



# ELITE MVB 650

## User manual



Version June 2024



**THIS PAGE IS NOT WRITTEN INTENTIONALLY**



## 1. FIRST STEPS

Congratulations on your purchase of the ELITE model MVB 650 tungsten carbide tooth circular saw concave tooth sharpener.

**Please read this guide before you begin.**

The ELITE MVB 650 model is our bead breaker to remove the steel on the back of the tooth in circular saws with carbide teeth for saws from ø210 to 650 mm.

Its operation is automatic through 2 CNC axes: B= Feed claw; X= Sharpening path

The design of the cabin ensures particularly easy access for quick adjustment of the machine's preparation for sharpening.

If you have any questions, please contact us directly or one of our authorized distributors.

***Informative Note:*** *The use manual of the circular saw sharpener 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 Machines of the MVB 650 model range have been designed for the hollow tooth grinding of circular saws with carbide teeth, 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 Machines, SLU**  
**C/Joan Oró, 27**  
**ES-08635 Sant Esteve Sesrovires**

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 MVB 650***  
Product type: ***Circular saw 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, manager



## 3.TECHNICAL DATA

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

| TECHNICAL DATA              | MVB 650                             |
|-----------------------------|-------------------------------------|
| Outer diameter of saw blade | From ø210 to ø650 mm. (6" to 25.5") |
| Inner diameter of saw blade | From ø10 mm.                        |
| Saw body thickness          | Up to 8 mm.                         |
| Tooth pitch                 | Up to 125 mm.                       |
|                             |                                     |
| <b>HOLLOW TOOTH</b>         |                                     |
| Sharpening path             | Up to 125 mm.                       |
| Cutting angle               | From -10° to +30°                   |
|                             |                                     |
| <b>OTHER DATA</b>           |                                     |
| Grinding wheel motor        | 1,5 kW                              |
| Grinding wheel speed        | 24,000 RPM                          |
| Saw holding                 | By pneumatic clamp                  |
| 2 CNC axes                  | ø6 mm.                              |
| Machine dimensions          | Adjustable from 5000 to 9000 RPM    |
| Dimensions of the machine   | 1430 x 1285 x 1820mm.               |
| Machine weight              | 520 kg.                             |



### **3.1 TECHNICAL REQUIREMENTS**

A 6 bar air connection is required.

Connection voltage: 220/240V 2Ph 50/60 Hz

Required connection power: 1.5 kW



## 4. TRANSPORT

The ELITE MVB 650 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) |
|---------------|-----------------|-------------|
| MVB 650       | 172 x 172 x 207 | 630         |



## 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 for the calculation of the weights to lift.

Once the packaging has been opened, remove the fixing stops from the feet of the machine.



Before connecting the machine, remove any protection that the machine may have to protect the components during transport.



## 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 leveling the machine can cause unwanted vibrations and premature wear of the linear guides.

Remember: before connecting the machine, remove any protection that the machine may have to protect the components during transport.



**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.



### 5.3.Main components of the machine



1. Enclosure sliding door.
2. Machine enclosure.
3. Machine control panel.



## 5.4. Control panel



1. Menu screen.
2. Raising of the grinding wheel/stone. (Optional)
3. Movement of the grinding wheel/stone to the left.
4. Movement of the grinding wheel/stone to the right.
5. Navigation menu.
6. Lowering the grinding wheel/stone. (Optional)
7. Drive of the feed claw.
8. Opening and closing of the jaw.
9. Turning on the LED light.
10. Refrigeration drive.
11. Machine power on
12. Machine shutdown.
13. Emergency stop.



**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/mvb-650](http://www.elite.es/en/support/manuals/mvb-650)



## 9. ACCESSORIES AND CONSUMABLES

### 9.1. Abrasive wheels

#### 9.1.1 Sharpening of the hollow tooth

For sharpening the hollow tooth we recommend the diamond pin 2200-A ø6.5x3xø6 mm.



### 9.2. Coolant agents

We recommend to use ELITE SintoCut PRO MIX or equivalent to mix with water emulsion.



SintoCut PRO MIX 20 L



## 9.3. Equipment

Additional equipment of the machine.

### 9.3.1 Filtering systems

Machine could be equipped with one of the following ELITE filtering systems. If your machine already has one of this systems and you need information or help, please refer to the manual of the filtering system.

#### 9.3.1.1 FILTRAmaq UNO



Filtering system integrated in the machine to save space.

#### 9.3.1.2 FILTRAmaq SOLO

Independent filtering system for one machine.





### 9.3.1.3 FILTRAMAq PRO

Centralized filtering system for up to 5 machines.





[www.elite.es/en/support/manuals/mvb-650](http://www.elite.es/en/support/manuals/mvb-650)

**For more up-to-date information and useful videos on how to operate the machine, see our website [www.elite.es](http://www.elite.es)**