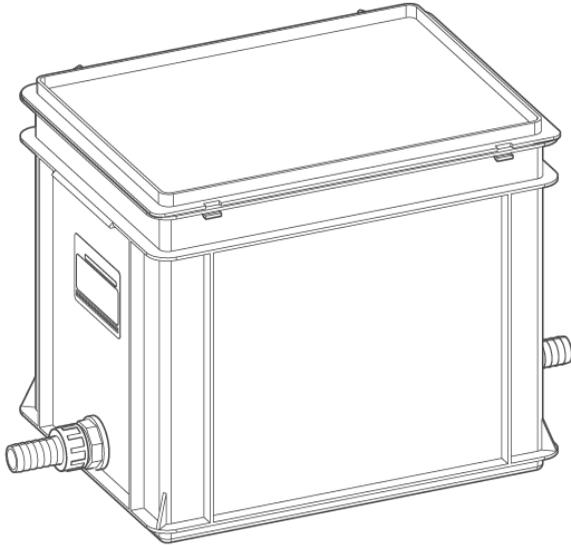




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We understand water.



Accessories | Condensate prefiltration box DN 25

Operation manual

grünbeck

General Contact
Germany

International Sales

 +49 9074 41-145

Service

 +49 9074 41-333
service@gruenbeck.de

Availability

Monday to Thursday
7:00 am - 6:00 pm

Friday
7:00 am - 4:00 pm

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1 Introduction

This manual is intended for owners/operators/operating companies, users as well as qualified specialists and ensures the safe and efficient handling of the product. The manual is an integral part of the product.

- Carefully read this manual and the included manuals on the components before you operate your product.
- Obey all safety and handling instructions.
- Keep this manual and all other applicable documents, so that they are available when needed.

Illustrations in this manual are for basic understanding and can differ from the actual design.

1.1 Validity of the manual

This manual applies to the product below:

- Condensate prefiltration box DN 25

1.2 Other applicable documents

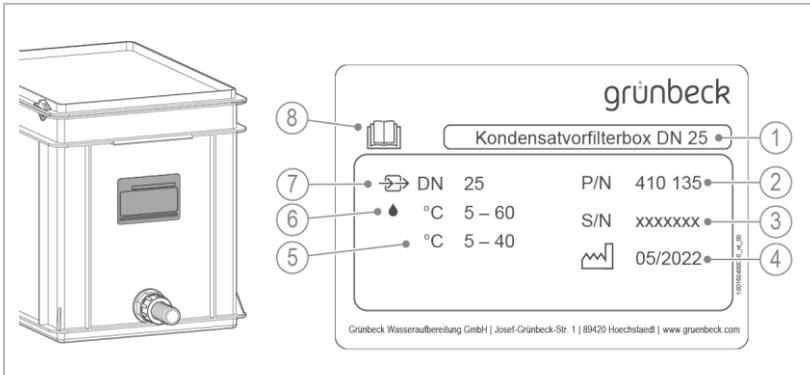
- Safety data sheet for activated carbon

1.3 Product identification

You can identify your product based on the product designation and the order no. indicated on the type plate.

- ▶ Check whether the products indicated in chapter 1.1 correspond to your product.

The type plate is located on the narrow side of the condensate pre-filtration box.



Designation	
1	Product designation
2	Order no.
3	Serial no.
4	Date of manufacture

Designation	
5	Ambient temperature
6	Condensate temperature
7	Nominal connection diameter
8	Obey the operation manual

1.4 Symbols used

Symbol	Meaning
	Danger and risk
	Important information or requirement
	Useful information or tip
	Written documentation required
	Reference to further documents
	Work that must be carried out by qualified specialists only
	Work that must be carried out by qualified electricians only
	Work that must be carried out by technical service personnel only

1.5 Depiction of warnings

This manual contains information and instructions that you must obey for your personal safety. The information and instructions are highlighted by a warning symbol and are structured as shown below:



SIGNAL WORD Type and source of hazard

- Possible consequences
- ▶ Preventive measures

The signal words below are defined subject to the degree of danger and might be used in the present document:

Warning symbol and signal word		Consequences if the information/instructions are ignored	
	DANGER		Death or serious injuries
	WARNING	Personal injury	Possible death or serious injuries
	CAUTION		Possible moderate or minor injuries
	NOTE	Damage to property	Possible damage to components, the product and/or its functions, or an object in its vicinity

1.6 Demands on personnel

During the individual life cycle phases of the product, different people carry out work on the product. This work requires different qualifications.

1.6.1 Qualification of personnel

Personnel	Requirements
User	<ul style="list-style-type: none"> • No special expertise required • Knowledge of the tasks assigned • Knowledge of possible dangers in case of incorrect behaviour • Knowledge of the required protective equipment and protective measures • Knowledge of residual risks
Owner/operator/ operating company	<ul style="list-style-type: none"> • Product-specific expertise • Knowledge of statutory regulations on work safety and accident prevention
Qualified specialist <ul style="list-style-type: none"> • Electrical engineering • Sanitary engineering (HVAC and plumbing) • Transport 	<ul style="list-style-type: none"> • Professional training • Knowledge of relevant standards and regulations • Knowledge of detection and prevention of potential hazards • Knowledge of statutory regulations on accident prevention

Personnel	Requirements
Technical service (Grünbeck's technical service/authorised service company)	<ul style="list-style-type: none"> • Extended product-specific expertise • Trained by Grünbeck

1.6.2 Authorisations of personnel

The table below describes which tasks may be carried out by whom.

	User	Owner/ operator/ operating company	Qualified specialist	Technical service
Transport and storage		X	X	X
Installation and mounting		X	X	X
Start-up/commissioning			X	X
Operation and handling	X	X	X	X
Cleaning	X	X	X	X
Inspection	X	X	X	X
Maintenance			X	X
Troubleshooting	X	X	X	X
Repair			X	X
Decommissioning and restart/recommissioning			X	X
Dismantling and disposal			X	X

1.6.3 Personal protective equipment

- ▶ As an owner/operator/operating company, make sure that the required personal protective equipment is available.

The components below fall under the heading of personal protective equipment (PPE):



Protective gloves



Safety goggles

2 Safety

2.1 Safety measures

- Obey the local regulations on accident prevention and occupational safety.
- Obey the following regulations on the treatment and discharge of condensate originating from condensing boilers into the public sewer system:
 - Work sheet DWA-A 251:2011 "Condensates from condensing boilers"
 - DVGW VP 114 „Neutralisation systems for gas firing systems; requirements and testing“

2.1.1 Obligation to neutralise in accordance with DWA-A 251:2011

Excerpt from the standard

Nominal heat output	Neutralisation for firing systems and motors without catalytic converter is required for			
	GAS	Fuel oil DIN 51603-1 low on sulphur	Alternative fuels DIN 51603-6	Fuel oil DIN 51603-1
< 25 kW	No ^{1), 2)}	No ^{1), 2)}	No ^{1), 2)}	Yes
25 kW up to 200 kW	No ^{1), 2), 3)}	No ^{1), 2), 3)}	No ^{1), 2)}	Yes
> 200 kW	Yes	Yes	Yes	Yes

Neutralisation is nevertheless required:

- ¹⁾ If the domestic waste water is discharged into small sewage treatment plants,
- ²⁾ in case of buildings and lots whose drainage pipes do not meet the material requirements stipulated in paragraph 5.3,
- ³⁾ in case of buildings which do not meet the requirements for adequate mixing as per paragraph 4.1.1.

- Only operate your product if all components are installed properly.
- Do not make any changes, alterations or extensions on your product.
- Only use genuine spare parts for maintenance or repair.
- Keep the premises locked against unauthorised access to protect imperilled or untrained persons from residual risks.
- Comply with the maintenance intervals (refer to chapter 8.2).

2.1.2 Mechanical hazards

- You must never remove, bridge, or otherwise tamper with safety equipment.
- Make sure that the product is set up in a way that it cannot tip over and that its stability is guaranteed at all times.

2.1.3 Danger due to condensate

- Non-neutralised condensate is acidic and can cause chemical burns and irritation when coming into contact with the skin or the eyes.
- Avoid any skin/eye contact with the condensate.
- Use personal protective equipment when working with condensate.
- The condensate can damage surfaces when covering them.

Cleaning/Disposal

- Immediately absorb leaked and non-neutralised condensate with disposable towels.
- Dispose of the absorbed condensate with residual waste in an environmentally sound manner.

2.1.4 Groups of persons requiring protection

- This product is not designed to be used by persons (including children) with reduced capabilities, lack of experience or lack of knowledge.
- Children should be supervised to make sure that they do not play with the product.

2.1.5 Activated carbon granulate

- The activated carbon is not considered to be a dangerous good in the sense of the German Dangerous Goods Regulation.
- Keep the activated carbon away from children.

2.2 Conduct in emergencies

2.2.1 In case of water leaks

1. Locate the leak.
2. Eliminate the cause of the water leak.

3 Product description

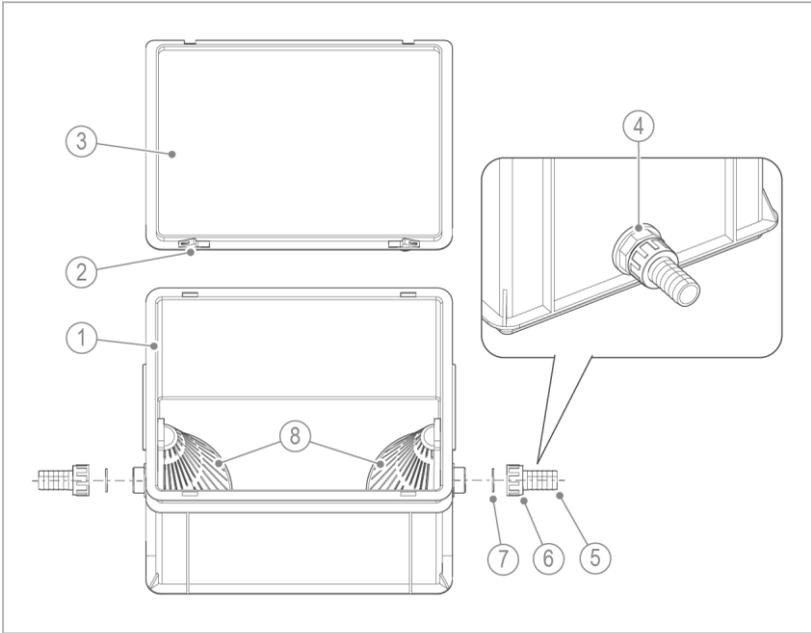
3.1 Intended use

- The condensate prefiltration box is suitable for the prefiltration of highly contaminated condensate originating from oil and gas-fired heat generators (condensing boilers) and/or exhaust systems made of stainless steel, plastic, glass, graphite and ceramics according to work sheets DWA-A 251:2011 and DVGW VP 114.

3.1.1 Possible applications

- In case of gas/oil switchover operation of a condensing boiler, deposits from the pipes and from other components can come loose and enter the neutralisation system.
- The condensate prefiltration box can be used as a prefilter upstream of a neutralisation system such as GENO-Neutra FNH-420-R.
- This increases the service life of the filter material of the neutralisation system.
- The condensate prefiltration box can be used as sole filtration device for unburnt hydrocarbons.

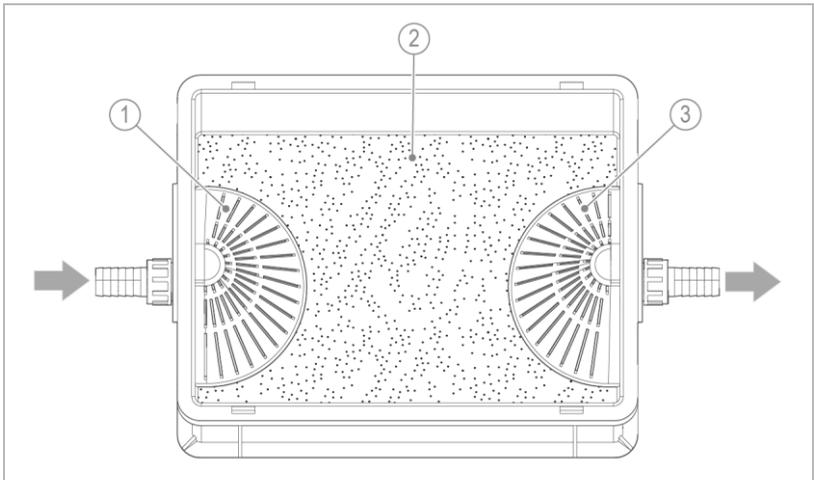
3.2 Product components



Designation	
1	Condensate prefiltration box
2	Snap lock
3	Cover
4	Hose connection DN 25 (inlet and outlet)

Designation	
5	Hose nozzle
6	Locknut
7	Seal
8	Coarse filter

3.3 Functional description



Designation

- 1 Coarse filter in the inlet
- 2 Filling area with activated carbon filling

Designation

- 3 Coarse filter in the outlet

The condensate prefiltration box is designed symmetrically.

The condensate can flow from the right or from the left.

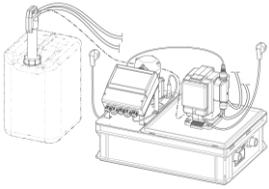
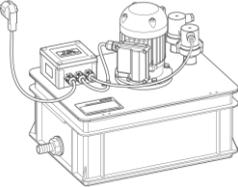
The condensate flows into the condensate prefiltration box via a coarse filter and is then distributed in the activated carbon filling.

The activated carbon filling retains impurities, combustion residues or unburnt hydrocarbons.

The filtered condensate then flows from the condensate prefiltration box via the coarse filter at the outlet.

3.4 Accessories

You can retrofit your product with accessories. Please contact your local Grünbeck representative or Grünbeck's headquarters in Hoechststedt/Germany for details.

Illustration	Product	Order no.
	<p>Neutralisation system GENO-Neutra FNH-420-R</p> <p>For neutralisation (increase of pH value to > 6.5) of condensate originating from gas or oil-fired heat generators</p>	<p>410 540</p>
	<p>Waste water lifting system AH-300</p> <p>Lifting system for condensates originating from neutralisation systems of gas or oil-fired condensing boilers as well as non-neutralised gas condensates > pH 3, clear water or slightly polluted industrial water</p>	<p>420 150</p>
	<p>Hose DN 25 (5 m)</p> <p>For connection to the inlet and outlet of the condensate prefiltration box</p>	<p>410 774e</p>
<p>—</p>	<p>Activated carbon filter filling, 3.5 l</p> <p>Additional activated carbon filling to increase the filling volume</p>	<p>410 590</p>

4 Transport, set-up and storage

4.1 Shipping/Delivery/Packaging

The product is packed in a cardboard box at the factory.

The activated carbon is included in separately packed bags.

- ▶ Upon receipt, immediately check for completeness and transport damage.

4.2 Transport/Set-up

- ▶ Transport the product in its original packaging only.
- ▶ The activated carbon is not considered to be a dangerous good in the sense of the German Dangerous Goods Regulation. Obey the current safety data sheet.

4.3 Storage

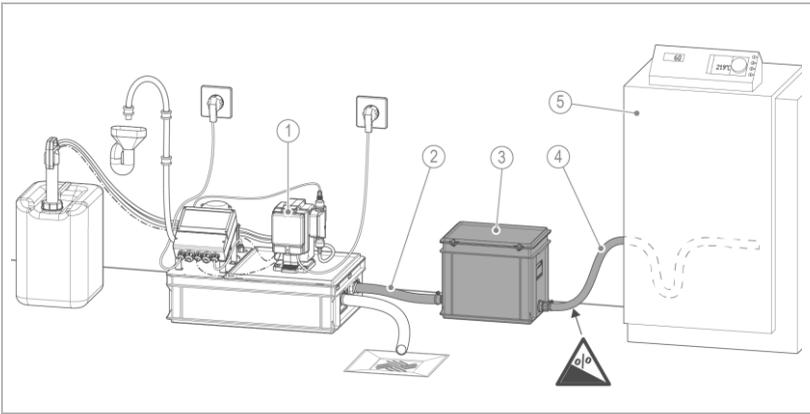
- ▶ Protect the product from the impacts below when storing it:
 - Dampness, moisture
 - Environmental impacts such as wind, rain, snow, etc.
 - Frost, direct sunlight, severe heat exposure
 - Chemicals, dyes, solvents and their vapours

5 Installation



The installation of the product must be carried out by a qualified specialist only.

Installation example



Designation	
1	Neutralisation system GENO-Neutra FNH-420-R
2	Connecting hose
3	Condensate prefiltration box

Designation	
4	Inlet hose
5	Heat generator

5.1 Requirements for the installation site

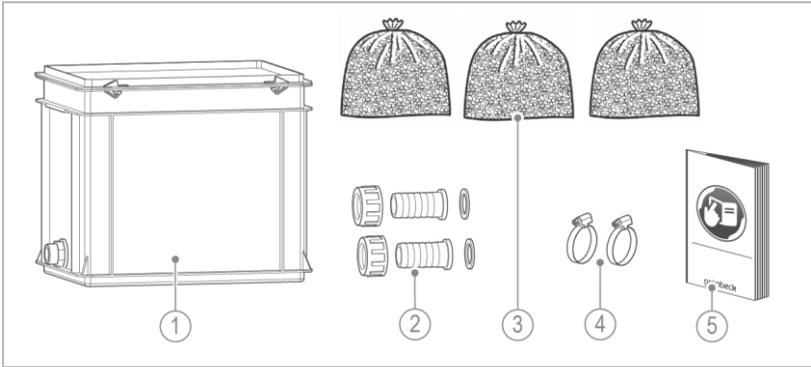
Obey the local installation directives, general guidelines and technical specifications.

- Protection from frost, severe heat exposure and direct sunlight
- Protection from high radiation temperatures in the immediate vicinity ($\leq 40\text{ °C}$)
- Protection from chemicals, dyes, solvents and their vapours
- Access for maintenance work (take note of space required)
- Sufficiently illuminated as well as aerated and ventilated
- Horizontal installation surface with sufficient load-bearing capacity to support the operating weight of the product

Water installation

- Inlet hose with a downward slope and a siphon in the heat generator
- Outlet hose towards the neutralisation system
- Floor drain or an alarm device which, in the event of a malfunction, clearly indicates the alarm and switches off the heat generator, if necessary
- Waste water lifting system in case the drain connection is located at a higher level
- Drain connection $\geq \text{DN } 40$ with possibility of backflow-free discharge of the condensate

5.2 Checking the scope of supply



Designation

- 1 Condensate prefiltration box (partly pre-assembled)
- 2 2 Hose connections DN 25 with union nut and seal

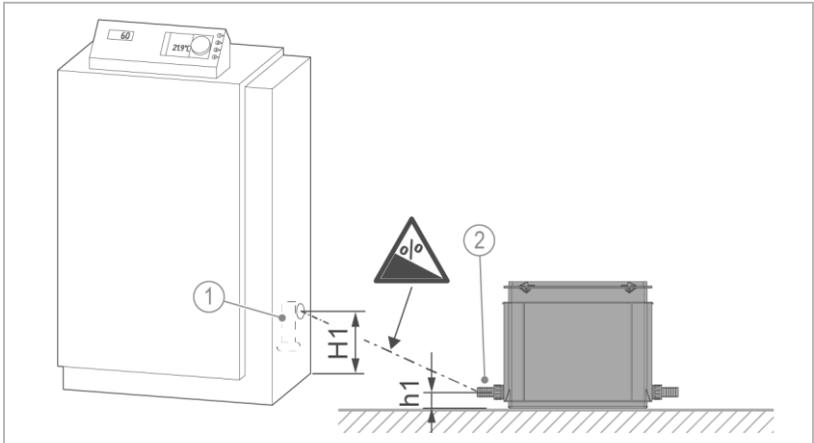
Designation

- 3 Activated carbon filling (3 x 3.5 l)
- 4 2 Hose clamps
- 5 Operation manual

► Check the scope of supply for completeness and damage.

5.3 Water installation

5.3.1 Setting up the condensate prefiltration box



Designation

1 Siphon at the heat generator

Designation

2 Inlet connection

- ▶ Set up the condensate prefiltration box in a horizontal position close to the boiler – but away from traffic routes.

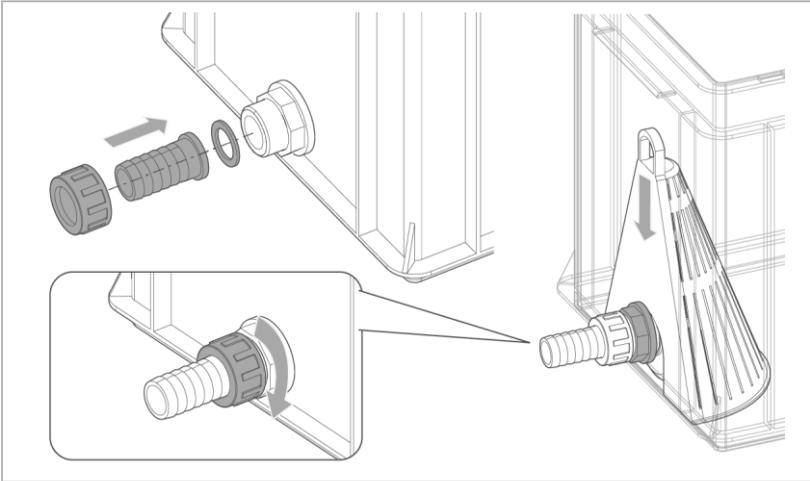


Select an installation site where the inlet and outlet hoses can be kept as short as possible.

- ▶ Check that the connection on the heat generator has a downward slope to the inlet connection on the condensate prefiltration box of approximately 3 %.

5.3.2 Connecting the condensate prefiltration box

5.3.2.1 Installing the hose connections



1. Unlock and open the lid.
2. Install the hose connections on the inlet and the outlet.
 - a Insert the seal and firmly tighten the hose fitting using the union nut.
 - b Check the locknuts of the connection points for a tight fit.
 - c Check the coarse filters for a tight fit.

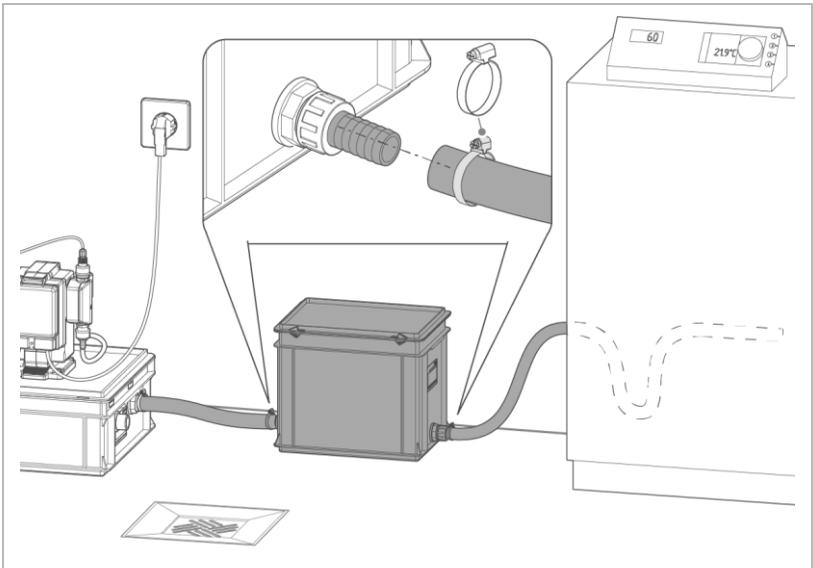
5.3.2.2 Connecting the inlet and outlet hoses

The condensate prefiltration box does not have a hose in the scope of supply.

- ▶ Use the hose of the neutralisation system when connecting the condensate prefiltration box.
- If required, you can use an optionally available hose (refer to chapter 3.4).



The condensate flow can be from both connection sides.



1. Shorten the hose to the required length for inlet and outlet.
2. Connect the inlet hose to the inlet of the condensate prefiltration box. Make sure that a downward slope is maintained from the heat generator to the condensate prefiltration box.
3. Fix the inlet hose by means of the hose clamp.

4. Connect the outlet hose to the outlet of the condensate prefiltration box.
5. Fix the outlet hose by means of the hose clamp.
6. Route the outlet hose to the neutralisation system without any kinks and fix it with the hose clamp.
7. Secure the outlet hose against mechanical damage, if necessary. Do not step on the hose.



Should additional hoses and fittings be needed, only approved, corrosion-resistant materials according to worksheet DWA-A 251:2011 (e.g. made of PP, PE, PVC) must be used. Do not use any brass, copper or steel components.



By using corresponding T pieces, additional condensing boilers or/and exhaust systems can be integrated up to the max. capacity of condensate prefiltration box.

6 Start-up/commissioning



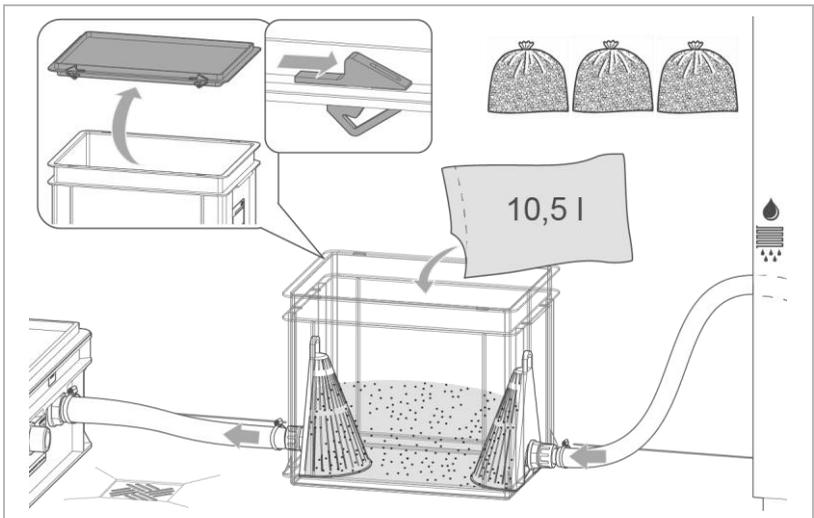
The initial start-up/commissioning of the product must be carried out by technical service personnel only.



WARNING Acidic condensate

- Chemical burns of eyes and body parts
- ▶ Use personal protective equipment (refer to chapter 1.6.3).
- ▶ Avoid any skin and eye contact with the condensate.
- ▶ Thoroughly rinse your eyes with water if condensate gets into your eyes.

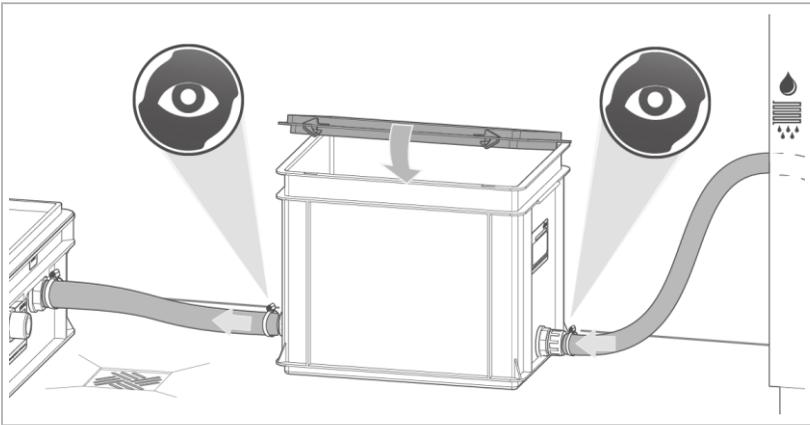
6.1 Filling the condensate prefiltration box



1. Unlock the locks on both sides of the lid.

2. Lift the lid a little.
3. Remove the lid and place it safely away from damage.
4. Remove any transport protection from the condensate prefiltration box (e.g. cardboard packaging).
5. Carefully fill the activated carbon into the condensate prefiltration box.
6. Fill water into the condensate prefiltration box.

6.2 Checking the product



1. Check the inlet and outlet hoses for leaks.
2. Close the condensate prefiltration box with the lid.
3. Put the heat generator into operation.
4. Check the entire installation for leaks.
5. Check that the condensate flows freely into the neutralisation system.

6.3 Handing over the product to the owner/operator/operating company

- ▶ Explain to the owner/operator/operating company how the product works.
- ▶ Use the manual to brief the owner/operator/operating company and answer any questions.
- ▶ Inform the owner/operator/operating company about the need for inspections and maintenance.
- ▶ Hand over all documents to the owner/operator/operating company for keeping.

6.3.1 Disposal of packaging

- ▶ Dispose of packaging material as soon as it is no longer needed (refer to chapter 11.2).

6.3.2 Storage of accessories/consumables

- ▶ Store accessories and consumables properly (refer to chapter 4.3).

7 Operation

The product is operated automatically and does not require any manual operation.



WARNING

Acidic condensate

- Chemical burns of eyes and body parts
 - ▶ Use personal protective equipment (refer to chapter 1.6.3).
 - ▶ Avoid any skin and eye contact with the condensate.
 - ▶ Thoroughly rinse your eyes with water if condensate gets into your eyes.
-
- ▶ Inspect the product at regular intervals (refer to chapter 8.3).
 - ▶ Have maintenance work carried out in good time (refer to chapter 8.4).

8 Maintenance and repair

Maintenance and repair includes cleaning, inspection and maintenance of the product.



The responsibility for inspection and maintenance is subject to local and national requirements. The owner/operator/operating company is responsible for compliance with the prescribed maintenance and repair work.



By concluding a maintenance contract you make sure that all maintenance work will be carried out on time.

- ▶ Only use genuine spare and wearing parts from Grünbeck.

8.1 Cleaning



Only have the cleaning work carried out by persons who have been instructed in the risks and dangers that can arise from the product.

NOTE

Do not clean the product with cleaning agents containing alcohol/solvents

- Plastic components are damaged.
- Varnished surfaces are affected.
- ▶ Use a mild/pH-neutral soap solution.
- ▶ Use personal protective equipment.
- ▶ Only clean the outside of the product.
- ▶ Do not use any strong or abrasive cleaning agents.
- ▶ Wipe the surfaces with a damp cloth.

8.2 Intervals



By way of regular inspections and maintenance, malfunctions can be detected in time and product failures might be prevented.

- ▶ As owner/operator/operating company determine which components must be inspected and maintained at which intervals (load-dependent). These intervals are subject to the actual conditions such as: degree of impurities, environmental impacts, consumption, etc.

The interval table below shows the minimum intervals for the activities to be carried out.

Task	Interval	Activities
Inspection	6 months	<ul style="list-style-type: none"> • Check inlet and outlet hoses for deposits • Check the water level in the condensate prefiltration box • Check the condensate prefiltration box and the hoses for leaks
Maintenance	annually	<ul style="list-style-type: none"> • Check the condensate prefiltration box and the hoses for their condition and for leaks • Clean the condensate prefiltration box • Replace the activated carbon
	load-dependent	<ul style="list-style-type: none"> • Refer to “annually”
Repair	5 years	<ul style="list-style-type: none"> • Recommendation: Replace wearing parts

8.3 Inspection

You as owner/operator/operating company can do the regular inspections yourself. Initially, we recommend inspecting the product at shorter intervals and later on as required, but at least every six months.



- ▶ Use personal protective equipment (refer to chapter 1.6.3).
 - ▶ Carry out an inspection at least every six months.
1. Open the lid of the condensate prefiltration box.
 2. Check whether there is an oil film on the water surface.
 - a Remove any oil film with an oil binding mat, if necessary – do not use any loose oil binding agents.
 - b Replace the activated carbon, if necessary.
 - c Inform the customer service of the condensing boiler about the oil film.
 3. Check the inlet and outlet hoses for deposits – clean them, if needed.
 4. Check the water level in the condensate prefiltration box – refill water, if necessary.
 5. Check the condensate prefiltration box and the hoses for leaks.
 6. Close and lock the condensate prefiltration box with the lid.
 7. Record the inspection carried out in the operation log (refer to chapter 13.2).

8.4 Maintenance

Regular work is required in order to ensure the proper functioning of the product in the long term.

Maintenance must be carried out at regular intervals depending on the volume and the contamination of the condensate, but at least once a year.

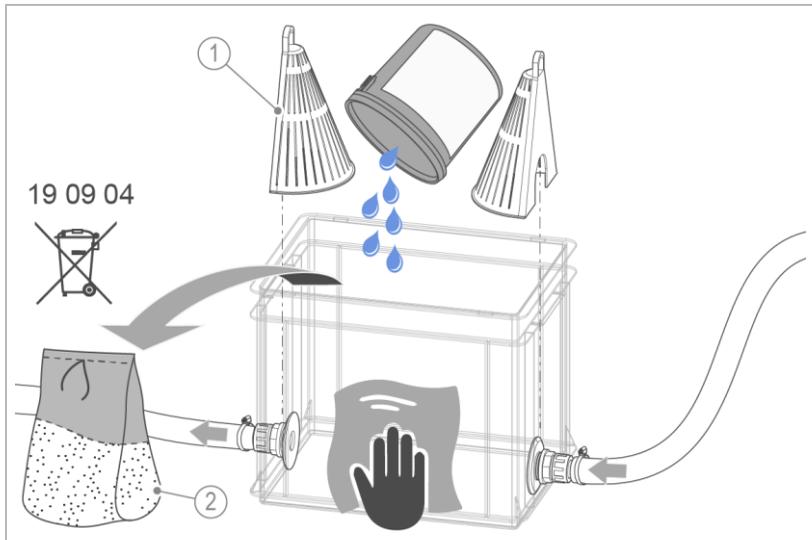
8.4.1 Annual maintenance



Annual maintenance work requires expert knowledge. The work below must be carried out by qualified specialists only.



- ▶ Use personal protective equipment (refer to chapter 1.6.3).



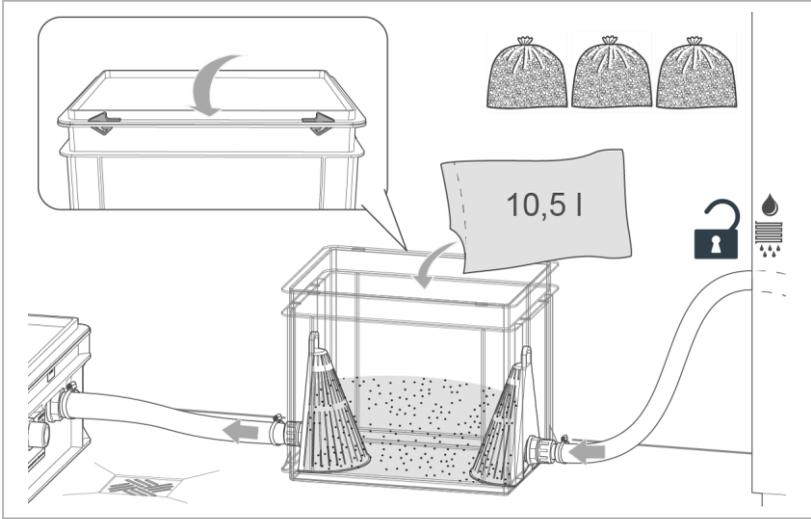
Designation

1 Coarse filter

Designation

2 Used activated carbon in foil bag for disposal

1. Stop the inflow of condensate or divert it into a suitable collection vessel.
2. Open the lid of the condensate prefiltration box.
3. Check whether there is an oil film on the water surface.
 - a Remove any oil film with an oil binding mat, if necessary – do not use any loose oil binding agents.
 - b Inform the customer service of the condensing boiler about the oil film.
4. Remove the used activated carbon from the condensate prefiltration box – e.g. using a wet vacuum cleaner
 - a Fill the used activated carbon into a foil bag.
 - b Dispose of the used activated carbon (refer to chapter 11.2).
5. Pull the coarse filter out upwards.
6. Clean the coarse filter.
7. Completely clean the inside of the condensate prefiltration box.
8. Check the inlet and outlet hoses for deposits – clean them, if necessary.
9. Reinsert the coarse filter.



- 10.** Fill new activated carbon (10.5 l) into the condensate prefiltration box.
- 11.** Fill the condensate prefiltration box with water.
- 12.** Check the condensate prefiltration box and the hoses for leaks.
- 13.** Replace worn components, if necessary.
- 14.** Close the condensate prefiltration box with the lid.
- 15.** Record the maintenance carried out in the operation log (refer to chapter 13.2).

8.5 Consumables

Product	Quantity	Order no.
Activated carbon filling	3.5 l	410 590
Oil binding mat	20 pieces	410 585

8.6 Spare parts

For an overview of the spare parts, refer to our spare parts catalogue at www.gruenbeck.com. You can order the spare parts from your local Grünbeck representative.

8.7 Wearing parts



Wearing parts must be replaced by qualified specialists only.

Wearing parts are listed below:

- Seals

9 Troubleshooting

9.1 Observations

Observation	Explanation	Remedy
Oil residue on the condensate surface	Poor combustion in the condensing boiler	<ul style="list-style-type: none"> ▶ Absorb the oil film using oil binding mats ▶ Clean the condensate prefiltration box more frequently and replace the activated carbon ▶ Check the settings of the burner ▶ Inform the specialist for the condensing boiler
Condensate does not flow out at all	Condensate prefiltration box or outlet hose clogged	<ul style="list-style-type: none"> ▶ Check the condensate prefiltration box for clogging ▶ Check the outlet hose for free outlet



If a malfunction cannot be eliminated, the technical service personnel can take further measures.

- ▶ Contact technical service (refer to inner cover sheet for contact data).

10 Decommissioning

If a longer period of standstill is planned for the heat generator, the condensate prefiltration box must be decommissioned.

10.1 Temporary standstill

If the heat generator is to be switched off temporarily (e.g. for three months in summer), carry out the following activities on the condensate prefiltration box:

1. Open the condensate prefiltration box.
2. Check whether deposits have formed on the surfaces in the condensate prefiltration box.
 - a Remove the deposits, if necessary.
3. Check that the condensate prefiltration box is filled with enough water.
 - a Refill water, if necessary.
4. Close the condensate prefiltration box.

10.2 Restart/recommissioning

1. Check the state of the activated carbon filling – replace it, if necessary (e.g. after a longer period of standstill).
2. Put the condensate prefiltration box into operation again (refer to chapter 6).

11 Dismantling and disposal

11.1 Dismantling



- ▶ Have this work carried out by qualified specialists only.
1. Make sure that the heat generator is out of operation and no condensate is produced.
 2. Remove the condensate from the condensate prefiltration box.
 3. Remove the activated carbon filling from the condensate prefiltration box.
 4. Disconnect the condensate prefiltration box from the water installation – dismantle the inlet and outlet hoses.

11.2 Disposal

- ▶ Obey the applicable national regulations.

Packaging

- ▶ Dispose of the packaging in an environmentally sound manner.

NOTE

Danger to the environment due to incorrect disposal

- Packaging materials are valuable raw materials that can be reused in many cases.
- Incorrect disposal can cause hazards to the environment.
- ▶ Dispose of packaging materials in an environmentally sound manner.
- ▶ Obey the local disposal regulations.
- ▶ If necessary, commission a specialist company with the disposal.

Activated carbon

- ▶ Dispose of the used activated carbon via local waste disposal companies using waste code number 19 09 04 – do not dispose of it with residual waste or household waste.

Oil binding mat

Used oil binding mats are categorised as oil-contaminated operating materials and must be disposed of as hazardous waste.

- ▶ Dispose of used oil binding mats properly – do not dispose of them with residual waste or household waste.

Product



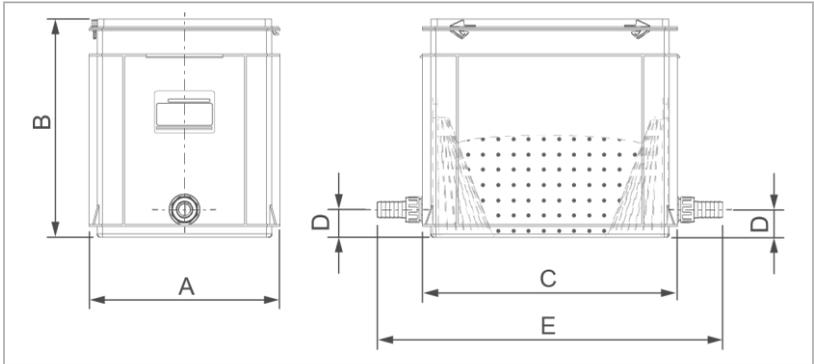
If this symbol (crossed-out wheellie bin) is on the product, this product or its electrical and electronic components must not be disposed of as household waste.

- ▶ Find out about the local regulations on the separate collection of electrical and electronic products.
- ▶ Make use of the collection points available to you for the disposal of your product.
- ▶ If your product contains batteries or rechargeable batteries, dispose of them separately from your product.



For more information on take-back and disposal, go to www.gruenbeck.de.

12 Technical specifications



Dimensions and weights		DN 25
A	Width	mm 300
B	Height	mm 335
C	Length	mm 400
D	Connection height of inlet and outlet	mm 43
E	Total length with connections	mm 540
	Operating weight	kg ~ 20
	Empty weight	kg ~ 10
Connection data		DN 25
Nominal connection diameter of inlet and outlet		DN 25
Performance data		DN 25
Fuel/process (generation of condensate)		oil or gas/condensing boiler technology
Filling volumes and consumption data		DN 25
Activated carbon granulate	l	10.5
General data		DN 25
Condensate temperature	°C	5 – 60
Ambient temperature	°C	5 – 40
Order no.		410 135

13 Operation log



- ▶ Document the initial start-up/commissioning and all maintenance activities.

Condensate prefiltration box DN 25

Serial no.: _____

13.1 Start-up/commissioning log

Customer	
Name	
Address	
Installation/Accessories	
Manufacturer of condensing boiler	
Type of condensing boiler	
Fuel	
Capacity of condensing boiler	kW
Accessories	
Materials	
Material(s) of boiler	
Material(s) of heat exchanger	
Material(s) of exhaust system	
Remarks	
Start-up/commissioning	
Company	
Service technician	
Work time certificate (no.)	
Date/signature	

13.2 Maintenance

Work performed	
<input type="checkbox"/> Inspection	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Repair	

Description

Execution confirmed	
Company:	
Name:	
Date:	Signature:

Work performed	
<input type="checkbox"/> Inspection	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Repair	

Description

Execution confirmed	
Company:	
Name:	
Date:	Signature:

Work performed

Inspection

Maintenance

Repair

Description

Execution confirmed

Company:

Name:

Date:

Signature:

Work performed

Inspection

Maintenance

Repair

Description

Execution confirmed

Company:

Name:

Date:

Signature:

Work performed

Inspection

Maintenance

Repair

Description

Execution confirmed

Company:

Name:

Date:

Signature:

Work performed

Inspection

Maintenance

Repair

Description

Execution confirmed

Company:

Name:

Date:

Signature:

Publisher's information

Technical documentation

Should you have any questions or suggestions regarding this operation manual, please contact Grünbeck Wasseraufbereitung GmbH's Department for Technical Documentation directly.

Email: dokumentation@gruenbeck.de

Grünbeck Wasseraufbereitung GmbH
Josef-Grünbeck-Str. 1
89420 Hoechstädt/Germany

 +49 9074 41-0

 +49 9074 41-100

info@gruenbeck.com
www.gruenbeck.com



For more information go
to www.gruenbeck.com