

**Pneumatic transfer press for mugs
with automatic conveyor**

MUG¹⁵ 2nd GENERATION

Instruction manual

ENGLISH

1 Introduction

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1.2. Warning pictograms on the machine



ATTENTION! MOVING ELEMENTS

ACHTUNG! BEWEGLICHE TEILE
UWAGA! RUCHOME ELEMENTY



ATTENTION! HAND CRUSH HAZARD

ACHTUNG! QUETSCHGEFAHR DER HAND
UWAGA! NIEBEZPIECZEŃSTWO
ZGNIECENIA DŁONI



ATTENTION! DANGER

ACHTUNG! GEFAHR
UWAGA! NIEBEZPIECZEŃSTWO



ATTENTION! HIGH VOLTAGE

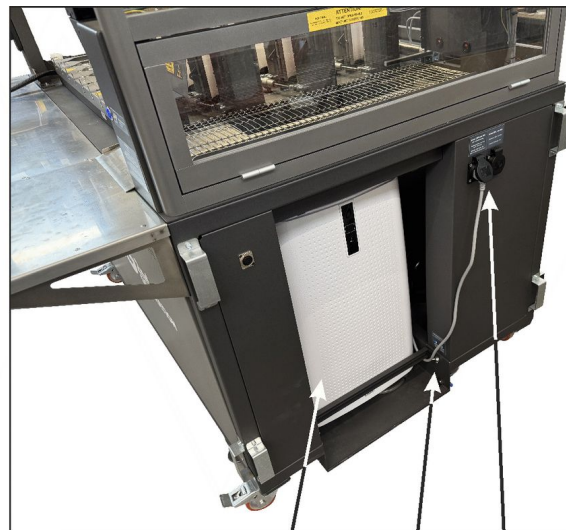
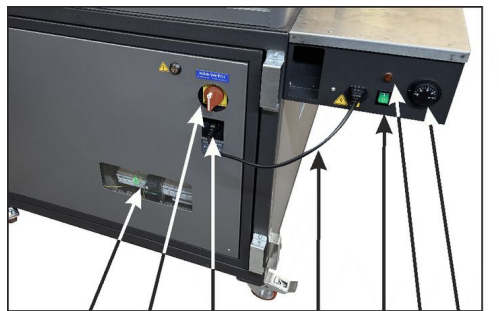
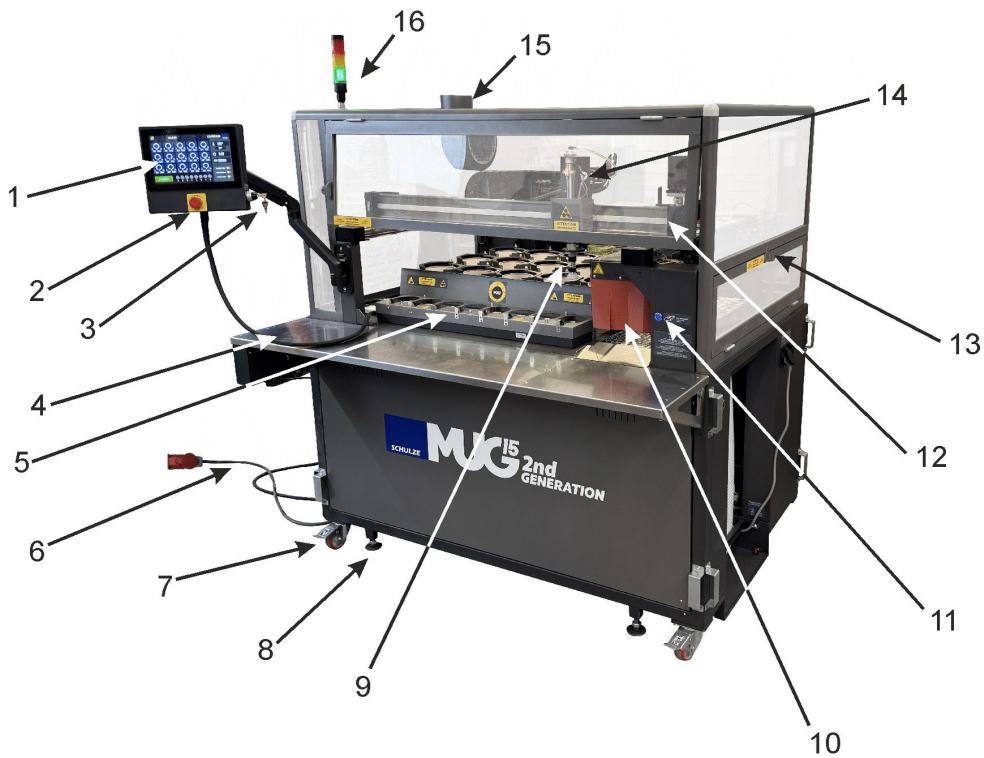
ACHTUNG! HOCHSPANNUNG
UWAGA! WYSOKIE NAPIĘCIE



ATTENTION! HOT SURFACE

ACHTUNG! HEIßE OBERFLÄCHE
UWAGA! GORĄCA POWIERZCHNIA

1.3. Construction of the press



- | | | |
|--|--|---|
| 1. Control panel | 10. Cooling zone | 19. Table top power socket |
| 2. Emergency stop | 11. Cooling belt manual travel button | 20. Table top power cord |
| 3. Maintenance switch | 12. Head guard | 21. Table top switch |
| 4. Table top with pre-heating function | 13. Side guard | 22. Table heat indicator light |
| 5. Preheating station | 14. Automatic feeder with suction cylinder | 23. Tabletop heating temperature controller |
| 6. Power cord with plug | 15. Exhaust nozzle | 24. Air conditioner |
| 7. Driving set | 16. Operation signalling device | 25. Air tank drain valve |
| 8. Adjustable foot | 17. Circuit breakers | 26. Air conditioner power socket |
| 9. Heating element | 18. Main switch | 27. Air preparation block |

ENGLISH

1.4. Technical data

Technical data	SCHULZE Mug 15 2nd Generation Press
Dimensions	149 x 131 x 185 cm
Dimensions for transportation	155 x 106 x 177 cm
Weight	374 kg
Power supply voltage	3 x 400 VAC
Power output	7,5 kW
Main fuse	B25A
Temperature range	60 - 200°C
Time settings	2 min. 30 sec. - 5 min.
Heating element	105 x 230 mm
Working area	85 x 180 mm
Diameter of mugs	78 - 83 mm
Min. pressure supplied to the press	6,0 bar
Max. pressure supplied to the press	7,0 bar
Air consumption	10 l / min.
Noise	The machine generates noise less than 70 dB (A)
Max. efficiency of the exhaust fan	400 m³/h
Max. power of the exhaust fan	70 W
Exhaust fan stub pipe diameter	Ø 125 mm

1.5. Safety arrangements of the heat press

The SCHULZE Mug 15 2nd Generation Press is equipped with different safety arrangements, to make a safe usage possible.

Main fuse B25A

The main fuse B25A is situated on the left side of the machine, in the control box. In case of overcharge, the main fuse prevents the heat press from getting damaged. Once the fuse was switched off, it has to be activated. The instruction for activation of the main fuse can be found in chapter 4.3.

Safety valve 8 bar

The safety valve 8 bar is located at the pressure pipe in the press. If the pressure exceeds 8.0 bar, the valve will be activated automatically.

Emergency stop button

Has been installed to eliminate the residual risks. In dangerous situations push the red emergency button. It is situated in front of the press. The press will open automatically. To resume the work pull the button back again.

1.6. Safety arrangements at the workspace

The machine is equipped with a pressure tank with a capacity of 10L. If the regulations of the country in which the machine will be used require this, please report the machine to the appropriate technical inspection body. The tank must be regularly serviced and inspected.

Set-up and installation of the heat press

The set up and installation of the press has to be done under supervision of an authorized person by the company owner. Depending on the model and weight of the heat press, the installation has to be done by 4 or more persons. The press should be situated on the flat, non-flammable surface, in a room with constant temperature and constant moisture. Keep the machine away from dusty rooms, because dust could have a negative influence on some parts of the machine. Very important! The machine may be connected only to an installation provided with a protection against electric shock. The machine is destined for industrial use only.

Testing the machine

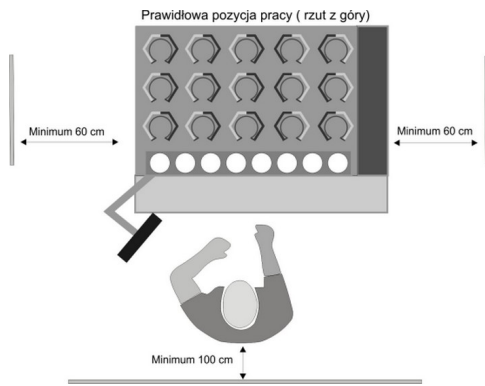
After the correct installation of the machine it is important to ensure that the machine works properly, is not damaged after the transportation and has no safety defects. The testing can only be done by the employer or other authorized persons. It is mandatory to guarantee a correct installation and safe usage of the machine. After receiving the machine, check the packaging. The testing should be protocolled. If any irregularities regarding functionality or safety are found during the testing, these have to be noted and reported to the manufacturer or supplier in written form within 7 days. Until the clarification the machine can not be used.

Information and education

According to §81 the industrial law and § 14 employment protection law (german law), the advice from the producer and general safety arrangements at the workplace, the employer has to make arrangements to give all information about the safety, function and the range of application to the user. In particular the user needs to be acquainted with the complete manual and be explicitly informed of the dangers of working with the machine. The details have to be explained in a coherent form and language. Every user is obligated to a safe usage of the machine and to read the manual instruction before start working with the machine. Using the machine means, that the operator has read the instruction and is aware of the possible risks of working with the machine

Safety arrangements

In order to ensure optimized safety, please read the instruction manual precisely. Only one person is allowed to work on the machine at the time. The machine has to be under supervision the whole time, when it is working. Supervise the machine till it is switched off and the power plug is pulled out.



There should be no unauthorized persons near the machine while it's working. Using the press with certain materials may create a strong smell. That's why the user should evaluate the need for a ventilation system at the workplace. The type of ventilation should be used as needed and depends on the size of the room and used inks. There is a risk of burns on the heating elements and on the preheating plate, which has been indicated by warning signs. Do not install the machine in doors, floors or busy places. The machine has to be installed at a place with enough space around the machine. The space in front of the machine has to be wide enough. Nothing can disturb the operator at work. All wires should be placed in a safe way, to make sure they will not pose a threat for the person working at the machine or passing it. In case of damages or untypical signals from the machine, please disconnect the machine from the power supply, contact the service and do not work with the machine, till the problem is solved. All repairs should be performed after consulting the service. Do not remove machine covers while the machine is working.


Correct operating position

The operator needs enough space and free distance to all switches and buttons to work with the machine. Safe position allows operator to activate the emergency button in every moment.

Other risks and dangers

There are some movable elements on the machine, which can cause injuries of hands or fingers. For reasons of workability, these elements cannot be eliminated. It is important to work with the machine with great care and be alert to avoid other dangerous situations. The machine should be operated in accordance with the manufacturer's recommendations to avoid risks. The machine complies with the essential requirements laid down in regulation for machines. Above information has been worked out in accordance with the standards PN-EN 12100:2012.

1.7. Environmental protection

The packaging of the device must be disposed of in accordance with the applicable rules. Do not dispose of the equipment marked with an  together with your household waste. No longer needed machines may be returned to the manufacturer or disposed of in an environmentally friendly manner by means of appropriate disposal systems.

2 Preparatory steps

2.1. Notes regarding transportation

For transport the SCHULZE Mug 15 2nd Generation Press is packed in a box and placed on a pallet. It should be checked, if the packaging and the machine are in good condition without damages. It has to be done just after receiving the goods from the transportation company and in accompany of a responsible person. Later on, if you need to send the press, please pack the press exactly as you received it. The machine must be cooled for further shipping.

2.2. Package contents

- | | |
|--|---------------------|
| - x1 SCHULZE Mug 15 2nd Generation Press | - x1 Allen key 3 mm |
| - x1 Instruction manual | - x1 Allen key 5 mm |
| - x1 Allen key 2 mm | - x1 Silicone spray |
| - x1 Allen key 2,5 mm | |

2.3. Installation of the heat press

After unpacking the press according to the enclosed instructions, place it at its destination. Then gently remove the display from the device. Then unpack the table top and fix it on the front of the machine. Connect the exhaust fan to the ventilation system. Connect the air conditioner. The air conditioner manual is included in the set.



Unpacking and first setup

2.4. Connection of the press to compressed air

The SCHULZE Mug 15 2nd Generation Press is a pneumatic press that must be connected to the compressed air. The maximum pressure in the press must not exceed 6 bar. The compressed air must be dry and free of oil.

It is recommended to use an air dryer. By using an air dryer we achieve dry and clean air and avoid damage to the pneumatic installation.

The compressor is connected to the press with a quick connector type DN 7,2. Once the work on the press is finished, the compressed air hose must be disconnected and the filter container emptied. Water may accumulate in the filter tank. Check the container at least once a day and empty the collected condensation water if needed. If there is oil in the tank, switch off the press immediately and repair the compressor. Oil in the system may damage the press. If necessary, please contact Service.



Damage to the pneumatic installation caused by a faulty compressor or by no use of an air dryer is excluded from the warranty.

2.5. Power supply voltage

The press **must be connected to the power supply by authorized personnel with appropriate qualifications.**

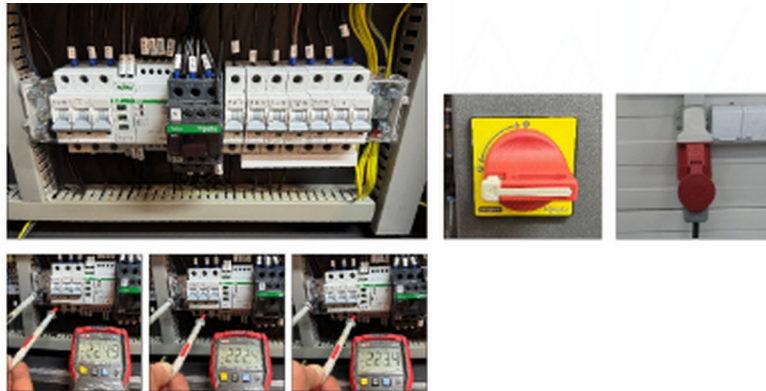
The SCHULZE Mug 15 2nd Generation Press must be connected to a 400 VAC / 50 Hz three-phase power supply. The press is equipped with a three-phase plug 16A. Pay particular attention to whether the socket is in good condition and whether a protective circuit is connected in the socket.

VERY IMPORTANT! The press may only be connected to an installation equipped with electric shock protection. Connecting the machine to the power socket without additional grounding or with faulty grounding is dangerous and may lead to an accident or damage to the device. **Damage resulting from improper connection leads to loss of warranty.**

Before starting the machine, it is absolutely necessary to measure the voltage according to the following instructions. Only after the voltages have been checked can the machine be started.

Step 1 - Open the control cabinet cover located on the left side of the machine and make sure that all fuses are turned off. Then connect the machine to the power supply, but do not turn it on (the main switch is to be set to the "0" position). Then measure the voltage on all three phases. The measurement value on each of the phases should be in the range of 220V - 240V.

Step 1



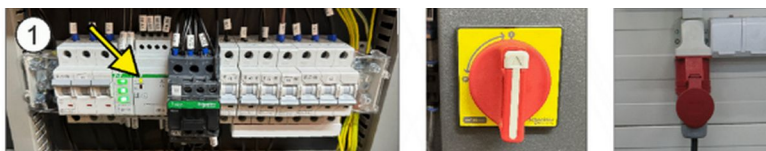
Step 2 - turn on the main fuse (the main switch is still in the "0" position) Three LEDs will light up (the color of the lights does not matter)

Step 2

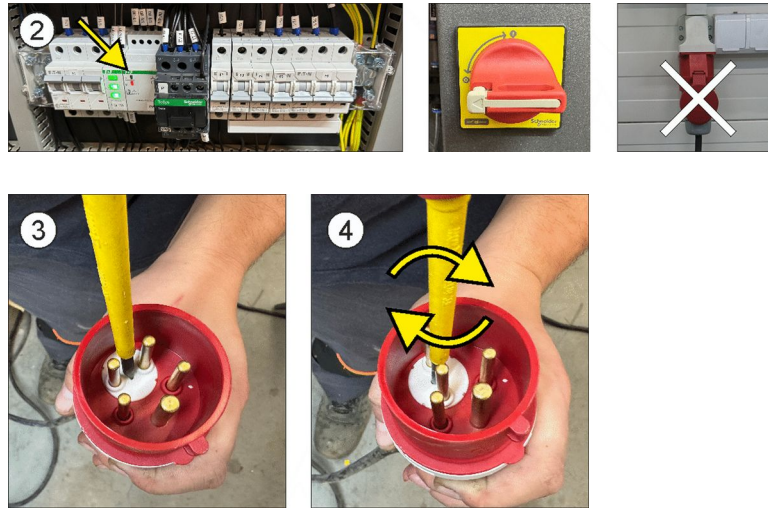


Step 3 - turn on the machine by setting the main switch to position "1". The diode will indicate the correct connection of the phase sequence. Green color (**photo 1**) indicates the correct connection of the phases.

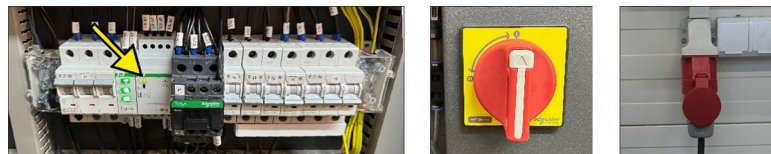
Step 3



If the led turns red (photo 2), remove the plug from the power socket, then use a screwdriver to change the position of the contacts (photos 3 and 4).

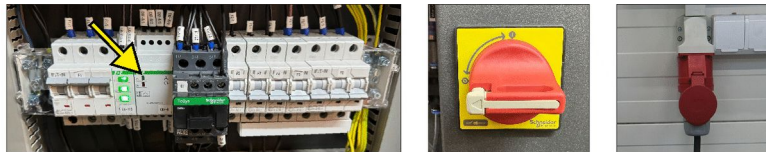


Plug the plug into the power socket; turn the machine on with the main switch. The green LED indicates the correct operation of the machine. If the indicator light is still red, it indicates an error in the electronic installation in the building.



Step 4 – turn off the machine by setting the main switch to the "0" position. The green LED will go out.

Step 4



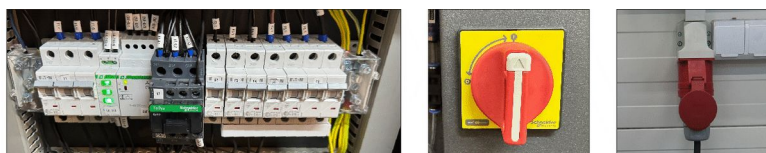
Step 5 - While the main switch is set to "0", turn on the remaining circuit breakers.

Step 5



Step 6 - If there are no problems and the voltage has been checked correctly, close the cover of the distribution box and then start the machine by setting the main switch to position "1".

SKrok 6



2.6. Preparing the press for operation

The SCHULZE Mug 15 2nd Generation Press may only be operated by trained personnel after reading the instruction manual. Before starting work, the working plate and the air conditioner must be installed (see chapter 2.3). Before you switch on the press for the first time, please check that your socket is in proper condition and that the protective line is properly connected. After the press has been connected to the electricity network and the compressed air, the press is ready for operation.

3 Working with the heat press

3.1. Initiation of the heat press

To start the press, set the main switch to position 1. The switch is located on the left side of the press (photo 1). Wait for the electronics to start up.



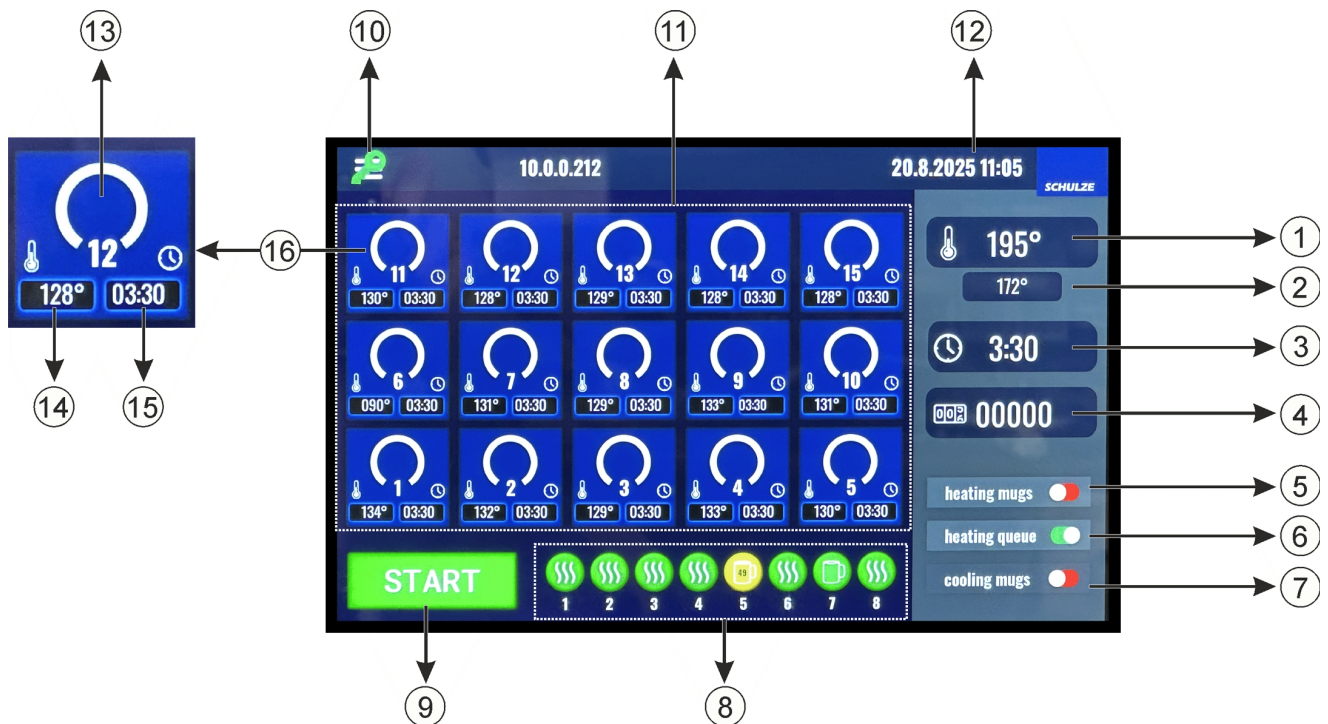
During the machine start-up confirm the safety circuit reset and activate the machine



Once the main menu is displayed, set the mug heating time and temperature, turn on the mug heating systems and the heating station, and start the mug cooling on the conveyor belt (chapter 3.2). After these systems are activated, the machine is ready for operation.

3.2. Interface description and changing program settings

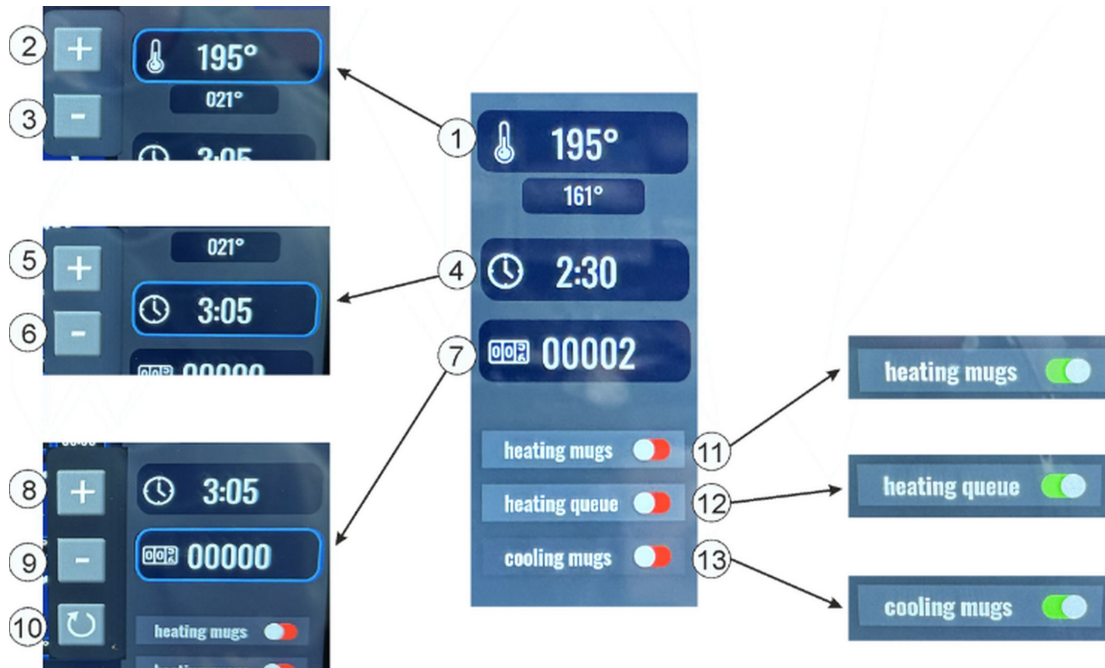
1. Description of main menu functions



1. Set temperature of the heaters.
2. Temperature of the cup preheating station.
3. Preset cup heating time.
4. Heated cups counter.
5. Cup heating switch.
6. Cup preheating station switch.
7. Cooling switch on the conveyor belt.
8. Viewing the status of the cup preheating station.
9. Operation cycle switch.

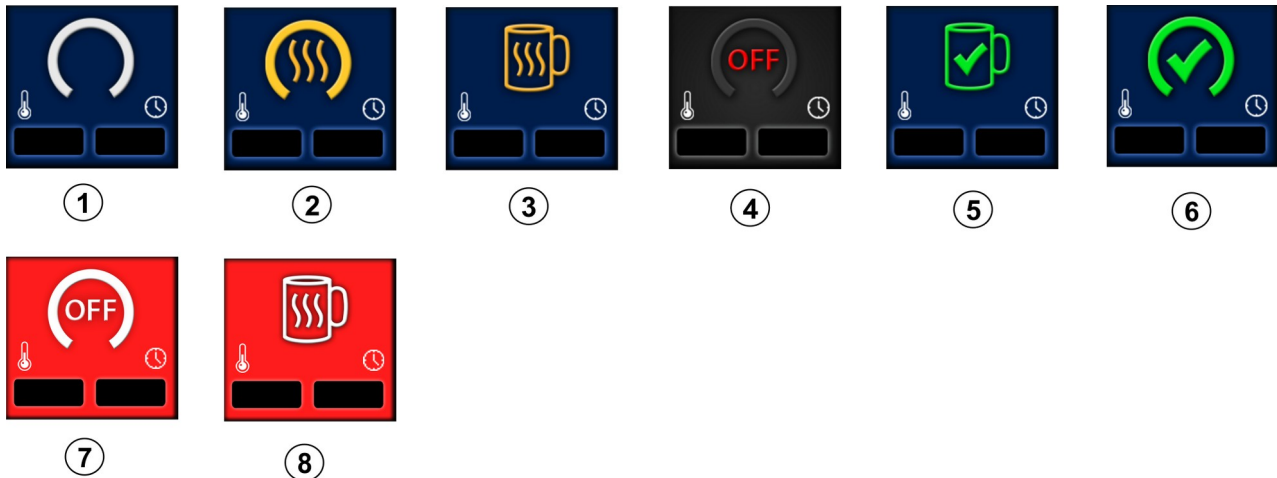
10. Machine setup menu.
11. Viewing the status of all 15 cup heating coils.
12. Date and time.
13. Condition of the heating element.
14. Heating element temperature.
15. Set / countdown cup heating time.
16. Switching the heating element on/off.

2. Changing program parameters.



1. Editing the soaking temperature of the cups.
2. Increasing the temperature (+)
3. Decreasing the temperature (-)
4. Editing the heating time of the cups.
5. Increase the time (+)
6. Decreasing the time (-)
7. Editing the cup counter.
8. Increasing the counter (+)
9. Decrease the counter (-)
10. Resetting the counter
11. Enable/disable cup heating.
12. Switching the heating of the station on/off.
13. Switching the cooling on the conveyor belt on/off.

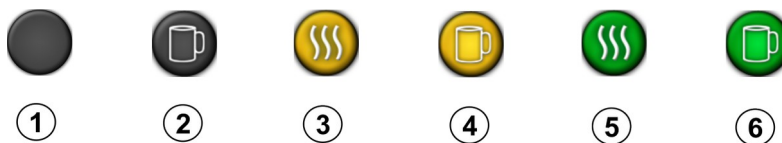
3. Description of the condition of the heating element and the heating station.



Condition of the cup heating element:

1. No cup, no heating.
2. Without cup, heating on – warming up
3. With cup, heating on - warming up
4. Heating element off.
5. With the cup, the cup heating has been completed.
6. No cup, heating enabled – heated to the set temperature
7. Heating element error – without cup
8. Heating element error – with cup

4. Condition of the cup in the preheating station

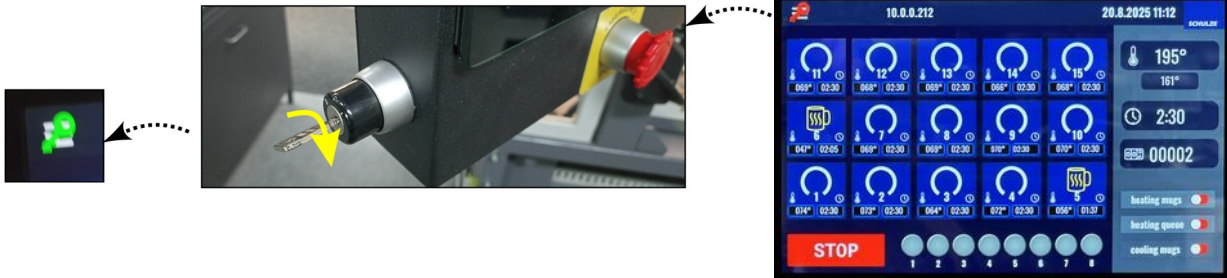


1. No cup, no heating
2. With cup – heating switched off
3. Without cup - warming up
4. With a cup – warming up
5. Without cup – heated to the set temperature
6. With a cup – heated to the set temperature

3.3. Setup and Maintenance Menu

1. Accessing the menu

Access to the machine setup and maintenance menu is secured with a service key.



To enter the setup and maintenance menu, press the icon in the upper left corner - the machine must have the access key turned and not be in the work cycle.

2. Description of the setup and maintenance menu icons

1. Return to the main menu.
2. Setting the position of the heating elements and the preheating station
3. Heating element counters and global counter.
4. Choose your language
5. Maintenance
6. Setting date and time
7. Service menu



3. Description of the positioning menu icons of the heating elements and the preheating station



- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Return to setup and maintenance menu 2. Saving settings (icon active when there are changes of position) 3. Reducing the Y-coordinate for the selected position 4. Increasing the X-coordinate for the selected position 5. Reducing the X-coordinate for the selected position 6. Increasing the Y-coordinate for the selected position 7. Heating elements 11-15 8. Heating elements 6-9 9. Heating elements 1-5 | <ol style="list-style-type: none"> 10. 8 preheating station positions 11. x-coordinate for the selected position 12. y-coordinate for the selected position 13. Cup lift arm on/off 14. Vacuum in the cup lifting arm on/off 15. Repositioning the cart 16. Current date and time 17. Selected position – displays the edited position of the heating element and its state - green open, yellow closed. |
|---|--|

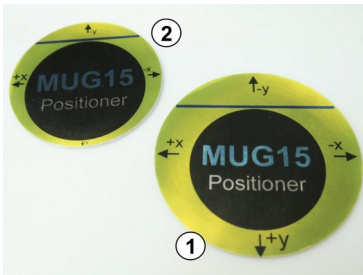
4. Setting the position of the heating elements and the preheating station.

Changing the position settings of the heating elements and the preheating station can be performed by personnel **trained in Work Safety at the machine** and **after reading the machine manual**. When setting the position, it is recommended to **be especially careful** when manually inserting cups into individual sections with a heating element when fixing the position of a closed heating element with a cup inside.

After entering the positioning menu when the machine has not previously determined the position of the cart, press the **icon 1** to determine the position of the cart – after the machine has performed positioning, the positioning edit field will be displayed - **icon 2**.



Positioning elements.

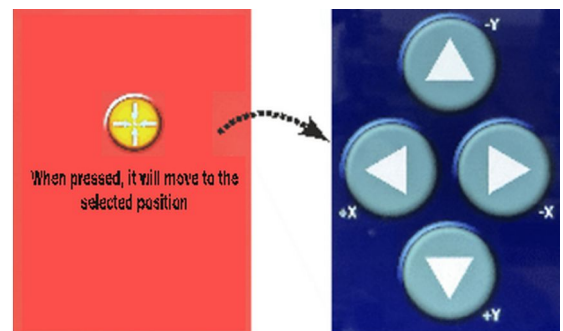


The machine is equipped with elements used in positioning:

1. larger - for determining the open position of the heating element and the cup preheating station
2. smaller - for fixing the closed position of the heater with the cup.

Moving to a new position.

After selecting a new item to edit, an icon will be displayed that requires pressing before editing the item. Once activated, the cart will move to the newly selected position and the X and Y coordinates of the selected position can then be edited.



Position of the open and closed heating element.

Po wybraniu nowego elementu grzewczego domyślnie wybrana jest pozycja otwarte (zielona ikona). Aby edytować pozycje zamkniętą elementu grzewczego należy nacisnąć ponownie jego ikonę – wybrany element grzewczy zamknie maczetę oraz ikona zmieni kolor na żółty. Kolejne jego naciśnięcie otworzy elementy grzewczy i ikona zmieni kolor na zielony.

Determining the open position of the heating section and the position in the cup preheating station.

1. Move the cart to the front of the machine – above the cup preheating station (select one of the icons in the preheating station and press the cart move icon).



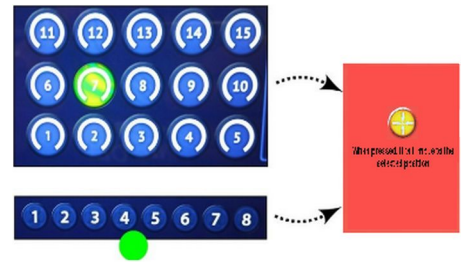
2. Place a larger positioner under the suction cup (see **subsection 3.3.4 positioning elements icon 1**) so that the black wheel on it coincides with the suction cup. Then, while manually holding the positioner at the suction cup, press the vacuum on icon - after the vacuum is applied, the positioner will adhere to the suction cup



3. Selecting a position to edit

- For an open heating element – select the heating element which position is to be edited so that its icon lights up green – the section will be open
- For the heating station – select the item you want to edit.

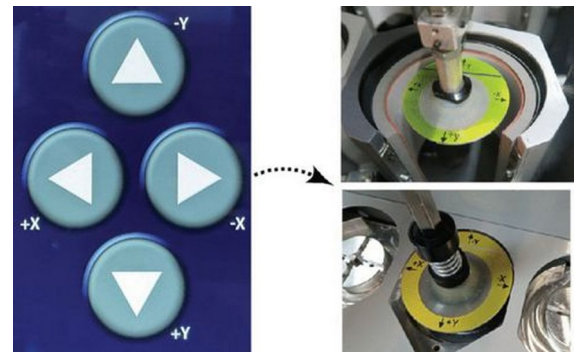
And press the cart move icon above the selected position.



4. After moving over the edited position, turn off the actuator holding the arm with the positioner in the upper position by pressing the actuator icon – the color of the icon will change from green to gray.



5. Then manually lower the positioner arm over the position being edited (over an open heating element or over a heating station). And use the arrows on the screen to center the positioner inside the heating element or the heating station.



6. After finishing editing, save the changed coordinates by pressing the SAVE icon.

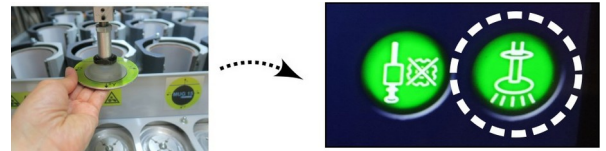


Determining the closed position of the heating element.

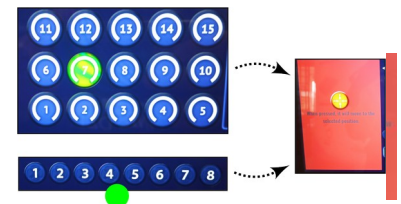
1. Move the cart to the front of the machine – above the cup heating stations (select one of the icons in the heating station and press the cart move icon).



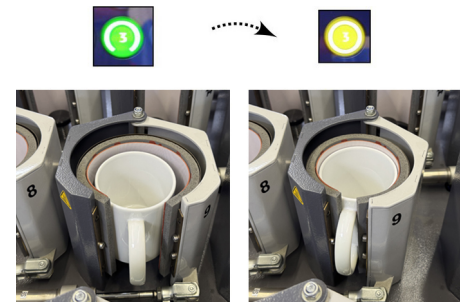
2. Place a larger positioner under the suction cup (see **subsection 3.3.4 positioning elements icon 2**) so that the black wheel on it coincides with the suction cup. Then, while manually holding the positioner at the suction cup, press the vacuum on icon - after the vacuum is applied, the positioner will adhere to the suction cup.



3. When the cup lifting arm is over the position you want to edit, move the arm over another position to be able to insert the cup into the heating element -> select a position other than the one you want to edit on the display and then press the arm shift icon.



4. Insert the cup into the section whose position is to be changed, then press the icon corresponding to the position to which it is to be edited twice – the position icon will turn yellow and the heating element with the cup will close.



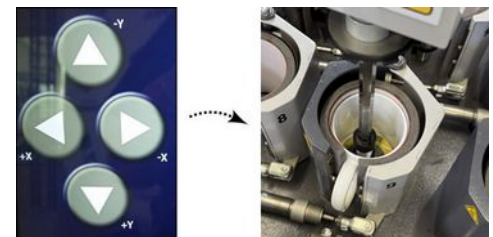
5. After closing the heating element with the cup inside, move the frame to the position by pressing the movement icon over the selected position.



6. After moving over the edited position of the closed heating element, turn off the actuator holding the arm with the positioner in the upper position by pressing the actuator icon – the icon will change from green to gray.



7. Then manually lower the arm with the positioner over the position being edited. And use the arrows on the screen to center the positioner inside the cup – the position is well established when we you freely lower the positioner to the bottom of the cup.



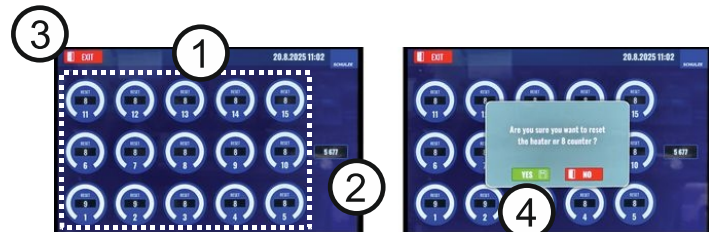
8. After finishing editing, save the changed coordinates by pressing the SAVE icon.



5. Heater cycle counter and global counter

The machine is equipped with cycle counters for each heating element – **icon 1** and a non-editable global transfer counter – **icon 2**. The counter menu can be closed by pressing **icon 3**.

When the heating element is replaced, the counter of this element should be reset – this is done by pressing the corresponding heating element of the counter on the screen. You will then be asked to confirm the reset of the selected counter – then confirm the reset by pressing the **icon 4**.



6. Selecting the language

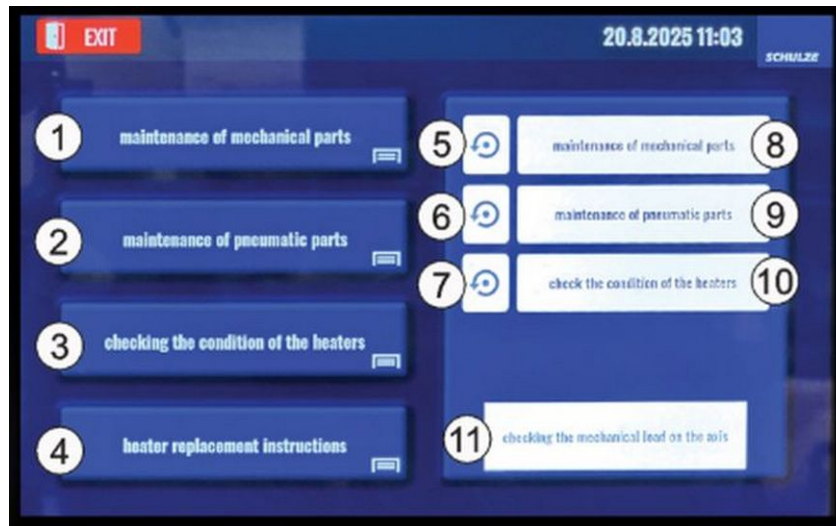
In the language selection menu, you can select in which language the interface and machine messages will be displayed. **Icons 1, 2 and 3** determine in which language the messages will be displayed:

1. Polish
2. English
3. German

Return to setup and maintenance menu by pressing **icon 4**



7. Description of maintenance menu icons



1. Instruction for maintenance of mechanical parts of the machine
2. Maintenance manual for the pneumatic parts of the machine
3. Instructions for checking the condition of the heating element
4. Instructions for replacing the heating element
5. History of performed maintenance of mechanical parts
6. History of performed maintenance of pneumatic parts
7. History of the performed checks of the condition of the heaters

8. Active when periodic maintenance of mechanical parts is required
9. Active when periodic maintenance of pneumatic parts is required
10. Active when periodic checking of the condition of the heaters is required
11. The menu for checking the condition of the cart running gear
12. Return to previous menu

Description of machine maintenance in point 4. Maintenance and replacement of parts

8. Time shift



1. Day shift +
2. Day shift -
3. Month shift +
4. Month shift -
5. Year shift +
6. Year shift -
7. Hour shift +

8. Hour shift -
9. Minute shift +
10. Minute shift -
11. Date display order: day month year / month day year
12. Display time mode 12h / 24h
13. In 12h am / pm mode
14. Return to previous menu

9. Access to the service menu

Access to the service menu of the machine is unlocked with a code that is available only to authorized personnel. Unauthorized interference with service settings may damage or block the operation of the machine.

3.4. Working on the machine

1. Starting the heating elements and cooling the conveyor belt

After the machine has been prepared for operation (see **point 2.5**), the heating of the heating elements (see **point 3.2.1 – icon 5**), the preheating station (see **point 3.2.1 – icon 6**) and the cooling on the conveyor belt (see **point 3.2.1 – icon 7**) must be switched on.

2. Starting the cycle and feeding the cups

To activate the machine, press the start icon (see **section 3.2.1 icon 9**). The machine will enter the operating state and will automatically take cups from the queue (when the heating elements warm up to the set temperature). When cup heating is turned on after inserting the cup, the machine will start counting down the time to heat it up (**icon 1**) and after that time it will be ready to be collected (**icon 2**). When more than one cup is ready to be collected, the one that is in the preheating station for the longest time will be collected by the machine.



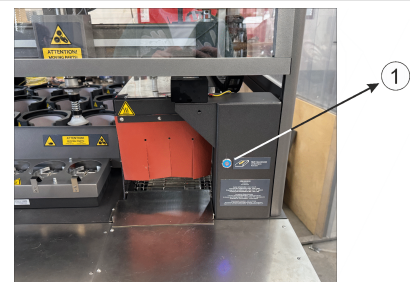
3. Collecting heated cups

The machine is equipped with a cooling system of moving cups after heating on the conveyor belt, its activation is carried out by pressing the icon in the main menu (see **point 3.2.1 icon 7**). After its activation, the heated cups are cooled during transport on the belt.

Regularly collect the cups from the conveyor belt so as not to lead to a congestion on the conveyor belt.

3.5. Manual movement of the conveyor belt

If it is necessary to manually move the conveyor belt (e.g. to eject the cups after the end of the work cycle), press the button at the conveyor belt. The manual movement of the belt through the button is blocked during the automatic movement of the belt resulting from the operation of the machine.



Conveyor belt

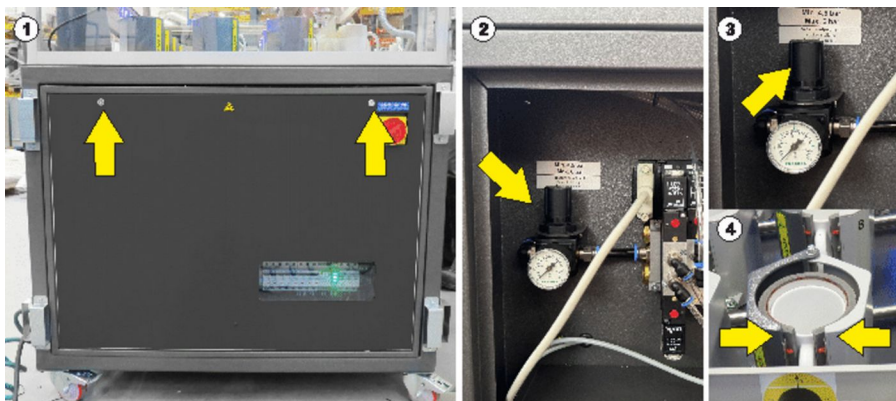
3.6. Application range and sample adjustments of the heat press

The SCHULZE Mug 15 2nd Generation Press is used to apply transfers to mugs. Here are some sample settings:

Sublimation to a mug:

- Temperature of the heating sleeves 180°C
- Time 3:30 min.
- Air conditioner temperature: 18°C

3.7. Pressure adjustment



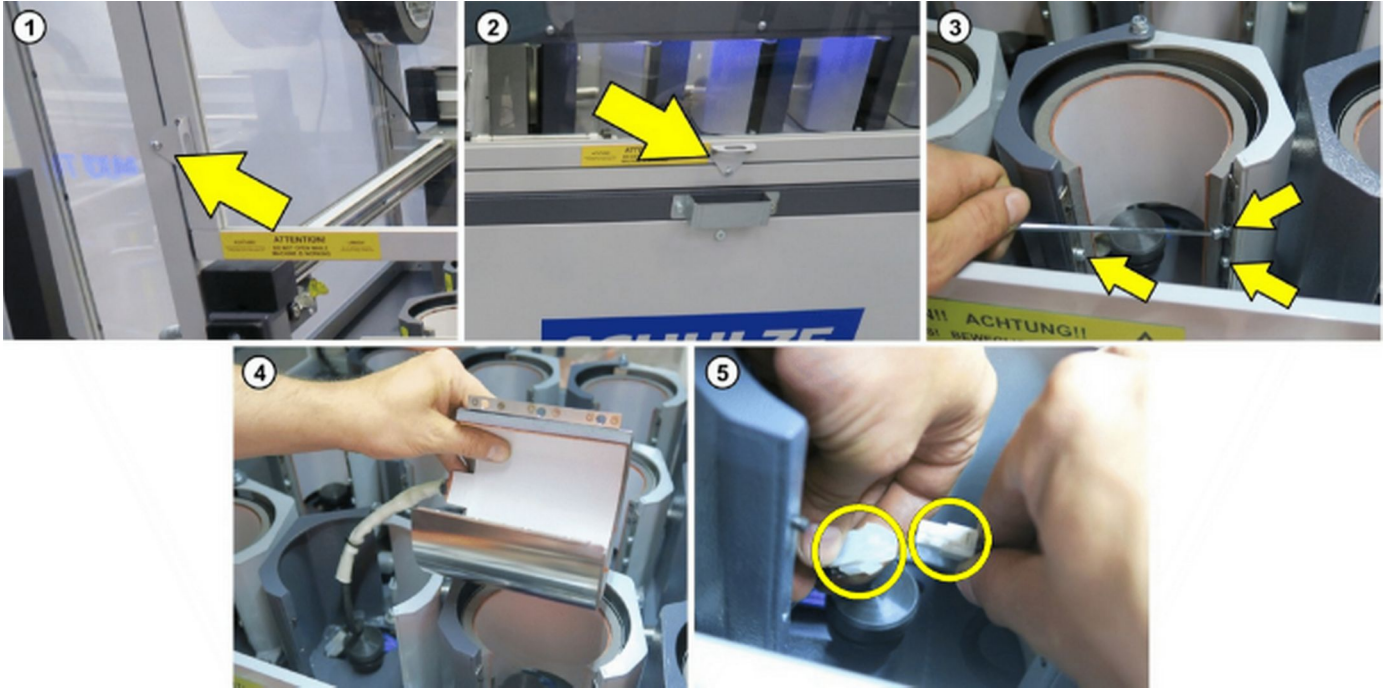
The pressure of the heating elements is set at the factory and adjusted by pneumatic cylinders. The adjustment is located on the left side of the machine (photos 1-4) The pressure has been set optimally (**5 bar**) and these settings should not be changed without consulting the service.

3.8. Instruction for replacement of the heating element

Before replacing the heating element, switch off the press and remove the plug from the socket. The heating element must be cooled down. To replace the heating element, follow the instructions:

1. open the correct safety cover (picture 1 or 2)
2. unscrew the heating element (picture 3)
3. remove the heating element (picture 4)
4. pull out the cable (picture 5)
5. install the new heating element.

Very important! After replacing the heating sleeve, please make sure to check the starting position of the new sleeve.



The instructions can be found in **chapter 3.3.4**.

3.9. Setting the machine up after replacing the heating element

After replacing the heating element, the position must be reset for the open heating element without a mug and the closed heating element with a mug. Both procedures are described in subsection **3.3.4 Setting the position of the heating elements and the heating station**.

4 Maintenance and replacement of parts

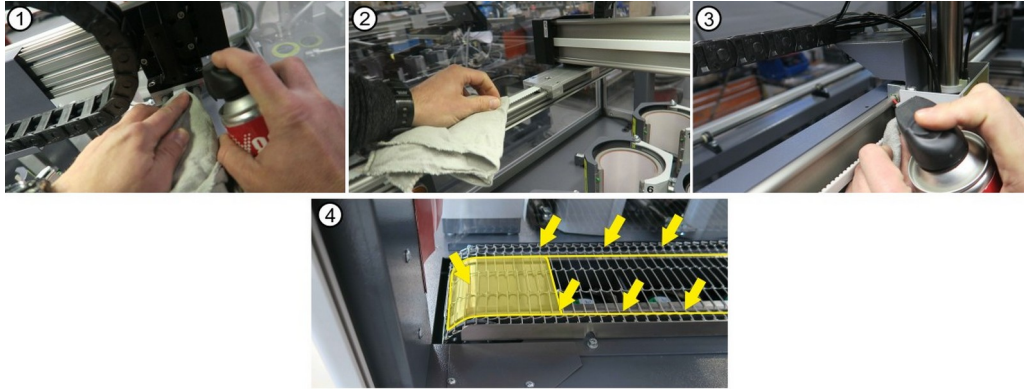
All maintenance work must be carried out on the machine switched off and cooled down.

4.1. Periodic maintenance of mechanical parts

Information about periodic maintenance of mechanical parts will appear when the machine is switched on every 30 days.



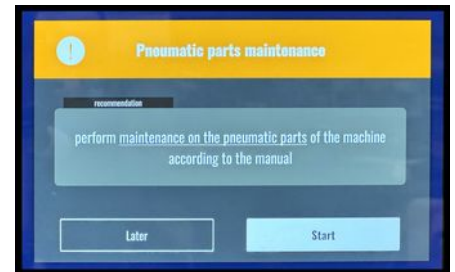
Then follow the instructions on the screen or the photos below - wipe the guides with a cloth and lubricate them with silicone spray grease (photos 1-4 **check – the belt as well**). If in doubt, please contact the service.



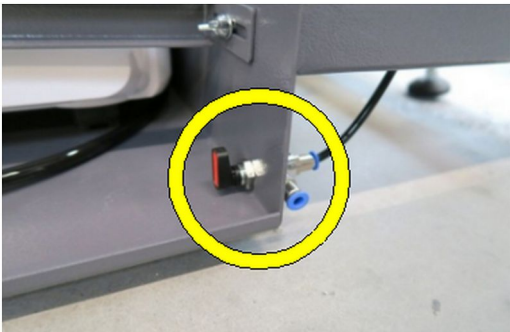
4.2. Periodic maintenance of pneumatic parts

The SCHULZE Mug 15 2nd Generation Press is equipped with a 10L air tank. **Therefore, this device should be reported to the Office of Technical Inspection. The tank must be regularly inspected and controlled.** This is located at the rear of the machine.

Information about periodic maintenance of mechanical parts will appear when the machine is switched on every 7 days.



Emptying the press tank

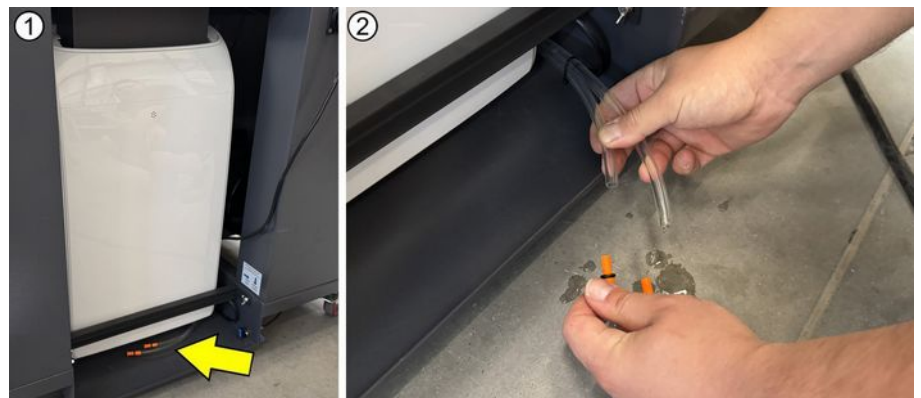


To do this, unscrew the valve located in the lower right part of the machine (**photo**). After emptying the tank, close the valve.

Emptying the air conditioner tank

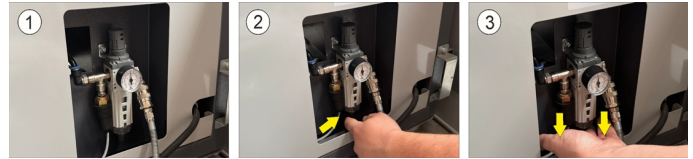
In order to do so it is necessary to:

1. Turn off the machine with the main switch and pull the plug out of the power socket.
2. Place the condensate tray next to the air conditioner.
3. Remove the plug and drain the water from the tank (photos 1-2)
4. Secure the hose with the plug and connect the machine to the power supply.



Emptying the air filter.

This should be done by pulling and turning the plug located under the tank (**photo 1**). If water still remains in the tank, disconnect the compressed air pipe, then rotate the reservoir (**photo 2-3**) and pour out its contents. If necessary, clean the filter in the reservoir. The reservoir should be unscrewed and removed (**photo 2-3**), then unscrew the screw securing the filter (**photo 4**). Remove the filter, clean it and screw it back on (**photo 5**). compressed air entering the press may damage the pneumatics

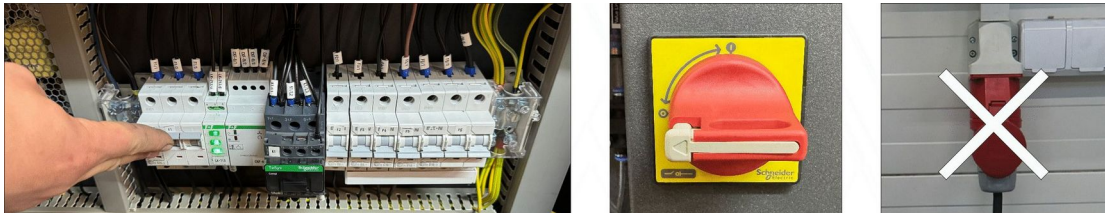


4.3. Periodic check of the condition of the heat elements

Check the condition of the heating elements every 2 weeks. Attention should be paid to whether the heating element is not mechanically damaged or whether air bubbles have formed in it that would cause discoloration of the transfer during sublimation. An example of a damaged heating element is shown next to it. If the heating element is found to be damaged, it must be replaced – see **section 3.8**.



4.4. Instructions for activating the main fuse



If the press does not work when switched on, check the main fuse in the press. Activation may only be carried out by authorized personnel. The main fuse is located in the lower part of the press, in the control box on the left side. To activate the fuse, first switch off the press and pull the plug out of the power socket. Then unscrew and remove the cover and activate the fuse by moving its lever up (**photo**).

4.4.1 Replacing the fuse in the preheating table top

If the press does not work when switched on, check the main fuse in the machine and replace it if necessary. Replacement can be done only by authorized personnel, after agreeing the failure with the supplier of the device. To replace the fuse, first turn off the machine, pull out the plug from the mains socket **and unplug the power cord of the preheating station** (**photo 1**). The fuse 6A is located on the left side of the machine. **Open the holder in which the fuses are located** (**photo 2**). **Photo 3 shows two fuses: fuse A and fuse B. Fuse A is connected to the electrical circuit of the machine and fuse B is spare.** Pull both fuses out of the holder (**photo 3**), replace fuse **B** with fuse **A** and close the fuse holder again.



4.5. Adjustment of proximity sensors

The sensors in the arm are responsible for the correct lifting and lowering movement of the mugs. The adjustment is carried out with the machine switched on.

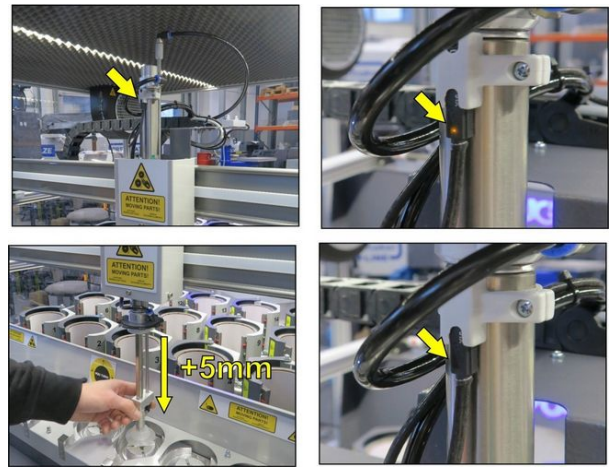
1. Enter the *Heating elements and heating station position setup* menu (see subsection 3.3.3).

2. Insert a mug into the heating station and move the carriage to the front of the machine – above the mug heating station (select the icon of the heating station where the mug was inserted and press the carriage movement icon).

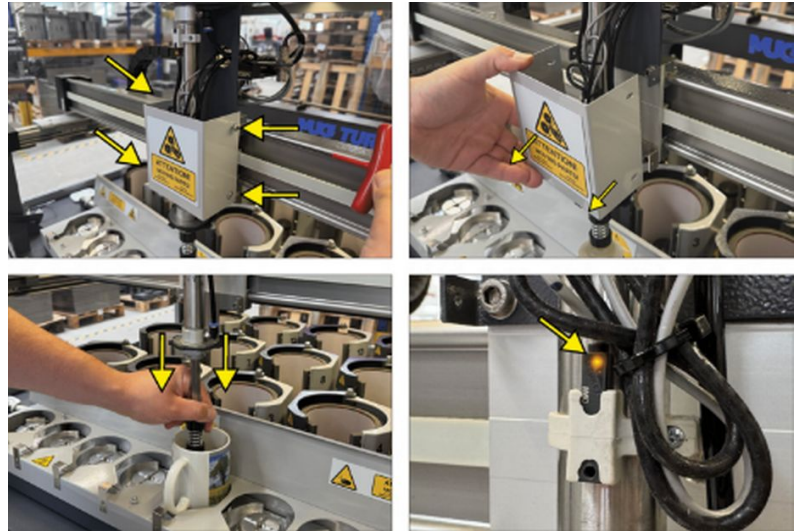
3. Unlock the arm by pressing the 'arm unlock' icon



4. Adjust the upper sensor so that when manually lowered by 5 mm, the indicator light on the sensor turns off



5. Adjust the lower sensor so that when the arm is lowered onto the mug in the station, the indicator light on the lower sensor turns on



Adjustment of proximity sensors

The SCHULZE Mug 15 2nd Generation Press is equipped with two proximity sensors that activate the belt movement. The adjustment of the proximity sensors is located in the back part of the machine (**photo 1**). To adjust the distance over which the cups should move, please contact the service.

The sensor is equipped with a potentiometer for adjusting its sensitivity. Sensitivity of the sensors was adjusted at the factory. Adjust sensors only if necessary. Keep in mind that the sensors respond differently depending on the color and material reflecting their light.

ADJUSTMENT OF SENSOR No. 1 (**photo 3**)

1. Place a cup in front of sensor 1 at a distance of 15 cm (**photo 4**).

2. Adjust the sensor using the screw on the sensor.

- Turn the screw on the sensor gently to the left as far as possible and the diode will light up green (**photos 5 and 6**).

- Turn the screw slowly to the right until the green diode light turns off (**photo 7**).

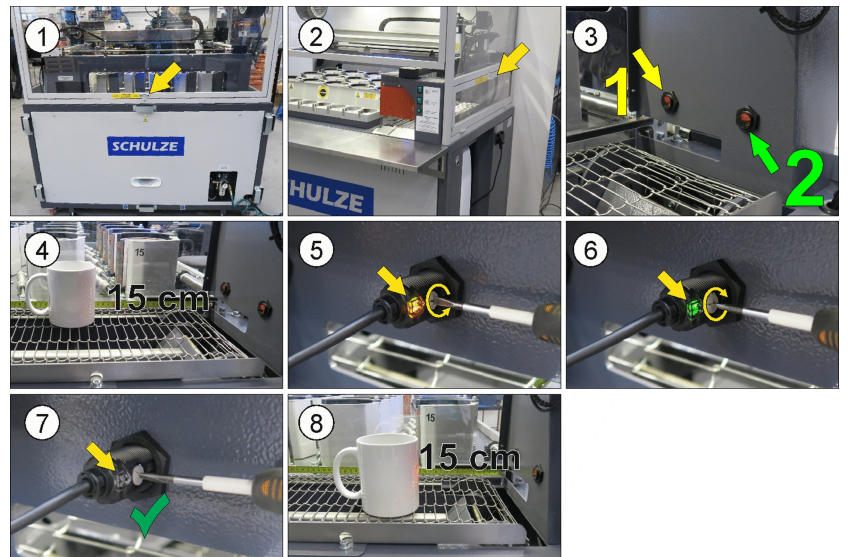
ADJUSTMENT OF SENSOR No. 2 (**photo 3**)

1. Place a cup in front of sensor 2 at a distance of 15 cm (**photo 4**).

2. Adjust the sensor using the screw on the sensor.

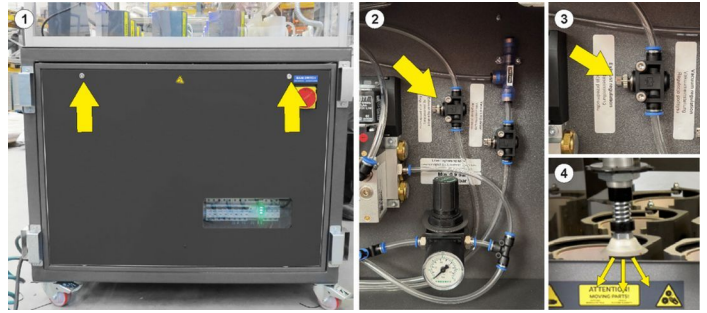
- Turn the screw on the sensor gently to the left as far as possible and the diode will light up green (**photos 5 and 6**).

- Turn the screw slowly to the right until the green diode light turns off (**photo 7**).



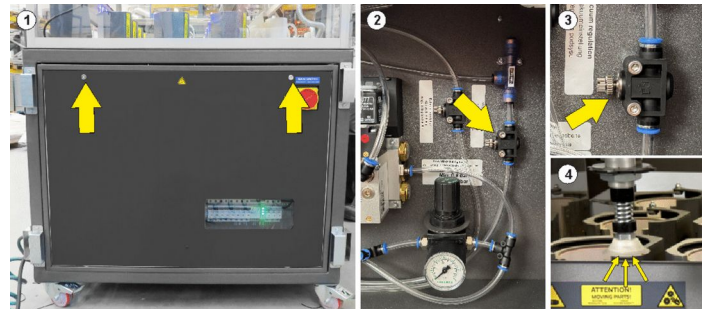
4.6. Adjustment of the air flow

On the SCHULZE Mug 15 2nd Generation Press, the amount of air discharged through the vacuum nozzle can be adjusted. The adjustment valve is located in the pneumatic box (pictures 1-4). The amount of air discharged through the vacuum nozzle has been adjusted in the factory and these settings should not be changed without consulting the service.



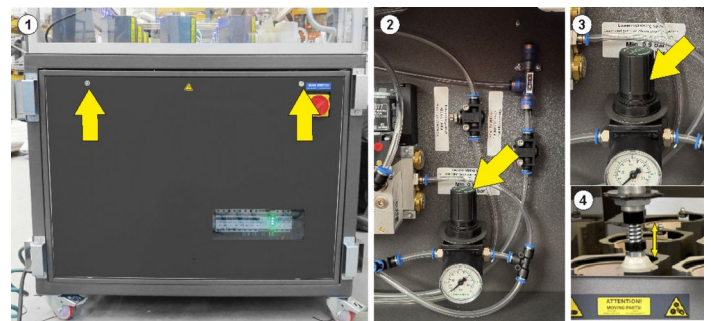
4.7. Adjustment of vacuum power

The vacuum power can be adjusted on the SCHULZE Mug 15 2nd Generation Press. The adjustment valve is located in the pneumatic box (pictures 1-4). The amount of air which can be drawn in has been adjusted at the factory and these settings should not be changed without consulting the service.



4.8. Speed adjustment of the lowering / raising of the gripper

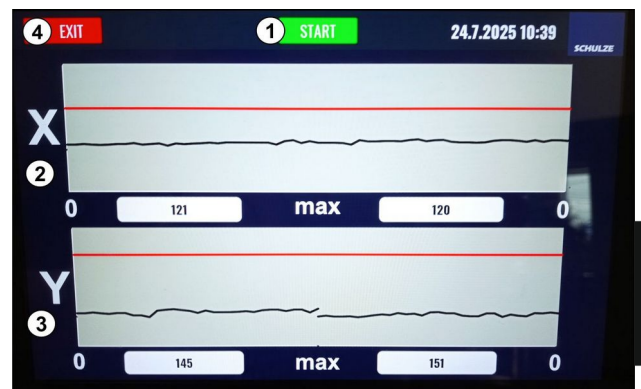
On the SCHULZE Mug 15 2nd Generation Press, the lowering/raising speed of the gripping arm can be adjusted. The adjustment valve is located in the pneumatic box (pictures 1-4). The lowering/raising speed of the gripper has been adjusted at the factory and should not be changed without consulting the service.



4.9. Carriage movement resistance check"

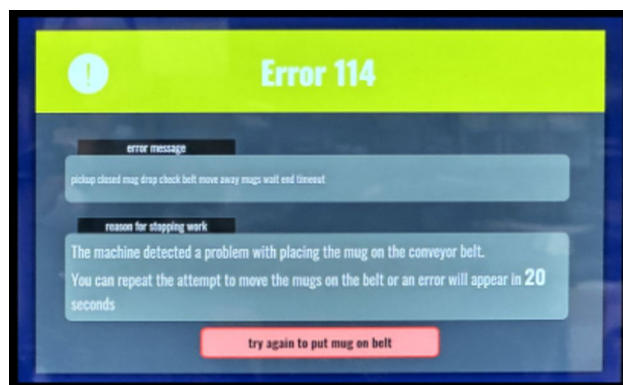
To check for issues with the drive system, enter the *Carriage movement resistance check* menu in the maintenance section (see subsection 3.3.7, icon 11), and then activate the carriage resistance test function using icon 1. The press will then measure the resistance values across the range of motion of each axis.

If the measurement result exceeds the permissible value, perform maintenance of the drive system (see section 4.1). If this does not resolve the issue, contact the service department.



4.10. Conveyor belt problems

If for some reason the last mug on the conveyor belt does not move away from the proximity sensor (there will be no room to put another mug away), an error screen will appear on the display. Open the side cover and remove the mugs from the conveyor belt manually. After removing the blockage, close the side cover and confirm by pressing the screen.



5 Documentation

5.1 Warranty terms and conditions

Schulze heat presses and other equipment are covered by a 24-month warranty for the correct operation of the machinery in accordance with its intended use and operating conditions.

The warranty covers: machine structure, mechanical components, electronics and housing.

Replacement parts such as the fuse, temperature sensor, buttons, fans and all springs and gas springs in presses and equipment are covered by a 6-month warranty.

Pneumatic cylinders and ionizers have a warranty for 12 months.

The PretreatMaker is covered by a 12-month warranty.

The heating element in the heating plates is covered by a 12-year warranty.

The specifications of the device with serial numbers can be found on the nameplate on the machine housing or, in case of the heating plate as well as the cup heater, on the cable.

The purchaser is obliged to nominate a person responsible for the operation and proper maintenance of the machine. The purchaser performs inspection, maintenance and cleaning of machines at his own costs. The warranty covers equipment with complete nameplates.

Warranty does not cover:

1. Components which have been damaged by external factors such as water, electrostatic discharge and others.
2. Components and parts which have been damaged as a result of using unsuitable consumables.
3. Damages caused by improper transport or use inconsistent not regarding with the operating conditions specified in this manual, caused by the fault or ignorance of the purchaser.
4. Usage, damage to consumables, i.e. teflon and heating elements in mug presses, conveyor belts silicone foams, air bags in membrane plates, lamp, glass, valves, nozzles, rubber gaskets, filter, rubber in Simple, Simple Plus mugbands, foam in HotMug mugbands.
5. Warranty rights do not include the purchaser's right to claim reimbursement of lost profits and costs incurred as a result of equipment failure.

5.2. Conformance declaration

Konformitätserklärung
Conformance declaration
Deklaracja zgodności
nr MUG152ndGenPress/01/25/01



Produzent
Manufactuer
Producent

ROMANIK Andrzej Romanik, ul. Przemysłowa 10, 84-240 Reda, Polen / Poland / Polska

erklärt in seiner Verantwortung, dass unsere Produkte:
hereby declares that the following machine:
stwierdza, że produkt

SCHULZE Mug15 2nd Generation Press,
die unter diese Erklärung fallen, den einschlägigen Richtlinien entsprechen:
is compliant with the specifications of the followings CE directives:
którego dotyczy niniejsza deklaracja, jest zgodny z odpowiednimi dyrektywami:

Maschinenrichtlinie (2006/42/EC)
Machinery (2006/42/EC)
Dyrektywa maszynowa (2006/42/EC)

Niederspannungsrichtlinie (2014/35/EU)
Low Voltage (2014/35/EU)
Dyrektywa niskonapięciowa (2014/35/EU)

EMV Richtlinie (2014/30/EU)
EMC (2014/30/EU)
Dyrektywa kompatybilności elektromagnetycznej EMC (2014/30/EU)

RoHS II Richtlinie (2011/65/EU) und RoHS III Richtlinie (2015/863)
RoHS II (2011/65/EU) and RoHS III (2015/863)
Dyrektywa RoHS II (2011/65/EU) i RoHS III (2015/863)

Angewendete Normen und technische Spezifikationen:
Used norms and technical specifications:
Zastosowane normy i specyfikacje techniczne:

PN-EN ISO 12100:2012
PN-EN 60204-1:2018-12
PN-EN IEC 61000-6-1:2019-03
PN-EN IEC 61000-6-3:2021-08
PN-EN ISO 13850:2016-03
PN-EN IEC 6300:2019-01

Angewendet Qualitätssystem: testing report / 2023
Applied quality system: testing report / 2023
Zastosowano system jakości: testing report / 2023

Reda, 24.10.2025

Geschäftsinhaber / Company owner / Właściciel firmy
Andrzej Romanik

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Für die technische Dokumentation ist Romanik Andrzej Romanik ul. Przemysłowa 10, 84-240 Reda, Polen, befugt.
Technische Änderungen vorbehalten. Der Produzent haftet nicht für Druck- und Inhaltsfehler.

Entity authorized to prepare technical documentation and declaration of conformity: ROMANIK Andrzej Romanik ul. Przemysłowa 10, 84-240 Reda, tel. 58 6780-700, e-mail: sprzedaz@romanik.pl. The manufacturer reserves the right to make constructional and technological changes.

Podmiot upoważniony do przygotowania dokumentacji technicznej oraz deklaracji zgodności: ROMANIK Andrzej Romanik ul. Przemysłowa 10, 84-240 Reda, tel. 58 6780-700, e-mail: sprzedaz@romanik.pl. Zastrzegamy sobie prawo do zmian technicznych.

