



Operating and Instruction Manual

Dirt trap EN

Version 1.3.2

Translation of the original instructions





Introduction

This operating and installation manual is intended for installation, operation, maintenance and monitoring staff.

Also observe the instructions in the installation and operating manuals for LOHSE valves.

The instructions in this manual must be read and understood by all above personnel and must at all times be adhered to.

The manufacturer shall not be liable for damage or loss resulting from non-compliance with the instructions in this installation and operating manual.

Manufacturer details

The content of this document is the intellectual property of MARTIN LOHSE GmbH. The preproduction, copying or disclosure of the content of this document or parts thereof, for whatever purpose, is only permitted with the explicit written consent of **MARTIN LOHSE GmbH**.

All rights reserved.

Manufacturer address:

MARTIN LOHSE GmbH

Unteres Paradies 63 89522 Heidenheim

Germany

Telephone: +49 7321 755-0

sales@lohse-gmbh.de www.lohse-gmbh.de



Contents

1	About this installation and operating manual	7
1.1	General notes	7
1.2	Warning signs and symbols	7
1.3	Target group	8
1.4	Filing of installation and operating manual	8
1.5 1.5.1	Validity Trap type	
2	Safety	10
2.1 2.1.1 2.1.2 2.1.3 2.1.4 2.1.5 2.1.6	General safety instructions General risks Risks in connection with electrical equipment Operation in explosive atmosphere Preconditions for operation Residual risks State of technology	10 10 10 10
2.2 2.2.1 2.2.2	Proper use Maximum permissible operating temperature Maximum permissible operating pressure p [bar]	12
2.3	Improper use	12
2.4	Modifications	12
2.5	Inspections	12
2.6	Personal protective equipment	12
2.7	Noise protection	12
2.8	Additional regulations	13
2.9	Safety instructions for LOHSE dirt traps	13
3	Transport and storage	15
3.1	Transport	15
3.2	Storage	17
4	Design of the dirt trap	18



4.1	Basic design of type RSL dirt trap1						
4.2	RSL design	. 19					
5	Installation / dismantling	20					
5.1 5.1.1 5.1.1. 5.1.1.	•	21 21					
5.2	Installation	. 22					
5.3	Dismantling	23					
6	Functional description	24					
6.1	Process description	24					
7	Maintenance	26					
7.1	General	. 26					
7.2	Safety instructions	26					
7.3	Cleaning of the dirt trap	. 27					
7.4	Replacement of the sight glasses	27					
7.5	Type plate	28					
8	Troubleshooting	. 29					
8.1	Valves	29					
8.2	Dirt Trap RSL	31					
9	Repair	32					
9.1	General notes	32					
9.2	Disposal	32					



1 About this installation and operating manual

1.1 General notes

Dirt traps consist of at least one inlet valve, a sluice chamber and a discharge valve. For the individual valves, see the respective installation and operating manuals.

These operating and installation instructions, together with the operating and installation instructions for valves and drives, contain all the information which is needed to

- transport
- · commissioning and decommissioning
- operation of the dirt trap
- proper disposal

For information regarding the maintenance and repair of the attached valves, please refer to the separate service manuals for LOHSE valves.

Using this document, familiarise yourself with the dirt trap. The installation and operating manual assists you in the proper and correct operation of the product. Safe operation of the dirt trap is only ensured, if you proceed exactly as described in this manual. Do not make any unauthorised modifications to the dirt trap.

For accessories and attachments, refer to the operating manual of the respective manufacturer.

1.2 Warning signs and symbols

The following symbols and warnings are used to highlight

- dangers
- warnings
- · safety measures and precautions

There are three categories of risks:

DANGER



Type and source of danger

Indicates an immediate danger. Non-compliance with the instructions can result in serious or even fatal injury.

• Explanation of the necessary safety measures

WARNING



Type and source of danger

Indicates a potential risk. Non-compliance with the instructions can result in serious or damage to property.

Explanation of the necessary safety measures



CAUTION



Type and source of danger

Indicates a potential risk. Non-compliance with the instructions can result in injury or damage to property.

Explanation of the necessary safety measures

1.3 Target group

This installation and operating manual has been compiled for the owner of the product and the qualified technical personnel working with and on the valve who are able to carry out the required tasks and identify potential risks.

Personnel must be qualified for working with:

- · electrical power
- · control and regulating equipment
- · pressurised components

The valve owner must assess the personnel as regards the necessary knowledge and skills.

Qualified technical personnel are in charge of the operation, maintenance and monitoring of the dirt trap.

1.4 Filing of installation and operating manual

Keep this installation and operating manual in a suitable location so that it can be accessed at any time by qualified technical staff.



1.5 Validity

This installation and operating manual is valid for the following LOHSE dirt traps:

1.5.1 Trap type

RSL dirt trap

Series	Description				
RSL 50/150	Inlet Ø 50,	outlet □ 150			
RSL 65/150	Inlet Ø 65,	outlet □ 150			
RSL 80/150	Inlet Ø 80,	outlet □ 150			
RSL 100/150	Inlet Ø 100,	outlet □ 150			
RSL 100/200	Inlet Ø 100,	outlet □ 200			
RSL 100/250	Inlet Ø 100,	outlet □ 250			
RSL 125/250	Inlet Ø 125,	outlet □ 250			
RSL 150/200	Inlet Ø 150,	outlet □ 200			
RSL 150/250	Inlet Ø 150,	outlet □ 250			
RSL 200/250	Inlet Ø 200,	outlet □ 250			
RSL 250/300	Inlet Ø 250,	outlet □ 300			

In principle, the instructions in this installation and operating manual also apply to LOHSE dirt traps other than those listed above. Please contact the manufacturer for additional data sheets.



2 Safety

2.1 General safety instructions

2.1.1 General risks

Danger sources posing general risks:

- · Mechanical danger sources
- Electrical danger sources

2.1.2 Risks in connection with electrical equipment

DANGER



Risk in connection with electrical equipment

As there is a constant humid atmosphere in the production process, electrically operated valves are a source of danger.

Danger: electric shock

 Observe the relevant regulations regarding the use of electrical devices in wet rooms.

2.1.3 Operation in explosive atmosphere

CAUTION



Operation in explosive atmosphere

Risk of explosion from ungrounded dirt trap

• After installation, the dirt trap must be integrated into the general grounding circuit!

2.1.4 Preconditions for operation

The dirt trap must only be operated

- if it is in proper working order
- for the intended purpose
- with awareness of the associated dangers and in accordance with the instructions in this manual
- if all safety and EMERGENCY-STOP devices are in place and working properly

Malfunctions and faults that might impair the safety of the trap must be eliminated without delay.

DANGER



Danger of injury due to crushing or uncontrolled escape of medium

• The danger area (closing device / escaping medium) must be protected by the owner/operator with a suitable protective device.



2.1.5 Residual risks

DANGER



Risk of injury from shearing, crushing and snagging

Danger by moving valve parts that might have become accessible when covers are removed for function checks or similar purposes and by automatically actuated valves.

• Do not reach with your hands or fingers into the range of the moving valve parts.

DANGER



Risk of injury from burning and scalding

on machines and systems operated at high temperatures (above 40° C):

operating temperature >= 70° C:

Short-term skin contact (approx. 1 sec.) with the surface of the valve or machine components can result in burns (DIN EN ISO 13732-1)

operating temperature = 65° C:

Longer skin contact (approx. 3 sec.) with the surface of the valve or machine components can result in burns (DIN EN ISO 13732-1).

operating temperature 55° C - 65° C:

Longer skin contact (approx. 3 to 10 sec.) with the surface of the valve or machine components can result in burns (DIN EN ISO 13732-1).

Wear personal protective equipment.

2.1.6 State of technology

Dirt traps from MARTIN LOHSE GmbH are designed and manufactured according to the latest state of technology and the relevant technical safety standards. There remains however a residual risk to life and limb of the operator or third parties, and a risk of damage to the dirt trap and other property,

- if the dirt trap is operated for a purpose other than that intended
- if the dirt trap is operated by persons who are not suitably qualified (see chapter 1.3)
- if the dirt trap has been modified without authorisation
- if the safety instructions in this manual are not strictly adhered to

2.2 Proper use

LOHSE dirt traps are used to remove reject particles from fibrous media of various viscosity. They can be used in all types of cleaning machines, tanks and pipelines, provided that the conditions specified in 2.2.1 and 2.2.2 are met. The properties of the medium must be taken into account when choosing the trap material.

LOHSE dirt traps must only be combined with original LOHSE valves.



2.2.1 Maximum permissible operating temperature

The maximum permissible operating temperature for LOHSE RSL dirt traps is 80 °C.

Dirt traps for operation at higher temperatures are available on request.

2.2.2 Maximum permissible operating pressure p [bar]

The maximum permissible operating pressure of the LOHSE RSL dirt trap depends on the installed valves, but must never exceed a pressure of 6 bar.

Dirt traps for operation at higher pressures are available on request.

2.3 Improper use

Any use of the dirt traps for purposes other than that intended is deemed improper. MARTIN LOHSE GmbH shall not be liable for damage to persons or property resulting from improper use.

2.4 Modifications

Do not make any modifications to the dirt trap that might impair its safety.

It is forbidden to remove type plates and markings!

2.5 Inspections

Regularly instruct the operating personnel in the safe and proper use of the dirt trap, with reference to the installation and operating manual. Carry out regular inspections to ensure that all instructions are adhered to.

2.6 Personal protective equipment

If required, wear personal protective equipment.

The personal protective equipment consists of

- · safety footwear
- · protective gloves
- safety goggles
- hard hat
- hearing protection

The personal protective equipment must be suitable for the pressurised medium.

2.7 Noise protection

The dirt trap produces noise at a sound pressure level of less than 70 dB(A). If combined with a control valve, the continuous sound pressure level might be higher, depending on the type of the valve.



2.8 Additional regulations

For the operation of the dirt trap, all internal and statutory safety and accident prevention regulations must be adhered to.

2.9 Safety instructions for LOHSE dirt traps

DANGER



Danger of injury due to open interface on the discharge pipe

Crushing and uncontrolled escape of medium

 The danger area at the discharge pipe must be protected by the owner/operator with a suitable protective device.

DANGER



Risk of injury from crushing

Automated actuators that are electrically powered might move the valve to its open or closed position.

 Before carrying out any maintenance or repair work on the dirt trap and when installing or removing it, disconnect the power supply to the actuator.

WARNING









Risk of injury on hot or cold surfaces, risk to health from hazardous substances

All personnel working with or on the dirt trap, including installation, operation and repair of the trap, must be suitably trained. This helps eliminate the risk of damage to property or injury to persons.

Ensure that all installation and assembly personnel are familiar with

- installation and removal procedures for the dirt trap in a process
- · special and potential risks associated with the process
- · most important safety instructions
- risk in connection with the handling of pressurised equipment as well as hot and cold surfaces
- risk in connection with the handling of hazardous substances

WARNING



Risk of injury from escaping media

If the design limits of the valve are exceeded, there is a risk of damage to the dirt trap and of uncontrolled release of the pressurised medium

• Do not exceed the design limits of the dirt trap!



DANGER



Risk of injury from pressurised dirt trap

The dismantling of pressurised dirt traps can result in uncontrolled depressurisation. Before starting work, always insulate the dirt trap from the system; depressurise the trap and remove all medium.

• Do not dismantle or remove the dirt trap from the system as long as it is pressurised!

DANGER



Risk of injury from hazardous substances

- Inform yourself of the properties of the medium and any associated risks. Protect yourself and the environment from hazardous substances.
- Observe the safety instructions in the material safety data sheets of the medium manufacturer.
- Ensure that no medium is discharged into the system during maintenance work.
- Wear personal protective equipment that is suitable to protect you against the pressurised medium.

DANGER



Risk of injury from suspended loads

When transporting the dirt trap, observe its weight.

Never lift the dirt trap by its accessories, attached components or connected pipes. Always use suitable lifting gear, taking into account the centre of gravity of the dirt trap.

• Do not stand under suspended loads.

WARNING



Risk of injury from heavy objects

Observe the weight of the dirt trap.

• Always use suitable transport and lifting gear.

CAUTION



Damage due to overfilling of the reject trap RSL with foreign materials

Damage to the inlet valve due to foreign materials in the flow area.

 The discharge cycle must be set so that overfilling of the reject trap with foreign materials is prevented. The fill level can be observed and checked at the sight glasses.



3 Transport and storage

DANGER







Risk of injury from heavy objects

Observe the weight of the dirt trap.

• Always use suitable transport and lifting gear.

Risk of injury from crushing if dirt trap topples over

Observe the asymmetric design of the dirt trap.

• Always use suitable transport gear and secure the dirt trap against toppling over.

Risk of injury from suspended loads

When transporting or otherwise handling the dirt trap, observe its weight.

• Do not stand under suspended loads.







Wear personal protective equipment consisting of

- · hard hat
- · safety footwear
- · protective gloves

3.1 Transport



Upon receipt of the delivery, inspect the dirt trap for damage caused during transport.

When transporting the dirt trap, observe its weight. Always transport the dirt trap with suitable slings / transporting equipment.



CAUTION

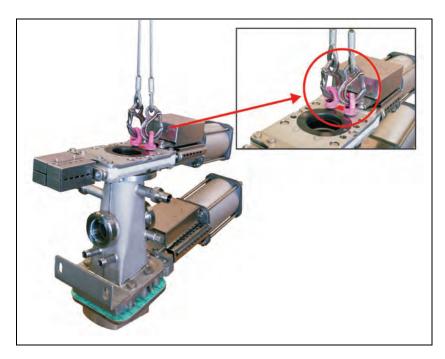


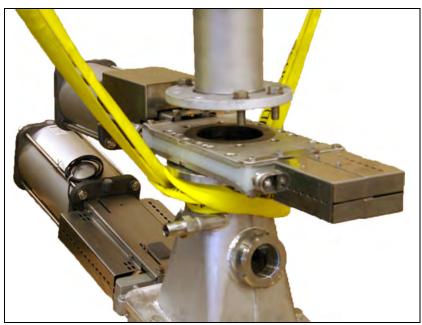
Damaging of the dirt trap

Do not lift the dirt trap by the actuator of the valve.

• To lift the dirt trap, use suitable lifting tackle. The dirt trap must be properly balanced when lifted (observe centre of gravity).

The pictures below show examples of attachment points on the dirt trap.







3.2 Storage

Store the dirt trap on a suitable support in a dry and clean room. Protect the dirt trap against dirt.

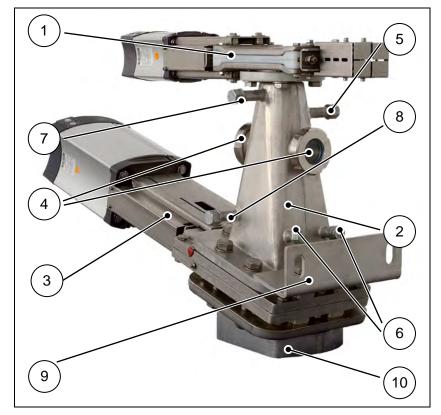


4 Design of the dirt trap

In principle, the dirt trap consists of the following main components. For operation, it must be integrated into an unit.

4.1 Basic design of type RSL dirt trap

1	Inlet valve (round cross-section)
2	Sluice chamber (round to rectangular)
3	Discharge valve (rectangular cross- section)
4	Sight glasses
5	Flush water connection D
6	Cleaning/ filling connections A / B
7	Air relief C
8	Flush water connection E
9	Attaching device
10	Outlet piece





4.2 RSL design

Туре	Inlet Ø	Dis- charge	Volu- me [ltr.]	Overall height [mm]	C [inch]	A / B [inch]	D [inch]	E [inch]	weight [kg]							
RSL 50/150-G	DN 50	DN	~ 5	682	1/	27	1/	3/	98							
RSL 50/150-E	DIN 30	150	~ 3	002	1/2	3/4	1/2	3/4	100							
RSL 65/150-G	DN 65	DN	~ 5	682					98							
RSL 65/150-E	DIVOS	150	~ 3	002	1/2	3/4	1/2	3/4	100							
RSL 80/150-G	DN 80	DN	~ 5	695					121							
RSL 80/150-E	DIN 60	150	~ 5	095	1/2	3/4	1/2	3/4	123							
RSL 100/150-G	DN	DN	~ 8	635					136							
RSL 100/150-E	100	150	~ 0	033	1	3/4	1	3/4	138							
RSL 100/200-G	DN	DN	~ 11	650					155							
RSL 100/200-E	100	200	200	~ 11	050	1	3/4	1	3/4	141						
RSL 100/250-G	DN	DN	~ 15	634					169							
RSL 100/250-E	100	250	250	250	250	250	250	~ 10	034	1	3/4	1	3/4	168		
RSL 125/250-G	DN	DN	~ 15	625					175							
RSL 125/250-E	125	250	250	250	250	250	250	250	250	~ 15	635	1	3/4	1	3/4	174
RSL 150/200-G	DN	DN	~ 13	660					189							
RSL 150/200-E	150	200	~ 13	000	1	3/4	1	3/4	176							
RSL 150/250-G	DN	DN	~ 17	cco					182							
RSL 150/250-E	150	250	~ 17	17 662	1	3/4	1	3/4	181							
RSL 200/250-G	DN	DN	~ 22	743	_				221							
RSL 200/250-E	200	250	~ 22	/43	1	3/4	1	3/4	220							
RSL 250/300-G	DN	DN	~ 40	823					434							
RSL 250/300-E	250	300	~ 40	ი∠ა	1	3/4	1	3/4	463							



5 Installation / dismantling

5.1 Installation instructions

Before installing the dirt trap, remove the transport securing devices. The inlet side of the dirt trap is secured with bolts to the respective flange. The bolts are inserted into through bores and threaded bores. All safety instructions (chapter 2) and product-specific instructions (see LOHSE valve operating instructions) must be adhered to.

With a valve diameter of DN300 or larger, automated actuators require additional support if the mounting position of the valve is more than 30° from vertical.

To seal the flange connections, insert suitable seals between the flange surfaces.

The outlet piece is an open interface. It must be adjusted by the trap operator to the requirements of the unit to which it is to be attached, in accordance with the applicable safety regulations.

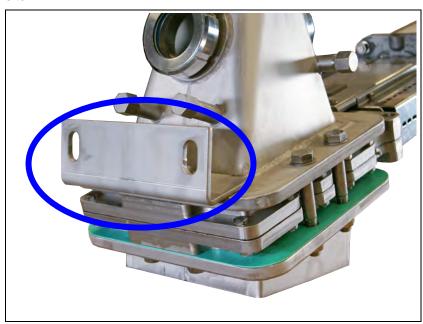
DANGER



Risk of injury from crushing and escaping medium

• The danger area (connecting parts / escaping medium) must be cordoned off with suitable safety equipment.

The dirt trap must be attached to the suspension device provided on site.



see 5.2



DANGER



Risk of damage from incorrectly mounted dirt trap

Incorrectly installed dirt traps can lead to damage to property.

Ensure that the dirt trap is installed correctly.

5.1.1 Flange connection

Ensure that the sealing surfaces of the flanges are clean and not damaged.

5.1.1.1 Flange connection dimensions

Standard connections according to DIN EN 1092-1 / ANSI B16.5 150 lbs/sq.in

The flange connections might vary, depending on the inlet valve. For details, refer to the installation and operating manual of the respective LOHSE valve.

Other flange connections are available on request.

CAUTION



Risk of damage to property from bolts of incorrect length

Prevent damage to the valve from bolts that are too long.

- Observe the depth of thread in the housing (t_{max}) and choose suitable bolts (lengths).
- Observe the specifications on the label attached to the valve.

5.1.1.2 Tightening torques

For bolts for the flange mounting of the dirt trap

The following values are to be used only as recommendations for nonlubricated threaded connections using materials with a tensile strength of 700 MPa. Additional lubrication of the threads affects the coefficient of friction and will result in unpredictable tightening conditions.

5.1.1.2.1 Metric threads

	DN							
	50 65 80 100 125	150 200 250 300 350	400 450 500	600 700	800 900	1000		
Bolt Ø	M16	M20	M24	M27	M30	M33		
Tightening torque	75 Nm	90 Nm	170 Nm 240 Nm		310 Nm	400 Nm		

5.1.1.2.2 UNC threads

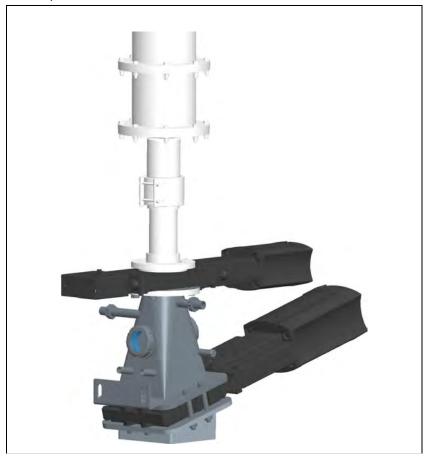
	DN						
	50 65 80 100 (2") (2,5") (3") (4")	125 150 200 (5") (6") (8")	250 300 (10") (12")	350 400 (14") (16")	450 500 (18") (20")	600 700 (24") (28")	800 900 1000 (32") (36") (40")
Bolt Ø	5/8" UNC	3/4" UNC	7/8" UNC	1" UNC	1.1/8" UNC	1.1/4" UNC	1.1/2" UNC
Tightening torque	75 Nm	90 Nm	160 Nm	210 Nm	250 Nm	330 Nm	420 Nm

Operating and Instruction Manual



5.2 Installation

- The inlet valve of the RSL dirt trap must be flange-mounted to the unit.
- The dirt trap must be permanently connected through the suspension device to the unit.



CAUTION



Risk of damage to property from incorrect installation

Due to the weight and vibration of the dirt trap, the trap and the unit can be damaged if the dirt trap is installed without securing the suspension device.

- Permanently secure the dirt trap with the suspension device to the unit, using suitable bolts.
- The connections must be connected according to the unit-specific requirements. Use suitable fittings and lines.



5.3 Dismantling

CAUTION



Danger of injury during disassembly

The reject trap may be disassembled only if the system has been shut down and all connected machines and pumps – upstream and downstream – have been secured against accidental startup.

• Observe the safety instructions in chapter 2.



6 Functional description

LOHSE dirt traps of type RSL have been specially designed for the removal of foreign particles from the cleaning process.

ACHTUNG



Damage due to overfilling of the reject trap with foreign materials

Damage to the inlet valve due to foreign materials in the flow area.

 The discharge cycle must be set so that overfilling of the reject trap with foreign materials is prevented. The fill level can be observed and checked at the sight glasses.

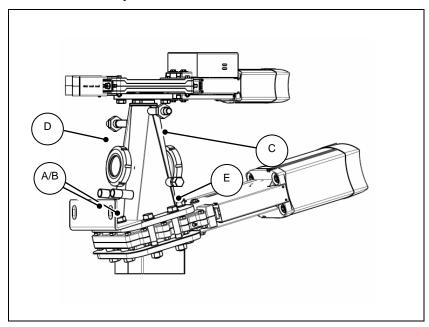
6.1 Process description

Flush water connection D

Cleaning/ filling connections A / B

Air relief C

Flush water connection E



Start of dirt trap control

Power to solenoid valves "on"

Water pressure "ok"

Water "supply ok"

Pump of cleaning machine "off"

Compressed air for shut-off valve "supply ok"

- Pressure "ok"

Flow control valve "adjusted"

START – Flushing phase of dirt trap

24/32

The moment the pump in front of the cleaning machine is started, the timer relay of the cycle control system is started.

After the cycle time has lapsed:

Functional description EN Version 1.3.2



- Timer relay cycle time "0"

- Upper shut-off valve "closed"
 - Lower shut-off valve "open"
 - Filling water solenoid valve "open"

- FILLING timer relay "on" (10 to 20 sec.)

- Signal lower valve "closed" via

exhaust air restrictor

- VENTING timer relay "on" (10 to 20 sec.)

Signal lower valve "closed"
 FILLING timer relay after time has lapsed "off"
 Filling water solenoid valve "closed"
 VENTING timer relay after time has lapsed "off"
 Air relief solenoid valve "closed"

If required:

- Upper shut-off valve

- Readjustment of dilution water by means of manually operated taps

- Next cycle time started through timer relay "on"

(5 to 120 minutes)

"open"



* All values are approximate and must be adapted to the specific system!

Interlocking: If there is no compressed air

If there is no dilution water
If there is no control voltage

If there is no medium

If the medium pressure drops in front of the cleaning machine



7 Maintenance

7.1 General

LOHSE dirt traps must be inspected every 2 weeks for wear.

To ensure optimum operation of the dirt trap and a long service life, it must be regularly serviced. Inspect the entire dirt trap with all accessories to ensure safe and trouble-free operation. In particular, inspect the trap body for abrasion. Check the flange connections for proper tightening torque of the flange bolts and inspect the flange seals (see manufacturer instructions).

7.2 Safety instructions

Maintenance work must be carried out in compliance with the safety information (Chapter 2) and the information in the operating and assembly instructions for the valves and actuators.

DANGER



Risk of injury from escaping media

Before carrying out any maintenance, cleaning and repair work, depressurise the line sections in front of and behind the valve and ensure that it cannot be inadvertently pressurised (by shutting down pumps and machines). Secure all connected pumps and machines

- · against inadvertent switching on.
- empty the lines and upstream connected cleaning machines.
- · accidental flushing and filling of the reject trap

DANGER



Risk of injury from shearing, crushing and snagging

Danger by moving valve parts.

• Safety devices must only be removed for maintenance work.

After completion of the work, all safety equipment must be mounted and fastened.

DANGER



Risk of injury from pressurised pneumatic or hydraulic cylinders

Pneumatic and hydraulic cylinders under pressure involve a risk of injury during movement of the cylinder rod.

• Before carrying out maintenance, cleaning or repair work on the valve, pressure lines must be depressurised and removed.



DANGER



DANGER OF LIFE for users

Valves with electric actuators must be disconnected from the power supply.

• Disconnect the actuator or valve from the mains line. Secure the motor against inadvertent switching on.

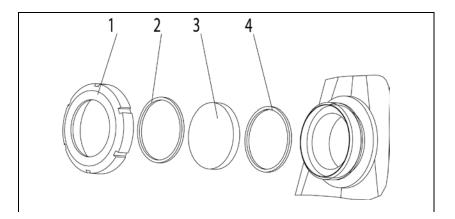
7.3 Cleaning of the dirt trap

Dirt can impair the operation of the dirt trap and must therefore be removed.

7.4 Replacement of the sight glasses

If necessary, replace the sight glasses, observing the relevant safety instructions in 6.2.

- Screw off cap nut using a DIN 1810A 110-115 or 120-130 sickle spanner
 - Direction of rotation counter-clockwise = "OPEN"
- · Remove seals and sight glass
- · Clean seal seat
- Put on new seal ring (4), sight glass plate (3), flat seal (2) and grooved union nut (1) in the order shown



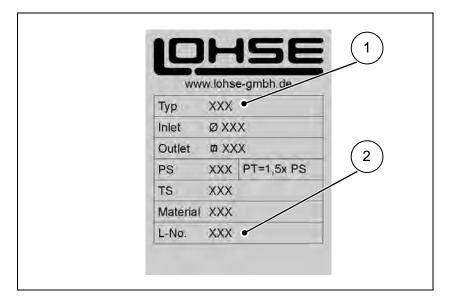
- Screw on cap nuts tightly using a sickle spanner
 - Direction of rotation clockwise = "CLOSED"

Operating and Instruction Manual



7.5 Type plate

1	Type designation
2	L number



When ordering wear and spare parts, always quote the type designation and the L number (see type plate). Spare parts lists can be ordered separately.



8 Troubleshooting

8.1 Valves

Problem	Possible cause		Remedy		
External lookage from	Packing not tight	i	Retighten packing, lubricate valve plate		
External leakage from the packing chamber	Packing defectiv	е	Replace packing, clean and grease valve plate		
	Object jammed be housing	petween valve plate and	Open valve slightly, remove jammed object and repeat closing procedure		
	Sealing in flow-th	nrough section defective	Dismantle valve and replace seals		
Leakage along flow- through section	Pneumatically operated valve	Incorrect stroke settings	Check stroke and readjust, if necessary		
	Electrically operated valve	Incorrect limit switch settings	Check stroke and adjust travel- controlled limit switch, if necessary (for instructions, see manufacturer documentation)		
	Valve jammed d	uring installation	Loosen flange bolts and reinstall valve according to the instructions		
Leakage at flange connection	Flange seal defe	ctive	Dismantle valve and replace flange seals		
	Flange seal miss	sing	Install flange seal(s)		
	Valve blocked ar	nd/or valve plate dirty	Dismantle valve and clean it; lubricate valve plate		
	Flange bolts too	tight	Loosen flange bolts, especially through bolts		
	Flange bolts too	long	Remove flange bolts from threaded bores, check length and replace, if necessary (for depth of thread, see attached label) Check the inner shells for damage		
Valve stiff (difficult to close or open)	Insufficient faste	ning	Following the instructions in the operating manual, fasten with suitable means at the corresponding points		
close of open)	Manually operated valve	Stem dirty	Check stem, clean and grease		
		Insufficient operating pressure	Check operating pressure and increase, if necessary		
		Control valve blocked	Clean control valve		
	Pneumatically operated valve	Line connections defective	Check lines and replace, if necessary		
		Complete piston defective	Dismantle complete piston and replace; check cylinder seals; replace and grease, if necessary		



Problem	Pos	sible cause	Remedy
	Flange bolts too	long	Remove flange bolts from threaded bores, check length and replace, if necessary (for depth of thread, see attached label)
	Lubricant washe	d off	Clean and lubricate
	Insufficient faste	ning	Following the instructions in the operating manual, fasten with suitable means at the corresponding points
	Manually operated valve	Actuator element defective	Check stem; replace defective parts
	Pneumatically operated valve	No operating pressure	Check operating pressure supply
		Control valve not powered	Check control valve for power
Valve plate cannot be moved		Control valve blocked or defective	Check control valve; clean or replace, if necessary
		Cylinder seal defective	Check seals and replace, if necessary
		Connection between cylinder rod and valve plate broken	Check connecting bolt and replace, if necessary
		Electrical actuator	Check motor for power supply
		Electrical actuator	Check electrical actuator for defects
	Electrically operated valve	Limit switch	Check limit switch and settings; readjust or replace, if necessary (for instructions, see manufacturer documentation)
		Gear mechanism/stem	Check gear mechanism or stem nut for dry run or defects; clean and lubricate; replace, if necessary (for instructions, see manufacturer documentation)

The replacement of wear parts is described in the respective service manual.



8.2 Dirt Trap RSL

Problem	Possibl	le cause	Remedy		
	Discharge tank leaki	ng due to wear	Check discharge tank for leaks; replace discharge tank if necessary		
Leakage of medium	Defeative sinks along		Check seal in sight glass; replace seal if necessary		
	Defective sight glass	S	Check sight glass; replace sight glass if necessary		
Evace procure in	Bleed valve not oper process	ned during filling	Check bleed valve; adjust control if necessary or replace if defective		
Excess pressure in reject trap	Design specifications	s exceeded	Check whether operating data of the cleaning machine are consistent with operating data of the reject trap		
	Reject trap overfilled	l	Reset cycle time		
Inadequate	Flush valve set incor	rectly	Check flush valve; adjust if necessary		
separation of rejects	Slumping of reject do	uring start of trap	Fill reject trap with water before opening the top valve		
	Upper trap valve	Reject trap overfilled	Reset cycle time		
Valves close sluggishly or not at all	Lower trap valve	Reject remnants in trap	Check cleaning valves; adjust if necessary		
	·	Rejects jammed	Clean lower valve		
Reject trap is not	Lower trap valve doe	es not open	Check lower trap valve; replace if necessary		
emptied	Too many rejects ac	cumulated	Reset cycle time		

If problems occur, please contact our Technical Service department



9 Repair

In the event of a return or repair, please contact MARTIN LOHSE GmbH.

When ordering wear and spare parts, always quote the type designation and the L number (see type plate). Spare parts lists can be ordered separately.

9.1 General notes

When returning a dirt trap for servicing or repair, please always indicate the pressurised medium for which it is used.

WARNING



Residue of hazardous substances

Residue of hazardous substances can affect the health of persons.

• Before returning the dirt trap, decontaminate it.

9.2 Disposal

The packaging is made from environmentally friendly materials. Dispose of the packaging through the available recycling channels.

The dirt trap is made from materials that can be recycled by specialised recycling firms. Proper disposal of the product prevents any negative impact on the environment and human health and allows for the recycling of valuable commodities.

Should you not be in a position to dispose of the dirt trap through a recycling firm, please contact MARTIN LOHSE GmbH for a return for disposal.