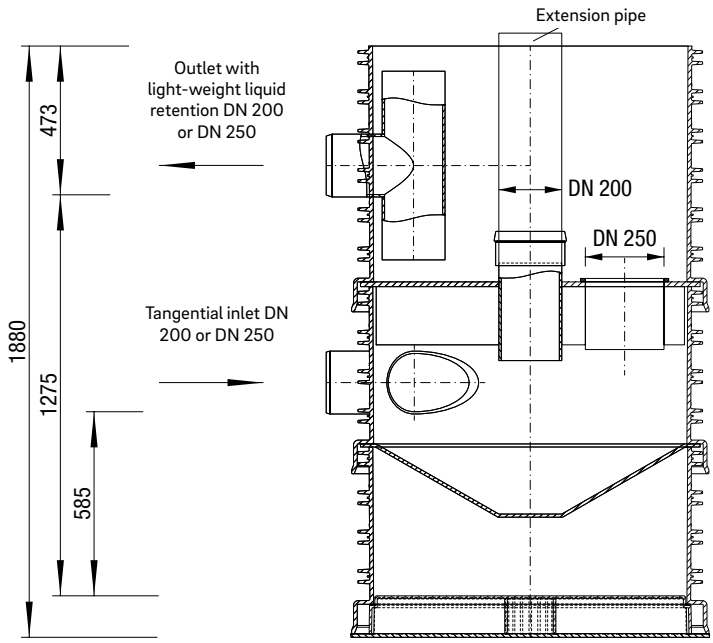
05.01.03 RAUSIKKO FilterClean



Structure

- Robust polypropylene chamber (PP)
- Inside diameter = 1000 mm
- Integrated light-weight liquid retention
- Integrated hydrodynamic separator
- Protected, drainable sedimentation reservoir
- 5 stainless-steel filter screens

Benefits:

- Compact design
- Flexible chamber connections (rotatable through 360°)
- Easy to maintain
- Expandable sludge collector volume
- Installation possible under traffic loads of SLW 60
- Purification performance proven by the IKT (Institute for Underground Infrastructure)
- Tested according to the specifications of the German Institute of Civil Engineering (DIBt)

Classification of pre-treatment:
Type D24 (from DWA data sheet M153)
Leakage value = 0.5
Max. connectable area = 2,000 m²

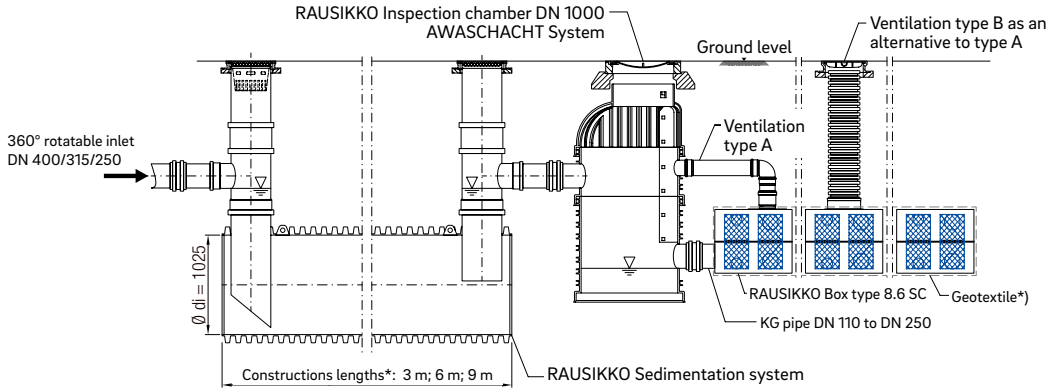
Leakage value = 0.5 as per DWA-M 153

Connectable area Au m²	**Connections** DN I/O	**Chamber height** mm	**Filter screen Mesh width** mm	**Filter screen Diameter** mm	**Filter screen Thickness** mm
2,000	200/200	1,880	1.5	250	0.5
	250/250				

The installation instructions can be found in chapter “06 RAUSIKKO HydroClean” on page <?>.

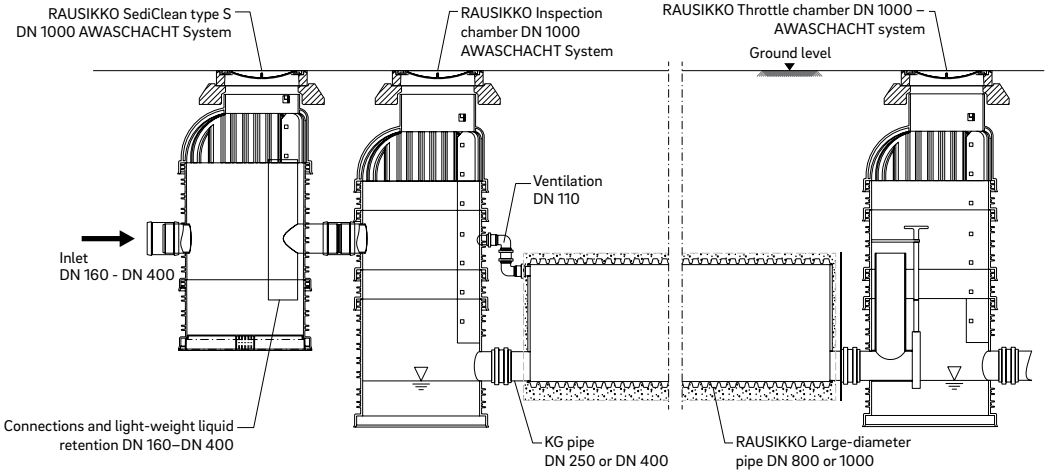
05.02 Execution examples

RAUSIKKO Sedimentation with downstream box gravel trench

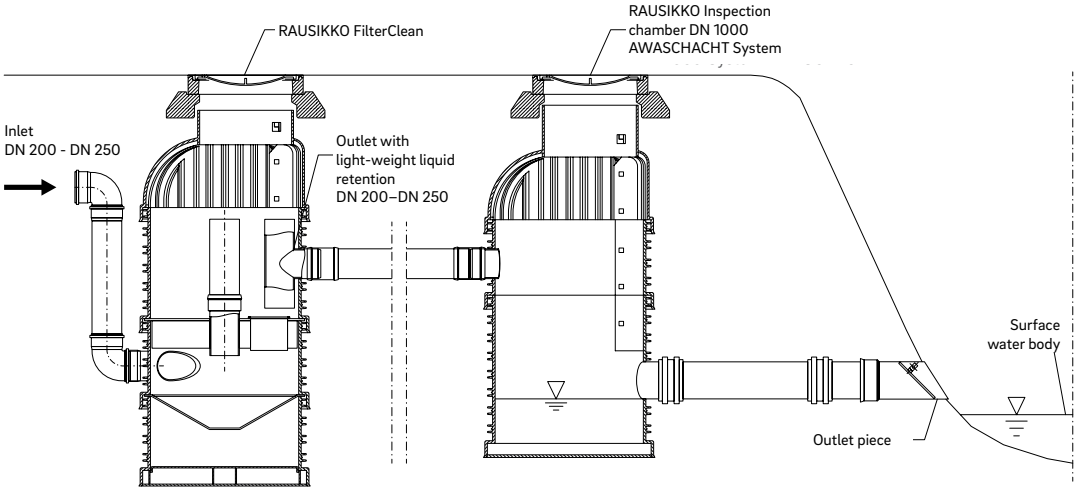


*) bei Rigole: Filtervlies RAUMAT 3
bei Speicher: Schutzvlies und HDPE-Kunststoffdichtungsbahn in Sandwichbauweise verschweißt

RAUSIKKO SediClean Type S with downstream large-diameter pipe



RAUSIKKO FilterClean with outlet into a water body



05.03 Installation instructions for SediClean

The installation instructions for FilterClean can be found in the section „06 RAUSIKKO HydroClean".

05.03.01 General

The company commissioned with this is solely responsible for a professional installation.

Area of application
RAUSIKKO SediClean systems are used for mechanical purification of precipitation water. The systems facilitate sedimentation of certain solids and retention of light-weight liquids in the case of accidents or damage.

Installation in groundwater
RAUSIKKO SediClean may only be installed in groundwater if this has been considered in the structural analysis.
For queries please use the structural questionnaire on pipe systems for rainwater management on page <?>.

Incoming material inspection
- The RAUSIKKO SediClean systems must be checked for damage and completeness of contents on receipt.
- It must also be ensured that the components conform to the client's requirements.
- The delivery must be signed off with the recipient's legible signature.
- Damaged parts may not be installed.

Installation conditions
RAUSIKKO SediClean systems can be loaded with SLW 60 under a minimum coverage of 80 cm and a max. installation depth of 4.0 m. Installation conditions different from those listed above and also installation carried out below the max. groundwater, impounded water or stratum water level need to be considered on case-by-case basis and should be clarified with the REHAU Applications Engineering Department.

Dimensions and structure of SediClean systems
The dimensions and structure of the different SediClean system types discussed here can be found in the illustrations on page 92 and page 93.

05.03.02 Transport and storage

Unloading components

The sedimentation pipes are provided with lifting lugs ex works. You can unload the components using a digger or crane and the lifting lugs and appropriate lifting tool (e.g. cable belt). Accessories are packed and delivered in wire mesh crates except for the extension pipe DN 400, which is generally packed separately. Use appropriate tools to unload the wire mesh crates. Under no circumstances should you tip, throw, drop or bash pipes and accessories.

Storage at the construction site

- The components must be stored on an even surface. The subsoil of this surface must be sufficiently solid. Avoid point loading.
- If stored in the open air for longer periods, the pipes and fittings must be protected against direct sunlight. The protective cover is to be laid out in such a way that no heat builds up underneath it.

Transporting to pipe trenches

Lowering the sedimentation section into the pipe trenches

- Use lifting lugs to transport the components to the excavation pit.

05.03.03 Preparing excavation pits and bedding

Excavation and compaction

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For safety reasons, the trench width must at least be in accordance with DIN EN 1610 and the work sheet DWA-A 139.

The excavation pit must remain water-free until all installation works have been completed.

Trench base

After excavation, the trench base is to be cleared of stones with a grain diameter of > 20 mm, sharp-edged protrusions and any other unevenness.
The trench base must demonstrate sufficient load-bearing capacity. If necessary, corresponding measures to increase the load-bearing capacity are to be taken.

The trench base must be even and completely flat in the area of the SediClean system.

Pipe bedding

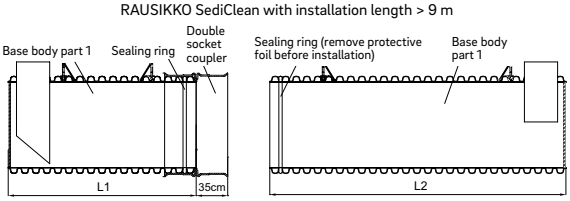
The pipe bedding should be created with stone-free, compactable soil material and compacted following the guidelines. The thickness of this layer should be at least 0.15 m. The biggest grain of soil for the pipe bedding should not exceed 20 mm.

05.03.04 Installing SediClean

- Material inspection: Check the components for damage prior to installation.
  Damaged components may not be installed.
- Calibrate the sedimentation system based on its position and height and install it as per the plan. When doing so, make sure it is installed without an incline.
- SediClean base bodies with a length of more than 9 m (e.g. with a length of 12 or 15 m) are delivered in 2 parts. On one part, a sealing ring and a double socket coupler are assembled ex works. A sealing ring covered with a protective foil is assembled on the other part.
  - Remove this protective foil prior to installation.
  - Check the socket, spigot and sealing ring for contamination and clean, if necessary.
  - Apply REHAU lubricant to the sealing ring.

Oil or grease may not be used in any case.

- Push both components into each other until they latch.
  They must be pushed together using a lever and centrically in the direction of the pipe axis. When using a lever, put a piece of squared timber underneath so that the components are not damaged.



RAUSIKKO SediClean before filling

05.03.05 Filling the pipe zone

The soil may only be placed in the pipe zone in layers. To prevent filler base getting into the sedimentation section, the connection branch can be closed temporarily.

The soil must not spill over the top edge of the pit. The drop height of the soil to be spread above the crown of the sedimentation section must not exceed 1.0 m. It is recommended to spread the soil up to 0.3 m above the pipe crown using the excavator shovel. Here, it is important to ensure that the excavator shovel does not touch the pipe.

The soil should be compacted in layers (for this, see the following instructions). When lining the trench, this should also be removed in layers. The filling material may only consist of soils of soil type G1 (friable soil GE, GW, GI, SE, SW, SI). The size of the biggest grain should not exceed 20 mm.

- Where there is insufficient superimposed load, sedimentation systems laid in groundwater should be secured against rising up using anchors or additional loads (e.g. concrete, sandbags, etc.).

Compacting the filling material in the pipe zone

- Compact the filling material up to 0.3 m above the pipe crown only using light-weight compaction equipment or by hand.
- The compaction equipment must not touch the system to avoid damage.
- If the sedimentation system is installed beneath a traffic area, the degree of compaction must be at least 95%.

Filling the rest of the pipe trench

- Fill the rest of the pipe trench as per DIN EN 1610.
- The covering has to be laid in layers.
- For a coverage of 0.3 m to 1.0 m, you may only use light-weight compaction equipment (e.g. light-weight vibrating plate). For thicker coverages, medium-weight compaction equipment may be used. Ensure that the pipe system is not overloaded.

05.03.06 Attaching chambers and connections

Connecting pipes to the rotatable inlet socket

After the pipe trench has been filled up to the crown of the sedimentation section, extend the inlet and outlet socket upwards as per the plan.
The sockets are correspondingly indicated with adhesive labels.

First, attach the inlet parts included in the delivery (branch DN 400, 90°) onto the connection branches of the sedimentation section. Then, attach the extension pipes.

1. Remove any contamination from the sockets and spigots of the connection branches and inlet parts.
2. Coat the spigots of the connection branches with REHAU lubricant.

Oil or grease may not be used in any case.

3. Push the sockets of the connection branches onto the spigots until they latch. The connection branches can be rotated 360° if necessary.

Attached inlet connection

4. To install the chamber extensions, plug the sockets of the trimmed extension pipe into the branch pipes as described above.
When doing so, use the trimmed extension pipe on the inlet side and the rest of the piece with an

extra double socket coupler on the outlet side.

When installing a system with a manhole DN 1000 that needs to be extended with the supplied chamber extension (fitted with a sealing ring and socket ex works), proceed as follows:

1. Remove the protective foil from the sealing ring of the chamber and check the socket, the spigot and the sealing ring for contamination and clean, if necessary.
2. Apply REHAU lubricant to the sealing ring.

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Oil or grease may not be used in any case.

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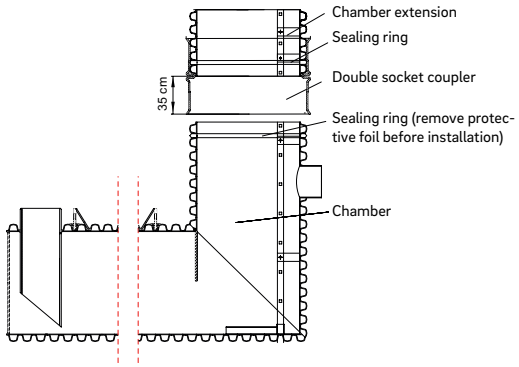
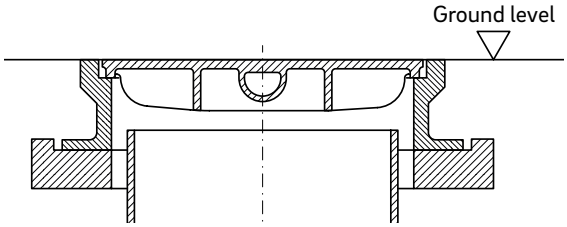
3. Push the chamber extension socket onto the chamber spigot until it latches.
   They must be pushed together using a lever and centrically in the direction of the pipe axis. When using a lever, put a piece of squared timber underneath so that the components are not damaged.

RAUSIKKO SediClean mit Schachtverlängerung



The cast covers DN 400 are installed as shown below.



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Install the ventilated chamber cover (with ventilation openings) and the sludge trap on the inlet chamber of the SediClean, and the unventilated cover on the outlet chamber.

Follow the below procedure to install a concrete cover plate for a SediClean system with a manhole DN 1000:

1. On subsoil with good load-bearing capacity, fill the excavation pit up to raw formation of the concrete cover plate and create an approx. 30 mm-thick, horizontal and even fine-grit bedding layer.
   On subsoil with poor load-bearing capacity, create an approx. 150 mm thick, horizontal and level concrete bedding.
   The bedding surface level for the cover plate should be at least 50 mm below the top edge of the chamber pipe.

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When correctly installed, there will be a distance of 50 mm between the top edge of the chamber pipe and the inside cover of the concrete plate, so that the chamber remains load-free.

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2. Lift the concrete cover plate horizontally above the chamber pipe and place onto the prepared subsoil. Align the access opening with the rungs of the ladder.
   If required, place the concrete adjustment ring(s) or the chamber cover on the levelling mortar layer. (Procure these items separately.)

RAUSIKKO Chambers DN 600 or RAUSIKKO Inspection chambers (AWASCHACHT system) are used as inlet, outlet, inspection, cleaning or throttle chambers.