Operating and Instruction Manual

Dirt trap

EN

Version 1.3

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

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Contents

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 line
- 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.

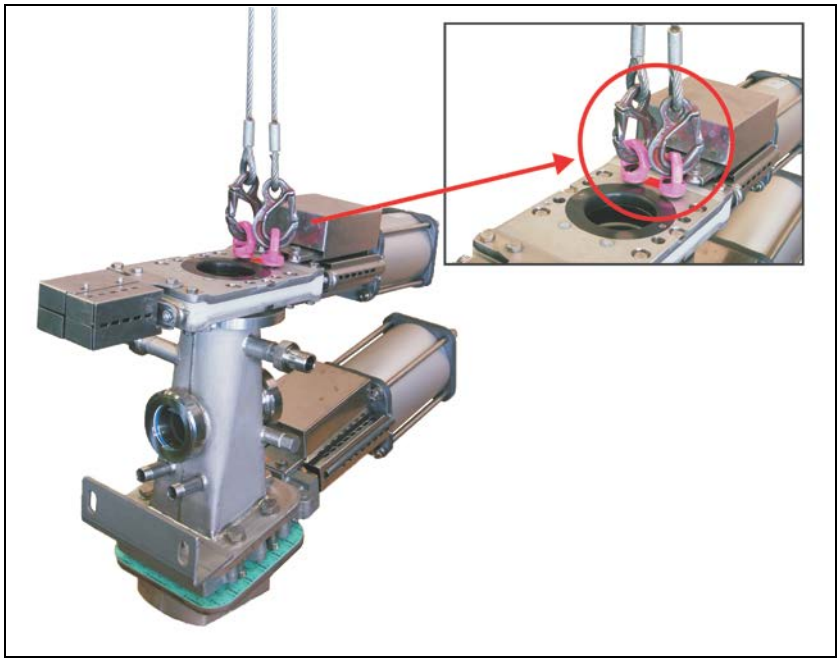
CAUTION

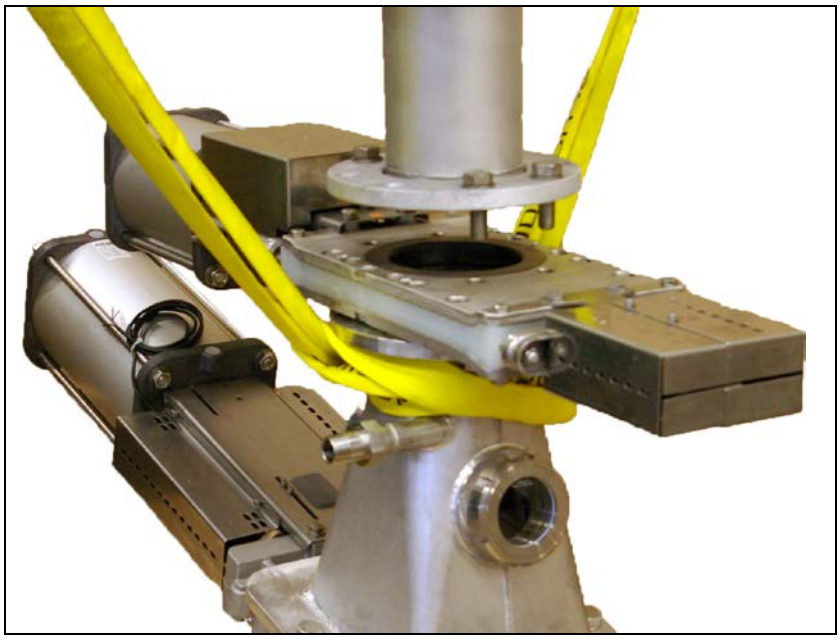
Damaging of the dirt trap

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.

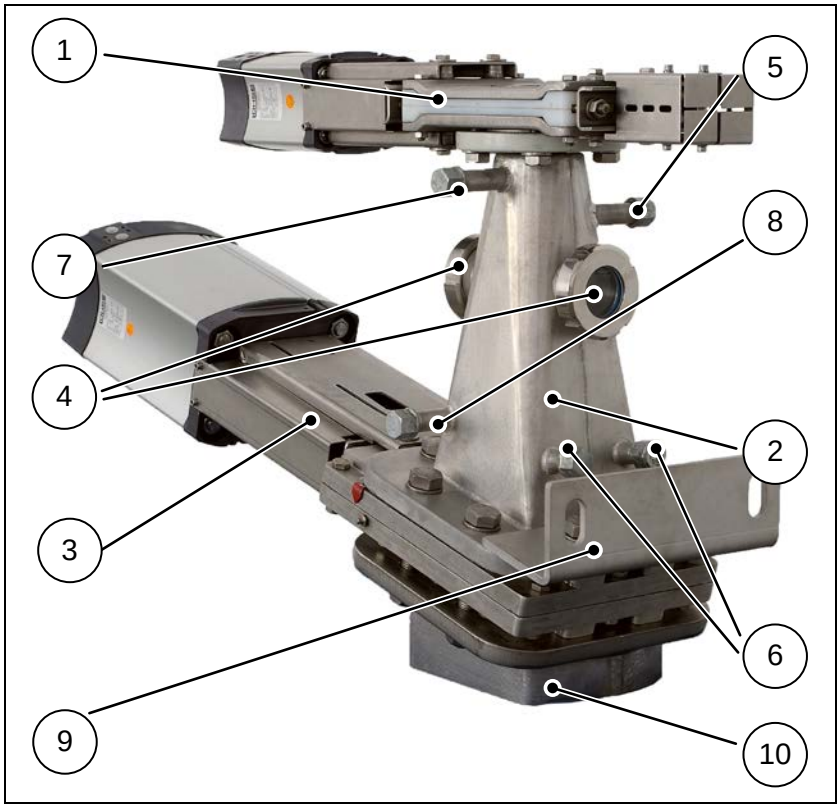
Protect the dirt trap against dirt.

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

Type	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 150	~ 5	682	½	½	1	¾	98
RSL 50/150-E									100
RSL 65/150-G	DN 65	DN 150	~ 5	682	½	½	1	¾	98
RSL 65/150-E									100
RSL 80/150-G	DN 80	DN 150	~ 5	695	½	½	1	¾	121
RSL 80/150-E									123
RSL 100/150-G	DN 100	DN 150	~ 8	635	1	¾	1	¾	136
RSL 100/150-E									138
RSL 100/200-G	DN 100	DN 200	~ 11	650	1	¾	1	¾	155
RSL 100/200-E									141
RSL 100/250-G	DN 100	DN 250	~ 15	634	1	¾	1	¾	169
RSL 100/250-E									168
RSL 125/250-G	DN 125	DN 250	~ 15	635	1	¾	1	¾	175
RSL 125/250-E									174
RSL 150/200-G	DN 150	DN 200	~ 13	660	1	¾	1	¾	189
RSL 150/200-E									176
RSL 150/250-G	DN 150	DN 250	~ 17	662	1	¾	1	¾	182
RSL 150/250-E									181
RSL 200/250-G	DN 200	DN 250	~ 22	743	1	¾	1	¾	221
RSL 200/250-E									220
RSL 250/300-G	DN 250	DN 300	~ 40	823	1	¾	1	¾	434
RSL 250/300-E									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.

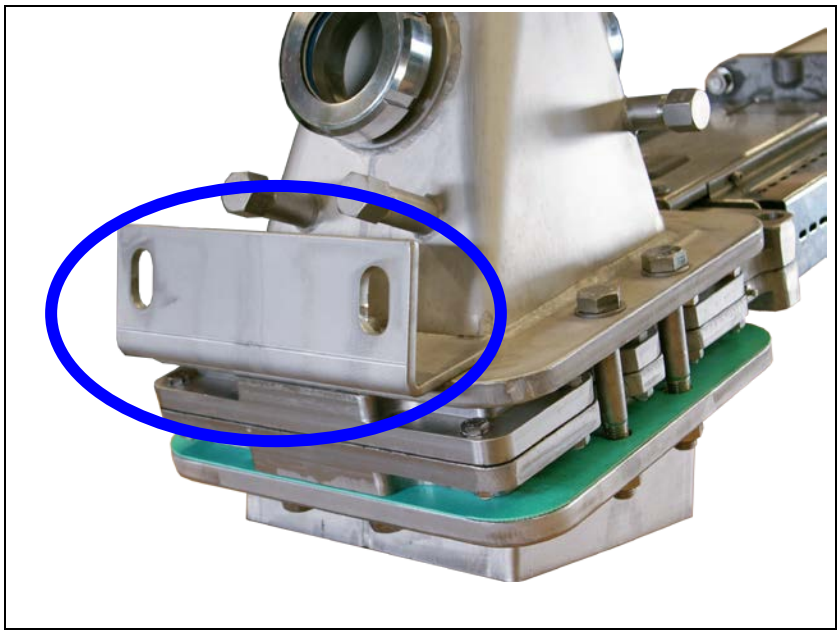
The outlet piece is an open interface. It must be adjusted by the trap operator to the requirements of the unit to which it is to be attached, in accordance with the applicable safety regulations.

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 non-lubricated 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 (2“)	65 (2,5“)	80 (3“)	100 (4“)	125 (5“)	150 (6“)	200 (8“)	250 (10“)	300 (12“)	350 (14“)	400 (16“)	450 (18“)	500 (20“)	600 (24“)	700 (28“)	800 (32“)	900 (36“)	1000 (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		

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

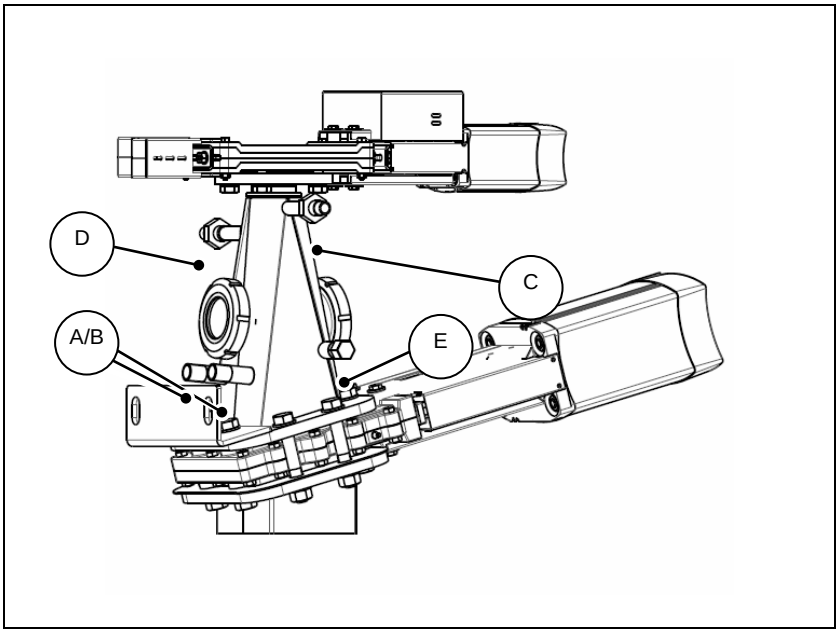
Damage due to overfilling of the reject trap with foreign materials

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

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:

- 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"
- Upper shut-off valve	"open"

If required:
- Readjustment of dilution water by means of manually operated taps

- Next cycle time started through timer relay	"on" (5 to 120 minutes)

* 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.

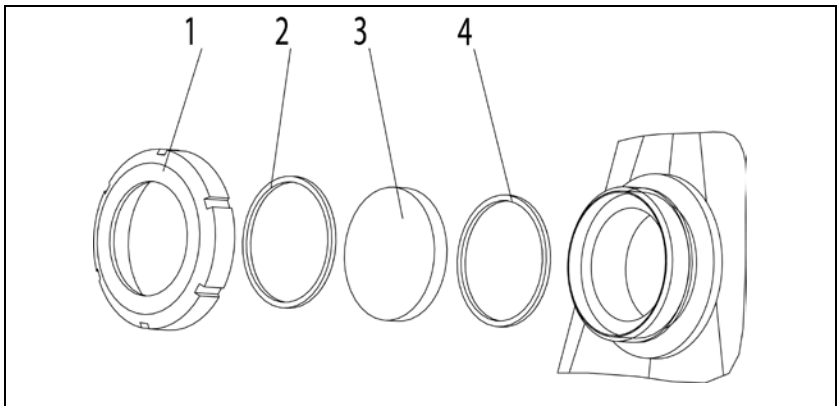
7.3 Cleaning of the dirt trap

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.

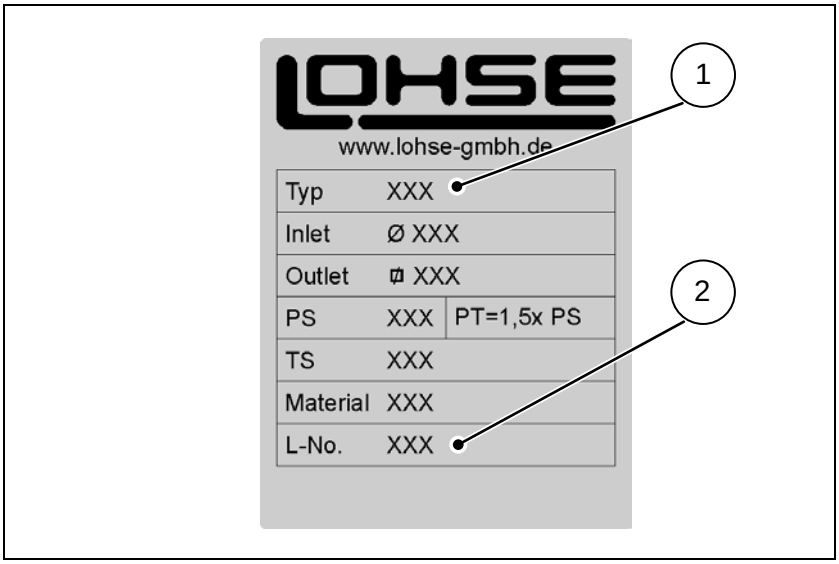
- Screw off cap nut using a DIN 1810A 110-115 or 120-130 sickle spanner
    - o Direction of rotation counter-clockwise = "OPEN"
- Remove seals and sight glass
- Clean seal seat
- Put on new seal ring (4), sight glass plate (3), flat seal (2) and grooved union nut (1) in the order shown



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

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 leakage from the packing chamber	Packing not tight		Retighten packing, lubricate valve plate
	Packing defective		Replace packing, clean and grease valve plate
Leakage along flow-through section	Object jammed between valve plate and housing		Open valve slightly, remove jammed object and repeat closing procedure
	Sealing in flow-through section defective		Dismantle valve and replace seals
	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)
Leakage at flange connection	Valve jammed during installation		Loosen flange bolts and reinstall valve according to the instructions
	Flange seal defective		Dismantle valve and replace flange seals
	Flange seal missing		Install flange seal(s)
Valve stiff (difficult to close or open)	Valve blocked and/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
	Insufficient fastening		Following the instructions in the operating manual, fasten with suitable means at the corresponding points
	Manually operated valve	Stem dirty	Check stem, clean and grease
	Pneumatically operated valve	Insufficient operating pressure	Check operating pressure and increase, if necessary
		Control valve blocked	Clean control 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	Possible cause		Remedy
Valve plate cannot be moved	Flange bolts too long		Remove flange bolts from threaded bores, check length and replace, if necessary (for depth of thread, see attached label)
	Lubricant washed off		Clean and lubricate
	Insufficient fastening		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
		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
	Electrically operated valve	Electrical actuator	Check motor for power supply
			Check electrical actuator for defects
		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	Possible cause		Remedy
Leakage of medium	Discharge tank leaking due to wear		Check discharge tank for leaks; replace discharge tank if necessary
	Defective sight glass		Check seal in sight glass; replace seal if necessary
			Check sight glass; replace sight glass if necessary
Excess pressure in reject trap	Bleed valve not opened during filling process		Check bleed valve; adjust control if necessary or replace if defective
	Design specifications exceeded		Check whether operating data of the cleaning machine are consistent with operating data of the reject trap
Inadequate separation of rejects	Reject trap overfilled		Reset cycle time
	Flush valve set incorrectly		Check flush valve; adjust if necessary
	Slumping of reject during start of trap		Fill reject trap with water before opening the top valve
Valves close sluggishly or not at all	*Upper trap valve*	Reject trap overfilled	Reset cycle time
	Lower trap valve	Reject remnants in trap	Check cleaning valves; adjust if necessary
		Rejects jammed	Clean lower valve
Reject trap is not emptied	Lower trap valve does not open		Check lower trap valve; replace if necessary
	Too many rejects accumulated		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.