

Operating instructions (original) Negative pressure unit smart dec

S50, S200, S300 , S400, S500



S50



S200



S300



S400



S500

	deconta GmbH Im Geer 20 46419 Isselburg	Telephone: 02874/9156-0 Fax: 02874/9156-11 E-mail: info@deconta.com Web: www.deconta.com	Language: EN
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1 Product and manufacturer

1.1 Product

The following product is described in these operating instructions:

Negative pressure unit smart dec.

Types: S50, S200, S300, S400, S500

1.2 Manufacturer

Name and address	deconta GmbH Im Geer 20 46419 Isselburg
	
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
13.03.2023	4	Complete revision	Thomas Boland
28.05.2025	5	S400 and S500 added, SE+ control unit added	Thomas Boland

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 style="list-style-type: none"> • Carry out a risk assessment • Create operating instructions • Instruct persons
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.

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 Signal words and signal colours

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

Signal word	Meaning	Signal colour
DANGER	Consequence of non-compliance: Death or serious injury.	
WARNING	Consequence of non-compliance: Death or very serious injuries possible.	
CAUTION	Consequence of non-compliance: Serious or minor injuries possible.	
NOTE	Consequence of non-compliance: Material damage or environmental damage possible.	
SAFE HANDLING	Implement the following instructions.	-

2.3.2 Structure

Warnings are structured according to the SAFE method:

S	Signal 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
	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 machine (the Negative pressure unit) was designed and built by the company deconta GmbH, Im Geer 20, 46419 Isselburg.

Negative pressure unit for filtering asbestos-contaminated room air via a 2-stage filter unit. The built-in HEPA filter fulfils the requirements of EN 1822 class H 13 or H 14.

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

3.2 Scope of delivery

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

- Negative pressure unit smart dec
- These operating instructions
- Suction adapter
- Sealing plugs

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)
- Free from any adhesive residue
- 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

- outdoors
- on roofed areas
- in rooms closed on all sides

Operating modes

Operating modes for use:

- Automatic mode (with SE+ and SRE connect version)
- Manual operation

3.5 Interfaces

This section contains information about interfaces.

The following interfaces are available on the machine:

- Human - product: Control panel, touchscreen
- Product - power supply: Electrical power supply 110 V / 230 V
- Product - waste products: Connection piece for clean air
- Product - material feed: connection nozzle for contaminated air
- Product - building: feet or castors

3.6 Type plate

The rating plate contains information for identifying the machine.

3.6.1 Execution

Aluminium plate, riveted

3.6.2 Position

Near the control panel on the outlet side.

4 Technical data

4.1 Dimensions

	Length x width x height (mm)
S50	575 x 390 x 400
S200	780 x 410 x 810
S300	880 x 720 x 810
S400	880 x 720 x 810
S500	1080 x 750 x 1145

4.2 Weights

	Weight incl. filter (kg)
S50	21,5
S200	45,0
S300	66,0
S400	89,0
S500	132,0

4.3 Performance data

All data on air flow rate and volume flow rates taking into account a measurement tolerance of $\pm 15\%$ in relation to the upper measuring range value, determined in a multi-point measurement procedure with a calibrated vane anemometer.

4.3.1 Negative pressure unit smart dec S50

	110 V	230 V
Air flow free-blowing max.	1500 m ³ /h	1700 m ³ /h
Air flow rate with deconta H13 filter, max.	1000 m ³ /h	1100 m ³ /h
Air flow rate with deconta H13 filter, pre-filter, max.	700 m ³ /h	900 m ³ /h
Power connection	100 - 120 V	230 V
Power consumption	2,4 A	1,2 A
Engine power	0.17 kW	0.21 kW
Power cable type	H07RN-F 3G1.5	
Filter system	2-stage	
Pre-filter	EU 4	
HEPA filter	according to EN 1822 class H13	

4.3.2 Negative pressure unit smart dec S200

	110 V	230 V
Air flow free-blowing max.	2700 m ³ /h	3000 m ³ /h
Air flow rate with deconta H13 filter, max.	2500 m ³ /h	2500 m ³ /h
Air flow rate with deconta H13 filter, pre-and intermediate filter, max.	2250 m ³ /h	2300 m ³ /h
Power connection	100 - 120 V	230 V
Power consumption	4,6 A	2,6 A
Engine power	0.375 kW	0.385 kW
Power cable type	H07RN-F 3G1.5	
Filter system	2-stage	
Pre-filter	EU 4	
HEPA filter	according to EN 1822 class H13	

4.3.3 Negative pressure unit smart dec S300

	110 V	230 V
Air flow free-blowing max.	5000 m ³ /h	6000 m ³ /h
Air flow rate with deconta H13 filter, max.	4500 m ³ /h	4600 m ³ /h
Air flow rate with deconta H13 filter, pre- and intermediate filter, max.	4000 m ³ /h	4200 m ³ /h
Power connection	100 - 120 V	230 V
Power consumption	2x 4.6 A	4,0 A
Engine power	2x 0.375 kW	0.78 kW
Power cable type	H07RN-F 3G1.5	
Filter system	2-stage	
Pre-filter	EU 4	
HEPA filter	according to EN 1822 class H13	

4.3.4 Negative pressure unit smart dec S400

Air flow free-blowing max.	7000 m ³ /h
Air flow rate with deconta H13 filter, max.	5900 m ³ /h
Air flow rate with deconta H13 filter, pre-filter, max.	5400 m ³ /h
Power connection	230 V
Power consumption	7,0 A
Engine power	1.3 kW
Power cable type	H07RN-F 3G1.5
Filter system	2-stage
Pre-filter	EU 4
HEPA filter	according to EN 1822 class H13

4.3.5 Negative pressure unit smart dec S500

Air flow free-blowing max.	13300 m ³ /h
Air flow rate with deconta H13 filter, max.	10850 m ³ /h
Air flow rate with deconta H13 filter, pre-filter, max.	10300 m ³ /h
Power connection	230 V
Power consumption	13 A
Engine power	2x 1.3 kW
Power cable type	H07RN-F 3G1.5
Filter system	2-stage
Pre-filter	EU 4
HEPA filter	according to EN 1822 class H13

4.4 Performance data special versions

The S200, S300, S400 and S500 appliances in the smart dec series can be equipped with double filtration (2x HEPA filters in series) using an optional SNAP housing.

When using double filtration, the maximum volume flow rate changes.

The modified technical data can be found in the following tables.

4.4.1 Negative pressure unit smart dec S200

Free-blowing air flow rate, max.	3000 m ³ /h
Air flow rate with filter, max.	2000 m ³ /h

4.4.2 Negative pressure unit smart dec S300

Free-blowing air flow rate, max.	6000 m ³ /h
Air flow rate with filter, max.	3600 m ³ /h

4.4.3 Negative pressure unit smart dec S400

Free-blowing air flow rate, max.	7000 m ³ /h
Air flow rate with filter, max.	4600 m ³ /h

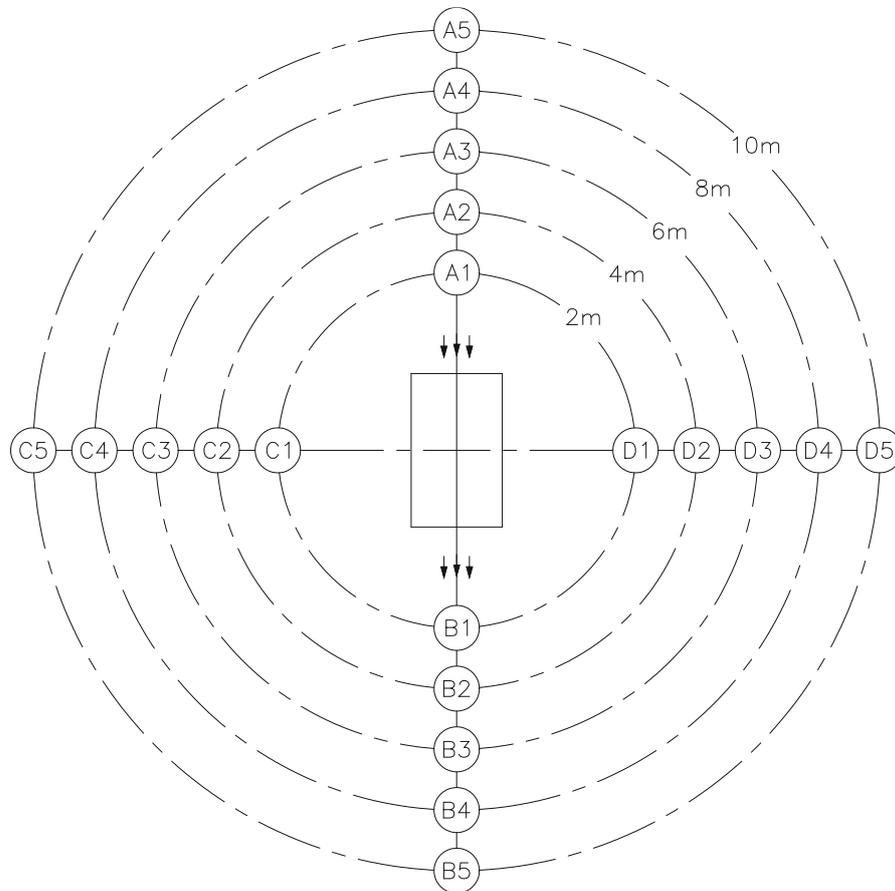
4.4.4 Negative pressure unit smart dec S500

Free-blowing air flow rate, max.	13300 m ³ /h
Air flow rate with filter, max.	7800 m ³ /h

4.5 Ambient conditions

Ambient temperature	0 °C to +45 °C
Relative humidity	70 % non-condensing

4.6 Noise emission



Status:

Engine power 100%, outdoor area, values in dB (A)

Device	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1 D1	C2 D2	C3 D3	C4 D4	C5 D5
S50	59	57	56	55	54	66	62	60	58	56	60	58	56	54	52
S200	62	60	59	57	52	72	66	63	59	57	65	61	58	57	55
S300	64	61	58	57	56	71	65	62	59	57	62	58	55	54	53
S400	80	75	73	69	67	80	73	69	69	67	71	68	65	63	62
S500	73	67	65	63	60	75	69	66	65	64	69	66	63	62	61

The sound level can be reduced by fitting a silencer, taking power losses into account.

4.7 Filter description / classification

A 2-stage filter combination is integrated in the appliance

Pre-filter

Quality class according to DIN 24185 / EN 779	G4 / EU4
Frame	Cardboard frame, 47 mm wide
Filter medium	Synthetic
Degree of separation (Am)	90 %
Nominal volume flow:	5400m ³ /h/m ²
Nominal face velocity at nominal volume	1.5 m/s
Initial pressure difference	42 Pa
Recommended final pressure difference	250 Pa
Temperature / humidity	100°C/100% RH (relative humidity)
Filter dimensions (in mm):	
S50	305 x 305 x 47
S200	305 x 610 x 47
S300	610 x 610 x 47
S400	610 x 610 x 47
S500	610 x 910 x 47

HEPA filter

Frame	Plastic or aluminium
Filter medium	Micro glass fibre paper
Potting compound	Polyurethane
Gasket	Polyurethane
Filter class	H13 or H 14 according to EN 1822
Temperature / humidity	70°C/100% RF (relative humidity)
Filter dimensions (in mm): S50 S200 S300 S400 S500	284 x 284 x 150 305 x 610 x 292 610 x 610 x 292 610 x 610 x 292 610 x 910 x 400
Handle protection	on both sides

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

The Negative pressure unit is used for filtering non-condensing room air contaminated with asbestos fibres, in the temperature range up to +45 °C, with exhaust air discharge to the outside.

When carrying out asbestos removal work in enclosed spaces, it is important to prevent asbestos fibres from leaving the removal area and thus posing a risk to people and the environment. For these reasons, removal areas (also known as contaminated areas) are separated from asbestos-free areas and kept under dynamic negative pressure using Negative pressure units.

An integrated filter system ensures that the concentration of asbestos fibres in the exhaust air is not exceeded. The exhaust air is channelled outside.

The appliance is not suitable for filtering flammable gases or dusts.

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

5.3 Tasks and qualifications of staff

Person	Task	Required qualification
Operator	<< Machine-specific >>	Instruction, training
Occupational safety specialist	<ul style="list-style-type: none"> • Carry out a risk assessment • Create operating instructions • Instruct persons 	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 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.

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 transport

A means of transport 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 down due to unintentional change of position when loading and unloading onto/from a means of transport.

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 transport

A means of transport 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 due to unintentional change of position when loading and unloading onto/from a means of transport.

7 Assembly

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

The Negative pressure unit is delivered ready for operation ex works and is intended for immediate commissioning.

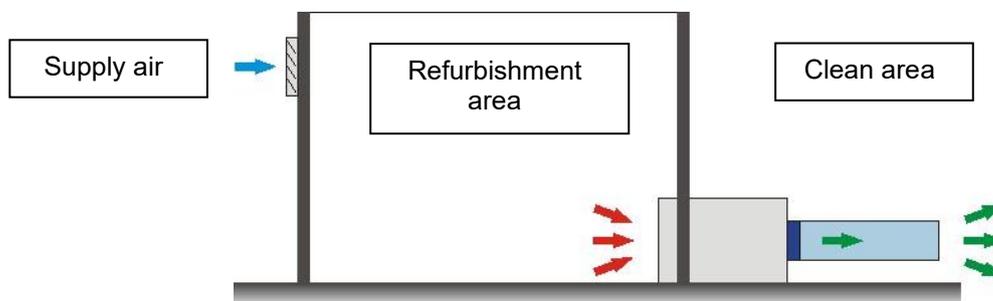
Do not operate the appliance if it is visibly damaged. Contact deconta GmbH immediately.

HINWEIS

Please note: In principle, the Negative pressure unit can also be operated directly in the contaminated area (pressurisation technology prevents contaminated ambient air from entering the housing).

However, as the appliances are contaminated from the outside and therefore have to be thoroughly cleaned after the refurbishment is complete, use in contaminated areas should be avoided at all costs.

- Integrate the appliance into the partition wall between the clean and refurbishment areas
- Insert approx. 100 mm into the renovation area
- Seal appliance with partition wall
- Route the exhaust air hose to the outside
- Ensure sufficient supply air in the refurbishment area



⚠ GEFÄHR

Never use the appliance without correctly installed filters that are approved for the respective requirement. Avoid blowing out unfiltered air.

8 Operation

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

8.1 Qualification of staff

Persons using the machine must fulfil the following requirements:

Person	Required qualification
Operator	Instruction, training by the manufacturer

8.2 Warning of residual risks



Contact with wires of a damaged mains connection cable.

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



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.



The following materials must not be filtered:

- Hot materials (smouldering cigarettes, hot ashes, etc.)
- Flammable, explosive, aggressive materials and dusts

8.3 Number of persons

One person is required to use the machine.

8.4 Tools required

No tools are required to use the machine.

8.5 Required equipment

No equipment is required to use the machine.

8.6 Negative pressure units with SE control unit

The Negative pressure unit is supplied with a manual stepless control for power regulation.



- Establish power connection
- Actuate controller

8.6.1 Room pressurisation

- Set the desired negative pressure at the supply air opening or on the infinitely variable regulator
 - ⇒ Vacuum too high: Open the supply air opening or reduce the appliance
 - ⇒ Vacuum too low: Close supply air opening or regulate device upwards

8.7 Negative pressure units with SE+ control unit

The Negative pressure unit is supplied with a manual / automated stepless control for power regulation.



- Determine the measuring point in the contaminated area and connect it to the negative pressure "-" connection using PE hose 8 x 1.
- Determine the measuring point in the clean area (neighbouring rooms) and connect with PE hose 8 x 1 to the atmosphere "+" connection.



- Establish power connection
- To switch on, set the selector switch "0/1" to position "1"
- Set the desired power on the stepless controller
- Fix the currently set value by pressing the "set" button, the green light indicates activation, the controller is now deactivated
- The Negative pressure unit now maintains the fixed negative pressure (within the performance limits) (automated control)
- To deactivate the automatic control, the appliance must be switched off and on again using the selector switch

8.8 Negative pressure units with SRE connect control unit

IoT (Internet of Things) => Devices with SRE connect control can be remotely controlled and monitored with any internet-enabled PC, mobile phone or tablet.

For power regulation, the Negative pressure unit is supplied with a control unit via a touch display to measure and regulate the negative pressure and / or the volume flow.

The negative pressure is measured between the contaminated area and a reference point to be defined (neighbouring rooms) and maintained at the setpoint by continuous speed control of the electric fan.

The volume flow is measured in the device and kept at the setpoint by continuous speed control of the electric fan.

Manual control is also possible.

A filter sensor monitors the particle concentration in the exhaust air and triggers a visual and acoustic alarm if a value of approx. 100 particles per litre is permanently exceeded.

A necessary filter change is shown on the display.

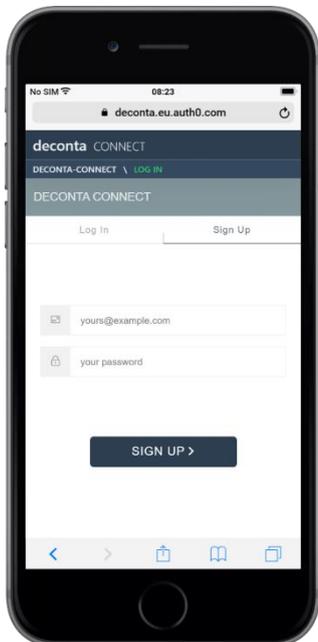
The connect functions are supported as standard in the following countries:

Albania, Algeria, Armenia, Aruba, Australia, Austria, Azerbaijan, Bangladesh, Belarus, Belgium, Bolivia, Bonaire, Bulgaria, Cambodia, China, Croatia, Curacao, Cyprus, Czech Republic, Denmark, El Salvador, Estonia, Faroe Islands, Finland, France, French Guyana, Georgia, Germany, Ghana, Gibraltar, Greece, Guadeloupe, Guyana, Honduras, Hong Kong, Hungary, Iceland, Indonesia, Ireland, Israel, Italy, Japan, Jersey, Kazakhstan, Kuwait, Kyrgyzstan, Laos, Latvia, Liechtenstein, Lithuania, Luxembourg, Macau, Macedonia, Malaysia, Malta, Martinique, Moldova, Mongolia, Montenegro, Nepal, Netherlands, Netherlands Antilles, New Zealand, Nigeria, Norway, Pakistan, Palestine, Panama, Papua New Guinea, Philippines, Poland, Portugal, Puerto Rico, Qatar, Romania, Russia, Saint Eustatius and Saba, Saint Martin (French part), Saint-Barthélemy, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Suriname, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Thailand, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Kingdom, United States, Uzbekistan, Vietnam, Virgin Islands, U.S., Zambia

All other countries not listed on request

8.8.1 Create user account

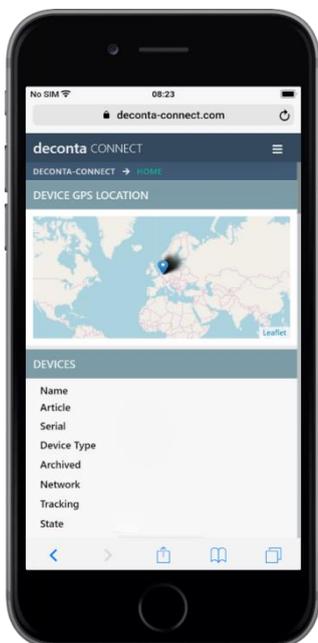
Open the page www.deconta-connect.com in your Internet browser.



Tap on the "Sign Up" tab. Enter an e-mail address and your desired password.

The password must be at least 8 characters long and fulfil 3 of the following 4 criteria:

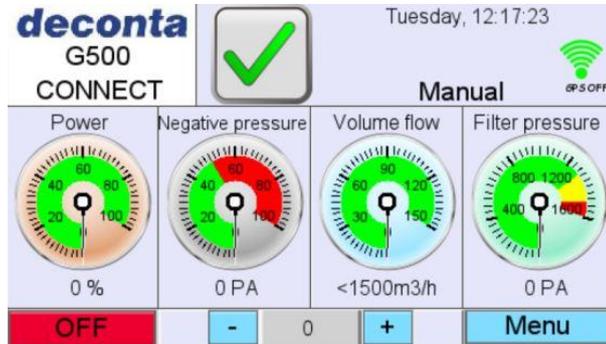
- at least 1 number
- at least 1 capital letter
- at least 1 lower case letter
- at least 1 special character.



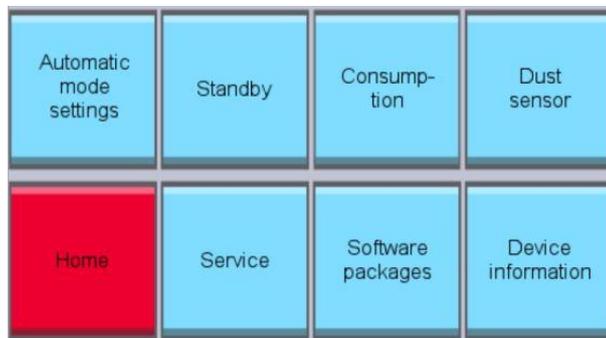
You will see this page after successful registration.

Any number of devices can now be assigned to the user account.

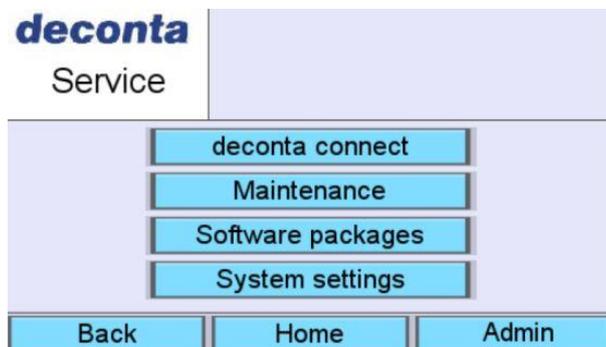
8.8.2 Add device to the user account



Switch on the device.
Tap on the "Menu" button.



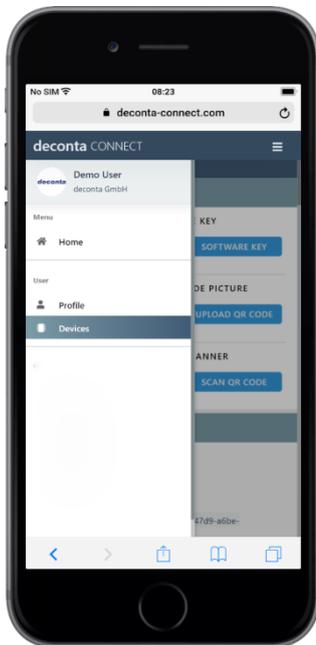
Tap on the "Service" button



Tap on the "deconta connect" button.

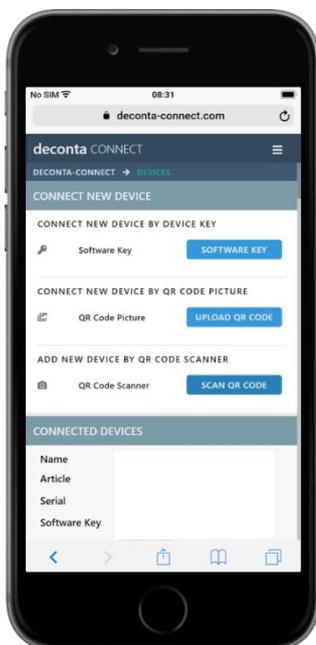


The page with a QR code and a key underneath is displayed.

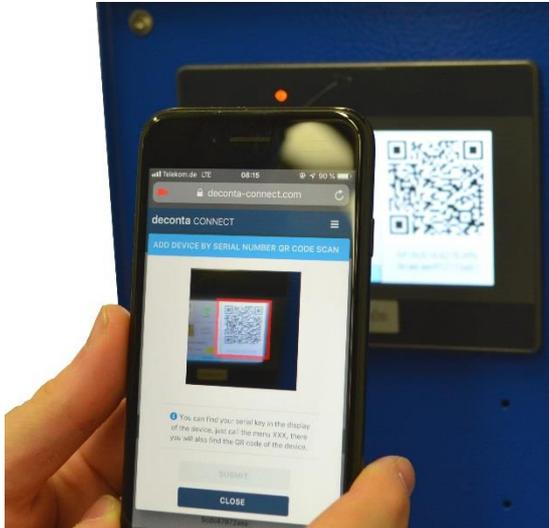


Log in to the connect page with your e-mail address and password.

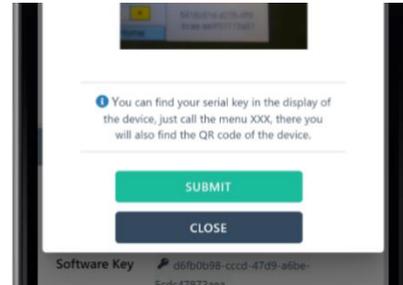
Tap on the menu icon  and then on "Devices".



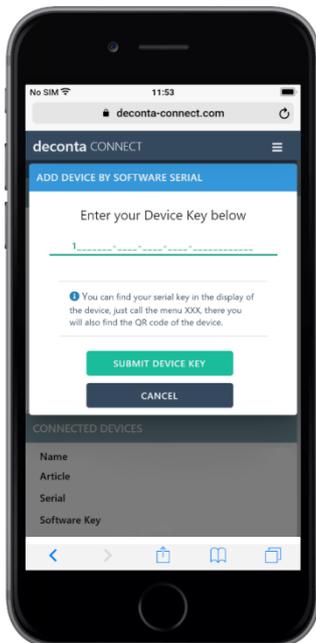
Tap on the "SCAN QR CODE" button (our recommendation) or alternatively on the "SOFTWARE KEY" button.



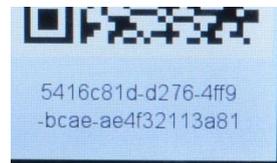
Scan the QR code shown on the device display.



If the QR code is recognised, the "SUBMIT" button changes to green. To add, tap this button and the device is now registered in your user account.



Alternative registration via the "SOFTWARE KEY" button

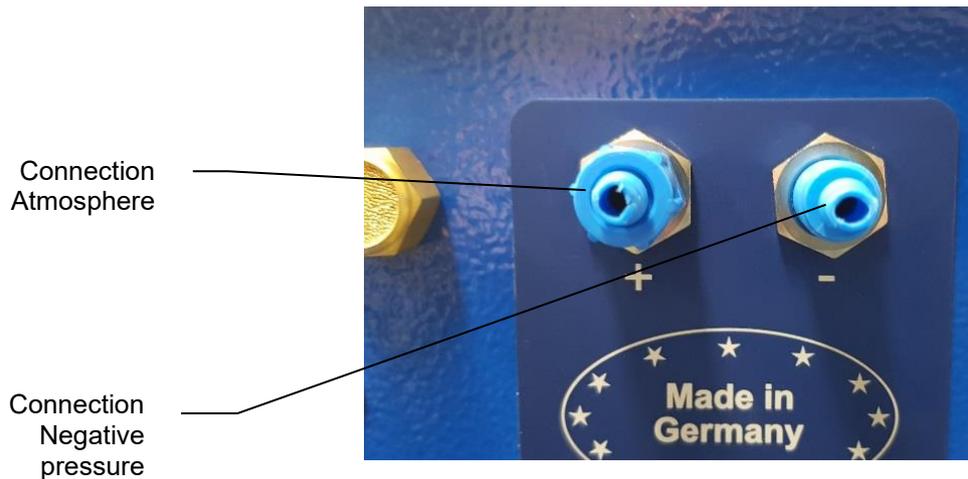


Enter the key that is displayed below the QR code on the device in the field provided and then tap the green "SUBMIT DEVICE KEY" button, the device is now registered in your user account.

8.8.3 Preparation

Determine the measuring point in the contaminated area and connect it to the negative pressure "-" connection using PE hose 8 x 1.

Determine the measuring point in the clean area (neighbouring rooms) and connect with PE hose 8 x 1 at the atmosphere "+" connection.

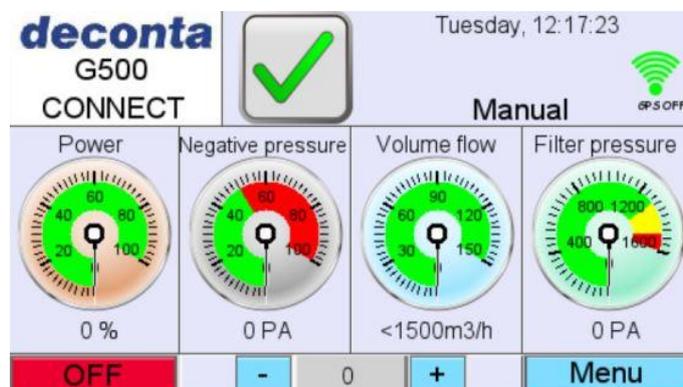


The control unit can be used in 2 different operating modes.

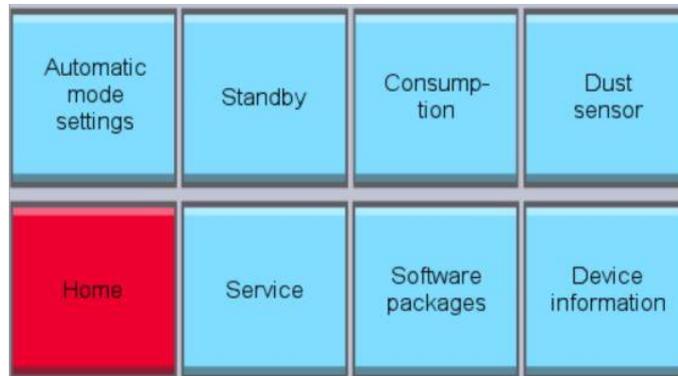
8.8.4 Manual operation

In manual mode, the fan power is set using the "-" and "+" buttons.

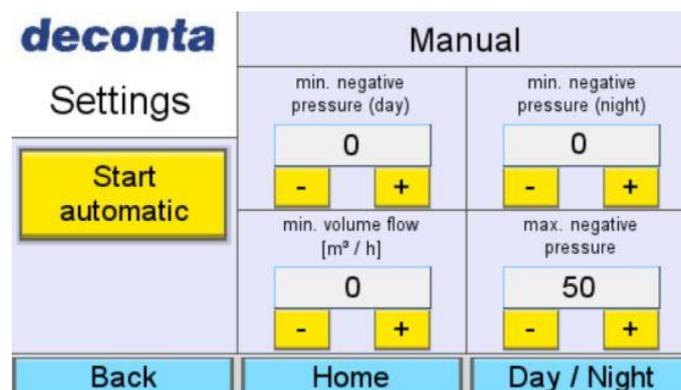
The display shows the power value in % (Power), the measured negative pressure in the contaminated area (Negative pressure) in Pa, the volume flow in m³/h and the filter pressure in Pa.



8.8.5 Automatic operation



To make the settings and switch automatic mode on/off, tap the "Menu" button. In the following menu, tap the "Automatic mode settings" button.



The following parameters can be set:

- Minimum negative pressure in day mode (min. negative pressure day)
- Minimum negative pressure in night mode (min. negative pressure night)
- Minimum volume flow in m³/h (min. volume flow)
- Maximum negative pressure (max. negative pressure)

Automatic mode is started by tapping the "Start automatic" button.

By comparing the setpoint entered with the permanently measured actual value, the speed of the fan is automatically adjusted, i.e. the fan automatically runs "up" or "down".

8.8.6 Day / Night settings (Day / Night)



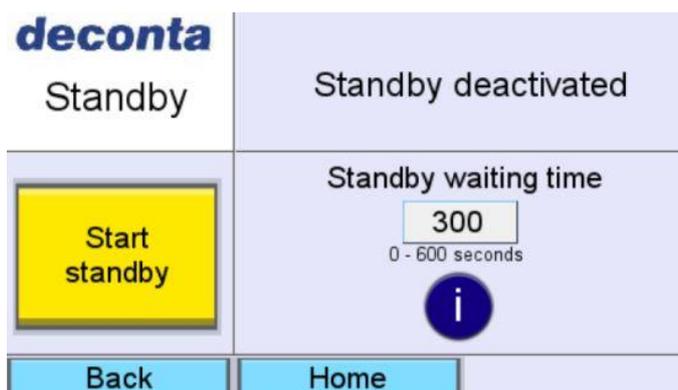
By selecting time ranges, you can set here on which days and at what time the value set in automatic mode for the minimum negative pressure in night mode (min. negative pressure night) is activated.

8.8.7 Standby mode

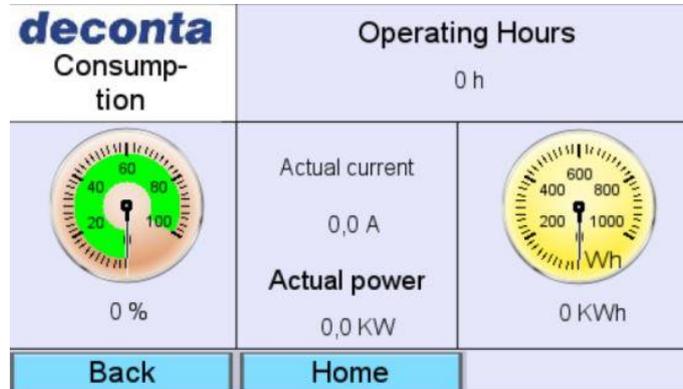
A Negative pressure unit with SRE connect control can be operated as a standby device (reserve device). If this function is activated, the device switches on automatically if the pressure falls below a previously defined negative pressure (e.g. if the actual Negative pressure unit fails).

Standby mode is switched on in the menu by tapping the "Standby" button.

A delay of 0-600 seconds for switching on can be entered in the Standby waiting time field.



8.8.8 Consumption



Left: The current power of the device is displayed here in %.

Top centre: Display of the current power consumption (Actual current) in A

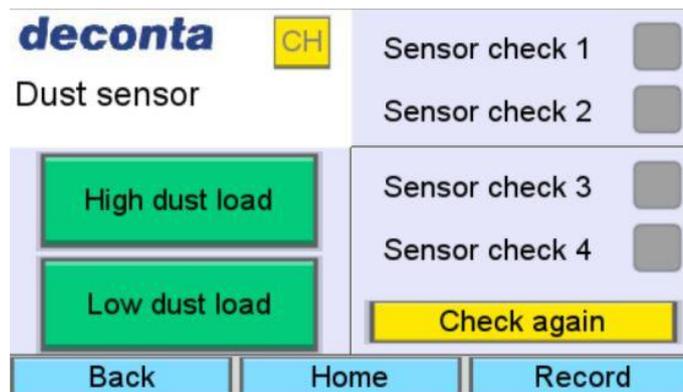
Centre bottom: Display of the current power (Actual power) in kW

Right: Display of Wh and below the total consumption in KWh

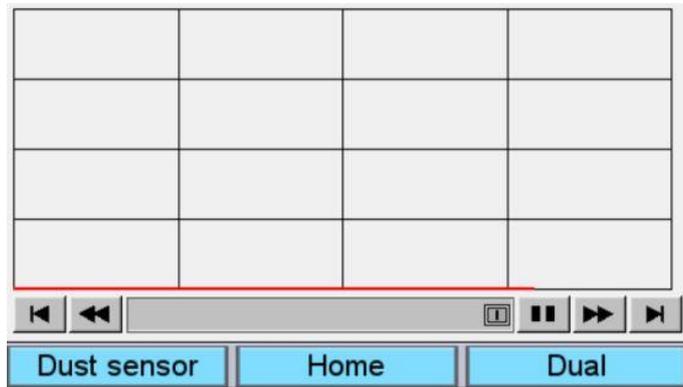
8.8.9 Dust sensor

A filter sensor monitors the particle concentration in the exhaust air.

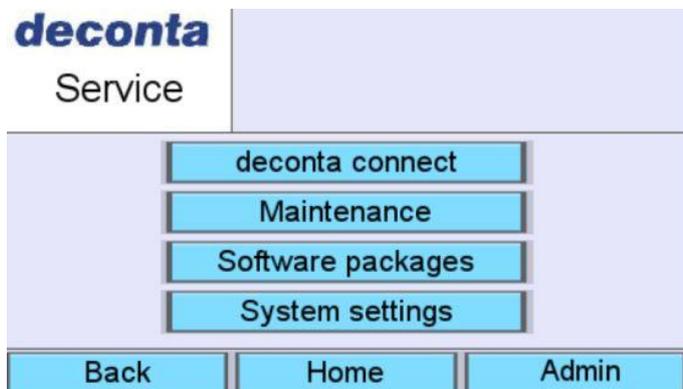
The functions and status of the filter sensors are shown on the display.



The measured values of the filter sensors can be displayed graphically using the "Record" button.



8.8.10 Service



deconta connect

Assign device to a connect account, see .8.8.1

Maintenance

Settings in this menu can only be made by qualified deconta service partners.

Software packages

Display of the booked options and the expiry date of the licences.

deconta	
Software packages	
connect BASIC	25.02.44
Particle Sensor	28.02.25
connect Pro	28.02.25
includes connect BASIC & Particle Sensor	
Back	Home
Set payments	

System settings



Setting the day of the week and time. These values are shown on the device display and are required for the Day / Night settings.

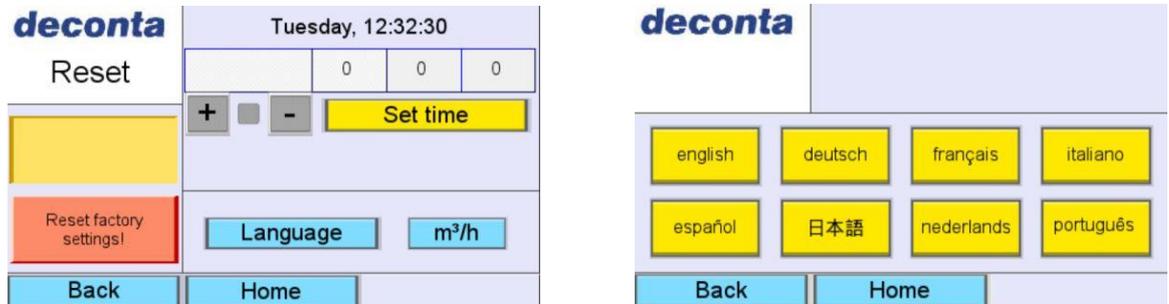
Data that is sent to the connect user account is displayed there in the set time zone (by default UTC± 0 = Coordinated Universal Time).

Tapping the yellow "Reset factory settings? (reset to factory settings?), the red "Reset factory settings!" button is activated.



Tapping this red button resets all settings to the factory settings!

Setting the language. Tapping the "Language" button takes you to the menu for setting the display language. Selectable languages: English, German, French, Italian, Spanish, Japanese, Dutch and Portuguese.



The unit can be changed to m³/min by tapping the m³/h button.



8.8.11 Device information (Device information)

Display of device information.



8.8.12 Alarms

Alarms are displayed visually via a flashing symbol on the main screen and an acoustic signal sounds at the same time. There are 3 different displays:

- Green tick: there is no alarm message



- Yellow bell: there was an alarm, but it no longer exists and has not yet been acknowledged



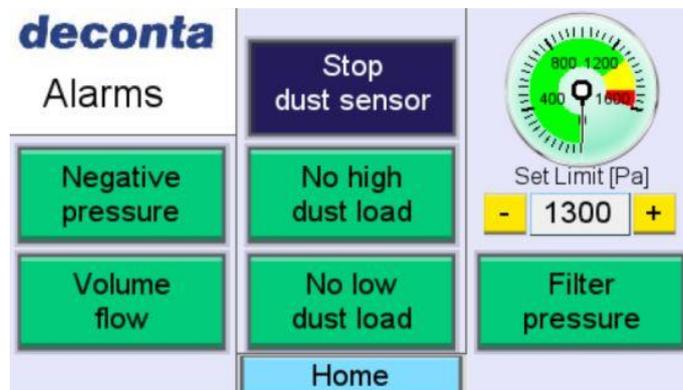
- Red bell: there is an acute alarm message



A submenu with more detailed information on alarms can be called up by tapping the button with the green tick, the yellow bell or the red bell.

Alarms are displayed with a red button.

Once the fault has been rectified, the alarm must be acknowledged by tapping the relevant button and the colour changes to green.



Negative pressure:

- the set target value for the minimum negative pressure could not be reached.

Volume flow (volume flow):

- the setpoint value for the minimum volume flow could not be reached.

High dust load:

- Filter sensor message for many particles within a short period of time

Low dust load:

- Filter sensor message for a few particles over a longer period of time

Filter pressure (filter pressure):

The alarm value for the filter pressure can be set continuously using the "-" and "+" buttons (yellow area in the display = filter must be replaced soon). The red area is a fixed factory setting.

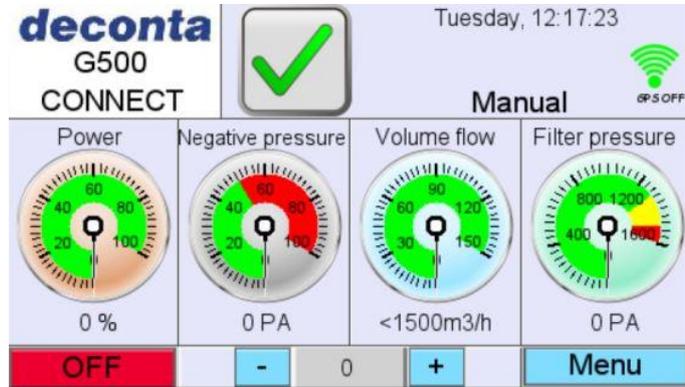
Stop dust sensor / Start dust sensor:

- Switching the dust sensors on / off.

HINWEIS

The particle concentration in the exhaust air is not monitored when the sensors are switched off!

8.8.13 Switch off the device



To switch off the device, tap the red "OFF" button

deconta

Shut down

The appliance switches off and the mains plug can be pulled out.

deconta

Pull power
cable



9 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.

9.1 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

9.2 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.

The ventilation systems (dust extractors, industrial hoovers and devices used for ventilation or negative pressure maintenance) must be serviced as required, but at least once a year, repaired if necessary and inspected by an expert. The test results must be presented on request.

Devices with SRE connect control should be checked and calibrated once a year by deconta service.

9.3 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.



Do not use any residual fibre binders on the appliance.



Pull out the mains plug before opening the housing

9.3.1 Personal protective equipment required



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

9.4 Information on changing the filter

The frequency of the filter change depends on the degree of soiling of the filters. As the filter occupancy increases (filter soiling), the air performance decreases.

For filter monitoring during operation, a pressure gauge is fitted on appliances with SE control; on appliances with SRE connect control, the filter monitoring is shown on the display.

9.4.1 SE and SE+ control unit

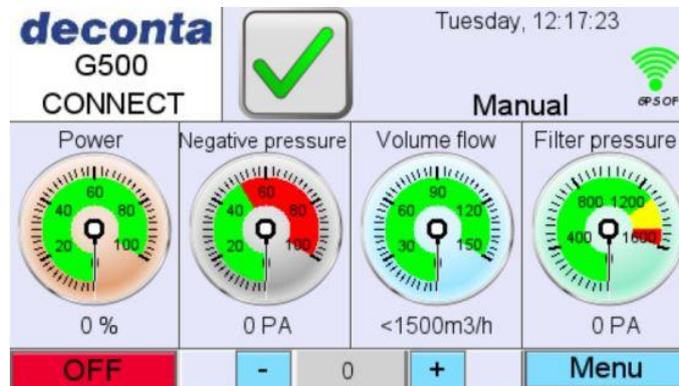


The following table shows the display values for a recommended filter change. If the display reaches this value, please replace the pre-filter first. If the display value drops by 100 Pascal or more, the appliance can continue to be operated. If the value drops by less than 100 Pascal, the HEPA filter must be replaced.

Device	Recommended filter change for	
	110 V	230 V
S50	approx. 700 Pascal	approx. 800 Pascal
S200	approx. 700 Pascal	approx. 750 Pascal
S300	approx. 700 Pascal	approx. 850 Pascal
S400	---	approx. 950 Pascal
S500	---	approx. 950 Pascal

100 Pa = 1 mbar

9.4.2 SRE connect control unit



To monitor the filter, the filter pressure is shown on the control unit display. If the display reaches the red area, please replace the pre-filter first. If the display value drops by 100 Pascal or more, the appliance can continue to be operated. If the value drops by less than 100 Pascal, the HEPA filter must be replaced.

9.5 Filter change



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.



Do not use any residual fibre binders on the appliance.



Pull out the mains plug before opening the housing



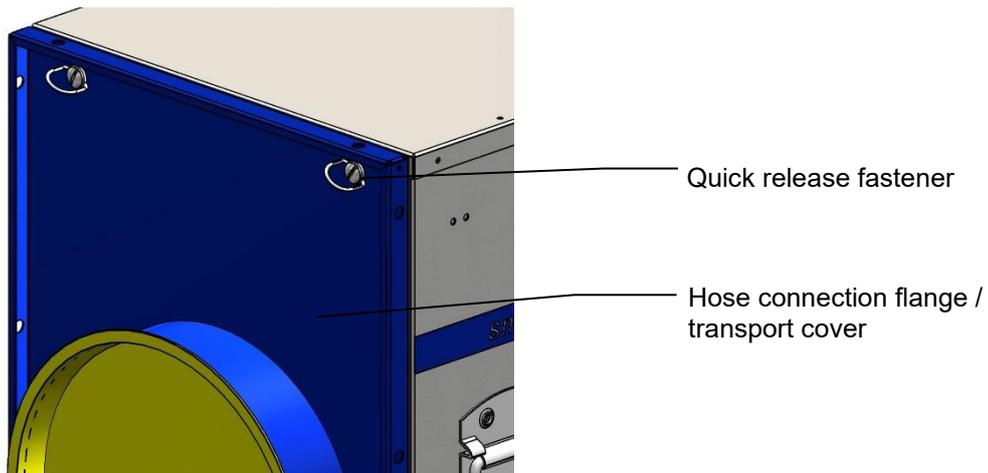
Maintenance work, including changing/removing filters, may only be carried out by authorised persons wearing suitable protective clothing.

9.5.1 Procedure using the S200 as an example

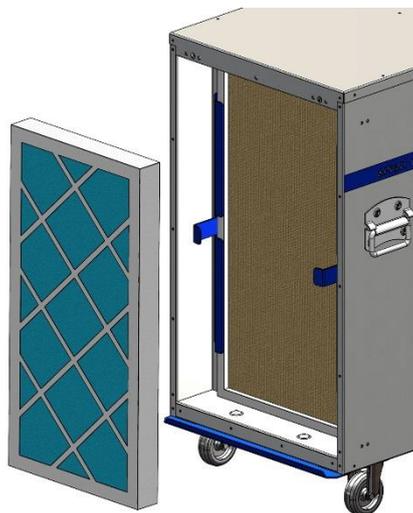
- Release the quick-release fastener and remove the hose connection flange / transport cover.

HINWEIS

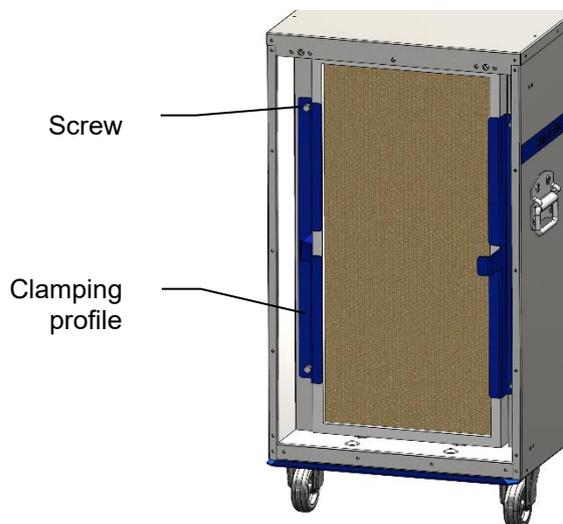
Risk of crushing fingers when fitting / removing connecting flanges



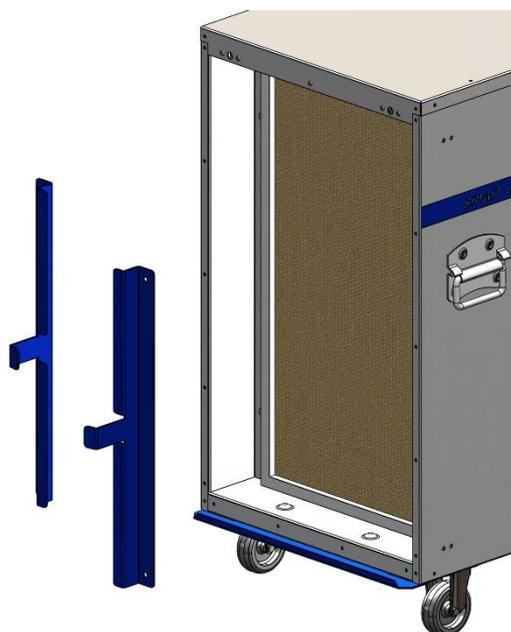
- Remove the pre-filter and dispose of it in accordance with regulations



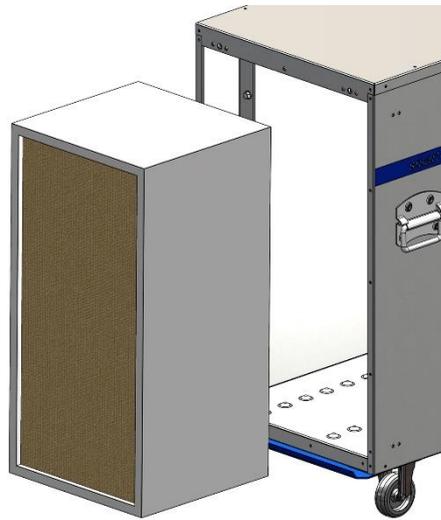
- Unscrew the screws of the clamping profiles



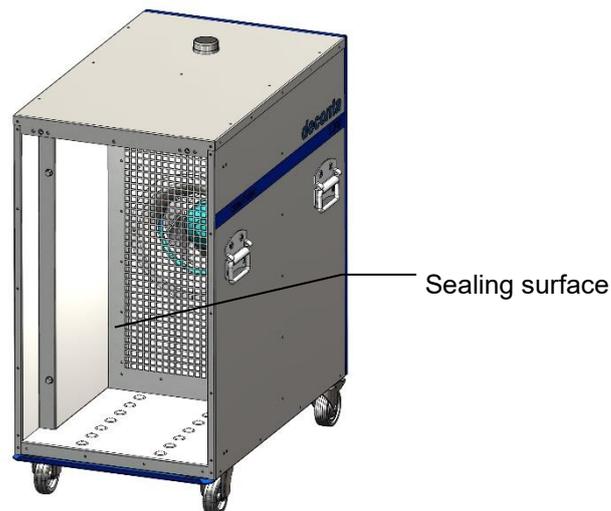
- Remove clamping profiles



- Remove the HEPA filter and dispose of it in accordance with regulations



- Check and clean the sealing surface on the appliance



- Clean the inside of the housing and insert a new main filter **in the centre**
- Insert clamping profiles and screws (tighten screws evenly)
- Insert pre-filter
- Fitting the hose connection flange

HINWEIS

The appliances have only been tested with original deconta HEPA filters. To ensure machine safety, only original deconta filters should be used. If this is not observed, machine safety cannot be guaranteed. This may result in the unintentional and uncontrolled release of hazardous substances into the environment due to filter overload (leakage, filter tear, etc.).

9.6 Troubleshooting and fault rectification

This section contains information on safe troubleshooting and fault rectification for the machine.

9.6.1 Possible faults and instructions for rectifying faults

The following table provides an overview of faults and troubleshooting measures.

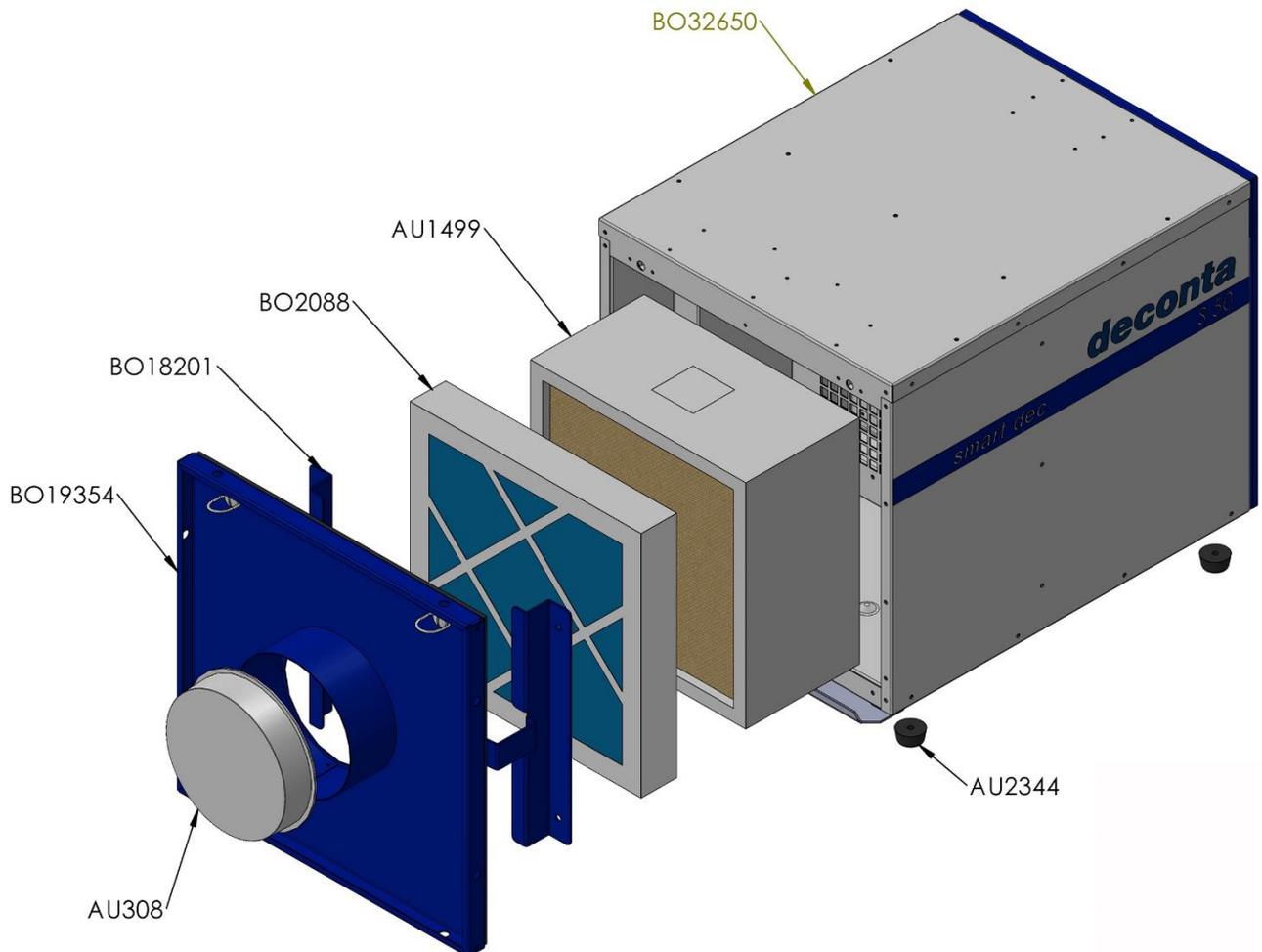
Malfunction	Possible cause	Measure
Negative pressure too low	Pre-filter or main filter dirty	Change the filter as described at 9.5
Device does not work	Power source not in order	Power source to be inspected and repaired by a qualified electrician
Device does not work	Components on the vacuum holding device defective	Have the device repaired by deconta or a workshop authorised by deconta.

10 Spare parts

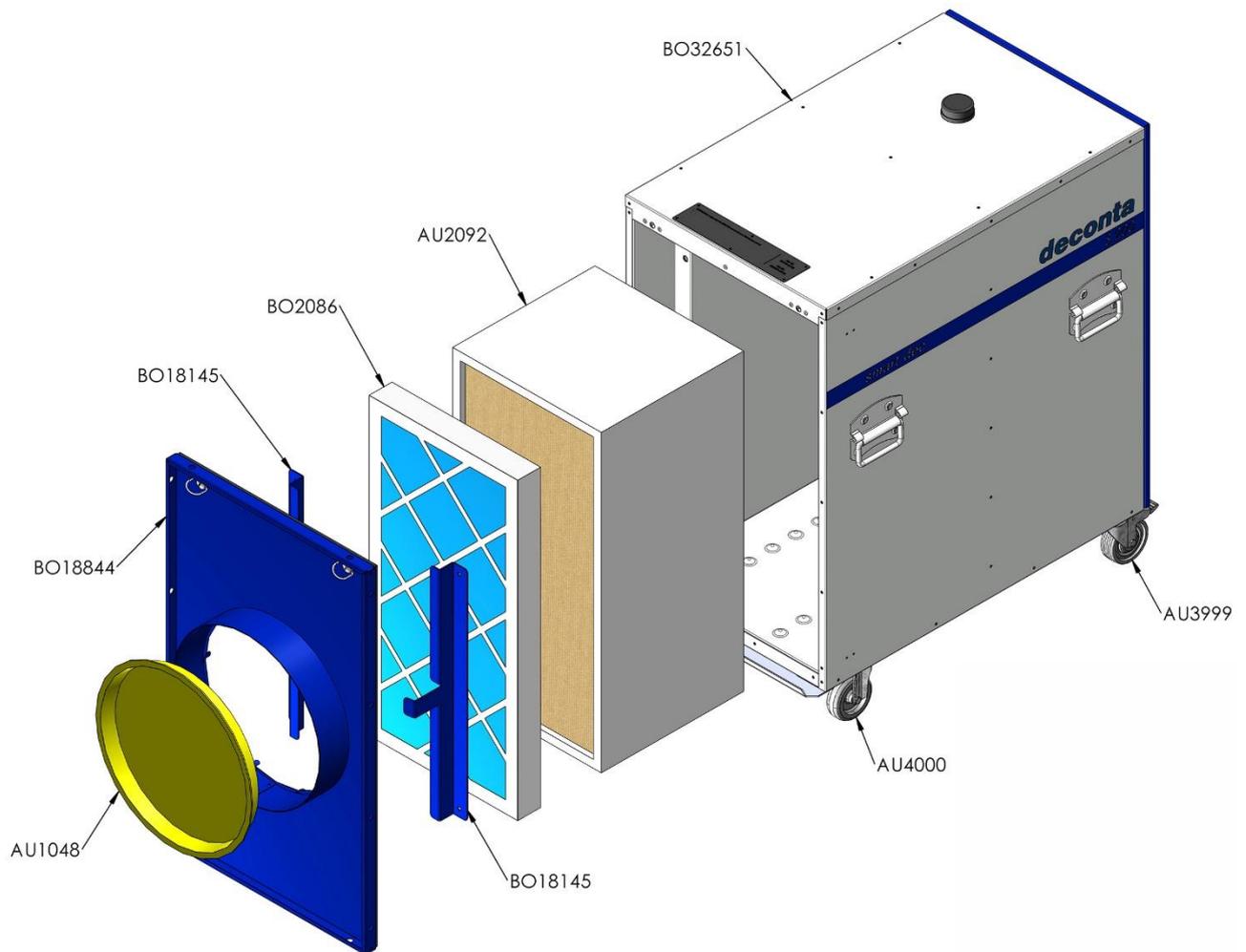
Original spare parts should be used to ensure safe, trouble-free and economical use of the machine.

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.

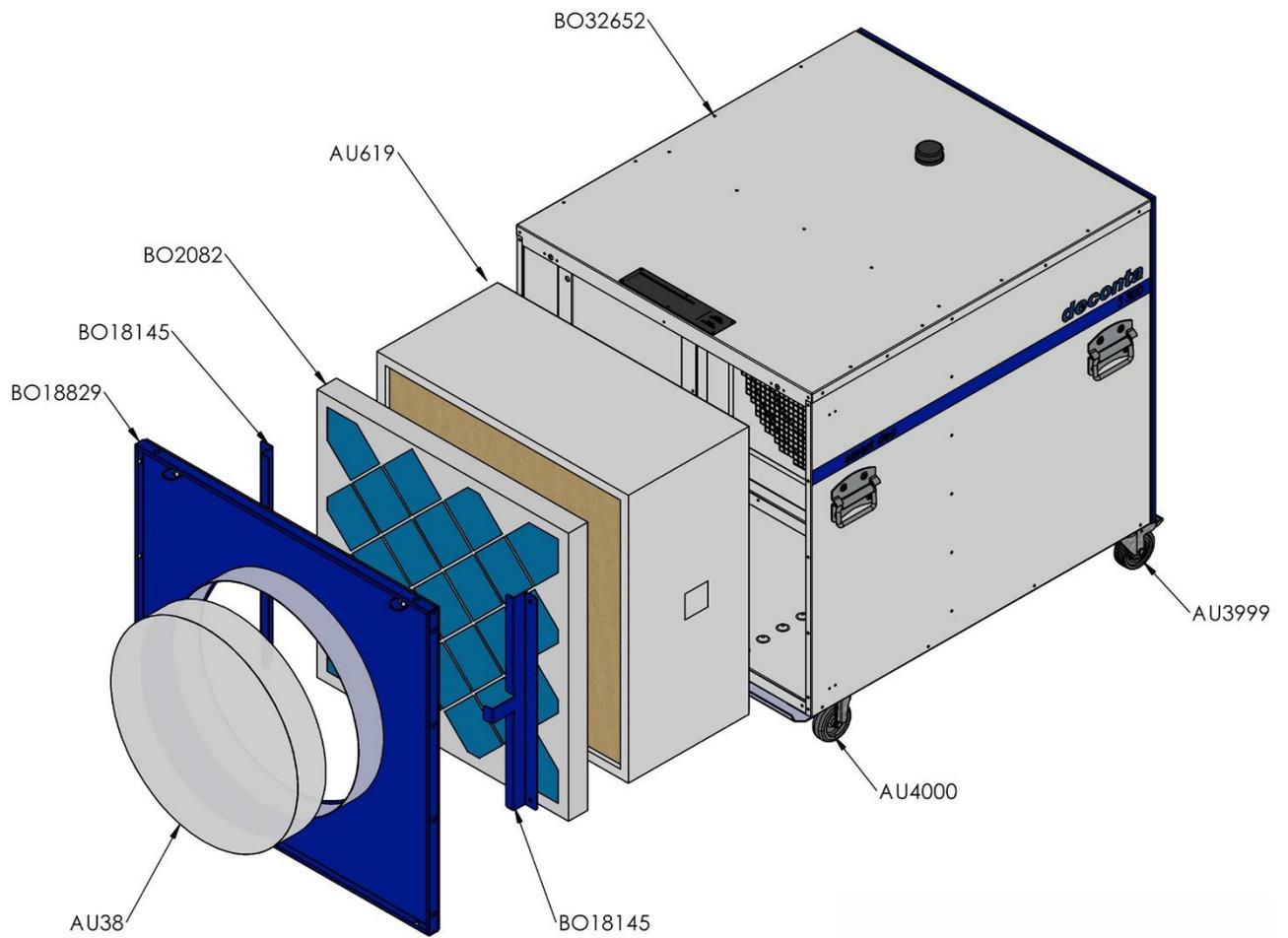
10.1 Negative pressure unit smart dec S50



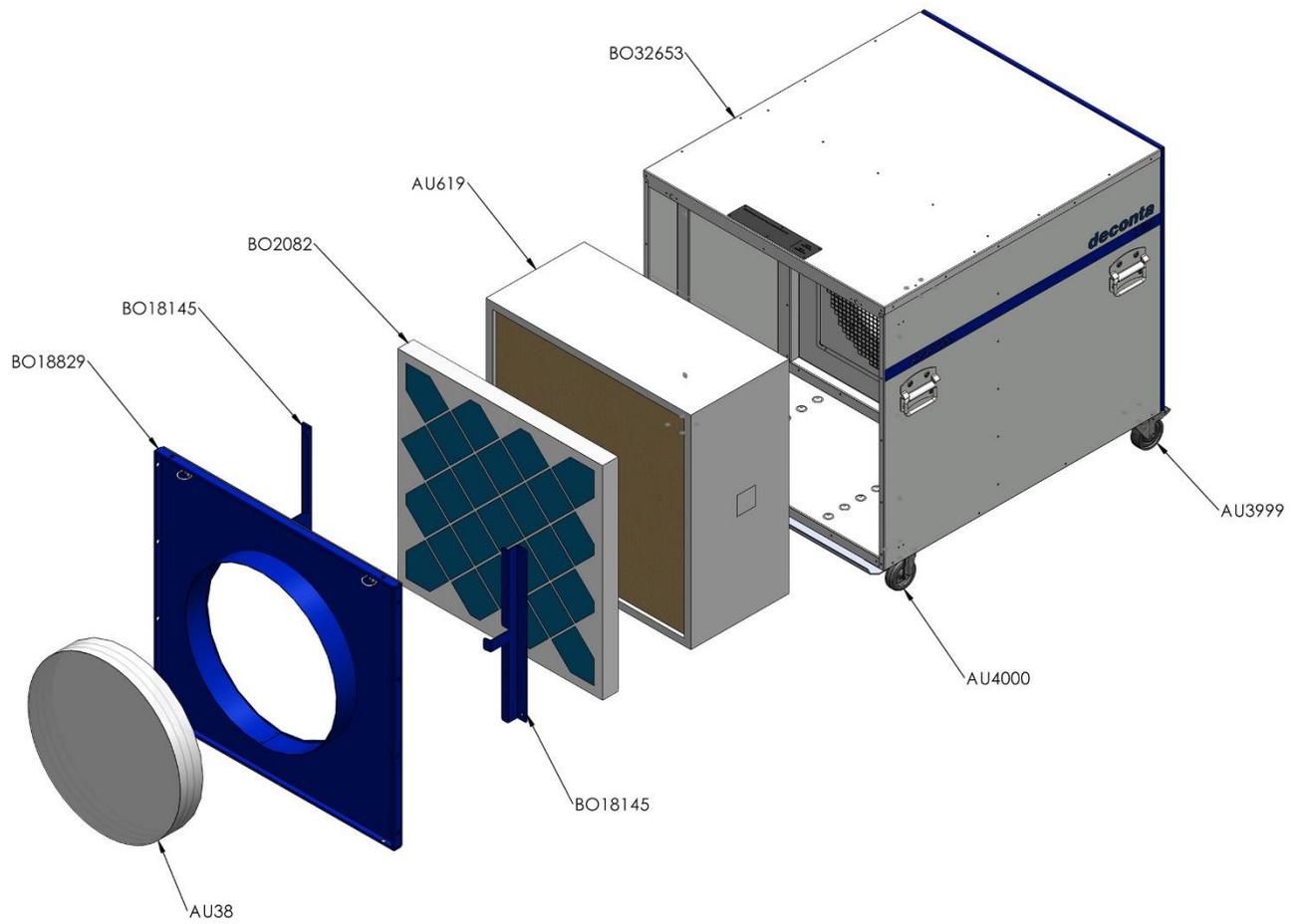
10.2 Negative pressure unit smart dec S200



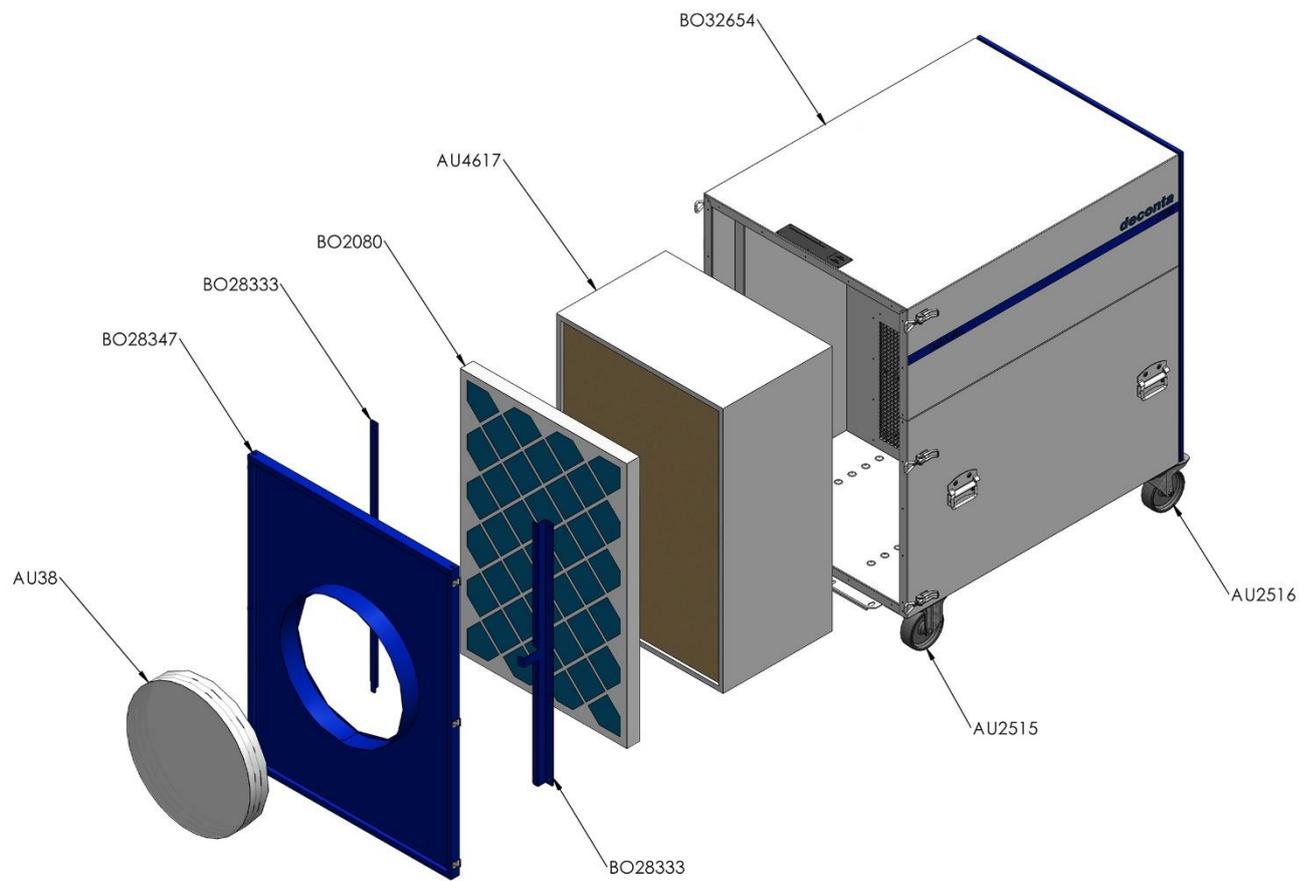
10.3 Negative pressure unit smart dec S300



10.4 Negative pressure unit smart dec S400



10.5 Negative pressure unit smart dec S500



11 Storage

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

The machine is stored in the following cases:

- After decommissioning for a longer period of non-use
- After decommissioning for a relocation

11.1 Ambient conditions

The machine can be stored under the following ambient conditions:

Ambient temperature	0 °C to +45 °C
Relative humidity	70 % non-condensing

11.2 Prerequisites

The following requirements must be met for storing the machine:

- Thoroughly cleaned (decontaminated)
- with fitted transport/sealing lid

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

12 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 correct disposal of the machine.

12.1 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

12.2 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.

12.3 Waste

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

13 EC Declaration of Conformity

The manufacturer / distributor

deconta GmbH
Im Geer 20
46419 Isselburg

hereby declares that the following product

Product designation: smart dec
Type designation: S50, S200, S300, S400, S500
Serial number: see type plate
Trade name: Negative pressure unit smart dec
Year of manufacture: see type plate
Description: Negative pressure unit smart dec

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
EMC Directive 2014/30/EU
Radio Equipment Directive 2014/53/EU
RoHS Directive 2011/65/EU

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

Low Voltage Directive 2014/35/EU

The following harmonised standards were applied:

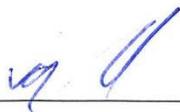
EN 60204-1:2018	Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1:2016 (Modified))
EN 61000-6-2:2005	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments (IEC 61000-6-2:2005)
EN 62368-1:2014/AC:2015	Audio/video, information and communication technology equipment - Part 1: Safety requirements (IEC 62368-1:2014 (Modified))
EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
EN ISO 13849-1:2023	Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2023)
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 upper and lower limbs (ISO 13857:2019)

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

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

Place: Isselburg

Date: 28.05.2025



Leiter Konstruktion / head of construction



Leiter Elektro / head of electro