

Operating instructions

Belt grinder with lapping disc

SL2



CE

Version: 02-2024-EN

Date: 07.08.2024

Manufacturer:
Greiner Vibrograf AG
Mittelstrasse 2
CH-4900 Langenthal

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1 General information

1.1 Information on these operating instructions

This is the **original operating manual** for the product **SL2** from Greiner Vibrograf AG.

The version and language can be found on the title page.

1.2 Customer service information

If you have any questions about the product or require any other service related to the product, please do not hesitate to contact our customer service.

Contact:

Greiner Vibrograf AG
Mittelstrasse 2
CH-4900 Langenthal

+41 62 916 60 80

info@greinervibrograf.ch
www.greinervibrograf.ch

1.3 Intended use



The **SL2** belt grinder with lapping disc is used for grinding and lapping watches. Other uses are not permitted. The installation and operating conditions specified in these operating instructions must be strictly observed.

1.4 Non-intended use




Greiner Vibrograf AG accepts no liability for the use of other applications.

2 Safety instructions


2.1 Symbols

	<p>Read through the operating instructions</p>
	<p>General information</p>

2.2 Safety instructions and warnings

	<p>General danger</p>
	<p>Warning of electrical voltage</p>
	<p>Warning of hand injuries</p>

2.3 Bidding instructions

	<p>Wear hearing protection and eye protection!</p> <p>This sticker indicates that hearing protection and safety goggles with shatter-proof clear lenses must be worn when working with the appliance.</p> <p>This sticker is located on the front of the protective cap of the sanding belt.</p>
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2.4 Emergency stop system



The **SL2** belt grinder with lapping disc is equipped with an EMERGENCY STOP switch. This is located at the top of the housing.

It is used to quickly bring the mechanical parts of the **SL2** to a standstill in the event of danger or to avert danger.

3 Function, installation and commissioning

3.1 Functional description

The appliance has been designed for grinding, lapping and processing watches or small parts. Any other use or use beyond this is considered improper use. The manufacturer is not liable for any resulting damage. The user alone bears the risk.

3.2 Scope of delivery

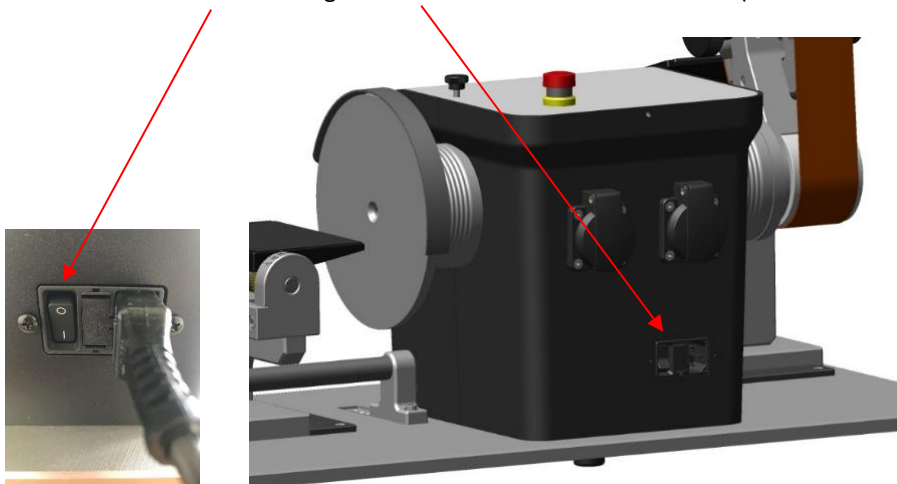
- Belt sander with lapping disc SL2 ready for connection (incl. mains cable)
- 1 x operating instructions
- 1 x Quick Start Guide Packaging
- 1 x original packaging (packaging set + pallet)

3.3 Installation

- Remove the **SL2** and the supplied accessories from the packaging and position them in the intended installation location.
- Keep the packaging for possible returns in the event of repairs.
- Check that the **SL2** and accessories are complete. Additional accessories can be ordered from customer service
- Connect **the SL2** to the mains using the enclosed connection cable. Observe connected loads!
- Protect the connection cable from heat and sharp edges and lay it in such a way that it cannot be damaged. When extending the cable, ensure that it is in perfect condition and ensure that it can withstand the current before use.

3.4 Commissioning

Switch on the SL2 using the mains switch at the bottom rear (on the back of the appliance).

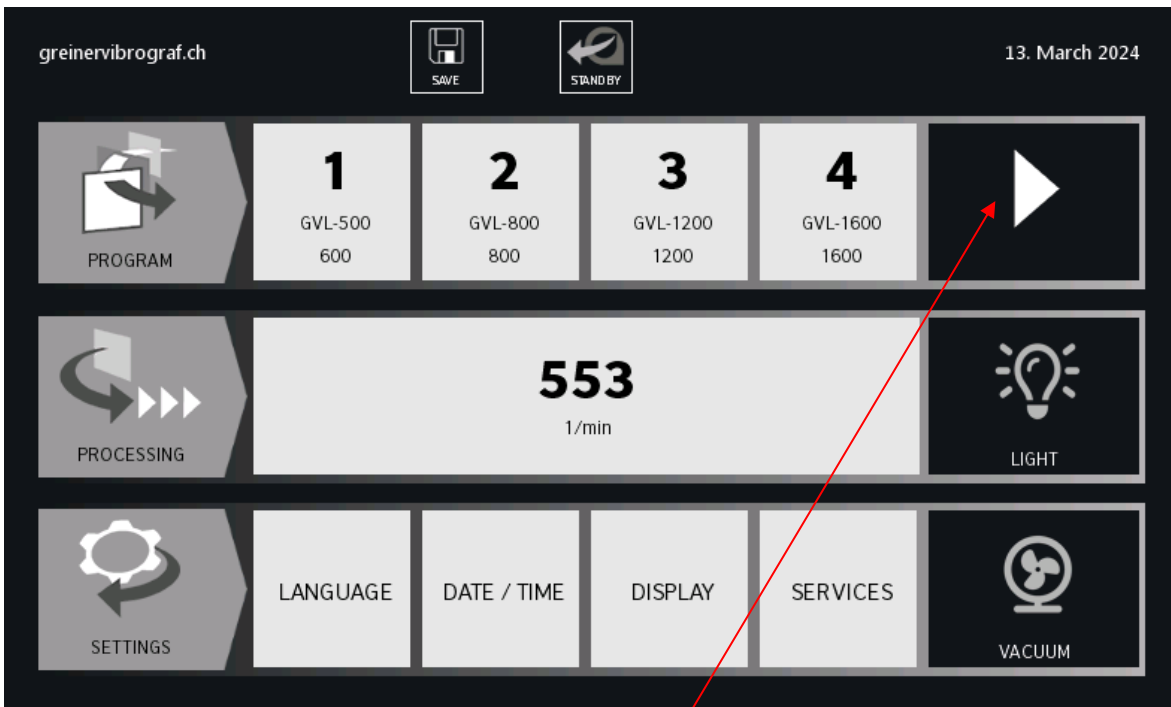


4 Operation

4.1 Screen

The **SL2** has a touchscreen.
All functions and settings are carried out via this screen.

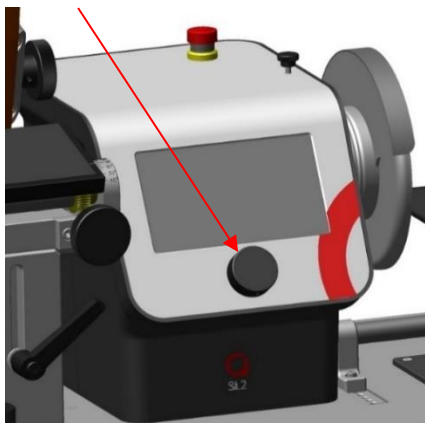
After starting up the **SL2**, the following **main menu** is always displayed:



4.2 Settings

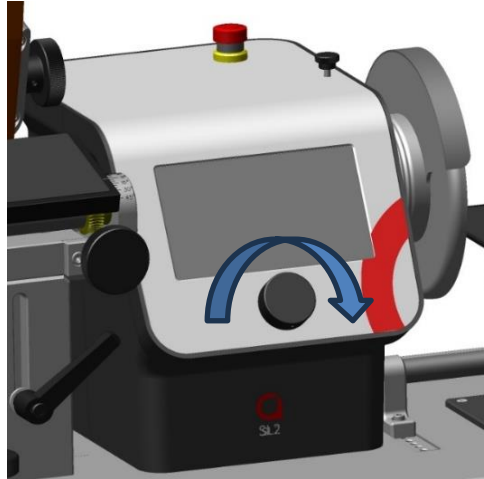
4.2.1 Start / Stop

The Start / Stop button is located at the top right of the display. First select the desired program (1 - 4) and briefly press the start button. The appliance can also be started using the central rotary knob. To do this, briefly press the rotary knob. Press it again to stop the appliance. There are therefore 2 options for start/stop.



4.2.2 Speed setting

The speed can be changed very easily directly using the central rotary knob.



As follows:

- Faster in a clockwise direction
- Slower in anti-clockwise direction

The speed is immediately adjusted to the set speed and shown on the display.

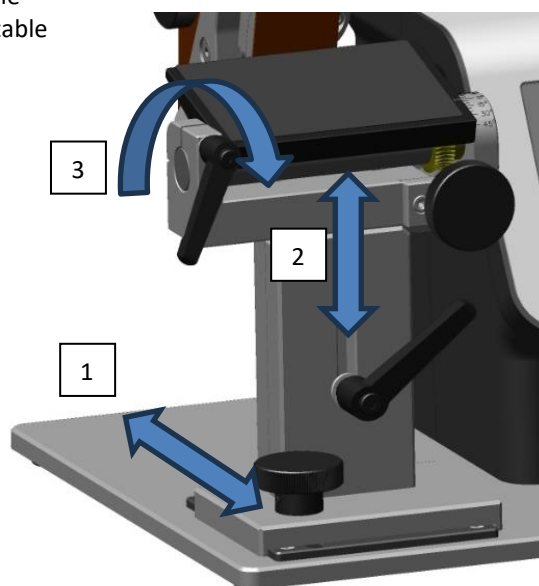
It is also possible to use the preset speeds.

Simply tap the corresponding program field briefly and the appliance switches to the new speed.

4.2.3 Adjusting the worktable

The worktable can be adjusted in 3 ways. Namely:

1. Distance to the sanding belt
2. Height of the worktable
3. Tilt angle of the worktable



1. Distance to the sanding belt

- Loosen the front knurled screw, position the table and tighten again

2. Height of the worktable

- Loosen the clamping lever anticlockwise
- Move to new height position
- Tighten the clamping lever again (clockwise)

3. Tilt angle of the worktable

- Release the clamping lever on the outside left
- Use the large, knurled screw to set the desired working angle.
- There is an angle scale for orientation

4.2.4 Belt position

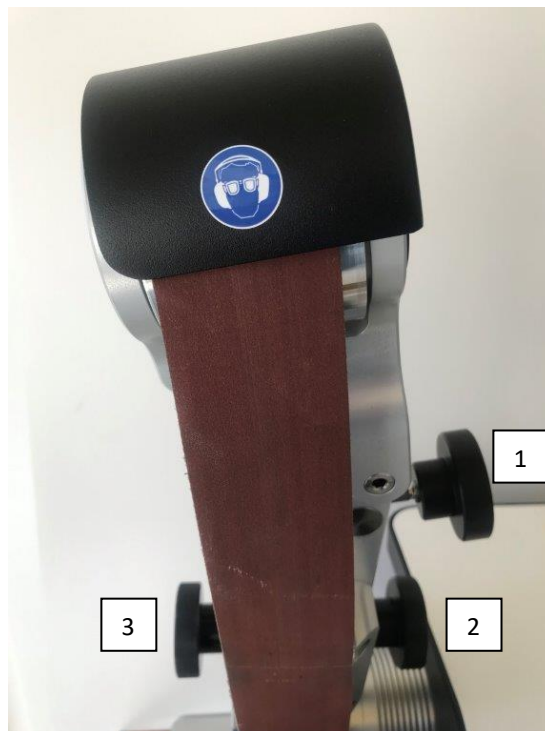
To ensure that the sanding belt runs in the centre, it can be easily adjusted. This is done using the belt adjustment screw (no. 1) shown in the picture below. Turn to the left or right until the belt is in the correct central position.

4.3 Belt change

When changing the belt or carrying out maintenance and repair work, ensure that the power supply is effectively disconnected (pull out the mains plug)

The belt is changed as described below:

1. Turn the belt adjustment screw (no. 1) anti-clockwise until the head is in the position shown.



2. Loosen the strap rider screw (no. 2)

- a. Turn the strap tensioning screw (no. 3) until the strap tensioner is slackened (3.2) and the strap is loose



3.1 Tensioned belt tensioner



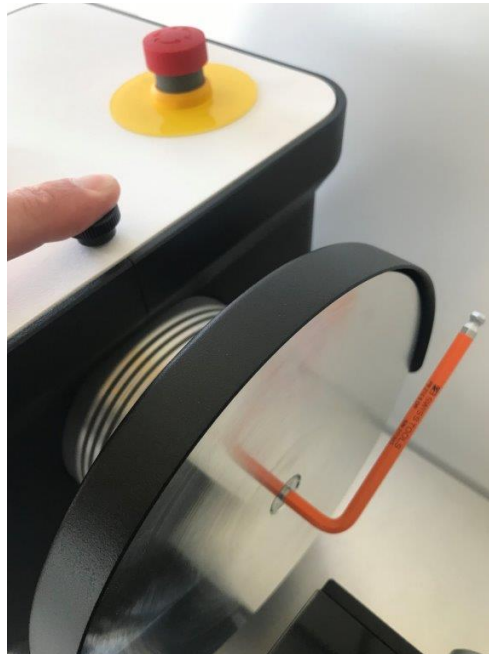
3.2 Belt tensioner untensioned

3. In this position of the belt adjustment head, the sanding belt can be both removed and mounted again.



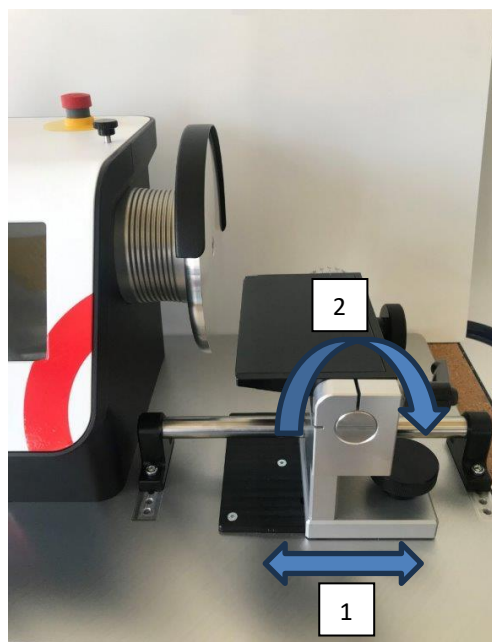
Important: When changing the strap, pay attention to the arrows on the inside of the strap. The arrows indicate the running direction of the belt!

4.4 Changing the lapping disc



Press the locking button on the top of the housing and simultaneously turn the lapping disc until the button engages.
Hold down the button and loosen and unscrew the central hexagon socket screw (tool no. 5).
The lapping disc can now be replaced. Refit in reverse order.

4.5 Setting the lapping table

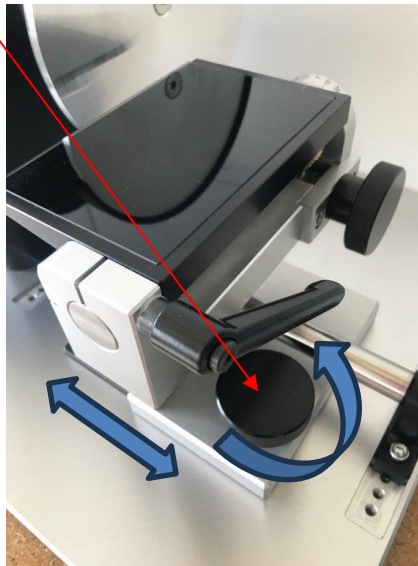


The **lapping table** can be adjusted in 3 ways. Namely:

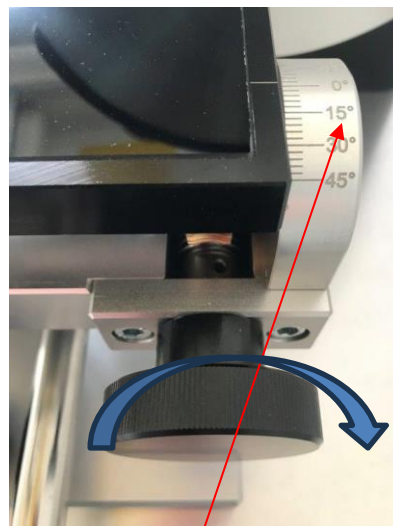
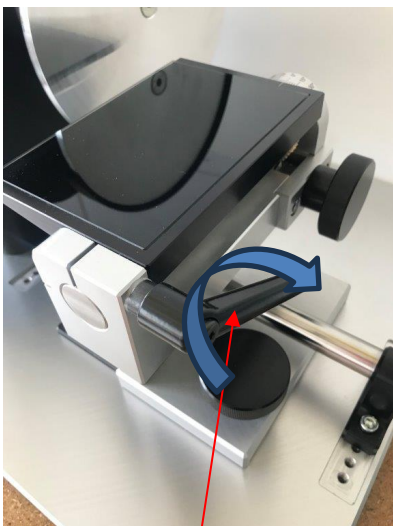
1. Distance to the lapping disc (X-axis)
2. Angle to the lapping disc

1. Distance to the lapping disc (X-axis)

Loosen, adjust and retighten the front knurled screw.



2. Angle to the lapping disc



- Release the clamping lever on the outside left
- Adjust the working angle with the knurled screw.
- For orientation, there is an angle scale for the inclination

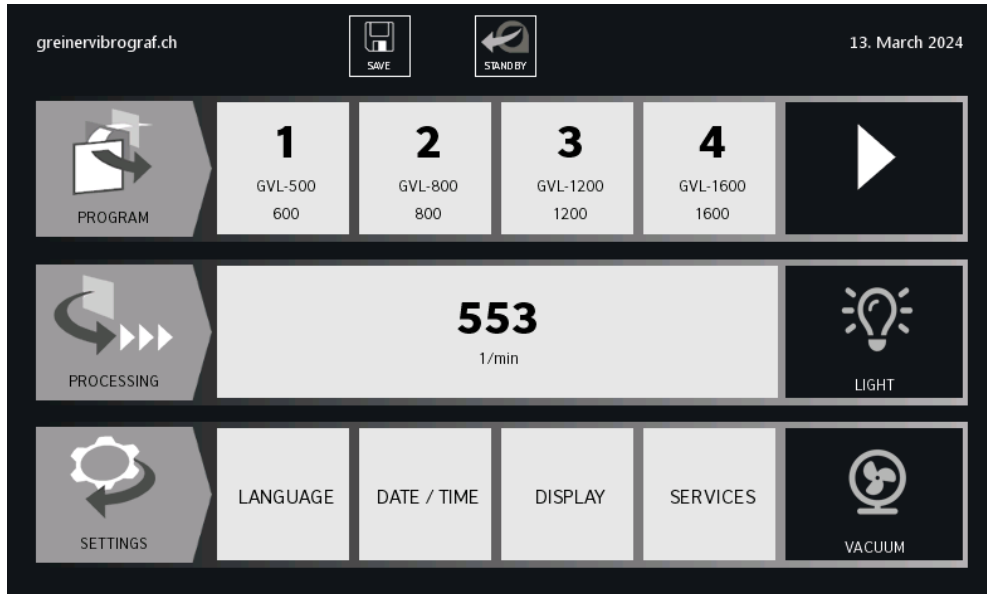
4.6 Adjusting the guide for the hand piece



Loosen both hex screws on the left and right, adjust in the grid and tighten again.

4.7 Display adverts

4.7.1 Control panel



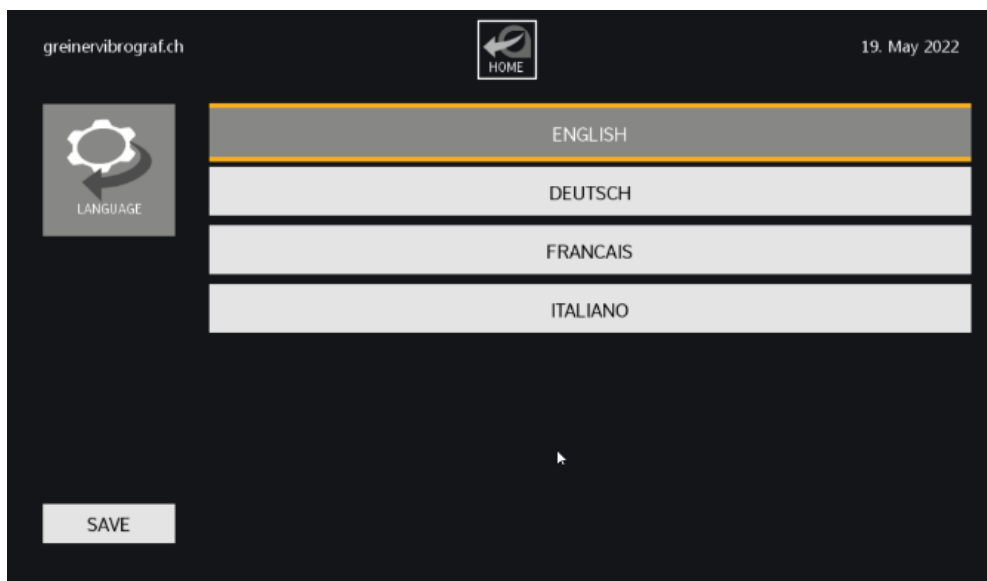
Programmes: 4 standard programmes are preset.
The programmes can be individually adapted (4.7.7).

Processes: The nominal speed is displayed here.
The speed can be adjusted manually using the rotary knob or assigned to a programme via screen (4.7.7).

Settings:

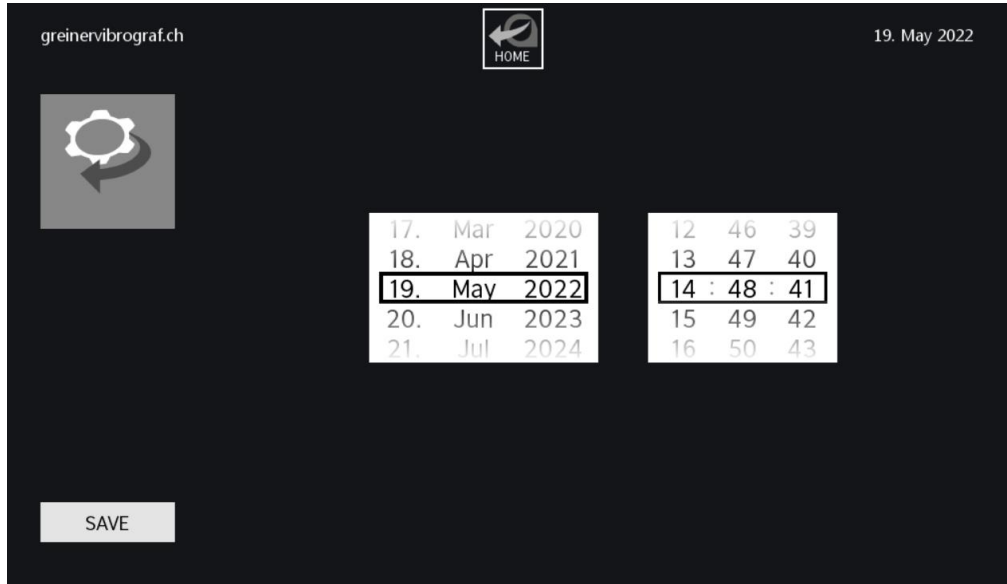
4.7.2 Language

The language can be selected here. There are 5 languages to choose from:



4.7.3 Date Time

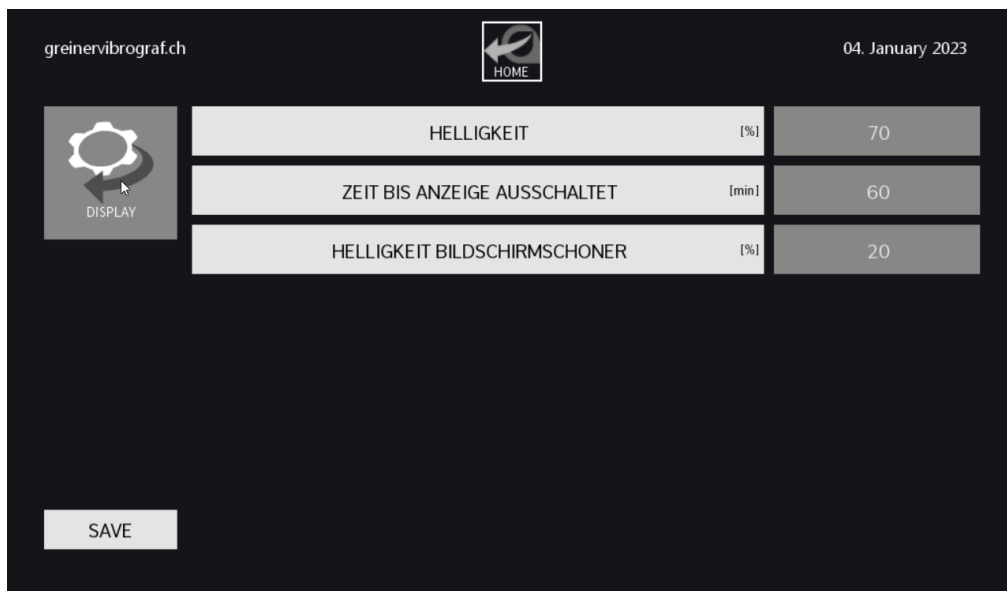
Basic setting for date and time via scroll-up/down menu.
Set and confirm with **SAVE**.



4.7.4 Display

The parameters for the display can be set here.

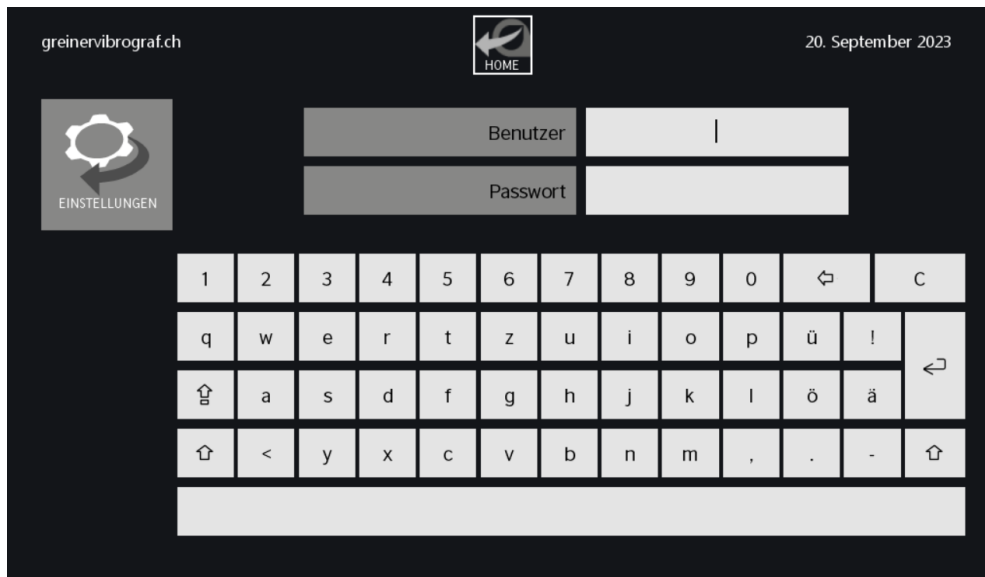
These are brightness, time until the display switches off and the screen saver appears, and the brightness of the screen saver.



4.7.5 Service



Press and hold the **SERVICE** button for 2 seconds, the following screen appears:



The **user** and **password** are only accessible to authorised users.

However, every **user** (level 1) can call up the following information without a password by **double-clicking the Enter key**:

- SW version
- HW version
- Date of commissioning
- Hour counter

4.7.6 Light and extraction

Light and suction, if available, can be switched on and off directly using the two buttons.



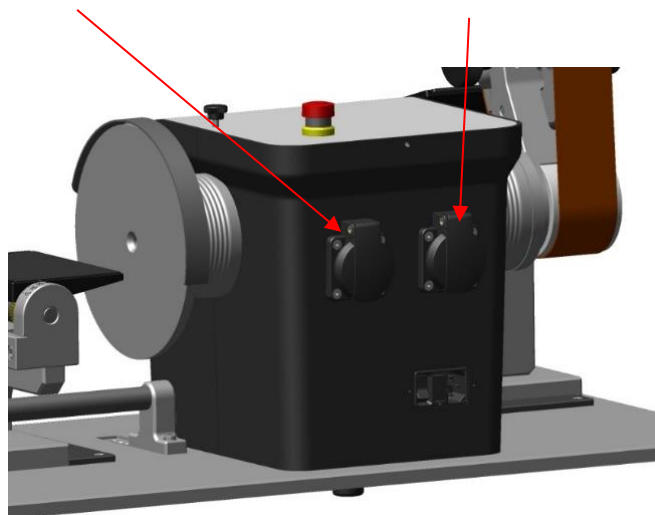
When light or suction is activated, the field frame appears in yellow.

The 2 connection sockets (Schuko) for light and extraction are located on the rear of the appliance.

Max. permissible connection: 16A / 250V

Left side Extraction

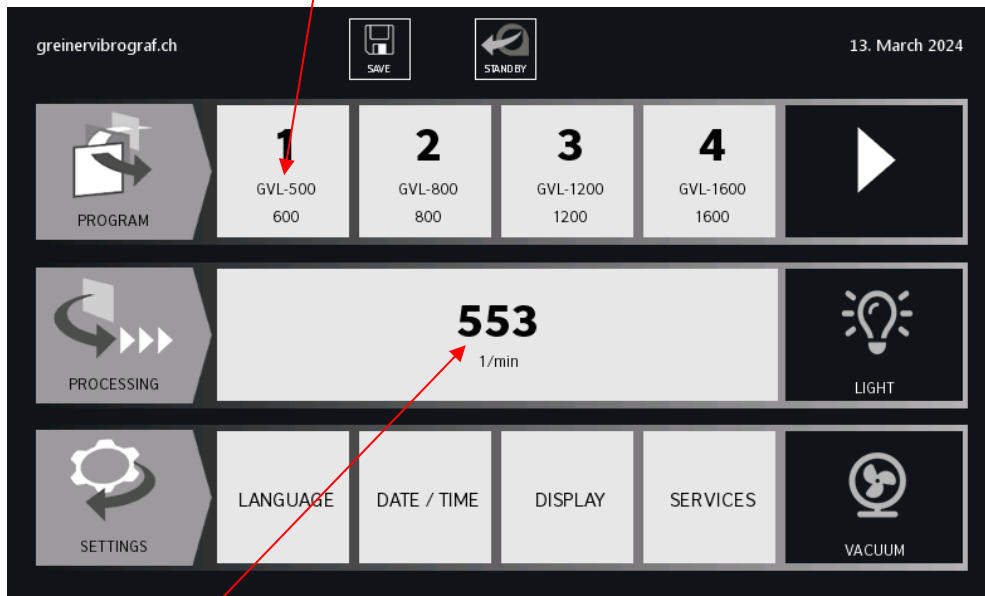
Right side light



4.7.7 Changing programmes

The preset programme names can be overwritten as required. To do this, simply press the corresponding programme button for longer than 2 seconds.

The existing text can now be renamed. Finally, confirm with **SAVE**.



The nominal speed for the selected programme can be changed by pressing the speed button for at least 2 seconds.

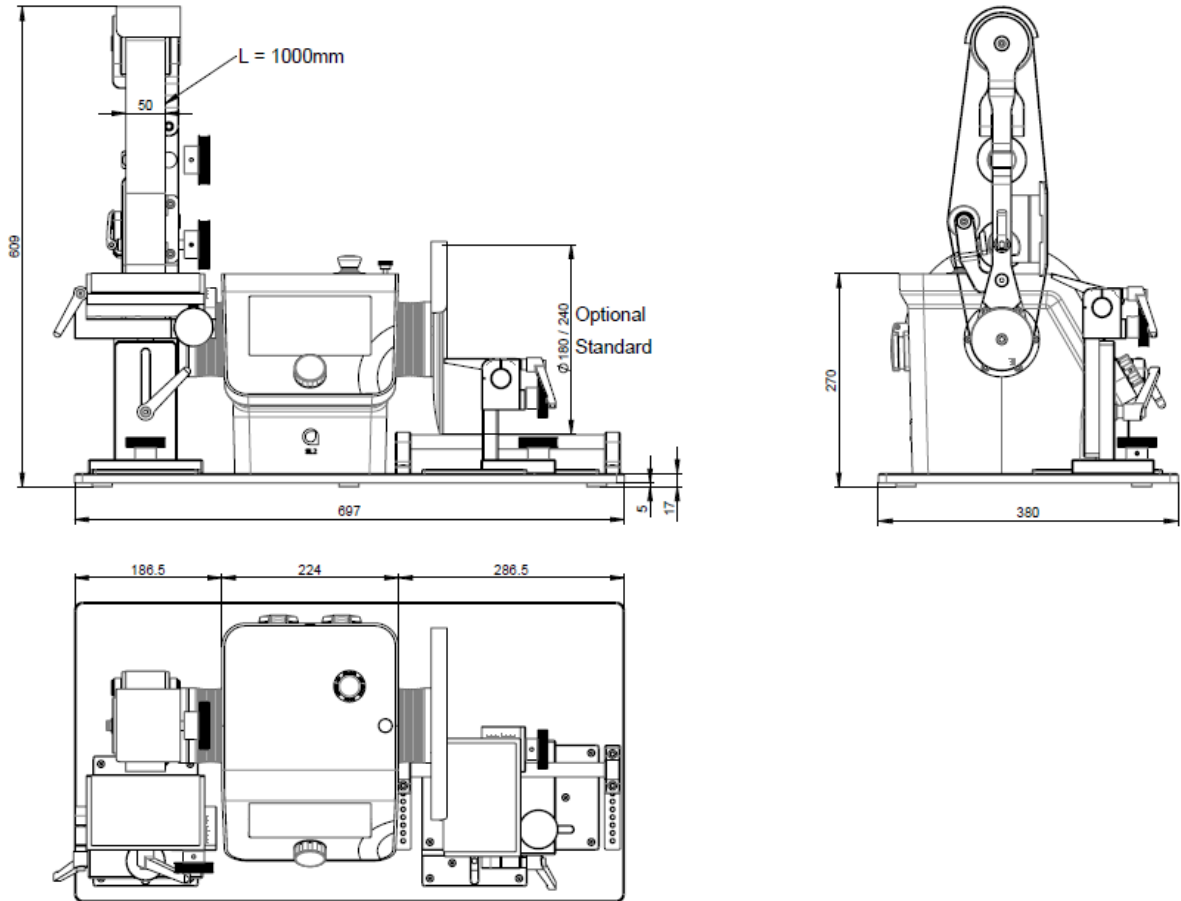
The speed can now be reset. Finally, confirm with **SAVE**.

The gradation of the speed selection can be adjusted in the service menu if required. The username and password for service (level 2) can be requested from customer service.

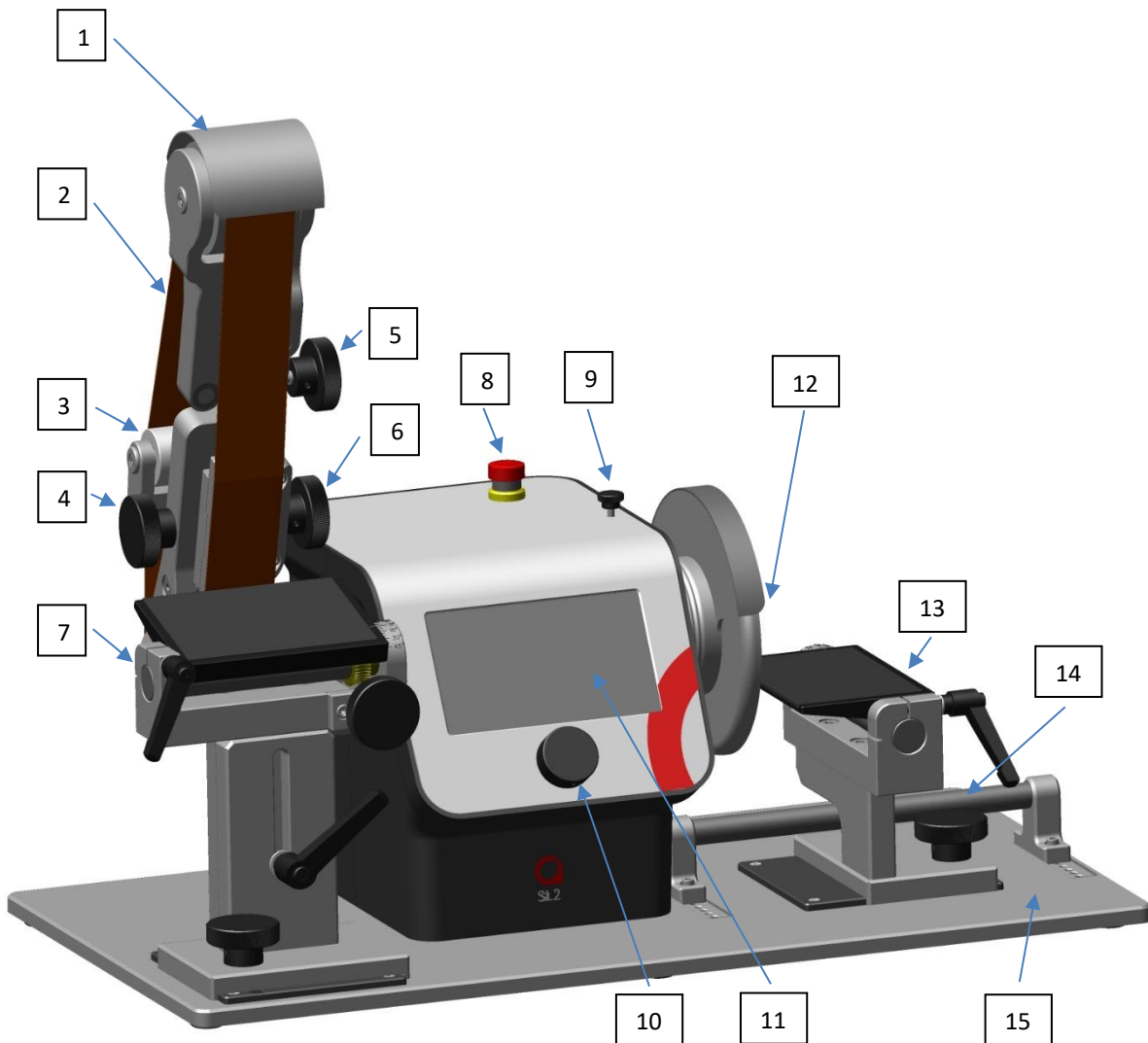
5 Technical data

Item numbers	32000 SL2 (230V)
	32100 SL2 (115V)
Mains connection	230 V / 50 Hz
	115 V / 60 Hz
Engine performance:	0.5 kW
Power consumption:	max. 2.2 A
Speed:	150 - 2000 rpm, variable speed
Belt speed:	38 - 500 m/s
Sanding belt dimensions:	1000 x 50 mm
Diameter of lapping disc:	180mm (240 mm)
Dimensions:	697 x 30 x 609 mm (L x W x H)
Weight:	32 kg net (without packaging)
	49 kg gross (incl. packaging)
Noise emissions	< 70 dBA

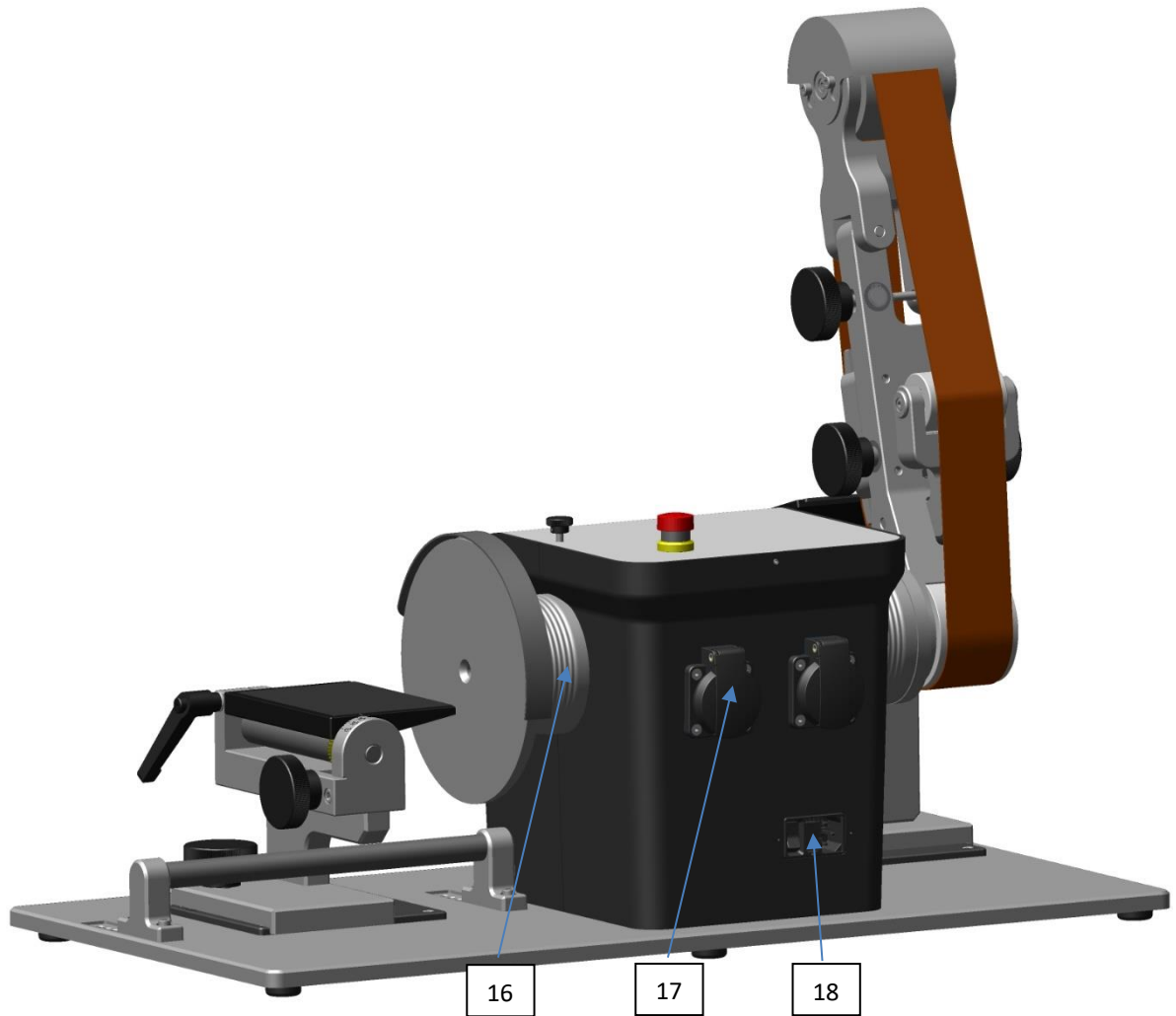
5.1 Dimensions



5.2 Device overview



- | | | | |
|---|---------------------------------------|----|---|
| 1 | Protective cap for sanding belt | 9 | Locking motor |
| 2 | Sanding belt | 10 | Rotary knob, rotary switch |
| 3 | Tensioning pulley | 11 | Display |
| 4 | Tensioner fixing | 12 | Lapping disc |
| 5 | Belt adjustment screw | 13 | Adjustable lapping table (accessory) |
| 6 | Tensioner adjustment wheel | 14 | Guide rod for quill |
| 7 | Adjustable grinding table (accessory) | 15 | Base plate |
| 8 | EMERGENCY STOP | | |
| | | 16 | Engine |
| | | 17 | Connection sockets for extraction/light |
| | | 18 | Mains connection On/Off switch |



6 Service and maintenance, faults

6.1 Service and maintenance

The SL2 sanding and lapping machine is practically maintenance-free.

Only the sanding belts and discs should be checked regularly and replaced if necessary.

The appliance should also be kept as clean as possible to ensure that it functions properly.

6.2 Fault reports, troubleshooting

6.2.1 Fault messages

There is only a message when the emergency stop button is pressed:



To rectify this, it is **IMPERATIVE** to unlock the emergency stop switch and confirm the message (RESET ERROR).

7 Declaration of Conformity



EG-Konformitätserklärung

Der Hersteller / Inverkehrbringer

Greiner Vibrograf AG
Mittelstrasse 2
CH-4900 Langenthal



erklärt hiermit, dass folgendes Produkt

Produktbezeichnung: Bandschleifgerät mit Lapidierscheibe
Modellbezeichnung: SL2
Artikelnummer: 32000/32100
Handelsbezeichnung: SL2
Baujahr: 2024
Seriennummer:

allen einschlägigen Bestimmungen der angewandten Rechtsvorschriften (nachfolgend) - einschließlich deren zum Zeitpunkt der Erklärung geltenden Änderungen - entspricht. Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller. Diese Erklärung bezieht sich nur auf die Maschine in dem Zustand, in dem sie in Verkehr gebracht wurde; vom Endnutzer nachträglich angebrachte Teile und/oder nachträglich vorgenommene Eingriffe bleiben unberücksichtigt.

Folgende Rechtsvorschriften wurden angewandt:

Maschinenrichtlinie 2006/42/EG
Niederspannungsrichtlinie 2014/35/EU
EMV-Richtlinie 2014/30/EU

Folgende harmonisierte Normen wurden angewandt:

EN ISO 12100-1:2011-03	Sicherheit von Maschinen – Allgemeine Gestaltungsleitsätze
EN 60204-1:2019-06	Sicherheit von Maschinen - Elektrische Ausrüstung von Maschinen - Teil 1: Allgemeine Anforderungen (IEC 60204-1:2005 (modifiziert))
EN ISO 13849-1:2015	Sicherheit von Maschinen - Sicherheitsbezogene Teile von Steuerungen - Teil 1: Allgemeine Gestaltungsleitsätze (ISO 13849-1:2015)
EN ISO 13849-2:2012	Teil 2: Validierung
EN ISO 13857:2020-04	Sicherheit von Maschinen – Erreichen von Gefährdungsbereichen
EN ISO 14118:2018	Sicherheit von Maschinen - Vermeidung von unerwartetem Anlauf (ISO 14118:2017)
EN ISO 14120:2016-05	Trennende Schutzeinrichtungen
EN 61800-3:2019-04	Drehzahlveränderbare elektrische Antriebssysteme Teil 3: EMV-Anforderungen

Name und Anschrift der Person, die bevollmächtigt ist, die technischen Unterlagen zusammenzustellen:

Ort: Langenthal
Datum: 02.04.2024

Michael Kläfiger (CEO)

greinervibrograf.ch

8 Waste disposal

We do our utmost to keep recycling costs to a minimum in order to pass on the resulting benefits to our customers and society as a whole.

For this reason, if you ever have to part with this appliance, please do not dispose of it in the rubbish bin, but send it to the appropriate collection centre for old electrical appliances.



9 Appendix

9.1 Spare parts

9.2 Original accessories

Important! With the exception of the sanding belts and sanding discs, only use original accessories with the appliance.

9.2.1 Table for grinding belt Art. no 32020



9.2.2 Table for lapping disc Art. no 32030



9.2.3 Hand piece Art. No. 32040



See also on our website under:

www.greinvibrograf.ch/Lapidiergeraete/Zubehoer SL2