



GBT 850 DUO - User manual

ELITE GBT 850 DUO

User Manual



Version March 2023



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1. FIRST STEPS

Congratulations on your purchase of the ELITE model GBT 850 DUO circular saw blades grinding machine.

Read this guide before you start.

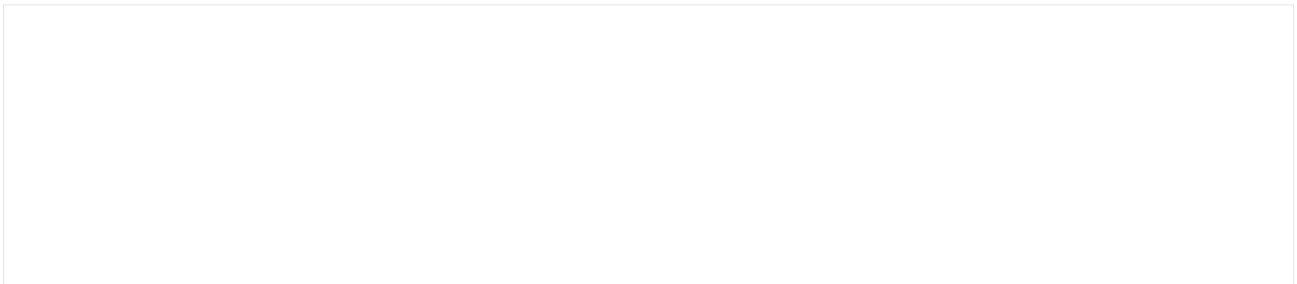
The GBT 850 DUO is an automatic grinding machine with double grinding wheel for the sides of the teeth, to repair or manufacture carbide-tipped circular saw blades from $\varnothing 100$ to $\varnothing 850$ mm.

Its operation is CNC with LCD screen. It allows a precise and fast grinding of the sides of the teeth.

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 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 sharpening machines of the GBT 850 DUO model range have been designed for the grinding of the sides 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.





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2.3. Declaration of conformity

The company hereby **Elite Sharpening 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 GBT 850 DUO***
Product type: ***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, manager



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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.

FEATURES	
Saw diameter	100 to 850 mm. (4" to 33.5")
Saw hole diameter	From \varnothing 10 mm.
Saw body thickness	Up to 14 mm.
Tooth pitch	From 1 to 125 mm.
FLANK GRINDING	
Sharpening path	Up to 40 mm.
Attack angle	From -15° to $+30^{\circ}$
Radial cutting angle	From -5° to $+6^{\circ}$
Tangential cutting angle	Up to 8°
TECHNICAL CHARACTERISTICS	
Automatic operation by means of 4 CNC axis	X: Sharpening travel, Y1: Grinding wheel 1 grinding load, Y2: Grinding wheel 2 grinding load, A: Tooth pitch
Grinding wheel motor	1.5 kW (two units. 0.75 kW per motor)
Grinding travel path	Up to 25 mm.
Grinding wheel rotation speed	Adjustable from 5000 to 9000 RPM
Diameter of the abrasive wheel	\varnothing 100 mm. (two units)
Available versions	Half enclosure - Full enclosure
Machine weight	710 Kg.
Machine size	1410 x 1225 x 1800 mm.
EQUIPMENT INCLUDED	
Saw holder for small saw blade diameter	100 to 200 mm.
Saw holder for saw blades	200 up to 850 mm.
Centering rings	\varnothing 30 mm.
Wheel holder for sharpening stones	Two units
4 mm. feed pawl.	
Device for production of equal diameter saw blades	



4. TRANSPORT

The ELITE GBT 850 DUO 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 (cm)	Weight (kg)
GBT 850 DUO	1430x1285x1820	710



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

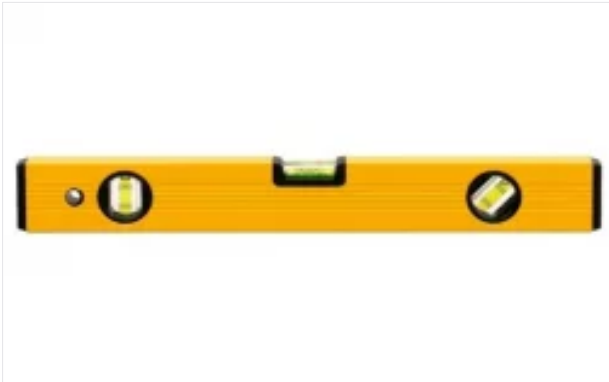




5.INSTALLATION

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.



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



5.2. Electrical connection

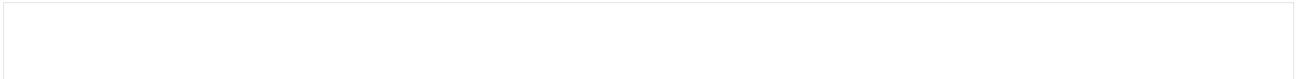


DANGER HIGH VOLTAGE!

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

Full enclosure version

1. Sliding door of the cabin.
2. Cabin of the machine in the version with half cab.
3. Control panel of the machine.

Version with half enclosure



1. Sliding door of the cabin.
2. Cabin of the machine in the version with half cab.
3. Control panel of the machine.



5.4. Control panel



1. LCD screen
2. Z axis up / grinding wheel up.
3. X axis left / grinding wheel left.
4. X axis right / grinding wheel right.
5. Encoder to navigate through screen menus.
6. Z axis down / grinding wheel down.
7. Indexing pawl movement up/down.
8. Clamping open/close.
9. LED cabin light switch ON/OFF.
10. Cooling pump ON/OFF.
11. START button.
12. STOP button.
13. Emergency stop.



www.elite.es/en/support/manuals/gbt-850-duo

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