Suprasetter 106
User's Guide

01/2024
Order No PL.999.0005/07

HEIDELBERG

Kurfuersten-Anlage 52-60
69115 Heidelberg
Germany
Phone +49 6221 92-00
Fax +49 6221 92-6999
www.heidelberg.com

Important notice:

Our products are constantly improved and subjected to further development. 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 the original Instruction Manual

Order No PL.999.0005/07
01/2024

Printed in Germany.

Before you start ...

Introduction

1 Notes on Installation

2 Operation

Index

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.

- Quotation marks 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 marked 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 Designation

Designation Kind	**Name**
Sales designation	Suprasetter 106
Type designation	PL.000.0000

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 is to be installed by authorized service personnel only. The ambient conditions must be observed in this process.

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 may only be performed by authorized personnel trained for this purpose. 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 top right 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.

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 triggers an all-pole cut-off of the Suprasetter and any loader from the power supply.
In an emergency, it is to be used as an emergency cutoff switch for the Suprasetter.

Emergency Stop Switch

The emergency stop switch is located behind the upper left side panel and is designed for an emergency during servicing. In the case of danger, it must be operated with the panel open. All mechanical motions in the Suprasetter are stopped and the invisible laser beam is switched off when the emergency stop switch is used.

On/Off button

The **On/Off switch** switches the Suprasetter to an operational or standby mode.

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.

Note: All connectors and outlets of the service line must be easily accessible at all times.

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 provision 11 of the German Social Accident Insurance (DGUV) 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.

Working on the suction device

The manufacturers of printing plates recommended by HEIDELBERG state that application of their plates is harmless with regard to any pollutants. Obtain and heed the notes provided by the printing plate manufacturer if applicable. If printing plates are used that are not on the list of printing plates recommended by HEIDELBERG, the instructions from the printing plate manufacturer must be obtained and heeded.

The parameters given in the reference list must never be exceeded. Otherwise, excessive ablation may occur.

CAUTION

Health hazard from ablation residues

When working on the exhaust (filter change, replacement of hoses), there is a health hazard when touching or inhaling ablation residues.

- Wear protective gloves and a dust mask.

Notes:

- Pick up ablation residues with a damp cloth. Use a cloth moistened with isopropanol when picking up ablation residues that contain silicone.
- If a suitable vacuum cleaner (industrial vacuum cleaner at least class L) is available, then use it for cleaning.
- It is not allowed to perform sweeping without dust-binding measures (e.g. moistening) or blowing dust deposits off machines or filters.
- Used filters, gloves, sponges or cloths contaminated with ablation residues must be disposed of in a tightly sealed waste container (handle like paint residues; in the EU: EWC code 150202).

Likewise, dispose used hoses and adapters between laser module and filter housing *commercial waste resembling household waste* if you have removed an exhaust.

If you are not sure about disposal procedures, contact your local waste disposal company for details.

Order number	**Material (box of 50 pieces)**
00.760.1461/	Disposable gloves, size S
00.760.0477/	Disposable gloves, size M
00.760.0478/	Disposable gloves, size L
00.760.0479/	Disposable gloves, size XL

Order number	**Material**
00.760.1341/	3M dust mask type FFP2 with exhalation valve

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

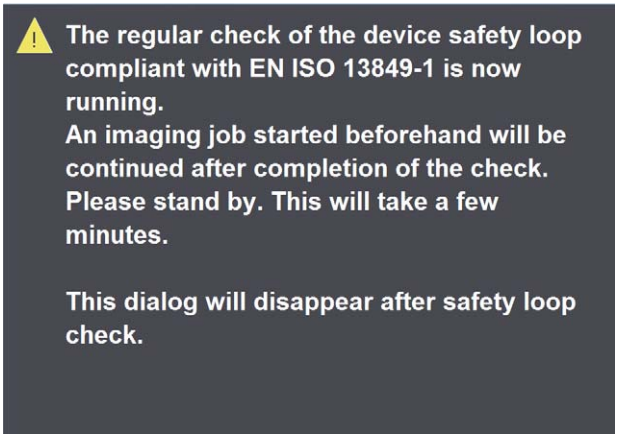
For the safety of the operating personnel, DIN EN ISO 13849-1 requires that the safety function of the Suprasetter is checked regularly.

Automatic check of the safety loop

This regular check is triggered automatically after the following criteria:

- When switching on the Suprasetter
- When running certain error corrections
- After a period of 24 hours before the start of a new plate sequence plus a brief waiting period when the machine is running continuously.

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 19) 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 55024:2016-05).

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 < 1 x 10^9 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, existing charges are only slowly reduced depending on the shoes worn. For personal safety, the resistance of floor to ground should not fall below 10^5 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 up to 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
  https://www.esda.org/
- Electrostatic Society of America
  https://www.electrostatics.org

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:

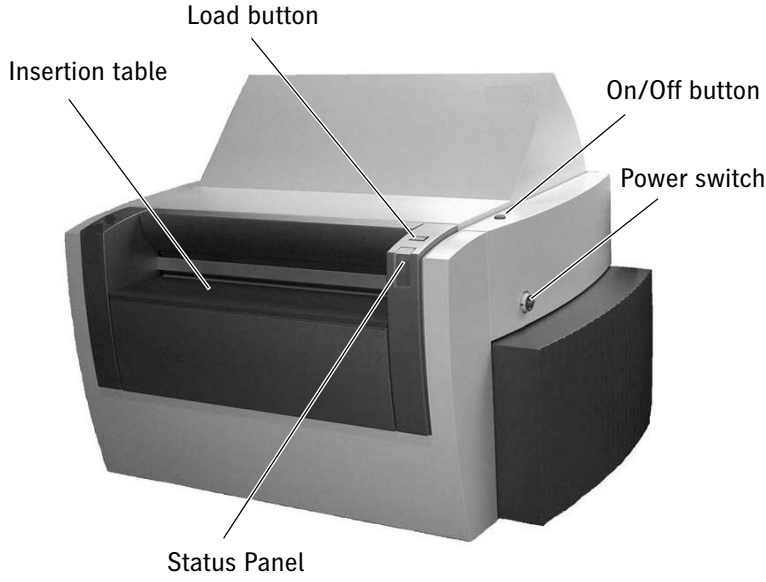
www.heidelberg.com

Description of the Unit and its Functions

The Suprasetter is a high-speed, PostScript™-compatible, computer-to-plate imaging device.

It images thermal printing plates in daylight operation.

The Suprasetter receives screened data from the RIP for imaging onto printing plates. The printing plates are placed manually on the insertion table, or loaded automatically by the Loader. The Suprasetter automatically loads the printing plate onto the drum, images it, punches it (option) and then transports the imaged plate back to the insertion table or, if an online processor is connected, directly to the processor.



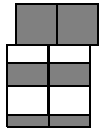
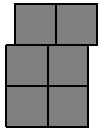
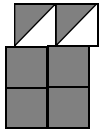
Ambient Conditions

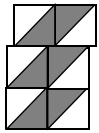
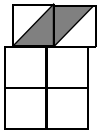
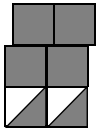
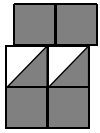
A color set must always be imaged without a break (within max. 20 minutes) if the Suprasetter is not located in an air-conditioned room. Register errors can occur if single separations are repeated at a later point in time.

Status Panel

The status panel of theSuprasetter is divided into a left and a right area.

Actions are indicated by the status panel as follows:

Status LED	Action
	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 Suprasetter fully from the power supply with the power switch, for example, for maintenance work. You can switch on the Suprasetter 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 32.
- switch off the Suprasetter, see section "Switching off the Suprasetter", page 34.
- 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.

If the Suprasetter is equipped with a suction device, then this must be activated when using ablative printing plates. Activation of the suction device is also recommended for non-ablative plates.

Note: The activation procedure for the suction device described in the online help of the CTP user interface.

Punch Systems

As an option, you can equip your Suprasetter with different punch systems.

The punches are located within the Suprasetter. They punch the plate after imaging before the plate is unloaded.

Device	Max. number of punch systems	Max. number of punches per system
Suprasetter 106	4	8

The following punch gaps are possible:

- 220 mm gap for QM 46
- 425 mm gap for GTO and SM 52/75
- 550 mm gap for Komori
- 780 mm gap for SM 106
- 830 mm gap for Komori 44

Transport of the Suprasetter

The Suprasetter 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 only be installed 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 Suprasetter off the pallet 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 45. Repairs may be done only by service personnel.

Selecting the User Interface Language

1. Click the "Change to Device" button.
2. Select "Options" in the vertical menu bar.
3. Select the "Miscellaneous" dialog 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 Suprasetter 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.

Power-off order

1. Switch off the Suprasetter by means of the CtP user interface or with the push button on the Suprasetter.
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

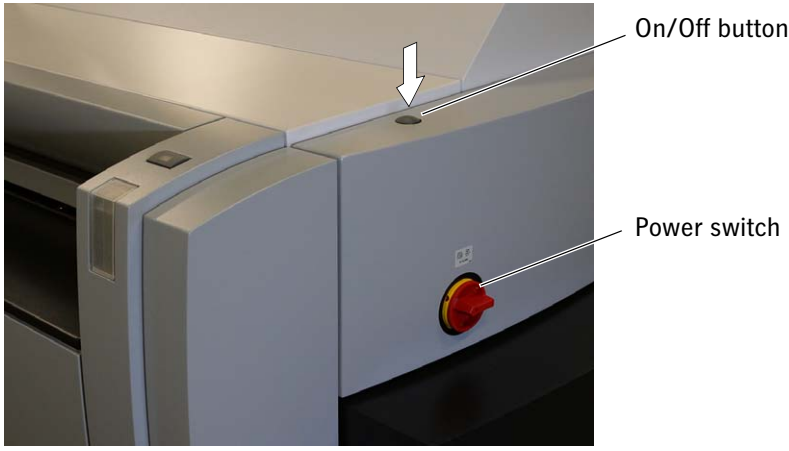
Prerequisite: There is no printing plate on the insertion table.

Operation:

1. Switch the power switch to 'I'.
2. Press the On/Off button on the Suprasetter as far down as it will go before releasing it.

This switches on the Suprasetter, 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, all other operation is done at the workstation.



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 Suprasetter 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 Suprasetter.

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

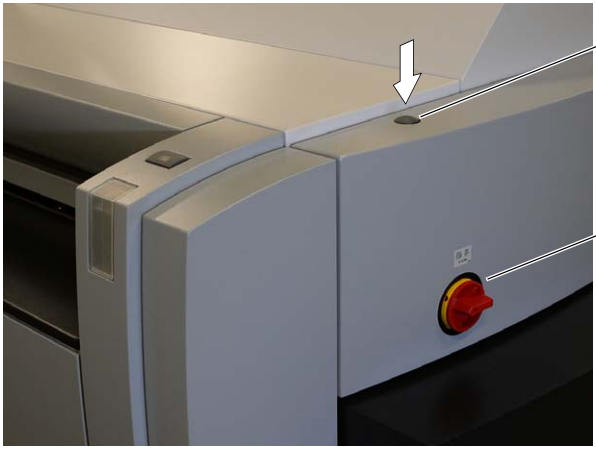
At all times keep to the shutdown order described here. The Suprasetter can be damaged on the inside if you switch off the Suprasetter directly with the power switch.

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' for cleaning and servicing.
5. Switch off the workstation (PC).



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: Here as well, the shutdown procedure must be repeated if the beep sounds for a second time before you have carried out 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.

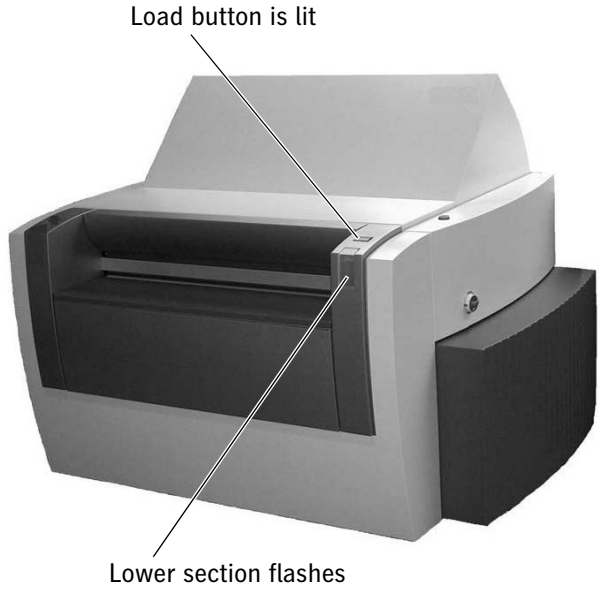
- Never touch the emulsion side of the printing plate with your bare hands. Finger prints will appear on the printing plate which can adversely affect the print quality.
- The printing plates are very easily scratched. For that reason, it is essential to insert slip sheets when you place printing plates 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.

Manual Loading of a Printing Plate

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



Caution

Risk of injury from improper handling

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

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.

Note: Generally, in the "Transit Mode“ (i.e. plates go directly from the Suprasetter to the online processor), you should load punched plates to the Suprasetter with the non-punched side inserted first.

5. Center the printing plate (± 30 mm) on the insertion table with the emulsion side facing up.

6. Push the plate into the Suprasetter until you can see the rear edge of the plate at the scale on the insertion table.
7. Press the load button. The plate is loaded to the Suprasetter. This is accompanied by a brief beep.

Note: The Suprasetter loads the plate and checks at what angle it is. The plate is immediately transported back to the insertion table if it was too askew when inserted. Three beeps are heard and the load button flashes. You must repeat loading with the plate straightened.

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

Removing a Printing Plate

After imaging, the printing plate will be ready for unloading above the insertion table.

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.

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

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

2. Follow the instructions to eliminate the error.
3. 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:

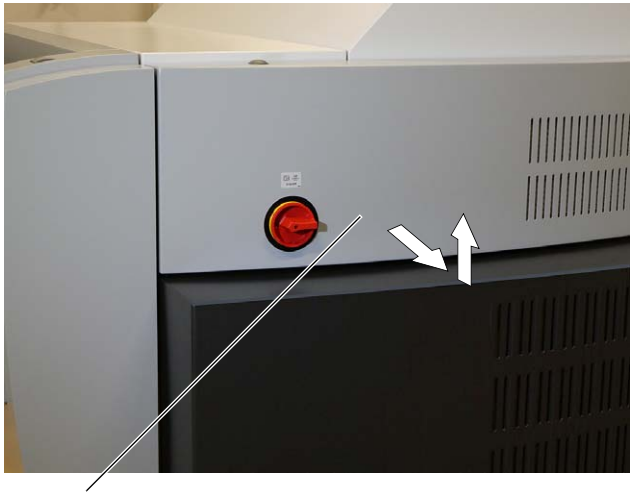
1. Remove the right-hand side panel.

   The now-visible key-operated switch **may only be operated by service personnel** and **not by the operator**.

Warning

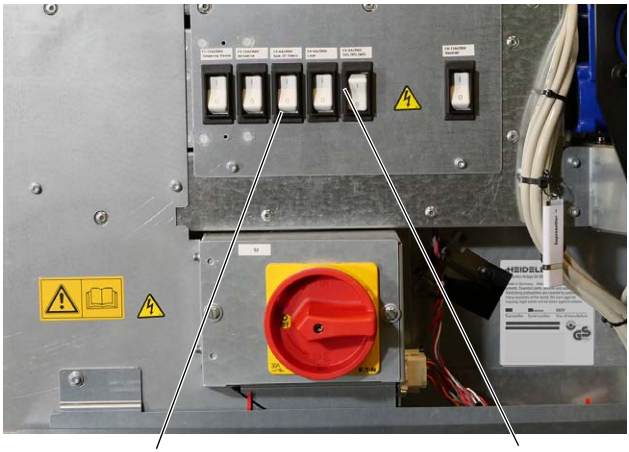
Risk of injury if safety system bypassed

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



Side panel

2. Switch on the automatic cutout that was triggered.

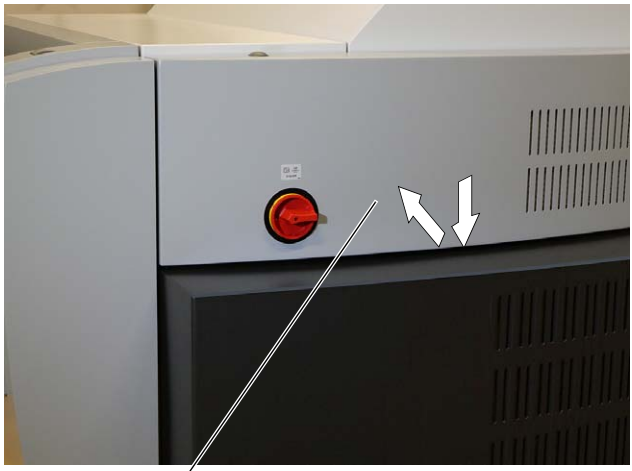


Automatic cutouts (5x) F5

3. Please inform your maintenance service if you cannot switch on an automatic cutout again so that this malfunction can be remedied.

Note: Automatic cutout F5 remains switched off if you do not use an autoloader.

4. Put the side panel back on.



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.

Warning

Risk of fatal injury from unauthorized opening of the device

Unauthorized opening 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.

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 the Imaging Drum

A message prompts the user to clean the cleaning rollers.

Cleaning cycle: 1000 printing plates

Cleaning agents for the cleaning roller on the imaging drum:

- HITECLOTH cleaning cloth, order number PP.00124656

1. In the Suprasetter user interface, click the "Open Cover" button in "Administration > Maintenance > Monitoring".

The insertion table is not locked. Despite this, you should still press the "Open Cover" button to get a cycle that is allowed.

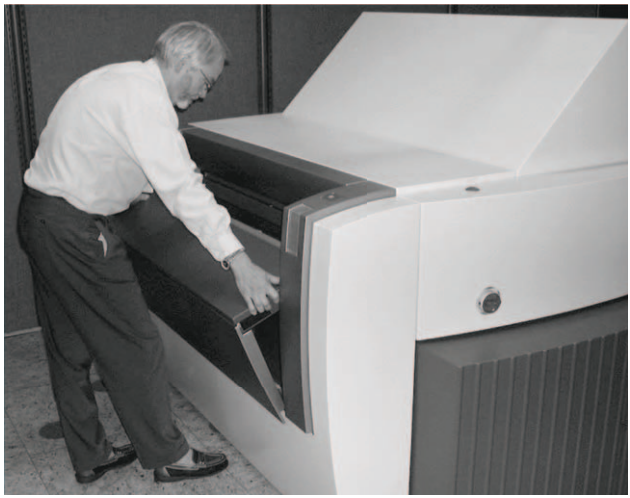
Note: The "Open Cover" button is enabled only if no imaging is running, i.e. the imaging drum must not be moving. The Suprasetter switches to an error state when the insertion table is removed.

Notice

The Suprasetter switches to an error state if you remove the insertion table during a running operation. As a result, imaging can abort and you can have incorrectly imaged plates.

2. Pull the insertion table towards you by its upper edge.

3. Lift the insertion table out of the Suprasetter and place it carefully on a table.



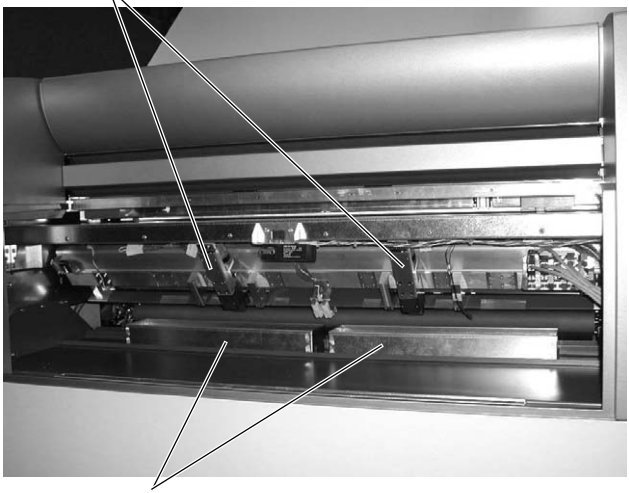
Notice

Do not touch the punch motors and their pcbs that you can now see. They do not present any hazard to the user because unlocking the insertion table makes them dead, but they could be damaged.

Note: Punches are integrated as an option.

4. Remove the punch waste containers from the Suprasetter.

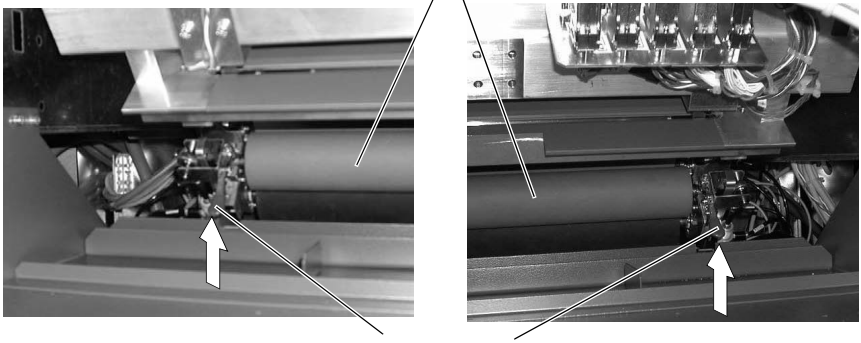
Punch motors



Punch waste containers

5. Open the tilting lever stoppers on both bearings of the cleaning roller

Cleaning roller



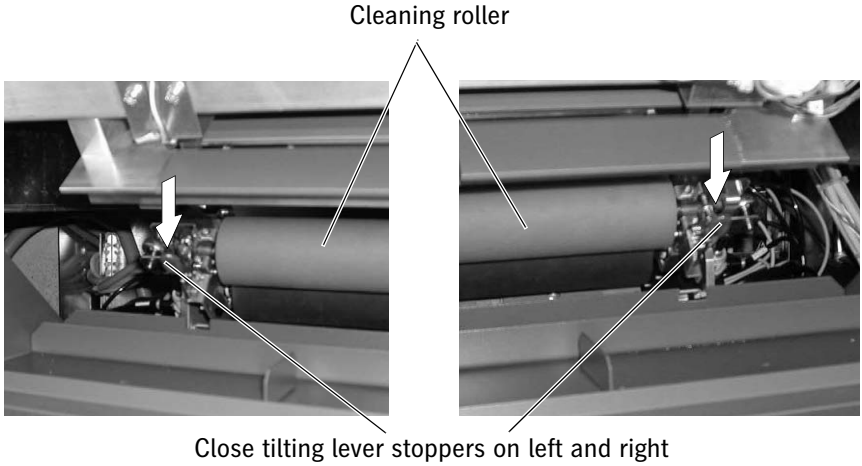
Open tilting lever stoppers on left and right

6. Remove the cleaning roller from the Suprasetter. Make sure that the roller does not become damaged when doing so.
7. Clean the cleaning roller with the cleaning cloth, some liquid soap and warm water.

Notice

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

8. Dry the cleaning roller with the cleaning cloth.
9. Insert the cleaning roller back into the Suprasetter. Make sure that the roller is seated properly in the bearings and is not damaged.
10. Close the tilting lever stoppers on both bearings of the cleaning roller Make sure that the stoppers are engaged.



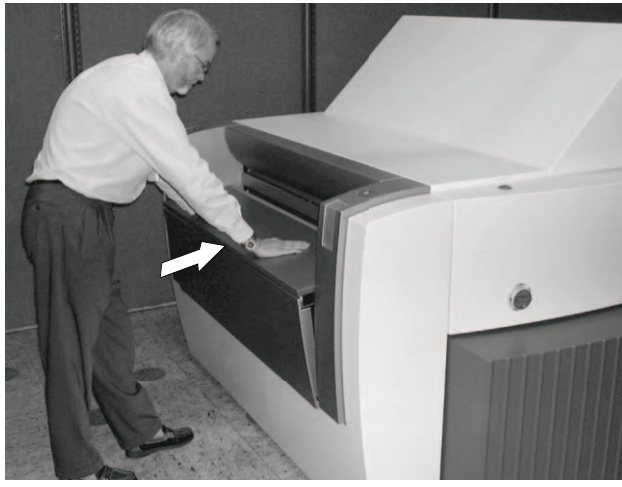
11. Refit the punch waste container.

Punch waste containers

12. Dry the cleaning roller again with a lint-free cloth.

13. Place the lower edge of the insertion table into the guide.

14. Push the insertion table away from you until the holding magnets catch.



15. In the Suprasetter user interface, go to "Administration > Maintenance > Monitoring" and click the box in the "Cleaning Rollers" row in the "Maintenance Completed" column. The number of plates in the "Next Maintenance" column is reset to its initial value.
16. Click "Apply" and confirm the query with "Yes". The maintenance interval for cleaning the cleaning rollers starts from the beginning.
17. Run a troubleshooting routine to eliminate the error state of the Suprasetter, see the section "Troubleshooting", page 43.

Removing the Punch Waste

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 "Open Cover" button in "Administration > Maintenance > Monitoring".

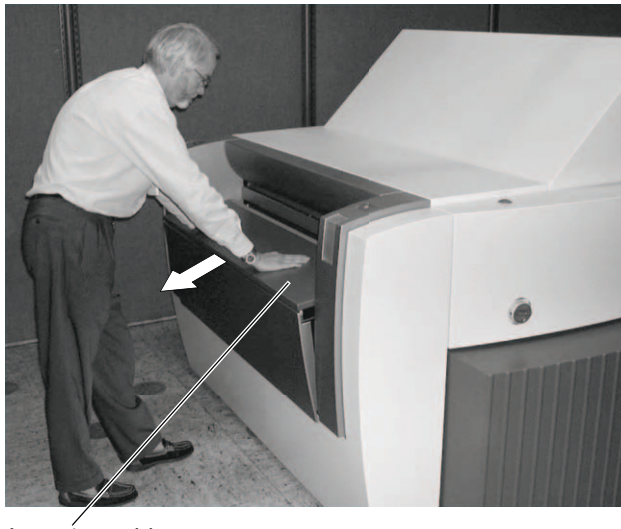
The insertion table is not locked. Despite this, you should still press the "Open Cover" button to get a cycle that is allowed.

Note: The "Open Cover" button is only enabled if no imaging is running, i.e. the imaging drum must not be moving. The Suprasetter switches to an error state when the insertion table is removed.

Notice

The Suprasetter switches to an error state if you remove the insertion table during a running operation. As a result, imaging can abort and you can have incorrectly imaged plates.

2. Pull the insertion table towards you by its upper edge.



Insertion table

3. Lift the insertion table out of the Suprasetter and place it carefully beside the Suprasetter.

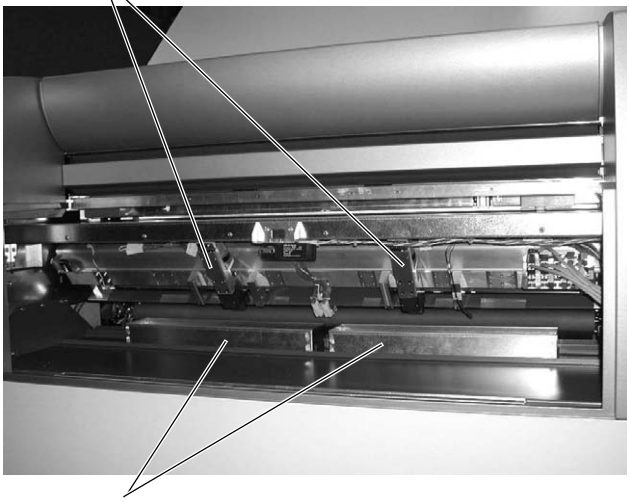
Notice

Do not touch the punch motors and their pcbs that you can now see. They do not present any hazard to the user because unlocking the insertion table makes them dead, but they could be damaged.

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

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.

Punch motors



Punch waste containers

5. Refit the punch waste container.

6. Place the lower edge of the insertion table into the guide.

7. Push the insertion table away from you until the holding magnets catch.

8. 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.

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

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

10. Run a troubleshooting routine to eliminate the error state of the Suprasetter, see the section "Troubleshooting", page 43.

Replacing the Air Filter

A message prompts the user to change the air filter.

Maintenance interval: 1000 hours

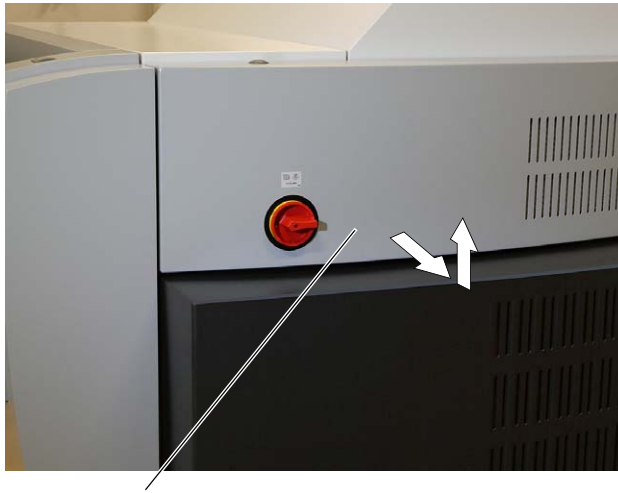
Filter mat order number: PL.517.0501

1. Remove the right-hand side panel.

Warning

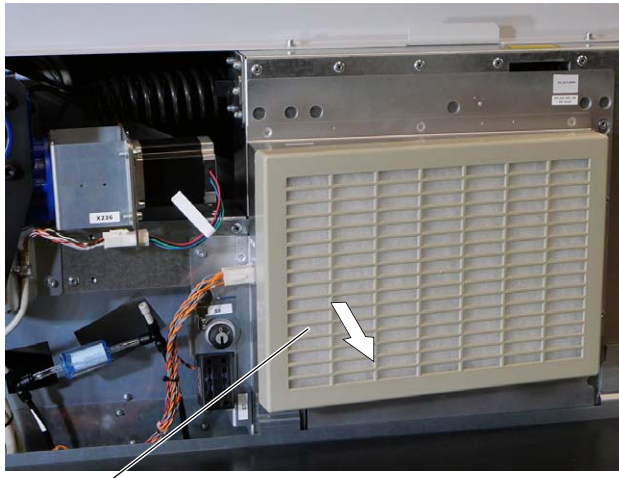
Risk of injury if safety system bypassed

The key-operated switch which is now visible may only be operated 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.



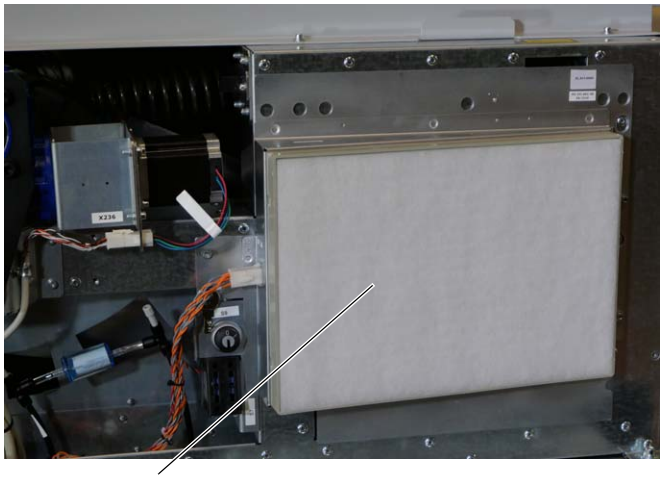
Side panel

2. Pull off the cover of the air filter casing.



Cover

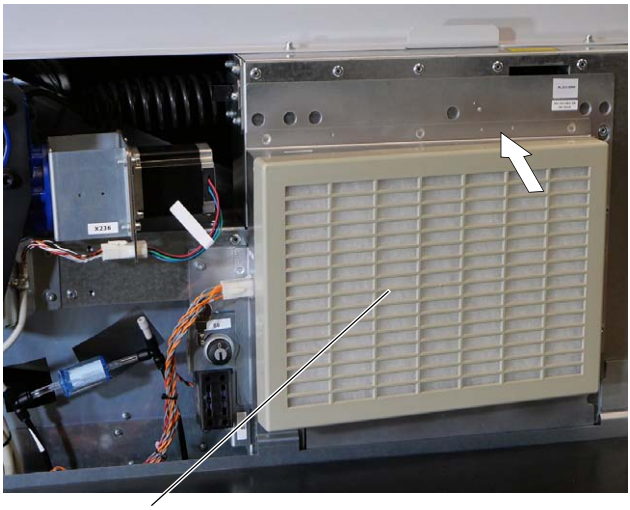
3. Put on protective gloves because of the dirty filter.
4. Remove the air filter from the filter casing and replace it with a new one.



Note: The coated side must face the inside of the device.

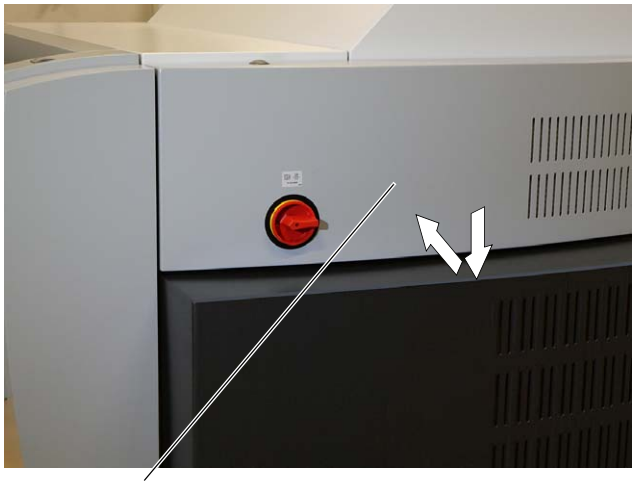
5. Dispose of the old air filter as *household-type commercial waste*. Contact your local waste disposal company for more details about disposal procedures.

6. Place the cover back on the filter casing.



Cover

7. Put the side panel back on.



Side panel

8. In the Suprasetter user interface, go to "Administration > Maintenance > Monitoring" and click the box in the "Air Filter" row in the "Maintenance Completed" column.

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

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

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

Suprasetter 106

Dimensions (mm)	W x D x H	2150 x 1494 x 1536
Weight	approx. 990 kg	
Power supply	200 V - 240 V	3-phase connection ex works (can be configured depending on power supply network)
Frequency	50/60 Hz	
Rated operational current	3 x 10 A	for three-phase connection
Power consumption	< 3000 W	
Heat Radiation	approx. 11,000 kJ/h incl. automatic loader	
Compressed air connection	min. 6 bar / 90 PSI max. 8 bar / 120 PSI	dry, oil-free compressed air Residual particle size ≤ 5 µm
Air flow requirement permanent	min. 100 l/min	Semi-automatic device
	min. 200 l/min	with SCL
	min. 350 l/min	with DCL
	min. 300 l/min	with APL
	min. 350 l/min	with DCL + APL
Ambient conditions (operation)	Temperature	+17 °C to +30 °C
	Air pressure	700 mbar to 1060 mbar
	Relative humidity	40 % to 70 % non-condensing

Ambient conditions (transport)	Temperature	-10 °C to +50 °C
	Air pressure	250 mbar to 1060 mbar
	Relative humidity	10 % to 85 % non-condensing
Noise emission	< 70 dB (A), workplace-related value	
Plate size	max.	930 mm x 1150 mm
	min.	370 mm x 323 mm
Plate thickness	0.15 mm to 0.35 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.

Note: The editions valid at the time of manufacture of the device apply. For approvals and markings, see the type label of the device.

General

Product Safety Act	(Germany)
EC directive relating to machinery	(Europe)
Low-voltage directive	(Europe)
EMC directive	(Europe)
"Electromagnetic Compatibility Act" (EMVG)	(Germany)

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 68-2-27	(International)

Electrical Safety

EN ISO 13849-1	(International)
EN 60204-1	(Europe)
IEC 60204-1	(International)
EN 62368-1	(Europe)
IEC 62368-1	(International)
UL 62368-1	(USA)
CSA C22.2 No. 62368-1	(Canada)

Interference emission (interference radiation and interference voltage)

EN 55032, threshold value B	(Europe)
CISPR 22, Class B	(International)
FCC CFR 47, Part 15, Subpart B, Class A	(USA)
ICES-003, Class A	(Canada)
EN 61000-3-2	(Europe)
EN 61000-3-3	(Europe)
AS/ZNS 3548	(Australia/New Zealand)

Interference immunity

EN 61000-6-2	(Europe)
EN 61000-6-3	(Europe)
EN 55024 / A1	(Europe)
CISPR 24	(International)

Radio interference suppression

In compliance with electromagnetic compatibility according to the EMC directive, the Suprasetter is only to be operated 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) or the UKCA mark and the instructions for installation, operation and service are followed.

FCC note

This device has been tested and complies with the restrictions for class A digital devices (see section 15 of the FCC regulations). These limits are designed to provide protection against harmful interference when the device is operated in commercial environments. The device generates and uses high-frequency oscillation and can emit it. Interference to radio and television reception can occur if the device is not installed and operated in compliance with the manufacturer's instructions. Harmful interference can occur when operated in a residential environment. Elimination of these interferences is at the expense of the user.

Declaration of Conformity

The facts below apply exclusively within the member states of the European Economic Area (EEA) as well as to England, Scotland, and Wales as part of the United Kingdom (UK) and to products for which HEIDELBERG in its entirety is the manufacturer:

- The original version of the declaration of conformity is enclosed with this operating instructions.

Disposal

The Suprasetter must be disposed of in compliance with the relevant national regulations. The Suprasetter 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 office.

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.

General Dimensions

See "Dimensions (mm)", page 69 and "Weight", page 69.

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 Suprasetter can be found in the graphics below.

Description	Harmful Substances	Image No. (Item)
Electronics box Various pcbs Power supply module	 Tetrabrombisphenol, lead, etc. Tetrabrombisphenol, lead, etc.	 7 (19)
Servo control	Tetrabrombisphenol, lead, etc.	6 (25)
Laser power supply module	Tetrabrombisphenol, lead, etc.	7 (26)
Pilot lamp	Tetrabrombisphenol, lead, etc.	1 (24)
Connection pcb for laser module	Tetrabrombisphenol, lead, etc.	8 (23)
PCBs in punches	Tetrabrombisphenol, lead, etc.	3 (13)
Light barrier pcbs	Tetrabrombisphenol, lead, etc.	8 (22)
Laser module	lead, chromium (VI), etc.	8 (23)
Chiller	see section "Disposal Instructions for Chiller", page 89	6 (18)
Chiller preservative Glysantin	Ethylene glycol approx. 10 liter (see the section "Disposal of Glysantin", page 77)	In the cooling circuit
Button cell battery on pcb	Various heavy metals	7 (19)

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

The safety data sheet for **GLYSANTIN® G48® Ready Mix/50 blue-green also suitable for electric vehicles** or **GLYSANTIN® G30® pink also suitable for electric vehicles** from BTC Europe GmbH valid at the time of disposal must always be followed.

Supplier:
BTC Europe GmbH, Rheinpromenade 1, 40789 Monheim, Germany
ph. +49-2173-3347-0
E-Mail: btc-productsafety@btc-europe.com

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 Suprasetter can be found in the graphics below.

Pos.	Description	Material	Weight approx. (kg)	Image No.
1	Cover plates	Aluminum plate, varnished, Maniewicz Alexit 426-44	41	1 (1)
2	Swivel table	Aluminum, partially powder-coated	50	4 (15)
3	Side panel	Aluminum, powder-coated	25	1 (3)
4	Front panel Front table	Polyurethane	18	1 (4)
5	Base frame	Sheet steel, galvanized	205	1 (5)
6	Machine Base	Aluminum EN 573-3 EN AW 6060 T5	140	8 (22)

Pos.	Description	Material	Weight approx. (kg)	Image No.
7	Imaging rails	Aluminum EN 573-3 EN AW 6060 T5	14 5	8
8	Imaging drum	Aluminum EN 573-3 EN AW 6060 T5	75	8
9	Punch bar	Aluminum EN 573-3 EN AW 6060 T5	16	3 (13)
	Various parts: Mounting parts Motors Pumps Cables Rubberized rollers	Steel, aluminum, plastic, cast aluminum	350	

Dismantling

Pos.	Steps	Comment
1, 3, 4, 5 Image 1	Dismantling of the panels	Upper side panels, front and front table
	Draining of the coolant	Disposal of the coolant must be environmentally safe following the manufacturer's instructions. The notes in the safety data sheet must be observed (see the section "Disposal of Glysantin", page 77). Open the hoses lower down on the imaging unit and chiller and allow the liquid to drain off into a suitable container.
11 Image 2	Dismantling of the transport rollers at the rear of the device	Two screws per unit
12 Image 3	Dismantling of the transport rollers at the front of the device	Two screws on bottom, four screws near hinges.
14, 15 Image 4	Swinging of tilting rack to flat position and pulling out and dismantling of inserted two tables	Loosen 4 side hexagon head screws and release safety clips on lower table.
16, 17 Image 5	Dismantling of two relieving springs	Warning: Safety hazard! Before dismantling springs, always relieve tension by turning spring clamps
14 Image 4	Removing and dismantling of the tilting rack	Four screws

Pos.	Steps	Comment
13 Image 3	Removing the punch support bar	Loosen the snap lock and remove the support bar up towards you.
20 Image 7	Removing single parts from the upper frame	
20 Image 7	Lifting the upper frame off the lower frame	Eight screws (also in the braces)
18 Image 6	Removing the cooler	Two screws at the front
19 Image 7	Removing the electronics	Loosen two screws, then pull out the electronics on the slide rails and remove four screws.
21 Image 8	Dismantling of the pumps	Screws
23 Image 8	Dismantling of the laser modules	Only the positions can be seen in the image.
22 Image 8	Lifting the imaging unit off the lower frame and dismantling it Dismantling the drum	Drum contains different types of material

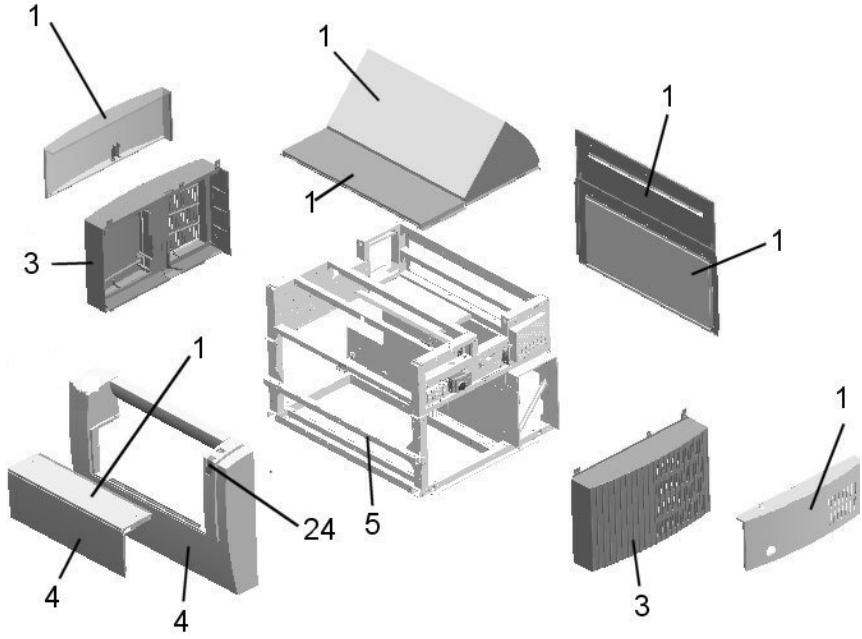
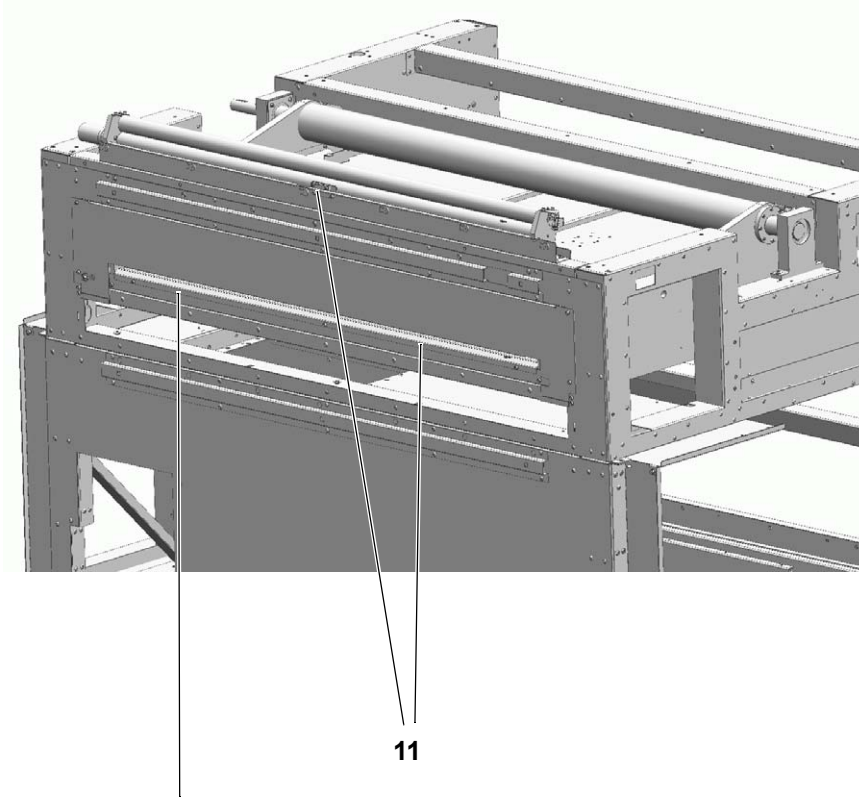


Image 1



Note: The position can vary, depending on the type of loader.

Image 2

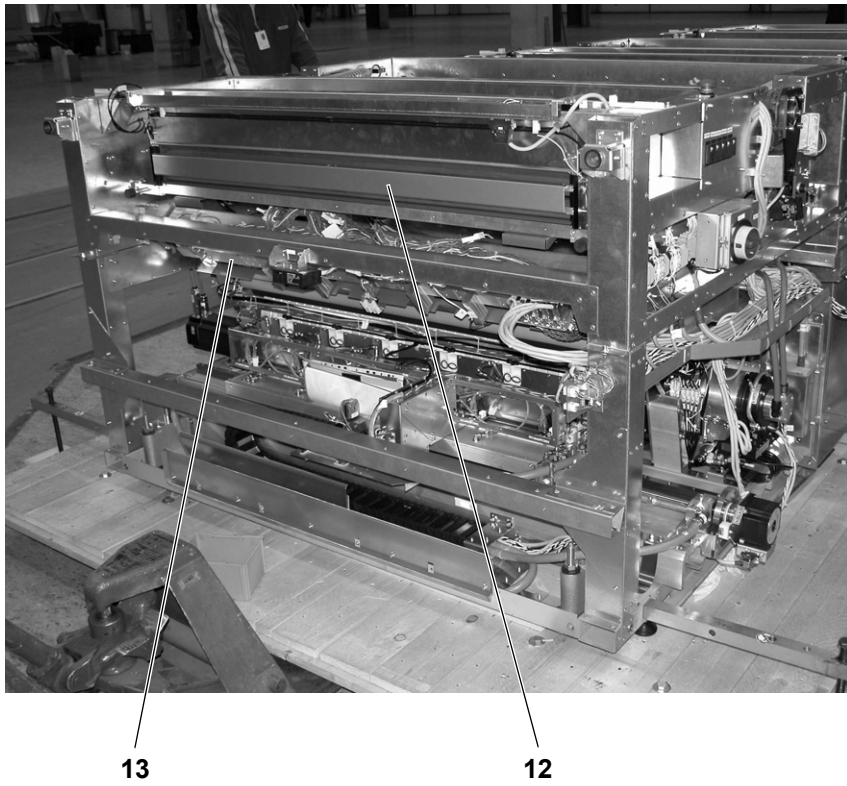


Image 3

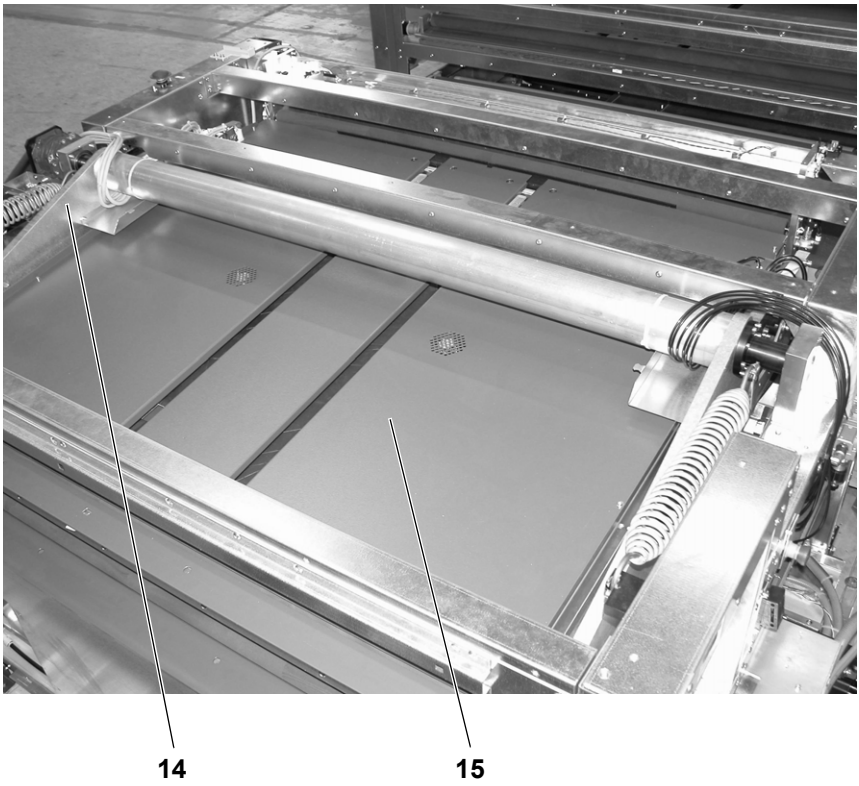


Image 4

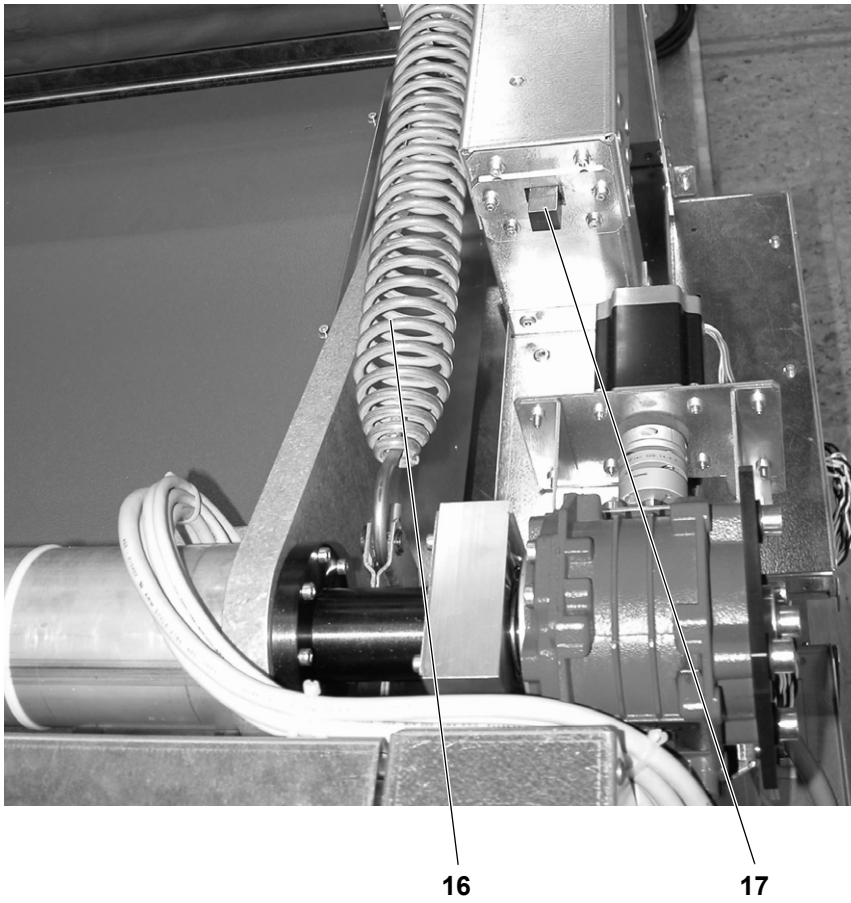


Image 5

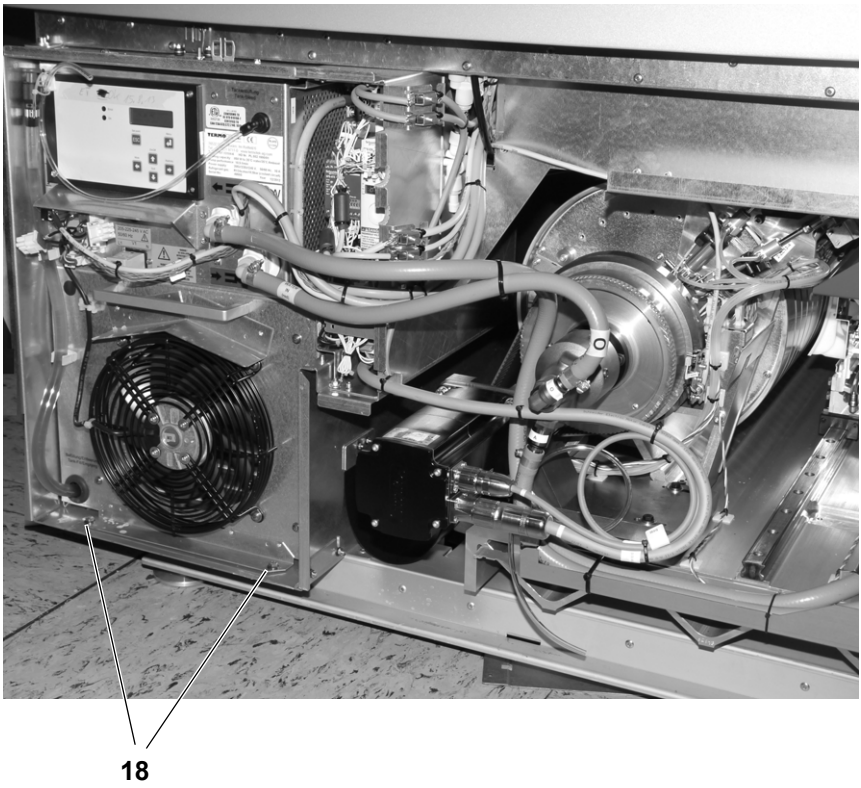


Image 6

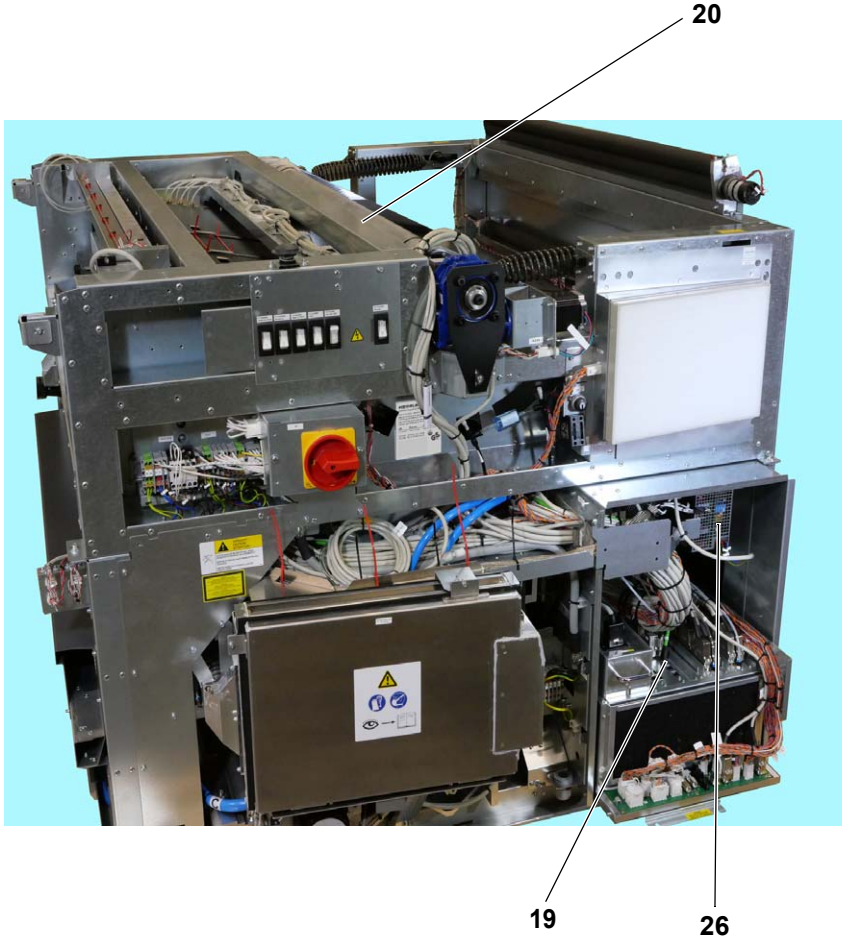


Image 7

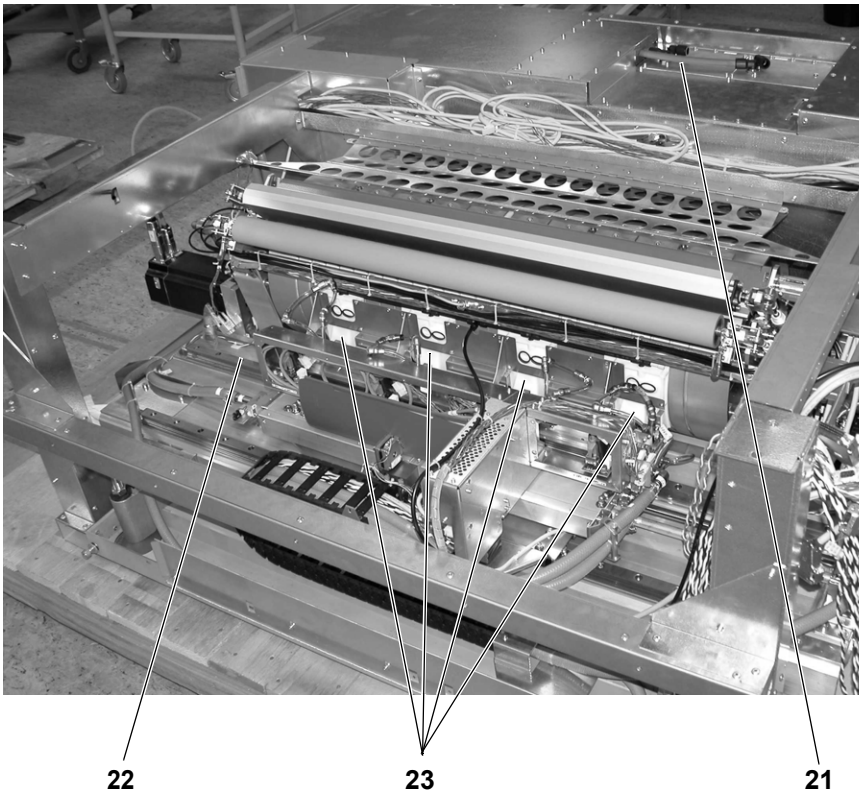


Image 8

Disposal Instructions for Chiller

Chiller P107-13188

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.

1. Electrical parts, components, all cable types can be dismantled and the single material items can then be recycled. Electrical parts and components can be disposed of directly at recycling centers.
2. Unusable residue (plastics, insulating material, sheet metal parts, etc.) can be disposed of as household waste or at recycling centers.
3. The refrigeration circuit must be fully disposed of by a company that is certified for the disposal and/or recycling of such equipment. The refrigeration circuit may only be dismantled by refrigeration specialists.
4. 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.

Note: All waste must be disposed of in compliance with the respective national environmental protection regulations.

Labels on the Suprasetter 106

1

Type label (example illustration)

* This is where the certification marks that may apply to the device such as CE, EAC, UKCA or cETLus are shown.

2

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 brouiller du Canada.

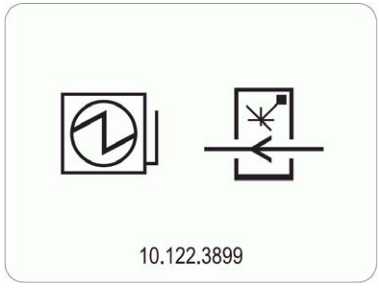
This product has been manufactured to meet or exceed the performance requirements for laser products as stated in 21CFR1040.10 and 21CFR1040.11 of the Health and Safety Act of 1968.

FCC note

3

Reference to laser Class 1

4



Power switch identification

5

Caution! Beware of moving parts when interlock defeated.

6

Caution! Invisible Class 4 Laser Radiation
When open and interlock defeated, Avoid eye or skin exposure to direct or scattered radiation.

7

Electric shock hazard.

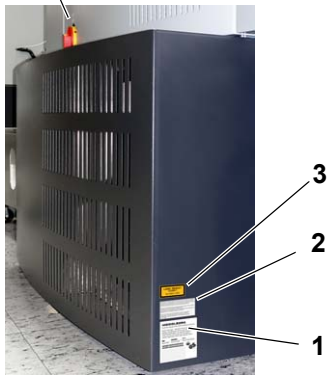
8

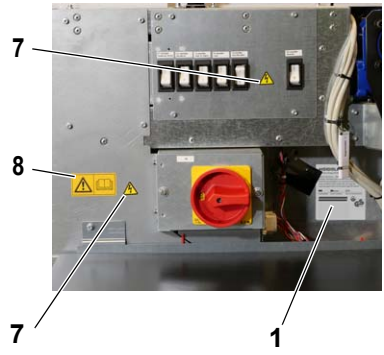
Take note of accompanying documents.

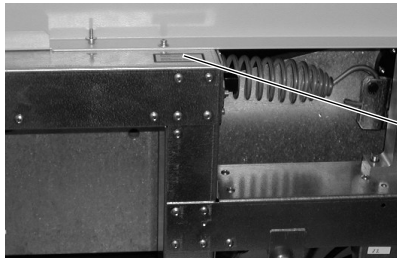
9

Attention: Before removing the spring, the tension must be released.

Position of Labels







Heidelberger Druckmaschinen AG
Kurfuersten-Anlage 52-60
69115 Heidelberg
Germany
Phone +49 (62 21) 92-00
Fax +49 (62 21) 92 69 99
www.heidelberg.com

For further information please contact
your local HEIDELBERG representative.