

# **Operating instructions (original) Wastewater filter system AS 300**

**Type 328** 



		Language: EN
	Phone: 02874/9156-0	Version: 2
deconta GmbH		Date of issue:
Im Geer 20 46419 Isselburg	E-Mail: info@deconta.com Web: www.deconta.com	30.04.2025





1	Product and manufacturer			4
	1.1		t	
	1.2		cturer	
	1.3	Change	e index	4
2	Abou	t these o	pperating instructions	F
_				
	2.1 2.2	-	e ility	
	2.3		gs	
	2.0	2.3.1	Warning words and warning colours	
		2.3.2	Structure	
	2.4	Symbol	s	
		2.4.1	Warning signs	
		2.4.2	Instruction sign	7
3	Desc	ription of	f the machine	8
	3.1		Il description	
	3.1		of delivery	
	3.3	•	delivery after termination of a rental	
	3.4		ng modes	
		3.4.1	Available operating modes	
	3.5	Interfac	es	
	3.6	Type pla	ate	11
		3.6.1	Execution	11
		3.6.2	Position	
	3.7	Access	ories	11
4	Tech	nical data	a	12
	4.1	Dimens	sions	12
	4.2	Mass		12
	4.3	Wastew	vater pump	12
	4.4	Filter sy	/stem	12
5	Secu	rity		13
	5.1	Intende	ed use	13
	5.2		lication	
	5.3		and qualifications of staff	
	5.4	Notes o	on occupational health and safety	16
6	Trans	sport		17
	6.1	•	warranty claims	
	6.2		al transport	
		6.2.1	Transport space	
		6.2.2	Legislation	
		6.2.3	Qualification of staff	
		6.2.4	Warning of residual risks	18
		6.2.5	Means of transportation	18

#### Table of contents



	6.3 Internal transport1				
		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	
7	Assei	mbly		19	
8	Put in	ito oper	ration	20	
	8.1	Comm	nissioning for wastewater hose with proximity sensor	21	
9	Opera	ation		22	
	9.1	Qualifi	cation of staff	22	
	9.2	Warnir	ng of residual risks	22	
	9.3	Numbe	er of persons	22	
	9.4	Tools	required	22	
	9.5	Equipr	ment required	22	
10	Maint	enance		23	
	10.1	Loss o	of warranty claims	23	
	10.2	Mainte	enance	23	
		10.2.1	9		
		10.2.2	1 1 1		
	10.3	-	maintenance		
	10.4	Filter o	change	24	
11	Spare	parts		26	
12	Circu	it diagra	am	27	
13	Clean	ing		28	
14	Stora	ge		28	
15	Waste	e dispos	sal	29	
	15.1	Qualifi	cation of staff	29	
	15.2	Legisla	ation	29	
	15.3	Waste	·	29	
16	EC De	eclaration	on of Conformity	30	



# 1 Product and manufacturer

#### 1.1 Product

The following product is described in these operating instructions:

AS 300 wastewater filter system

Serial number:

#### 1.2 Manufacturer

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

# 1.3 Change index

date	Version	Amendment	Responsible
12.03.2024	2	Complete revision	Thomas Boland

#### About these operating instructions



# 2 About these operating instructions

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

Keep these operating instructions 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 provides an overview of people and tasks.

Person	Task	
Operator	<< Machine-specific >>	
Occupational safety specialist	<ul><li>Carry out a risk assessment</li><li>Create operating instructions</li><li>Instruct persons</li></ul>	
Maintenance engineer	Maintenance of the mechanics	
Qualified electrician (EFK)	Installation and maintenance of electrical equipment	
Freight forwarder	External 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 carry out tasks with or in connection with the machine.

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

If the machine is handed over to another person, the operator passes these operating instructions on to this person.

#### About these operating instructions



## 2.3 Warnings

These operating instructions contain warnings of residual dangers.

The categorisation of the warnings is based on the severity of the damage that can occur if the warnings are ignored and the 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 of non-compliance: Death or serious injury.	<b>▲</b> GEFAHR
WARNING	Consequence of non-compliance:  Death or very serious injuries possible.	<b>▲ WARNUNG</b>
CAUTION	Consequence of non-compliance: Serious or minor injuries possible.	<b>▲ VORSICHT</b>
NOTE	Consequence of non-compliance:  Material damage or environmental damage possible.	HINWEIS
SAFE HANDLING	Implement the following instructions.	-

#### 2.3.2 Structure

Warnings are structured according to the SAFE method:

S	Warning word (DANGER; WARNING, CAUTION or NOTICE)
A	Type and source of danger  Description of the hazard and the cause of the hazard
F	Consequence Description of the possible consequences of the hazard for humans, animals and the environment
E	Escape Recommendations on how hazards can be avoided



## 2.4 Symbols

The following symbols are used in these operating instructions.

#### 2.4.1 Warning signs

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

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

Symbol	Meaning	Symbol	Meaning
4	Warning of electrical voltage		General warning sign

### 2.4.2 Instruction sign

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

The following table provides an overview of the instruction symbols used and their meaning.

Symbol	Meaning	Symbol	Meaning
	Wear safety shoes		Use protective clothing



#### 3 Description of the machine

This section contains information on understanding the machine.

#### 3.1 General description

#### General description of the product

The wastewater filter system was designed and built by the company deconta GmbH, Im Geer 20, 46419 Isselburg.

Contaminated wastewater is cleaned via a 3-stage filter unit consisting of a pre-filter and 2 fine filters.

The filter status is monitored via a pressure gauge.

The entire unit is housed in a powder-coated aluminium housing 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-stage 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 the SIL (Safety Integrity Level): EN 62061 Safety of machinery Functional safety of safety-related electrical, electronic and programmable electronic control systems

#### Description of the machine



## 3.2 Scope of delivery

The scope of delivery of the machine includes the following items:

- AS 300 wastewater filter system
- Filters
- Service Pack
- These operating instructions

#### 3.3 Return delivery after termination of a rental

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

- As listed above
- Thoroughly cleaned (ready for use)
- Without residual fibre bonding
- Without filter
- Without damage



#### 3.4 Operating modes

#### 3.4.1 Available operating modes

#### Type of utilisation

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

Use for other types of utilisation is not in accordance with the intended purpose.

#### **User groups**

Commercial users

#### **Utilisation 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 products: Geka connection for filtered wastewater into the sewage system
- Product material feed: Geka connection for contaminated water
- Product base: castors / feet



# 3.6 Type plate

The rating plate contains information for identifying the machine.

3.6.1 Execution

Aluminium plate, riveted

3.6.2 Position

Close to the service

#### 3.7 Accessories

The following accessories are optionally available for the wastewater filter system:

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



#### **Technical data** 4

#### 4.1 **Dimensions**

Length: 775 mm Width: 285 mm Height: 695 mm

#### 4.2 Mass

Weight: approx. 25 kg

#### 4.3 Wastewater pump

Self-priming and protected against dry running

230V, 50Hz Voltage: Power: 0.45 kw Max. flow rate: 30 l/min max. medium temperature: 90°C

#### 4.4 Filter system

3-stage filter system

Pre-filter: 10" 220μ (disposable) Fine filter: 10" 50μ (disposable) Fine filter: 10" 1μ (disposable) 50°C at 4bar

max. medium temperature:

Subject to technical changes



# 5 Security

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

#### 5.1 Intended use

The machine is intended exclusively for the following use:

#### Intended use

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

The deconta wastewater filter system treats (filters) the contaminated wastewater.

The user must comply with the operating parameters specified in the operating instructions. The appliance 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 injuries of any kind.

#### **Authorised persons**

The following persons are authorised to handle the product:

- Specialised personnel
  - Task: Maintenance and servicing
  - Qualification: trained specialist personnel (fitters, industrial mechanics, electricians) with knowledge and experience in handling the machine
- Operating personnel
  - Task: Operation
  - Qualification: Training activity, information through operating instructions

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

#### Field of application

The machine is intended for use in the following areas of application:

#### Field 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 and tampering
- Use, installation, operation, maintenance or repair in a manner other than described
- Work carried out by unqualified personnel
- Use of unsuitable or incompatible materials, operating or auxiliary materials or accessories
- Non-compliance with safety and operating instructions, occupational safety and accident prevention regulations or relevant statutory regulations
- Failure to promptly rectify faults that could jeopardise safety
- Use of non-original replacement parts or accessories that are not equivalent in quality and function
- Operating the machine in a technically unsatisfactory 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 staff

Person	Task	Required qualification
Operator	<< Machine-specific >>	Instruction, training
Programmer	Machine teaching, programming	Knowledge of programming and teaching machines and robots
Occupational safety specialist	<ul> <li>Carry out a risk     assessment</li> <li>Create operating     instructions</li> <li>Instruct persons</li> </ul>	Completed training as an occupational safety specialist with recent experience with machines
Qualified electrician	Installation and maintenance of electrical equipment	A person with suitable training, appropriate education, timely experience and knowledge of the relevant regulations that enables them to recognise risks and avoid hazards that may arise from electricity.
Freight forwarder	External transport of the machine	A person with suitable training, appropriate education, up-to-date experience and knowledge of the relevant regulations, who is able to transport machines safely off-site.
Conveyor	Internal transport of the machine	A person with suitable training, appropriate education, up-to-date experience and knowledge of the relevant regulations, who is able to transport machines safely within the company.
Disposer	Dispose of the machine	Qualified waste disposal 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 implementing the obligations arising from occupational health and safety. The health and safety regulations of the country in which the machine is used apply.

The obligations include the following points:

- make these operating instructions or extracts available to persons who carry out tasks with or in connection with the machine
- Provide the applicable documents to these persons
- Instruction of 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

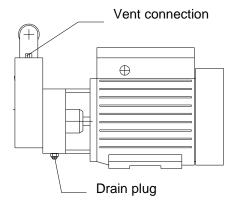
This section contains information on external and internal transport of the machine.

Transport is the movement of the machine by manual or technical means.



In winter, it is essential to pay attention to the risk of frost:

Empty 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 modifications to the machine that have not been agreed with the manufacturer
- If the transport is not carried out properly

#### 6.2 External transport

#### 6.2.1 Transport space

Off-site transport takes place in public areas. The machine is transported from one location to another.

#### 6.2.2 Legislation

The off-site transport of the machine is carried out in accordance with the legal regulations of the country in which the machine is transported off-site.

#### 6.2.3 Qualification of staff

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

Person	Required qualification
Freight forwarder	Completed training in transport and experience in the external transport of machines
Logistician	Completed training and experience in the internal transport of machines

#### 6.2.4 Warning of residual risks



Risk of crushing: Wear safety shoes to protect limbs from being run over.

#### 6.2.5 Means of transportation

A means of transportation that fulfils the following requirements is needed for safe external transport:

- The load capacity must be dimensioned so that the mass of the machine can be safely supported.
- The size of the transport surface must be dimensioned so that the machine can be parked safely on the transport surface without falling.



Machine may fall 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

During internal transport, the machine is transported from one installation location to another on the company premises.

#### 6.3.2 Legislation

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

#### 6.3.3 Warning of residual risks



Risk of crushing: Wear safety shoes to protect limbs from being run over.

#### 6.3.4 Means of transportation

A means of transportation that fulfils the following requirements is needed for safe internal transport:

- The load capacity must be dimensioned so that the mass of the machine can be safely supported.
- The size of the transport surface must be dimensioned so that the machine can be parked safely on the transport surface without falling.



Machine may fall down 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 installation of the machine.

The wastewater filter system is delivered ready for operation ex works and is intended for immediate commissioning.

**Do not** operate the appliance if it is visibly damaged. 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 pump shaft 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 rotational resistance of the impeller on new pumps will loosen after running in.

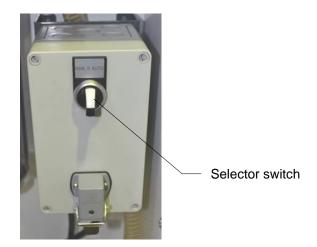


- Fill the wastewater pump completely through the vent connection
- Hand-tighten the union nuts on the filter housing



- Connect the wastewater hose to the "IN" connection and connect to the place of use
- Connect the "OUT" connection to the sewer
- Establish 230V power supply (earthed plug)



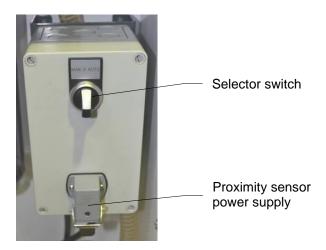


 Switch on the system (switch position "MAN" on the selector switch) and check whether the filter housings are filled with water

#### 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 and connect to the place of use
- Connecting the proximity sensor power supply
- Connect the "OUT" connection to the sewer
- Establish 230V power supply (earthed plug)





Switch on the system (switch position "AUTO" on the selector switch)

The proximity sensor on the wastewater hose recognises whether there is water in the hose and then switches the wastewater filter system 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 staff

Persons using the machine must fulfil the following requirements:

Person	Required qualification
Operator	Instruction, training by the manufacturer

#### 9.2 Warning of residual risks



Contact with wires of a damaged mains connection cable.

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

Only operate the appliance on power supply networks that are protected by residual current circuit breakers!

Damage due to unsuitable mains voltage.



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

Check whether the voltage specified on the rating plate corresponds to the local mains voltage.



Never operate the appliance without water!

If there is a risk of frost, as described in **Fehler! Verweisquelle k onnte nicht gefunden werden.** Empty the tank!

#### 9.3 Number of persons

One person is required to use the machine.

#### 9.4 Tools required

No tools are required to use the machine.

#### 9.5 Equipment required

No equipment is required to use the machine.



#### 10 Maintenance

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

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

#### 10.1 Loss of warranty claims

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

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

#### 10.2 Maintenance

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

The appliance must be completely disconnected from the power supply for all repair and maintenance work.

We expressly refer to possible additional regional and national regulations for the maintenance of the appliance technology.

#### 10.2.1 Warning of residual risks



Contaminated filters may only be changed in compliance with all relevant safety precautions. Only change filters when the appliance 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 filters, may only be carried out by authorised persons wearing suitable protective clothing.

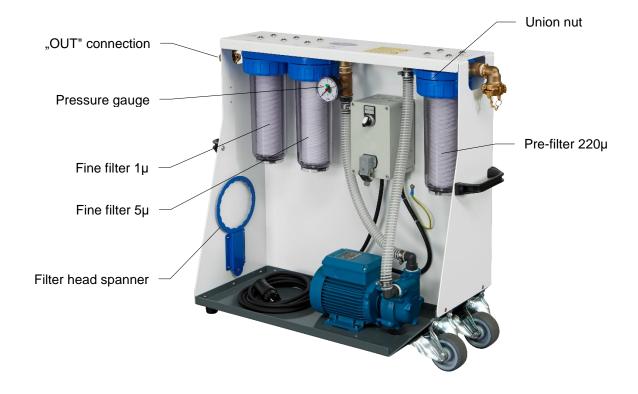
#### 10.3 Daily maintenance

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

#### 10.4 Filter change

#### **Attention:**

- Only change the filter when the appliance 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





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

- Loosen the union nut using the filter head spanner
- Remove the filter and dispose of it in accordance with regulations
- Insert new filter cartridge
- Ensure that the sealing ring is correctly seated and clean
- Hand-tighten the union nut



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

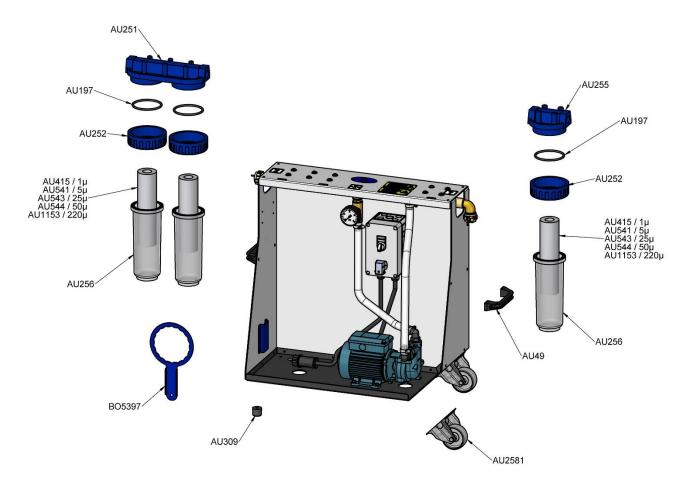
The filters must be disposed of in accordance with legal regulations.



# 11 Spare parts

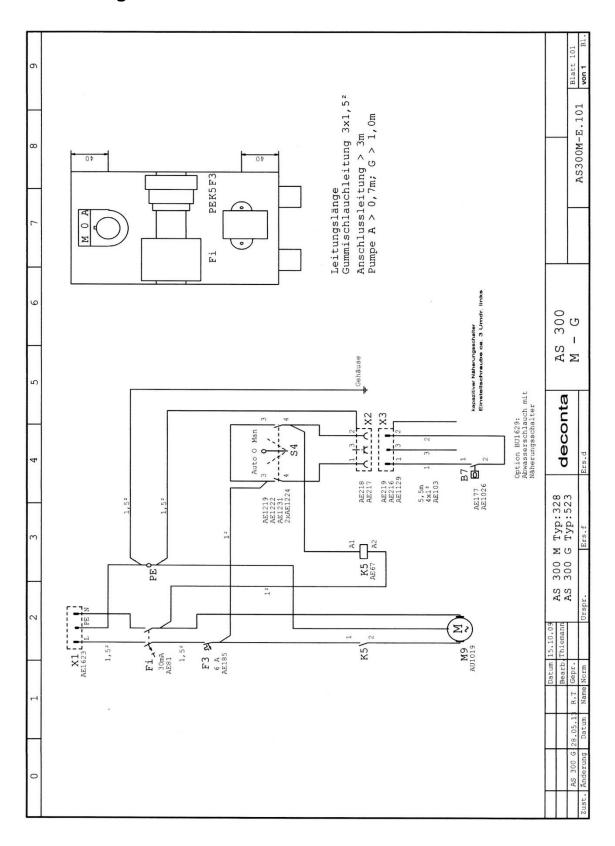
Original spare parts should be used to ensure safe, trouble-free and economical use of the machine.

If this is not possible, the alternative spare parts should correspond to the properties of the original spare parts in order to ensure 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 the 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.

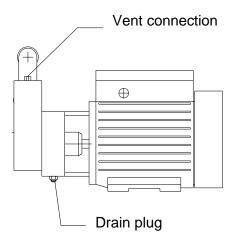
## 14 Storage

To prevent damage, the appliance may only be stored in dry rooms that are inaccessible to unauthorised persons.



In winter, it is important to pay attention to the risk of frost:

Empty water pipes, filter housing, tank and pumps



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

During storage, care must be taken to ensure that contamination with other substances is excluded. Wastewater hoses must be stored separately from fresh water hoses.



# 15 Waste disposal

Disposal is the capture, collection, transformation, selection, processing, regeneration, destruction, utilisation and sale of the materials to be disposed of that are used in the machine.

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

#### 15.1 Qualification of staff

Persons who dispose of the machine must fulfil the following requirements:

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

#### 15.2 Legislation

The machine is disposed of in accordance with the legal regulations of the country in which the machine is disposed of.

The operator of the machine or the person authorised to dispose of the waste is responsible for compliance with these legal regulations.

#### 15.3 Waste

The waste generated by the machine must be disposed of properly and professionally in accordance with the law.



# 16 EC Declaration of Conformity

The manufacturer

deconta GmbH Im Geer 20 46419 Isselburg

hereby declares that the following product

Product designation: AS 300 Type designation: 328

Serial number: see type plate

Trade name: Waste water filter system AS 300

Year of manufacture: see type plate

Description:

AS 300 waste water filter system

complies with all relevant provisions of the applicable legal regulations (hereinafter) - including their amendments valid at the time of the declaration. This declaration of conformity is issued under the sole responsibility of the manufacturer. This declaration relates only to the machine in the state in which it was placed on the market; parts and/or modifications subsequently fitted by the end user are not taken into account.

The following legal provisions were applied:

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

The protection targets of the following other legal regulations were met:

Low Voltage Directive 2014/35/EU

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

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 being reached by the

upper and lower limbs (ISO 13857:2019)

Place: IsselburgDate : 12.03.2024

Leiter Konstruktion / head of construction

Leiter Elektro / head of electro