Suprasetter 145/162/190

User's Guide

08/2019
Order No. PG.999.0005

HEIDELBERG

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Important notice:

We are dedicated to improving and enhancing our products. Consequently, the information in this manual is subject to change without notice.

Heidelberger Druckmaschinen AG assumes no responsibility for information and description as far as third-party products are concerned.

The information contained in this manual about performance and speed as well as technical data concerning application of our products is not legally binding as it does not constitute a written contract of features.

If any problems occur with the product described in this manual, please contact the agency which is responsible for you.

Translation of Original operating manual

Order No. PG.999.0005
08/2019

Printed in Germany.

Before you start ...

Introduction

Notes on Installation

Operation

Service and Maintenance

Disposal

Technical Data

About This Documentation

This documentation is intended as a reference work for the operator during training courses and in operation.

Note: The documentation must be kept safely for future use right up to the disposal of the Suprasetter.

What You Should Already Know

The user, having attended a training course, should be familiar with the Suprasetter.

Symbols and Styles

The following typographical conventions are used in this manual:

- References to other chapters and sections are blue (on the screen) and underlined.

  Example: See section "Symbols and Styles", page 7.

- Quotes are used to indicate menus, folders, functions, hardware conditions, switch settings, system messages, etc.

  Example: Set the switch to "off".

- Menus, functions and sub-functions are separated by ">".

  Example: Select "File > Open...".

- Buttons which you should hold down simultaneously are connected with a plus character.

  Example: Press Alt+A.

Important Information

Important information in the text is indicated by symbols at the side which are used as follows:

DANGER

The "DANGER" signal word indicates a hazard with a high risk which, if not avoided, will result in death or severe injury.

Warning

The "WARNING" signal word indicates a hazard with a medium risk which, if not avoided, can result in death or severe injury.

Caution

The "CAUTION" signal word indicates a hazard with a low risk which, if not avoided, can result in minor or moderate injury.

Notice

The "NOTICE" signal word indicates possible material damage. Non-observance of this notice can cause damage to the machine.

Note: Contains important general or supplementary information about a specific topic.

Prerequisite: Lists requirements which must be met before the subsequent steps can be performed.

Safety Notes

The Suprasetter complies with the safety regulations of the standards and specifications listed in the "Technical Data" chapter.

Device Names

Sales designation	**Type designation**
Suprasetter 145/162/190	PG.010.000B
I/O table	PG.021.000F

Intended use

The Suprasetter is a laser imagesetter for imaging offset printing plates and may only be used for this purpose as described in the customer documentation.
All other use that does not comply with the correct use is prohibited.

Avoid Misuse

Do not place any objects or liquids on the Suprasetter.
Ventilation outlets must be kept clear at all times.

Do not use the Suprasetter as a seat.

Qualification of the Users

After installation, users will be instructed in the operation and service and maintenance of the Suprasetter by Heidelberg service personnel. Further instruction, for example, for new staff employed subsequently, must be ensured by the operator of the Suprasetter.

General

The Suprasetter may be installed only by authorized service personnel. The ambient conditions must be observed.

For the operating company of a print shop, it is important that the exposure limits regarding the breathable air in the work area, where the Suprasetter is located, are adhered to. The air exchange must be arranged in such a way that the measured dust particles are regularly below the exposure limit values. In accordance with the state of the art, this can be achieved with an 8 to 10 air change rate per hour. If this is not the case at the installation site, the operating company should install an additional exhaust system.

Warning

Risk of fatal injury from unauthorized opening of the device

Unauthorized opening of any parts of the casing not specifically referred to in the operating manual and inexpert repairs can lead to considerable danger for the user.

Servicing work may only be performed by authorized specialist personnel. The relevant accident prevention regulations must be observed at all times.

Non-observance of accident prevention regulations can lead to the loss of accident insurance cover.

Caution

Risk of injury from improper handling

Plate edges can be sharp. You can injure your hands if you do not wear protective gloves.

Caution

Risk of injury from improper handling

The following loads should not be exceeded: women 15 kg, men 25 kg.

Warning

Risk of injury if safety system bypassed

The key-operated switch that can be seen after the left side panel is opened may be operated only by service personnel and not by the operator.

The key-operated switch bypasses the safety loop.
The following risks can occur:
- Hazard of being crushed by moving parts.
- Injury from electric shock.

DANGER

Danger! High Voltage!

If cleaning the Suprasetter involves the use of liquids, disconnect it from the power supply beforehand.

Do this by pulling out the power connector on the service tap or by switching it off with the power switch.

Caution

Risk of injury from improper handling

You run the risk of injuring yourself between the insertion/ejection table and the cross conveyor of the Suprasetter when printing plates with sharp edges are output. You can injure your fingers if they are between the insertion/ejection table and the cross conveyor. Use the protective cover to avoid this.

Caution

Risk of injury from improper handling

We recommend that you wear the disposable gloves and light dust mask included in the kit when you are changing the filters.

Note: After you remove the filters, clean the casing with a vacuum cleaner. Place the used filters, disposable gloves, dust mask and vacuum cleaner bag in a plastic bag, tie the bag up and dispose of it as general commercial waste. If you are not sure about disposal procedures, contact your local waste disposal company for details.

Power Switch with Emergency Cutoff Function

The Suprasetter is **fully cut off** from the power supply by the **power switch** (red rotary switch).

The power switch (red rotary switch) triggers an all-pole cut-off of the Suprasetter from the power supply.
In an emergency, it is to be used as an emergency cutoff switch for the Suprasetter.

Emergency Stop Switch

The four emergency stop switches are located behind the panels of the device. They are designed for an emergency during servicing and must be actuated in the case of danger.

If one of the emergency stop switches is used, all mechanical motions in the device are stopped.

Note: The invisible laser beam is switched off whenever a panel is removed.

On/Off button

The Suprasetter is only de-energized by the **On/Off button**.

All connectors and outlets of the service line must be easily accessible at all times.
You must **fully disconnect** the Suprasetter from the power supply, for example, in hazardous situations. To do this, use the power switch or pull out the power connector.

DANGER

Danger! High Voltage!

When connecting or disconnecting the power connector, make sure that your hands are not wet. Do not pull the connector by the cable. A damaged power cable can cause leakage currents and electric shocks. Protect the power cable from being damaged. Never place any heavy objects upon it and do not allow it to get jammed.

Laser Safety

The laser imagesetter is a Class 1 laser product.

This means that the invisible laser radiation produced in the Suprasetter is shielded by means of protective covers.

If used as directed, the user is never exposed to danger from the laser beam.

The laser systems used in the Suprasetter are Class 4 products (> 500 mW). Companies servicing the equipment in Germany must appoint a laser protection officer in compliance with the Accident Prevention Regulations (BGV B2) of the Professional Trade Association.

Note: Servicing may only be carried out by Heidelberg personnel who have been trained by appropriate laser protection officers for this purpose.

Service and Maintenance

Servicing may be done solely by persons who are authorized by Heidelberg to do so.
The relevant accident prevention regulations must be observed at all times.

Warning

Risk of injury from improper handling

Never remove covers or any other parts of the casing except for the work described in the "Service and Maintenance" and "Troubleshooting" chapters. Keep exactly to the procedures laid down when doing this.

If you do not, the invisible laser beam may cause injuries to eyes and skin and/or you may suffer a fatal electric shock.

Warning

Risk of injury from laser radiation

You may be exposed to dangerous radiation by the invisible laser beams if you use operating or adjustment equipment other than those mentioned in this document or if you follow other working procedures.

When carrying out work as described in the customer documentation, the user must always adhere to the operating process stipulated. Protection from invisible laser radiation is ensured by covers and safety loops.

The use of laser protection glasses is not intended as correct operation eliminates the need for these.

Safety Loop

For your safety, the Suprasetter is equipped with a safety loop. If the safety loop is interrupted, e.g. by removing the insertion table, all mechanical motions are stopped and the invisible laser beam is switched off in the exposure head.

DANGER

Risk of injury if safety system bypassed

The safety loop must never be bridged as otherwise you are in danger of being injured by the invisible laser beam, of being crushed by moving parts or being fatally injured by an electric shock.

Check of the safety loop

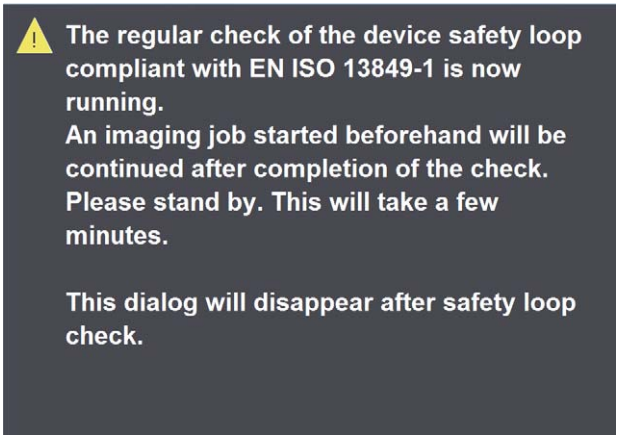
For the safety of the users, EN ISO 13849-1 requires that the safety function of the Suprasetters is checked at regular intervals.

Automatic check of the safety loop

This regular check is triggered automatically after the following criteria:

- When switching on the Suprasetters
- When running certain error corrections
- When the machine is running after a period of 24 hours before the start of a new plate sequence and a brief waiting period.

During the startup, a window displays on the CTP User Interface, pointing out the check of the safety loop.



Note: During the check of the safety loop, it is not possible to image plates.

The window closes automatically as soon as the check is finished (this can take some minutes).

Manual check of the safety loop

The user can run an early check of the safety loop at any time before the 24-hour time limit expires (see "Timeframe", page 18) if, for example, a suitable moment in production allows this.

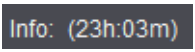
Start check of safety loop

The check of the safety loop starts after you click this button in the user interface and confirm again.

Notice

During the test no imaging jobs may be processed! In other words, no plates must be in the device and no jobs are waiting for processing. You must stop processing beforehand.

Timeframe



This displays the interval until the next regular safety loop test.

ESD Protective Measures for Prepress Systems and Operators

Basics

Devices from Heidelberger Druckmaschinen AG are resistant to electrostatic discharges (within the limits of EN 55024:2001).

In order to protect devices and users from being unnecessarily exposed to such discharges, we have listed a few tips below that will help reduce the frequency and intensity of the discharges.

Formation

In a prepress environment, this physical phenomenon occurs most frequently as a result of triboelectricity. In such cases, electrostatic charges are generated when bodies that have close contact are separated.

Examples:

- Walking across non-conductive (insulating) flooring (e.g. synthetic floor covering)
- Removing the slip sheet from the plate
- Getting up off a seat

The intensity of these charges is determined basically by the following parameters:

- Humidity
- Roughness of the material surface
- Pressure/space when in contact
- Conductivity of the materials

Practical Tips

The following practical tips are to help reduce the number and intensity of electrostatic discharges when handling the devices:

- Install the devices in rooms that have conductive floor covering.
- Resistance to ground < $1x10^9$ ohms (IEC/EN 61340-5). Synthetic carpeting does not comply with this requirement in the majority of cases. Pure concrete flooring generally has a low volume resistance. If you have non-conductive floor covering, the use of ESD mats placed on the operator side of the devices is recommended. These mats can be obtained from suppliers. However, in such a case, existing charges are only slowly reduced depending on the shoes that the personnel wear. For personal safety, the resistance of floor to ground should not fall below 105 ohms.
- The humidity at the installation site should not fall below 45% relative humidity. High air humidity is a decisive factor in preventing the formation of electrostatic charges. For example, a relative humidity of 10 - 20% will produce 35,000 V when crossing a carpet. This value drops to 1,500 V with a relative air humidity of 65 - 90%.

- Clothing where cotton material is >50%.
- Conductive seating.
- ESD shoes that can be obtained from suppliers and are used on conductive flooring help further to reduce charges when walking across floor coverings.

Standards/Sources

More details on this subject can be found in the following sources:

- IEC / EN 61340-5 (Protection of electronic devices from electrostatic phenomena - General Requirements)
- Electrostatic Discharge Association
  http://www.esda.org/
- Electrostatic Society of America
  http//www.electrostatics.org

Disposal of the Suprasetter 145/162/190

The disposal of the Suprasetter 145/162/190 is described in section "Disposal", page 71.

Converting the Suprasetter 145/162/190

Any conversion work on the Suprasetter 145/162/190 may be performed only by Heidelberg service personnel.

Heidelberg online

Do you have questions concerning our products?
Do you want to improve your workflows?
Then visit us on the Internet. You can find us at:
http://www.heidelberg.com/

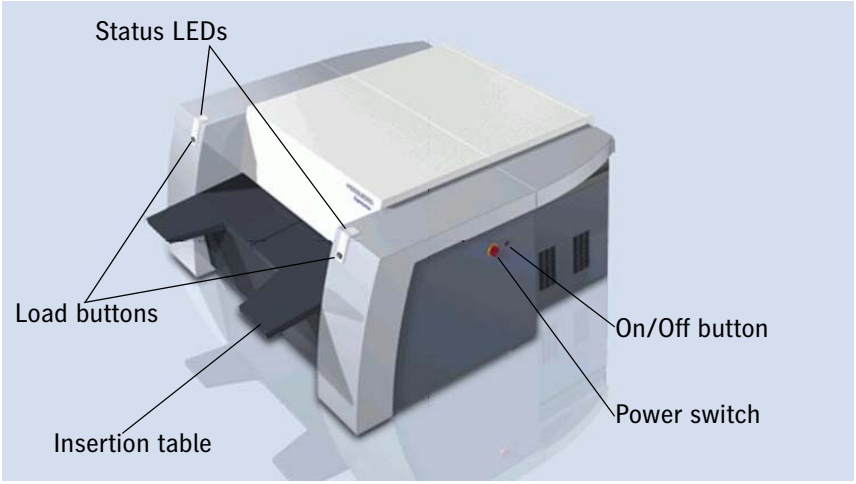
Description of the Unit and its Functions

The Suprasetter is a high-speed computer-to-plate imaging device for large-format plates.

It images thermal printing plates in daylight operation. The Suprasetter receives screened data from the RIP for imaging onto printing plates. On a manual device or semi-automatic device, the plates are placed manually onto the insertion table or, in the case of a fully automated device, they are loaded by the cassette magazine. The Suprasetter automatically loads the plate onto the drum, images it, punches it (option) and conveys the imaged plate back to the insertion table or to the connected ejection table.

The Suprasetter can be shipped and installed in various versions:

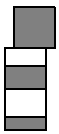
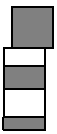
- As a manual device. The plates are inserted and ejected at the front of the device.
- As a semi-automatic device with manual plate feed at the front. The plates are ejected at the rear of the device to an ejection table that conveys them straight ahead, to the right or to the left.
- As a fully automated device, with the plates ejected at the front of the device to an ejection table that conveys them straight ahead, to the right or to the left.

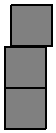
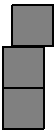
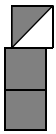
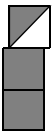
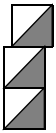
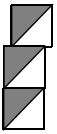
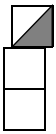
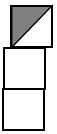


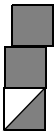
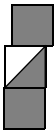
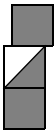
Operating elements on the manual device and on the semi-automatic device

Status LEDs

The following actions of the Suprasetter are indicated by the status LEDs:

Status LED		Action
Left half	**Right half**	
		Startup: The Suprasetter starts the software and initializes the hardware. The status LEDS are like level indicators filling up from bottom to top, running parallel on both sides, until normal operation is reached.

		Standby: The Suprasetter is ready to image a plate but is not busy imaging at that moment. All LEDs light up.
		Normal operation: The Suprasetter is presently imaging a plate or otherwise busy, for example, it is unloading a plate to the online processor or loading a plate from the Autoloader. The top LEDs flash synchronously.
		Error: An error occurred that must be eliminated by the user. The LEDs on each level flash, alternating between left and right. A beep also indicates the error status. The user must go to the GUI of the Suprasetter to learn more details about the error.
		Waiting: The Suprasetter is waiting for something within it (e.g. until the operating temperature is reached) or is waiting for a connected device (online processor or the cassette loader). The top LEDs flash alternately. A brief beep is also heard if an operator intervention is required.

		Waiting for a plate: The user is prompted to insert the required plate. The bottom LEDs flash synchronously. A brief beep is also heard.
		Plate ready to be removed: You will hear a beep approx. 3 seconds before an imaged plate appears. In addition, the middle LEDs flash synchronously. When the plate is output, you will hear a brief beep again, indicating that the plate can now be removed.

Power switch

You can disconnect the device fully from the power supply with the power switch, for example, for maintenance work. You can switch on the device only when the power switch is set to 'I'.

On/Off button

The On/Off button allows you to:

- switch on the Suprasetter, see section "Switching on the Suprasetter", page 34.
- switch off the Suprasetter, see section "Switching off the Suprasetter", page 36.
- switch off the beep that sounds, for example, after a malfunction occurs.

Notes on the Use of Plates

Only plates that are qualified and approved by Heidelberg may be used in the Suprasetter.

Similarly, only slip sheets that are also qualified and approved may be used in the Suprasetter.

The use of unapproved plates and slip sheets can result in malfunctions in the Suprasetter.

The Suprasetter must be fitted with a suction device if plates requiring a suction device are to be used in the Suprasetter.

Notes on Installation

Transport of the Suprasetter 145/162/190

The Suprasetter 145/162/190 is to be transported solely by companies that are authorized by Heidelberg to do so. Transport may be done only by qualified persons. The appropriate transport regulations must be observed during transport..

Installation of the Suprasetter

The Suprasetter may be installed only by authorized service personnel. The ambient conditions must be observed.

- Because the installation site must have clean conditions, the Suprasetter may not be operated in sites where paper is being printed or paper finishing devices are running.
- The floor at the installation site must be even and firm.
- Make sure that the device is installed at a sufficient distance from walls and other objects to ensure adequate ventilation and proper servicing. (for minimum distances, see the drawings in the installation instructions)
- The Suprasetter should not be installed near air-conditioning equipment and must be protected from humidity and direct sunlight.

Note: Initial installation is performed by service personnel. This includes lifting the unit off the palette and removing the transport safeguards.

Automatic Cutouts

The automatic cutouts are located behind the right side panel. When an automatic cutout is triggered, please proceed as described in the section "Switching on an Automatic Cutout", page 48. Repairs may be done only by service personnel.

Software Installation (Container Version)

Prerequisite:

- The Suprasetter is switched off.
- The workstation is switched on and ready for operation.
- All Windows applications were run down.
- A backup of the recorder configuration is saved, see the section "Saving a Backup of the Recorder Configuration" (page 41).
- A buffer plate named "Pagebuff" is available and formatted.

Operation:

1. Insert the Suprasetter installation CD into the CD-ROM drive. Setup starts automatically if Autorun is activated.
2. If Autorun is disabled, you can start the setup by double-clicking "Setup.exe". The "CTP User Interface Setup" window displays.
3. Click "Next". The "LicenseAgreement" window displays.
4. Accept the licensing agreement and click "Next". The "Choose Destination Location" window displays.
5. Use the suggested path or select the path you want by clicking the "Browse" button.
6. Click "Next". The "Select Program Folder" window displays.

7. Use the suggested folder or select one from the list or enter a new folder name.
8. Click "Next", the "Ethernet Address" window displays.
9. Accept the Ethernet address (172.16.0.2) by clicking "Next". The "Start Copying Files" window displays.
10. Click "Next". The installation procedure is executed. You will see the "Install Shield Wizard Complete" window at the end of the installation procedure.
11. Click "Finish". The installation is complete.
12. To start the Suprasetter user interface, select "Start > Programs > Heidelberg > CTP User Interface" or use the previously set path.
13. Switch the Suprasetter on.

Saving a Backup of the Recorder Configuration

Prerequisite:

- The Suprasetter as well as the workstation are switched on and ready for operation.
- The Suprasetter GUI was started.

Operation:

1. Click the "Change to Administration" button (wrench icon).
2. Select "Software" in the vertical menu bar.
3. Select the "Backup" tab.
4. Select "Save Configuration".
5. Click "Apply". The recorder configuration is saved to the following directory: C:\Programme\Heidelberg\CTP

   User Interface\package\files\backup\Recorder<serial_number>

Selecting the User Interface Language

1. Click the "Change to Device" button.
2. Select "Options" in the vertical menu bar.
3. Select the "Miscellaneous" tab.
4. Select the language you want in "Language".
5. Click "Apply". The user interface switches over to the selected language.

Power-on and Power-off Rules with a Linux Operating System

The workstation (PC) of every Suprasetter with a Linux operating system must be powered on in order for the device to start up. The software of the recorder is on the PC and is sent to the Suprasetter during the boot phase. For that reason, the Suprasetter cannot run without a PC.

It is mandatory to follow the set order for power-on and power-off. If this set order is not observed, unforeseeable errors and issues may occur in the communication between the devices that can be remedied only by a power-on and power-off of the Suprasetter in the correct order as described below.

Power-on order

1. Switch on the workstation (PC), log into the Prinect account and start the "CtP User Interface".
2. Wait until the CtP User Interface has finished its startup routine.
3. Switch on the Suprasetter, see "Switching on the Suprasetter", page 34.

Shutdown order

1. Switch off the Suprasetter by means of the CtP user interface or with the push button on the Suprasetter (see "Switching off the Suprasetter", page 36).
2. Wait until the Suprasetter is fully switched off.
3. Switch off the workstation (PC).

Note: If you need the workstation (PC) without the Suprasetter (e.g. for a job transfer), it is advisable to restart the PC before starting the Suprasetter. The Suprasetter must be in an off-state when you restart the workstation (PC).

The workstation (PC) must remain powered on in the time switch mode of the Suprasetter. It is advisable to restart the PC before the time switch mode. The Suprasetter must be in an off-state when you restart the workstation (PC).

Workstation (PC) restart

The Suprasetter must be in an off-state when you restart the workstation (PC).

Switching on the Suprasetter

Manual Startup

Prerequisite: There is no printing plate on the insertion table.

Operation:

1. Switch the power switch to 'I'.
2. Press down the On/Off button of the Suprasetter and release it again.

This switches on the device, but it needs approx. another 15 minutes (or longer depending on the temperature at the installation site) to reach their operating temperature.
Apart from inserting and removing the printing plates, the device is operated at the workstation.

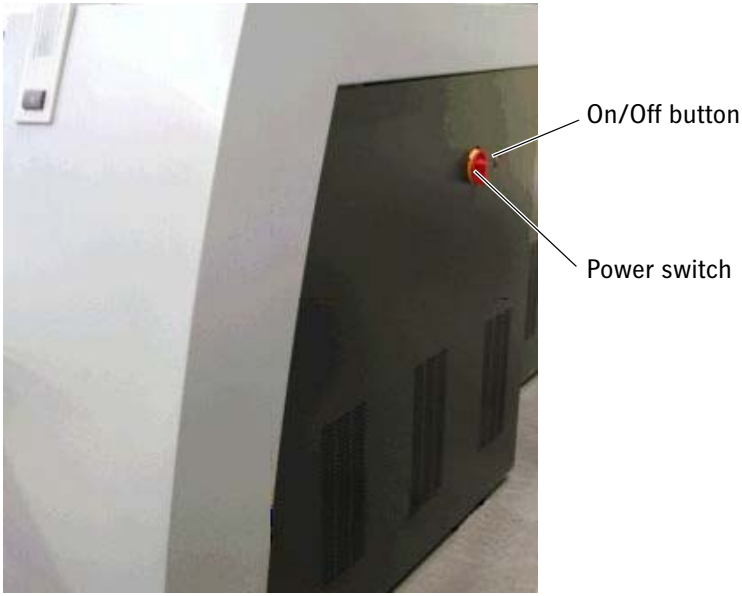


Fig. 1: Press the On/Off button

Automatic Startup

Note: When switched on, the Suprasetter needs approx. 15 minutes (or longer depending on the temperature at the installation site) to reach its operating temperature. For that reason, it has an automatic startup mechanism that can be used to switch on the device at defined periods, for example, a half an hour before shift work starts. The startup time is set at the workstation.

Prerequisite:
- The power switch of the Suprasetter is set to 'I'.
- The Suprasetter GUI is running.

Operation:

1. Click the "Device" button in the Suprasetter GUI.
2. Click "Configuration" in the vertical menu bar.
3. Select the "Timer" tab.
4. Select "Switch on Timer".
5. Set the startup cycle you want in "Schedule" in the "Settings" box.
6. Set the switch-on time you want in "Start Time" in the "Settings" box.

Note: If you selected "Once" in "Schedule", you can also set the startup day in addition to the start time in "Schedule Once".

7. Click "Apply". The startup time is saved and the Suprasetter will switch itself on at this time.

Switching off the Suprasetter

Notice

To prevent condensation damaging the Suprasetter, the required ambient conditions (see the Technical Data chapter) must be complied with for at least 12 hours after the machine is switched off.

There are two ways to switch off the Suprasetter:

- Shutdown using the user interface on the workstation.
- Shutdown with the On/Off button on the device.

Shutdown using the User Interface on the Workstation

Notice

At all times keep to the shutdown order described here. The Suprasetter can be damaged on the inside if you switch off the Suprasetter directly with the power switch.

1. Click the "Switch off recorder" button in the Suprasetter GUI.

The "Confirmation" window displays.

2. Click "Yes" in the "Confirmation" window.

The Suprasetter shuts down.

3. Set the power switch to '0' for cleaning and servicing.
4. Switch off the workstation (PC).

Shutdown with the On/Off button on the Suprasetter.

Notice

At all times keep to the shutdown order described here. The Suprasetter can be damaged on the inside if you switch off the Suprasetter directly with the power switch.

1. Press and hold down the On/Off button (approx. 3 seconds) until you hear a beep.

2. Release the On/Off button.
3. Press the On/Off button a second time.

The Suprasetter shuts down.

Note: You must repeat the shutdown procedure from the start if the beep sounds for a second time before you have done step 3.

4. Set the power switch to '0' on the Suprasetter for cleaning and servicing.
5. Switch off the workstation (PC).

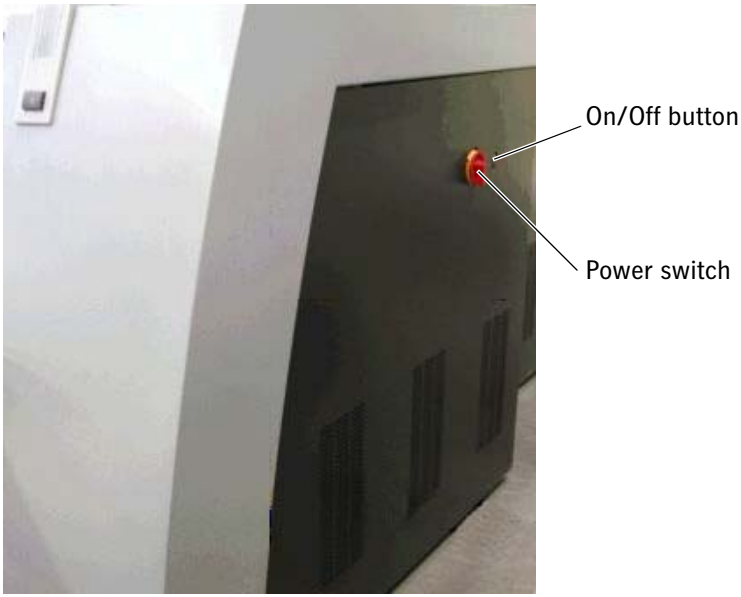


Fig. 2: Switch off power switch

Note: The workstation (PC) must remain powered on in the time switch mode of the Suprasetter.
The power switch must be at 'I' if the Suprasetter is to be started automatically, e.g. before shift work starts.

Quick Shutdown with the On/Off button on the Suprasetter.

A quick shutdown is not possible after you trigger the shutdown sequence if the Suprasetter is currently running an error correction (can take several minutes). However, you can force a quick shutdown by triggering the shutdown sequence again.

1. Press and hold down the On/Off button (approx. 3 seconds) until you hear a beep.
2. Release the On/Off button.
3. Press the On/Off button a second time.

Now repeat shutdown:

4. Press and hold down the On/Off button (approx. 3 seconds) until you hear a beep.
5. Release the On/Off button.
6. Press the On/Off button a second time.

The Suprasetter interrupts error correction and shuts down.

Note: In this case as well, you must repeat shutdown if the beep sounds for a second time before you have done step 3 or 6.

Material Handling

Observe the following when handling printing plates:

Caution

Risk of injury from improper handling

Plate edges can be sharp. Put on protective gloves. This will protect you from injury.

- Never touch the emulsion side of the printing plate with your bare hands. Finger prints will appear on the printing plate which can adversely affect the print quality.
- The printing plates are very easily scratched. For that reason, it is essential to insert slip sheets when you place printing plates on top of each other, so that they cannot scrape against each other.
- Do not load plates that are obviously damaged to the Suprasetter. This can cause malfunctions in the Suprasetter.

Material storage

Various requirements apply to the storage of printing plates prior to imaging, after imaging and after development. Please refer to the manufacturer of the printing plates for information.

Loading Plates on the Manual Device and on the Semi-automatic Device

Note: You can only load a printing plate to the device if the lower part of the two status LEDs is flashing and the load buttons are lit. The insertion rollers first open for you to load a printing plate. This is accompanied by a brief beep.

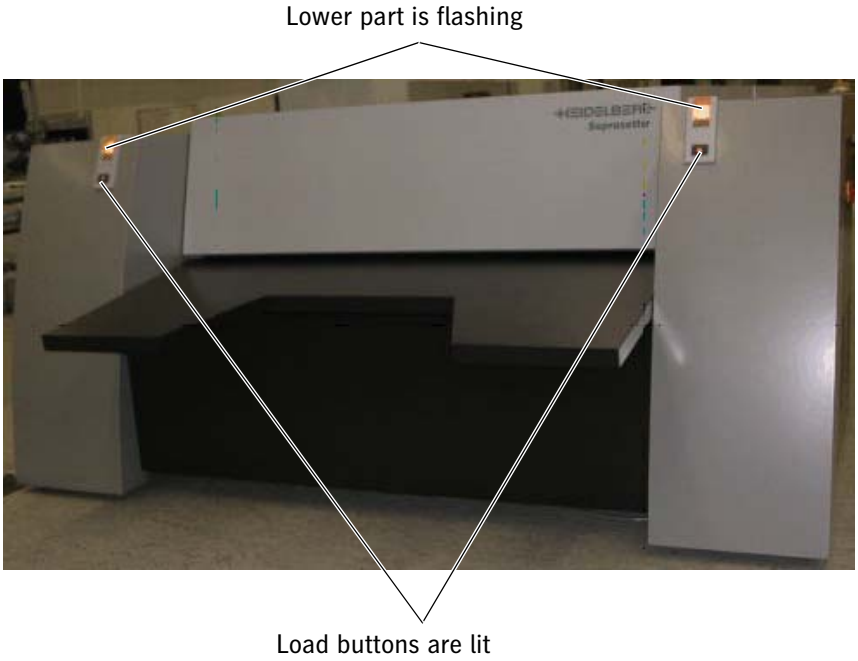


Fig. 3: Load buttons are lit and lower part of the status LEDs is flashing

Caution

Risk of injury from improper handling

Plate edges can be sharp. Put on protective gloves. This will protect you from injury.

Notice

Never handle printing plates on your own. Two persons are always required to transport printing plates so that they do not buckle or bend during loading and unloading.

1. Put on protective gloves.
2. Take the requested printing plate from the packaging.
3. Remove all slip sheets or packaging materials which may stick to the plate.

Notice

Carefully remove all slip sheets or packaging materials from both sides of the printing plate before loading it into the Suprasetter. The laser beam can ignite the material and cause a fire in the Suprasetter.

4. Dust the plate with a lint-free cloth.
5. Center the plate (± 30 mm) on the insertion table with the emulsion side facing up.

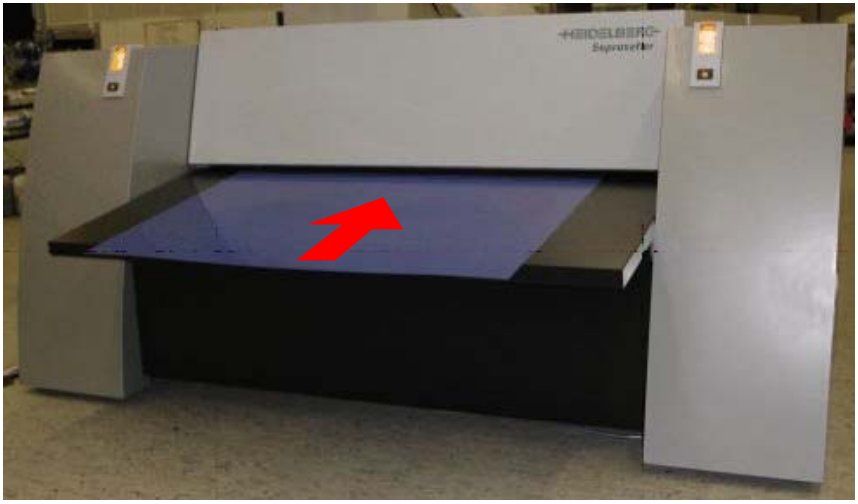


Fig. 4: Load plate

6. Push the plate into the Suprasetter as far as the mechanical stop.
7. Press one of the two load buttons. The plate is loaded to the Suprasetter. This is accompanied by a brief beep.

Note: If you do not press the load button, the plate is drawn into the device automatically after the period that is set in parameter 40115.

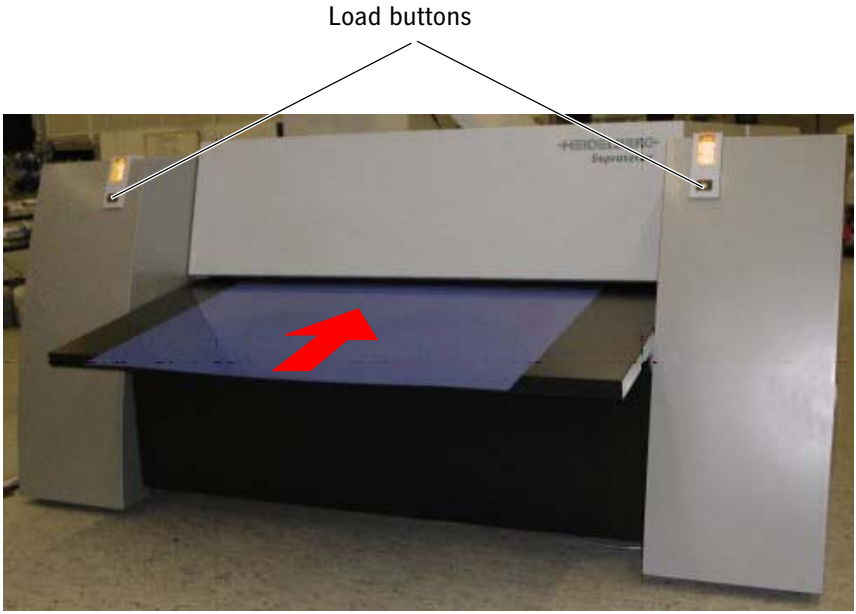


Fig. 5: Press load buttons

Note: The Suprasetter checks the length of the plate after it is inserted. The plate is immediately transported back to the insertion table if the wrong length was detected. Three beeps are heard and the load buttons flash. You must remove the plate from the Suprasetter and repeat loading using a plate with the correct length.

Unloading the Plates on a Manual Device

After imaging, the plate lies on the insertion table ready for removal.

Note: You will hear a beep approx. 3 seconds before an imaged plate appears. In addition, the middle LEDs flash synchronously.
When the plate is output, you will hear a brief beep again, indicating that the plate can now be removed.

Caution

Risk of injury from improper handling

Plate edges can be sharp. Put on protective gloves. This will protect you from injury.

Notice

Never handle printing plates on your own. Two persons are always required to transport printing plates so that they do not buckle or bend during loading and unloading.

1. Put on protective gloves.
2. Remove the printing plate from the Suprasetter for further processing.

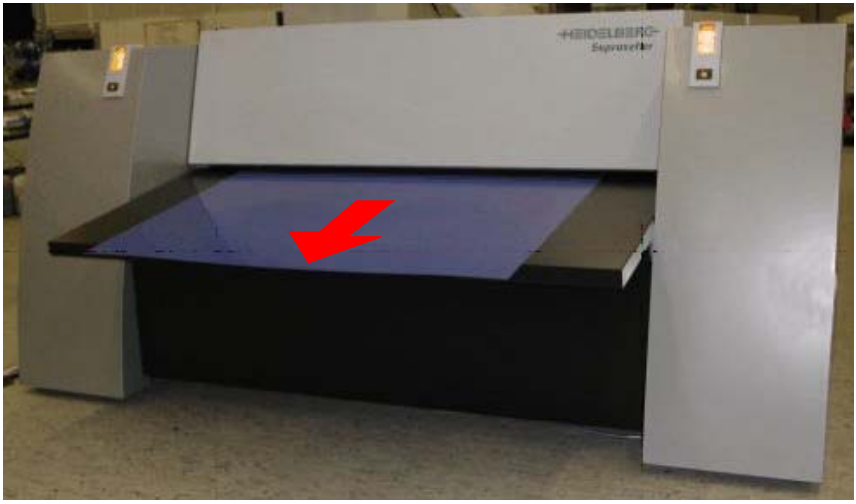


Fig. 6: Removing a Printing Plate

Troubleshooting

In the case of a malfunction, you will hear a beep from the Suprasetter, and the GUI displays an error message.

1. Click the "Recorder Error Messages" button.

The following help information is displayed:

- Error ID
- Description of error

  Error remedy

1. Follow the instructions to eliminate the error.
2. Click the "Correct error" button. This action returns the Suprasetter to its initial status and the function which was interrupted by the error can be repeated.

Notice

If you hear unusual noises during an error correction that you run following an incorrectly loaded plate to the drum, do not switch off the Suprasetter. Wait until the error correction is finished. Canceling the error correction causes the Suprasetter to be set to an undefined state that can only be eliminated by the service support.

Notice

The loader turns red in the 3D display if an error occurs in the loader. If imaging is also running parallel to that, you can run an error correction only after imaging is finished and the Suprasetter has switched to an error state. If you run the error correction without waiting, imaging will be aborted, and you may have to restart the system because of the undefined states that result from such an action.

Switching on an Automatic Cutout

You must switch on an automatic cutout again after you eliminated the malfunction that triggered this cutout. Proceed as follows:

1. Remove the right-hand side panel.

Fig. 13: Remove side panel

2. Switch on the automatic cutout that was triggered.

Fig. 14 Automatic Cutouts

3. Please inform your maintenance service if you cannot switch on an automatic cutout again so that this malfunction can be remedied.
4. Put the side panel back on.

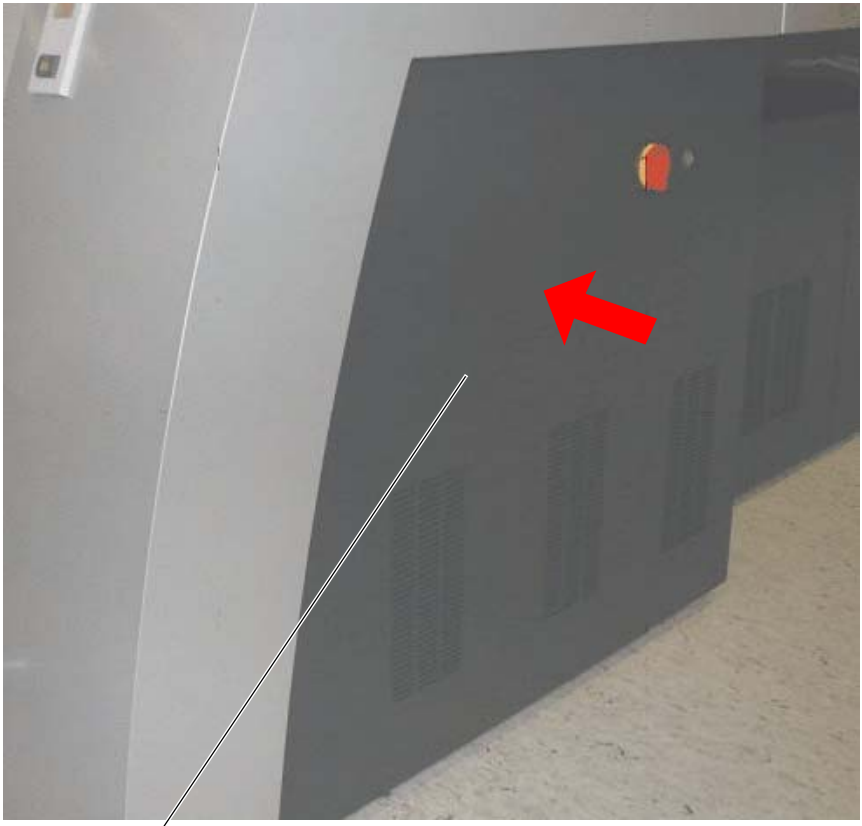


Fig. 15: Insert side panel

General

Maintenance work to be done by the user is described in this chapter. The Suprasetter does not contain any parts within the housing which require servicing by the user.

Exception: see sections "Cleaning the Cleaning Roller on a manual Suprasetter and on a Semi-automatic Device", page 55, "Cleaning the Cleaning Roller on a Fully Automated Device with a Cross Conveyor or OLP Table", page 57, "Removing Punch Waste on a manual Suprasetter and on a Semi-automatic Device", page 60, "Removing Punch Waste on a Fully Automated Device with a Cross Conveyor or OLP Table", page 62, and "Changing the Filter Kit in the Suction Device", page 66.

Safety Notes

Warning

Risk of fatal injury from unauthorized opening of the device

Unauthorized opening of the unit's housing or improper repairs can lead to considerable danger for the user.

Service work may only be performed by authorized personnel specialized in this field. The relevant accident prevention regulations must be observed at all times.

Failure to observe the safety regulations may result in the loss of accident insurance!

In addition to the maintenance work described in this chapter that is to be performed by the user, further maintenance work, also during warranty time, is to be performed by the service support. This maintenance work is not part of warranty. Messages in the Suprasetter user interface will draw your attention to such servicing. Please contact your local service technicians.

Qualification of the Users

After installation, users will be instructed in the operation and service and maintenance of the Suprasetter by Heidelberg service personnel. Further instruction, for example, for new staff employed subsequently, must be ensured by the operator of the Suprasetter.

Maintenance by the User

The table below lists the maintenance work and maintenance intervals that are to be done by the user.

Maintenance	**Interval**
Cleaning the cleaning roller.	500 printing plates
Removing the punch waste (only if an optional punch is built in).	2000 punches
Changing the filter kit in the suction device	7500 m^2 plate material

Maintenance Intervals

Cleaning the Suprasetter

Warning

Danger! High Voltage!

If cleaning the Suprasetter involves the use of liquids, disconnect it from the power supply beforehand.

Do this by pulling out the power connector on the service tap or by switching it off with the power switch.

The surfaces of the Suprasetter can be cleaned using a dry cloth.

If the device is very dirty, it can be cleaned with a damp cloth which has been dipped in dish-washing liquid and well wrung.
Make sure that no fluids get inside the Suprasetter and keep moisture away from the connection points on the rear of the Suprasetter. Do not use any abrasive cleaning agents or solvents.

Cleaning the Cleaning Roller on a manual Suprasetter and on a Semi-automatic Device

A message prompts the user to clean the cleaning rollers.

Cleaning cycle: 500 printing plates

Cleaning agents:

- Water, sponge, sponge cloth, lint-free cloth.

1. In the Suprasetter user interface, click the "Cleaning Roller" button in "Administration > Maintenance > Maintenance Work".

The cover on the front of the device is released and the cleaning roller is raised so that you can clean it.

Note: The "Cleaning Roller" button is enabled only if no imaging is running, i.e. the imaging drum must not be moving. The recorder is set to an error state after you click the "Cleaning Roller" button.

2. Open the cover on the front of the device.

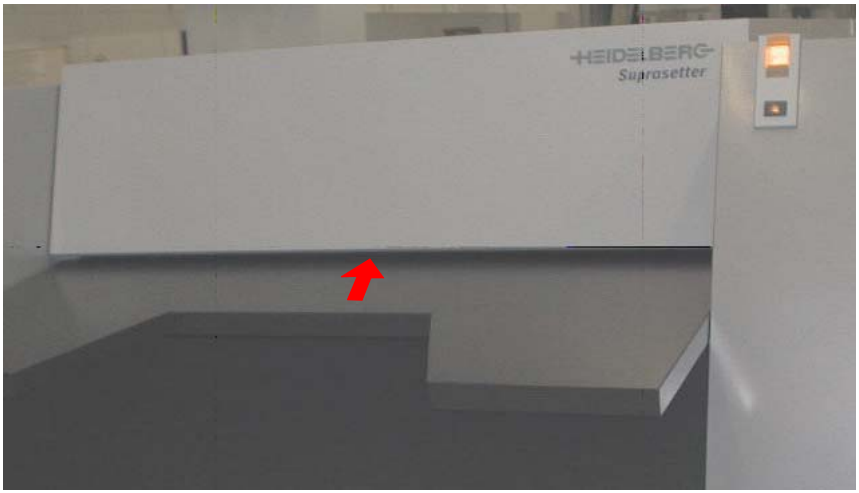


Fig. 1: Open cover

3. Clean the cleaning roller using a sponge or sponge cloth moistened with water. Turn the cleaning roller while cleaning in order to clean the whole surface.

Notice

Do not use any abrasive or scratching cleaning agents or equipment.

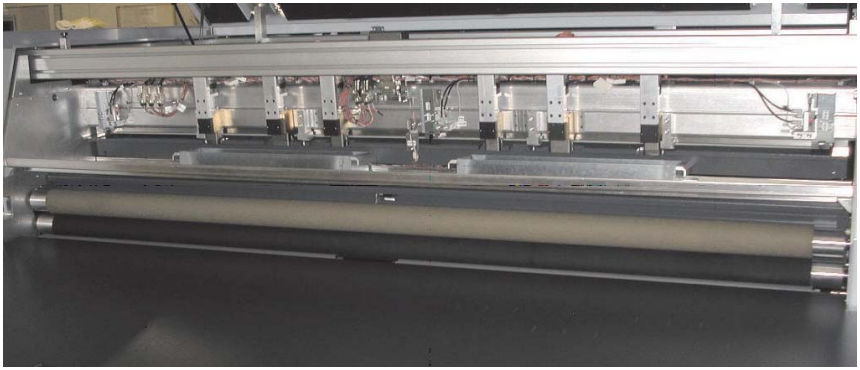


Fig. 2: Cleaning roller

4. Dry the cleaning roller with a lint-free cloth.
5. Close the cover on the front of the Suprasetter.
6. In the Suprasetter user interface, go to "Administration > Maintenance > Monitoring" and click the box in the "Cleaning Roller" row in the "Maintenance Completed" column.

The number of plates in the "Next Maintenance" column is reset to its initial value.

7. Click "Apply" and confirm the query with "Yes".

The maintenance interval for cleaning the cleaning roller starts from the beginning.

8. Run a troubleshooting routine to eliminate the error state of the Suprasetter, see the section "Troubleshooting", page 47.

Cleaning the Cleaning Roller on a Fully Automated Device with a Cross Conveyor or OLP Table

A message prompts the user to clean the cleaning roller.

Cleaning cycle: 500 printing plates

Cleaning agents:

- Water, sponge, sponge cloth, lint-free cloth.

1. In the Suprasetter user interface, click the "Cleaning Roller" button in "Administration > Maintenance > Maintenance Work".

The cover on the front of the device is released and the cleaning roller is raised so that you can clean it.

Note: The "Cleaning Roller" button is enabled only if no imaging is running, i.e. the imaging drum must not be moving. The Suprasetter is set to an error state after you click the "Cleaning Roller" button.

2. Unlock the wheels of the cross conveyor.
3. Push the cross conveyor approx. 70 cm away from the Suprasetter to be able to reach the cleaning roller.

Note: If you use an OLP table instead of a cross conveyor, you must first manually swing up the protective cover on the insertion/ejection table in order to swing up the OLP table. After that, the OLP table top is swung up and then the protective cover is lowered again.

4. Open the cover on the front of the Suprasetter.
5. Clean the cleaning roller (1) using a sponge or sponge cloth moistened with water. Turn the cleaning roller while cleaning in order to clean the whole surface.

Notice

Do not use any abrasive or scratching cleaning agents or equipment.

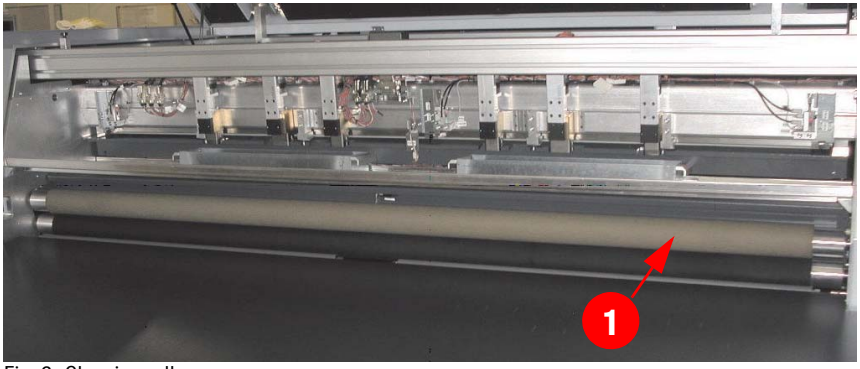


Fig. 3: Cleaning roller

6. Dry the cleaning roller (1) with a lint-free cloth.
7. Close the cover on the front of the Suprasetter.
8. Push the cross conveyor back up against the Suprasetter and set the lock back on the wheels of the cross conveyor.

Caution

Risk of injury from improper handling

You run the risk of injuring yourself between the insertion/ejection table and the cross conveyor of the Suprasetter when printing plates with sharp edges are output. You can injure your fingers if they are between the insertion/ejection table and the cross conveyor. Use the protective cover to avoid this.

When you push the cross conveyor back up against the insertion/ejection table of the Suprasetter, you must move the cross conveyor slowly up to the protective cover of the insertion/ejection table. By pushing the cross conveyor, you can lift the protective cover so that it lies on the side parts of the cross conveyor. A second person can also help you lift the protective cover and place it down on the cross conveyor. You must push the cross conveyor to its final posi-

tion that is set during initial installation. This means that the wheels must touch the end of the U-rails. Then you must lock the two front wheels with the brakes.

Note: An OLP table must be lowered again if this is used instead of a cross conveyor.

9. In the Suprasetter user interface, go to "Administration > Maintenance > Monitoring" and click the box in the "Cleaning Roller" row in the "Maintenance Completed" column.

The number of plates in the "Next Maintenance" column is reset to its initial value.

10. Click "Apply" and confirm the query with "Yes".

The maintenance interval for cleaning the cleaning roller starts from the beginning.

11. Run a troubleshooting routine to eliminate the error state of the Suprasetter, see the section "Troubleshooting", page 47.

Removing Punch Waste on a manual Suprasetter and on a Semi-automatic Device

If your Suprasetter has an optional punch, a message will request you at certain intervals to remove the punch waste. In such a case, proceed as follows:

Maintenance interval: 2000 punches

1. In the Suprasetter user interface, click the "Punch Waste" button in "Administration > Maintenance > Maintenance Work".

The cover on the front of the device is unlocked.

Note: The "Punch Waste" button is enabled only if no imaging is running, i.e. the imaging drum must not be moving. The Suprasetter is set to an error state after you click the "Punch waste" button.

2. Open the cover on the front of the device.

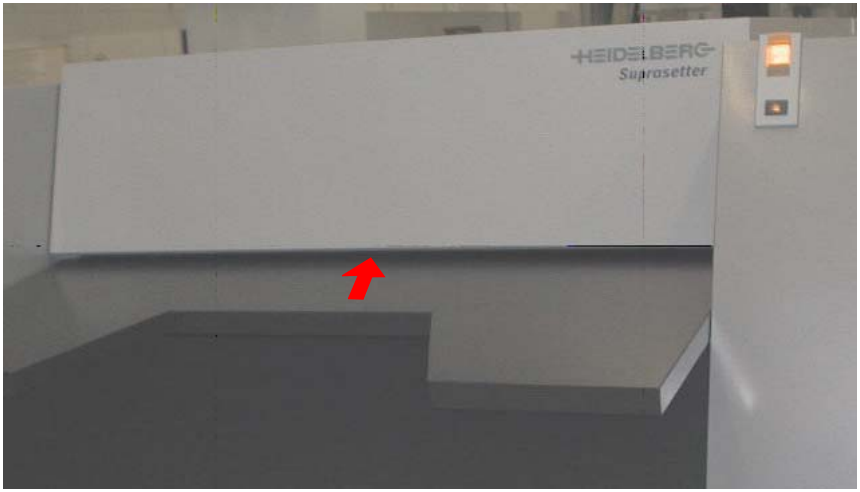


Fig. 4: Open cover

(3.) Remove the punch waste containers from the device and empty them.

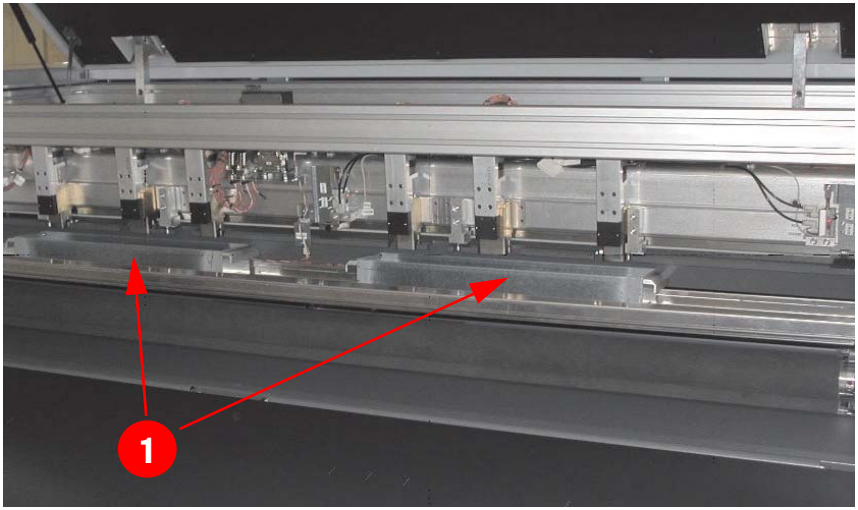


Fig. 5: Punch waste containers

Note: Punch waste may not be disposed of as household waste. Dispose of the punch waste together with any printing plates you no longer need at your local waste disposal company.

4. Place the punch waste containers back on the guides. Push them to the back as far as they can go so that the punch waste is sure to fall into the container.
5. Close the cover on the front of the device.
6. In the Suprasetter user interface, go to "Administration > Maintenance > Monitoring" and click the box in the "Punch Waste" row in the "Maintenance Completed" column.

The number of punches in the "Next Maintenance" column is reset to its initial value.

7. Click "Apply" and confirm the query with "Yes".

The maintenance interval for removing the punch waste starts from the beginning.

8. Run a troubleshooting routine to eliminate the error state of the recorder, see the section "Troubleshooting", page 47.

Removing Punch Waste on a Fully Automated Device with a Cross Conveyor or OLP Table

If your Suprasetter has an optional punch, a message will request you at certain intervals to remove the punch waste. In such a case, proceed as follows:

Maintenance interval: 2000 punches

1. In the Suprasetter user interface, click the "Punch Waste" button in "Administration > Maintenance > Maintenance Work".

The cover on the front of the Suprasetter is unlocked.

Note: The "Punch Waste" button is enabled only if no imaging is running, i.e. the imaging drum must not be moving. The Suprasetter is set to an error state after you click the "Punch waste" button.

2. Unlock the wheels of the cross conveyor.
3. Push the cross conveyor approx. 70 cm away from the Suprasetter to be able to reach the cleaning roller.

Note: If you use an OLP table instead of a cross conveyor, you must first manually swing up the protective cover on the insertion/ejection table in order to swing up the OLP table. After that, the OLP table top is swung up and then the protective cover is lowered again.

4. Open the cover on the front of the Suprasetter.

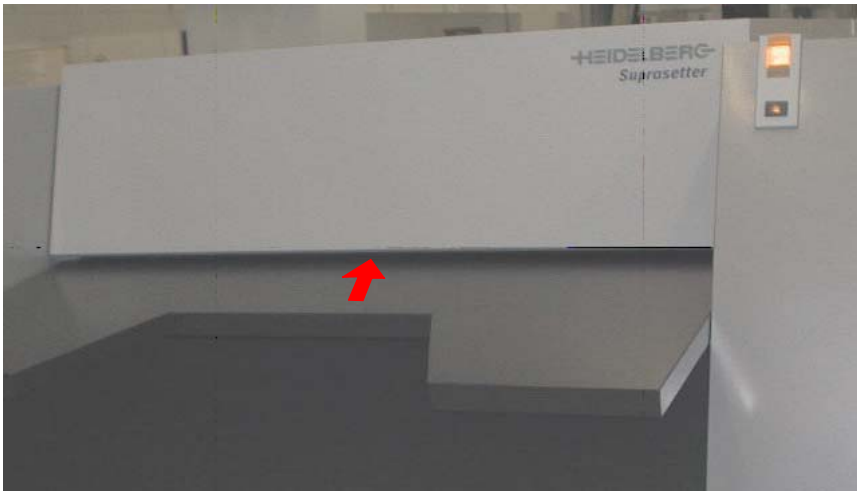


Fig. 6: Open cover

5. Remove the punch waste containers from the Suprasetter and empty them.

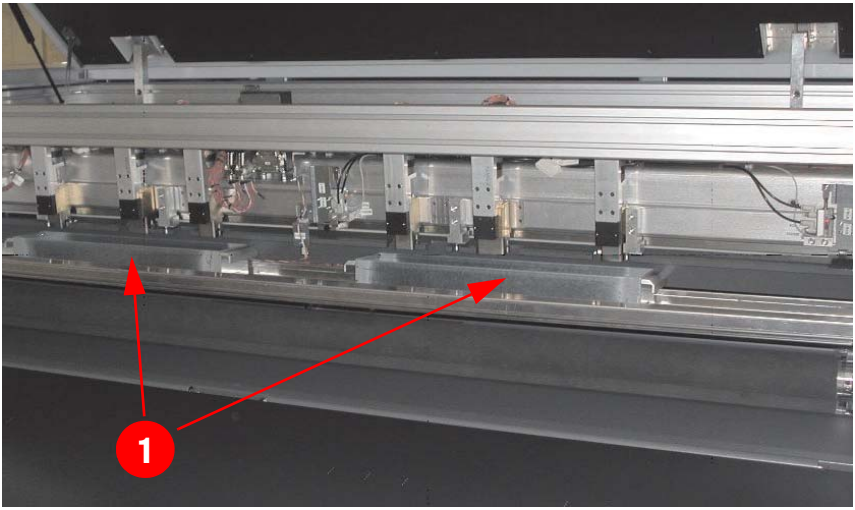


Fig. 7: Punch waste containers

Note: Punch waste may not be disposed of as household waste. Dispose of the punch waste together with any printing plates you no longer need at your local waste disposal company.

6. Place the punch waste containers back on the guides. Push them to the back as far as they can go so that the punch waste is sure to fall into the container.
7. Close the cover on the front of the Suprasetter.
8. Push the cross conveyor back up against the Suprasetter and set the lock back on the wheels of the cross conveyor.

Caution

Risk of injury from improper handling

You run the risk of injuring yourself between the insertion/ejection table and the cross conveyor of the Suprasetter when printing plates with sharp edges are output. You can injure your fingers if they are between the insertion/ejection table and the cross conveyor. Use the protective cover to avoid this.

When you push the cross conveyor back up against the insertion/ejection table of the Suprasetter, you must move the cross conveyor slowly up to the protective cover of the insertion/ejection table. By pushing the cross conveyor, you can lift the protective cover so that it lies on the side parts of the cross conveyor. A second person can also help you lift the protective cover and place it down on the cross conveyor. You must push the cross conveyor to its final position that is set during initial installation. This means that the wheels must touch the end of the U-rails. Then you must lock the two front wheels with the brakes.

Note: An OLP table must be lowered again if this is used instead of a cross conveyor.

9. In the Suprasetter user interface, go to "Administration > Maintenance > Monitoring" and click the box in the "Punch Waste" row in the "Maintenance Completed" column.

The number of punches in the "Next Maintenance" column is reset to its initial value.

10. Click "Apply" and confirm the query with "Yes".

The maintenance interval for removing the punch waste starts from the beginning.

11. Run a troubleshooting routine to eliminate the error state of the Suprasetter, see the section "Troubleshooting", page 47.

Changing the Filter Kit in the Suction Device

A message prompts the user to change the air filters in the suction device.

Maintenance interval: 7500 m^2 plate material

Order number of the filter kit: PJ.570.280.

The filter kit consists of a high efficiency submicron particulate air filter, a preliminary filter, disposable gloves and a light dust mask.

Note: Manufacturers of the plates we recommend point out that users are exposed to no harm from any pollutants released through the use of their plates. Please take note of the information supplied by the plate manufacturers. You are advised to request this information if you do not have it.

Caution

Risk of injury from improper handling

We recommend that you wear the disposable gloves and light dust mask included in the kit when you are changing the filters.

Note: After you remove the filters, clean the casing with a vacuum cleaner. Place the used filters, disposable gloves, dust mask and vacuum cleaner bag in a plastic bag, tie the bag up and dispose of it as general commercial waste. If you are not sure about disposal procedures, contact your local waste disposal company for details.

We strongly recommend that you also proceed as described above if you use plates that are not recommended by Heidelberg. It is essential to take note of the information supplied by the plate manufacturers. You are advised to request this information if you do not have it.

Inform the Heidelberg Service if during filter changing you notice that one of the filter kits is heavily soiled or both filter kits are still clean. The maintenance interval can then be changed accordingly.

1. Remove the right-hand side panel.

Side panel

Fig. 8: Remove side panel

Note: The Suprasetter switches to an error state when you remove the side panel.

2. Put on the disposable gloves because of the dirty filters and the light dust mask.

Loosen the six rocker arm locks and move the casing cover to the side.

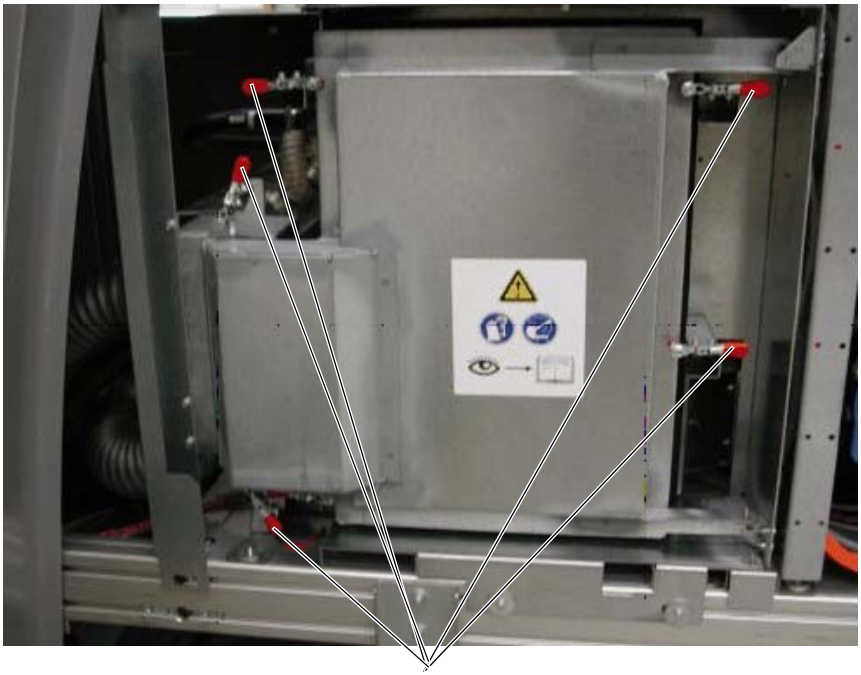


Fig. 9: Loosen rocker arm locks

3. Remove the high-efficiency submicron particulate air filter from the filter casing and place it in a plastic bag.

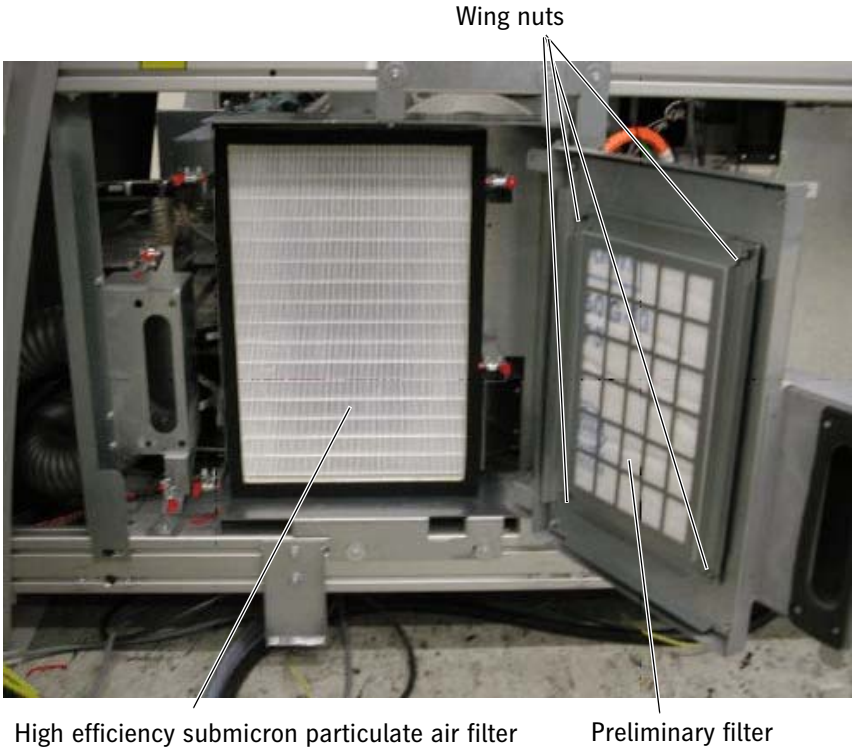


Fig. 10: Exhaust Filter

4. Unscrew the four wing nuts from the cover and remove the washers as well.
5. Remove the cover above the preliminary filter.
6. Place the preliminary filter in the plastic bag as well.
7. Clean the filter casing with a vacuum cleaner.
8. Place the vacuum cleaner bag, dust mask and disposable gloves also into the plastic bag.
9. Tie up the plastic bag and dispose of it as general commercial waste.

Note: Contact your local waste disposal company for more details about disposal procedures.

10. Insert the new high efficiency submicron particulate air filter into the filter casing. The side with the arrow must be on top and the arrow must point towards the inside of the door.
11. Place the new preliminary filter on the casing cover that you moved to the side.
12. Place the cover onto the setscrews over the preliminary filter.
13. Place the washers on top of the setscrews and tighten the cover with the wing nuts.
14. Put the casing cover back into place. Make sure that the casing cover is seated properly on the rubber seal.
15. Close the rocker arm locks.
16. Put the side panel back on.
17. In the Suprasetter user interface, go to "Administration > Maintenance > Monitoring" and click the box in the "Exhaust Filter" row in the "Maintenance Completed" column.

The number of hours in the "Next Maintenance" column is reset to its initial value.

18. Click "Apply" and confirm the query with "Yes".

The maintenance interval for replacing the air filter starts from the beginning.

19. Run a troubleshooting routine to eliminate the error state of the Suprasetter, see the section "Troubleshooting", page 47.

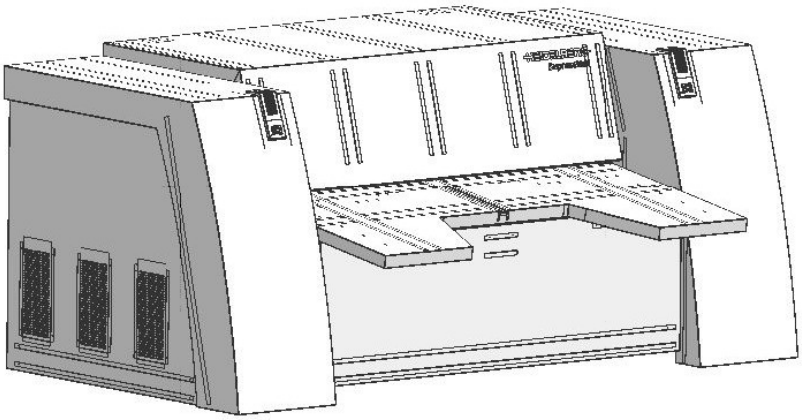
Disposal

Disposal of the device

The device must be disposed of in compliance with the relevant national regulations. The device contains harmful substances. It must be handed over to an approved waste disposal company and not be disposed of as household waste. Addresses can be obtained from the relevant environmental offices.

The details of this disposal description are made to the best of our knowledge. They do not release persons disposing of the unit from their obligation to observe the regulations and legal provisions applicable at the time of disposal.

Disposal of the Recorder



Recorder disposal

Size of the device (width, depth, height):

3400 mm x 1836 mm x 1560 mm

Weight of the device: 1600 kg

Harmful substances

The table below lists the parts that contain harmful substances and, therefore, must be disposed of or recycled separately.

The positions of such parts in the device can be found in the graphics below.

Description	Harmful Substances	Image No. (Pos.)
Various pcbs	Tetrabrombisphenol A etc.	2 (1)
Power supply modules	Tetrabrombisphenol A etc.	2 (3)
Pilot lamps	Tetrabrombisphenol A etc.	7 (1)
Interface PCBs of laser carriage	Tetrabrombisphenol A etc.	4 (1, 3, 4)
PCBs in punches	Tetrabrombisphenol A etc.	3 (1)
Light barrier pcb	Tetrabrombisphenol A etc.	5 (1)
Laser module	Lead, chromium (VI), etc.	4 (2)
Distributor PCB (2x)	Tetrabrombisphenol A etc.	2 (2), 3 (2)
Chiller preservative Glysantin 20 liters of Glysantin + 30 liters of water	Ethylene glycol, see the section "Disposal of Glysantin"	In the cooling circuit
Filters in suction device	Fine industrial dust	6 (1)

Harmful substances

Polyvinyl chloride could be contained in the cable covering. The electronic components contain flame retardants. State-of-the-art technology allows thermal recycling in appropriately equipped plants.

Disposal of Glysantin

BASF's safety data sheet "Glysantin G48-00" that is valid at the time you dispose of the product must always be followed.

BASF Aktiengesellschaft, 67056 Ludwigshafen, Germany,

ph. +49-621-60-43333

E-Mail: Productinformation.Performance-Chemicals@basf-ag.de

Recyclable Materials

The following table lists the main parts that do not contain harmful substances and that can undergo environmentally safe recycling.

The positions of such parts in the device can be found in the graphics below.

Pos.	Description	Material	Weight approx. (kg)	Image No. (Pos.)
1	Cover plates	Aluminum, ENAW-AlMg3, powder coated	150	8 (1)
2	Table top	Aluminum, ENAW-AlMg3, powder coated	25	9 (1, 2)
3	Base plates	Sheet steel, galvanized	60	8 (3)
4	Base frame	Aluminum, AlMgSiO, 5F25	220	8 (2)
5	Machine base	Aluminum, EN 573-3 AW6060-T5	420	10 (5)
6	Side panels (2 off)	Aluminum, AlMg4,5MnO,7	44	10 (3)
7	Imaging rails	Aluminum, ENAW-AlMgO,7SiT6	24	10 (6)
8	Imaging drum (cylinder) (lid)	Aluminum, ENAW-AlMgO,7SiT5, ENAC-46200 SF AlSi8Cu3SF	155	10 (4)

Pos.	Description	Material	Weight approx. (kg)	Image No. (Pos.)
9	Punch bar	Aluminum, ENAW-AlMgSiT66	35	10 (1)
10	Mains filter	Copper	10	4 (13)
11	VCT bar	Steel	42	10 (2)
12	Bearing block	Aluminum, EN1706AC-AlSi8-Cu3SF	40	10 (7)
13	Various parts: mounting parts, motors, pumps, cables, rubberized rollers	Steel, aluminum, plastic, cast aluminum, copper	400	

Recyclable Materials

Dismantling

Pos.	Description	Material
Image 8 (1)	Dismantle the sheet-metal coverings	Hinged or screwed
Image 9 (1.2)	Remove table or conveyor (option)	Screwed from below
	Remove cables and hoses	
	Remove electronic components	Dispose of professionally as electronic waste

Pos.	Description	Material
Image 6 (1)	Remove filters	Remove the filter mats (option) only when wearing gloves and dust mask and dispose of them as commercial waste.
	Dismantle sheet-metal components	Screwed
Image 8 (3)	Dismantle base plates	Screwed
Image 8 (2)	Dismantle the frame	Screwed
	Drain remaining coolant at lowest point	Disposal of the coolant must be environmentally safe following the manufacturer's instructions. The notes on job safety in the safety data sheet must be observed.
Image 4 (2)	Dismantling of the laser modules	Dispose of the laser modules as electronic waste
Image 10	Disassemble exposure unit [punch bar (1), VCT bar (2), side panels (3), drum (4), machine base (5)], from top to bottom	Dispose of the motors, PCBs and cables professionally. Drum contains different types of material (steel, aluminum)

Dismantling

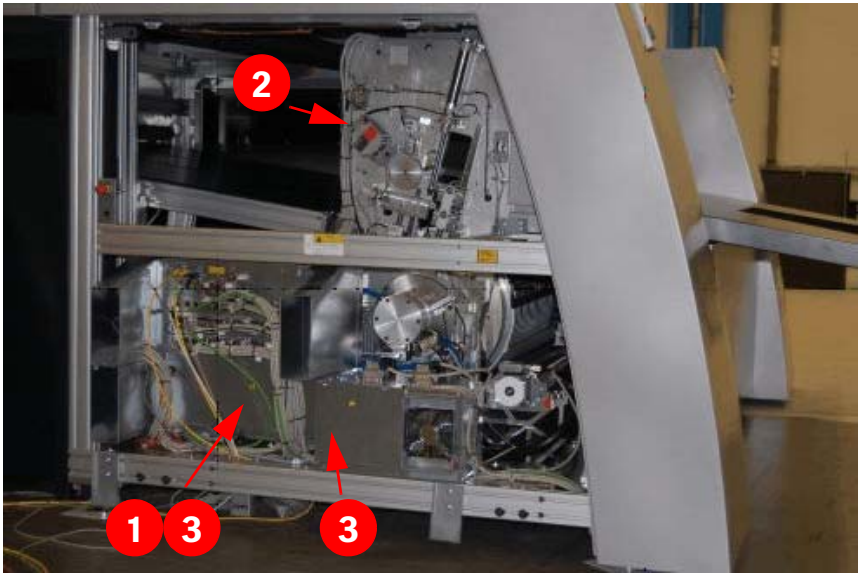


Fig. 2: Recorder disposal

1, 3: Various PCBs and power supply modules

2: Distributor PCB

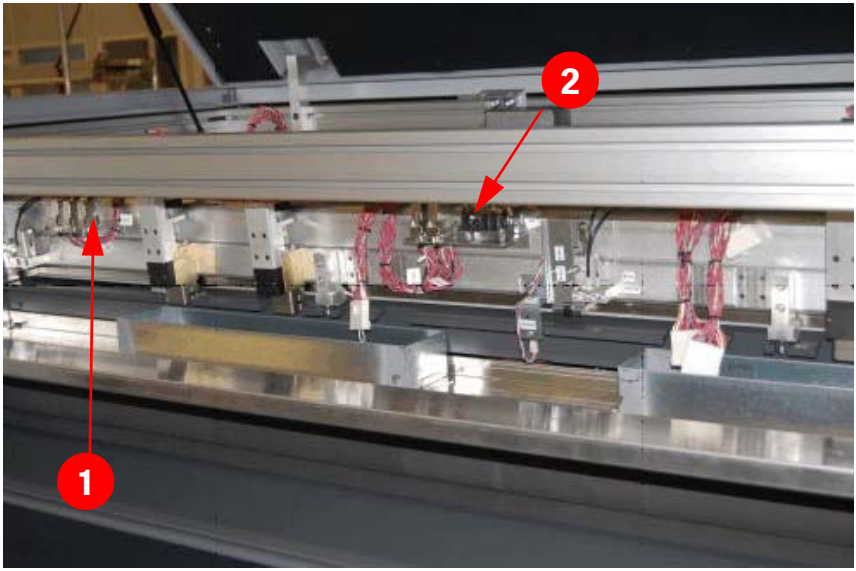


Fig. 3: Recorder disposal

1: PCBs in punches

2: Distributor PCB

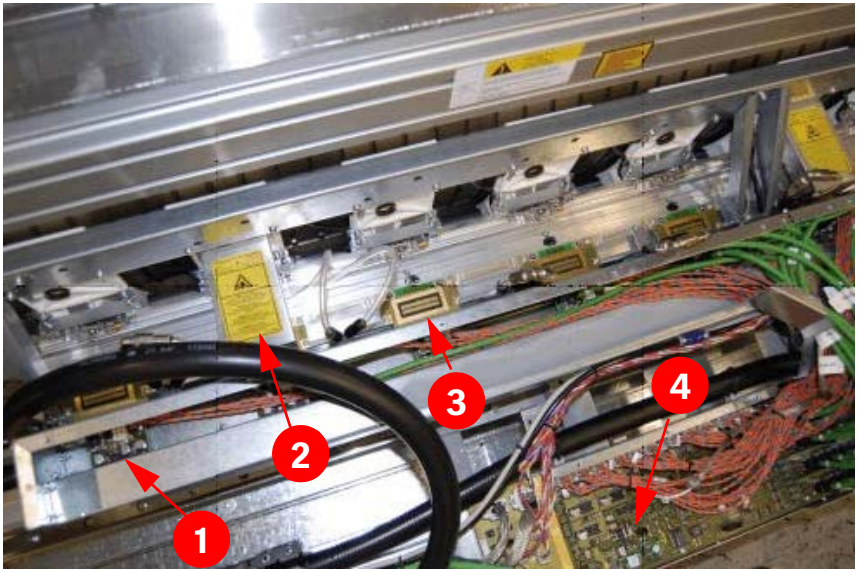


Fig. 4: Recorder disposal

1, 3, 4: Interface PCBs

2: Laser module

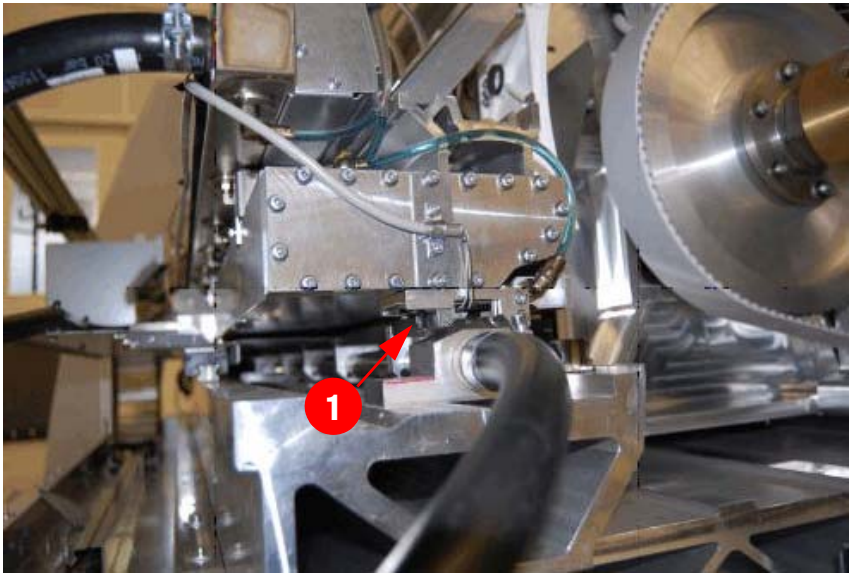


Fig. 5: Recorder disposal

1: Light barrier pcb

Fig. 6: Recorder disposal

1: Filters in suction device

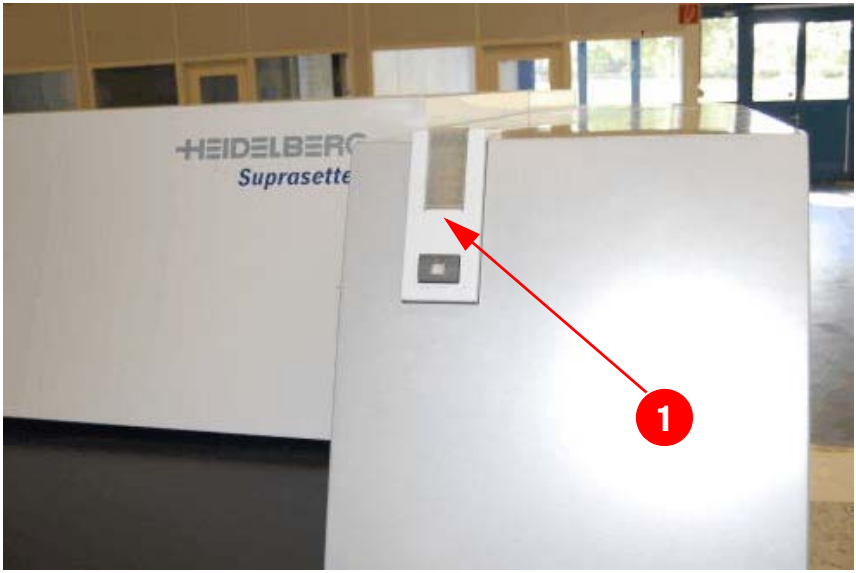


Fig. 7: Disposal of the recorder 6

1: Pilot lamps

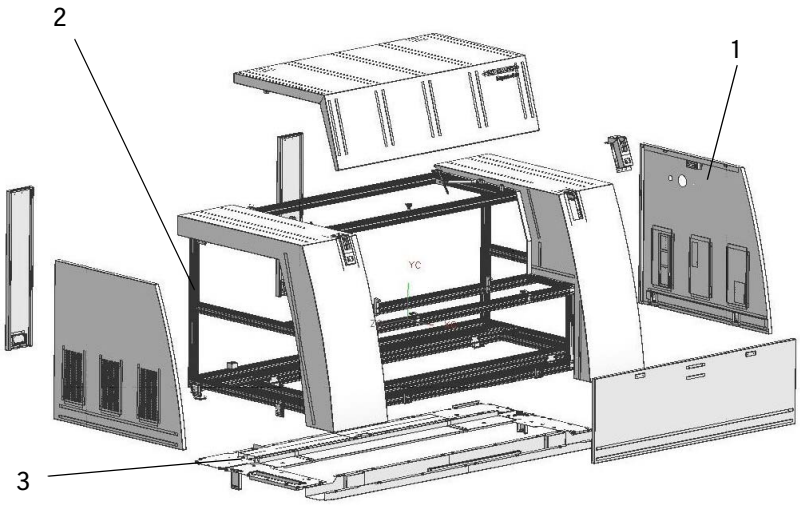


Fig. 8: Recorder disposal

1: Cover plates

2:Base frame

3:Base plates

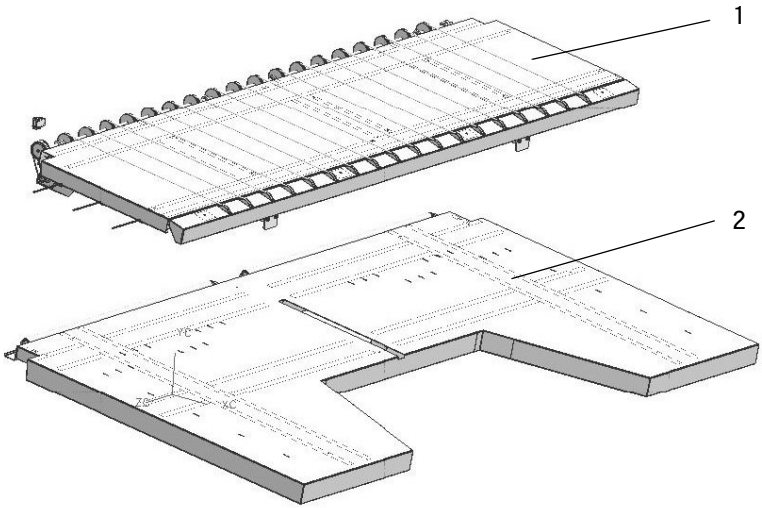


Fig. 9: Recorder disposal

1, 2: Table top

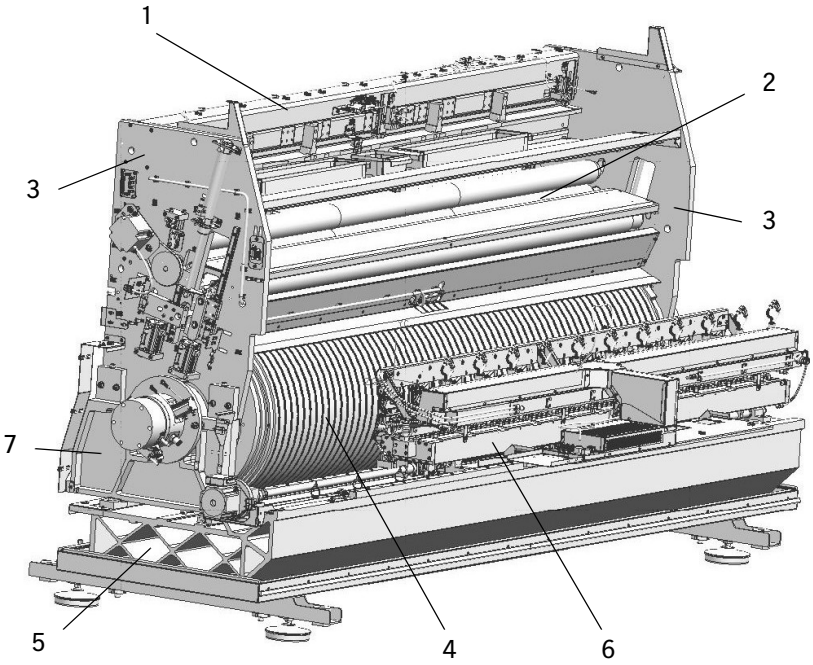


Fig. 10: Recorder disposal

1: Punch bar

2: VCT bar

3: Side panels (2 off)

4: Imaging drum

5: Machine base

6: Imaging rails

Disposal of the Loader/Unloader

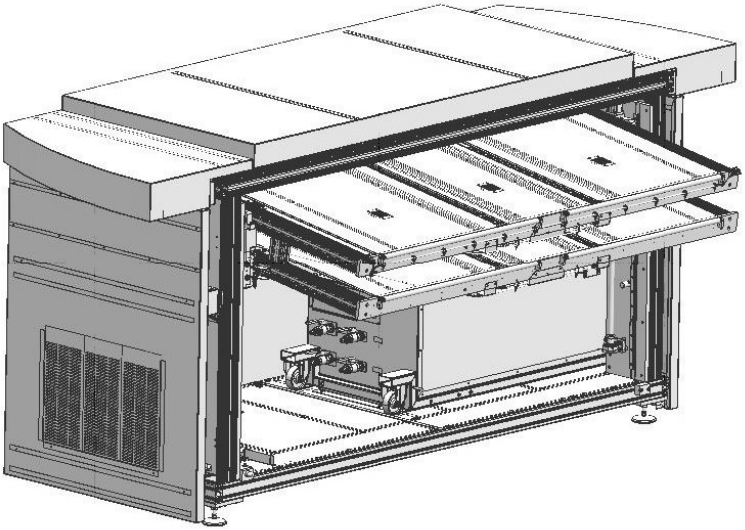


Fig. 11 Disposal of loader/unloader

Disposal of loader/unloader

Size of the device (width, depth, height):

3400 mm x 1255 mm x 1560 mm

Weight of the device: 800 kg

Harmful substances

The table below lists the parts that contain harmful substances and, therefore, must be disposed of or recycled separately.

The positions of such parts in the device can be found in the graphic below.

Description	Harmful Substances	Image No. (Pos.)
Various PCBs	Tetrabrombisphenol A etc.	12 (1.2)
Power supply modules and motors	Tetrabrombisphenol A etc.	
Refrigerant in the chiller	Refrigerant R 134a (820 grams)	12 (3)
Electronic components in the chiller	Tetrabrombisphenol A etc.	12 (3)
Chiller preservative Glysantin 20 liters Glysantin + 30 liters water	Ethylene glycol, see the section "Disposal of Glysantin"	In the cooling circuit

Harmful substances

Polyvinyl chloride could be contained in the cable covering. The electronic components contain flame retardants. State-of-the-art technology allows thermal recycling in appropriately equipped plants.

Disposal of Glysantin

BASF's safety data sheet "Glysantin G48-00" that is valid at the time you dispose of the product must always be followed.

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E-Mail: Productinformation.Performance-Chemicals@basf-ag.de

Recyclable Materials

The following table lists the main parts that do not contain harmful substances and that can undergo environmentally safe recycling.

The positions of such parts in the device can be found in the graphic below.

Pos.	Description	Material	Weight approx. (kg)	Image No. (Pos.)
1	Cover plates	Aluminum, ENAW-AlMg3, powder coated	100	12 (4)
2	Base plates	Sheet steel, galvanized	36	12 (6)
3	Base frame	Aluminum, AlMgSiO, 5F25	130	12 (7)
4	Tables	Aluminum plate, EN AW-AlMg3, profile, AlMgSiO, 5F25	125	12 (5)
5	Carriers (2x)	Aluminum, AlMg4,5MnO,7	26	12 (8)
6	Various parts: mounting parts, motors, pumps, cables, rubberized rollers	Steel, aluminum, plastic, cast aluminum, copper	380	

Recyclable Materials

Dismantling

Pos.	Description	Material
1	Dismantle the sheet-metal coverings	Hinged or screwed
2	Remove cables and hoses	
3	Remove electronic components, assemblies and motors	Dispose of professionally as electronic waste
4	Dismantle the chiller and dispose of it professionally (see disposal instructions below for the Termotek chiller)	Screwed
5	Dismantle sheet-metal components	Screwed
6	Dismantle tables	Screwed
7	Dismantle base plates	Screwed
8	Dismantle the frame	Screwed

Dismantling

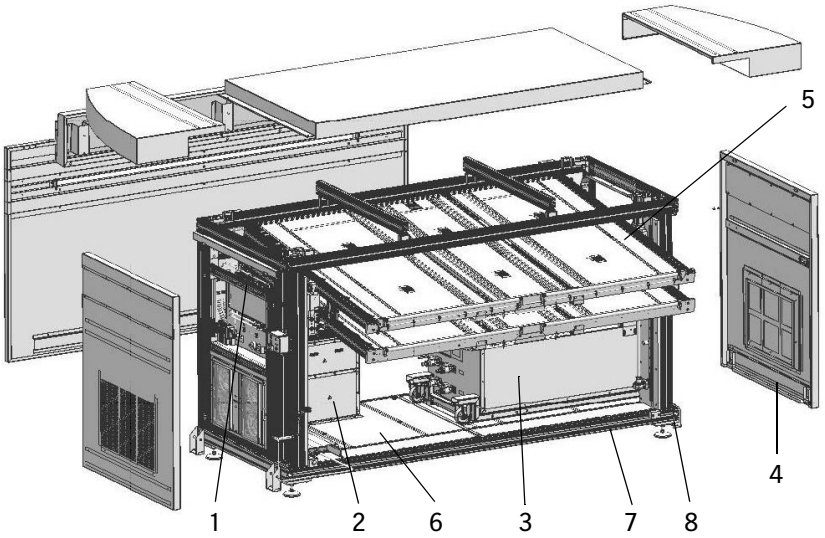


Fig. 12: Disposal of loader/unloader

1, 2: Various PCBs

3: Electronic components and coolants in the chiller

4: Cover plates

5: Tables

6: Base plates

7: Base frame

8: Beams (aluminum)

Disposal instructions for the Termotek chiller

(printed with the permission of Termotek AG)

The chiller comprises several components that must be disposed of separately. Disposal of the unit must be done professionally and only at appropriately designated locations. The chiller can be divided into three groups.

- Electrical parts, components, all cable types are dismantled where possible and the single material items can then be recycled. Electrical parts and components can be disposed of directly at recycling centers.
- Unusable residue (plastics, insulating material, sheet metal parts, etc.) can be disposed of as household waste or at recycling centers.
- The entire cooling circuit must be disposed of by a company certified according to § 52 para. 1 of the Closed Substance Cycle Waste Management Act. The refrigeration circuit may only be dismantled by refrigeration specialists.
- Dirty cooling water or cooling water with additives must not enter the sewerage system or waters. Cooling water is classified as hazardous waste and may only be disposed of at an authorized company or recycling center.

Overview

Dimensions	
Manual device and semi-automatic device.	Width3400 mm Depth 3380 mm Height 1560 mm Depth 7812 mm (with OLP table) 8725 mm (with Nela cross conveyor)
Weight	
Semi-automatic device	approx. 2600 kg
Power supply	400 V, three-phase connection (Y connection + N + PE)
Frequency	50/60 Hz
Rated operational current	3 x 15 A, three-phase connection
Power consumption	≤ 10 kW
Heat Radiation	≤ 36000 KJ/h, ≤34000 BTU/h
Compressed air connection	max. 8 bar / 120 PSI
Air flow requirement	
Suprasetter 145/162/190	200l/min.
Suprasetter 145/162/190 + APL	350 l/min.
Ambient conditions (operation)	Temperature +20°C to +27°C Air pressure 700 mbar to 1060 mbar Rel. humidity 40% to 70% non-condensing

Ambient conditions (transport)	Temperature -10°C to +50°C Air pressure 250 mbar to 1060 mbar
Noise emission	< 70 dB (A), workplace-related value
Plate sizes	
Suprasetter 145	Min. 500 mm x 650 mm Max. 1425 mm x 1460 mm
Suprasetter 162	Min. 500 mm x 650 mm Max. 1425 mmx 1630 mm
Suprasetter 190	Min. 500 mm x 650 mm Max. 1425 mm x 1905 mm
Plate thickness	0.24 mm to 0.40 mm
Resolution	1000 pixels/cm (2540 dpi)

Protection and Safety Requirements

Standards

The Suprasetter complies with the safety regulations of the standards and directives listed below.

General safety

ProdSG "Product Safety Act" (2011)	Germany
2006/42/EC Machinery Directive	Europe
2014/35/EC Low Voltage Directive	Europe
2014/30/EC EMC Directive	Europe

Laser Safety

Please refer to the label overview at the end of this chapter for laser labels and their positions.

DGUV Regulation 11	Germany
EN 60825-1	Europe
IEC 60825-1	International
21 CFR 1040	USA

Mechanical Safety

EN ISO 12100	Europe
EN 1010-1/2	Europe
IEC 68-2-6	International
IEC 68-2-7	International

Electrical safety

EN ISO 13849-1	(International)
EN 60204-1	Europe
IEC 60204-1	International
EN 60950-1	Europe
IEC 60950-1	International
UL 60950-1	USA
CSA C22.2 No. 60950-1	Canada

Electromagnetic Compatibility (EMC)

Law regarding electromagnetic compatibility of technical equipment (EMVG)	Germany

Interference emission (stray radiation and interference voltage)

EN 61000-6-4: 2007 + A1:2011	Europe
EN 61000-3-2: 2014	Europe
EN 61000-3-3: 2013	Europe
EN 61000-3-11: 2000	Europe
FCC CFR 47, Part 15, Subpart B, Class A	USA
ICES-003, Class A	Canada
CISPR 22: 2009 + A1:2010	Australia/New Zealand

Interference immunity

EN 61000-6-2: 2005	Europe
IEC 61000-6-2: 2005	International

Radio Interference Suppression

To comply with directive 2014/30/EU on electromagnetic compatibility, the unit is to be operated only with all covers correctly installed.

Ensure compliance with the radio interference suppression regulations, when you connect other electrical equipment to this unit by following the instructions given by the manufacturer of this equipment regarding correct installation and maintenance.

Compliance with radio interference suppression regulations can be assumed when the equipment in question is marked with the European Union mark of conformity (CE) and the instructions for installation, operation and servicing are followed.

Approvals and conformity

GS	Germany
CE: Declaration of Conformity	Europe
CDRH: Accession No. (submitted)	USA
cETLus	USA / Canada
GOST-R	Russia
ACN 004 395 779	Australia

CE Declaration of Conformity

The circumstances listed below are valid solely within the member states of the European Union (EU):

- You received a copy of the CE Declaration of Conformity together with your accounting documents.
- Keep this copy with the operating manual.

EC conformity declaration in accordance with the EC Machinery Directive 2006/42/EC, Appendix II A,
and other European directives
We herewith declare that the design of the
product:
model/type:
machine no.:
year of manufacture:
meets the following pertinent stipulations as per the version valid at the present time:

- EC Machinery Directive 2006/42/EC
- EC EMC Directive 2004/108/EC
- Low–voltage Directive 2006/95/EC

Harmonized standards used, in particular:

- EN 1010
- EN 60 204-1
- EN 61 000-3-2/-3-31)
- EN 61 000-6-2/-6-3/-6-41)

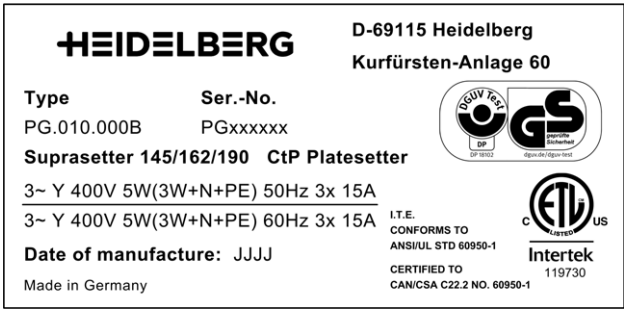
1) Suprasetter 145/162/190: not -3-3/-6-3
SCL and Suprasetter 75/105/A105/A52/A75: not -6-4
MCC: not -3-3/-6-4
DoD print system: not -3-2/-3-3/-6-3

(Stephan Plenz)
Member of the management board

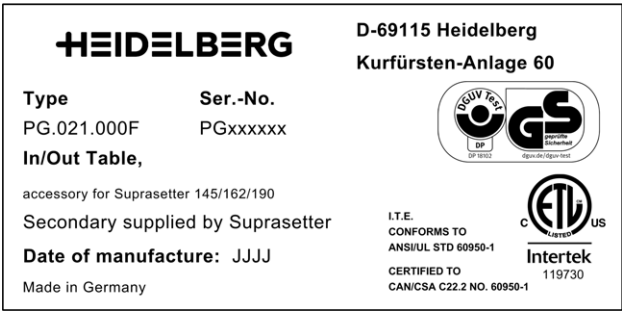
(Frank Kropp)
Head of Research and Development,
Authorized representative in terms of technical documents

Basic principle

Labels on the Suprasetter 145/162/190



Type label, recorder



I/O table type label

CE mark of conformity

Laser Product Class 1

Caution! Class 4 laser radiation

Vor Anschluß an das Netz Aufstellanleitung beachten
See installation instruction before connection to the supply
Voir la notice d' installation avant de raccorder au rèseau

Installation instructions

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.
Cet appareil numèrique de la classe A respecte toutes les exigencis du Règlement sur le matèriel brouilleur du Canada.

This product has been manufactered to meet or exceed the performance requirements for laser products as stated in 21CFR1040.10 and 21CFR1040.11 of the Health and Safety Act of 1968

Note on conformance

Beware of moving parts

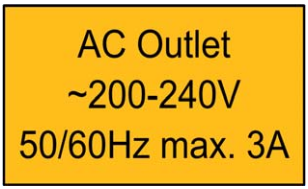
Electric shock hazard.

Data cable connection warning

High leakage current

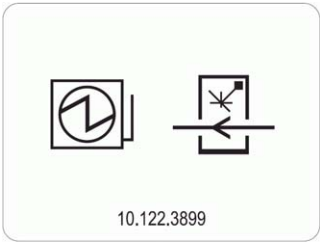
Air Inlet

Air Outlet



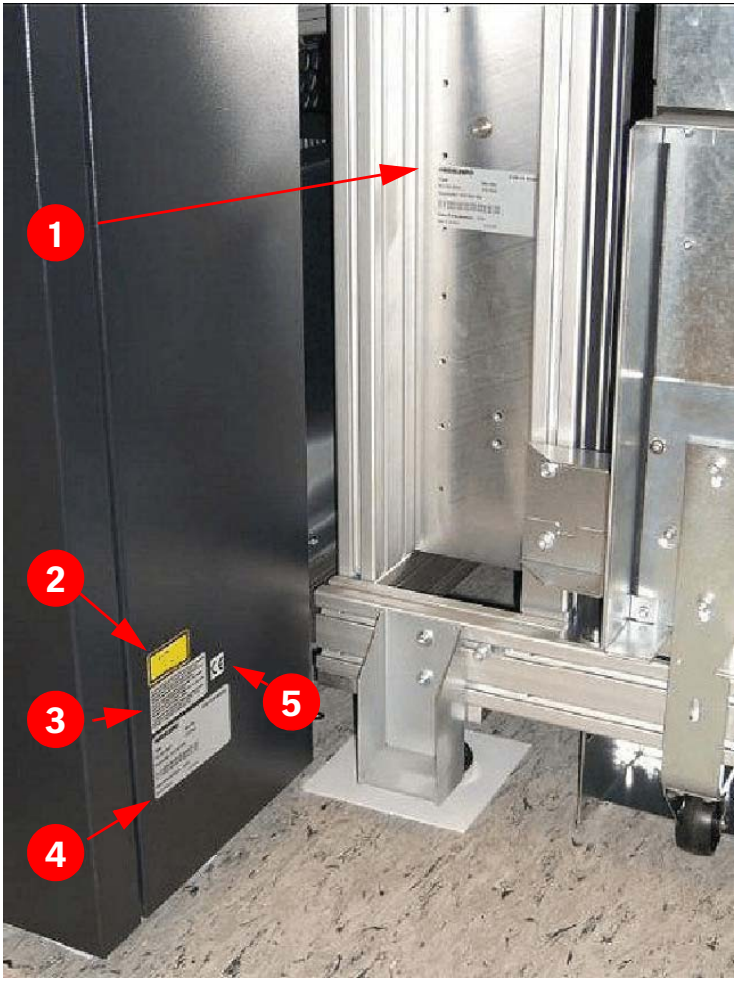
AC outlet

Warning/information labels on suction unit



Power switch identification

Power switch with identification label



Recorder with plate loader

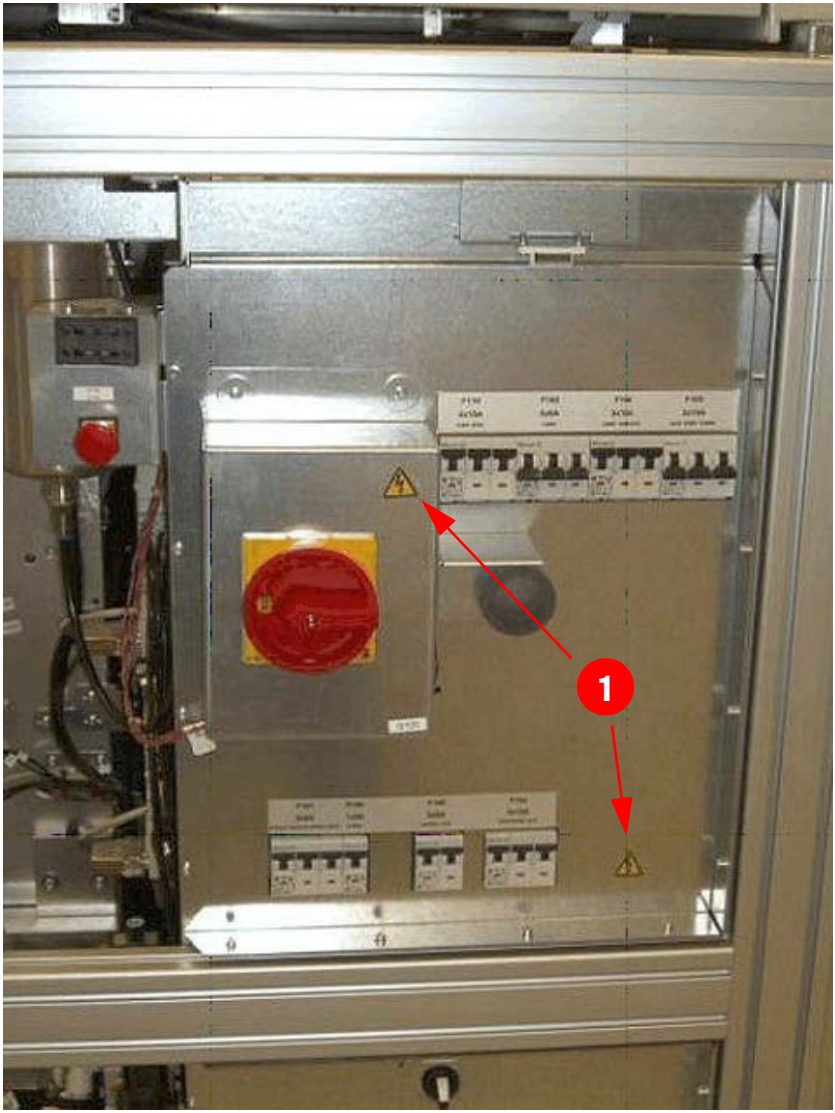
1: Type label, recorder

2: Laser Product Class 1

3: Note on conformance

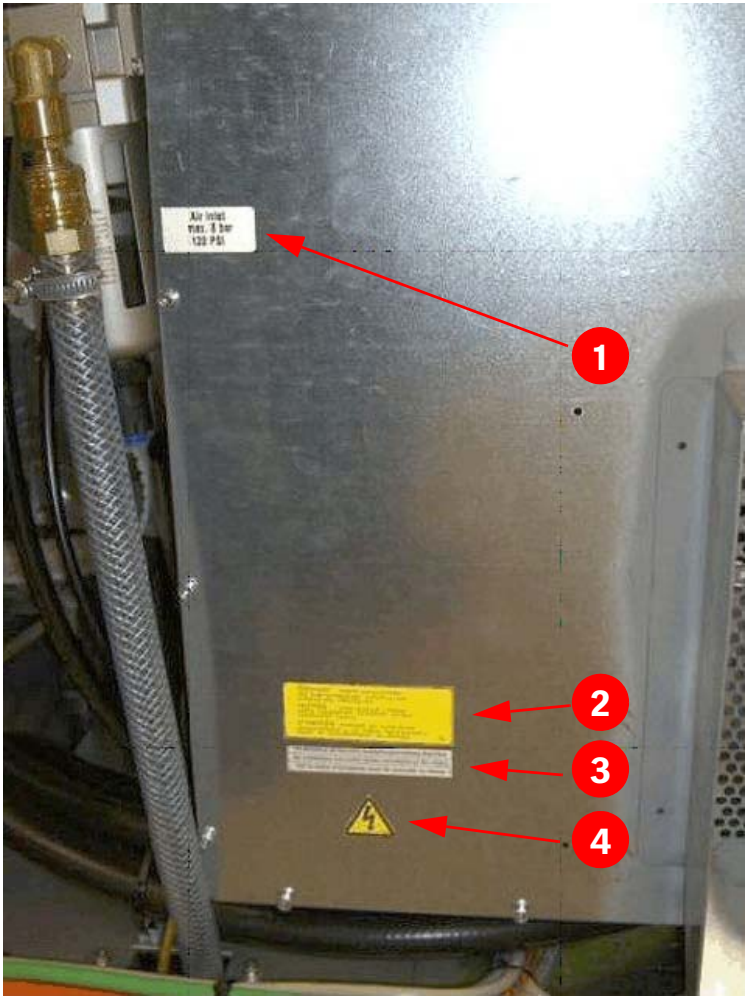
4: Type label, recorder

5: CE mark of conformity



Recorder power connection and fuses

1: Electric shock hazard.



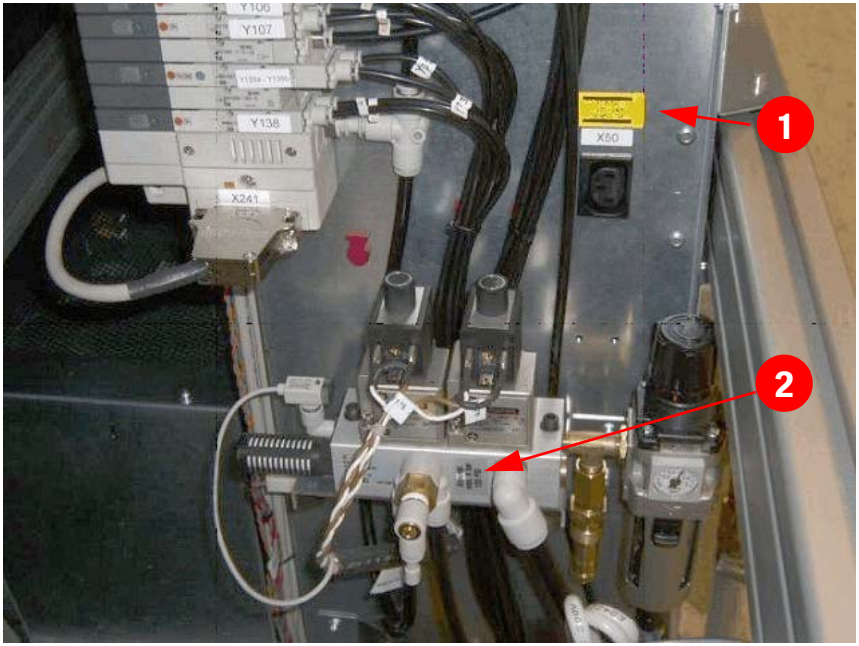
Recorder power supply box, outside

1: Air Inlet

2: High leakage current

3: Installation instructions

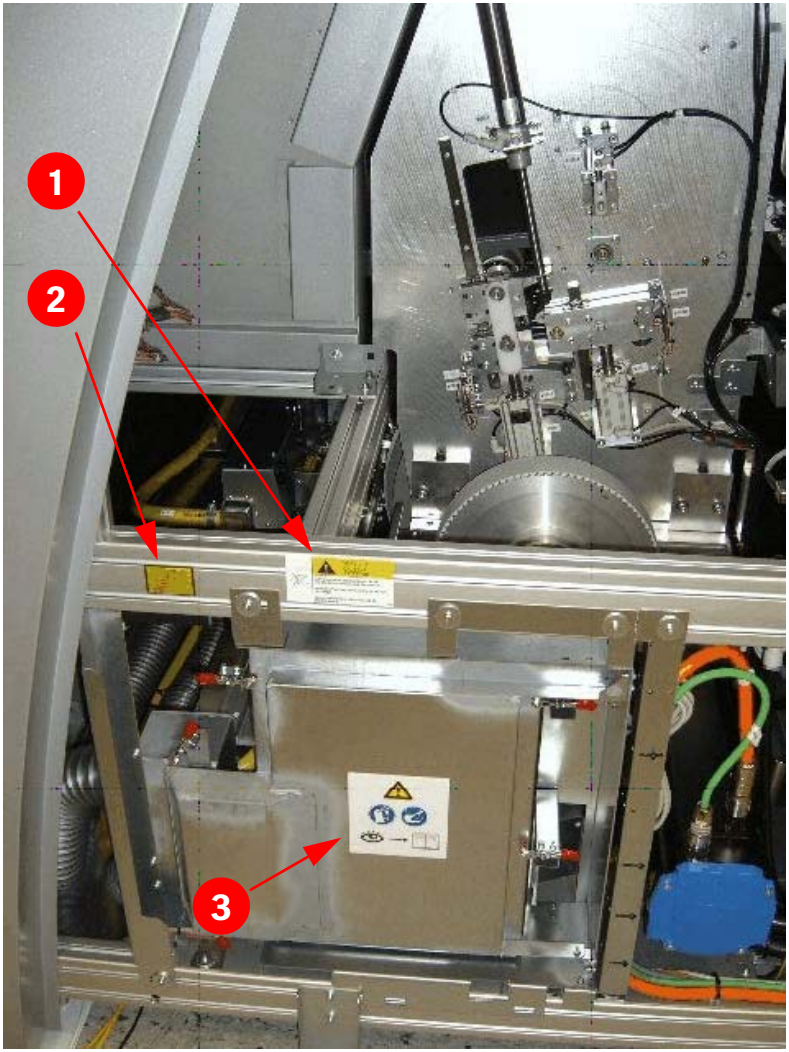
4: Electric shock hazard.



Recorder, compressed air

1: AC outlet, connector socket for cross table

2: Air Outlet, compressed air connection for the Autoloader

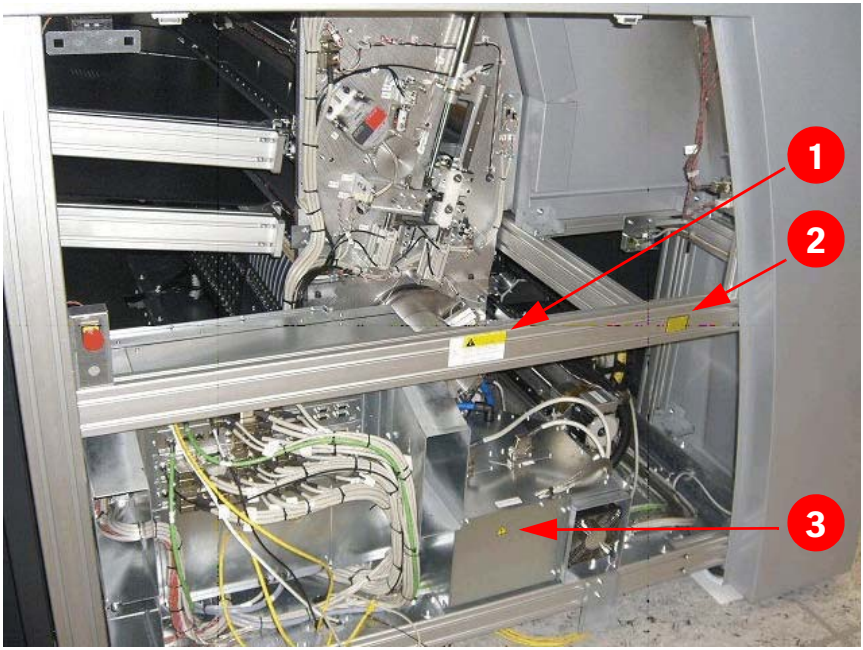


Recorder, right side

1: Beware of moving parts

2: Caution! Class 4 laser radiation

3: Warning/information labels on suction unit



Recorder, left side

1: Beware of moving parts

2: Caution! Class 4 laser radiation

3: Electric shock hazard.

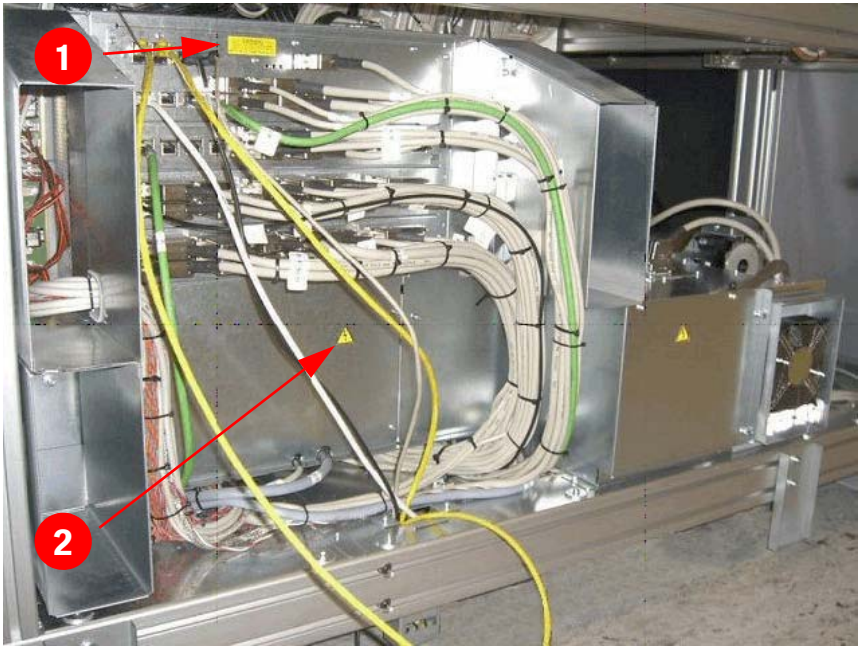
Recorder, cross beam in front of exposure drum

1: Beware of moving parts

2: Caution! Class 4 laser radiation

Recorder, lifting table of plate loader

1: Beware of moving parts (on both sides of the upper side rail)



Recorder, electronics unit

1: Data cable connection warning

2: Electric shock hazard.

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