

PU = Printing unit

CU = Coating unit

ICWD = Impression cylinder washup device

IRWD = Inking roller washup device

BWD = Blanket washup device

LED = Light-emitting diode

MID = Press display

Topicality

The information provided in this operator manual corresponds to the series version at the time of publication of this document. We reserve the right to make changes in accordance with the progress of modern technology.

Should you have any questions, please contact your Heidelberg agency.

Note on protection

Essential parts, devices and assemblies as well as software, control and measuring devices of our machines are internationally protected by copyright, patents and other intellectual property laws. The reproduction, distribution and utilization of this document as well as the communication of its contents to others without express authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design.

Open Source Software

Certain software libraries and other software programs are software from third parties that belong to the delivery package of the Heidelberg software. This software is Open Source software, where the granted right of utilization is subject to the individual regulations of the Open Source license agreements. Upon written order, you can receive a free complete machine-readable copy of the source code of such Open Source software, in accordance with the applicable regulations, from Heidelberg. You will be charged with the costs of data medium, shipping and administration.

To receive a copy of the source code, please specify your Heidelberg software version in your order to:

Heidelberger Druckmaschinen AG Service Hotline
Electronics

E-mail: GlobalExpertPress@heidelberg.com

Copyright and address of manufacturer

© Copyright by

Heidelberger Druckmaschinen AG

Kurfürstenanlage 52 - 60

69115 Heidelberg

Germany

Table of Contents

A	General information / Checklists	A.1
	General information	A.1.1
1	General information on maintenance and cleaning	A.1.3
2	Notes on the maintenance schedule	A.1.6
3	Maintenance and cleaning intervals	A.1.7
4	Manual lubrication	A.1.9
5	Lubricants	A.1.12
6	Washing fluids and water	A.1.16
	Maintenance checklists	A.2.1
1	Note on the maintenance checklists	A.2.3
2	Checklist signature box	A.2.4
3	Maintenance checklist: Feeder	A.2.5
4	Maintenance checklist: Printing unit	A.2.9
5	Maintenance checklist: Intermediate unit	A.2.22
6	Maintenance checklist: Coating unit	A.2.23
7	Maintenance checklist: Delivery	A.2.25
8	Maintenance checklist: Entire press	A.2.30
	Cleaning checklists	A.3.1
1	Note on the cleaning checklists	A.3.3
2	Cleaning checklist: Feeder	A.3.4
3	Cleaning checklist: Printing unit	A.3.5
4	Cleaning checklist: Intermediate unit	A.3.7
5	Cleaning checklist: Coating unit	A.3.8
6	Cleaning checklist: Delivery	A.3.10
B	Maintenance	B.1
	Maintenance on the feeder	B.1.1
1	Feeder - safety instructions	B.1.3
2	Overview of the maintenance points on the feeder	B.1.4
3	Preloading device	B.1.6
4	Non-stop device	B.1.7
5	Automatic non-stop device	B.1.10
6	Suction head	B.1.14
7	Feed table	B.1.18
8	Feeder drive	B.1.19
9	Pneumatic system	B.1.20

10	Air supply	B.1.23
11	Central grease lubrication	B.1.25
Maintenance on the printing unit		B.2.1
1	Printing unit - safety instructions	B.2.5
2	Overview of the maintenance points on the printing unit	B.2.8
3	Sheet alignment	B.2.10
4	Rotary valve "Vacuum control/suction tape"	B.2.19
5	Transfer gripper	B.2.21
6	Feed cylinder without UV interdeck dryer	B.2.24
7	Feed cylinder with UV interdeck dryer	B.2.27
8	Sheet travel monitor	B.2.30
9	Impression control mechanism	B.2.32
10	Impression cylinder without UV interdeck dryer	B.2.34
11	Impression cylinder with UV interdeck dryer	B.2.36
12	Prinect Inpress Control	B.2.38
13	Ink mist extraction device (only on printing presses with UV interdeck dryer)	B.2.43
14	Impression cylinder washup device	B.2.45
15	AutoPlate Advanced plate changer	B.2.49
16	AutoPlate XL plate changer	B.2.53
17	Blanket cylinder	B.2.60
18	Blanket washup device	B.2.61
19	Suction brush	B.2.66
20	Inking unit	B.2.68
21	Inking roller washup device	B.2.70
22	Washing fluid container	B.2.74
23	Dampening system	B.2.76
24	Transfer drum without UV interdeck dryer	B.2.78
25	Transfer drum with UV interdeck dryer	B.2.80
26	Variable transfer drum without UV interdeck dryer	B.2.82
27	Storage drum	B.2.87
28	Reversing drum	B.2.93
29	Impression cylinder (P)	B.2.99
30	Sheet control	B.2.101
31	Perfector	B.2.103
Maintenance on the intermediate unit		B.3.1
1	Intermediate unit - safety instructions	B.3.3
2	Overview of the maintenance points on the intermediate unit	B.3.5
3	Transfer drum	B.3.6

4	Impression cylinder	B.3.8
Maintenance on the coating unit		B.4.1
1	Coating unit - safety instructions	B.4.3
2	Overview of the maintenance points on the coating unit	B.4.6
3	Transfer drum without UV interdeck dryer and without LYYL	B.4.7
4	Transfer drum with UV interdeck dryer or LYYL	B.4.9
5	Sheet travel monitor	B.4.11
6	Impression cylinder without UV interdeck dryer and without LYYL	B.4.12
7	Impression cylinder with UV interdeck dryer or LYYL	B.4.14
8	Chambered blade system	B.4.16
9	Varnish supply	B.4.19
Maintenance on the delivery		B.5.1
1	Delivery - safety instructions	B.5.3
2	Overview of the maintenance points on the delivery	B.5.6
3	Sheet transport without UV end-of-press dryer	B.5.7
4	Sheet transport with UV end-of-press dryer	B.5.11
5	Sheet brake system	B.5.15
6	Sheet joggers	B.5.24
7	Non-stop device	B.5.27
8	Pile guidance and pile transport	B.5.28
9	Sheet decurler	B.5.30
10	Sheet guide	B.5.31
11	Air supply	B.5.35
12	CleanStar	B.5.40
Maintenance on the entire press		B.6.1
1	Entire press - safety instructions	B.6.3
2	Overview of the maintenance points on the entire press	B.6.5
3	Suction unit	B.6.6
4	Central oil lubrication	B.6.8
5	Main motor	B.6.12
6	Control cabinet of the SinuSynchro main driving motor	B.6.16
7	Prinect Press Center	B.6.18
8	Prinect Axis Control	B.6.22
9	Wallscreen	B.6.24
Maintenance by service technicians		B.7.1
1	Maintenance work with service support: Feeder	B.7.3
2	Maintenance work with service support: Printing unit	B.7.6

3	Maintenance work with service support: Intermediate unit	B.7.10
4	Maintenance work with service support: Coating unit	B.7.11
5	Maintenance work with service support: Delivery	B.7.13
6	Maintenance work with service support: General press	B.7.15
C	Cleaning	C.1
	Cleaning of the press	C.1.1
1	Cleaning work at the feeder	C.1.1
2	Cleaning work at the printing unit	C.1.3
3	Cleaning work at the intermediate unit	C.1.16
4	Cleaning work at the coating unit	C.1.17
5	Cleaning work at the delivery	C.1.27
	Index	Ind.1

A General information / Checklists

General information		A.1.1
1	General information on maintenance and cleaning	A.1.3
1.1	Maintenance and cleaning reduces costs!	A.1.3
1.2	How to use this manual	A.1.3
1.3	Peripheral units	A.1.5
2	Notes on the maintenance schedule	A.1.6
2.1	General information	A.1.6
2.2	Legend	A.1.6
3	Maintenance and cleaning intervals	A.1.7
3.1	Definition	A.1.7
3.2	Display of revolutions	A.1.8
4	Manual lubrication	A.1.9
4.1	Types of lubricating points	A.1.9
4.2	How to apply lubricant	A.1.9
4.3	Lubricating devices	A.1.9
5	Lubricants	A.1.12
5.1	General information	A.1.12
5.2	Approved lubricants for printing presses	A.1.12
6	Washing fluids and water	A.1.16
6.1	Important note	A.1.16
6.2	Characteristics of the approved washing fluids	A.1.16
6.3	Not approved washing fluids	A.1.16
6.4	Notes on cleaning work with UV washing fluids	A.1.17
6.5	General note on manual cleaning work	A.1.17
6.6	Approved cleaners for manual cleaning work	A.1.18
6.7	Approved cleaners for automatic cleaning work	A.1.21
6.8	Properties of the washing fluid	A.1.21
6.9	Approved water for manual cleaning work	A.1.21
6.10	Approved water for automatic cleaning work	A.1.22
Maintenance checklists		A.2.1
1	Note on the maintenance checklists	A.2.3
1.1	Using the checklists	A.2.3
2	Checklist signature box	A.2.4
2.1	Maintenance work has been completed	A.2.4

3	Maintenance checklist: Feeder	A.2.5
3.1	Maintenance work: Feeder	A.2.5
4	Maintenance checklist: Printing unit	A.2.9
4.1	Maintenance work: Printing unit	A.2.9
5	Maintenance checklist: Intermediate unit	A.2.22
5.1	Maintenance work: Intermediate unit	A.2.22
6	Maintenance checklist: Coating unit	A.2.23
6.1	Maintenance work: Coating unit	A.2.23
7	Maintenance checklist: Delivery	A.2.25
7.1	Maintenance work: Delivery	A.2.25
8	Maintenance checklist: Entire press	A.2.30
8.1	Maintenance work: Entire press	A.2.30
	Cleaning checklists	A.3.1
1	Note on the cleaning checklists	A.3.3
1.1	Using the checklists	A.3.3
2	Cleaning checklist: Feeder	A.3.4
2.1	Cleaning points: Feeder	A.3.4
3	Cleaning checklist: Printing unit	A.3.5
3.1	Cleaning points: Printing unit	A.3.5
4	Cleaning checklist: Intermediate unit	A.3.7
4.1	Cleaning points: Intermediate unit	A.3.7
5	Cleaning checklist: Coating unit	A.3.8
5.1	Cleaning points: Coating unit	A.3.8
6	Cleaning checklist: Delivery	A.3.10
6.1	Cleaning points: Delivery	A.3.10

General information

1	General information on maintenance and cleaning	A.1.3
	1.1 Maintenance and cleaning reduces costs!	A.1.3
	1.2 How to use this manual	A.1.3
	1.3 Peripheral units	A.1.5
2	Notes on the maintenance schedule	A.1.6
	2.1 General information	A.1.6
	2.2 Legend	A.1.6
3	Maintenance and cleaning intervals	A.1.7
	3.1 Definition	A.1.7
	3.2 Display of revolutions	A.1.8
4	Manual lubrication	A.1.9
	4.1 Types of lubricating points	A.1.9
	4.2 How to apply lubricant	A.1.9
	4.3 Lubricating devices	A.1.9
5	Lubricants	A.1.12
	5.1 General information	A.1.12
	5.2 Approved lubricants for printing presses	A.1.12
6	Washing fluids and water	A.1.16
	6.1 Important note	A.1.16
	6.2 Characteristics of the approved washing fluids	A.1.16
	6.3 Not approved washing fluids	A.1.16
	6.4 Notes on cleaning work with UV washing fluids	A.1.17
	6.5 General note on manual cleaning work	A.1.17
	6.6 Approved cleaners for manual cleaning work	A.1.18
	6.7 Approved cleaners for automatic cleaning work	A.1.21
	6.8 Properties of the washing fluid	A.1.21
	6.9 Approved water for manual cleaning work	A.1.21
	6.10 Approved water for automatic cleaning work	A.1.22

1 General information on maintenance and cleaning

1.1 Maintenance and cleaning reduces costs!

Regular thorough maintenance and cleaning of the printing press and peripheral units mean maintaining the press availability by reducing failure and repair times.

Following the maintenance and cleaning instructions and observing the maintenance intervals that are provided in this manual is a prerequisite for obtaining a long service life of your press and the peripheral units, as well as for maintaining their value in an optimum way.

The maintenance and cleaning work for your printing press and its peripheral units is generally applicable and must be performed.

The maintenance work listed in the "Maintenance by service technicians" chapter under the main "Maintenance" chapter must also be performed. However, you cannot perform this work yourself; this must always be carried out with assistance from Heidelberg service staff.

Have your Heidelberg service also carry out all maintenance work you are not able to carry out yourselves due to constructional reasons in your pressroom.

Always inform your Heidelberg service in good time!

Furthermore, you can define your own individual rules that are adapted to your print shop, e.g. contamination is kept to a minimum and removed as required, even before the defined maintenance interval.

Check your printing press and the peripheral units at regular intervals. Check, for example, the cooling air paths of the main driving motor for dirt or ink deposits. If necessary, remove the deposits with dry blast air and a brush. Avoid lubricant accumulation on the floor and on components.

Ensure proper air conditioning and ventilation of your pressroom. Please refer to the "Technical information", that is enclosed to the document case, for the relevant details.

All these measures will reduce costs and ensure productivity!

1.2 How to use this manual

► **Note**

Keep to the instructions printed on the plates on the actual press first and then follow the instructions in this manual.

- This manual forms the basis for conducting the maintenance and cleaning activities on your press.

- The main chapter "**General information/Checklists**" facilitates the first steps with this documentation.
Please note:
The checklists contained in the manual and the signature box are your master copies.
Only use copies for your work.
- The **maintenance schedule** provides you with an overview of the maintenance points and the maintenance work on the printing press. The intervals for maintenance work are color-coded. Explanatory details are available in "Maintenance and cleaning intervals".
The maintenance schedule is enclosed in the document case.
Please note:
The documents provided in this manual on intervals and the maintenance schedule are your master copies.
Only use copies for your work.
- The **Maintenance checklists** and the **Cleaning checklists** contain subassembly-related descriptions of all maintenance and cleaning work to be carried out on the press.
The checklists contain information on the following items:
 - Part
 - Maintenance work/maintenance location
or
 - Cleaning work/location
 - Required resources (e.g. lubricant)
 - Required part
 - Maintenance interval
- The main chapter "**Maintenance**" is related to subassemblies describing the maintenance work to be carried out.
The descriptions always start with an overview of the location of the maintenance points (illustration).
Here, the location of the maintenance point and the maintenance work to be done are described.
- The main chapter "**Cleaning**" contains subassembly-related descriptions of the individual cleaning work.
The descriptions always start with an overview of the location of the cleaning points (illustration).
Here, the location of the cleaning point and the cleaning work to be done are described.
- Lubricating, maintenance and cleaning points are described in the form of tables. There is

e.g. information on the interval, location, type of lubricating point, etc.

- The lubricating points are assigned to the individual maintenance intervals via color coding (see relevant table).
- Additional, important hints are explicitly marked.
- The "**Maintenance by service technicians**" chapter contains brief, subassembly-related descriptions of the maintenance work which you cannot perform on your press yourselves. Have Heidelberg service staff perform this maintenance work.

1.3 Peripheral units

The optimum value preservation of the peripheral units is achieved by regular and thorough maintenance and cleanliness. Please follow these instructions.

The maintenance and cleaning instructions for your peripheral units are generally applicable and must be observed.

For details on the maintenance and cleaning work to be carried out on peripheral units (e. g. compressors, central air supply and accessories) please refer to the instructions of the peripheral suppliers. These instructions are an integral part of the documentation supplied with your press. Please observe the relevant information in the respective manuals.

Please have your Heidelberg service carry out all maintenance work you are not able to carry out yourselves because of constructional reasons in your pressroom.

Always inform your Heidelberg service in good time!

Check the peripheral units at regular intervals: For example the cooling air ducts of the main motor for dirt and ink deposits. Remove the deposits with dry blast air and a brush. Avoid lubricant accumulation on the floor and on components.

00.994.0075-0007ERU.11

2 Notes on the maintenance schedule

2.1 General information

► **Note**

The maintenance schedule is enclosed in the document case.

The maintenance schedule provides you with an overview of the maintenance points and the maintenance work on the printing press.

The intervals for maintenance work are color-coded. For detailed information see the chapter on "Maintenance and cleaning intervals".

The following key explains the symbols used in the maintenance schedule. The symbols illustrate the maintenance work. For precise instructions, please refer to the following chapters.

2.2 Legend

Maintenance work	Symbol
Check	
Cleaning	
Lubricate with grease	
Lubricate with grease in printing presses with UV dryer	
Lubricate with oil	
Lubricate with spray can	
Lubricate with grease and brush	
Lubricate with lubricant tube	
Top up lubricant.	
Replacing parts	
Changing the lubricant	

Tab. 1

ES_904_0137-00000001_03

3 Maintenance and cleaning intervals

3.1 Definition

The periods between the individual maintenance and cleaning activities are referred to as maintenance or cleaning intervals.

A maintenance/cleaning interval is either the time until a certain number of press revolutions is reached or a fixed time.

Five maintenance/cleaning intervals are specified.

Maintenance/cleaning intervals		Color coding of the lubricating point
I	200 000 revolutions or daily	Red
II	1 000 000 revolutions or weekly	Yellow
III	4 000 000 revolutions or monthly	Blue
IV	20 000 000 revolutions or every six months	Green
V	40 000 000 revolutions or yearly	Violet

Tab. 2

The number of revolutions is shown on the monitor of the control station in the menu **Service** in the "Rev." display.

3.2 Display of revolutions

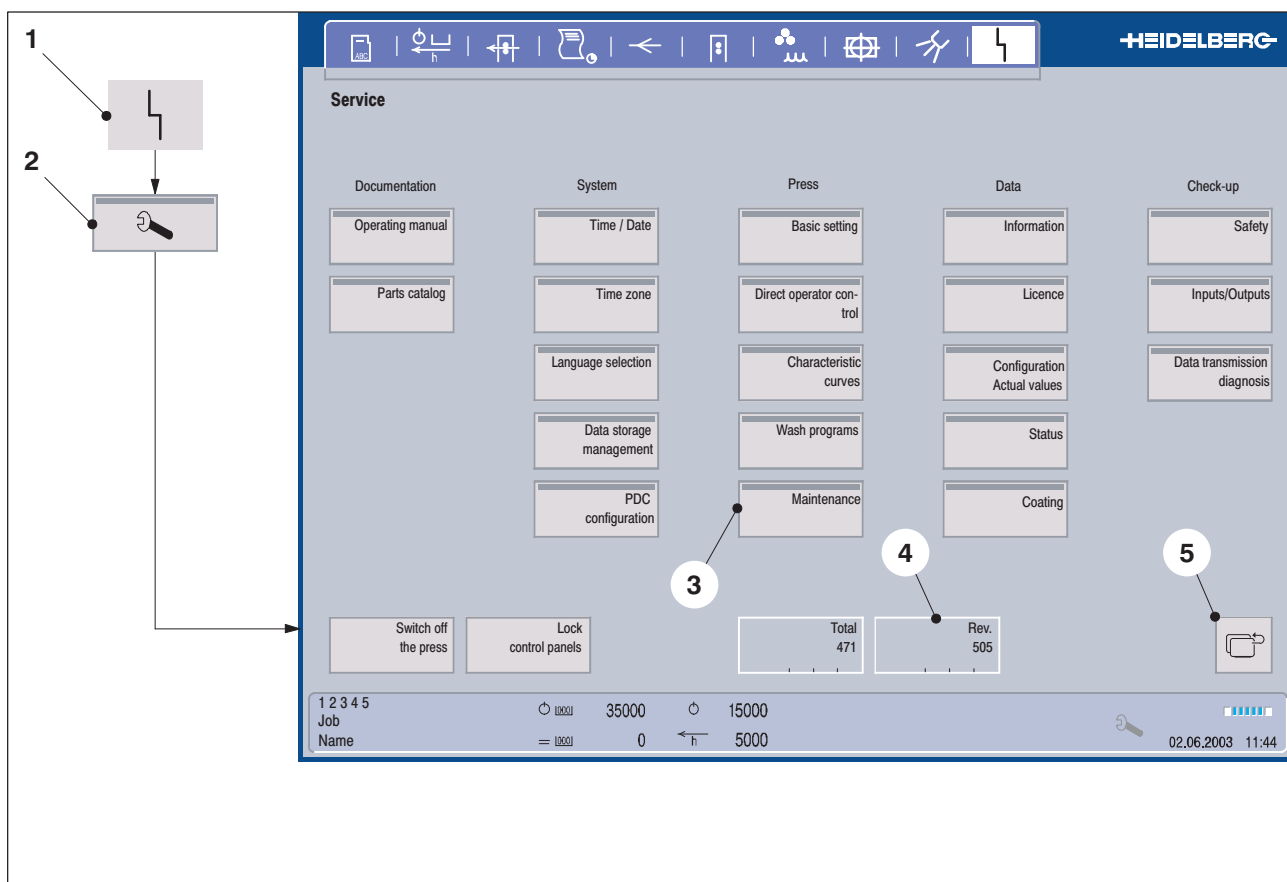


Fig. 1 User interface

- 1 *Malfunction* button
 - 2 *Service* button
 - 3 *Maintenance* button
 - 4 Display of revolutions "Rev."
 - 5 *Back* button
1. Push the *Malfunction* button.
 2. Then, push the *Service* button.

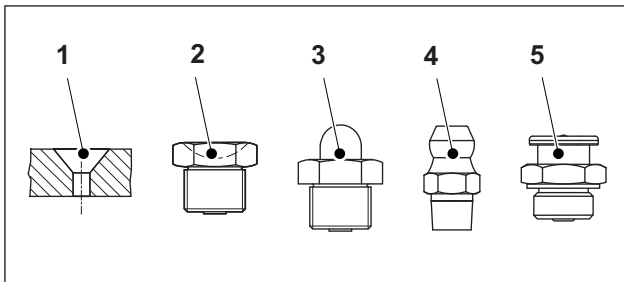
► **Result**

This will display the "Service" screen. On the "Rev." display you can see the number of revolutions.

00.994.0081-000FRONT_1.4

4 Manual lubrication

4.1 Types of lubricating points



00.224.0004-003FRONT_00

- 1 Open lubrication hole
- 2 Recessed grease nipple
- 3 Ball type lubricating nipple
- 4 Conical head lubrication nipple
- 5 Button head grease nipple

Fig. 2 Oil and grease lubricating points

4.2 How to apply lubricant

Remove any dirt from the lubricating point before each lubrication procedure.

Then top up lubricant on the lubricating point until the lubricant emerges from the corresponding bearing point.

Remove any emerging, used lubricant by means of a rag.

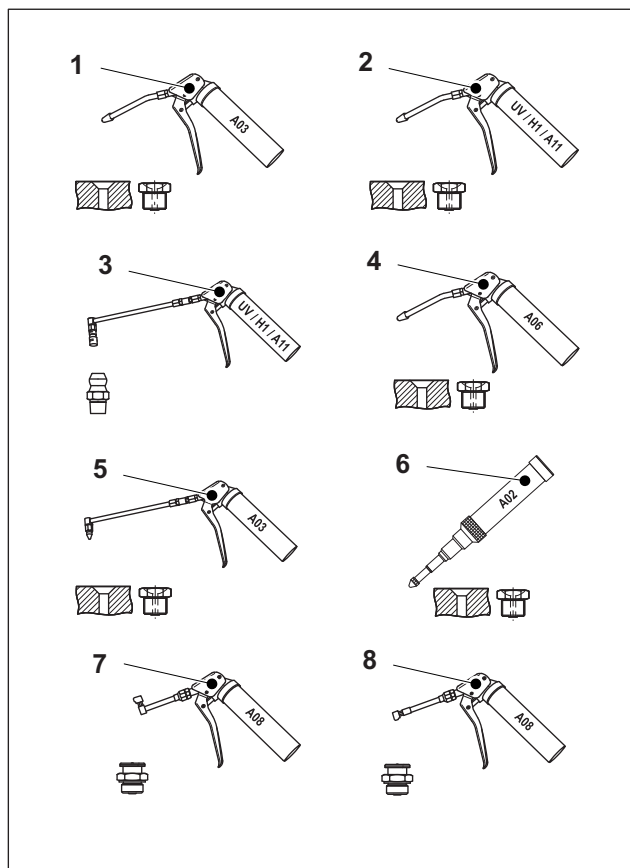
4.3 Lubricating devices



Caution - Press damage!

On presses with UV dryers and the model group LYYL/LYL, lubricate certain components with UV-compatible lubricant. Use the **UV / H1 / A11 grease gun** to lubricate these parts. Fill this grease gun only with UV-compatible lubricant!

Always fill the lubricant gun with the specified lubricant. Note the designation of your lubricants and lubricant gun. Failure to follow these instructions can lead to press damage.

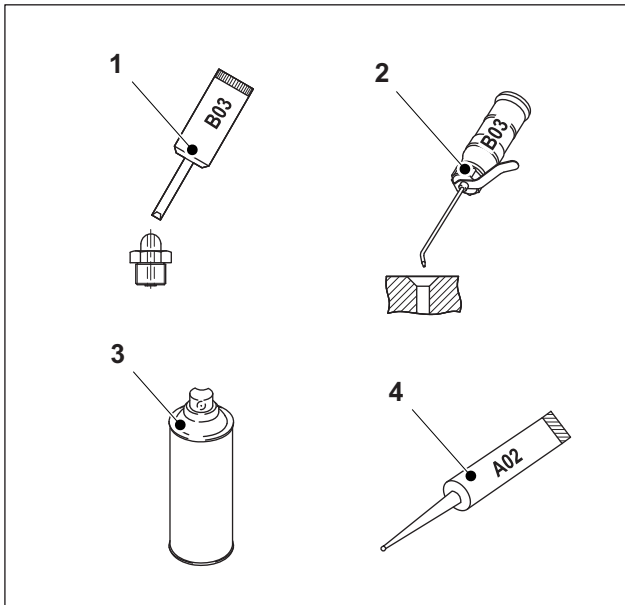


SM.994.001-00GRAND_00

Grease guns

- 1 Grease gun A03**
To be used for recessed grease nipples and open lubrication holes.
- 2 Grease gun UV / H1 / A11**
To be used for recessed grease nipples and open lubrication holes.
- 3 Grease gun UV / H1 / A11 with nozzle tube, 90° connection elbow**
To be used with conical head lubrication nipples for gripper bars on XL 75 impression cylinders.
- 4 Grease gun A06 (Gleitmo 585 M)**
To be used for recessed grease nipples on the gear teeth of the gear segments of the XL 106 reversing drum.
- 5 A03 grease gun with nozzle tube 90° connection elbow** (nozzle tube with 90° connection elbow only available in the separate parts set of the XL 106)
To be used for recessed grease nipples and open lubrication holes on the transfer gripper of the XL 106. Replace the fixed tube by the nozzle tube with 90° connection elbow on the grease gun.
- 6 Grease gun A02 (Renolit AS)**
To be used for recessed grease nipples on the sucker bar of the XL 106 storage drum.
- 7 Grease gun A08 with slide coupling (standard gallery)**
To be used for button head grease nipples on the main motor ≥ 90 kW
- 8 Grease gun A08 with slide coupling (narrow gallery)**
To be used for button head grease nipples on the main motor ≥ 90 kW

Fig. 3 Lubricating devices - grease guns



SM 914-0107-01GERMIND_00

Other

- 1 B03 oil gun**
To be used for ball type lubricating nipples.
- 2 Oil can B03**
- 3 Spray can**
- 4 Lubricant tube A02 (Renolit AS)**

Fig. 4 Lubricating devices

00.994.0080-0007KERNL_30

5 Lubricants

5.1 General information



Caution - Press damage!

Always use lubricant of one manufacturer for lubrication.

If you use lubricants of various manufacturers, check with the manufacturers whether the lubricants are compatible and can be mixed.



Note

Lubricants used ex factory are listed in the parts catalog.

5.2 Approved lubricants for printing presses

5.2.1 Central lubrication

Lubricant used ex factory Part no. Class	Range of application Required resources	Product line						
		GTO	SM52 SX52	SM74 SX74	XL75	SM102 CD102 CX102	XL106	XL145 XL162
Renolin CLP 150 00.580.8593/ Class B03 Lubricant according to DIN 51517 - CLP 150, ISO viscosity class ac- cording to DIN 51519 - ISO VG 150, mineral oil	• Central oil lubrication	X		X	X	X	X	X
	Central oil lubrication "Sheet slow-down device gearing" (double-gripper delivery)							X
	• Central oil lubrication "Main driving motor" (for machines with 7 and more printing units)		X					
	• Central oil lubrication "Semi- automatic perfecter/Pres- sure intensifier"			X				
Approved H1 lubri- cants for printing presses Saphira Lubricating Oil H1 B13 (Elkalub LFC 34150) 00.580.8903/ Class B13	• Central oil lubrication							X
Centoplex GLP 500 00.580.8594/ Class A07	• Central grease lubrication		X	X	X			
	• Central grease lubrication, "printing unit"							X

Lubricant used ex factory Part no. Class	Range of application Required resources	Product line						
		GTO	SM52 SX52	SM74 SX74	XL75	SM102 CD102 CX102	XL106	XL145 XL162
<p>Approved H1 lubricants for printing presses Saphira Fluid Grease H1 A13 (Elkalub VP 890) 00.580.9230/ Class A13</p>	<ul style="list-style-type: none"> Central grease lubrication, "printing unit" 							X
<p>Elkalub LA 8 P 00.580.8716/ Class B01</p>	<ul style="list-style-type: none"> Central grease lubrication <p>Note: The following lubricants are compatible and can be mixed with Elkalub LA 8 P. Changing the lubricant is possible. The lubricants are not used ex factory! - Hotemp 2000 from Klüber Lubrication - Viscogen KL 300 from Castrol</p>					X		
<p>Approved H1 lubricants for printing presses Saphira Chain Oil H1 B04 (Elkalub LA 8 H1) 00.580.8721/ Class B04</p>	<ul style="list-style-type: none"> Central grease lubrication, "delivery" 							X
<p>Saphira Grease A03 (Castrol Longtime PD2) 00.580.8575/ Class A03 Lubricant according to DIN 51825 - KP2K-20, mineral oil, lithium saponified</p>	<ul style="list-style-type: none"> Central grease lubrication Grease cartridge A03 						X	

Tab. 3

5.2.2 Manual lubrication

Lubricant used ex factory Part no. Class	Range of application Required resources	Product line						
		GTO	SM52 SX52	SM74 SX74	XL75	SM102 CD102 CX102	XL106	XL145 XL162
Renolin CLP 150 00.580.8593/ Class B03 Lubricant according to DIN 51517 - CLP 150, ISO viscosity class according to DIN 51519 - ISO VG 150, mineral oil	Oil can / oil gun B03	X	X	X	X	X		
Saphira Grease A03 (Castrol Longtime PD2) 00.580.8575/ Class A03 Lubricant according to DIN 51825 - KP2K-20, mineral oil, lithium saponified	Grease gun A03	X	X	X	X	X	X	X
Berutox FH 28 KN 00.580.8574/ Class A01	Grease gun UV / A01		X		X	X	X	
Approved H1 lubricants for printing presses Saphira Lubricant Multi-temperature H1 A11 (Rivolta FLG GT-2) 00.580.9155/ Class A11	Grease gun UV / H1 / A11 Note: Lubricating point instructions specifying that lubricant must definitely be observed! It is not acceptable to use a different lubricant!							X
Klüberquiet BQ 72-72 00.580.8717/ Class A08	<ul style="list-style-type: none"> Main motor >90kW Grease gun A08 Grease cartridge A08						X	X
Renolit AS 00.580.8591/ Class A02	<ul style="list-style-type: none"> Operating rod on the storage drum Lubricant tube A02		X	X	X	X		
	<ul style="list-style-type: none"> Modular blanket washup device Lubricant tube A02					X	X	
	<ul style="list-style-type: none"> Grooves on the operating rod of the storage drum Grease gun A02						X	

Lubricant used ex factory Part no. Class	Range of application Required resources	Product line						
		GTO	SM52 SX52	SM74 SX74	XL75	SM102 CD102 CX102	XL106	XL145 XL162
Gleitmo 585 M 00.580.8597/ Class A06	<ul style="list-style-type: none"> • Gear and gear segment on the reversing drum Grease gun A06						X	X
	<ul style="list-style-type: none"> • Running surface of the cam follower on the reversing drum • Main bearing point on the switch actuating rod of the storage drum • Grooves on the operating rod of the storage drum Grease gun A06							X
Saphira High Performance Paste A04 (Gleitmo 800) 00.580.8595/ Class A04	<ul style="list-style-type: none"> • Shell segment and swing frame on the variable transfer drum A04 lubricant spray can						X	
	<ul style="list-style-type: none"> • Screen roller for Anicolor A04 lubricant spray can		X					
Elkalub FLC 1012 00.580.8592/ Class B02	<ul style="list-style-type: none"> • Gripper holder • Chains • Prinect Axis Control guide rail Spray can B02	X	X	X	X	X	X	
Approved H1 lubricants for printing presses Saphira Spray Lubricant Synthetic H1 B05 (Elkalub FLC 9010) 00.580.8722/ Class B05	<ul style="list-style-type: none"> • Gripper holder • Chains • Prinect Axis Control guide rail Spray can B05							X
Renax 00.580.9651/ Class A10	<ul style="list-style-type: none"> • Axial contact surface between sucker and sucker bar on the suction device of the storage drum Spray can A10		X	X	X	X	X	X
VP 612 AC 00.580.9090/ Class B07 Lubricant to DIN 51517 - CLP 150, ISO viscosity class to DIN 51519 - ISO VG 150	<ul style="list-style-type: none"> • Bearers Lubricant can B07 Note: You may also use mineral oil!		X	X	X	X	X	X

Tab. 4

6 Washing fluids and water

6.1 Important note

When using washing fluids, you must observe the national regulations and the notes in the related safety data sheets!

6.2 Characteristics of the approved washing fluids

For safety reasons, washing fluids for manual cleaning work and for the automatic washup devices must meet the following requirements:

- Flash point of at least 55°C

Furthermore, the Employers' Liability Insurance Association demands that washing fluids meet the following requirements:

- Benzene percentage < 0.1 %
- Toluene-xylene content < 1 %
- Aromatics content (> C₉) < 1 %
- Washing fluids free from chlorinated hydrocarbons, chlorofluorocarbons, terpenes, n-hexane, secondary amines and amides.
- Washing fluids free from other substances, which might constitute a risk to health.

These requirements correspond with the HEIDELBERG certified washing fluids.

The certified washing fluids are available on the Internet at:

- <<http://www.fogra.org>>

6.3 Not approved washing fluids

For safety reasons, the following washing fluids must not be used:

- Alcohol
- Washing fluids containing acetone

For functional reasons, the following washing fluids must not be used:

- Scouring powder
- Cream cleansers
- Chrome polish
- Washing fluids on orange terpene base
- Strong acids/intensive cleaners (e.g. plate cleaners, phosphoric cleaners, tartaric acids)
- Washing fluids containing chlorine (e.g. sanitary cleaners)
- Strong lyes (e.g. concentrated soap cleaners)
- Chlorinated/fluoride hydrocarbons (chlorinated hydrocarbon/CFC)

Current exceptions are:

- **Alcohol:**
Alcohol may be used in small quantities for cleaning the following parts:
 - Dampening rollers
 - Sensors
 - Control panels
 - User interface of the control system (touch screen)
 - Display
 - Rotary valve
 - Suction discs of the forwarding suckers
 - Counter-rollers and plastic rings on the tape driving rollers of the AutoPlate XL plate changer and AutoPlate Pro plate changer
 - Glass guard of the laser optics
 - Measuring bar and hand-held spectrophotometer on the Prinect Inpress Control
- **Tartaric acid:**
Tartaric acid may be used to clean demounted rollers with rubber sleeves.
- **Washing fluids containing acetone:**
Washing fluids containing acetone may be used in small quantities to clean dampening rollers without rubber sleeves.



Caution - Risk of damaging the surface!
Acetone-containing washing fluids will attack the paintwork as well as most plastic parts on the press.

6.4 Notes on cleaning work with UV washing fluids



Caution - Risk of damaging the paint finish!
UV washing fluids affect the paint finish of the printing press. Never put a cleaning cloth that is soaked with UV washing fluid on a finished surface.

Remove UV inks and UV varnish from the paint finish of the printing press within 2 hours with lukewarm soapy water.

6.5 General note on manual cleaning work

After each manual cleaning, all parts must be cleaned again with a cloth moistened with water.

6.5.1 Approved auxiliary equipment for manual cleaning work on the reversing drum

The brush is in the separate parts set on the press.

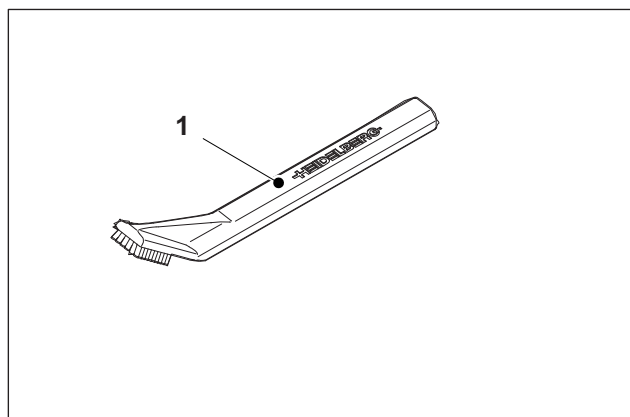


Fig. 5 Brush

1 Brush for cleaning



Note

Only the brush may be used to clean the pincer gripper system SM 52 with diamond coating.

6.6 Approved cleaners for manual cleaning work



Caution - Risk of damaging the surface!

Never spray alcohol or washing fluids containing acetone directly onto the components. Always apply washing fluids to a soft, lint-free cloth for cleaning.

Component / assembly group		Certified washing fluid		Washing fluid		
		without UV	with UV	Containing acetone (e.g. Rolomatik)	Alcohol (e.g. isopropanol)	Other
General information						
Ionizing unit		X				
Washup devices / washing fluid containers		X	X			
Sheet guides		X	X			
Pile guidance and pile transport		X				
Bearers		X	X			
Sensors and contact-free protective devices (BWS), displays		X			X	
Prinect Axis Control		X				
Sheet-transferring cylinders	Gripper tips on the grippers of the gripper systems	X				
Feeder						
Sheet alignment system		X				
Suction head		X				
Printing unit						
Transfer gripper, feed cylinder, transfer cylinder I, transfer cylinder III, transfer drum II		X	X			
Perfector (storage drum, reversing drum)		X	X			

Component / assembly group		Certified washing fluid		Washing fluid		
		without UV	with UV	Containing acetone (e.g. Rolomatik)	Alcohol (e.g. isopropanol)	Other
Impression cylinder	With refined surface	X	X			
	With refined cylinder jacket	X	X			
	With PerfectJacket	X				
Plate cylinder	Cylinder surface	X	X			
	Bearers	X	X			
Plate changer AutoPlate Advanced	Holding device	X				
	Sensor	X			X	
Plate changer AutoPlate XL	Holding device	X				
	Delivery-side cylinder guard: Guide rollers, guide rails, register pins	X				
	Delivery-side cylinder guard: Counter rollers and plastic rings on the tape driving roller				X	
	Pressing roller	X				
	Sensors	X			X	
Plate changer AutoPlate Pro	Cylinder guard: Sliding strips, guide straps, guide roller cassettes	X				
	Roller guard: Guide straps, guide rollers	X				
	Cylinder guard/roller guard: Plastic rings on the tape driving roller and counter rollers				X	
	Pressing roller	X				
	Plate cylinder: Register pin	X				
	Sensors	X			X	
Blanket cylinder	With refined surface	X	X			
	With galvanized surface	X				

Component / assembly group		Certified washing fluid		Washing fluid		
		without UV	with UV	Containing acetone (e.g. Rolomatik)	Alcohol (e.g. isopropanol)	Other
	Bearers	X	X			
Prinect Inpress Control	Sheet guide plates	X	X			
	Bearing	X	X			
	Measuring bar				X	
	Hand-held spectrophotometer				X	
Inking unit	Inking rollers with rubber sleeves	X	X			Tartaric acid ²
	Inking rollers without rubber sleeves	X	X			
	Screen roller: Roller surface	X				Alkaline cleaner ² e.g. Recyl Clean 2000
	Screen roller: End face and bearers	X				
	Ink chamber blade	X	X			
Dampening system	Dampening rollers with rubber sleeves				X	Tartaric acid ²
	Dampening rollers without rubber sleeves			X ¹	X	
Coating unit						
Screen roller, coating blanket cylinder						Water
Delivery						
Sheet decurler		X	X			
Sheet brake system		X				
Delivery drum		X	X			

Tab. 5

Legend

- 1 Clean the metering roller with alcohol after washing fluid has been applied.
- 2 Use washing fluid only for heavily soiled parts. Clean the component/assembly group only when it is removed. The washing fluid must be completely removed before the component is installed. Do not allow the washing fluid to get into the printing press.

6.7 Approved cleaners for automatic cleaning work

Component / assembly group	Certified washing fluid		Washing fluid		
	without UV	with UV	Containing acetone (e.g. Rolomatik)	Alcohol (e.g. isopropanol)	Other
Washup devices / washing fluid containers	X	X			

Tab. 6

6.8 Properties of the washing fluid

To be used for manual cleaning of rollers and cylinders, and for the automatic washup device, the water must fulfill the following criteria:

- The water must be distilled and/or fully demineralized.
- Water that is partly demineralized and re-hardened by treatment with an ion exchanger or a reverse osmosis filter, can also be used.
- The water must not contain any fine particles or suspended matter.
- To prevent clogging up in the washing fluid container (e.g. by algae growth), a germicide must be added to the water.

Germicide	Packet size	Part no.	Remark
Aqua Clean AC5	100 tablets	00.580.6353/	One tablet is sufficient for a water volume of up to 5 liters.
Aqua Clean AC20	100 tablets	00.580.6354/	One tablet is sufficient for a water volume of up to 20 liters.
Aqua Clean AC10.000	100 g powder	00.580.6355/	100 g powder is sufficient for a water volume of up to 10,000 liters.

Tab. 7

6.9 Approved water for manual cleaning work

Component / assembly group	Distilled or partly demineralized water	Tap water	Tap water with commercially available soap (e.g. dishwashing liquid)
Rollers and cylinders	X		
Others (e.g. screens, guards, footsteps, etc.)	X	X	X

Tab. 8

6.10 Approved water for automatic cleaning work

Component / assembly group	Distilled or partly demineralized water with germicide
Automatic washup device	X

Tab. 9

Maintenance checklists

1	Note on the maintenance checklists	A.2.3
1.1	Using the checklists	A.2.3
2	Checklist signature box	A.2.4
2.1	Maintenance work has been completed	A.2.4
3	Maintenance checklist: Feeder	A.2.5
3.1	Maintenance work: Feeder	A.2.5
4	Maintenance checklist: Printing unit	A.2.9
4.1	Maintenance work: Printing unit	A.2.9
5	Maintenance checklist: Intermediate unit	A.2.22
5.1	Maintenance work: Intermediate unit	A.2.22
6	Maintenance checklist: Coating unit	A.2.23
6.1	Maintenance work: Coating unit	A.2.23
7	Maintenance checklist: Delivery	A.2.25
7.1	Maintenance work: Delivery	A.2.25
8	Maintenance checklist: Entire press	A.2.30
8.1	Maintenance work: Entire press	A.2.30

00_904_0072-000FERNL_05

1 Note on the maintenance checklists

1.1 Using the checklists

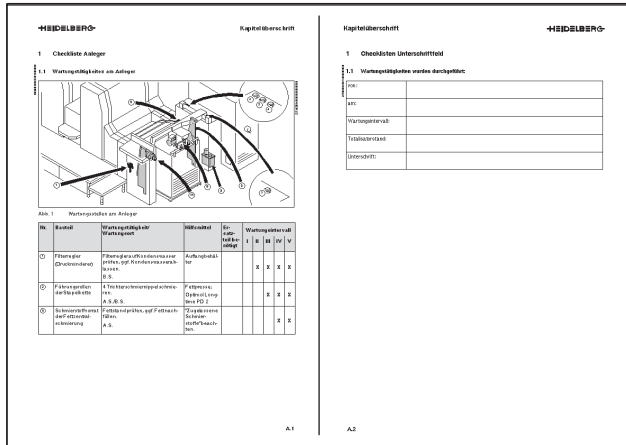


Fig. 1 Checklist example: Printing press feeder

The maintenance checklists allow you to gain an overview of, and carry out all necessary maintenance work. More detailed descriptions of the individual maintenance work on the press can be found in the "Maintenance" chapter.

Please note!

The checklists contained in the manual and the signature box are your master copies.

Please always use copies for your work.

Use these copies as a basis for all maintenance work carried out for the respective maintenance interval, and keep records of this maintenance work. Please also complete the entries in the signature field. This is confirmation that the maintenance has been performed correctly.

00.994.0073-0007KERNL_03

2 Checklist signature box

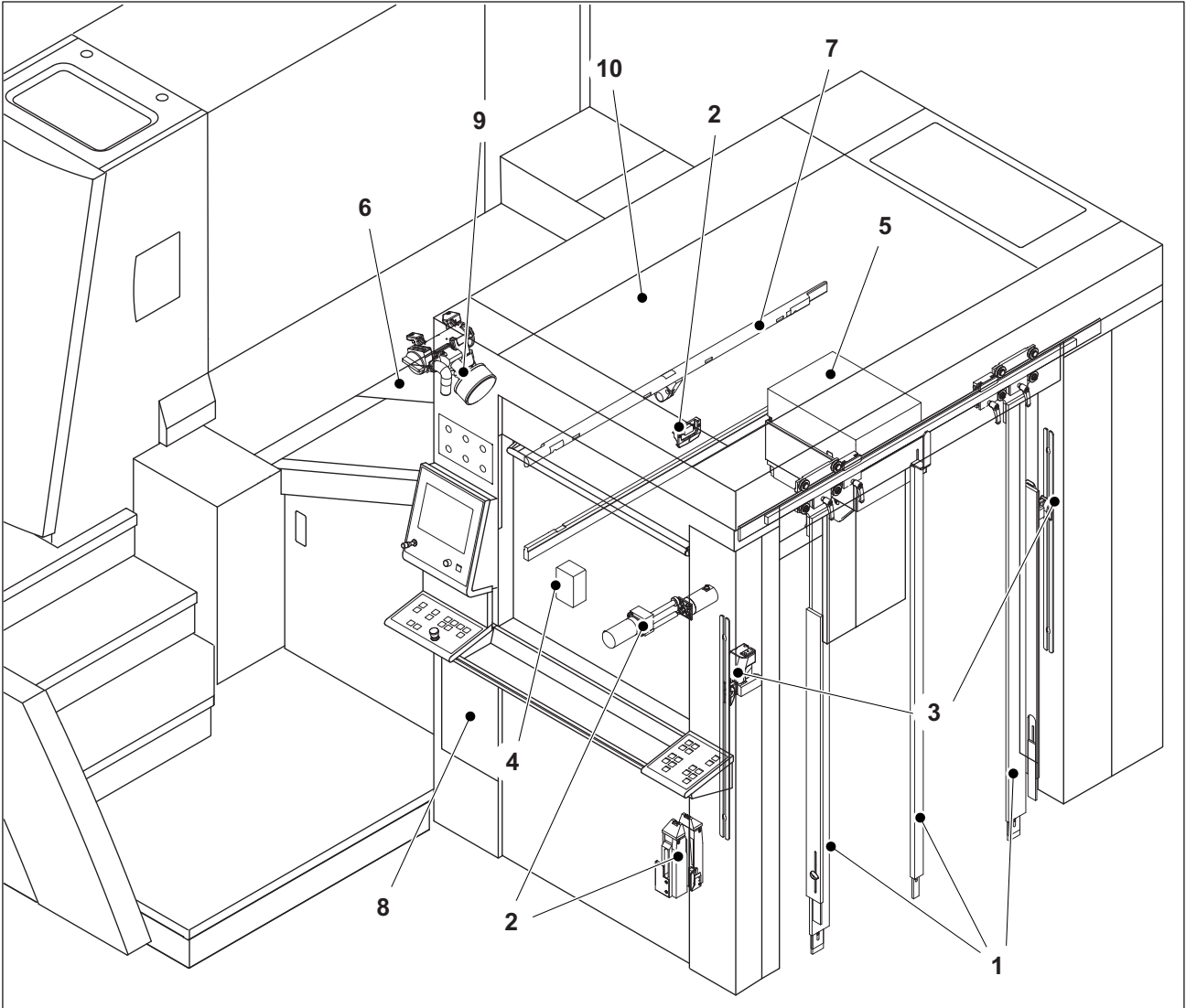
2.1 Maintenance work has been completed

By:	
On:	
Maintenance interval:	
Revolution counter reading:	
Signature:	

FS_B04_1101-000FEKML_00

3 Maintenance checklist: Feeder

3.1 Maintenance work: Feeder



FS_B04_1101-000FEKML_00

Fig. 2 Maintenance points: Feeder

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
1	Preloading device								
	Front stops	Clean the stop bars. D.S. / O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
2	Pile guidance and pile transport								
	Pile alignment	Clean 1 adjusting spindle. With non-stop: Clean 2 adjusting spindles. Center Note: Do not lubricate!	Soft, lint-free cloth				X	X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval					
					I	II	III	IV	V	
	Side stops	Lubricate the bearing blocks. 2 recessed grease nipples. D.S. / O.S.	Grease gun A03, note "Approved lubricants".					X	X	
	Pile support plate	Clean the mechanical control levers, and check their smooth functioning. D.S. / O.S.	Brush, approved industrial vacuum cleaner				X	X	X	
		Clean outer guide rails from top to bottom. D.S. / O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X	
	Sensor "Pile height front edge"	Clean the sensor. Center	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".			X	X	X	X	
3	Non-stop device									
	Non-stop device	Clean 2 suspensions of the rear non-stop bar. D.S. / O.S.	Soft, lint-free cloth, paint brush, approved industrial vacuum cleaner					X	X	
		Clean 2 guide rails of the rear non-stop bar from top to bottom. D.S. / O.S.	Soft, lint-free cloth, paint brush, approved industrial vacuum cleaner					X	X	
		Clean 2 guides of the front non-stop bar from top to bottom. D.S. / O.S.	Soft, lint-free cloth, paint brush, approved industrial vacuum cleaner					X	X	
		Clean the sensor "Main pile detection in non-stop mode". Center	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".					X	X	
4	Automatic non-stop device									
	Automatic non-stop device	Clean the sensors: "Position of main pile relative to auxiliary pile", "Horizontal pallet position 1", "Vertical pallet position", "Main pile detection in non-stop mode", "Horizontal pallet position 2", From D.S. to O.S.	Soft, lint-free cloth			X	X	X	X	X
		Clean 2 suspensions of the rear non-stop bar. D.S. / O.S.	Soft, lint-free cloth, paint brush, ap-						X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval					
					I	II	III	IV	V	
			proved industrial vacuum cleaner							
		Clean 2 guide rails of the rear non-stop bar from top to bottom. D.S. / O.S.	Soft, lint-free cloth, paint brush, approved industrial vacuum cleaner					X	X	
	Safety shutter	Clean 2 safety shutters. Face side and D.S.	Soft, lint-free cloth			X	X	X	X	
		Clean 4 guide rails. Face side and D.S.	Brush, paint brush, soft, lint-free cloth					X	X	
5	Suction head									
	Suction head	Remove and clean 4 lifting suckers. Clean the lifting sucker guide. Check the smooth functioning of the mounted lifting suckers. D.S. / O.S. Note: Do not lubricate!	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".					X	X	X
		Check the suction discs of the lifting suckers for wear and porosity. If necessary, replace the suction discs. D.S. / O.S.		X	X	X	X	X	X	
		Remove and clean 5 forwarding suckers. Clean the forwarding sucker housing. Check the smooth functioning of the mounted forwarding suckers. Note: Do not lubricate! D.S. / O.S.	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".					X	X	X
		Loosen and remove the rotary valve. Clean the valve channels, rotary valve surface and bearing surface. Note: Do not lubricate! O.S.	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".					X	X	X
6	Feed table									
	Suction tape	Go along the complete suction tape once. Check the suction tape for damage, turned-up edges and wear. If necessary, adjust the suction tape tension. Replace the suction tape, if necessary. See operating manual chapter on "Feeder".		X				X	X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		Center							
7	Feeder drive								
	Forwarding roller shaft	Lubricate the middle bearing. 1 recessed grease nipple. Center	Grease gun A03, note "Approved lubricants".					X	X
8	Pneumatic system								
	Compressed-air control unit	Check the condensate level in the condensation tank. Drain condensation water if necessary. Check the system pressure on the manometer. 6.4 ±0.3 bar or the pointer must be in the green area. O.S.				X	X	X	X
		Check the filter element for soiling. Replace the filter element, if necessary. O.S.		X					X
9	Air supply								
	Blower "Suction air for suction tape"	Clean 2 air filters. Tap the filters gently or use a vacuum cleaner! D.S.	Approved industrial vacuum cleaner				X	X	
		Replace 2 air filters. D.S.		X					X
10	Central grease lubrication								
	Central grease lubrication	Note the message "Malfunction, Feeder grease cartridge empty" in the menu Malfunction/Central lubrication system . If necessary, replace the grease cartridge. D.S.	Grease cartridge A03, note "Approved lubricants".	X					X

Tab. 2 Maintenance checklist: Feeder

FS_B04_2101-000FRONT_00

4 Maintenance checklist: Printing unit

4.1 Maintenance work: Printing unit

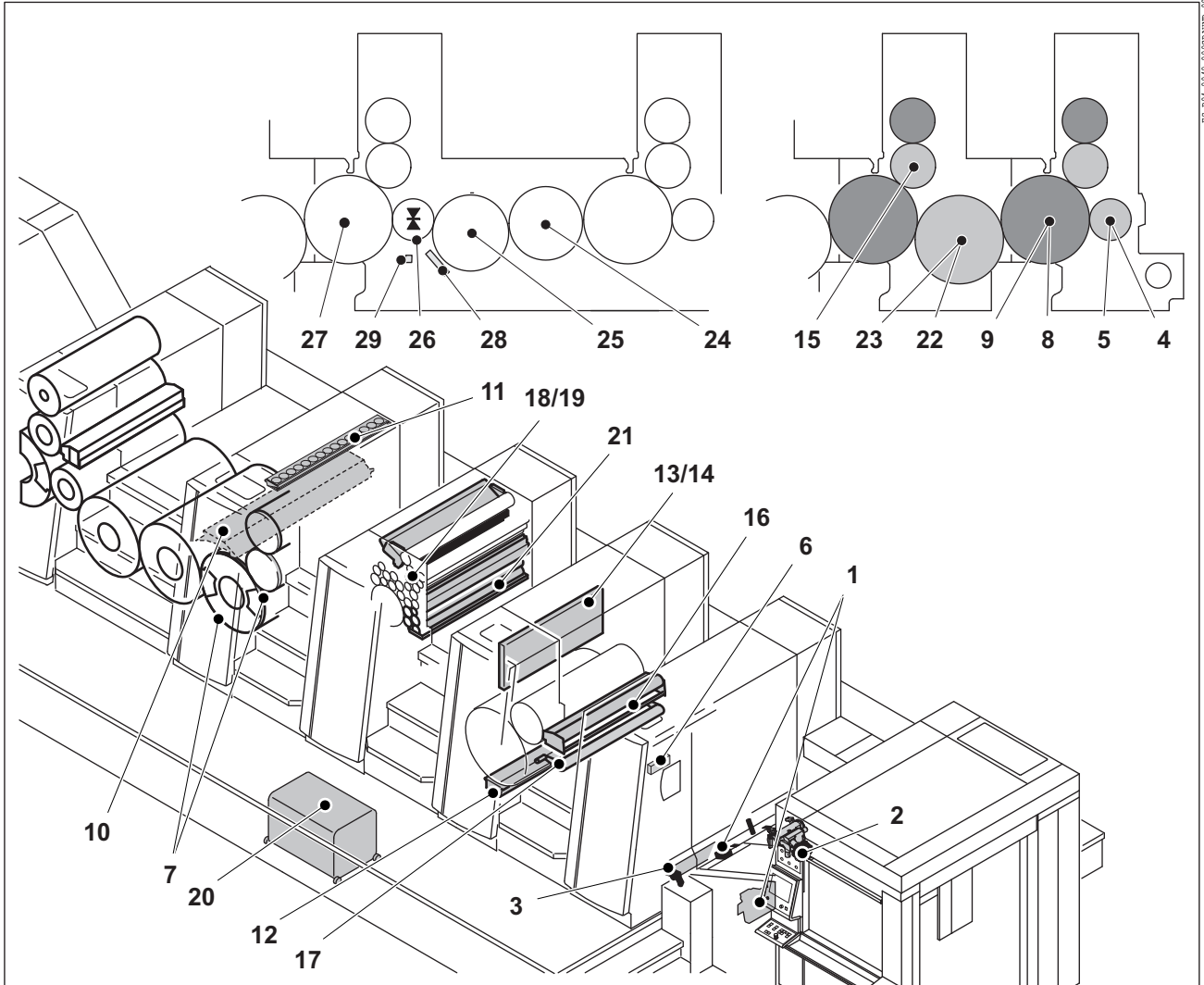


Fig. 3 Maintenance points: Printing unit

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
1	Sheet alignment system								
	Pull lay	Clean 2 sensors "Pull lay monitor". D.S. / O.S.	Soft, lint-free cloth, paint brush				X	X	X
	Sensor "Double sheet detector"	Clean the sensor. If necessary, vacuum the recess in the guide plate. Center	Soft, lint-free cloth, approved industrial vacuum cleaner					X	X
	Sensor "Sheet alignment monitor"	Clean 2 sensors "Sheet alignment monitor". D.S. / O.S.	Soft, lint-free cloth, paint brush			X	X	X	X
	Sheet stop finger	Check the wear limit of the plastic cap. The wear limit of the plastic cap is 8 mm. If the wear limit is reached or	Cardboard strip				X	X	X

FS_B04_01048-0100FRONT_00

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval					
					I	II	III	IV	V	
		exceeded, have the sheet stop finger replaced by Heidelberg Service. D.S. / O.S.								
	Air filter "Suction air, pull lay/suction drive roller"	Carefully knock out 2 filter cartridges, or clean by using a vacuum cleaner. D.S.	Approved industrial vacuum cleaner				X	X		
		Replace 2 filter cartridges. D.S.		X					X	
	Drive belt, pull lay drive / printing unit 1	The drive belt must be replaced not later than after 80 million revolutions. Check the revolution counter reading on the control console. Compare this value with the revolution counter reading for the drive belt, entered in the press file or noted down directly on a piece of paper at the drive belt. If the difference between the two readings is ≥ 80 million revolutions, have the drive belt replaced by Heidelberg Service. Then note down the current revolution counter reading and the date on a piece of paper again. Attach this note where it is clearly visible at the maintenance point. Enter the replacement in the press file stating the current revolution counter reading and date. O.S.	Press file						X	
	Cover guides	Lubricate the spring rod. 2 recessed grease nipples. Center	Grease gun A03, note "Approved lubricants".					X	X	
2	Rotary valve "Vacuum control/suction tape"									
	Rotary valve "Vacuum control/suction tape"	Release the filter of the rotary valve and remove it. Clean the filter. Center Note: Tighten the pipe clamp lightly when fitting.	Approved industrial vacuum cleaner				X	X	X	
		Unscrew the cover and clean the inside of the rotary valve housing. Center	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".				X	X	X	
3	Transfer gripper									
	Gripper system	Lubricate the roller lever. 2 recessed grease nipples.	Grease gun A03, note "Approved lubricants".					X	X	

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		D.S. / O.S.							
		Lubricate the spring rod of the gripper control. 2 recessed grease nipples. D.S. / O.S.	Grease gun A03, note "Approved lubricants".					X	X
	Transfer gripper drive	The cam followers of the transfer gripper drive must be replaced every 120 million revolutions at the latest. Check the revolution counter reading on the control console. Compare this value with the revolution counter reading of the cam followers entered in the press file. If the difference between both readings is ≥ 120 million revolutions, have the cam followers replaced by Heidelberg Service. Next, enter the replacement of the cam followers in the press file stating the current revolution counter reading and date. D.S.	Press file	X					X
4	Feed cylinder without UV interdeck dryer								
	Gripper system	Lubricate the roller lever. 1 recessed grease nipple. D.S.	Grease gun A03, note "Approved lubricants".				X	X	X
		Lubricate the gripper shaft bearing. 6 recessed grease nipples. From D.S. to O.S.	Grease gun A03, note "Approved lubricants".				X	X	X
	Sensor "Sheet detection feed cylinder"	Clean the sensor and reflector. Reflector D.S./Sensor O.S.	Soft, lint-free cloth, paint brush			X	X	X	X
5	Feed cylinder with UV interdeck dryer								
	Gripper system	Lubricate the roller lever. 1 recessed grease nipple. D.S.	Grease gun UV / A01, note "Approved lubricants".				X	X	X
		Lubricate the gripper shaft bearing. 6 recessed grease nipples. From D.S. to O.S.	Grease gun UV / A01, note "Approved lubricants".				X	X	X
	Sensor "Sheet detection feed cylinder"	Clean the sensor and reflector. Reflector D.S./Sensor O.S.	Soft, lint-free cloth, paint brush			X	X	X	X
6	Sheet travel monitor								
	Sensor "Sheet travel monitor"	Presses without foil printing kit: Clean the sensor. Center	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".			X	X	X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		Presses with foil printing kit (Stati-cStar): Clean the sensor. Center	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
7	Impression control mechanism								
	Bearers	Lubricate the bearers. Apply a thin lubricating film to the bearers, ensuring that no smudge marks occur. Remove any excess lubricant! D.S. / O.S.	Bearer oil B07, soft, lint-free cloth, note "Approved lubricants".			X	X	X	X
8	Impression cylinder without UV interdeck dryer								
	Gripper systems	Lubricate the roller lever. 1 recessed grease nipple per gripper bar. O.S.	Grease gun A03, note "Approved lubricants".					X	X
		Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun A03, note "Approved lubricants".					X	X
9	Impression cylinder with UV interdeck dryer								
	Gripper systems	Lubricate the roller lever. 1 recessed grease nipple per gripper bar. O.S.	Grease gun UV / A01, note "Approved lubricants".					X	X
		Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun UV / A01, note "Approved lubricants".					X	X
10	Prinect Inpress Control								
	Measuring bar	Check the function of the swivel unit. When changing from the cleaning position to the work position, the measuring bar must be buffered. If this is not the case, the pneumatic spring is defective and must be replaced by Heidelberg Service. The measuring bar must no longer move after engaging into the work position. D.S.					X	X	X
		Clean the sheet guide plate from top to bottom. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
		Check the function of the locking mechanism of the sheet guide plate.					X	X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		D.S. / O.S.							
		Check the glass pane in the measuring bar base for soiling. Clean the glass panes if necessary. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".			X	X	X	X
		Check the bearings for mounting the measuring bar for soiling. Clean the bearings if necessary. D.S. / O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".					X	X
	Hand-held spectrophotometer	Visually check the aperture of the hand-held spectrophotometer for soiling. Clean the screen if necessary.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
11	Ink mist suction removal (only on printing presses with UV interdeck dryer)								
	Filter case	Check the filtering mat for soiling. If necessary, replace the filtering mat. From D.S. to O.S.	Protective gloves, paper pad	X	X	X	X	X	X
12	Impression cylinder washup device								
	Impression cylinder washup device	Lubricate the bearing bolts of the cloth supply spindle/used-cloth roll spindle. O.S.	Spray can B02, Elkalub FLC 1012, note "Approved lubricants".						X
		Clean the distributor bar and check for cracks and wear. Replace the distributor bar, if necessary. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".	X					X
		Lubricate the brake and turn the brake wheel one full revolution. D.S.	Spray can B02, Elkalub FLC 1012, note "Approved lubricants".					X	X
		Clean the guide rails. O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".						X
	Spray tubes	Check the function and condition of the spray tubes with the <i>Test spray tube</i> button in the Washup menu. Clean the spray tubes if necessary. From D.S. to O.S.	Protective gloves; note "Approved washing fluids".					X	X
13	Plate changer AutoPlate Advanced								
	Holding device	Check the O-seals on the two guide shafts for soiling. Clean the O-seals, if necessary. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".					X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		Check the 3 guide straps for wear. If necessary, have the guide straps replaced by Heidelberg Service. D.S./middle/O.S.		X				X	X
		Clean the straps and O-seals of the plate ejector. If necessary, replace the O-seals. From D.S. to O.S.	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".	X			X	X	X
		Check the 13 guide rollers in the maintenance flap and in the cylinder guard for soiling. Clean the guide rollers, if necessary. From D.S. to O.S.	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".				X	X	X
		Clean the sensor "Rear edge of plate". Center	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
14	AutoPlate XL plate changer								
	Holding device	Check the O-seals on the two guide shafts for soiling. Clean the O-seals, if necessary. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".					X	X
		Check the 3 guide straps for wear. If necessary, have the guide straps replaced by Heidelberg Service. D.S./middle/O.S.		X				X	X
	Delivery-side cylinder guard	Check the silicone rings on the transport roller for soiling. Clean the counter rollers and silicone rings, if necessary. D.S. / O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".			X	X	X	X
		Check the cleanness of the guide rollers in the plate loading and plate ejection compartments of the guiding element and in the service lid, and check the guide rails. Clean the guide rollers and guide rails, if necessary. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
		Check the "Plate rear edge" sensor for soiling. Clean the sensor, if necessary. Center	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
		Check the sensor "New plate ready" for soiling. Clean the sensor, if necessary.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		O.S.							
		Check the register pin for soiling. Clean the register pin, if necessary. D.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
	Pressing roller	Check the silicone rings for wear and soiling. Clean the silicone rings, if necessary. If wear is detected on the silicone rings, have them replaced by Heidelberg Service. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
	Plate cylinder	Check the sensor "Register pin, PPD system" for soiling. Clean the sensor in the visible area, as necessary. D.S. / O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
15	Blanket cylinder								
	Cylinder surface	Check the cylinder jacket for damage and ink residue. From D.S. to O.S.							X
16	Blanket washup device								
	Blanket washup device	Check the edge of the "End of cloth supply roll" control lever for damage. There must be no burr on the edge. If the control lever is damaged, have it replaced by Heidelberg Service. O.S.		X				X	X
		Check the function of the locking bolt. This is done by moving the two locking levers on O.S. in the horizontal direction. Clean the locking bolt if necessary. D.S. / O.S.	Soft, lint-free cloth, paint brush						X
		Lubricate the brake and turn the brake wheel one full revolution. D.S.	Spray can B02, Elkalub FLC 1012, note "Approved lubricants".					X	X
		Clean the rubber lip and check for wear. Replace the rubber lip if necessary. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".	X					X
		Lubricate the bearing bolts of the cloth supply spindle/used-cloth roll spindle. O.S.	Spray can B02, Elkalub FLC 1012, note "Approved lubricants".						X
		Check the function and condition of the spray tubes with the <i>Test spray</i>	Soft, lint-free cloth, protective gloves,					X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		<p><i>tube</i> button in the Washup menu. Clean the spray tubes if necessary. From D.S. to O.S.</p> <p>Clean the distributor bar and check for cracks and wear. Replace the distributor bar, if necessary. From D.S. to O.S.</p> <p>Check the swiveling table collecting trough of the blanket washup device for washing fluid residues. Clean the collecting trough, if necessary. From D.S. to O.S.</p>	<p>note "Approved washing fluids".</p> <p>Soft, lint-free cloth, protective gloves, note "Approved washing fluids".</p> <p>Soft, lint-free cloth, protective gloves, note "Approved washing fluids".</p>						
17	Suction brush								
	Suction brush	<p>Check the suction brush and clean, if necessary. From D.S. to O.S.</p>	Soft, lint-free cloth, safety goggles			X	X	X	
		<p>Check the suction brush and replace, if necessary. From D.S. to O.S.</p>		X					X
18	Inking unit								
	Ink fountain	<p>Check the protective film for damage. Replace protective film if necessary. From D.S. to O.S.</p> <p>Note: Consult the chapter on the "Inking Unit" in your operating manual.</p>						X	X
		<p>Check the ink collecting pan underneath the ink fountain roller for dirt. Clean the ink collecting pan, if necessary. From D.S. to O.S.</p> <p>Note: Consult the chapter on the "Inking Unit" in your operating manual.</p>	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".						X
19	Inking roller washup device								
	Inking roller washup device	<p>Check the function and condition of the spray tubes. Clean the spray tubes, if necessary. From D.S. to O.S.</p>	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".					X	X
		<p>Check the overflow of the collecting trough for blockage. Clean the collecting trough, if necessary. From D.S. to O.S.</p>	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".			X	X	X	

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		Check the cover plate of the collecting trough for ink deposits. Clean the cover plate if necessary. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
	Washup blade	Check the rubber lip for wear. If necessary, turn the rubber lip around or replace it. From D.S. to O.S.		X					X
		Clean the fixing lever and spring. D.S. / O.S.	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".						X
20	Washing fluid container								
	Washing fluid container	Check the condition and quality of washing fluid and water in the respective chamber. Check the sieves on the inside and outside for soiling. There must be no dirt, such as slime, flocculation, dirt particles or rust on the floor of the chambers and on the sieves. If necessary, clean the sieves and chambers of the washing fluid container and replace the washing fluid or water. Follow the instructions in the operating manual given under "Washing fluid container" when performing this work. O.S.	Protective gloves; note "Approved washing fluids".					X	X
		Replace the suction filter. O.S.		X					X
21	Dampening system								
	Rider roller	Lubricate the claw and driver. D.S.	Grease gun A03, paint brush, note "Approved lubricants".			X	X	X	X
	Water pan roller and metering roller	Lubricate the drive. 3 gears. D.S. / O.S.	Grease gun A03, paint brush, note "Approved lubricants".			X	X	X	X
22	Transfer drum without UV interdeck dryer								
	Gripper systems	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.	Grease gun A03, note "Approved lubricants".					X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		D.S.							
		Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun A03, note "Approved lubricants".					X	X
23	Transfer drum with UV interdeck dryer								
	Gripper systems	Lubricate the roller lever. 1 recessed grease nipple per gripper bar. D.S.	Grease gun UV / A01, note "Approved lubricants".					X	X
		Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun UV / A01, note "Approved lubricants".					X	X
24	Variable transfer drum								
	Gripper system	Lubricate the roller lever. 1 recessed grease nipple per gripper system. O.S.	Grease gun A03, note "Approved lubricants".				X	X	X
		Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun A03, note "Approved lubricants".					X	X
	Swing frame and cylinder shells	<p>Note: Heidelberg recommends performing this maintenance work when replacing the TransferJacket. In this way you do not have to remove components on another occasion which will save you time! The given maintenance interval represents the longest possible time span between the maintenance work. Visually check the condition of the following swing frame components. Clean and lubricate the components if necessary.</p> <ul style="list-style-type: none"> • Ratchet pawls • Mounting fixtures for bolts of the TransferJacket front and rear edges • Front and rear stops and their contact areas • Contact areas between leaf spring and bolt D.S./middle/O.S.	Lubricant can A04, Gleitmo 800, note "Approved lubricants", soft, lint-free cloth, paint brush, protective gloves, note "Approved cleaners".						X
		Note:	Lubricant can A04, Gleitmo 800, note						X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		<p>Heidelberg recommends performing this maintenance work when replacing the TransferJacket. In this way you do not have to remove components on another occasion which will save you time!</p> <p>The given maintenance interval represents the longest possible time span between the maintenance work.</p> <p>Visually check the condition of the bolts for the front and rear edges of the cylinder shells. If necessary clean and lubricate the bolts.</p> <p>D.S. / O.S.</p>	"Approved lubricants", soft, lint-free cloth, paint brush, protective gloves, note "Approved cleaners".						
	Cylinder surface	<p>Visually check the TransferJacket for damage.</p> <p>From D.S. to O.S.</p>						X	X
25	Storage drum								
	Gripper systems	<p>Lubricate the roller lever. 1 recessed grease nipple per gripper bar.</p> <p>D.S.</p>	Grease gun A03, note "Approved lubricants".				X	X	X
		<p>Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.</p> <p>From D.S. to O.S.</p>	Grease gun A03, note "Approved lubricants".					X	X
	Sucker bar	<p>Lubricate the main bearing points. 4 lubricating points per sucker bar.</p> <p>From D.S. to O.S.</p>	Grease gun A06, Gleitmo 585 M, paint brush, note "Approved lubricants".					X	X
		<p>Lubricate the locking bolt. 1 lubricating point per sucker bar.</p> <p>O.S.</p>	Grease gun A06, Gleitmo 585 M, paint brush, note "Approved lubricants".					X	X
		<p>Lubricate the cam follower. 1 recessed grease nipple per sucker bar.</p> <p>O.S.</p>	Grease gun A03, note "Approved lubricants".					X	X
		<p>Spray the axial contact surface between sucker and sucker bar. 20 lubricating points per sucker bar.</p> <p>From D.S. to O.S.</p>	Spray can A10, Renax, note "Approved lubricants".					X	X
	Movable part	<p>Lubricate the bearings. 4 recessed grease nipples.</p> <p>D.S. / O.S.</p>	Grease gun A06, Gleitmo 585 M, note "Approved lubricants".					X	X
26	Reversing drum								

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
	Gripper system	Lubricate the gear and gear segment. 2 recessed grease nipples. D.S. / O.S.	Grease gun A06, Gleitmo 585 M, note "Approved lubricants".				X	X	X
		Lubricate the gripper tube bearing. 7 recessed grease nipples. From D.S. to O.S.	Grease gun A06, Gleitmo 585 M, note "Approved lubricants".				X	X	X
		Lubricate the outer gripper shaft bearing. 1 recessed grease nipple. O.S.	Grease gun A06, Gleitmo 585 M, note "Approved lubricants".				X	X	X
		Lubricate the gripper shaft bearing. 6 recessed grease nipples. From D.S. to O.S.	Grease gun A06, Gleitmo 585 M, note "Approved lubricants".				X	X	X
		Spray the gripper holder on the gripper bar. 19 lubricating points. From D.S. to O.S. Note: Do not spray any lubricant on the set collar, gears, or gear segments!	Spray can B02, Elkalub FLC 1012, note "Approved lubricants".				X	X	X
		Lubricate the carriage. 6 recessed grease nipples with at least 5 strokes of the grease gun each. Center Note: Remove the grease escaping between the carriage and the jacket, otherwise soiling of the print sheet may result.	Grease gun A06, Gleitmo 585 M, soft, lint-free cloth, note "Approved lubricants".				X	X	X
	Bearing	Lubricate the cam followers. 4 recessed grease nipples. D.S. / O.S.	Grease gun A06, Gleitmo 585 M, note "Approved lubricants".				X	X	X
	Cylinder surface	Visually check the TransferJacket for damage. From D.S. to O.S.					X	X	
27	Impression cylinder (P)								
	Gripper systems	Lubricate the roller lever. 1 recessed grease nipple per roller lever. D.S. / O.S.	Grease gun A03, note "Approved lubricants".					X	X
		Lubricate the gripper shaft bearing. 10 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun A03, note "Approved lubricants".					X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval					
					I	II	III	IV	V	
28	Sheet guide									
	Fan row underneath the reversing drum	Lift the cover plate above the row of fans "I" and pull it out toward the O.S. Clean the cover plate. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".					X	X	
29	Perfector									
	Sensor "Missing sheet detector"	Clean the sensor and reflector. D.S. / O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".					X	X	
	Stop lever	Lubricate the stop lever. 1 recessed grease nipple. O.S.	Grease gun A03, note "Approved lubricants".					X	X	

Tab. 3 Maintenance checklist: Printing unit

FS_B04_3301-0007KERN_00

5 Maintenance checklist: Intermediate unit

5.1 Maintenance work: Intermediate unit

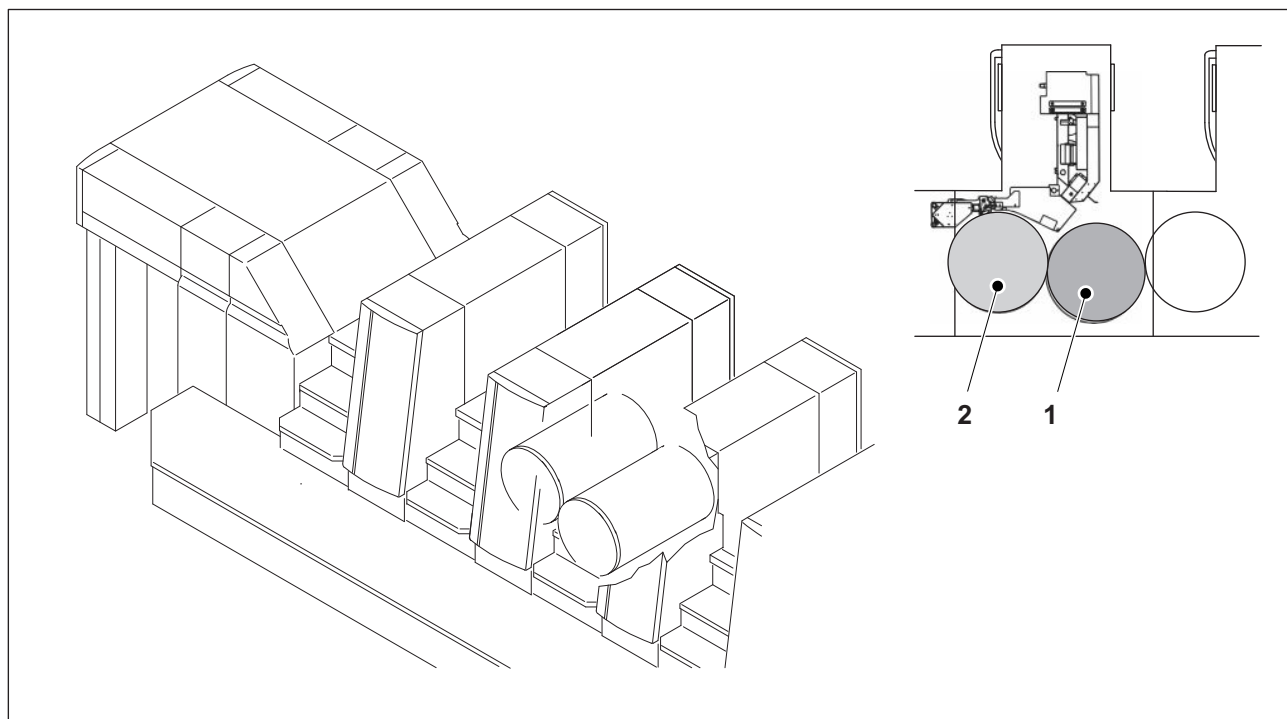


Fig. 4 Maintenance points: Intermediate unit

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
1	Transfer drum								
	Gripper systems	Lubricate the roller lever. 1 recessed grease nipple per gripper bar. D.S.	Grease gun UV / A01, note "Approved lubricants".					X	X
		Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun UV / A01, note "Approved lubricants".					X	X
2	Impression cylinder								
	Gripper systems	Lubricate the roller lever. 1 recessed grease nipple per gripper bar. O.S.	Grease gun UV / A01, note "Approved lubricants".					X	X
		Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun UV / A01, note "Approved lubricants".					X	X

Tab. 4 Maintenance checklist: Intermediate unit

FS_B04_3101-00000000_00

6 Maintenance checklist: Coating unit

6.1 Maintenance work: Coating unit

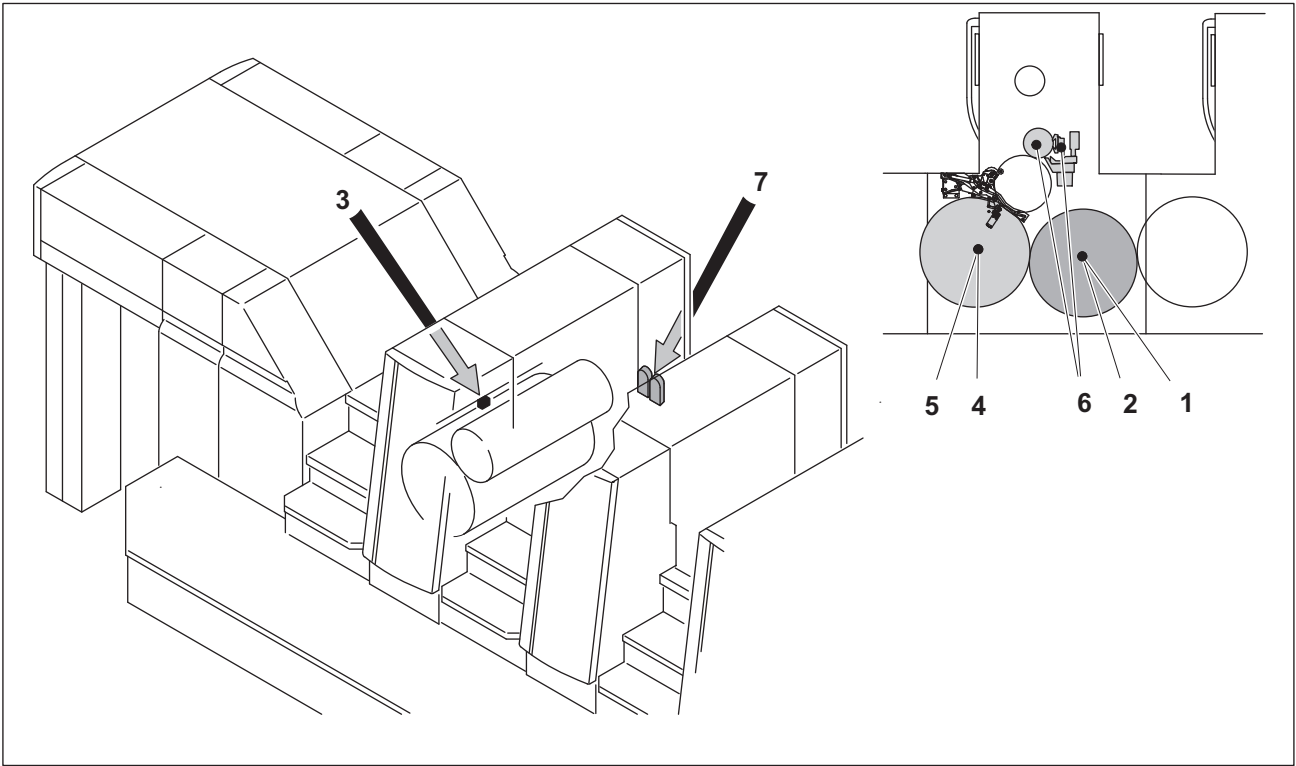


Fig. 5 Maintenance points: Coating unit

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
1	Transfer drum without UV interdeck dryer and without LYYL								
	Gripper systems	Lubricate the roller lever. 1 recessed grease nipple per gripper bar. D.S.	Grease gun A03, note "Approved lubricants".					X	X
		Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun A03, note "Approved lubricants".					X	X
2	Transfer drum with UV interdeck dryer or with LYYL								
	Gripper systems	Lubricate the roller lever. 1 recessed grease nipple per gripper bar. D.S.	Grease gun UV / A01, note "Approved lubricants".					X	X
		Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.	Grease gun UV / A01, paint brush, note "Approved lubricants".					X	X
3	Sheet travel monitor								
	Sensor "Sheet travel monitor"	Clean the sensor. Center	Soft, fluffless cloth, paint brush, pro-			X	X	X	X

FS_B04_0039-00000000_00

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
			protective gloves, note "Approved washing fluids".						
4	Impression cylinder without UV interdeck dryer and without LYYL								
	Gripper system	Lubricate the roller lever. 1 recessed grease nipple per gripper bar. O.S.	Grease gun A03, note "Approved lubricants".					X	X
Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.		Grease gun A03, note "Approved lubricants".					X	X	
5	Impression cylinder with UV interdeck dryer or with LYYL								
	Gripper system	Lubricate the roller lever. 1 recessed grease nipple per gripper bar. O.S.	Grease gun UV / A01, note "Approved lubricants".					X	X
Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar. From D.S. to O.S.		Grease gun UV / A01, note "Approved lubricants".					X	X	
6	Chambered blade system								
	Screen roller	Lubricate the driver. D.S.	Grease gun A03, paint brush, note "Approved lubricants".				X	X	X
	Roller locks	Lubricate the eccentric. D.S. / O.S.	Grease gun A03, paint brush, note "Approved lubricants".				X	X	X
	Level sensor	Clean the sensor. Center	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
7	Varnish supply								
	Sensor "Insufficient varnish flow"	Clean sensor tip. D.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".				X	X	X

Tab. 5 Maintenance checklist: Coating unit

FS_B04_4.01-000FRONT_00

7 Maintenance checklist: Delivery

7.1 Maintenance work: Delivery

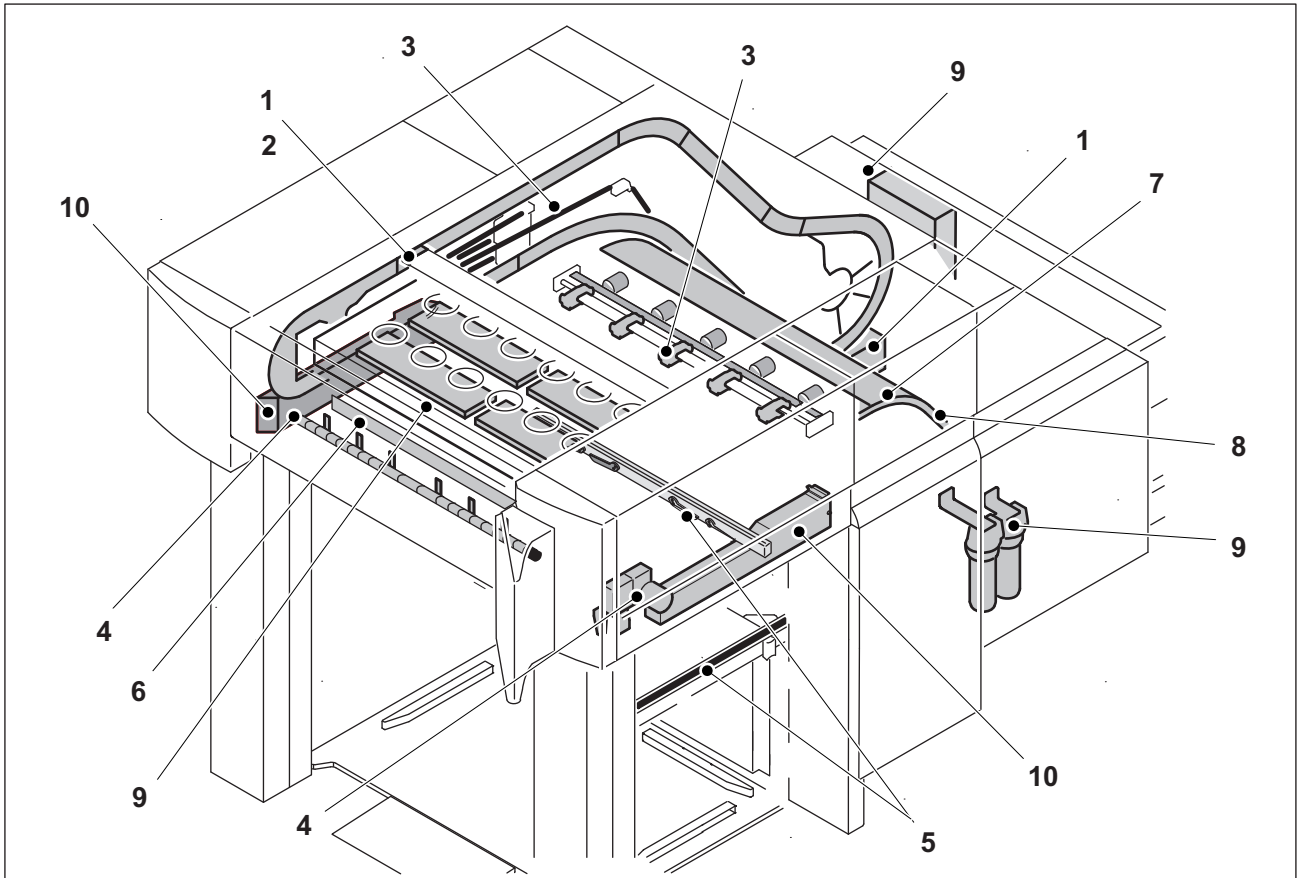


Fig. 6 Maintenance points: Delivery

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
1	Sheet transport without UV end-of-press dryer								
	Gripper system	Clean the gripper pads. Check the gripper pads visually. 19 gripper pads per gripper system. From D.S. to O.S.	Brush, flashlight, mirror						X
		Lubricate the roller lever. 1 recessed grease nipple per gripper system. D.S.	Grease gun A03, note "Approved lubricants".				X	X	
	Gripper opening cam	Clean and lubricate the adjusting spindle. D.S.	Spray can B02, Elkalub FLC 1012, soft, lint-free cloth, note "Approved lubricants".			X	X	X	
	Chain guide	Clean the oil drain groove of the gripper chain guide. Clean the oil drip pans of the gripper chain top/bottom. D.S. / O.S.	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".				X	X	

FS_B04_0092-000FRONT_00

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval					
					I	II	III	IV	V	
		Empty and clean the oil collecting vessel. D.S. / O.S.	Soft, lint-free cloth, protective gloves.						X	
2	Sheet transport with UV end dryer									
	Gripper system	Clean the gripper pads. Check the gripper pads visually. 19 gripper pads per gripper system. From D.S. to O.S.	Brush, flashlight, mirror						X	
		Lubricate the roller lever. 1 recessed grease nipple per gripper system. D.S.	Grease gun UV / A01, note "Approved lubricants".					X	X	
	Gripper opening cam	Clean and lubricate the adjusting spindle. D.S.	Spray can B02, Elkalub FLC 1012, soft, lint-free cloth, note "Approved lubricants".				X	X	X	
	Chain guide	Clean the oil drain groove of the gripper chain guide. Clean the oil drip pans of the gripper chain top/bottom. D.S. / O.S.	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".					X	X	
		Empty and clean the oil collecting vessel. D.S. / O.S.	Soft, lint-free cloth, protective gloves.						X	
3	Sheet brake system									
	Sheet brake module	Check friction wheels for wear and damage; replace if necessary. Wear limit The surfaces of the friction wheels are provided with grooves. The grooves must be at least 1/10 mm deep. If you can no longer feel these grooves, the wear limit has been reached. From D.S. to O.S.		X				X	X	
		Pull the suction tape off the sheet brake module. Turn the guide rolls to check their smooth functioning. Clean the sheet brake module if necessary. Check the intake ports of the suction inserts for soiling. Remove and clean the suction inserts if necessary. Lightly lubricate the O-seals on the suction inserts. From D.S. to O.S.	Spray can B02, Elkalub FLC 1012, paint brush, soft, lint-free cloth, note "Approved lubricants".				X	X	X	

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		Check the suction tape for wear. Replace if necessary. From D.S. to O.S.		X			X	X	X
		Clean and check the O-seal. Lightly lubricate the O-seal. Have the O-seal replaced by Heidelberg Service, if necessary. Note: The O-seal is glued in. From D.S. to O.S.	Grease gun A03, soft, lint-free cloth, note "Approved lubricants".					X	X
	Module support	Check the 4-way valve for soiling and smooth functioning. Clean the 4-way valve if necessary. From D.S. to O.S.	Fork wrench with width across flats of 7 mm, protective gloves, note "Approved washing fluids".					X	X
		Clean thread, surfaces and edges of the sheet brake module support. From D.S. to O.S.	Soft, lint-free cloth, paint brush, protective gloves, note "Approved washing fluids".					X	X
	Drive	The drive belt must be replaced not later than after 80 million revolutions. Check the revolution counter reading on the control console. Compare this value with the revolution counter reading for the drive belt, entered in the press file or noted down directly on a piece of paper at the drive belt. If the difference between the two readings is ≥ 80 million revolutions, have the drive belt replaced by Heidelberg Service. Then note down the current revolution counter reading and the date on a piece of paper again. Attach this note where it is clearly visible at the maintenance point. Enter the replacement in the press file stating the current revolution counter reading and date. D.S.	Press file	X					X
		Lubricate the bearing of the driving roller. 2 recessed grease nipples. D.S. / O.S.	Grease gun A03, note "Approved lubricants".					X	X
		Clean the surface of the tape driving roller. From D.S. to O.S. Note:	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".					X	X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
		The washing fluid must not be sprayed directly on the roller surface of the driving roller!							
4	Sheet jogger								
	Front edge system	Lubricate the cam follower on the lever of the jogging drive. 1 recessed grease nipple. O.S. Note: Remove only the plastic cover for lubrication, not the sheet-metal guard. Fit the plastic cover when lubrication is completed.	Grease gun A03, note "Approved lubricants".					X	X
		Lubricate the cam follower at the front edge stop shaft. 1 recessed grease nipple. O.S.	Grease gun A03, note "Approved lubricants".					X	X
		Lubricate the bearing of the front edge stop shaft. 2 recessed grease nipples. D.S. / O.S. Note: The recessed grease nipples are only visible when the auxiliary pile frame is lowered.	Grease gun A03, note "Approved lubricants".					X	X
		Remove any powder dust from the spring assemblies, pneumatic cylinders and from the housings. D.S. / O.S.	Soft, lint-free cloth, paint brush						X
5	Non-stop device								
	Guide rails	Clean 2 guide rails. From D.S. to O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
6	Pile guidance and pile transport								
	Sensor "Overrun sheet control"	Clean the sensor and check its functioning. Center of front edge	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
	"Main pile towards non-stop carriage" sensor	Clean the sensors. D.S. / O.S.	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".				X	X	X
7	Sheet decurler								

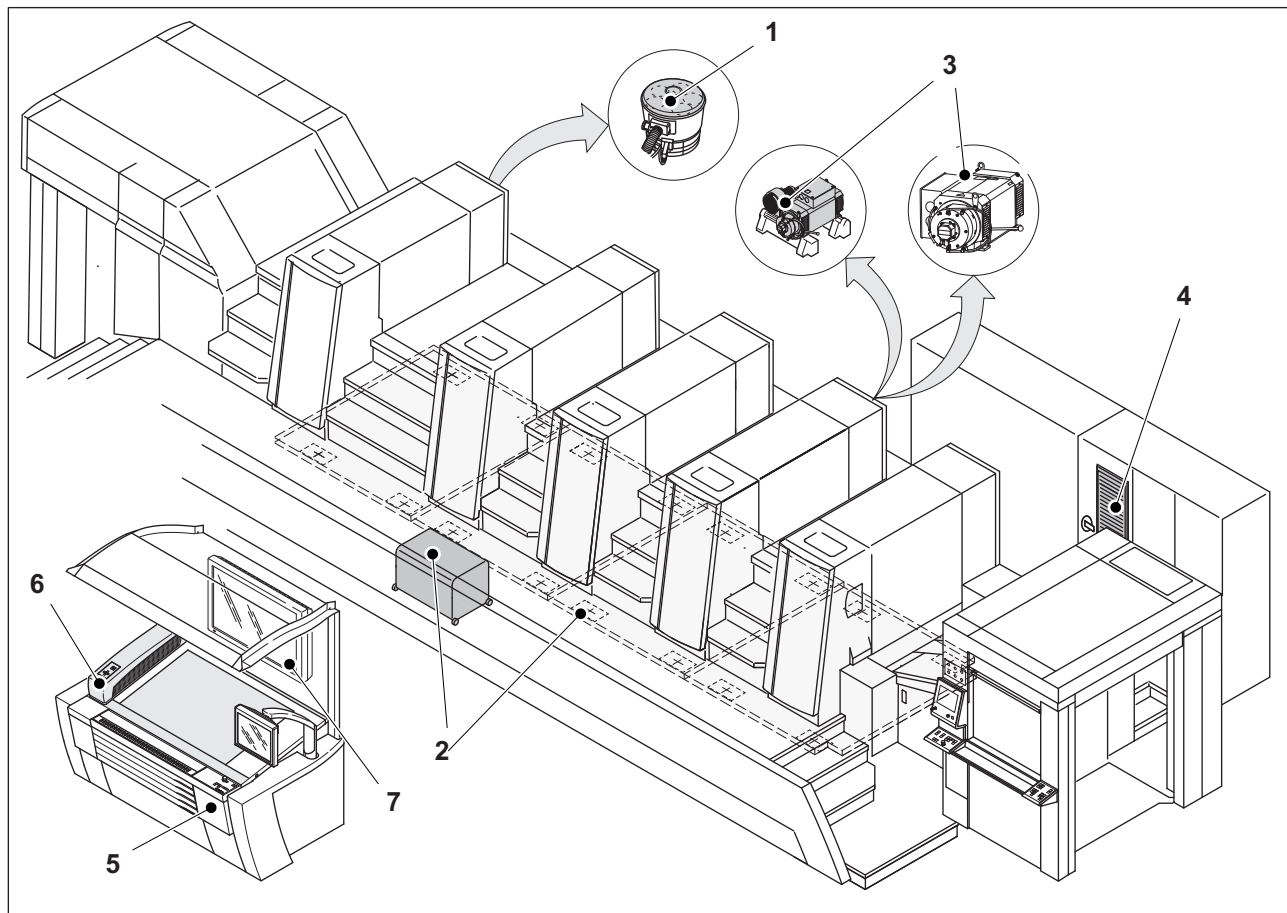
No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
	Sheet decurler	Check the boreholes in the sheet decurler for ink residues and powder dust. Clean the boreholes if necessary. From D.S. to O.S.	Soft, lint-free cloth, paint brush, approved industrial vacuum cleaner, protective gloves; note "Approved washing fluids".					X	X
8	Sheet guide								
	Sheet guide plates and powder deflector	Basic cleaning; clean the delivery with a vacuum cleaner and clean the sheet guide plates. From D.S. to O.S. Note: Please observe the function "Blast air 100 %" (self-protection)!	Soft, lint-free cloth, plastic spatula, approved industrial vacuum cleaner, protective gloves; note "Approved washing fluids".				X	X	X
		Check the hollow space under the sheet guide plates for soiling. Clean the hollow spaces if necessary. From D.S. to O.S.	Approved industrial vacuum cleaner					X	X
9	Air supply								
	"Sheet brake" air filter	Clean the filter cartridge. O.S.	Brush, approved industrial vacuum cleaner			X	X		
		Replace the filter cartridge. O.S.		X				X	X
	Air filter "Sheet decurler"	Clean the filter cartridge. O.S.	Brush, approved industrial vacuum cleaner			X	X	X	
		Replace the filter cartridge. O.S.		X					X
	Air filter "Sheet guide plate blower"	Clean the filter cartridge. D.S.	Approved industrial vacuum cleaner				X	X	
		Replace the filter cartridge. D.S.		X					X
10	CleanStar								
	Suction ducts	Remove any powder dust. D.S. / O.S.	Brush, spatula					X	X

Tab. 6 Maintenance checklist: Delivery

FS-BM4-5.0.1-0007ERR1_00

8 Maintenance checklist: Entire press

8.1 Maintenance work: Entire press



FS-BM4-0055-0006RND1_00

Fig. 7 Maintenance points: Entire press

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
1	Suction unit								
	Suction unit	Check filtering bags. Clean filtering bags if necessary. D.S.	Approved industrial vacuum cleaner				X	X	X
		Check and clean interior of the suction unit. D.S.	Soft, lint-free cloth, approved industrial vacuum cleaner					X	X
2	Central oil lubrication								
	Central oil lubrication	Change the lubricant. Quantity per unit: approximately 20 l , and approximately 16 l for elevated presses D.S.	Commercially available suction pump; container for used lubricants; note "Approved lubricants".						X

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval					
					I	II	III	IV	V	
		Replace the filter cartridge of the oil filter. D.S.	Note "Approved lubricants".	X					X	
		Remove lubricant by suction from the drip pans. Clean 1 drip pan per unit. From D.S. to O.S.	Soft, lint-free cloth, suction pump, container for used lubricants					X	X	
3	Main motor									
	Main motor ≥90 kW	Lubricate the main motor. 1 button head grease nipple. D.S. The main motor is equipped with 2 button head grease nipples. The lubrication procedure requires only one button head grease nipple. Select the lubricating nipple that is easily accessible for you. For each lubrication procedure, empty one complete grease cartridge A08. D.S.	Grease gun A08, grease cartridge A08, note "Approved lubricants".	X					X	
	Main motor 120 kW	Clean the filter element of the suction filter. D.S.	Approved industrial vacuum cleaner				X	X		
		Replace the filter element of the suction filter. D.S.		X					X	
4	Control cabinet of the SinuSynchro main motor									
	Control cabinet	Clean the filter element of the air filter. D.S.	Approved industrial vacuum cleaner				X	X		
		Replace the filter element of the air filter. D.S.		X					X	
5	Prinect Press Center									
	Filter fan	Replace the filter element of the filter fan.		X				X	X	
	Standard daylight lamp	Check the number of operating hours of the standard daylight lamp. To do so, call up the Maintenance/Documentation and Status menus on the control console. When 5,000 operating hours have been reached, all fluorescent tubes of the standard daylight lamp need to be replaced. Lightly turn the fluorescent tubes and remove them.	Pointed tool	X				X	X	
6	Prinect Axis Control									

No.	Part	Maintenance work/maintenance location	Required resources	Part	Maintenance interval				
					I	II	III	IV	V
	Prinect Axis Control	Vacuum-clean the measuring table surface. Note: The measuring bar must be in home position!	Approved industrial vacuum cleaner				X	X	X
		Clean and lubricate the front and rear guide rails.	Spray can B02, Elkalub FLC 1012, soft, lint-free cloth, note "Approved lubricants".			X	X	X	X
7	Wallscreen								
	Air filter	Clean the air intake opening. Then replace the filter element of the filter fan.	Soft, lint-free cloth	X				X	X

Tab. 7 Maintenance checklist: Entire press

Cleaning checklists

1	Note on the cleaning checklists	A.3.3
	1.1 Using the checklists	A.3.3
2	Cleaning checklist: Feeder	A.3.4
	2.1 Cleaning points: Feeder	A.3.4
3	Cleaning checklist: Printing unit	A.3.5
	3.1 Cleaning points: Printing unit	A.3.5
4	Cleaning checklist: Intermediate unit	A.3.7
	4.1 Cleaning points: Intermediate unit	A.3.7
5	Cleaning checklist: Coating unit	A.3.8
	5.1 Cleaning points: Coating unit	A.3.8
6	Cleaning checklist: Delivery	A.3.10
	6.1 Cleaning points: Delivery	A.3.10

00_904_0083-000FEEDNL_04

1 Note on the cleaning checklists

1.1 Using the checklists

The cleaning checklists allow you to gain an overview of, and carry out all the necessary cleaning work. More precise descriptions of the individual cleaning tasks on the printing press can be found in the "Cleaning" chapter.

Please note:

The checklists in this manual are your originals. Please always use copies for your work.

HEIDELBERG

1 Cleaning printing press
1.1 Cleaning work at the feeder

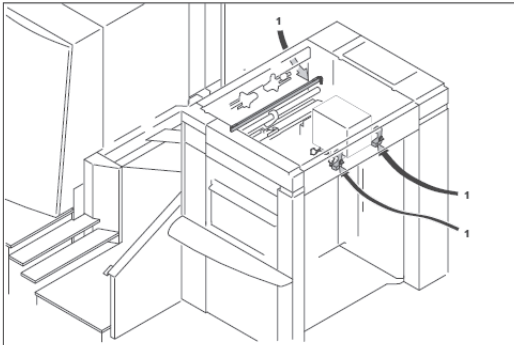


Fig. 1 Cleaning work at the feeder

No.	Part	Cleaning work/location	Required resources	Part re-quired	Cleaning Interval				
					I	II	III	IV	V
1 Cleaning points on the ionizing unit:									
	Ionizing bar	Clean the surface and the discharge tips of the ionizing bar. D.S. to O.S.	Paint brush, brush; note "Approved washing fluids".		X	X	X	X	
	Ionizing blower	Clean the surface and discharge tips of all ion blowers. Center	Paint brush, brush; note "Approved washing fluids".		X	X	X	X	

Tab. 1 Cleaning work at the feeder

1

Fig. 1 Checklist example: Printing press feeder

FS-BM4-1105-0007KERN_00

2 Cleaning checklist: Feeder

2.1 Cleaning points: Feeder

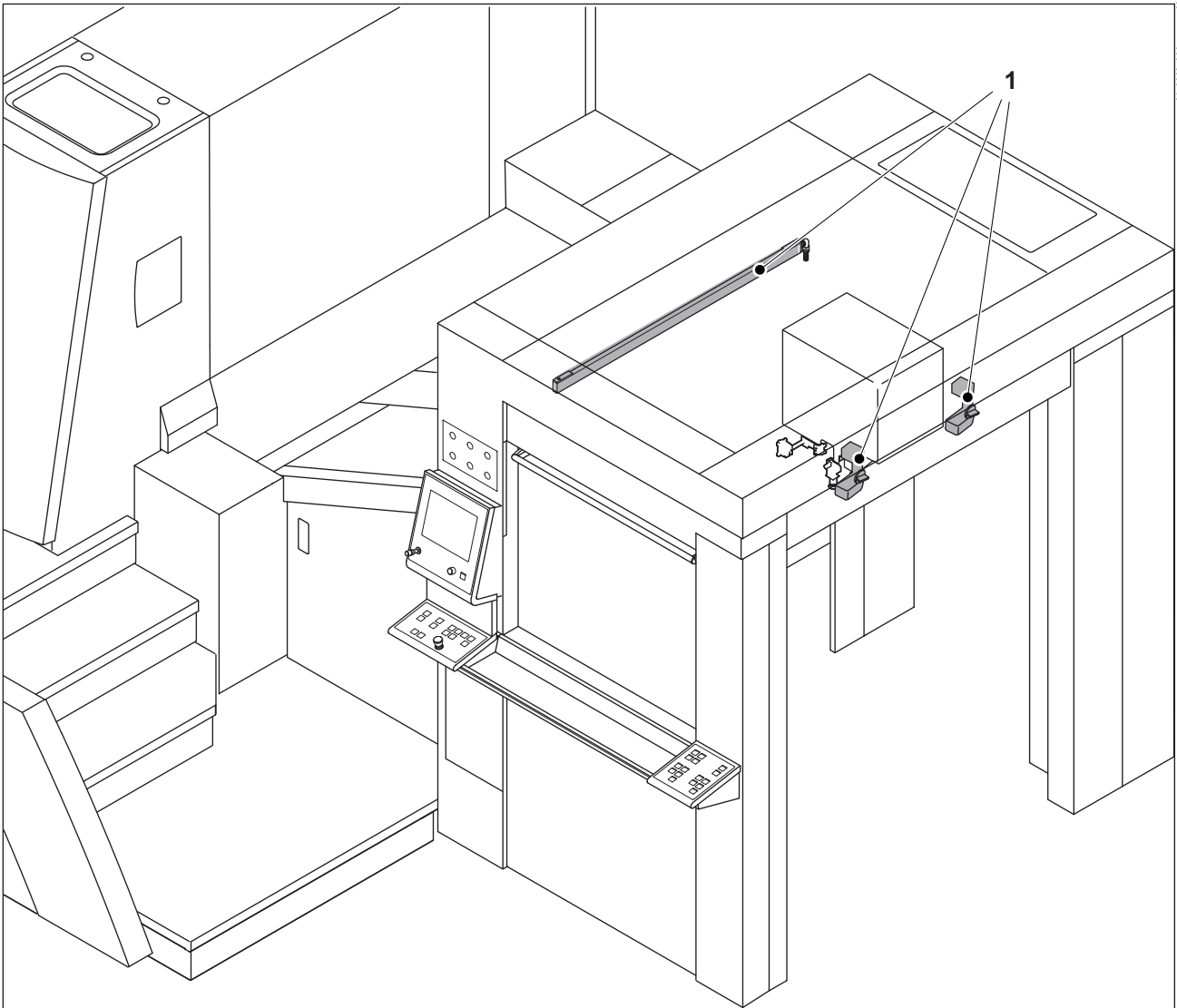


Fig. 2 Cleaning work: Feeder

No.	Part	Cleaning work/location	Required resources	Part	Cleaning interval				
					I	II	III	IV	V
1	Ionizing unit								
	Ionizing bar	Clean the surface and the discharge openings of the ionizing bar. From D.S. to O.S.	Brush, paint brush, protective gloves, note "Approved washing fluids".			X	X	X	X
	Ion blower	Clean the surface and discharge tips of all ion blowers. Center	Brush, paint brush, protective gloves, note "Approved washing fluids".			X	X	X	X

Tab. 1 Cleaning checklist: Feeder

FS_B04_0105-0000FRONT_00

3 Cleaning checklist: Printing unit

3.1 Cleaning points: Printing unit

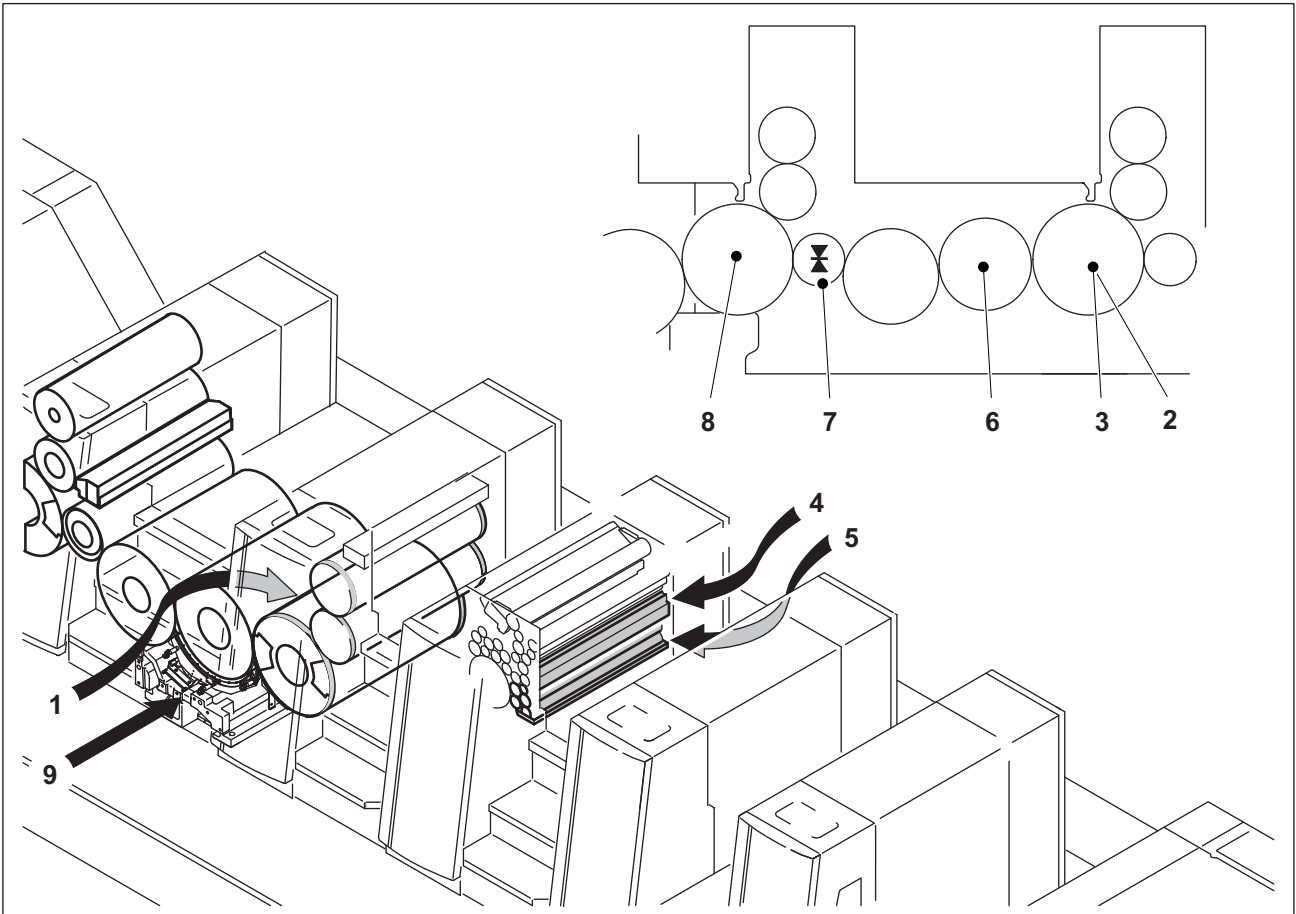


Fig. 3 Cleaning work: Printing unit

No.	Part	Cleaning work/location	Required resources	Part	Cleaning interval				
					I	II	III	IV	V
1	Impression control mechanism								
	Bearers	Clean the bearers. Checking the lubricating film of the bearers. If necessary, apply a thin lubricating film on the bearers, ensuring that no smudge marks occur. Remove any excess lubricant! D.S. / O.S.	Soft, fluffless cloth, protective gloves, note "Approved cleaners"; bearer oil B07, note "Approved lubricants".		X	X	X	X	X
2	Impression cylinder without UV interdeck dryer								
	Cylinder surface	Clean the refined cylinder surface. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
3	Impression cylinder with UV interdeck dryer								
	Cylinder surface	Clean the refined cylinder surface.	Soft, fluffless cloth, protective gloves,		X	X	X	X	X

No.	Part	Cleaning work/location	Required resources	Part	Cleaning interval				
					I	II	III	IV	V
		From D.S. to O.S.	note "Approved washing fluids".						
4	Inking roller washup device								
	Washup blade	Clean the rubber lip and blade trough. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
5	Dampening system								
	Dampening solution pan	Remove, clean and check the dampening solution pan. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".						X
6	Variable transfer drum								
	Cylinder surface	Clean the TransferJacket. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
7	Reversing drum								
	Cylinder surface	Clean the TransferJacket. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
8	Impression cylinder (P)								
	Cylinder surface	Clean the cylinder surface. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
9	Sheet guide								
	Sheet guide plates after the perfecter	Demount 2 sheet guide plates. Clean the 2 removed sheet guide plates. Check the condition. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".					X	X

Tab. 2 Cleaning checklist: Printing unit

FS_B04_3305-000FRONT_00

4 Cleaning checklist: Intermediate unit

4.1 Cleaning points: Intermediate unit

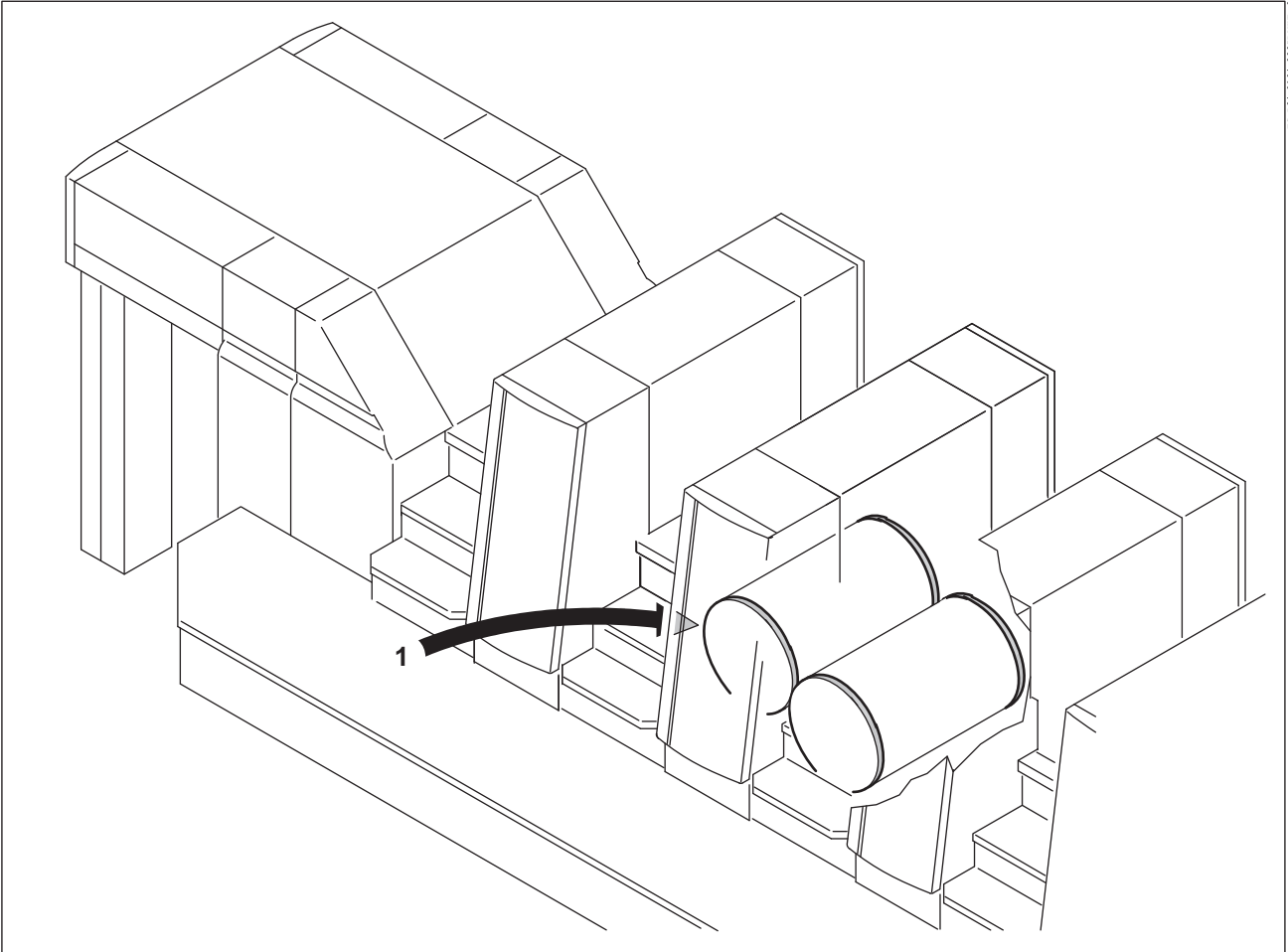


Fig. 4 Cleaning work: Intermediate unit

No.	Part	Cleaning work/location	Required resources	Part	Cleaning interval				
					I	II	III	IV	V
1	Impression control mechanism								
	Bearers	Clean the bearers. D.S. / O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X

Tab. 3 Cleaning checklist: Intermediate unit

FS_B04_3105-0007ERR1_00

5 Cleaning checklist: Coating unit

5.1 Cleaning points: Coating unit

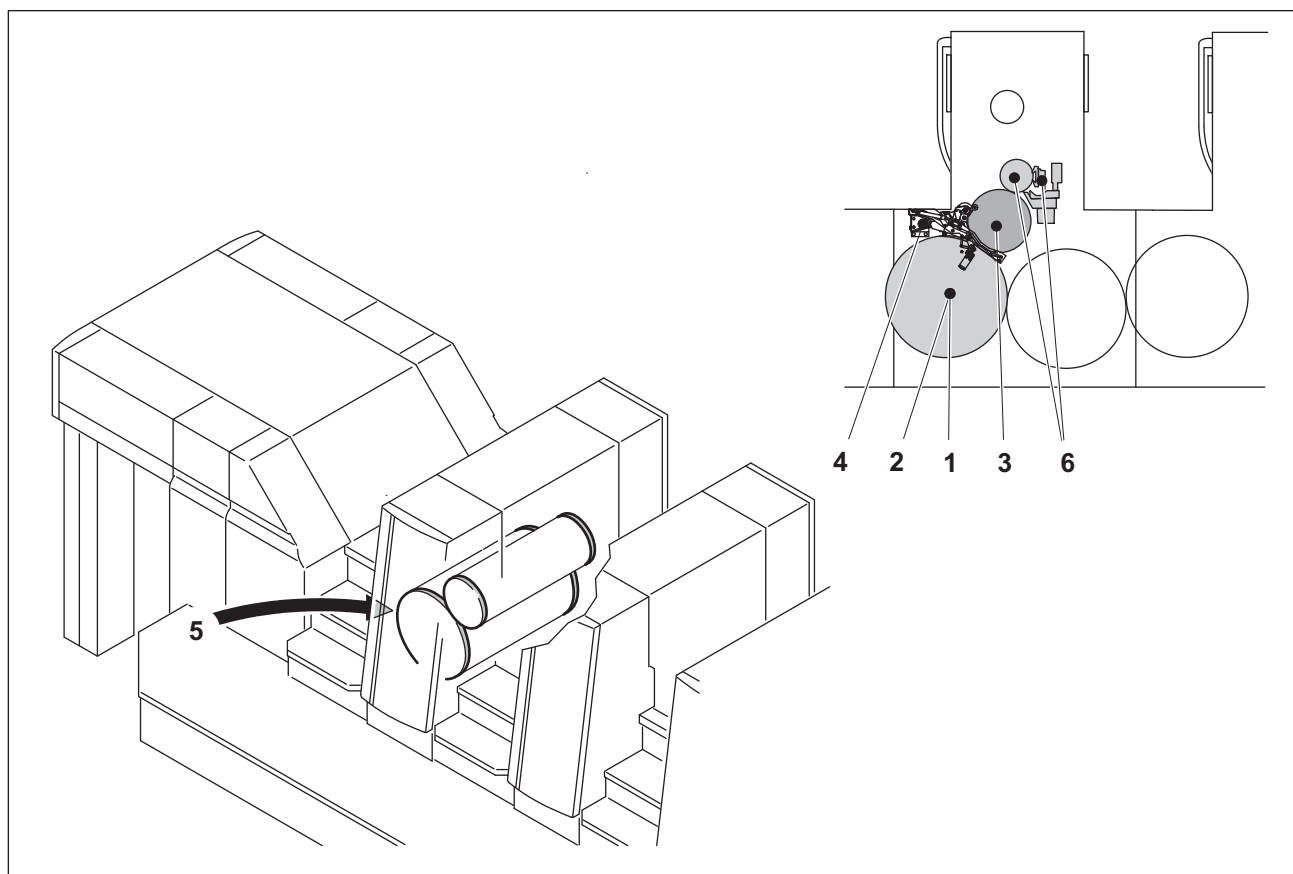


Fig. 5 Cleaning work: Coating unit

No.	Part	Cleaning work/location	Required resources	Part	Cleaning interval				
					I	II	III	IV	V
1	Impression cylinder without UV interdeck dryer and without LYYL								
	Cylinder surface	Clean the refined cylinder surface and check visually for damage. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
2	Impression cylinder with UV interdeck dryer or with LYYL								
	Cylinder surface	Clean the refined cylinder surface and check visually for damage. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
3	Coating blanket cylinder								
	Cylinder surface	Clean the refined cylinder surface and check visually for damage. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".			X	X	X	X
	Pressing roller	Visually check the condition of the pressing roller. Clean the pressing roller if necessary.	Soft, fluffless cloth, protective gloves,			X	X	X	X

FS_B04_3105-0007ERR1_00

No.	Part	Cleaning work/location	Required resources	Part	Cleaning interval				
					I	II	III	IV	V
		From D.S. to O.S.	note "Approved washing fluids".						
4	Sheet guide								
	Sheet guide plate after printing nip	Check the sheet guide plates and guide plate for soiling. Clean the sheet guide plates and guide plate if necessary. D.S. / O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".			X	X	X	X
5	Impression control mechanism								
	Bearers	Clean the bearers. D.S. / O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
6	Chambered blade system								
	Chambered blade	Clean the supports of the chambered blade. D.S. / O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".					X	X
	Screen roller	Clean the cylinder surface and the end faces. From D.S. to O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
	Roller locks	Clean the contact surfaces. D.S. / O.S.	Soft, fluffless cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X
	Pressurized chambered blade	Remove and clean the relief valve.	Protective gloves; note "Approved washing fluids".			X	X	X	X

Tab. 4 Cleaning checklist: Coating unit

FS.B04_4105-0007ERR_00

6 Cleaning checklist: Delivery

6.1 Cleaning points: Delivery

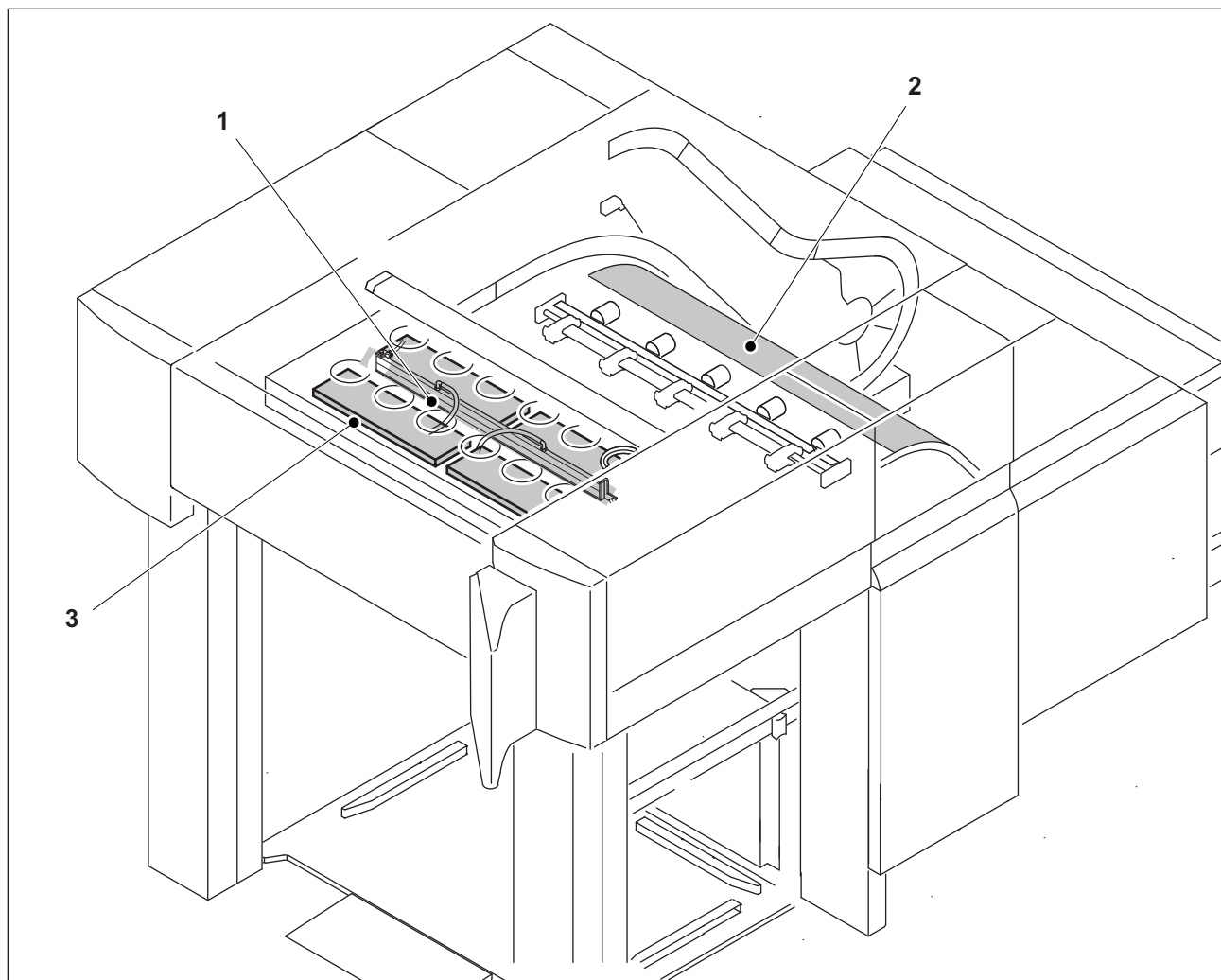


Fig. 6 Cleaning work: Delivery

No.	Part	Cleaning work/location	Required resources	Part	Cleaning interval				
					I	II	III	IV	V
1	Ionizing unit								
	Ionizing bars	Clean the surface and discharge tips of the ionizing bars. From D.S. to O.S.	Brush, paint brush, protective gloves, note "Approved washing fluids".			X	X	X	X
2	Sheet guide								
	Sheet guide plates and powder deflector	Clean the sheet guide plates and powder deflector with a damp cloth. From D.S. to O.S. Note: Please note "Blast air 100 %" feature (self-protection)!	Soft, lint-free cloth, protective gloves, note "Approved washing fluids".		X	X	X	X	X

No.	Part	Cleaning work/location	Required resources	Part	Cleaning interval				
					I	II	III	IV	V
		Check the chain guides and suction ducts for soiling. Clean the room if necessary. Remove any scraps and sheets of paper from the lowest point of the sheet path and the suction ducts. Remove any powder deposits from the chain guides and the suction ducts. From D.S. to O.S.	Soft, lint-free cloth, approved industrial vacuum cleaner		X	X	X	X	X
3	Air supply								
	Delivery fans	Clean the delivery fans and honeycomb grids. From D.S. to O.S.	Brush, approved industrial vacuum cleaner			X	X	X	X

Tab. 5 Cleaning checklist: Delivery

B Maintenance

Maintenance on the feeder	B.1.1
1 Feeder - safety instructions	B.1.3
1.1 To be observed for all work	B.1.3
1.2 Pile guidance and pile transport	B.1.3
2 Overview of the maintenance points on the feeder	B.1.4
2.1 Overview	B.1.4
3 Preloading device	B.1.6
3.1 Stop bars	B.1.6
4 Non-stop device	B.1.7
4.1 Non-stop device	B.1.7
5 Automatic non-stop device	B.1.10
5.1 Automatic non-stop device	B.1.10
5.2 Protective roller blinds	B.1.12
6 Suction head	B.1.14
6.1 Suction head	B.1.14
7 Feed table	B.1.18
7.1 Suction tape	B.1.18
8 Feeder drive	B.1.19
8.1 Forwarding roller shaft	B.1.19
9 Pneumatic system	B.1.20
9.1 Compressed-air control unit	B.1.20
10 Air supply	B.1.23
10.1 Blower "Suction air for suction tape"	B.1.23
11 Central grease lubrication	B.1.25
11.1 Central grease lubrication	B.1.25
Maintenance on the printing unit	B.2.1
1 Printing unit - safety instructions	B.2.5
1.1 To be observed for all work	B.2.5
1.2 Washing fluid container	B.2.7
1.3 Inking unit	B.2.7
2 Overview of the maintenance points on the printing unit	B.2.8
2.1 Overview	B.2.8

3	Sheet alignment	B.2.10
3.1	Pull lay	B.2.10
3.2	Sensor "Double sheet detector"	B.2.11
3.3	Sensor "Sheet alignment monitor"	B.2.12
3.4	Sheet stop finger	B.2.13
3.5	Air filter "Suction air, pull lay/suction drive roller"	B.2.14
3.6	Drive belt, pull lay drive / printing unit 1	B.2.16
3.7	Cover guide	B.2.17
4	Rotary valve "Vacuum control/suction tape"	B.2.19
4.1	Rotary valve "Vacuum control/suction tape"	B.2.19
5	Transfer gripper	B.2.21
5.1	Gripper systems	B.2.21
5.2	Transfer gripper drive	B.2.22
6	Feed cylinder without UV interdeck dryer	B.2.24
6.1	Gripper system	B.2.24
6.2	The "Sheet detection feed cylinder" sensor	B.2.25
7	Feed cylinder with UV interdeck dryer	B.2.27
7.1	Gripper system	B.2.27
7.2	The "Sheet detection feed cylinder" sensor	B.2.28
8	Sheet travel monitor	B.2.30
8.1	Sensor "Sheet travel monitor"	B.2.30
9	Impression control mechanism	B.2.32
9.1	Bearers	B.2.32
10	Impression cylinder without UV interdeck dryer	B.2.34
10.1	Gripper systems	B.2.34
11	Impression cylinder with UV interdeck dryer	B.2.36
11.1	Gripper systems	B.2.36
12	Prinect Inpress Control	B.2.38
12.1	Measuring bar	B.2.38
12.2	Hand-held spectrophotometer	B.2.42
13	Ink mist extraction device (only on printing presses with UV interdeck dryer)	B.2.43
13.1	Filter case	B.2.43
14	Impression cylinder washup device	B.2.45
14.1	Impression cylinder washup device	B.2.45
14.2	Spray tubes	B.2.47

15	AutoPlate Advanced plate changer	B.2.49
	15.1 Holding device	B.2.49
16	AutoPlate XL plate changer	B.2.53
	16.1 Holding device	B.2.53
	16.2 Delivery-side cylinder guard	B.2.54
	16.3 Pressing roller	B.2.58
	16.4 Plate cylinder	B.2.59
17	Blanket cylinder	B.2.60
	17.1 Cylinder surface	B.2.60
18	Blanket washup device	B.2.61
	18.1 Blanket washup device	B.2.61
19	Suction brush	B.2.66
	19.1 Suction brush	B.2.66
20	Inking unit	B.2.68
	20.1 Inking unit	B.2.68
	20.2 Ink fountain	B.2.68
21	Inking roller washup device	B.2.70
	21.1 Inking roller washup device	B.2.70
	21.2 Washup blade	B.2.72
22	Washing fluid container	B.2.74
	22.1 Washing fluid container	B.2.74
23	Dampening system	B.2.76
	23.1 Rider roller	B.2.76
	23.2 Water pan roller and metering roller	B.2.77
24	Transfer drum without UV interdeck dryer	B.2.78
	24.1 Gripper systems	B.2.78
25	Transfer drum with UV interdeck dryer	B.2.80
	25.1 Gripper systems	B.2.80
26	Variable transfer drum without UV interdeck dryer	B.2.82
	26.1 Gripper system	B.2.82
	26.2 Swing frame and cylinder shells	B.2.83
	26.3 Cylinder surface	B.2.86
27	Storage drum	B.2.87
	27.1 Gripper system	B.2.87

27.2	Sucker bar	B.2.88
27.3	Movable part	B.2.91
28	Reversing drum	B.2.93
28.1	Gripper system	B.2.93
28.2	Bearing	B.2.97
28.3	Cylinder surface	B.2.98
29	Impression cylinder (P)	B.2.99
29.1	Gripper system	B.2.99
30	Sheet control	B.2.101
30.1	Fan row underneath the reversing drum	B.2.101
31	Perfector	B.2.103
31.1	Sensor "Missing sheet detector"	B.2.103
31.2	Stop lever	B.2.105
Maintenance on the intermediate unit		B.3.1
1	Intermediate unit - safety instructions	B.3.3
1.1	To be observed when working at the press	B.3.3
2	Overview of the maintenance points on the intermediate unit	B.3.5
2.1	Overview	B.3.5
3	Transfer drum	B.3.6
3.1	Gripper systems	B.3.6
4	Impression cylinder	B.3.8
4.1	Gripper systems	B.3.8
Maintenance on the coating unit		B.4.1
1	Coating unit - safety instructions	B.4.3
1.1	To be observed when working at the press	B.4.3
1.2	Chambered blade system	B.4.5
2	Overview of the maintenance points on the coating unit	B.4.6
2.1	Overview	B.4.6
3	Transfer drum without UV interdeck dryer and without LYYL	B.4.7
3.1	Gripper systems	B.4.7
4	Transfer drum with UV interdeck dryer or LYYL	B.4.9
4.1	Gripper systems	B.4.9
5	Sheet travel monitor	B.4.11
5.1	Sensor "Sheet travel monitor"	B.4.11

6	Impression cylinder without UV interdeck dryer and without LYYL	B.4.12
6.1	Gripper systems	B.4.12
7	Impression cylinder with UV interdeck dryer or LYYL	B.4.14
7.1	Gripper systems	B.4.14
8	Chambered blade system	B.4.16
8.1	Screen roller	B.4.16
8.2	Roller locks	B.4.17
8.3	Level sensor	B.4.18
9	Varnish supply	B.4.19
9.1	Sensor "Insufficient varnish flow"	B.4.19
Maintenance on the delivery		B.5.1
1	Delivery - safety instructions	B.5.3
1.1	To be observed when working at the press	B.5.3
1.2	Pile guide rail and pile transport	B.5.5
2	Overview of the maintenance points on the delivery	B.5.6
2.1	Overview	B.5.6
3	Sheet transport without UV end-of-press dryer	B.5.7
3.1	Gripper system	B.5.7
3.2	Gripper opening cam	B.5.8
3.3	Chain guide	B.5.9
4	Sheet transport with UV end-of-press dryer	B.5.11
4.1	Gripper system	B.5.11
4.2	Gripper opening cam	B.5.12
4.3	Chain guide	B.5.13
5	Sheet brake system	B.5.15
5.1	Sheet brake module	B.5.15
5.2	Module support	B.5.18
5.3	Drive	B.5.19
6	Sheet joggers	B.5.24
6.1	Front edge system	B.5.24
7	Non-stop device	B.5.27
7.1	Guide rail	B.5.27
8	Pile guidance and pile transport	B.5.28
8.1	Pile guidance and pile transport	B.5.28

9	Sheet decurler	B.5.30
	9.1 Sheet decurler	B.5.30
10	Sheet guide	B.5.31
	10.1 Sheet guide plates and powder deflectors	B.5.31
11	Air supply	B.5.35
	11.1 Air filters "Sheet brake" and "Sheet decurler"	B.5.35
	11.2 Air filter for the sheet guide plate blower	B.5.38
12	CleanStar	B.5.40
	12.1 Suction ducts	B.5.40
Maintenance on the entire press		B.6.1
1	Entire press - safety instructions	B.6.3
	1.1 To be observed when working at the press	B.6.3
2	Overview of the maintenance points on the entire press	B.6.5
	2.1 Overview	B.6.5
3	Suction unit	B.6.6
	3.1 Suction unit	B.6.6
4	Central oil lubrication	B.6.8
	4.1 Central oil lubrication	B.6.8
5	Main motor	B.6.12
	5.1 Main motor ≥ 90 kW	B.6.12
	5.2 Main motor 120 kW	B.6.14
6	Control cabinet of the SinuSynchro main driving motor	B.6.16
	6.1 Air filter	B.6.16
7	Prinect Press Center	B.6.18
	7.1 Filter fan	B.6.18
	7.2 Standard daylight lamp	B.6.20
8	Prinect Axis Control	B.6.22
	8.1 Prinect Axis Control	B.6.22
9	Wallscreen	B.6.24
	9.1 Air filter	B.6.24
Maintenance by service technicians		B.7.1
1	Maintenance work with service support: Feeder	B.7.3
	1.1 Feeder	B.7.3

2	Maintenance work with service support: Printing unit	B.7.6
2.1	Printing unit	B.7.6
3	Maintenance work with service support: Intermediate unit	B.7.10
3.1	Intermediate unit	B.7.10
4	Maintenance work with service support: Coating unit	B.7.11
4.1	Coating unit	B.7.11
5	Maintenance work with service support: Delivery	B.7.13
5.1	Delivery	B.7.13
6	Maintenance work with service support: General press	B.7.15
6.1	Entire press	B.7.15

Maintenance on the feeder

1	Feeder - safety instructions	B.1.3
1.1	To be observed for all work	B.1.3
1.2	Pile guidance and pile transport	B.1.3
2	Overview of the maintenance points on the feeder	B.1.4
2.1	Overview	B.1.4
3	Preloading device	B.1.6
3.1	Stop bars	B.1.6
4	Non-stop device	B.1.7
4.1	Non-stop device	B.1.7
5	Automatic non-stop device	B.1.10
5.1	Automatic non-stop device	B.1.10
5.2	Protective roller blinds	B.1.12
6	Suction head	B.1.14
6.1	Suction head	B.1.14
7	Feed table	B.1.18
7.1	Suction tape	B.1.18
8	Feeder drive	B.1.19
8.1	Forwarding roller shaft	B.1.19
9	Pneumatic system	B.1.20
9.1	Compressed-air control unit	B.1.20
10	Air supply	B.1.23
10.1	Blower "Suction air for suction tape"	B.1.23
11	Central grease lubrication	B.1.25
11.1	Central grease lubrication	B.1.25

ES_904_0057-000FEEDERL_03

1 Feeder - safety instructions

1.1 To be observed for all work



Warning - Risk of injury!

When you perform maintenance work, observe all notes on safety contained in the operating manual.



Warning - Risk of injury from moving parts!

Pay particular attention to moving parts and hazards in the material in-feed area during work on the feeder. Do not reach into the gap of the material infeed.



Warning - Risk of explosion and fire due to dust deposits!

Dust, such as powder or paper dust, can pose a risk of fire or explosion. You should therefore clean the areas affected by dust regularly, at least once a week, using a vacuum cleaner. Only use suitable and approved industrial vacuum cleaners and avoid working with compressed air, as this could swirl up the dust.

1.2 Pile guidance and pile transport



Warning - Risk of injury from moving pile carrier!

Prior to raising or lowering the pile support plate: Ensure by means of a visual inspection that no one is standing in the hazardous area of moving parts and that nothing can be jammed underneath the pile support plate.

When the press is switched on: Never stand underneath the pile support plate. Do not sit on the pile support plate. Do not ride on the pile support plate.

FS.B14_028-000KERN_00

2 Overview of the maintenance points on the feeder

2.1 Overview

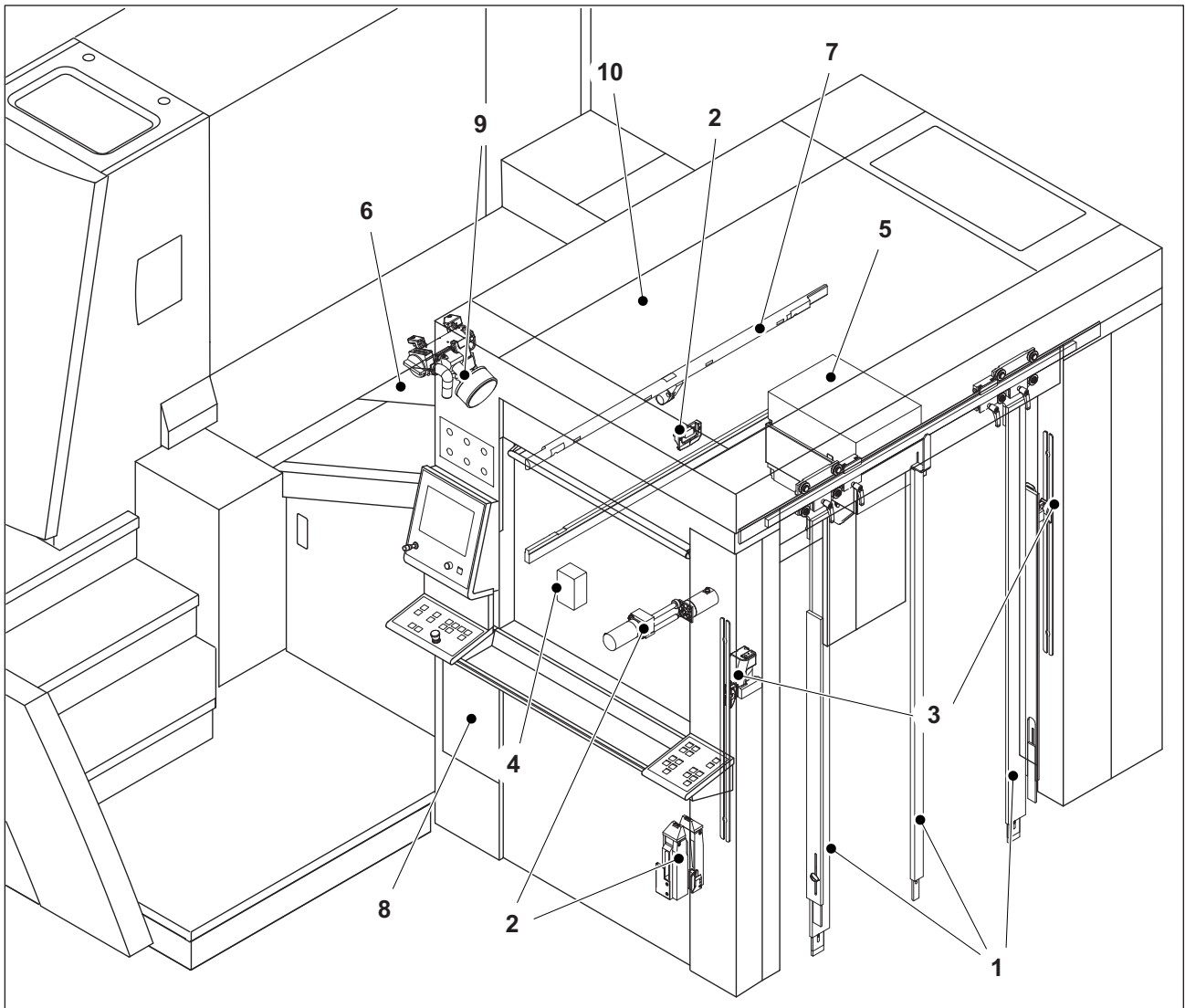


Fig. 1 Maintenance points on the feeder

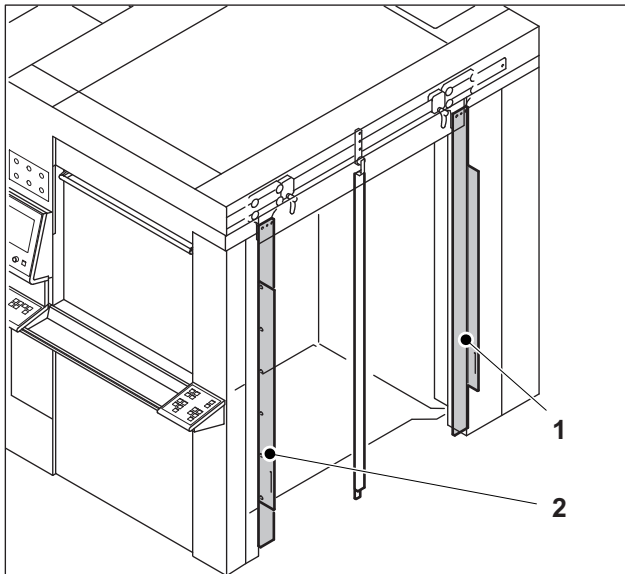
- 1 Maintenance points on the preloading device
- 2 Maintenance points on the pile guide rail and the pile transport
- 3 Maintenance points on the non-stop device
- 4 Maintenance points on the automatic non-stop device
- 5 Maintenance points on the suction head
- 6 Maintenance points on the feed table
- 7 Maintenance points on the feeder drive
- 8 Maintenance points on the pneumatic system
- 9 Maintenance points on the air supply

10 Maintenance points on the central grease lubrication

FS.BM.0027-000KERN_00

3 Preloading device

3.1 Stop bars



FS.BM.0096-000KERN_00

Place of installation

- 1 Stop bar D.S.
- 2 Stop bar O.S.

The stop bars of the preloading device are fitted on D.S. and O.S.

Fig. 2 Place of installation of the stop bars

3.1.1 Cleaning the stop bars

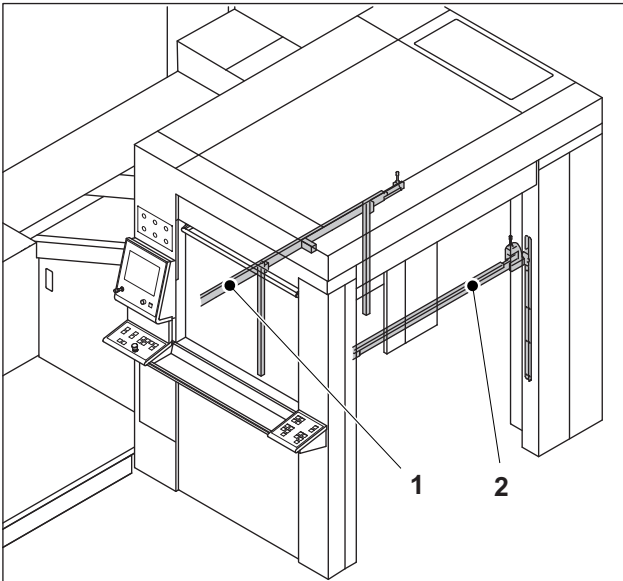
Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S. / O.S.
Access to the lubricating points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean the stop bars.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 1

FS_B04_0026-000FRONT_00

4 Non-stop device

4.1 Non-stop device



FS_B04_0097-000FRONT_00

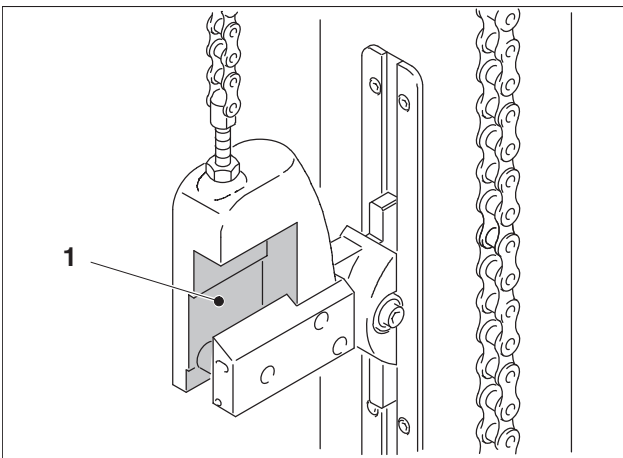
Place of installation

- 1 Rear non-stop bar
- 2 Front non-stop bar

The guide rails of the front and rear non-stop bars are fitted on D.S. and O.S.

Fig. 3 Place of installation of the non-stop device

4.1.1 Cleaning the suspension



FS_521_0001-000FRONT_00

- 1 Suspension of the rear non-stop bar O.S.

Fig. 4 Suspension of the rear non-stop bar O.S.

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Access to the lubricating points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean 2 suspensions of the rear nonstop bar.
Required resources	Soft, lint-free cloth; paint brush; approved industrial vacuum cleaner

Tab. 2

4.1.2 Cleaning the rear guide rails

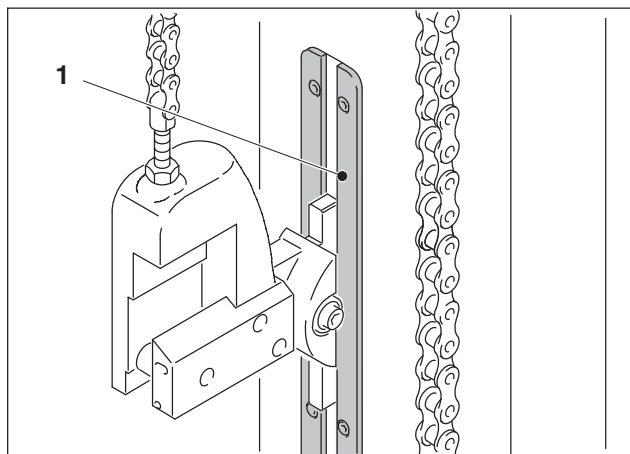


Fig. 5 Guide rail of the rear non-stop bar O.S.

1 Guide rail O.S.

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Access to the lubricating points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean 2 guide rails of the rear non-stop bar from top to bottom.
Required resources	Soft, lint-free cloth; paint brush; approved industrial vacuum cleaner

Tab. 3

4.1.3 Cleaning the guides

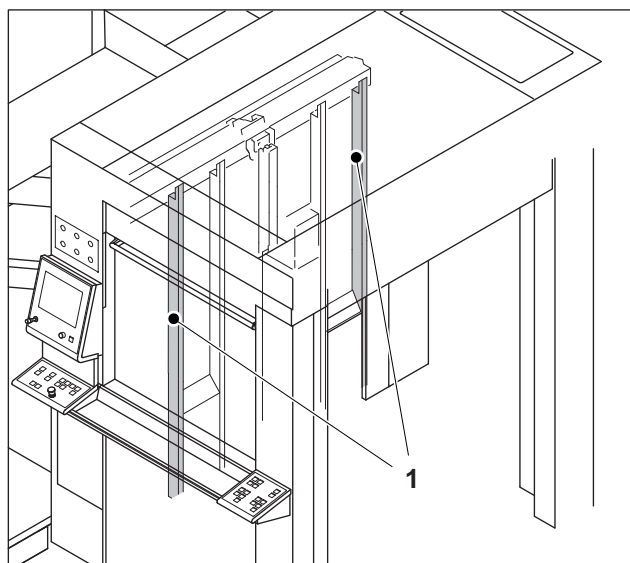


Fig. 6 Guides of the front non-stop bar

1 Guides of the front non-stop bar

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Access to the lubricating points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean 2 guides of the front non-stop bar from top to bottom.
Required resources	Soft, lint-free cloth; paint brush; approved industrial vacuum cleaner

Tab. 4

4.1.4 Cleaning the sensor "Main pile detection in non-stop mode"

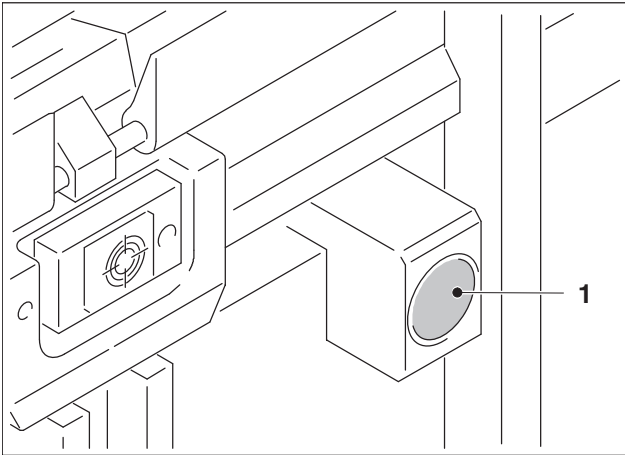


Fig. 7 Sensor "Main pile detection in non-stop mode"

1 Sensor "Main pile detection in non-stop mode"

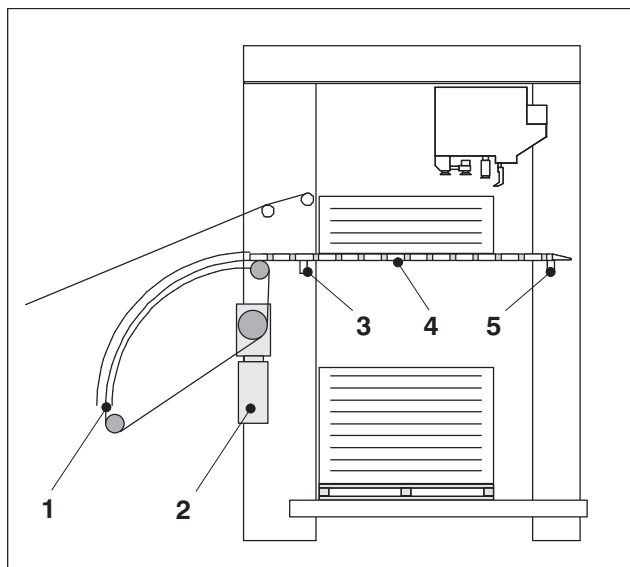
Description of the maintenance point	
Maintenance interval	IV
Maintenance location	Center
Access to the lubricating points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean the sensor.
Required resources	Soft, lint-free cloth; paint brush; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 5

FS.B14.0025-0007ERR1_00

5 Automatic non-stop device

5.1 Automatic non-stop device



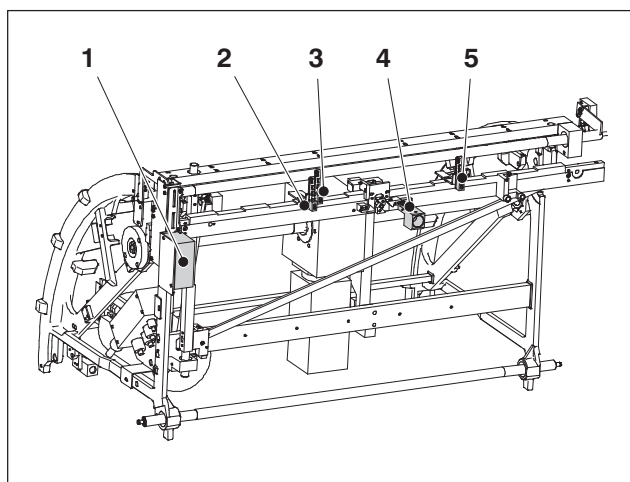
FS.B17.0000-0006ERR1_00

Place of installation

- 1 Drive chain of nonstop rods
- 2 Drive of non-stop rods
- 3 Front non-stop bar
- 4 Non-stop rods
- 5 Rear non-stop bar

Fig. 8 Place of installation of the automatic non-stop device

5.1.1 Cleaning the sensors



FS.B17.0001-0006ERR1_00

- 1 Sensor "Position of main pile relative to auxiliary pile"
- 2 Sensor "Horizontal pallet position 1"
- 3 Sensor "Vertical pallet position"
- 4 Sensor "Main pile detection in non-stop mode"
- 5 Sensor "Horizontal pallet position 2"

Fig. 9 Sensors on the non-stop rake system

Description of the maintenance point	
Maintenance interval	I
Maintenance location	-
Accessing the maintenance point	Secure the press against being started up: Press the <i>Emergency stop</i> button on the nearest control panel.
Number/type/maintenance work	Clean the sensors: <ul style="list-style-type: none"> • "Position of main pile relative to auxiliary pile" • "Horizontal pallet position 1" • "Vertical pallet position" • "Main pile detection in non-stop mode" • "Horizontal pallet position 2"
Required resources	Soft, lint-free cloth

Tab. 6

5.1.2 Cleaning the suspension

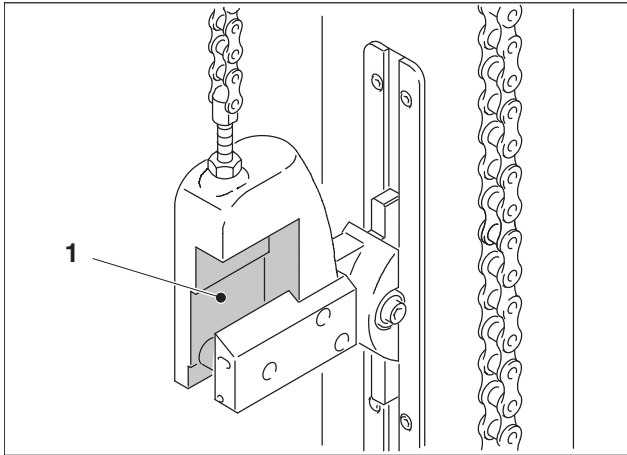


Fig. 10 Suspension of the rear non-stop bar D.S.

1 Suspension of the rear non-stop bar D.S.

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Access to the lubricating points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean 2 suspensions of the rear nonstop bar.
Required resources	Soft, lint-free cloth; paint brush Approved industrial vacuum cleaner

Tab. 7

5.1.3 Cleaning the guide rails

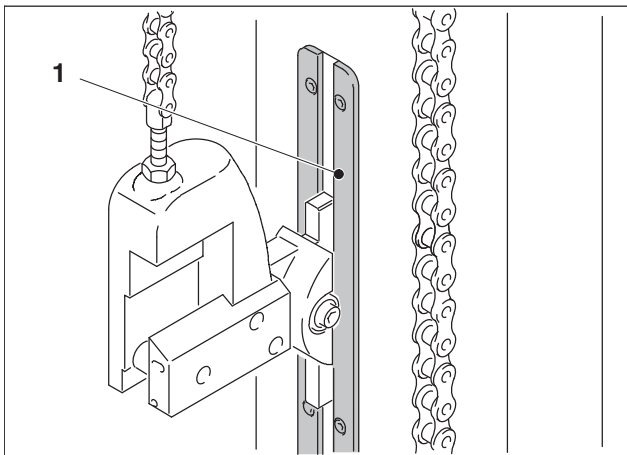


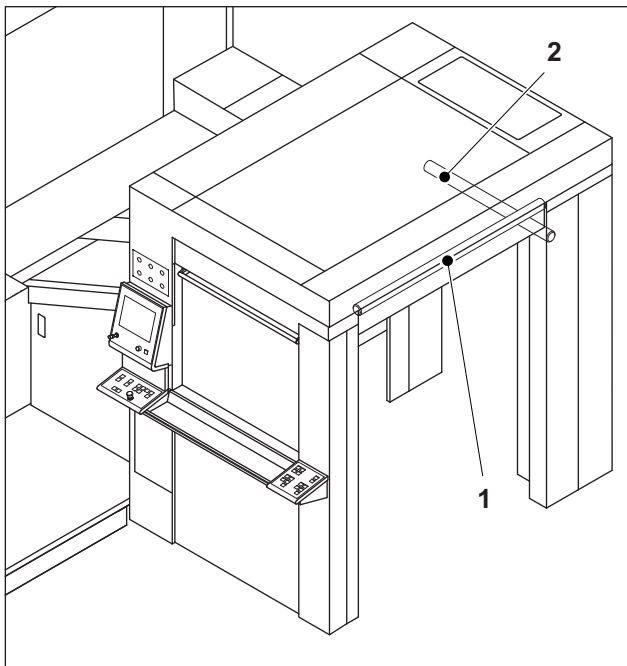
Fig. 11 Guide rail of the rear non-stop bar D.S.

1 Guide rail D.S.

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Access to the lubricating points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean 2 guide rails of the rear non-stop bar from top to bottom.
Required resources	Soft, lint-free cloth; paint brush Approved industrial vacuum cleaner

Tab. 8

5.2 Protective roller blinds



FS_B04_0039-00GRAND_00

Place of installation

- 1** Safety shutter, face side
- 2** Safety shutter D.S.

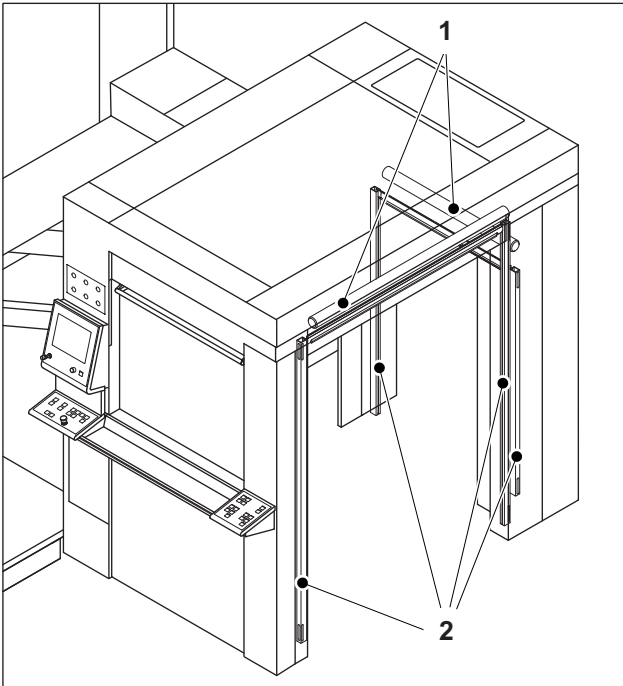
Fig. 12 Place of installation of the safety shutters of the automatic non-stop device

5.2.1 Cleaning the safety shutters

Description of the maintenance point	
Maintenance interval	II
Maintenance location	Face side and D.S.
Accessing the maintenance point	Open the "Feeder" guard. Set the safety shutter to the desired position.
Number/type/maintenance work	Clean 2 safety shutters.
Required resources	Soft, lint-free cloth

Tab. 9

5.2.2 Cleaning the guide rails of the safety shutters



- 1 Safety shutter
- 2 Guide rails

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	Face side and D.S.
Accessing the maintenance point	Open the "Feeder" guard. Set the safety shutter to the desired position.
Number/type/maintenance work	Clean 4 guide rails of the safety shutters.
Required resources	Soft, lint-free cloth; paint brush; brush

Tab. 10

Fig. 13 Guide rails of the safety shutters

FS-994.0002-0007KERNL_00

6 Suction head

6.1 Suction head

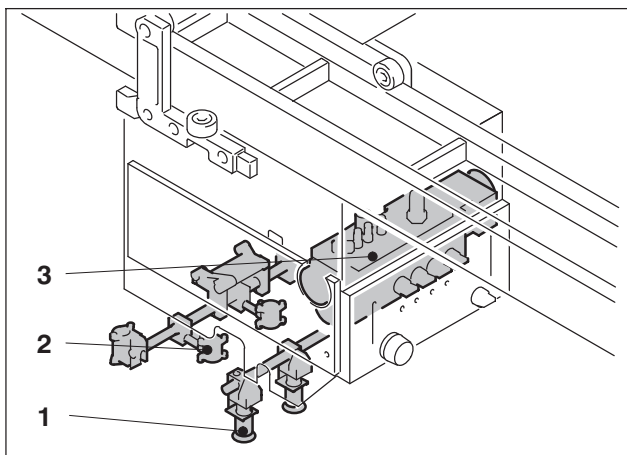


Fig. 14 Place of installation of the suction head

Place of installation

- 1 Lifting sucker
- 2 Forwarding sucker
- 3 Rotary valve

The suction head is mounted above the feeder pile.

6.1.1 Cleaning and checking the lifting suckers

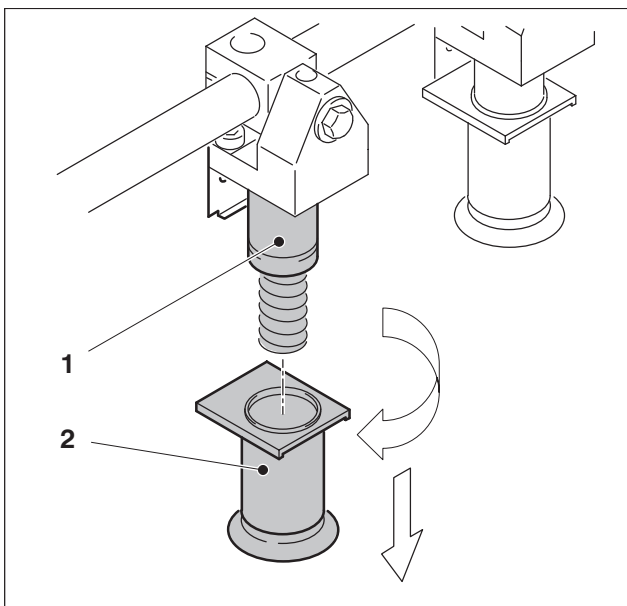


Fig. 15 Lifting sucker

- 1 Lifting sucker guide
- 2 Lifting sucker

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Maintenance work	Clean and check 4 lifting suckers. Note: Do not lubricate!
Required resources	Soft, lint-free cloth; paint brush; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 11

Mounting and demounting

1. Rotate the lifting sucker (Fig. 15/2) through 90°, and remove it.
2. Clean lifting sucker guide (Fig. 15/1) and lifting sucker (Fig. 15/2).
3. Mount the lifting sucker.
4. Check the smooth functioning of the installed lifting suckers.

6.1.2 Checking the suction discs of the lifting suckers and replacing them if necessary

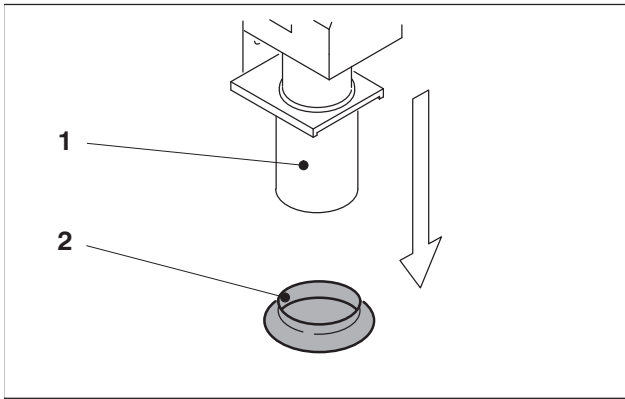


Fig. 16 Suction discs

- 1 Lifting sucker
- 2 Suction disc

Description of the maintenance point	
Maintenance interval	I
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Maintenance work	Check the suction discs of the lifting suckers for wear and porosity. If necessary, replace the suction discs.

Tab. 12

6.1.3 Cleaning and checking the forwarding suckers

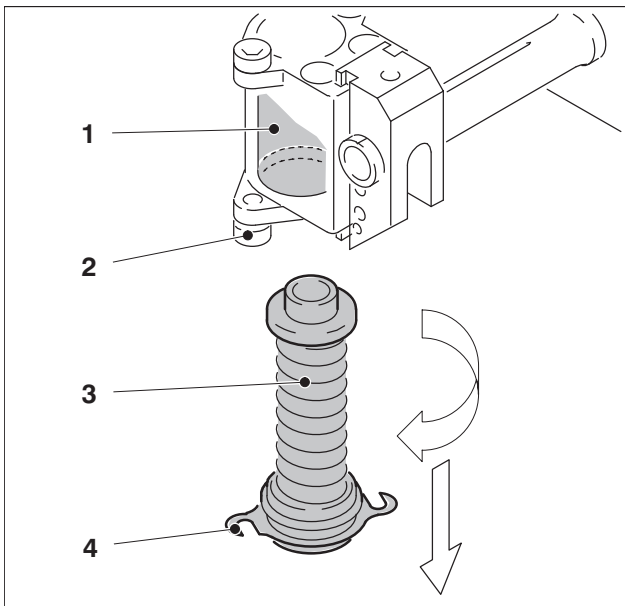


Fig. 17 Forwarding sucker

- 1 Forwarding sucker housing
- 2 Allen screw
- 3 Forwarding sucker
- 4 Bayonet catch

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Maintenance work	Remove and clean 5 forwarding suckers. Clean the forwarding sucker housing. Check the smooth functioning of the mounted forwarding suckers. Note: Do not lubricate!
Required resources	Soft, lint-free cloth; paint brush; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 13

Mounting and demounting

- 1. Slacken the Allen screws (Fig. 17/2). Turn the bayonet catch (Fig. 17/4) anti-clockwise to re-

1. Release it and remove the forwarding sucker (Fig. 17/3).
2. Clean the forwarding sucker (Fig. 17/3) and the forwarding sucker housing (Fig. 17/1).
3. Mount the forwarding sucker.
4. Check the smooth functioning of the installed forwarding suckers.

6.1.4 Cleaning the rotary valve

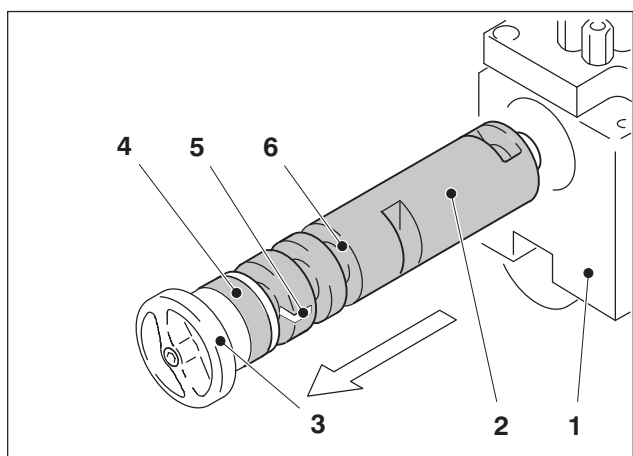


Fig. 18 Rotary valve, valve ports, and surface

- 1 Suction head housing
- 2 Rotary valve surface
- 3 Cover plate
- 4 Bearing surface
- 5 Mark
- 6 Valve ports

Description of the maintenance point	
Maintenance interval	III
Maintenance location	O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel. Loosen and remove the rotary valve.
Maintenance work	Clean the valve ports, rotary valve surface, and bearing surface. Note: Do not lubricate!
Required resources	Soft, lint-free cloth; paint brush; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 14



Caution - Risk of damage!

During any work on the rotary valve you must ensure that the surface is not damaged.

Mounting and demounting

1. Press the cover plate (Fig. 18/3) slightly towards the inside and remove it by turning it anti-clockwise.
2. Pull out the rotary valve (Fig. 18/2), together with the cover plate (Fig. 18/3).

3. Clean the valve ports and the surface at the rotary valve (Fig. 18), and the bearing surface (Fig. 18/4).
4. For installation, set the mark (Fig. 18/5) on the rotary valve to the 3-o'clock position. Insert the rotary valve into the suction head housing (Fig. 18/1). Turn the cover plate clockwise to lock it.

FS.B14.0024-0007KERN_00

7 Feed table

7.1 Suction tape

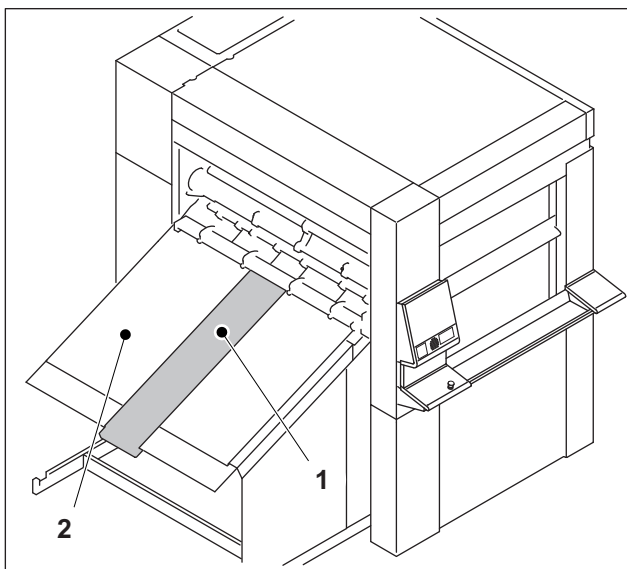


Fig. 19 Place of installation of the suction tape

Place of installation

- 1 Suction tape
- 2 Feed table

The suction tape is installed in the center of the feed table.

7.1.1 Checking the suction tape

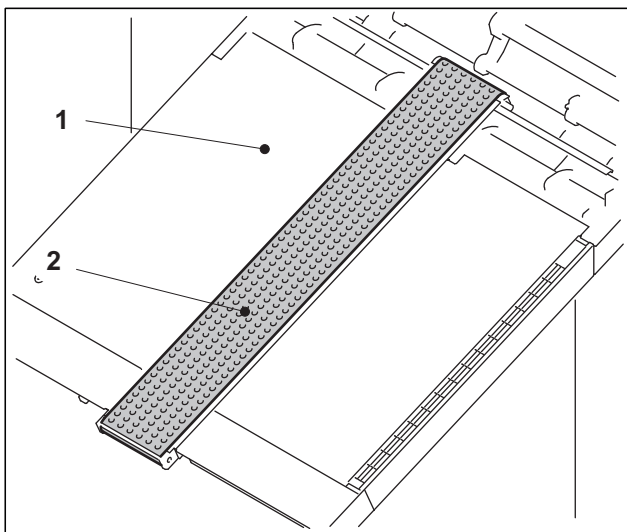


Fig. 20 Feed table with suction tape

- 1 Feed table
- 2 Suction tape

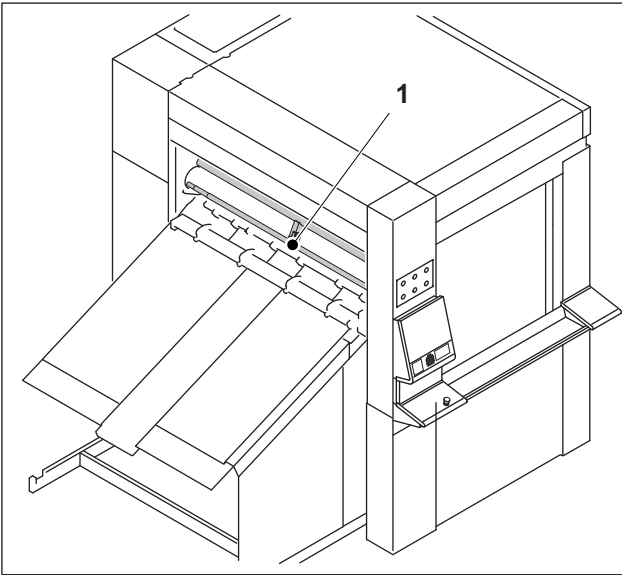
Description of the maintenance point	
Maintenance interval	III
Maintenance location	Center
Accessibility of the maintenance points	Open the "Feeder" guard. Engage the feeder.
Number/type/maintenance work	Go along the complete suction tape once. Visually check the suction tape for damage, for example turned-up edges and wear. Adjust the tension of the suction tape or replace the suction tape, if necessary. See operating manual, "Feeder" chapter.

Tab. 15

FS.B04.0023-000FEEDNL_00

8 Feeder drive

8.1 Forwarding roller shaft



FS.B04.0107-000FRAND_00

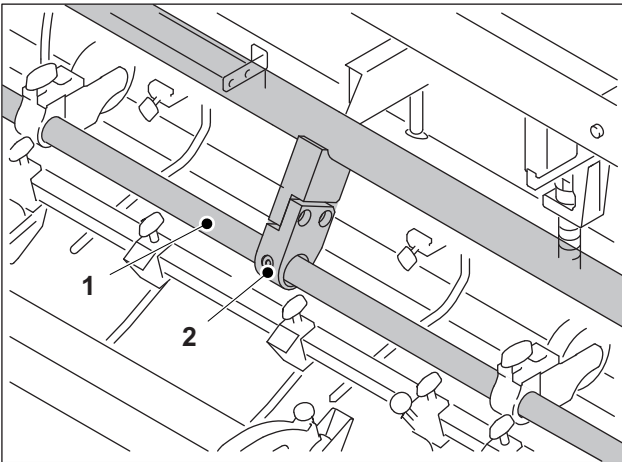
Place of installation

- 1 Forwarding roller shaft with middle bearing

The forwarding roller shaft is installed at the end of the feed table, before the pile.

Fig. 21 Place of installation of the forwarding roller shaft

8.1.1 Lubricating the middle bearing



FS.B04.0108-000BRAND_00

- 1 Forwarding roller shaft
- 2 Middle bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	Center
Accessibility of the maintenance points	Perform the maintenance work.
Number/type/maintenance work	Lubricate 1 recessed grease nipple.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Fig. 22 Feeder drive with middle bearing and forwarding roller shaft

Tab. 16

FS.BM.022-0007ERR1_00

9 Pneumatic system

9.1 Compressed-air control unit

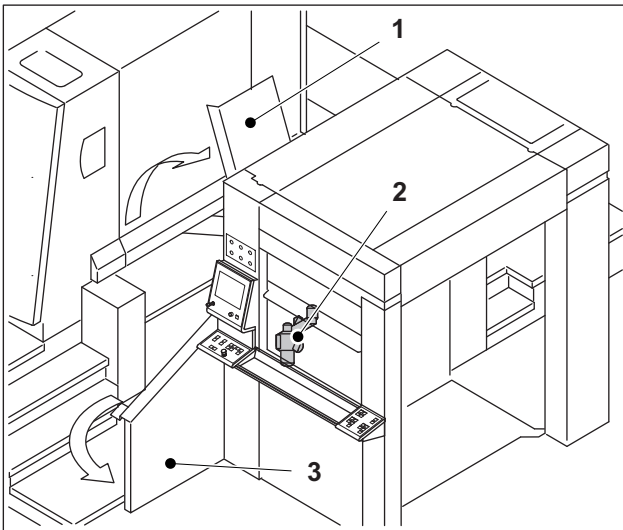


Fig. 23 Place of installation of the compressed-air control unit on presses without automatic non-stop device

Place of installation without automatic non-stop device

- 1 Feed table
- 2 Compressed-air control unit
- 3 "Feeder" guard

The compressed-air control unit is installed on O.S. underneath the feed table.

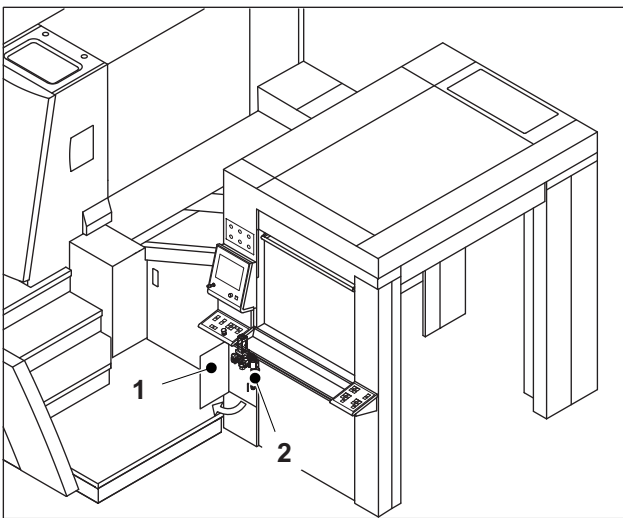


Fig. 24 Place of installation of the compressed-air control unit on presses with automatic non-stop device

Place of installation with automatic non-stop device

- 1 Flap in "Feeder guard" O.S.
- 2 Compressed-air control unit

The compressed-air control unit is fitted behind the flap in the "feeder guard" on O.S.

9.1.1 Checking the condensate level

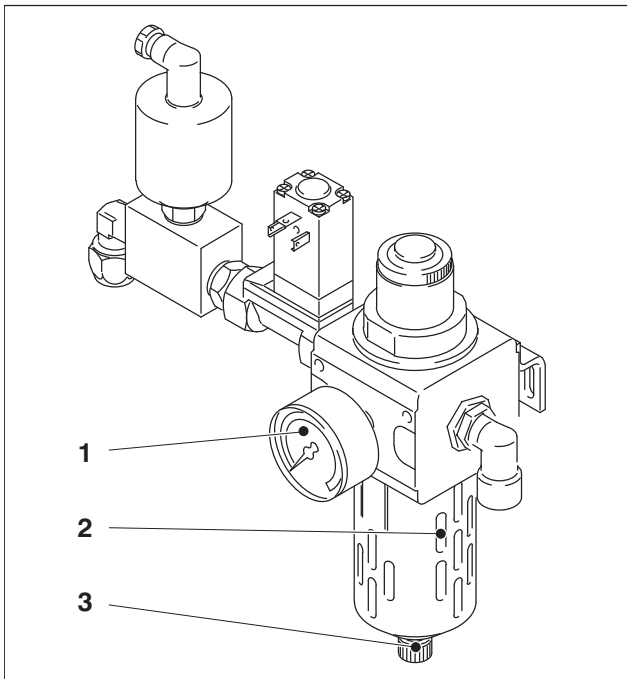


Fig. 25 Compressed-air control unit with burst guard

- 1 Manometer
- 2 Condensation tank with burst protection
- 3 Drain plug



Caution - Press damage!

The condensation tank of the compressed-air control unit must never be filled with condensate. Otherwise, the condensation water may penetrate into the pneumatic system and destroy pneumatic valves and cylinders.

Description of the maintenance point	
Maintenance interval	II
Maintenance location	O.S.
Accessing the maintenance point	Open the "Feeder" guard. Swing up the feed table.
Maintenance work	Check the condensate level in the condensation tank. Drain condensation water if necessary. Check the system pressure on the manometer. 6.4 ± 0.3 bar or the pointer must be in the green area.

Tab. 17

Draining condensation water

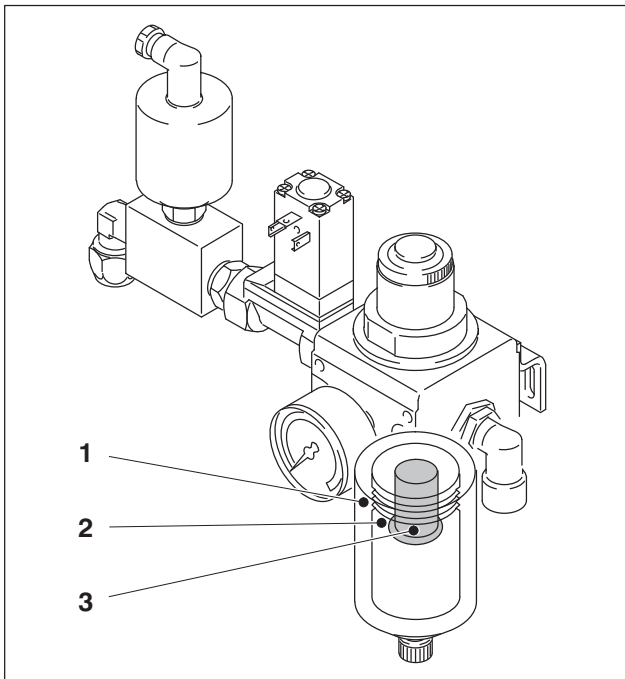


Caution - Press damage!

The system pressure drops (6.4 ± 0.3 bars) when you drain the condensation tank. Never drain the condensation tank during the modes "Production", "Paper run", or "Washup".

1. Open the drain plug until a spray of condensation water emerges.
2. Close the drain plug once the condensation tank has completely been drained.
3. Check on the manometer whether the system pressure is 6.4 ± 0.3 bar and the manometer pointer is in the green area.

9.1.2 Checking and, if necessary, replacing the filter element



- 1 Burst protection
- 2 Condensation tank
- 3 Filter element

Description of the maintenance point	
Maintenance interval	V
Maintenance location	O.S.
Accessing the maintenance point	Open the "Feeder" guard. Swing up the feed table. Remove the burst guard and screw out the condensation tank.
Maintenance work	Check the filter element for soiling. Replace the filter element, if necessary.

Tab. 18

Fig. 26 Filter element



Caution - Press damage!

Switch the printing press off before you replace the filter element of the compressed-air control unit.

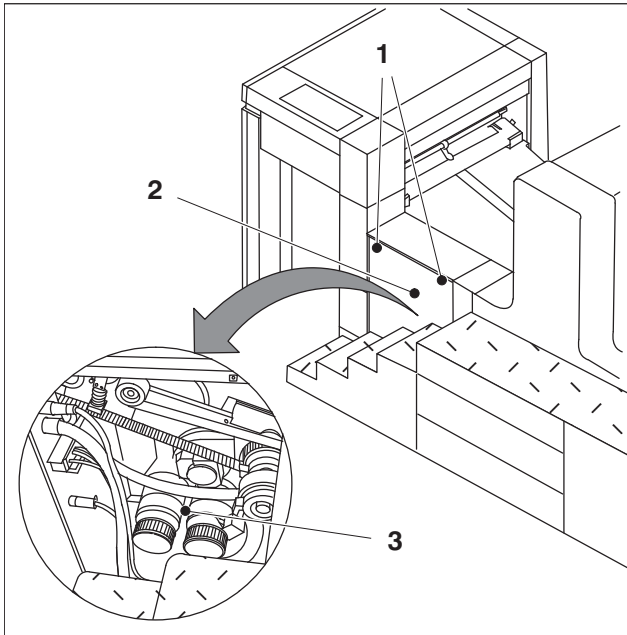
Mounting and demounting

1. Switch off the printing press.
2. Open the drain plug until condensation water escapes (sprays), and the system is completely bled.
3. Remove the burst protection of the condensation tank.
4. Unscrew the condensation tank and check whether the filter element in the tank is soiled.
5. Replace the filter element if necessary.
6. Mount the filter element in the reverse sequence.
7. Switch on the press again.
8. Check on the manometer whether the system pressure is **6.4 ±0.3 bar** and the manometer pointer is in the green area.

FS. 904.0064-000FEEDER_02

10 Air supply

10.1 Blower "Suction air for suction tape"



FS. 904.0029-001GRAND_00

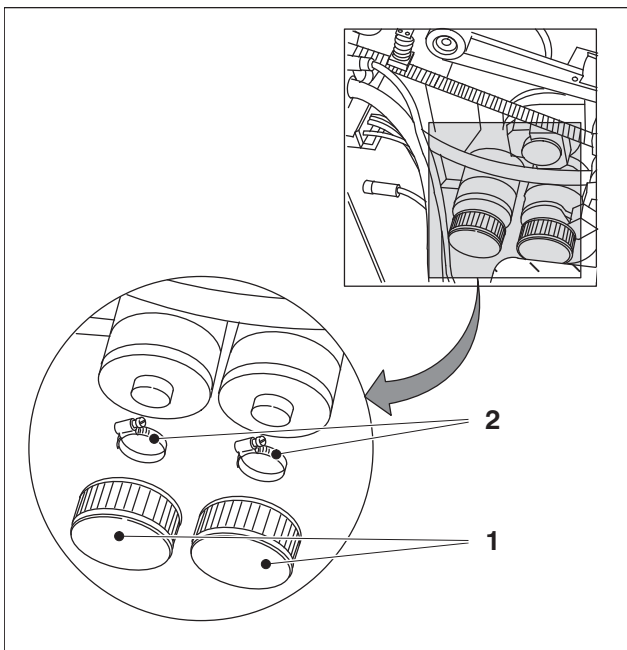
Place of installation

- 1 Allen screws
- 2 Cover on the control cabinet
- 3 Blower "Suction air for suction tape"

The two blowers are fitted behind the cover of the control cabinet on D.S.

Fig. 27 Place of installation of the "Suction tape suction air" blowers

10.1.1 Cleaning the air filter



FS. 904.0028-000GRAND_00

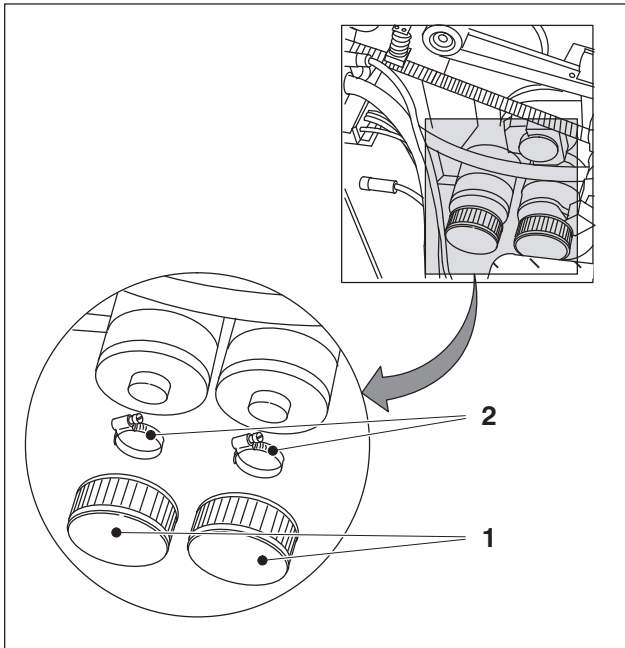
- 1 Air filter
- 2 Pipe clamps

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S.
Access to the lubricating points	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press. Remove the Allen screws and the cover on the control cabinet.
Number/type/maintenance work	Clean 2 air filters. Knock them out carefully or vacuum-clean.
Required resources	Approved industrial vacuum cleaner
Washing fluid	-

Fig. 28 Air filter on the "Suction tape suction air" blowers

Tab. 19

10.1.2 Replace the air filter



FS. 994. 0028-02GRAND_00

- 1 Air filter
- 2 Pipe clamps

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Access to the lubricating points	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press. Remove the Allen screws and the cover on the control cabinet.
Number/type/maintenance work	Replace 2 air filters.
Required resources	-
Washing fluid	-

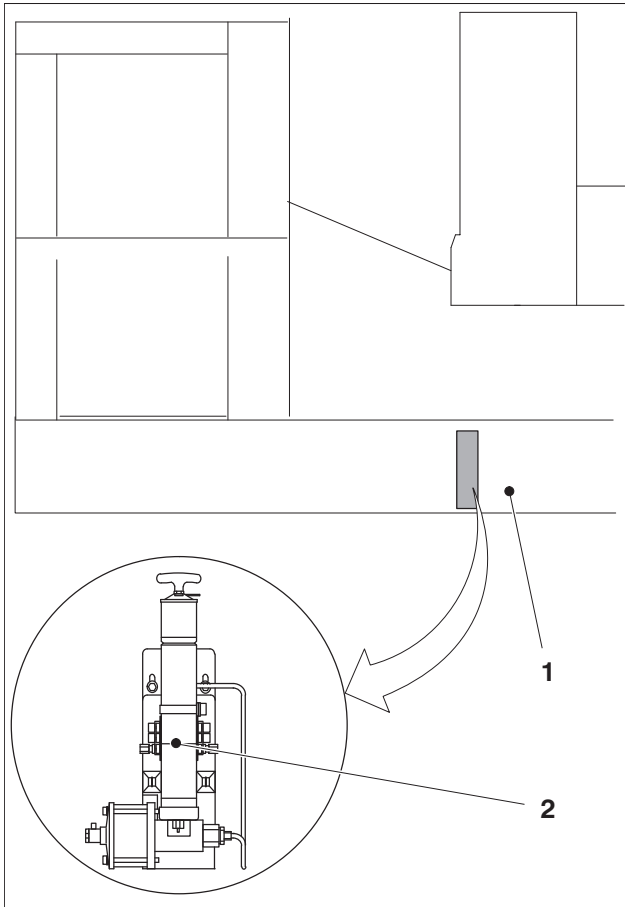
Fig. 29 Air filter on the "Suction tape suction air" blowers

Tab. 20

FS_904_0091-000FEEDER_00

11 Central grease lubrication

11.1 Central grease lubrication



FS_904_0041-000FEEDER_00

Place of installation

- 1 Base
- 2 Grease pump

The grease pump (Fig. 30/2) is secured on D.S. under the footboard on the base (Fig. 30/1).



Caution - Damage and failure of the press!

Using the press unlubricated will damage it and lead to failures. A dry-running counter saves the number of revolutions turned without lubrication. The stored value can be retrieved by the service department of your Heidelberg agency.

Fig. 30 Place of installation of the grease pump

11.1.1 Examining the grease cartridge

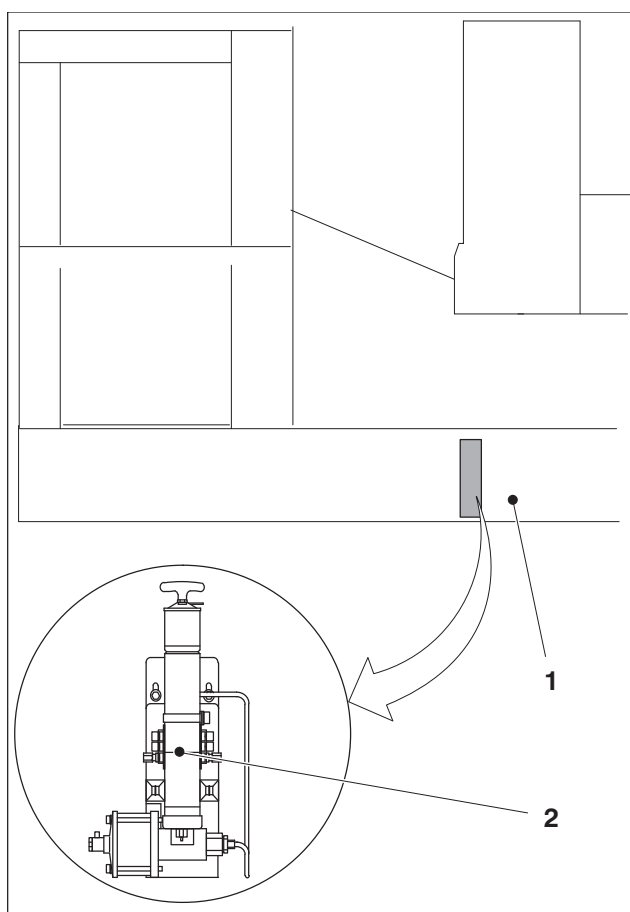


Fig. 31 Grease pump

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Access to the lubricating points	Remove the footboard guard. See "Mounting and demounting".
Number/type/maintenance work	Observe the message <i>Malfunction, Feeder grease cartridge empty</i> in the Malfunction/Central lubrication system menu. If necessary, replace the grease cartridge.
Required resources	Grease cartridge A03
Washing fluid	Note "Approved lubricants".

Tab. 21

► **Note**
 The lubricant in the grease cartridge is sufficient for approximately 100,000,000 to 150,000,000 revolutions of the printing press (around 3-4 years).

Mounting and demounting

1. Change the grease cartridge when the message *Malfunction, Feeder grease cartridge empty* appears in the **Malfunction/Central lubrication** menu.
2. Switch the main switch to *OFF*.
3. Remove the footboard guard.

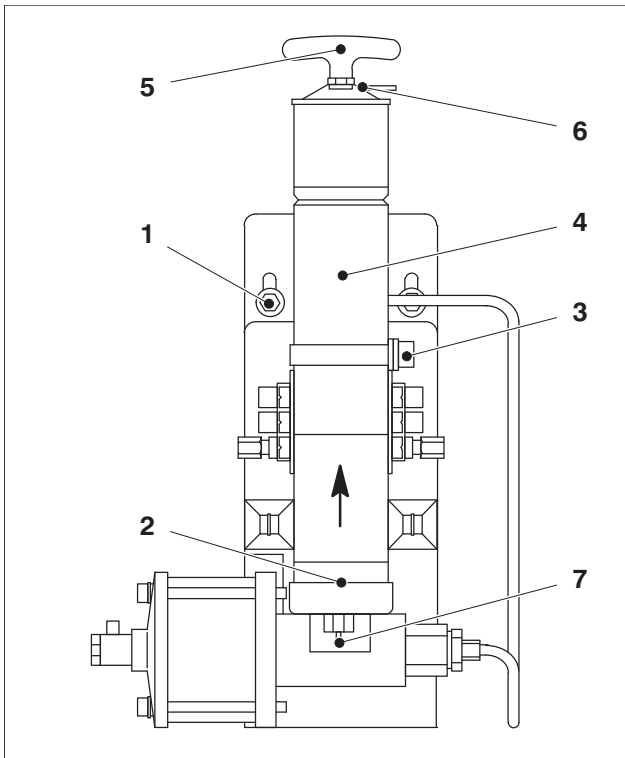


Fig. 32 Grease cartridge

- 1 Allen screw
 - 2 Thread area on the pump
 - 3 Clamp clip
 - 4 Pressure pipe
 - 5 Handle with rod
 - 6 Locking element for pressing rod
 - 7 Air-relief valve
4. Open the Allen screw (Fig. 32/1) slightly.
 5. Lift the grease pump off the groove boreholes and put it down on the footboard.
 6. Prior to changing the cartridge, clean the pressure pipe thread area (Fig. 32/2) of the pump.
 7. Open the clamp clip (Fig. 32/3).
 8. Hold the rod at the handle (Fig. 32/5), pull it out and lock it.
 9. Unscrew the pressure pipe (Fig. 32/4).
 10. Remove the empty cartridge from the pressure pipe.

► **Note**

Please contact the Heidelberg Service if the message *Malfunction, Feeder grease cartridge empty* appears in the **Malfunction/Central lubrication** menu, when the cartridge is not actually empty.

11. Remove the plastic cap from the new cartridge.
12. Insert the new cartridge, opening first, into the pressure pipe.
13. Turn the cartridge in the direction of the arrow fully home into the pressure pipe.
14. Cut off the bottom of the cartridge with a knife.
15. Screw on the pressure pipe firmly.
16. Close the clamp clip.
17. Press the lever (Fig. 32/6) to release the bar locking device, and push in the rod.
18. Press the air-relief valve (Fig. 32/7).
19. Mount the grease pump underneath the footboard.
20. Mount the footboard guard.
21. Press the *Manual lubrication* button in the **Malfunction/Central lubrication** menu. The cause of the fault disappears from the list window after the lubrication process.

Maintenance on the printing unit

1	Printing unit - safety instructions	B.2.5
1.1	To be observed for all work	B.2.5
1.2	Washing fluid container	B.2.7
1.3	Inking unit	B.2.7
2	Overview of the maintenance points on the printing unit	B.2.8
2.1	Overview	B.2.8
3	Sheet alignment	B.2.10
3.1	Pull lay	B.2.10
3.2	Sensor "Double sheet detector"	B.2.11
3.3	Sensor "Sheet alignment monitor"	B.2.12
3.4	Sheet stop finger	B.2.13
3.5	Air filter "Suction air, pull lay/suction drive roller"	B.2.14
3.6	Drive belt, pull lay drive / printing unit 1	B.2.16
3.7	Cover guide	B.2.17
4	Rotary valve "Vacuum control/suction tape"	B.2.19
4.1	Rotary valve "Vacuum control/suction tape"	B.2.19
5	Transfer gripper	B.2.21
5.1	Gripper systems	B.2.21
5.2	Transfer gripper drive	B.2.22
6	Feed cylinder without UV interdeck dryer	B.2.24
6.1	Gripper system	B.2.24
6.2	The "Sheet detection feed cylinder" sensor	B.2.25
7	Feed cylinder with UV interdeck dryer	B.2.27
7.1	Gripper system	B.2.27
7.2	The "Sheet detection feed cylinder" sensor	B.2.28
8	Sheet travel monitor	B.2.30
8.1	Sensor "Sheet travel monitor"	B.2.30
9	Impression control mechanism	B.2.32
9.1	Bearers	B.2.32
10	Impression cylinder without UV interdeck dryer	B.2.34
10.1	Gripper systems	B.2.34
11	Impression cylinder with UV interdeck dryer	B.2.36
11.1	Gripper systems	B.2.36

12	Prinect Inpress Control	B.2.38
	12.1 Measuring bar	B.2.38
	12.2 Hand-held spectrophotometer	B.2.42
13	Ink mist extraction device (only on printing presses with UV interdeck dryer)	B.2.43
	13.1 Filter case	B.2.43
14	Impression cylinder washup device	B.2.45
	14.1 Impression cylinder washup device	B.2.45
	14.2 Spray tubes	B.2.47
15	AutoPlate Advanced plate changer	B.2.49
	15.1 Holding device	B.2.49
16	AutoPlate XL plate changer	B.2.53
	16.1 Holding device	B.2.53
	16.2 Delivery-side cylinder guard	B.2.54
	16.3 Pressing roller	B.2.58
	16.4 Plate cylinder	B.2.59
17	Blanket cylinder	B.2.60
	17.1 Cylinder surface	B.2.60
18	Blanket washup device	B.2.61
	18.1 Blanket washup device	B.2.61
19	Suction brush	B.2.66
	19.1 Suction brush	B.2.66
20	Inking unit	B.2.68
	20.1 Inking unit	B.2.68
	20.2 Ink fountain	B.2.68
21	Inking roller washup device	B.2.70
	21.1 Inking roller washup device	B.2.70
	21.2 Washup blade	B.2.72
22	Washing fluid container	B.2.74
	22.1 Washing fluid container	B.2.74
23	Dampening system	B.2.76
	23.1 Rider roller	B.2.76
	23.2 Water pan roller and metering roller	B.2.77
24	Transfer drum without UV interdeck dryer	B.2.78
	24.1 Gripper systems	B.2.78

25	Transfer drum with UV interdeck dryer	B.2.80
	25.1 Gripper systems	B.2.80
26	Variable transfer drum without UV interdeck dryer	B.2.82
	26.1 Gripper system	B.2.82
	26.2 Swing frame and cylinder shells	B.2.83
	26.3 Cylinder surface	B.2.86
27	Storage drum	B.2.87
	27.1 Gripper system	B.2.87
	27.2 Sucker bar	B.2.88
	27.3 Movable part	B.2.91
28	Reversing drum	B.2.93
	28.1 Gripper system	B.2.93
	28.2 Bearing	B.2.97
	28.3 Cylinder surface	B.2.98
29	Impression cylinder (P)	B.2.99
	29.1 Gripper system	B.2.99
30	Sheet control	B.2.101
	30.1 Fan row underneath the reversing drum	B.2.101
31	Perfector	B.2.103
	31.1 Sensor "Missing sheet detector"	B.2.103
	31.2 Stop lever	B.2.105

ES_904_0076-000FRNL_04

1 Printing unit - safety instructions

1.1 To be observed for all work



Warning - Risk of injury!

When you perform maintenance work, observe all notes on safety contained in the operating manual.



Caution - Damage caused by incorrect cleaning agents!

Never use cleaning agents (e.g. "ink attackers") that contain **dichloromethane (methylenechloride), trichloroethylene or other chlorinated or halogenated hydrocarbons.**

These cleaning agents damage press components, cylinder packing, rollers, and blankets.



Caution - Non-approved washing fluids can damage the gripper tips!

Depending on the press version, the gripper tips can be polyurethane-coated. Non-approved cleaning agents attack the polyurethane coating and consequently cause malfunctions in the printing process.

Use only approved washing fluids when cleaning the gripper tips. There is a list of approved cleaning agents on the Internet sites of FOGRA and Heidelberger Druckmaschinen AG.



Warning - Risk of injury from rotating rollers and cylinders!

When cleaning the rollers and cylinders, the ball of your thumb must point in the direction of the infeed gap and your fingers in the direction of the outlet gap. Select the corresponding direction of rotation.



Warning - Risk of burn injuries due to hot surfaces!

After dryer use, wait until all accessible parts have cooled down and are no more than lukewarm (approximately 40°C).

**Warning - Explosion hazard from evaporating solvents!**

Before using washing fluids, wait until the cylinders and press parts to be cleaned have cooled down and are no more than lukewarm (approximately 40°C).

**Warning - Explosion hazard from evaporating solvents!**

When working with dryers, use only inks and varnishes that do not create an explosive atmosphere through heating up in the dryer. This is specified in the corresponding safety data sheets.

Ensure that no solvent can come into contact with the dryer area when you use washing fluids on the press. Do not use or store any solvents near the dryer.

When using the automatic washup device, adjust the wash program so that the blankets and impression cylinders are dry before further production is started. This ensures that no washing fluid can get into the dryer area.

**Warning - Risk of explosion and fire due to dust deposits!**

Dust, such as powder or paper dust, can pose a risk of fire or explosion.

You should therefore clean the areas affected by dust regularly, at least once a week, using a vacuum cleaner.

Only use suitable and approved industrial vacuum cleaners and avoid working with compressed air, as this could swirl up the dust.

**Warning - Danger of death from electrical voltage!**

Dryers work with very high operating voltages. Secure the press and the dryers from being switched on before performing any maintenance work on the dryer:

Switch the main switches to *0/OFF*, and lock each switch with a padlock. Leave a sign with the name of the person authorized to switch on the main switches.

Never touch or disconnect any plugs of the electrical connections when the dryer is in operation. Protect all plugs of electrical connections against moisture, contamination and damage.

Faulty cables, plugs and insulation should be repaired by skilled personnel only, using original spare parts.

1.2 Washing fluid container

**Warning - Explosion hazard from evaporating solvents!**

Fill the washing fluid container carefully and only with approved washing fluids. Do not overfill the washing fluid container. Keep sources of heat away from the washing fluid container. Dispose of any leaking substances immediately and in the correct manner.

1.3 Inking unit

**Warning - Risk of injury from rotating ink fountain roller!**

Be careful with the rotating ink fountain roller when working on the ink fountain when it is engaged or swung down. Clean the swung-down ink fountain only when the ink fountain roller is at standstill.

FS_B14_0098-0007ENR1_00

2 Overview of the maintenance points on the printing unit

2.1 Overview

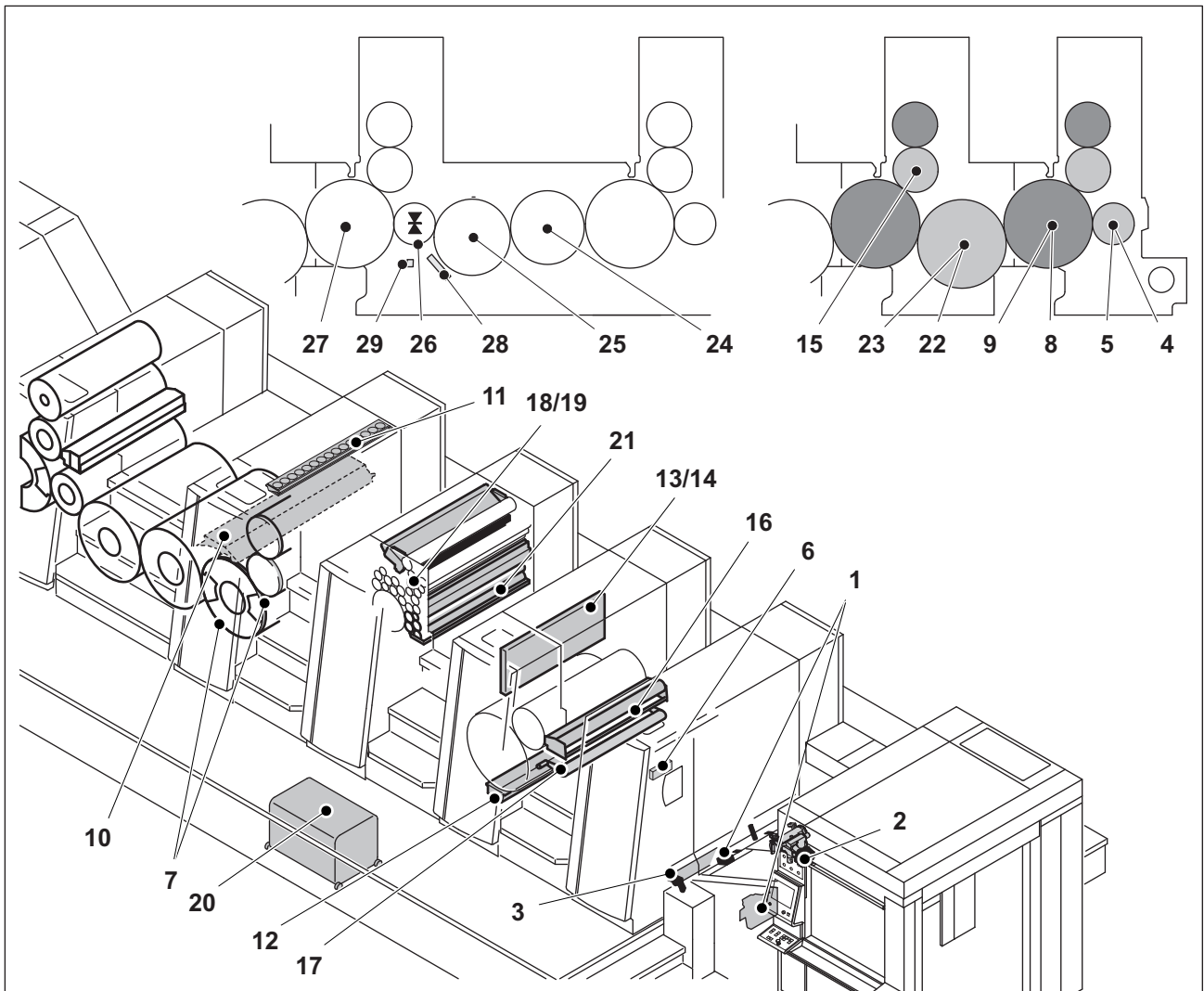


Fig. 1 Maintenance points on the printing unit

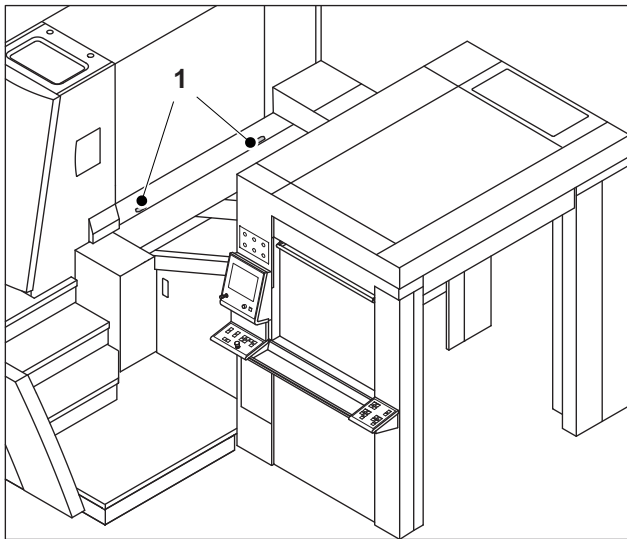
- 1 Maintenance points on the sheet alignment system
- 2 Maintenance points on the "suction tape vacuum regulation" rotary valve
- 3 Maintenance points on the transfer gripper:
- 4 Maintenance points on the feed cylinder without UV interdeck dryer
- 5 Maintenance points on the feed cylinder with UV interdeck dryer
- 6 Maintenance points on the sheet travel monitor
- 7 Maintenance points on the impression control mechanism
- 8 Maintenance points on the impression cylinder without UV interdeck dryer

- 9 Maintenance points on the impression cylinder with UV interdeck dryer
- 10 Maintenance points on the Prinect Inpress Control
- 11 Maintenance points on the ink mist suction device (only on printing presses with UV interdeck dryer):
- 12 Maintenance points on the impression cylinder washup device
- 13 Maintenance points on the AutoPlate Advanced plate changer
- 14 Maintenance points on the AutoPlate XL plate changer
- 15 Maintenance points on the blanket cylinder
- 16 Maintenance points on the blanket washup device
- 17 Maintenance points on the suction brush
- 18 Maintenance points on the inking unit
- 19 Maintenance points on inking roller washup device
- 20 Maintenance points on the washing fluid container
- 21 Maintenance points on the dampening system
- 22 Maintenance points on the transfer drum without UV interdeck dryer
- 23 Maintenance points on the transfer drum with UV interdeck dryer
- 24 Maintenance points on the variable transfer drum:
- 25 Maintenance points on the storage drum
- 26 Maintenance points on the reversing drum
- 27 Maintenance points on the impression cylinder (P)
- 28 Maintenance points on the sheet control
- 29 Maintenance points on the perfecter

FS.B04.0021-000TKERU_00

3 Sheet alignment

3.1 Pull lay



FS.B04.0111-0006BRND_00

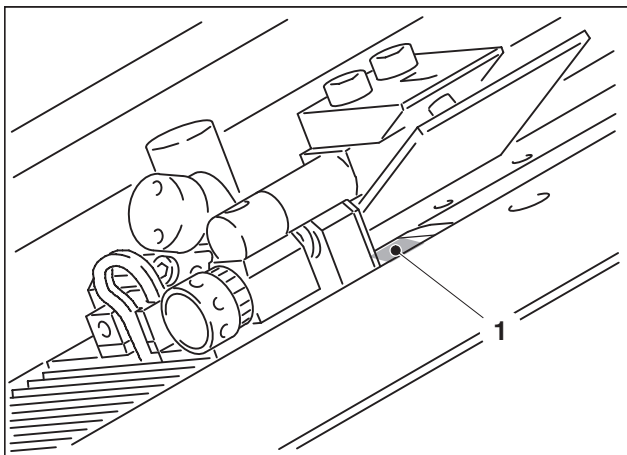
Place of installation

1 Pull lays

The pull lays are installed at the feeder side of the printing unit on D.S. and O.S.

Fig. 2 Place of installation of the pull lays

3.1.1 Cleaning the sensor "Pull lay monitor"



FS.072.0007-0006BRND_00

1 Sensor "Pull lay monitor"

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean 2 sensors.
Required resources	Soft, lint-free cloth; paint brush

Fig. 3 Sensor for pull lay monitor

Tab. 1

3.2 Sensor "Double sheet detector"

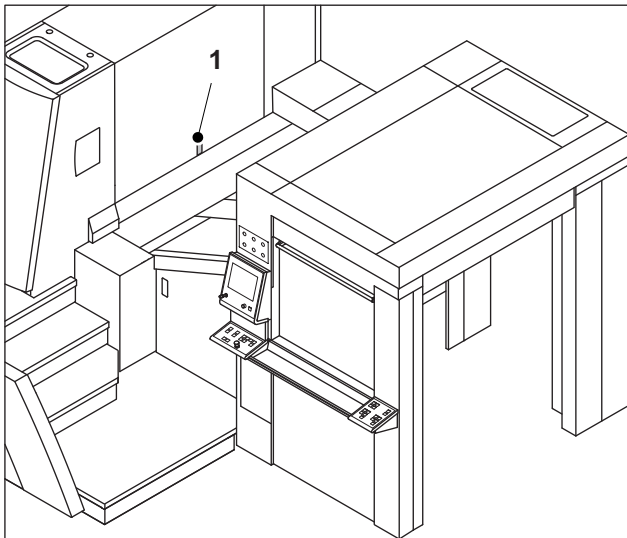


Fig. 4 Place of installation of the double sheet detector

Place of installation

- 1 Sensor "Double sheet detector"

The sensor "double sheet detector" is installed in the middle of the first printing unit, above the front lays.

3.2.1 Cleaning the sensor "Double sheet detector"

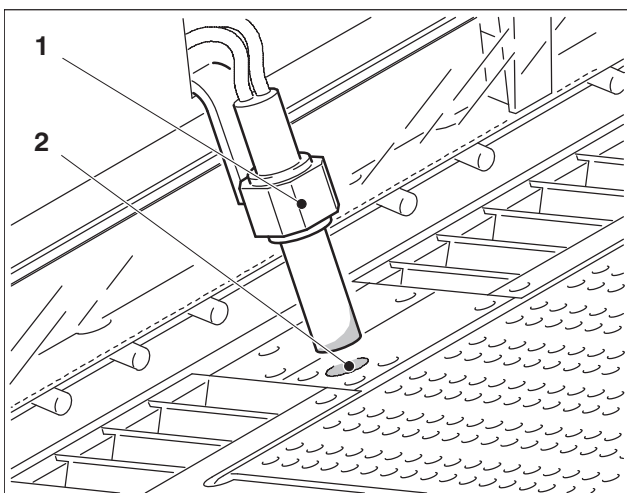


Fig. 5 Sensor for double sheet detection

- 1 Sensor "Double sheet detector"
- 2 Recess in the sheet guide plate

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	Center
Accessibility of the maintenance points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean the sensor. If necessary, vacuum the recess in the guide plate.
Required resources	Soft, lint-free cloth; Approved industrial vacuum cleaner

Tab. 2

3.3 Sensor "Sheet alignment monitor"

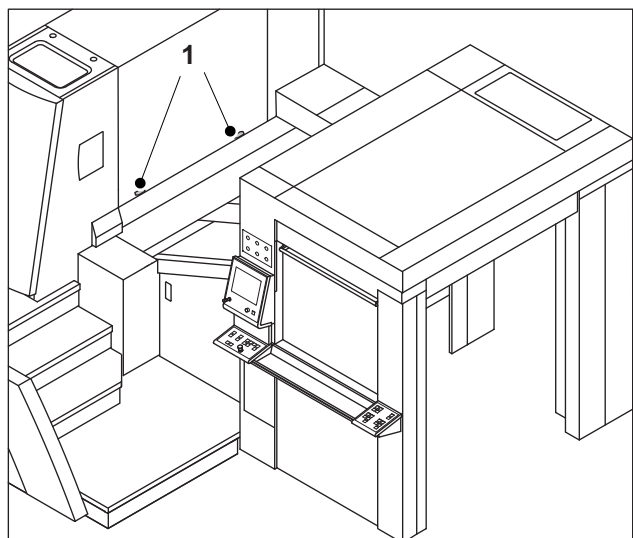


Fig. 6 Place of installation of the sheet alignment monitor

Place of installation

1 Sensors "Sheet alignment monitor"

The sensors "Sheet alignment monitor" are mounted at the sheet infeed to the first printing unit. The sensors are on D.S. and O.S.

3.3.1 Cleaning the "Sheet alignment monitor" sensor

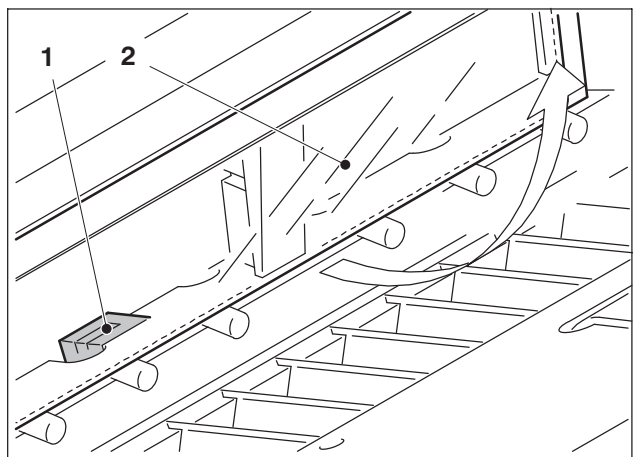


Fig. 7 Sensor for sheet alignment monitor

1 Sensor "Sheet alignment monitor"

2 Guard "Transfer gripper"



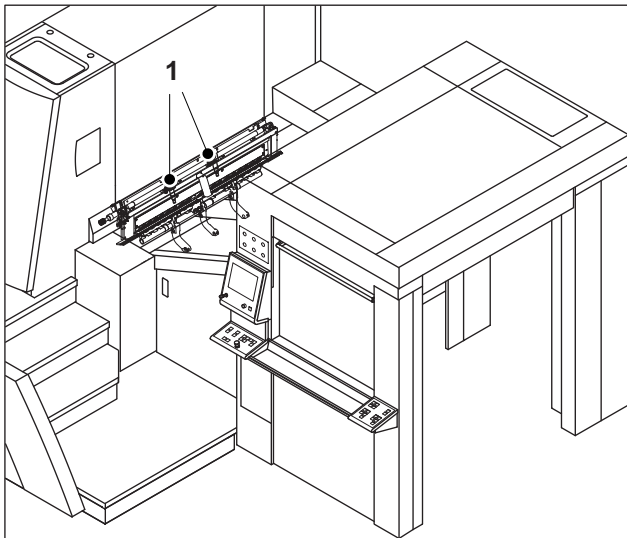
Caution - Damage to the sensor surface!

Never use a hard object for cleaning the sensor surface.

Description of the maintenance point	
Maintenance interval	II
Maintenance location	D.S. / O.S.
Accessibility of the maintenance points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/maintenance work	Clean 2 sensors.
Required resources	Soft, lint-free cloth; Paint brush

Tab. 3

3.4 Sheet stop finger



FS.B04.0114-00GRAND_00

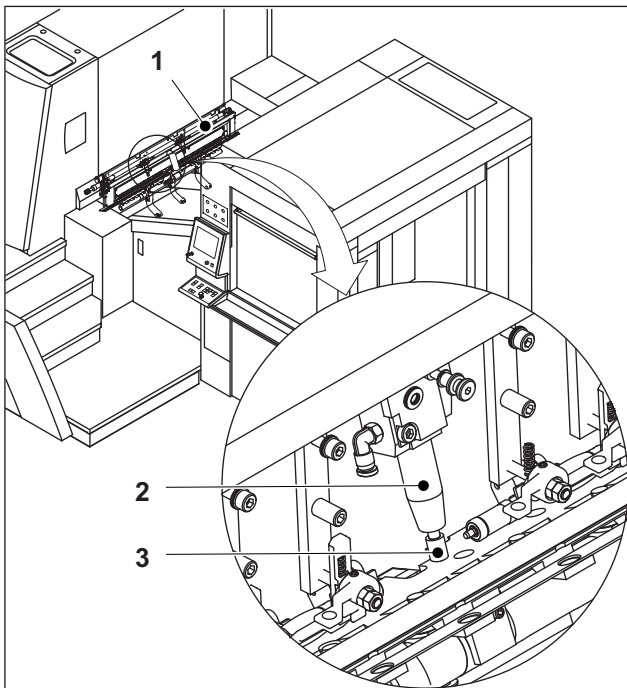
Place of installation

- 1** Sheet stop finger

The sheet stop fingers are located behind the front lay guard D.S./O.S.

Fig. 8 Place of installation of the sheet stop fingers

3.4.1 Checking the wear limit of the plastic cap



FS.B04.0115-00GRAND_00

- 1** Front lay guard
- 2** Sheet stop finger
- 3** Plastic cap

Fig. 9 Sheet stop finger

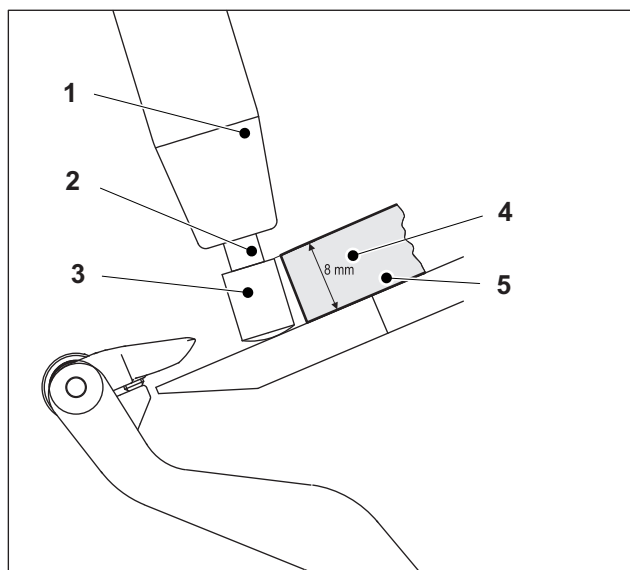


Fig. 10 Wear limit

- 1 Sheet stop finger
- 2 Piston rod
- 3 Plastic cap
- 4 Wear limit
- 5 Cardboard strip

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S. / O.S.
Accessibility of the maintenance points	Open the front lay guard.
Number/type/maintenance work	Check the wear limit of the plastic cap. The wear limit of the plastic cap is 8 mm. If the wear limit is reached or exceeded, have the sheet stop finger replaced by Heidelberg Service.
Required resources	Cardboard strip

Tab. 4

Carrying out the maintenance work

1. Prepare a cardboard strip with a height of 8 mm.
2. Position the cardboard strip against the plastic cap.
3. If the height of the plastic cap is 8 mm or less, have the sheet stop finger replaced by Heidelberg Service.

3.5 Air filter "Suction air, pull lay/suction drive roller"

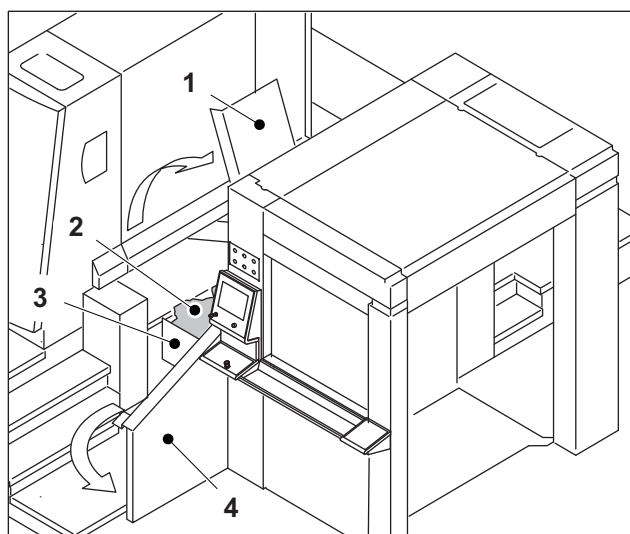


Fig. 11 Place of installation of the air filters "Suction air, pull lay/suction drive roller"

Place of installation

- 1 Feed table
- 2 Air filter "Suction air, pull lay/suction drive roller"
- 3 Service lid
- 4 "Feeder" guard

The air filters "Pull lay/suction drive roller suction air" are installed underneath the feed table.

3.5.1 Cleaning the filter cartridges

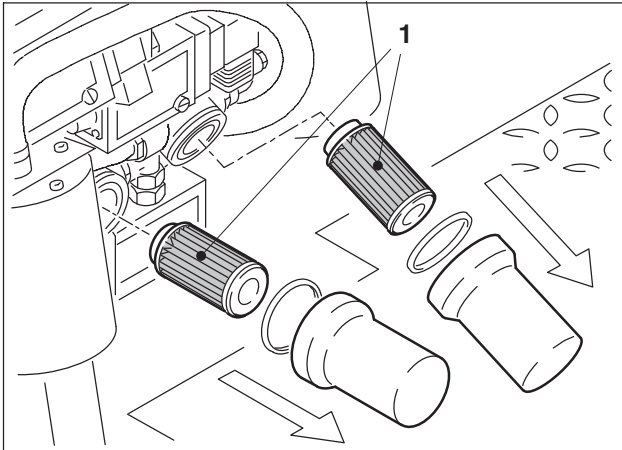


Fig. 12 Filter cartridges

1 Filter cartridges "Pull lay/suction drive roller suction air"

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel. Open the "Feeder" guard. Swing up the feed table. Open the service lid.
Number/type/maintenance work	Carefully knock out 2 filter cartridges, or clean by using a vacuum cleaner.
Required resources	Approved industrial vacuum cleaner

Tab. 5

3.5.2 Replacing the filter cartridges

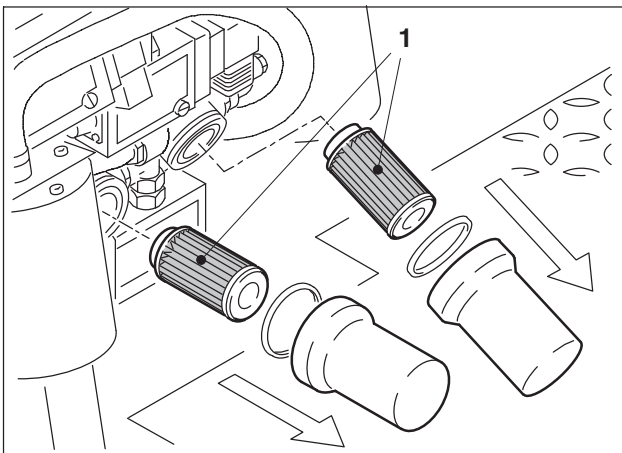


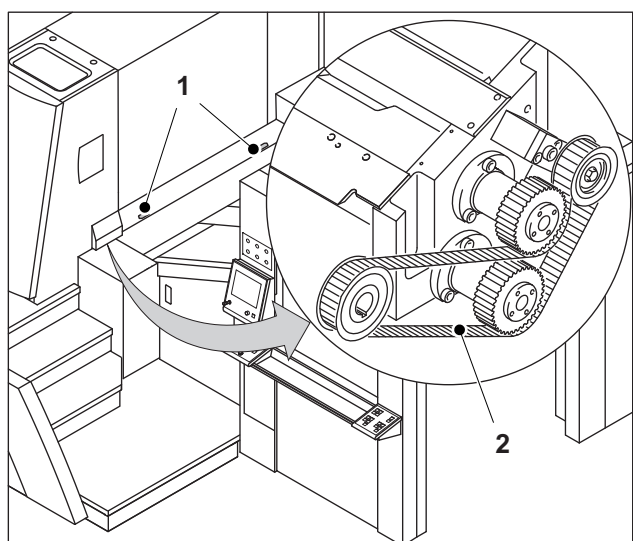
Fig. 13 Filter cartridges

1 Filter cartridges "Pull lay/suction drive roller suction air"

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel. Open the "Feeder" guard. Swing up the feed table. Open the service lid.
Number/type/maintenance work	Replace 2 air filters.

Tab. 6

3.6 Drive belt, pull lay drive / printing unit 1



ES_B04_0117-00GRAND_00

Place of installation

- 1** Pull lays
- 2** Drive belt, pull lay drive / printing unit 1

The drive belt, pull lay drive / printing unit 1 is installed behind the belt guard on the front lay cross bar.

Fig. 14 Place of installation for the drive belt, pull lay drive / printing unit 1

3.6.1 Checking the replacement date of the drive belt

Description of the maintenance point	
Maintenance interval	V
Maintenance location	O.S.
Accessing the maintenance point	Press file
Number/type/maintenance work	<p>The drive belt must be replaced after 80 million revolutions at the latest.</p> <p>Check the revolution counter reading on the control console. Compare this value with the revolution counter reading for the drive belt, entered in the press file or noted down directly on a piece of paper at the drive belt. If the difference between the two readings is ≥ 80 million revolutions, have the drive belt replaced by Heidelberg Service.</p> <p>Then note down the current revolution counter reading and the date on a piece of paper again. Attach this note where it is clearly visible at the maintenance point. Enter the replacement in the press file stating the current revolution counter reading and date.</p>

Description of the maintenance point	
Required resources	Press file

Tab. 7

3.7 Cover guide

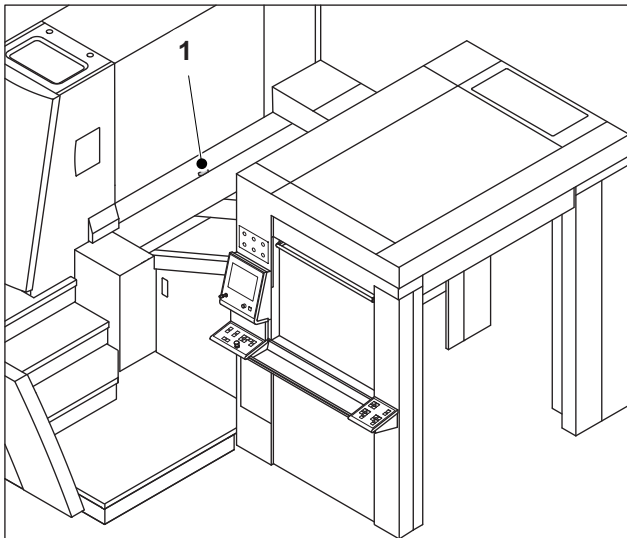


Fig. 15 Place of installation of the cover guide

Place of installation

1 Cover guide

The cover guide is fitted on the feeder side of the printing unit in the center.

3.7.1 Lubricating the spring rod

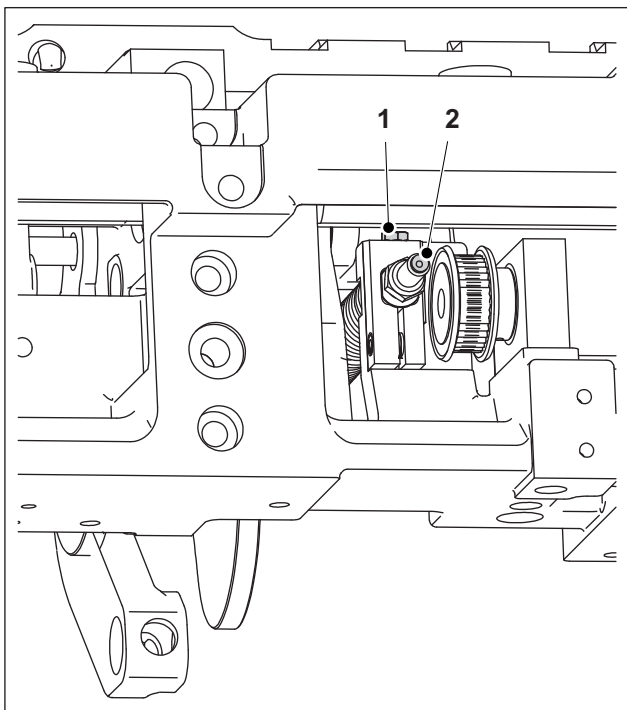
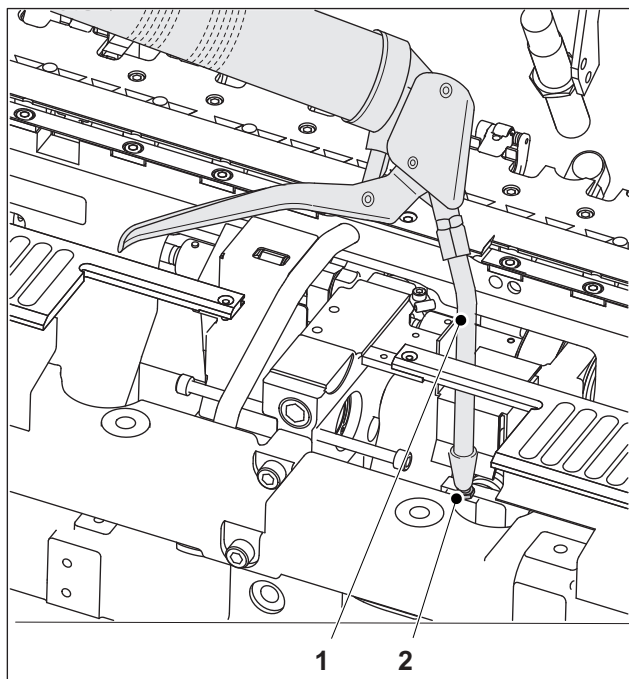


Fig. 16 Spring rod of the cover guide

- 1 Recessed grease nipple, lubricate from above
- 2 Recessed grease nipple, lubricate from the feeder side.

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	Center
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel. See also "Access to the lubricating point".
Number/type/maintenance work	Lubricate 2 recessed grease nipples.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 8



Access to the lubricating point "Recessed grease nipple, lubricate from above"

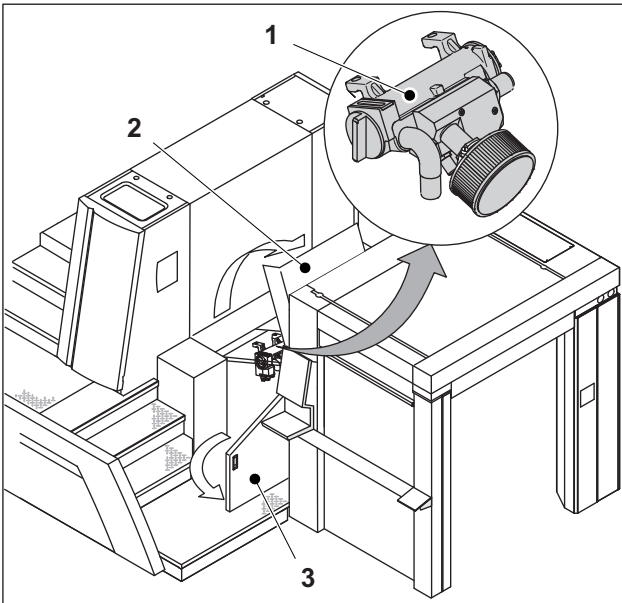
- 1** Grease gun
 - 2** Recessed grease nipple
1. Open the bellows at the pull lay.
 2. Lubricate the recessed grease nipple (Fig. 17/2) through the opening on the bellows.
 3. Open the "Feeder" guard.
 4. Swing up the feed table. Open the service lid.
 5. Lubricate the recessed grease nipple (Fig. 16/2).

Fig. 17 Lubricate recessed grease nipple with grease gun from above

FS_B04_001E-000FRONT_00

4 Rotary valve "Vacuum control/suction tape"

4.1 Rotary valve "Vacuum control/suction tape"



FS_B04_001E-000FRONT_00

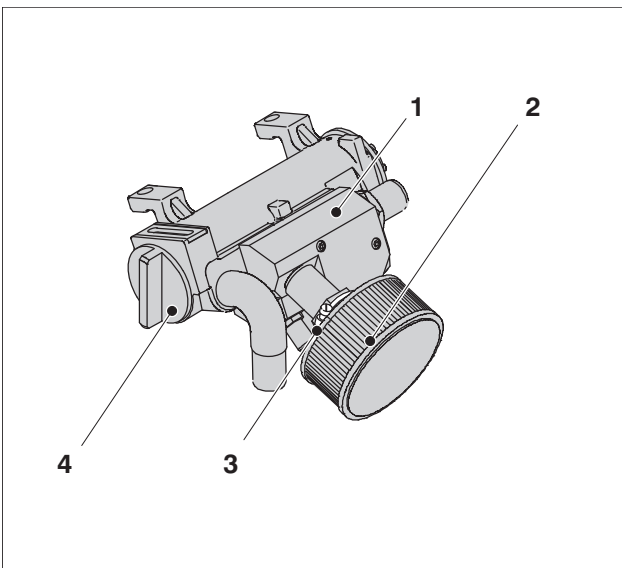
Place of installation

- 1 Rotary valve "Vacuum control/suction tape"
- 2 Feed table
- 3 "Feeder" guard

The rotary valve "Vacuum control/suction tape" is fitted underneath the feed table.

Fig. 18 Rotary valve "Vacuum control/suction tape"

4.1.1 Cleaning the filter



FS_B04_007E-000FRONT_00

- 1 Rotary valve
- 2 Filter
- 3 Pipe clamp
- 4 Cover

Fig. 19 Rotary valve

Description of the maintenance point	
Maintenance interval	III
Maintenance location	Center
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Slacken the hose clamp and remove the filter. Clean the filter.
Required resources	Approved industrial vacuum cleaner

Tab. 9

- ▶ **Note**
Tighten the pipe clip lightly when fitting the filter.

4.1.2 Cleaning the rotary valve

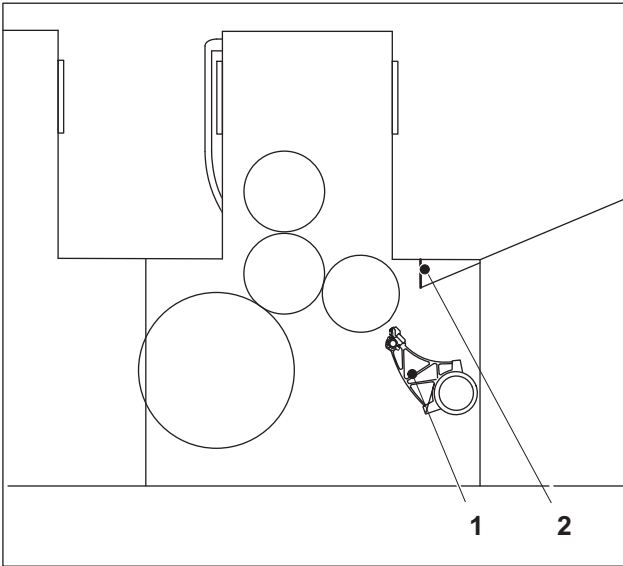
Description of the maintenance point	
Maintenance interval	III
Maintenance location	Center
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Unscrew the cover. Clean the inside of the rotary valve housing.
Required resources	Soft, lint-free cloth; paint brush; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 10

FS_B04_0085-000FRONT_00

5 Transfer gripper

5.1 Gripper systems



FS_013_0000-001GRAND_00

Place of installation

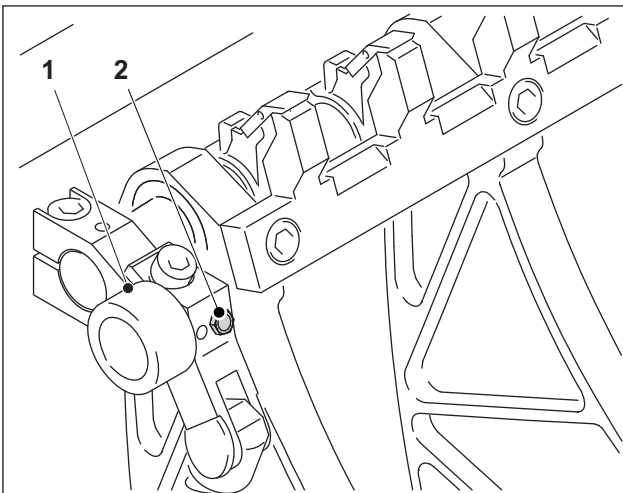
- 1 Transfer gripper
- 2 Front lay guard

The transfer gripper is located in the first printing unit behind the front lay guard.

A roller lever has been installed on the transfer gripper at each end of the gripper bar on D.S. and O.S.

Fig. 20 Place of installation of the transfer gripper

5.1.1 Lubricating the roller lever



FS_013_0001-001GRAND_00

- 1 Roller lever O.S.
- 2 Recessed grease nipple

Fig. 21 Roller lever O.S.

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S. / O.S.
Access to the lubricating points	Open the front lay guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Next, secure the press from being started up again: Press the <i>emergency stop button</i> on the nearest control panel.
Number/type/maintenance work	Lubricate 2 recessed grease nipples.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 11

5.1.2 Lubricating the spring rod of the gripper control

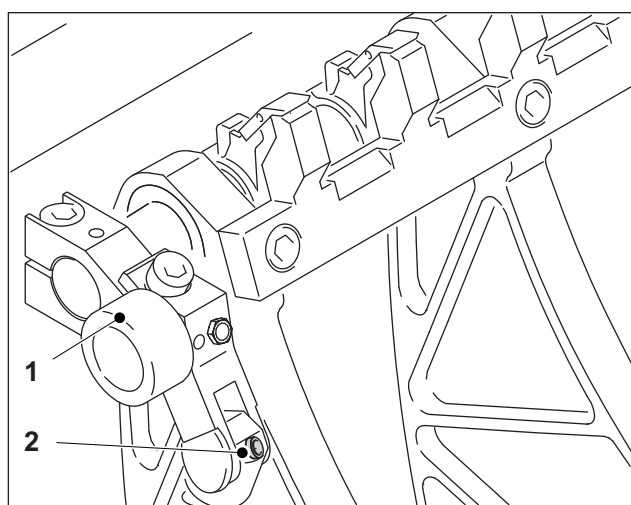


Fig. 22 Spring rod O.S.

- 1 Roller lever
- 2 Recessed grease nipple O.S.

Description of the lubricating point	
Maintenance interval	IV
Color code	-
Maintenance location	D.S. / O.S.
Access to the lubricating points	Open the front lay guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Next, secure the press from being started up again: Press the <i>emergency stop button</i> on the nearest control panel.
Number/type/maintenance work	Lubricate 2 recessed grease nipples.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 12

5.2 Transfer gripper drive

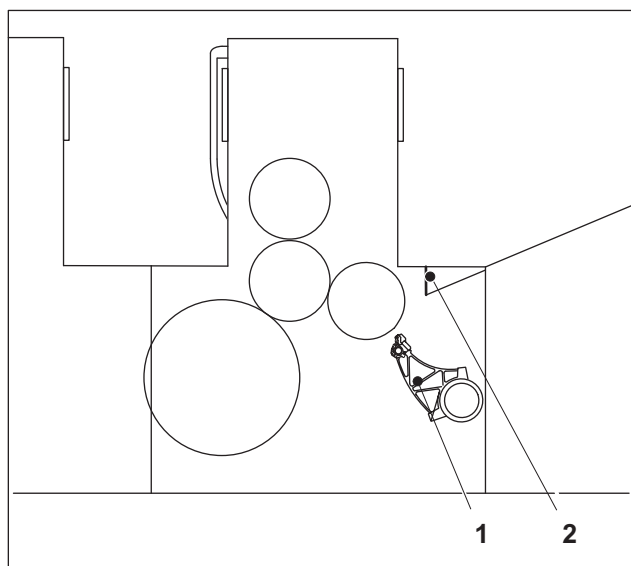


Fig. 23 Place of installation of the transfer gripper

Place of installation

- 1 Transfer gripper
- 2 Front lay guard

The transfer gripper is located in the first printing unit behind the front lay guard.

The transfer gripper drive has been fitted on the transfer gripper on D.S.

5.2.1 Replacing the cam follower of the transfer gripper drive

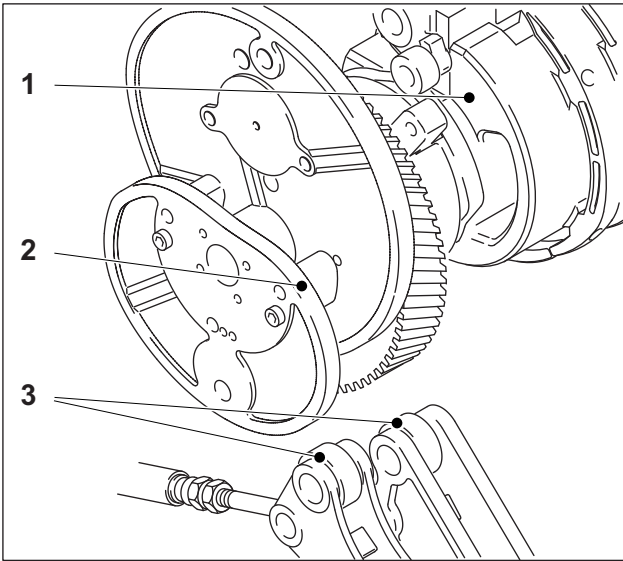


Fig. 24 Transfer gripper drive D.S.

- 1 Feed cylinder
- 2 Cams
- 3 Cam followers

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Accessibility of the maintenance points	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	The cam followers of the transfer gripper drive must be replaced every 120 million revolutions at the latest. Check the revolution counter reading on the control console. Compare this value with the revolution counter reading of the cam followers entered in the press file. If the difference between both readings is ≥ 120 million revolutions, have the cam followers replaced by Heidelberg Service. Next, enter the replacement of the cam followers in the press file stating the current revolution counter reading and date.

Tab. 13

FS.914.0086-0007KERN_06

6 Feed cylinder without UV interdeck dryer

6.1 Gripper system

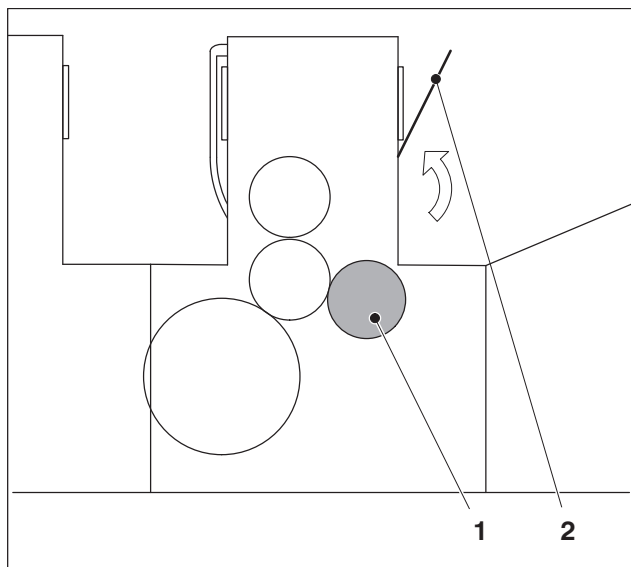


Fig. 25 Place of installation of the feed cylinder

Place of installation

- 1 Feed cylinder
- 2 "Feed cylinder" guard

The feed cylinder is mounted behind the "Feed cylinder" guard in the first printing unit.

The feed cylinder is equipped with a gripper system. The gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is installed on D.S., at the end of the gripper bar.

6.1.1 Lubricating the roller lever

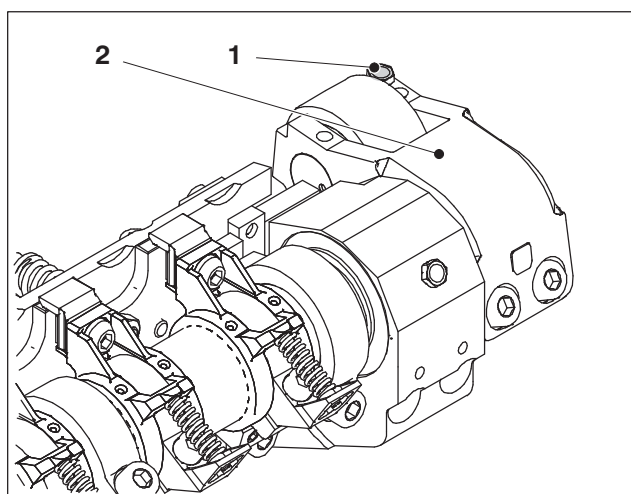


Fig. 26 Roller lever on D.S.

- 1 Recessed grease nipple
- 2 Roller lever on D.S.

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	D.S.
Access to the lubricating points	Open the guard "Feed cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate 1 recessed grease nipple.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 14

6.1.2 Lubricating the gripper shaft bearing

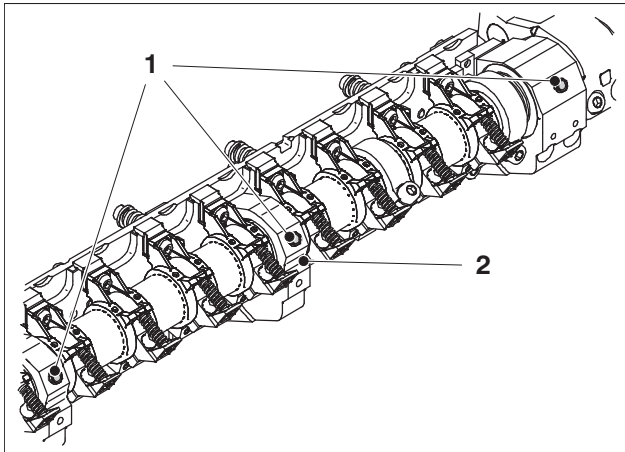


Fig. 27 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guard "Feed cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate 6 recessed grease nipples.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 15

6.2 The "Sheet detection feed cylinder" sensor

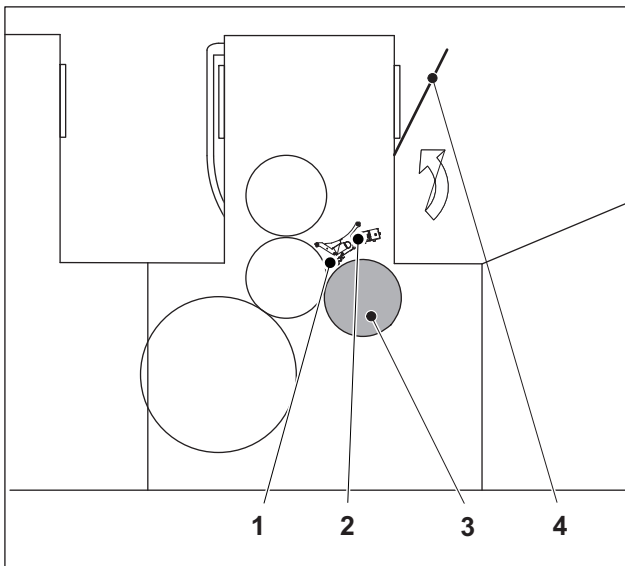


Fig. 28 Place of installation of the "Sheet detection feed cylinder" sensor

Place of installation

- 1 Sensor "Sheet detection feed cylinder"
- 2 Example: Blast air system without sheet dust removal
- 3 Feed cylinder
- 4 "Feed cylinder" guard

The feed cylinder is mounted behind the "Feed cylinder" guard in the first printing unit.

The "Sheet detection feed cylinder" sensor is either fitted on the suction brush with sheet dust removal or on the blast air system without sheet dust removal. The suction brush or the blast air system is fitted above the feed cylinder.

6.2.1 Cleaning the "Sheet detection feed cylinder" sensor

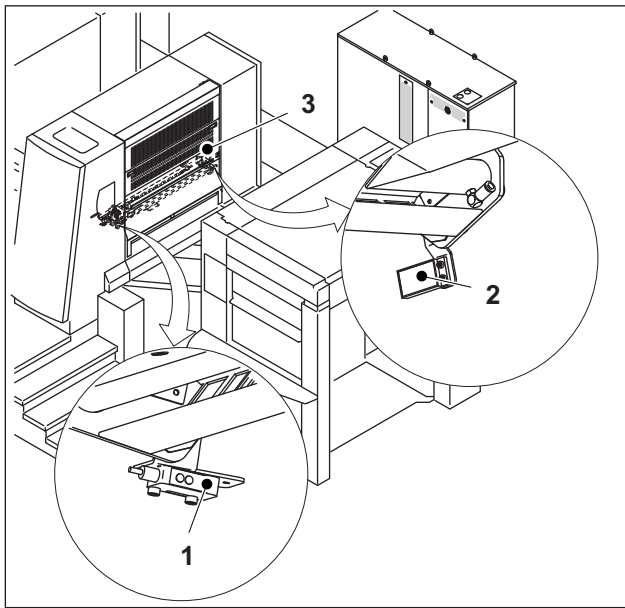


Fig. 29 "Sheet detection feed cylinder" sensor and reflector

- 1 Sensor "Sheet detection feed cylinder"
- 2 "Sheet detection feed cylinder" reflector
- 3 Blast air system without sheet dust removal

Description of the maintenance point	
Maintenance interval	II
Maintenance location	Reflector D.S./sensor O.S.
Access to the lubricating points	Open the guard "Feed cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Demount the blanket washup device.
Number/type/maintenance work	Clean the sensor and reflector.
Required resources	Soft, fluffless cloth, paint brush

Tab. 16

FS_904_0106-0107FRONT_02

7 Feed cylinder with UV interdeck dryer

7.1 Gripper system

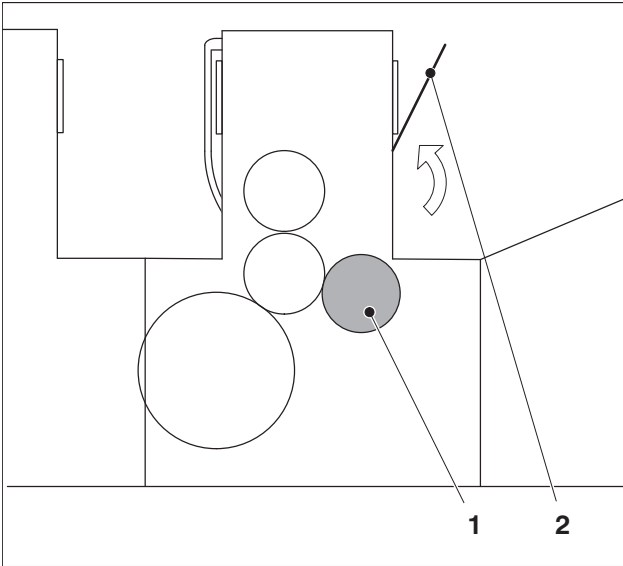


Fig. 30 Place of installation of the feed cylinder

Place of installation

- 1 Feed cylinder
- 2 "Feed cylinder" guard

The feed cylinder is mounted behind the "Feed cylinder" guard in the first printing unit.

The feed cylinder is equipped with a gripper system. The gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is installed on D.S., at the end of the gripper bar.

7.1.1 Lubricating the roller lever

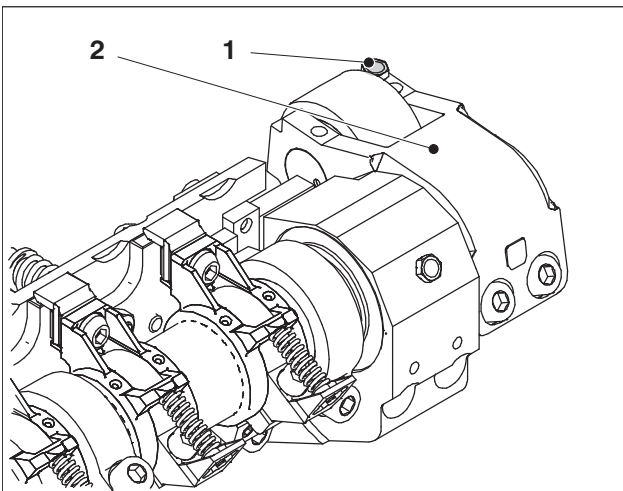


Fig. 31 Roller lever on D.S.

- 1 Recessed grease nipple
- 2 Roller lever on D.S.

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	D.S.
Access to the lubricating points	Open the guard "Feed cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate 1 recessed grease nipple.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 17

7.1.2 Lubricating the gripper shaft bearing

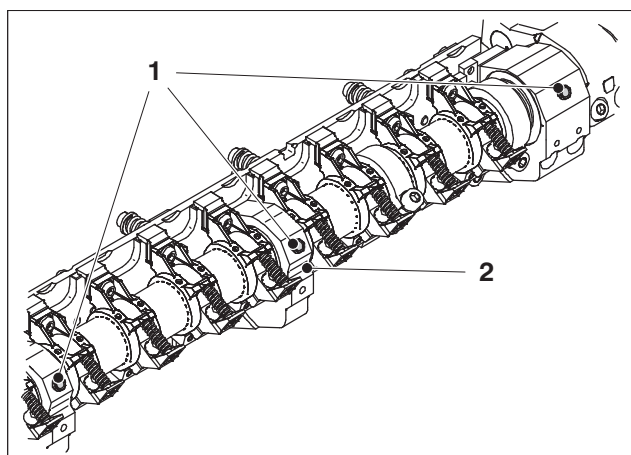


Fig. 32 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guard "Feed cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate 6 recessed grease nipples.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 18

7.2 The "Sheet detection feed cylinder" sensor

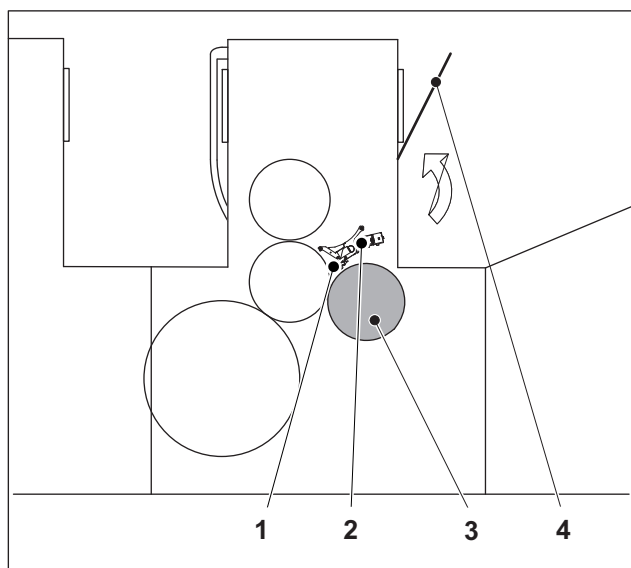


Fig. 33 Place of installation of the "Sheet detection feed cylinder" sensor

Place of installation

- 1 Sensor "Sheet detection feed cylinder"
- 2 Example: Blast air system without sheet dust removal
- 3 Feed cylinder
- 4 "Feed cylinder" guard

The feed cylinder is mounted behind the "Feed cylinder" guard in the first printing unit.

The "Sheet detection feed cylinder" sensor is either fitted on the suction brush with sheet dust removal or on the blast air system without sheet dust removal. The suction brush or the blast air system is fitted above the feed cylinder.

7.2.1 Cleaning the "Sheet detection feed cylinder" sensor

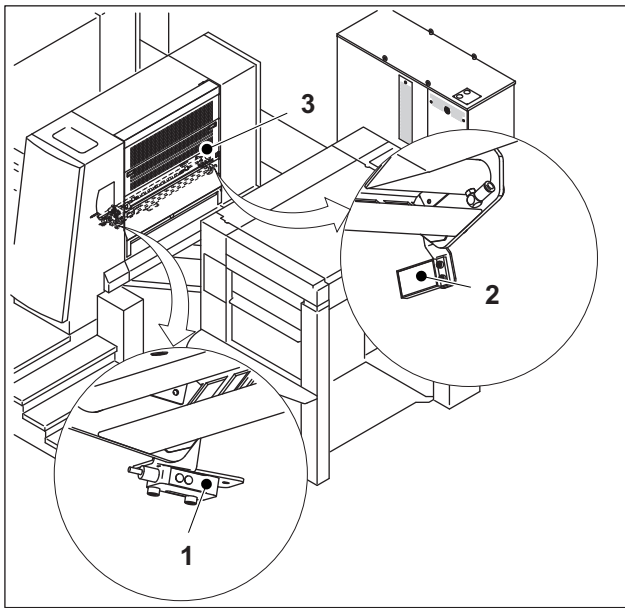


Fig. 34 "Sheet detection feed cylinder" sensor and reflector

- 1 Sensor "Sheet detection feed cylinder"
- 2 "Sheet detection feed cylinder" reflector
- 3 Blast air system without sheet dust removal

Description of the maintenance point	
Maintenance interval	II
Maintenance location	Reflector D.S./sensor O.S.
Access to the lubricating points	Open the guard "Feed cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Demount the blanket washup device.
Number/type/maintenance work	Clean the sensor and reflector.
Required resources	Soft, fluffless cloth, paint brush

Tab. 19

FS.BM.003-00000000_00

8 Sheet travel monitor

8.1 Sensor "Sheet travel monitor"

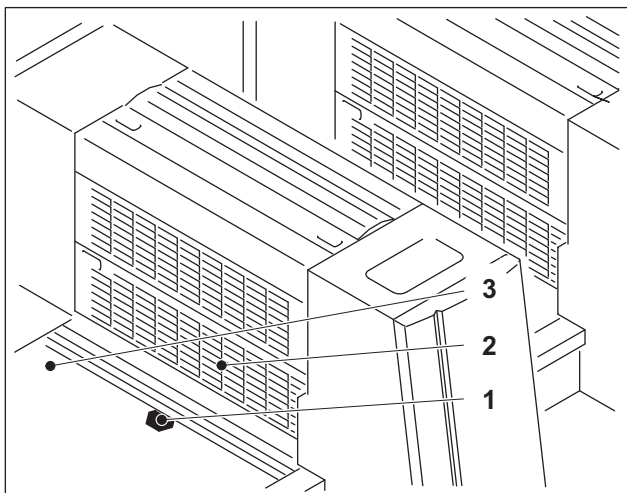


Fig. 35 Place of installation of the sensor "Sheet travel monitor"

Place of installation

- 1 Sensor "Sheet travel monitor"
- 2 Guard "Plate cylinder and blanket cylinder"
- 3 Guard "Transfer cylinder"

The "Sheet travel monitor" sensor is screwed to a cross bar in the printing unit, centrally above the impression cylinder. The sensor monitors the sheet travel on the impression cylinder.

8.1.1 Cleaning the "Sheet travel monitor" sensor

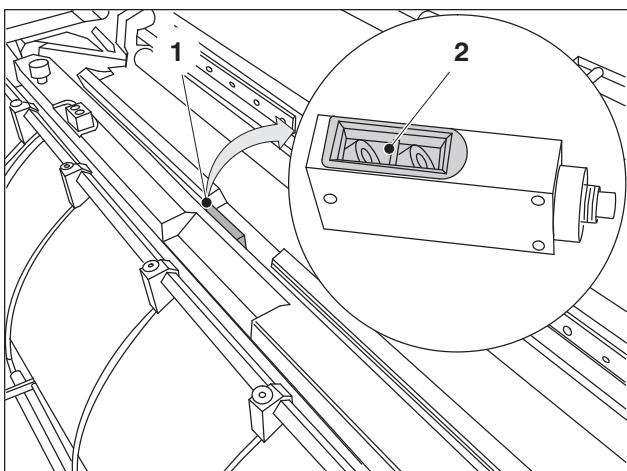


Fig. 36 Sheet travel monitor sensor

Presses without foil kit

- 1 Sensor "Sheet travel monitor"
- 2 Sensor surface



Caution - Damage to the sensor surface!
Never use a hard object for cleaning the sensor surface.

Description of the maintenance point	
Maintenance interval	II
Maintenance location	Center
Accessing the maintenance point	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Maintenance work	Clean the "Sheet travel monitor" sensor.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 20

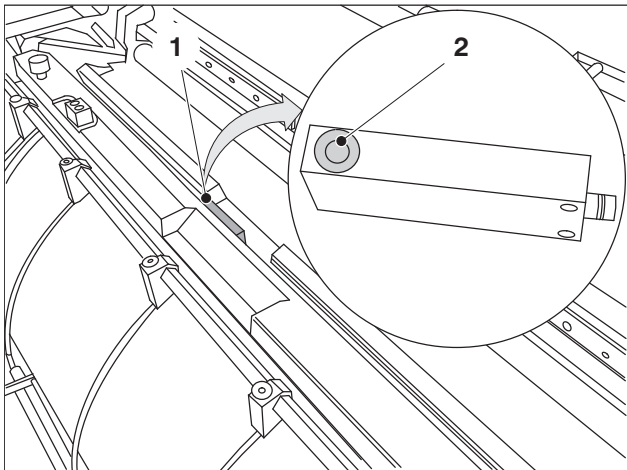


Fig. 37 The "Sheet travel monitor" sensor on presses with foil kit (StaticStar)

Presses with foil kit (StaticStar)

- 1 Sensor "Sheet travel monitor"
- 2 Sensor surface



Caution - Damage to the sensor surface!

Never use a hard object for cleaning the sensor surface.

Description of the maintenance point	
Maintenance interval	III
Maintenance location	Center
Accessing the maintenance point	Open the "Plate cylinder and blanket cylinder" and "Transfer cylinder" guards.
Maintenance work	Clean the "Sheet travel monitor" sensor.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 21

9 Impression control mechanism

9.1 Bearers

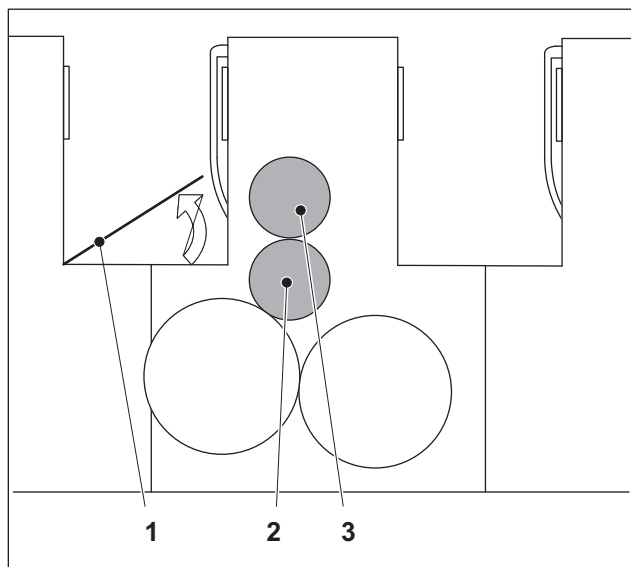


Fig. 38 Place of installation of the bearers

Place of installation

- 1 Guard "Transfer cylinder"
- 2 Blanket cylinder
- 3 Plate cylinder

The bearers can be found on D.S. and O.S. at the ends of the plate and blanket cylinders.

9.1.1 Lubricating the bearers

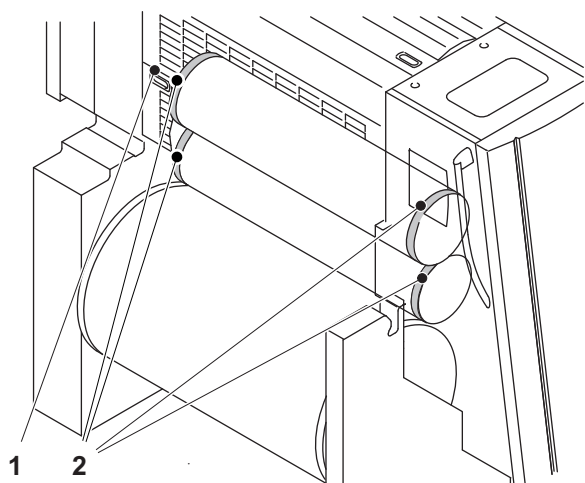


Fig. 39 Bearers

- 1 Guard "Plate cylinder and blanket cylinder"
- 2 Bearers

Description of the maintenance point	
Maintenance interval	II
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Open the guard "Plate cylinder/blanket cylinder". Control panel selection: Press the Control panel selection button twice (at an interval of max. 0.5 seconds). The LED lights up.
Maintenance work	Apply a lubricating film to the bearers. See "Applying a lubricating film".
Required resources	Bearer oil B07 ; soft, fluffless cloth
Lubricant	Note "Approved lubricants".

Tab. 22

Applying a lubricating film

- 1. Apply a small amount of lubricant to a soft, lint-free cloth.
- 2. Apply a thin lubricating film to the bearers. Ensure that no smudge marks occur.

3. Remove the excess lubricant using a clean, soft and lint-free cloth.

FS.914.004-0007KERN_09

10 Impression cylinder without UV interdeck dryer

10.1 Gripper systems

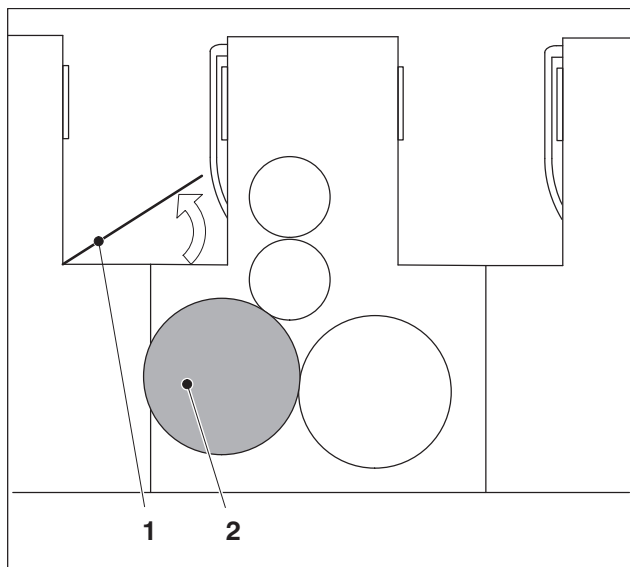


Fig. 40 Place of installation of the impression cylinder

Place of installation

- 1 Guard "Transfer drum"
- 2 Impression cylinder

The impression cylinder is mounted in the printing unit underneath the "Transfer drum" guard.

The impression cylinder is equipped with 2 gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is mounted on O.S., at the end of the gripper bar.

10.1.1 Lubricating the roller lever

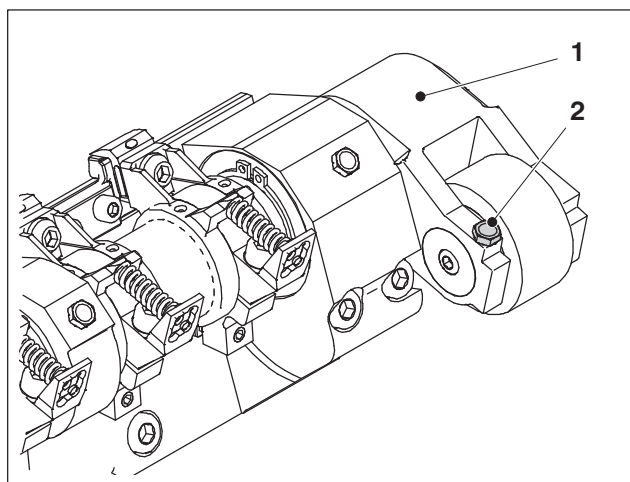


Fig. 41 Roller lever O.S.

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	O.S.
Access to the lubricating points	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 23

10.1.2 Lubricating the gripper shaft bearing

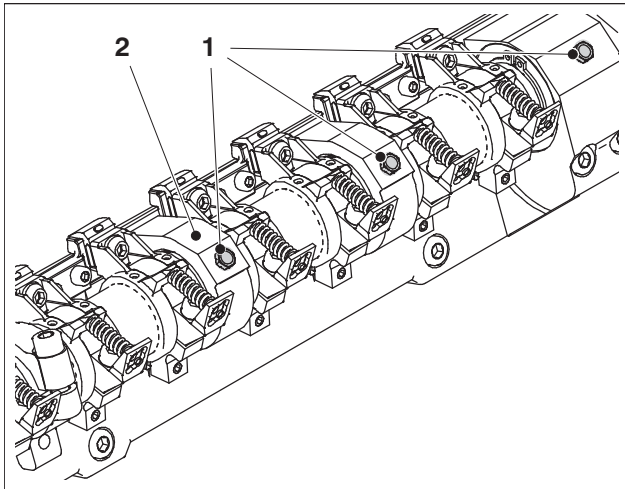


Fig. 42 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 24

FS.994.01.02-0007KERN_06

11 Impression cylinder with UV interdeck dryer

11.1 Gripper systems

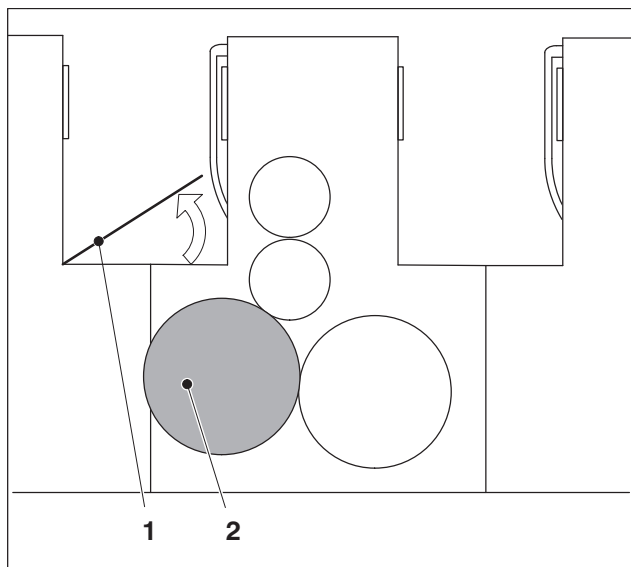


Fig. 43 Place of installation of the impression cylinder

Place of installation

- 1 Guard "Transfer drum"
- 2 Impression cylinder

The impression cylinder is mounted in the printing unit underneath the "Transfer drum" guard.

The impression cylinder is equipped with 2 gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is mounted on O.S., at the end of the gripper bar.

11.1.1 Lubricating the roller lever

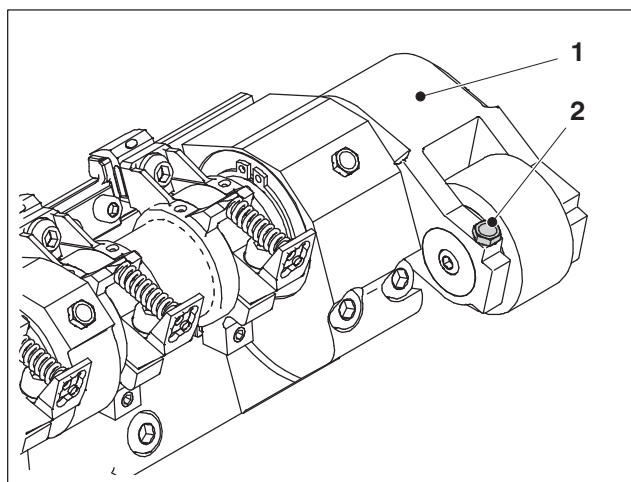


Fig. 44 Roller lever O.S.

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	O.S.
Access to the lubricating points	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 25

11.1.2 Lubricating the gripper shaft bearing

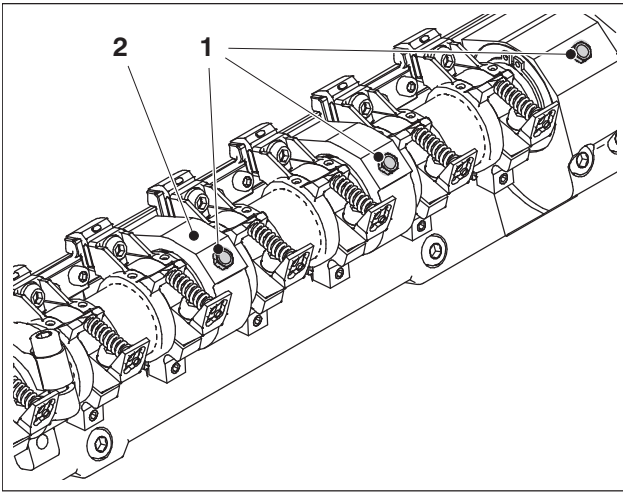


Fig. 45 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 26

FS-BM4-0136-000TERRU_00

12 Prinect Inpress Control

12.1 Measuring bar

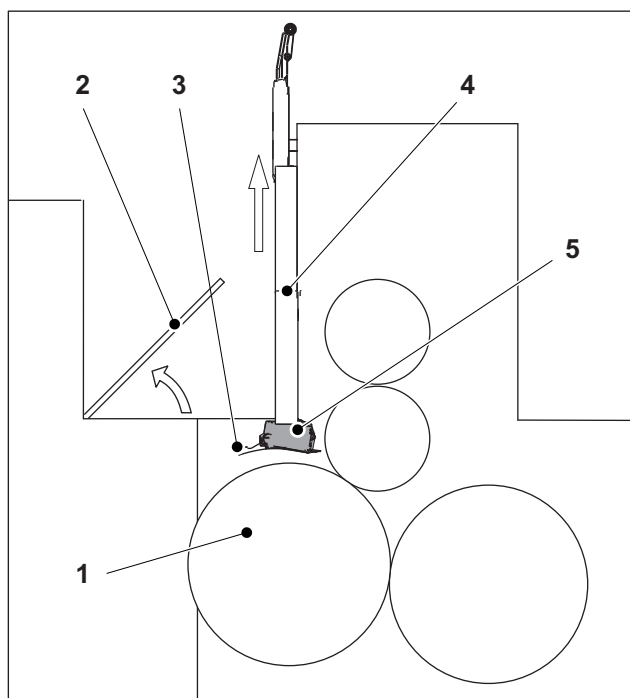


Fig. 46 Place of installation of the measuring bar

Place of installation

- 1 Impression cylinder
- 2 Guard "Transfer drum"
- 3 Sheet guide plate
- 4 AutoPlate
- 5 Measuring bar

The Prinect Inpress Control is installed in the last printing unit.

Two Prinect Inpress Controls are installed in presses with a perfector. The first system is located in the printing unit upstream of the perfector and the second system is located in the last printing unit upstream of the delivery.

12.1.1 Checking the swiveling unit

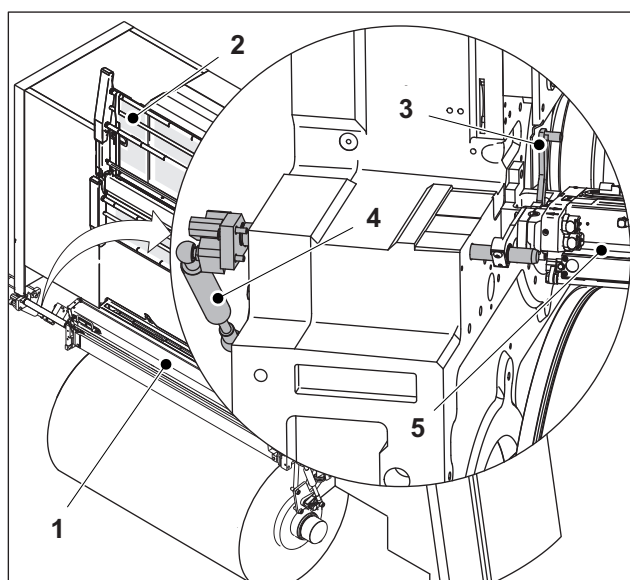


Fig. 47 Swiveling unit

The swiveling unit consists of a pneumatic spring and a notch lever.

- 1 Measuring bar in cleaning position
- 2 Holding device of the AutoPlate plate changer
- 3 Notch lever D.S.
- 4 Pneumatic spring D.S.
- 5 Measuring bar

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S.
Accessing the maintenance point	Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Move the holding device of the AutoPlate plate changer upward. Open the "Transfer drum" guard. Move the measuring bar to cleaning position.
Maintenance work	Check the function of the swivel unit.

Description of the maintenance point	
	<p>When changing from the cleaning position to the work position, the measuring bar must be buffered.</p> <p>If this is not the case, the pneumatic spring is defective and must be replaced by Heidelberg Service.</p> <p>The measuring bar must no longer move after engaging into the work position.</p>

Tab. 27

12.1.2 Cleaning the sheet guide plate

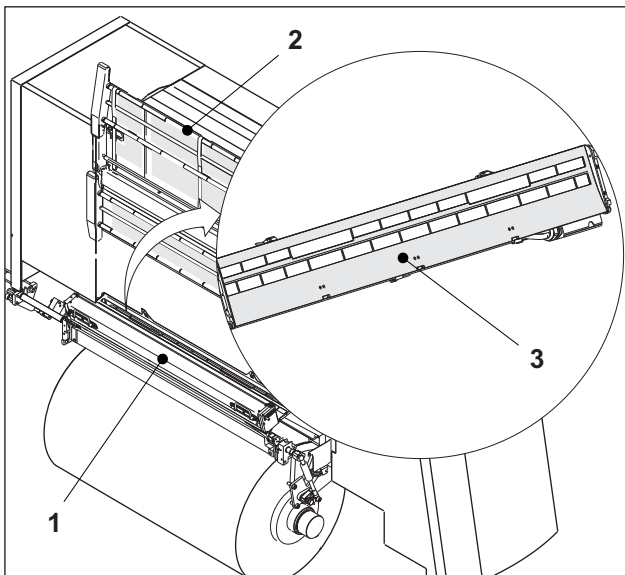


Fig. 48 Sheet guide plate on the measuring bar

- 1 Measuring bar in cleaning position
- 2 Holding device of the AutoPlate plate changer
- 3 Sheet guide plate on the measuring bar

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	<p>Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.</p> <p>Move the holding device of the AutoPlate plate changer upward. Open the "Transfer drum" guard. Move the measuring bar to cleaning position.</p>
Maintenance work	Clean the sheet guide plate from top to bottom.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 28

12.1.3 Checking the locking mechanism of the sheet guide plate

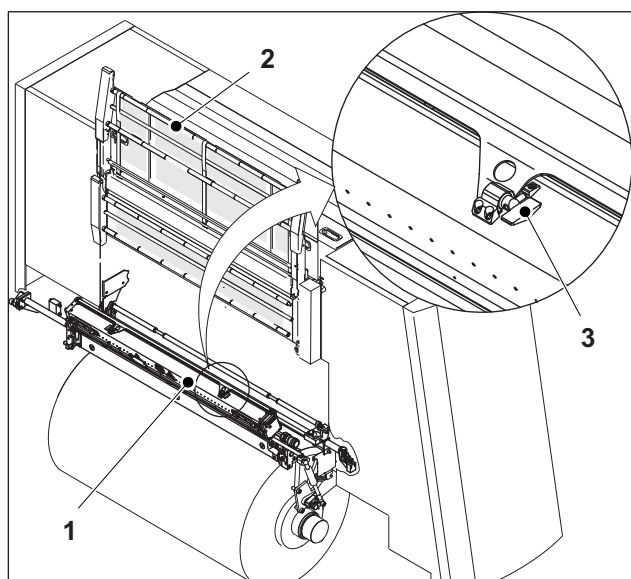


Fig. 49 Locking mechanism of the sheet guide plate

- 1 Measuring bar in cleaning position
- 2 Holding device of the AutoPlate plate changer
- 3 Closing mechanism O.S.

! Caution - Press damage!
The sheet guide plate must never open in working position.

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Move the holding device of the AutoPlate plate changer upward. Open the "Transfer drum" guard. Move the measuring bar to cleaning position.
Maintenance work	Check the function of the locking mechanism of the sheet guide plate.

Tab. 29

12.1.4 Checking and, if necessary, cleaning the glass pane

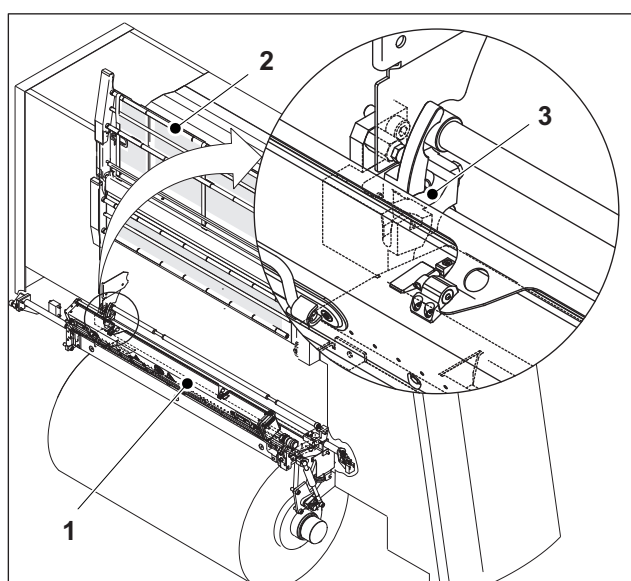


Fig. 50 Glass pane in the measuring bar base

- 1 Measuring bar in cleaning position
- 2 Holding device of the AutoPlate plate changer
- 3 Open sheet guide plate
- 4 Glass pane in the measuring bar base

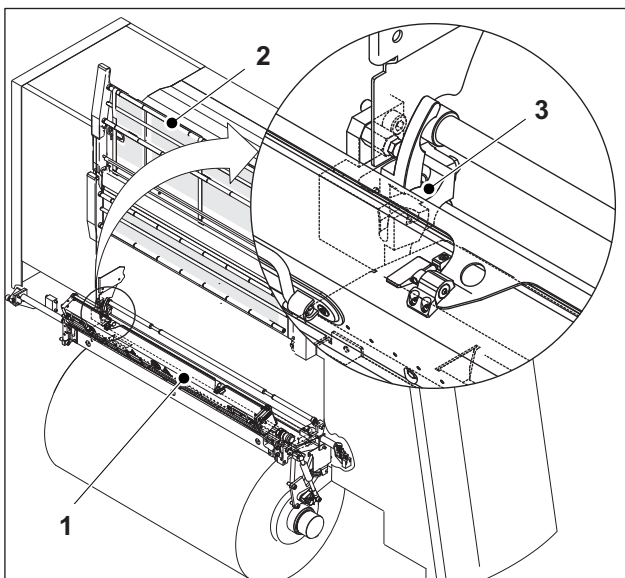
! Caution - Damage to the glass pane in the measuring bar base.
Never use a hard object to clean the surface of the glass pane in the measuring bar base!

Description of the maintenance point	
Maintenance interval	II
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Move the holding device of the AutoPlate plate changer up-

Description of the maintenance point	
	ward. Open the "Transfer drum" guard. Move the measuring bar to cleaning position.
Maintenance work	Check the glass pane in the measuring bar base for soiling. Clean the glass pane, if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 30

12.1.5 Checking and, if necessary, cleaning the bearings



FS-B04_0020-000PRINTD_00

- 1 Measuring bar in cleaning position
- 2 Holding device of the AutoPlate plate changer
- 3 Bearing for holding the measuring bar base

Fig. 51 Bearing for holding the measuring bar base

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Move the holding device of the AutoPlate plate changer upward. Open the "Transfer drum" guard. Move the measuring bar to cleaning position.
Maintenance work	Check the bearings for mounting the measuring bar for soiling. Clean the bearings if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 31

12.2 Hand-held spectrophotometer

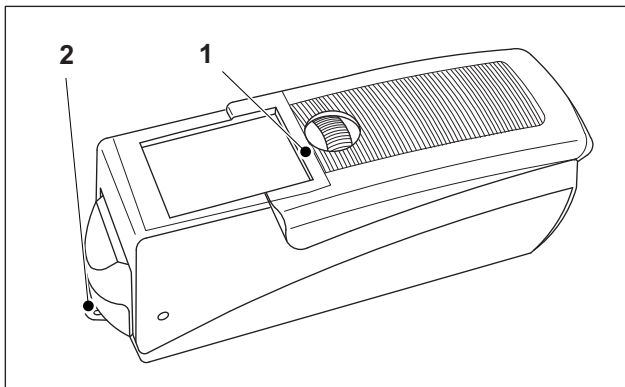


Fig. 52 Hand-held spectrophotometer

Place of installation

- 1 Hand-held spectrophotometer
- 2 Aperture

The hand-held spectrophotometer belongs to the Printect Inpress Control.

12.2.1 Checking and, if necessary, cleaning the aperture

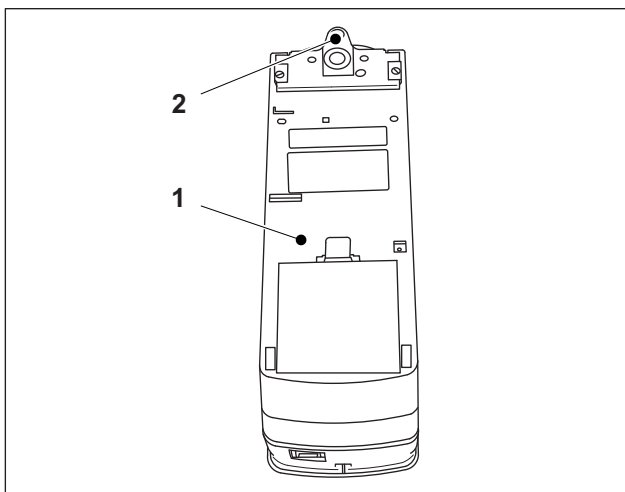


Fig. 53 Aperture of the hand-held spectrophotometer

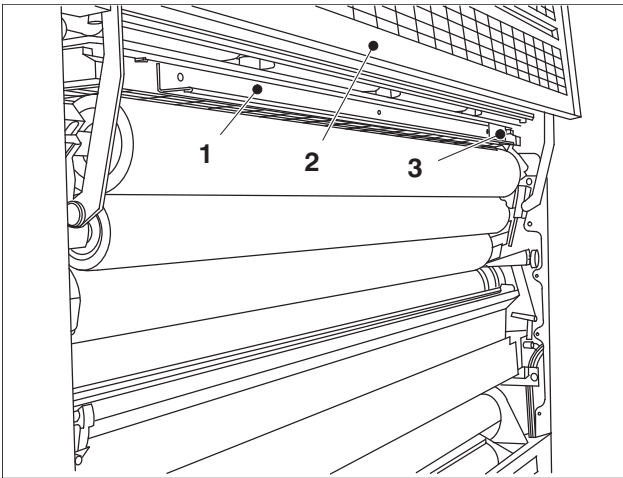
- 1 Underside of the hand-held spectrophotometer
- 2 Aperture

Description of the maintenance point	
Maintenance interval	III
Maintenance location	-
Accessing the maintenance point	-
Maintenance work	Visually check the aperture of the hand-held spectrophotometer for soiling. Clean the screen if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 32

13 Ink mist extraction device (only on printing presses with UV interdeck dryer)

13.1 Filter case

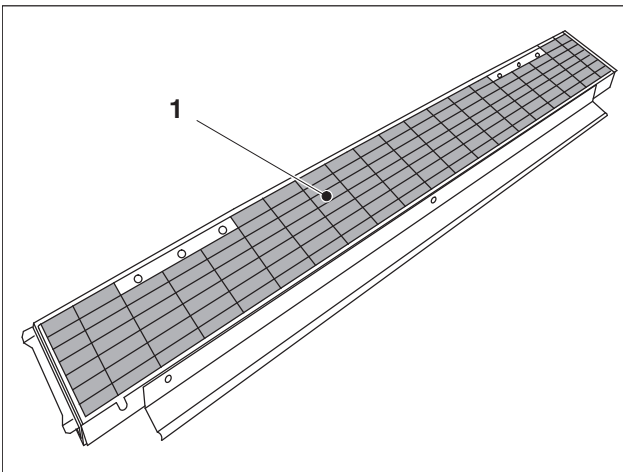


- 1 Filter case of the ink mist extraction device
- 2 Inking unit guard
- 3 Guide, filter case D.S.

The ink mist extraction device is fitted in the printing unit with UV interdeck dryer behind the inking unit guard.

Fig. 54 Filter case in the printing unit

13.1.1 Checking the filtering mat, replacing if necessary



- 1 Filter case with filtering mat

Description of the maintenance point	
Maintenance interval	I
Maintenance location	From D.S. to O.S.
Accessibility of the maintenance points	Open the inking unit guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Maintenance work	Check the filtering mat for soiling. If necessary, replace the filtering mat.
Required resources	Protective gloves; paper pad

Tab. 33

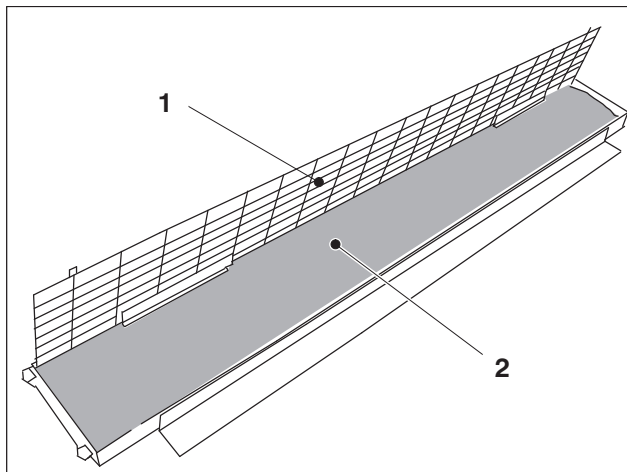


Fig. 56 Changing the filtering mat

- 1 Protection grid
- 2 Filtering mat

**Note**

Wear protective gloves while changing the filtering mat!

Mounting and demounting

1. Open the inking unit guard.
2. Remove the filter case from the printing unit. Lay down the filter case on a paper base.
3. Open the protection grid (Fig. 56/1) of the filter case.
4. Remove the soiled filtering mat (Fig. 56/2) from the filter case.

**Note**

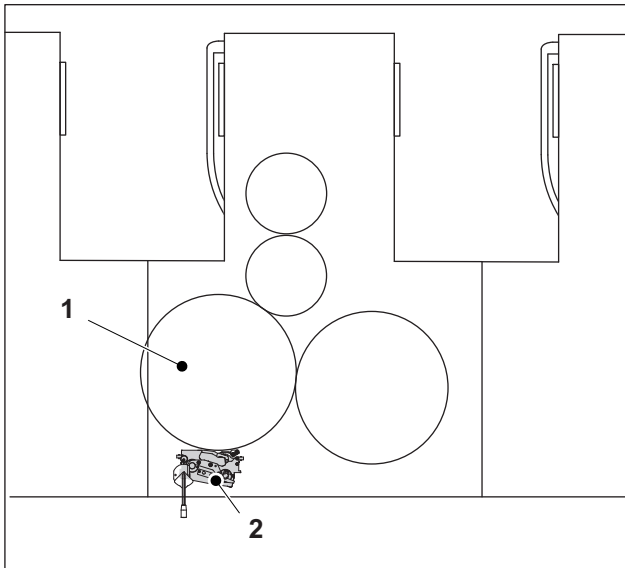
Dispose of the soiled filtering mat in an environmentally friendly manner!

5. Insert the new filtering mat into the filter case. Ensure that the smooth side of the surface points upward when inserting the mat.
6. Close the protection grid (Fig. 56/1) of the filter case.
7. Insert the filter case via the guides into the printing unit (Fig. 54/1). Take care that the case does not get jammed.
8. Close the inking unit guard.

FS_904_604-000FRONT_00

14 Impression cylinder washup device

14.1 Impression cylinder washup device



FS_904_6103-000FRONT_00

Place of installation

- 1 Impression cylinder
- 2 Impression cylinder washup device

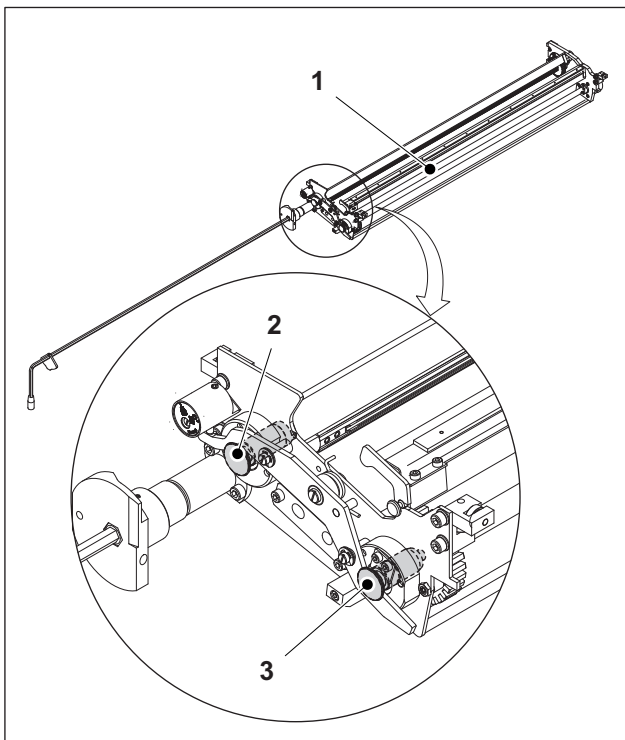
The impression cylinder washup device is installed in the printing unit, underneath the impression cylinder and behind the footboard guard.

► **Note**

Consult also the chapter on "Impression Cylinder Washup Device" in your operating manual.

Fig. 57 Place of installation of the impression cylinder washup device

14.1.1 Lubricating the bearing bolts of the cloth supply spindle/used-cloth roll spindle



FS_904_6104-000FRONT_00

- 1 Impression cylinder washup device
- 2 Bearing bolts of spindle for used-cloth roll
- 3 Bearing bolts of cloth supply spindle

Description of the lubricating point	
Maintenance interval	V
Maintenance location	O.S.
Access to the lubricating points	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Lubricate the bearing bolts of the cloth supply spindle/used-cloth roll spindle.
Required resources	Spray can B02
Lubricant	Elkalub FLC 1012 Note "Approved lubricants".

Fig. 58 Bearing bolt O.S.

Tab. 34

14.1.2 Cleaning and checking the distributor bar and replacing it if necessary

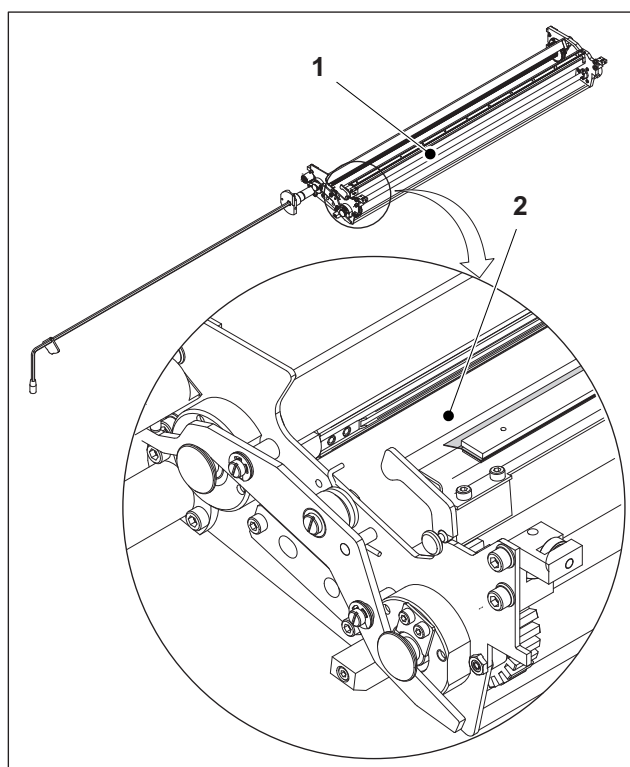


Fig. 59 Distributor bar O.S.

- 1 Impression cylinder washup device
- 2 Distributor bar

Description of the maintenance point	
Maintenance interval	V
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Clean the distributor bar and check for cracks and wear. Replace the distributor bar, if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 35

14.1.3 Lubricating the brake

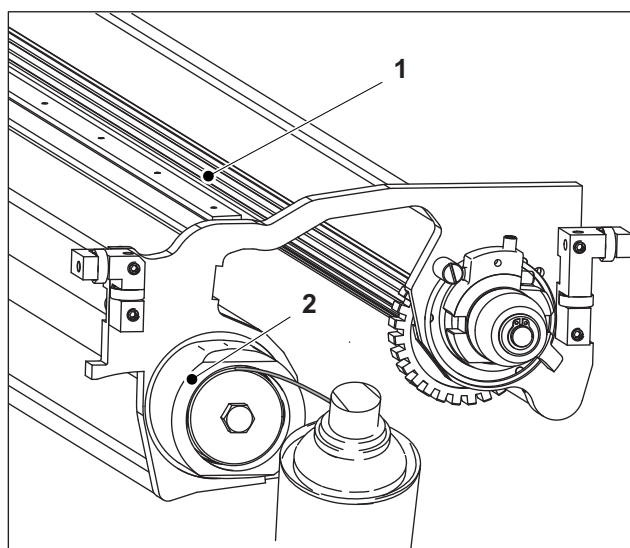


Fig. 60 Brake

- 1 Impression cylinder washup device
- 2 Brake

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Lubricate the brake and turn the brake wheel one full revolution.
Required resources	Spray can B02
Lubricant	Elkalub FLC 1012 Note "Approved lubricants".

Tab. 36

14.1.4 Cleaning the guide rail

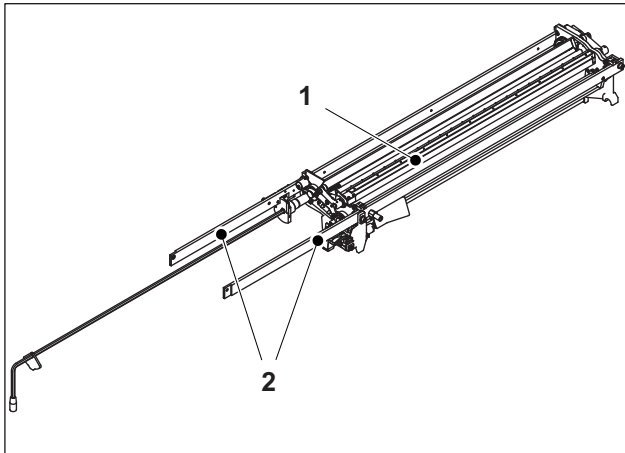


Fig. 61 Guide rails

- 1 Impression cylinder washup device
- 2 Guide rails

Description of the maintenance point	
Maintenance interval	V
Maintenance location	O.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Clean the guide rails.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 37

14.2 Spray tubes

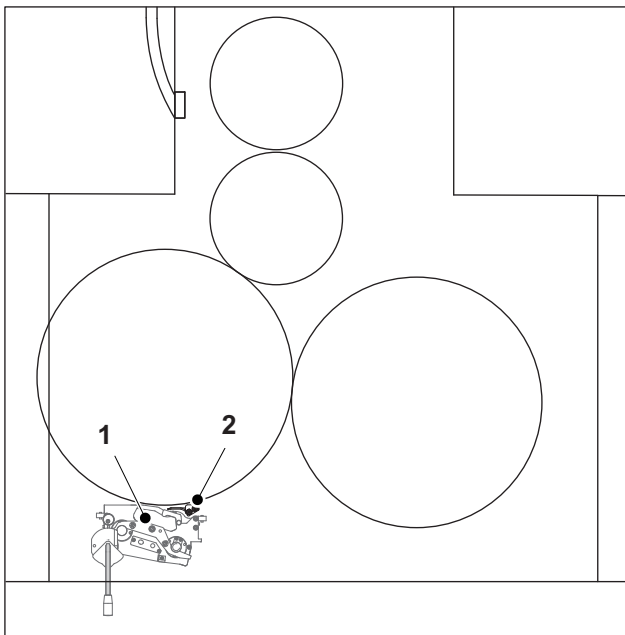


Fig. 62 Place of installation of the spray tubes

Place of installation

- 1 Impression cylinder washup device
- 2 Spray tubes

The spray tubes of the impression cylinder washup device are installed in each printing unit, underneath the impression cylinder.

► **Note**
Consult also the chapter on "Impression Cylinder Washup Device" in your operating manual.

14.2.1 Checking and, if necessary, cleaning the spray tubes

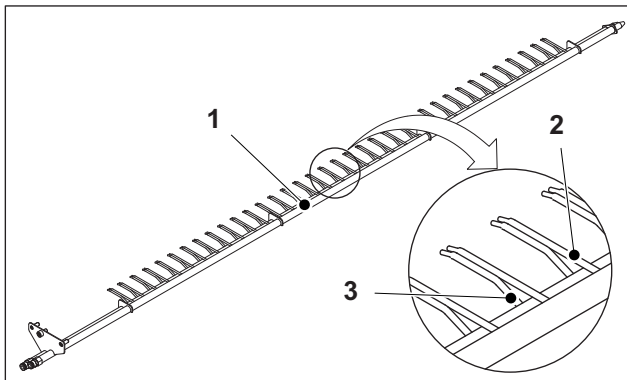


Fig. 63 Spray tubes

- 1 Spray tubes
- 2 Spray tubes for washing fluid
- 3 Spray tubes for water

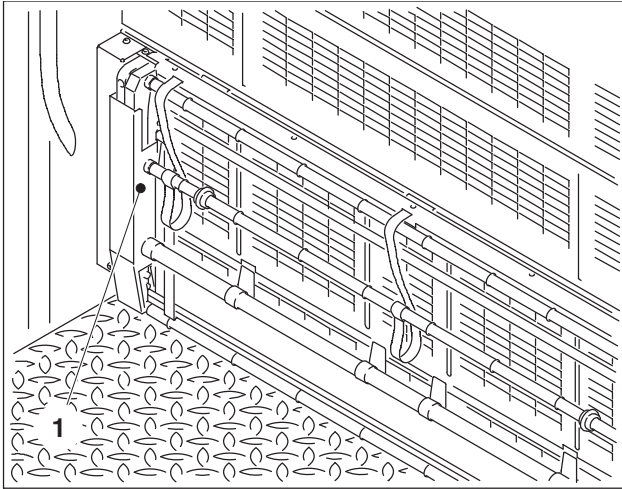
Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Check the function and condition of the spray tubes with the <i>Test spray tube</i> button in the Washup menu. Clean the spray tubes if necessary.
Required resources	Protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 38

FS.904.0097-000FRONT_05

15 AutoPlate Advanced plate changer

15.1 Holding device



FS.904.0046-000FRONT_00

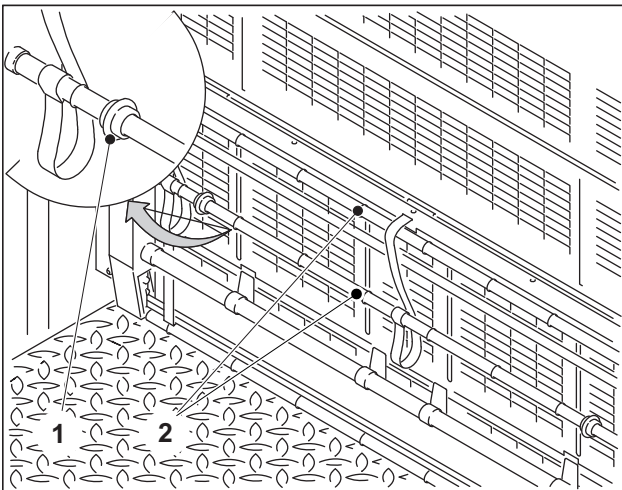
Place of installation

- 1 Holding device of the AutoPlate Advanced plate changer

The holding device of the AutoPlate Advanced plate changer is fitted on the delivery side in every printing unit.

Fig. 64 Place of installation of AutoPlate Advanced

15.1.1 Checking and, if necessary, cleaning the guide shafts



FS.904.0047-000FRONT_00

- 1 Guide shaft
- 2 O-seals

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	-
Maintenance work	Check the O-seals on the two guide shafts for soiling. Clean the O-seals, if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note approved washing fluids.

Fig. 65 O-seals on the guide shafts

Tab. 39

15.1.2 Checking and, if necessary, replacing the guide straps

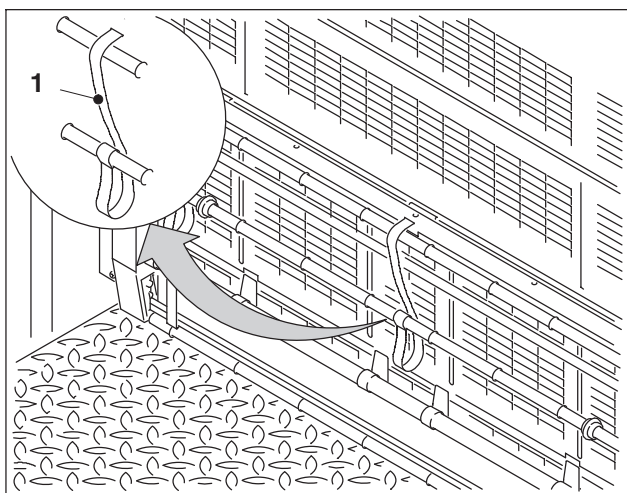


Fig. 66 Guide straps

1 Guide straps

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S./middle/O.S.
Accessing the maintenance point	-
Maintenance work	Check the 3 guide straps for wear. If necessary, have the guide straps replaced by your Heidelberg Service.

Tab. 40

15.1.3 Cleaning and, if necessary, replacing the clamps and O-seals of the plate ejector

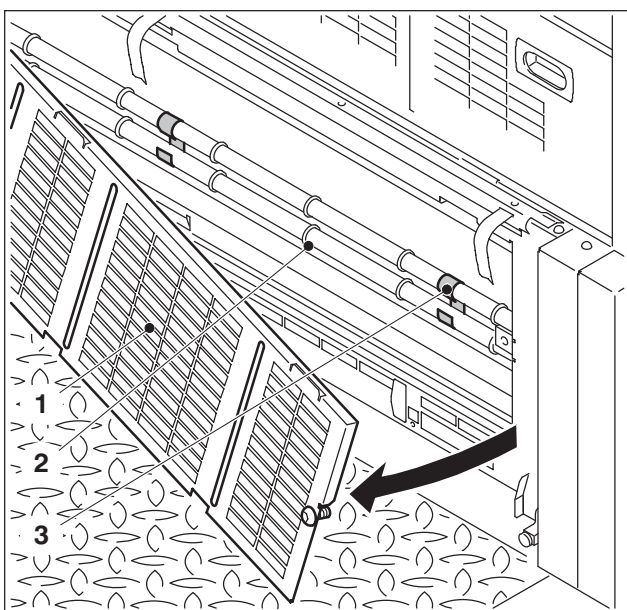


Fig. 67 Clamps and O-seals of the plate ejector

1 Maintenance cover

2 O-seals

3 Clamp

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Move the holding device to its upper position and open the maintenance flap.
Maintenance work	Clean the straps and O-seals of the plate ejector. If necessary, replace the O-seals.
Required resources	Soft, fluffless cloth, brush, protective gloves
Washing fluid	Note approved washing fluids.

Tab. 41

15.1.4 Checking and, if necessary, cleaning the guide rollers

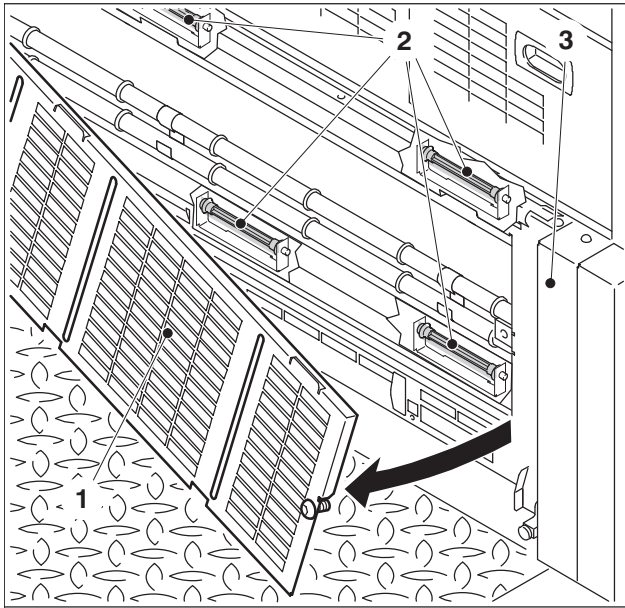


Fig. 68 Guide rollers on the guard

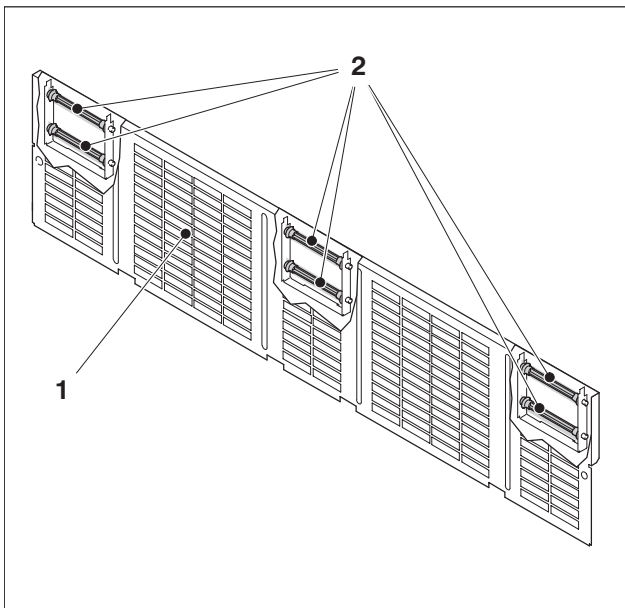


Fig. 69 Guide rollers on the maintenance cover

- 1 Maintenance cover
- 2 Guide rollers
- 3 Cylinder guard

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Move the holding device to its upper position and open the maintenance flap.
Maintenance work	Check the 13 guide rollers in the maintenance flap and cylinder guard for soiling. Clean the guide rollers, if necessary.
Required resources	Soft, lint-free cloth; paint brush; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 42

15.1.5 Cleaning the "Rear edge of plate" sensor

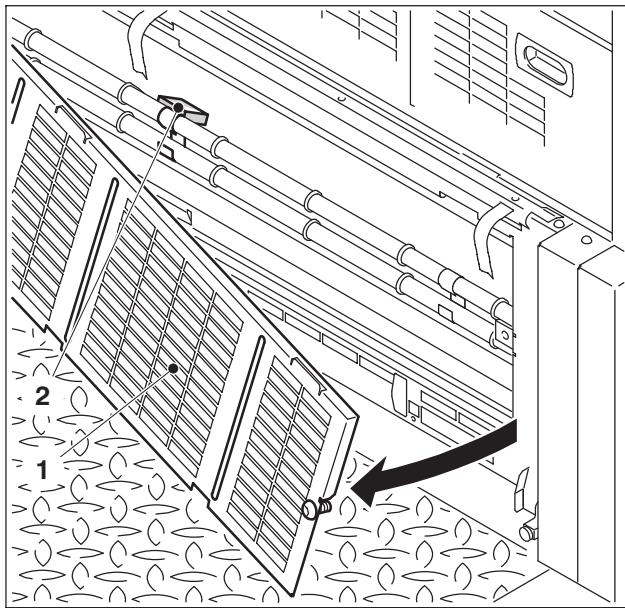


Fig. 70 "Rear edge of plate" sensor

- 1 Maintenance cover
- 2 "Rear edge of plate" sensor

Description of the maintenance point	
Maintenance interval	III
Maintenance location	Center
Accessing the maintenance point	Move the holding device to its upper position and open the maintenance flap.
Maintenance work	Clean the sensor "Rear edge of plate".
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 43

FS_B04_0135-000FRONT_00

16 AutoPlate XL plate changer

16.1 Holding device

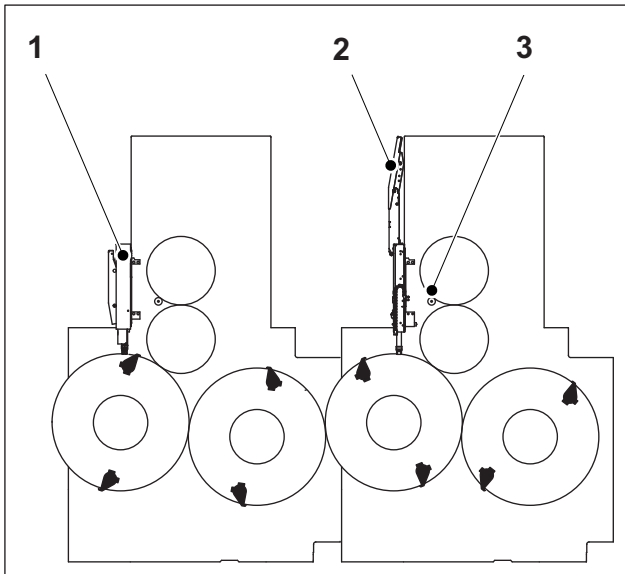


Fig. 71 Holding device of the AutoPlate XL plate changer

Place of installation

- 1 Delivery-side cylinder guard with retracted holding device
- 2 Holding device extended
- 3 Pressing roller

The AutoPlate XL plate changer fitted to each printing unit at the delivery side. It consists of the delivery-side cylinder guard, the holding device, and the pressing roll.

16.1.1 Checking and, if necessary, cleaning the guide shafts

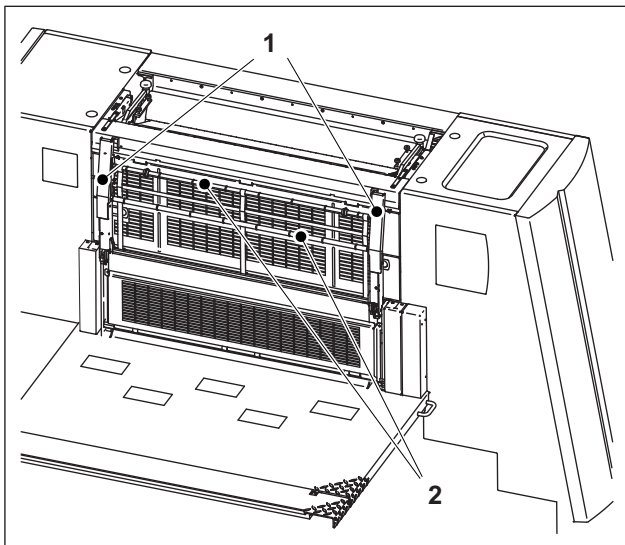


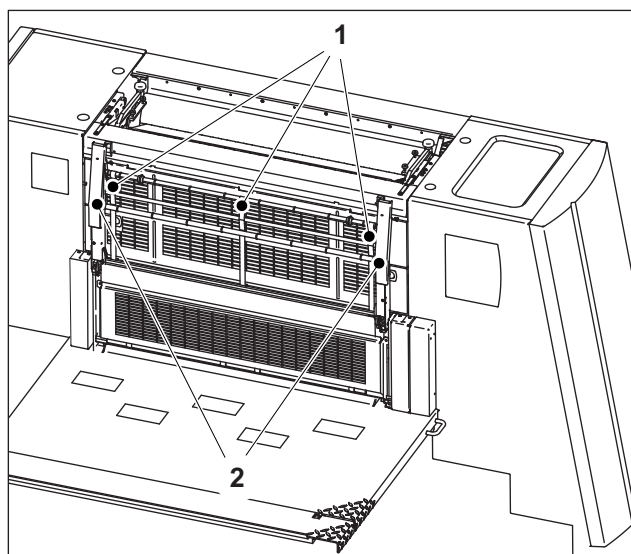
Fig. 72 Guide shafts on the holding device

- 1 Holding device extended
- 2 Guide shafts

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Set the holding device upward.
Maintenance work	Check the O-seals on the two guide shafts for contamination. Clean if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 44

16.1.2 Checking and, if necessary, replacing the guide straps



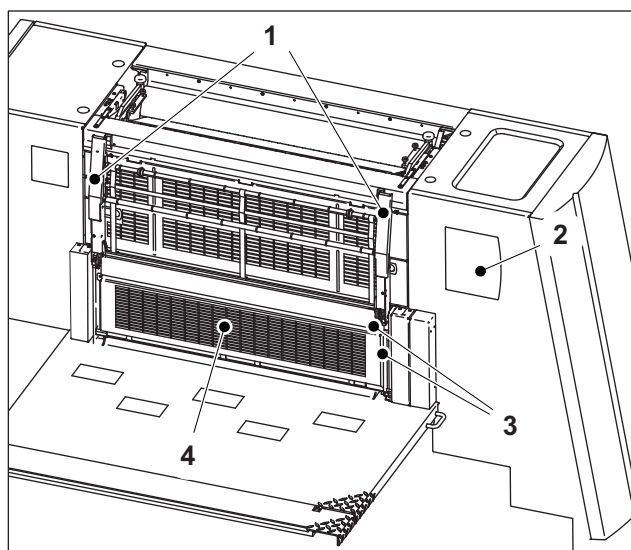
- 1 Guide straps
- 2 Holding device extended

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S./middle/O.S.
Accessing the maintenance point	Set the holding device upward.
Maintenance work	Check the 3 guide straps for wear. If the guide straps are worn out, have them replaced by Heidelberg Service.

Tab. 45

Fig. 73 Guide tapes on the holding device

16.2 Delivery-side cylinder guard



Place of installation

- 1 Holding device extended
- 2 Printing unit control panel O.S.
- 3 Delivery-side cylinder guard
- 4 Maintenance cover

The AutoPlate XL plate changer fitted to each printing unit at the delivery side It consists of the delivery-side cylinder guard, the holding device, and the pressing roll.

► Note

Some of the maintenance activities on the delivery-side cylinder guard are only possible when the printing press is in "cleaning function". The maintenance point descriptions of the individual activities point out when this is required.

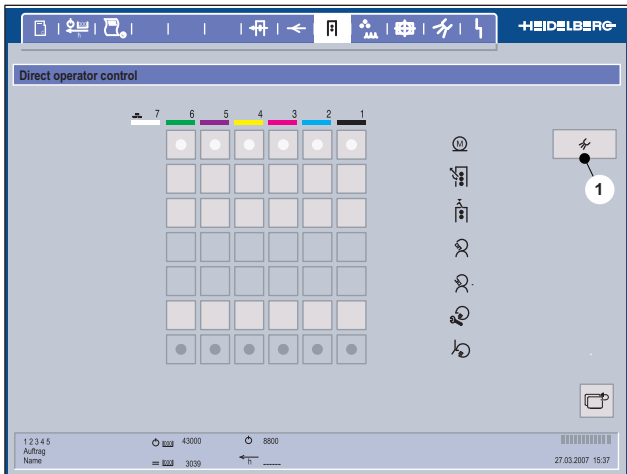


Fig. 75 Direct operator control menu

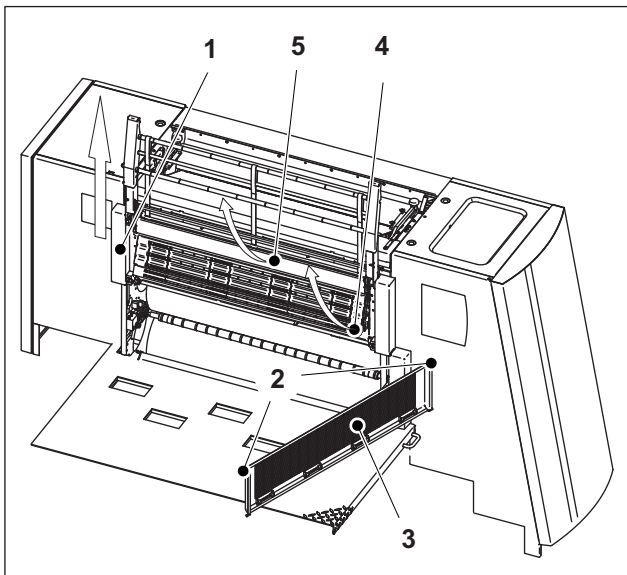


Fig. 76 Setting the cleaning function

Setting the cleaning function

1. On the control console, select the *Washup* button (Fig. 75/1) in the **Direct operator control** menu.

2. Set the holding device (Fig. 76/1) upward.
3. Release the two screw fasteners (Fig. 76/2) on the service cover and remove the service cover (Fig. 76/3).
4. Open the delivery-side cylinder guard (Fig. 76/1). The motor of the tape driving roller starts rotating for approximately 2 min.
5. Raise the cover (Fig. 76/5).
6. **Only to be done during maintenance activities on the guide rollers, guide rails and the "Rear edge of plate" sensor!** Swing up the guiding device (Fig. 76/4). Hold the guiding device **at the sides only**. You can release the guiding device afterwards. Its latching mechanism holds it at this position.

Caution - Press damage!
 Hold the guiding device **only at the sides** to swing it open. Improper handling may damage the guiding device.

7. Carry out the described maintenance activities.

16.2.1 Checking and, if necessary, cleaning the counter rollers and silicone rings on the tape driving roller

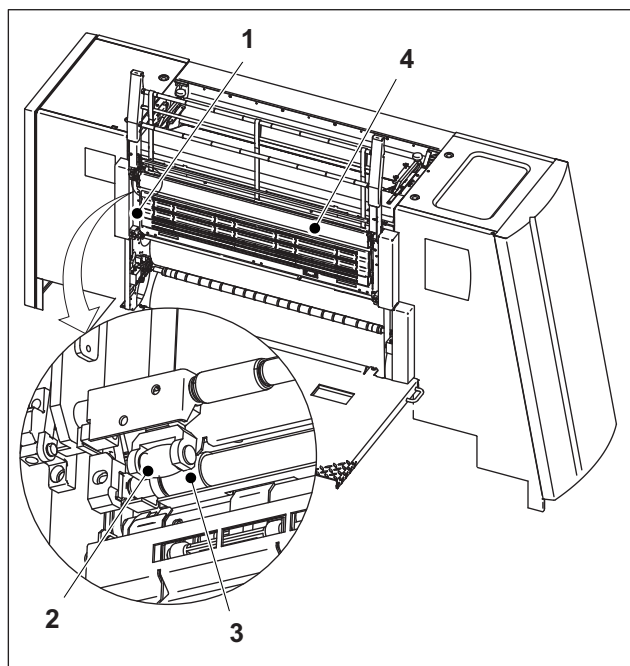


Fig. 77 Counter roller and silicone ring on the tape driving roller

- 1 Delivery-side cylinder guard
- 2 Counter roller
- 3 Silicone ring on the tape driving roller
- 4 Cover

Description of the maintenance point	
Maintenance interval	II
Maintenance location	D.S. / O.S.
Accessing the maintenance point	See "Setting the cleaning function" (Fig. 76). Note: Do not swing out the guiding device!
Maintenance work	Check counter roller and silicone rings on the tape driving roller for contamination. Clean the counter rollers and silicone rings, if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 46

16.2.2 Checking and, if necessary, cleaning the guide rollers and guide rails

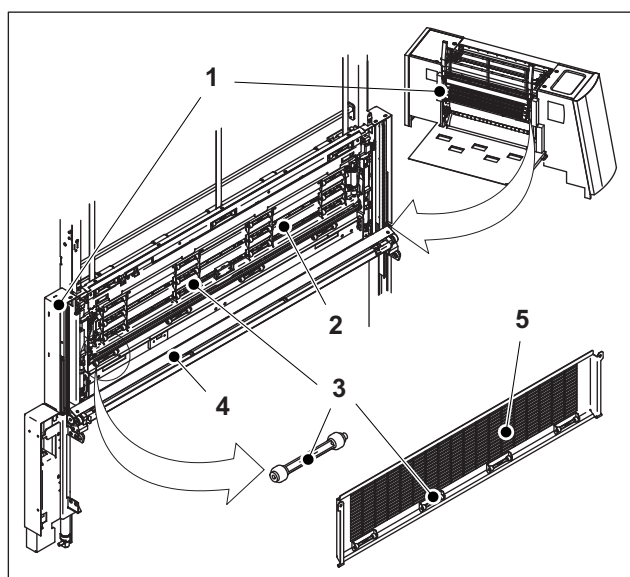


Fig. 78 Guide rollers in the delivery-side cylinder guard

- 1 Delivery-side cylinder guard
- 2 Guiding device
- 3 Guide roller
- 4 Guide rails
- 5 Maintenance cover

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	See "Setting the cleaning function" (Fig. 76).
Maintenance work	Check the guide rollers in the plate loading and plate ejection compartments of the guiding element and in the service lid, as well as the guide rails for soiling. Clean the guide rollers and guide rails, if necessary.

Description of the maintenance point	
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 47

16.2.3 Checking and, if necessary, cleaning the "Rear edge of plate" sensor

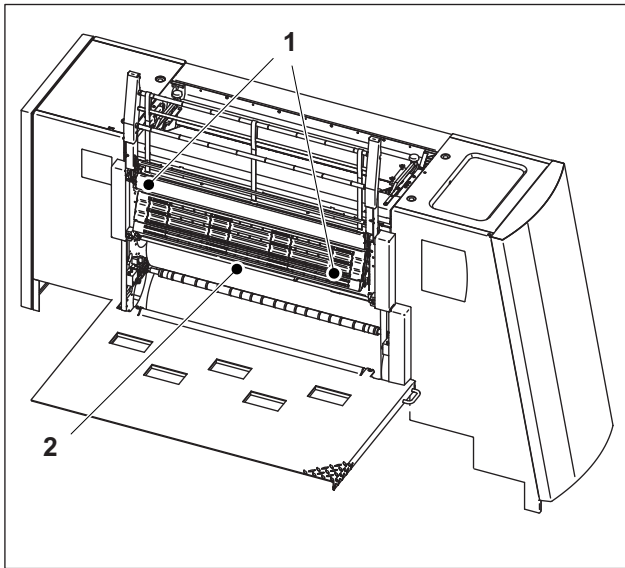


Fig. 79 "Rear edge of plate" sensor in the delivery-side cylinder guard

- 1 Delivery-side cylinder guard
- 2 "Rear edge of plate" sensor

Description of the maintenance point	
Maintenance interval	III
Maintenance location	Center
Accessing the maintenance point	See "Setting the cleaning function" (Fig. 76).
Maintenance work	Check the "Plate rear edge" sensor for soiling. Clean the sensor, if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 48

16.2.4 Checking and, if necessary, cleaning the "New plate ready" sensor

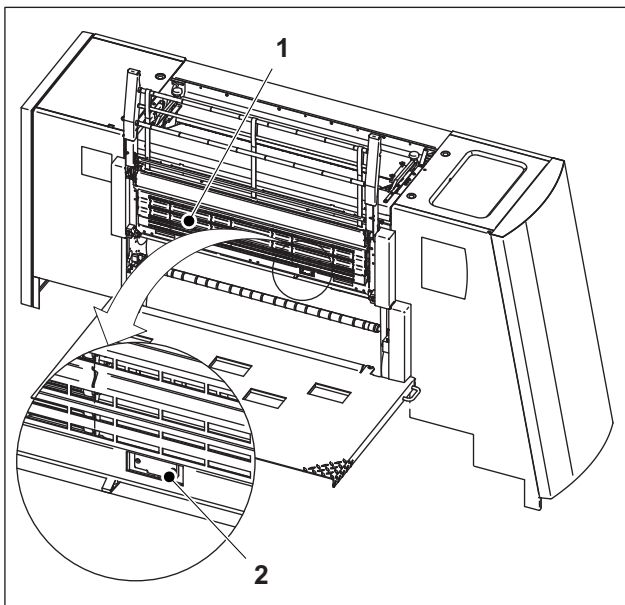


Fig. 80 "New plate" sensor in the delivery-side cylinder guard

- 1 Delivery-side cylinder guard
- 2 "New plate" sensor

Description of the maintenance point	
Maintenance interval	III
Maintenance location	O.S.
Accessing the maintenance point	Set the holding device upward. Open the delivery-side cylinder guard. Release the two screw fasteners on the service cover and remove the service cover.
Maintenance work	Check the sensor "New plate ready" for soiling. Clean the sensor, if necessary.
Required resources	Soft, lint-free cloth; protective gloves

Description of the maintenance point	
Washing fluid	Note "Approved washing fluids".

Tab. 49

16.2.5 Checking and, if necessary, cleaning or replacing the register pins

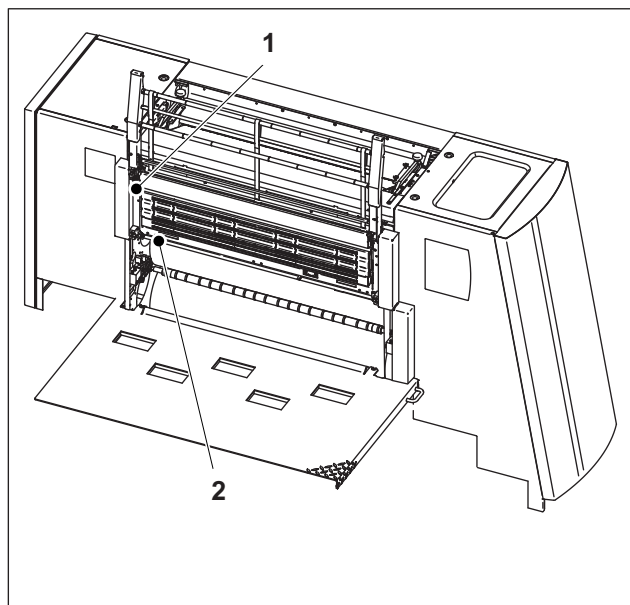


Fig. 81 Register pins in the delivery-side cylinder guard

- 1 Delivery-side cylinder guard
- 2 Register pin

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S.
Accessing the maintenance point	Set the holding device upward. Open the delivery-side cylinder guard. Release the two screw fasteners on the service cover and remove the service cover.
Maintenance work	Check the register pin for soiling. Clean the register pin, if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 50

16.3 Pressing roller

16.3.1 Checking and, if necessary, cleaning the silicone rings

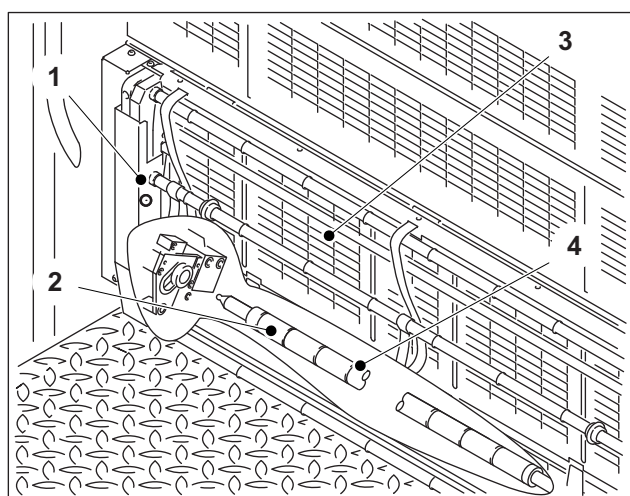


Fig. 82 Silicone rings on the pressing roll

- 1 Holding device
- 2 Pressing roller
- 3 Delivery-side cylinder guard
- 4 Silicone ring

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Open the delivery-side cylinder guard.
Maintenance work	Check the silicone rings for wear and soiling. Clean the silicone rings, if necessary.

Description of the maintenance point	
	If wear is detected on the silicone rings, have them replaced by Heidelberg Service.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 51

16.4 Plate cylinder

16.4.1 Checking and, if necessary, cleaning the "Register pin, PPD system" sensor

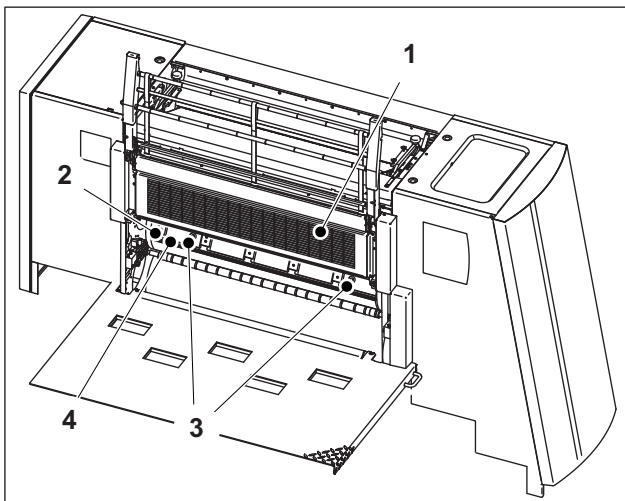


Fig. 83 "Register pin" sensor in the delivery-side cylinder guard

- 1 Delivery-side cylinder guard
- 2 Plate cylinder
- 3 "Register pin" sensor
- 4 Clamping bar

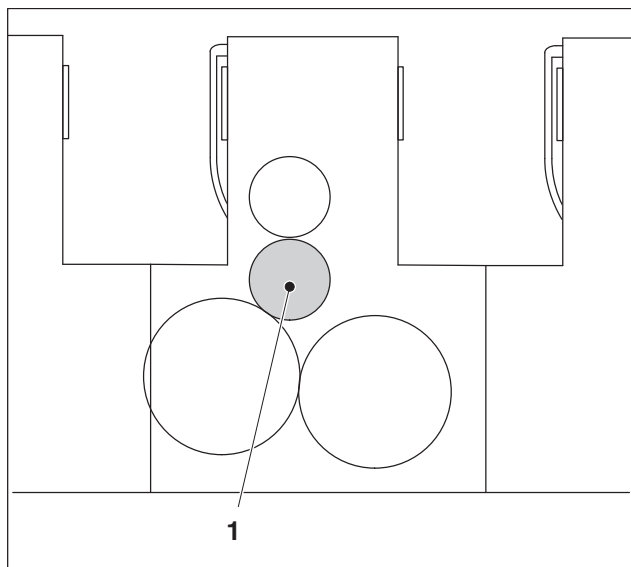
Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Open the delivery-side cylinder guard. Crank the plate cylinder in <i>inching mode</i> until the clamping bar is visible.
Maintenance work	Check the "Register pin" sensor for contamination. Clean the sensor in the visible area, as necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 52

FS.BA.0092-0007KERN_00

17 Blanket cylinder

17.1 Cylinder surface



FS.006.0006-0006BAND_00

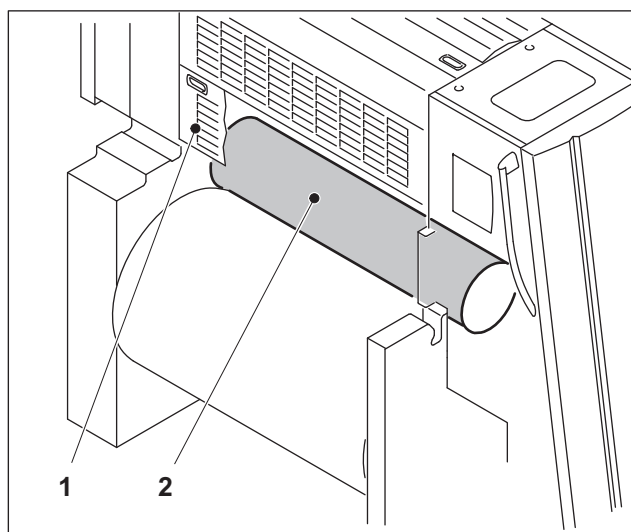
Place of installation

1 Blanket cylinder

The blanket cylinder is installed in the printing unit behind the "Plate cylinder and blanket cylinder" guard.

Fig. 84 Place of installation of the blanket cylinder

17.1.1 Checking the sheet-metal jacket



FS.BA.0004-0006BAND_00

1 "Plate cylinder" guard

2 Blanket cylinder

Description of the maintenance point	
Maintenance interval	V
Maintenance location	-
Accessing the maintenance point	Open the guard "Plate cylinder and blanket cylinder". Crank the blanket cylinder in inching mode.
Maintenance work	Check the cylinder jacket for damage and ink residue.
Required resources	-
Washing fluid	-

Fig. 85 Blanket cylinder

Tab. 53

FS_B04_0096-000FRANZ_00

18 Blanket washup device

18.1 Blanket washup device

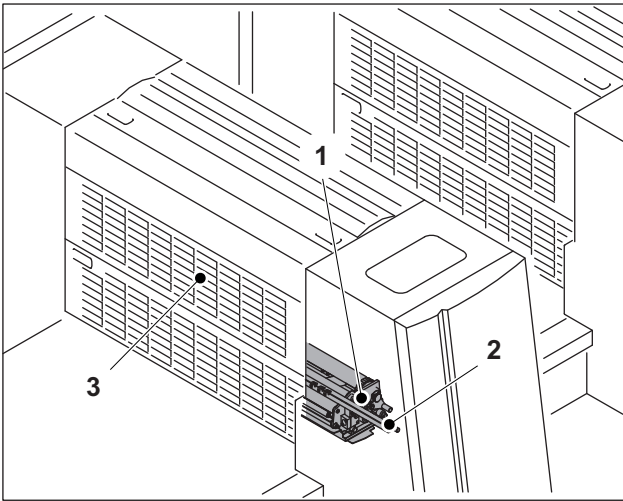


Fig. 86 Place of installation of the blanket washup device

Place of installation

- 1 Blanket washup device
- 2 Spray tubes
- 3 Guard "Plate cylinder and blanket cylinder"

The blanket washup device is fitted behind the "Plate and blanket cylinder" guard in the printing unit.

The spray tubes are fitted over the blanket washup device.

► **Note**

Consult also the chapter on "Blanket Washup Device" in your operating manual.

18.1.1 Checking and, if necessary, replacing the control lever

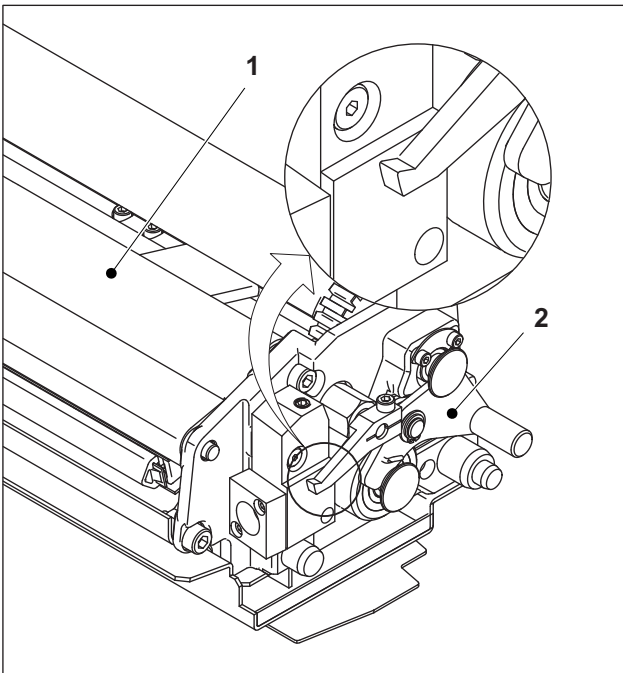


Fig. 87 "End of cloth supply roll" control lever

- 1 Blanket washup device
- 2 "End of cloth supply roll" control lever

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	O.S.
Accessing the maintenance point	Secure the press against starting up again: Press the <i>Emergency-stop</i> button on the next-nearest control panel. Open the "Plate cylinder/blanket cylinder" guard.
Maintenance work	Check the edge of the "End of cloth supply roll" control lever for damage. There must be no burr on the edge. If the control lever is damaged, have it replaced by Heidelberg Service.

Tab. 54

18.1.2 Checking and, if necessary, cleaning the locking device

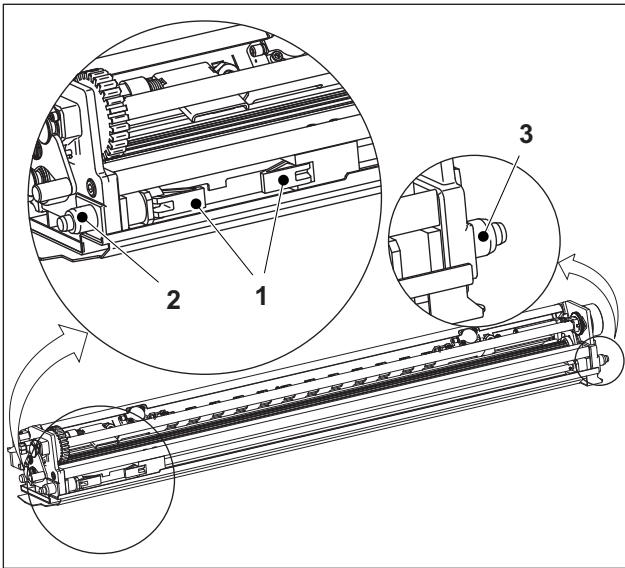


Fig. 88 Locking device of the blanket washup device

- 1 Locking lever
- 2 Locking bolt O.S.
- 3 Locking bolt D.S.

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against starting up again: Press the <i>Emergency-stop</i> button on the next-nearest control panel. Open the "Plate cylinder/blanket cylinder" guard.
Maintenance work	Check the function of the locking bolt. This is done by moving the two locking levers on O.S. in the horizontal direction. Clean the locking bolt if necessary.
Required resources	Soft, lint-free cloth, paint brush

Tab. 55

18.1.3 Lubricating the brake

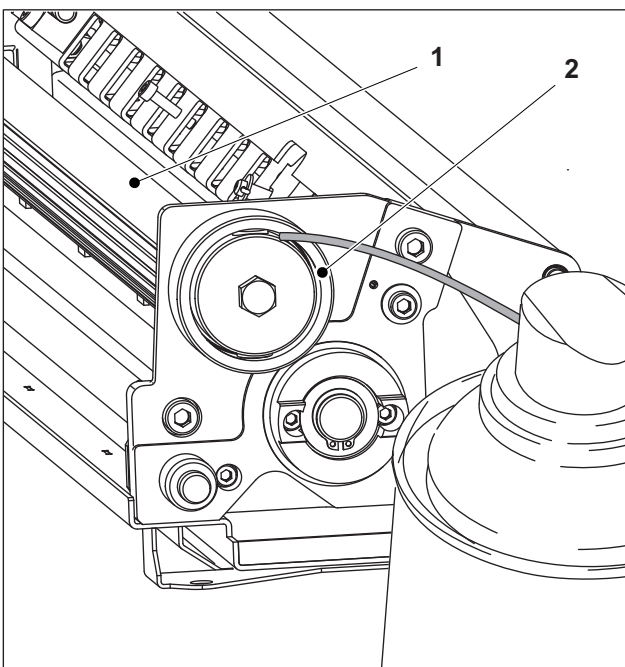


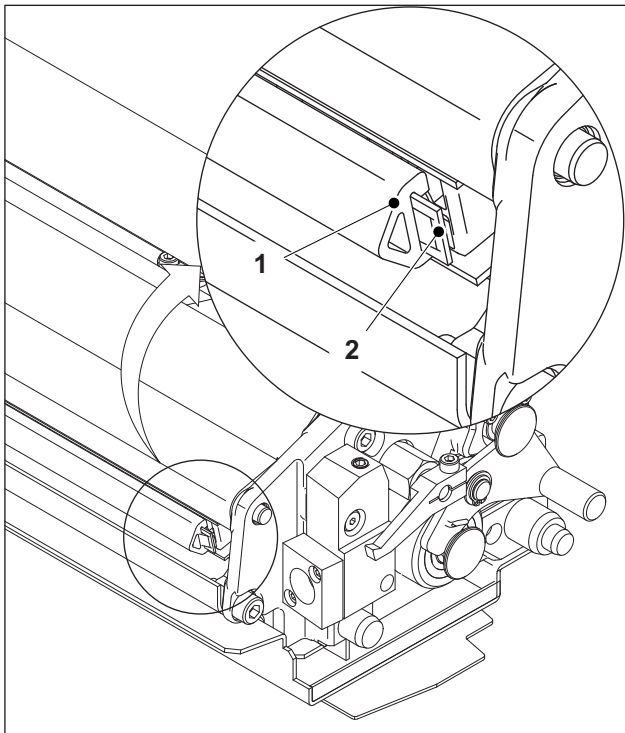
Fig. 89 Brake

- 1 Blanket cylinder washup device
- 2 Brake

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S.
Accessing the maintenance point	Secure the press against starting up again: Press the <i>Emergency-stop</i> button on the next-nearest control panel. Open the "Plate cylinder/blanket cylinder" guard.
Maintenance work	Lubricate the brake and turn the brake wheel one full revolution.
Required resources	Spray can B02
Lubricant	Elkalub FLC 1012, Note "Approved lubricants".

Tab. 56

18.1.4 Cleaning and checking the rubber lip and replacing it if necessary



FS-904_6099-000GRAND_00

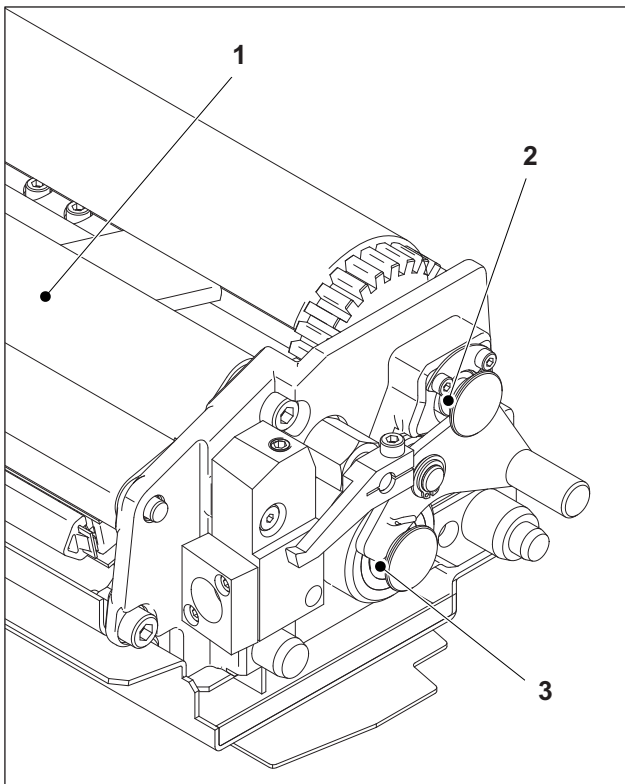
1 Rubber lip

Description of the maintenance point	
Maintenance interval	V
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against starting up again: Press the <i>Emergency-stop</i> button on the next-nearest control panel. Open the "Plate cylinder/blanket cylinder" guard.
Maintenance work	Clean the rubber lip and check for wear. Replace the rubber lip if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 57

Fig. 90 Rubber lip

18.1.5 Lubricating the bearing bolts



FS-904_6100-000GRAND_00

- 1 Blanket washup device
- 2 Bearing bolts of cloth supply spindle
- 3 Bearing bolts of spindle for used-cloth roll

Description of the lubricating point	
Maintenance interval	V
Maintenance location	O.S.
Access to the lubricating points	Secure the press against starting up again: Press the <i>Emergency-stop</i> button on the next-nearest control panel. Open the "Plate cylinder/blanket cylinder" guard.
Number/type/maintenance work	Lubricate the bearing bolts of the cloth supply spindle/used-cloth roll spindle.
Required resources	Spray can B02
Lubricant	Elkalub FLC 1012, Note "Approved lubricants".

Tab. 58

Fig. 91 Bearing bolt O.S.

18.1.6 Checking and, if necessary, cleaning the spray tubes

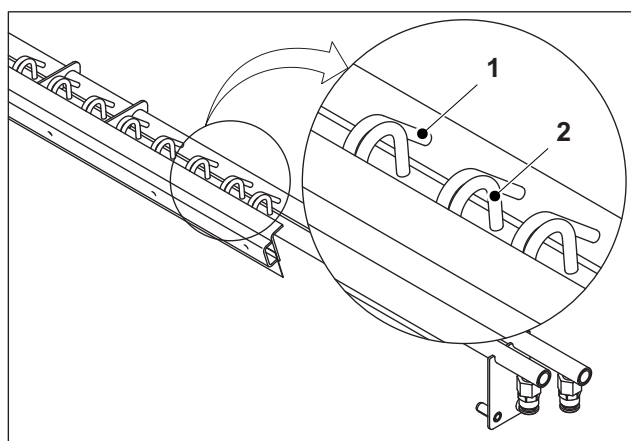


Fig. 92 Spray tubes

- 1 Spray tubes for washing fluid
- 2 Spray tubes for water

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against starting up again: Press the <i>Emergency-stop</i> button on the next-nearest control panel. Open the "Plate cylinder/blanket cylinder" guard.
Maintenance work	Check the function and condition of the spray tubes with the <i>Test spray tube</i> button in the Washup menu. Clean the spray tubes if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 59

18.1.7 Cleaning and checking the distributor bar and replacing it, if necessary

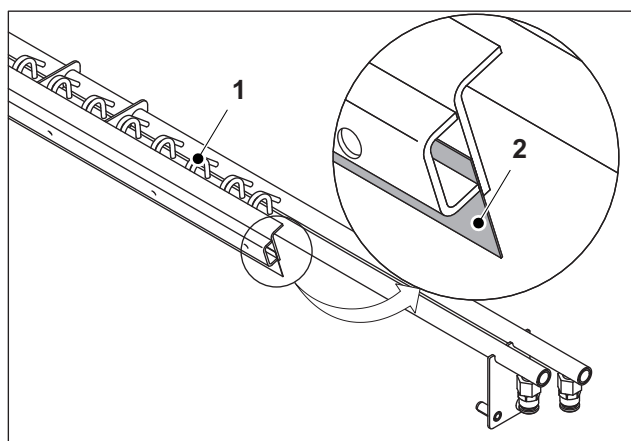


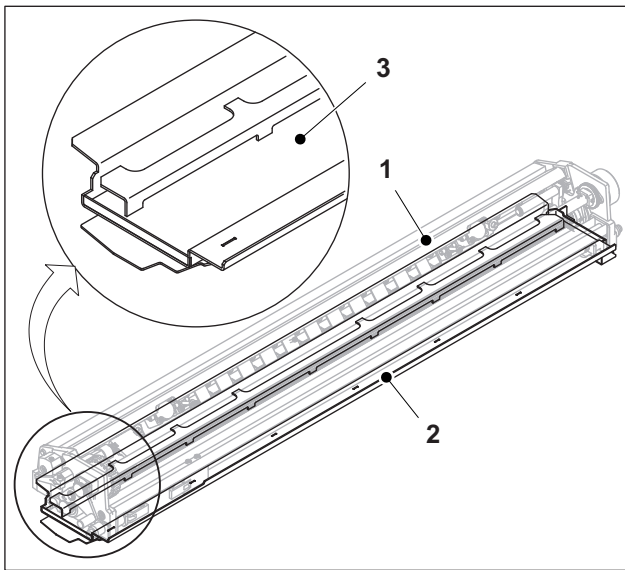
Fig. 93 Distributor bar

- 1 Spray tubes
- 2 Distributor bar

Description of the maintenance point	
Maintenance interval	V
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against starting up again: Press the <i>Emergency-stop</i> button on the next-nearest control panel. Open the "Plate cylinder/blanket cylinder" guard.
Maintenance work	Clean the distributor bar and check for cracks and wear. Replace the distributor bar, if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 60

18.1.8 Checking and, if necessary, cleaning the swiveling table of the blanket washup device



FS-914-0134-00GRAND_00

- 1 Blanket washup device
- 2 Swiveling table
- 3 Collecting trough

Fig. 94 Collecting trough of the swiveling table

Description of the maintenance point	
Maintenance interval	II
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against starting up again: Press the <i>Emergency-stop</i> button on the next-nearest control panel. Open the "Plate cylinder/blanket cylinder" guard.
Maintenance work	Check the swiveling table collecting trough of the blanket washup device for washing fluid residues. Clean the collecting trough, if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 61

FS.BM.0029-0007KERN_00

19 Suction brush

19.1 Suction brush

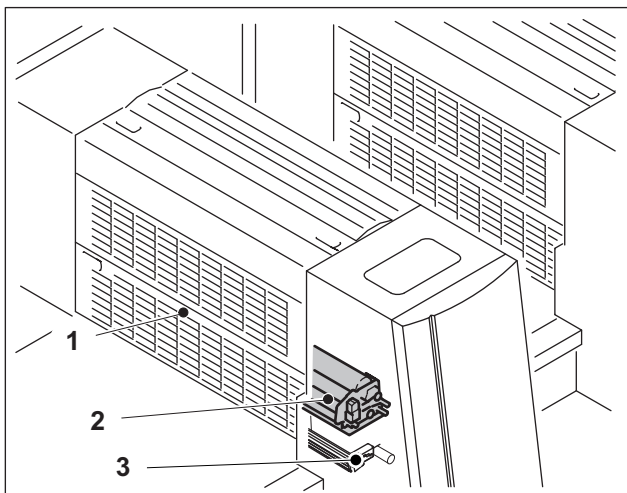


Fig. 95 Place of installation of the suction brush

Place of installation of the suction brush

- 1 Printing unit guard
- 2 Blanket washup device
- 3 Suction brush

The suction brush is fitted in the printing unit, below the blanket washup device.

19.1.1 Checking and cleaning the suction brush

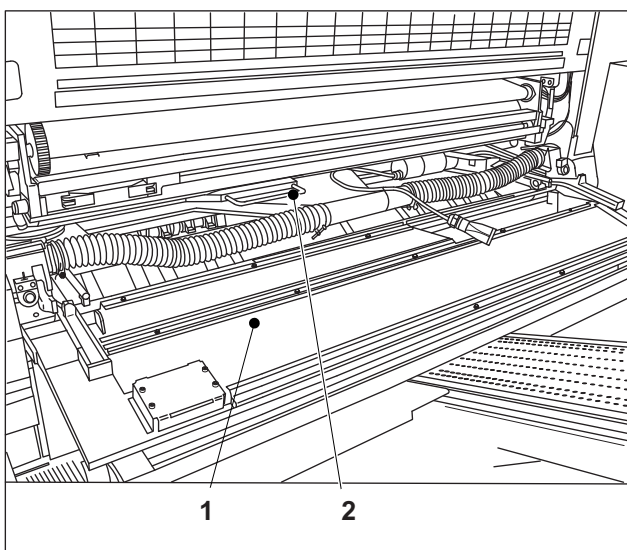


Fig. 96 Suction brush in the printing unit

- 1 Guard in front of the blanket wash-up device
- 2 Suction brush

► **Note**
Remove the suction brush for maintenance work.

Description of the maintenance point	
Maintenance interval	II
Maintenance location	D.S. to O.S.
Accessing the maintenance point	Open the "Blanket washup device" guard.
Maintenance work	Check the suction brush and clean, if necessary.
Required resources	Soft, lint-free cloth; safety goggles

Description of the maintenance point	
Washing fluid	-

Tab. 62

19.1.2 Checking and replacing the suction brush

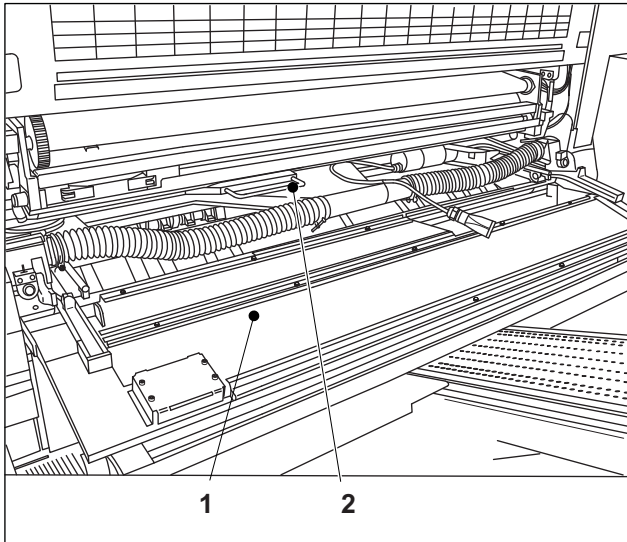


Fig. 97 Suction brush

- 1 Guard in front of the blanket wash-up device
- 2 Suction brush

► **Note**
Remove the suction brush for maintenance work.

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S. to O.S.
Accessing the maintenance point	Open the "Blanket washup device" guard.
Maintenance work	Check the suction brush and replace, if necessary.
Required resources	-
Washing fluid	-

Tab. 63

► **Note**
Have the suction brush replaced by the HEIDELBERG Service.

Mounting and demounting

1. Remove the plug-in connection for the power supply.
2. Swing down the guide rails on D.S./O.S.
3. Open the locking device of the extraction hoses on D.S./O.S.
4. Disconnect the connection pieces for the extraction hoses on D.S./O.S. and push the extraction hoses to their park position.
5. Use the operator tool to open the locking device of the suction brush on D.S./O.S.
The journals on the locking device on D.S. and O.S. must point inwards.
6. Pull out the suction brush against the direction of paper travel until it hits the stop.
7. Remove the suction brush.

FS.B14.0068-0007KERN_00

20 Inking unit

20.1 Inking unit

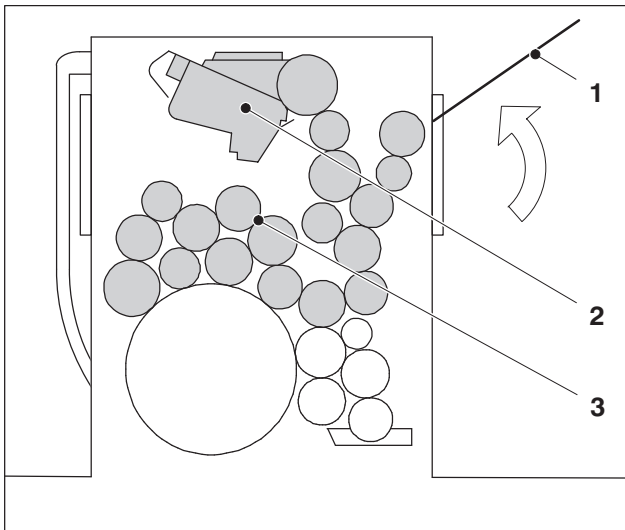


Fig. 98 Inking unit

Place of installation

- 1 Guard "Inking unit"
- 2 Ink fountain
- 3 Inking rollers

The inking unit is installed in the printing unit under the "Inking unit" guard.

20.2 Ink fountain

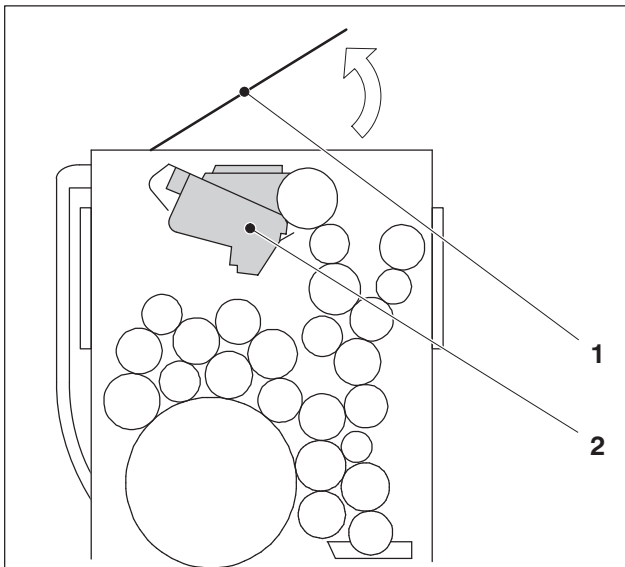


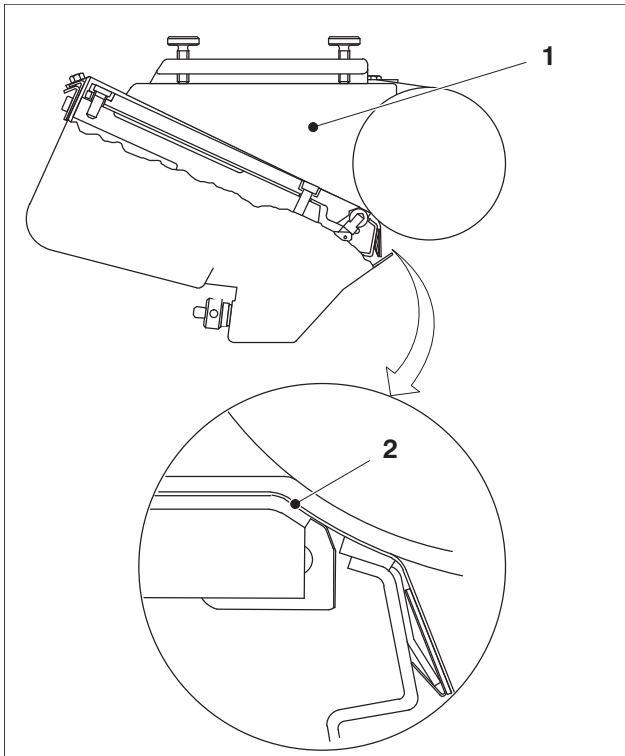
Fig. 99 Place of installation of the ink fountain

Place of installation

- 1 Guard "Inking unit"
- 2 Ink fountain

The ink fountain is installed in the printing unit under the "Inking unit" guard.

20.2.1 Checking the protective film



FS.010.0011-000BRAND_00

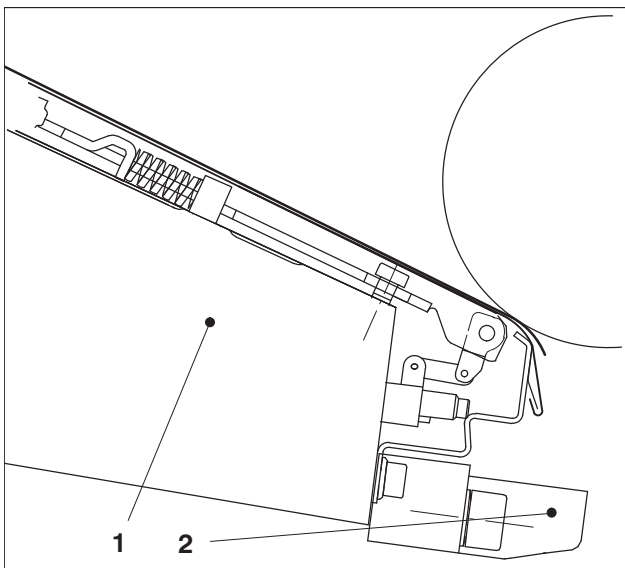
- 1 Ink fountain
- 2 Protective film

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Open the "Inking unit" guard.
Maintenance work	<p>Check the protective film for damage. Replace protective film if necessary.</p> <p>Note: Consult the chapter on the "Inking Unit" in your operating manual.</p>

Tab. 64

Fig. 100 Protective film

20.2.2 Checking and cleaning the ink collecting pan



FS.010.0012-000BRAND_00

- 1 Ink fountain
- 2 Ink collecting pan

Description of the maintenance point	
Maintenance interval	V
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Open the "Inking unit" guard.
Maintenance work	<p>Check the ink collecting pan underneath the ink fountain roller for dirt. Clean the ink collecting pan, if necessary.</p> <p>Note: Consult the chapter on the "Inking Unit" in your operating manual.</p>
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 65

Fig. 101 Ink collecting pan

21 Inking roller washup device

21.1 Inking roller washup device

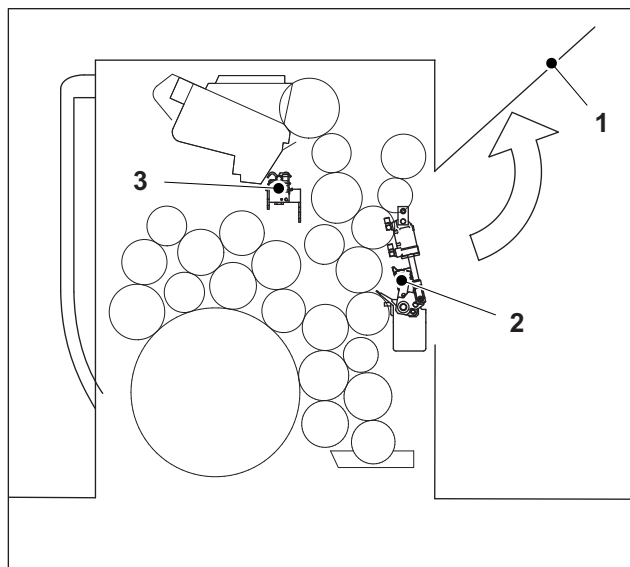


Fig. 102 Place of installation of the inking roller washup device

Place of installation

- 1 Guard "Inking unit"
- 2 Washup blade
- 3 Spray tubes

The inking roller washup device is installed in every printing unit behind the "Inking unit" guard.

► **Note**

Consult also the chapter on the "Inking Unit" in your operating manual.

21.1.1 Checking and, if necessary, cleaning the spray tubes

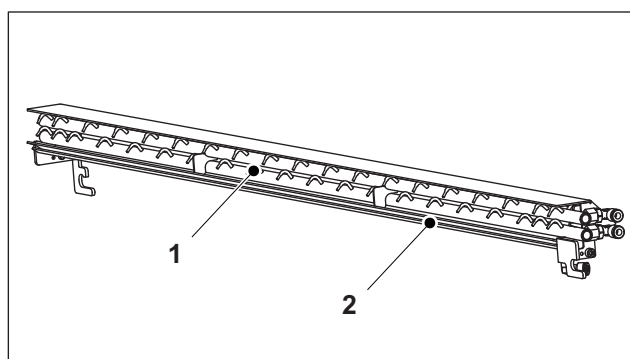


Fig. 103 Spray tubes

- 1 Spray tubes
- 2 Collecting trough

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Open the "Inking unit" guard.
Maintenance work	Check the function and condition of the spray tubes. Clean the spray tubes, if necessary.
Required resources	Soft, lint-free cloth, protective gloves
Washing fluid	Note approved washing fluids.

Tab. 66

21.1.2 Checking and, if necessary, cleaning the collecting trough

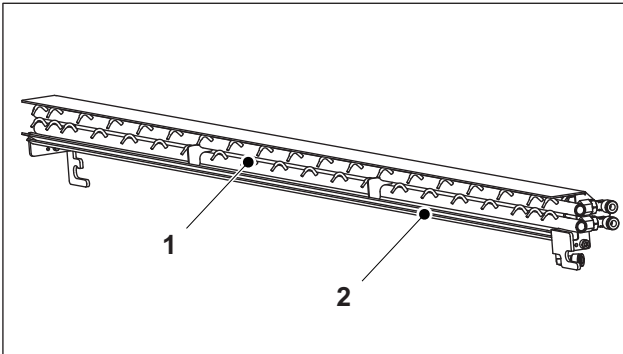


Fig. 104 Collecting trough under the spray tubes

- 1 Spray tubes
- 2 Collecting trough

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Open the "Inking unit" guard.
Maintenance work	Check the overflow of the collecting trough for blockage. Clean the collecting trough, if necessary.
Required resources	Soft lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 67

21.1.3 Checking and, if necessary, cleaning the cover plate of the collecting trough

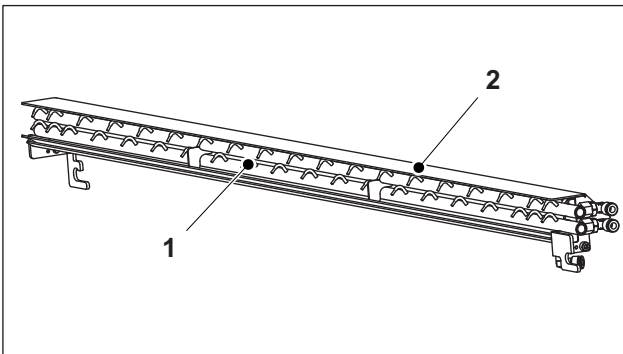


Fig. 105 Cover plate over the spray tubes

- 1 Spray tubes
- 2 Cover plate

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Open the "Inking unit" guard.
Maintenance work	Check the cover plate of the collecting trough for ink deposits. Clean the cover plate if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 68

21.2 Washup blade

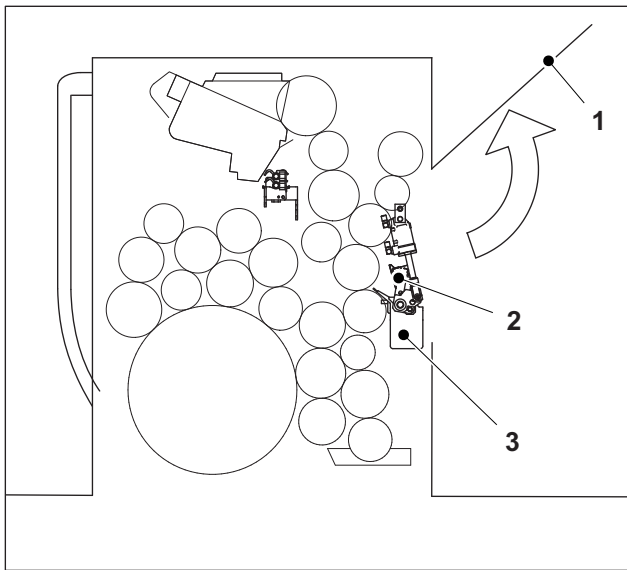


Fig. 106 Place of installation of the washup blade

Place of installation

- 1 Guard "Inking unit"
- 2 Washup blade
- 3 Washup tray

The washup blade of the inking roller washup device is mounted behind the "Inking unit" guard in every printing unit.

► **Note**
Consult also the chapter on the "Inking Unit" in your operating manual.

21.2.1 Checking and, if necessary, replacing the rubber lip

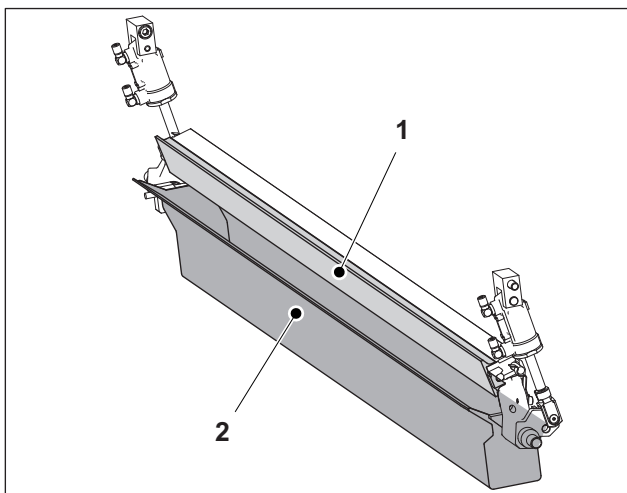
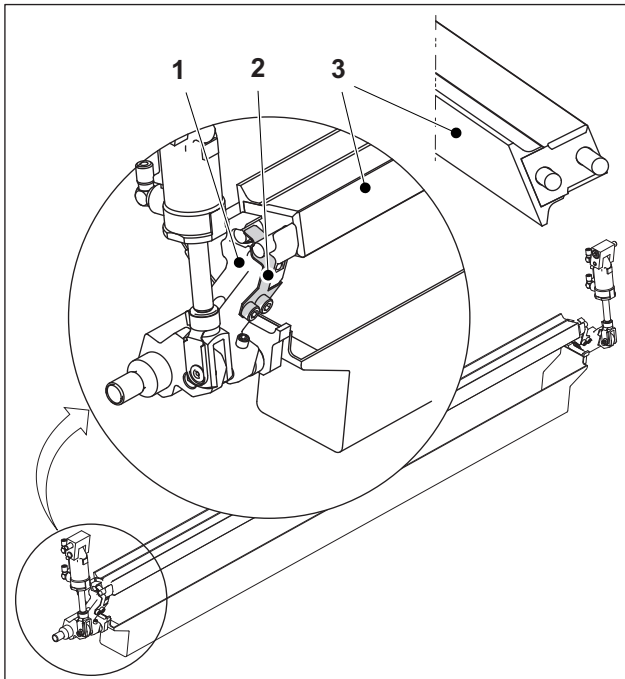


Fig. 107 Washup blade

- 1 Rubber lip
- 2 Washup tray

Description of the maintenance point	
Maintenance interval	V
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Open the "Inking unit" guard. See "Mounting and demounting the rubber lip".
Maintenance work	Check the rubber lip for wear. If necessary, turn the rubber lip around or replace it.

Tab. 69



- 1 Fixing lever
- 2 Spring
- 3 Rubber lip

Mounting and demounting

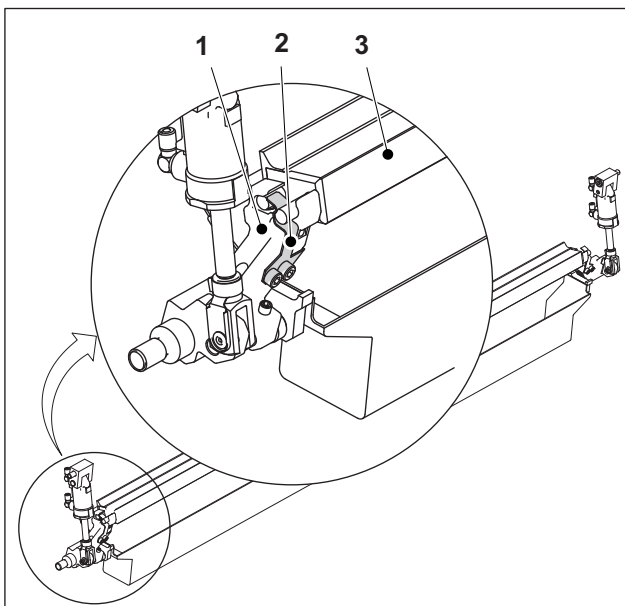
1. Press the spring (Fig. 108/2) on D.S. and O.S. backward and take out the rubber lip (Fig. 108/3).
2. The rubber lip can be used on both sides. Check the condition of both rubber lip edges.
3. If just one edge is worn out, turn the rubber lip around.

Replace the rubber lip if both rubber lip edges are worn out.

Insert the new rubber lip in the fixing levers. Make sure that the rubber lip sits tightly between spring and fixing lever (Fig. 108/2 and 1).

Fig. 108

21.2.2 Cleaning the fixing lever and spring



- 1 Fixing lever
- 2 Spring
- 3 Rubber lip

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Open the "Inking unit" guard.
Maintenance work	Clean the fixing lever and spring.
Required resources	Soft, lint-free cloth, paint brush, protective gloves
Washing fluid	Note "Approved washing fluids".

Fig. 109 Fixing lever and spring

Tab. 70

22 Washing fluid container

22.1 Washing fluid container

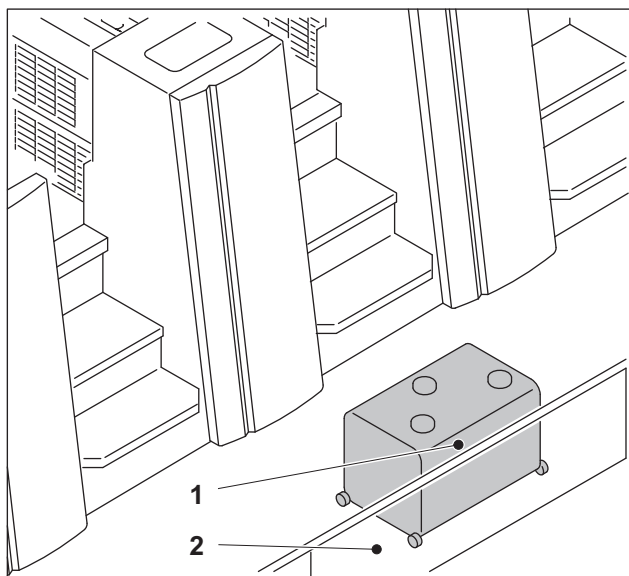


Fig. 110 Place of installation of the washing fluid container

Place of installation

- 1 Washing fluid container
- 2 Footboard guard

The washing fluid container is installed on O.S. underneath the footboard.

Presses with seven or more printing units have two washing fluid containers.

22.1.1 Checking, cleaning and, if necessary, replacing washing fluid, water, and sieve

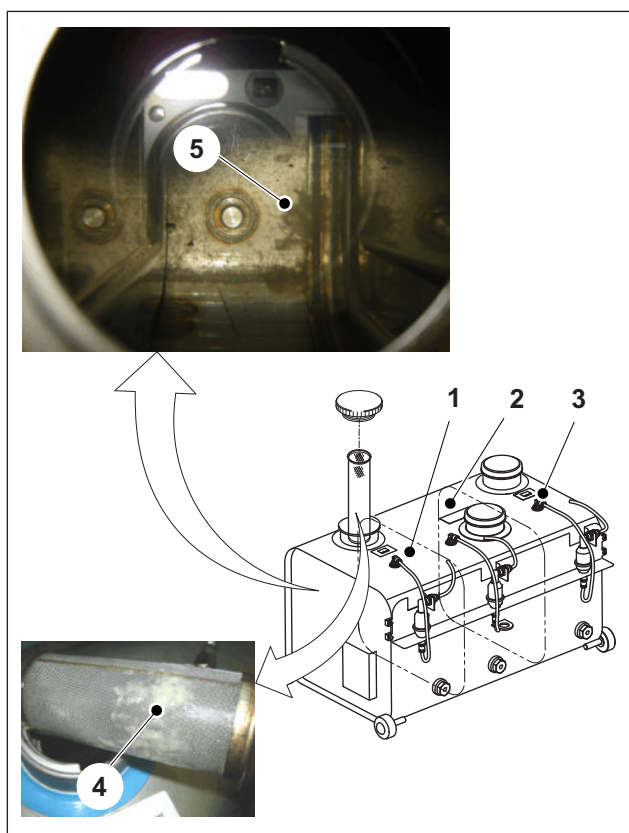


Fig. 111 Chambers in the washing fluid container with sieve

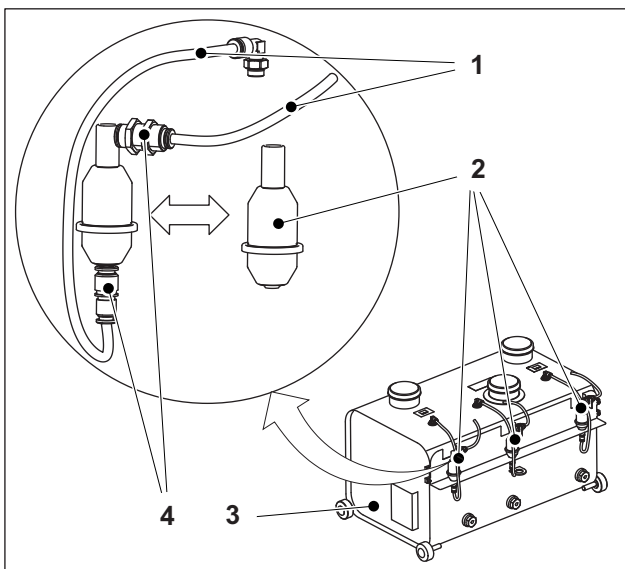
- 1 Washing fluid chamber for the impression cylinder and blanket washup device (black supply pipe)
- 2 Chamber for water (blue supply pipe)
- 3 Washing fluid chamber for the inking roller washup device (green supply pipe)
- 4 Dirt on the sieve
- 5 Soiling in a chamber of the washing fluid container

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	O.S.
Accessing the maintenance point	Unhinge the guard on the footboard, and pull out the washing fluid container.
Maintenance work	<p>Check the condition and quality of washing fluid and water in the respective chamber.</p> <p>Check whether the sieves are soiled.</p> <p>There must be no dirt, such as slime, flocculation, dirt particles or rust on the floor of the chambers and on the sieves.</p>

Description of the maintenance point	
	If necessary, clean the sieves and chambers of the washing fluid container and replace the washing fluid or water. Follow the instructions in the operating manual given under "Washing fluid container" when performing this work.
Required resources	Protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 71

22.1.2 Replacing the suction filter



F5.205.0002-00.GRAND_00

- 1 Suction hose
- 2 Suction filter
- 3 Washing fluid container
- 4 Screw connection

Description of the maintenance point	
Maintenance interval	V
Maintenance location	O.S.
Accessing the maintenance point	Unhinge the guard on the footboard, and pull out the washing fluid container. Open the screw connection on the suction filter.
Maintenance work	Replace the suction filter.

Tab. 72

Fig. 112 Suction filter

FS.B14.0094-0007KERNL_00

23 Dampening system

23.1 Rider roller

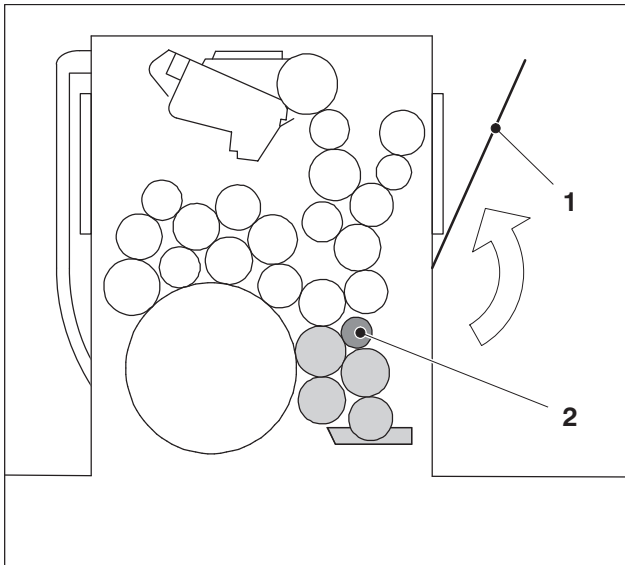


Fig. 113 Place of installation of the rider roller

Place of installation

- 1 Guard "Inking unit"
- 2 Rider roller

The rider roller is installed behind the "Inking unit" guard.

23.1.1 Lubricating the claw and driver

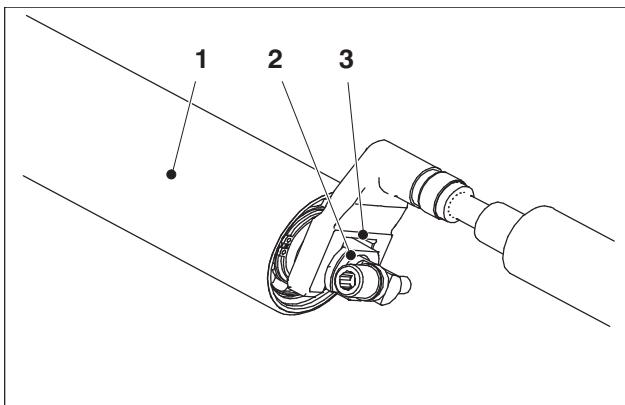


Fig. 114 Claw and driver of the rider roller on D.S.

- 1 Rider roller
- 2 Driver
- 3 Claw D.S.

Description of the lubricating point	
Maintenance interval	II
Color code	Yellow
Maintenance location	D.S.
Access to the lubricating points	Open the "Inking unit" guard.
Number/type/maintenance work	Lubricate the claw and driver.
Required resources	Paint brush; grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 73

23.2 Water pan roller and metering roller

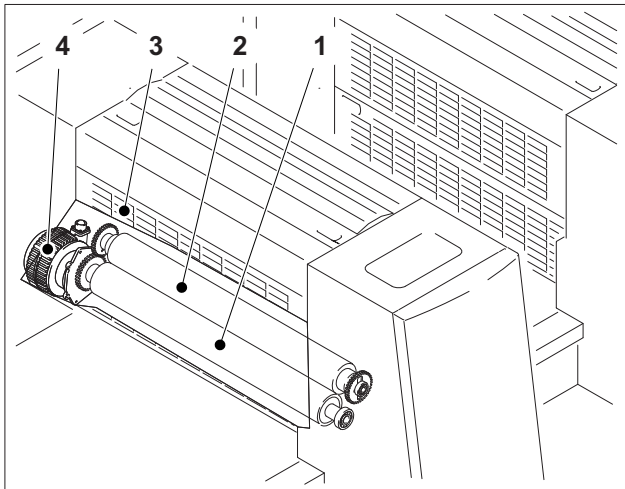


Fig. 115 Place of installation of water pan roller and metering roller

Place of installation

- 1 Water pan roller
- 2 Metering roller
- 3 Guard "Inking unit"
- 4 Drive of water pan roller and metering roller

The water pan roller and metering roller are installed behind the "Inking unit" guard. The drive is fitted on D.S.

23.2.1 Lubricating the drive of the water pan roller and metering roller

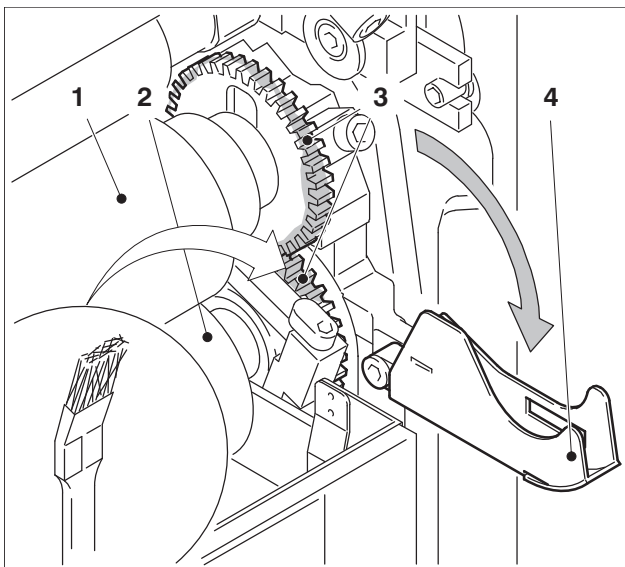


Fig. 116 Gears on D.S.

- 1 Metering roller
- 2 Water pan roller
- 3 Gears
- 4 Gear guard

Description of the lubricating point	
Maintenance interval	II
Color code	Yellow
Maintenance location	D.S. / O.S.
Access to the lubricating points	Open the "Inking unit" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate 2 gears on D.S. Lubricate 1 gear on O.S.
Required resources	Paint brush; grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 74

FS.994.0043-0007KERN_05

24 Transfer drum without UV interdeck dryer

24.1 Gripper systems

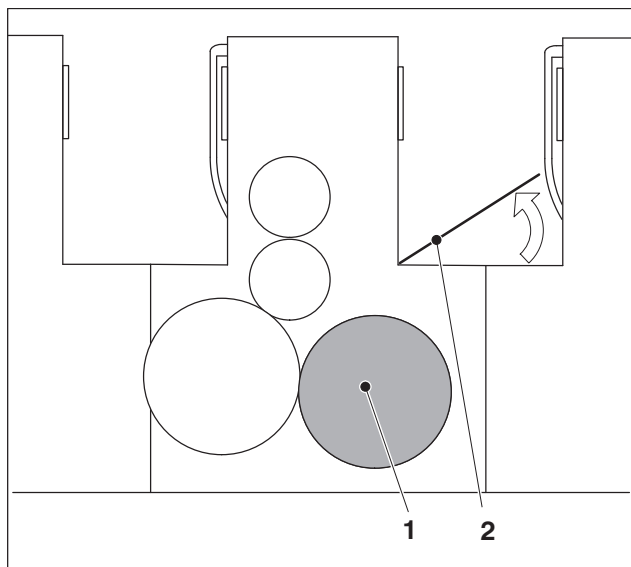


Fig. 117 Place of installation of the transfer drum

Place of installation

- 1 Transfer drum
- 2 Guard "Transfer drum"

The transfer drum is installed in the printing unit, underneath the "Transfer drum" guard.

The transfer drum possesses 2 gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is installed on D.S., at the end of the gripper bar.

24.1.1 Lubricating the roller lever

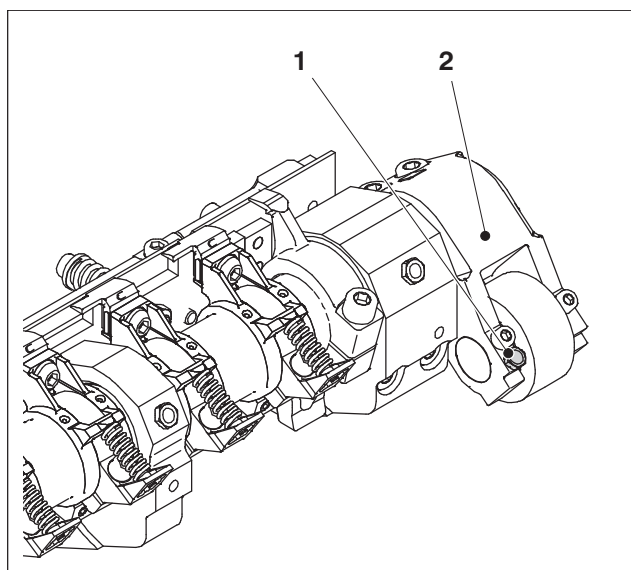


Fig. 118 Roller lever on D.S.

- 1 Recessed grease nipple
- 2 Roller lever

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S.
Access to the lubricating points	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 75

24.1.2 Lubricating the gripper shaft bearing

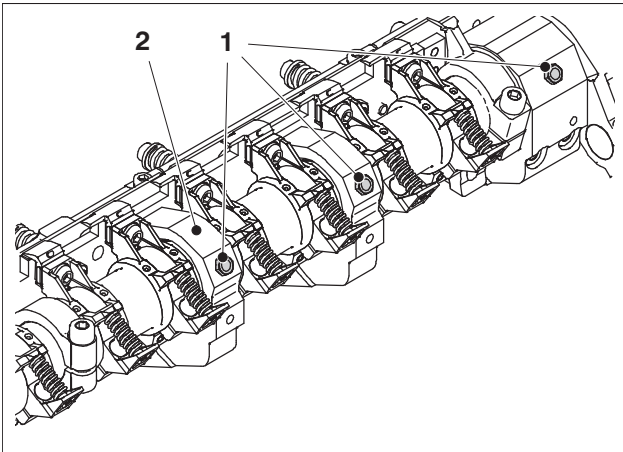


Fig. 119 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 76

FS.994.0103-0007KERN_03

25 Transfer drum with UV interdeck dryer

25.1 Gripper systems

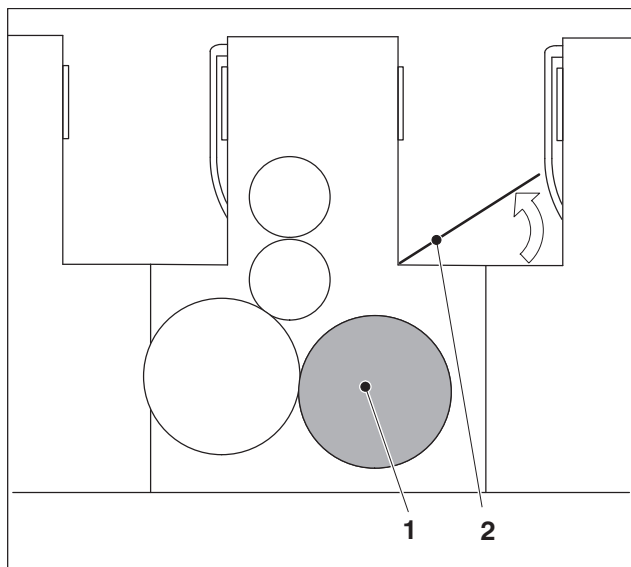


Fig. 120 Place of installation of the transfer drum

Place of installation

- 1 Transfer drum
- 2 Guard "Transfer drum"

The transfer drum is installed in the printing unit, underneath the "Transfer drum" guard.

The transfer drum possesses 2 gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is installed on D.S., at the end of the gripper bar.

25.1.1 Lubricating the roller lever

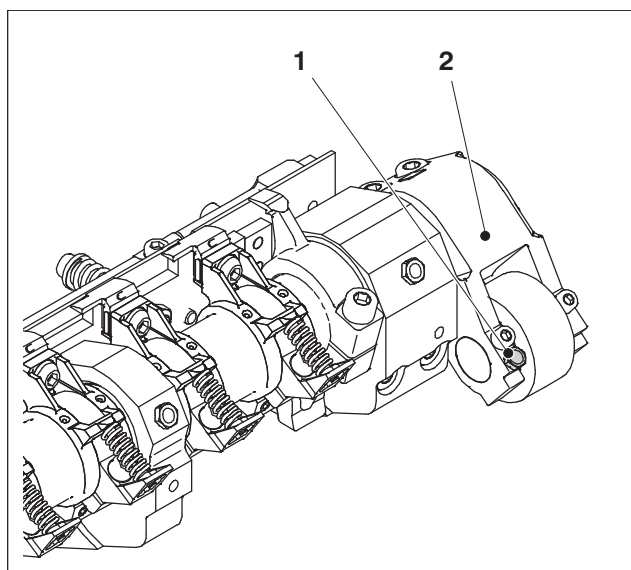


Fig. 121 Roller lever on D.S.

- 1 Recessed grease nipple
- 2 Roller lever

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S.
Access to the lubricating points	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 77

25.1.2 Lubricating the gripper shaft bearing

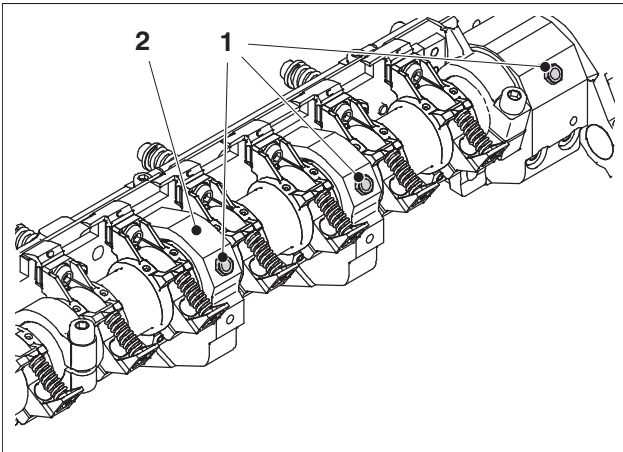


Fig. 122 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 78

FS.994.0114-0007ERR0_03

26 Variable transfer drum without UV interdeck dryer

26.1 Gripper system

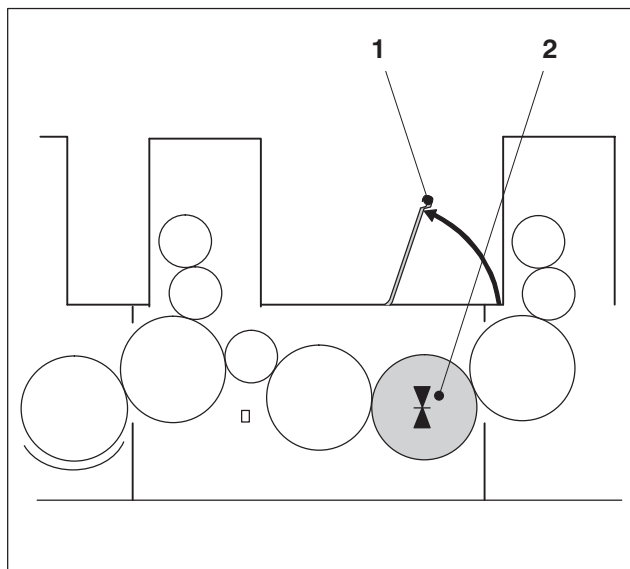


Fig. 123 Cylinder diagram

Place of installation

- 1 Guard "Variable transfer drum"
- 2 Variable transfer drum

The variable transfer drum is mounted under the "Variable transfer drum" guard. The variable transfer drum is mounted in the perfecting unit and in all following printing units and coating units.

The variable transfer drum has two gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are mounted on the gripper bar. The roller lever is mounted on O.S., at the end of the gripper bar.

26.1.1 Lubricating the roller lever

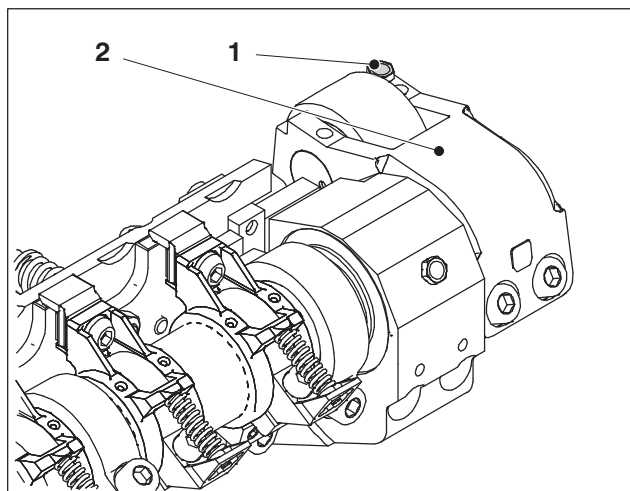


Fig. 124 Roller lever

- 1 Recessed grease nipple
- 2 Roller lever

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	O.S.
Access to the lubricating point	Open the "Variable transfer drum" guard. Control panel selection: Press the Control panel selection button twice (at an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate 1 recessed grease nipple per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 79

26.1.2 Lubricating the gripper shaft bearing

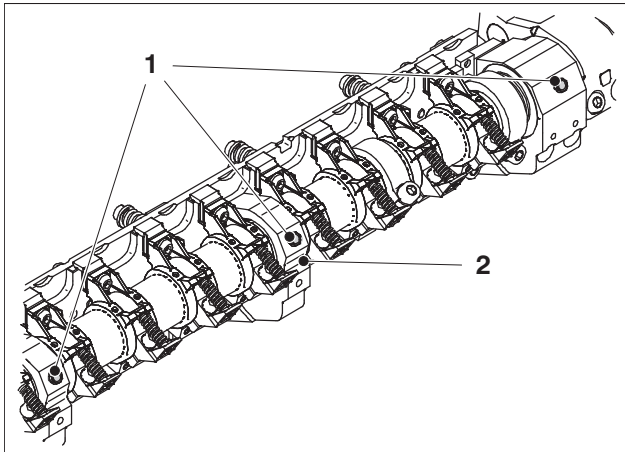


Fig. 125 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating point	Open the "Variable transfer drum" guard. Control panel selection: Press the Control panel selection button twice (at an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate 7 recessed grease nipples per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 80

26.2 Swing frame and cylinder shells

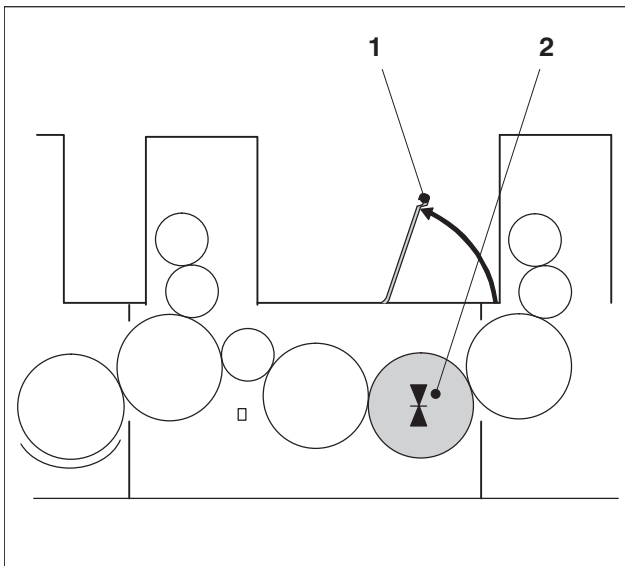


Fig. 126

Place of installation

- 1 Guard "Variable transfer drum"
- 2 Variable transfer drum
- 3 Swing frame with cylinder shells

The variable transfer drum is mounted under the "Variable transfer drum" guard. The variable transfer drum is mounted in the perfecting unit and in all following printing units and coating units.

26.2.1 Checking and, if necessary, cleaning and lubricating the swing frame

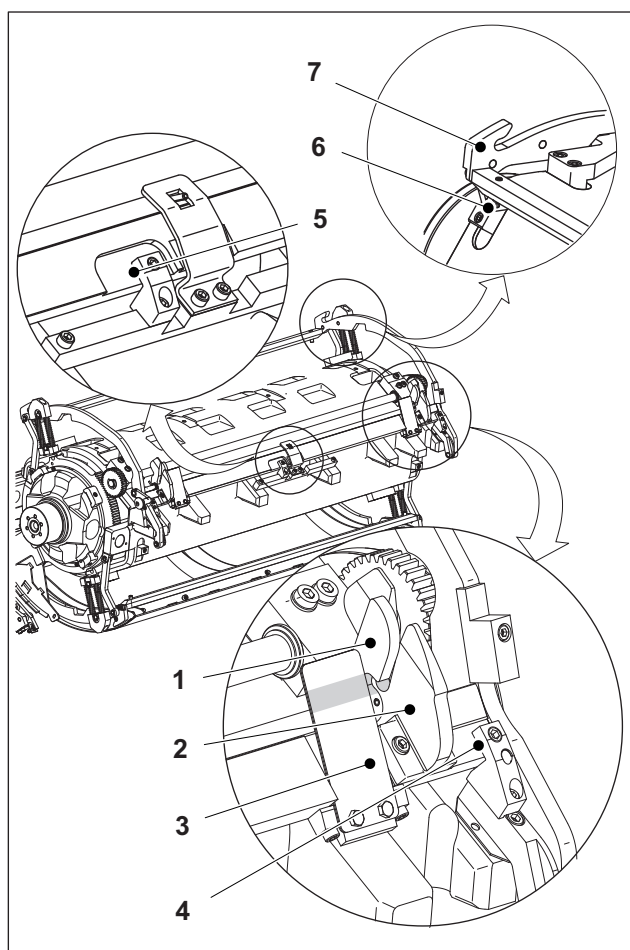


FIG. 974_6036-010GRAND_00

- 1 Ratchet pawl
- 2 Mounting fixture for the bolts of the front edge cylinder shell
- 3 Leaf spring
- 4 Front stop and its contact area (D.S./O.S.)
- 5 Front stop and its contact area (center)
- 6 Rear stop and its contact area (view with folded swing frame)
- 7 Mounting fixture for the bolts of the rear edge cylinder shell

► **Note**

Heidelberg recommends performing this maintenance work when replacing the TransferJacket. In this way you do not have to remove components on another occasion which will save you time!

The given maintenance interval represents the longest possible time span between the maintenance work.

Fig. 127 Swing frame

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S./middle/O.S.
Accessing the maintenance point	<p>Fold up the swing frame.</p> <p>Open the "Variable transfer drum" guard.</p> <p>Control panel selection: Press the Control panel selection button twice (at an interval of max. 0.5 seconds). The LED lights up.</p> <p>Removing cylinder shells</p>
Maintenance work	<p>Visually check the condition of the following swing frame components. Clean and lubricate the components if necessary.</p> <ul style="list-style-type: none"> • Ratchet pawls • Mounting fixtures for bolts of the front and rear edge cylinder shells • Front and rear stops and their contact areas • Contact areas between leaf spring and bolt
Required resources	<p>A04 lubricant spray can</p> <p>Soft, lint-free cloth, paint brush, protective gloves,</p>

Description of the maintenance point	
Washing fluid	Note "Approved washing fluids".
Lubricant	Saphira High Performance Paste (Gleitmo 800) Note "Approved lubricants".

Tab. 81

26.2.2 Cleaning, checking and, if necessary, lubricating the cylinder shells

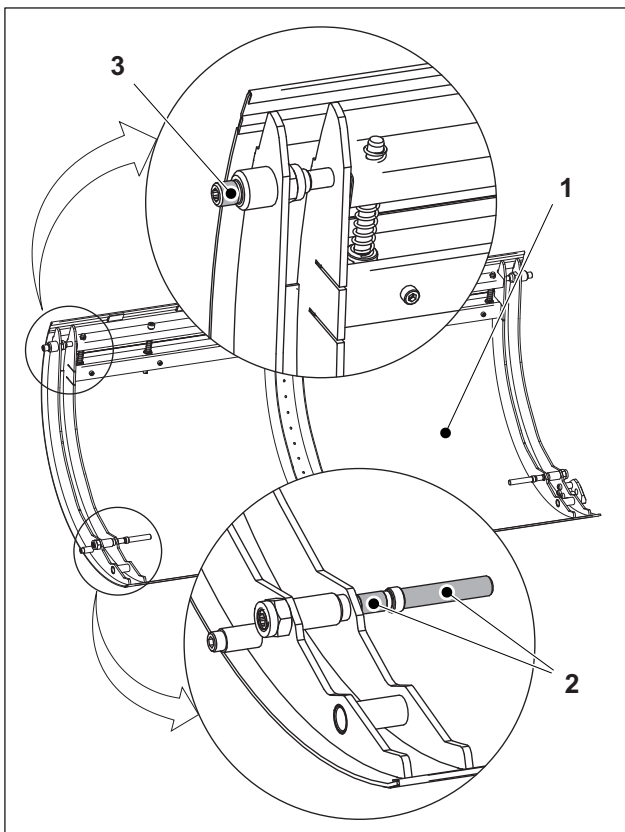


Fig. 128 Cylinder shell

- 1 Cylinder shell
- 2 Bolts for front edge cylinder shells
- 3 Bolts for rear edge cylinder shells

► **Note**
Heidelberg recommends performing this maintenance work when replacing the TransferJacket. In this way you do not have to remove components on another occasion which will save you time!
The given maintenance interval represents the longest possible time span between the maintenance work.

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Fold up the swing frame. Open the "Variable transfer drum" guard. Control panel selection: Press the Control panel selection button twice (at an interval of max. 0.5 seconds). The LED lights up. Removing cylinder shells
Maintenance work	Visually check the condition of the bolts for the front and rear edges of the cylinder shells. If necessary clean and lubricate the bolts.
Required resources	A04 lubricant spray can Soft, lint-free cloth, paint brush, protective gloves,
Washing fluid	Note "Approved washing fluids".
Lubricant	Saphira High Performance Paste

Description of the maintenance point	
	(Gleitmo 800) Note "Approved lubricants".

Tab. 82

26.3 Cylinder surface

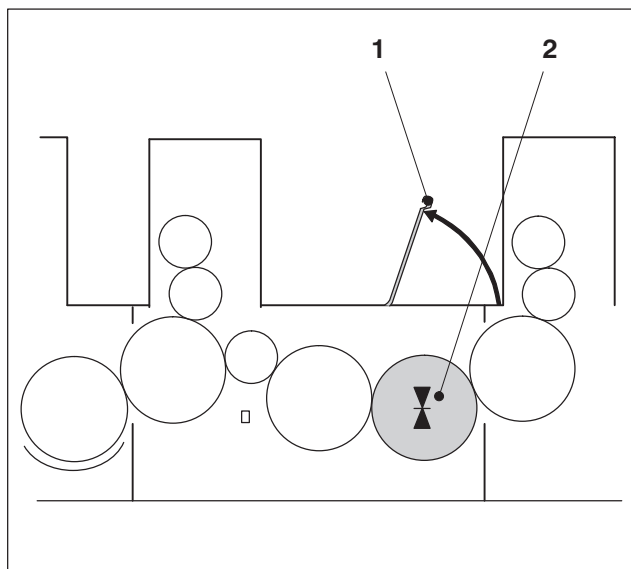


Fig. 129 Cylinder diagram

Place of installation

- 1** Guard "Variable transfer drum"
- 2** Variable transfer drum

The variable transfer drum is mounted under the "Variable transfer drum" guard. The variable transfer drum is mounted in the perfecting unit and in all following printing units and coating units.

26.3.1 Checking the TransferJacket

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Open the "Variable transfer drum" guard. Control panel selection: Press the Control panel selection button twice (at an interval of max. 0.5 seconds). The LED lights up.
Maintenance work	Visually check the Transfer-Jacket for damage.

Tab. 83

FS_B04_0112-000FRONT_00

27 Storage drum

27.1 Gripper system

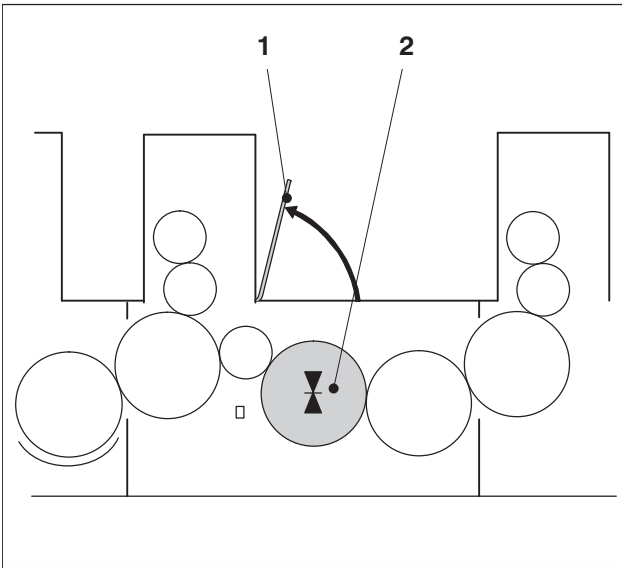


Fig. 130 Place of installation of the storage drum

Place of installation

- 1 Guard "Reversing drum/storage drum"
- 2 Storage drum

The storage drum is fitted in the perfecting unit. The storage drum is located below the guard "Reversing drum/storage drum".

Each storage drum is equipped with two gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is installed on D.S. at the end of the gripper bar.

► **Note**

When performing any maintenance work on the storage drum, make sure that no lubricant can soil its surface. Otherwise, print problems can occur!

27.1.1 Lubricating the roller lever

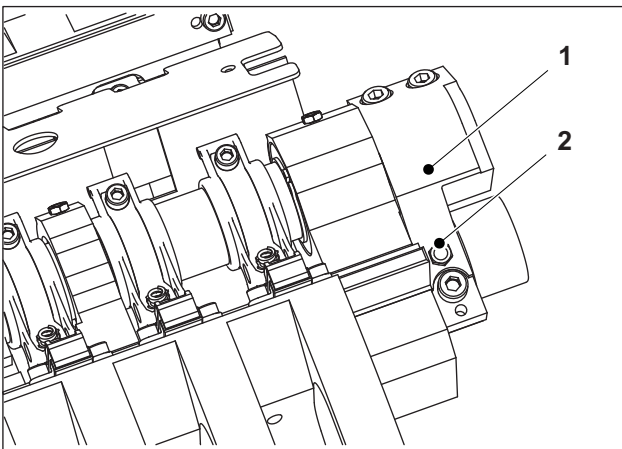


Fig. 131 Roller lever

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	D.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 84

27.1.2 Lubricating the gripper shaft bearings

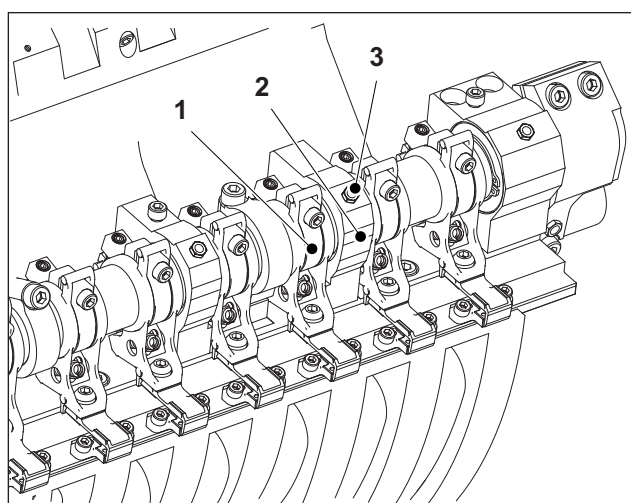


Fig. 132 Gripper shaft bearing

- 1 Grippers
- 2 Gripper shaft bearing
- 3 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 85

27.2 Sucker bar

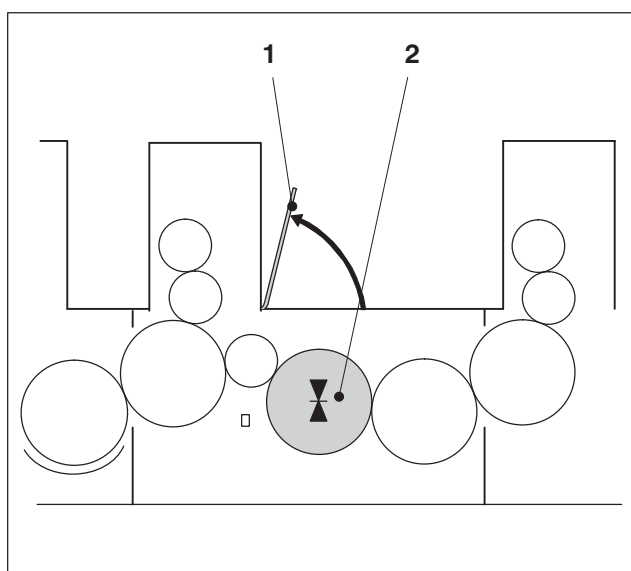


Fig. 133 Place of installation of the storage drum

Place of installation

- 1 Guard "Reversing drum/storage drum"
- 2 Storage drum

The storage drum is fitted in the perfecting unit. The storage drum is located below the guard "Reversing drum/storage drum".

There are two operating rods and two sucker bars on the storage drum. The suckers are located on the sucker bar.

27.2.1 Lubricating the main lubricating point

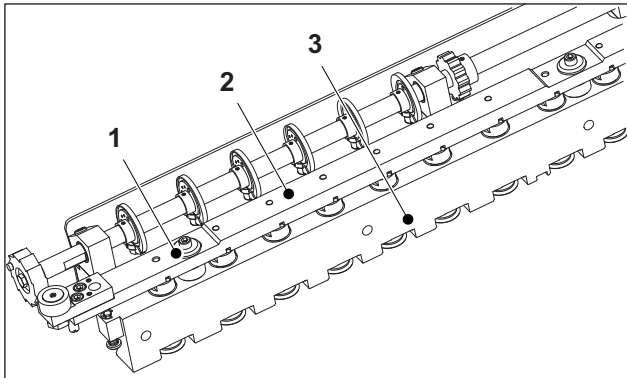


Fig. 134 Main bearing point on the operating rod

- 1 Lubricating point
- 2 Operating rod
- 3 Sucker bar

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Set the sheet length to 415 mm . Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the main bearing points. 4 lubricating points per sucker bar.
Required resources	Grease gun A06 , Gleitmo 585 M, Paint brush
Lubricant	Note "Approved lubricants".

Tab. 86

27.2.2 Lubricating the locking bolt

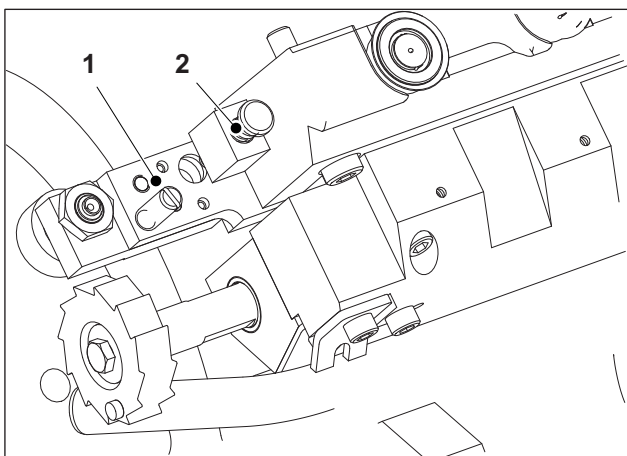


Fig. 135 Locking bolt on the operating rod

- 1 Operating rod
- 2 Locking bolt with spring

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	O.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the locking bolt. 1 lubricating point per sucker bar.
Required resources	Grease gun A06 , Gleitmo 585 M,

Description of the lubricating point	
	Paint brush
Lubricant	Note "Approved lubricants".

Tab. 87

27.2.3 Lubricating the cam follower

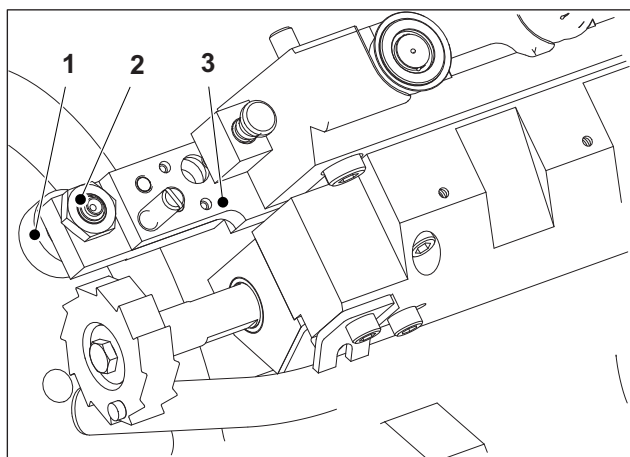


Fig. 136 Cam follower on the operating rod

- 1 Cam follower
- 2 Recessed grease nipple
- 3 Operating rod

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	O.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the cam follower. 1 recessed grease nipple per sucker bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 88

27.2.4 Lubricating the axial bearing surface between sucker and sucker bar

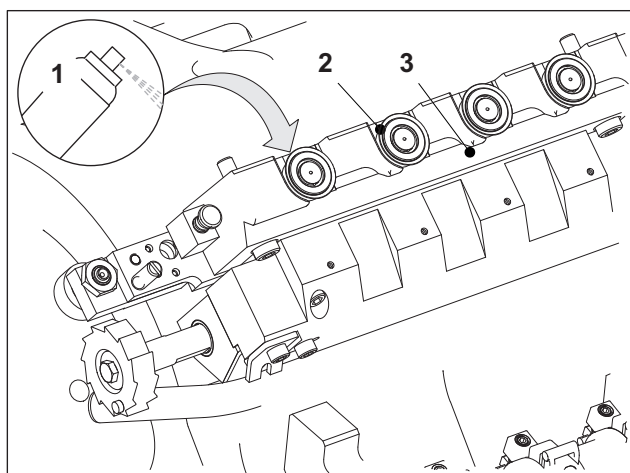


Fig. 137 Suckers and sucker bar

- 1 Spray can
- 2 Lubricating point
- 3 Sucker bar

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Set the smallest sheet width and length. Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of

Description of the lubricating point	
	max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Spray the axial contact surface between sucker and sucker bar. 20 lubricating points per sucker bar.
Required resources	Spray can A10, Renax
Lubricant	Note "Approved lubricants".

Tab. 89

27.3 Movable part

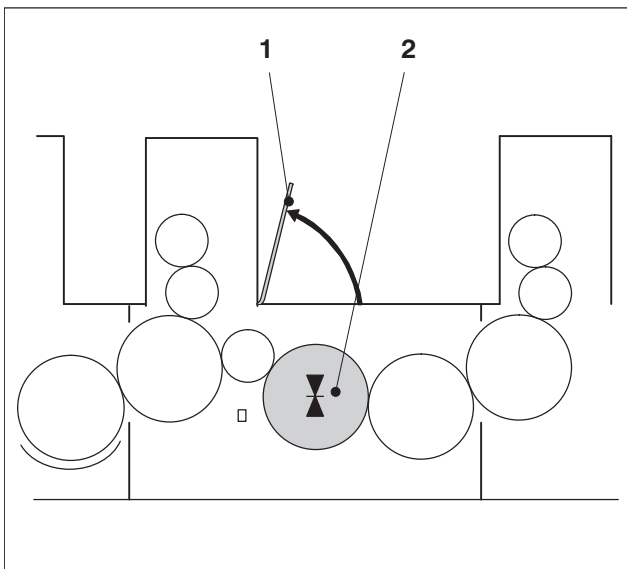


Fig. 138 Place of installation of the storage drum

Place of installation

- 1 Guard "Reversing drum/storage drum"
- 2 Storage drum

The storage drum is fitted in the perfecting unit. The storage drum is located below the guard "Reversing drum/storage drum".

The storage drum is fitted with a movable part.

27.3.1 Lubricating the bearing

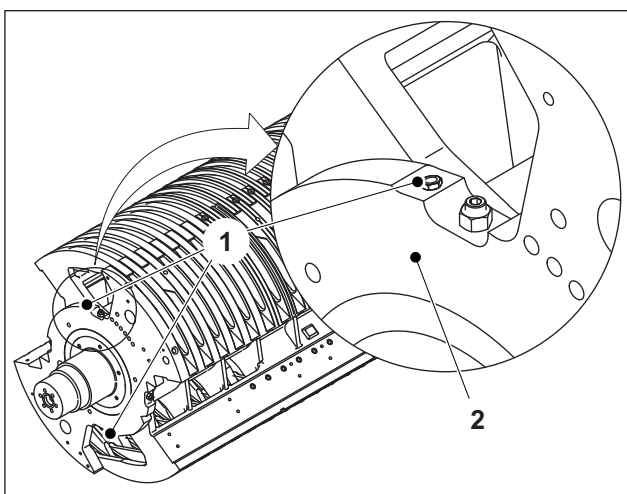


Fig. 139 Bearing of the movable part of the storage drum

- 1 Recessed grease nipple
- 2 Movable part, storage drum

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S. / O.S.
Access to the lubricating points	Set the sheet length to 700 mm . Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of

Description of the lubricating point	
	max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the bearings. 4 recessed grease nipples.
Required resources	Grease gun A06 , Gleitmo 585 M
Lubricant	Note "Approved lubricants".

Tab. 90

ES_B04_0117-000FRONT_00

28 Reversing drum

28.1 Gripper system

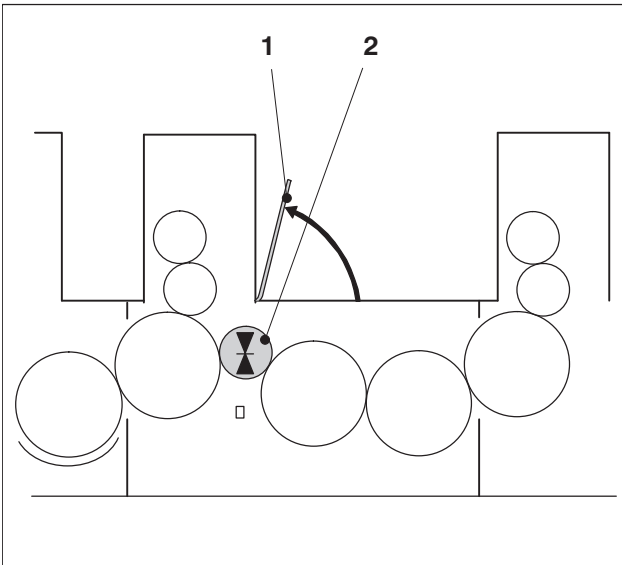


Fig. 140 Place of installation of the reversing drum

Place of installation

- 1 Guard "Reversing drum/storage drum"
- 2 Reversing drum

In the perfecting unit, the reversing drum is fitted below the "Reversing drum/storage drum" guard.

The reversing drum has one gripper system. A gripper system consists of movable grippers that move with one another.

28.1.1 Lubricating the gear and gear segment

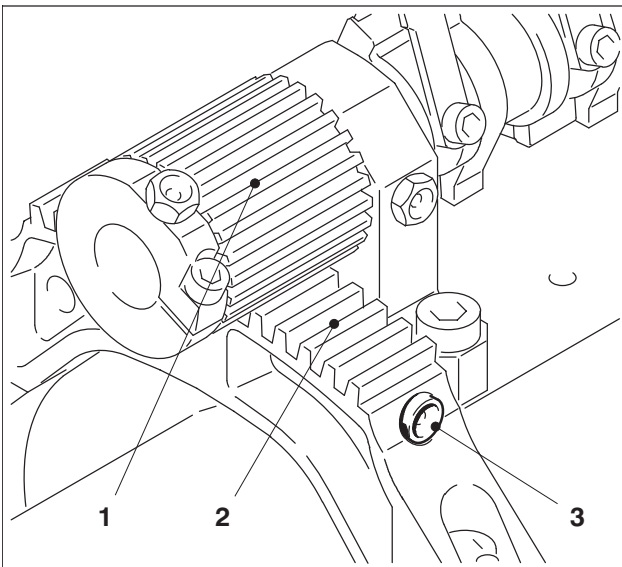


Fig. 141 Gear and gear segment

- 1 Gear
- 2 Gear segment
- 3 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	D.S. / O.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gear and gear segment. 2 recessed grease nipples.
Required resources	Grease gun A06 (Gleitmo 585 M)
Lubricant	Note "Approved lubricants".

Tab. 91

28.1.2 Lubricating the gripper tube bearing

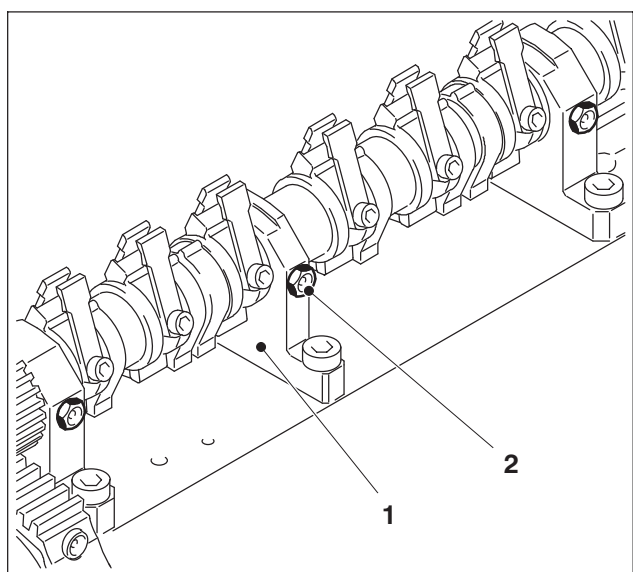


Fig. 142 Gripper tube bearing

- 1 Gripper tube bearing
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper tube bearing. 7 recessed grease nipples.
Required resources	Grease gun A06 (Gleitmo 585 M)
Lubricant	Note "Approved lubricants".

Tab. 92

28.1.3 Lubricating the outer gripper shaft bearing

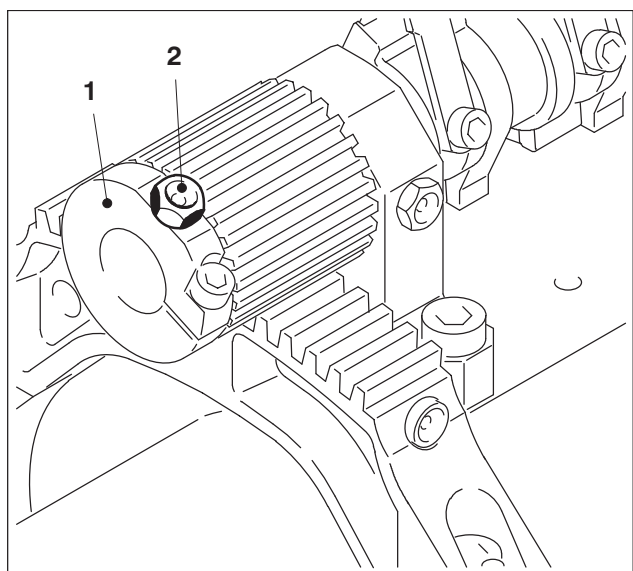


Fig. 143 Set collar/outer gripper shaft bearings O.S.

- 1 Set collar/outer gripper shaft bearings O.S.
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	O.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the outer gripper shaft bearing. 1 recessed grease nipple.
Required resources	Grease gun A06 (Gleitmo 585 M)
Lubricant	Note "Approved lubricants".

Tab. 93

28.1.4 Lubricating the gripper shaft bearings

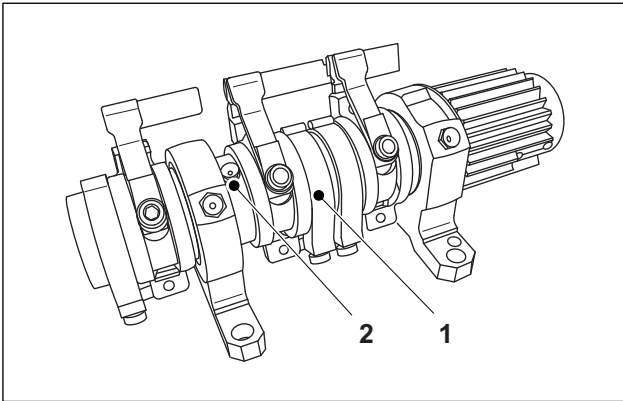


Fig. 144 Gripper shaft bearing

- 1 Gripper shaft bearing
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 6 recessed grease nipples.
Required resources	Grease gun A06 (Gleitmo 585 M)
Lubricant	Note "Approved lubricants".

Tab. 94

28.1.5 Lubricating the gripper holder on the gripper bar

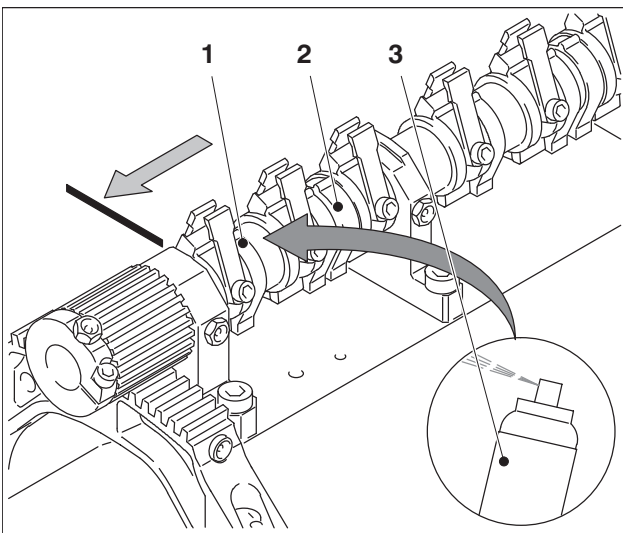


Fig. 145 Gripper bar

- 1 Gripper holder
- 2 Gripper bar
- 3 Spray can

Description of the lubricating point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Spray the gripper holder on the gripper bar. 19 lubricating points. Note: Do not spray any lubricant on the set collar, gears, or gear segments!
Required resources	Spray can B02

Description of the lubricating point	
Lubricant	Elkalub FLC 1012, note "Approved lubricants".

Tab. 95

28.1.6 Lubricating the carriage

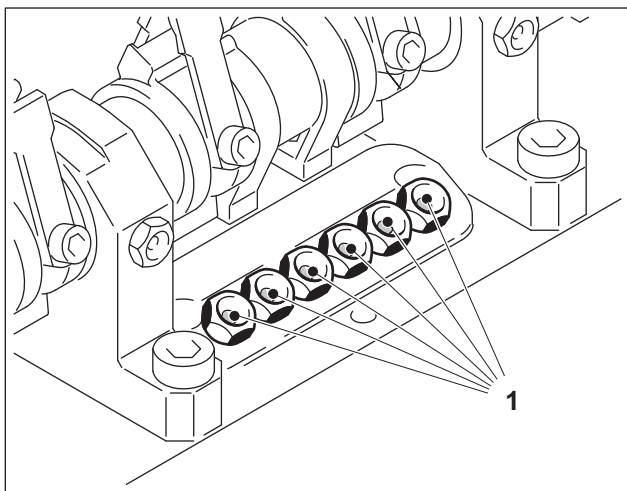


Fig. 146 Carriage

1 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	Center
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the carriage. 6 recessed grease nipples with at least 5 strokes of the grease gun each. Note: Remove the grease escaping between the carriage and the jacket, otherwise soiling of the print sheet may result.
Required resources	Grease gun A06 (Gleitmo 585 M); Soft, lint-free cloth
Lubricant	Note "Approved lubricants".

Tab. 96

28.2 Bearing

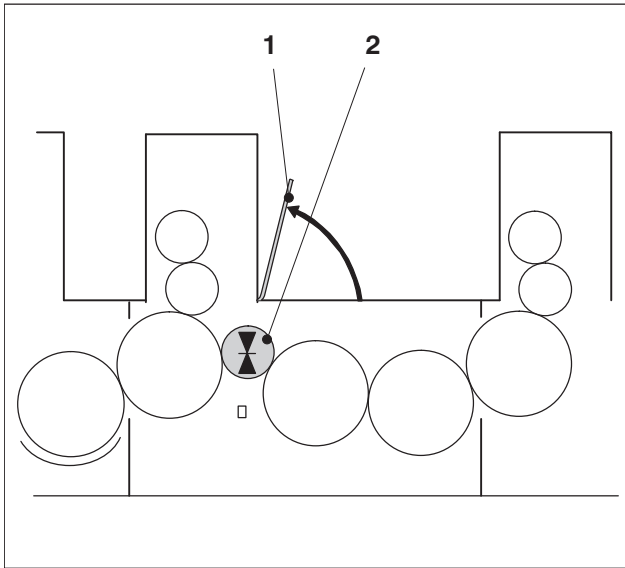


Fig. 147 Place of installation of the reversing drum

Place of installation

- 1 Reversing drum
- 2 Guard "Reversing drum/storage drum"

In the perfecting unit, the reversing drum is fitted below the "Reversing drum/storage drum" guard.

28.2.1 Lubricating the cam follower

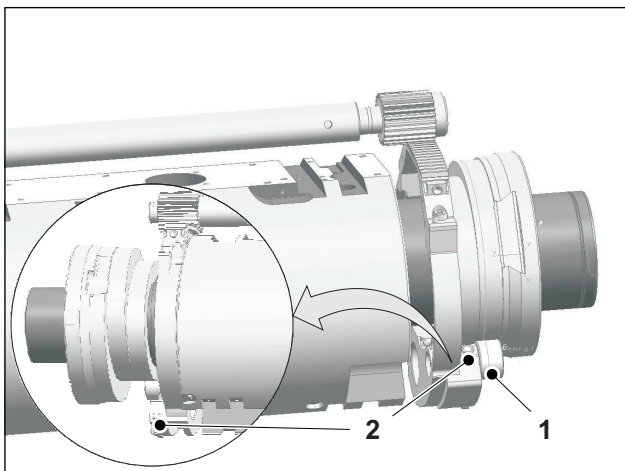


Fig. 148 Cam follower O.S.

- 1 Cam follower
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	D.S. / O.S.
Access to the lubricating points	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the cam followers. 4 recessed grease nipples.
Required resources	Grease gun A06 (Gleitmo 585 M)
Lubricant	Note "Approved lubricants".

Tab. 97

28.3 Cylinder surface

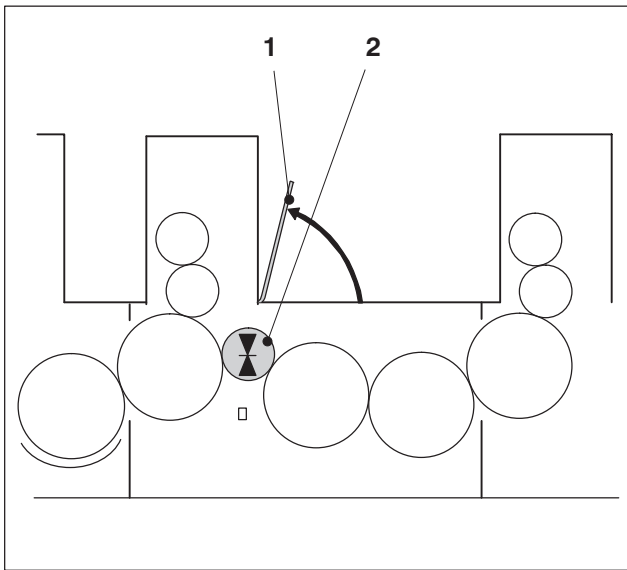


Fig. 149 Place of installation of the reversing drum

Place of installation

- 1** Guard "Reversing drum/storage drum"
- 2** Reversing drum

In the perfecting unit, the reversing drum is fitted below the "Reversing drum/storage drum" guard.

28.3.1 Checking the TransferJacket

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Open the guard "Reversing drum/storage drum". Control panel selection: Press the Control panel selection button twice (at an interval of max. 0.5 seconds). The LED lights up.
Maintenance work	Visually check the Transfer-Jacket for damage.

Tab. 98

FS_994_011E-000PRELIM_03

29 Impression cylinder (P)

29.1 Gripper system

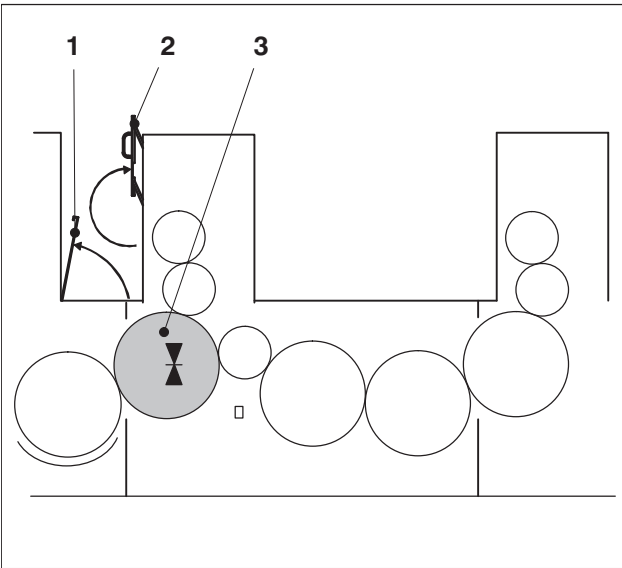


Fig. 150 Cylinder diagram

Place of installation

- 1 Guard "Transfer cylinder"
- 2 Guard "Plate cylinder/blanket cylinder"
- 3 Impression cylinder (P)

The impression cylinder (P) is fitted in the perfecting unit and in the units after the perfector under the "Transfer cylinder" guard.

The impression cylinder (P) has two gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar.

The roller lever is fitted on the end of the gripper bar.

- In the perfecting unit on D.S. and O.S.
- In the printing unit after the perfector on O.S.

29.1.1 Lubricating the roller lever

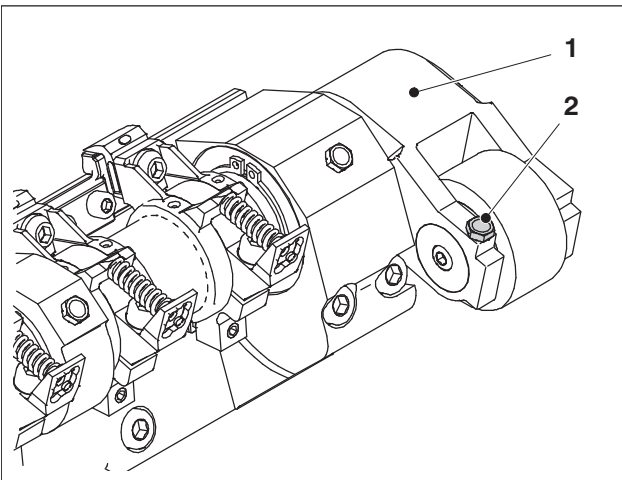


Fig. 151 Roller lever

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	<ul style="list-style-type: none"> • In the perfecting unit on D.S. and O.S. • In the printing unit after the perfector on O.S.
Access to the lubricating point	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per roller lever.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 99

29.1.2 Lubricating the gripper shaft bearing

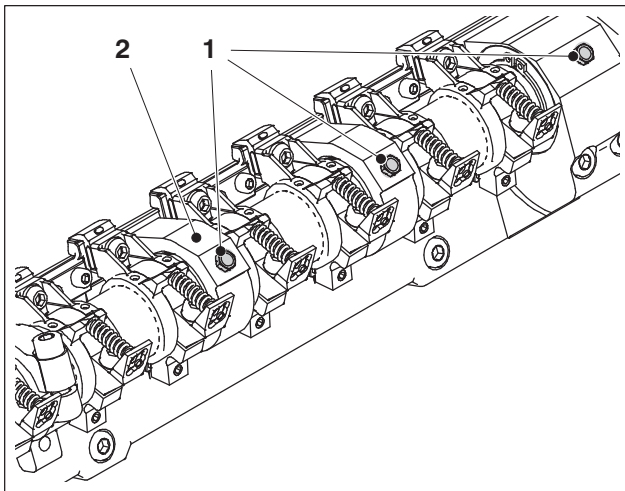


Fig. 152 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating point	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 10 recessed grease nipples per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 100

ES_904_0116-000FRANZ_00

30 Sheet control

30.1 Fan row underneath the reversing drum

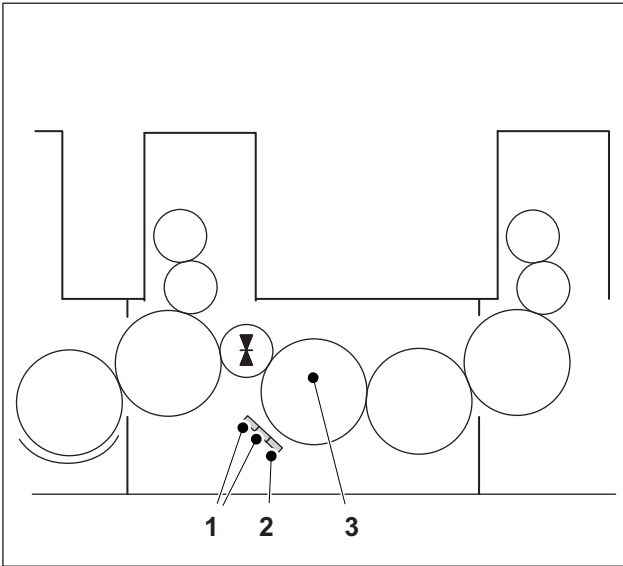


Fig. 153 Installation location of the row of fans below the perfector

Place of installation

- 1 Rows of fans II and III
- 2 Row of fans I
- 3 Storage drum

Three rows of fans (I, II and III) are fitted below the reversing drum for sheet guidance. You can gain access to the cover plate of the first row of fans via the manhole on O.S.

30.1.1 Cleaning the cover plate

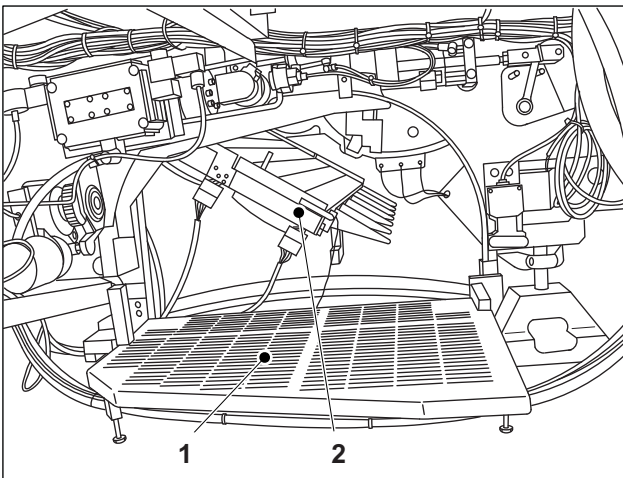


Fig. 154 Protection grid on the manhole

- 1 Protection grid
- 2 Row of fans I

The rows of fans are fitted below the reversing drum. There is a protection grid (Fig. 154/1) behind the guard below the gallery. When you pull the lever below the gallery, this protection grid opens.

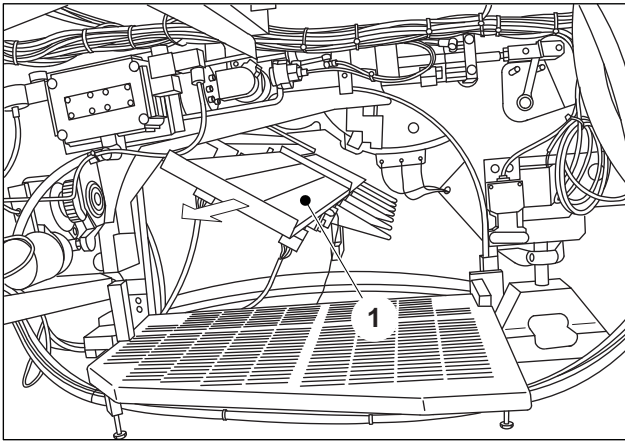


Fig. 155 Cover plate for the row of fans below the reversing drum

1 Cover plate for row of fans I

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Unhook the guard below the gallery at the height of the perfector. Open the protection grid on the manhole. The machine is in <i>emergency stop</i> operating state.
Maintenance work	Lift the cover plate above the row of fans "I" and pull it out toward the O.S. Clean the cover plate.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 101

ES_B04_0113-000FRONT_00

31 Perfector

31.1 Sensor "Missing sheet detector"

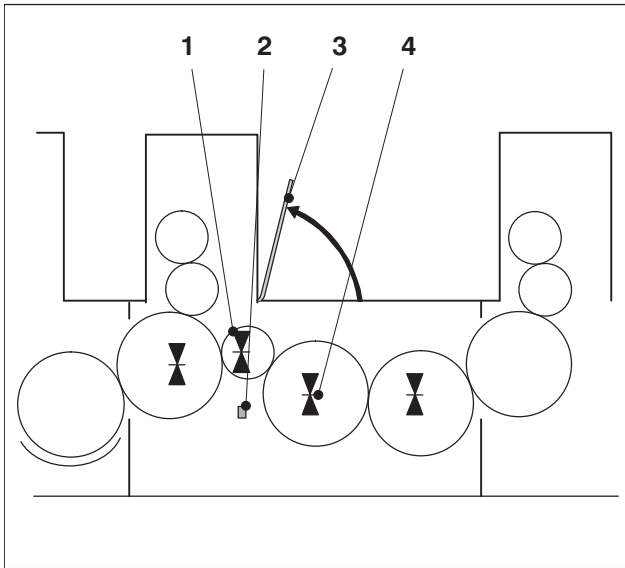


Fig. 156 Place of installation, sensor "Missing sheet detector"

Place of installation

- 1 Reversing drum
- 2 Sensor "Missing sheet detector"
- 3 Guard "Reversing drum/storage drum"
- 4 Storage drum

The sensor "Missing sheet detector" is mounted behind the storage drum or underneath the reversing drum.

The sensor checks whether the pincer grippers on the reversing drum have picked up the sheet.

31.1.1 Cleaning the sensor "Missing sheet detector"



Caution - Risk of damage to the "Storage drum" sensor!

Always maintain a minimum distance of 2 mm from the "Storage drum" sensor. Avoid metallic objects (e.g. metallic bracelet of a wristwatch) making contact with the "Storage drum" sensor. Otherwise the sensor can be damped or mechanically damaged.

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Accessing the maintenance point	<p>Set the storage drum to the smallest sheet size. Open the guard "Reversing drum/storage drum".</p> <p>Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.</p> <p>Turn the storage drum in <i>inching mode</i> until the gap points toward the reversing drum.</p>
Maintenance work	Clean the sensor and reflector.

Description of the maintenance point	
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 102

Maintenance work

- 1** Reflector, D.S.
 - 2** Missing sheet detector sensor, O.S.
1. Set the storage drum to the smallest sheet size to clean the sensor on O.S. and the reflector on D.S.
 2. Open the guard above the storage drum.
 3. Inch the press until the storage drum gap is directed towards the reversing drum.
 4. Use a soft, lint-free cloth to clean the sensor on O.S. and the reflector on D.S. through the space between the two cylinders. Use only light manual force for cleaning, as otherwise the position of the sensor or reflector might be changed.
 5. Close the guard above the storage drum.
 6. Adjust the storage drum to the required sheet size.

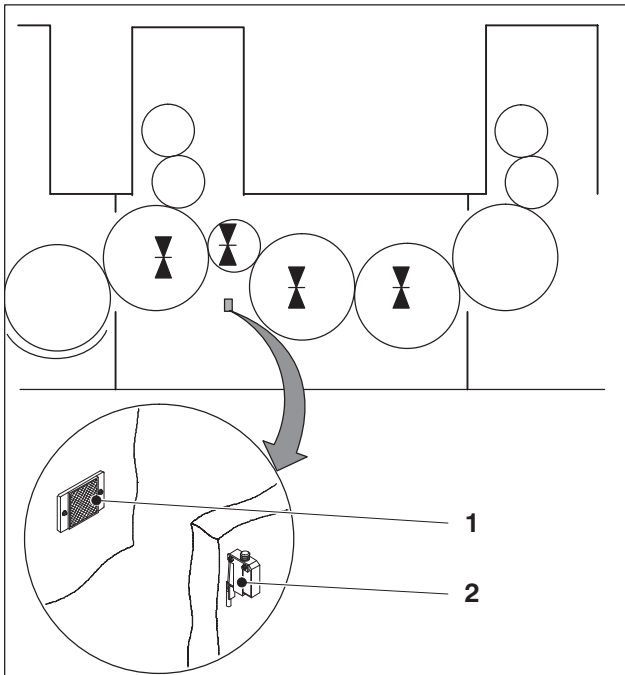


Fig. 157 Sensor "Missing sheet detector"

31.2 Stop lever

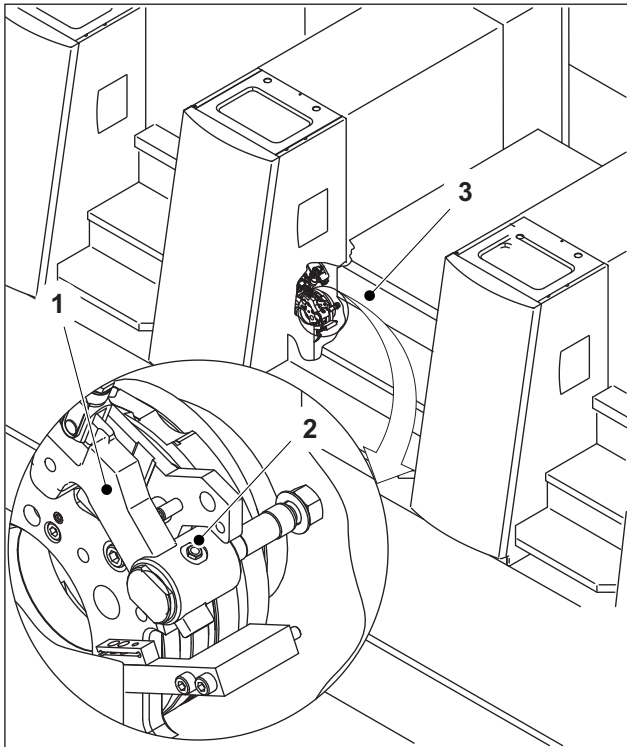


Fig. 158 Place of installation of the stop lever O.S.

Place of installation

- 1 Stop lever
- 2 Recessed grease nipple
- 3 Footboard cover

The stop lever is mounted on O.S. underneath the footboard cover at the reversing drum.

31.2.1 Lubricating the stop lever

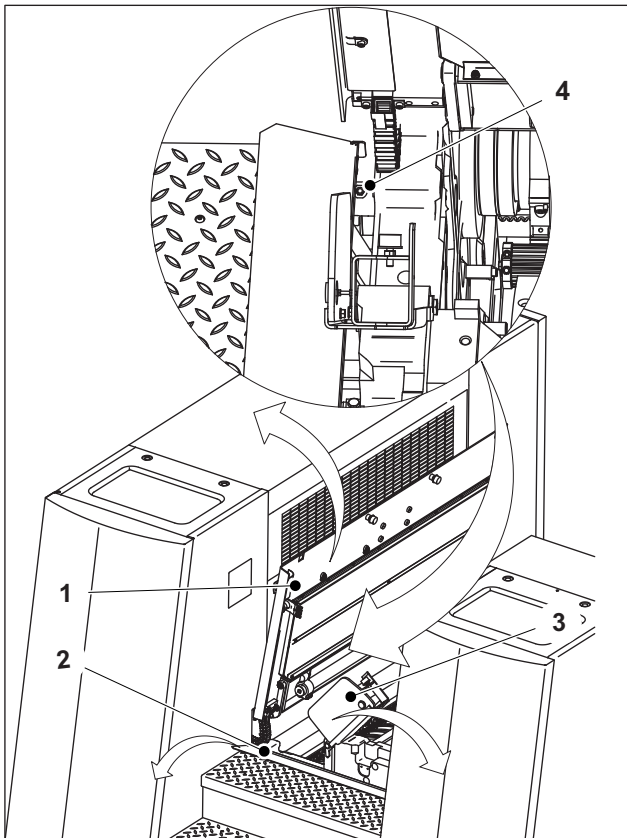


Fig. 159

- 1 Guard "Reversing drum/storage drum"
- 2 Footboard cover
- 3 Folding seat
- 4 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	III
Color code	Green
Maintenance location	O.S.
Access to the lubricating point	Open the guard "Reversing drum/storage drum". Swing the footboard cover down and swing the folding seat away.
Number/type/maintenance work	Lubricate 1 recessed grease nipple per perfecting device.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 103

Maintenance on the intermediate unit

1	Intermediate unit - safety instructions	B.3.3
1.1	To be observed when working at the press	B.3.3
2	Overview of the maintenance points on the intermediate unit	B.3.5
2.1	Overview	B.3.5
3	Transfer drum	B.3.6
3.1	Gripper systems	B.3.6
4	Impression cylinder	B.3.8
4.1	Gripper systems	B.3.8

ES_904_0000-0000EN_01

1 Intermediate unit - safety instructions

1.1 To be observed when working at the press



Warning - Risk of injury!

When you perform maintenance work, observe all notes on safety contained in the operating manual.



Warning - Risk of injury from rotating rollers and cylinders!

When cleaning the rollers and cylinders, the ball of your thumb must point toward the infeed gap and your fingers toward the outlet gap. Select the corresponding direction of rotation.



Warning - Risk of burning from hot surfaces!

After dryer use, wait until all accessible parts have cooled down and are no more than lukewarm (approximately 40°C).



Warning - Risk of explosion from evaporating solvents!

Before using cleaning agents, wait until the cylinders and press parts to be cleaned have cooled down and are no more than lukewarm (approximately 40°C).



Warning - Risk of explosion from evaporating solvents!

When working with dryers, use only inks and coatings that do not create an explosive atmosphere when heated in the dryer. This is specified in the corresponding safety data sheets.

When using cleaning agents on the press, ensure that no solvent can come into contact with the dryer area. Never use or store solvents in the vicinity of the dryer.

When using an automatic washup device, set the program so that the blankets and impression cylinders are dry before you resume production. This ensures that no cleaning agents are in the vicinity of the dryer.

**Warning - Risk of explosion and fire due to dust deposits!**

Dust, such as powder or paper dust, can pose a risk of fire or explosion.

You should therefore clean the areas affected by dust regularly, at least once a week, using a vacuum cleaner.

Only use suitable and approved industrial vacuum cleaners and avoid working with compressed air, as this could swirl up the dust.

**Warning - Danger of death from electrical voltage!**

Dryers work with very high operating voltages. Secure the press and the dryers against being switched on prior to all maintenance work:

Switch the main switches to *0/OFF*, and lock them each with a padlock. Leave a sign with the name of the person authorized to switch on the main switches.

Never touch any plugs of the electrical connections or disconnect them when the dryer is in operation. Protect all connectors of electrical connections against moisture, contamination and damage.

Faulty cables, plugs and insulation should be repaired by skilled electricians only, using original spare parts.

FS_B04_0054-000FREN1_00

2 Overview of the maintenance points on the intermediate unit

2.1 Overview

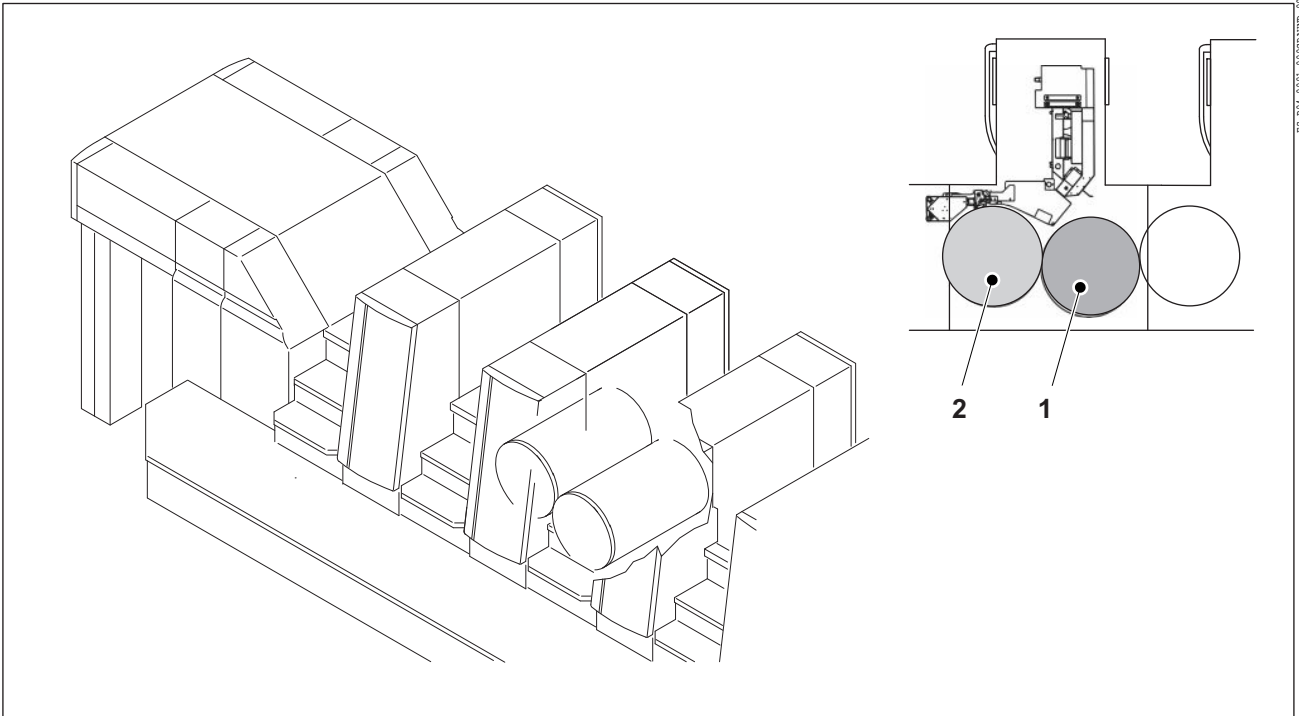


Fig. 1 Maintenance work on the intermediate unit

- 1 Maintenance points on the transfer drum
- 2 Maintenance points on the impression cylinder

FS.994.0066-0007KERN_03

3 Transfer drum

3.1 Gripper systems

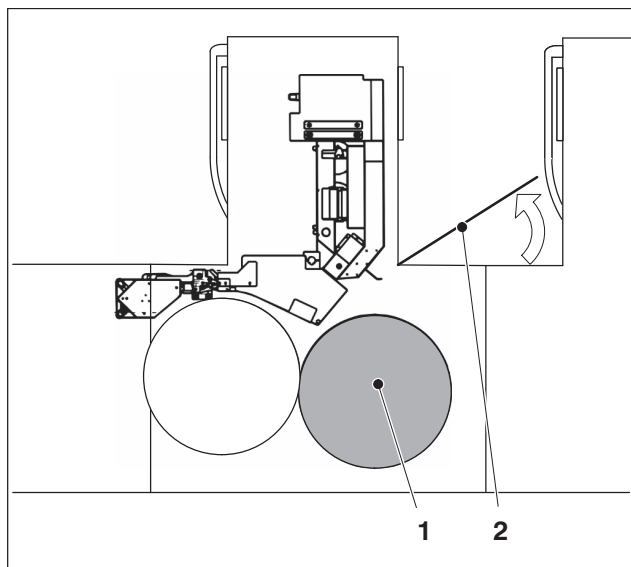


Fig. 2 Place of installation of the transfer drum

Place of installation

- 1 Transfer drum
- 2 Guard "Transfer drum"

The transfer drum is installed in the intermediate unit underneath the "Transfer drum" guard.

The transfer drum possesses 2 gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is installed on D.S., at the end of the gripper bar.

► **Note**

The intermediate unit is a dryer unit that generates high temperatures. Lubricate the intermediate unit with UV-compatible lubricant only!

3.1.1 Lubricating the roller lever

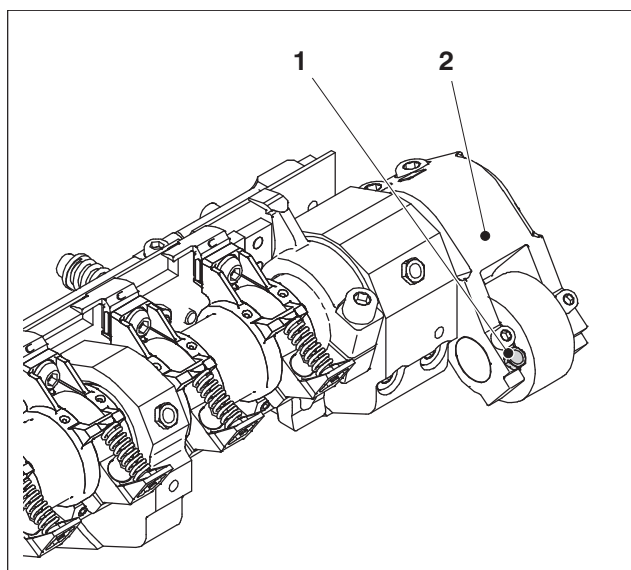


Fig. 3 Roller lever on D.S.

- 1 Recessed grease nipple
- 2 Roller lever

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S.
Access to the lubricating points	Open the "Transfer drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 1

3.1.2 Lubricating the gripper shaft bearings

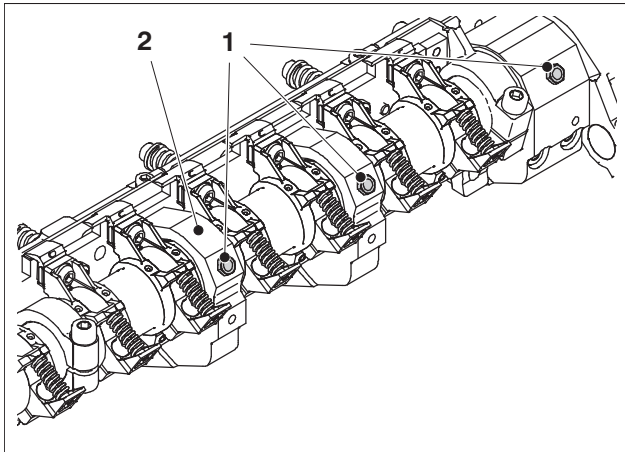


Fig. 4 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the "Transfer drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 2

FS.994.0016-0007KERN_04

4 Impression cylinder

4.1 Gripper systems

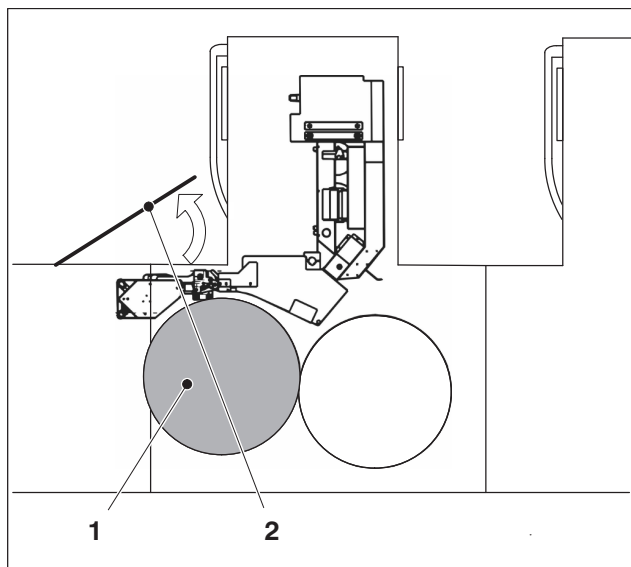


Fig. 5 Place of installation of the impression cylinder

Place of installation

- 1 Impression cylinder
- 2 Guard "Transfer drum"

The impression cylinder is installed in the intermediate unit underneath the "Transfer drum" guard.

The impression cylinder possesses two gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is mounted on O.S., at the end of the gripper bar.

► **Note**

The intermediate unit is a dryer unit that generates high temperatures. Lubricate the intermediate unit with UV-compatible lubricant only!

4.1.1 Lubricating the roller lever

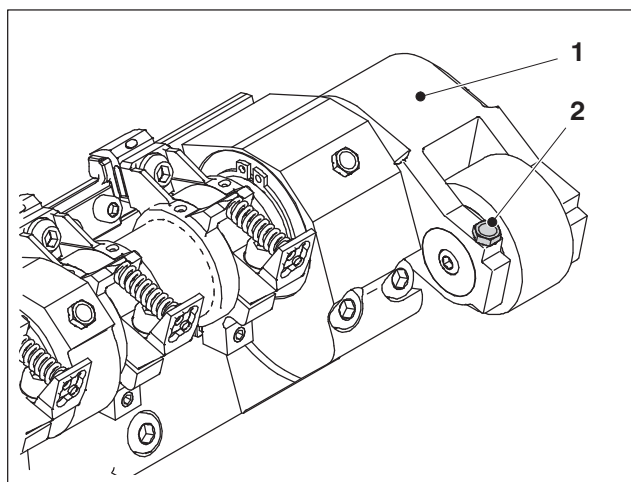


Fig. 6 Roller lever

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	O.S.
Access to the lubricating points	Open the "Transfer drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 3

4.1.2 Lubricating the gripper shaft bearings

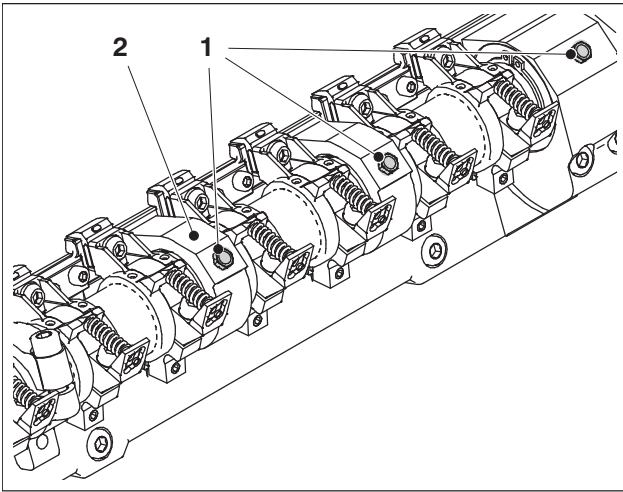


Fig. 7 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the "Transfer drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 4

Maintenance on the coating unit

1	Coating unit - safety instructions	B.4.3
1.1	To be observed when working at the press	B.4.3
1.2	Chambered blade system	B.4.5
2	Overview of the maintenance points on the coating unit	B.4.6
2.1	Overview	B.4.6
3	Transfer drum without UV interdeck dryer and without LYYL	B.4.7
3.1	Gripper systems	B.4.7
4	Transfer drum with UV interdeck dryer or LYYL	B.4.9
4.1	Gripper systems	B.4.9
5	Sheet travel monitor	B.4.11
5.1	Sensor "Sheet travel monitor"	B.4.11
6	Impression cylinder without UV interdeck dryer and without LYYL	B.4.12
6.1	Gripper systems	B.4.12
7	Impression cylinder with UV interdeck dryer or LYYL	B.4.14
7.1	Gripper systems	B.4.14
8	Chambered blade system	B.4.16
8.1	Screen roller	B.4.16
8.2	Roller locks	B.4.17
8.3	Level sensor	B.4.18
9	Varnish supply	B.4.19
9.1	Sensor "Insufficient varnish flow"	B.4.19

ES_904_0006-0007ENL_04

1 Coating unit - safety instructions

1.1 To be observed when working at the press



Warning - Risk of injury!

When you perform maintenance work, observe all notes on safety contained in the operating manual.



Warning - Risk of injury from rotating rollers and cylinders!

When cleaning the rollers and cylinders, the ball of your thumb must point toward the infeed gap and your fingers toward the outlet gap. Select the corresponding direction of rotation.



Caution - Damage caused by incorrect cleaning agents!

Never use cleaning agents (e.g. "ink attackers") that contain **dichloromethane (methylenechloride), trichloroethylene or other chlorinated or halogenated hydrocarbons**.

These cleaning agents damage press components, cylinder packings, rollers, and blankets.



Caution - Non-approved cleaning agents can damage the gripper tips!

Depending on the press version, the gripper tips can be polyurethane-coated. Non-approved cleaning agents attack the polyurethane coating and consequently cause malfunctions in the printing process.

Use only approved cleaners when cleaning the gripper tips. There is a list of approved cleaning agents on the Internet sites of FOGRA and Heidelberger Druckmaschinen AG.



Warning - Risk of burning from hot surfaces!

After dryer use, wait until all accessible parts have cooled down and are no more than lukewarm (approximately 40°C).

**Warning - Risk of explosion from evaporating solvents!**

Before using cleaning agents, wait until the cylinders and press parts to be cleaned have cooled down and are no more than lukewarm (approximately 40°C).

**Warning - Risk of explosion from evaporating solvents!**

When using dryers, only use inks and varnishes that do not create any explosive atmosphere when heated in the dryer. This is specified in the corresponding safety data sheets.

Ensure that no solvent can come into contact with the dryer area when using cleaning agents on the press. Never use or store solvents in the vicinity of the dryer.

When using the automatic washup device, set the wash program so that the blankets and impression cylinder are dry before further production. This ensures that no cleaning agents are in the vicinity of the dryer.

**Warning - Risk of explosion and fire due to dust deposits!**

Dust, such as powder or paper dust, can pose a risk of fire or explosion.

You should therefore clean the areas affected by dust regularly, at least once a week, using a vacuum cleaner.

Only use suitable and approved industrial vacuum cleaners and avoid working with compressed air, as this could swirl up the dust.

**Warning - Danger of death from electrical voltage!**

Dryers work with very high operating voltages. Secure the press and the dryers against being switched on before you start any maintenance work:

Switch the main switches to *0/OFF*, and lock each switch with a padlock. Leave a sign with the name of the person authorized to switch on the main switches.

Never touch any plugs of the electrical connections or disconnect them when the dryer is in operation. Protect all connectors of electrical connections against moisture, contamination and damage.

Faulty cables, plugs and insulation should be repaired by skilled electricians only, using original spare parts.

1.2 Chambered blade system

**Warning - Risk of cutting on sharp doctor blades!**

Proceed with utmost caution and great care when removing and fitting the chambered blade and when changing the doctor blades. Wear protective gloves when you perform any work on the chambered blade system. Only transport the chambered blade using the handles intended for this and with the black protective bars on the doctor blades. Always be aware of other people when handling the chambered blade.

FS.B04.0039-00000000_00

2 Overview of the maintenance points on the coating unit

2.1 Overview

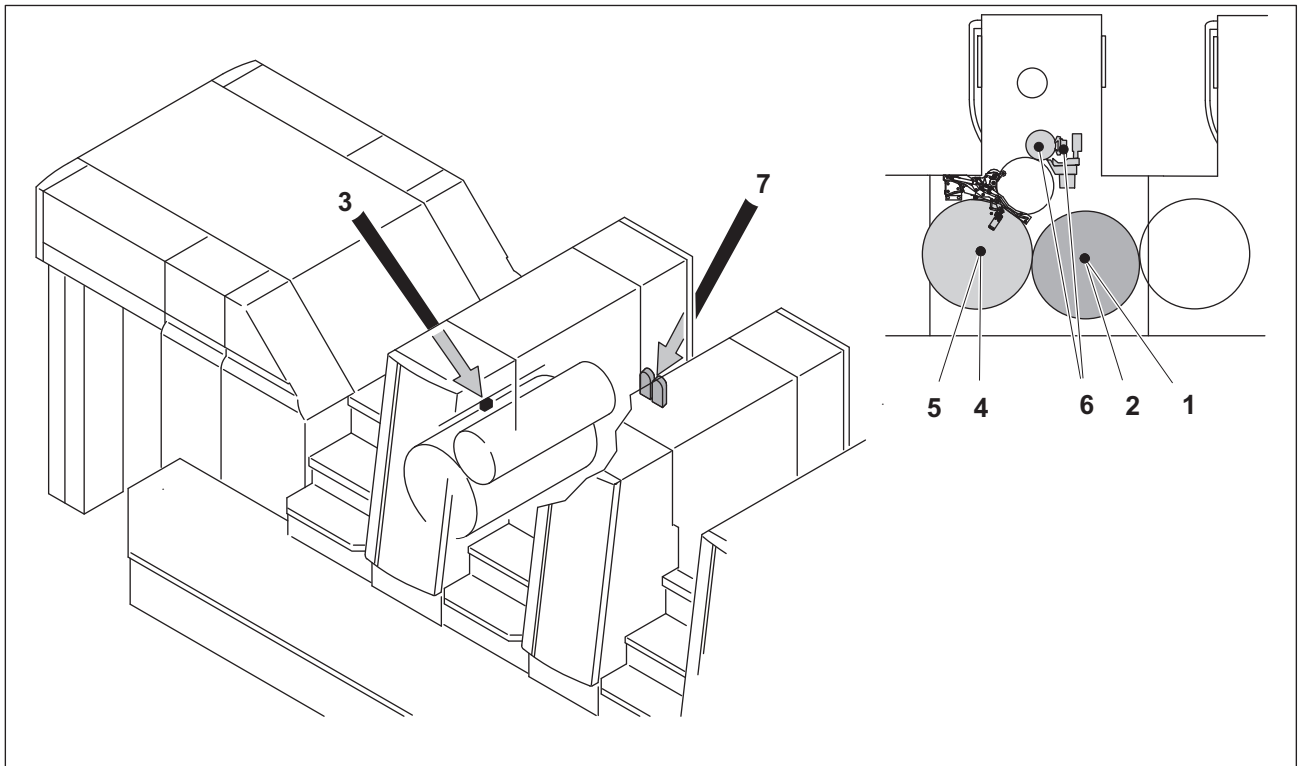


Fig. 1 Maintenance points on the coating unit

- 1 Maintenance points on the transfer drum without UV interdeck dryer and without LYYL
- 2 Maintenance points on the transfer drum with UV interdeck dryer or LYYL
- 3 Maintenance points on the sheet travel monitor
- 4 Maintenance points on the impression cylinder without UV interdeck dryer and without LYYL
- 5 Maintenance points on the impression cylinder with UV interdeck dryer or LYYL
- 6 Maintenance points on the chambered blade system
- 7 Maintenance points on the varnish supply

FS_994_0056-000FRONT_05

3 Transfer drum without UV interdeck dryer and without LYYL

3.1 Gripper systems

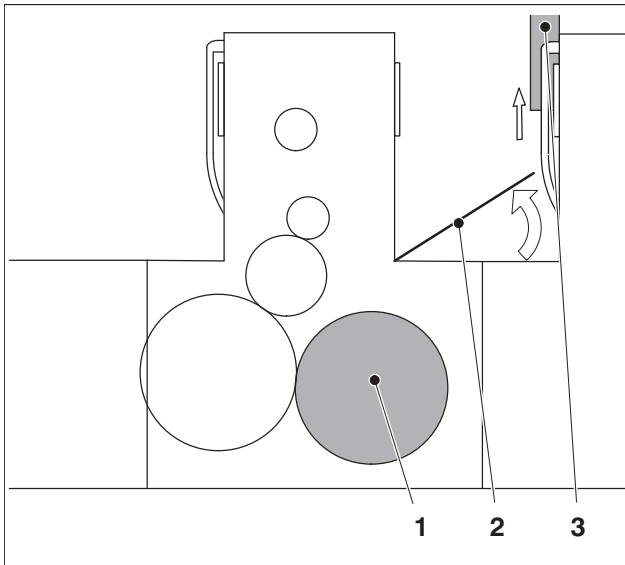


Fig. 2 Place of installation of the transfer drum

Place of installation

- 1 Transfer drum
- 2 Guard "Transfer drum"
- 3 "Plate changer" guard in front of plate cylinder and blanket cylinder

The transfer drum is installed in the coating unit, underneath the "Transfer drum" guard.

The transfer drum possesses 2 gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is installed on D.S., at the end of the gripper bar.

3.1.1 Lubricating the roller lever

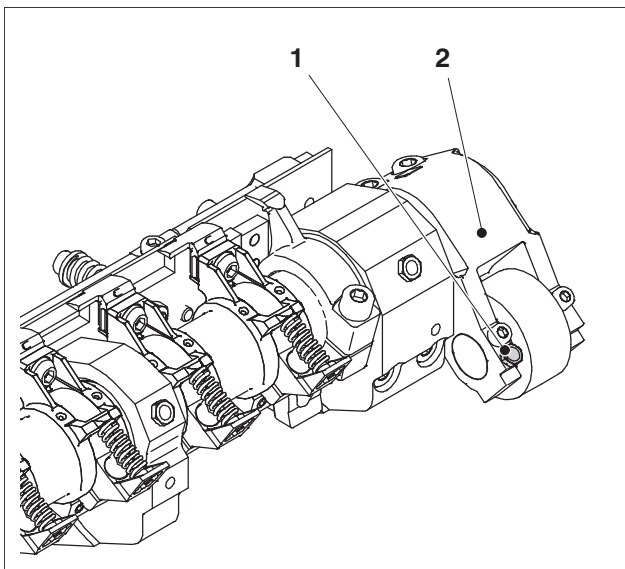


Fig. 3 Roller lever on D.S.

- 1 Recessed grease nipple
- 2 Roller lever

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S.
Access to the lubricating points	Open the guards "Impression cylinder/transfer drum" and "Plate cylinder/blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 1

3.1.2 Lubricating the gripper shaft bearing

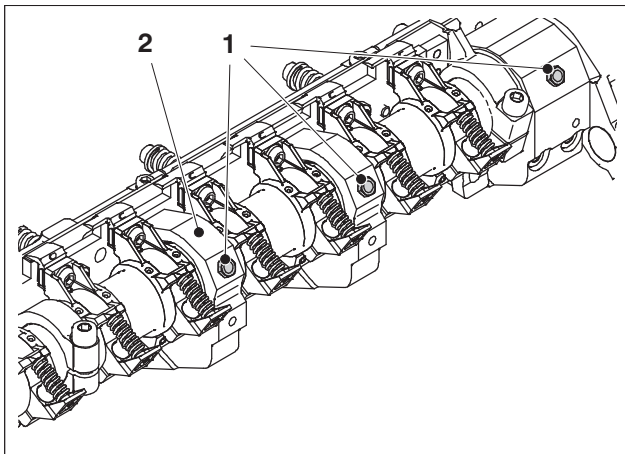


Fig. 4 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guards "Impression cylinder/transfer drum" and "Plate cylinder/blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 2

FS_994_0104-000FRONT_02

4 Transfer drum with UV interdeck dryer or LYLL

4.1 Gripper systems

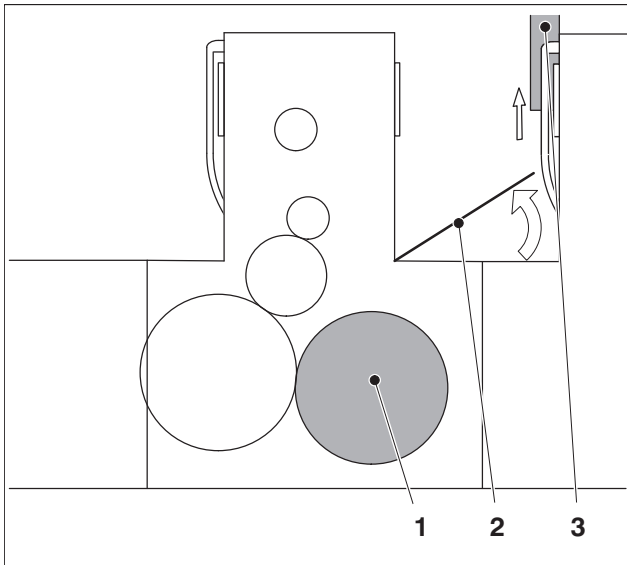


Fig. 5 Place of installation of the transfer drum

Place of installation

- 1 Transfer drum
- 2 Guard "Transfer drum"
- 3 "Plate changer" guard in front of plate cylinder and blanket cylinder

The transfer drum is installed in the coating unit, underneath the "Transfer drum" guard.

The transfer drum possesses 2 gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is installed on D.S., at the end of the gripper bar.

4.1.1 Lubricating the roller lever

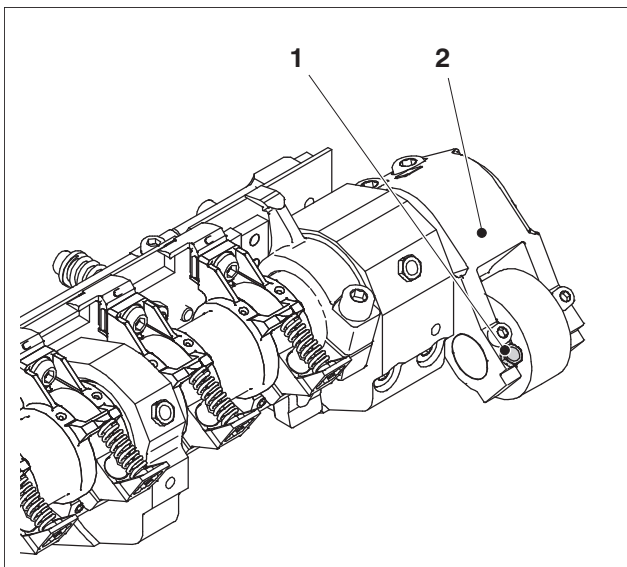


Fig. 6 Roller lever on D.S.

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S.
Access to the lubricating points	Open the guards "Impression cylinder/transfer drum" and "Plate cylinder/blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 3

4.1.2 Lubricating the gripper shaft bearing

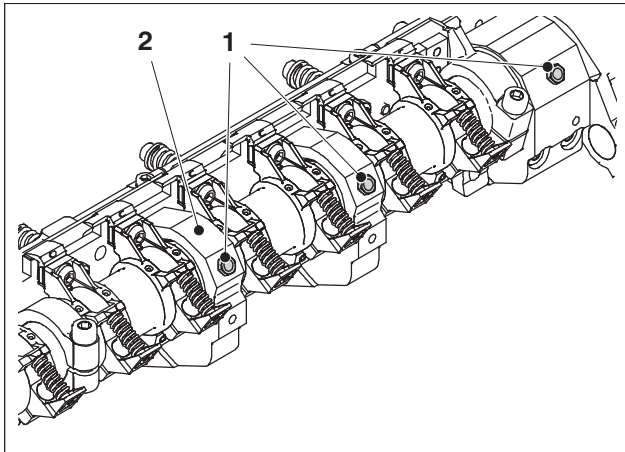


Fig. 7 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

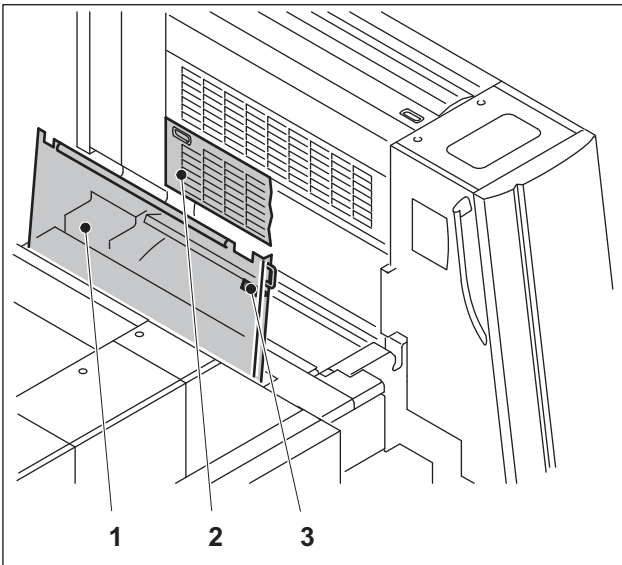
Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guards "Impression cylinder/transfer drum" and "Plate cylinder/blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 4

FS_B04_0079-000FRAND_00

5 Sheet travel monitor

5.1 Sensor "Sheet travel monitor"



FS_B04_0036-000FRAND_00

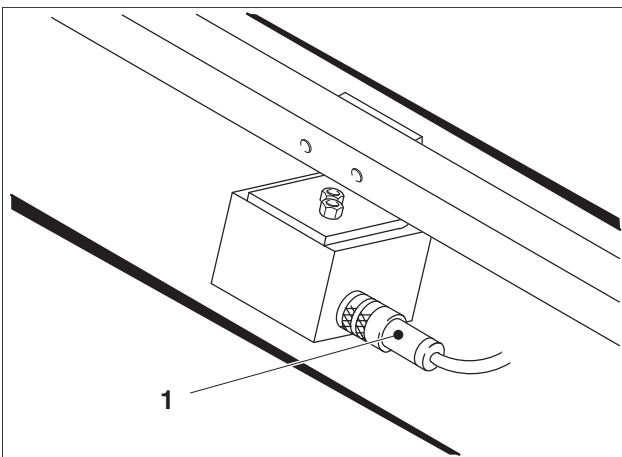
Place of installation

- 1 Guard "Delivery drum"
- 2 Guard "Coating blanket cylinder"
- 3 Sensor "Sheet travel monitor"

The sensor "Sheet travel monitor" is screwed to a cross bar in the coating unit, centrally above the impression cylinder.

Fig. 8 Place of installation of the sensor "Sheet travel monitor"

5.1.1 Cleaning the "Sheet travel monitor" sensor



FS_904_0036-000FRAND_00

- 1 Sheet travel monitor sensor



Caution - Damage to the sensor surface!
Never use a hard object for cleaning the sensor surface.

Fig. 9 Sensor "Sheet travel monitor"

Description of the maintenance point	
Maintenance interval	II
Maintenance location	Center
Accessing the maintenance point	Open the guard "Coating blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Maintenance work	Clean the "Sheet travel monitor" sensor.
Required resources	Soft, lint-free cloth; paint brush; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 5

6 Impression cylinder without UV interdeck dryer and without LYYL

6.1 Gripper systems

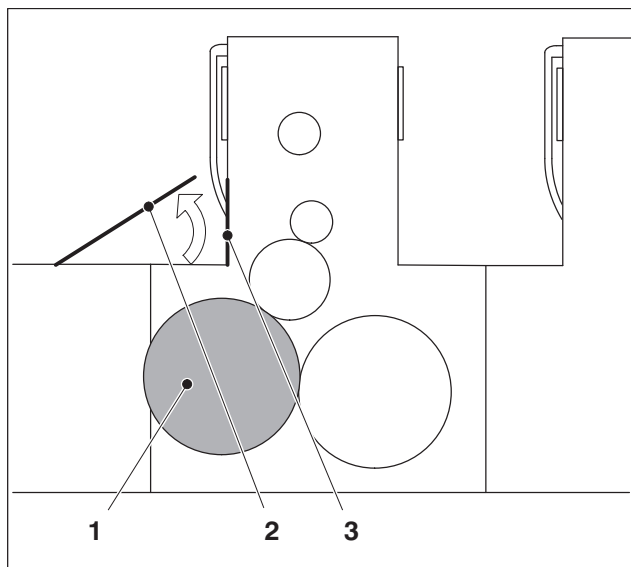


Fig. 10 Place of installation of the impression cylinder

Place of installation

- 1 Impression cylinder
- 2 Guard "Delivery drum"
- 3 Guard "Coating blanket cylinder"

In the coating unit, the impression cylinder is mounted under the guard "Delivery drum".

The impression cylinder is equipped with 2 gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is mounted on O.S., at the end of the gripper bar.

6.1.1 Lubricating the roller lever

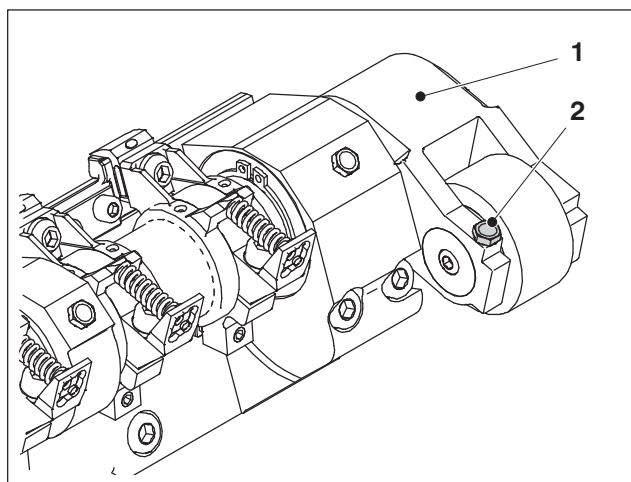


Fig. 11 Roller lever

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	O.S.
Access to the lubricating points	Open the guard "Coating blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 6

6.1.2 Lubricating the gripper shaft bearing

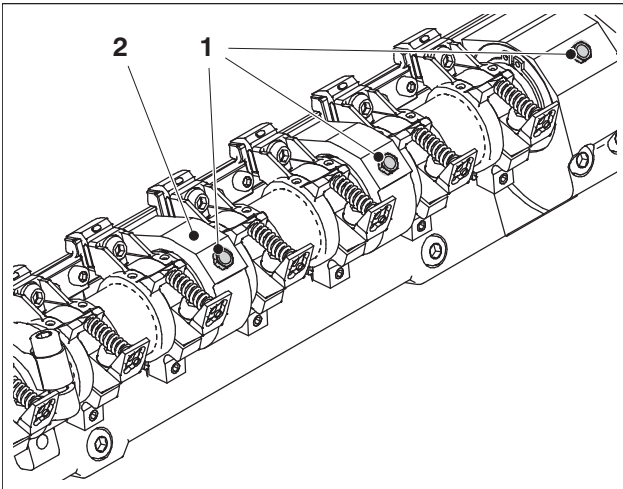


Fig. 12 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guard "Coating blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 7

FS.994.0105-0007KERNL_04

7 Impression cylinder with UV interdeck dryer or LYYL

7.1 Gripper systems

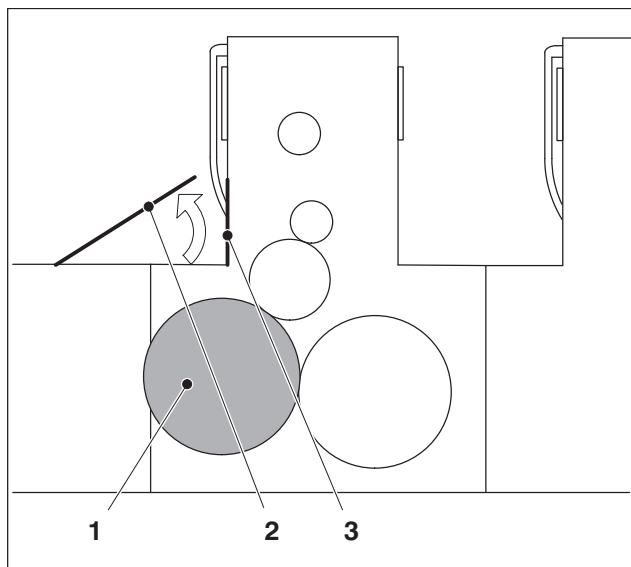


Fig. 13 Place of installation of the impression cylinder

Place of installation

- 1 Impression cylinder
- 2 Guard "Delivery drum"
- 3 Guard "Coating blanket cylinder"

In the coating unit, the impression cylinder is mounted under the guard "Delivery drum".

The impression cylinder is equipped with 2 gripper systems. Each gripper system consists of the gripper bar and the gripper pads.

The grippers and the gripper shaft bearings are installed on a gripper bar. The roller lever is mounted on O.S., at the end of the gripper bar.

7.1.1 Lubricating the roller lever

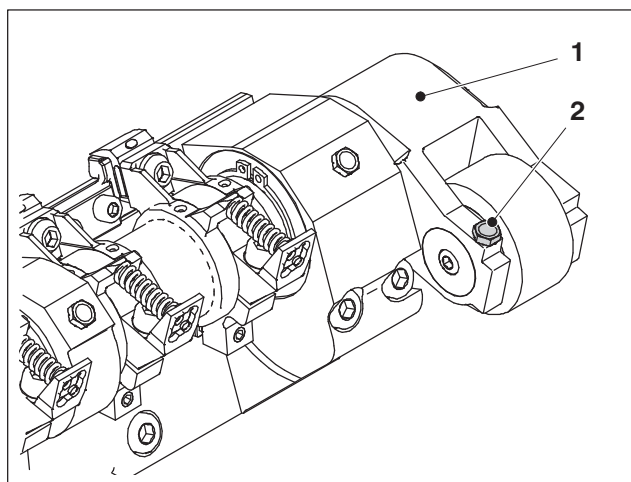


Fig. 14 Roller lever

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	O.S.
Access to the lubricating points	Open the guard "Coating blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 8

7.1.2 Lubricating the gripper shaft bearing

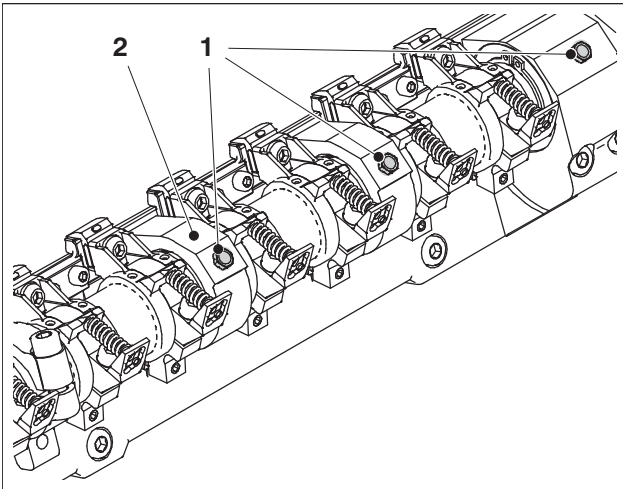


Fig. 15 Gripper shaft bearing

- 1 Recessed grease nipple
- 2 Gripper shaft bearing

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	From D.S. to O.S.
Access to the lubricating points	Open the guard "Coating blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the gripper shaft bearing. 7 recessed grease nipples per gripper bar.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 9

FS_B14_0093-0007KRU_00

8 Chambered blade system

8.1 Screen roller

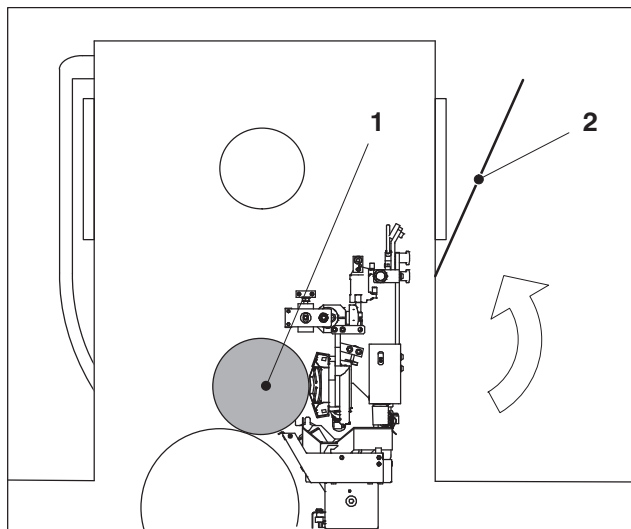


Fig. 16 Place of installation of the screen roller

Place of installation

- 1 Screen roller
- 2 Guard "Coating unit"

► **Note**

Consult also the chapter on "Coating Unit"/"Chambered Blade" in your operating manual.

8.1.1 Lubricating the driver

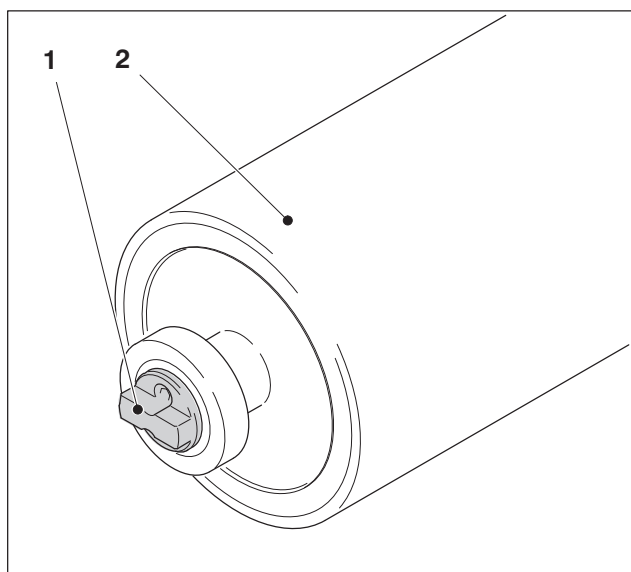


Fig. 17 Driver D.S.

- 1 Driver D.S.
- 2 Screen roller

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	D.S.
Access to the lubricating point	Open the guard "Coating blanket cylinder".
Number/type/maintenance work	Lubricate the driver.
Required resources	Paint brush; grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 10

8.2 Roller locks

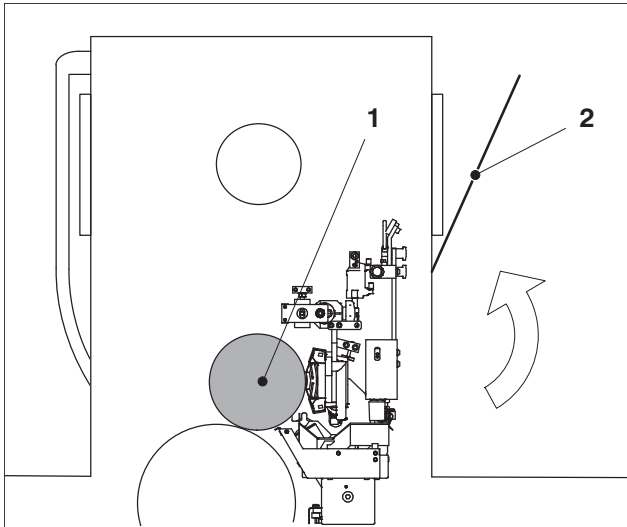


Fig. 18 Place of installation of the screen roller

Place of installation

- 1 Screen roller
- 2 Guard "Coating unit"

► Note

Consult also the chapter on "Coating Unit"/"Chambered Blade" in your operating manual.

8.2.1 Lubricating the eccentric

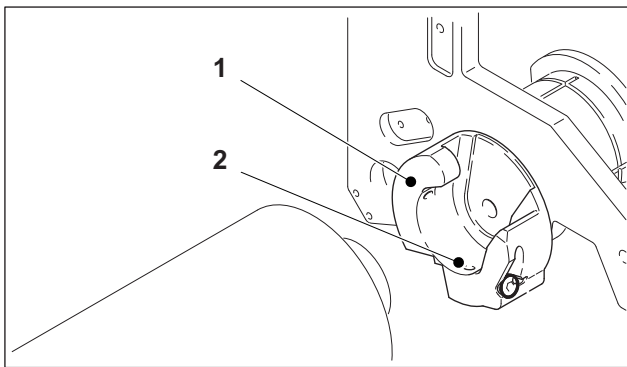


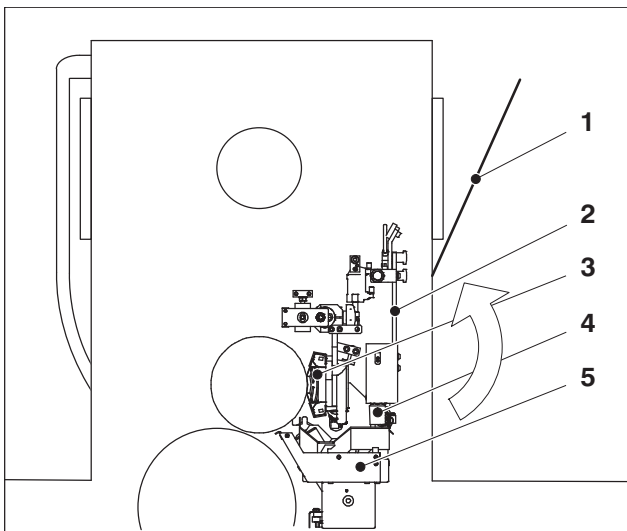
Fig. 19 Eccentric on roller lock O.S.

- 1 Roller lock O.S.
- 2 Eccentric

Description of the lubricating point	
Maintenance interval	III
Color code	Blue
Maintenance location	D.S. / O.S.
Access to the lubricating point	Open the guard "Coating blanket cylinder".
Number/type/maintenance work	Lubricate the eccentric on the roller locks.
Required resources	Paint brush; grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 11

8.3 Level sensor



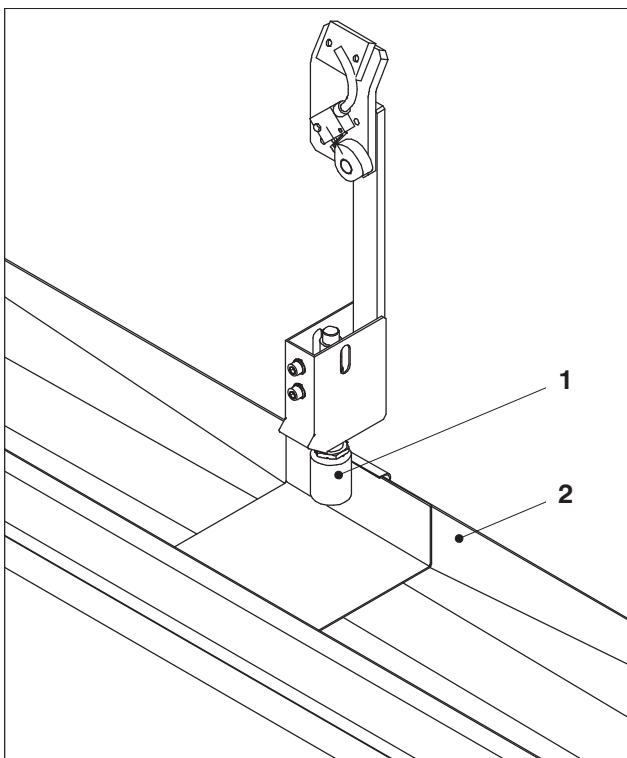
FS_043_0006-000BRAND_00

Place of installation

- 1 Guard "Coating unit"
- 2 Support
- 3 Chambered blade
- 4 Level sensor
- 5 Coating pan

Fig. 20 Place of installation of the level sensor

8.3.1 Cleaning the level sensor



FS_043_0002-000BRAND_00

- 1 Level sensor
- 2 Coating pan



Caution - Damage to the sensor surface!

Never use a hard object for cleaning the sensor surface.

Description of the maintenance point	
Maintenance interval	I
Maintenance location	Center
Accessing the maintenance point	Open the guard "Coating blanket cylinder".
Maintenance work	Clean the sensor.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 12

Fig. 21 Level sensor

FS.904.0415-000FRONT_00

9 Varnish supply

9.1 Sensor "Insufficient varnish flow"

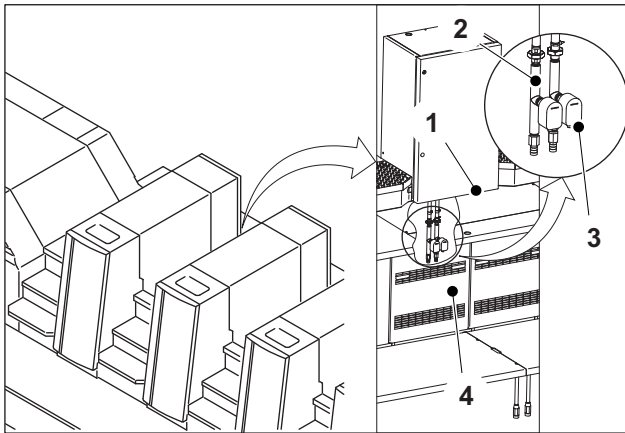


Fig. 22 Place of installation, sensor "Insufficient varnish flow" D.S.

Place of installation

- 1 Footboard
- 2 Return flow line
- 3 Sensor "Insufficient varnish flow"
- 4 Screen on the footboard

The sensor "Varnish return flow" is mounted at D.S. behind the screen of the footboard.

9.1.1 Cleaning the sensor "Insufficient varnish flow"

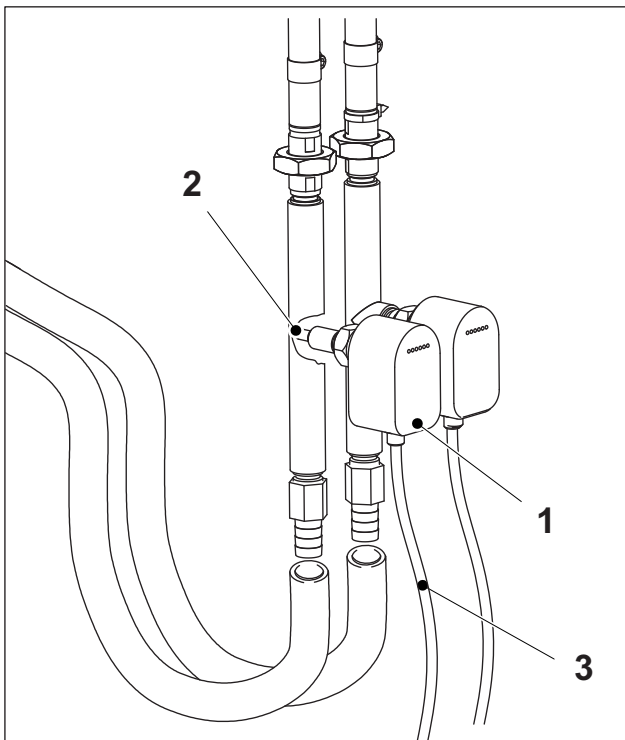


Fig. 23 Sensor "Insufficient varnish flow"

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S.
Accessing the maintenance point	Remove the screen on the footboard.
Maintenance work	Clean sensor tip.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 13

Carrying out the maintenance work

- 1 Sensor "Insufficient varnish flow"
 - 2 Sensor tip
 - 3 Sensor cable
1. Remove the varnish from the coating pan. Press the button *Pump off* on the remote control of the varnish supply unit.

Allow the varnish supply pump to pump off for at least 10 seconds, or until no varnish remains in the varnish circulation.

2. Switch the varnish pumps off on the remote control.
3. Remove the sensor cable.
4. Unscrew the sensor.
5. Clean the sensor tip.



Caution - Press damage!

When UV varnishes are used, never use water to clean the sensor. Use only the "Approved washing fluids". Failure to follow these instructions can lead to press damage.

Maintenance on the delivery

1	Delivery - safety instructions	B.5.3
1.1	To be observed when working at the press	B.5.3
1.2	Pile guide rail and pile transport	B.5.5
2	Overview of the maintenance points on the delivery	B.5.6
2.1	Overview	B.5.6
3	Sheet transport without UV end-of-press dryer	B.5.7
3.1	Gripper system	B.5.7
3.2	Gripper opening cam	B.5.8
3.3	Chain guide	B.5.9
4	Sheet transport with UV end-of-press dryer	B.5.11
4.1	Gripper system	B.5.11
4.2	Gripper opening cam	B.5.12
4.3	Chain guide	B.5.13
5	Sheet brake system	B.5.15
5.1	Sheet brake module	B.5.15
5.2	Module support	B.5.18
5.3	Drive	B.5.19
6	Sheet joggers	B.5.24
6.1	Front edge system	B.5.24
7	Non-stop device	B.5.27
7.1	Guide rail	B.5.27
8	Pile guidance and pile transport	B.5.28
8.1	Pile guidance and pile transport	B.5.28
9	Sheet decurler	B.5.30
9.1	Sheet decurler	B.5.30
10	Sheet guide	B.5.31
10.1	Sheet guide plates and powder deflectors	B.5.31
11	Air supply	B.5.35
11.1	Air filters "Sheet brake" and "Sheet decurler"	B.5.35
11.2	Air filter for the sheet guide plate blower	B.5.38
12	CleanStar	B.5.40
12.1	Suction ducts	B.5.40

1 Delivery - safety instructions

1.1 To be observed when working at the press



Warning - Risk of injury!

When you perform maintenance work, observe all notes on safety contained in the operating manual.



Warning - Risk of burning from hot surfaces!

After dryer use, wait until all accessible parts have cooled down and are no more than lukewarm (approximately 40°C).



Warning - Risk of explosion from evaporating solvents!

Before using cleaning agents, wait until the cylinders and press parts to be cleaned have cooled down and are no more than lukewarm (approximately 40°C).



Warning - Risk of explosion from evaporating solvents!

When working with dryers, use only inks and coatings that do not create an explosive atmosphere when heated in the dryer. This is specified in the corresponding safety data sheets.

When using cleaning agents on the press, ensure that no solvent can come into contact with the dryer area. Never use or store solvents in the vicinity of the dryer.

When using an automatic washup device, set the program so that the blankets and impression cylinders are dry before you resume production. This ensures that no cleaning agents get into the dryer area.

**Warning - Risk of explosion and fire due to dust deposits!**

Dust, such as powder or paper dust, can pose a risk of fire or explosion.

You should therefore clean the areas affected by dust regularly, at least once a week, using a vacuum cleaner.

Only use suitable and approved industrial vacuum cleaners and avoid working with compressed air, as this could swirl up the dust.

**Warning - Danger of death from electrical voltage!**

Dryers work with very high operating voltages. Secure the press and the dryers against being switched on prior to all maintenance work:

Switch the main switch to *0/OFF*, and lock it with a padlock. Leave a sign with the name of the person authorized to switch on the main switches.

Never touch any plugs of the electrical connections or disconnect them when the dryer is in operation. Protect all connectors of electrical connections against moisture, contamination and damage.

Faulty cables, plugs and insulation should be repaired by skilled electricians only, using original spare parts.



Warning - Risk of injury from moving chain gripper systems!



Prior to any extensive work in the delivery that takes more than 5 minutes to complete:

- Switch the main switch to 0/OFF and lock it with a padlock.
- Leave a sign with the name of the person authorized to switch on the press.

Prior to any other work in the delivery:

- Press the *Emergency stop* button on the delivery control panel.
- Open the front guard on the delivery.

When performing work while the press is running (for example pile change, removal of sample sheets, work with spacer wedges), pay particular attention to the movement of the chain gripper systems.

1.2 Pile guide rail and pile transport



Warning - Risk of injury from moving pile support!

Prior to raising or lowering the pile support plate: Ensure by means of a visual inspection that no one is standing in the hazardous area of moving parts and that nothing can be jammed underneath the pile support plate.

When the press is switched on, never stay underneath the pile support. Do not sit on the pile support. Do not ride on the pile support.

2 Overview of the maintenance points on the delivery

2.1 Overview

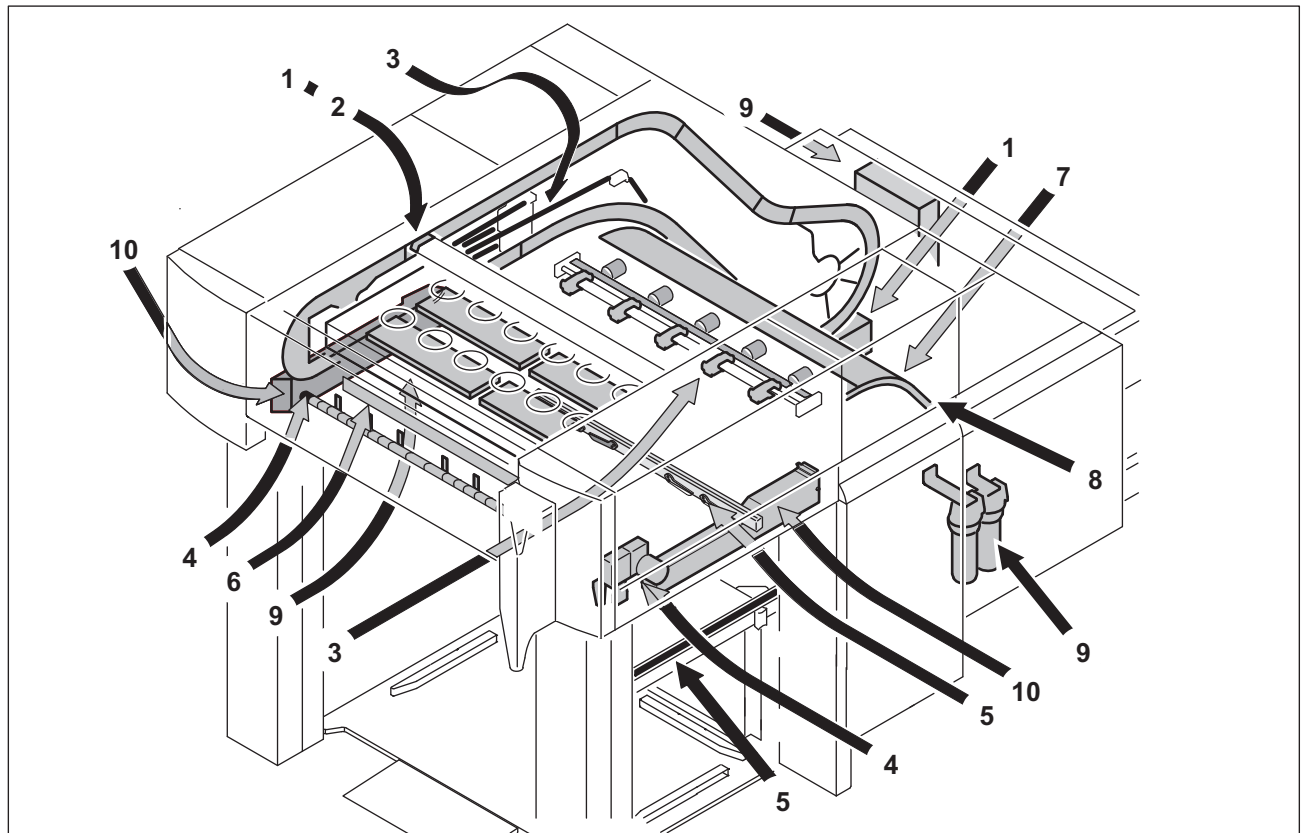


Fig. 1 Maintenance points on the delivery

- 1 Maintenance points on the sheet transport system without UV end-of-press dryer
- 2 Maintenance point on the sheet transport system with UV end-of-press dryer
- 3 Maintenance points on the sheet brake system
- 4 Maintenance points on the sheet jogger
- 5 Maintenance points on the non-stop device
- 6 Maintenance points on the pile guide rail and on the pile transport
- 7 Maintenance points on the sheet decurler
- 8 Maintenance points on the sheet control
- 9 Maintenance points on the air supply
- 10 Maintenance point on the CleanStar

3.1.2 Lubricating the roller lever

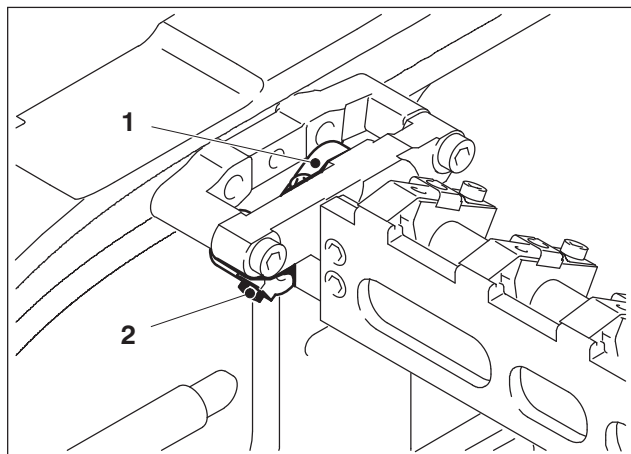


Fig. 4 Roller lever on the gripper system

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S.
Access to the lubricating points	Open the "Delivery guard" at the front. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper system.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 2

3.2 Gripper opening cam

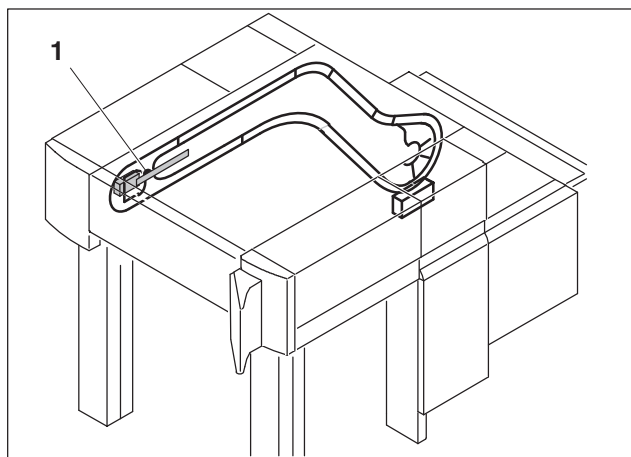


Fig. 5 Place of installation of the gripper opening cam

Place of installation

- 1 Gripper opening cam

The gripper opening cam is mounted at the delivery side frame on D.S.

3.2.1 Cleaning and lubricating the adjusting spindle

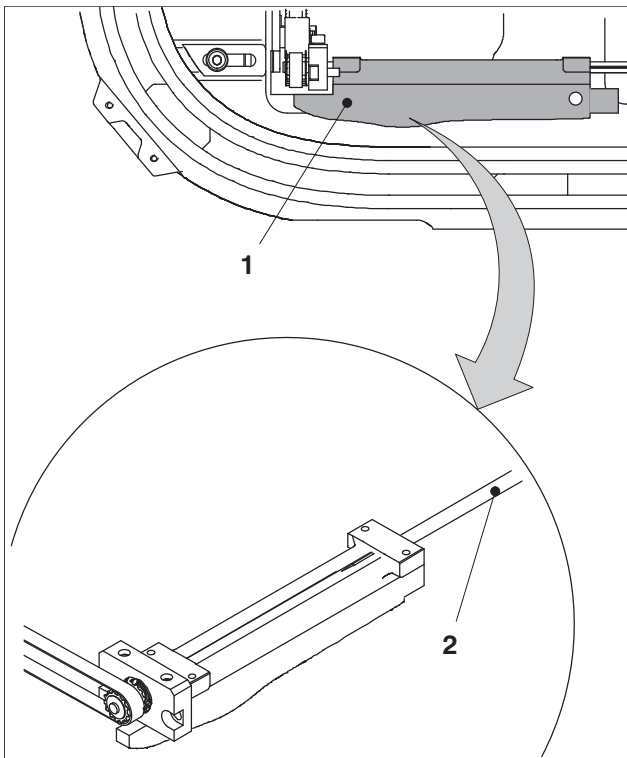


Fig. 6 Adjusting spindle on the gripper opening cam

- 1 Gripper opening cam
- 2 Adjusting spindle

Description of the lubricating point	
Maintenance interval	III
Color code	-
Maintenance location	D.S.
Access to the lubricating points	Open the "Delivery guard" at the front. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Clean and lubricate the adjusting spindle.
Required resources	Spray can B02 , paint brush; soft, lint-free cloth
Lubricant	Elkalub FLC1012, note "Approved lubricants".

Tab. 3

3.3 Chain guide

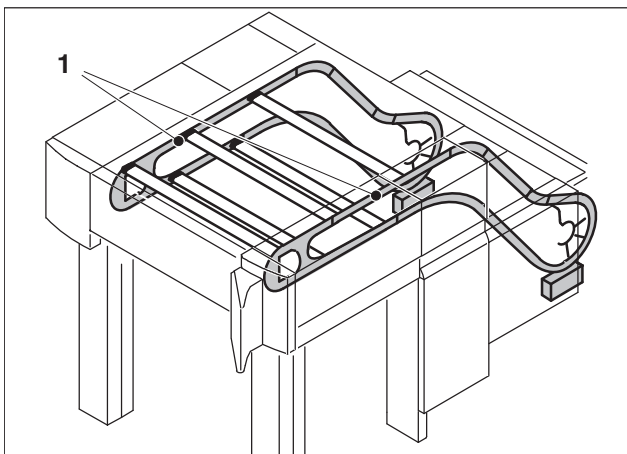


Fig. 7 Place of installation of the chain guide

Place of installation

- 1 Gripper chains

3.3.1 Cleaning the oil discharge channel and oil drip pan

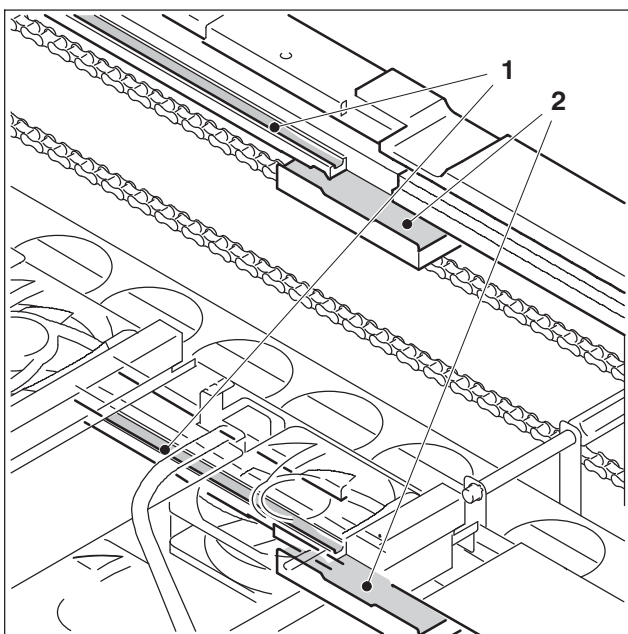


Fig. 8 Oil drain groove and oil drip pan

- 1 Oil drain grooves
- 2 Oil drip pan

► **Note**
Unscrew the bottom oil drip pan for cleaning.

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Open the "Delivery guard" at the front. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Clean the oil drain groove of the gripper chain guide. Clean the oil drip pans of the gripper chain top/bottom.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 4

3.3.2 Emptying and cleaning the oil collecting vessel

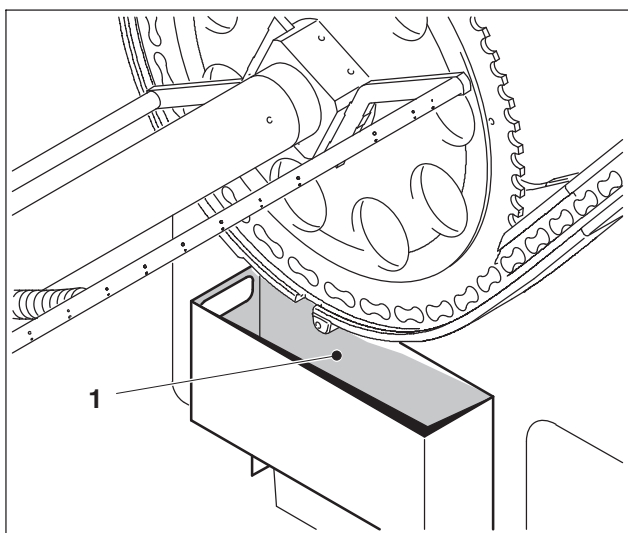


Fig. 9 Oil collecting vessel underneath the sprocket wheel

- 1 Oil collecting vessel

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Empty and clean the oil collecting vessel.
Required resources	Soft, lint-free cloth; protective gloves

Tab. 5

FS.994.0111-000FRONT_05

4 Sheet transport with UV end-of-press dryer

4.1 Gripper system

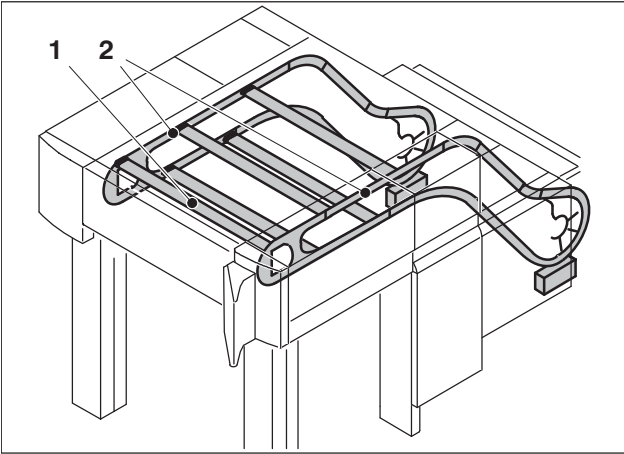


Fig. 10 Place of installation of the gripper systems

Place of installation

- 1 Gripper bar
- 2 Gripper chains

The gripper systems are mounted to the delivery chain. Each gripper system is supported on D.S. and O.S.

The number of gripper systems depends on the delivery type. Each gripper system is provided with one roller lever mounted on D.S.

Number of gripper systems

- 8 gripper systems with standard delivery
- 14 gripper systems with extended delivery

4.1.1 Checking and cleaning the gripper pads

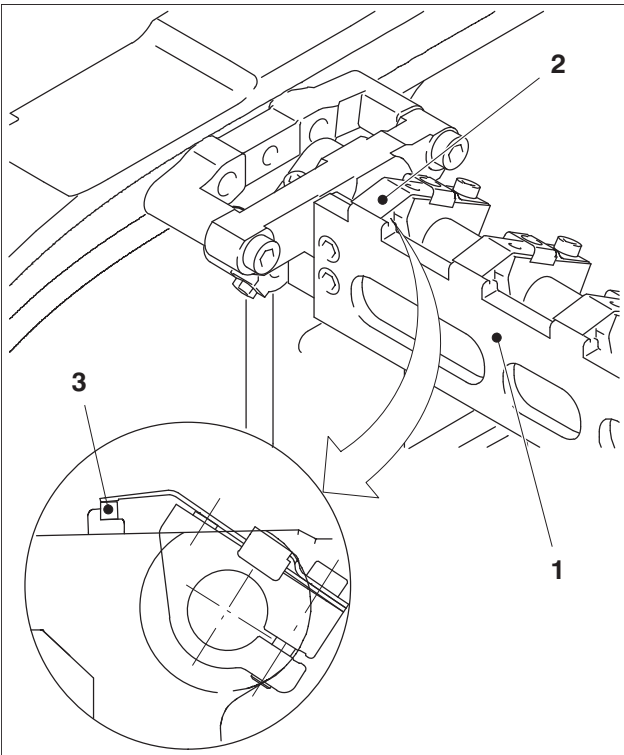


Fig. 11 Gripper pads

- 1 Gripper bar
- 2 Grippers
- 3 Gripper pads



Caution - Press damage!

Do not open the grippers manually! Move the gripper system in *inching mode* until the grippers of a gripper bar open. Clean the grippers and grooved plates when the grippers are open.

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Open the "Delivery guard" at the front. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Clean the gripper pads. Check the gripper pads visually. 19 gripper pads per gripper system.
Required resources	Brush, flashlight, mirror

Tab. 6

4.1.2 Lubricating the roller lever

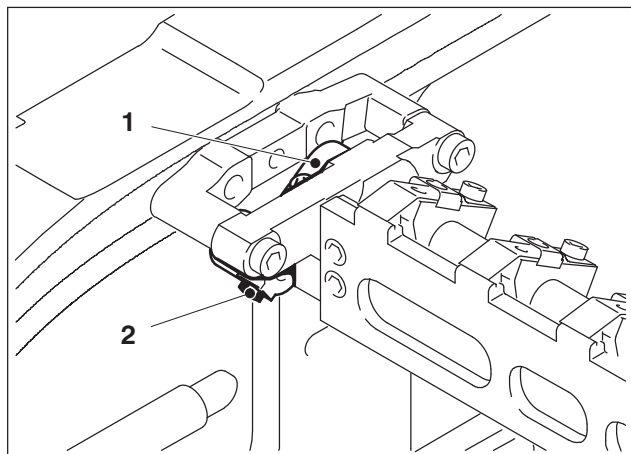


Fig. 12 Roller lever on the gripper system

- 1 Roller lever
- 2 Recessed grease nipple

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S.
Access to the lubricating points	Open the "Delivery guard" at the front. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Lubricate the roller lever. 1 recessed grease nipple per gripper system.
Required resources	Grease gun UV / A01
Lubricant	Note "Approved lubricants".

Tab. 7

4.2 Gripper opening cam

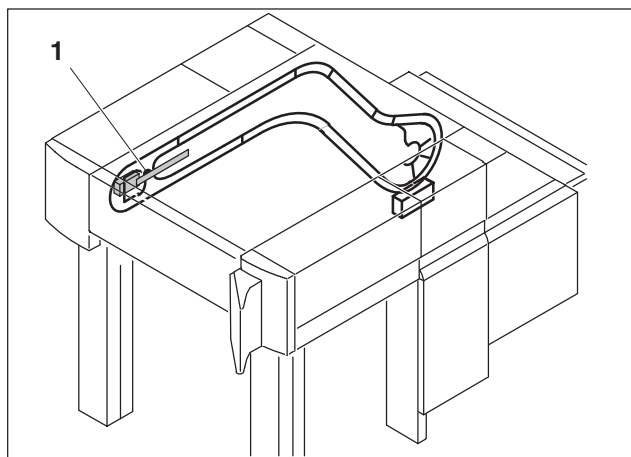


Fig. 13 Place of installation of the gripper opening cam

Place of installation

- 1 Gripper opening cam

The gripper opening cam is mounted at the delivery side frame on D.S.

4.2.1 Cleaning and lubricating the adjusting spindle

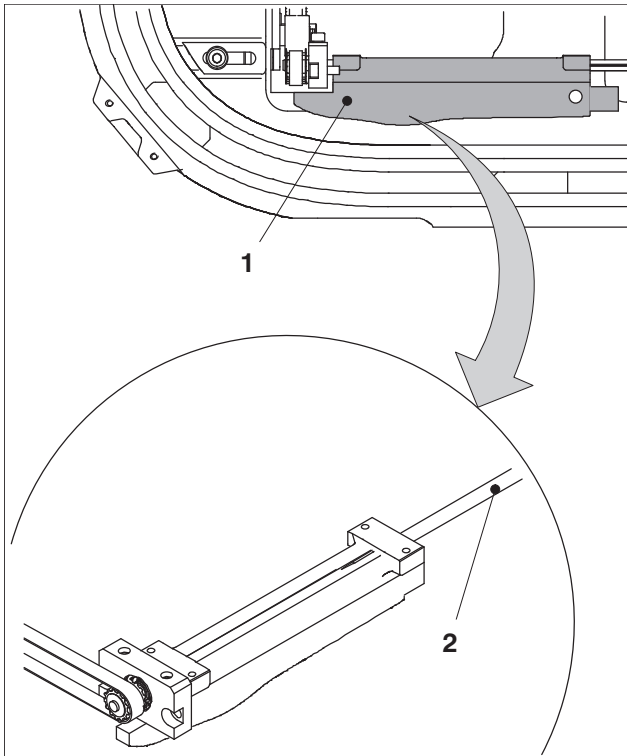


Fig. 14 Adjusting spindle on the gripper opening cam

- 1 Gripper opening cam
- 2 Adjusting spindle

Description of the lubricating point	
Maintenance interval	III
Color code	-
Maintenance location	D.S.
Access to the lubricating points	Open the "Delivery guard" at the front. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Clean and lubricate the adjusting spindle.
Required resources	Spray can B02 , paint brush; soft, lint-free cloth
Lubricant	Elkalub FLC1012, note "Approved lubricants".

Tab. 8

4.3 Chain guide

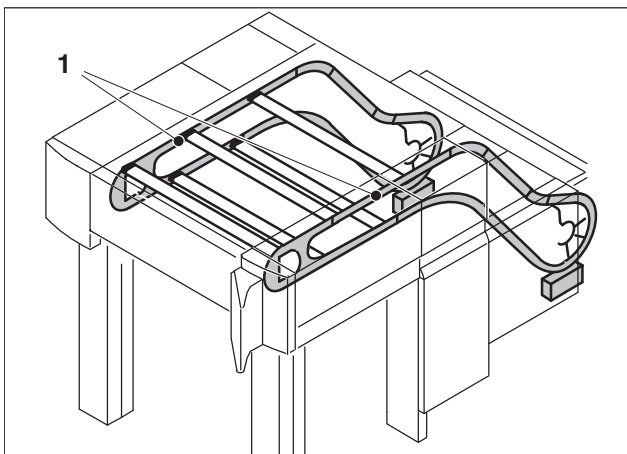


Fig. 15 Place of installation of the chain guide

- Place of installation
- 1 Gripper chains

4.3.1 Cleaning the oil discharge channel and oil drip pan

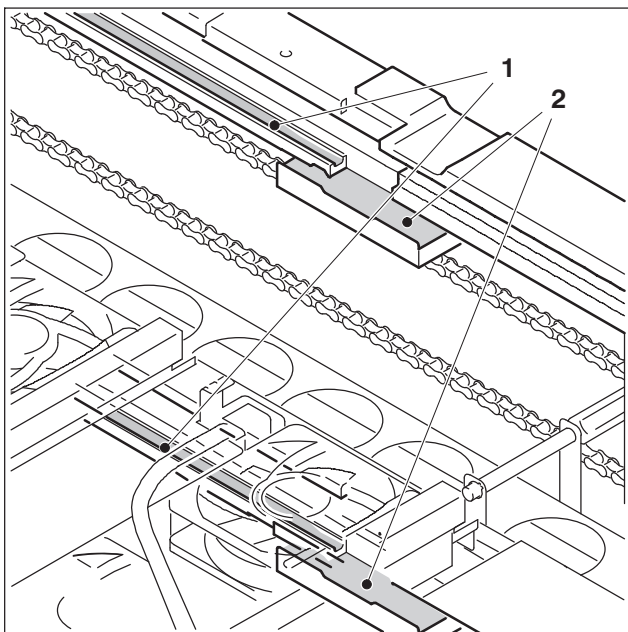


Fig. 16 Oil drain groove and oil drip pan

- 1 Oil drain grooves
- 2 Oil drip pan

► **Note**
Unscrew the bottom oil drip pan for cleaning.

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Open the "Delivery guard" at the front. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/maintenance work	Clean the oil drain groove of the gripper chain guide. Clean the oil drip pans of the gripper chain top/bottom.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 9

4.3.2 Emptying and cleaning the oil collecting vessel

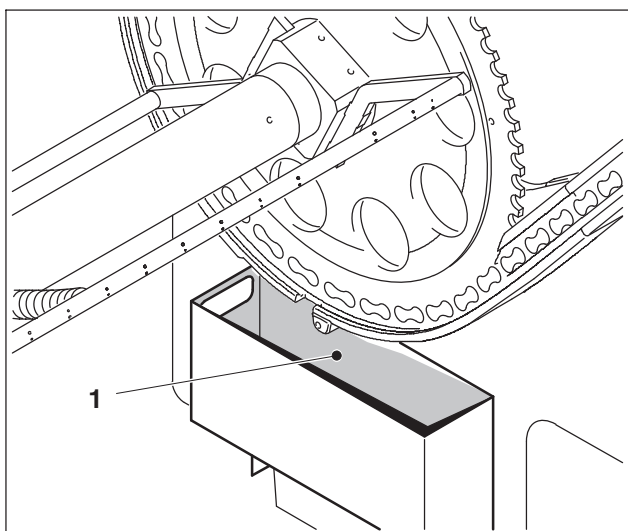


Fig. 17 Oil collecting vessel underneath the sprocket wheel

- 1 Oil collecting vessel

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Empty and clean the oil collecting vessel.
Required resources	Soft, lint-free cloth; protective gloves

Tab. 10

FS_B04_0033-000FRONT_00

5 Sheet brake system

5.1 Sheet brake module

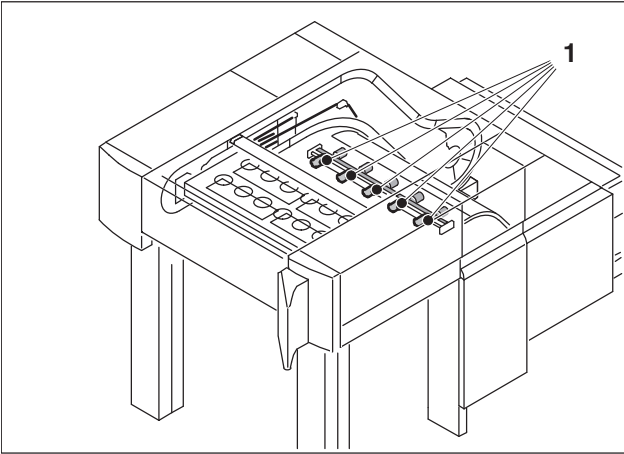


Fig. 18 Place of installation of the sheet brakes

Place of installation

- 1 5 sheet brakes

The sheet brake system is installed in the delivery underneath the gripper systems. The sheet brake system consists of:

- Guide cross bar
- 5 module supports
- Up to 2 sheet brakes per module support

The sheet brakes are mounted on the module supports. The module supports are mounted on the guide cross bar.

5.1.1 Checking the friction wheel, replacing, if necessary

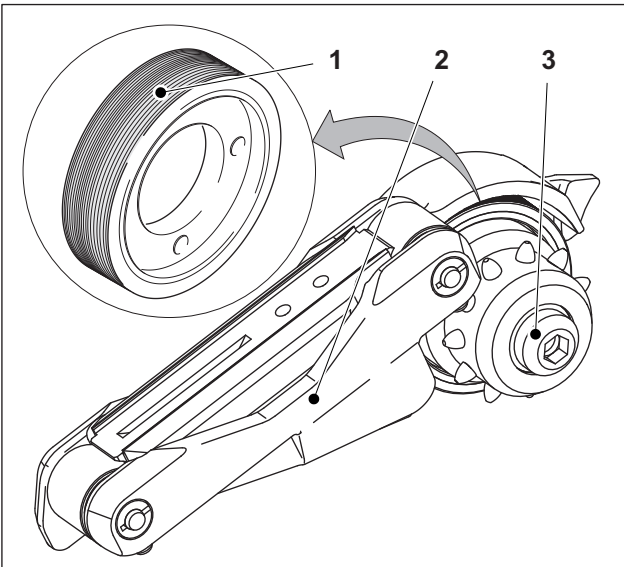


Fig. 19 Sheet brake module with friction wheel

- 1 Friction wheel
 2 Sheet brake module
 3 Headless screw

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the <i>main switch</i> to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Check friction wheels for wear and damage; replace if necessary. Wear limit The surfaces of the friction wheels are provided with grooves. The grooves must be at least 1/10 mm deep. If you can no longer feel these grooves, the wear limit has been reached.

Tab. 11

5.1.2 Checking and cleaning the guide rolls and suction insert

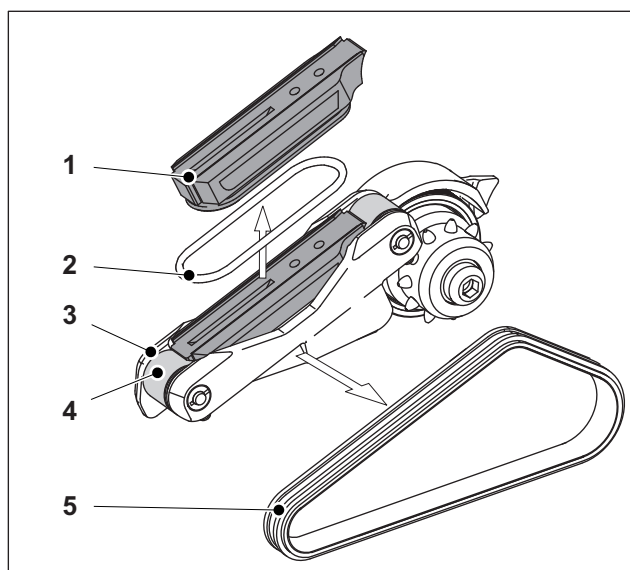


Fig. 20 Sheet brake module with suction insert

- 1 Suction insert
- 2 O-seal
- 3 Sheet brake module
- 4 Guide rolls
- 5 Suction tape



Caution - Risk of damage to the sheet brake modules!

Do not place the sheet brake modules directly into a washing fluid bath. Washing fluids wash the lubricants out of the bearings of the guide rolls and render the sheet brake modules useless.



Note

Clean the groove of the suction insert on the sheet brake module thoroughly and ensure that the suction insert fits correctly when reassembling, otherwise the suction tape will be damaged.

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the <i>main switch</i> to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	<p>Pull the suction tape off the sheet brake module. Turn the guide rolls to check their smooth functioning. Clean the sheet brake module if necessary.</p> <p>Check the intake ports of the suction inserts for soiling. Remove and clean the suction inserts if necessary. Lightly lubricate the O-seals on the suction inserts.</p>
Required resources	Spray can B02 , Soft, lint-free cloth
Washing fluid	Elkalub FLC 1012, Note "Approved lubricants".

Tab. 12

5.1.3 Checking the suction tape, replacing if necessary

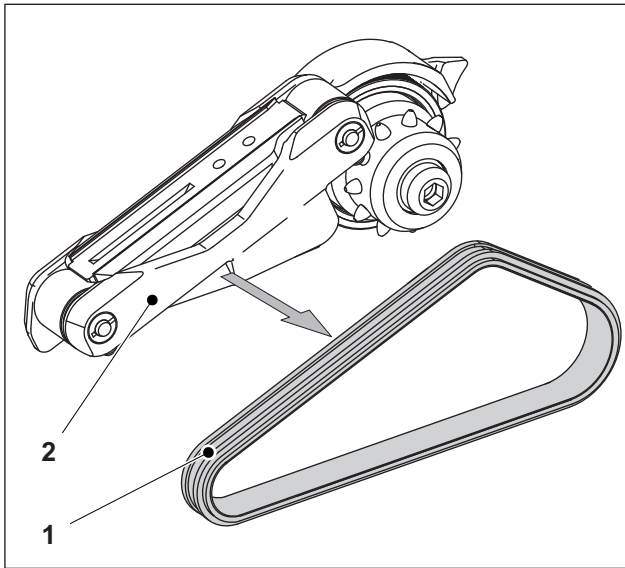


Fig. 21 Sheet brake module with suction tape

- 1 Suction tape
- 2 Sheet brake module

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the <i>main switch</i> to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Check the suction tapes for wear and tear, replace if necessary.

Tab. 13

5.1.4 Checking and cleaning the O-seal

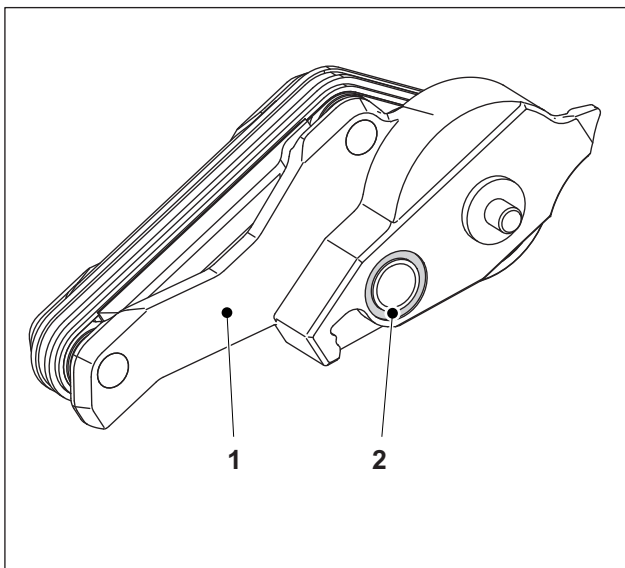


Fig. 22 O-seal on sheet brake module

- 1 Sheet brake module
- 2 O-seal

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the <i>main switch</i> to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press. Demount the sheet brake module.
Number/type/maintenance work	Clean and check the O-seal. Lightly lubricate the O-seal. Have the O-seal replaced by Heidelberg Service, if necessary. Note: The O-seal is glued in.
Required resources	Grease gun A03 ; soft, lint-free cloth
Lubricant	Note "Approved lubricants".

Tab. 14

5.2 Module support

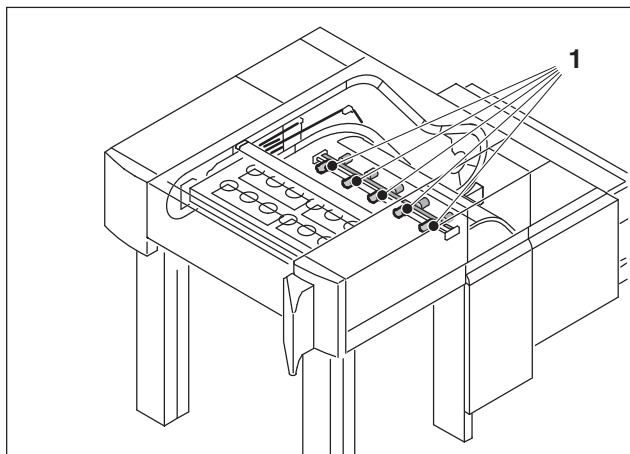


Fig. 23 Place of installation of the module supports

Place of installation

- 1 Module supports with sheet brake modules

The sheet brake system is installed in the delivery underneath the gripper systems.

The guide cross bar supports the module supports with the sheet brake modules.

5.2.1 Checking the 4-way valve, cleaning if necessary

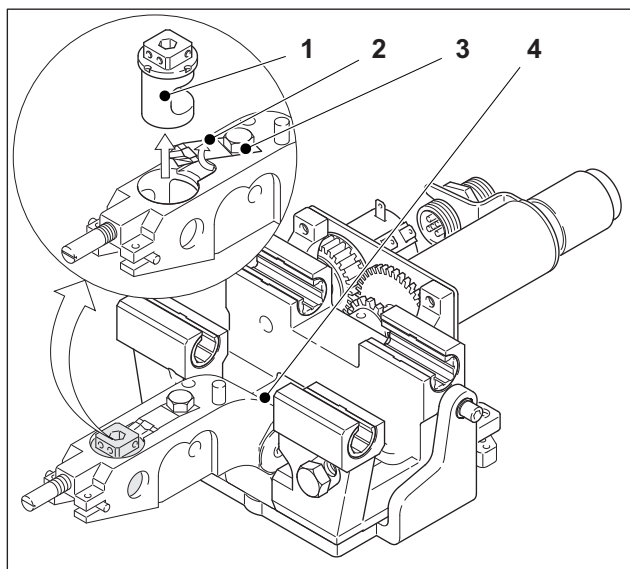


Fig. 24 Gears and chain

- 1 Valve core
- 2 Catch spring
- 3 Hexagon-head screw
- 4 Module support

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the <i>main switch</i> to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Check the 4-way valve for soiling and smooth functioning, remove and clean if necessary. See "Demounting and mounting the 4-way valve".
Required resources	7 mm fork wrench; soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 15

Demounting and mounting the 4-way valve

1. Open the hexagon-head screw (Fig. 24/3) of the latching spring (Fig. 24/2) using the 7 mm fork wrench. Do not remove the hexagon-head screw.
2. Turn the catch spring (Fig. 24/2) to the side.
3. Remove the valve core (Fig. 24/1) upwards out of the 4-way valve.

4. Reverse the procedure to remount the valve core.

5.2.2 Cleaning the sheet brake module holding fixture

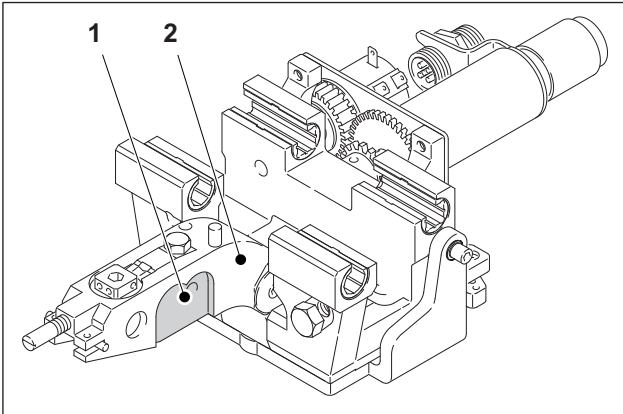


Fig. 25 Guide cross bar

- 1 Holding fixture for the sheet brake module
- 2 Module support

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the <i>main switch</i> to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Clean threads, surfaces and edges of the holding fixture for the sheet brake module on the module support.
Required resources	Paint brush; soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 16

5.3 Drive

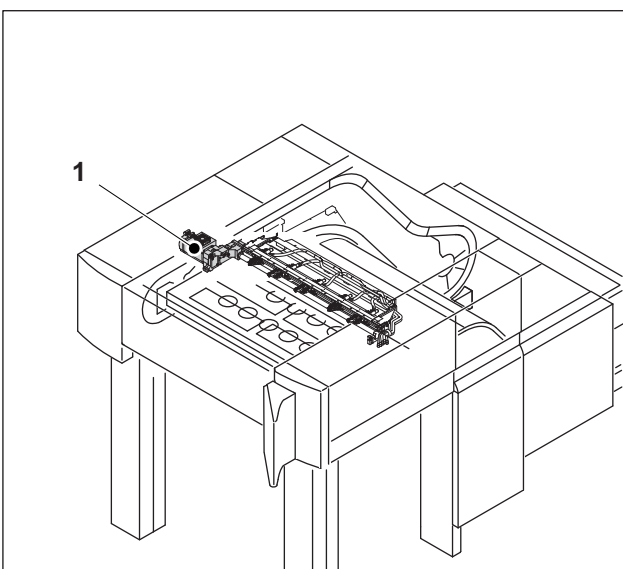


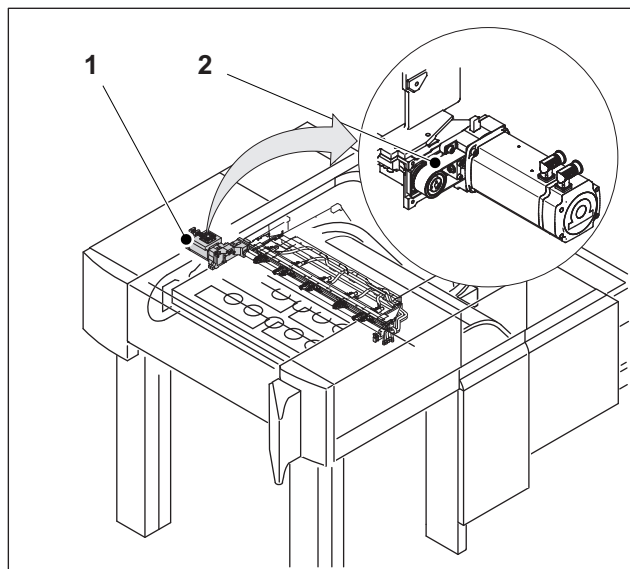
Fig. 26 Place of installation of the sheet brake system drive

Place of installation

- 1 Sheet brake system drive

The drive belt of the sheet brake system is behind a belt guard on the driving motor on the drive side.

5.3.1 Checking the replacement date of the drive belt



FS_014_1060-00GRAND_00

- 1 Sheet brake system drive
- 2 Drive belt

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Accessing the maintenance point	Press file
Number/type/maintenance work	<p>The drive belt must be replaced not later than after 80 million revolutions.</p> <p>Check the revolution counter reading on the control console. Compare this value with the revolution counter reading noted down on a piece of paper directly at the drive belt. If the difference between revolution counter readings is ≥ 80 million, have the drive belt replaced by Heidelberg Service.</p> <p>Then note down the current revolution counter reading on a piece of paper again. Attach this note where it is clearly visible at the maintenance point. Enter the replacement in the press file stating the current revolution counter reading and date.</p>

Fig. 27 Drive belt

Tab. 17

5.3.2 Lubricating the bearing of the driving roller

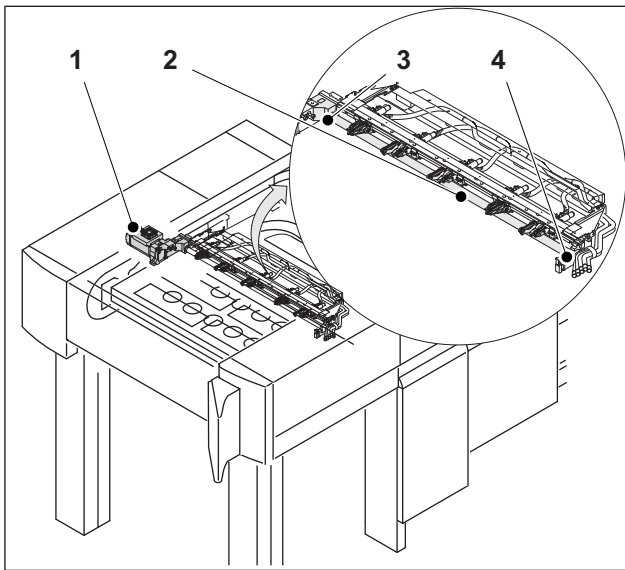


Fig. 28 Bearing of the driving roller

- 1 Sheet brake system drive
- 2 Driving roller
- 3 Bearing D.S.
- 4 Bearing O.S.

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S. / O.S.
Access to the lubricating points	Move the auxiliary frame of the manual non-stop device down. Secure the press against being switched on: set the <i>main switch</i> to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Lubricate the bearing of the driving roller. 2 recessed grease nipples. See "Lubricating the bearing point D.S." and "Lubricating the bearing point O.S.".
Required resources	Grease gun A03; soft, lint-free cloth
Lubricant	Note "Approved lubricants".

Tab. 18

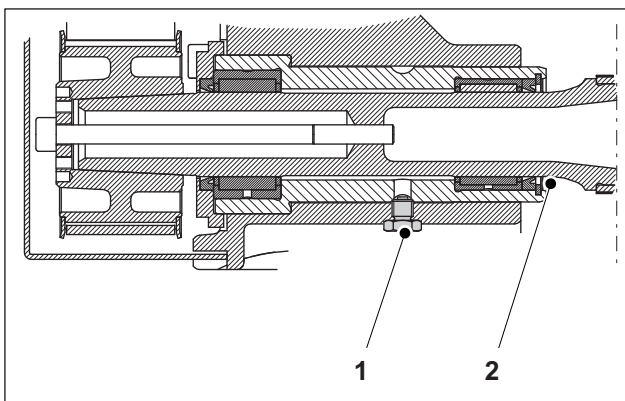


Fig. 29 Lubricating point D.S.

- 1 Recessed grease nipple D.S.
- 2 Driving roller, shaft seal

Lubricating the bearing point D.S.

1. Lubricate the bearing of the driving roller D.S. via the recessed grease nipple D.S. (Fig. 29/1). Apply the grease gun only until grease emerges at the driving roller (Fig. 29/2).

► **Note**

At the same time, manually rotate the driving roller several times.

2. Remove any residual grease on the shaft seal of the driving roller (Fig. 29/2).

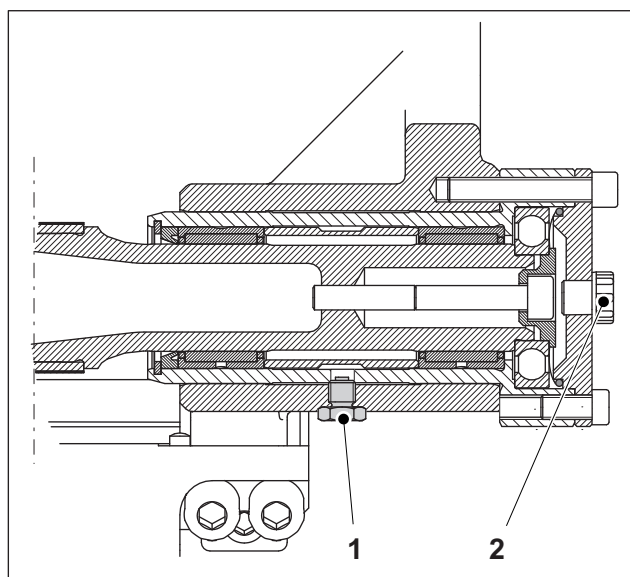


Fig. 30 Lubricating point O.S.

- 1 Recessed grease nipple O.S.
- 2 Screw plug

Lubricating the bearing point O.S.

1. Remove the screw plug (Fig. 30/2).
2. Lubricate the bearing of the tape driving roller O.S. via the recessed grease nipple O.S. (Fig. 30/1) until grease emerges from the threaded hole of the screw plug (Fig. 30/2).

► **Note**
At the same time, manually rotate the driving roller several times.

3. Remove the residual grease from the threaded hole (Fig. 30/2).
4. Screw in the screw plug (Fig. 30/2) again and tighten.

5.3.3 Cleaning the driving roller

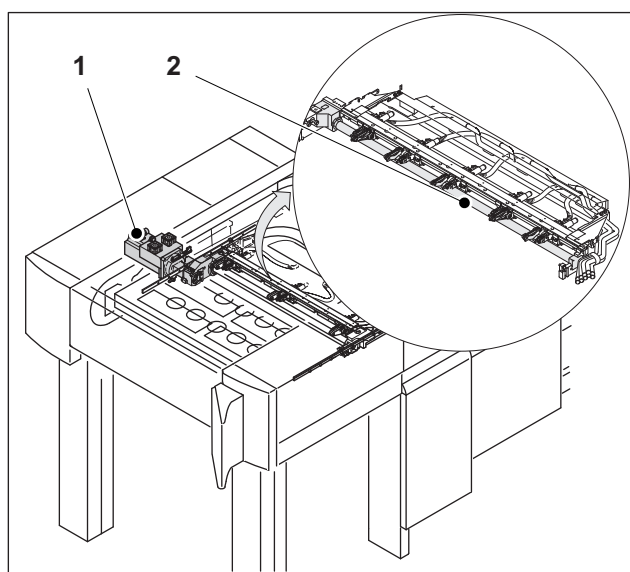


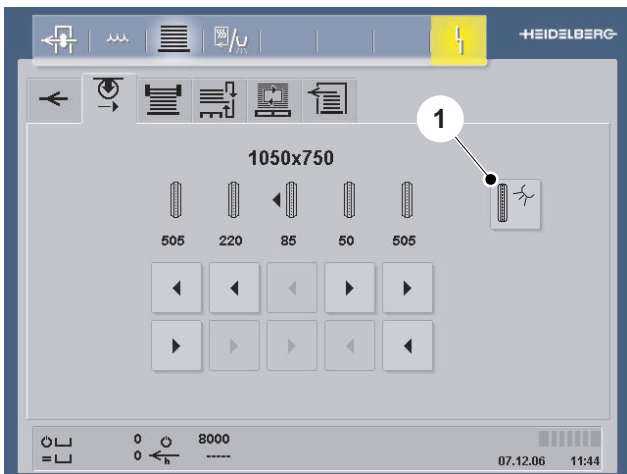
Fig. 31 Chain for format adjustment

- 1 Sheet brake system drive
- 2 Driving roller

! **Caution - Risk of damaging the surface!**
Use only a soft, lint-free cloth and washing fluid to clean the surface of the driving roller. Sharp edges, jolts and scratching tools destroy the sensitive surface. Moisten the cloth with washing fluid. The washing fluid must not be sprayed directly on the roller surface of the driving roller!

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. to O.S.
Accessing the maintenance point	-
Number/type/maintenance work	Clean the surface of the tape driving roller. See "Cleaning the driving roller".
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 19



LS_901_8564-01GERMIND_00

Cleaning the driving roller

1. Press the button *Rotate driving roller* (Fig. 32/1).
The driving roller turns as long as you hold down the button.
2. Clean the driving roller from below.

Fig. 32 Compact information display: Cleaning the driving roller

FS.B04.0075-0007KERNL_00

6 Sheet joggers

6.1 Front edge system

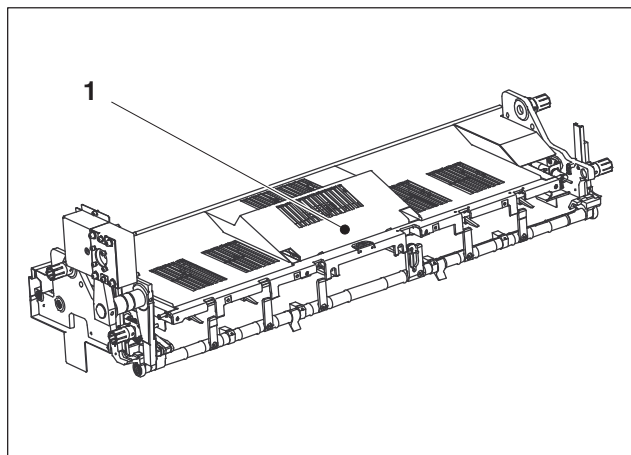


Fig. 33 Front edge system

Place of installation

1 Front edge system

The front edge system is located at the height of the upper front edge of the pile.

6.1.1 Lubricating the cam follower on the lever of the jogging drive

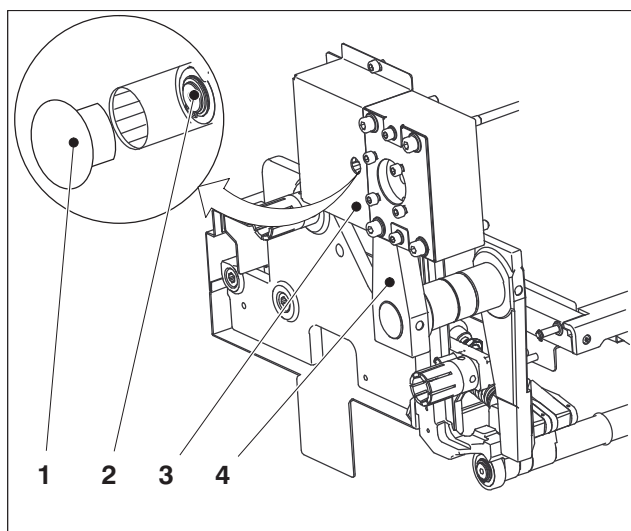


Fig. 34 Cam follower on the lever of the jogging drive

- 1 Plastic cover
- 2 Recessed grease nipple
- 3 Sheet-metal guard
- 4 Lever of the jogging drive

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	O.S.
Access to the lubricating point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the delivery control panel. Open the "Delivery guard" at the front.
Number/type/maintenance work	Lubricate the cam follower on the lever of the jogging drive. 1 recessed grease nipple. Note: Remove only the plastic cover for lubrication, not the sheet-metal guard. Fit the plastic cover when lubrication is completed.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 20

6.1.2 Lubricating the cam follower on the front edge stop shaft

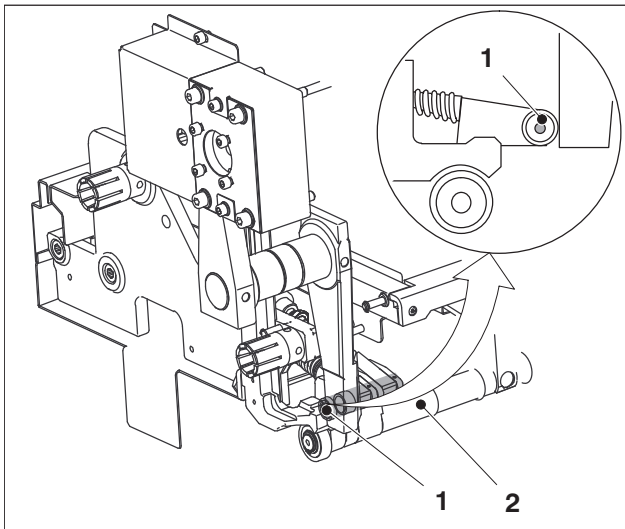


Fig. 35 Cam follower on the front edge stop shaft

- 1 Recessed grease nipple
- 2 Front edge stop shaft

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	O.S.
Access to the lubricating point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the delivery control panel. Open the "Delivery guard" at the front.
Number/type/maintenance work	Lubricate the cam follower at the front edge stop shaft. 1 recessed grease nipple.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 21

6.1.3 Lubricating the bearings of the front edge stop shaft

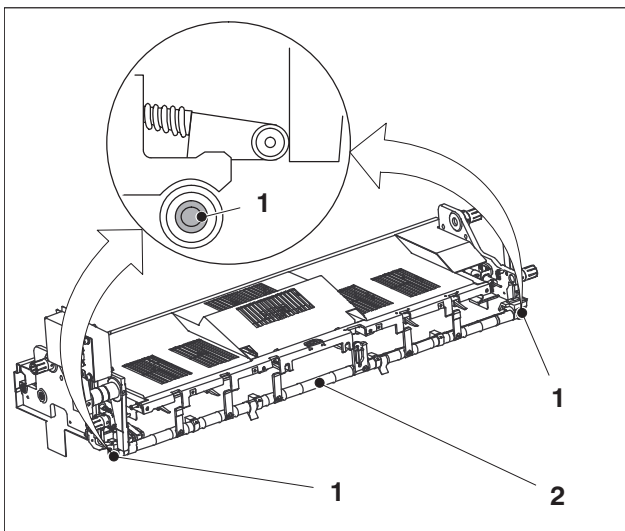


Fig. 36 Bearing of the front edge stop shaft

- 1 Recessed grease nipple
- 2 Front edge stop shaft

Description of the lubricating point	
Maintenance interval	IV
Color code	Green
Maintenance location	D.S. / O.S.
Access to the lubricating point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the delivery control panel. Open the "Delivery guard" at the front.
Number/type/maintenance work	Lubricate the bearing of the front edge stop shaft. 2 recessed grease nipples. Note: The recessed grease nipples are only visible when the auxiliary pile frame is lowered.
Required resources	Grease gun A03
Lubricant	Note "Approved lubricants".

Tab. 22

6.1.4 Cleaning the guide bar and pneumatic cylinder

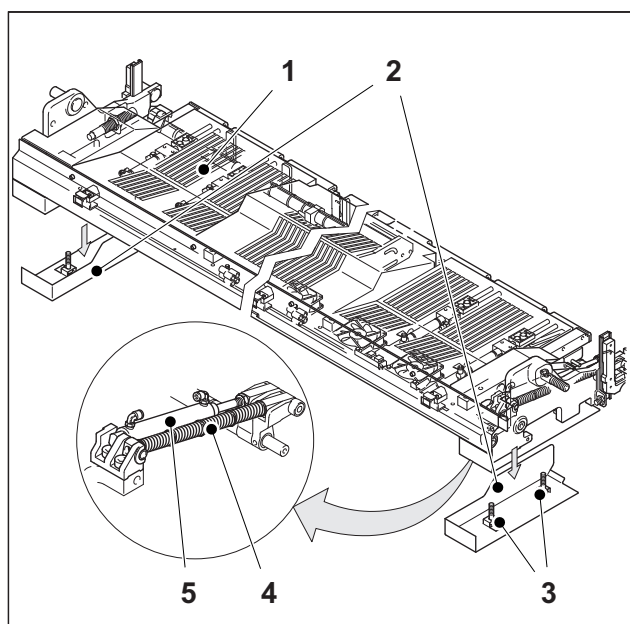


Fig. 37 Guide bar and pneumatic cylinder

- 1 Front edge system
- 2 Bottom guard D.S./bottom guard O.S.
- 3 Allen screws
- 4 Spring assembly
- 5 Pneumatic cylinder

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the delivery control panel. Open the "Delivery guard" at the front. Unscrew the bottom guards at D.S. and O.S. See "Mounting and demounting the guards"
Number/type/maintenance work	Remove any powder dust from the spring assemblies, pneumatic cylinders and from the housings.
Required resources	Paint brush; soft, lint-free cloth

Tab. 23

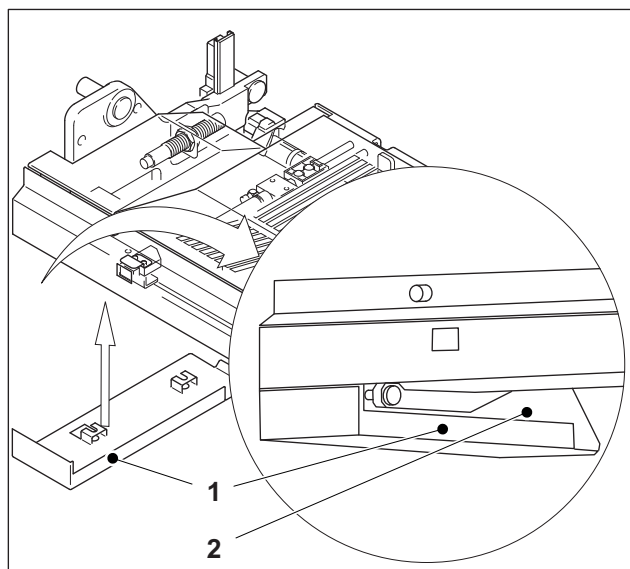


Fig. 38 Aligning the sheet-metal guard and the guide/deflector plate

- 1 Sheet-metal guard
- 2 Guide/deflector plate

Mounting and demounting the guards

1. Unscrew the Allen screws (Fig. 37/3).
2. Remove the bottom sheet-metal guards at D.S. and O.S. (Fig. 37/2).
3. Clean the inside of the housing, the pneumatic cylinders and the spring assembly of the guide bars.
4. Screw down the bottom sheet-metal guards at D.S. and O.S. (Fig. 37/2).

On presses with CleanStar:

5. Align the sheet-metal guards (Fig. 38/1) at D.S. and O.S. flush with the guide/deflector plate (Fig. 38/2).

FS_B04_0012-000FRONT_00

7 Non-stop device

7.1 Guide rail

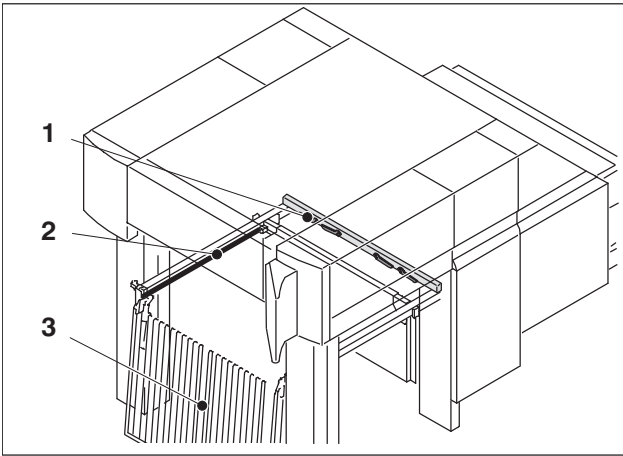


Fig. 39 Place of installation of the non-stop- carriage with non-stop rake

Place of installation

- 1 Rear edge stop
- 2 Guide rail
- 3 Non-stop carriage with non-stop rake

The non-stop carriage is equipped with non-stop rake or rack board.

7.1.1 Cleaning the guide rails

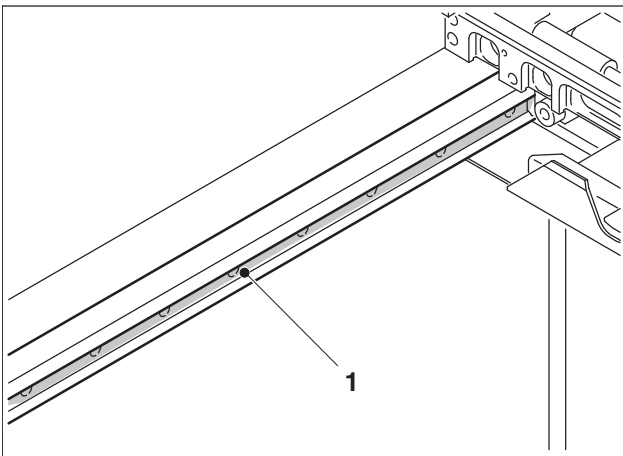


Fig. 40 Guide rails

- 1 Guide rail D.S.

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the delivery control panel. Open the "Delivery guard" at the front.
Number/type/maintenance work	Clean 2 guide rails.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 24

FS.B14.0078-00000001_00

8 Pile guidance and pile transport

8.1 Pile guidance and pile transport

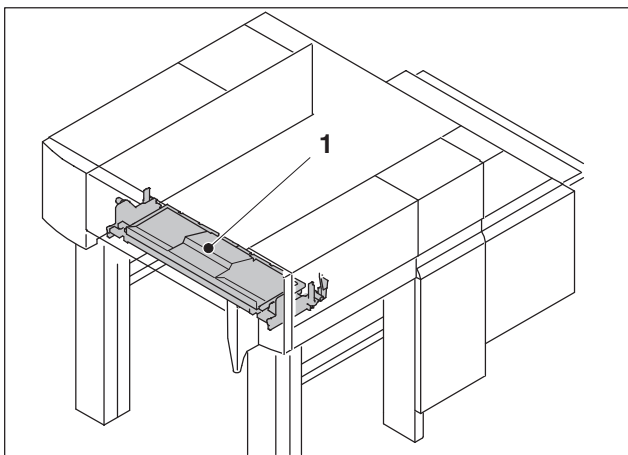


Fig. 41 Place of installation of the front edge stop

Place of installation

- 1 Front edge stop

The "Overrun sheet control" sensor is installed in the middle of the fixed front edge stop.

8.1.1 Cleaning and checking the "Overrun sheet control" sensor

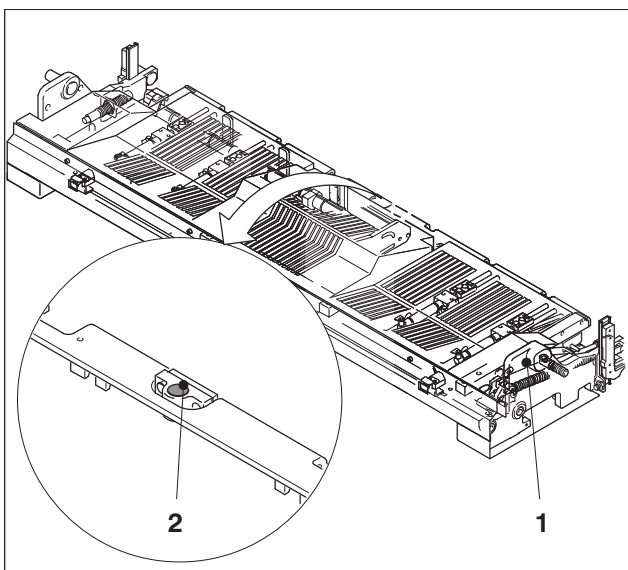


Fig. 42 Sensor "Overrun sheet control"

- 1 Front edge stop

- 2 Sensor "Overrun sheet control"

Description of the maintenance point	
Maintenance interval	III
Maintenance location	Center of front edge
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the delivery control panel. Open the "Delivery guard" at the front.
Number/type/maintenance work	Clean the sensor and check its functioning.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 25

8.1.2 Cleaning the "Main pile towards non-stop carriage" sensor

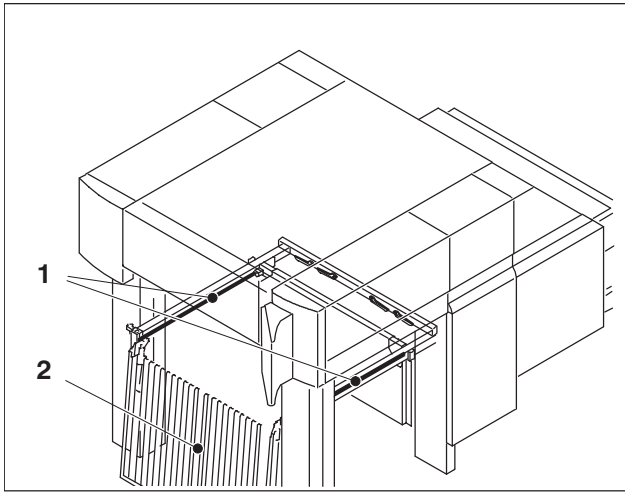


Fig. 43 Place of installation of the guide

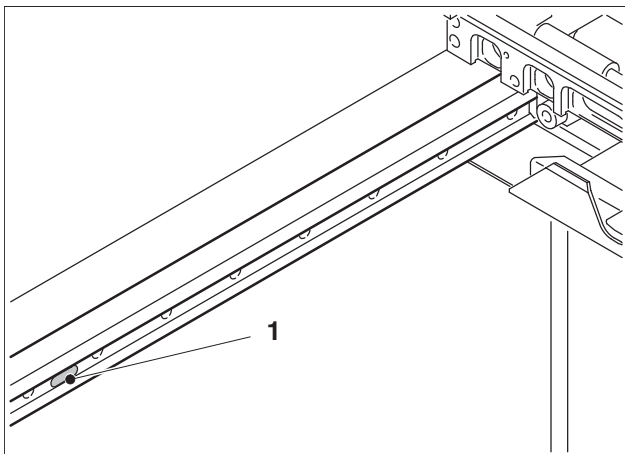


Fig. 44 "Main pile towards non-stop carriage" sensor, D.S.

Place of installation

- 1 Guide D.S./O.S.
- 2 Non-stop carriage with non-stop rake

The "Main pile towards non-stop carriage" sensors are installed in the guides of the auxiliary pile frame on D.S. and on O.S.

- 1 "Main pile towards non-stop carriage" sensor, D.S.

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the delivery control panel. Open the "Delivery guard" at the front.
Number/type/maintenance work	Clean the sensors.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 26

FS.B14.002-00000000_00

9 Sheet decurler

9.1 Sheet decurler

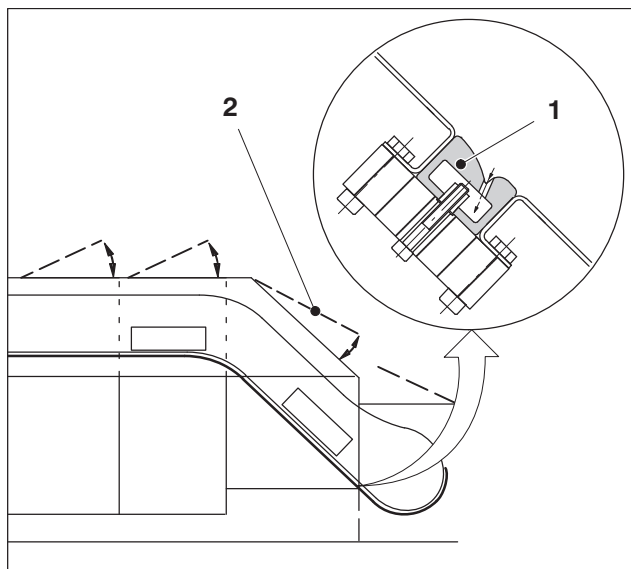


Fig. 45 Place of installation of the sheet decurler

Place of installation

- 1 Sheet decurler
- 2 Guard "Sheet ascent ramp"

The sheet decurler is fitted at the start of the sheet ascent ramp.

9.1.1 Checking and cleaning the boreholes

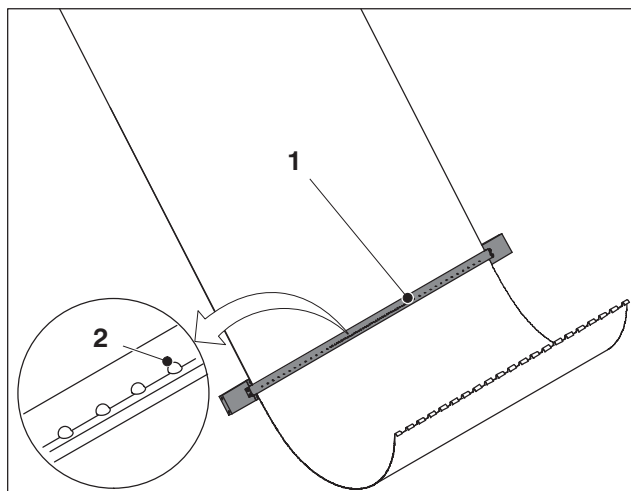


Fig. 46 Boreholes in the sheet decurler

- 1 Sheet decurler
- 2 Boreholes in the sheet decurler

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the delivery control panel. Open the "Delivery guard" at the front.
Number/type/maintenance work	Check the boreholes for ink residues and powder dust. If necessary, clean.
Required resources	Soft, lint-free cloth, paint brush; approved industrial vacuum cleaner; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 27

FS_B04_0014-000FRONT_00

10 Sheet guide

10.1 Sheet guide plates and powder deflectors

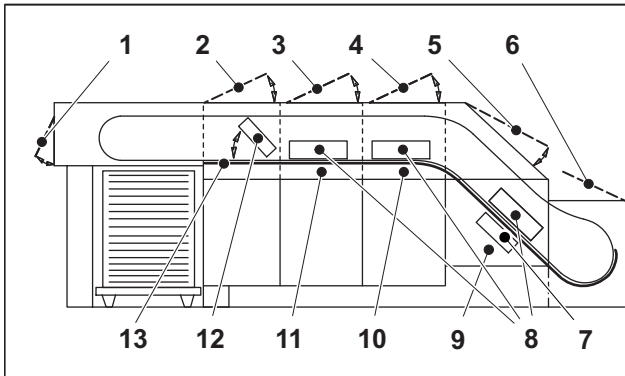


Fig. 47 Place of installation of the sheet guide plates and powder deflectors

Place of installation

- 1 Glass guard, delivery
- 2 Guard "Pile module"
- 3 Guard "Delivery extension 2"
- 4 Guard "Delivery extension 1"
- 5 Guard "Sheet ascent ramp"
- 6 Guard "Transfer drum"
- 7 Chain guide and suction ducts
- 8 Slide-in dryer
- 9 "Slide-in dryer" guard
- 10 Guard "Slide-in dryer delivery extension 1"
- 11 Guard "Slide-in dryer delivery extension 2"
- 12 Powder spray device
- 13 Sheet guide plates and powder deflector

Figure 47 shows a delivery with 2 delivery extensions.

The sheet guide plates and powder deflectors are installed underneath the following guards:

- Guard "Transfer drum"
- Guard "Sheet ascent ramp"
- Guard "Delivery extension 1"
- Guard "Delivery extension 2"
- Guard "Pile module"

10.1.1 Basic cleaning of sheet guide plates

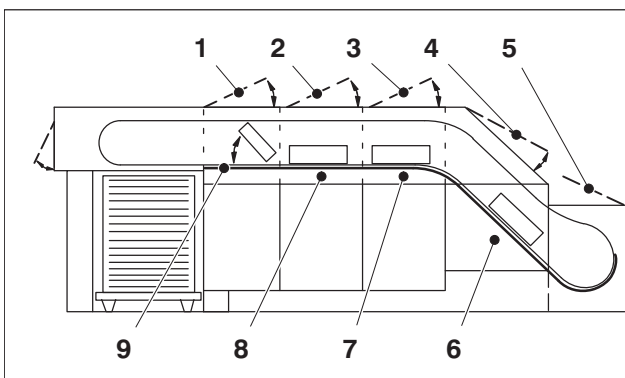


Fig. 48 Delivery with 2 extensions

- 1 Guard "Pile module"
- 2 Guard "Delivery extension 2"
- 3 Guard "Delivery extension 1"
- 4 Guard "Sheet ascent ramp"
- 5 Guard "Transfer drum"
- 6 "Slide-in dryer" guard
- 7 Guard "Slide-in dryer delivery extension 1"
- 8 Guard "Slide-in dryer delivery extension 2"
- 9 Sheet guide plates and powder deflector

► **Note**

Pull out the slide-in dryers if a dryer is installed on the printing press. Swing up the nozzle tube of the powder spray device.

Description of the maintenance point	
Maintenance interval	III
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Basic cleaning: Vacuum-cleaning the delivery. Clean the powder deflector and the sheet guide plates. Note: Please note "Blast air 100 % (self-protection)".
Required resources	Soft, lint-free cloth; plastic spatula Approved industrial vacuum cleaner, protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 28

- 1 Tapered plastic ink slice
- 2 Plastic ink slice



Caution - Press damage!

Clean the sheet guide plates and powder deflectors by wiping off the powder dust in the direction of the blast air. Never wipe the powder dust into the air-blast nozzles. Never use a sharp-edged or metallic tool for cleaning the air-blast nozzles. Use a tapered plastic ink slice, for example.

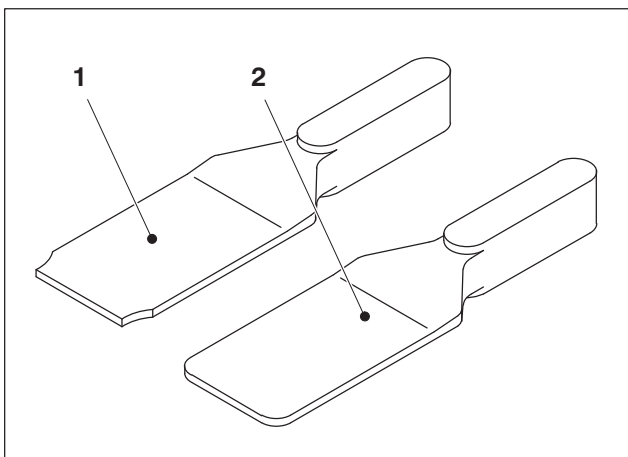


Fig. 49 Plastic ink slice and pointed plastic ink slice

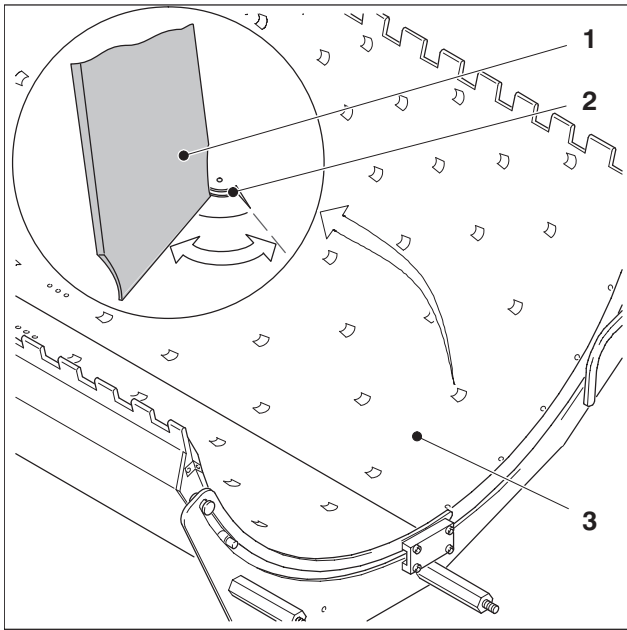


Fig. 50 Air-blast nozzles at the sheet guide plate

- 1 Plastic ink slice
 - 2 Air-blast nozzle
 - 3 Sheet guide plate
1. Open the guards as required. Pull out the slide-in dryers if a dryer is installed on the printing press.
 2. Apply suction to the sheet guide plates.
 3. Remove the powder dust on the air-blast nozzles using a pointed plastic ink slice (turning motion) and clean the base of the nozzle.
 4. Vacuum-clean the sheet guide plates again.

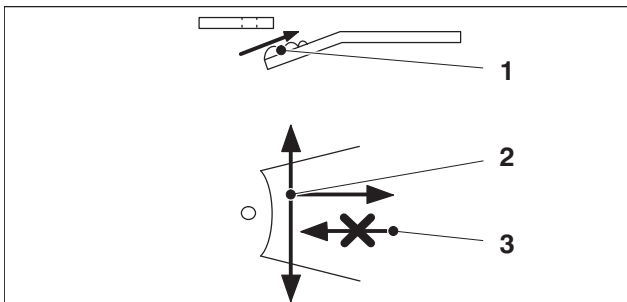


Fig. 51 Cleaning diagram of the air-blast nozzle

5. Clean the sheet guide plates and the powder deflectors on D.S. and on O.S. with a cloth moistened with washing fluid. Please observe the cleaning diagram at the air-blast nozzle (Fig. 51).

- 1 Powder dust in the air-blast nozzle
- 2 Direction of cleaning
- 3 Prohibited direction of cleaning

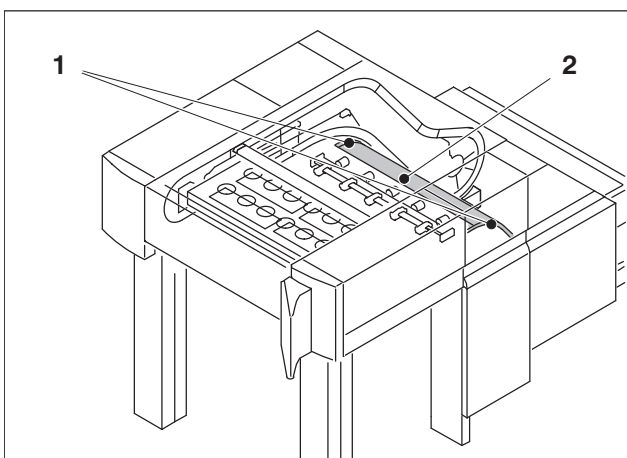


Fig. 52 Cleaning the powder deflectors and sheet guide plates

- 1 Powder deflector D.S./O.S.
 - 2 Sheet guide plates and powder deflector
6. Remove any cleaner residues with a soft and dry cloth.
 7. Insert the slide-in dryers back into the delivery. Close the guards.

10.1.2 Checking and, if necessary, cleaning the hollow space under the sheet guide plates

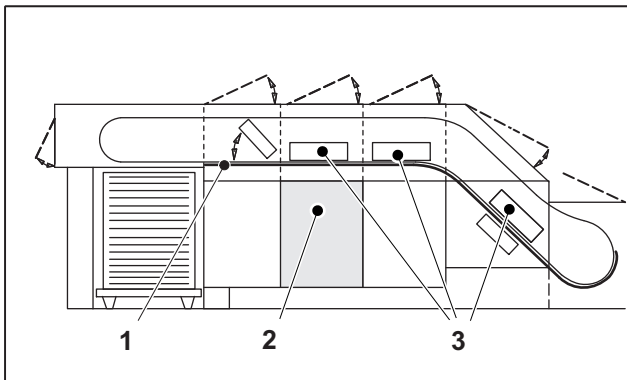


Fig. 53

- 1 Sheet guide plates
- 2 "X1 module" protecting door
- 3 Slide-in dryers

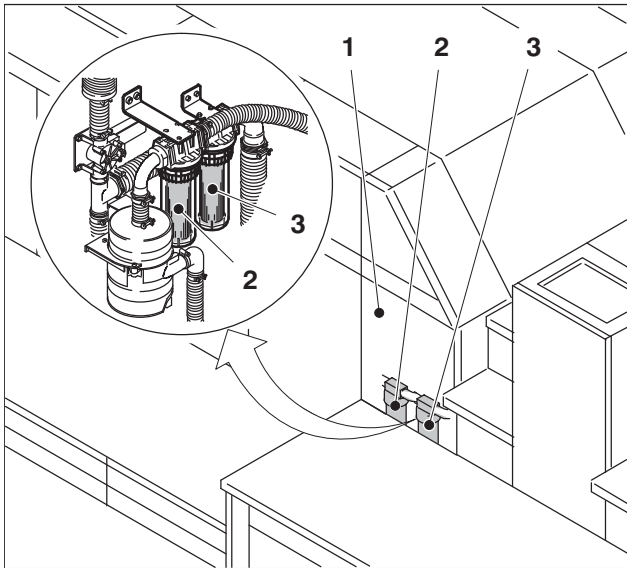
Description of the maintenance point	
Maintenance interval	IV
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press. Open the "X1 module" protecting door.
Number/type/maintenance work	Check the hollow space under the sheet guide plates for soiling. Clean the hollow spaces if necessary.
Required resources	Approved industrial vacuum cleaner

Tab. 29

FS_B04_0013-000FRONT_00

11 Air supply

11.1 Air filters "Sheet brake" and "Sheet decurler"



FS_812_0003-000FRONT_00

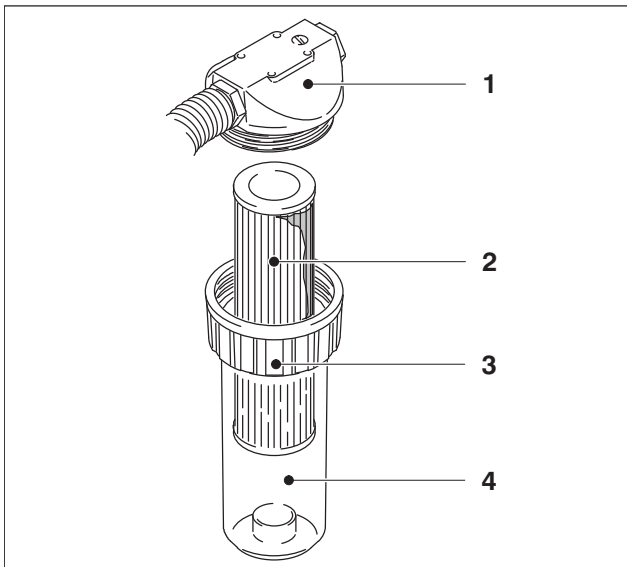
Place of installation

- 1 "Slide-in dryer" guard
- 2 Air filter "Sheet decurler"
- 3 "Sheet brake" air filter

The "Sheet brake" and air filter "Sheet decurler"s are installed behind the "Slide-in dryer" guard.

Fig. 54 Place of installation of the air filters

11.1.1 Cleaning the filter cartridges



FS_812_0002-000FRONT_00

- 1 Filter head
- 2 Filter cartridge
- 3 Union nut
- 4 Filter case

Description of the maintenance point	
Maintenance interval	II
Maintenance location	O.S.
Accessing the maintenance point	Open the "Slide-in dryer" guard. See "Mounting and demounting".
Number/type/maintenance work	Clean the 2 filter cartridges.
Required resources	Brush, approved industrial vacuum cleaner

Tab. 30

Fig. 55 Filter cartridge

Mounting and demounting



Caution - Press damage!

Prior to opening the air filter you must ensure that the filler neck of the grease pump is not open.

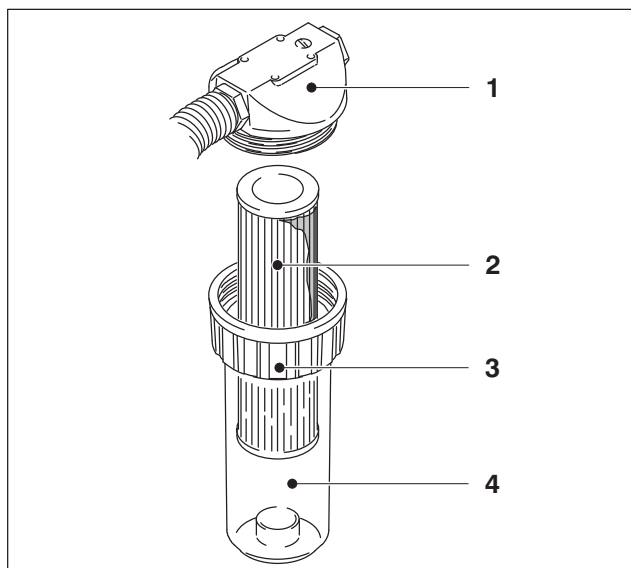
1. Release the union nut (Fig. 55/3) on the filter head (Fig. 55/1).

2. Remove the filter cartridge (Fig. 55/2) from the filter case (Fig. 55/4).
3. Clean the filter cartridge.
4. Put the filter cartridge back into the filter case. Ensure that it is properly seated.
5. Check the seating of the gasket in the filter case.
6. Use the union nut to fasten the filter case to the filter head. Ensure that the filter cartridge is properly seated.

► **Note**

Do not blow compressed air through the filter cartridge. Carefully tap or vacuum the filter cartridge.

11.1.2 "Sheet brake" air filter - replacing the filter cartridge



- 1 Filter head
- 2 Filter cartridge
- 3 Union nut
- 4 Filter case

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	O.S.
Accessing the maintenance point	Open the "Slide-in dryer" guard. See "Mounting and demounting".
Number/type/maintenance work	Replace the filter cartridge.

Tab. 31

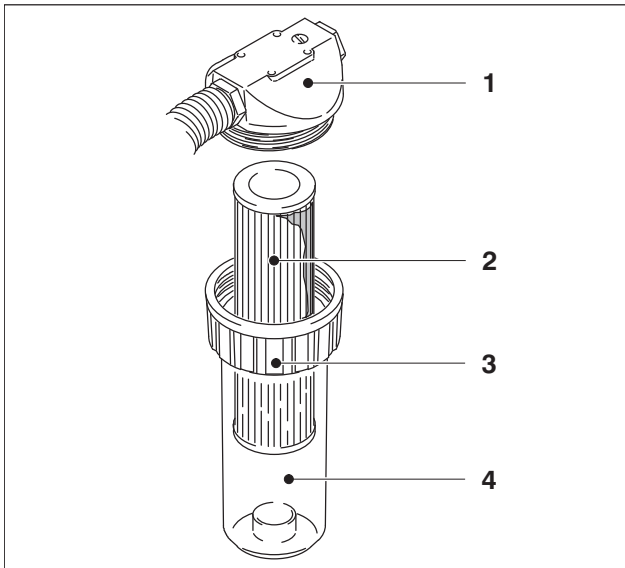
Fig. 56 "Sheet brake" filter cartridge

Mounting and demounting

! **Caution - Press damage!**
 Prior to opening the air filter you must ensure that the filler neck of the grease pump is not open.

1. Release the union nut (Fig. 56/3) on the filter head (Fig. 56/1).
2. Remove the filter cartridge (Fig. 56/2) from the filter case (Fig. 56/4).
3. Put the new filter cartridge into the filter case. Ensure that it is properly seated.
4. Check the seating of the gasket in the filter case.
5. Use the union nut to fasten the filter case to the filter head. Ensure that the filter cartridge is properly seated.

11.1.3 Air filter "Sheet decurler" - replacing the filter cartridge



- 1 Filter head
- 2 Filter cartridge
- 3 Union nut
- 4 Filter case

Description of the maintenance point	
Maintenance interval	V
Maintenance location	O.S.
Accessing the maintenance point	Open the "Slide-in dryer" guard. See "Mounting and demounting".
Number/type/maintenance work	Replace the filter cartridge.

Tab. 32

Fig. 57 "Sheet decurler" filter cartridge

Mounting and demounting



Caution - Press damage!

Prior to opening the air filter you must ensure that the filler neck of the grease pump is not open.

1. Release the union nut (Fig. 57/3) on the filter head (Fig. 57/1).
2. Remove the filter cartridge (Fig. 57/2) from the filter case (Fig. 57/4).
3. Put the new filter cartridge into the filter case. Ensure that it is properly seated.
4. Check the seating of the gasket in the filter case.
5. Use the union nut to fasten the filter case to the filter head. Ensure that the filter cartridge is properly seated.

11.2 Air filter for the sheet guide plate blower

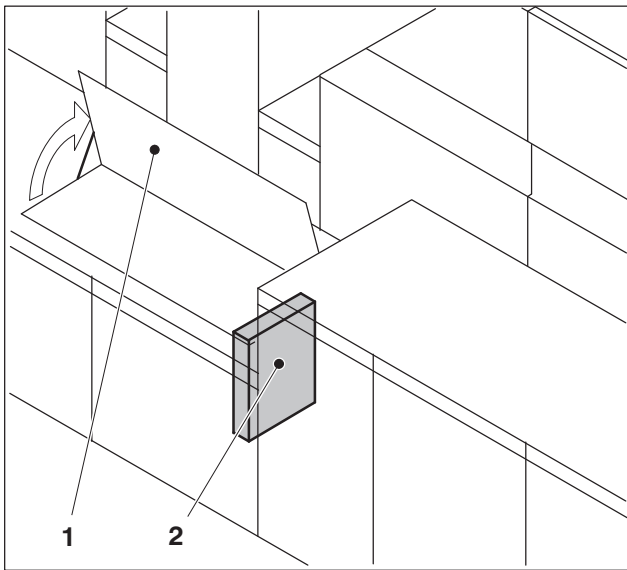


Fig. 58 Air filter place of installation (D.S.)

Place of installation

- 1 Hinged footstep
- 2 Air filter "Sheet guide plate blower"

The "Sheet guide plate blower" air filter is installed on D.S. underneath the platform.

11.2.1 Cleaning the filter cartridge

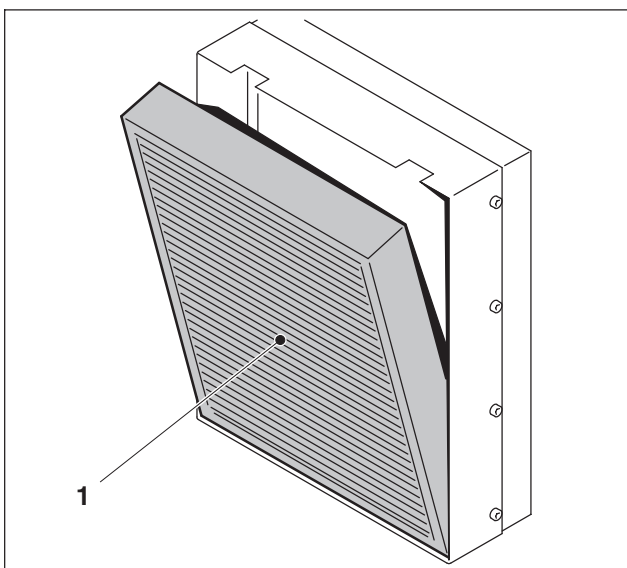


Fig. 59 "Sheet guide plate blower" filter cartridge

1 Filter cartridge

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S.
Accessing the maintenance point	Open the hinged footstep.
Number/type/maintenance work	Vacuum-clean the filter cartridge.
Required resources	Approved industrial vacuum cleaner

Tab. 33

11.2.2 Replacing the filter cartridge

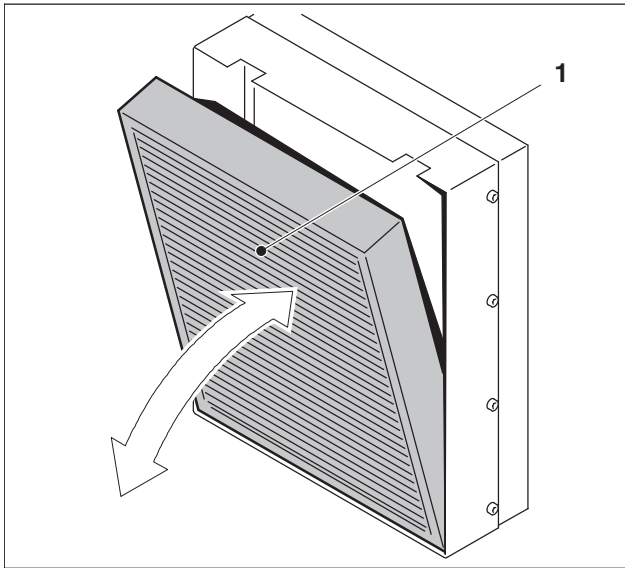


Fig. 60 "Sheet guide plate blower" filter cartridge

1 Filter cartridge

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Accessing the maintenance point	Open the hinged footstep.
Number/type/maintenance work	Replace the filter cartridge.

Tab. 34

FS.904.01.41-0007KERN_03

12 CleanStar

12.1 Suction ducts

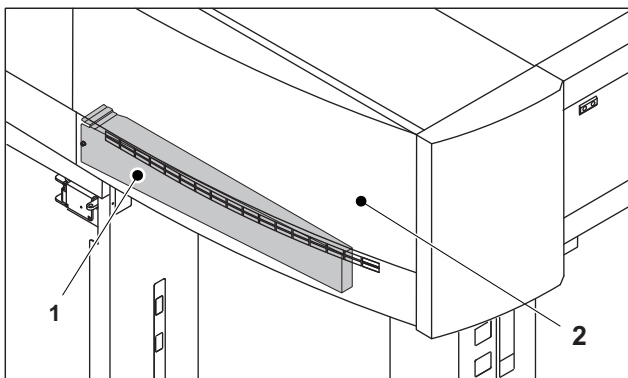


Fig. 61 Place of installation of suction duct D.S.

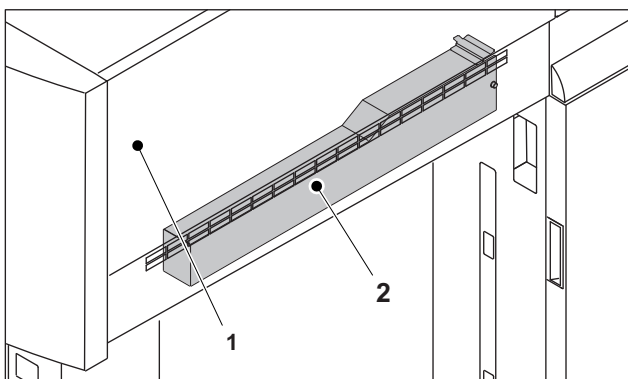


Fig. 62 Place of installation of suction duct O.S.

Place of installation

- 1 Suction duct D.S.
- 2 Guard "delivery D.S."

- 1 Guard "delivery O.S."
- 2 Suction duct O.S.

CleanStar is installed in presses with sheet brakes. A suction duct is installed behind each of the "delivery D.S." and "delivery O.S." guards.

12.1.1 Cleaning the suction ducts

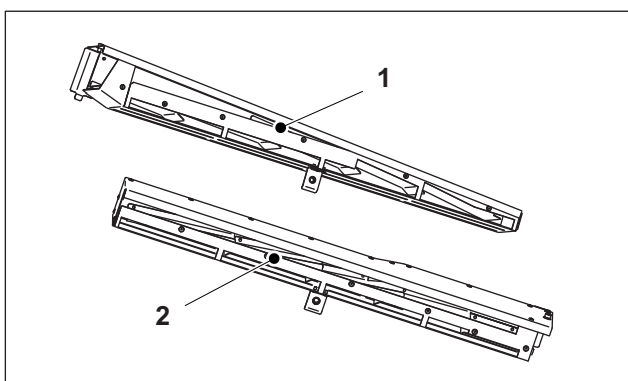


Fig. 63 Suction ducts

- 1 Suction duct D.S.
- 2 Suction duct O.S.

! Caution - Damage of the surface!
 Never clean the suction ducts using sharp-edged tools otherwise the surface may be scratched.

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S. / O.S.
Accessing the maintenance point	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the delivery control panel. Remove the "Delivery D.S." guard. Open the "Delivery O.S." guard.

Description of the maintenance point	
Number/type/maintenance work	Remove any powder dust.
Required resources	Soft, lint-free cloth; brush; paint brush

Tab. 35

Mounting and demounting

1. Switch off the suction device for the CleanStar at the control station.
2. Secure the press against starting up again: Press the *Emergency-stop* button on the next-nearest control panel.

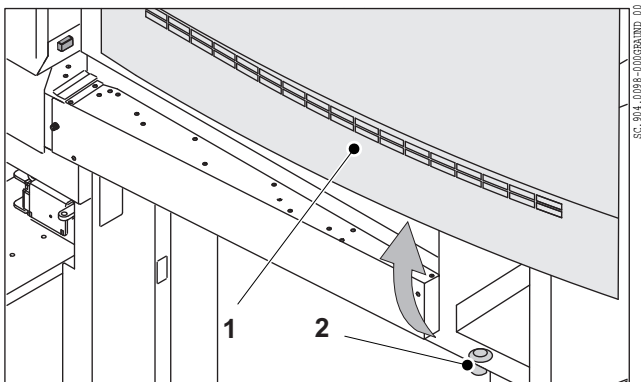


Fig. 64 Guard "delivery D.S."

- 1 Guard "delivery D.S."
- 2 Safety screw

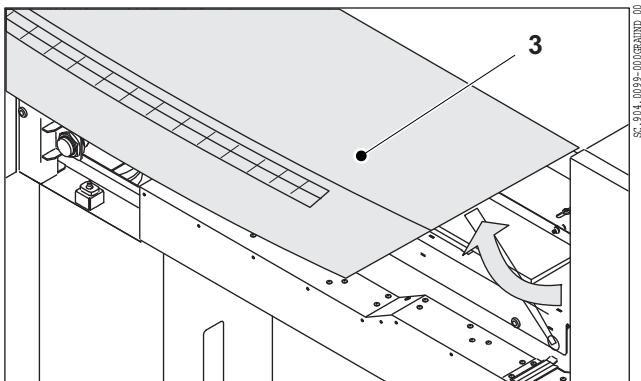


Fig. 65 Guard "delivery O.S."

- 3 Guard "delivery O.S."
3. Slacken the safety screw (Fig. 64/2) and remove the guard "delivery D.S." (Fig. 64/1). Open the guard "delivery O.S." (Fig. 65/3).

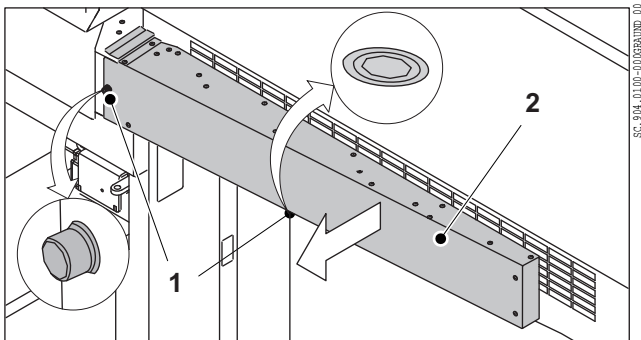


Fig. 66 Suction duct D.S.

- 1 Allen screws
- 2 Suction duct D.S.

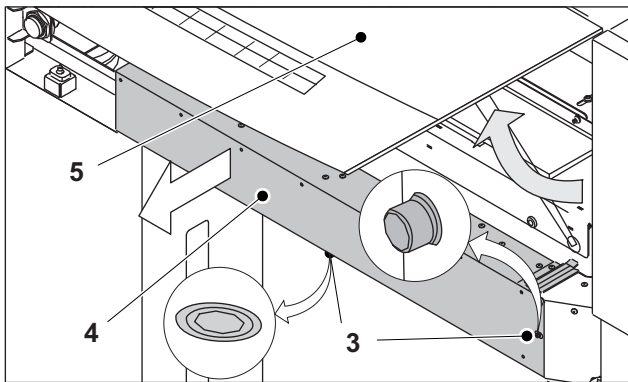


Fig. 67 Suction duct O.S.

- 3 Allen screws
 - 4 Suction duct O.S.
 - 5 Guard "delivery O.S."
4. Slacken the two Allen screws (Fig. 66/1 and Fig. 67/3) on the suction duct.
 5. Remove the suction duct (Fig. 66/2 and Fig. 67/4).

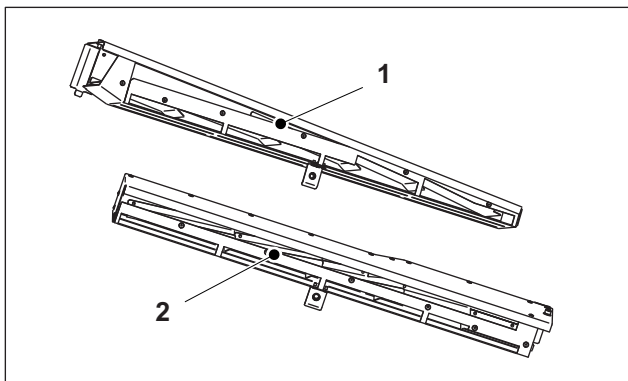


Fig. 68 Suction ducts

- 1 Suction duct D.S.
 - 2 Suction duct O.S.
6. Carefully remove the powder dust from the two suction ducts (Fig. 68) using a brush or spatula.

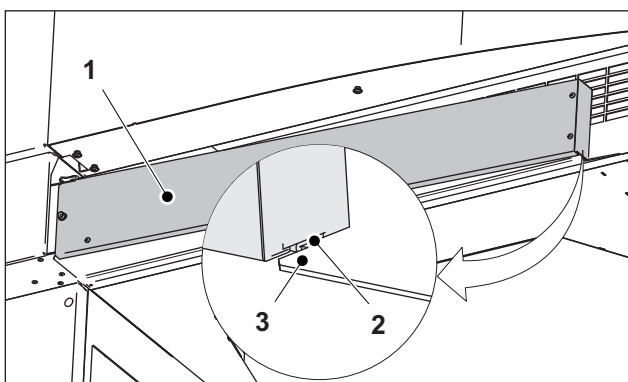


Fig. 69 Fold on the suction duct D.S.

- 1 Suction duct D.S.
- 2 Fold D.S.
- 3 Plate D.S.

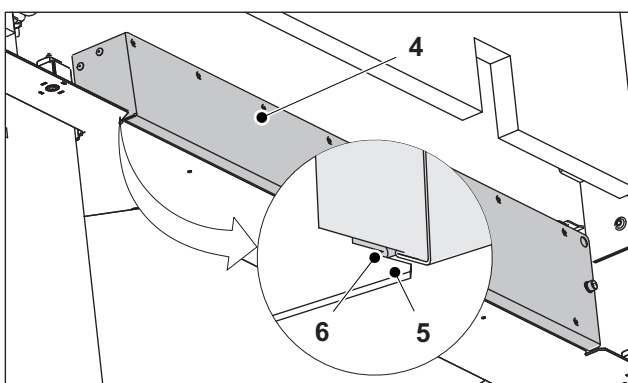


Fig. 70 Fold on the suction duct O.S.

- 4 Suction duct O.S.
 - 5 Plate O.S.
 - 6 Fold O.S.
7. Reverse this procedure to install the suction ducts.
- Be sure to guide the fold on the suction duct (Fig. 69/2 and Fig. 70/6) under the plate (Fig. 69/3 and Fig. 70/5).

Maintenance on the entire press

1	Entire press - safety instructions	B.6.3
1.1	To be observed when working at the press	B.6.3
2	Overview of the maintenance points on the entire press	B.6.5
2.1	Overview	B.6.5
3	Suction unit	B.6.6
3.1	Suction unit	B.6.6
4	Central oil lubrication	B.6.8
4.1	Central oil lubrication	B.6.8
5	Main motor	B.6.12
5.1	Main motor ≥90 kW	B.6.12
5.2	Main motor 120 kW	B.6.14
6	Control cabinet of the SinuSynchro main driving motor	B.6.16
6.1	Air filter	B.6.16
7	Prinect Press Center	B.6.18
7.1	Filter fan	B.6.18
7.2	Standard daylight lamp	B.6.20
8	Prinect Axis Control	B.6.22
8.1	Prinect Axis Control	B.6.22
9	Wallscreen	B.6.24
9.1	Air filter	B.6.24

ES_904_9031-000FRENL_02

1 Entire press - safety instructions

1.1 To be observed when working at the press



Warning - Risk of injury!

When you perform maintenance work, observe all notes on safety contained in the operating manual.



Warning - Risk of burning from hot surfaces!

After dryer use, wait until all accessible parts have cooled down and are no more than lukewarm (approximately 40°C).



Warning - Risk of explosion from evaporating solvents!

Before using cleaning agents, wait until the cylinders and press parts to be cleaned have cooled down and are no more than lukewarm (approximately 40°C).



Warning - Risk of explosion from evaporating solvents!

When working with dryers, use only inks and coatings that do not create an explosive atmosphere when heated in the dryer. This is specified in the corresponding safety data sheets.

When using cleaning agents on the press, ensure that no solvent can come into contact with the dryer area. Never use or store solvents in the vicinity of the dryer.

When using an automatic washup device, set the program so that the blankets and impression cylinders are dry before you resume production. This ensures that no cleaning agents get into the dryer area.



Warning - Risk of explosion and fire due to dust deposits!

Dust, such as powder or paper dust, can pose a risk of fire or explosion.

You should therefore clean the areas affected by dust regularly, at least once a week, using a vacuum cleaner.

Only use suitable and approved industrial vacuum cleaners and avoid working with compressed air, as this could swirl up the dust.



Warning - Danger of death from electrical voltage!

Dryers work with very high operating voltages. Secure the press and the dryers against being switched on prior to all maintenance work:

Switch the main switch to *0/OFF*, and lock it with a padlock. Leave a sign with the name of the person authorized to switch on the main switches.

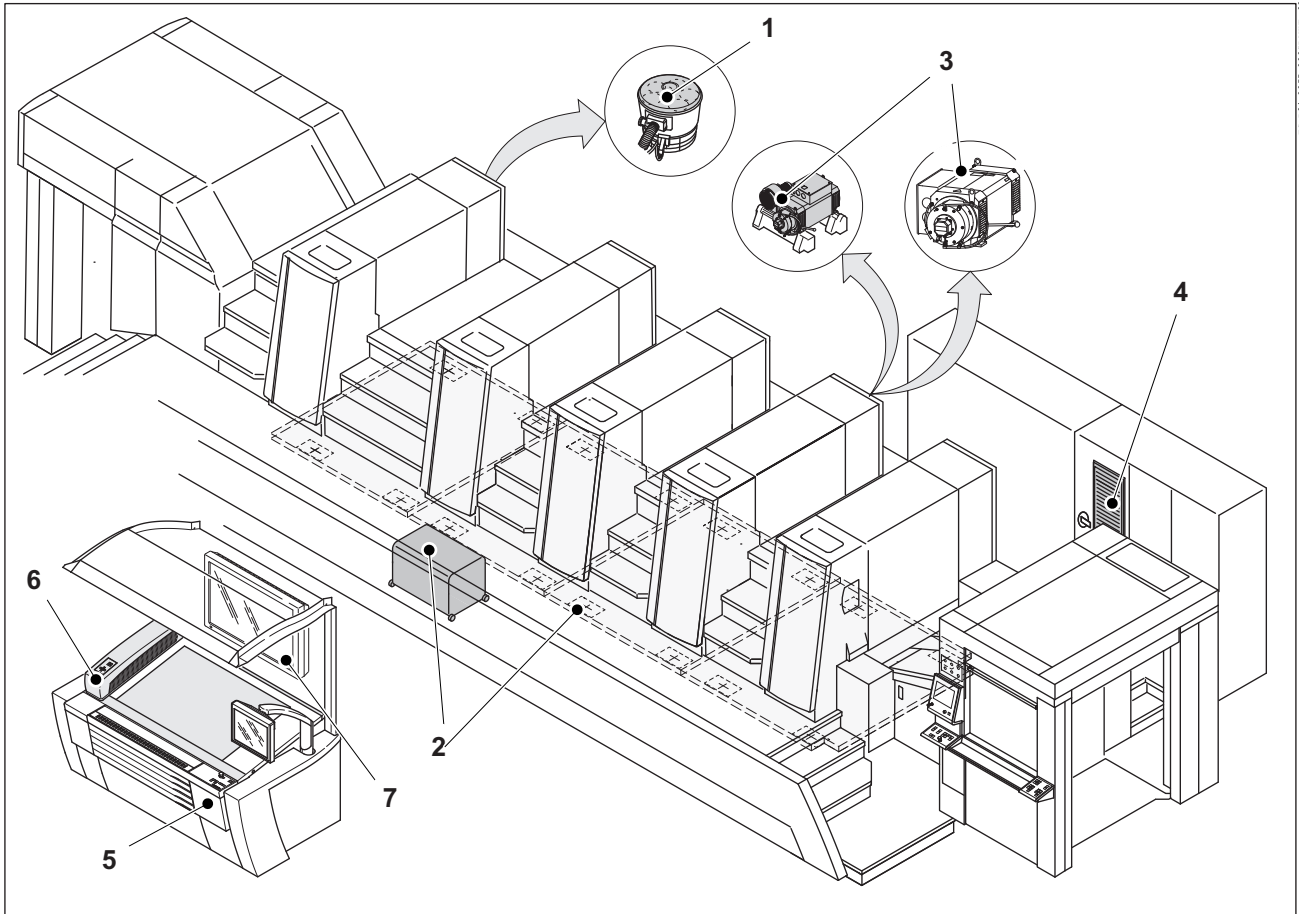
Never touch any plugs of the electrical connections or disconnect them when the dryer is in operation. Protect all connectors of electrical connections against moisture, contamination and damage.

Faulty cables, plugs and insulation should be repaired by skilled electricians only, using original spare parts.

FS_B04_0042-00000000_00

2 Overview of the maintenance points on the entire press

2.1 Overview



FS_B04_0055-00000000_00

Fig. 1 Maintenance points on the entire press

- 1 Maintenance points on the suction unit
- 2 Maintenance points on the central oil lubrication
- 3 Maintenance points on the main driving motor
- 4 Maintenance points on the control cabinet of the SinuSynchro main driving motor
- 5 Maintenance points on the Prinect Press Center
- 6 Maintenance points on the Prinect Axis Control
- 7 Maintenance points on the Wallscreen

FS_B04_0125-000TERRU_00

3 Suction unit

3.1 Suction unit

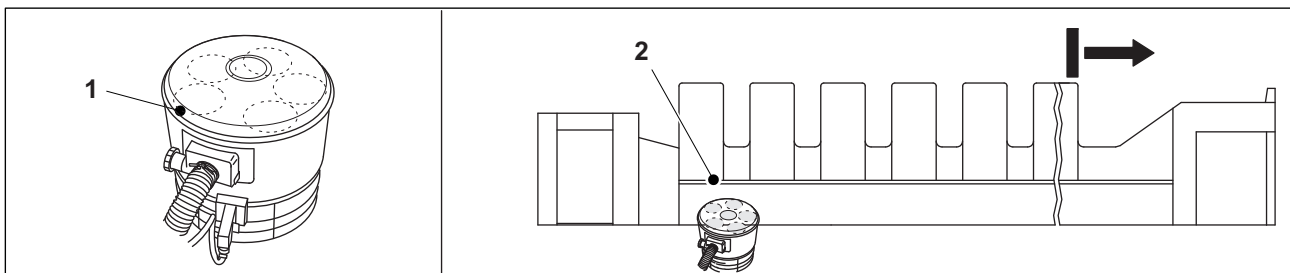


Fig. 2 Installation location of the suction unit

Position

- 1 Suction unit
- 2 Footboard D.S.

The suction unit is installed below the footboard on D.S. next to the 1st printing unit.

3.1.1 Checking and cleaning the filtering bags

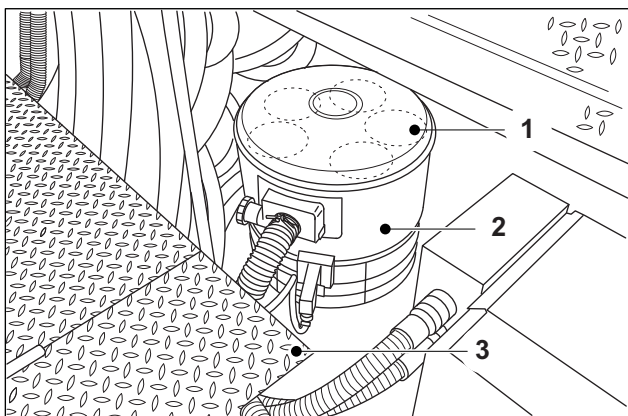


Fig. 3 Suction unit

- 1 Cover of the suction unit
- 2 Suction unit
- 3 Footboard D.S.

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S.
Accessing the maintenance point	Demount the guard on the footboard. Open the filter cap of the suction unit.
Maintenance work	Check the filtering bags, clean if necessary.
Required resources	Approved industrial vacuum cleaner

Tab. 1

3.1.2 Checking and cleaning the interior

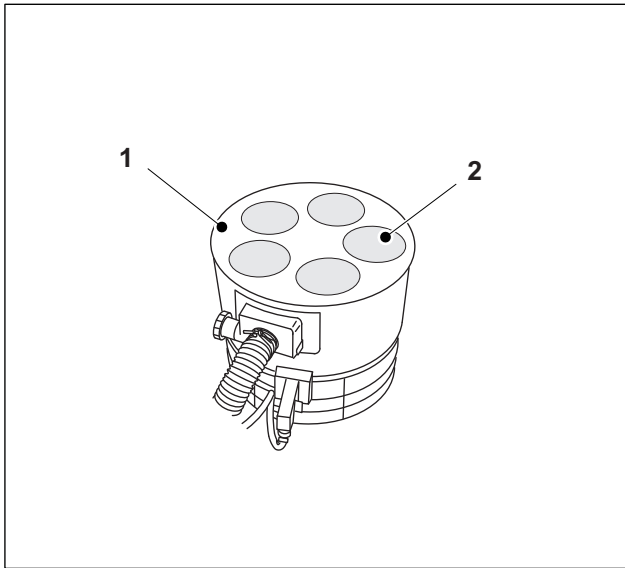


Fig. 4 Suction unit without cover

- 1 Suction unit
- 2 Filtering bag

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	D.S.
Accessing the maintenance point	Open the filter hood. Remove the filtering bags and the filter pot.
Maintenance work	Check the interior of the blower, clean if necessary.
Required resources	Soft, lint-free cloth; approved industrial vacuum cleaner

Tab. 2

FS.994.0049-0007KERN_06

4 Central oil lubrication

4.1 Central oil lubrication

Position

The lubricant reservoir is fitted on D.S. in the middle of the printing press, underneath the footboard.

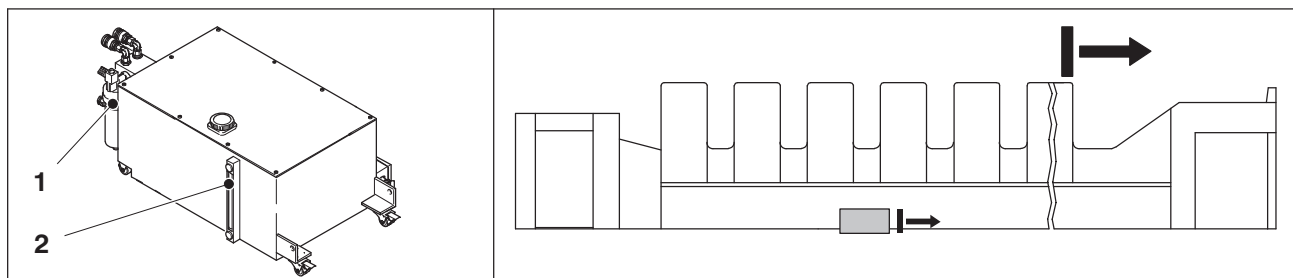


Fig. 5 Place of installation of oil level glass and oil filter

- 1 Oil filter
- 2 Oil level glass

► **Note**

Note the safety instructions in "Entire press - Safety instructions"!

4.1.1 Performing a lubricant change

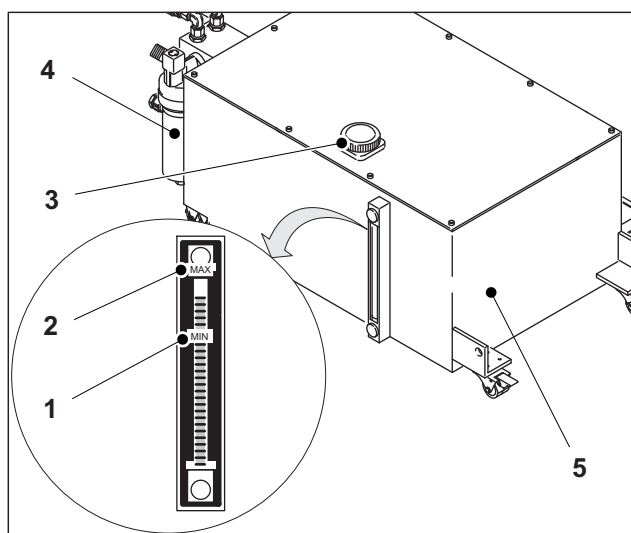


Fig. 6 Lubricant reservoir

- 1 "MIN" mark
- 2 "MAX" mark
- 3 Cover
- 4 Filter with filter cartridge
- 5 Lubricant reservoir



Caution - Overfilling!

Before you change the lubricant, the press must have been out of operation for several hours.

► **Note**

Replace the filter cartridge whenever you change the lubricant.

► **Note**

Dispose of the used lubricant in an environmentally friendly manner!

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a

Description of the maintenance point	
	padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Change the lubricant. Quantity per unit: approximately 20 l , and approximately 16 l for elevated presses
Required resources	Commercially available suction pump; Container for worn-out lubricant
Lubricant	Note "Approved lubricants".

Tab. 3

Performing maintenance work

1. Set the main switch at the control cabinet to "OFF" and lock it with a padlock to secure it against start-up.
2. Remove the entire lubricant from of the lubricant reservoir.
3. Open the cover (Fig. 6/3) of the lubricant reservoir (Fig. 6/5).
4. Fill the lubricant through the sieve into the lubricant reservoir up to the "MAX" mark (Fig. 6/2).
5. Close the cover of the lubricant reservoir.
6. Set the main switch on the control cabinet to "ON".

4.1.2 Replacing the filter cartridge

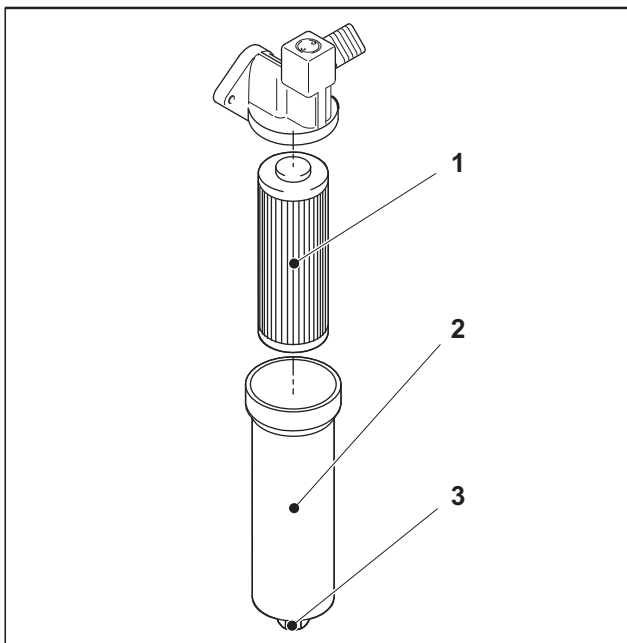


Fig. 7 Filter cartridge of the lubricant filter

- 1 Filter cartridge
- 2 Filter case
- 3 Hexagon

Note
 Dispose of the used filter cartridge in an environmentally friendly manner.

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Replace the filter cartridge.
Required resources	-
Lubricant	Note "Approved lubricants".

Tab. 4

Performing maintenance work

1. Set the main switch at the control cabinet to "OFF" and lock it with a padlock to secure it against start-up.
2. Unscrew the filter case (Fig. 7/2) on the hexagon (Fig. 7/3).
3. Remove the filter cartridge (Fig. 7/1) from the filter case and then insert a new filter cartridge.

! Caution - Press damage!
 Make sure you fill the filter case with lubricant before fitting it. Air in the lubricant circuit will lead to damage due to insufficient lubrication!

4. Mount the filter case.
 Ensure cleanliness and proper fit of the O-seal.
5. Set the main switch on the control cabinet to "ON".

4.1.3 Cleaning drip pans

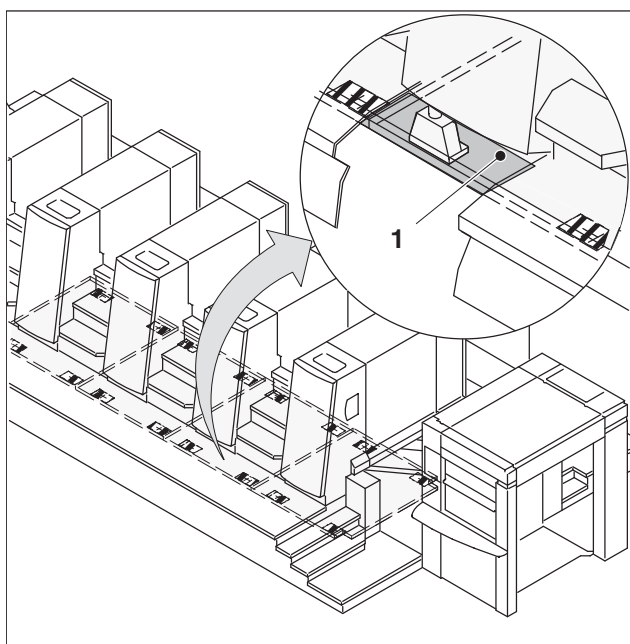


Fig. 8 Place of installation of the drip pans

Place of installation

- 1 Drip pan for lubrication

The drip pans for the draining lubricant are under the bases of the printing units.

► **Note**

Dispose of the used lubricant in an environmentally friendly manner!

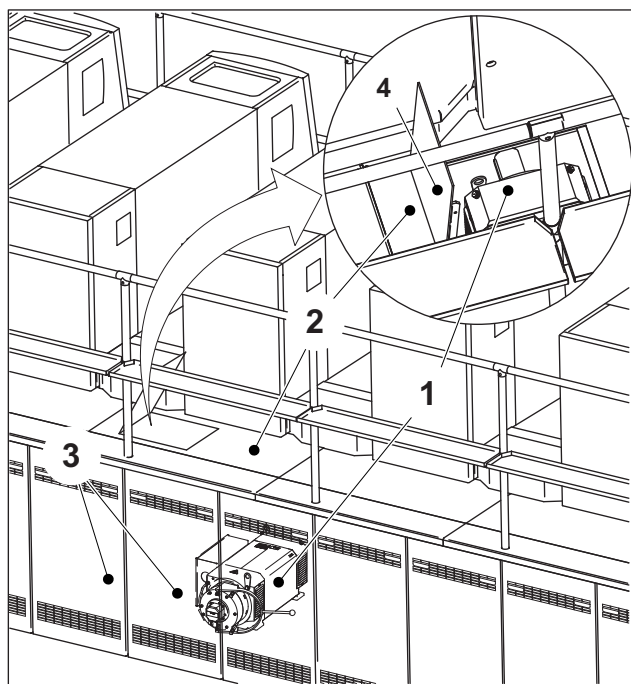
Description of the maintenance point	
Maintenance interval	IV
Maintenance location	-
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Remove lubricant by suction from the drip pans. Clean 1 drip pan per unit.
Required resources	Commercially available suction pump; soft, fluffless cloth; container for worn-out lubricants

Tab. 5

FS.B14.0126-000TKERU_00

5 Main motor

5.1 Main motor ≥ 90 kW



FS.914.411-000ERAND_00

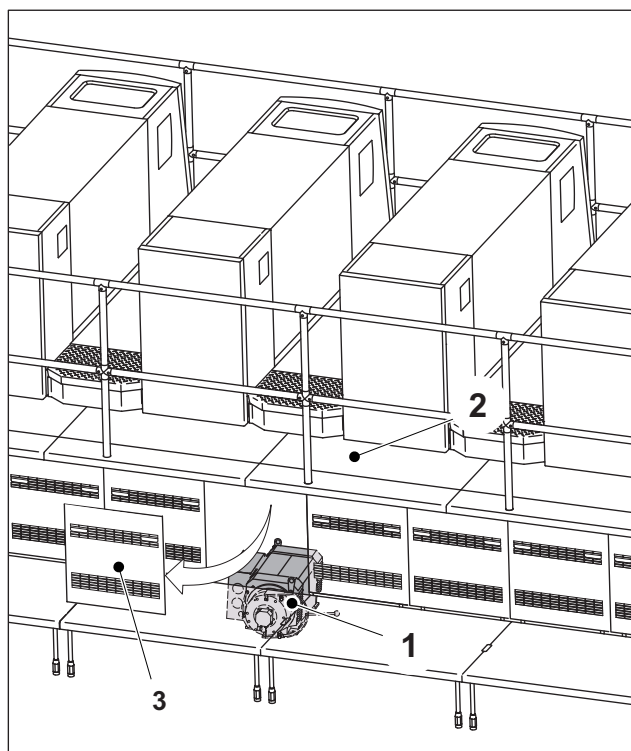
Place of installation

- 1 Main motor ≥ 90 kW
- 2 Footboard
- 3 Lateral footboard guard
- 4 Service lid

Narrow gallery

The main motor is located at D.S. between the 2nd and the last printing unit. It is accessible via the service lid.

Fig. 9 Place of installation of the main motor with narrow gallery



FS.914.411-000ERAND_00

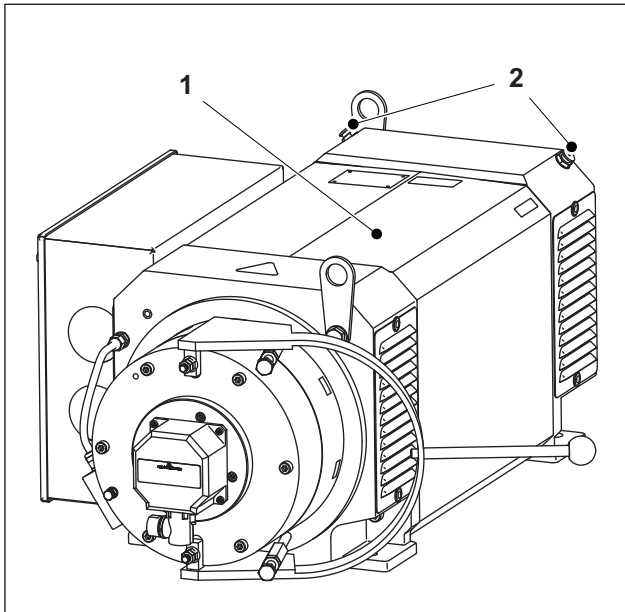
- 1 Main motor ≥ 90 kW
- 2 Footboard
- 3 Lateral footboard guard

Standard gallery

The main motor is located at D.S. between the 2nd and the last printing unit. It is accessible, when the lateral footboard guard is unhinged.

Fig. 10 Place of installation of the main motor with standard gallery

5.1.1 Lubricating the main motor



FS-904-4412-00GRAND_00

- 1 Main motor ≥ 90 kW
- 2 Button head grease nipple



Caution - Motor failure

Use only the specified lubricant. Note the expiration date of the lubricant. Never use a lubricant that is older than 24 months. Failure to follow these instructions can lead to damage to the main motor.

Fig. 11 Lubricating points, main motor

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press. Narrow gallery: Open the service lid in the footboard. Standard gallery: Remove the lateral footboard guard.
Maintenance work	Lubricate 1 button head grease nipple. The main motor is equipped with 2 button head grease nipples. The lubrication procedure requires only one button head grease nipple. Select the lubricating nipple that is easily accessible for you. For each lubrication procedure, empty one complete grease cartridge A08 .
Required resources	Grease gun A08 Grease cartridge A08
Lubricant	Note "Approved lubricants".

Tab. 6

5.2 Main motor 120 kW

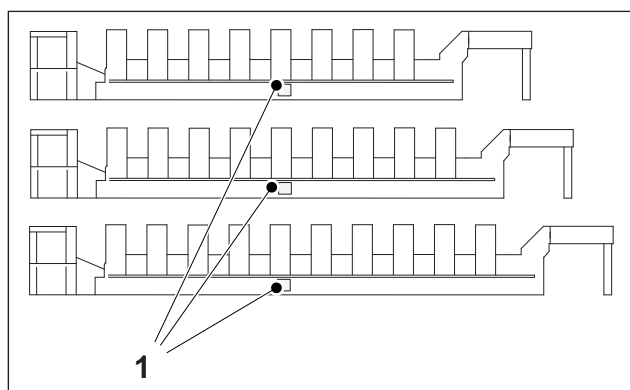


Fig. 12 Place of installation of the main motor 120 kW

Place of installation

1 Main motor 120 kW

The main motor 120 kW is located on D.S. under the footboard. It is assigned to the 5th printing unit.

5.2.1 Cleaning the suction filter

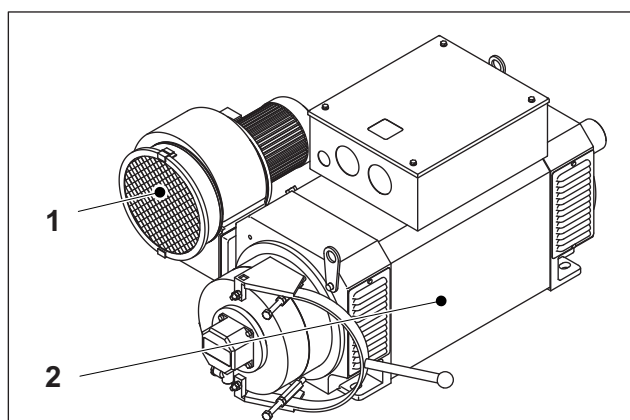


Fig. 13 Main motor

1 Suction filter

2 Main motor 120 kW

Description of the maintenance point	
Maintenance interval	III
Maintenance location	D.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Clean the filter element of the suction filter.
Required resources	Approved industrial vacuum cleaner

Tab. 7

5.2.2 Replacing the suction filter

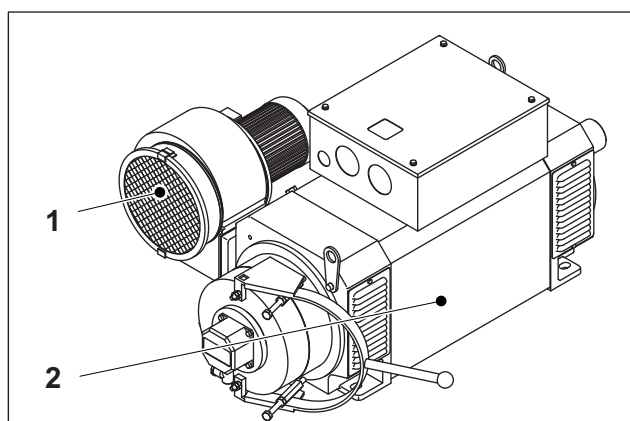


Fig. 14 Main motor

1 Suction filter

2 Main motor 120 kW

Description of the maintenance point	
Maintenance interval	V
Maintenance location	D.S.
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.

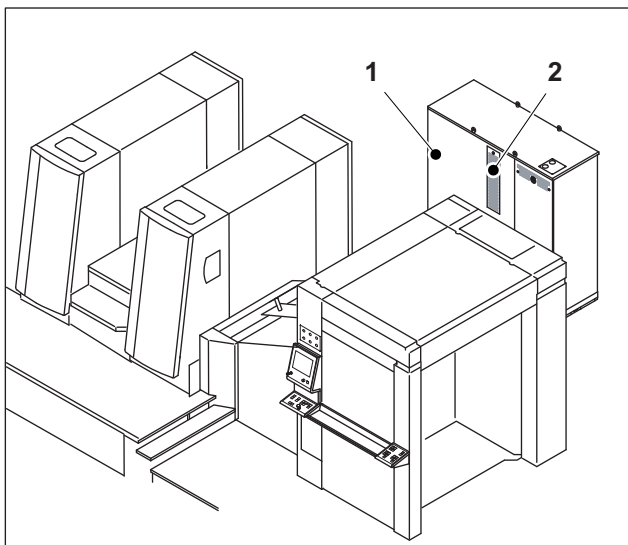
Description of the maintenance point	
Maintenance work	Replace the filter element of the suction filter.

Tab. 8

FS.BM.0050-0007KERN_00

6 Control cabinet of the SinuSynchron main driving motor

6.1 Air filter



FS.BM.0027-0106BRAND_00

Position

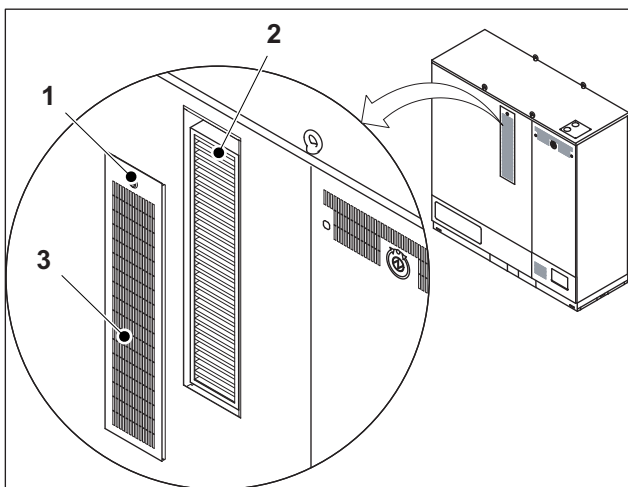
- 1 Control cabinet
- 2 Air filter

The control cabinet is located on D.S. in line with the feeder.

The air filter is integrated in the back panel of the control cabinet. The air filter consists of a cover and a filter element.

Fig. 15 Place of installation of the control cabinet

6.1.1 Cleaning the filter element



FS.LM.0106-0106BRAND_00

- 1 Locking device
- 2 Filter element of the air filter
- 3 Cover

Fig. 16 Filter element of the air filter

Description of the maintenance point	
Maintenance interval	III
Maintenance location	Control cabinet
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Clean the filter element of the air filter. See "Mounting and demounting".
Required resources	Approved industrial vacuum cleaner

Tab. 9

6.1.2 Replacing the filter element

Description of the maintenance point	
Maintenance interval	V
Maintenance location	Control cabinet

Description of the maintenance point	
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Maintenance work	Replace the filter element of the air filter. See "Mounting and demounting".

Tab. 10

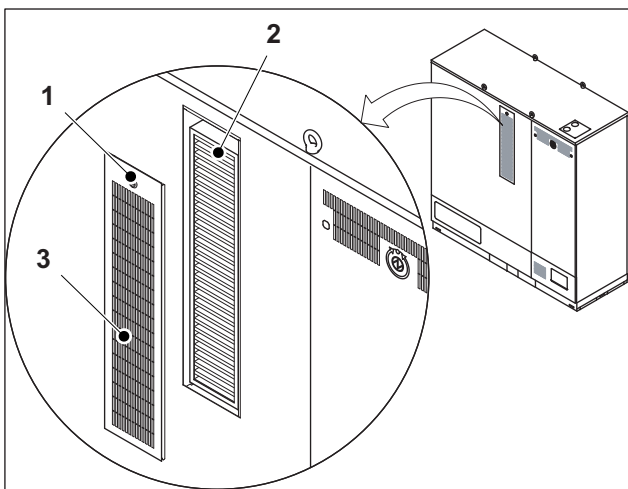


Fig. 17 Air filter

Mounting and demounting

- 1 Locking device
 - 2 Cover
 - 3 Filter element
1. Open the locking device.
 2. Pull out the cover on top towards the front and remove it upwards out of the door.
 3. Remove the exhausted filter element.
 4. Install the new filter element.
 5. Insert the cover into the door from the top. Lock the cover.

FS-914-0127-0001KERN_04

7 Prinect Press Center

7.1 Filter fan

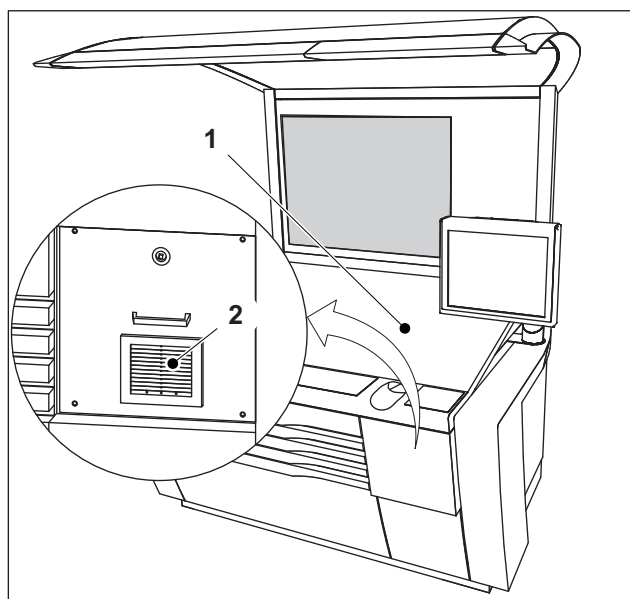


Fig. 18 Place of installation of Prinect Press Center

Place of installation

- 1 Prinect Press Center
- 2 Filter fan

The control console is located at O.S. in line with the feeder.

The axial fan is installed behind the upper right screen.



Caution - Press damage!

The filter element protects the Prinect Press Center from dust. Switch on the Prinect Press Center only when the filter element is installed. Failure to heed the maintenance instructions may result in the device overheating.

7.1.1 Replacing the filter element

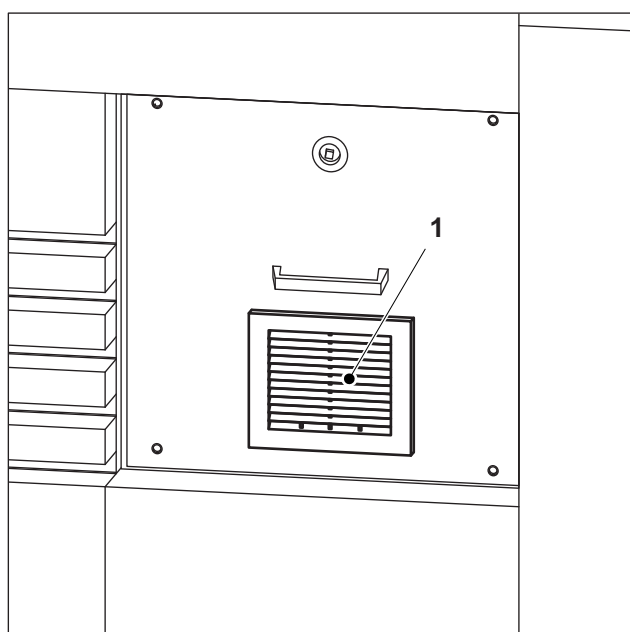


Fig. 19 Filter element of the air filter

- 1 Filter fan

The axial fan comprises a cover, a fan and a filter element.



Note

The Prinect Press Center must have been switched off for at least 2 minutes before you replace the filter element!

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	Prinect Press Center
Accessing the maintenance point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press. Open the top drawer of the control console. Remove the upper screen on the right side of the control console.
Maintenance work	Replace the filter element of the filter fan.

Tab. 11

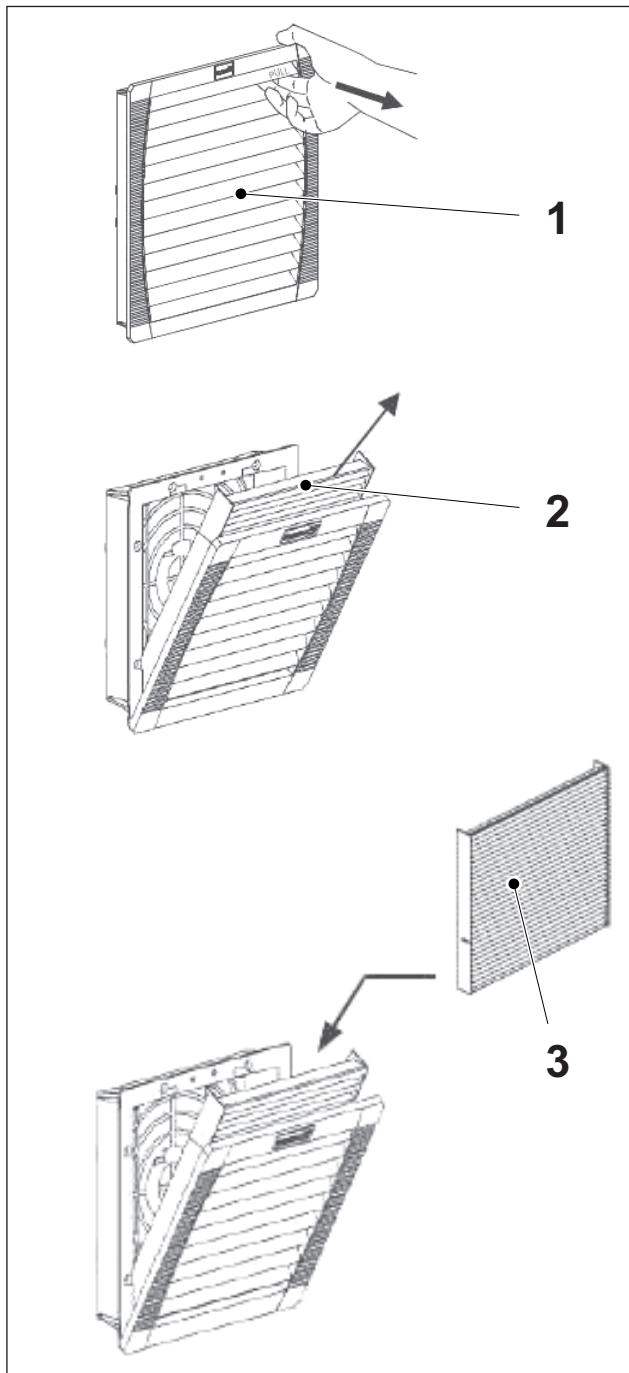


Fig. 20 Cover of the filter fan

Mounting and demounting

- 1 Cover of the filter fan
- 2 Used filter element
- 3 New filter element

1. Open the cover:
 - Open the upper drawer a little. This allows you to access a slot at the side of the covering to be removed.
 - Slip your left hand into the slot.
 - Slip your right hand into the slot at the bottom of the covering.
 - Remove the covering with a short, strong jerk.
2. Remove the cover at the top towards the front.
3. Remove the used filter element.
4. Install the new filter element.
5. Close the cover.

7.2 Standard daylight lamp

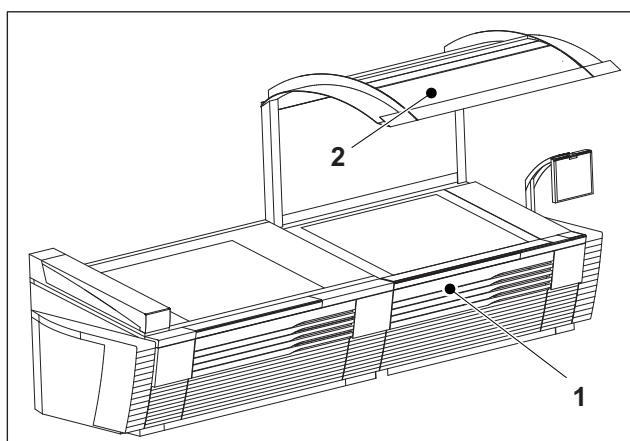


Fig. 21 Place of installation of the standard daylight lamp

Place of installation

- 1 Princt Press Center
- 2 Standard daylight lamp

The fluorescent tubes are in the standard daylight lamp of the Princt Press Center.

7.2.1 Replacing a fluorescent tube

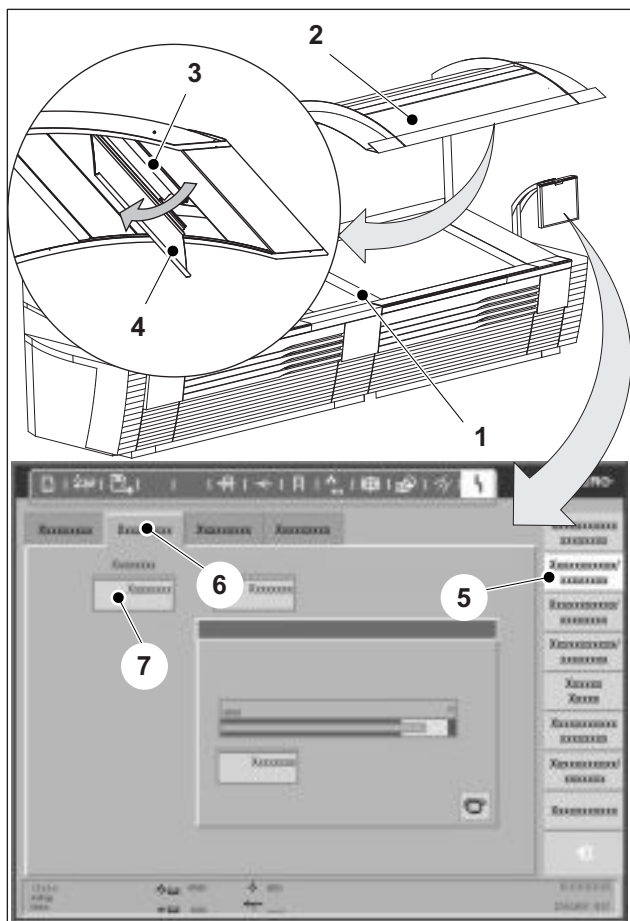


Fig. 22 Replacing fluorescent tubes

- 1 Princt Press Center
- 2 Standard daylight lamp
- 3 Fluorescent tube
- 4 Guard for the standard daylight lamp
- 5 The **Maintenance/Documentation** menu
- 6 The **Status** menu
- 7 The **Standard daylight lamp** menu

► Note

The Princt Press Center must have been switched off for at least 2 minutes before you can start with replacing the fluorescent tube!

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	Princt Press Center
Accessing the maintenance point	Use a pointed object (screwdriver) to open the guard of the standard daylight lamp on the Princt Press Center. The guard folds back automatically.
Maintenance work	Check the number of operating hours of the standard daylight lamp. To do so, call up the Maintenance/Documentation and Status menu on the control console. When 5,000 operating hours have been reached, all fluorescent tubes of the standard daylight lamp need to be re-

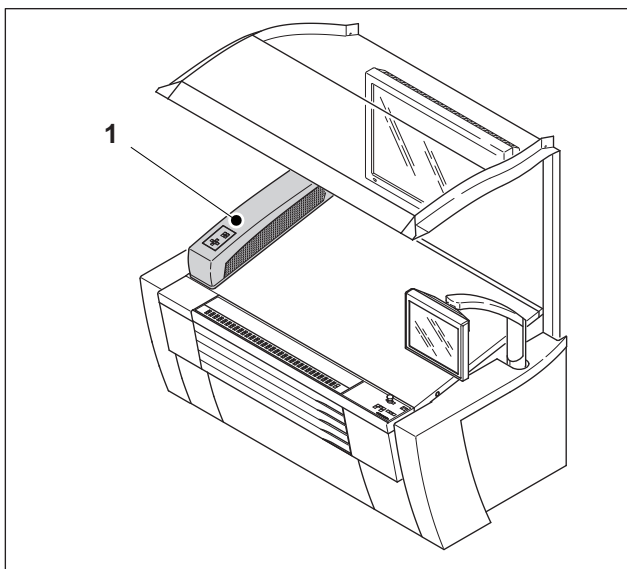
Description of the maintenance point	
	placed. Lightly turn the fluorescent tubes and remove them.
Required resources	Pointed tool

Tab. 12

FS-994-0142-0007KERN_04

8 Prinect Axis Control

8.1 Prinect Axis Control



FS-994-0007-0006BRND_00

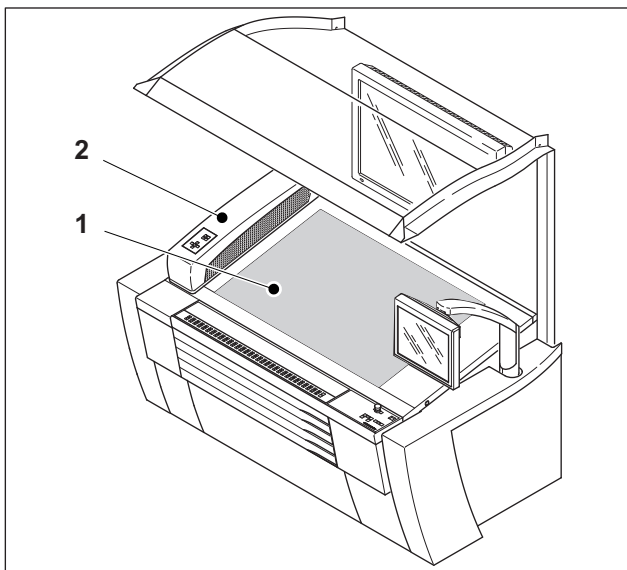
Position

- 1 Prinect Axis Control

The Prinect Axis Control is located on the Prinect Press Center.

Fig. 23 Prinect Axis Control

8.1.1 Cleaning the measuring table surface



FS-994-0008-0006BRND_00

- 1 Measuring table surface
- 2 Measuring bar

Description of the maintenance point	
Maintenance interval	III
Maintenance location	-
Accessing the maintenance point	-
Maintenance work	Vacuum-clean the measuring table surface. Note: The measuring bar must be in home position!
Required resources	Approved industrial vacuum cleaner

Fig. 24 Measuring table surface

Tab. 13

8.1.2 Cleaning and lubricating the guide rails

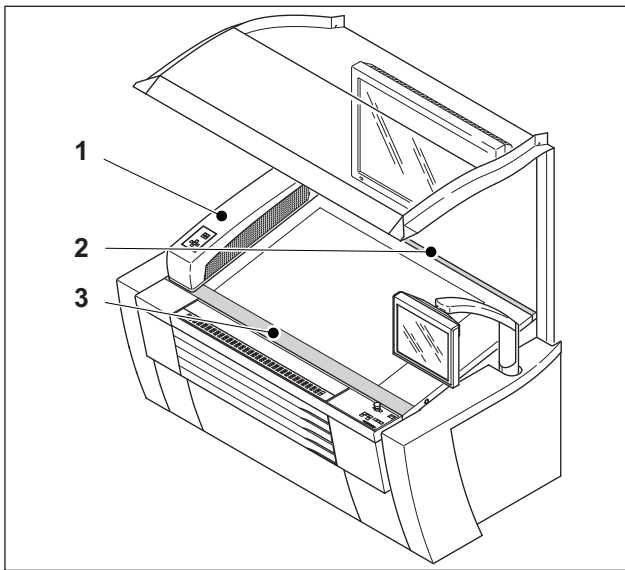


Fig. 25 Guide rail

- 1 Measuring bar
- 2 Rear guide rail
- 3 Front guide rail

Description of the maintenance point	
Maintenance interval	II
Maintenance location	-
Accessing the maintenance point	-
Maintenance work	Clean and lubricate the front and rear guide rails.
Required resources	Spray can B02 , soft, lint-free cloth
Lubricant	Elkalub FLC 1012, note "Approved lubricants".

Tab. 14

FS-994-0129-000TKERU_04

9 Wallscreen

9.1 Air filter

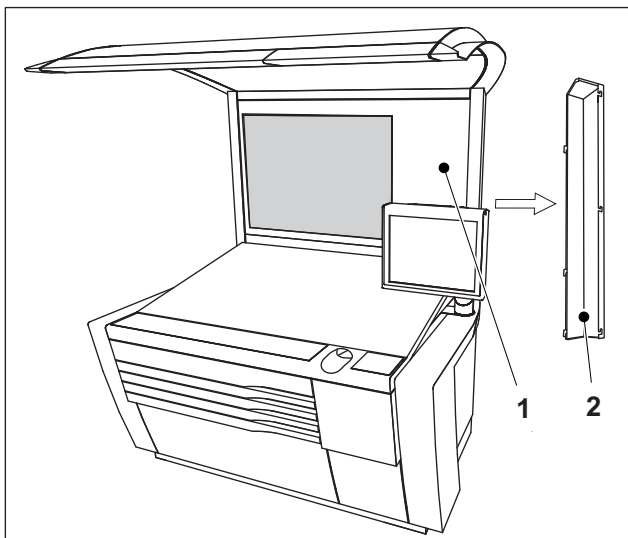


Fig. 26 Place of installation of the Wallscreen

Position

- 1 Wallscreen
- 2 Facing

The Wallscreen is mounted to the Princt Press Center.

9.1.1 Replacing the filter element

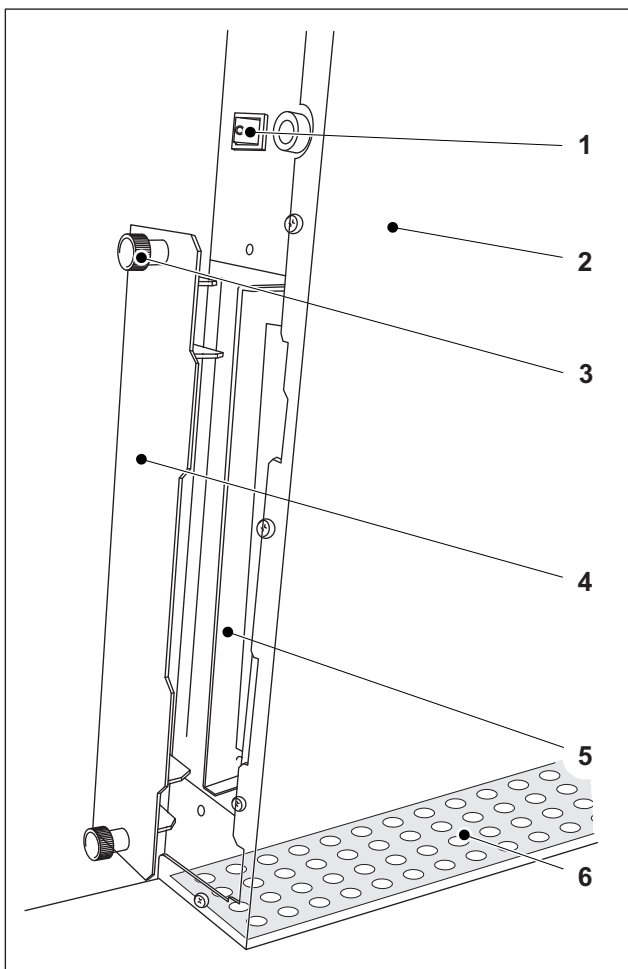


Fig. 27 Filter element of the Wallscreen

- 1 ON/OFF switch
- 2 Wallscreen
- 3 Knurled screw
- 4 Filter element support
- 5 Filter element
- 6 Air intake opening



Caution - Press damage!

The filter element protects the Wallscreen from dust. Only switch on the Wallscreen when the filter element is fitted. Failure to heed the maintenance instructions may result in the device overheating.

Description of the maintenance point	
Maintenance interval	IV
Maintenance location	-
Accessing the maintenance point	See Mounting and demounting.
Maintenance work	Clean the air intake opening. Then replace the filter element of the filter fan.
Required resources	Soft, lint-free cloth

Tab. 15

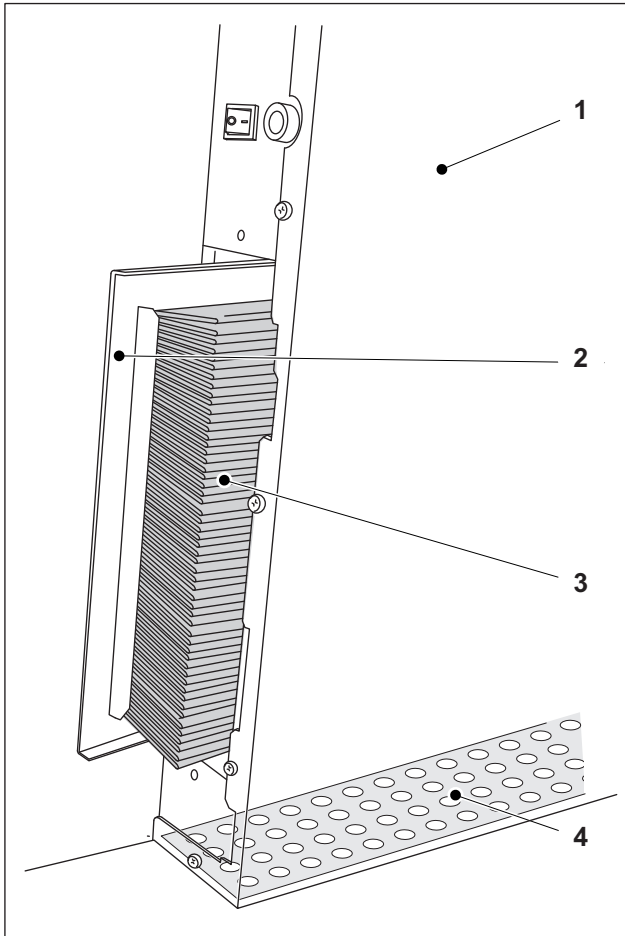


Fig. 28 Cover of the filter fan

Mounting and demounting

► **Note**

The wallscreen must have been switched off for at least 2 minutes before you can replace the filter element!

- 1 Wallscreen
- 2 Filter element support
- 3 Filter element
- 4 Air intake opening

1. Clean the air intake opening (Fig. 28/4) with a soft, lint-free cloth.
2. Switch off the Wallscreen at the ON/OFF switch (Fig. 27/1).
3. Open the right facing of the Wallscreen (Fig. 26/2). Push the facing upward by a few centimeters until it disengages. Pull off the facing in the direction of the arrow (Fig. 26).
4. Unscrew the knurled screws (Fig. 27/3) at the bottom of the filter element support (Fig. 27/4).
5. Pull out the support of the filter element (Fig. 28/2).
6. Remove the used filter element.
7. Clean the filter element support using a soft, lint-free cloth.
8. Fit the new filter element.
9. Insert the support of the filter element (Fig. 28/2) into the holder.
10. Tighten the knurled screws (Fig. 27/3).
11. Close the facing (Fig. 26/2).

Maintenance by service technicians

1	Maintenance work with service support: Feeder	B.7.3
	1.1 Feeder	B.7.3
2	Maintenance work with service support: Printing unit	B.7.6
	2.1 Printing unit	B.7.6
3	Maintenance work with service support: Intermediate unit	B.7.10
	3.1 Intermediate unit	B.7.10
4	Maintenance work with service support: Coating unit	B.7.11
	4.1 Coating unit	B.7.11
5	Maintenance work with service support: Delivery	B.7.13
	5.1 Delivery	B.7.13
6	Maintenance work with service support: General press	B.7.15
	6.1 Entire press	B.7.15

ES_B04_1109-0000000000_00

1 Maintenance work with service support: Feeder

1.1 Feeder

No.	Part	Maintenance work	Maintenance interval					Don ^e	Remark
			I	II	III	IV	V		
1	Preloading device								
	Lateral sheet stops	Check-up					X		
	Front stops	Check-up					X		
2	Pile guidance and pile transport								
	Pile alignment	Check-up			X	X	X		
	Side stops	Cleaning, check-up, lubrication				X	X		
	Pile support frame	Check-up; adjustment, if necessary					X		
	Pile chains	Cleaning, lubrication					X		
		Check-up					X		
		Check-up					X		
		Check-up					X		
	Drive chain / pile support plate	Cleaning, lubrication					X		
		Check-up					X		
3	Non-stop device								
	Auxiliary pile chains	Cleaning, lubrication					X		
		Check-up					X		
		Check-up					X		
		Check-up					X		
	Drive chain, non-stop bar	Cleaning, lubrication					X		
		Check-up					X		
	Non-stop device	Check-up					X		
Check-up, cleaning, if necessary						X			
4	Automatic non-stop device								
	Drive chain, non-stop bar	Cleaning, lubrication					X		
		Check-up; adjustment, if necessary					X		
	Drive chain of nonstop rods	Check-up; adjustment, if necessary					X		
		Cleaning, lubrication					X		
	Front non-stop bar	Check-up; adjustment, if necessary					X		
	Auxiliary pile chains	Cleaning, lubrication					X		

No.	Part	Maintenance work	Maintenance interval					Done	Remark
			I	II	III	IV	V		
		Check-up					X		
5	Suction head								
	Suction head	Check-up, replacing parts, if necessary				X	X		
		Cleaning, check-up, lubrication					X		
		Check-up, replacing parts, if necessary				X	X		
		Cleaning, check-up, lubrication					X		
		Check-up				X	X		
		Check-up					X		
		Check-up					X		
		Cleaning, check-up				X	X		
		Cleaning, lubrication				X	X		
		Check-up				X	X		
6	Ionizing unit								
	Ionizing bar	Check-up				X	X		
	Ion blower	Check-up				X	X		
7	Feed table								
	Drive belt from the infeed roller to the suction tape guide roller	Check-up					X		
	Cams for camshaft "Forwarding rollers/forwarding flap"	Cleaning, check-up					X		
	Forwarding roller/multiple sheet detector	Check-up; adjustment, if necessary				X	X		
		Check-up				X	X		
		Replacing parts				X	X		
	Automatic sheet arrival control	Cleaning, check-up				X	X		
		Lubrication				X	X		
	Tear-off detector	Check-up, adjustment				X	X		
8	Feeder drive								
	Basic adjustment / feeder/ printing unit	Check-up				X	X		
	Drive belt	Check-up				X	X		
	Universal joint shaft	Check-up, lubrication, if necessary					X		
	Clutch	Check-up				X	X		

No.	Part	Maintenance work	Maintenance interval					Don ^e	Remark
			I	II	III	IV	V		
	Forwarding flap	Lubrication				X	X		
9	Air supply								
	Speed-compensating blast air control	Check-up				X	X		
		Check-up				X	X		
		Check-up					X		

Tab. 1 Maintenance work with service support: Feeder

2 Maintenance work with service support: Printing unit

2.1 Printing unit

No.	Part	Maintenance work	Maintenance interval					Done	Remark
			I	II	III	IV	V		
1	Sheet alignment system								
	Pulling device	Cleaning, check-up				X	X		
		Cleaning, check-up				X	X		
	Bellows	Check-up				X	X		
	Pull lay	Adjustment				X	X		
	Suction drum	Cleaning				X	X		
	Venturi nozzles	Check-up				X	X		
	Front lay guard	Check-up				X	X		
	Sensor "Sheet alignment monitor"	Check-up; adjustment, if necessary				X	X		
	Sheet stop finger	Check-up				X	X		
	Drive belt, pull lay drive / printing unit 1	Check-up, replacing parts, if necessary					X		
	Front lays and cover guides	Check-up, lubrication				X	X		
		Lubrication				X	X		
	Front lays	Check-up				X	X		
		Check-up				X	X		
		Check-up				X	X		
	Cover guides	Cleaning				X	X		
		Check-up				X	X		
		Check-up				X	X		
	2	Rotary valve "Vacuum control/suction tape"							
Rotary valve "Vacuum control/suction tape"		Check-up				X	X		
Suction air distributor		Cleaning				X	X		
Drive belt		Check-up				X	X		
3	Transfer gripper								
	Gripper system	Check-up					X		
		Check-up					X		
		Check-up					X		
Transfer gripper drive	Check-up, replacing parts, if necessary					X			
4	Feed cylinder without UV interdeck dryer								
	Gripper system	Check-up					X		

No.	Part	Maintenance work	Maintenance interval					Don ^e	Remark
			I	II	III	IV	V		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
		Check-up				X	X		
5	Feed cylinder with UV interdeck dryer								
	Gripper system	Check-up					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
		Check-up				X	X		
6	Impression control mechanism								
	Bearers	Check-up					X		
7	Impression cylinder without UV interdeck dryer								
	Gripper systems	Check-up					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
	Cylinder surface	Check-up					X		
8	Impression cylinder with UV interdeck dryer								
	Gripper systems	Check-up					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
	Cylinder surface	Check-up					X		
9	Prinect Inpress Control								
	Measuring bar	Check-up, replacing parts, if necessary					X		
	Coolant supply	Check-up					X		
	Exhaust air supply	Check-up					X		
	Hand-held spectrophotometer	Cleaning, check-up					X		
		Check-up					X		
	Prinect Inpress Control	Cleaning, check-up					X		
		Check-up					X		
10	Impression cylinder washup device								
	Impression cylinder washup device	Check-up					X		

No.	Part	Maintenance work	Maintenance interval					Done	Remark
			I	II	III	IV	V		
		Check-up, replacing parts, if necessary					X		
		Check-up					X		
11	Plate cylinder								
	Diagonal adjustment	Check-up					X		
12	Plate changer AutoPlate Advanced								
	Holding device	Check-up				X	X		
		Lubrication					X		
13	AutoPlate XL plate changer								
	Delivery-side cylinder guard	Check-up, replacing parts, if necessary					X		
14	Blanket cylinder								
	Blanket mounting system	Check-up, lubrication					X		
15	Blanket washup device								
	Blanket washup device	Check-up					X		
		Check-up, replacing parts, if necessary					X		
16	Inking unit								
	Inking unit	Check-up					X		
	Ink fountain	Check-up					X		
		Check-up					X		
17	Inking roller washup device								
	Inking roller washup device	Check-up					X		
18	Washing fluid container								
	Washing fluid container	Check-up				X	X		
		Check-up				X	X		
19	Dampening system								
	On- and off-behavior	Check-up					X		
	Clamping of the roller offset	Check-up					X		
	Clamping latch	Check-up					X		
20	Transfer drum without UV interdeck dryer								
	Gripper systems	Cleaning					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
		Check-up				X	X		
21	Transfer drum with UV interdeck dryer								

No.	Part	Maintenance work	Maintenance interval					Don ^e	Remark
			I	II	III	IV	V		
	Gripper systems	Cleaning					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
		Check-up				X	X		
22	Variable transfer drum								
	Gripper system	Check-up					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
23	Storage drum								
	Gripper systems	Check-up					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
	Sucker bar	Check-up				X	X		
		Check-up				X	X		
24	Reversing drum								
	Gripper system	Check-up					X		
		Check-up					X		
		Cleaning, check-up					X		
25	Impression cylinder (P)								
	Gripper systems	Check-up					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
	Cylinder surface	Check-up					X		
26	Sheet guide								
	Sheet guide plates in front of the perfector	Check-up, cleaning, if necessary				X	X		
	Sheet guide plates after the perfector	Check-up				X	X		

Tab. 2 Maintenance work with service support: Printing unit

3 Maintenance work with service support: Intermediate unit

3.1 Intermediate unit

No.	Part	Maintenance work	Maintenance interval					Done ^e	Remark
			I	II	III	IV	V		
1	Transfer drum								
	Gripper systems	Check-up				X	X		
		Check-up					X		
		Check-up					X		
		Check-up					X		
Cleaning						X			
2	Impression cylinder								
	Gripper systems	Check-up					X		
		Check-up					X		
		Check-up					X		
Cleaning						X			
3	Impression control mechanism								
	Bearers	Check-up					X		

Tab. 3 Maintenance work with service support: Intermediate unit

ES_B04_3109-00000000_00

4 Maintenance work with service support: Coating unit

4.1 Coating unit

No.	Part	Maintenance work	Maintenance interval					Don ^e	Remark
			I	II	III	IV	V		
1	Transfer drum without UV interdeck dryer and without LYYL								
	Gripper systems	Check-up					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
Check-up					X	X			
2	Transfer drum with UV interdeck dryer or with LYYL								
	Gripper systems	Check-up					X		
		Check-up					X		
		Check-up					X		
		Cleaning					X		
Check-up					X	X			
3	Impression cylinder without UV interdeck dryer and without LYYL								
	Gripper system	Check-up					X		
		Check-up					X		
		Check-up					X		
Cleaning						X			
4	Impression cylinder with UV interdeck dryer or with LYYL								
	Gripper system	Check-up					X		
		Check-up					X		
		Check-up					X		
Cleaning						X			
5	Coating blanket cylinder								
	Clamping device	Check-up				X	X		
		Cleaning					X		
		Lubrication					X		
		Lubrication					X		
		Check-up					X		
Pressing roller	Check-up					X			
6	Sheet guide								
	Switch "Sheet guide plate de-mounted"	Check-up					X		
7	Impression control mechanism								

No.	Part	Maintenance work	Maintenance interval					Done	Remark
			I	II	III	IV	V		
	Bearers	Check-up					X		
	Printing pressure adjustment	Lubrication					X		
	Switch "Coating blanket cylinder out of mesh"	Check-up					X		
8	Chambered blade system								
	Screen roller	Lubrication					X		
	Provision of screen rollers	Check-up, lubrication					X		
	Roller locks	Check-up					X		
9	Roller storage of the screen rollers								
	Roller storage	Check-up					X		
		Check-up					X		
		Check-up					X		
		Lubrication					X		
		Lubrication					X		
		Check-up					X		
10	Varnish supply								
	Varnish hoses	Check-up, replacing parts, if necessary					X		
11	Air supply								
	Blast tubes and blower bars	Check-up, cleaning, if necessary					X		

Tab. 4 Maintenance work with service support: Coating unit

ES_B04_4L09-00000001_00

5 Maintenance work with service support: Delivery

5.1 Delivery

No.	Part	Maintenance work	Maintenance interval					Don ^e	Remark
			I	II	III	IV	V		
1	Sheet transport without UV end-of-press dryer								
	Gripper system	Cleaning, check-up				X	X		
	Chain guide	Check-up					X		
		Check-up					X		
Check-up						X			
2	Sheet transport with UV end dryer								
	Gripper system	Cleaning, check-up				X	X		
	Chain guide	Check-up					X		
		Check-up					X		
Check-up						X			
3	Sheet brake system								
	Drive	Check-up, replacing parts, if necessary					X		
4	Sheet jogger								
	Side jogger	Cleaning, check-up				X	X		
5	Sheet catcher mechanism								
	Sheet catcher mechanism	Check-up					X		
6	Non-stop device								
	Mobile rear edge stop	Cleaning				X	X		
	Pneumatic spring	Check-up					X		
	Non-stop carriage	Check-up					X		
	Auxiliary pile chains	Check-up					X		
		Check-up, cleaning, if necessary, lubrication					X		
		Check-up					X		
	Deflection bolts	Check-up					X		
Sheet catchers	Check-up					X			
7	Pile guidance and pile transport								
	Main pile chain	Check-up					X		
		Check-up, cleaning, if necessary, lubrication					X		
		Check-up					X		
Deflection bolts	Check-up					X			
8	Air supply								

No.	Part	Maintenance work	Maintenance interval					Done	Remark
			I	II	III	IV	V		
	Delivery fans	Check-up				X	X		

Tab. 5 Maintenance work with service support: Delivery

ES_B04_5109-00000001_00

6 Maintenance work with service support: General press

6.1 Entire press

No.	Part	Maintenance work	Maintenance interval					Done ^e	Remark
			I	II	III	IV	V		
1	Central oil lubrication								
	Central oil lubrication	Check-up				X	X		
	Sensor "Water in oil" on the condensate separator	Check-up				X	X		
2	Safety devices								
	Safety devices	Check-up				X	X		
3	Main motor								
	Drive belt	Check-up					X		
	Cooling fins	Check-up, cleaning, if necessary					X		
4	Control cabinet of the SinuSynchro main motor								
	Control cabinet	Cleaning					X		
5	Prinect Axis Control								
	Prinect Axis Control	Lubrication				X	X		
		Cleaning					X		
		Check-up					X		
6	Uninterruptible power supply (UPS)								
	UPS	Check-up, replacing parts, if necessary					X		

Tab. 6 Maintenance work with service support: General press

C Cleaning

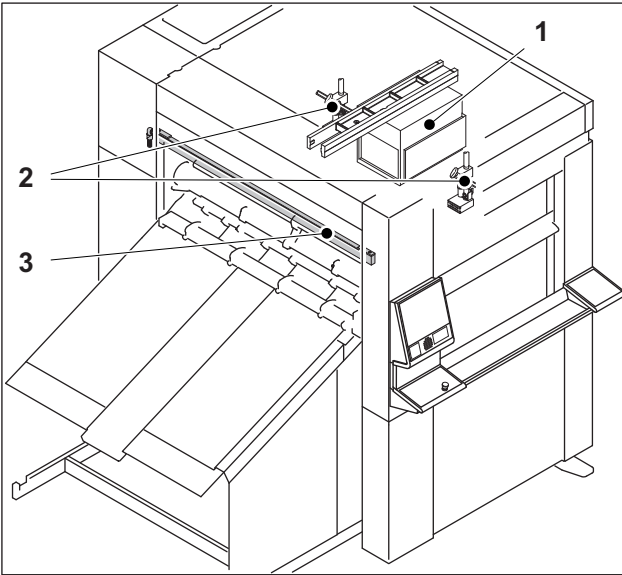
Cleaning of the press

1	Cleaning work at the feeder	C.1.1
1.1	Ionizing unit	C.1.1
2	Cleaning work at the printing unit	C.1.3
2.1	Impression control - bearers	C.1.3
2.2	Impression cylinder without UV interdeck dryer - cylinder surface	C.1.4
2.3	Impression cylinder with UV interdeck dryer - cylinder surface	C.1.5
2.4	Inking roller washup device - washup blade	C.1.6
2.5	Dampening system - dampening solution pan	C.1.7
2.6	Variable transfer drum - cylinder surface	C.1.8
2.7	Reversing drum - cylinder surface	C.1.9
2.8	Impression cylinder (P) - cylinder surface	C.1.10
2.9	Sheet guide - Sheet guide plates	C.1.11
3	Cleaning work at the intermediate unit	C.1.16
3.1	Impression control - bearers	C.1.16
4	Cleaning work at the coating unit	C.1.17
4.1	Impression cylinder without UV interdeck dryer and without LYYL - cylinder surface ..	C.1.17
4.2	Impression cylinder with UV interdeck dryer or with LYYL - cylinder surface	C.1.18
4.3	Coating blanket cylinder - cylinder surface	C.1.19
4.4	Coating blanket cylinder - pressing roller	C.1.20
4.5	Sheet guide - sheet guide plate after printing nip	C.1.21
4.6	Impression control - bearers	C.1.22
4.7	Chambered blade system - chambered blade	C.1.23
4.8	Chambered blade system - screen roller	C.1.24
4.9	Screen roller - roller locks	C.1.25
4.10	Chambered blade system - pressurized chambered blade	C.1.26
5	Cleaning work at the delivery	C.1.27
5.1	Ionizing unit - ionizing bars	C.1.27
5.2	Sheet guide - sheet guide plates and powder deflectors	C.1.28
5.3	Air supply - delivery fan	C.1.31

FS_B04_0130-000FRONT_00

1 Cleaning work at the feeder

1.1 Ionizing unit



FS_B04_0195-000FRONT_00

Place of installation

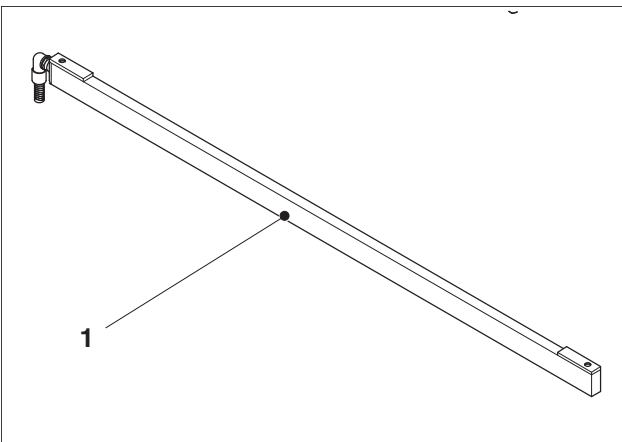
- 1 Suction head
- 2 Ion blower
- 3 Ionizing bar

The ionizing bar is fitted in the feeder on a cross bar above the feed table.

The ion blowers are mounted next to the suction head in direction of D.S. and O.S.

Fig. 1 Place of installation of the ionizing bar and ionizing blowers

1.1.1 Cleaning the ionizing bar



FS_B04_0173-000FRONT_01

1 Ionizing bar

► **Note**

High voltage is present on the ionizing bar. However, the high voltage is not dangerous to persons due to the low current flow. Nevertheless, avoid touching the discharge openings during operation.

Fig. 2 Ionizing bar

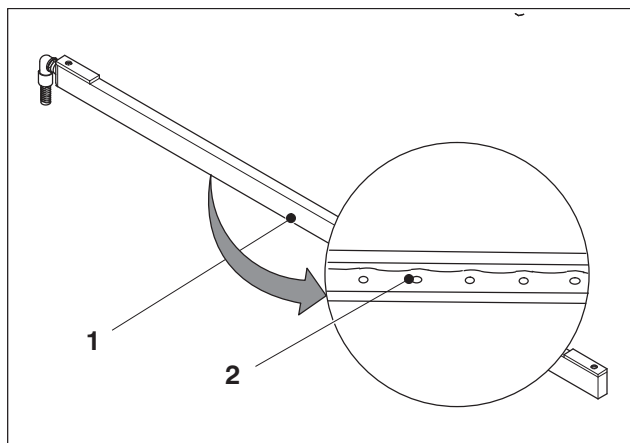


Fig. 3 Discharge openings

- 1 Ionizing bar
- 2 Discharge openings

Description of the cleaning points	
Cleaning interval	II
Cleaning location	D.S. to O.S.
Accessing the cleaning points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/cleaning work	Clean the surface and the discharge openings of the ionizing bar.
Required resources	Paint brush; brush, protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 1

1.1.2 Cleaning the ion blower

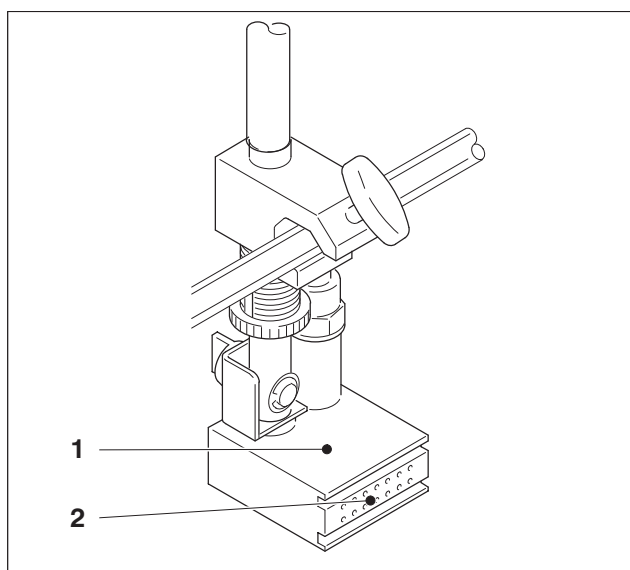


Fig. 4 Ion blower

- 1 Ion blower
- 2 Discharge openings

► **Note**
 High voltage is present on the ion blowers. However, the high voltage is not dangerous to persons due to the low current flow. Nevertheless, avoid touching the discharge openings during operation.

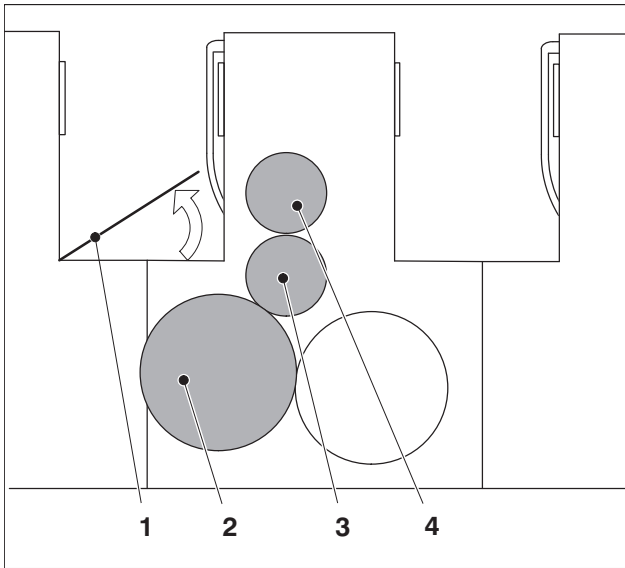
Description of the cleaning points	
Cleaning interval	II
Cleaning location	Center
Accessing the cleaning points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/cleaning work	Clean the surface and discharge tips of the 2 ion blowers.
Required resources	Paint brush; brush, protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 2

FS_B04_0131-000FRONT_00

2 Cleaning work at the printing unit

2.1 Impression control - bearers



FS_904_0044-000FRONT_00

Place of installation

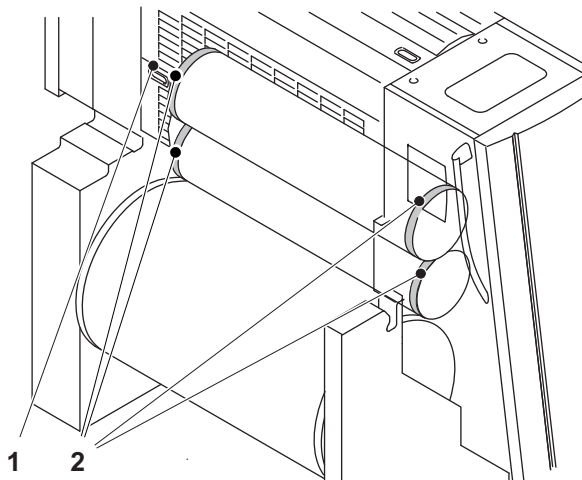
- 1 Guard "Transfer cylinder"
- 2 Impression cylinder
- 3 Blanket cylinder
- 4 Plate cylinder

The bearers can be found on D.S. and O.S. at the ends of the plate and blanket cylinders.

The bearers can be found on D.S. and O.S. at the ends of the impression cylinder.

Fig. 5 Place of installation of the bearers

2.1.1 Cleaning and checking the bearers



FS_B04_0045-000FRONT_00

- 1 Guard "Plate cylinder and blanket cylinder"
- 2 Bearer
- 3 Bearer

Fig. 6 Bearers

Description of the cleaning points	
Cleaning interval	I
Cleaning location	D.S. / O.S.
Accessing the cleaning point	Open the guard "Plate cylinder/blanket cylinder". Control panel selection: Press the Control panel selection button twice (at an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the bearers. Checking the lubricating film of the bearers. Reapply a lubricating film, if necessary. See "Applying a lubricating film".
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".
Lubricant	Bearer oil B07

Description of the cleaning points	
	Note "Approved lubricants".

Tab. 3

Applying a lubricating film

1. Apply a small amount of lubricant to a soft, lint-free cloth.
2. Apply a thin lubricating film to the bearers. Ensure that no smudge marks occur.
3. Remove any excess lubricant.

2.2 Impression cylinder without UV interdeck dryer - cylinder surface

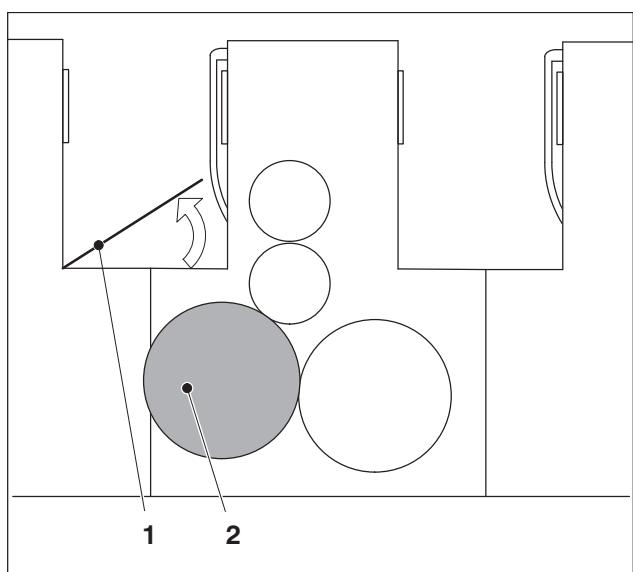


Fig. 7 Place of installation of the impression cylinder

Place of installation

- 1 Guard "Transfer drum"
- 2 Impression cylinder

The impression cylinder is mounted in the printing unit underneath the "Transfer drum" guard.

2.2.1 Cleaning and checking the refined cylinder surface

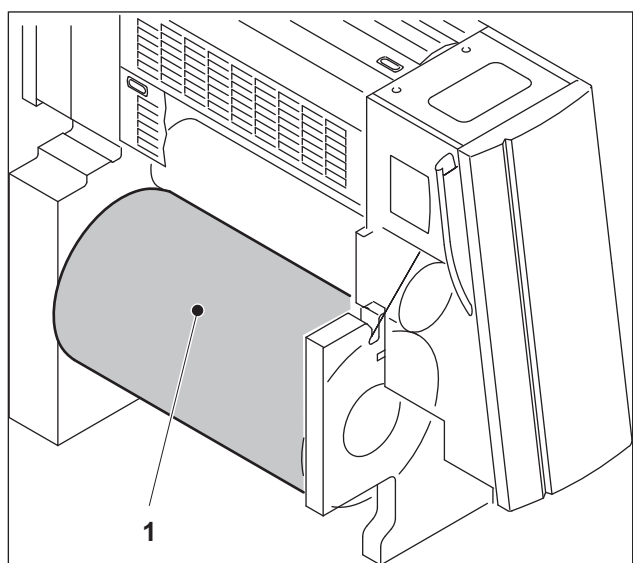


Fig. 8 Refined cylinder surface

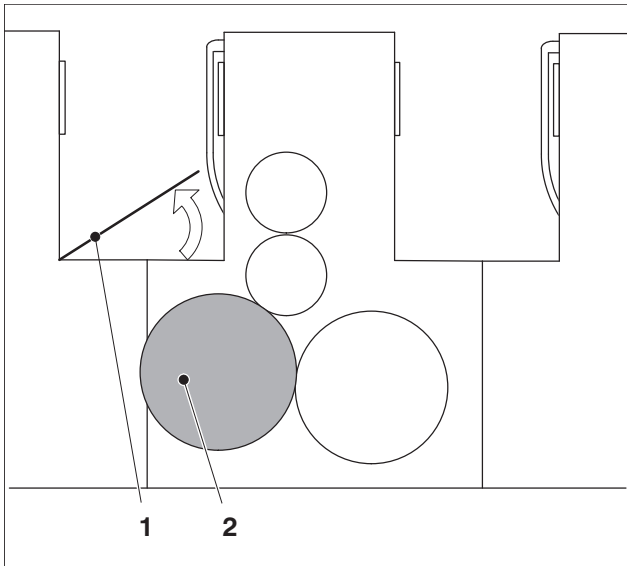
- 1 Impression cylinder

Description of the cleaning points	
Cleaning interval	I
Cleaning location	-
Accessing the cleaning points	Open the "Transfer drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the refined cylinder surface and check visually for damage.
Required resources	Soft, lint-free cloth; protective gloves

Description of the cleaning points	
Washing fluid	Note "Approved washing fluids".

Tab. 4

2.3 Impression cylinder with UV interdeck dryer - cylinder surface



FS.011.0008-000GRAND.00

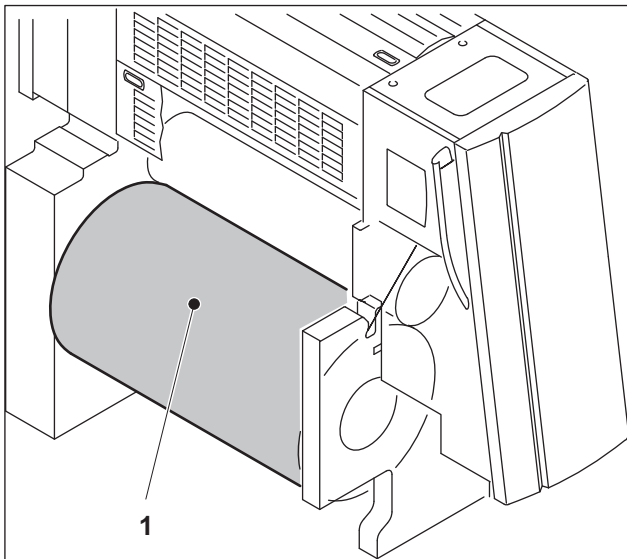
Place of installation

- 1 Guard "Transfer drum"
- 2 Impression cylinder

The impression cylinder is mounted in the printing unit underneath the "Transfer drum" guard.

Fig. 9 Place of installation of the impression cylinder

2.3.1 Cleaning and checking the refined cylinder surface



FS.894.0001-000GRAND.00

- 1 Impression cylinder

Description of the cleaning points	
Cleaning interval	1
Cleaning location	-
Accessing the cleaning points	Open the "Transfer drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the refined cylinder surface and check visually for damage.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 5

2.4 Inking roller washup device - washup blade

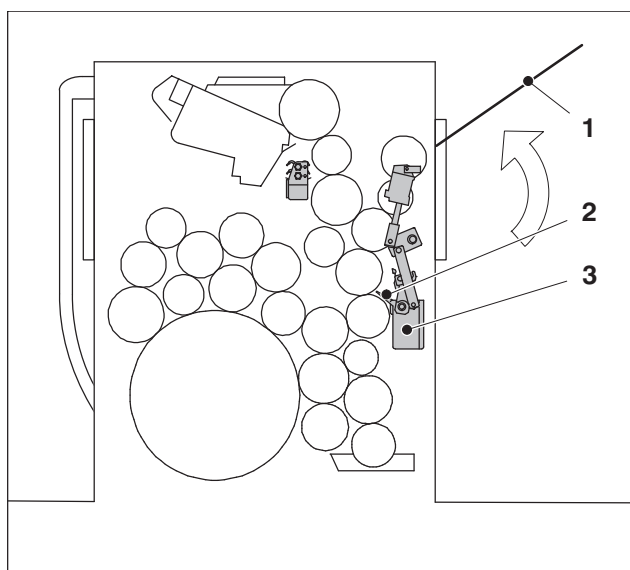


Fig. 11 Place of installation of the washup blade

Place of installation

- 1 Guard "Inking unit"
- 2 Washup blade
- 3 Washup tray

The washup blade of the inking roller washup device is mounted behind the "Inking unit" guard in every printing unit.

► **Note**
Consult also the chapter on the "Inking Unit" in your operating manual.

2.4.1 Cleaning rubber lip and washup blade trough

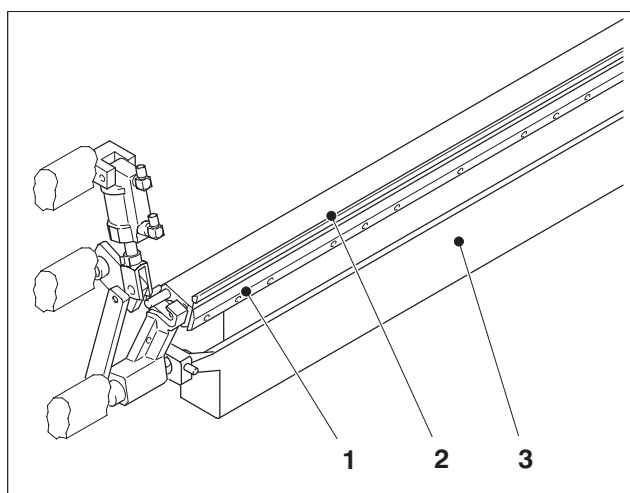


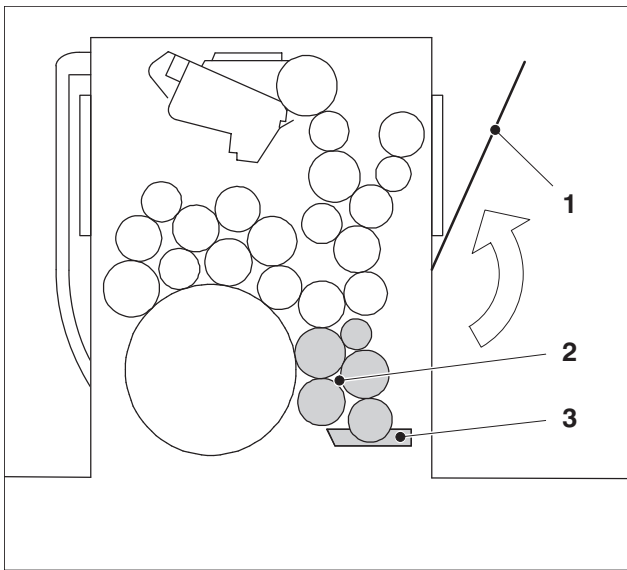
Fig. 12 Washup blade

- 1 Washup blade
- 2 Rubber lip
- 3 Washup tray

Description of the cleaning points	
Cleaning interval	I
Cleaning location	From D.S. to O.S.
Accessing the cleaning point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Cleaning work	Clean the rubber lip and blade trough.
Required resources	Protective gloves; Soft, lint-free cloth
Washing fluid	Note "Approved washing fluids".

Tab. 6

2.5 Dampening system - dampening solution pan



FS.030.0004-000BRAND_00

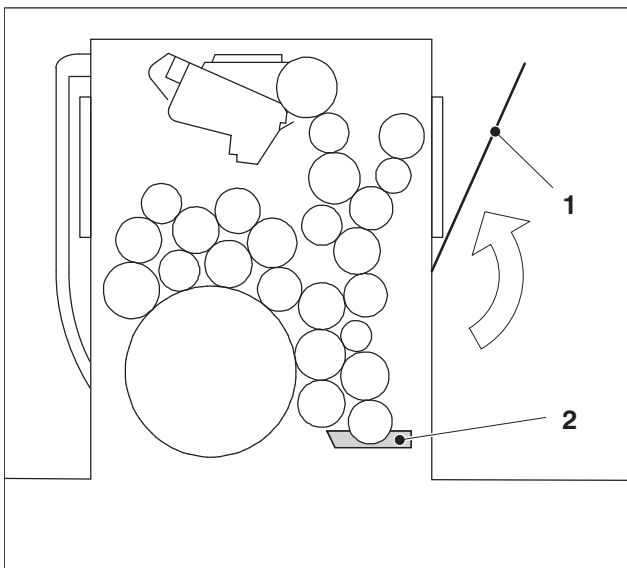
Place of installation

- 1 Guard "Inking unit"
- 2 Dampening rollers
- 3 Dampening solution pan

The dampening solution pan is mounted behind the "Inking unit" guard.

Fig. 13 Place of installation of the dampening rollers

2.5.1 Checking and cleaning the dampening solution pan



FS.030.0006-000BRAND_00

- 1 Guard "Inking unit"
- 2 Dampening solution pan

Description of the cleaning points	
Cleaning interval	V
Cleaning location	D.S. / O.S.
Accessing the cleaning point	Open the "Inking unit" guard.
Cleaning work	Check and clean the dampening solution pan.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Fig. 14 Dampening solution pan

Tab. 7

2.6 Variable transfer drum - cylinder surface

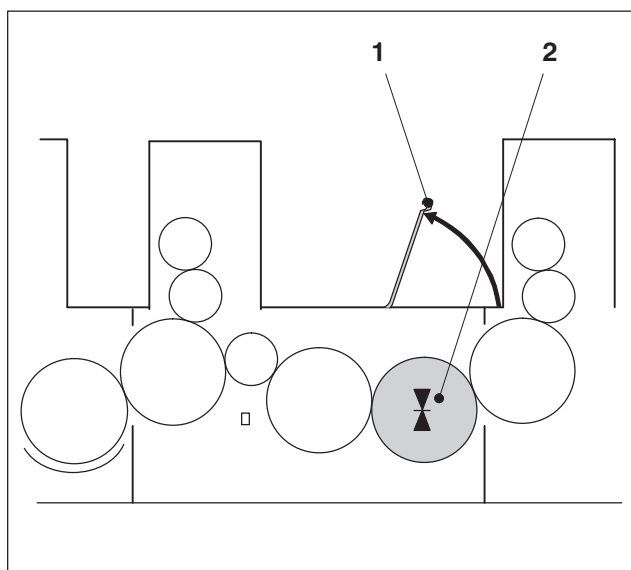


Fig. 15 Cylinder diagram

Place of installation

- 1 Guard "Variable transfer drum"
- 2 Variable transfer drum

The variable transfer drum is mounted under the "Variable transfer drum" guard. The variable transfer drum is mounted in the perfecting unit and in all following printing units and coating units.

2.6.1 Cleaning the TransferJacket

► Note

In addition to the specified cleaning interval I, also clean TransferJacket before the end of every shift and before prolonged press standstill times.

Description of the cleaning points	
Cleaning interval	I
Cleaning location	D.S. to O.S.
Accessing the cleaning point	Open the "Variable transfer drum" guard. Control panel selection: Press the Control panel selection button twice (at an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the surface.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 8

2.7 Reversing drum - cylinder surface

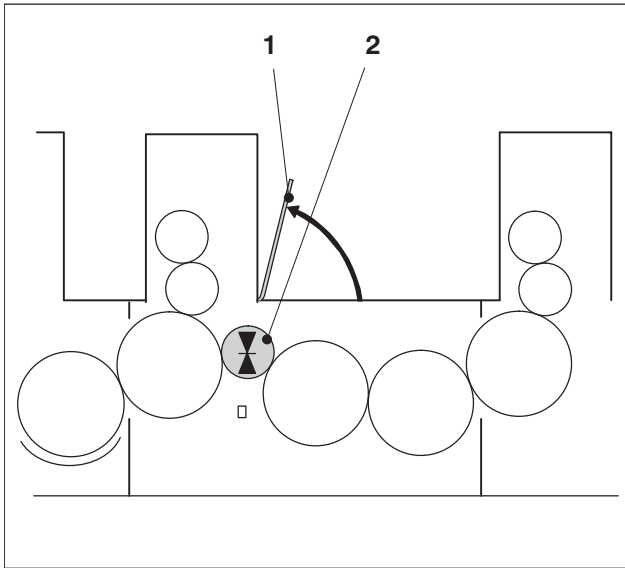


Fig. 16 Place of installation of the reversing drum

Place of installation

- 1 Guard "Reversing drum/storage drum"
- 2 Reversing drum

In the perfecting unit, the reversing drum is fitted below the "Reversing drum/storage drum" guard.

2.7.1 Cleaning the TransferJacket

► Note

In addition to the specified cleaning interval I, also clean TransferJacket before the end of every shift and before prolonged press standstill times.

Description of the cleaning points	
Cleaning interval	I
Cleaning location	From D.S. to O.S.
Accessing the cleaning point	Open the guard "Reversing drum/storage drum". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the surface and check visually for damage.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 9

2.8 Impression cylinder (P) - cylinder surface

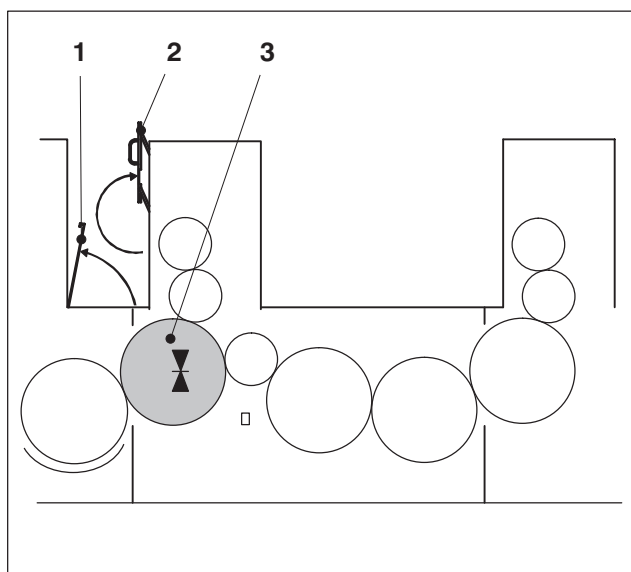


Fig. 17 Cylinder diagram

Place of installation

- 1 Guard "Transfer cylinder"
- 2 Guard "Plate cylinder/blanket cylinder"
- 3 Impression cylinder (P)

The impression cylinders (P) are fitted in the perfecting unit and in the units after the perfector under the "Transfer cylinder" guard.

2.8.1 Cleaning the cylinder surface

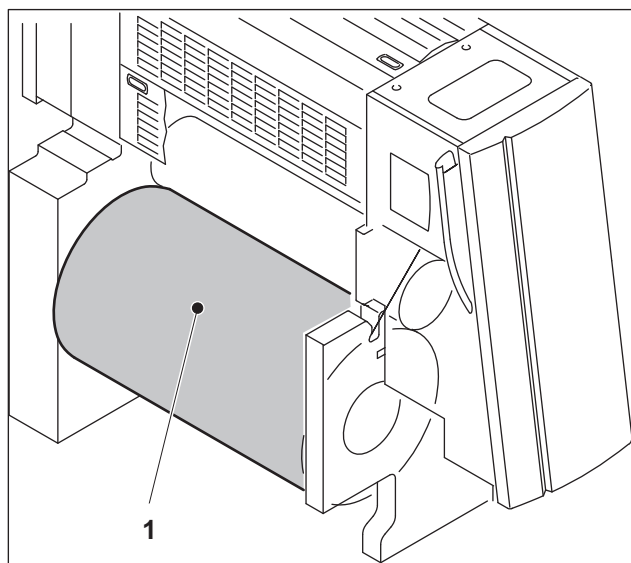


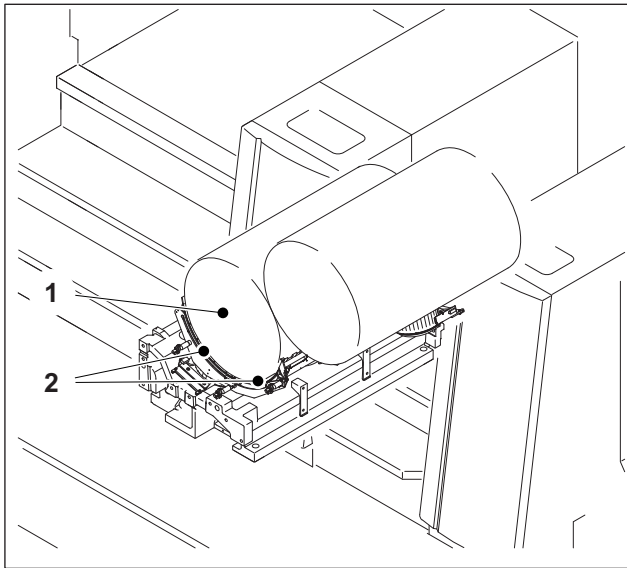
Fig. 18 Cylinder surface of the impression cylinder

1 Impression cylinder (P)

Description of the cleaning points	
Cleaning interval	I
Cleaning location	From D.S. to O.S.
Accessing the cleaning point	Open the "Transfer cylinder" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the cylinder surface.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 10

2.9 Sheet guide - Sheet guide plates



FS.614.009-000BRAND_00

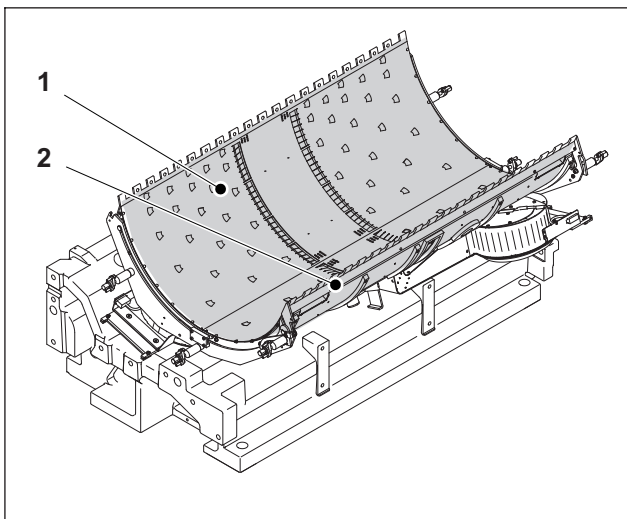
Place of installation

- 1 Variable transfer drum
- 2 Sheet guide plate on the delivery and feeder sides

On the variable transfer drum, the sheet guide plate guides the sheet without any contact. Two sheet guide plates can be removed for cleaning purposes.

Fig. 19 Place of installation of the sheet guide plates

2.9.1 Cleaning the sheet guide plates



FS.614.0016-000BRAND_00

- 1 Sheet guide plate on the delivery side
- 2 Sheet guide plate on the feeder side

Fig. 20 Sheet control between the printing units

Description of the cleaning points	
Cleaning interval	IV
Cleaning location	In each printing/coating unit after the perfecter.
Accessing the cleaning point	Adjust the variable transfer drum to a smaller size of the surface (see "Mounting and demounting the sheet guide plates"). Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Open the guard "Plate/impression cylinder" and the guard "Variable transfer drum". Please refer to the "Removing" and "Fitting" sections.
Cleaning work	Demount and clean 2 sheet guide plates, clean 1 fixed sheet guide plate. Check the condition.
Required resources	Protective gloves, soft, lint-free cloth

Description of the cleaning points	
Washing fluid	Note "Approved washing fluids".

Tab. 11



Caution - Risk of damage to sheet guide plate!

When mounting and demounting the sheet guide plates, make sure that they do not trail over the grippers of the variable transfer drum.



Caution - Risk of damage to cylinder surface!

When mounting and demounting the sheet guide plates, make sure that they do not contact the cylinder surface.



Tip

Place a sheet of paper on the cylinder surface and then demount the sheet guide plates.

Demounting the sheet guide plates



Requirement

The press is not in production. There is no paper in the press.

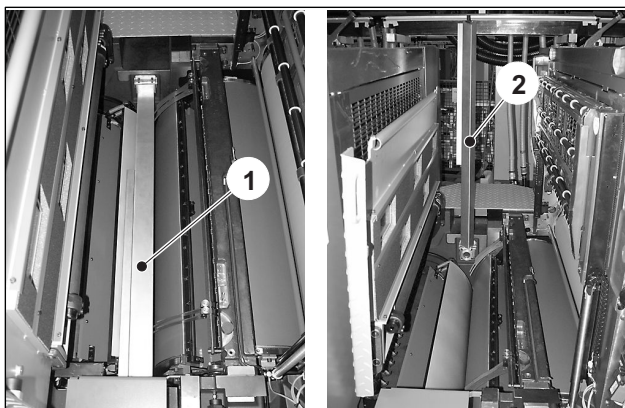


Fig. 21 Swinging up the blower bar

Demounting

1. Fold in the variable transfer drum on the selected printing unit via the control station. Please refer to the operating manual, chapter "Control system, Preparing a job, Fully automatic perfector" for more details on this.
2. Open the transfer guard.
3. Lift the blower bar (Fig. 21/1) on O.S. out of its bracket and swing the blower bar toward D.S. and upward (Fig. 21/2).
4. Take the blower bar upward out of the printing unit and put it down at a protected location.

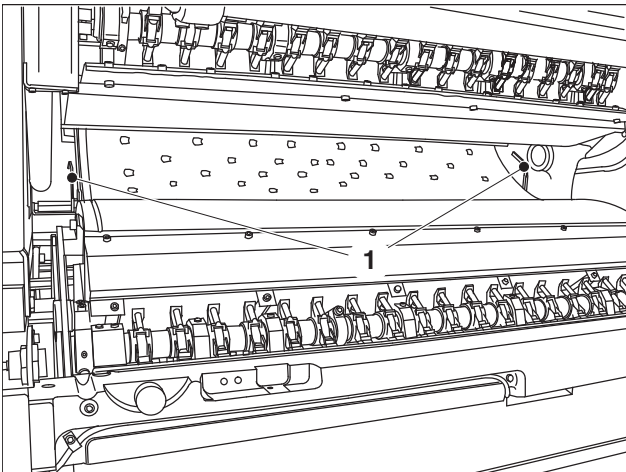


Fig. 22 Locking device of the sheet guide plate

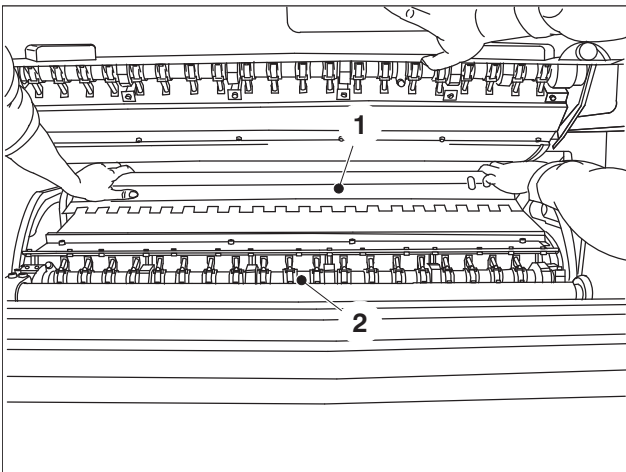


Fig. 23 Removing the sheet guide plate

1. Open the transfer guard.
2. Inch the press until the grippers of the transfer drum are at the top (Fig. 23/2). Continue to inch the press another 10°.

► **Note**

Get a second person to help you demount the sheet guide plates.

3. Secure the press against being started up: Press the *Emergency stop* button on the delivery control panel.
4. Open the locking device (Fig. 22/1) on D.S. and O.S.

Swivel the handles upward and hold them tight in this position.

The rows of fans below the sheet guide plates swing downward. The rows of fans are thereby disconnected from the sheet guide plates.

5. Swivel the sheet guide plate on the infeed side upward out of the locking device using your thumbs.
6. Lift the sheet guide plate up (Fig. 23/1) and out of the printing unit.

When you demount the sheet guide plate, make sure that it does not hit against the Transfer Jacket on the transfer drum. When you demount the sheet guide plate, guide it out with your free hand.

The sheet guide plate on the outlet side follows as soon as you remove the sheet guide plate on the infeed side.

7. Lift the sheet guide plate up on the outlet side, and out of the printing unit.
8. Insert the blower bar into the printing unit (Fig. 21/2).
9. Swing the blower bar (Fig. 21/2) downward (Fig. 21/1) and guide the blower bar into the bracket on O.S.
10. Close the transfer guard between the printing units.

Error message after removing the sheet guide plates

After the sheet guide plate on the infeed side has been removed, the control system signals a red malfunction. Inching mode is only possible on this unit.



Caution - Damage to the press due to incorrectly inserted sheet guide plate!

Before acknowledging a red malfunction, check whether the sheet guide plates on the individual printing units have been demounted completely. Adjust any incorrectly positioned sheet guide plates accordingly. If you acknowledge the red error message without checking it, you will damage the press in inching/crawl speed mode or when positioning.

The error message disappears when the sheet guide plate has correctly been mounted.

When you acknowledge the malfunction on the control station, the error message changes from red to yellow. You can now move all printing units in inching and crawl speed mode and perform positioning.

Fitting the sheet guide plates

1. Open the transfer guard.
2. Lift the blower bar (Fig. 24/1) on O.S. out of its bracket and swing the blower bar toward D.S. and upward (Fig. 24/2).
3. Take the blower bar upward out of the printing unit and put it down at a protected location.

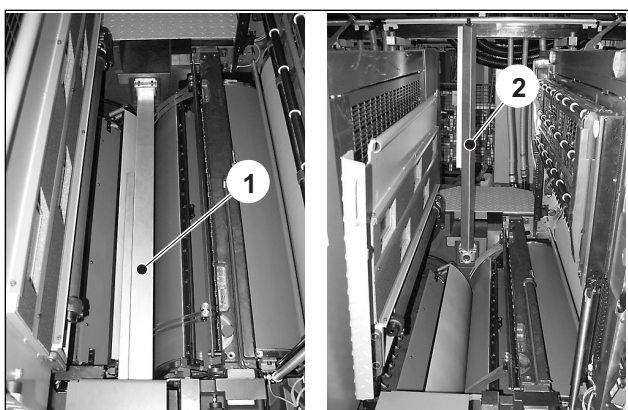


Fig. 24 Swinging up the blower bar

4. Open the transfer guard.
5. Inch the press until the grippers of the transfer drum are at the top (Fig. 23/2). Continue to inch the press another 10°.

► **Note**

Get a second person to help you fit the sheet guide plates.

6. Secure the press against being started up: Press the *Emergency stop* button on the delivery control panel.
7. Place the guide pins of the delivery-side sheet guide plate onto the guide rails in the printing unit. Slide the sheet guide plate into the printing unit from above.
8. Place the guide pins of the infeed-side sheet guide plate onto the guide rails in the printing unit. Slide the sheet guide plate into the printing unit from above.

Use the sheet guide plate on the infeed side to push the sheet guide plate on the outlet side into position.

When you mount the sheet guide plate, make sure that it does not hit against the TransferJack-etPlus on the transfer drum. When you mount the sheet guide plate, guide it in with your free hand.

9. Allow the sheet guide plate on the infeed side to fall into the locking device in the fitting position. The locking device has to lock into place on D.S. and O.S.

Once installation has been completed, check whether the sheet guide plate at the infeed side is locked on D.S. and on O.S.



Caution - Damage to the press due to incorrectly inserted sheet guide plate!

Before acknowledging a red malfunction, check whether the sheet guide plates on the individual printing units have been demounted completely. Adjust any incorrectly positioned sheet guide plates accordingly. If you acknowledge the red error message without checking it, you will damage the press in inching/crawl speed mode or when positioning.

The error message disappears when the sheet guide plate has correctly been mounted.

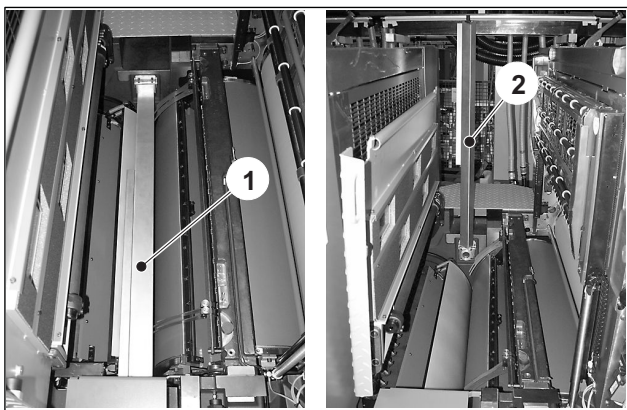


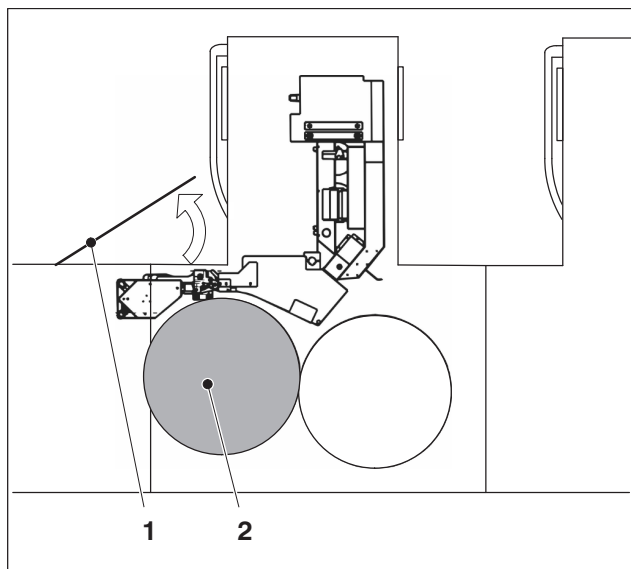
Fig. 25 Swinging up the blower bar

10. Insert the blower bar into the printing unit (Fig. 25/2).
11. Swing the blower bar (Fig. 25/2) downward (Fig. 25/1) and guide the blower bar into the bracket on O.S.
12. Close all open guards.
13. If necessary, fold up the variable transfer drum at the selected printing unit via the control station. Please refer to the operating manual, chapter "Control system, Preparing a job, Fully automatic perfecter" for more details on this.

FS.B14.0132-0007KERN_00

3 Cleaning work at the intermediate unit

3.1 Impression control - bearers



FS.006.0006-0006BAND_00

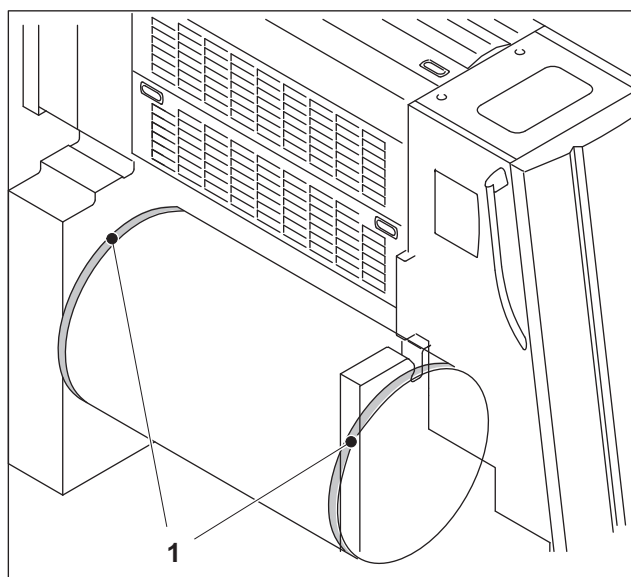
Place of installation

- 1 Guard "Transfer drum"
- 2 Impression cylinder

The bearers sit on the end faces of the impression cylinder. They are on D.S. and on O.S.

Fig. 26 Place of installation of the bearers

3.1.1 Cleaning the bearers



FS.B14.0024-0006BAND_00

1 Bearers

Description of the cleaning points	
Cleaning interval	I
Cleaning location	D.S. / O.S.
Accessing the cleaning point	Open the "Transfer drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the bearers.
Required resources	Protective gloves; Soft, lint-free cloth
Washing fluid	Note "Approved washing fluids".

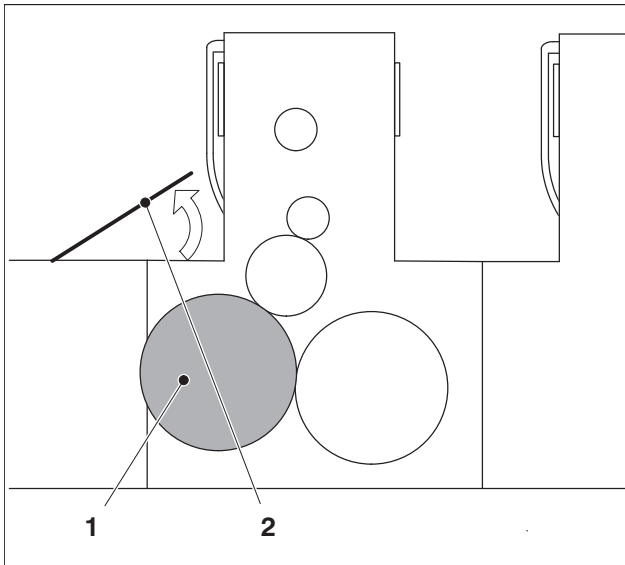
Fig. 27 Bearers

Tab. 12

FS_B04_0133-000FRONT_00

4 Cleaning work at the coating unit

4.1 Impression cylinder without UV interdeck dryer and without LYYL - cylinder surface



FS_011_0003-000FRONT_01

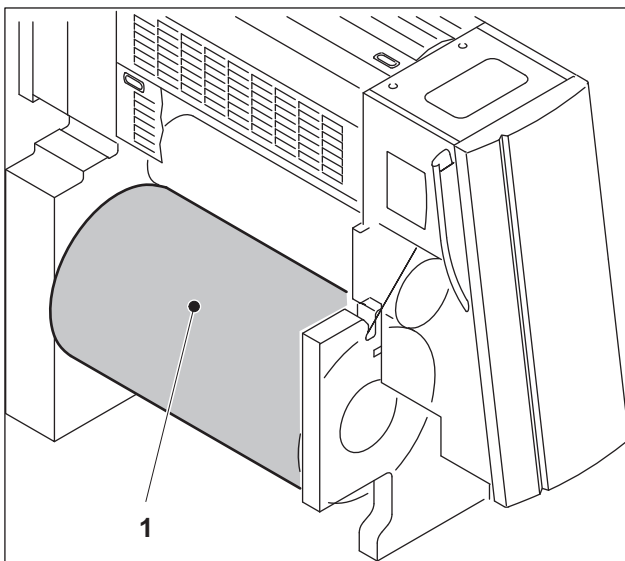
Place of installation

- 1 Impression cylinder
- 2 Guard "Delivery drum"

In the coating unit, the impression cylinder is mounted under the guard "Delivery drum".

Fig. 28 Place of installation of the impression cylinder

4.1.1 Cleaning and checking the refined cylinder surface



FS_B04_0021-000FRONT_00

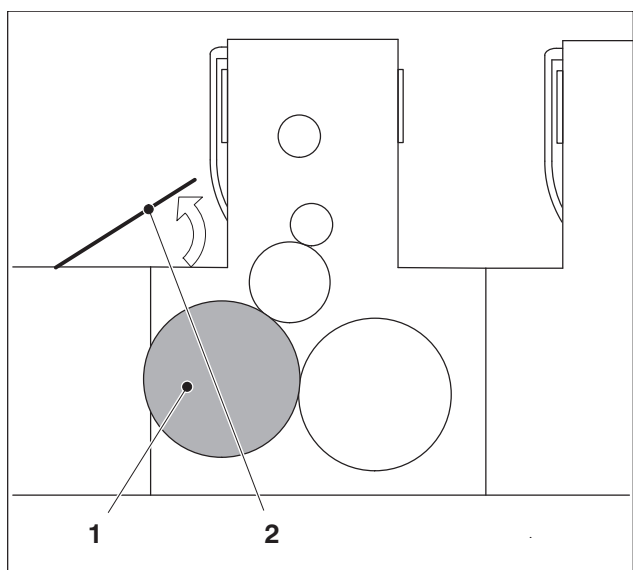
- 1 Impression cylinder

Description of the cleaning points	
Cleaning interval	I
Cleaning location	From D.S. to O.S.
Accessing the cleaning points	Open the "Delivery drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the refined cylinder surface and check visually for damage.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Fig. 29 Refined cylinder surface

Tab. 13

4.2 Impression cylinder with UV interdeck dryer or with LYYL - cylinder surface



FS_011_0003-00000000_00

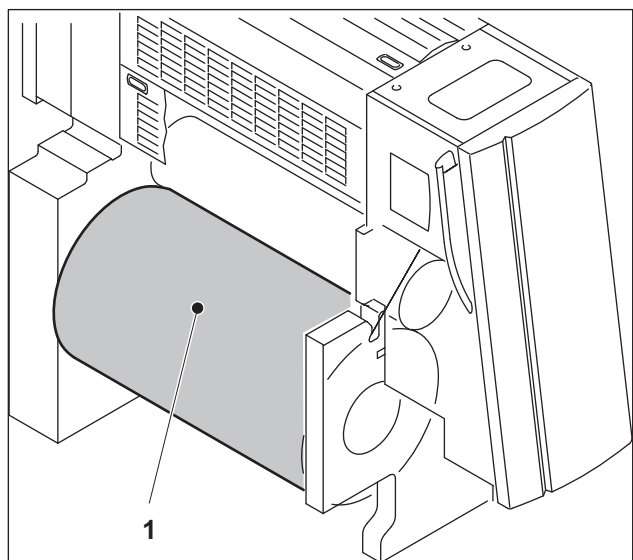
Place of installation

- 1 Impression cylinder
- 2 Guard "Delivery drum"

In the coating unit, the impression cylinder is mounted under the guard "Delivery drum".

Fig. 30 Place of installation of the impression cylinder

4.2.1 Cleaning and checking the refined cylinder surface



FS_004_0021-00000000_00

- 1 Impression cylinder

Description of the cleaning points	
Cleaning interval	I
Cleaning location	From D.S. to O.S.
Accessing the cleaning points	Open the "Delivery drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the refined cylinder surface and check visually for damage.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Fig. 31 Refined cylinder surface

Tab. 14

4.3 Coating blanket cylinder - cylinder surface

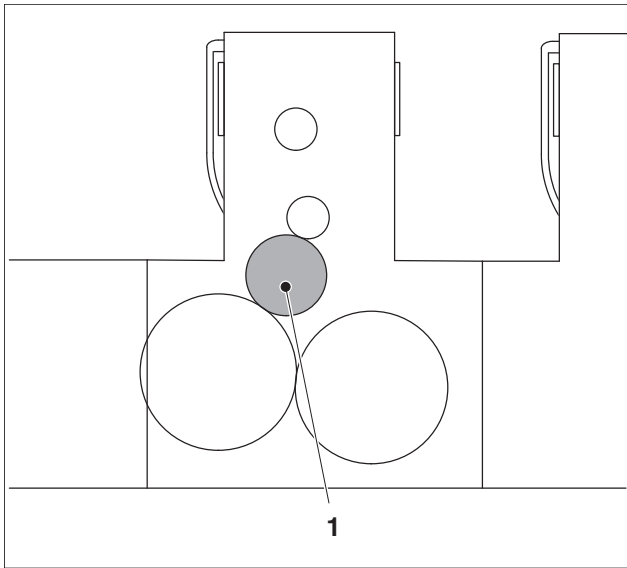


Fig. 32 Place of installation of the coating blanket cylinder

Place of installation

- 1 Coating blanket cylinder

The coating blanket cylinder is behind the "Coating blanket cylinder" guard.

4.3.1 Cleaning and checking the refined cylinder surface

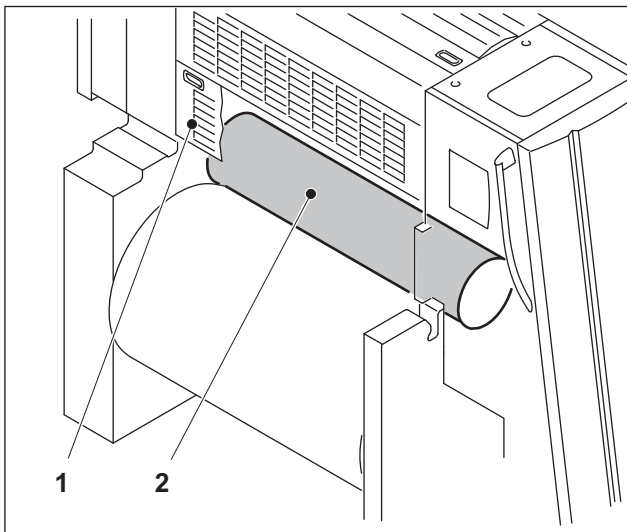


Fig. 33 Coating blanket cylinder

- 1 Guard "Coating blanket cylinder"
- 2 Cylinder jacket

Description of the cleaning points	
Cleaning interval	II
Cleaning location	From D.S. to O.S.
Accessing the cleaning point	Open the guard "Coating blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the sheet-metal jacket and visually check for any damage.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 15

4.4 Coating blanket cylinder - pressing roller

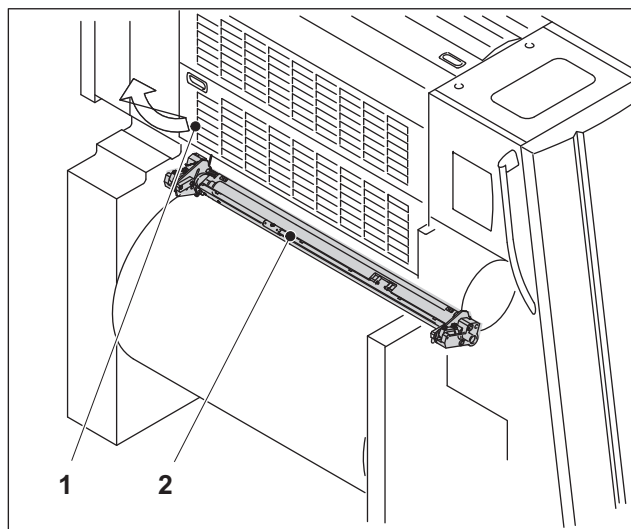


Fig. 34 Place of installation of the pressing roller

Place of installation

- 1 Guard "Coating blanket cylinder"
- 2 Pressing roller

The pressing roller is mounted behind the "Coating blanket cylinder" guard.

4.4.1 Checking and cleaning the pressing roller

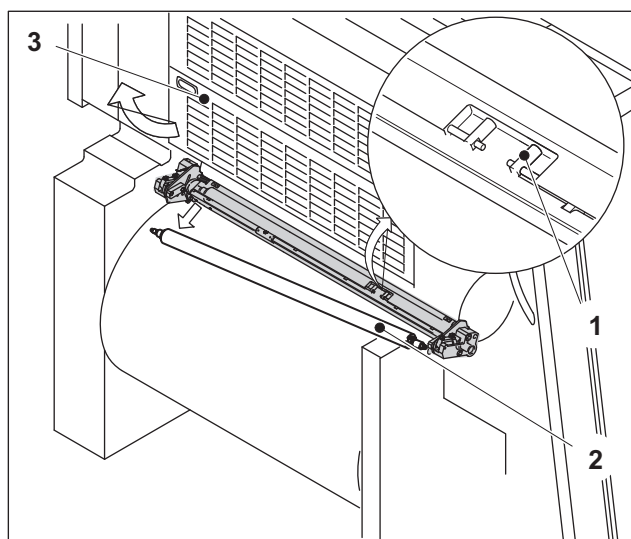


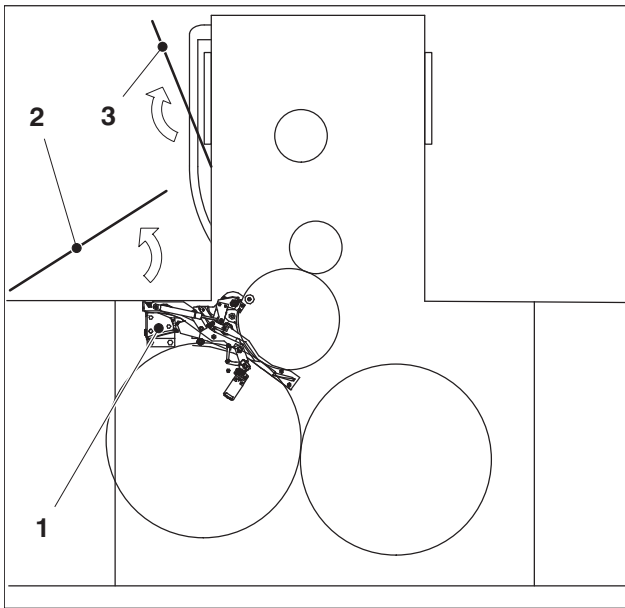
Fig. 35 Pressing roller O.S.

- 1 Locking device on the "Pressing roller" finger protecting bar
- 2 Pressing roller
- 3 Guard "Coating blanket cylinder"

Description of the cleaning points	
Cleaning interval	II
Cleaning location	From D.S. to O.S.
Accessing the cleaning point	Open the guard "Coating blanket cylinder". Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up. Unlock the "Pressing roller" finger protecting bar and swing up the pressing roller. Press the pressing roller towards O.S., and remove it.
Cleaning work	Visually check the condition of the pressing roller. Clean the pressing roller if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 16

4.5 Sheet guide - sheet guide plate after printing nip



FS.805.0001-000GRAND_00

Place of installation

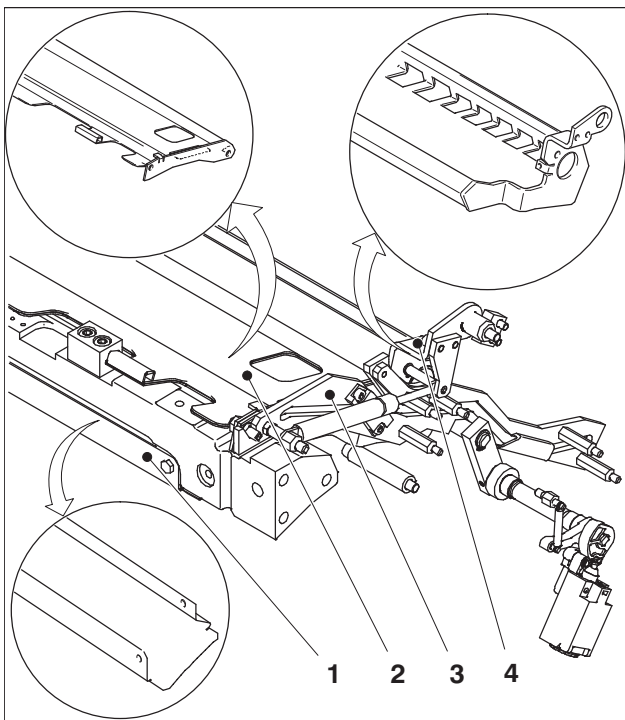
- 1 Sheet guide plate after printing nip
- 2 Guard "Delivery drum"
- 3 Guard "Coating blanket cylinder"

► Note

Consult also the chapter on "Coating Unit"/"Non-smearing Sheet Guidance" in your operating manual.

Fig. 36 Place of installation of the sheet guide plate after printing nip

4.5.1 Checking and, if necessary, cleaning the sheet guide plates and guide plates



FS.805.0001-000GRAND_00

- 1 Sheet guide plate
- 2 Sheet guide plate
- 3 Guide plate, O.S.
- 4 Sheet guide plate

Description of the cleaning points	
Cleaning interval	II
Cleaning location	D.S. / O.S.
Accessing the cleaning points	Open the "Delivery drum" guard. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Number/type/cleaning work	Check the sheet guide plates and guide plate for soiling. Clean the sheet guide plates and guide plate if necessary.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Fig. 37 Sheet guide plates and guide plate, O.S.

Tab. 17

4.6 Impression control - bearers

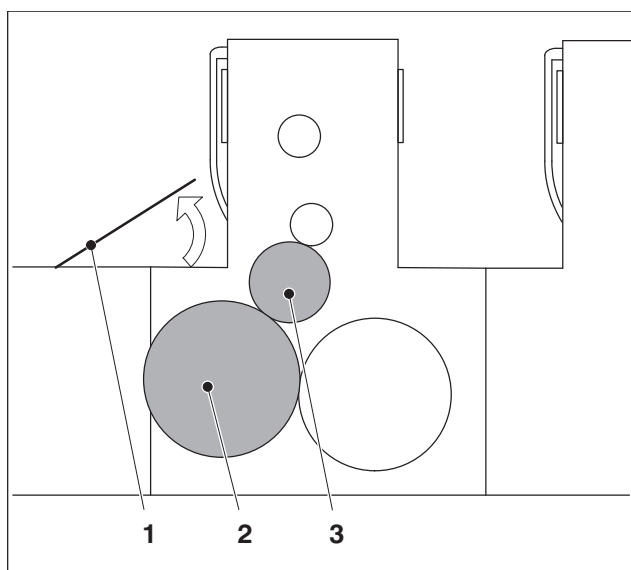


Fig. 38 Place of installation of the bearers

Place of installation

- 1 Guard "Delivery drum"
- 2 Impression cylinder
- 3 Coating blanket cylinder

The bearers sit on the end faces of the impression cylinder. They are on D.S. and on O.S.

4.6.1 Cleaning the bearers

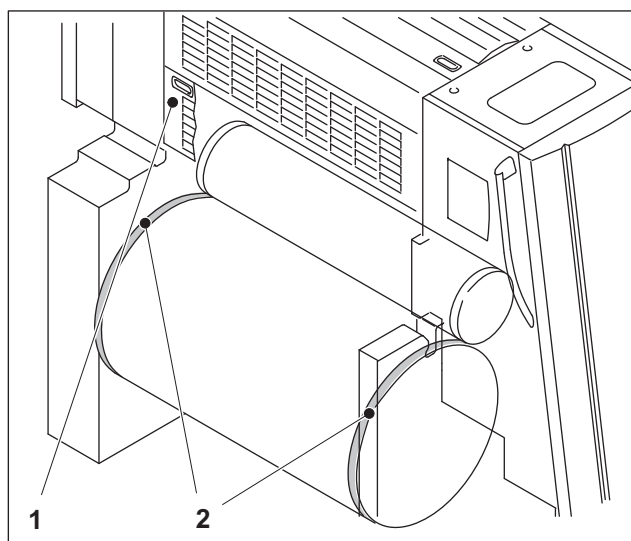


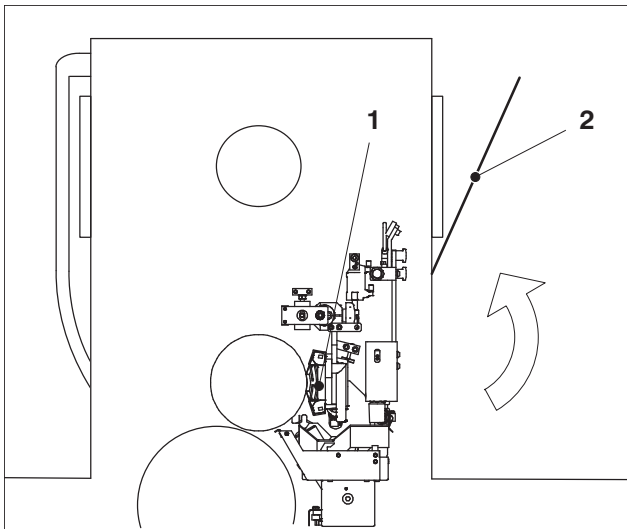
Fig. 39 Bearers

- 1 Guard "Coating blanket cylinder"
- 2 Bearers

Description of the cleaning points	
Cleaning interval	I
Cleaning location	D.S. / O.S.
Accessing the cleaning point	Open the "Delivery drum" and "Coating blanket cylinder" guards. Control panel selection: Press the <i>Control panel selection</i> button twice (with an interval of max. 0.5 seconds). The LED lights up.
Cleaning work	Clean the bearers.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 18

4.7 Chambered blade system - chambered blade



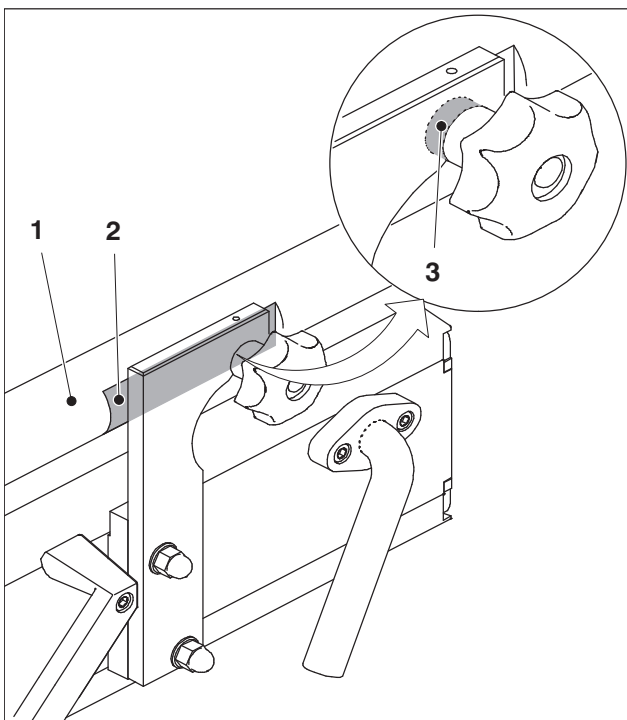
FS_043_0003-000BRAND_00

Place of installation

- 1 Chambered blade
- 2 Guard "Coating unit"

Fig. 40 Place of installation of the chambered blade

4.7.1 Cleaning the supports



FS_043_0005-000BRAND_00

- 1 Cross bar
 - 2 Support (cross bar)
 - 3 Support (chambered blade)
1. Dismount the chamber doctor blade. Refer to the operating manual chapter on "Coating Unit, Chambered Blade"
 2. Clean the supports (Fig. 41/2 and Fig. 41/3).
 3. Fit the chambered blade. Adjust the chambered blade if necessary. Refer to the operating manual chapter on "Coating Unit, Chambered Blade"

Fig. 41 Chambered blade - supports, D.S.

Description of the cleaning points	
Cleaning interval	IV
Cleaning location	D.S. / O.S.
Accessing the cleaning point	Open the guard "Coating blanket cylinder".
Cleaning work	Clean the supports.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 19

4.8 Chambered blade system - screen roller

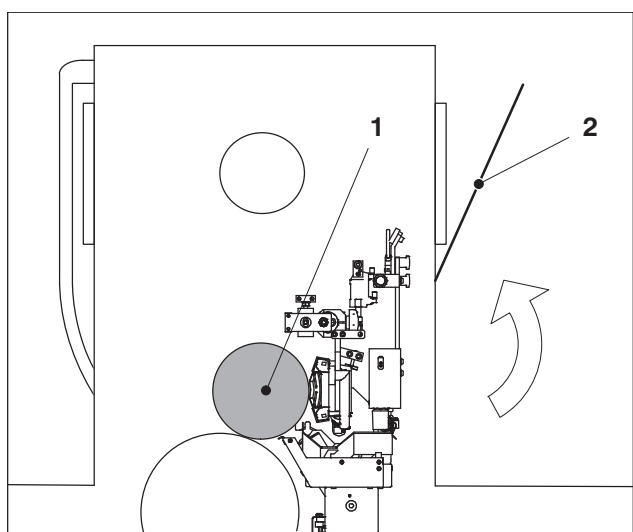


Fig. 42 Place of installation of the screen roller

Place of installation

- 1 Screen roller
- 2 Guard "Coating unit"



Note

Consult also the chapter on "Coating Unit"/"Chambered Blade" in your operating manual.

4.8.1 Cleaning the cylinder surface and face surface

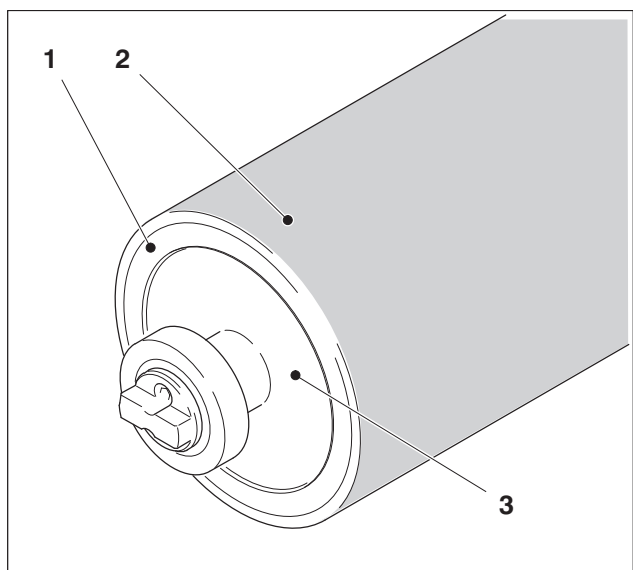


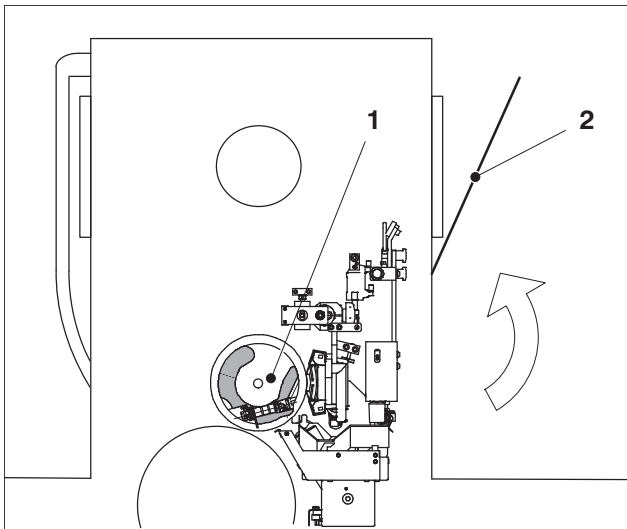
Fig. 43 Screen roller

- 1 End face D.S.
- 2 Cylinder surface
- 3 Screen roller

Description of the cleaning points	
Cleaning interval	I
Cleaning location	From D.S. to O.S.
Accessing the cleaning point	Open the guard "Coating blanket cylinder". Remove the screen roller.
Cleaning work	Clean the cylinder surface and the end faces.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 20

4.9 Screen roller - roller locks



FS.040.0697-000BRAND_00

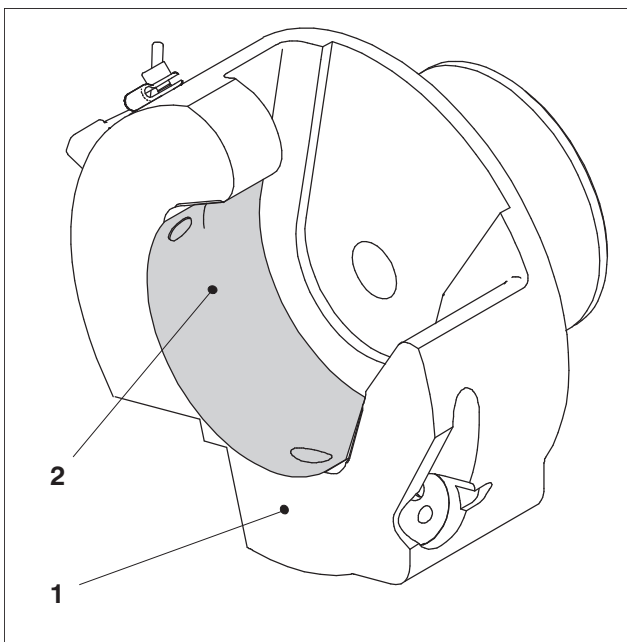
Place of installation

- 1 Roller locks
- 2 Guard "Coating unit"

Axial and radial clamping of the metering roller is ensured by two roller locks D.S./O.S.

Fig. 44 Place of installation of the roller locks

4.9.1 Cleaning the contact surfaces



FS.040.0696-000BRAND_00

- 1 Roller lock O.S.
- 2 Contact surface

Description of the cleaning points	
Cleaning interval	I
Cleaning location	D.S. / O.S.
Accessing the cleaning point	Open the guard "Coating blanket cylinder". Remove the screen roller.
Cleaning work	Clean the contact surfaces.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 21

Fig. 45 Contact surface

4.10 Chambered blade system - pressurized chambered blade

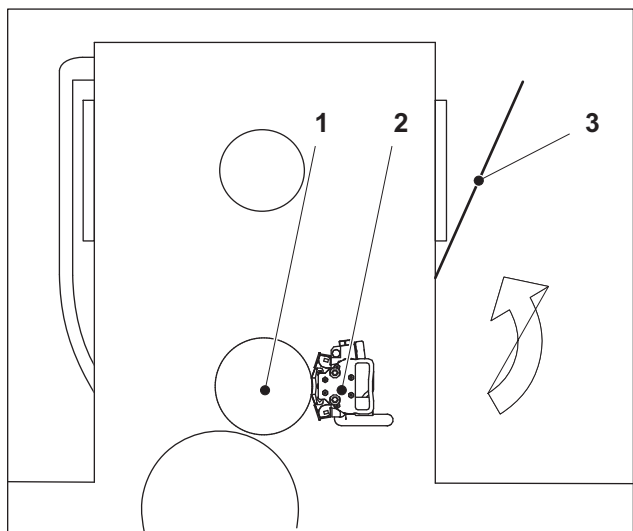


Fig. 46 Place of installation of the pressurized chambered blade

Place of installation

- 1 Metering roller, trihelical roller
- 2 Pressurized chambered blade
- 3 Guard "Coating unit"

The pressurized chambered blade is mounted in the coating unit, behind the "Coating unit" guard.

4.10.1 Removing and cleaning the relief valve

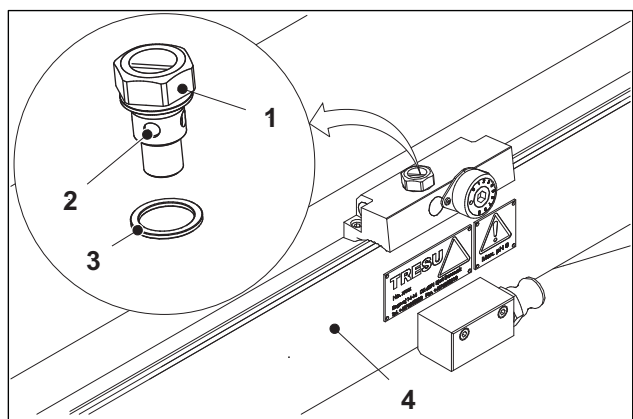


Fig. 47 Relief valve on the pressurized chambered blade

- 1 Relief valve
- 2 Ball
- 3 Flat gasket
- 4 Pressurized chambered blade

Description of the cleaning points	
Cleaning interval	
Cleaning location	Center
Accessing the cleaning point	Open the "Coating unit" guard on the coating unit. See Mounting and demounting.
Cleaning work	Clean the relief valve.
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 22

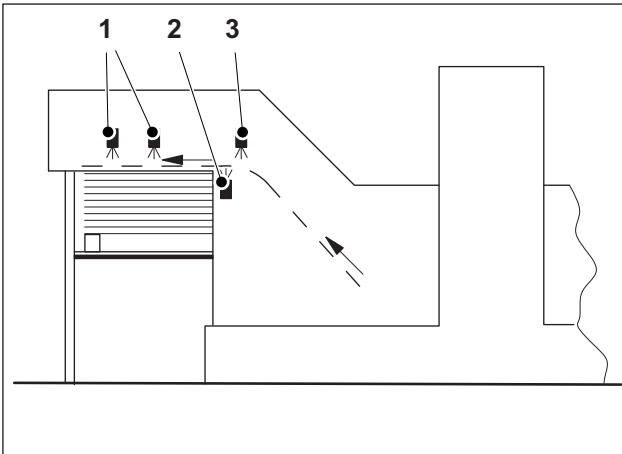
Mounting and demounting the relief valve

1. Unscrew the relief valve (Fig. 47/1) with a fork wrench or ring spanner SW22.
2. Clean the relief valve. Ensure that the ball (Fig. 47/2) can be moved easily.
3. Reinstall the relief valve with the flat gasket (Fig. 47/3).

FS_B04_0134-000FRONT_00

5 Cleaning work at the delivery

5.1 Ionizing unit - ionizing bars



FS_B04_0080-000FRONT_00

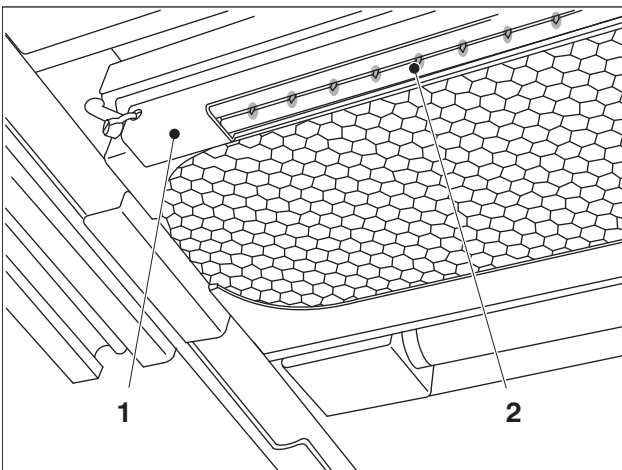
Fig. 48 Place of installation of the ionizing bars

Place of installation

Depending on the version of the printing press, up to 7 ionizing bars are mounted.

- 1 Ionizing bars in the delivery fan (max. 4)
- 2 Ionizing bar on the sheet brake
- 3 Ionizing bar on the powder tube (max. 2)

5.1.1 Cleaning the surface and discharge tips



FS_B04_0078-000FRONT_00

Fig. 49 Discharge openings

- 1 Ionizing bar
- 2 Discharge openings

► **Note**

High voltage is present on the ionizing bar. However, the high voltage is not dangerous to persons due to the low current flow. Nevertheless, avoid touching the discharge openings during operation.

Description of the cleaning points	
Cleaning interval	II
Cleaning location	From D.S. to O.S.
Accessing the cleaning points	Secure the press against being switched back on: Press the <i>Emergency stop</i> button on the next-nearest control panel.
Number/type/cleaning work	Clean the surface and discharge tips of the ionizing bars.
Required resources	Paint brush; brush, protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 23

5.2 Sheet guide - sheet guide plates and powder deflectors

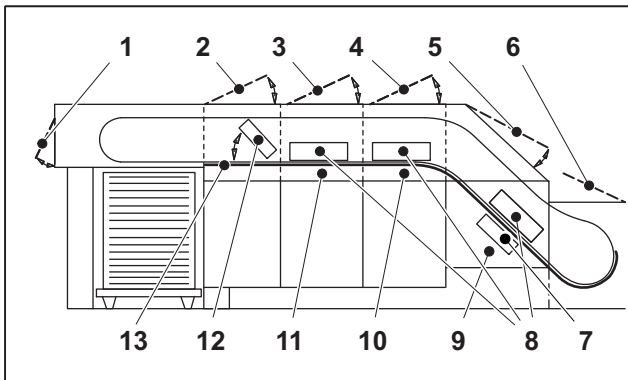


Fig. 50 Place of installation of the sheet guide plates and powder deflectors

Place of installation

- 1 Glass guard, delivery
- 2 Guard "Pile module"
- 3 Guard "Delivery extension 2"
- 4 Guard "Delivery extension 1"
- 5 Guard "Sheet ascent ramp"
- 6 Guard "Transfer drum"
- 7 Chain guide/suction ducts
- 8 Slide-in dryer
- 9 "Slide-in dryer" guard
- 10 Guard "Slide-in dryer delivery extension 1"
- 11 Guard "Slide-in dryer delivery extension 2"
- 12 Powder spray device
- 13 Sheet guide plates and powder deflector

Figure 50 shows a delivery with 2 delivery extensions. The sheet guide plates and powder deflectors are installed underneath the following guards:

- Guard "Transfer drum"
- Guard "Sheet ascent ramp"
- Guard "Delivery extension 1"
- Guard "Delivery extension 2"
- Guard "Pile module"

5.2.1 Cleaning sheet guide plates and powder deflectors

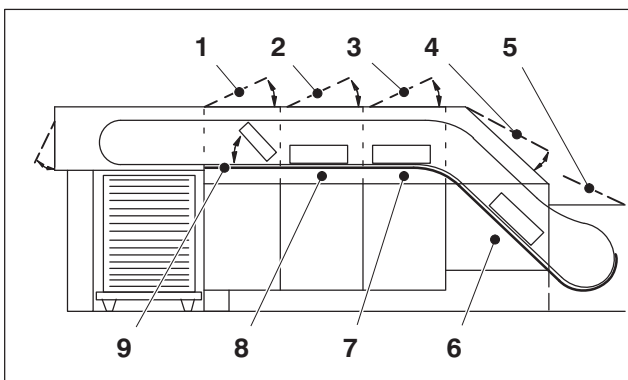


Fig. 51 Delivery with 2 extensions

- 1 Guard "Pile module"
- 2 Guard "Delivery extension 2"
- 3 Guard "Delivery extension 1"
- 4 Guard "Sheet ascent ramp"
- 5 Guard "Transfer drum"
- 6 "Slide-in dryer" guard
- 7 Guard "Slide-in dryer delivery extension 1"
- 8 Guard "Slide-in dryer delivery extension 1"
- 9 Sheet guide plate

To perform the following cleaning work, you need to open the corresponding guards of the respective variant.

Description of the cleaning points	
Cleaning interval	I
Cleaning location	-

Description of the cleaning points	
Accessing the cleaning point	Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/cleaning work	Clean the sheet guide plates and powder deflectors. Note: Please note "Blast air 100 % (self-protection)".
Required resources	Soft, lint-free cloth; protective gloves
Washing fluid	Note "Approved washing fluids".

Tab. 24

Blast air 100 % (self-protection)

The blast air at the sheet guide plate in the delivery zone automatically adjusts to 100 % when the following requirements are fulfilled:

- There is no printing material in the sheet travel.
- The emergency stop button is not pressed.
- The last unit is rendered safe.
- One of the following guards is open:
 - Guard "Pile module"
 - Guard "Delivery extension 1"
 - Guard "Delivery extension 2"
 - Guard "Sheet ascent ramp"
 - Guard "Transfer drum"

- 1 Powder deflector D.S./O.S.
- 2 Sheet guide plates and powder deflector

If one or more dryers are installed in the printing press, pull out the slide-in dryers and swing up the powder spray device.

1. Open the guards concerned and pull out the existing slide-in dryers.

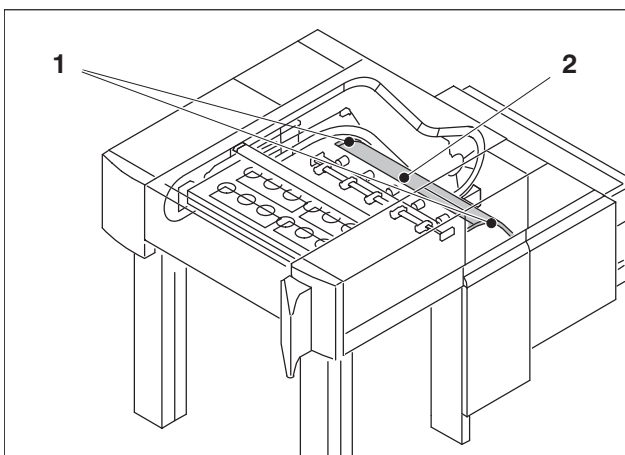


Fig. 52 Sheet guide plates and powder deflector

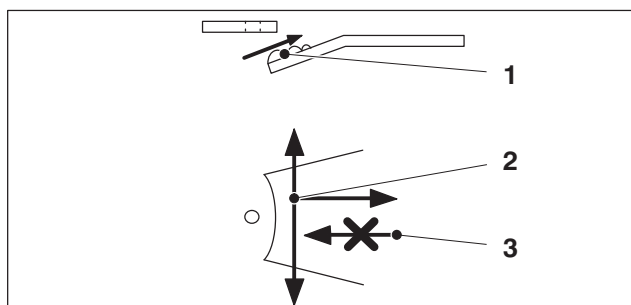


Fig. 53 Cleaning diagram of the air-blast nozzle

- 1 Powder dust in the air-blast nozzle
- 2 Direction of cleaning
- 3 Prohibited direction of cleaning



Caution - Press damage!

Clean the sheet guide plates and powder deflectors so that you wipe the powder dust in the direction of the blast air (Fig. 53/2). Never wipe the powder dust into the air-blast nozzles (Fig. 53/3).

- 2. Clean the sheet guide plates (Fig. 52/2) and the powder deflectors on D.S. and on O.S. (Fig. 52/1). To do this, use a cloth moistened with washing fluid. Please observe the cleaning diagram at the air-blast nozzle (Fig. 53).
- 3. Remove any cleaner residues with a soft and dry cloth.
- 4. Insert the slide-in dryers back into the delivery. Close the guards.

5.2.2 Checking and, if necessary, cleaning the chain guides and suction ducts

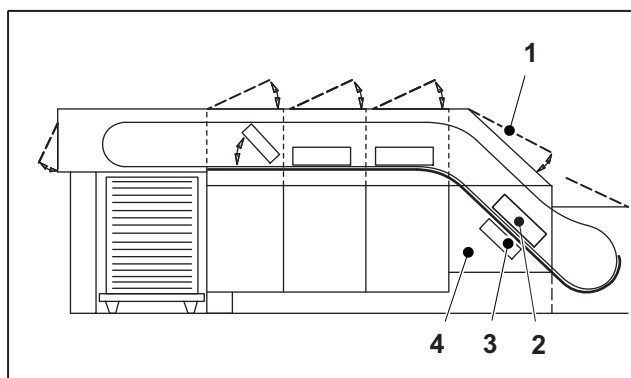


Fig. 54 Chain guides and suction ducts

- 1 Guard "Sheet ascent ramp"
- 2 Slide-in dryer
- 3 Chain guides and suction ducts
- 4 "Slide-in dryer" guard

Description of the maintenance point	
Maintenance interval	I
Maintenance location	From D.S. to O.S.
Accessing the maintenance point	Remove the slide-in dryer unit. Open the "Sheet ascent ramp" guard. Secure the press against being switched on: set the main switch to <i>0/Off</i> and lock it with a padlock. Leave a sign with the name of the person who is authorized to switch on the press.
Number/type/maintenance work	Check the chain guides and suction ducts for soiling. Clean the room if necessary. Remove any scraps and sheets of paper from the lowest point of the sheet path and the suction ducts. Remove any powder deposits from the chain guides and the suction ducts.
Required resources	Soft, lint-free cloth

Description of the maintenance point	
	Approved industrial vacuum cleaner

Tab. 25

5.3 Air supply - delivery fan

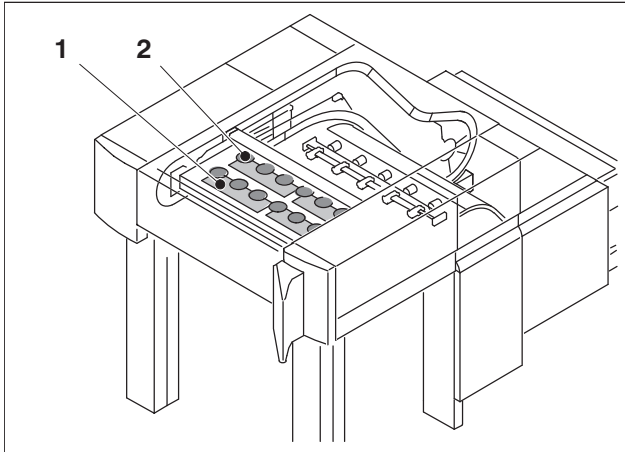


Fig. 55 Place of installation of the delivery fans

Place of installation

1 Honeycomb grid

2 Delivery fans

The delivery fans can be reached from the top through the "Pile module" guard. The honeycomb grids are installed underneath the delivery fans. They can be reached from the bottom.

5.3.1 Cleaning the delivery fan and honeycomb grid

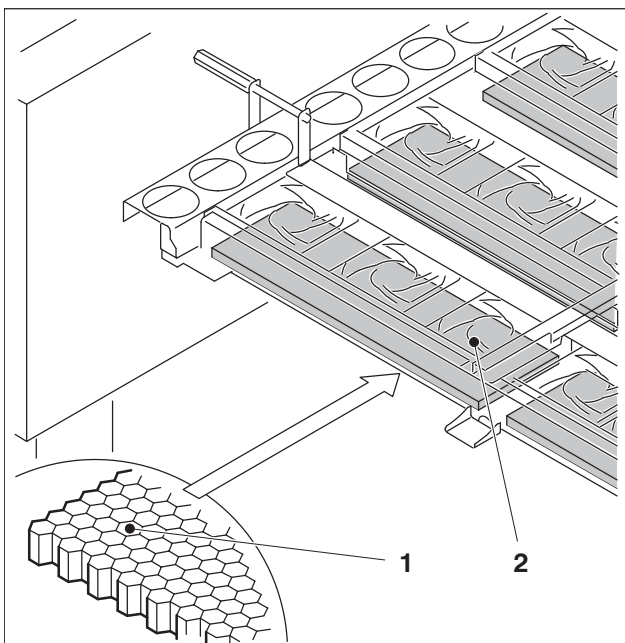


Fig. 56 Delivery fan and honeycomb grid

1 Honeycomb grid

2 Delivery fans

Description of the cleaning points	
Cleaning interval	II
Cleaning location	-
Accessing the cleaning point	Open the "Pile module" guard and the "Delivery guard" at the front.
Number/type/cleaning work	Clean the delivery fans and honeycomb grids.
Required resources	brush, Approved industrial vacuum cleaner

Tab. 26

Index

A

- Air filter "Pull lay/suction drive roller suction air"
 - Cleaning the filter cartridges B.2.15
 - Replacing the filter cartridges B.2.15
- Air filter "Sheet brake"
 - Filter cartridge, description of maintenance points B.5.35
- Air filter "Sheet decurler"
 - Filter cartridge, description of maintenance points B.5.35
- Air filter "Suction air for suction tape"
 - Place of installation B.1.23
- Air filter for the sheet guide plate blower
 - Filter cartridge, description of maintenance points B.5.38
- Air filter of the Wallscreen B.6.24
- Air supply
 - Air filter, description of the maintenance points B.1.23
 - Air filter "Sheet brake" B.5.35
 - Air filter "Sheet decurler" B.5.35
 - Air filter for the sheet guide plate blower B.5.38
 - Blower "Suction air for suction tape" B.1.23
 - Cleaning the delivery fan and honeycomb grid C.1.31
 - Delivery fan C.1.31
- Automatic non-stop device
 - Cleaning the guide rails B.1.11
 - Cleaning the guide rails of the safety shutters B.1.13
 - Cleaning the safety shutters B.1.12
 - Cleaning the sensors B.1.10
 - Cleaning the suspension B.1.11
 - Protective roller blinds B.1.12
- AutoPlate Advanced
 - Checking and, if necessary, cleaning the guide rollers B.2.51
 - Checking and, if necessary, cleaning the guide shafts B.2.49
 - Checking and, if necessary, replacing the guide straps B.2.50
 - Cleaning, replacing the clamps and O-seals B.2.50
 - Cleaning the "Rear edge of plate" sensor B.2.52
- AutoPlate XL
 - Checking and, if necessary, cleaning or replacing the register pins B.2.58
 - Checking and, if necessary, cleaning the "New plate ready" sensor B.2.57
 - Checking and, if necessary, cleaning the "Rear edge of plate" sensor B.2.57
 - Checking and, if necessary, cleaning the "Register pin, PPD system" sensor B.2.59

- Checking and, if necessary, cleaning the counter rollers and silicone rings on the tape driving roller B.2.56
 - Checking and, if necessary, cleaning the guide rollers and guide rails B.2.56
 - Checking and, if necessary, cleaning the guide shafts B.2.53
 - Checking and, if necessary, cleaning the silicone rings B.2.58
 - Checking and, if necessary, replacing the guide straps B.2.54
 - Setting the cleaning function B.2.54
- AutoPlate XL plate changer
- Holding device B.2.53

B

- Bearers
- Place of installation C.1.16
- Blanket cylinder
- Checking the sheet-metal jacket B.2.60
- Blanket washup device B.2.61
- Checking and, if necessary, cleaning the locking device B.2.62
 - Checking and, if necessary, cleaning the spray tubes B.2.64
 - Checking and, if necessary, cleaning the swiveling table of the blanket washup device B.2.65
 - Checking and, if necessary, replacing the control lever B.2.61
 - Cleaning and checking the distributor bar and replacing it, if necessary B.2.64
 - Cleaning and checking the rubber lip and replacing it if necessary B.2.63
 - Lubricating the bearing bolts B.2.63
 - Lubricating the brake B.2.62

C

- Central grease lubrication
- Examining the grease cartridge B.1.26
 - Grease pump B.1.25
 - Mounting and demounting the grease cartridge B.1.26
- Central oil lubrication
- Cleaning drip pans B.6.11
 - Maintenance work B.6.8
 - Performing a lubricant change B.6.8
 - Replacing the filter cartridge B.6.10
- Chain guide
- Place of installation B.5.9
- Chambered blade
- Cleaning the level sensor B.4.18
 - Cleaning the supports C.1.23
 - Level sensor B.4.18

- Chambered blade system
 - Removing and cleaning the relief valve C.1.26
 - Roller locks B.4.17
 - Screen roller B.4.16
 - Chambered blade system
 - Chambered blade C.1.23
 - Pressurized chambered blade C.1.26
 - Screen roller C.1.24
 - Checking the locking mechanism of the sheet guide plate
 - Prinect Inpress Control B.2.40
 - Checking the swiveling unit B.2.38
 - Checklist
 - Signature box A.2.4
 - Cleaning
 - Maintenance and cleaning reduces costs A.1.3
 - Cleaning the sheet guide plate
 - Prinect Inpress Control B.2.39
 - Cleaning work
 - Coating unit A.3.8
 - Delivery A.3.10
 - Feeder A.3.4
 - Intermediate unit A.3.7
 - Printing unit A.3.5
 - Cleaning work, automatic
 - Approved cleaners A.1.21
 - Approved water A.1.22
 - Cleaning work, manual
 - Approved auxiliary equipment for reversing drum A.1.17
 - Approved cleaners A.1.18
 - Approved water A.1.21
 - General note A.1.17
 - CleanStar
 - Cleaning the suction ducts B.5.40
 - Suction ducts B.5.40
 - Coating blanket cylinder
 - Checking and cleaning the pressing roller C.1.20
 - Cleaning and checking the refined cylinder surface C.1.19
 - Cylinder surface C.1.19
 - Pressing roller C.1.20
 - Coating unit
 - Chambered blade system B.4.16
 - Cleaning checklist A.3.8
 - Gripper systems B.4.12, B.4.14
 - Impression cylinder without UV interdeck dryer and without LYYL B.4.12
 - Impression cylinder with UV interdeck dryer or LYYL B.4.14
 - Maintenance checklist A.2.23
 - Maintenance with service support B.7.11
 - Overview of the maintenance points B.4.6
 - Sheet travel monitor B.4.11
 - Transfer drum without UV interdeck dryer and without LYYL B.4.7
 - Transfer drum with UV interdeck dryer or LYYL B.4.9
 - Varnish supply B.4.19
 - Color coding A.1.7
 - Compressed-air control unit
 - Mounting and demounting B.1.22
 - Control cabinet of the SinuSynchro main driving motor
 - Cleaning the filter element B.6.16
 - Replacing the filter element B.6.16
 - Cover guide
 - Lubricating the spring rod B.2.17
- ## D
- Dampening system
 - Checking and cleaning the dampening solution pan C.1.7
 - Dampening solution pan C.1.7
 - Lubricating the claw and driver B.2.76
 - Rider roller B.2.76
 - Water pan roller and metering roller B.2.77
 - Delivery
 - Air supply B.5.35
 - Cleaning checklist A.3.10
 - CleanStar B.5.40
 - Maintenance checklist A.2.25
 - Maintenance with service support B.7.13
 - Non-stop device B.5.27
 - Overview, maintenance points B.5.6
 - Pile guidance and pile transport B.5.28
 - Safety instructions B.5.3
 - Sheet brake system B.5.15
 - Sheet decurler B.5.30
 - Sheet guide B.5.31
 - Sheet joggers B.5.24
 - Sheet transport without UV end-of-press dryer B.5.7
 - Sheet transport with UV end-of-press dryer B.5.11
 - Double sheet detector
 - Sensor B.2.11
 - Double sheet detector sensor
 - Cleaning B.2.11
 - Drive belt, pull lay drive / printing unit 1
 - Checking replacement date B.2.16
 - Drive of the water pan roller and metering roller
 - Lubricating the gears of the water pan roller and metering roller B.2.77
- ## E
- Entire press
 - Central oil lubrication B.6.8
 - Control cabinet of the SinuSynchro main driving motor B.6.16
 - Main motor B.6.12
 - Maintenance checklist A.2.30

- Overview maintenance points B.6.5
 - PressCenter B.6.18
 - Prinect Axis Control B.6.22
 - Safety instructions B.6.3
 - Wallscreen B.6.24
- F**
- Feed cylinder without UV interdeck dryer
- Cleaning the "Sheet detection feed cylinder" sensor B.2.26
 - Gripper system B.2.24
 - Lubricating the gripper shaft bearing B.2.25
 - Lubricating the roller lever B.2.24
 - Sensor "Sheet detection feed cylinder" B.2.25
- Feed cylinder with UV interdeck dryer
- Cleaning the "Sheet detection feed cylinder" sensor B.2.29
 - Gripper system B.2.27
 - Lubricating the gripper shaft bearing B.2.28
 - Lubricating the roller lever B.2.27
 - Sensor "Sheet detection feed cylinder" B.2.28
- Feeder
- Automatic non-stop device B.1.10
 - Central grease lubrication B.1.25
 - Cleaning checklist A.3.4
 - Feeder drive B.1.19
 - Feed table B.1.18
 - Ionizing unit C.1.1
 - Maintenance checklist A.2.5
 - Maintenance with service support B.7.3
 - Non-stop device B.1.7
 - Overview of maintenance points B.1.4
 - Pneumatic system B.1.20
 - Preloading device B.1.6
 - Rotary valve "Vacuum control/suction tape" B.2.19
 - Safety instructions B.1.3
- Feeder drive
- Forwarding roller shaft B.1.19
 - Middle bearing, description of the lubricating points B.1.19
- Feed table
- Checking the suction tape B.1.18
 - Suction tape B.1.18
- Filter fan B.6.18
- Replacing the filter element B.6.18
- Front edge system
- Bearings of the front edge stop shaft, description of lubricating points B.5.25
 - Cam follower on the front edge stop shaft, description of lubricating points B.5.25
 - Cam follower on the lever of the jogging drive, description of lubricating points B.5.24
 - Guide bar and pneumatic cylinder, description of maintenance points B.5.26

- G**
- General information on maintenance and cleaning
- Peripheral units A.1.5
- General press
- Maintenance with service support B.7.15
- Gripper shaft bearing
- Description of the lubricating points B.2.83
- Gripper system
- Gripper shaft bearing, description of the lubricating points B.2.83
 - Roller lever, description of the lubricating points B.2.82
- I**
- Impression control
- Bearers C.1.3
 - Cleaning and checking the bearers C.1.3
 - Cleaning the bearers C.1.16, C.1.22
 - Lubricating the bearers B.2.32
- Impression control
- Bearers C.1.22
- Impression control mechanism
- Bearers B.2.32
- Impression cylinder
- Lubricating the gripper shaft bearings B.3.9
 - Lubricating the roller lever B.3.8
- Impression cylinder (P)
- Cleaning the cylinder surface C.1.10
 - Cylinder surface C.1.10
 - Gripper system B.2.99
 - Gripper system, gripper bar, lubricating point description B.2.99
 - Gripper system, gripper shaft bearing, lubricating point description B.2.100
- Impression cylinder washup device
- Checking and, if necessary, cleaning the spray tubes B.2.48
 - Cleaning and checking the distributor bar and replacing it if necessary B.2.46
 - Cleaning the guide rail B.2.47
 - Lubricating the brake B.2.46
 - Lubricating the cloth supply spindle/used-cloth roll spindle B.2.45
 - Spray tubes B.2.47
- Impression cylinder without UV interdeck dryer
- Cleaning and checking the refined cylinder surface C.1.4
 - Gripper shaft bearing, lubricating point description B.2.35
 - Gripper systems B.2.34
 - Place of installation B.2.34
 - Roller lever, lubricating point description B.2.34
- Impression cylinder without UV interdeck dryer
- Cylinder surface, description of cleaning points C.1.4

- Impression cylinder without UV interdeck dryer and without LYYL
 - Cleaning and checking the refined cylinder surface C.1.17
 - Lubricating the gripper shaft bearing B.4.13
 - Lubricating the roller lever B.4.12
- Impression cylinder without UV interdeck dryer and without LYYL
 - Cylinder surface C.1.17
- Impression cylinder with UV interdeck dryer
 - Cleaning and checking the refined cylinder surface C.1.5
 - Gripper shaft bearing, description of the lubricating points B.2.37
 - Gripper systems B.2.36
 - Place of installation B.2.36
 - Roller lever, description of the lubricating points B.2.36
- Impression cylinder with UV interdeck dryer
 - Cylinder surface, description of cleaning points C.1.5
- Impression cylinder with UV interdeck dryer and with LYYL
 - Cleaning and checking the refined cylinder surface C.1.18
- Impression cylinder with UV interdeck dryer or with LYYL
 - Lubricating the gripper shaft bearing B.4.15
 - Lubricating the roller lever B.4.14
- Impression cylinder with UV interdeck dryer or with LYYL
 - Cylinder surface C.1.18
- Ink fountain
 - Checking and cleaning the ink collecting pan B.2.69
 - Checking the protective film B.2.69
- Inking roller washup device
 - Checking and, if necessary, cleaning the collecting trough B.2.71
 - Checking and, if necessary, cleaning the cover plate of the collecting trough B.2.71
 - Checking and, if necessary, cleaning the spray tubes B.2.70
 - Checking and, if necessary, replacing the rubber lip B.2.72
 - Cleaning rubber lip and washup blade trough C.1.6
 - Cleaning the fixing lever and spring B.2.73
 - Spray tubes B.2.70
 - Washup blade B.2.72
 - Washup blade C.1.6
- Inking unit B.2.68
 - Ink fountain B.2.68
- Ink mist extraction device
 - Filter case B.2.43
 - Filter case, filtering mat, description of maintenance points B.2.43

- Intermediate unit
 - Cleaning checklist A.3.7
 - Gripper systems B.3.8
 - Impression cylinder B.3.8
 - Maintenance checklist A.2.22
 - Maintenance with service support B.7.10
 - Overview of the maintenance points B.3.5
 - Safety instructions B.3.3
 - Transfer drum B.3.6
- Ionizer
 - Cleaning the surface and discharge tips C.1.27
- Ionizing unit
 - Cleaning the ion blower C.1.2
 - Cleaning the ionizing bar C.1.1
- Ionizing unit
 - Ionizing bars C.1.27

L

- Legend
 - Maintenance schedule A.1.6
- Lubricants A.1.12
 - Approved lubricants A.1.12

M

- Main motor
 - Lubricating points B.6.12, B.6.13
 - Suction filter B.6.14
 - Suction filter, description of the maintenance point B.6.14
- Maintenance
 - General information on maintenance and cleaning A.1.3
 - How to use this manual A.1.3
 - Maintenance and cleaning reduces costs A.1.3
- Maintenance/cleaning intervals A.1.7
- Maintenance points
 - Delivery, overview B.5.6
- Maintenance schedule
 - General information A.1.6
 - Legend A.1.6
- Maintenance with service support
 - Coating unit B.7.11
 - Delivery B.7.13
 - Feeder B.7.3
 - General press B.7.15
 - Intermediate unit B.7.10
 - Printing unit B.7.6
- Maintenance work
 - Coating unit A.2.23
 - Delivery A.2.25
 - Entire press A.2.30
 - Feeder A.2.5
 - Intermediate unit A.2.22
 - Printing unit A.2.9
- Manual lubrication

- Lubricating devices A.1.9
- Measuring table
 - Cleaning the measuring table surface B.6.22
- Module support
 - Checking the 4-way valve, cleaning if necessary B.5.18
 - Cleaning the sheet brake module holding fixture B.5.19

N

- Non-stop device
 - Guide rail B.5.27
 - Guide rails, description of maintenance points B.5.27
 - Guides, description of maintenance points B.1.8
 - Rear guide rails, description of maintenance points B.1.8
 - Sensor "Main pile detection in non-stop mode", description of maintenance points B.1.9
 - Suspension, description of maintenance points B.1.7

O

- Overview
 - Delivery, maintenance points B.5.6

P

- Perfector
 - Sensor "Missing sheet detector" B.2.103
 - Sensor "Missing sheet detector", Description of the maintenance point B.2.103
- Pile guidance and pile transport
 - "Overrun sheet control" sensor, description of maintenance points B.5.28
- Pile guidance and transport
 - Main pile towards non-stop carriage" sensor, description of maintenance points B.5.29
- Plate changer
 - AutoPlate Advanced B.2.49
- Pneumatic system
 - Checking and, if necessary, replacing the filter element B.1.22
 - Compressed-air control unit, condensate level, description of the maintenance points B.1.21
 - Compressed-air control unit, draining condensation water B.1.21
- Preloading device
 - Cleaning the stop bars B.1.6
 - Stop bars B.1.6
- Preset Plus feeder
 - Air supply B.1.23
 - Suction head B.1.14
- Prinect Axis Control B.6.22
- Prinect Inpress Control

- Checking and, if necessary, cleaning the aperture B.2.42
- Checking and, if necessary, cleaning the bearings B.2.41
- Checking and, if necessary, cleaning the glass pane B.2.40
- Hand-held spectrophotometer B.2.42
- Measuring bar B.2.38
- Prinect Press Center
 - Place of installation B.6.18
- Printing unit
 - AutoPlate Advanced plate changer B.2.49
 - AutoPlate XL plate changer B.2.53
 - Blanket cylinder B.2.60
 - Blanket cylinder, Cylinder surface B.2.60
 - Blanket washup device B.2.61
 - Cleaning checklist A.3.5
 - Dampening system B.2.76
 - Feed cylinder without UV interdeck dryer B.2.24
 - Feed cylinder with UV interdeck dryer B.2.27
 - Impression control mechanism B.2.32
 - Impression cylinder (P) B.2.99
 - Impression cylinder washup device B.2.45
 - Impression cylinder without UV interdeck dryer B.2.34
 - Impression cylinder with UV interdeck dryer B.2.36
 - Inking roller washup device B.2.70
 - Inking unit B.2.68
 - Ink mist extraction device B.2.43
 - Maintenance checklist A.2.9
 - Maintenance with service support B.7.6
 - Perfector B.2.103
 - Prinect Inpress Control B.2.38
 - Reversing drum B.2.93
 - Safety instructions B.2.5
 - Sheet alignment B.2.10
 - Sheet control B.2.101
 - Sheet travel monitor B.2.30
 - Spray tubes B.2.47
 - Storage drum B.2.87
 - Suction brush B.2.66
 - Suction unit B.6.6
 - Transfer drum with UV interdeck dryer B.2.80
 - Transfer gripper B.2.21
 - Variable transfer drum without UV interdeck dryer B.2.82
 - Washing fluid container B.2.74
- Printing unit without UV interdeck dryer
 - Transfer drum B.2.78
- Pull lay drive / printing unit 1
 - Drive belt B.2.16
- Pull lays
 - Cleaning the reflex sensor B.2.10

R

Replacing the filter element of the air filter

- Mounting and demounting B.6.19

Reversing drum

- Bearing B.2.97
- Checking the TransferJacket B.2.98
- Cleaning the TransferJacket C.1.9
- Cylinder surface B.2.98, C.1.9
- Gripper system B.2.93
- Gripper system, gear and gear segment, description of lubricating points B.2.93
- Lubricating the cam follower B.2.97
- Lubricating the carriage B.2.96
- Lubricating the gripper holder on the gripper bar B.2.95
- Lubricating the gripper shaft bearings B.2.95
- Lubricating the gripper tube bearing B.2.94
- Lubricating the outer gripper shaft bearing B.2.94

Roller lever

- Description of the lubricating points B.2.82

Roller lock

- Lubricating the eccentric B.4.17

Rotary valve "Vacuum control/suction tape"

- Cleaning the filter B.2.19
- Cleaning the rotary valve B.2.20
- Place of installation B.2.19

S

Safety instructions

- Coating unit B.4.3
- Delivery B.5.3
- Feeder B.1.3
- Intermediate unit B.3.3
- Printing unit B.2.5
- To be observed for all work B.1.3, B.2.5
- To be observed when working at the press B.3.3, B.4.3, B.5.3, B.6.3

Screen roller

- Cleaning the contact surfaces C.1.25
- Cleaning the cylinder surface and face surface C.1.24
- Lubricating the driver B.4.16

Screen roller

- Roller locks C.1.25

Sensor

- Double sheet detector B.2.11
- Insufficient varnish flow B.4.19
- Main pile detection in non-stop mode B.1.9
- Missing sheet detector B.2.103
- Sheet alignment monitor B.2.12
- Sheet travel monitor B.2.30

Sensor "Sheet travel monitor"

- Sensor cleaning B.2.30

Sheet alignment

- Air filter "Suction air, pull lay/suction drive roller" B.2.14

- Cover guide B.2.17

- Drive belt, pull lay drive / printing unit 1 B.2.16

Sheet alignment monitor

- Sensor B.2.12

Sheet alignment monitor sensor

- Cleaning the sensor B.2.12

Sheet alignment system

- Pull lay B.2.10

Sheet brake module

- Checking and cleaning the guide rolls and suction insert B.5.16
- Checking and cleaning the O-seal B.5.17
- Checking the friction wheel, replacing, if necessary B.5.15
- Checking the suction tape, replacing if necessary B.5.17

Sheet brake system

- Drive B.5.19
- Module support B.5.18
- Sheet brake module B.5.15

Sheet brake system drive

- Checking the replacement date of the drive belt B.5.20
- Lubricating the bearing of the driving roller B.5.21

Sheet brake system drive

- Cleaning the driving roller B.5.22

Sheet decurler

- Boreholes, description of maintenance points B.5.30

Sheet guidance

- Sheet guide plates, basic cleaning B.5.31

Sheet guide

- Checking and, if necessary, cleaning the chain guides and suction ducts C.1.30
- Checking and, if necessary, cleaning the sheet guide plates and guide plates C.1.21
- Cleaning sheet guide plates and powder deflectors C.1.28
- Cleaning the sheet guide plates C.1.11
- Cover plate, description of maintenance points B.2.101
- Sheet guide plate after printing nip C.1.21
- Sheet guide plates C.1.11
- Sheet guide plates and powder deflectors B.5.31, C.1.28

Sheet guide plates

- Basic cleaning B.5.31

Sheet transport without UV end dryer

- Checking and cleaning the gripper pads B.5.7
- Cleaning and lubricating the adjusting spindle B.5.9
- Cleaning the oil discharge channel and oil drip pan B.5.10

- Emptying and cleaning the oil collecting vessel B.5.10
- Lubricating the roller lever B.5.8
- Sheet transport without UV end-of-press dryer
 - Chain guide B.5.9
 - Gripper opening cam B.5.8
- Sheet transport without UV end-of-press dryer
 - Gripper systems B.5.7
- Sheet transport with UV end dryer
 - Chain guide B.5.13
 - Checking and cleaning the gripper pads B.5.11
 - Cleaning and lubricating the adjusting spindle B.5.13
 - Cleaning the oil discharge channel and oil drip pan B.5.14
 - Emptying and cleaning the oil collecting vessel B.5.14
 - Gripper systems B.5.11
 - Lubricating the roller lever B.5.12
- Sheet transport with UV end-of-press dryer
 - Gripper opening cam B.5.12
- Sheet travel monitor
 - Sensor "Sheet travel monitor" B.2.30, B.4.11
- Sheet travel monitor sensor
 - Cleaning the "Sheet travel monitor" sensor B.4.11
 - Place of installation B.4.11
- Signature box
 - Checklists A.2.4
- SinuSynchro main motor B.6.16
- Storage drum without UV interdeck dryer
 - Clamping mechanism, bearing, description of lubricating points B.2.91
 - Gripper system B.2.87
 - Movable part B.2.91
 - Operating rod, cam follower, description of lubricating points B.2.90
 - Sucker bar B.2.88
 - Sucker bar, axial bearing surface between sucker and sucker bar, description of lubricating points B.2.90
 - Sucker bar, locking bolt, description of lubricating points B.2.89
 - Sucker bar, main lubricating point, description of lubricating points B.2.89
- Suction air, pull lay/suction drive roller
 - Air filter B.2.14
- Suction brush
 - Checking and cleaning the suction brush B.2.66
 - Checking and replacing the suction brush B.2.67
 - Suction brush B.2.66
- Suction head
 - Checking the suction discs of the lifting sucker and replacing them if necessary B.1.15
 - Forwarding suckers, description of maintenance points B.1.15

- Lifting suckers, maintenance point description B.1.14
- Rotary valve, description of the maintenance point B.1.16
- Suction unit B.6.6
 - Checking and cleaning the filtering bags B.6.6
 - Checking and cleaning the interior B.6.7

T

- Transfer drum
 - Gripper systems B.3.6
 - Lubricating the gripper shaft bearings B.3.7
 - Lubricating the roller lever B.3.6
- Transfer drum without UV interdeck dryer
 - Gripper shaft bearing, lubricating point description B.2.79
 - Gripper system, gripper shaft bearings, description of lubricating points B.2.88
 - Gripper system, roller lever, description of lubricating points B.2.87
 - Gripper systems B.2.78
 - Roller lever, lubricating point description B.2.78
- Transfer drum without UV interdeck dryer and without LYYL
 - Gripper systems B.4.7
 - Lubricating the gripper shaft bearing B.4.8
 - Lubricating the roller lever B.4.7
- Transfer drum with UV interdeck dryer
 - Gripper shaft bearing, description of the lubricating points B.2.81
 - Gripper systems B.2.80
 - Roller lever, description of the lubricating points B.2.80
- Transfer drum with UV interdeck dryer or LYYL
 - Gripper systems B.4.9
- Transfer drum with UV interdeck dryer or with LYYL
 - Lubricating the gripper shaft bearing B.4.10
 - Lubricating the roller lever B.4.9
- Transfer gripper
 - Cam follower of the transfer gripper drive, description of maintenance points B.2.23
 - Gripper systems B.2.21
 - Roller lever, description of lubricating points B.2.21
 - Spring rod of the gripper control, description of lubricating points B.2.22
- Types of lubricating points
 - Manual lubrication A.1.9

U

- User interface
 - Revolution counter A.1.8

V

Variable transfer drum

- Cleaning the TransferJacket C.1.8
- Cylinder surface C.1.8
- Place of installation B.2.83, B.2.86

Variable transfer drum without UV interdeck dryer

- Checking and, if necessary, cleaning and lubricating the swing frame B.2.84
- Cleaning, checking and, if necessary, lubricating the cylinder shells B.2.85
- Cleaning the cylinder surface B.2.86
- Cylinder surface B.2.86
- Gripper system B.2.82
- Gripper system, gripper shaft bearing, description of the lubricating points B.2.83
- Gripper system, roller lever, description of the lubricating points B.2.82
- Swing frame and cylinder shells B.2.83

Varnish supply

- Sensor "Insufficient varnish flow" B.4.19
- Sensor "Varnish flow", description of the maintenance point B.4.19

W

Wallscreen

- Replacing the filter element B.6.24

Washing fluid

- Properties A.1.21

Washing fluid container B.2.74

- Checking, cleaning and, if necessary, replacing washing fluid, water, and sieve B.2.74
- Replacing the suction filter B.2.75

Washing fluids

- Characteristics A.1.16
- Important note A.1.16
- Not approved A.1.16
- UV A.1.17