCESSORIES AND CONSUMABLES

### 9.1.Grinding wheels

We recommend to use ELITE ref. nr. 5211-A. Corundum  $\varnothing 150 \times 6 \times \varnothing 20$  mm



Corundum grinding wheel

### 9.2 Coolant agents

We recommend to use ELITE SintoCut MIX or equivalent in the machines equipped with coolant system.



SintoCut MIX 20 L



[www.elite.es/en/support/manuals/sc-3](http://www.elite.es/en/support/manuals/sc-3)

**For more updated information and helpful videos on how to operate the machine, check our website [www.elite.es](http://www.elite.es)**