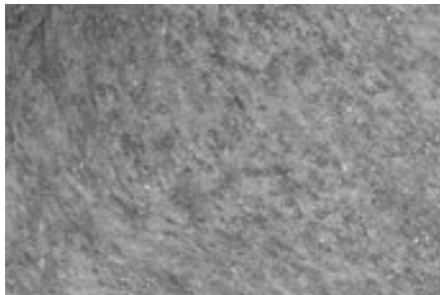
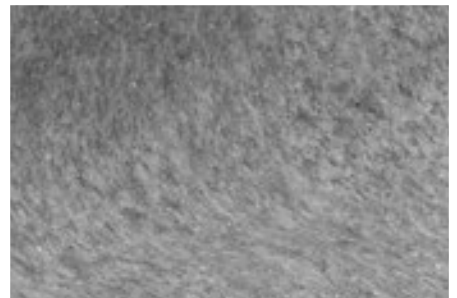


SediPipe® basic | SediPipe® level

**Installation and maintenance manual
Stormwater treatment system**



Last modified: April 2018

DRAINAGE SYSTEMS
ELECTRICAL SYSTEMS
BUILDING TECHNOLOGY
INDUSTRIAL PRODUCTS

1. Your connection to us

Professional advice from FRÄNKISCHE

International Sales Director

Horst Dörr +49 9525 88-2490
horst.doerr@fraenkische.de

International Sales

Dinah Nigrowics +49 9525 88-8155
dinah.nigrowics@fraenkische.de

Technology

Stefan Weiß +49 9525 88-8824
stefan.weiss@fraenkische.de

European Sales Director

Klaus Lichtscheidel +49 9525 88-8066
klaus.lichtscheidel@fraenkische.de

European Sales

Jennifer Gernert +49 9525 88-2569
jennifer.gernert@fraenkische.de

Carolin Rausch +49 9525 88-2229
carolin.rausch@fraenkische.de

Jessica Ursin +49 9525 88-2441
jessica.ursin@fraenkische.de

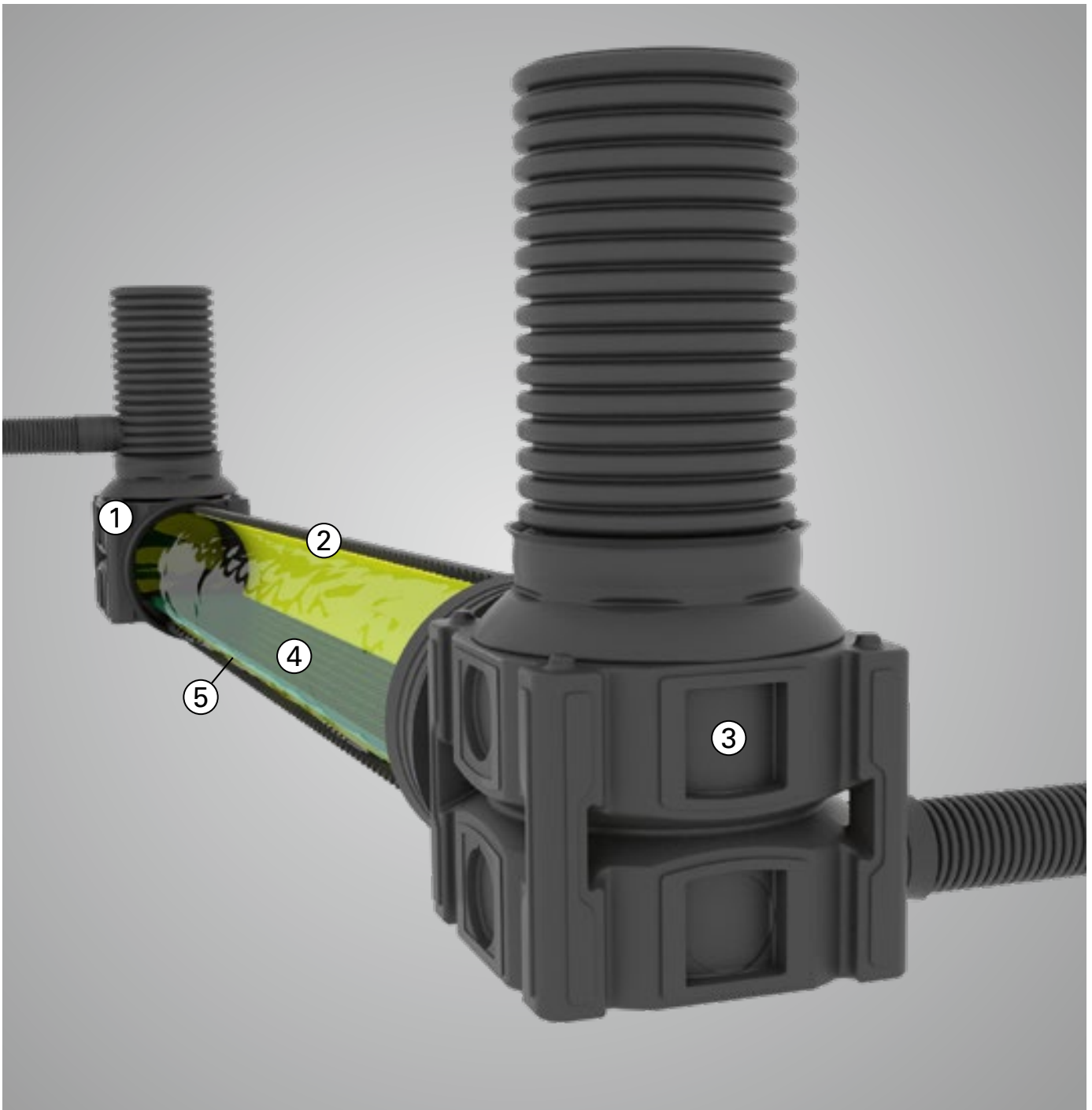
Fax +49 9525 88-2522



Table of contents

1. Your connection to us	2
2. SediPipe at a glance	4
3. System description	5 - 8
3.1 Application	5
3.2 Function description	5
3.3 SediPipe basic system description	6
3.4 SediPipe level system description	7
3.5 Technical data	8
4. Installation	9 - 17
4.1 Transport and construction site storage	9
4.2 Temporary construction site cover	9
4.3 Excavating pit and creating embedding	10
4.4 Installing the first shaft	10
4.5 Installing the sedimentation path	11
4.6 Installing the second shaft	11
4.7 Installing extension pipes	12
4.8 Tests before backfilling and impermeability test	12
4.9 Lateral and main backfilling	13
4.10 Installing shaft covers	14
4.11 Filling the system	15
4.12 Arrangement of multiple SediPipe basic systems	16
4.13 Commissioning	17
5. Cleaning	18 - 19
5.1 Emptying and cleaning of the system	18 - 19
5.2 Filling the system with water	19
6. Self-inspection and maintenance	20 - 21
6.1 General information	20
6.2 Self-inspection	20
6.3 Maintenance	20
6.4 Disposal	21
6.5 Thorough visual inspection	21
7. Overview - Who does what?	22
8. Safety instructions	23

2. SediPipe® at a glance



- ① Start shaft
- ② Sedimentation path
- ③ Target shaft
- ④ Flow separator
- ⑤ Mud chamber

3. System description

3.1 Application


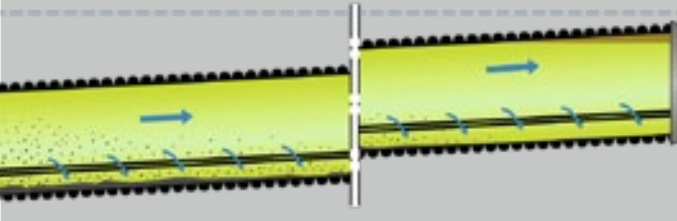
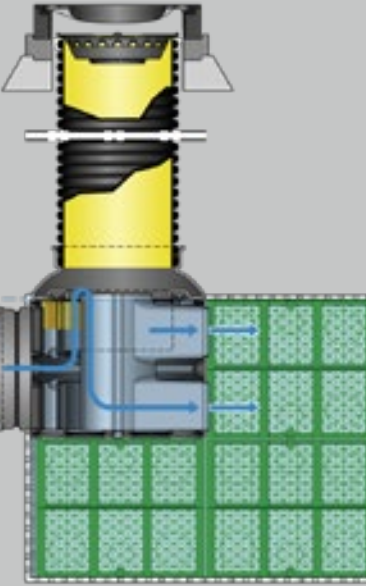
SediPipe basic and SediPipe level are stormwater treatment systems for polluted stormwater runoff, e.g. from traffic areas. The systems separate

washed-up particles and light liquids (oil) from stormwater and reliably retain these materials in the system, even in case of spills in dry weather.

3.2 Function description

SediPipe basic and SediPipe level are stormwater treatment systems which keep a permanent water level. Sedimentation initially retains the coarse particles in the start shaft. The upstream sedimentation path retains fine particles. The flow separator prevents remo-

obilisation and therefore discharge of sediment during heavy rain. The immersion wall in the target shaft retains fuel and oil in the system in case of spills.

Start shaft	Sedimentation path		Target shaft
			
Retention of coarse particles	Retention of fine particles		Retention of light liquids
Sedimentation (physical)	Sedimentation (physical)	Depot protection thanks to flow separator	Immersion wall (physical)

3. System description

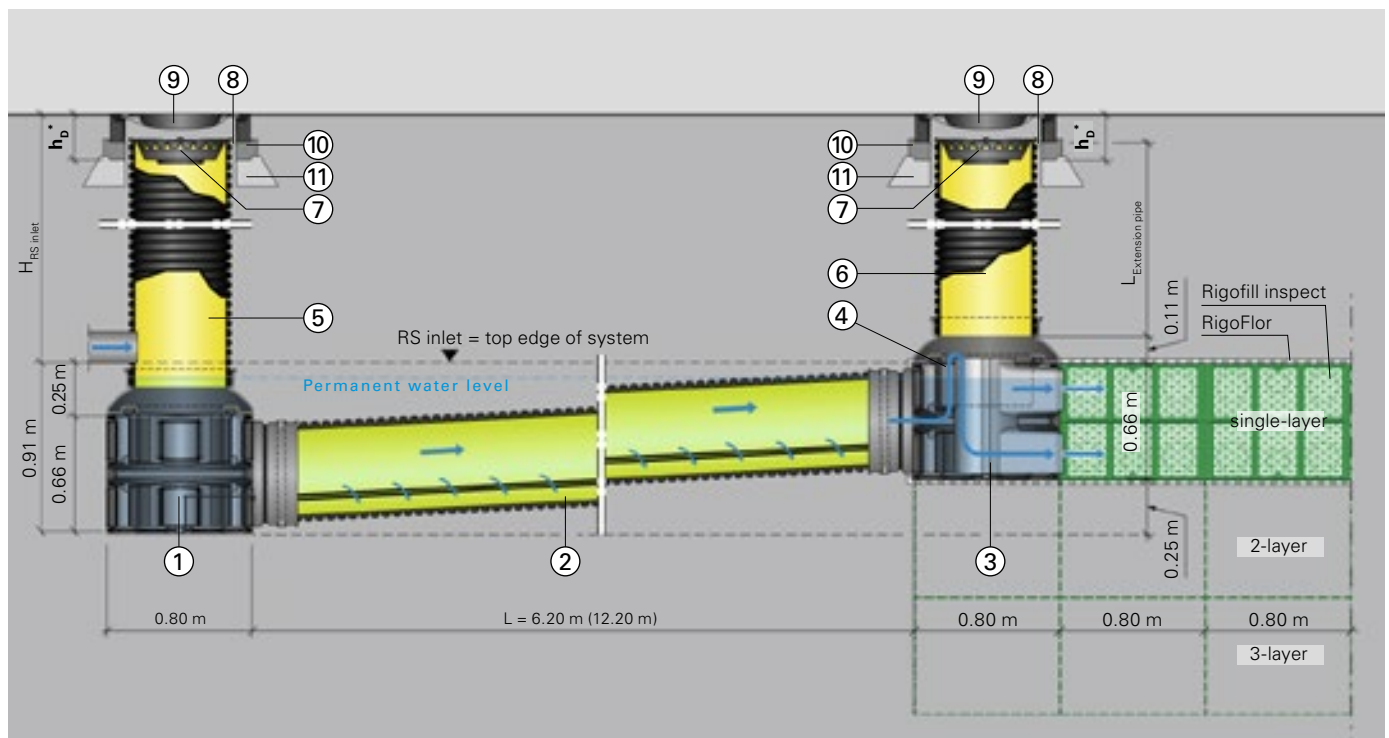
3.3 SediPipe basic system description

SediPipe basic systems have been designed to directly connect to Rigofill inspect storage/infiltration systems. The perfectly matching installation dimensions allow the complete integration of the target shaft into the storage/infiltration system. SediPipe basic comprises a start shaft, a target shaft, a sedimentation path and additional accessories

such as extension pipes, sediment trap and DOM sealing ring. The sedimentation path includes one or several main pipes in diameters 400, 500 or 600 with an installation length of 6 m each. The lower flow separator preventing remobilisation of sediment is located in the sedimentation pipe. The total length of the sedimentation path depends on

the system type and varies between 6 m and 12 m.

The sedimentation path features a construction-related slope when installed.



Example: SediPipe basic 500/6 (500/12) with downstream Rigofill inspect infiltration system

*Adjustable, depending on shaft cover, height and number of support rings

- | | |
|---|---|
| ① Start shaft with maintenance console | ⑦ Sediment trap D _o 600 |
| ② Sedimentation path with flow separator | ⑧ DOM sealing ring |
| ③ Target shaft for Rigofill connection | ⑨ Shaft cover CW 610 with ventilation openings* |
| ④ Immersion wall | ⑩ Concrete support ring* |
| ⑤ Extension pipe D _o 600 with 360° rotatable inlet | ⑪ Bearing without stationary loads* |
| ⑥ Extension pipe D _o 600 without inlet | |

*to be supplied on site

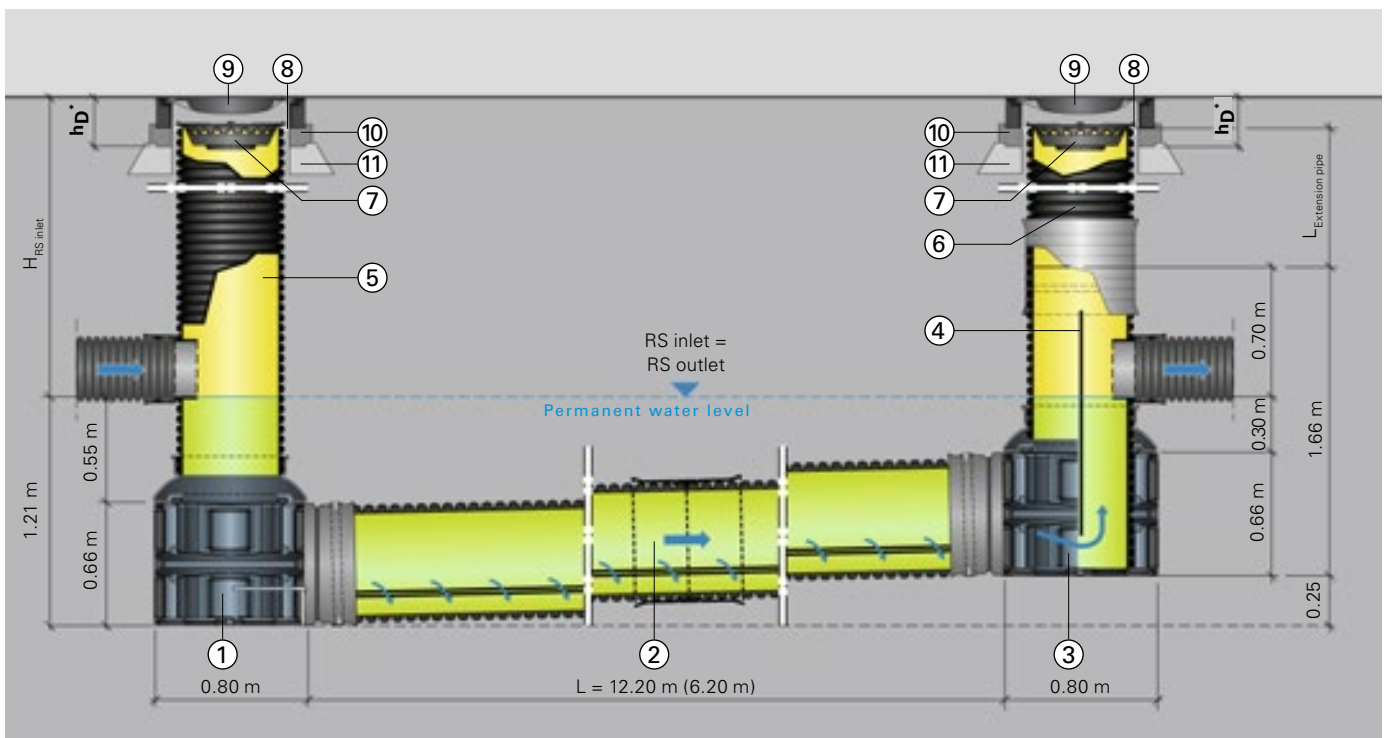
3. System description

3.4 SediPipe level system description

SediPipe level systems have been designed for different applications. In addition to being installed upstream of a waterbody, this system can also be installed upstream of a Rigofill inspect storage/infiltration system or a pipe swale. The significant characteristic of SediPipe level is its same-level inlet and outlet allowing for very shallow installation depths. SediPipe level comprises a

start shaft, a target shaft, the sedimentation path and additional accessories such as extension pipes, sediment trap and DOM sealing ring. The sedimentation path includes one or several main pipes in diameters 400, 500 or 600 with an installation length of 6 m each. The lower flow separator preventing remobilisation of sediment is located in the sedimentation pipe.

The total length of the sedimentation path depends on the system type and varies between 6 m and 12 m. The sedimentation path features a construction-related slope when installed.



Example: SediPipe level 600/12 (600/6) with discharge into a surface waterbody or sewer

*Adjustable, depending on shaft cover, height and number of support rings

- | | |
|--|---|
| ① Start shaft with maintenance console | ⑦ Sediment trap D ₀ 600 |
| ② Sedimentation path with flow separator | ⑧ DOM sealing ring |
| ③ Target shaft | ⑨ Shaft cover CW 610 with ventilation openings* |
| ④ Immersion wall | ⑩ Concrete support ring* |
| ⑤ Extension pipe D ₀ 600 with inlet, project-specific | ⑪ Bearing without stationary loads* |
| ⑥ Extension pipe D ₀ 600 without inlet | |
- *to be supplied on site

3. System description

3.5 Technical data

SediPipe basic	400/6	500/6	600/6	500/12	600/12
Length "L" [m]	6.20	6.20	6.20	12.20	12.20
Diameter of the sedimentation path [mm]	400	500	600	500	600
Length of the sedimentation path [m]	6	6	6	12	12
Light liquids collecting volume [litres] *	230	230	320	340	520
Collecting volume of the mud chamber [litres]	280	270	280	440	490
Mud level in the start shaft [cm]	31	21	17	21	17
Permanent water level volume [litres]	1,620	2,040	2,540	3,210	4,210
Material (sedimentation pipe)	PP	PP	PP	PP	PP

* Retention of light liquids in case of spills

SediPipe level	400/6	500/6	600/6	500/12	600/12
Length "L" [m]	6.20	6.20	6.20	12.20	12.20
Diameter of the sedimentation path [mm]	400	500	600	500	600
Length of the sedimentation path [m]	6	6	6	12	12
Light liquids collecting volume [litres] *	670	920	1,160	1,440	1,920
Collecting volume of the mud chamber [litres]	280	270	280	440	490
Mud level in the start shaft [cm]	31	21	17	21	17
Permanent water level volume [litres]	1,710	2,130	2,630	3,300	4,300
Material (sedimentation pipe)	PP	PP	PP	PP	PP

* Retention of light liquids in case of spills

4. Installation

4.1 Transport and construction site storage

The shaft base bodies (max. 50 kg/piece) must be specifically prepared for transport and lifting. To do so, form a loop between the two openings using a wide hoisting sling.

If required, hoisting slings can be fastened to this loop. The sedimentation and extension pipes can be suspended between two hoisting slings or round slings for transport.



Store all components on level ground using sleepers and secure against shifting. Damaged parts must NOT be installed. Do NOT throw components!



Transport using appropriate hoisting slings



Storage on sleepers

4.2 Temporary construction site cover

The shaft base bodies and extension pipes are delivered with factory-prepared temporary construction site covers. Make sure that no dirt, e.g. backfill material, enters the system during the construction period. Do NOT remove

the temporary construction site covers before installing extension pipes and/or shaft covers. Additionally protect shaft openings from earth slides until final installation of shaft covers.



Shafts must NOT be accessed before installing the cover. If necessary, the required load transfer to the native soil must be ensured using a wide steel plate.



Temporary construction site cover for shafts



Temporary construction site cover for extension pipes

4. Installation

4.3 Excavating pit and creating embedding

In addition to the regulations of DIN EN 1610, observe the specifications of DIN 18300 "Earthworks" as amended regarding excavating the pit and creating the embedding. The embedding must be 10 cm to 15 cm high and must be created from compactable, stoneless

material depending on the in-situ soil. The minimum widths according to DIN EN 1610 must be strictly adhered to when creating pipe swales. Please observe any deviating minimum widths in the area of the shafts according to local specifications.

ATTENTION

The bearing heights of start shafts and target shafts and the required height difference must be created according to design specifications.

4.4 Installing the first shaft

Installation directions:

Depending on on-site conditions, installation of the system can begin either at the start shaft or at the target shaft:

Supply pipe available;
→ begin at start shaft

Drainage pipe or storage/infiltration system available;
→ begin at target shaft

Place the shaft at the appropriate height on the prepared planum and secure it to prevent shifting. Connect supply pipe and drainage pipe according to design specifications. Make sure no backfill material enters the shaft (do NOT remove temporary construction site cover).



Example:
target shaft with Rigofill storage/infiltration system

ATTENTION

Crown markings of pipe and coupling must match exactly for all pipe installations!

4. Installation

4.5 Installation of the sedimentation path

1. Mount profile sealing rings into the first corrugation trough on each side while still outside the excavation pit. The pipe must be clean.
 2. Move the sedimentation pipe to the installation position using lifting equipment (see Section 4.1). The crown marking must face upwards! The integrated flow separator faces downwards!
 3. Keep the pipe, sealing ring and the coupling clean. Apply sufficient amount of lubricant to sealing ring and coupling. Ensure that the sealing area is free of dirt. In order to prevent the profile sealing ring from resting on the bearing, the pipe end to be installed can rest on square timber.
 4. Use a long lever to install the pipe. Place a board or square timber under
- the unattached pipe end to prevent damage to the pipe. Pipes must be installed horizontally. Mark the insertion depth on the pipe beforehand. Afterwards create the pipe slope by aligning the pipe.
5. Deepen the embedding in the area of the couplings as required.



Installation of sealing ring onto sedimentation pipe



Sealing ring with lubricant



Installation of sedimentation pipe

4.6 Installing the second shaft

Place the second shaft at the appropriate height on the prepared planum. Afterwards, prepare the coupling connection and mount the shaft onto the sedimentation pipe. Connect supply pipe and drainage pipe according to design specifications (see Section 4.4).



Installation of target shaft

4. Installation

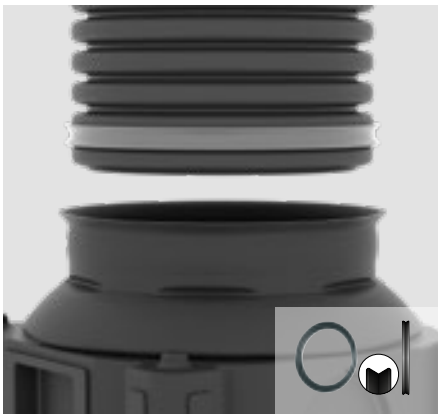
4.7 Installing extension pipes

Remove temporary construction site covers from shafts. Mount the profile sealing ring belonging to the start shaft and the target shaft into the first corrugation trough of the extension pipe.

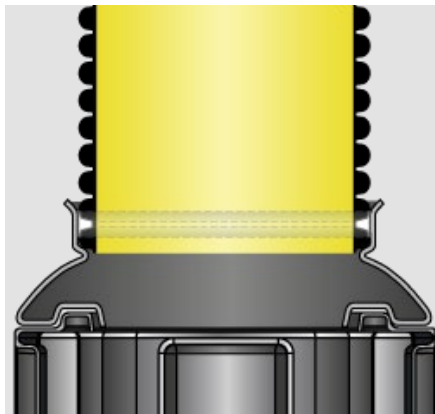
Apply a sufficient amount of lubricant to the profile sealing ring and the coupling of the start shaft and the target shaft (prevent the sealing area from getting dirty!).

Afterwards insert the extension pipe all the way into the shaft cone or the coupling of the shaft.

Observe the supply direction at the start shaft while doing so. Connect the supply pipe to the extension pipe of the start shaft.



Example of a SediPipe basic start shaft



4.8 Tests before backfilling and impermeability test

Before backfilling the excavation pit, check the system for proper installation and leak-tightness.

The following tests must be performed in particular:

- | | |
|--|---|
| 1 Height of the shafts according to design specifications. <input checked="" type="checkbox"/> | 5 Total insertion depths at the couplings. <input checked="" type="checkbox"/> |
| 2 Exact adjustment of the shafts. <input checked="" type="checkbox"/> | 6 Position and matching of crown markings (top). <input checked="" type="checkbox"/> |
| 3 Check for damage, foreign objects or coarse particle pollution. <input checked="" type="checkbox"/> | 7 Impermeability test. <input checked="" type="checkbox"/> |
| 4 Axial direction of the system. <input checked="" type="checkbox"/> | |

Tip

We recommend having the system approved by the site management before backfilling.

4. Installation

4.9 Lateral and main backfilling

The specifications of the latest version of DIN EN 1610 must be adhered to when creating lateral and main backfilling. If country-specific regulations or deviating specifications conflict with this, these must be agreed upon with FRÄNKISCHE if necessary. Compactable materials which can be compacted by hand in layers are approved for lateral backfilling only. Make sure that the bottom side of the sedimentation pipes rests completely

on the compacted foundation. Provide a soil cover of at least 30 cm for the sedimentation path.

The materials for main backfilling must be filled and compacted according to design specifications.

Make sure that the shafts and sedimentation pipes do not shift during backfilling of the excavation pit.

ATTENTION

Do NOT remove temporary construction site covers or protective covers before finishing main backfilling!



Compacting



Temporary construction site cover

4. Installation

4.10 Installing shaft covers

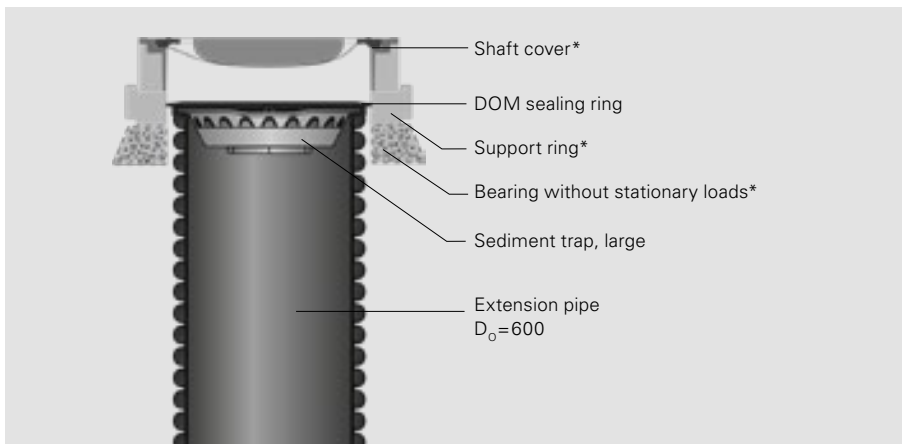
Cut the D_o 600 extension pipe such that it reaches the support ring. Seal the gap between the support ring and the shaft cover using a DOM sealing ring. Mount the sealing ring onto the last corrugation of the extension pipe.

Place a D_o 600 sediment trap onto the extension pipe. If the start shaft must feature a gully gutter according to design specifications, a bucket handle

(or feed hopper) and a bucket according to DIN 4052-A4 must be installed.

Shaft covers, concrete support rings, gully gutter, bucket handle and bucket are not included in the scope of delivery of FRÄNKISCHE Rohrwerke and must be ordered/supplied on site. Install shaft covers according to DIN EN 124, CW 610, installation according to design specifications. Put a support ring

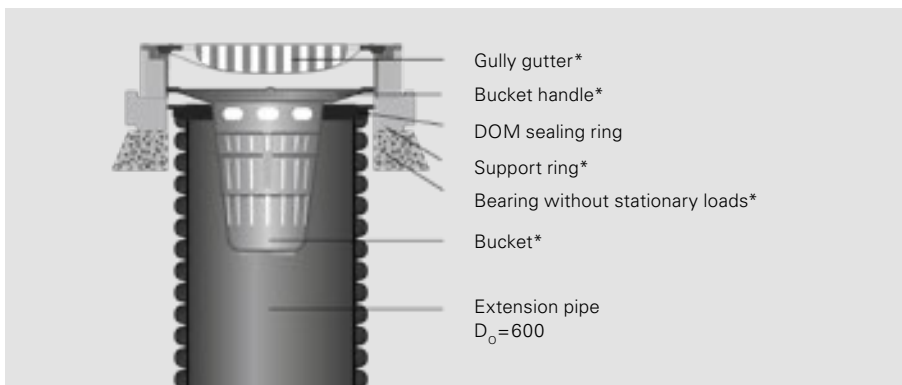
$h = 100$ mm acc. to DIN 4034 under the shaft cover / gully gutter on an appropriate bearing. Create the bearing from compacted bearing layer material (E_{v2} module ≥ 100 MN/m²) or in-situ concrete C 16/20. Avoid interlocking of the bearing with the corrugations of the extension pipe (use casing aid!). Vertical loads may only be transferred to the load-bearing underground.



Shaft cover on start or target shaft
*to be supplied on site



DOM sealing ring



Optional: gully gutter on start shaft
*to be supplied on site

4. Installation

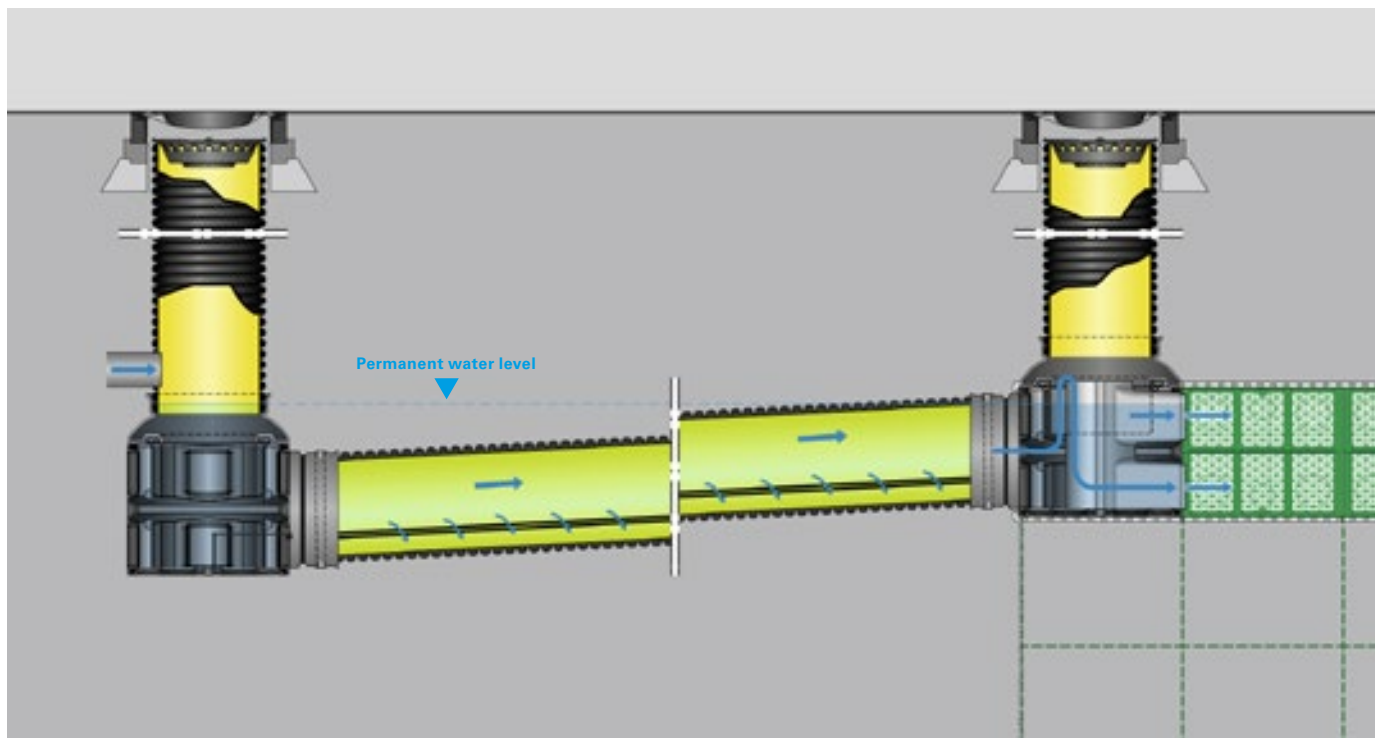
4.11 Filling the system

After the work has been completed, the system must be filled with water up to the permanent water level. This is required to ensure the retention of floatables and light liquids through the immersion wall. The system must be

filled with water (e.g. drinking water, service water, from water recovery or treated wastewater from system cleaning) complying with the local discharge conditions.

NB

For permanent water level volume see Section 3.5 Technical data, page 8



SediPipe basic permanent water level (example upstream of an infiltration system)

4. Installation

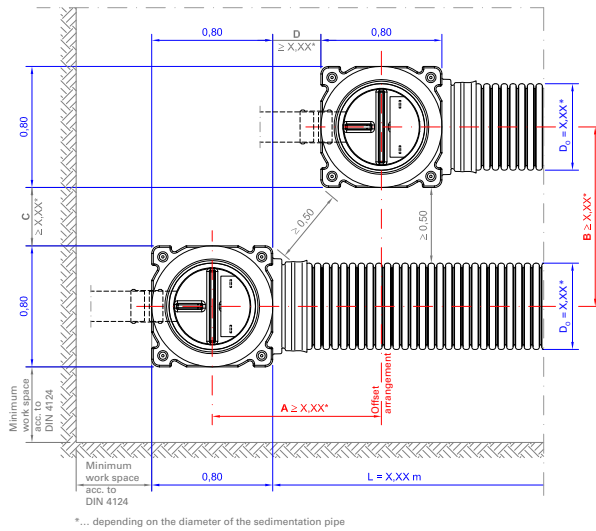
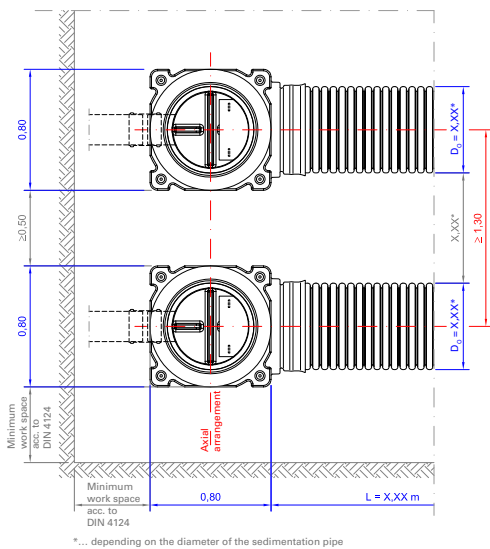
4.12 Arrangement of multiple SediPipe basic / SediPipe level systems

The above sections of the installation manual describe the standard installation as single system. The following describes the recommendations for the arrangement of multiple systems and the required minimum distances. We draw your attention to the fact that for installation distances between distri-

bution and combining units and treatment system, the respective fitting dimensions of the connection pipes and their space requirements must be considered for the installation in addition to the general minimum distances specified by standards.

ATTENTION

Make sure that the system components are not damaged during backfilling or compacting. Observe the installation instructions for individual systems.



Caption:

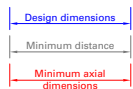


Fig. 12.1 SediPipe basic/level axial arrangement

We recommend a minimum distance of 1.30 m or more referring to the shaft centres for axial arrangements (Fig. 12.1). Please refer to the minimum distances and minimum centre distances for offset arrangements of

shaft constructions (Fig. 12.2). If the recommended distances for the respective installation situations are complied with, there is a breadth of working space of at least 0.5 m between the two shaft constructions or between the shaft con-

Dimension of the sedimentation pipe	Outside dimension of the sedimentation pipe	Minimum axial distance A start shaft and target shaft	Minimum axial distance B sedimentation pipes	Minimum distance C	Minimum distance D
DN 400	$D_o = 0,46 \text{ m}$	$\geq 1,18 \text{ m}$	$\geq 1,13 \text{ m}$	$\geq 0,33 \text{ m}$	$\geq 0,38 \text{ m}$
DN 500	$D_o = 0,57 \text{ m}$	$\geq 1,12 \text{ m}$	$\geq 1,19 \text{ m}$	$\geq 0,39 \text{ m}$	$\geq 0,32 \text{ m}$
DN 600	$D_o = 0,68 \text{ m}$	$\geq 1,03 \text{ m}$	$\geq 1,24 \text{ m}$	$\geq 0,44 \text{ m}$	$\geq 0,23 \text{ m}$

Fig. 12.2 SediPipe basic/level offset arrangement

struction and the sedimentation path. This is to ensure professional compaction between the system components using light compacting equipment.

4. Installation

4.13 Commissioning

ATTENTION

Observe the safety instructions (page 2).

1 Making system ready for operation

- Clean system of coarse dirt
- Remove auxiliary constructions
- Fill system with water
- Close shaft covers



2 Instruction

1. The following people should be present during instruction:

- persons authorised by the principal to perform the acceptance
- planner/engineering office
- construction contractor
- specialist/expert

We also recommend participation of operating staff.



2. Instruction

- Explain function of system
- Explain maintenance
- Information regarding cleaning and disposal
- Information about FRÄNKISCHE partner companies



3 Documentation/handling over

- Hand over maintenance and installation manuals
- Hand over system documentation including operating log
- Proof of system leak tightness
- Optionally: documentation of thorough visual inspection



5. Cleaning

5.1 Emptying and cleaning of the system

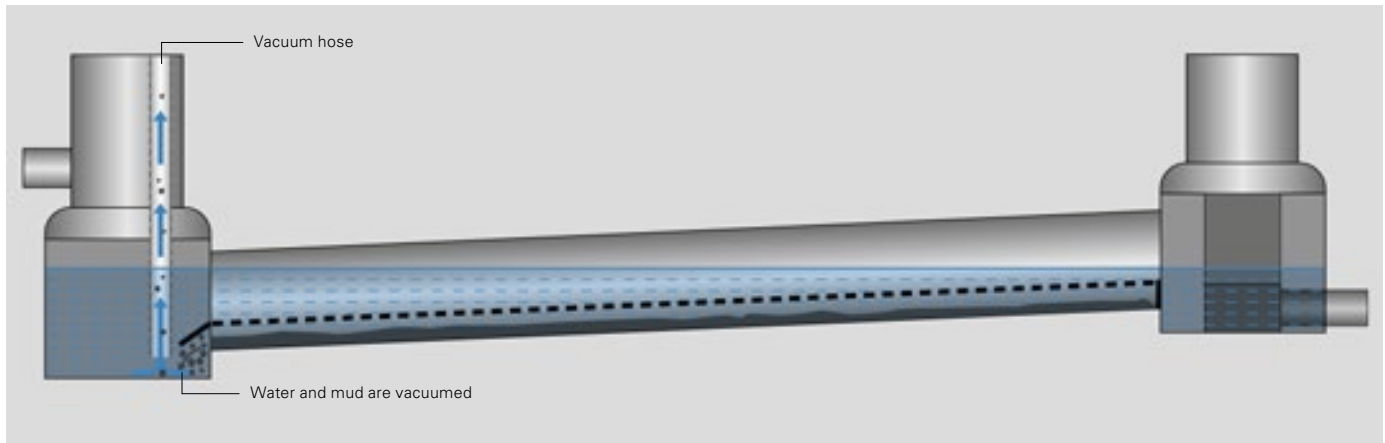
All the emptying and cleaning work of the system described in this section must generally be made from the start shaft.

Use a high-pressure cleaning/vacuum vehicle to empty the system and remove the contained water and mud

fractions. To do so, initially vacuum the complete contents through the start shaft. The valve flap sealing the sedimentation chamber of the sedimentation pipe can now be moved freely. Due to the slope of the sedimentation pipe, most of its mud collector will be emptied of its contents into the start shaft.

ATTENTION

In the event of an oil spill, the system must be immediately maintained by a specialist and the washed matter must be disposed of appropriately! Otherwise, subsequent rain may lead to a discharge of light liquids!



Emptying with vacuum hose using the example of SediPipe basic 500/6

5. Cleaning

When empty, the maintenance console mounted at the height of the flow separator is visible in the start shaft. The maintenance console facilitates inserting and guiding the flush hose during high-pressure cleaning.

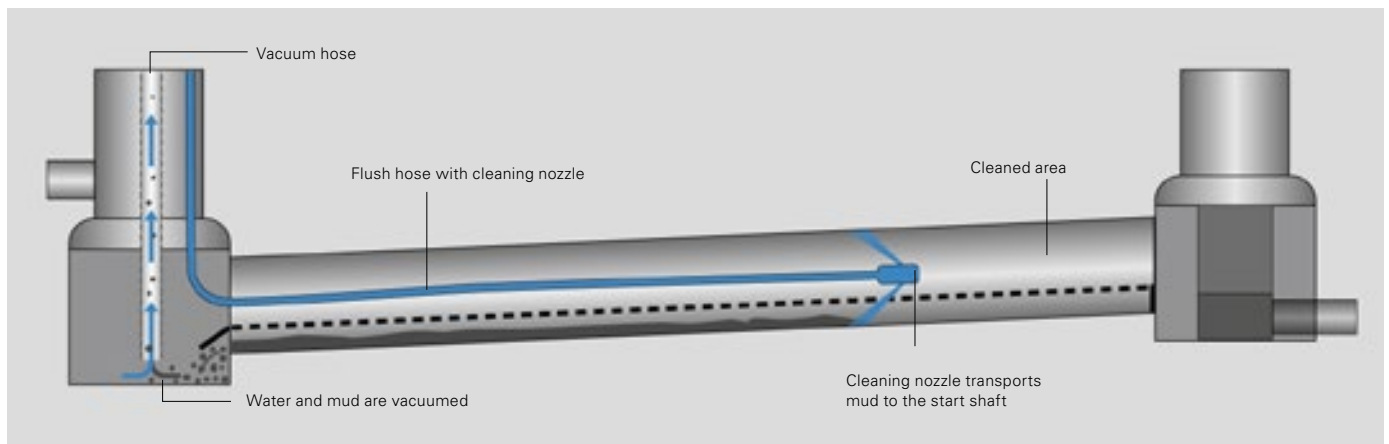
The flush hose is guided through the maintenance console on the flow separator. The cleaning nozzle is guided up to the target shaft during high-pressure

cleaning. Make sure that the nozzle does not enter the target shaft. The efficiency of the vehicle and the cleaning and nozzle parameters must be selected depending on the pipe section, pipe material and degree of pollution to be expected.

Use deflection pulleys to avoid damage to the system.

Tip

Combined flushing-vacuum vehicles with water recovery should be used preferably. This minimises disposal expenses and the treated water can be used to refill the system.



Cleaning with vacuum and flush hose

5.2 Filling the system with water

After the work has been completed, the system must be filled with water up to the permanent water level. This is required to ensure the retention of floatables and light liquids through the immersion wall.

The system must be filled with water (e.g. drinking water, service water, from water recovery or treated wastewater from system cleaning) complying with the local discharge conditions.

NB

**Drawing see Section 4.11, page 15
For permanent water level volume see Section 3.5 Technical data, page 8**

6. Self-inspection and maintenance

6.1 General information

To ensure functionality of the SediPipe basic/level system, its condition must be ensured through recurring self-inspections and maintenance. All work and findings must be documented in the operating log. We generally recommend

entering a maintenance agreement with an expert (FRÄNKISCHE partner company). Please find an overview of partner companies trained by FRÄNKISCHE at www.fraenkische.com under "Drainage systems", "Find partner companies".

ATTENTION

The respective periods and responsibilities are only a recommendation by FRÄNKISCHE and may differ from authority approvals. In these cases, the authorities' requirements are mandatory and must be observed!

6.2 Self-inspection

The operational capability of the system must be verified by the operator under dry weather conditions at least every three months. To do so, open the covers of the start and target shafts and visually inspect from the top without accessing the shafts themselves (simple visual inspection).

Check the following:

- structural condition of the system
- height of the permanent water level
- mud level of the start shaft

ATTENTION

If a relevant deviation from normal conditions occurs which may impair the operational capability of the system, maintenance must be carried out in order to immediately eliminate the detected deficiencies.

6.3 Maintenance

Until there are no system-specific empirical values regarding the actual volume of mud, the SediPipe system must be maintained according to the following guiding values.

The following work must be performed:

- Emptying and cleaning of the system (see 5.1, page 18 pp.)
- Refilling the system (see 4.11, page 15)

Tip

Operators can schedule the system-specific maintenance interval as described in the following to reduce operating costs or in case of special areas with increased mud volumes:

Provided that the complete system was cleaned after finishing construction, emptying and cleaning of SediPipe can take place depending on the mud level. To do so, measure the mud level in the start shaft during self-inspection. We recommend emptying when 80 % of the mud storage volume or the maximum mud level in the start shaft have been reached. The storage volume can be obtained from the table (see Section 3.5, page 8).

Type of system	Maintenance interval 1 year	Maintenance interval 2 years	Maintenance interval 3 years	Maintenance interval 4 years
	connectable area [m ²]	connectable area [m ²]	connectable area [m ²]	connectable area [m ²]
SediPipe basic/level 400/6	7,800	3,900	2,600	1,950
SediPipe basic/level 500/6	7,550	3,750	2,500	1,850
SediPipe basic/level 600/6	7,950	3,950	2,650	1,950
SediPipe basic/level 500/12	12,250	6,100	4,050	3,050
SediPipe basic/level 600/12	13,700	6,850	4,550	3,400

Basis average volume of pollution 500 kg/ha*a (dry matter)

6. Self-inspection and maintenance

6.4 Disposal

Materials removed from the system such as mud and flushing water used to clean the system may contain hydrocarbons and heavy metals. Therefore, they must be disposed of in compliance with the applicable legal provisions.

Waste fractions occurring after spills with light liquids must be disposed of

professionally as "oil/water separator contents" in compliance with the current waste catalogue. The statutory disposal and acceptance certificates must be included in the operating log together with the entries as evidence of proper disposal.

ATTENTION

Applicable waste disposal regulations must be observed when disposing of the system.

6.5 Thorough visual inspection

The structural condition of the sedimentation path can be inspected by thorough visual inspection using CCTV inspection.

To this end, the upper flow area is accessed with a state-of-the-art pan and tilt camera. The lower sedimentation

chamber can be inspected visually through the flow separator.

Here, the maintenance console facilitates inserting the dolly and guiding the camera cable. Use appropriate deflection pulleys.

Inspection equipment should be selected according to DWA worksheet and bulletin series DWA-A/M 149 "Conditions and Assessment of Drain and Sewer Systems Outside Buildings" and should be adjusted to pipe section and pipe material.



Inspection of flushing results with pan and tilt camera, camera on the maintenance console in the start shaft of a SediPipe basic system



Cleaned, residue-free system, here in the area of the flow separator

7. Overview - Who does what?

	Who	What	When	Documentation
Installation	Specialist	<ul style="list-style-type: none"> - Installation, cleaning and CCTV inspection of the system - Filling of the system with water from water recovery or with water complying with the local discharge conditions 		Operating log
Self-inspection	Operator	<p>Simple visual inspection</p> <ul style="list-style-type: none"> - Structural condition of the system - Height of the permanent water level - Mud level of the start shaft 	At least every 3 months	Operating log
Maintenance	Specialist	<ul style="list-style-type: none"> - Emptying and cleaning of the entire system using sewer cleaning vehicle - Refilling of the system with water from water recovery or with water complying with the local discharge conditions - Disposal of mud and solids - Applicable waste disposal regulations must be observed. 	Right after oil spill, otherwise see guiding values in the maintenance documentation	Operating log
Disposal	Specialist/waste disposal company	<ul style="list-style-type: none"> - Disposal of mud and solids - Applicable waste disposal regulations must be observed. 	When the retention volume has been used up	Operating log Disposal certificates
Repairs	Specialist	Only original parts or tailored party explicitly approved by the manufacturer may be used.	As required	Operating log

8. Safety instructions

ATTENTION

Staff responsible for installation, assembly, operation, maintenance and repair must have appropriate qualifications required for this kind of work.

The builder is responsible for organising in detail authority, responsibility and supervision of staff.

The operational safety of the system components supplied is only guaranteed in case of proper installation and correct use.

Technical threshold values must not be exceeded.

Observe the accident prevention regulations and relevant standards and directives for installation, fitting, operation, maintenance and repair!

This includes (in extracts):

- Accident prevention regulations
 - Construction work BGV C22
 - Technical wastewater systems GUV-V C5
- Safety regulations for working in enclosed spaces of technical wastewater systems GUV-R 126
- Handling biological working materials in technical wastewater systems GUV-R 145
- Directives for working in tanks and narrow spaces BGR 117
- Standards
 - Excavations and trenches - slopes, planking and strutting, breadths of working spaces DIN 4124
 - Construction and testing of drains and sewers DIN EN 1610
- Tool for safety and health protection in technical wastewater systems.



- Hazards from gases and vapours such as risk of suffocation, risk of poisoning and risk of explosion
- Risk of falling
- Risk of drowning

- Germ pollution and wastewater with sewage
- High physical and psychic strain during work in deep, narrow and dark spaces
- and others



Non-compliance with the operating manual may result in considerable prop-

erty damage, injury or death.



The system is part of an entire network. During installation, maintenance, service and repair work on one component, always consider the entire system. Avoid work during rain.

Changes or modifications to the system may only be carried out with the agreement of the manufacturer. For safety reasons, use original spare parts and accessories approved by the manufacturer. The use of other parts voids the liability for any consequences arising therefrom.

General information on using our products and systems:

Information about or assessments of the use and installation of our products and systems is exclusively provided on the basis of the information submitted. We do not assume any liability for damage caused by incomplete information. If the actual situation deviates from the planned situation or if a new situation occurs or if different or new installation techniques are applied, these must be agreed upon with FRÄNKISCHE, since these situations or techniques may lead to different conclusions. Notwithstanding the above, the customer is solely responsible for verifying the suitability of our products and systems for the intended purpose.

In addition, we do not assume any liability or responsibility for system characteristics and functionalities when third-party products or accessories are used in combination with FRÄNKISCHE systems. We only assume liability if original FRÄNKISCHE products are used. For use in other countries than Germany, country-specific standards and regulations must also be observed.

All information in this publication generally reflects the state of the art at the time of printing. Furthermore, considerable care was taken when preparing this publication. Nevertheless, typesetting and translation errors cannot be entirely excluded. We also reserve the right to make changes to our products, specifications and other data. Changes may also become necessary as a result of legal, material-related or other technological requirements, which cannot or can no longer be considered in this publication. For this reason, we cannot assume any liability which is based solely on the data provided in this publication. The decisive role with regard to the data on products and services is always played by the order placed, the product actually purchased and the documentation in connection with it, or the information provided by our specialist staff in each specific individual case.

Rooted in Königsberg – globally successful!



Our facilities in Europe:

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 Bückeberg, Germany
 Schwarzheide, Germany
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 Moscow, Russia
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Our facilities in Africa:

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FRÄNKISCHE is an innovative, growth-oriented, medium-sized family-owned enterprise and industry leader in the design, manufacturing and marketing of technically superior corrugated pipe systems for drainage, electrical, building technology and industrial applications.

We currently employ about 4,200 people worldwide. Both our many years of experience and expertise in plastics pro-

cessing, our consulting services and the large array of products are highly valued by our customers.

FRÄNKISCHE is a third generation family owned business that was established in 1906 and is now run by Otto Kirchner. Today, we are globally represented with production facilities and sales offices. The proximity to our customers enables us to develop products and solutions

that are perfectly tailored to our customers' needs. Our action and business philosophy focus on our customers and their needs and requirements for our products.

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