

VENTUS

Catalogue

Air Treatment Systems

PURECO 
THE PURE ECO



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OUR MISSION

We respect, appreciate our waters. We offer complex solutions in the field of water management on the domestic and international market.

We develop optimal and cost-effective, long-life solutions in order to keep our waters safe, focusing on added value and sustainability. Representing the best interests of our customers, in all cases, we develop optimal and cost-effective solutions, highlighting on innovation, predictability, liability, flexibility and multi-faceted approaches. We not only take into account economic sustainability reasons, our solutions consider the specific characteristics and environmental values of the ecosystem and region, thus we offer and provide unique, customer-specific solutions.

OUR NEW PROJECT

Water and air means life.

So far, PURECO GROUP had been focusing only on water treatment and management among the main activities. As during the previous years a strong need has been emerging for air pollution control our experts have developed PURECO VENTUS biodesodor family of product. Starting the development 2-3 years ago we tested our products on pumping stations and wastewater treatment plants that we had constructed. Right after the first successful testing process we completed the product range and now there are five different styled biofilter units using biodegradation for odor air treatment with biomass. Units are available from the smallest 10 m³/h to the largest VENTUS that can handle and treat 100 000 m³/h airstreams or even more. Moreover we have a special unit uses different method for the purification: adsorption with activated carbon.

Please welcome our new product line and new product catalog filled with detailed information, drawings to treat air, the vital element of life.



A close-up photograph of a person's hand touching the rough, textured bark of a tree trunk. The hand is positioned on the left side of the frame, with fingers spread against the bark. The background is a blurred green, suggesting an outdoor setting. A white rounded rectangular box with a green border is overlaid on the right side of the image, containing text.

VENTUS Biofilters

VENTUS A-P

VENTUS G

VENTUS PIPE

VENTUS C

VENTUS L

APPLICATION AND PRINCIPLE OF BIOFILTERS

What is biofiltration?

Biofiltration is a process based on microorganisms and its role in reducing odour and other contaminants found in polluted air. A special film layer is used inside the product where the microorganisms anchor themselves around the content of the filter, where the polluted air is pushing through. Contaminants from the air are blocked by the filter and after microorganisms adsorb them into CO_2 and water. The process is safe, environmentally friendly and complex solution for odour degradation.

About the product

VENTUS biofilters units are designed to treat airstreams and instable biological parts from polluted air coming from wastewater treatment, plants, pumping stations, sludge, handling units, sewage storage, systems, etc. Apart from average filters biofilters are working with microorganisms and its outputs are biomass, water and carbon-dioxide. VENTUS biofilters are developed as air treatment systems where no maintenance is needed as living microorganisms need no operation.

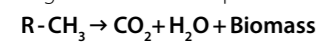
What is inside?

Efficiency of the biofilter depends on the size of the content. The filter material adsorbs the odorous compounds or other air pollutants from the waste air stream. Compost, bark or peat products, heather, lava, etc. are also can be found among the materials used as filters. We are working with shredded pine roots using special technology to increase its surface for more microorganisms and for more effective putrefaction. Low energy costs, stable forming process, less maintenance work, easily compostable components and 3-7 years life expectancy are all the features we can proudly say about our product.

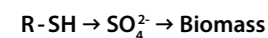
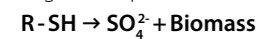
The main reactions of degradation in the biofiltration process

The success of a biofiltration system is mainly the result of the three basic biological degradation processes shown here (simplified representation):

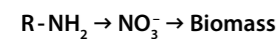
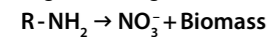
Organic Carbon Compounds



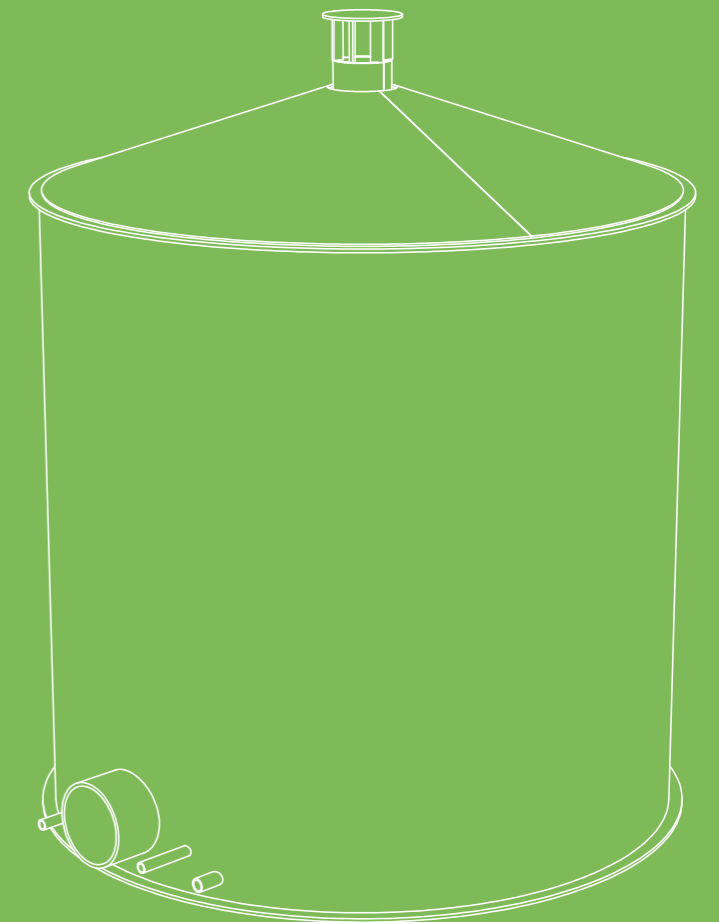
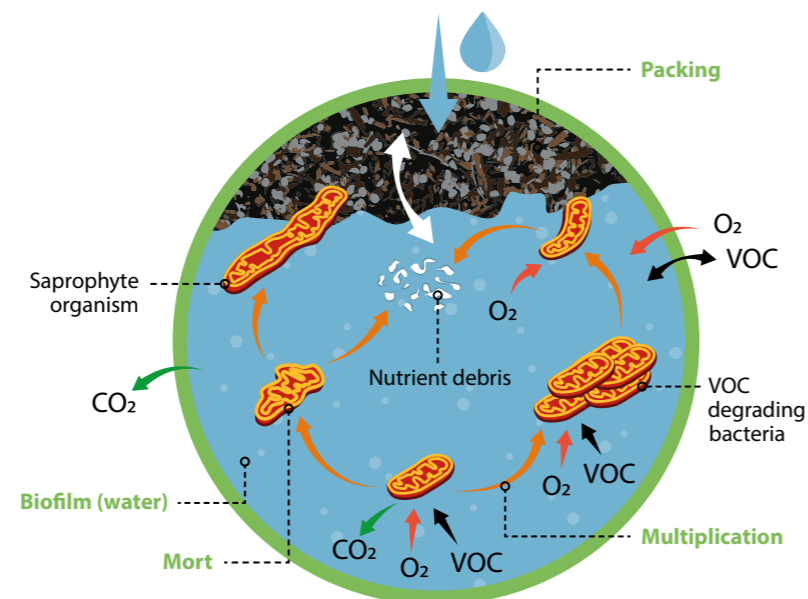
Organic Sulphur containing Compounds



Organic Nitrogen containing Compounds



R = organic matter



VENTUS A-P

The most important reaction of the degradation process is the oxidation of carbon, sulphur and nitrogen compounds to CO_2 , SO_4^{2-} and NO_3^- , and their assimilation into biomass. At times of reduced input concentrations, micro-organisms also assimilate nitrates (NO_3^-) and sulphates (SO_4^{2-}) into biomass.



VENTUS A-P

VENTUS A-P is a treatment system for all-purposes among the product range. Our active and passive biofilters are the most common products on the market of air filtration systems. Passive biofilter supplies without fan, the forced flow pushes the air through the filter media. Active biofilters are assembled with electrical fans and they are ready for 24/7 usage. The passive version can be upgraded anytime into active biofilter. The cleaning capacity of 10 m³ up to 1000 m³ meets the general requirements. The filters can run in network if the system needs an upgrade.

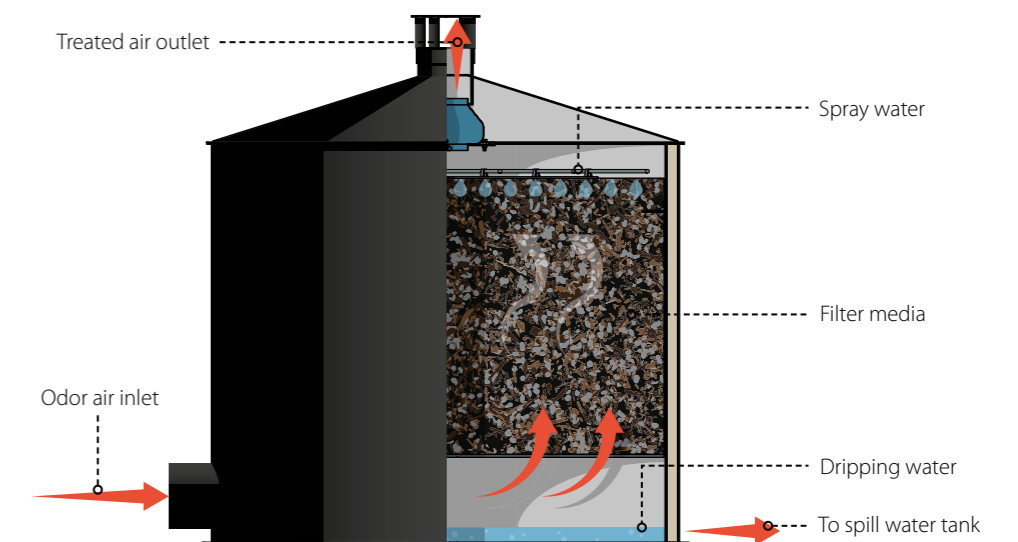
Applications:

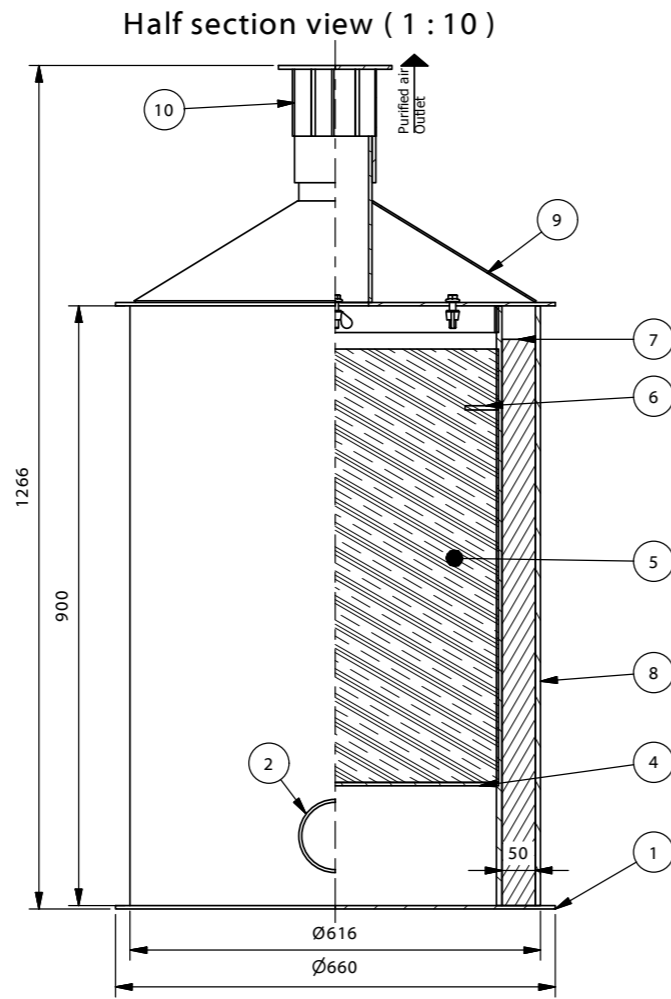
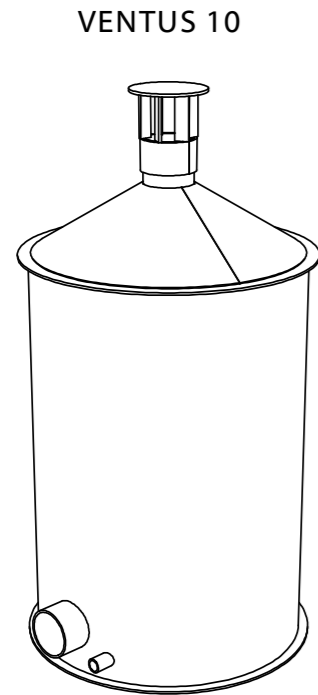
- sewage networks
- pumping stations
- waste water treatment plants
- food industry
- or chemical industry
- landfills, compostation plants



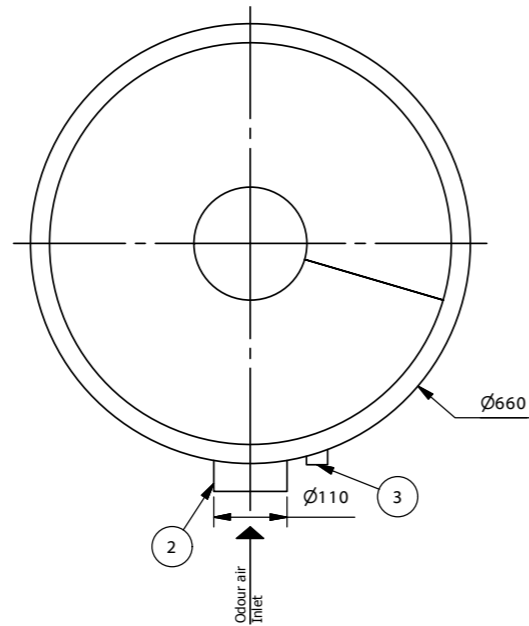
Dimensions:

Type	Cleaning capacity m ³ /h	Diemeter mm	Height mm	Weight kg	Volume of filter media liter	Connection size mm
VENTUS A-P 10	10	660	1266	33	122	110
VENTUS A-P 20	20	760	1366	43	205	110
VENTUS A-P 30	30	870	1531	62	344	110
VENTUS A-P 50	50	960	1642	75	458	110
VENTUS A-P 75	75	1370	1730	123	1045	160
VENTUS A-P 100	100	1480	1820	146	1286	160
VENTUS A-P 150	150	1480	1920	168	1495	200
VENTUS A-P 200	200	1680	2112	202	1978	200
VENTUS A-P 250	250	1780	2197	221	2254	200
VENTUS A-P 300	300	2050	2119	266	2880	200
VENTUS A-P 350	350	2100	2234	286	3040	200
VENTUS A-P 400	400	2200	2193	304	3373	250
VENTUS A-P 500	500	2200	2393	326	3833	315
VENTUS A-P 750	750	2200	2593	348	4446	315
VENTUS A-P 1000	1000	2400	2903	421	6136	350





Top View (1 : 10)



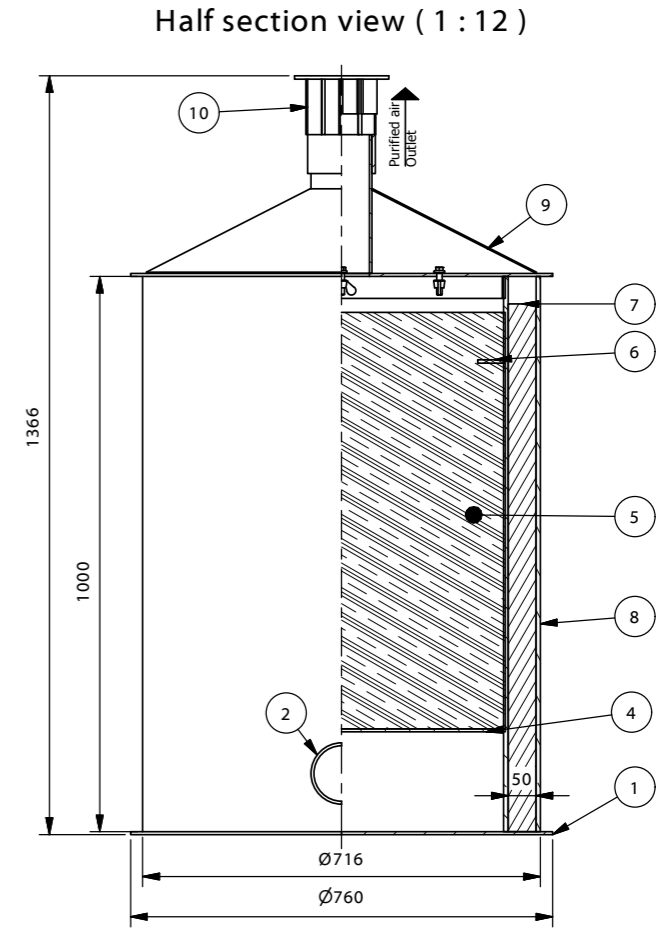
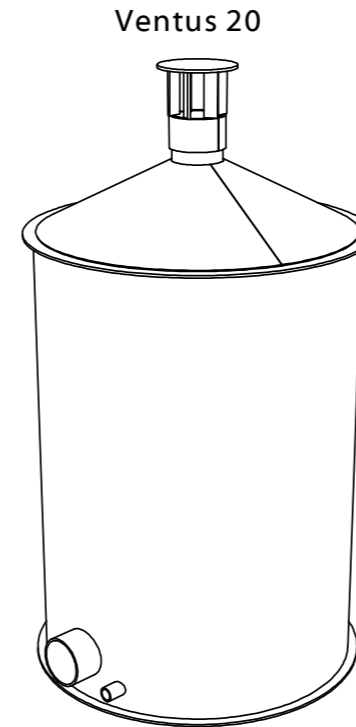
1. Biofilter base plate
2. Odor air influent
3. Condensate drain
4. Media holder plate
5. Filter media
6. Air guiding plate
7. Insulation (optional)
8. Biofilter surface
9. Cover
10. Purified air effluent

VENTUS A-P Odor air treatment system

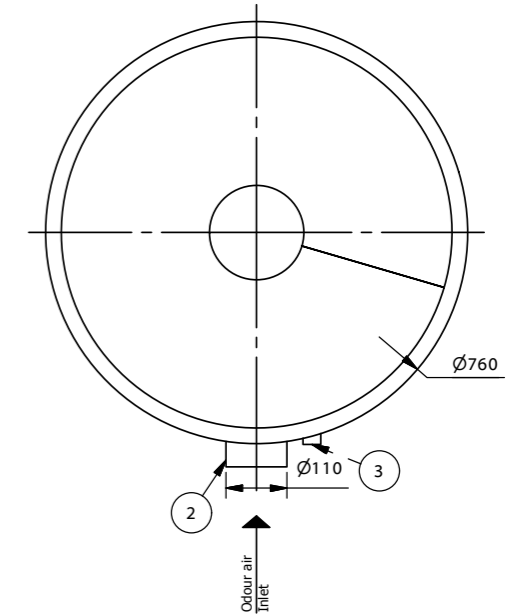
VENTUS 10
Info drawing

M= 1:10

Capacity:	10	m3/h
Efficiency:	95	%
Max element weight:	10	kg
Weight:	75	kg



Top View (1 : 12)



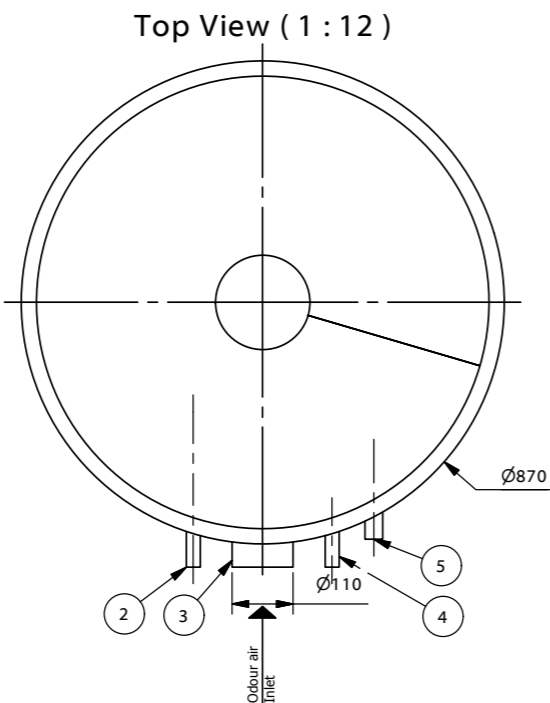
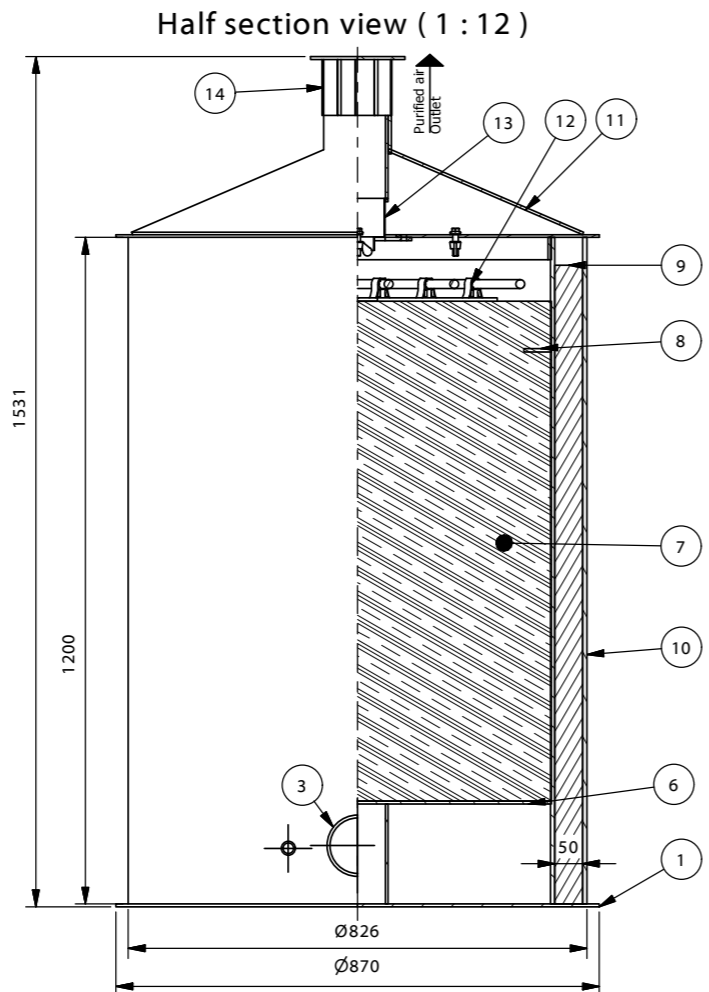
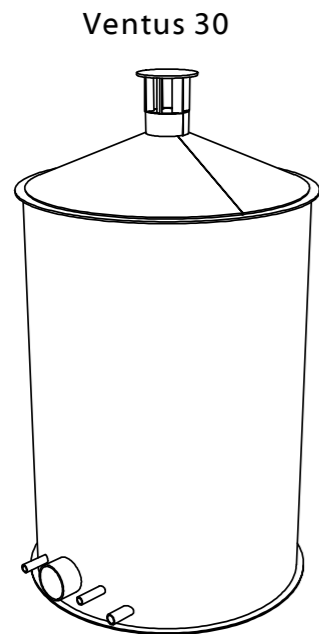
1. Biofilter base plate
2. Odor air influent
3. Condensate drain
4. Media holder plate
5. Filter media
6. Air guiding plate
7. Insulation (optional)
8. Biofilter surface
9. Cover
10. Purified air effluent

VENTUS A-P Odor air treatment system

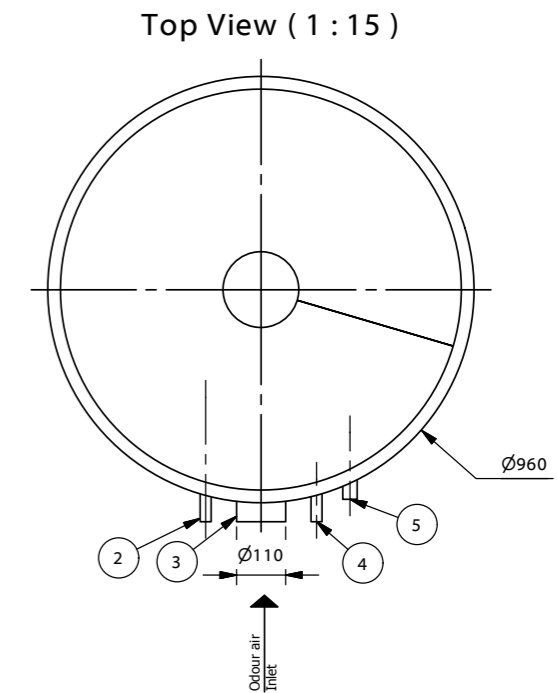
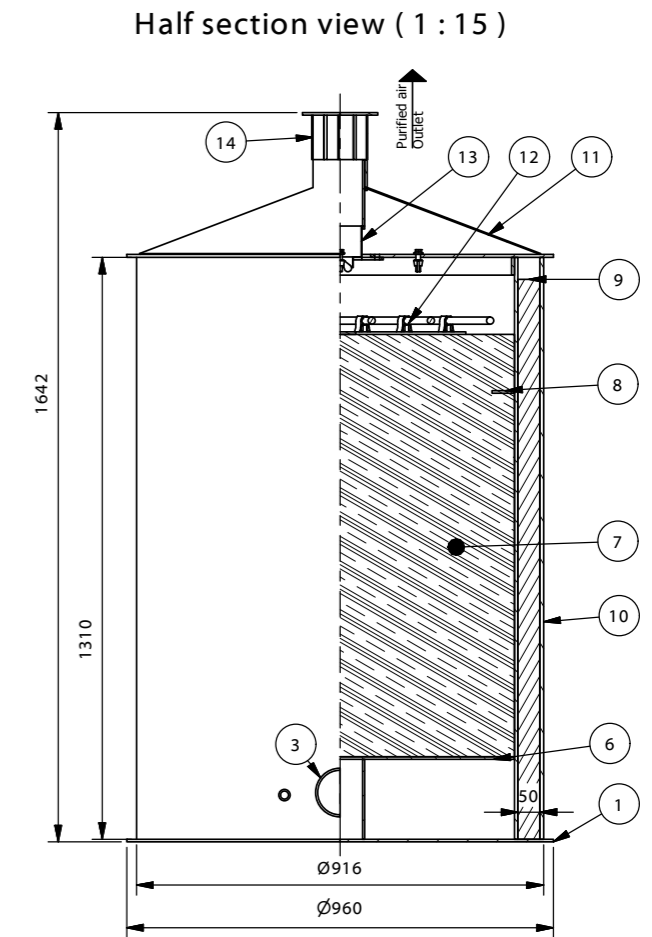
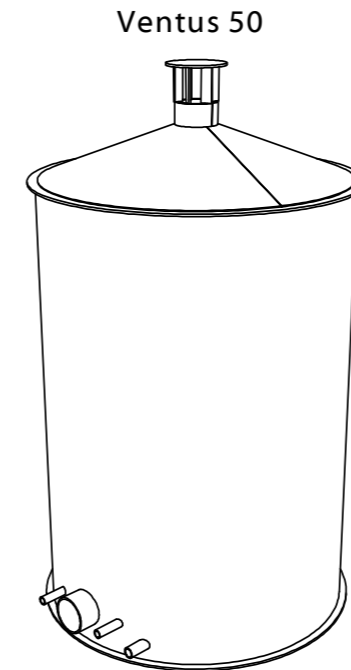
VENTUS 20
Info drawing

M= 1:12

Capacity:	20	m3/h
Efficiency:	95	%
Max element weight:	12	kg
Weight:	102	kg



1. Biofilter base plate
2. Spray water inlet
3. Odor air inlet
4. Power supply
5. Spill water outlet
6. Media holder plate
7. Filter media
8. Air guiding plate
9. Insulation (optional)
10. Biofilter body
11. Cover
12. Spray system (only for active system)
13. Fan (only for active system)
14. Purified air effluent



1. Biofilter base plate
2. Spray water inlet
3. Odor air inlet
4. Power supply
5. Spill water outlet
6. Media holder plate
7. Filter media
8. Air guiding plate
9. Insulation (optional)
10. Biofilter body
11. Cover
12. Spray system (only for active system)
13. Fan (only for active system)
14. Purified air effluent

VENTUS A-P Odor air treatment system

VENTUS 30
Info drawing

Capacity:	30	m3/h
Efficiency:	95	%
Max element weight:	20	kg
Weight:	130	kg

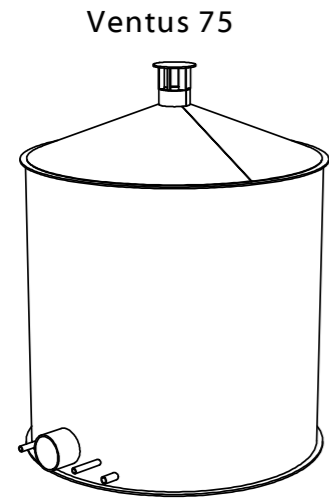
M= 1:12

VENTUS A-P Odor air treatment system

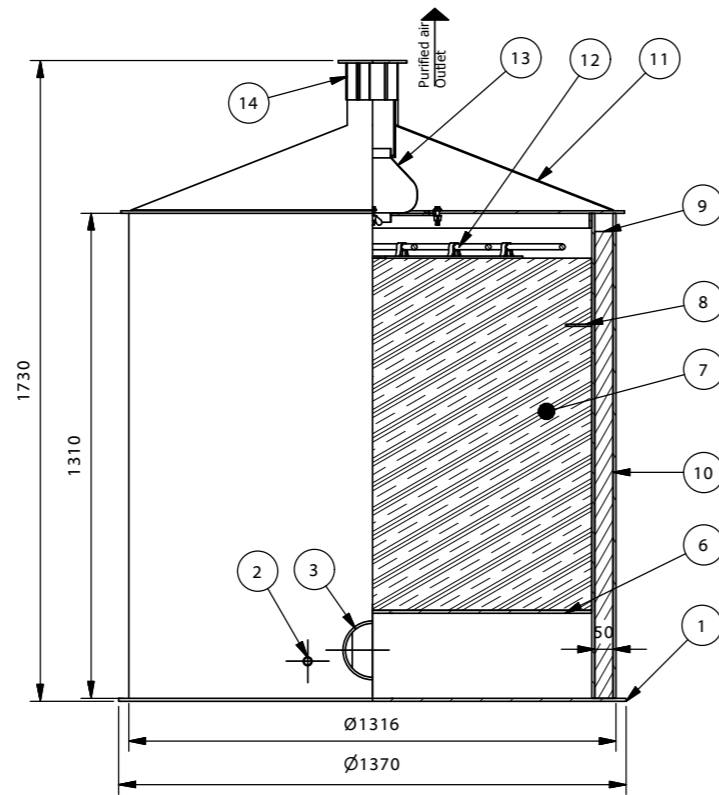
VENTUS 50
Info drawing

Capacity:	50	m3/h
Efficiency:	95	%
Max element weight:	30	kg
Weight:	183	kg

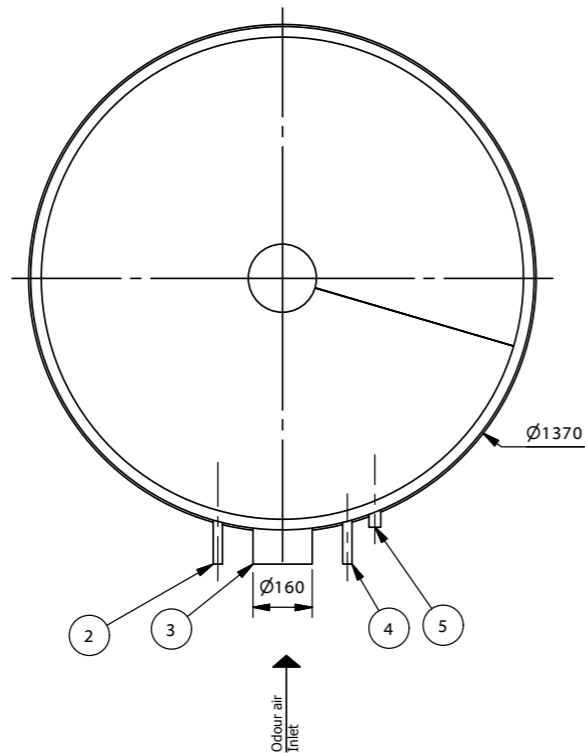
M= 1:15



Half section view (1 : 18)

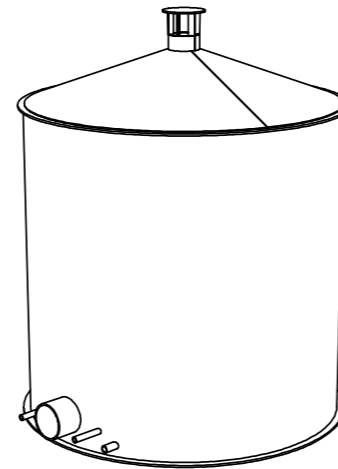


Top View (1 : 18)

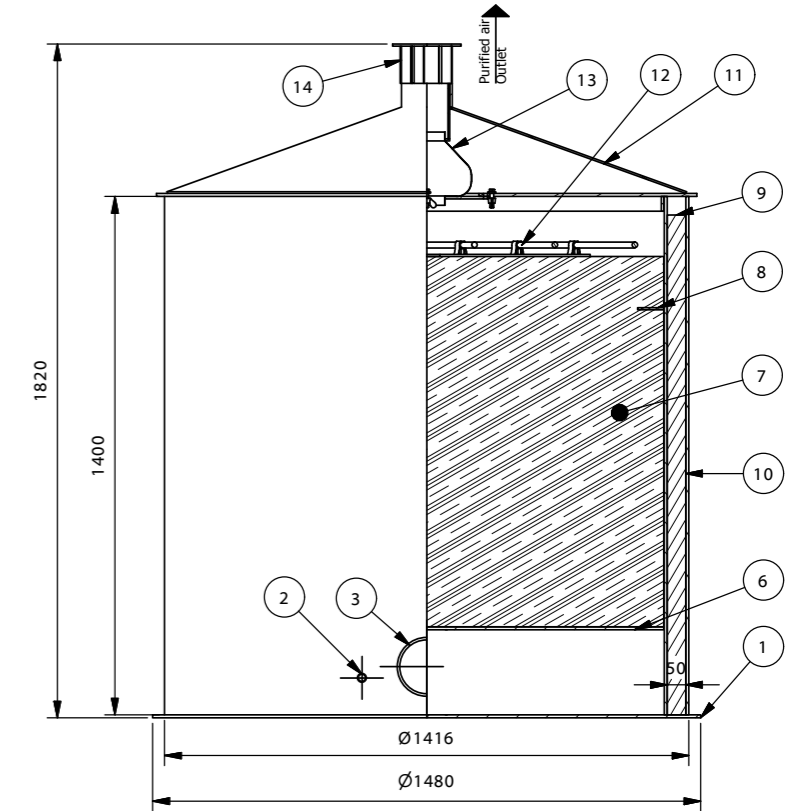


1. Biofilter base plate
2. Spray water inlet
3. Odor air inlet
4. Power supply
5. Spill water outlet
6. Media holder plate
7. Filter media
8. Air guiding plate
9. Insulation (optional)
10. Biofilter body
11. Cover
12. Spray system (only for active system)
13. Fan (only for active system)
14. Purified air effluent

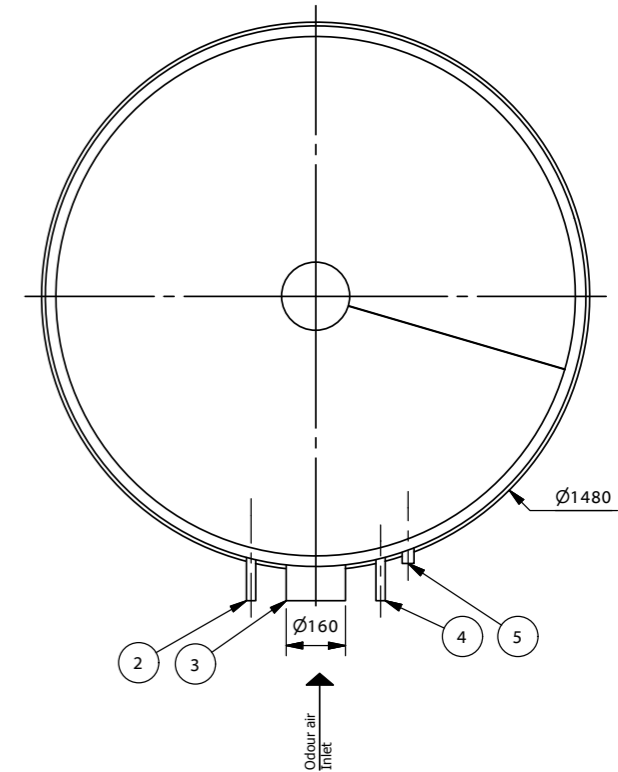
Ventus 100



Half section view (1 : 18)



Top View (1 : 18)



1. Biofilter base plate
2. Spray water inlet
3. Odor air inlet
4. Power supply
5. Spill water outlet
6. Media holder plate
7. Filter media
8. Air guiding plate
9. Insulation (optional)
10. Biofilter body
11. Cover
12. Spray system (only for active system)
13. Fan (only for active system)
14. Purified air effluent

VENTUS A-P Odor air treatment system

VENTUS 75
Info drawing

M= 1:18

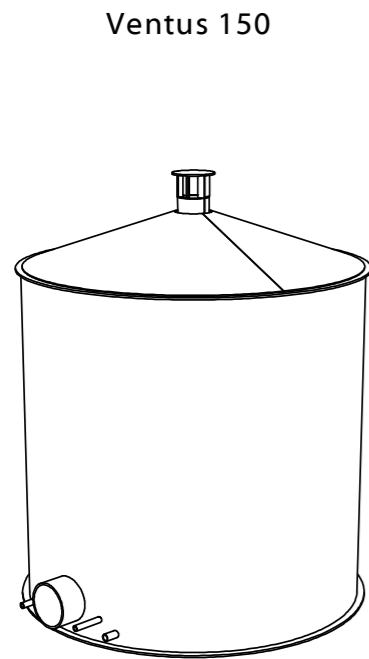
Capacity:	75	m3/h
Efficiency:	95	%
Max element weight:	69	kg
Weight:	304	kg

VENTUS A-P Odor air treatment system

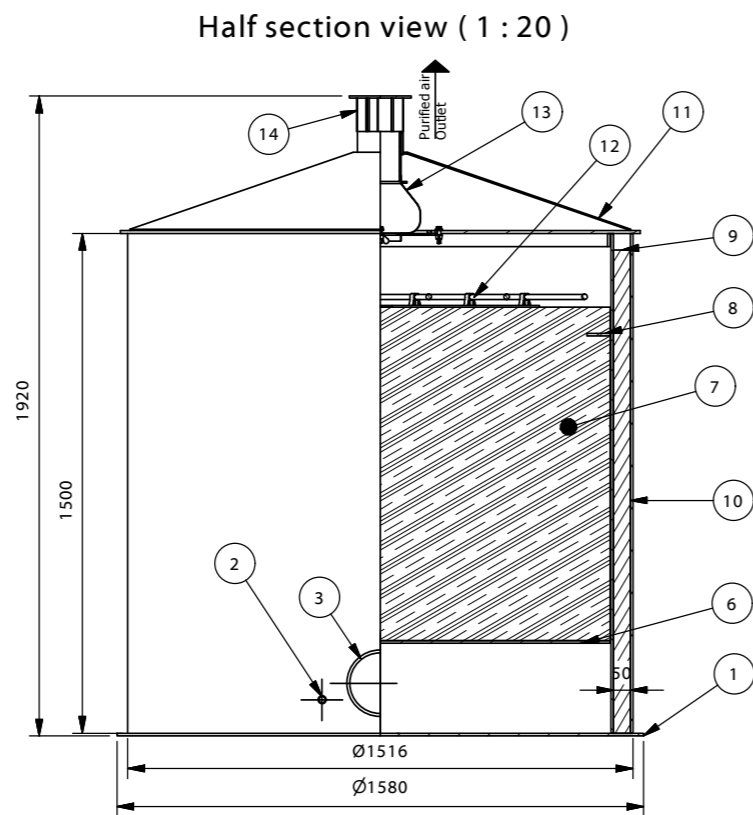
VENTUS 100
Info drawing

M= 1:18

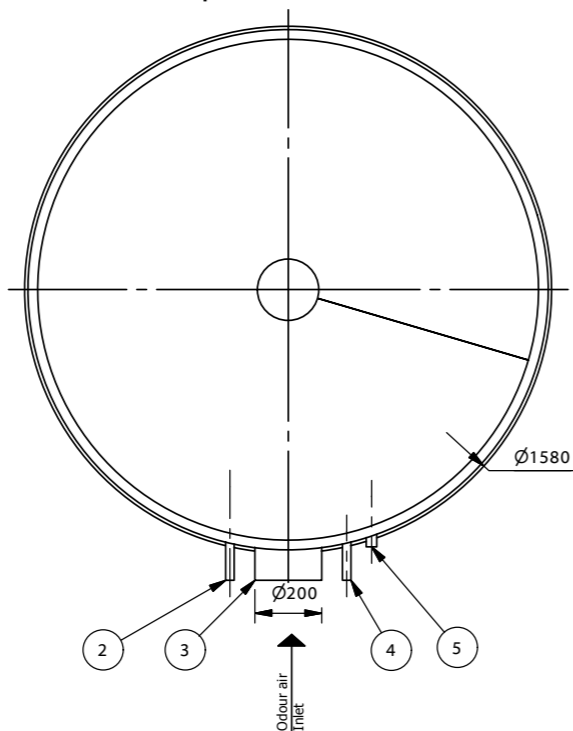
Capacity:	100	m3/h
Efficiency:	95	%
Max element weight:	100	kg
Weight:	380	kg



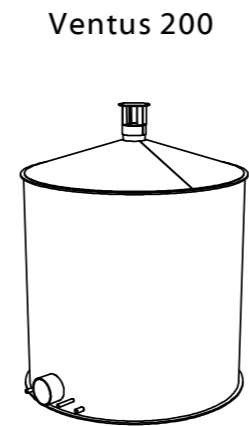
Ventus 150



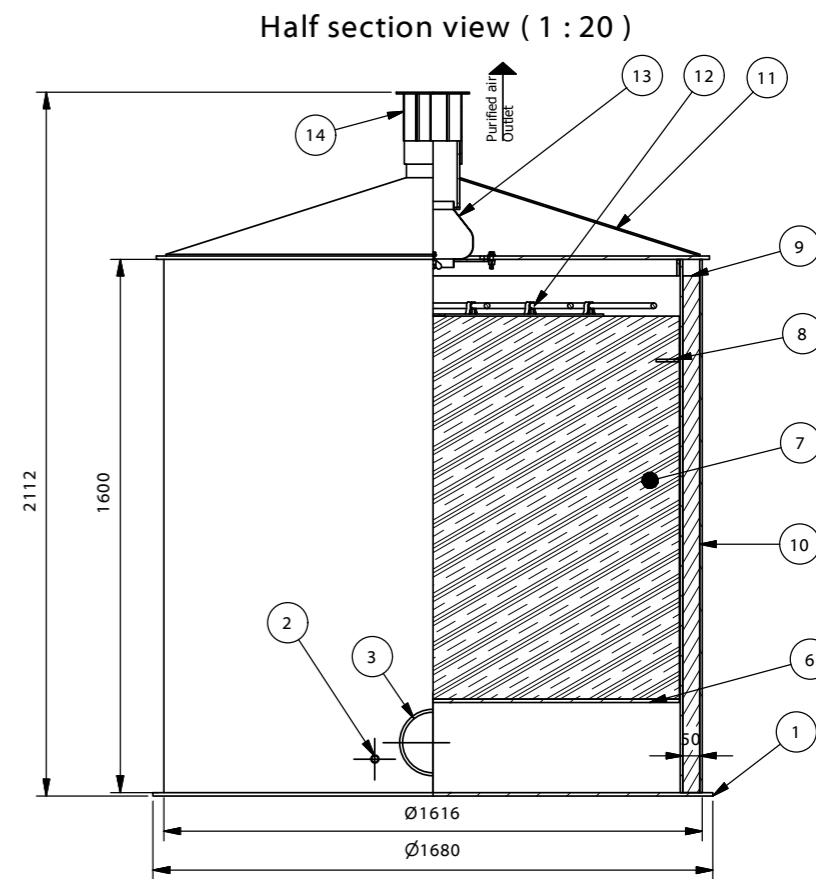
Top View (1 : 20)



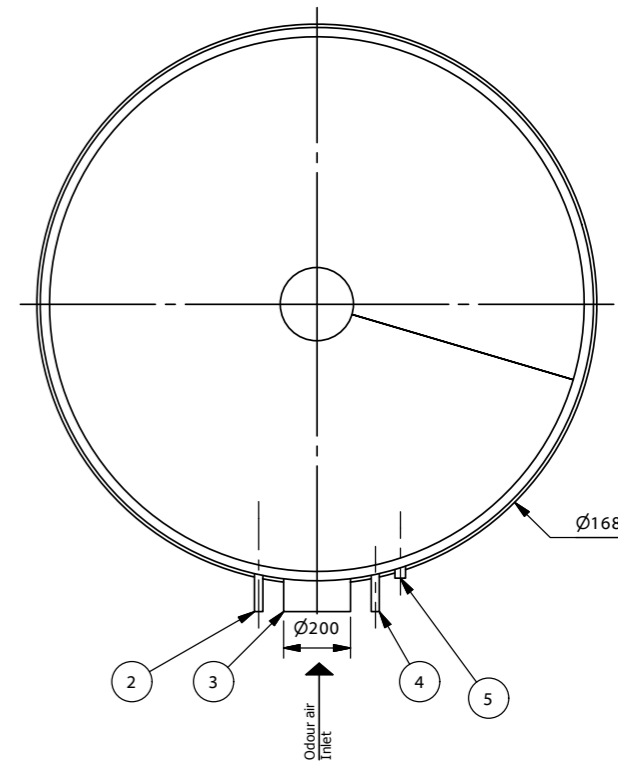
1. Biofilter base plate
2. Spray water inlet
3. Odor air inlet
4. Power supply
5. Spill water outlet
6. Media holder plate
7. Filter media
8. Air guiding plate
9. Insulation (optional)
10. Biofilter body
11. Cover
12. Spray system (only for active system)
13. Fan (only for active system)
14. Purified air effluent



Ventus 200



Top View (1 : 20)



1. Biofilter base plate
2. Spray water inlet
3. Odor air inlet
4. Power supply
5. Spill water outlet
6. Media holder plate
7. Filter media
8. Air guiding plate
9. Insulation (optional)
10. Biofilter body
11. Cover
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13. Fan (only for active system)
14. Purified air effluent



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VENTUS A-P Odor air treatment system

VENTUS 150
Info drawing

M= 1:18

Capacity:	150	m3/h
Efficiency:	95	%
Max element weight:	109	kg
Weight:	361	kg



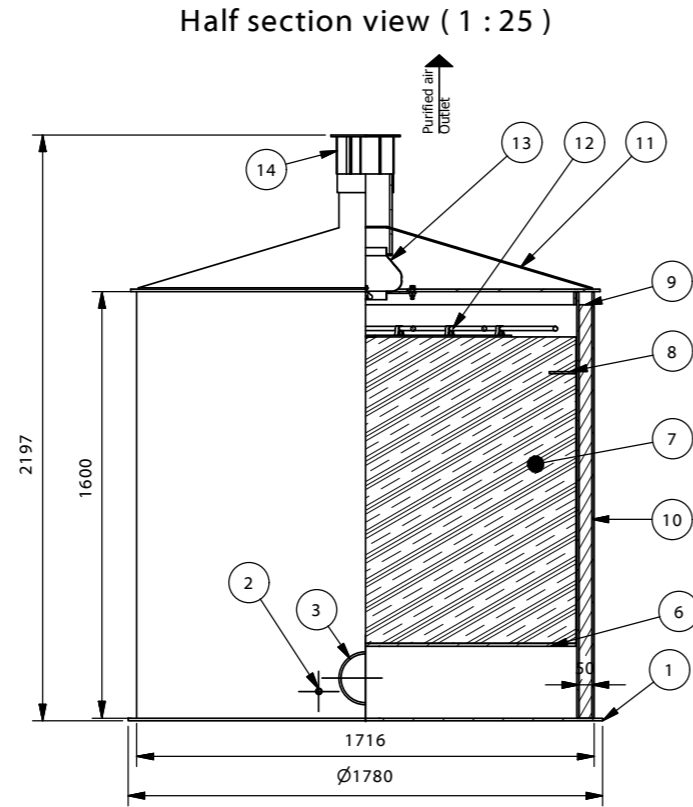
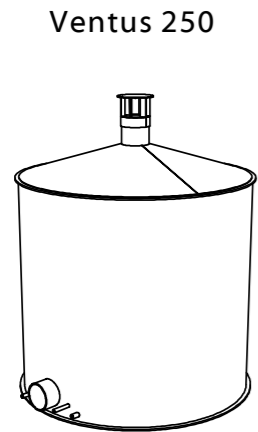
www.pureco.hu

VENTUS A-P Odor air treatment system

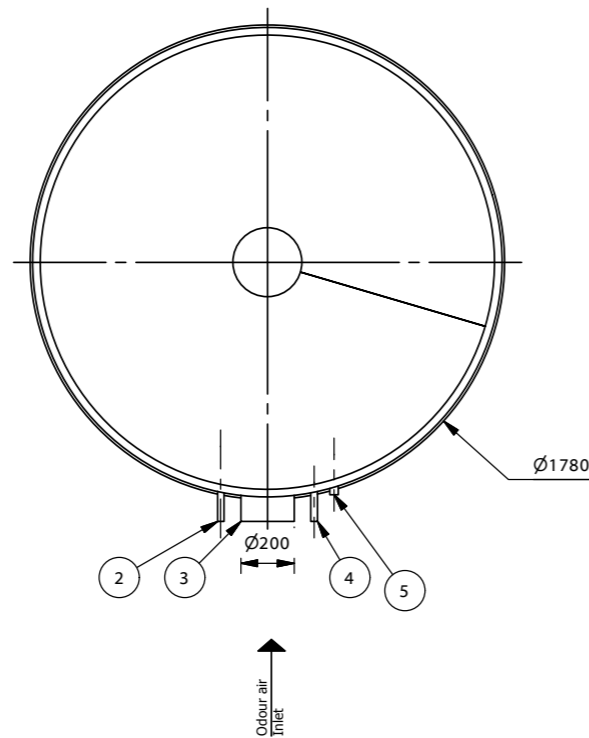
VENTUS 200
Info drawing

M= 1:20

Capacity:	200	m3/h
Efficiency:	95	%
Max element weight:	129	kg
Weight:	459	kg



Top View (1 : 25)



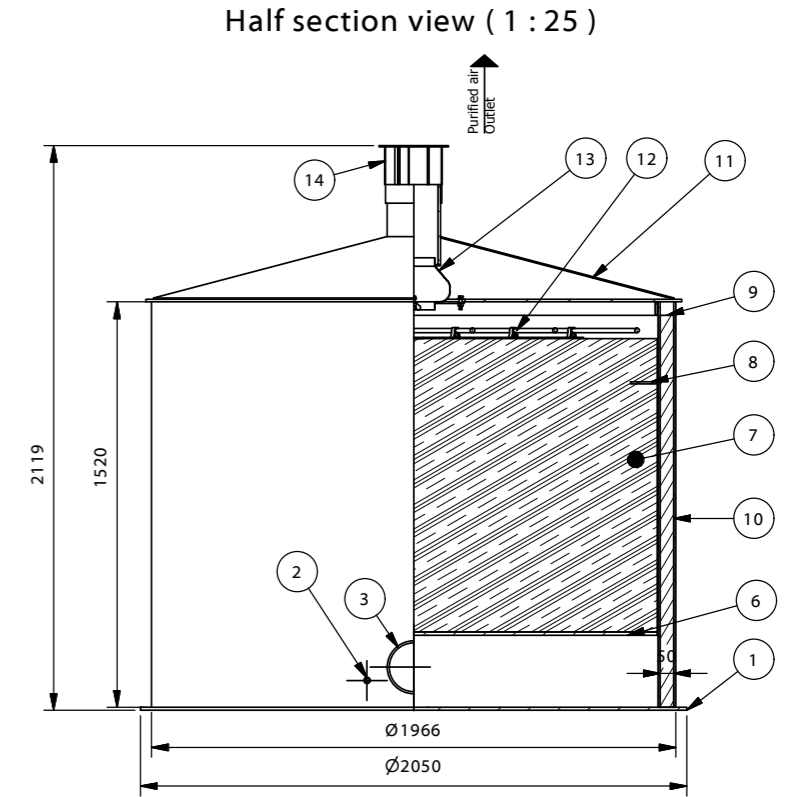
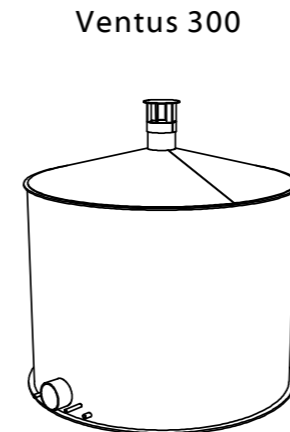
1. Biofilter base plate
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VENTUS A-P Odor air treatment system

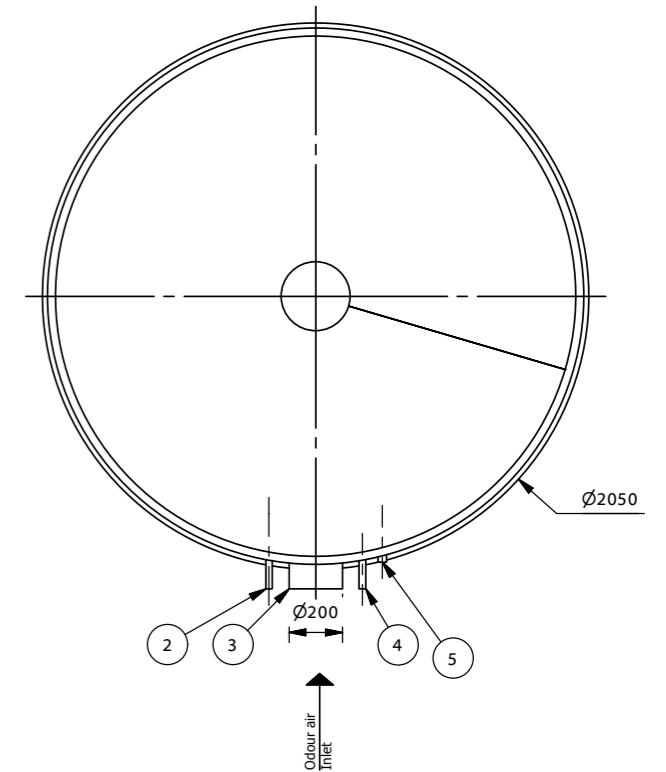
VENTUS 250
Info drawing

M= 1:20

Capacity:	250	m3/h
Efficiency:	95	%
Max element weight:	152	kg
Weight:	504	kg



Top View (1 : 25)



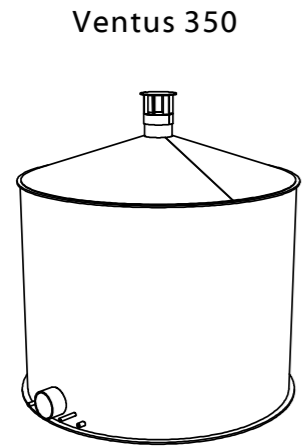
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VENTUS A-P Odor air treatment system

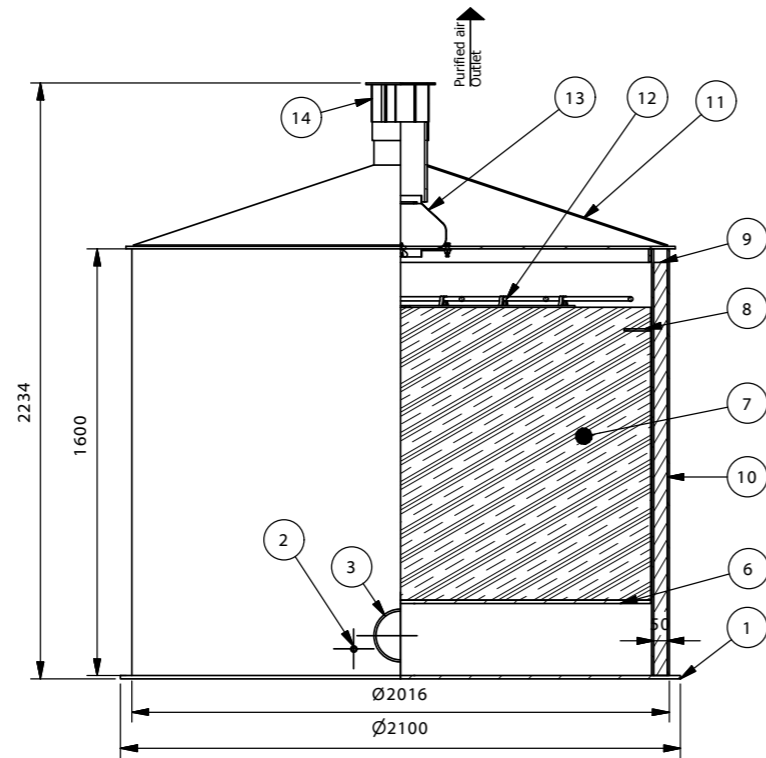
VENTUS 300
Info drawing

M= 1:25

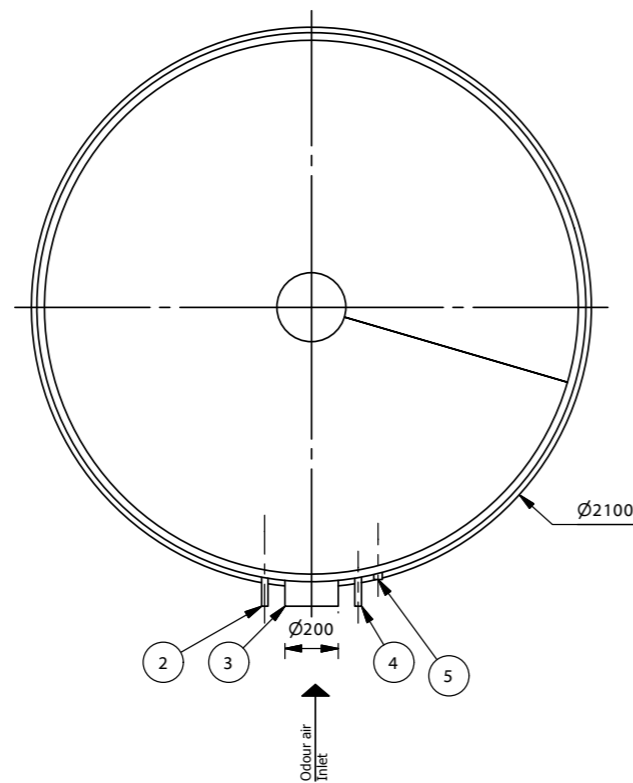
Capacity:	300	m3/h
Efficiency:	95	%
Max element weight:	214	kg
Weight:	610	kg



Half section view (1 : 25)



Top View (1 : 25)



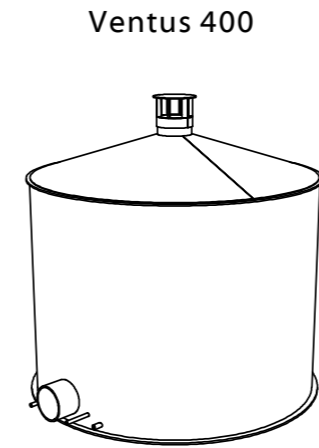
1. Biofilter base plate
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VENTUS A-P Odor air treatment system

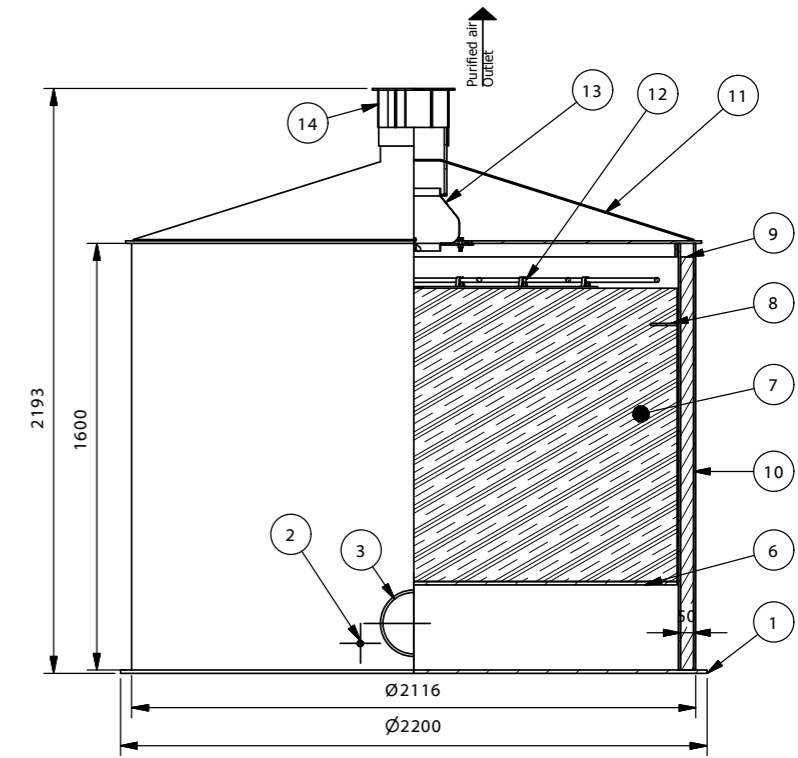
VENTUS 350
Info drawing

M= 1:25

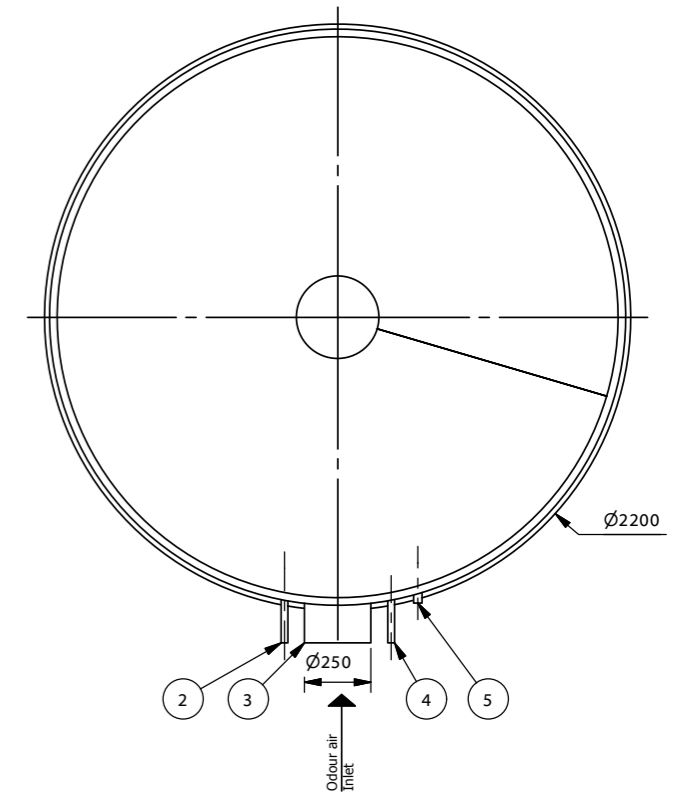
Capacity:	350	m3/h
Efficiency:	95	%
Max element weight:	230	kg
Weight:	648	kg



Half section view (1 : 25)



Top View (1 : 25)



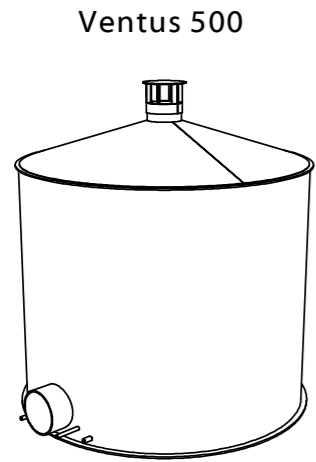
1. Biofilter base plate
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VENTUS A-P Odor air treatment system

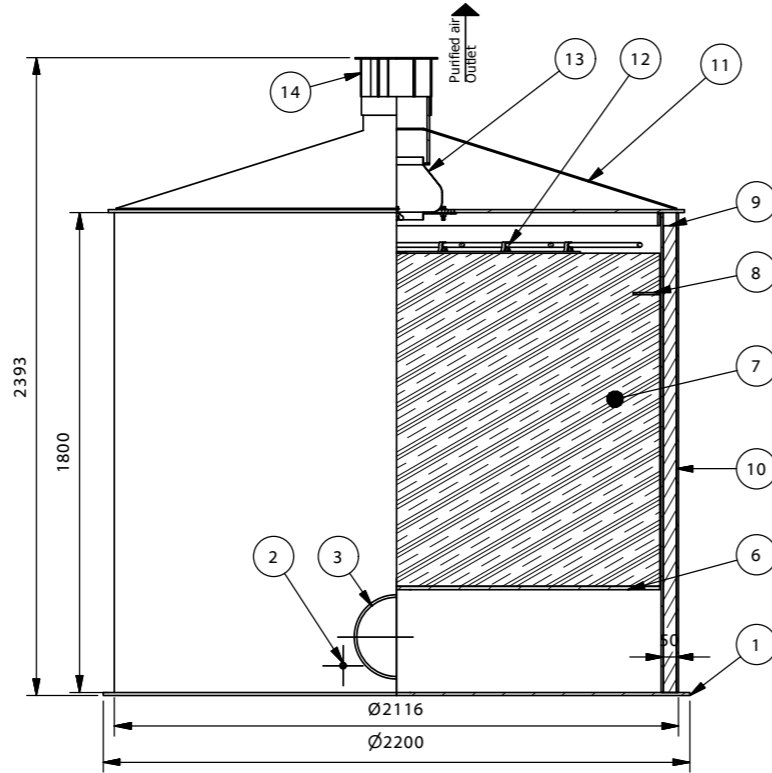
VENTUS 400
Info drawing

M= 1:25

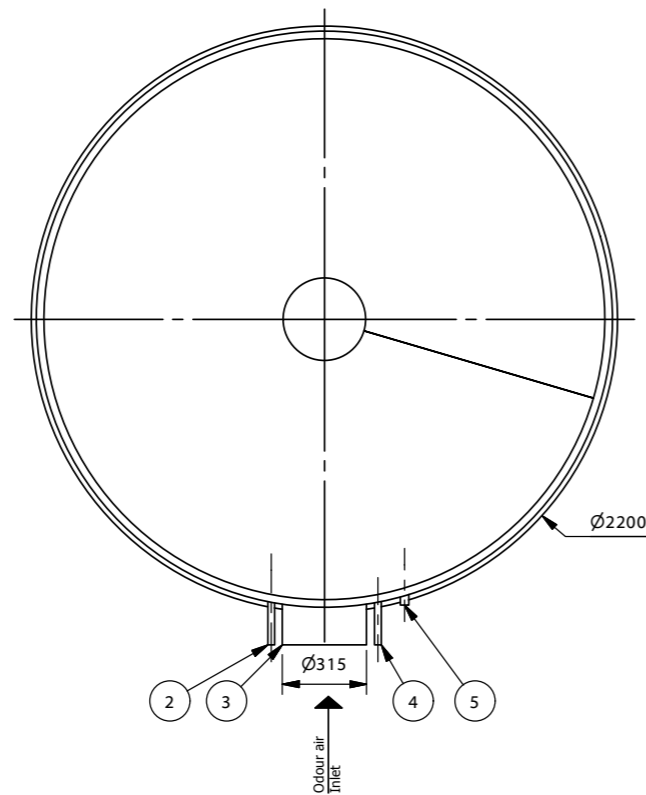
Capacity:	400	m3/h
Efficiency:	95	%
Max element weight:	294	kg
Weight:	734	kg



Half section view (1 : 25)



Top View (1 : 25)



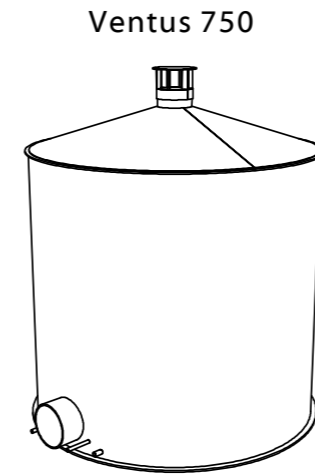
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VENTUS A-P Odor air treatment system

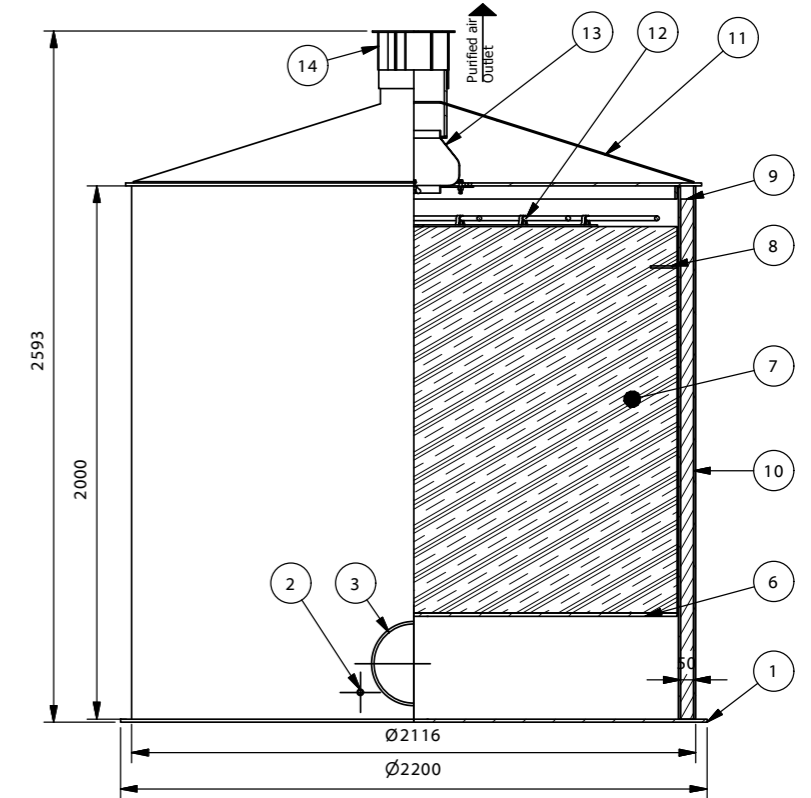
VENTUS 500
Info drawing

Capacity:	500	m3/h
Efficiency:	95	%
Max element weight:	313	kg
Weight:	833	kg

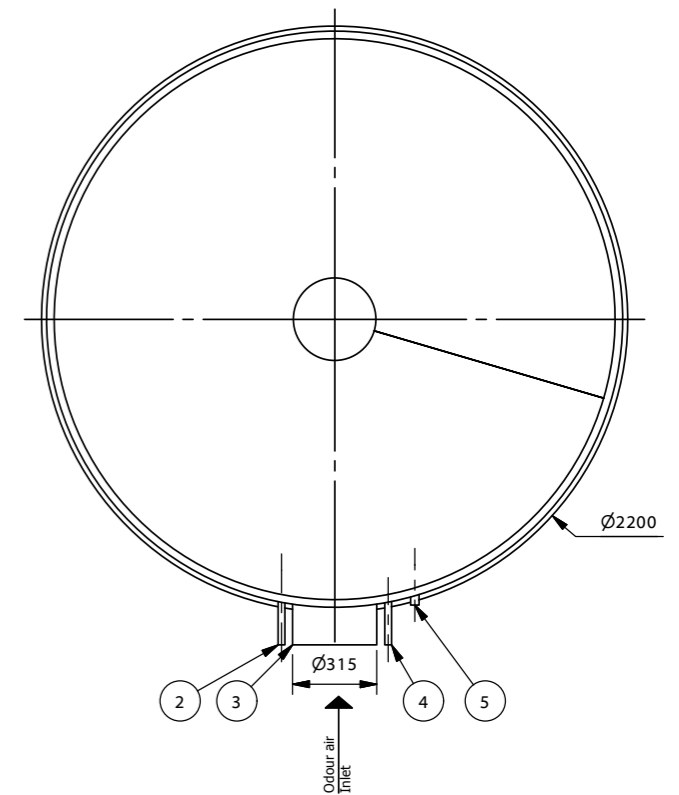
M= 1:25



Half section view (1 : 25)



Top View (1 : 25)



1. Biofilter base plate
2. Spray water inlet
3. Odor air inlet
4. Power supply
5. Spill water outlet
6. Media holder plate
7. Filter media
8. Air guiding plate
9. Insulation (optional)
10. Biofilter body
11. Cover
12. Spray system (only for active system)
13. Fan (only for active system)
14. Purified air effluent

VENTUS A-P Odor air treatment system

VENTUS 750
Info drawing

Capacity:	750	m3/h
Efficiency:	95	%
Max element weight:	347	kg
Weight:	905	kg

M= 1:25

INSTALLATION, USER MANUAL – VENTUS A-P

Introduction, fields of application of biofilters

This operation guide (Guide) includes general information about how to operate biofilters, type "VENTUS", developed by PURECO KFT. (H-1118, Budapest Rétköz utca 5.). It helps the Operator to operate the system safely on his own, keeping in mind the protection of the environment. While respecting this operation guide the Distributor guarantees the efficient operation of the biofilter.

The fields of application of biofilters, developed by PURECO, are usually the wastewater treatment, or eliminating the odours generated during wastewater transportation in the sewage system (during mechanical pre-treatment and sludge dewatering at wastewater treatment plants or at sewage system pump pits). Despite all of these fields the use of biofilters is appropriate at manure treatment in agricultural livestock farms, at animal protein treatment processes. At chemical industry facilities where deteriorative and harmful substances are generated the biofilters could also be a solution for decreasing these gaseous substances but only in that case when they are not toxic for microorganism of the biofilter.

The criterias of effective operation of the system are the regular inspection and maintenance. The damages due to the lack of inspection or maintenance are in the Operator's responsibility and PURECO shall not be liable. Therefore careful reviewing and compliance with this Guide is necessary. The Operator is responsible for the supervision of the system even if Maintenance Contract has been made between PURECO and the Client.

The nominal performance of adequate biofilters type "VENTUS" is between 3 and 1000 m³/h, specifically. The performance of the type "compact" varies between 20 and 1000 m³/h. Biofilters with performance above the mentioned figures can be created by unique design or connecting multiple units.

Legal aspects of system application

The biofilters type "VENTUS" are proprietarily developed and distributed in Hungary by PURECO Kft. (H-1118, Budapest Rétköz utca 5.). The biofilter type "VENTUS" is the intellectual property of PURECO Kft. and copying it's all or any portion is prohibited without the written permission of the Manufacturer! PURECO Kft. gives 2-year warranty for system which is properly sized and operated according to this Guide. The load at every time must comply with the planning and design values. The manufacturer's warranty is only provided in case of intended use, professional management and commissioning and if the operation of the system is in compliance with operating and maintenance instructions fully. The supplier is not subject to warranty obligations for natural wear or damages as results of external influences independent from normal operation. During the warranty period the Client or Operator is required to inform the service that performs the warranty repairs (Service) and also the manufacturer/distributor within 48 hours.

This notification must contain the followings:

- The name and location of User;
- Name of the built-in system;
- Description and circumstances of the failure and the requested repair.

The warranty repair of the failure must be confirmed by the Service or distributor/manufacturer. The manufacturer's warranty is terminated if the Client/User or third party disrupts/repairs the system without the manufacturer's/distributor's permission. In case of repairing the warranty is valid until the original warranty period of time.

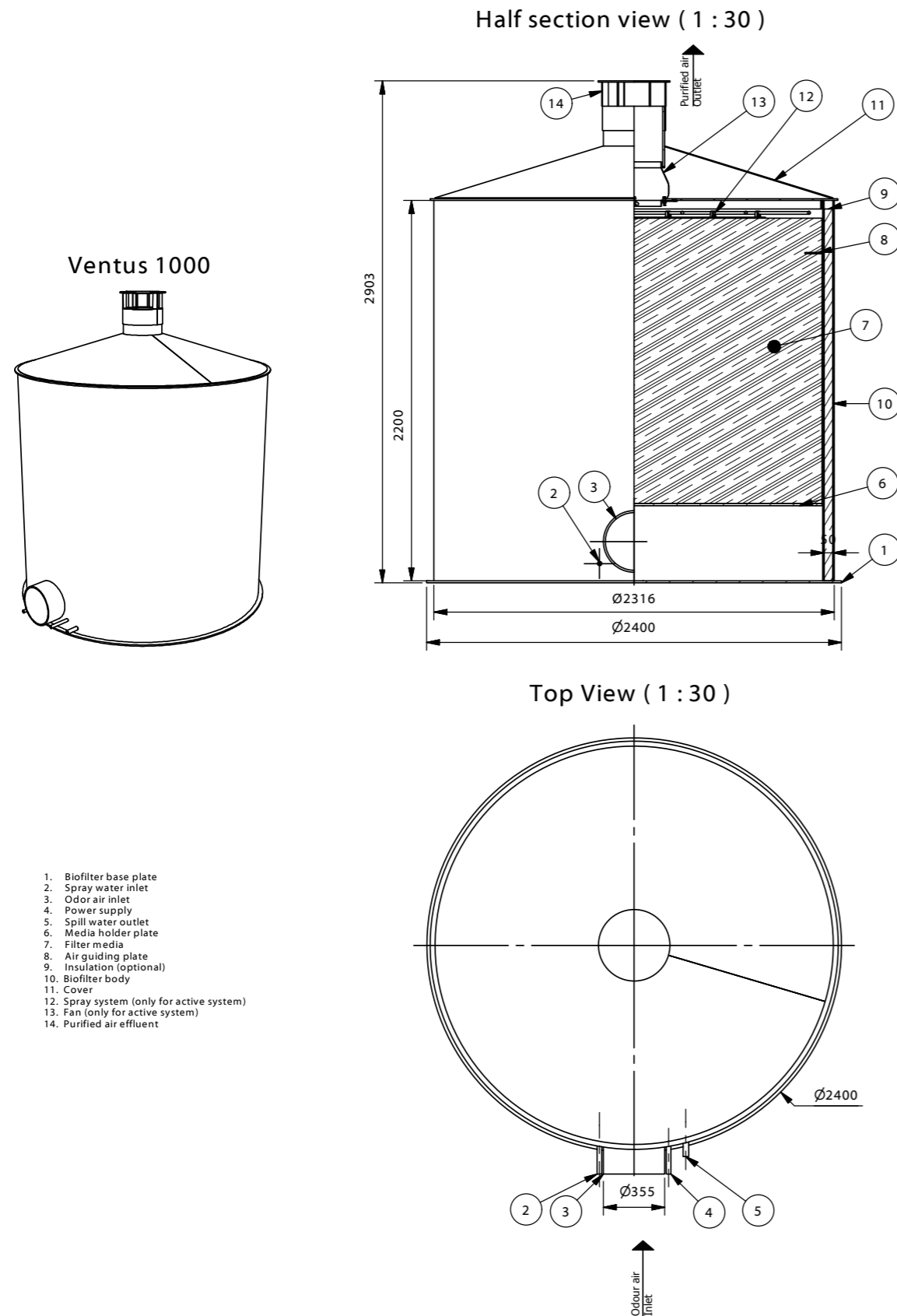
General information about application

The application of biofilters should be taken in accordance with this specification.

PURECO Kft.'s activities in connection with biofilters are:

- Consultation,
- Commissioning,
- Training of Operator,
- Providing replacement of filter media and wearing parts.

PURECO Kft. terminates operating abnormalites occurring within 2 years free of charge, after 2 years against ordering and payment.



1. Biofilter base plate
2. Spray water inlet
3. Odour air inlet
4. Power supply
5. Spill water outlet
6. Media holder plate
7. Filter media
8. Air guiding plate
9. Insulation (optional)
10. Biofilter body
11. Cover
12. Spray system (only for active system)
13. Fan (only for active system)
14. Purified air effluent



www.pureco.hu

VENTUS A-P Odour air treatment system

TYP: VENTUS 1000
Info drawing

M= 1:30

Capacity:	1000	m ³ /h
Efficiency:	95	%
Max element weight:	420	kg
Weight:	1250	kg

INSTALLATION, USER MANUAL – VENTUS A-P

Packing, transportation and storage

The manufacturer ships the biofilters prepared for installation, as agreed, to the customer's address. The shipping and storage can only take place in upright position. During shipping and storage the system shall not be injured. Because of the relatively great weight of the system, the displacement of it require technical support. Damages caused by improper storage, retraction or installation producing no warranty.

General information about the system

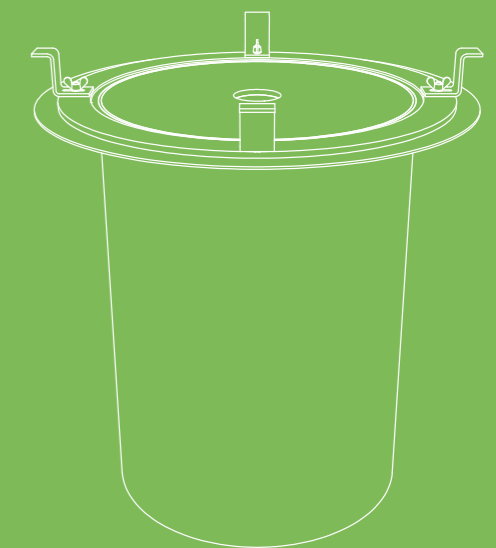
Each type of biofilter consists of filter media placed in the filter housing, ventilation, humidifier. Material of filter housing is PE-HD, material of armatures are PE-HD, PP-H, PVC. The filter media is an environmentally friendly material made by the manufacturer. The manufacturer suggests to use the ruined filter media as composting material however its possibility needs to be checked according to law in abroad (in Hungary such kind of usage of end of life filter media is not limited by law 98/2001. (VI.15.)).

For the effective operation of the biofilter the growth of microorganism (bacteria, fungi) on the filter media is necessary. They demolish the contaminations causing unwanted, unpleasant odors due to their metabolism. To provide optimal life conditions for these microorganisms, the supplied air going through the filter media has to be humidified over 95% relative humidity, its pH value has to be kept between 4 and 8, and its temperature has to be kept above +5°C.

In practice, certain substances such as solvents may cause problems to the microorganisms since their presence can deactivate or kill the microbiology just as at a normal wastewater treatment plant. It is a very simple rule: the biological treatment processes are results of the metabolism of microorganisms. The contaminated air is ventilated through the filter media while odors and other harmful substances are adsorbing on the surface of the filter media. The bacterias living there are demolishing the contaminants. The purified air leaves the filter and goes into the atmosphere. A pre-condition helps to develop the microorganism colony but it also occurs in a spontaneous way. This kind of bacteria can be found naturally everywhere.

As we provide optimal living conditions to the microorganism they start to grow, develop and while doing this they use the unpleasant odors as food during their metabolism. A start-up a biofilter system usually takes 2-3 weeks while the microorganisms adapt to their environment and an optimal filter efficiency is reached. Between unfavorable conditions the start-up requires much longer time.

Only completely wet filter media provides insufficient biosphere growing. Too little moisture (drier than the wet ground) may cause death of microorganisms and too much moisture may result in wash-out and water leakage. In case of too little moisture the volume of the water fed to the filter media should be increased while too much moisture the opposite should be done. When wash-out occurs the filter media must be filed again.



VENTUS G

VENTUS G

VENTUS G is developed for gullies and manholes. If there is odor problem with the canalization (combined sewer) VENTUS G solves it. It fits to the 600 mm manhole gratings. Let the air out from the canalization and allow the runoff water to the sewer through the system with the special flexible non return valve. The VENTUS G produced three different sizes 10, 20 and 30 m³/h.

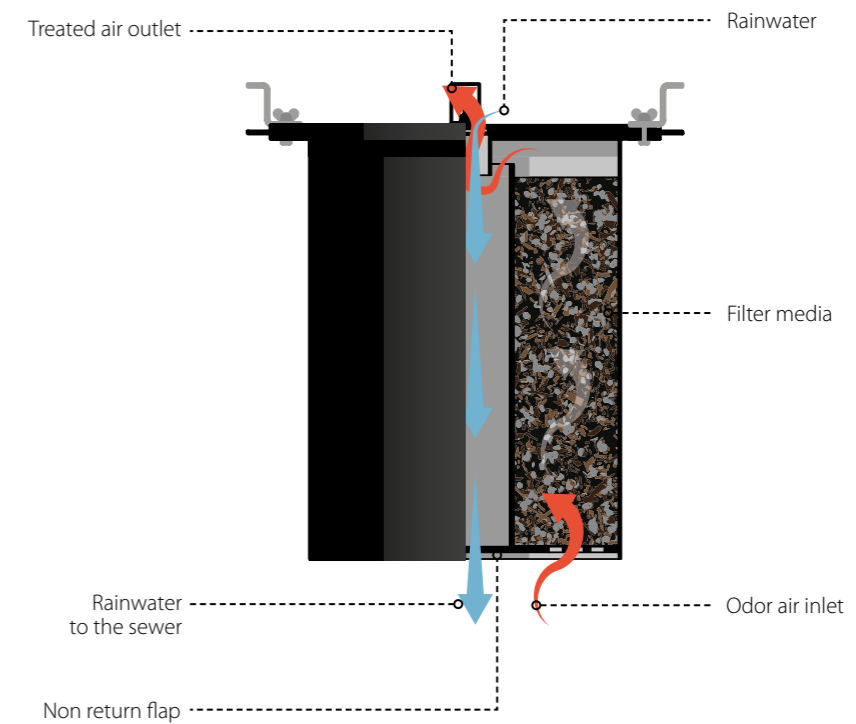
Application:

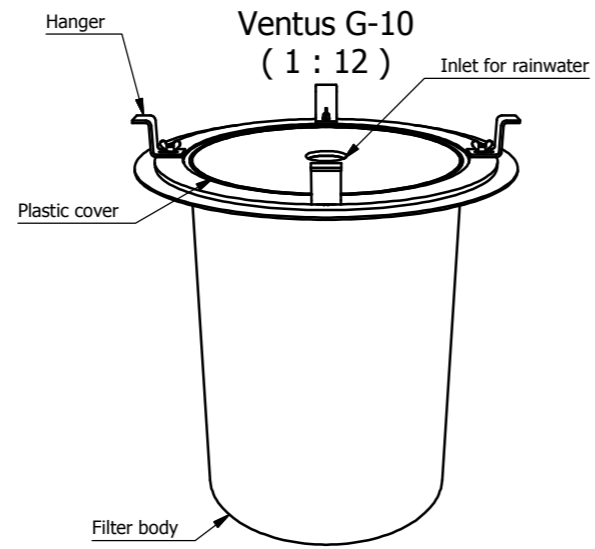
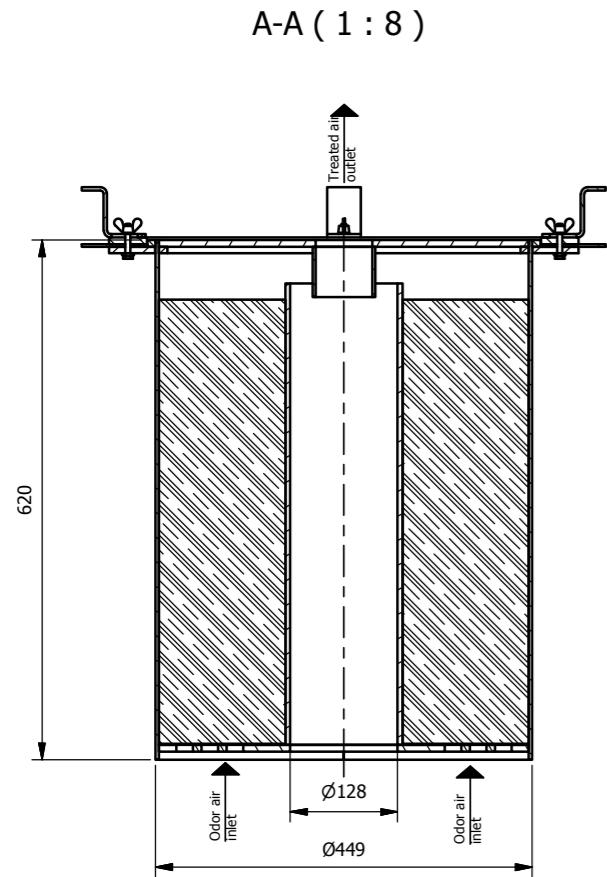
- combined sewer
- industry
- manhole insert



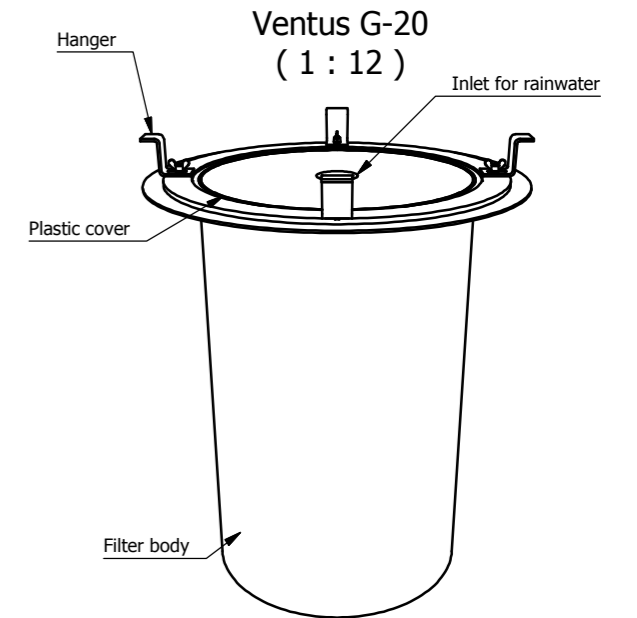
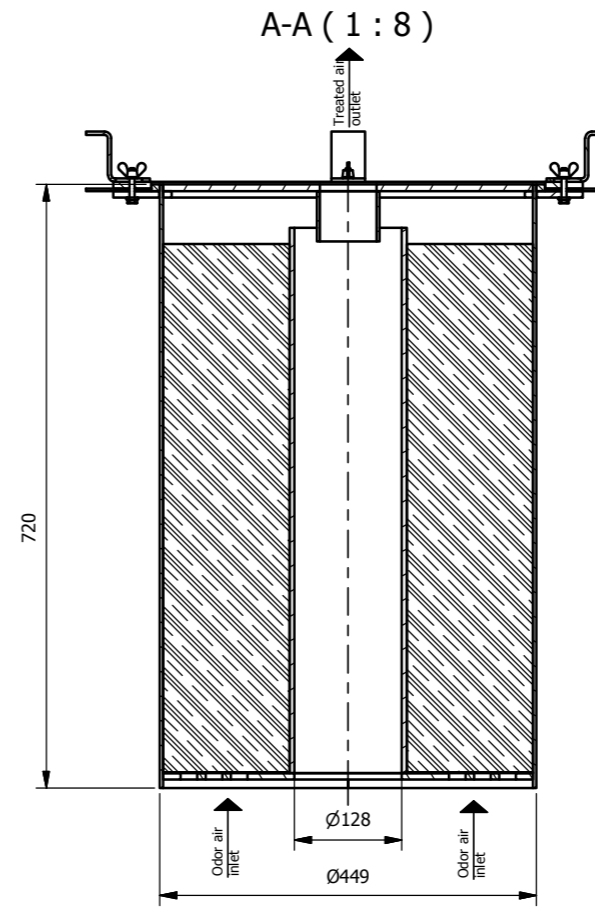
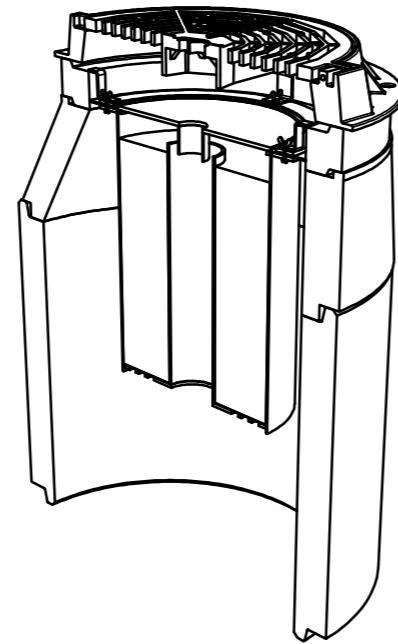
Dimensions:

Type	Cleaning capacity	Diemeter	Height	Weight	Volume of filter media
	m ³ /h	mm	mm	kg	liter
VENTUS G-10	10	500	605	15	72
VENTUS G-20	20	500	705	20	87
VENTUS G-30	30	500	805	25	100

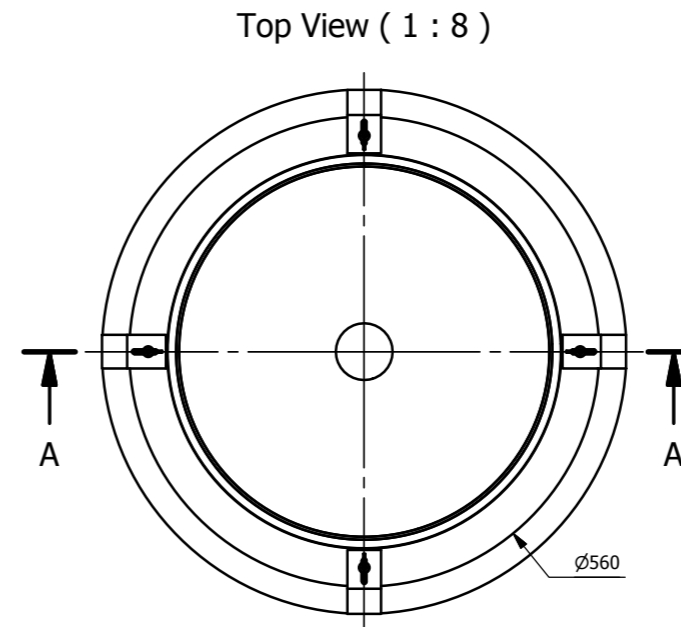
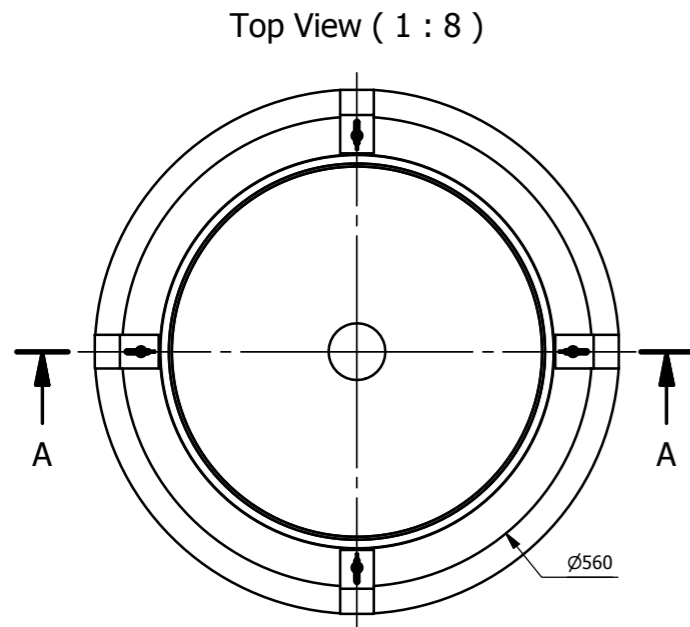
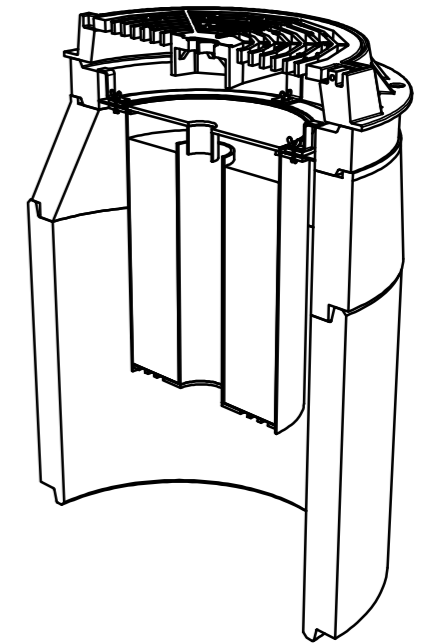




Installed VENTUS G-10
(1 : 15)

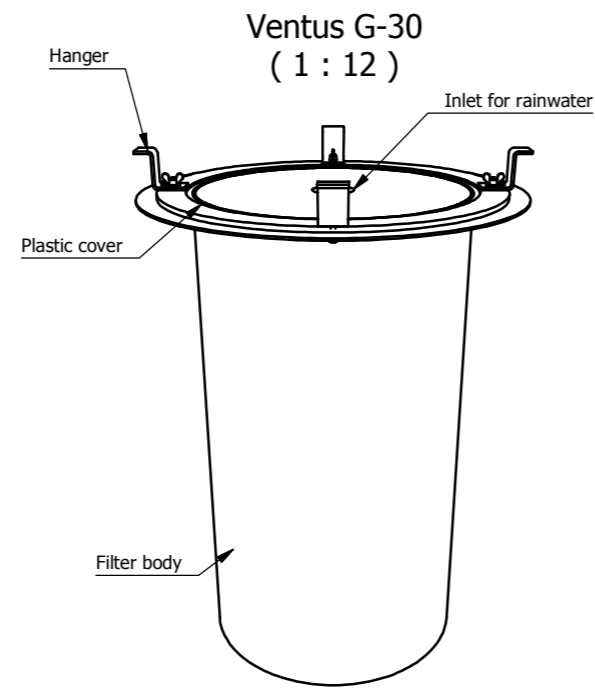
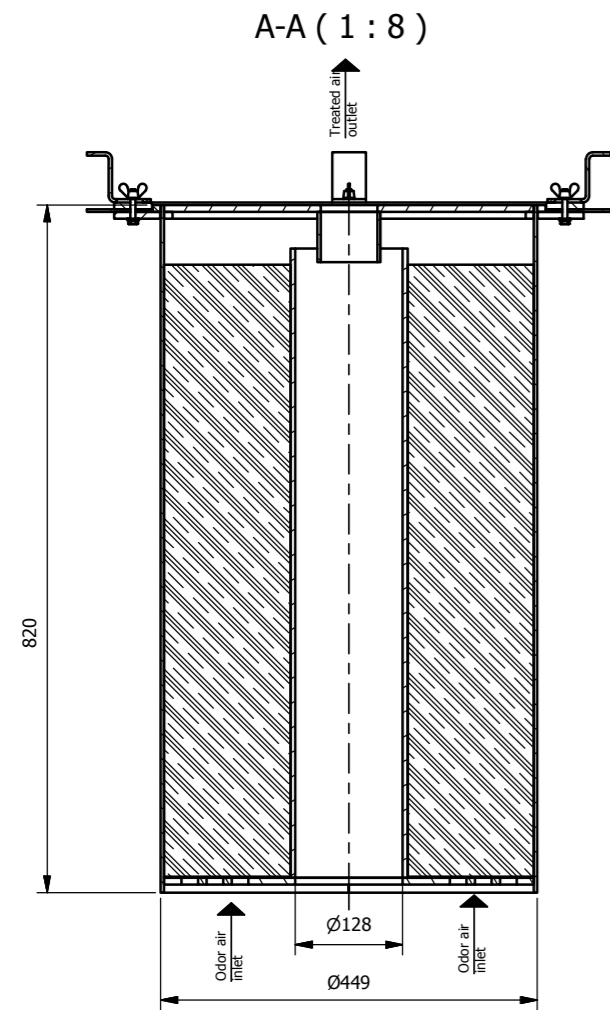


Installed VENTUS G-20
(1 : 15)

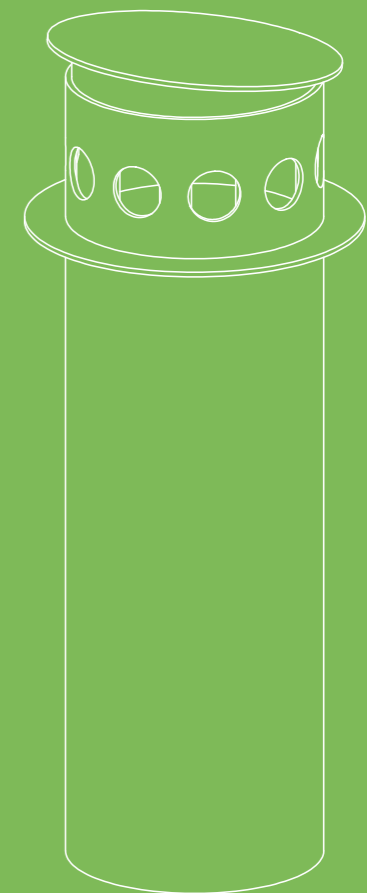
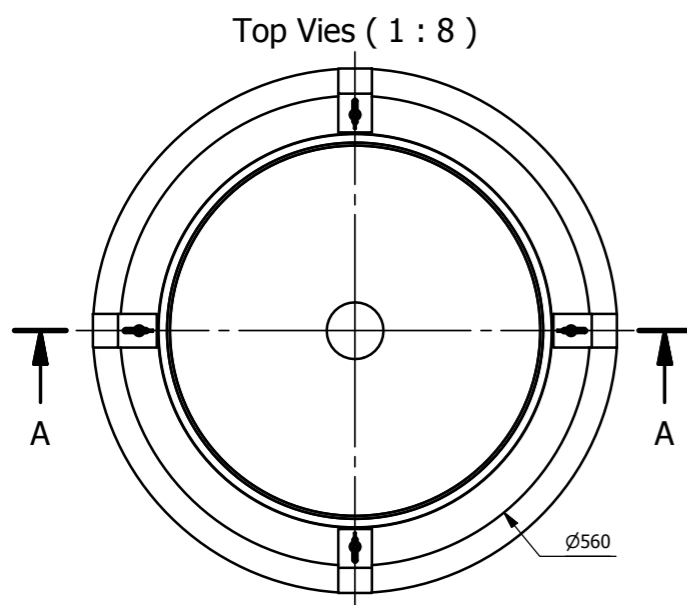
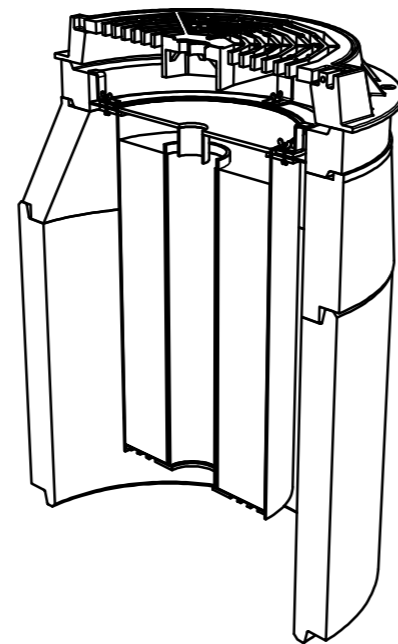


Capacity:	10	m ³ /h
Efficiency:	90	%
Max. element weight:	7	kg
Total weight:	15	kg

Capacity:	20	m ³ /h
Efficiency:	90	%
Max. element weight:	10	kg
Total weight:	20	kg



Installed VENTUS G-30
(1 : 15)



VENTUS PIPE

Capacity:	30	m ³ /h
Efficiency:	90	%
Max. element weight:	25	kg
Total weight:	15	kg

VENTUS PIPE

VENTUS PIPE is a pipe shaped biofilter as its name suggests. The system could fit into various sized holes and vent pipes from dn100 to 450. The system suspended on his flange to the hole, the forced flow pushes the airstream through the media. It can be used for low airstreams from 3 m³/h to 20 m³/h.

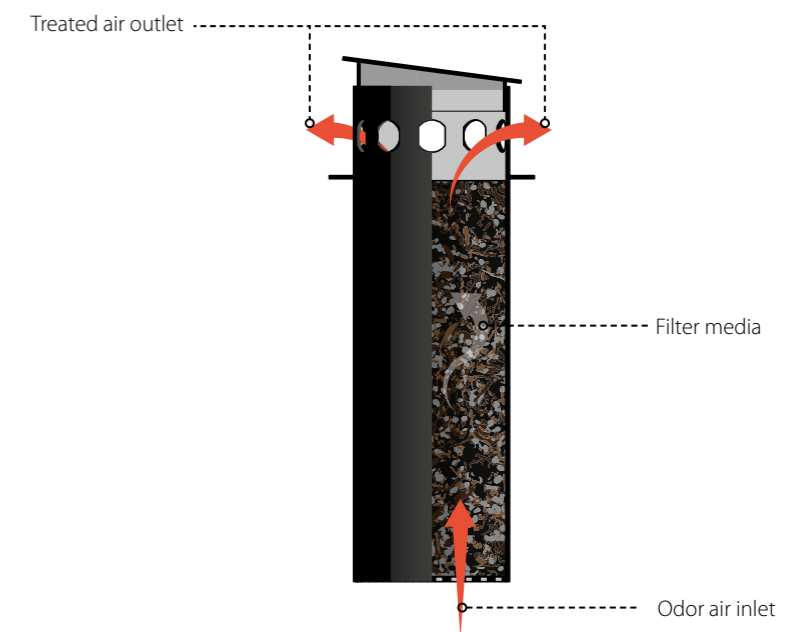
Applications:

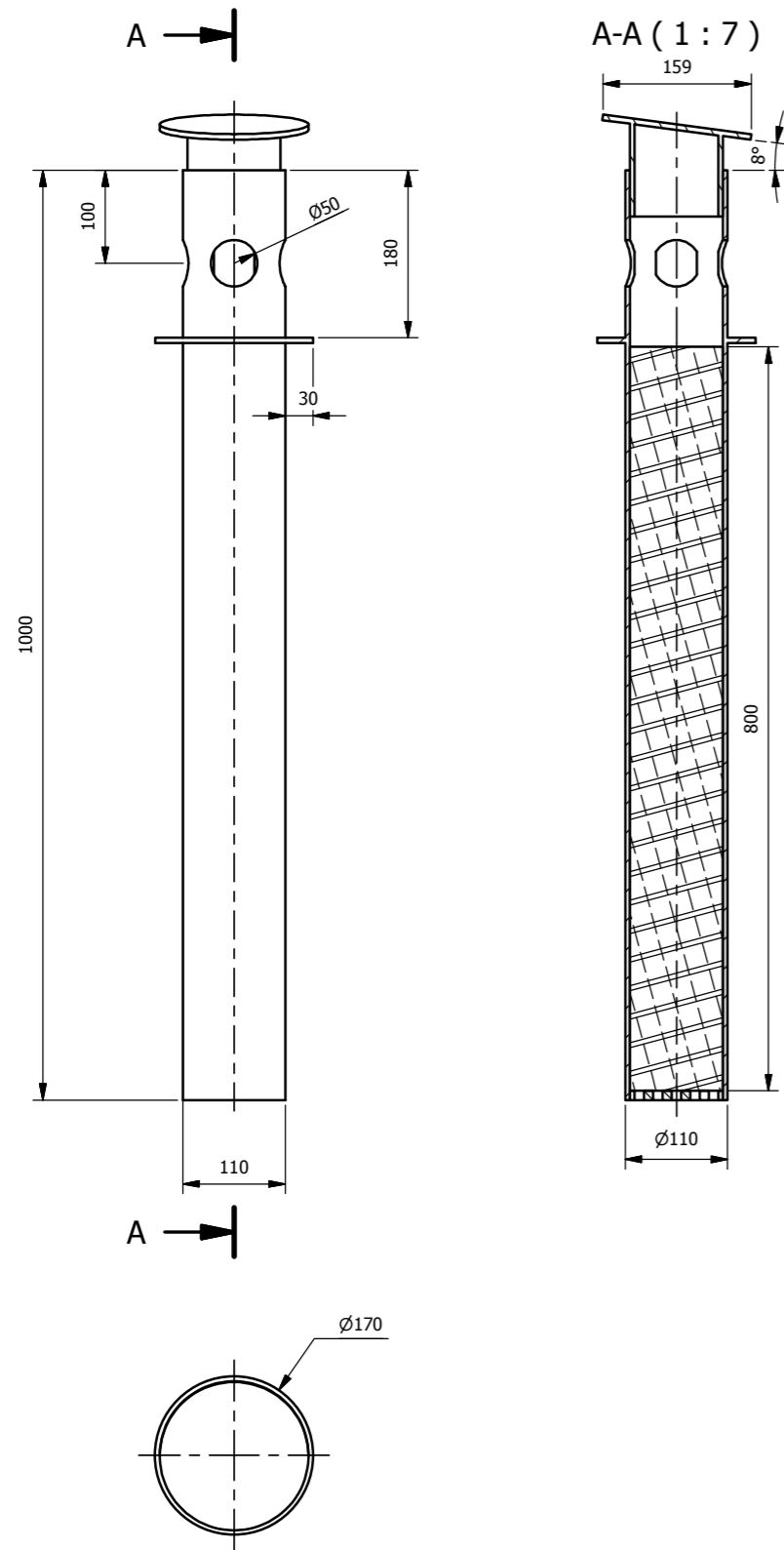
- pumping stations
- sewer
- storage tank



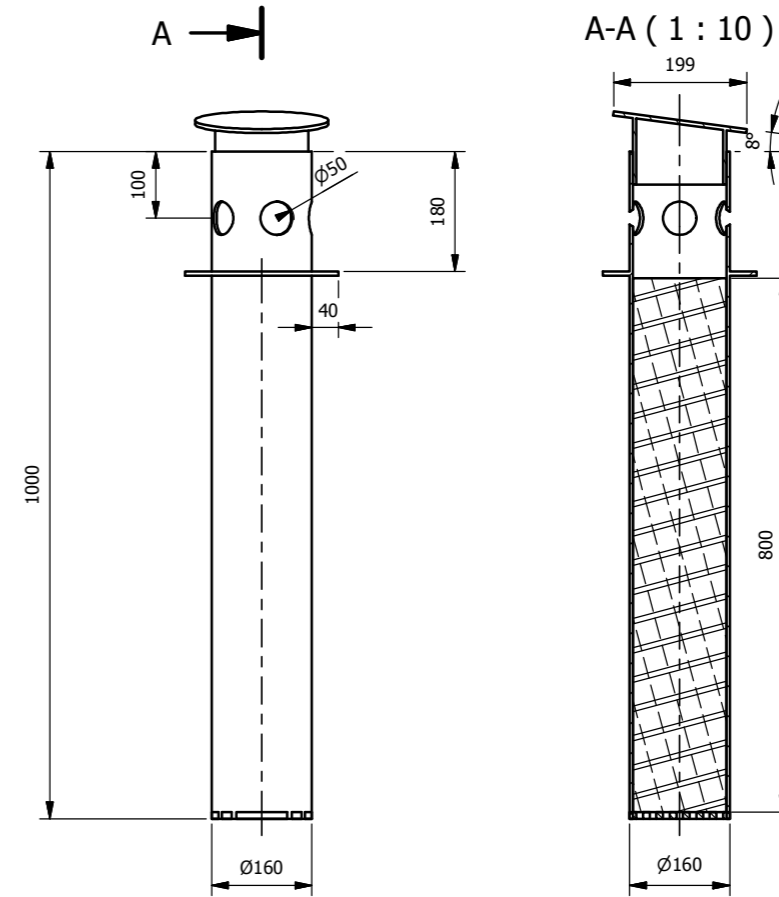
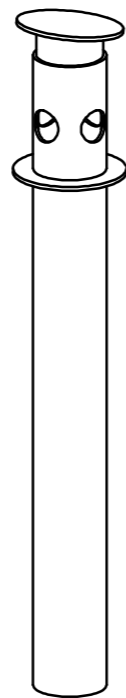
Dimensions:

Type	Cleaning capacity	Diemeter	Height	Weight	Volume of filter media
	m ³ /h	mm	mm	kg	liter
VENTUS PIPE 100	3	100	1000	6	7
VENTUS PIPE 150	4	150	1000	8	12
VENTUS PIPE 200	5	200	1000	13	23
VENTUS PIPE 250	7	250	1000	20	35
VENTUS PIPE 300	11	300	1000	30	57
VENTUS PIPE 400	18	400	1000	40	93
VENTUS PIPE 450	20	450	1000	45	118

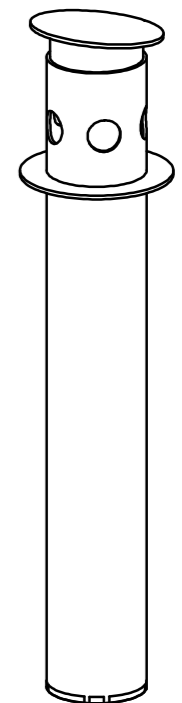




VENTUS Pipe 100
(1 : 10)



VENTUS Pipe 150
(1 : 10)



VENTUS PIPE Odor air treatment system

TYP: VENTUS Pipe 100
Info drawing

M= 1:7

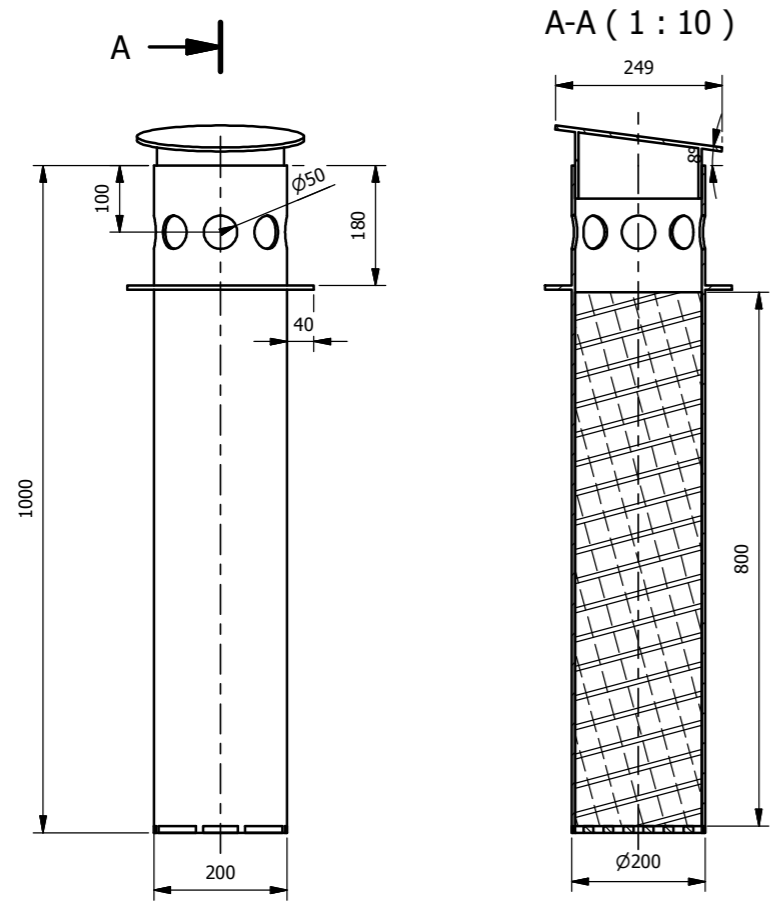
Capacity:	max. 3	m3/h
Efficiency:	95	%
Max element weight:	2	kg
Weight:	6	kg

VENTUS PIPE Odor air treatment system

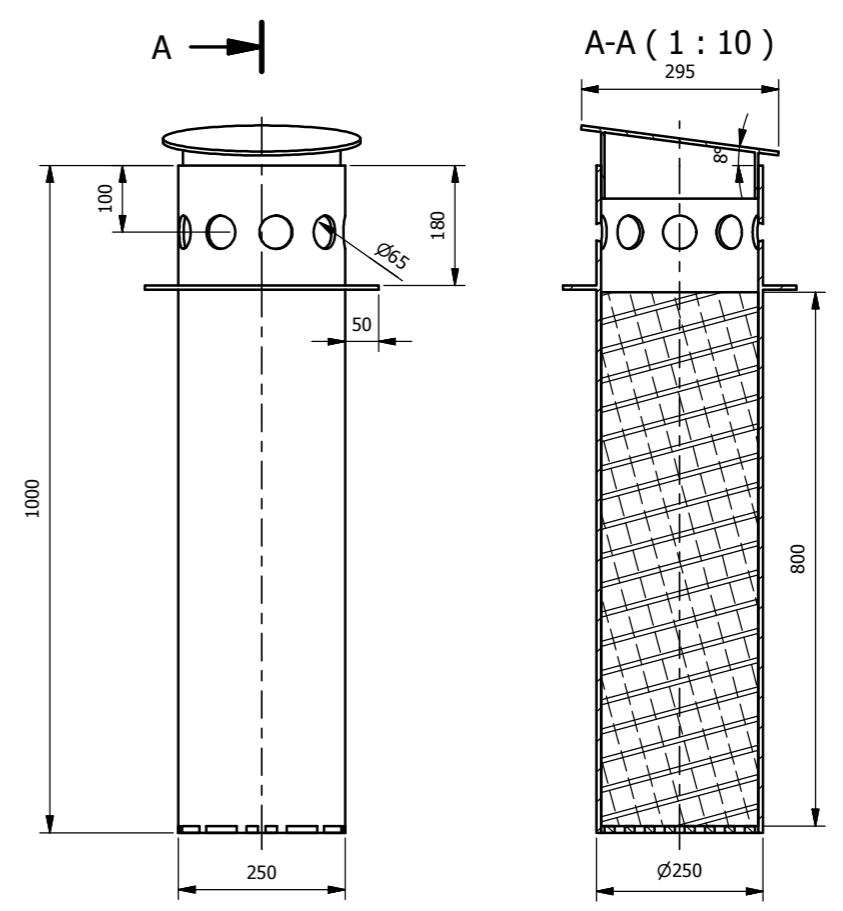
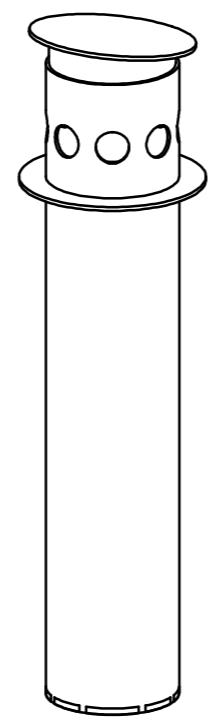
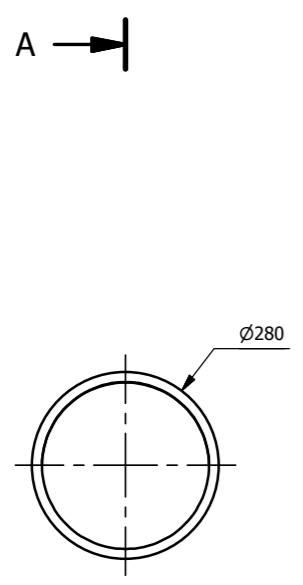
TYP: WNTUS Pipe 150
Info drawing

M= 1:10

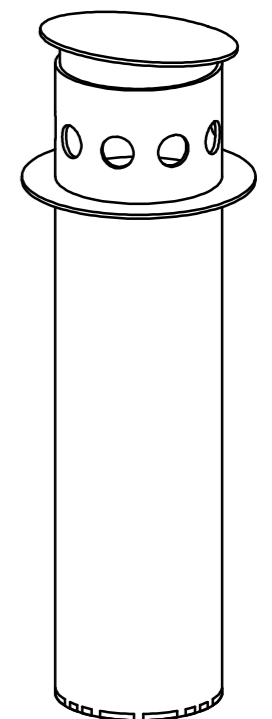
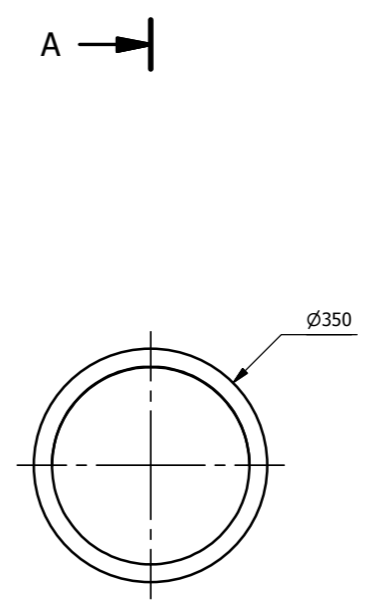
Capacity:	max. 4	m3/h
Efficiency:	95	%
Max element weight:	3	kg
Weight:	8	kg

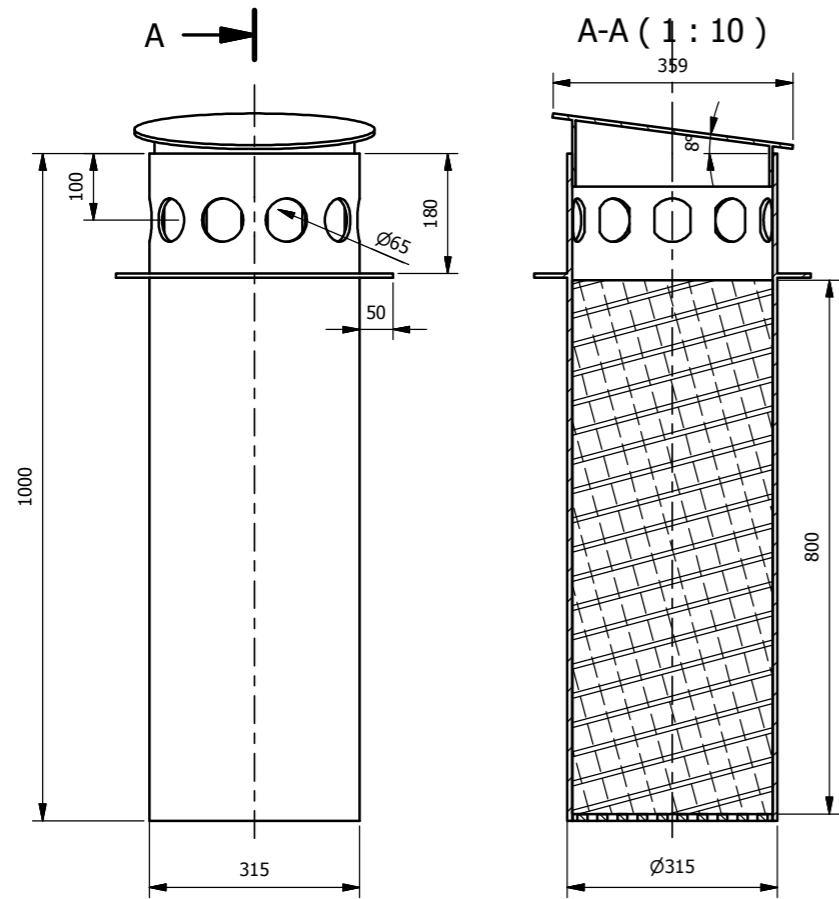


VENTUS Pipe 200
(1 : 10)

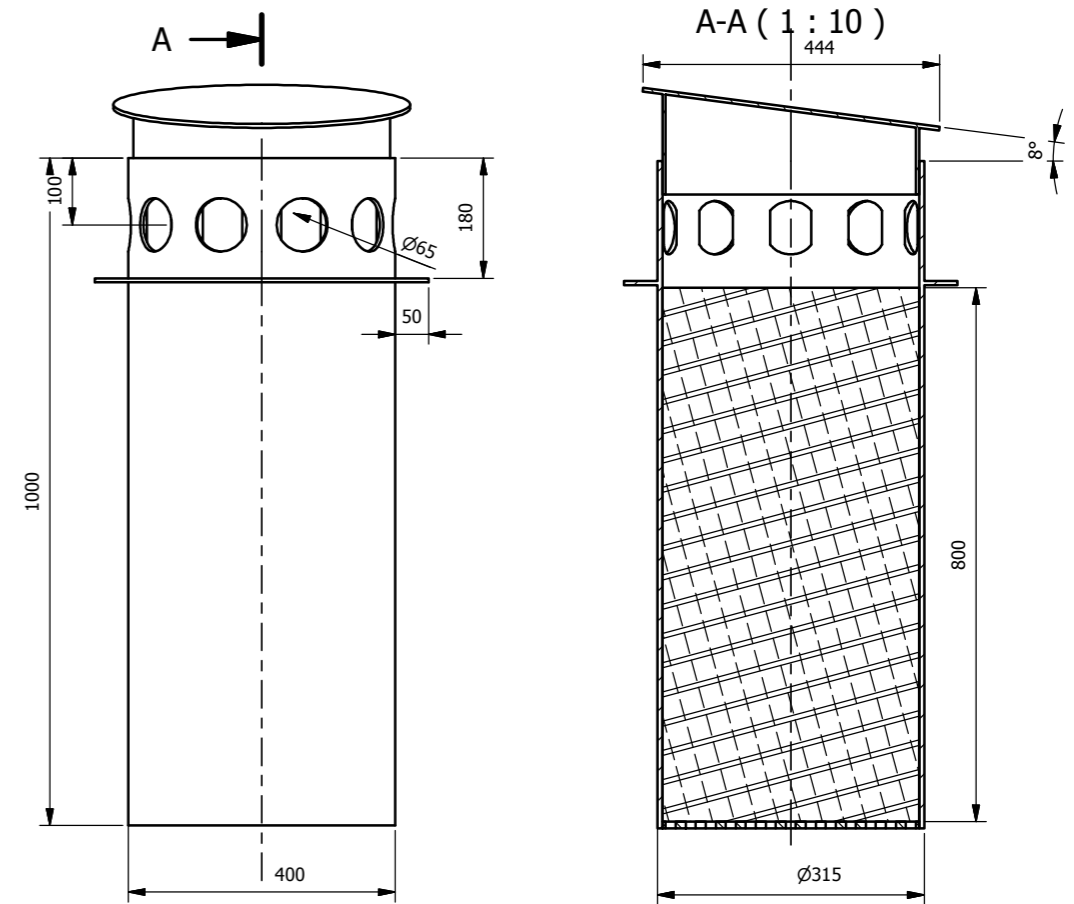
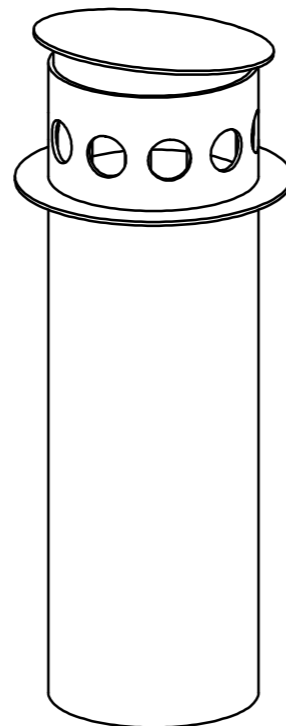
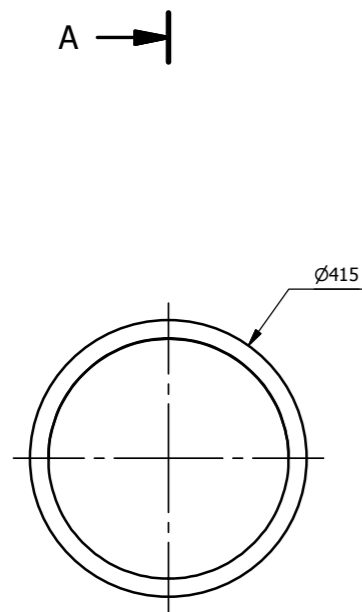


VENTUS Pipe 250
(1 : 10)

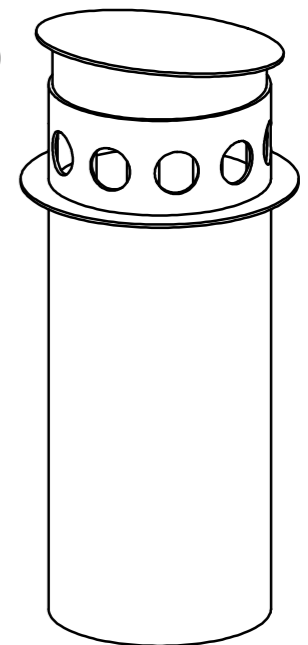
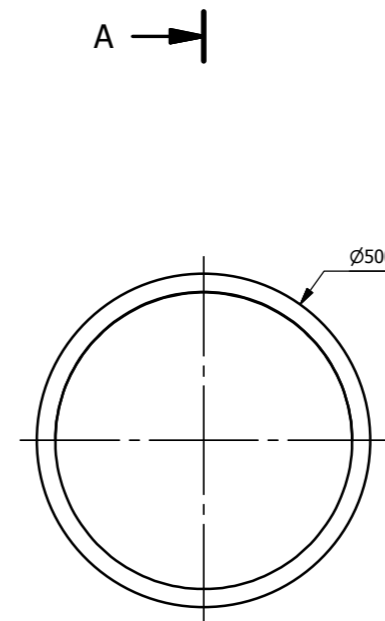




VENTUS Pipe 300
(1 : 10)



VENTUS Pipe 400
(1 : 12)



VENTUS PIPE Odor air treatment system

TYP: VENTUS Pipe 300
Info drawing

M= 1:10

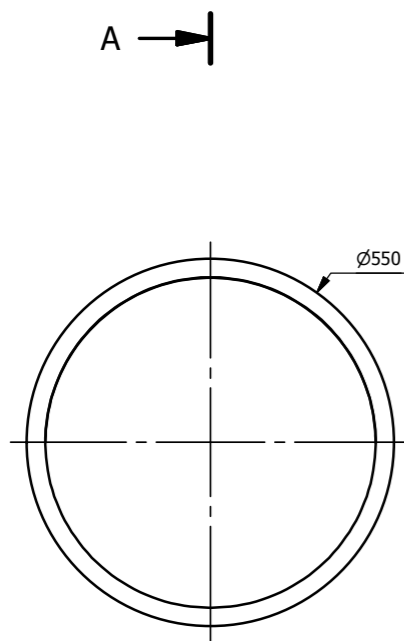
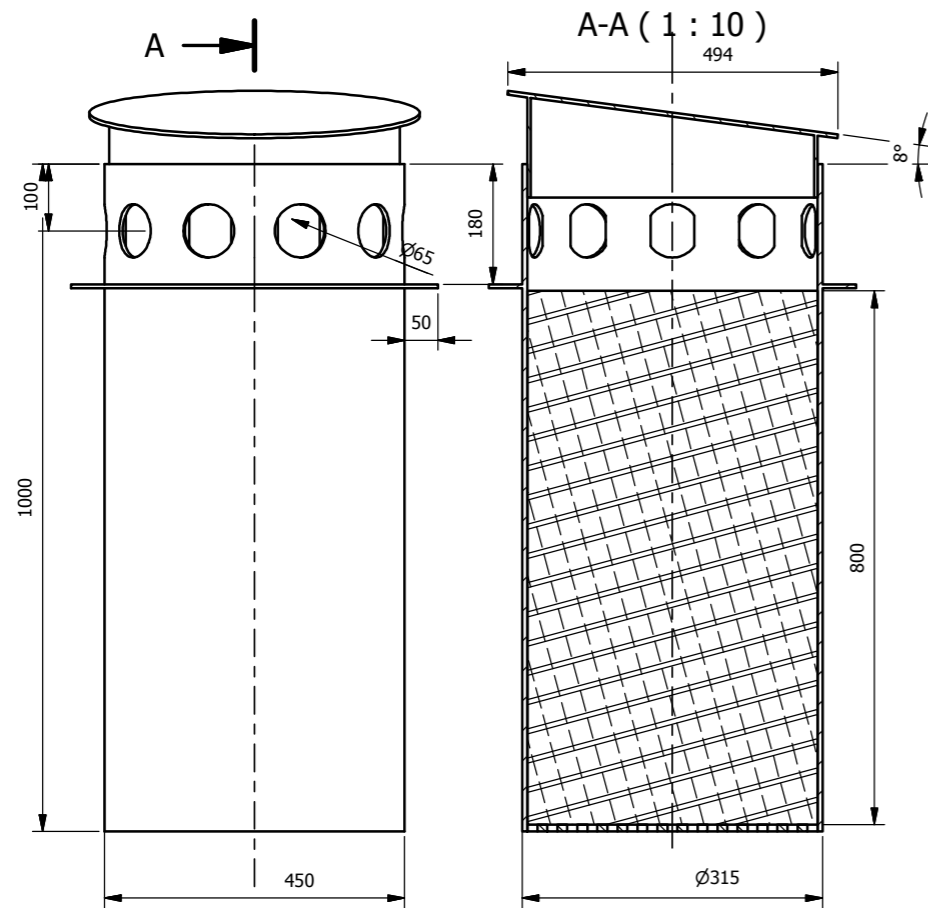
Capacity:	max. 11	m3/h
Efficiency:	95	%
Max element weight:	9	kg
Weight:	30	kg

VENTUS PIPE Odor air treatment system

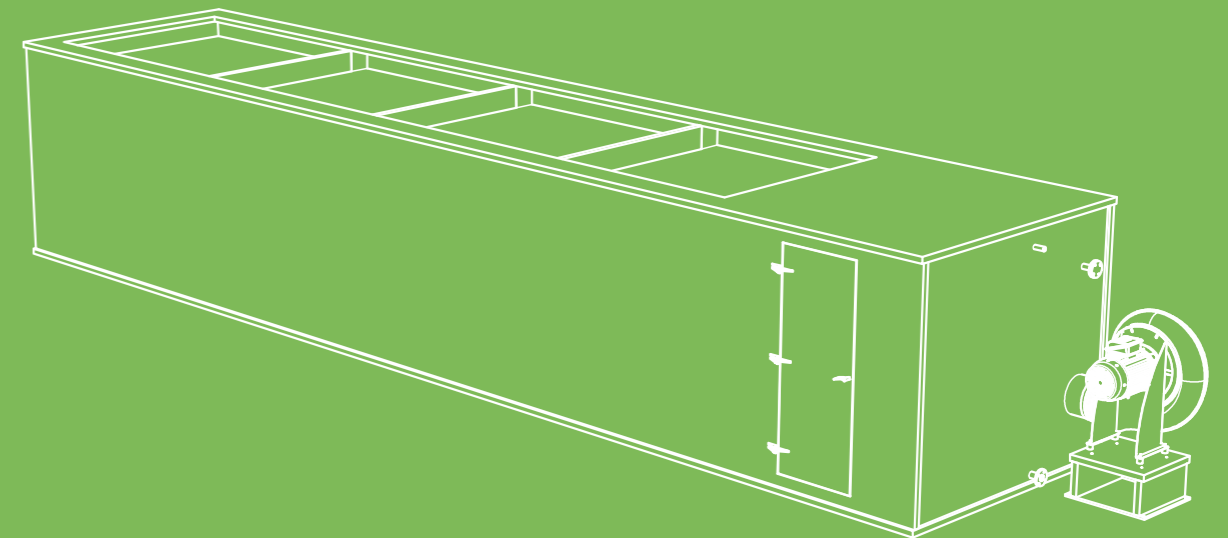
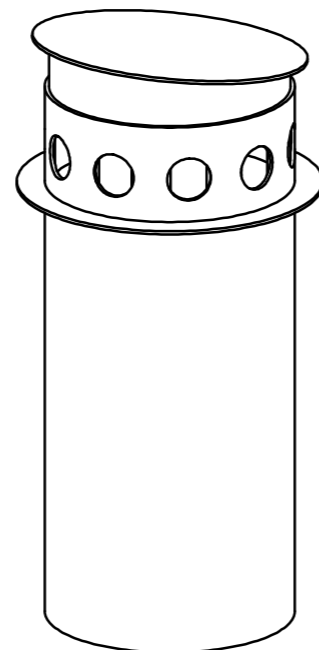
TYP: VENTUS Pipe 400
Info drawing

M= 1:10

Capacity:	max. 18	m3/h
Efficiency:	95	%
Max element weight:	12	kg
Weight:	40	kg



VENTUS Pipe 450
(1 : 12)



VENTUS C



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TYP:

VENTUS Pipe 450

Info drawing

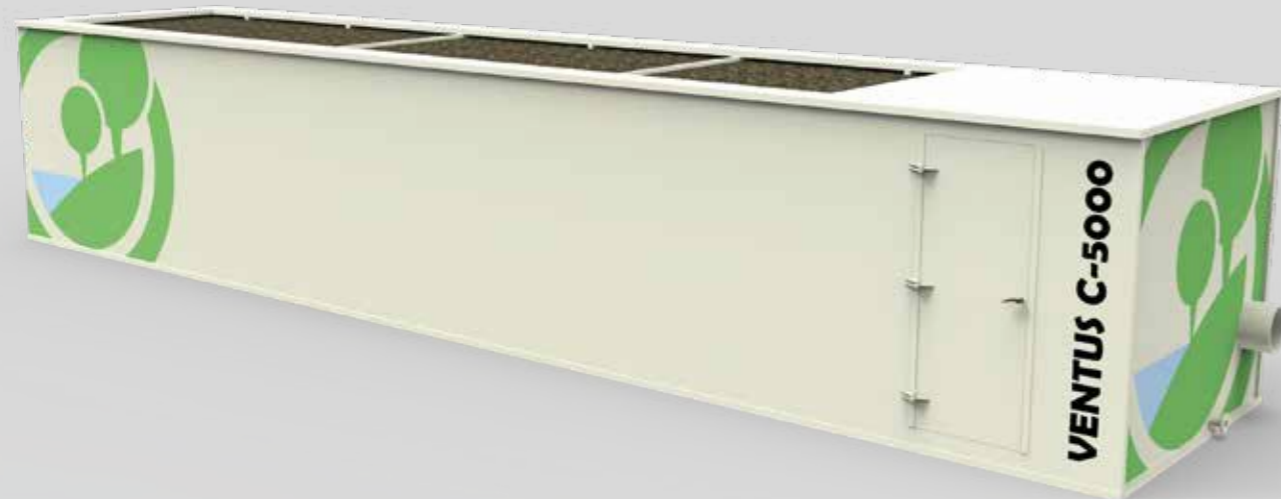
M= 1:10

VENTUS PIPE Odor air treatment system

Capacity:	max. 20	m ³ /h
Efficiency:	95	%
Max element weight:	15	kg
Weight:	45	kg

VENTUS C

Container sized biofilter system from PURECO. Our container is fully equipped and ready for automatic operation. The body of the filter unit is built up from special plastic wall (UV stable). The wall is strong enough to handle the loads from the operation and transport, but light to be handling without crane. The system is constructed up from three main elements, the first one is the washer tower, that prepares the airstream for the second biological stage, removes the solids and sets the humidity. The second stage is the air purification section with biomass filter media. Third part is the operator room with the control cabinet, from here the operator can set up everything. The largest container is truck sized with the treatment capacity of 5000 m³/h, with the combination of the units we can reach higher treatment capacity. The purified airstream can be 2000 m³/h with multiplied items it can expanded by 50 000 m³/h or more.

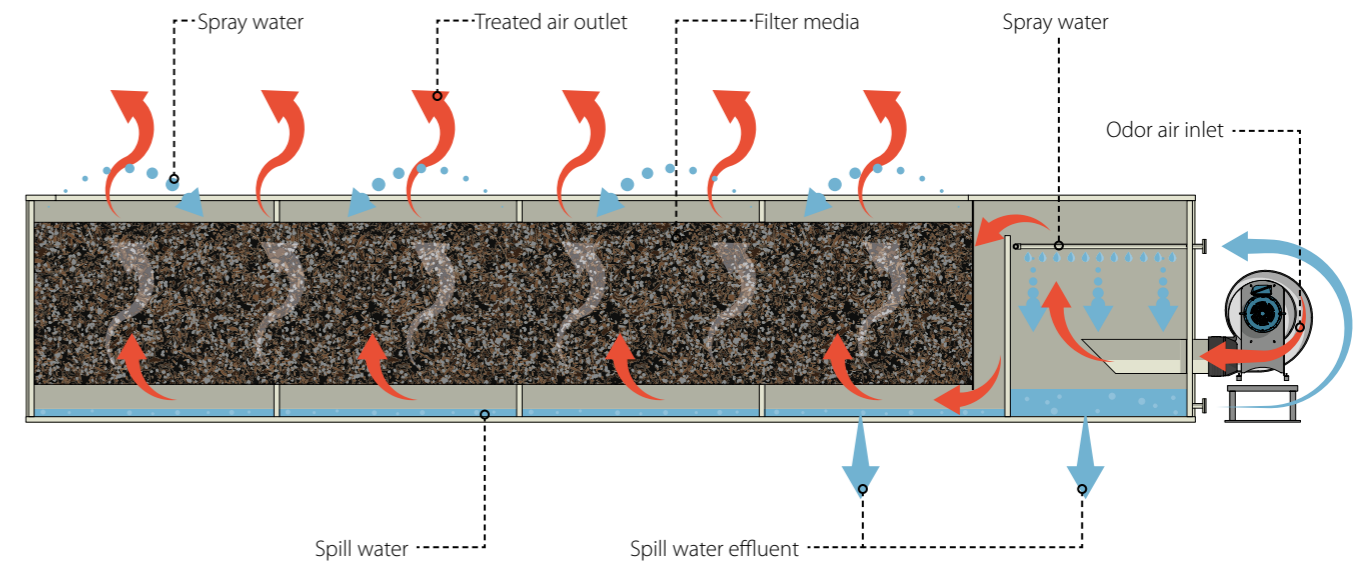


Application:

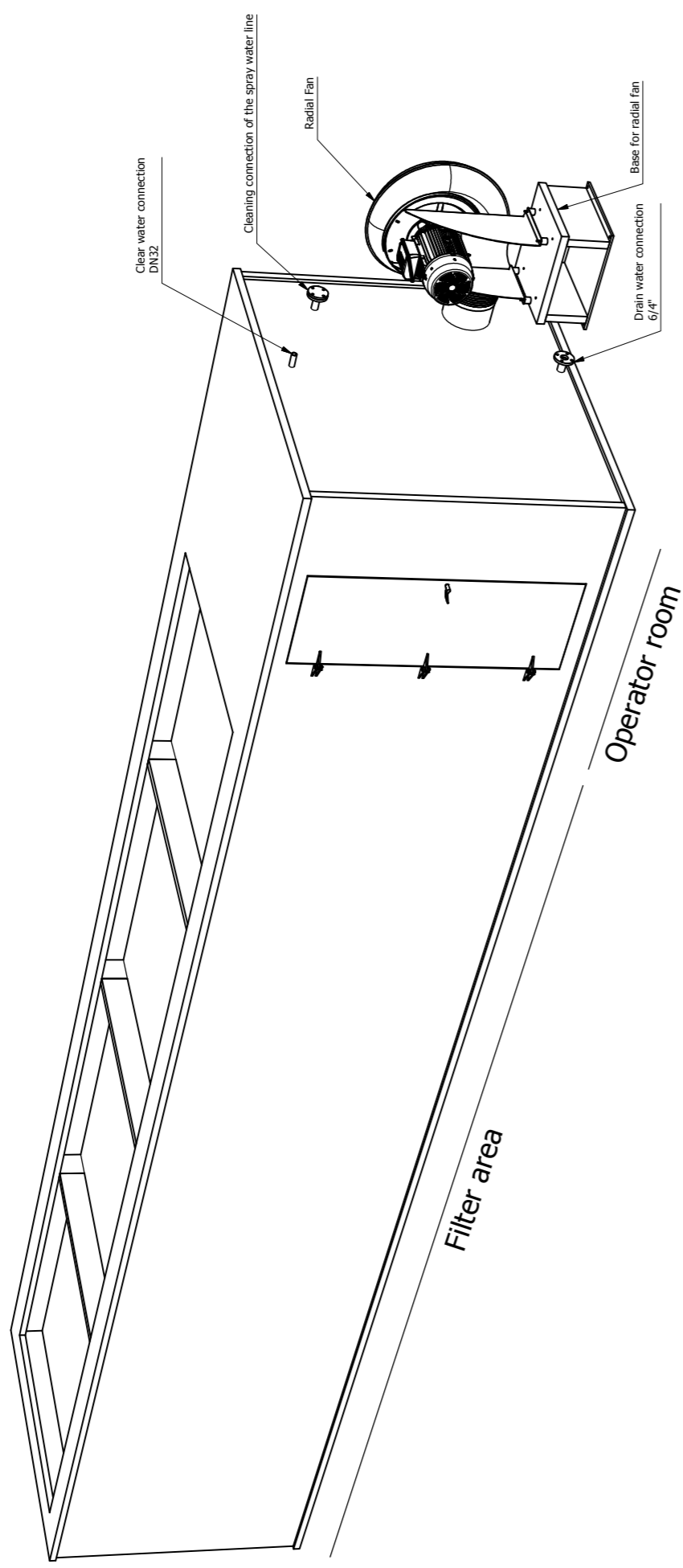
- waste water treatment plants
- landfills
- compostation plants
- private and public industry
- food processing
- sludge processing

Dimensions:

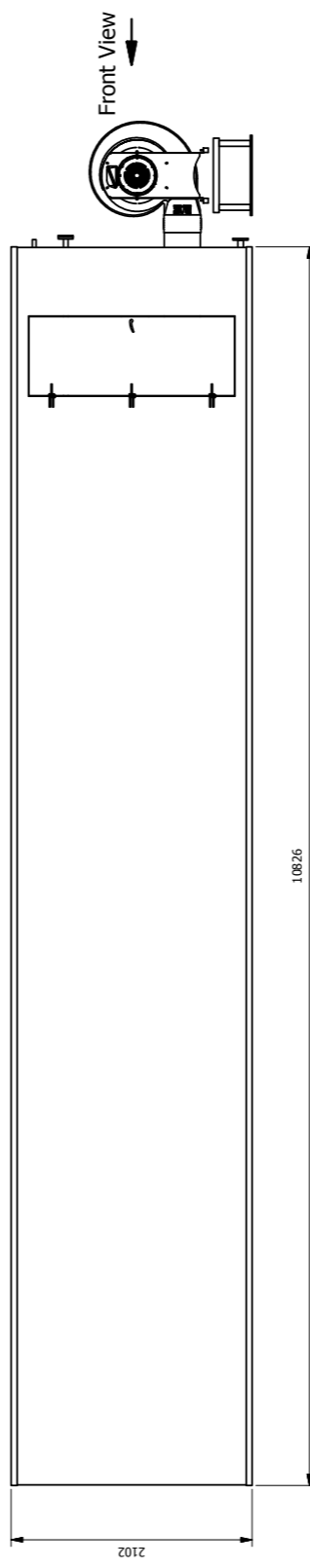
Type	Cleaning capacity m ³ /h	Length mm	Height mm	Width mm	Weight kg	Volume of filter media liter	Connection size mm	Power cons. kW
VENTUS C 1000	1 000	6 000	2 000	2 400	750	6 600	200	1.27 kW
VENTUS C 2000	2 000	7 500	2 200	2 400	1 200	11 800	250	1.74 kW
VENTUS C 3000	3 000	9 000	2 400	2 400	1 810	18 500	250	2.75 kW
VENTUS C 4000	4 000	10 000	2 400	2 400	2 320	23 100	250	4.05 kW
VENTUS C 5000	5 000	12 000	2 400	2 400	2 900	29 700	315	4.15 kW
VENTUS C 10 000	2×5 000	12 000	2 400	2 400	2×2 900	2×30 000	315	2×4.15 kW
VENTUS C 15 000	3×5 000	12 000	2 400	2 400	3×2 900	3×30 000	315	3×4.15 kW
VENTUS C 20 000	4×5 000	12 000	2 400	2 400	4×2 900	4×30 000	315	4×4.15 kW



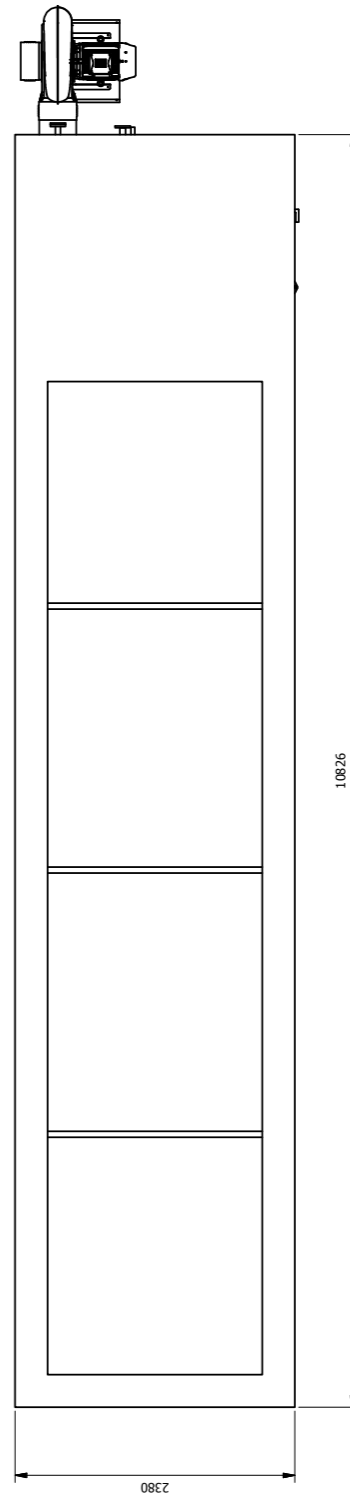
VENTUS-C 5000
(1 : 30)



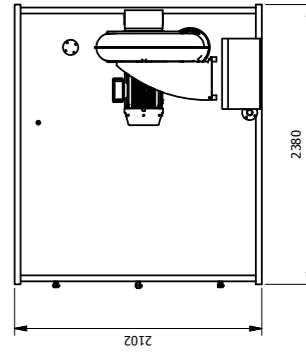
Side View (1 : 40)



Top View (1 : 40)



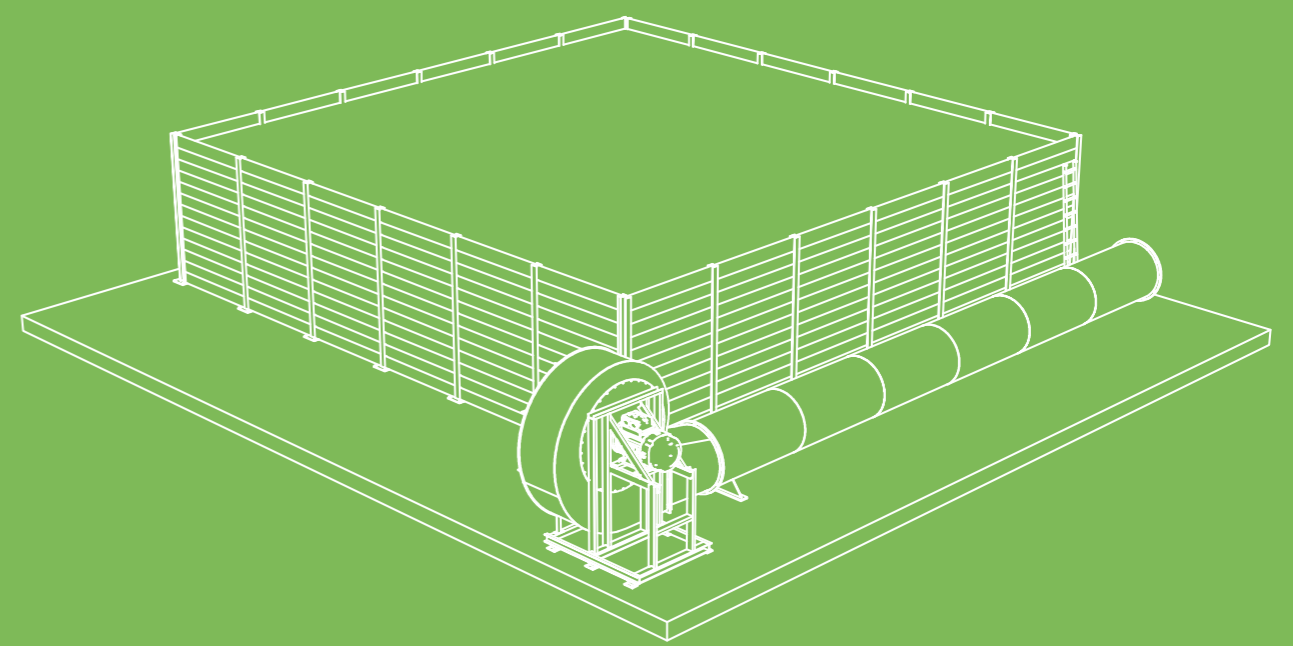
Front View (1 : 40)



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VENTUS C Odor air treatment system installed in plastic container
VENTUS-C 5000
Info drawing
Sara Zagora Total weight: kg

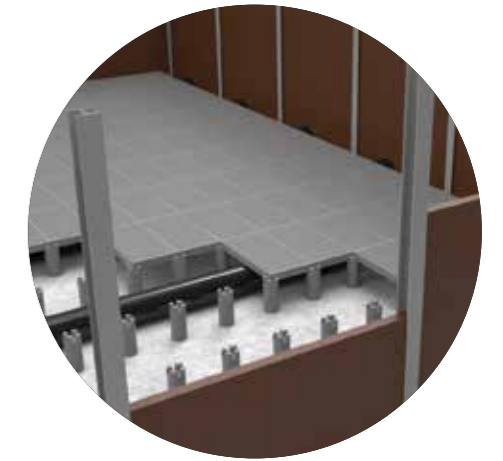
Capacity:	5000	m ³ /h
Efficiency:	90	%
Max. element weight:		kg
Total weight:		kg



VENTUS L

VENTUS L

Large or Lightweight you can call the new VENTUS L system in either of the way. The conventional biofilter installations are made on the site from fully concrete. Unlike the VENTUS L it needs only the flat concrete basement and other installations can be built up several days later. The newly developed wall system can set up fast, it is not only quick but it looks better than the ordinary concrete system. We use stainless steel posts for the wall and EPSDM sealing to make it airtight. Our special support system is available from 30 cm to 100 cm. The pre-installed slot drain system is handling the drip water from the humidifier system and rainfalls. With the modular system you can build either of the shape and size, with the capacity from 20 000 m³/h to 200 000 m³/h.

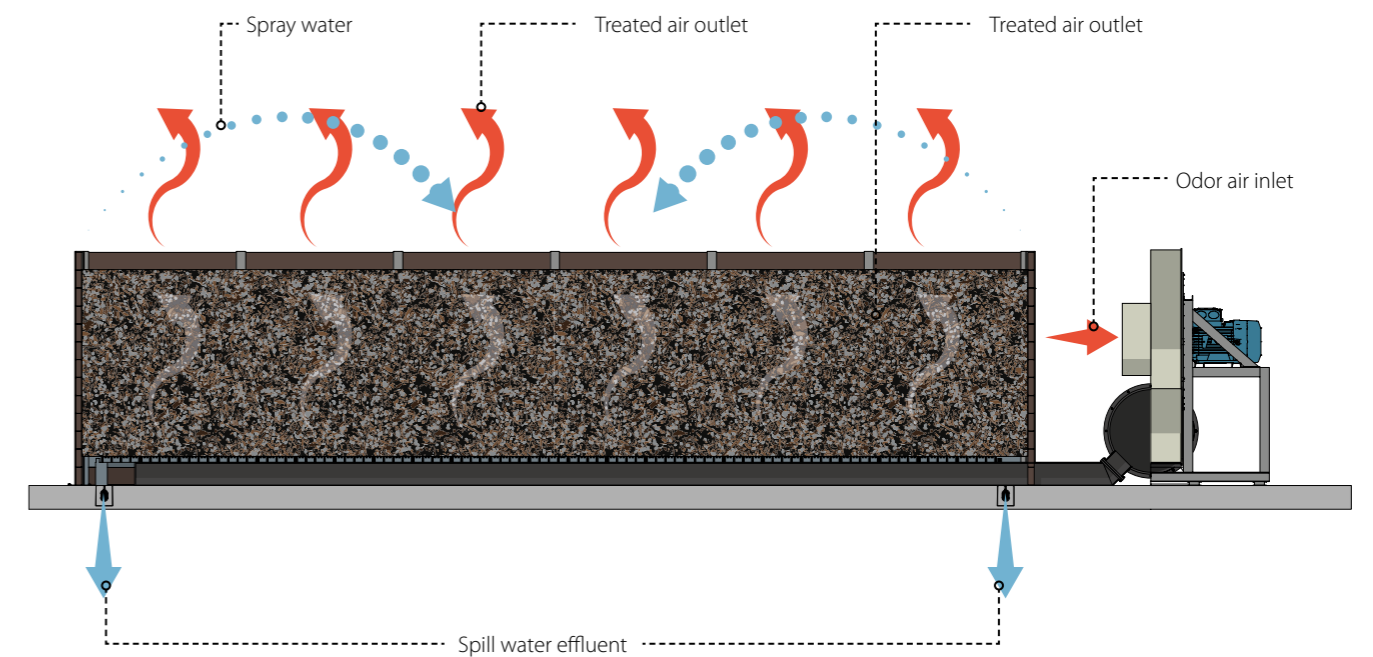


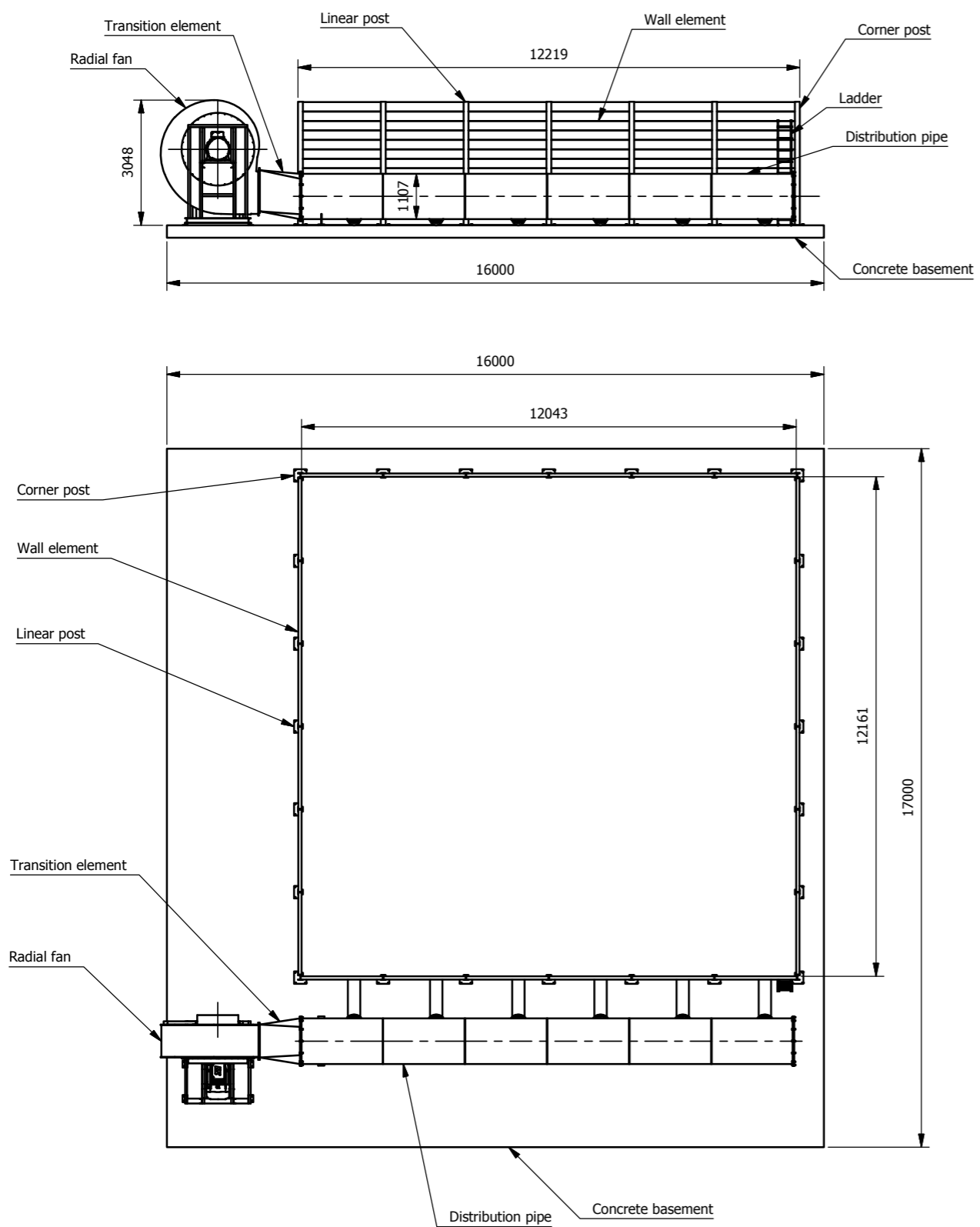
Application:

- especially for large airstreams and applications
- waste water treatment plants
- landfills
- food processing
- public and municipal industrial applications
- sludge handling plants

Dimensions:

Type	Cleaning capacity m ³ /h	Length mm	Height mm	Width mm	Weight kg	Volume of filter media liter	Power cons. kW
VENTUS L 50 000	50 000	12	3	12	na	345 600	61 kW
VENTUS L 100 000	100 000	17	3	17	na	693 000	114 kW







VENTUS Adsorption Filters

VENTUS AC

APPLICATION AND PRINCIPLE OF ADSORPTION FILTERS

Activated carbon

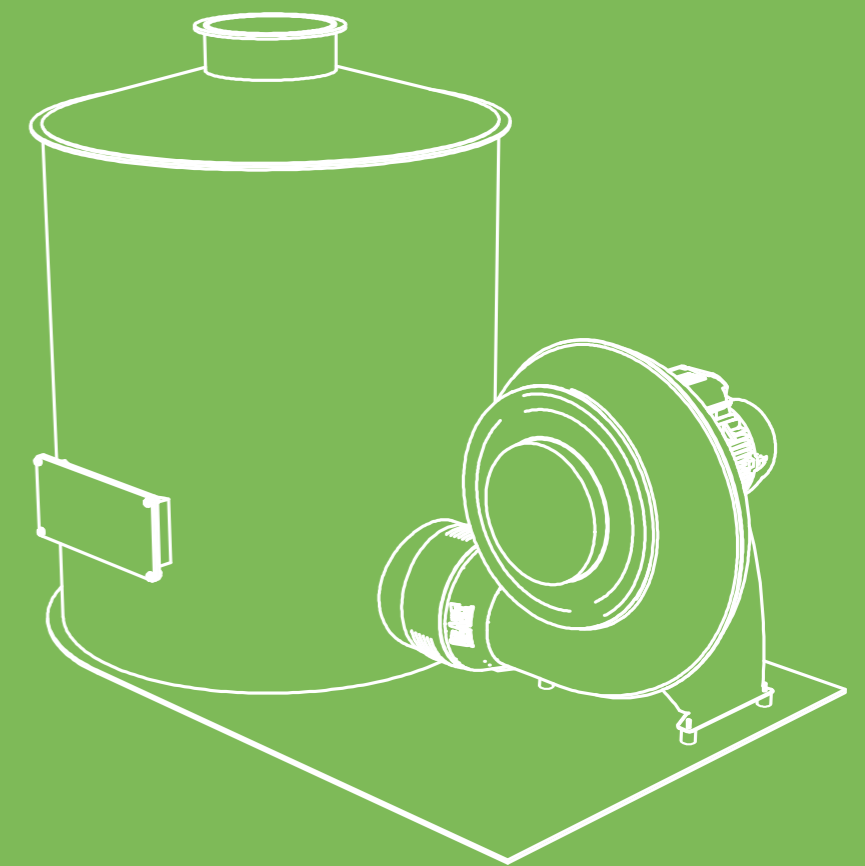
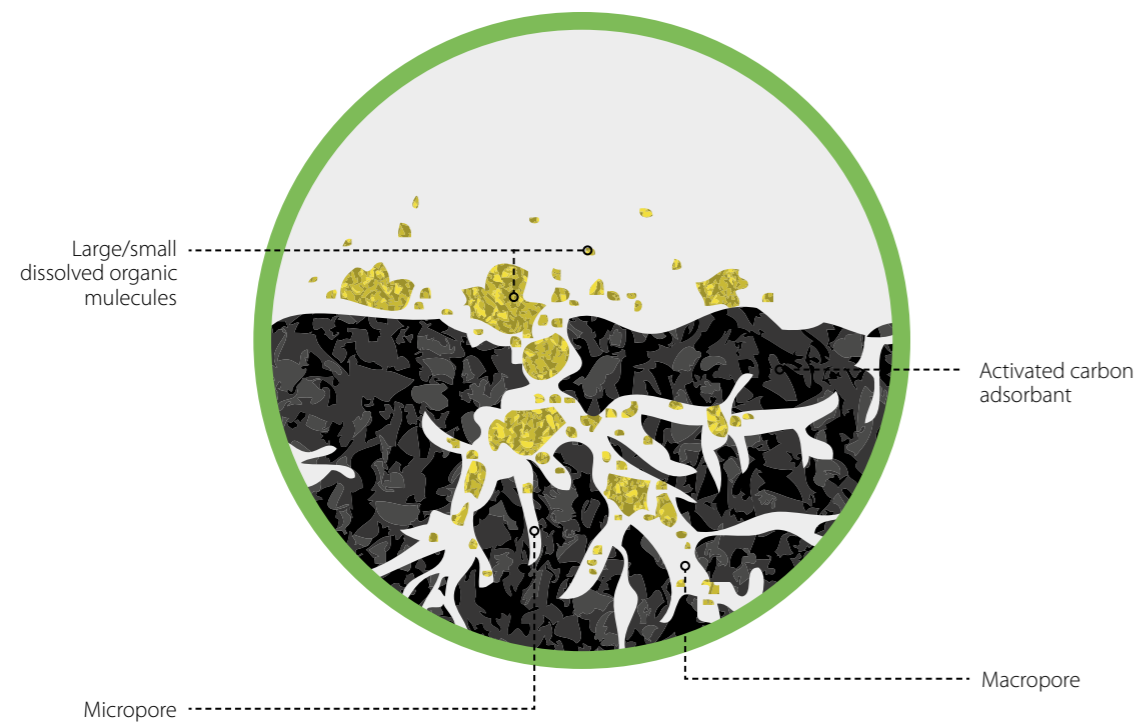
Activated carbon, also called activated charcoal, is a form of carbon processed to have small, low-volume pores that increase the surface area available for adsorption or chemical reactions. Activated is sometimes substituted with active.

Due to its high degree of micro porosity, just one gram of activated carbon has a surface area in excess of 1,300 m², as determined by gas adsorption. An activation level sufficient for useful application may be attained solely from high surface area; however, further chemical treatment often enhances adsorption properties.

This feature makes the activated carbon usable for air purification.

Adsorption

Adsorption is a process where a solid is used for removing a soluble substance from the water. In this process active carbon is the solid. Activated carbon filtration is a commonly used technology based on the adsorption of contaminants onto the surface of a filter. This method is effective in removing certain organics from the odor air.



VENTUS AC



VENTUS AC

Activated carbon is simple and effective technology for odor air filtration. Activated carbon filters use adsorption principle to eliminate the odor. The micro-pores makes the activated carbon surface huge and capable to catch (adsorb and bind) the different odor components. Dimensions of VENTUS AC filter are smaller than the VENTUS A-P for the same airstream. This minimum size allows to use for high capacity pumping stations and in any other application where there is not enough space. The granulated filter media needs changing occasionally after the carbon saturated. The saturated carb has to be changed and to be reactivated again. The activated carbon filters can be usable from 1 000 m³/h to 10 m³/h.

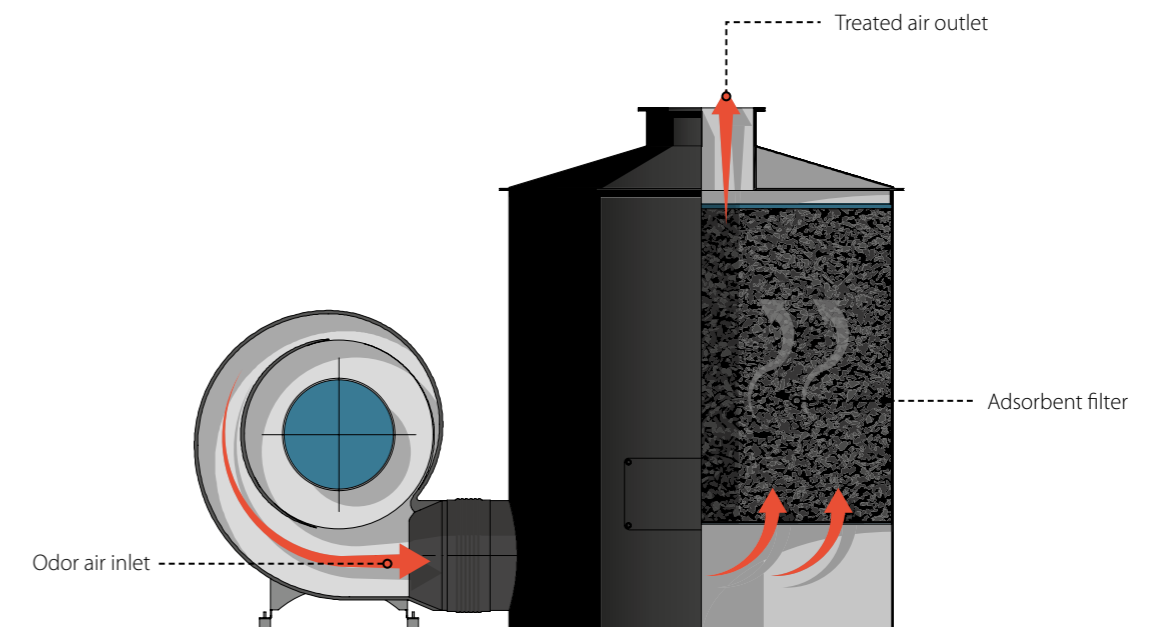
Application:

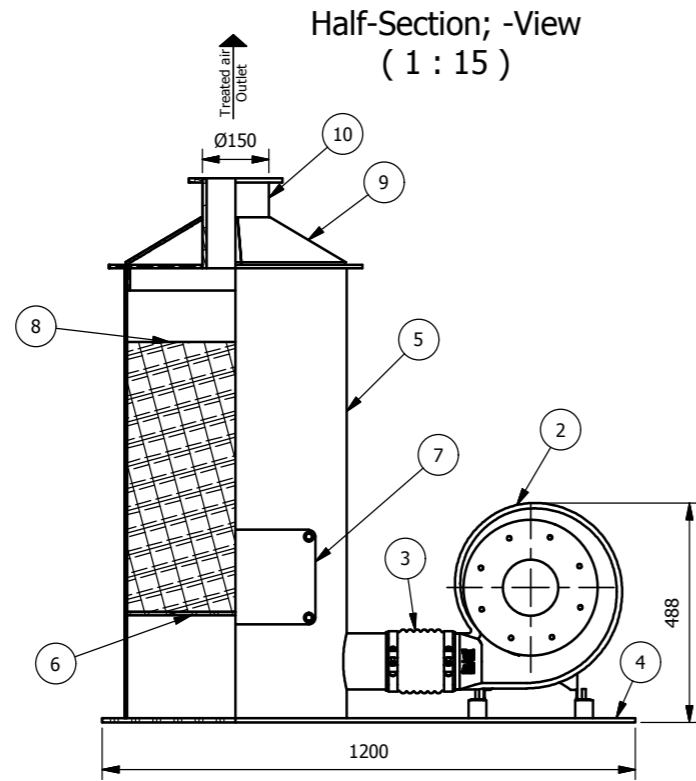
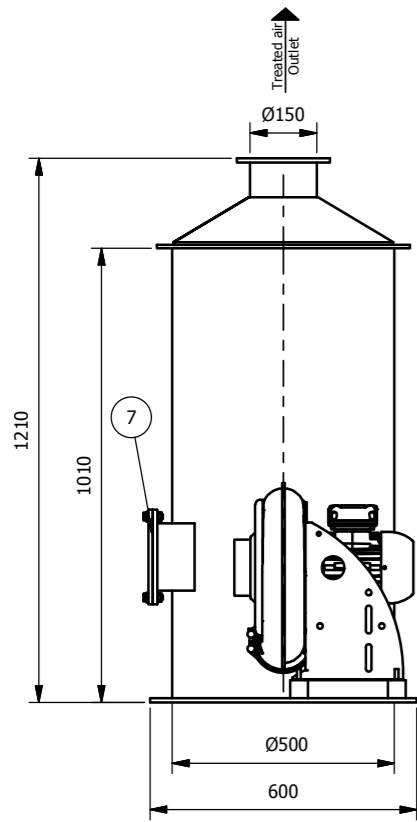
- industrial applications
- wastewater treatment plants
- pumping stations
- chemical processing



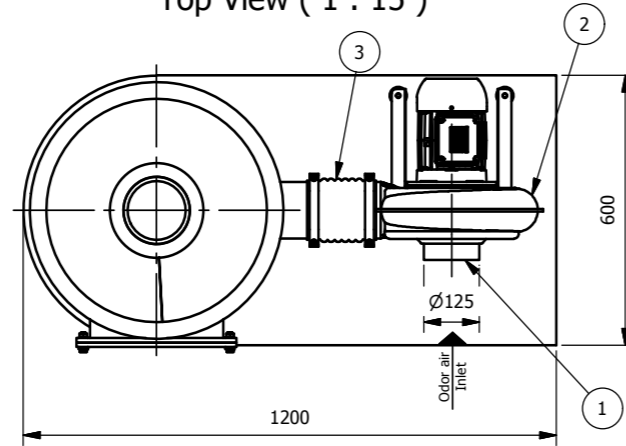
Dimensions:

Type	Cleaning capacity	Diemeter	Height	Volume of filter media	Connection size	Power cons.
	m ³ /h	mm	mm	liter	mm	kW
VENTUS AC 300	300	600	1210	122	125	0.37 kW
VENTUS AC 500	500	800	1410	232	160	0.55 kW
VENTUS AC 1000	1000	900	1310	334	200	0.68 kW
VENTUS AC 2500	2500	1200		993	315	0.76 kW
VENTUS AC 5000	5000	1400		1782	315	1.66 kW
VENTUS AC 8000	8000	1800	1910	2660	400	3.11 kW
VENTUS AC 10000	10000	2000	1910	3330	400	4.49 kW

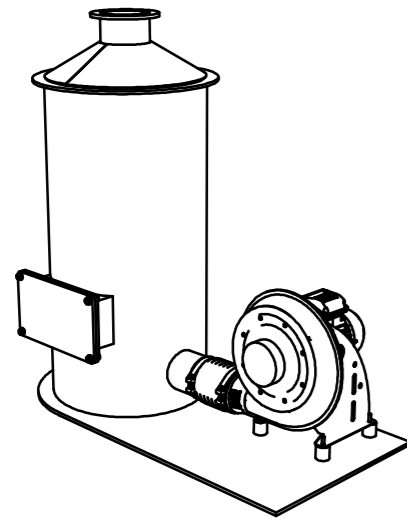




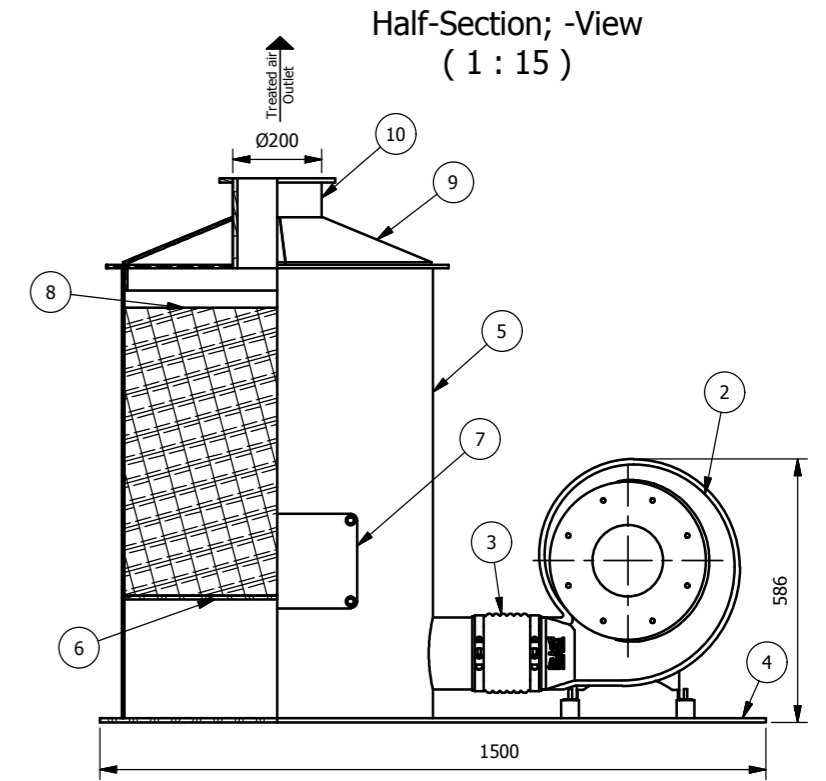
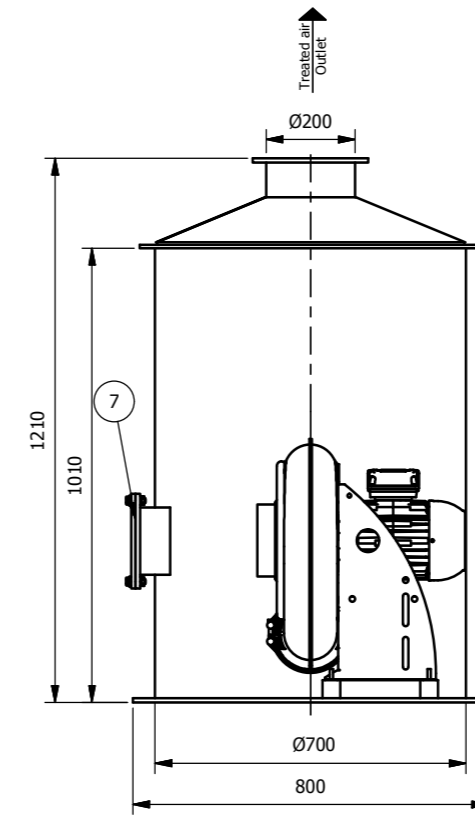
Top View (1 : 15)



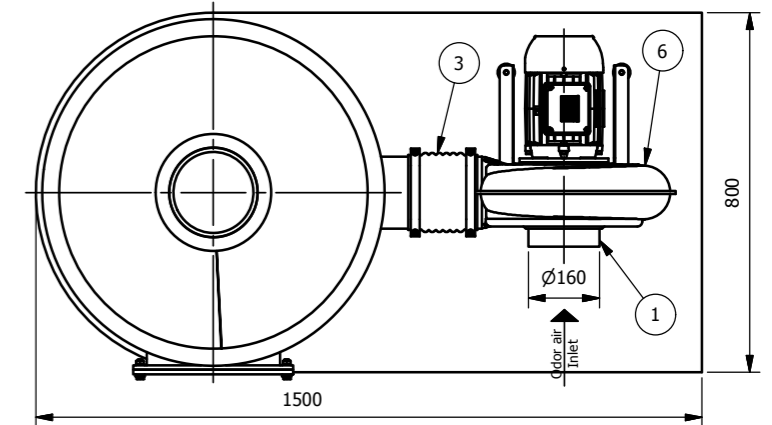
VENTUS AC-300
(1 : 20)



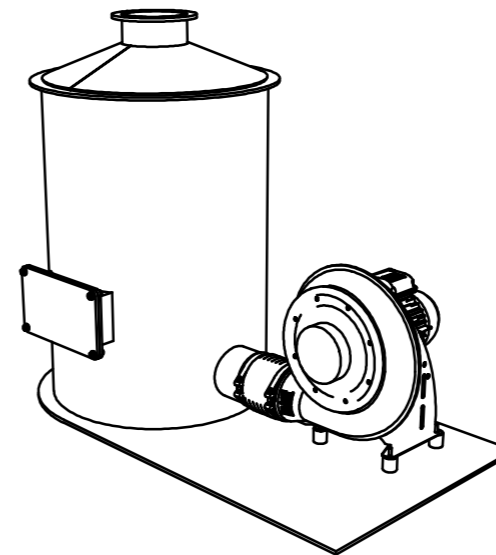
1. Odor air influent
2. Fan (CMVeco)
3. Clamping ring
4. Biofilter base plate
5. Biofilter body
6. Media holder plate
7. Service hole
8. Filter media (Granules Activated Carbon)
9. Cover
10. Purified air effluent



Top View (1 : 15)



VENTUS AC-500
(1 : 20)



1. Odor air influent
2. Fan (CMVeco)
3. Clamping ring
4. Biofilter base plate
5. Biofilter body
6. Media holder plate
7. Service hole
8. Filter media (Granules Activated Carbon)
9. Cover
10. Purified air effluent



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VENTUS AC Bidesodor system with granules activated carbon media

VENTUS AC-300

Info drawing

M= 1:15

Capacity:	300	m3/h
Efficiency:	90	%
Max. element weight:		kg
Total weight:		kg



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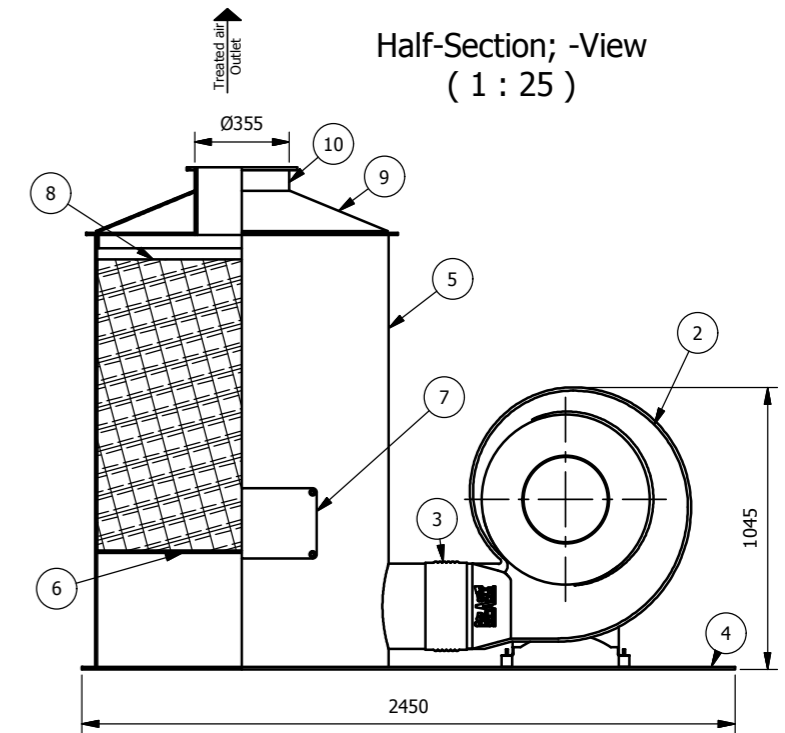
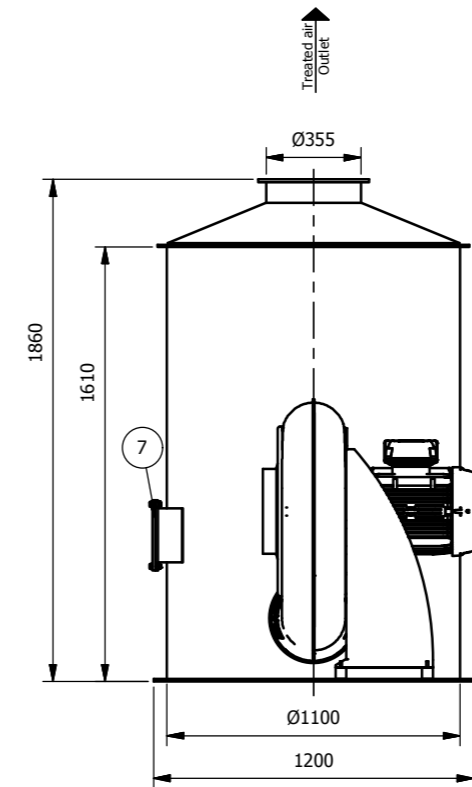
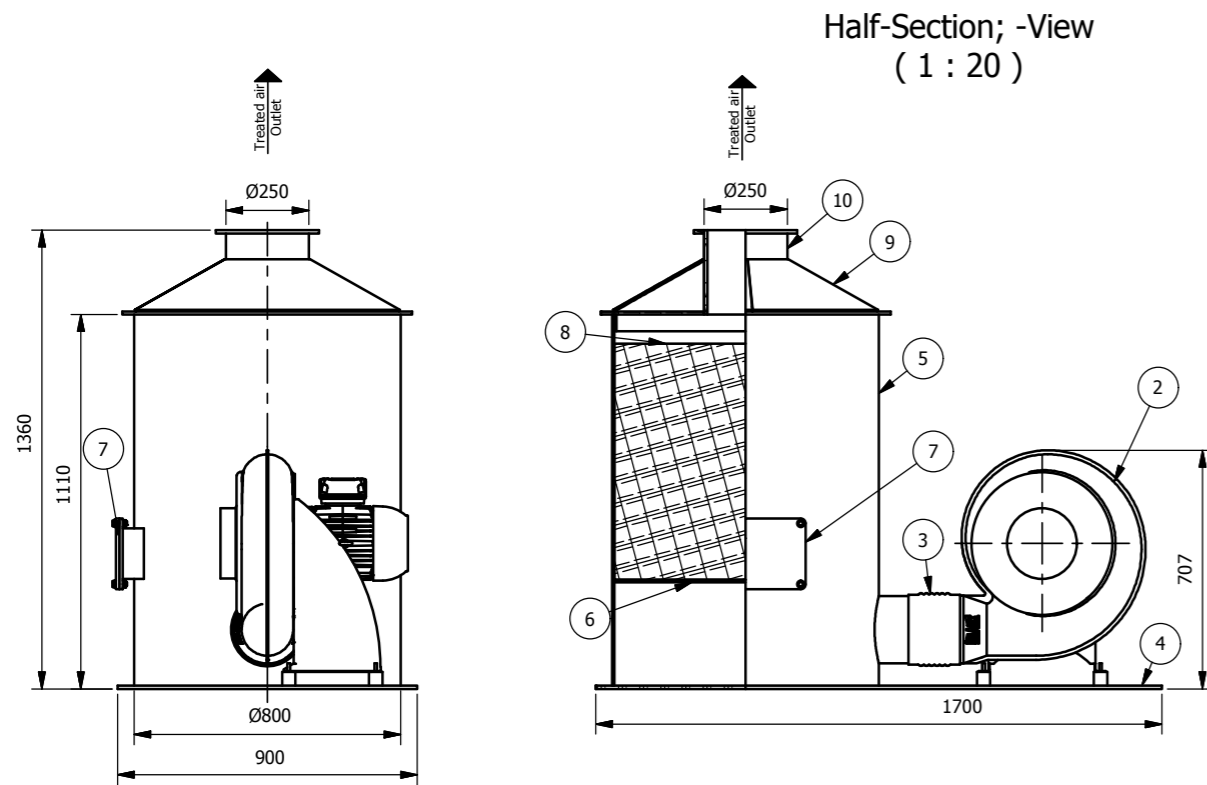
VENTUS AC Bidesodor system with granules activated carbon media

VENTUS AC-500

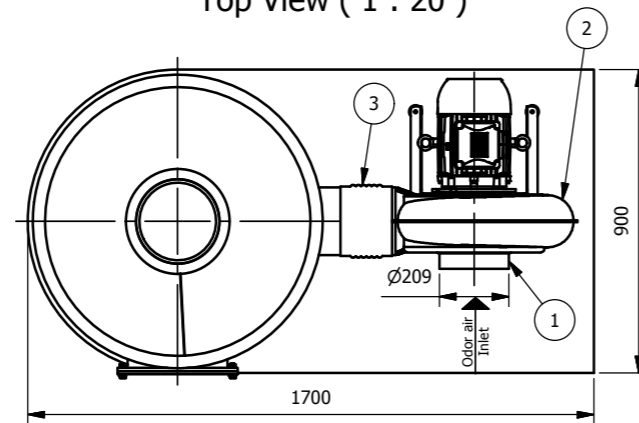
Info drawing

M= 1:15

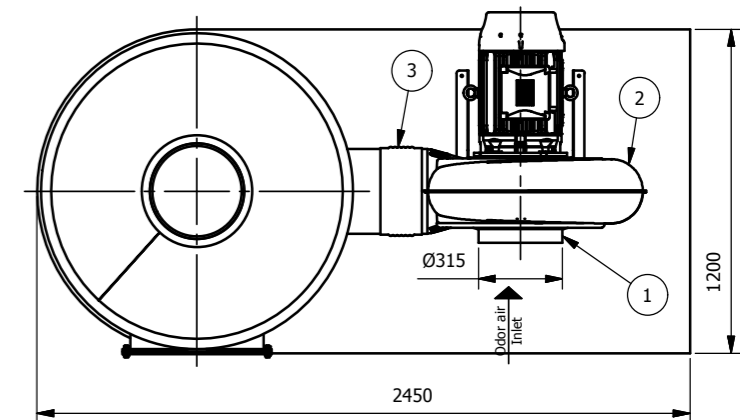
Capacity:	500	m3/h
Efficiency:	90	%
Max. element weight:		kg
Total weight:		kg



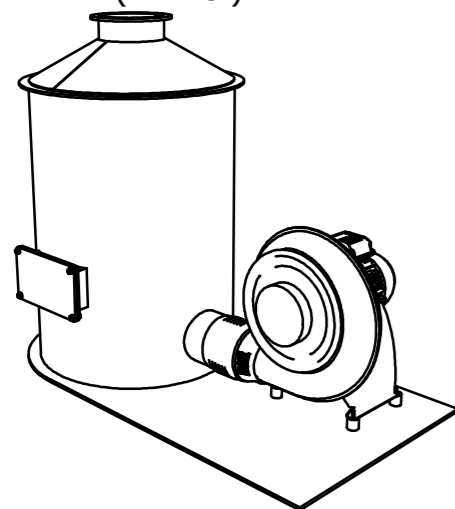
Top View (1 : 20)



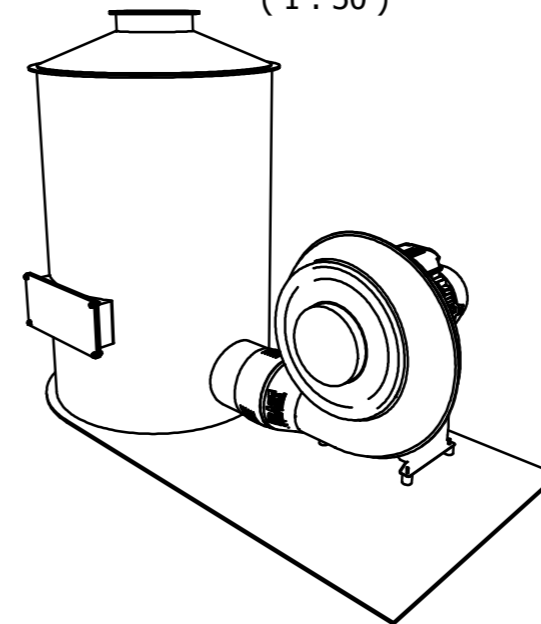
Top View (1 : 25)



VENTUS AC-1 000
(1 : 25)



VENTUS AC-2 500
(1 : 30)



1. Odor air influent
2. Fan (CMVeco)
3. Clamping ring
4. Biofilter base plate
5. Biofilter body
6. Media holder plate
7. Service hole
8. Filter media (Granules Activated Carbon)
9. Cover
10. Purified air effluent

1. Odor air influent
2. Fan (CMVeco)
3. Clamping ring
4. Biofilter base plate
5. Biofilter body
6. Media holder plate
7. Service hole
8. Filter media (Granules Activated Carbon)
9. Cover
10. Purified air effluent



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VENTUS AC Bodesodor system with granules activated carbon media

TYP: VENTUS AC-1 000

Info drawing

M= 1:20

Capacity:	1000	m ³ /h
Efficiency:	90	%
Max. element weight:		kg
Total weight:		kg



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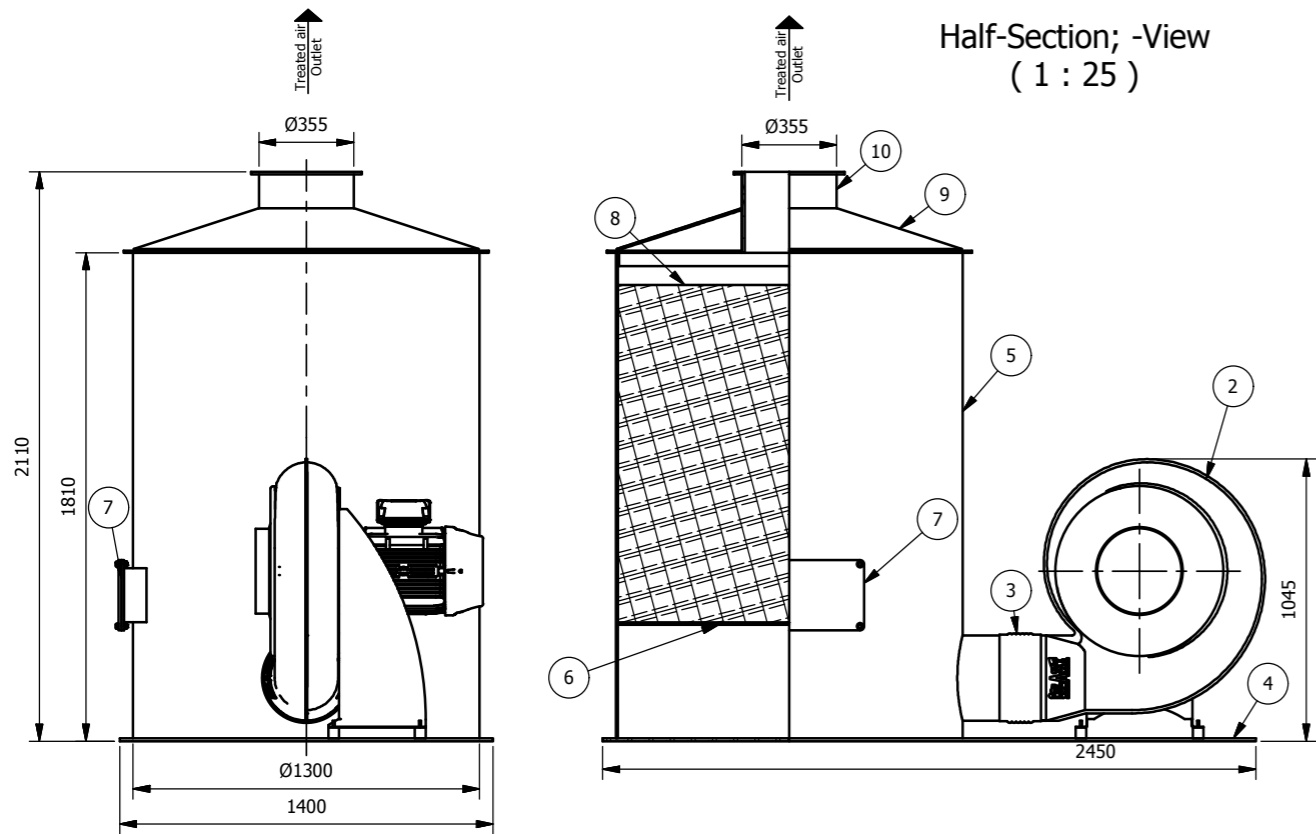
VENTUS AC Bodesodor system with granules activated carbon media

TYP: VENTUS AC-2 500

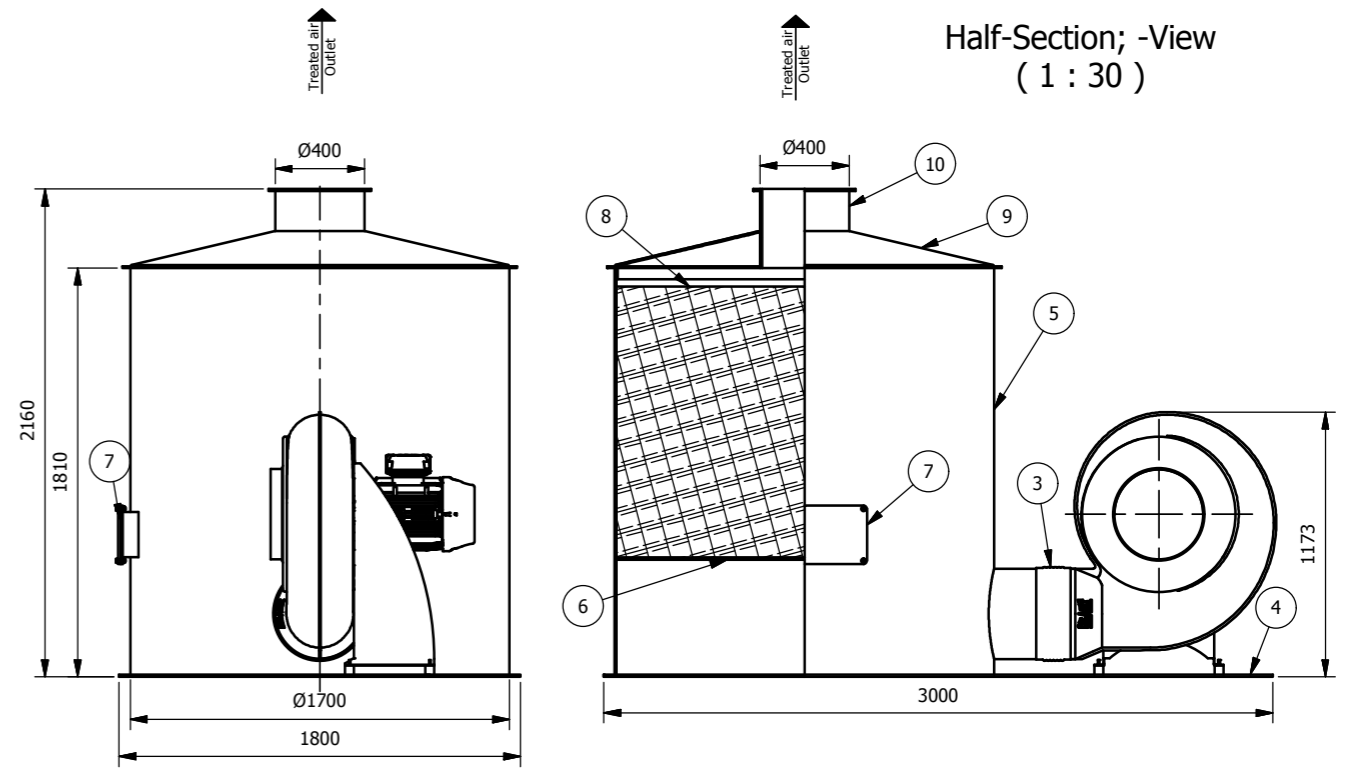
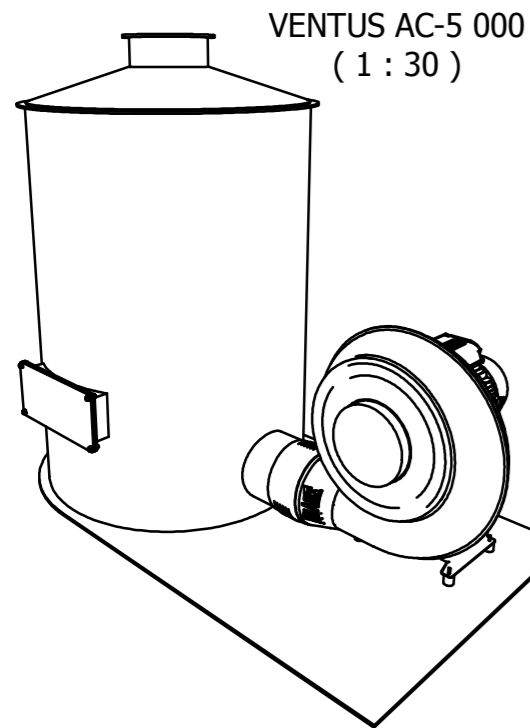
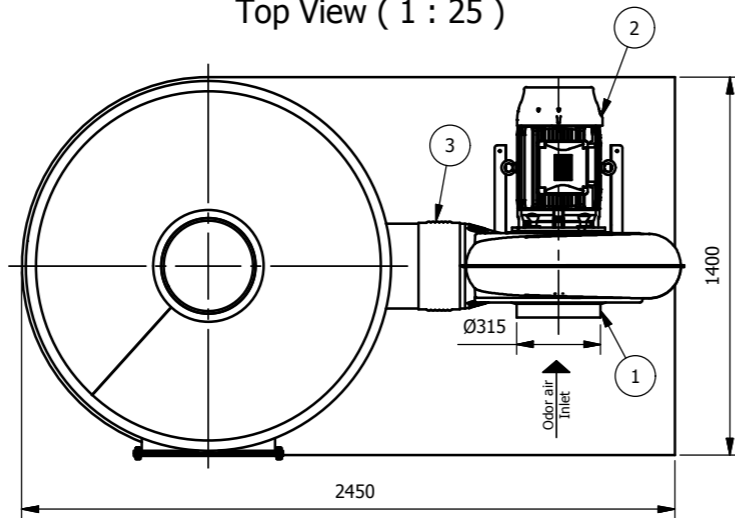
Info drawing

M= 1:25

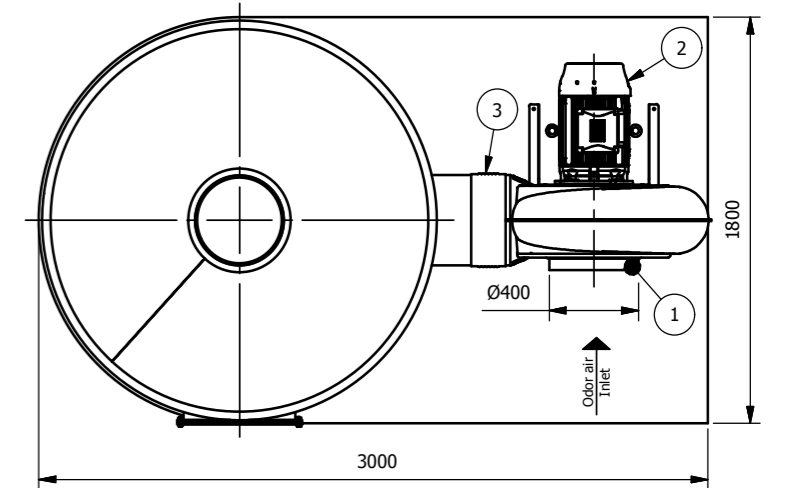
Capacity:	2500	m ³ /h
Efficiency:	90	%
Max. element weight:		kg
Total weight:		kg



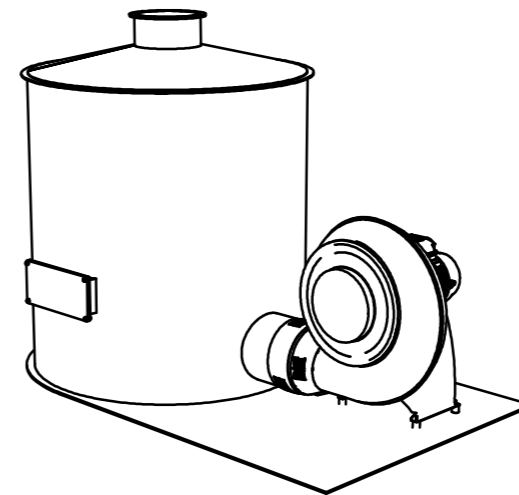
Top View (1 : 25)



Top View (1 : 30)



VENTUS AC-8 000
(1 : 40)



1. Odor air influent
2. Fan (CMVeCo)
3. Clamping ring
4. Biofilter base plate
5. Biofilter body
6. Media holder plate
7. Service hole
8. Filter media (Granules Activated Carbon)
9. Cover
10. Purified air effluent

1. Odor air influent
2. Fan (CMVeCo)
3. Clamping ring
4. Biofilter base plate
5. Biofilter body
6. Media holder plate
7. Service hole
8. Filter media (Granules Activated Carbon)
9. Cover
10. Purified air effluent



VENTUS AC Bodesodor system with granules activated carbon media

TYP: VENTUS AC-5 000

Info drawing

M= 1:25

Capacity:	5000	m3/h
Efficiency:	90	%
Max. element weight:		kg
Total weight:		kg

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VENTUS AC Bodesodor system with granules activated carbon media

TYP: VENTUS AC-8 000

Info drawing

M= 1:30

Capacity:	8000	m3/h
Efficiency:	90	%
Max. element weight:		kg
Total weight:		kg

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PURECO Air Treatment Systems

