


# Operating instructions (original) Wastewater filtration unit AS 300 CG

Type 539



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<b>1</b>	<b>Product and manufacturer .....</b>	<b>4</b>
1.1	Product.....	4
1.2	Manufacturer .....	4
1.3	Change index .....	4
<b>2</b>	<b>About these operating instructions.....</b>	<b>5</b>
2.1	Purpose.....	5
2.2	Availability .....	5
2.3	Warnings.....	6
2.3.1	Warning words and warning colours .....	6
2.3.2	Structure .....	6
2.4	Symbols .....	7
2.4.1	Warning sign.....	7
2.4.2	Instruction sign .....	7
<b>3</b>	<b>Description of the machine .....</b>	<b>8</b>
3.1	General description .....	8
3.2	Scope of delivery .....	9
3.3	Return delivery after termination of a lease .....	9
3.4	Operating modes.....	10
3.4.1	Available operating modes.....	10
3.5	Interfaces .....	10
3.6	Type plate .....	11
3.6.1	Content.....	11
3.6.2	Version .....	11
3.6.3	Position.....	11
3.7	Accessories.....	11
<b>4</b>	<b>Technical data.....</b>	<b>12</b>
4.4	Filtration unit.....	12
<b>5</b>	<b>Security .....</b>	<b>13</b>
5.1	Intended use .....	13
5.2	Misapplication .....	14
5.3	Tasks and qualifications of the staff.....	15
5.4	Notes on occupational health and safety .....	16
<b>6</b>	<b>Transport.....</b>	<b>17</b>
6.1	Loss of warranty claims .....	18
6.2	Off-site transport.....	18
6.2.1	Transport space.....	18
6.2.2	Legislation .....	18
6.2.3	Qualification of the staff .....	18
6.2.4	Warning of residual risks.....	18
6.2.5	Means of transportation .....	18
6.3	Internal transport .....	19
6.3.1	Transport space.....	19

6.3.2	Legislation .....	19
6.3.3	Warning of residual risks.....	19
6.3.4	Means of transportation .....	19
<b>7</b>	<b>Assembly.....</b>	<b>19</b>
<b>8</b>	<b>Put into operation .....</b>	<b>20</b>
8.1	Commissioning for wastewater hose with proximity sensor .....	21
<b>9</b>	<b>Operation.....</b>	<b>22</b>
9.1	Qualification of the staff .....	22
9.2	Warning of residual risks .....	22
9.3	Number of persons.....	22
9.4	Tools needed .....	22
9.5	Required equipment .....	22
<b>10</b>	<b>Maintenance.....</b>	<b>23</b>
10.1	Loss of warranty claims .....	23
10.2	Maintenance.....	23
10.2.1	Warning of residual risks.....	23
10.2.2	Personal protective equipment required.....	24
10.3	Daily maintenance.....	24
10.4	Filter change .....	24
10.4.1	Filter change bag filter .....	25
10.4.2	Filter change candle filter:.....	25
<b>11</b>	<b>Spare parts.....</b>	<b>26</b>
<b>12</b>	<b>Circuit diagram .....</b>	<b>27</b>
<b>13</b>	<b>Cleaning .....</b>	<b>28</b>
<b>14</b>	<b>Storage .....</b>	<b>28</b>
<b>15</b>	<b>Disposal .....</b>	<b>29</b>
15.1	Qualification of the staff .....	29
15.2	Legislation.....	29
15.3	Waste.....	29
<b>16</b>	<b>EC Declaration of Conformity .....</b>	<b>30</b>

## 1 Product and manufacturer

### 1.1 Product

This operating manual describes the following product:

Wastewater filtration unit AS 300 CG

Serial number:

### 1.2 Manufacturer

Name and address	deconta GmbH Im Geer 20 46419 Isselburg
	
Phone	02874/9156-0
Fax	02874/9156-11
E-mail	info@deconta.com
Internet	www.deconta.com

### 1.3 Change index

Date	Version	Change	Responsible
21.06.2023	2	complete revision	Thomas Boland

## 2 About these operating instructions

For proper and safe use of the machine, follow the descriptions and recommended actions in these operating instructions.

Keep this manual for future reference until the machine has been disposed of.

### 2.1 Purpose

These operating instructions contain information on the safe, trouble-free and economical use of the machine.

This information is intended for persons who perform tasks with or in connection with the machine.

The following table gives an overview of persons and tasks.

Person	Task
Operator	<< Machine-specific >>
Occupational safety specialist	<ul style="list-style-type: none"> <li>• Carry out a risk assessment</li> <li>• Create operating instructions</li> <li>• Instruct people</li> </ul>
Maintenance staff	Maintenance of the mechanics
Electrician (EFK)	Installation and maintenance of electrical equipment
Freight forwarder	Off-site transport of the machine
Conveyor	Internal transport of the machine
Disposer	Dispose of the machine in a legally compliant, proper and professional manner.

### 2.2 Availability

The operator shall make these operating instructions or extracts thereof available to persons who perform tasks with or in connection with the machine.

The operator keeps these operating instructions or extracts thereof within easy reach in the immediate vicinity of the machine.

When handing over the machine to another person, the operator passes these operating instructions on to that person.





## 2.3 Warnings

These operating instructions contain warnings of residual dangers.

The classification of the warnings is based on the severity of the damage that can occur if the warnings are disregarded and recommended actions are not followed.

### 2.3.1 Warning words and warning colours

Warnings are introduced with one of the following warning words and marked with a corresponding warning colour.

Warning word	Meaning	Warning colour
DANGER	Consequence for non-compliance: Death or most serious injuries.	
WARNING	Consequence for non-compliance: Death or serious injuries possible.	
CAUTION	Consequence for non-compliance: Severe or minor injuries possible.	
NOTE	Consequence for non-compliance: Property damage or environmental damage possible.	
SAFE ACTIVITY	Implement the following action guide.	-

### 2.3.2 Structure

Warnings are structured according to the SAFE method:

<b>S</b>	Warning word (DANGER; WARNING, CAUTION or NOTE)
<b>A</b>	Nature and source of the hazard Description of the hazard and the cause of the hazard
<b>F</b>	Follow Description of the possible consequences for humans, animals and the environment that may occur as a result of the hazard.
<b>E</b>	Escape Recommendations for action on how to avoid hazards



## 2.4 Symbols

The following symbols are used in these operating instructions.

### 2.4.1 Warning sign

The warning sign is a safety sign that warns of a risk or danger.



The following table gives an overview of warning signs used and their meaning.

Symbol	Meaning	Symbol	Meaning
	Warning of electrical voltage		General warning sign

### 2.4.2 Instruction sign

The instruction sign is a safety sign that prescribes a certain behaviour.

The following table gives an overview of the instruction signs used and their meaning.

Symbol	Meaning	Symbol	Meaning
	Wear safety shoes		Use protective clothing

### **3 Description of the machine**

This section contains information for understanding the machine.

#### **3.1 General description**

##### **General description of the product**

The wastewater filtration unit was designed and built by deconta GmbH, Im Geer 20, 46419 Isselburg.

Contaminated wastewater is cleaned via a 4-stage filtration unit consisting of coarse pre-filter, pre-filter, 2x fine filter.

In the case of heavily polluted wastewater, the coarse pre-filter protects the subsequent filtration stages from excessive and rapid contamination.

The filter condition is monitored via a pressure gauge.

The entire unit is housed in a powder-coated aluminium casing with standard Geka connections.

##### **Procedure for carrying out the risk assessment for machinery**

- Language of the risk assessment: German
- Risk assessment: EN ISO 12100 Safety of machinery - General principles for design - Risk assessment and risk reduction, three-step iterative process for risk reduction in conjunction with Machinery Directive 2006/42/EC, Annex I, first general principle.
- Risk assessment: DIN ISO/TR 14121-2 Safety of machinery - Risk assessment - Part 2: Practical guide and examples of procedures, 6.3 Risk graph; Determination of the required performance level (PLr): EN ISO 13849-1 Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design; Determination of SIL (Safety Integrity Level): EN 62061 Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems.



### **3.2 Scope of delivery**

The delivery scope of the machine includes the following items:

- Wastewater filtration unit AS 300 CG
- Filters
- Service Pack
- These operating instructions

### **3.3 Return delivery after termination of a lease**

For the protection of our customers and in terms of dangerous goods transport regulations, we must insist on the following return delivery conditions:

- As listed above
- Thoroughly cleaned (ready for use)
- Without residual fibre encapsulation
- Without filters
- Without damage

### **3.4 Operating modes**

#### **3.4.1 Available operating modes**

##### **Type of use**

The machine is intended exclusively for use in the following types of use.

Other types of use are not in accordance with the intended use.

##### **User groups**

- Commercial users

##### **User environment**

- on roofed areas
- in rooms closed on all sides

##### **Operating modes**

Operating modes for use:

- Automatic mode
- Manual operation

### **3.5 Interfaces**

This section contains information about interfaces.

The following interfaces are available on the machine:

##### **Interfaces**

- Human - product: Selector switch
- Product - power supply: Electrical power supply 230 V
- Product - waste: Geka connection for filtered wastewater into the sewage system
- Product - material feed: Geka connection for contaminated water
- Product - floor: castor wheels

### 3.6 Type plate

The type plate contains information for identifying the machine.

#### 3.6.1 Content

The following illustration shows the type plate.



#### 3.6.2 Version



Aluminium plate, riveted

#### 3.6.3 Position

Near the control panel

### 3.7 Accessories

The following accessories are optionally available for the wastewater filtration unit:

Designation	Item no.	Illustration
Wastewater hose 5m with Geka connection 3/4".	BU1504	
Wastewater hose with proximity switch	BU1629	

## **4 Technical data**

### **4.1 Dimensions**

- Length: 653 mm
- Width: 464 mm
- Height: 773 mm

### **4.2 Mass**

- Weight: approx. 56 kg

### **4.3 Sewage pump**

Self-priming and dry-running protected

- Voltage: 230V, 50Hz
- Power: 0,45 kw
- Max. delivery rate: 30 l/min
- max. medium temperature: 90°C
- Protection class: IP44

### **4.4 Filtration unit**

4-stage filtration unit

- Bag filter: 220 μ (reusable)
- Pre-filter: 220μ (disposable)
- Fine filter: 50μ (disposable)
- Fine filter: 1μ (disposable)
- Max. medium temperature: 50°C at 4bar

*technical modifications subject to alterations*

## 5 Security

This section contains information on the protection of humans, domestic and farm animals and the environment.

### 5.1 Intended use

The machine is intended exclusively for the following use:

#### **Intended use**

When carrying out construction work in enclosed spaces, it is important to ensure that hazardous substances do not leave the construction area in an uncontrolled manner and thus pose a risk to people and the environment. For this reason, objects that leave the construction area via airlocks must be cleaned.

The deconta wastewater filtration unit provides treatment (filtering) of the contaminated wastewater.

The user must comply with the operating parameters specified in the operating instructions. The unit may only be used in accordance with its intended purpose. Any other use beyond this is not in accordance with the intended use. The user is liable for any resulting damage or injury of any kind.

#### **Authorised persons**

The following persons are authorised to handle the product:

- Specialist staff
  - Task: Maintenance and servicing
  - Qualification: trained specialist personnel (locksmith, industrial mechanic, electrician) with knowledge and experience in handling the machine.
- Operating personnel
  - Task: Operation
  - Qualification: training, information through operating instructions

Any other use is not in accordance with the intended use.

#### **Range of application**

The machine is intended for use in the following applications:

#### **Range of application**

- Refurbishments

## 5.2 Misapplication

Use of the machine for the following purposes is not permitted:

### **Reasonably foreseeable misuse**

- Any application other than that described in the operating instructions
- Any use of the machine other than that described under "Intended use" without the written consent of the manufacturer.
- Operation outside the technical limits of use
- Unauthorised modifications or conversions as well as manipulation
- Use, installation, operation, maintenance or repair in a manner other than described
- Carrying out work by unqualified personnel
- Use of unsuitable or incompatible materials, operating or auxiliary materials or accessories.
- Non-compliance with safety and operating instructions, occupational health and safety or accident prevention regulations or relevant statutory regulations.
- Failure to promptly rectify faults that may affect safety
- Use of other than original spare parts or accessories that are not equivalent in quality and function.
- Operating the machine in a technically unsound condition, not being aware of safety and hazards and not observing all instructions in the documentation.  
Use in potentially explosive atmospheres

### 5.3 Tasks and qualifications of the staff

<b>Person</b>	<b>Task</b>	<b>Required qualification</b>
Operator	<< Machine-specific >>	Instruction, training
Programmer	Machine teaching, programming	Knowledge of programming and teaching machines or robots
Occupational safety specialist	<ul style="list-style-type: none"> <li>• Carry out a risk assessment</li> <li>• Create operating instructions</li> <li>• Instruct people</li> </ul>	Completed training as an occupational safety specialist with timely experience with machines
Electrician	Installation and maintenance of electrical equipment	Person with appropriate training, suitable education, timely experience and knowledge of the relevant regulations, enabling him/her to recognise risks and avoid hazards that may be caused by electricity.
Freight forwarder	Off-site transport of the machine	Person with suitable training, education, timely experience and knowledge of relevant regulations that enables them to safely transport machinery off-site.
Conveyor	Internal transport of the machine	Person with appropriate training, education, timely experience and knowledge of the relevant regulations that enables them to safely transport machinery within the company.
Disposer	Dispose of machine	Qualified waste management company for legally compliant, proper and professional disposal of the machine

#### **5.4 Notes on occupational health and safety**

The operator of the machine is responsible for the implementation of the occupational health and safety obligations. The occupational health and safety regulations of the country in which the machine is used apply.

The duties include, but are not limited to, the following:

- Make these operating instructions or extracts available to persons who carry out tasks with or in connection with the machine.
- Make the applicable documents available to these persons
- Instruction of the persons with regard to the intended use and misuse
- Instruction of persons with regard to protective devices and supplementary protective devices
- Instruction of persons with regard to residual risks

This list is not exhaustive and does not claim to be complete.



## 6 Transport

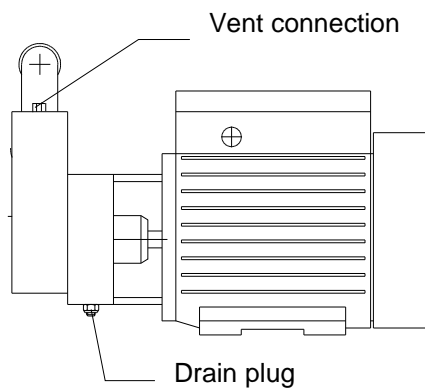
This section contains information on transporting the machine outside and inside the factory.

Transport is the change of location of the machine by manual or technical means.

### **HINWEIS**

**In winter, because of the danger of frost, urgent attention should be paid:**

Drain water pipes, tank, filter housing and pumps



**6.1 Loss of warranty claims**

The manufacturer's warranty is void in the following cases:

- In the event of changes to the machine that have not been agreed with the manufacturer
- If the transport is not carried out properly

**6.2 Off-site transport**

**6.2.1 Transport space**

Off-site transport takes place in public spaces. In this case, the machine is transported from one place of use to another.

**6.2.2 Legislation**

Off-site transport of the machine shall be in accordance with the legislation of the country in which the machine is transported off-site.

**6.2.3 Qualification of the staff**

Persons transporting the machine outside the company must meet the following requirements:

Person	Required qualification
Freight forwarder	Completed training in transport and experience in off-site transport of machinery
Logistician	Completed training and experience in the internal transport of machines

**6.2.4 Warning of residual risks**



Crushing hazard: Wear safety shoes to protect against running over limbs.

**6.2.5 Means of transportation**

For safe off-site transport, a means of transportation is required that meets the following requirements:

- The load capacity must be dimensioned in such a way that the mass of the machine can be safely accommodated.
- The size of the transport surface must be such that the machine can be safely placed on the transport surface without falling off.



Falling of the machine may be possible due to unintentional change of position when loading and unloading onto / from a means of transportation.

## 6.3 Internal transport

### 6.3.1 Transport space

In the case of in-plant transport, the machine is transported on the company premises from one installation site to another installation site.

### 6.3.2 Legislation

The internal transport of the machine is carried out in accordance with the legislation of the country in which the machine is transported outside the company.

### 6.3.3 Warning of residual risks



Crushing hazard: Wear safety shoes to protect against running over limbs.

### 6.3.4 Means of transportation

For safe internal transport, a means of transportation is required that meets the following requirements:

- The load capacity must be dimensioned in such a way that the mass of the machine can be safely accommodated.
- The size of the transport surface must be such that the machine can be safely placed on the transport surface without falling off.



Falling of the machine may be possible due to unintentional change of position when loading and unloading onto / from a means of transportation.

## 7 Assembly

This section contains information on the safe assembly of the machine.

The wastewater filtration unit is delivered ready for operation ex works and is intended for immediate commissioning.

If there is visible damage, **do not** operate the unit. Contact deconta GmbH immediately.

## 8 Put into operation

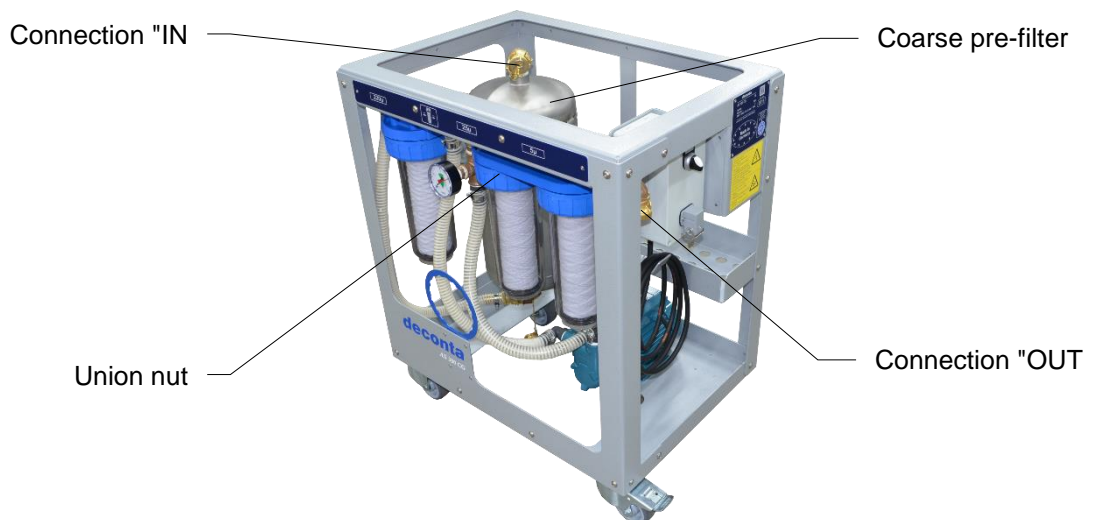
This section contains information on commissioning the machine.

### HINWEIS

Before initial commissioning or after a longer standstill, check whether the shaft of the pumps can be turned by hand. To do this, insert a screwdriver into the notch at the end of the shaft and move the shaft. The high initial resistance to rotation of the impeller in new pumps will loosen after running-in.



- Fill wastewater pump completely through vent connection
- Hand-tighten the union nuts of the filter housings



- Connect the wastewater hose to the "IN" connection of the coarse pre-filter and connect it to the place of use.
- Connecting the "OUT" connection to the wastewater channel
- Establish 230V power supply (safety plug)



Selector switch

- Switch on the unit (switch position "MAN" on the selector switch) and check whether the filter housings are filled with water.

### 8.1 Commissioning for wastewater hose with proximity sensor

A wastewater hose with proximity sensor for electrical and automatic ON / OFF switching is available as an option.

- Connect the wastewater hose with proximity sensor to the "IN" connection of the coarse pre-filter and connect it to the place of use.
- Connect the power supply to the proximity sensor
- Connect the "OUT" connection to the wastewater channel
- Establish 230V power supply (safety plug)



Selector switch

Power supply proximity sensor



- Switch on the system (switch position "AUTO" on the selector switch).  
The proximity sensor on the wastewater hose detects whether there is water in the hose and then switches the wastewater filtration unit on or off.  
The sensitivity of the proximity sensor can be readjusted using the screwdriver supplied.

## 9 Operation

This section contains information for the safe use of the machine.

### 9.1 Qualification of the staff

Persons using the machine must meet the following requirements:

Person	Required qualification
Operator	Instruction, training by the manufacturer

### 9.2 Warning of residual risks



Touching the cores of a damaged mains connection cable.

Touching machine parts that have become live due to faulty conditions.

Only operate the unit on mains supplies that are protected by residual current circuit breakers!



Damage due to unsuitable mains voltage.

The unit may be damaged if it is connected to an unsuitable mains voltage.

Check whether the voltage indicated on the type plate corresponds to the local mains voltage.



Never operate the unit without water!

If there is a risk of frost, as described under **Fehler! Verweisquelle konnte nicht gefunden werden**. Empty the water tank!

### 9.3 Number of persons

One person is needed to use the machine.

### 9.4 Tools needed

No tools are needed to use the machine.

### 9.5 Required equipment

No equipment is needed to use the machine.

## 10 Maintenance

This section contains information for the safe maintenance of the machine.

Maintenance includes all technical and organisational measures during the life cycle of the machine to ensure the safe, economical and functional condition of the machine and to prevent environmental damage.

### 10.1 Loss of warranty claims

The manufacturer's warranty is void in the following cases:

- In the event of changes to the machine that have not been agreed with the manufacturer
- In the event of improper performance of maintenance

### 10.2 Maintenance

Maintenance work, including changing / removing the filters, may only be carried out by authorised persons wearing suitable protective clothing.

For all repair and maintenance work, the unit must be completely disconnected from the power supply.

**We expressly refer to possible additional regional and national regulations when maintaining the appliance technology.**

#### 10.2.1 Warning of residual risks



**Contaminated filters may only be changed in compliance with all relevant safety precautions. Change filters only when the unit is switched off. Only use approved filters.**



**Pull out the mains plug before opening the housing**

10.2.2 Personal protective equipment required



**Maintenance work, including changing / removing the filters, may only be carried out by authorised persons wearing suitable protective clothing.**

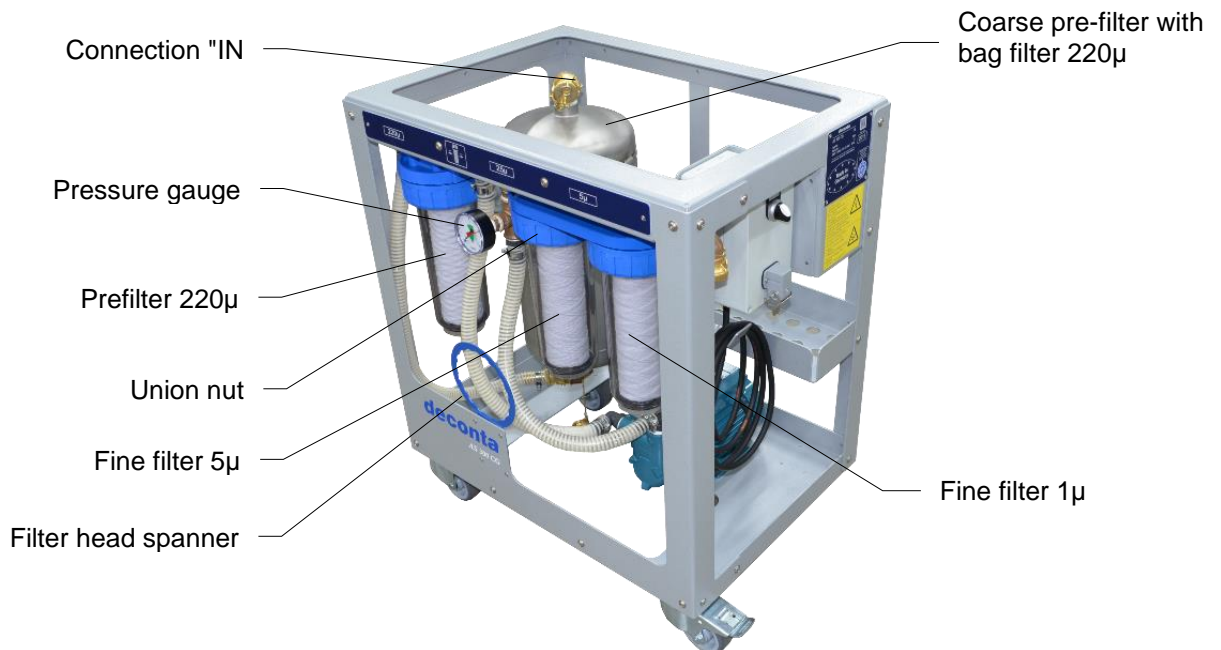
**10.3 Daily maintenance**

- Checking the water pipes for free flow
- Visual inspection of the filters for contamination

**10.4 Filter change**

**Attention:**

- Filter change only when the unit is switched off
- Remove dirty filters when damp to prevent the release of filter dust.
- Only use approved filters
- Damaged filter cartridges must not be used





#### 10.4.1 Filter change bag filter

The bag filter used in the coarse pre-filter can be removed when dirty, cleaned and reused.



**Suction hoses, pumps, filter housings and filters are already contaminated by the initial use. Repairs and maintenance work may only be carried out in compliance with all relevant safety measures.**

**The filters must be disposed of in accordance with the legal requirements.**

#### 10.4.2 Filter change candle filter:

The fine filters are monitored via the pressure gauge. We recommend changing the filter at approx. 3bar.

- Loosen the union nut with the help of the filter head spanner
- Remove the filter and dispose of it in accordance with the regulations
- Insert new filter cartridge
- Make sure that the sealing ring is correctly seated and clean.
- Tighten the union nut **hand-tight**



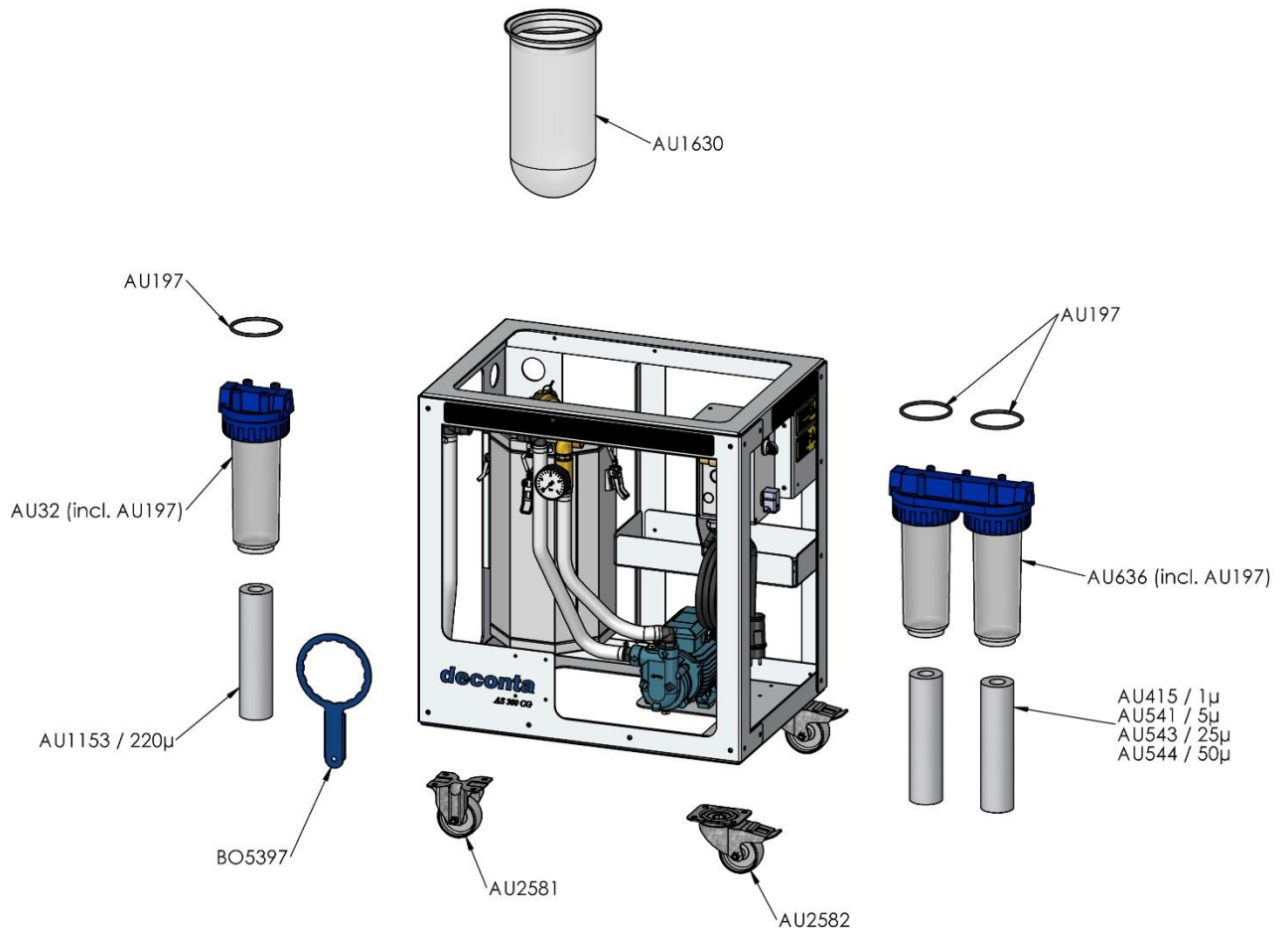
**Suction hoses, pumps, filter housings and filters are already contaminated by the initial use. Repairs and maintenance work may only be carried out in compliance with all relevant safety measures.**

**The filters must be disposed of in accordance with the legal requirements.**

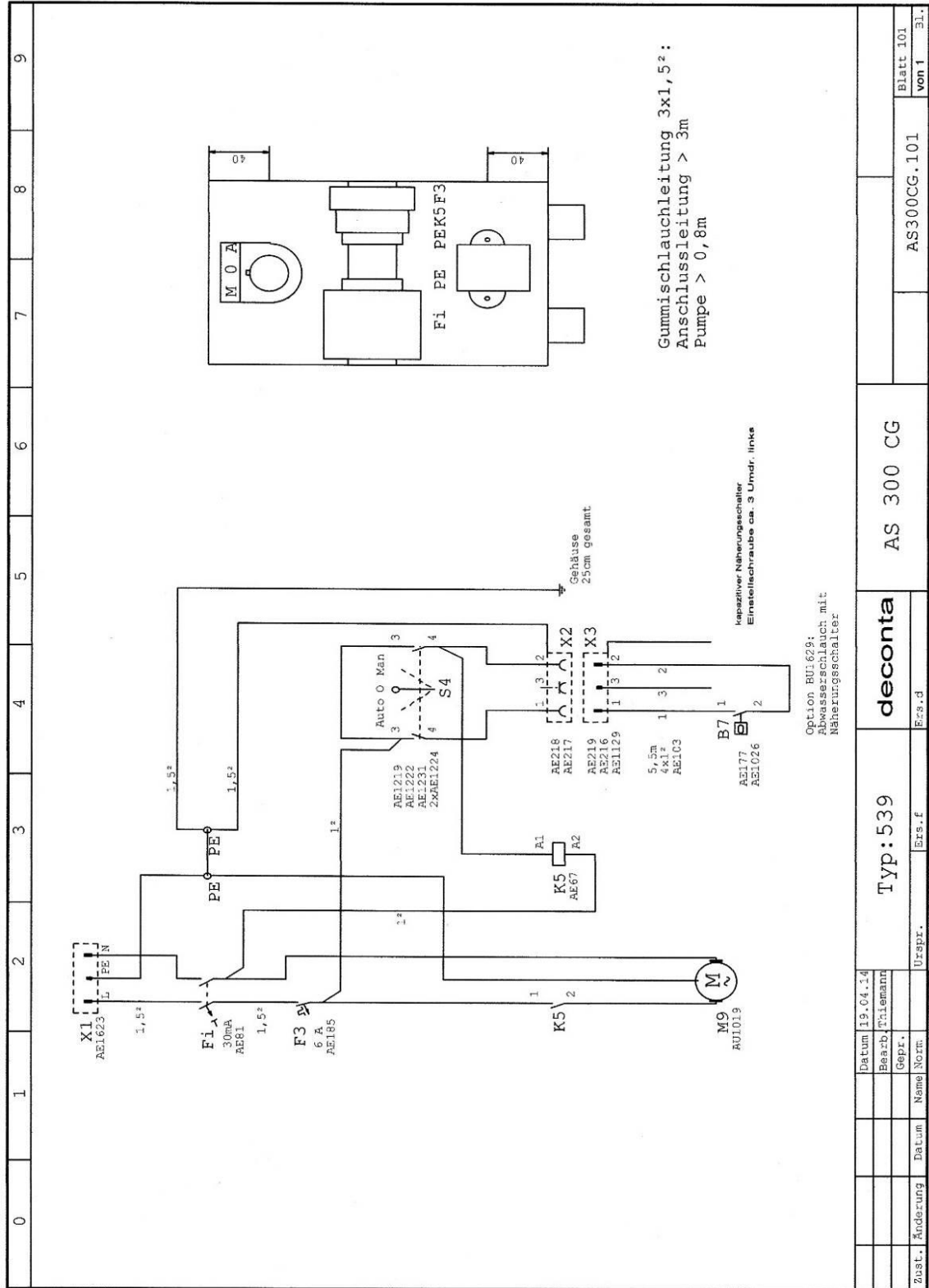
## 11 Spare parts

For safe, trouble-free and economical use of the machine, original spare parts should be used.

If this is not possible, the alternative spare parts should correspond to the characteristics of the original spare parts in order to ensure the safe, trouble-free and economical use of the machine.



12 Circuit diagram



### 13 **Cleaning**

The appliance must be cleaned and rinsed before each use (including first use). This also applies to the optionally available water hoses.

After use, the hoses must be carefully rinsed, disinfected and completely emptied or dried.

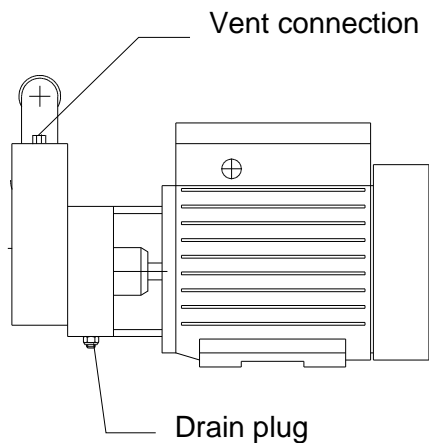
### 14 **Storage**

To avoid damage, the unit must only be stored in dry rooms that are inaccessible to unauthorised persons.

**HINWEIS**

**In winter, because of the danger of frost, urgent attention should be paid:**

Drain water pipes, filter housing, tank and pumps



The optional hoses may only be stored completely emptied and cleaned!

When storing, make sure that contamination with other substances is excluded. Wastewater hoses must be stored separately from freshwater hoses.

## 15 Disposal

Disposal is the capturing, collecting, forming, selecting, processing, regenerating, destroying, recycling and selling of the materials to be disposed of that are built into the machine.

This section contains information on the proper and professional disposal of the machine.

### 15.1 Qualification of the staff

Persons disposing of the machine must meet the following requirements:

Person	Required qualification
Disposer	Qualified waste management company for legally compliant, proper and professional disposal of the machine

### 15.2 Legislation

Disposal of the machine shall be in accordance with the legislation of the country where the machine is disposed of.

Compliance with these legal regulations is basically the responsibility of the operator of the machine or the person in charge of disposal.

### 15.3 Waste

The waste generated by the machine must be disposed of in a legally compliant, proper and professional manner.

## 16 EC Declaration of Conformity

The manufacturer

deconta GmbH  
Im Geer 20  
46419 Isselburg

hereby declares that the following product

Product designation: AS 300 CG  
Type designation: 539  
Serial number: see type plate  
Trade name: Wastewater filtration unit AS 300 CG  
Year of manufacture: see type plate  
Description:

Wastewater filtration unit AS 300 CG

complies with all relevant provisions of the applied legal regulations (hereinafter) - including their amendments in force at the time of the declaration. The sole responsibility for issuing this declaration of conformity lies with the manufacturer. This declaration relates only to the machine in the condition in which it was placed on the market; parts and/or interventions subsequently fitted by the end user are not taken into account.

The following legislation was applied:

Machinery Directive 2006/42/EC  
RoHS Directive 2011/65/EU

The protection goals of the following additional legal regulations were met:

Low Voltage Directive 2014/35/EU

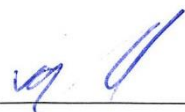
Name and address of the person authorised to compile the technical file:

Boland, Thomas - deconta GmbH, Im Geer 20 - 46419 Isselburg

The following harmonised standards were applied:

EN 60204-1:2018	Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1:2016 (Modified))
EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
EN ISO 13849-1:2015	Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2015)
EN ISO 13849-2:2012	Safety of machinery - Safety-related parts of control systems - Part 2: Validation (ISO 13849-2:2012)
EN ISO 13857:2019	Safety of machinery - Safety distances to prevent hazard zones from being reached by the upper and lower limbs (ISO 13857:2019)

Place: Isselburg Date : 21.06.2023



Leiter Konstruktion / head of construction



Leiter Elektro / head of electro