Air cleaners

for mechanical processing
and the food industry

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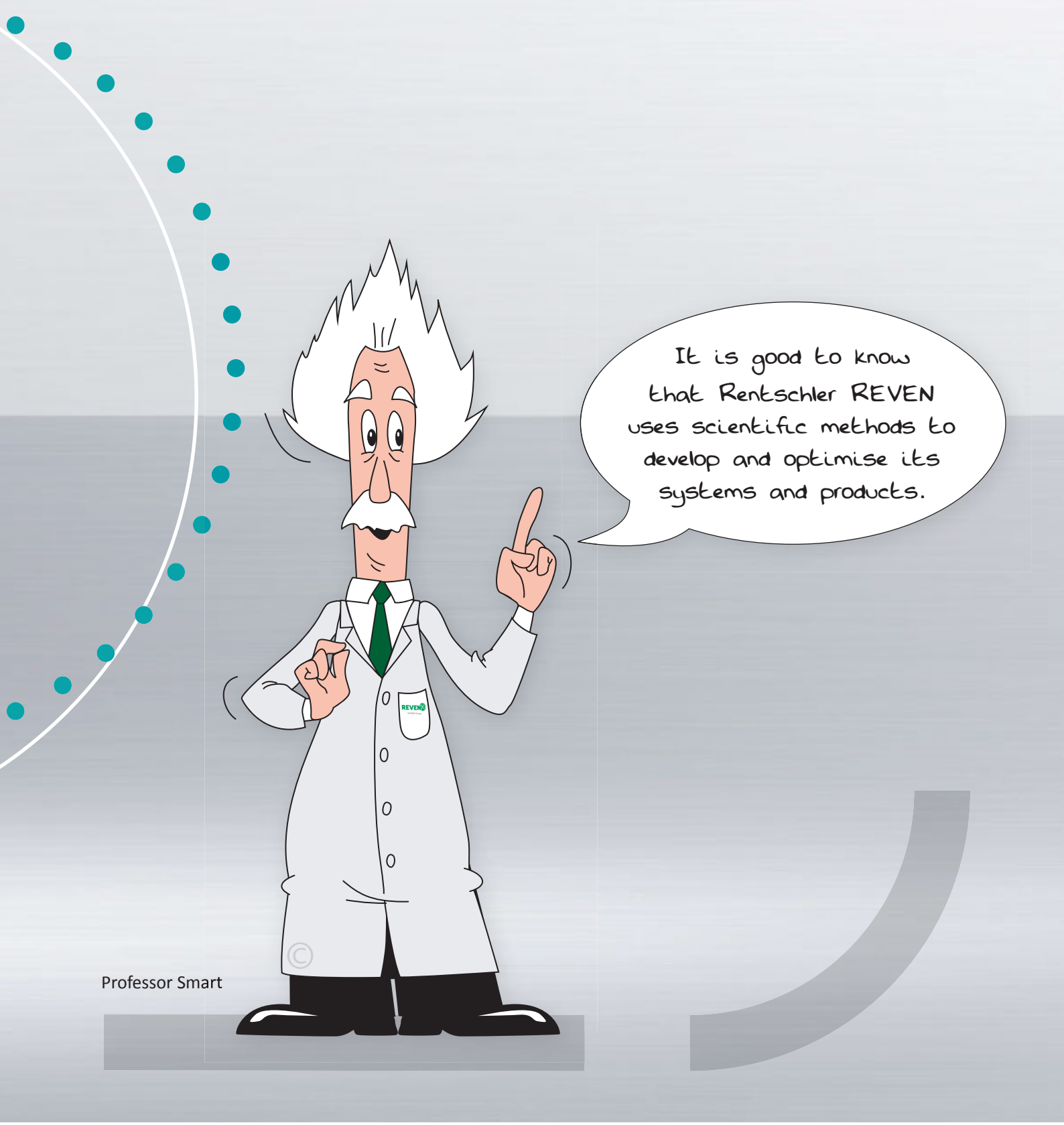

Professor Smart

Pure competence in air.

Our air cleaners guarantee:

- Higher productivity due to less downtime in your production!
- Higher quality due to constant ambient temperatures!
- Lower maintenance and cleaning costs due to improved air cleaning!
- Lower labour costs due to safer and more productive workplaces!
- Lower plant operating costs due to more efficient air cleaning!
- Lower consumption costs in your production processes due to recycling!
- Lower repair and maintenance costs of your production facilities due to highly efficient air cleaners!
- Considerably longer service life due to the use of 100 % rustproof stainless steel!
- Lower operating costs due to energy-saving air cleaners!

That is what the REVEN® brand and our products stand for and what I am wholeheartedly committed to.

Sven Rentschler

CEO and great-grandson of the company founder Gustav Rentschler

Vertrauenspreis der LüKK 2017
1. Platz
„Küchenlüftung“
verliehen durch die cci Dialog GmbH

INNOVATION BW Award Winner
Innovation Award Baden-Württemberg
Dr.-Rudolf-Eberle-Preis

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Contents

Contents

X-CYCLONE® Capture Systems

Air cleaners suitable for installation above production systems 132

X-CYCLONE® Ceiling Extractors

Air cleaners suitable for room-spanning installation 244

Sven Rentschler, CEO and greatgrandson of the company founder Gustav Rentschler

Clean air and a healthy working environment – the capture and separation of air pollutants is our core competence!

Welcome to Rentschler REVEN

REVEN = **RE**ntschler **VEN**tilation

Based on decades of experience in the field of air cleaning, Rentschler REVEN have developed the mechanical X-CYCLONE® separating system. Air pollutants such as vapour, mist and similar process waste gases are separated to the highest possible extent. The system works purely mechanical without any auxiliary energy. It is easy to clean and contains no disposable products that need to be replaced regularly. Operating and maintenance costs are therefore considerably lower than with conventional air cleaners!

Pure competence in air.

Thanks to our state-of-the-art ventilation technology, we create an agreeable and healthy working atmosphere in your commercial kitchen or your production shop.

TYPICAL AREAS OF APPLICATION FOR OUR AIR CLEANERS ARE:

- Food processing
- Production and machining processes in the mechanical engineering sector
- Commercial kitchens in restaurants, hotels and canteens
- Production processes in the oil and gas industries
- Lacquer application and coating processes
- Finishing processes in the textile industry

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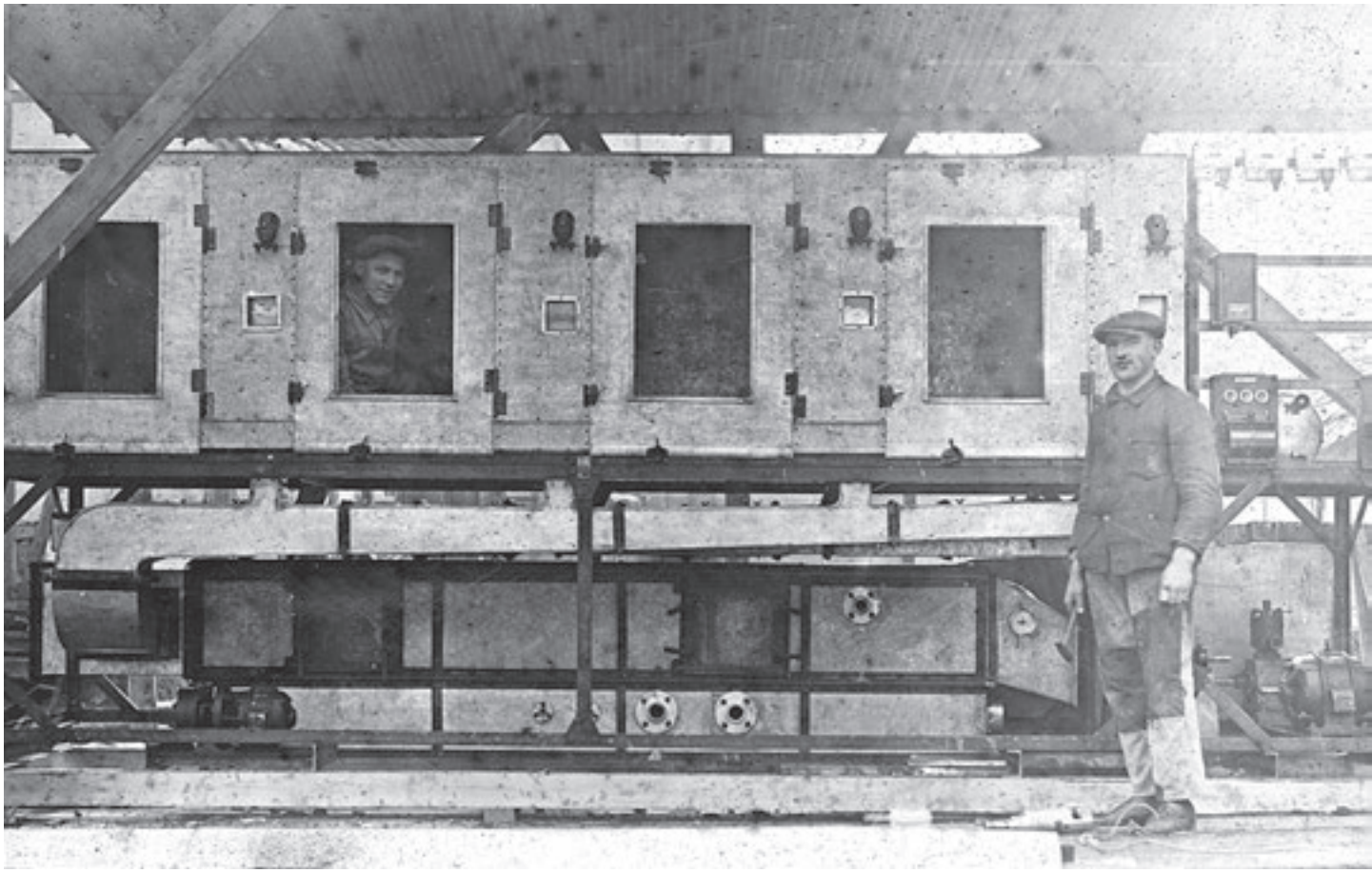
Rentschler REVEN since 1905



THE SKILLS AND KNOWLEDGE ACQUIRED DURING DECADES OF PLANT CONSTRUCTION FORMED THE BASIS FOR STATE-OF-THE-ART PRODUCTS THAT SET NEW STANDARDS.

The history of Rentschler REVEN began as early as 1905 when Gustav Rentschler, the great-grandfather of the present CEO Sven Rentschler, had the company Gustav Rentschler Flaschnerei und Apparatebau registered in the guild roll of the Swabian town of Sersheim. Even during the foundation phase, the company took up the construction of extraction apparatuses and systems for production facilities and workshops.

The family-owned company has remained loyal to this field of activity ever since, specialising in industrial air cleaning over the decades. The knowledge acquired in the field of air cleaning has grown continuously over the generations since then and is unique today.

Numerous internationally protected patents, brand names, design protection rights and technologies bear witness to more than a hundred years of company history and progress.

Milestones in the Company's History

1905 Gustav Rentschler founds the craft business "Flaschnerei und Apparatebau."

1985 Peter Rentschler focuses the business activities on environmental technology and air cleaning equipment for commercial kitchens and the food industry.

1990 The first patent is granted for the X-profile which becomes the basis of the X-CYCLONE® technology.

2001 The company starts developing its business branch for industrial equipment.

2012 A patent is granted for the fifth generation of the X-CYCLONE® separator with an efficiency improvement of 20 %.

5.

2013 The innovation prize of the Land Baden-Württemberg is awarded to Rentschler REVEN for the X-CYCLONE® technology.

INNOVATION BW 2013
Innovation Award Baden-Württemberg
Dr.-Rudolf-Eberle-Preis

2014 Seminars on air cleaning on a national and international level lead to high demand.

2015 The company develops international distribution capacities.

2016 Rentschler REVEN join the SCHAKO Group, one of the leading European company groups in the HVAC sector.

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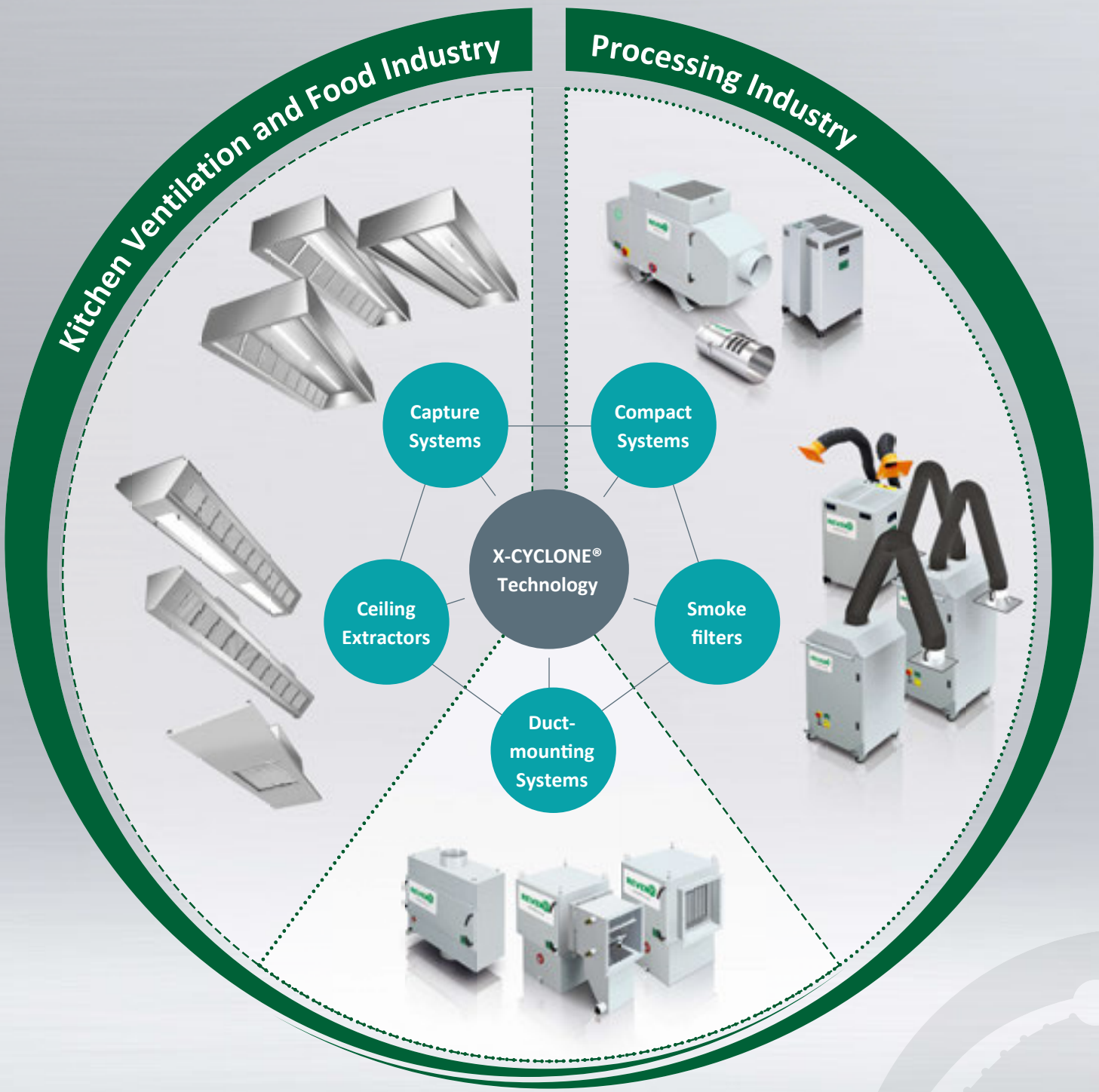
2017 The LÜKK (German refrigeration, ventilation and air-conditioning sector) Customer Confidence Price is awarded to Rentschler REVEN in the ventilation category by CCI Dialog GmbH.

Vertrauenspreis der LüKK 2017
1. Platz
„Küchenlüftung"
verliehen durch die cci Dialog GmbH

Product Range

Rentschler REVEN provide a broad product range (with more than 1,000 variants) and offer tailored solutions in addition to the standard equipment.



Trade Fairs, Seminars & Workshops

We are regularly represented at the ISH trade fair and present our latest technologies at the SCHAKO Group stand. Furthermore, we take part in smaller trade fairs at home and abroad.

With our seminars, we offer ventilation planners, plant managers and plant constructors a complex lecture programme and concentrated know-how on air pollution control in workshops, production halls and commercial kitchens.

In addition to this, we offer workshops to experience our technologies, systems and products in practice. Moreover, we offer training courses in our in-house seminar room.

Distribution

Our central factory in the heart of Baden-Württemberg serves our customers all over the world. We ensure perfect customer care by an international network of authorised Rentschler REVEN dealers and service points and our website offering information and documentation as well as our catalogue in twelve different languages.

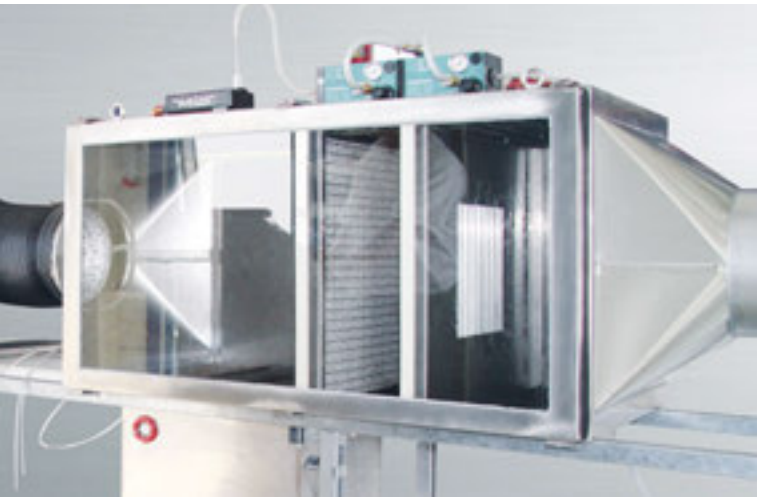
Further information

www.reven.de (Company)

Research & Development

All of our air cleaners are the fruit of decades of research and development. Our technicians and engineers use highly sophisticated measuring instruments, software and developer tools to foster improvement and optimisation. All our products pass through a development process of several years and we use the following facilities, systems and other equipment to support optimisation:

- Aerodynamic laboratory with scattered-light spectrometer system for precise and reliable measurement of particle concentrations and sizes.
- Fire exposure test stands for tests in accordance with DIN EN 16282, DIN 18869 and VDI 2052.
- Flame ionisation detector (FID) for the measurement of the total hydrocarbon content.
- Portable battery-backed laser photometer with scattered light measurement and data logger for real-time measurements of aerosol masses.
- Thermographic high-resolution camera systems suitable for flow analysis.
- Software systems for numerical flow mechanics calculations, the only way to analyse and understand airflows and use these findings for development.
- SolidWorks 3D-CAD systems for development and simulation.

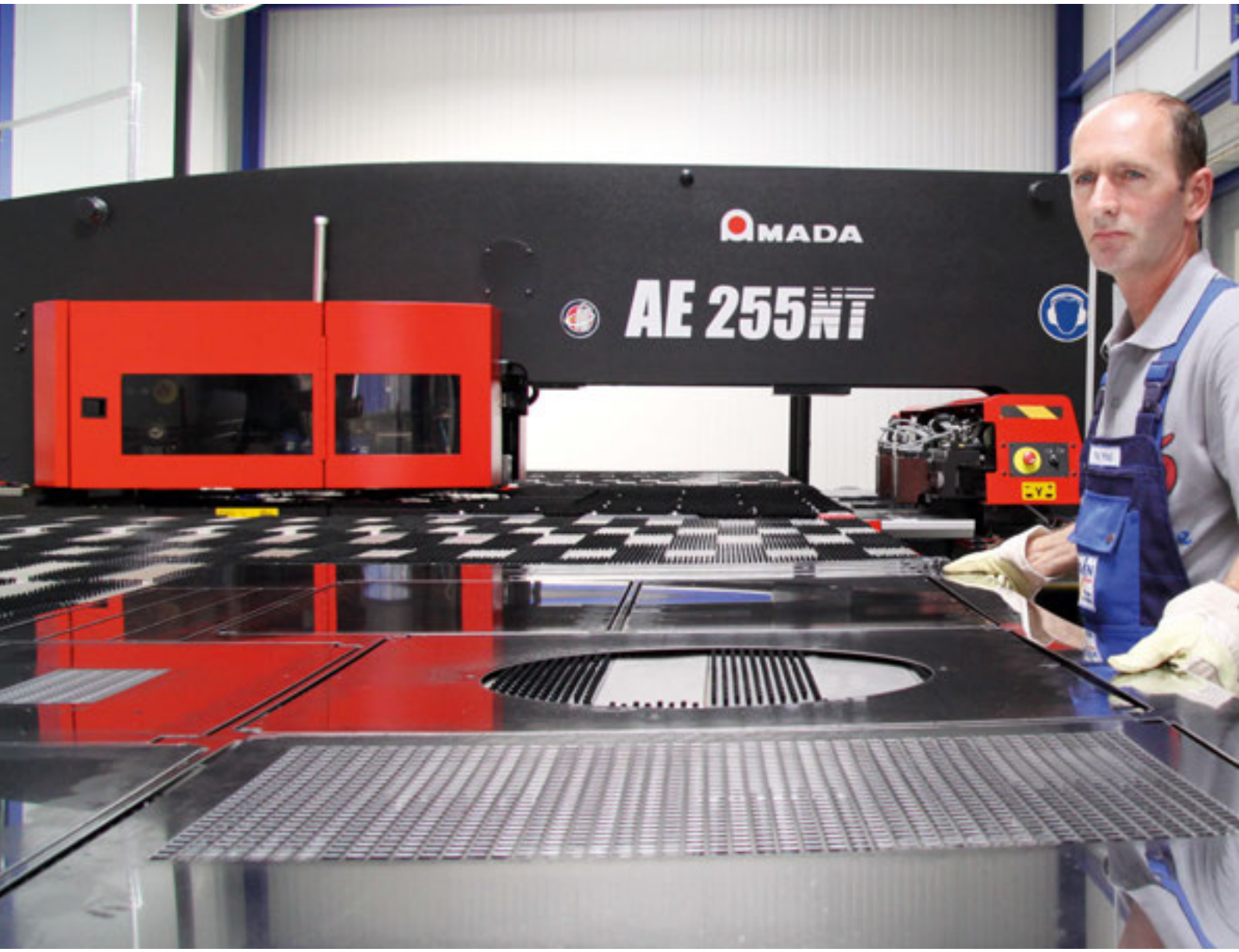


Production and High-rise Warehouse

Our production site is located in Sersheim in Baden-Württemberg, approximately 30 km north of Stuttgart.

We produce all of our air cleaners at this company site. In our automated and computer-controlled production, we process exclusively rustproof stainless steel and aluminium sheets. Our production processes and materials guarantee reproducible quality and fully corrosion-proof products.

Automated processing machines and a high-rise warehouse ensure very short delivery periods, because we keep 80 % of our air cleaner product range in stock!



EDELSTAHL Rostfrei

Designed, constructed and produced in Germany · MADE BY REVEN · Since 1905

References

Processing Industry

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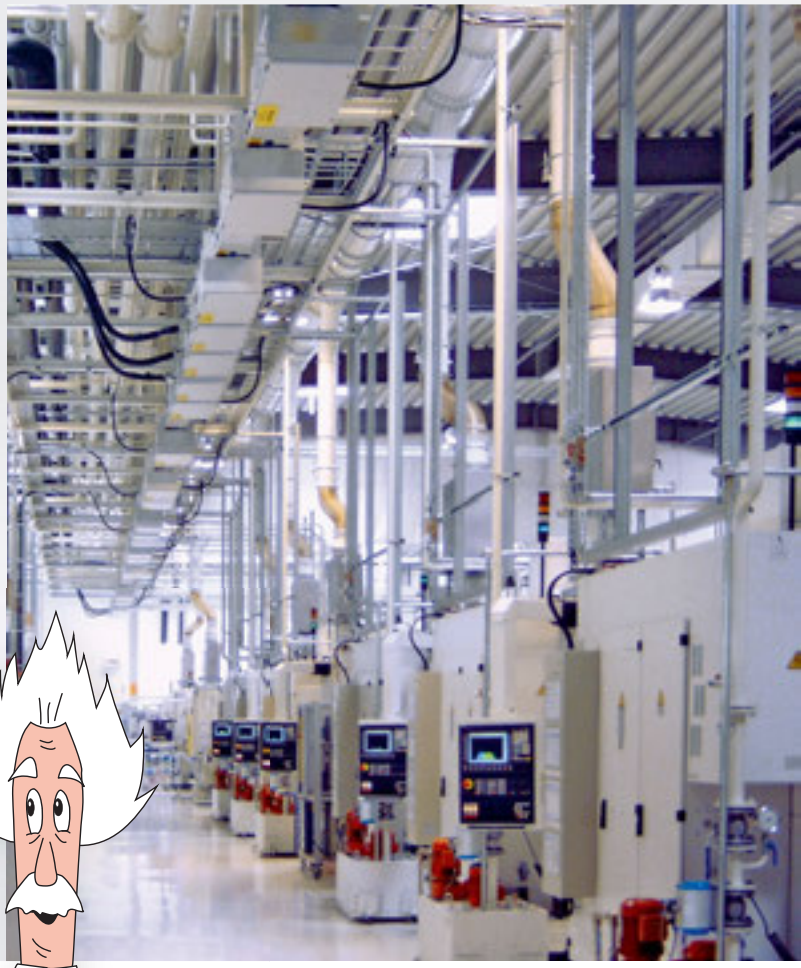

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References

Food Industry

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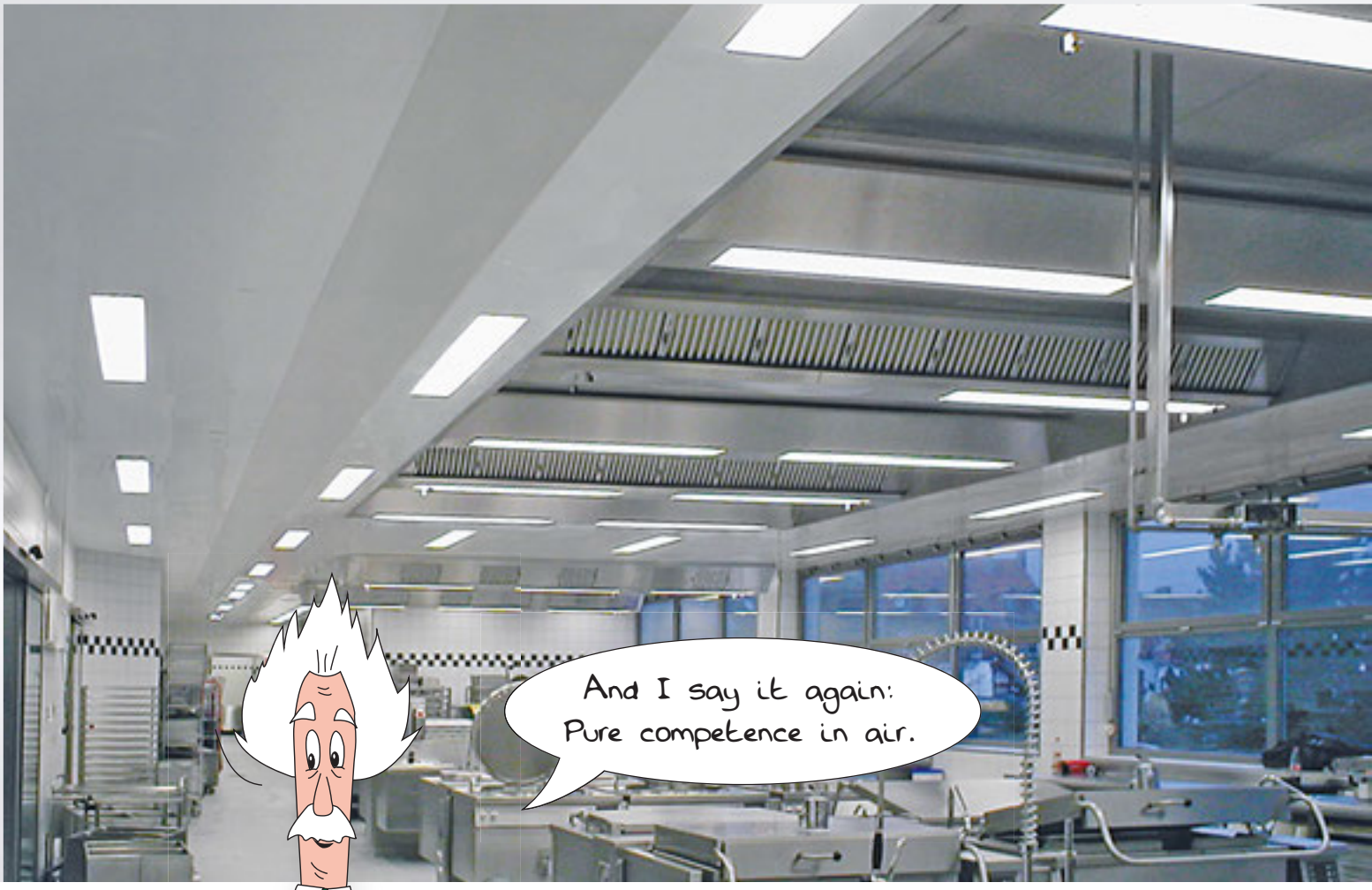

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Technologies

X-CYCLONE®, REVEN® and REVEX® Technologies

X-CYCLONE® technology protected by international PCT patent rights, based on further improvement of the arrow geometry!

X-CYCLONE® technology was developed for the separation of air-borne substances, such as aerosols, fluid and spraying mists and fine dusts that are released during manufacturing and finishing processes in the food processing and manufacturing industry.

Thanks to decades of continuous research and development, we succeeded in presenting the fifth product generation of the X-CYCLONE® air cleaner to the world in 2012.

The new air cleaner is characterised by a new arrow geometry and an increase in separating efficiency of 20 %.

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X-CYCLONE® – the Heart Piece of the REVEN® Product Line

Made entirely of stainless steel

Stainless steel frame fitted with aluminium profile sections

The X-CYCLONE® system is available in two versions:

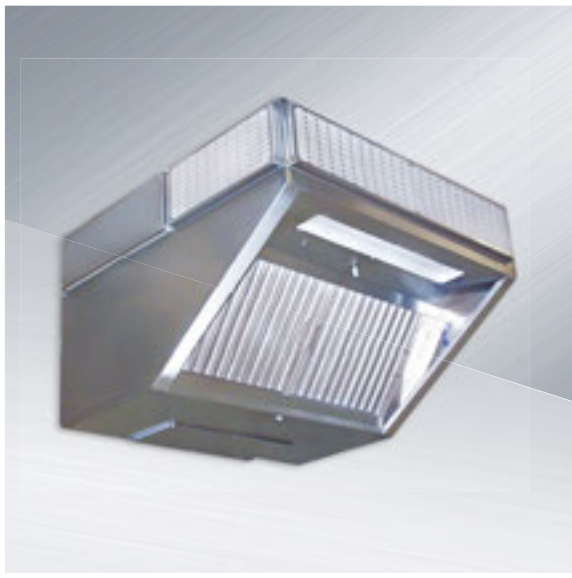
- Made entirely of stainless steel for food industry
- With a frame of rustproof stainless steel fitted with profile sections of seawater-resistant aluminium alloy for processing industry

In practice, the X-CYCLONE® system consists of rectangular elements with a thickness of 50 mm. The correct designation is X-CYCLONE® basic aerosol separator element.

Rentschler REVEN Grants a Life-long Guarantee on the X-CYCLONE® Basic Elements.

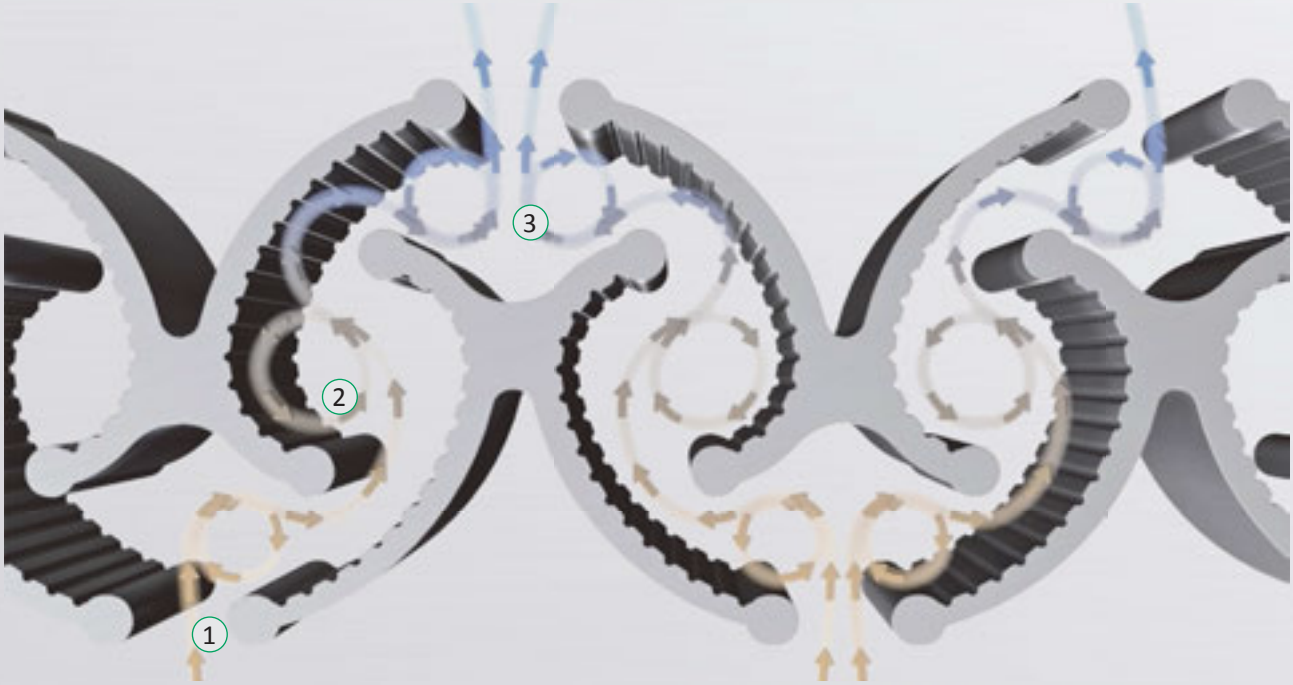
The X-CYCLONE® basic element is self-cleaning and needs no maintenance! The aerosols separated in the basic element run down as fluid mass along the X-CYCLONE® profile sections. As it runs off, the liquid washes away solids that accumulate on the profile surfaces of the basic element.

Disposable products that must be replaced at regular intervals are not required. Operation and maintenance are therefore far more cost efficient than with conventional air cleaners.



Functional Description of the Separation in the X-CYCLONE®

Separation in the X-CYCLONE® basic aerosol separator element takes place in four stages:



STAGE 1

The extracted air polluted by aerosols flows into the X-CYCLONE® basic element. When entering the element (1), the airflow is accelerated considerably. The acceleration produces a first separation.

STAGE 2

The highly accelerated airflow starts swirling (2) inside the profile sections. The rotational vortex flow ejects airborne aerosols.

STAGE 3

The rotational vortex flows collide with non-rotational airflows at the air outlet (3) of the X-CYCLONE® basic aerosol separator element, thus resulting in an agglomeration and further separation of smaller aerosol particles.

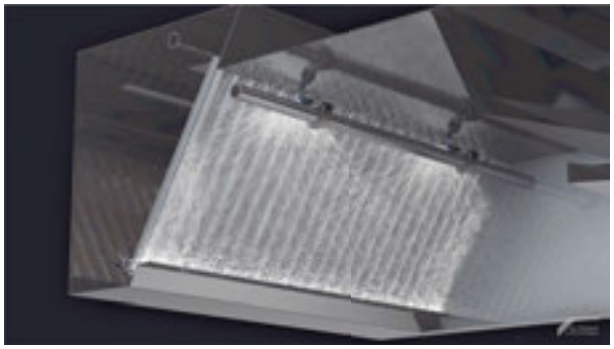
STAGE 4

The aerosols separated in the X-CYCLONE® basic aerosol separator element accumulate on the profile surfaces and run down as fluid mass (4) to the bottom of the element.

Fine dust is separated in the same way. The dust particles do not run down like the fluids (4), however.

A REVEX® system must therefore be integrated if dry and sticky fine dusts are separated. The REVEX® system is based on a patented spraying technology that fulfils two functions:

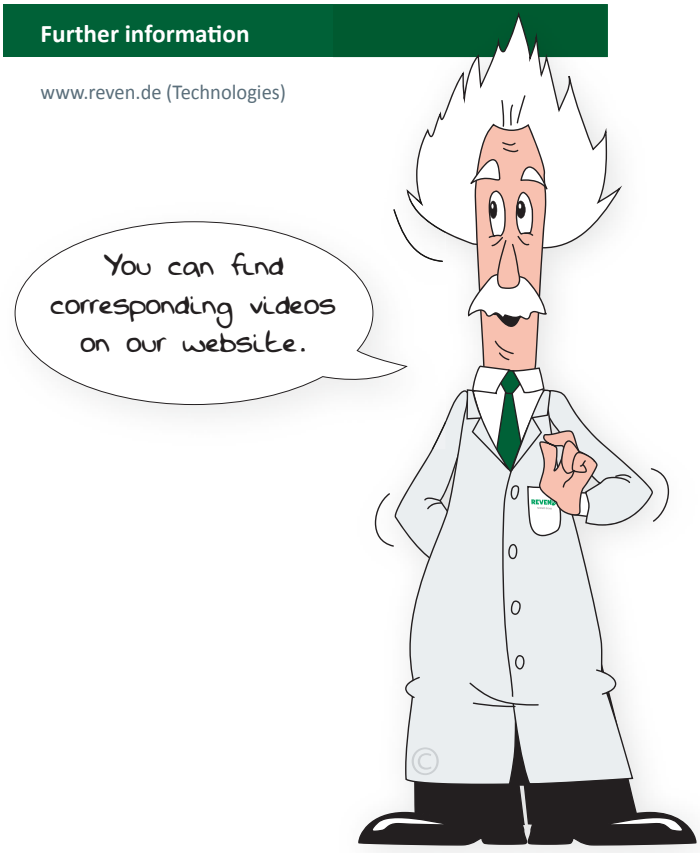
A) It cleans the profile surfaces of the X-CYCLONE® basic aerosol separator element automatically and



B) cleans the air in the same way as an air washer in the chemical industry. The continuous air washing by the REVEX® spraying system washes even the smallest aerosols and harmful gases out of the airflow. The illustration shows a compact X-CYCLONE® air cleaner of the CR series with an integrated REVEX® spraying system ensuring automatic cleaning and continuous air washing.

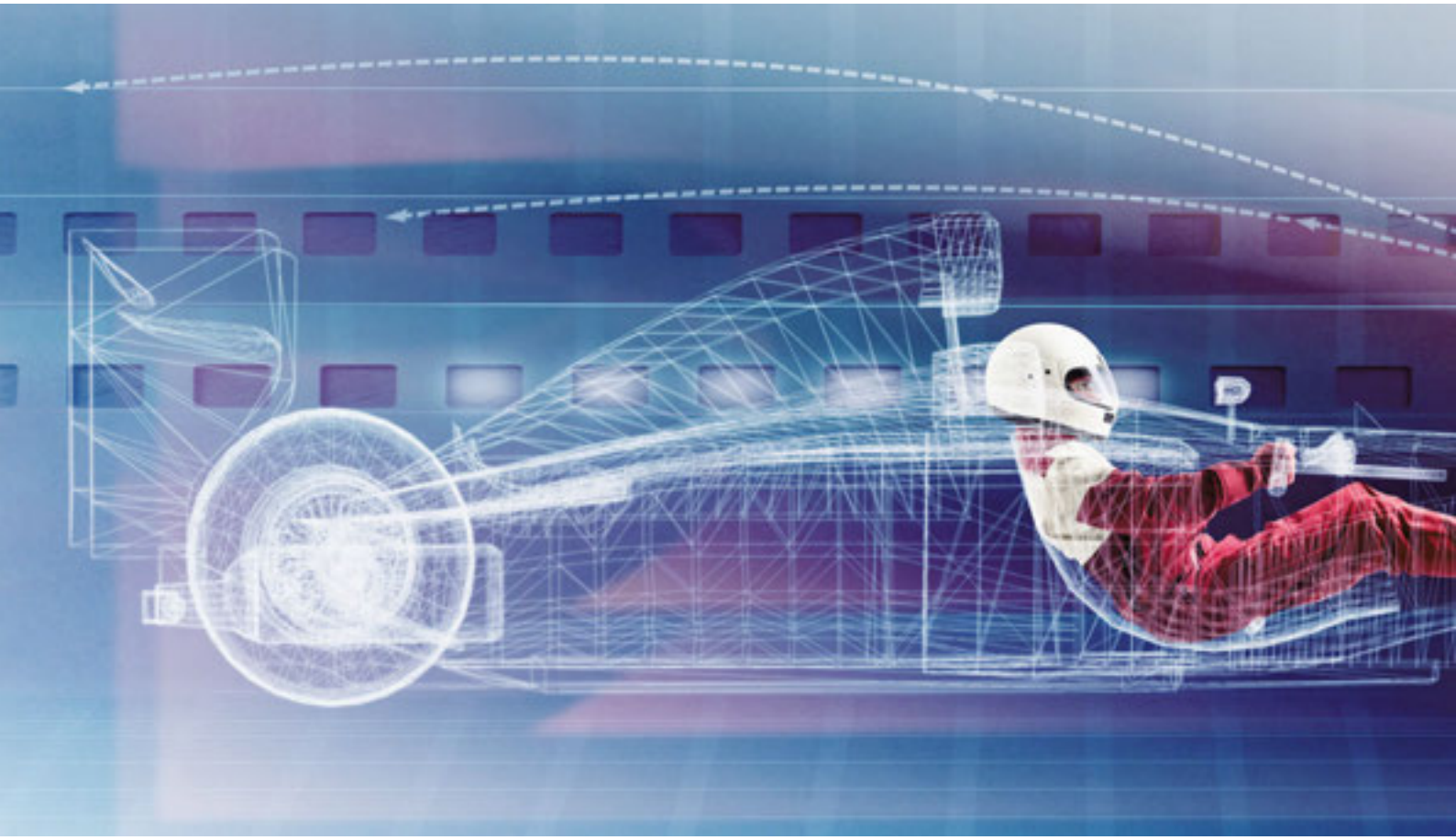
Further information

www.reven.de (Technologies)



CFD-Simulation

For years, the X-CYCLONE® and REVEN® systems have been continuously analysed and progressively improved with the help of CFD!



Airflows are complex and cannot be mapped by analytical means. The only way to examine and understand these flows and gain useful knowledge for the improvement of processes and products is their simulation with computational fluid dynamics (CFD).

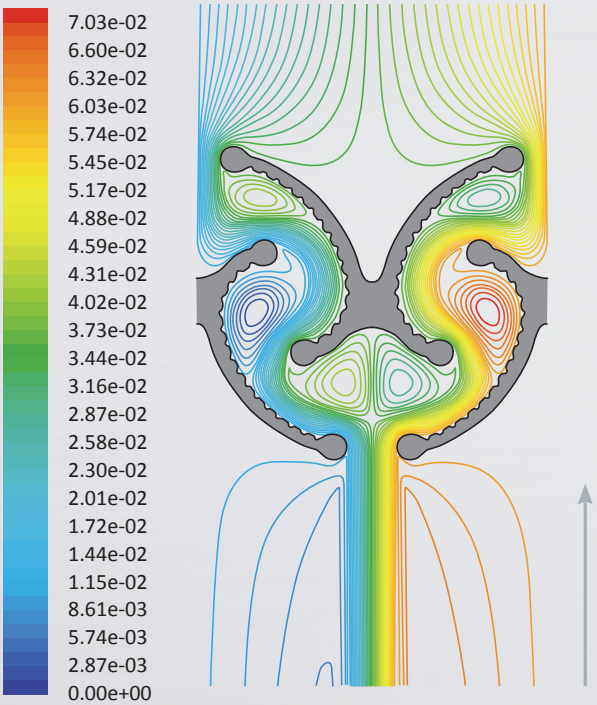
Even highly complex airflows at the front and back spoilers of modern Formula One racing cars are analysed and optimised by today's racing teams with the help of CFD simulation.
The airflows outside and inside the chassis of a Formula One racing car, an air cleaner or an air-induction capture hood are decisive for perfect and efficient functioning.
CFD simulation maps these important invisible processes in their entire complexity with sound physical and mathematical models. The great benefit in comparison to experimental methods and measurements lies in the fact that CFD maps all physical entities together in their interaction and provides evidence of the functioning instead of delivering values merely for selected points.

This is the reason why we have used CFD simulation for years to analyse and improve our equipment.

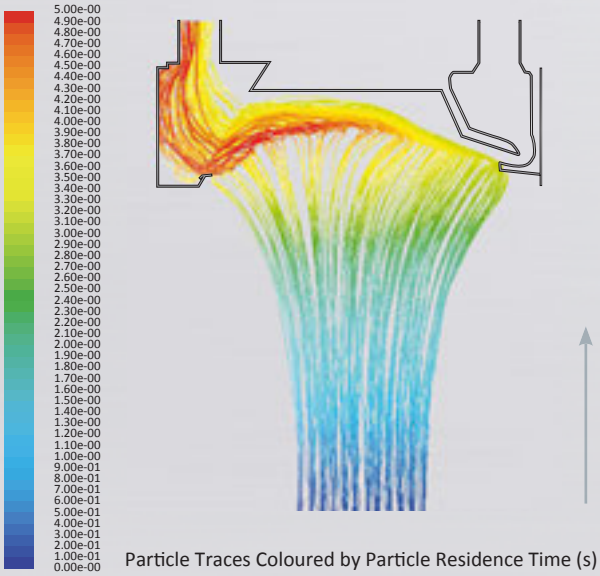
The X-CYCLONE® air-cleaning system and REVEN® air-induction system were both developed with the help of CFD simulation!

Further information

www.reven.de (Technologies → for fume capture)



Contours of Stream Function (kg/s)
The different particle sizes are identified by different colours.



Particle Traces Coloured by Particle Residence Time (s)

RSC and XSC

Computer-controlled management of the air supply and exhaust as well as of the extraction power.

Technology for automatic control

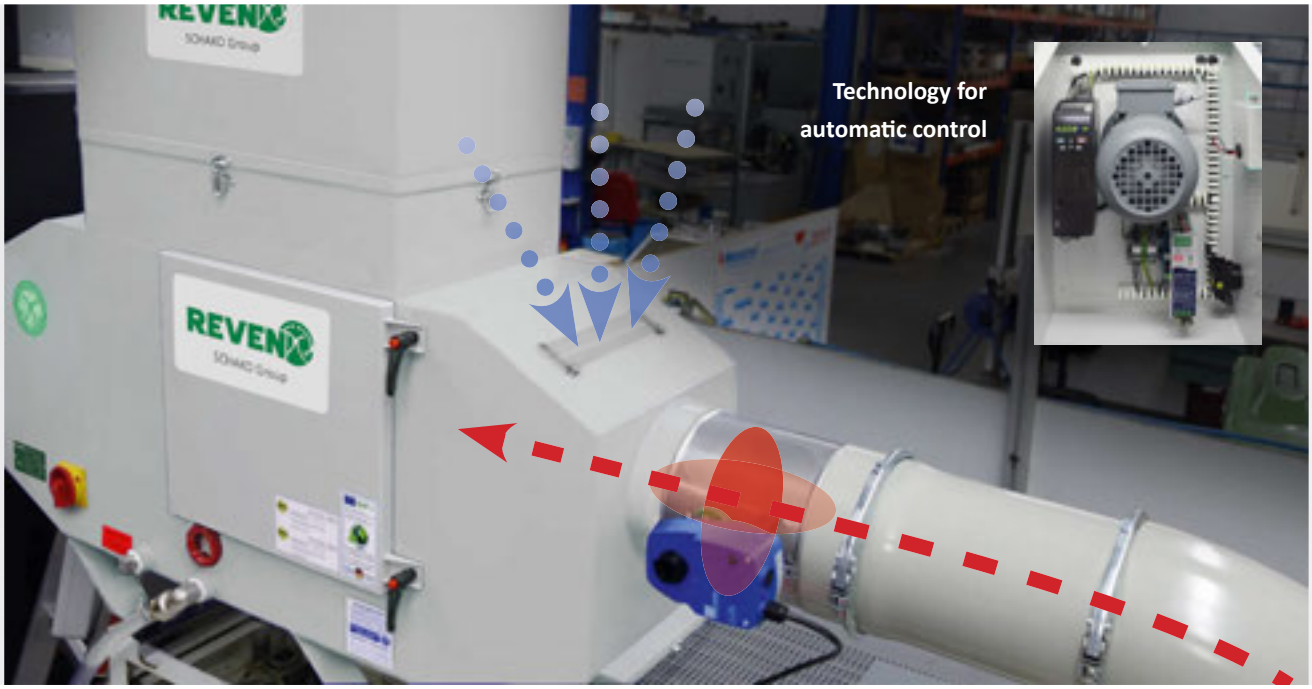
RSC – REVEN® SPEED CONTROL

To improve the economic efficiency of ventilation systems in commercial kitchens, Rentschler REVEN offer the intelligent automatic control system RSC. The system adjusts the speed of the air supply and exhaust fans continuously to the cooking activities, as required by the innovative Industry 4.0 concept.

The temperature and humidity sensors are designed for operation in commercial kitchens and can detect the cooking activity. The controller increases or decreases the air supply and extraction in accordance with the requirements. At the same time, the required air volumes are distributed over the respective cooking zones via air dampers. The sensor-driven control allows a reduction of energy consumption costs of up to 50 % and extends the service life of the air cleaners fitted downstream. Moreover, draught is avoided.

Further information

www.reven.de (Technologies → for adjustment and control)



XSC – X-CYCLONE® SPEED CONTROL

As an alternative to the conventional on/off control, Rentschler REVEN offer the digital power controller XSC in accordance with the innovative Industry 4.0 concept. The sensors measure the processing activity on the machine tool. An intelligent control system with microprocessor ensures the continuous control of the extraction power via air dampers and a frequency converter (available on option). The aerosol separator communicates with the machine to be extracted. The continuous automatic control cuts energy consumption by half and increases the separating rates by up to 50 % thanks to the patented Venturi ventilation and condensation system. In addition to this, the system allows the extension of the service intervals and increases the service life of the filters.

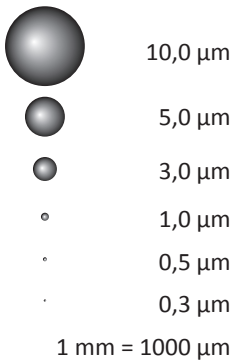
Further information

www.reven.de (Technologies → for adjustment and control)

Workplace Exposure Limits

Clean air for workers in industry

In food processing as well as machining processes on machine tools, high concentrations of PM10 aerosols are released.
PM10 aerosols are airborne particles with a diameter of less than 10 µm.
The comparison with a human hair illustrates the difference in size between a five-micrometer particle and a human hair.
PM10 particles may occur in very high concentrations in certain processes. An air volume of a thousand cubic metres might contain PM10 concentrations of up to 500 grams.



The WELs for air pollution in the processing industry differ considerably from country to country. The same applies to the verification and control of compliance with these limits. Many studies have revealed in the meantime that even outdoor air pollution in cities has a decisive influence on the health and mortality rate of exposed people. For this reason, Rentschler REVEN bases the design and dimensioning of its equipment on the far more stringent outdoor exposure limits adopted in the metropolises of the world. In many large cities, the maximum permitted concentration of fine dust is 50 micrograms per cubic metre of air. Rentschler REVEN is committed to the following quality goal: the air quality demanded for people in large cities and the limit values that apply there must also be achieved for the industrial workers.

The illustration shows the city centre of Brussels. The air in industrial factories must comply with the same standards of purity!

You should also take note of the interview with our CEO Sven Rentschler published in Germany's leading mechanical engineering magazine "maschine + werkzeug", edition 10/2011, page 72.

Rentschler REVEN technology for healthy air at workplaces

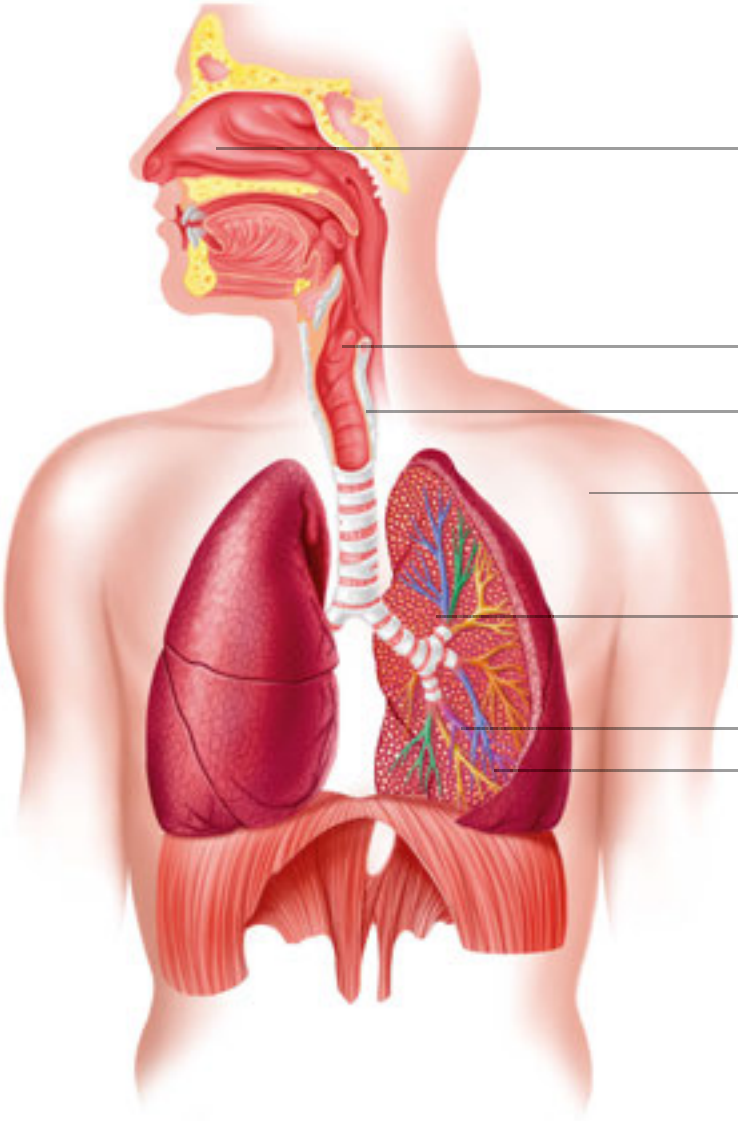
X-CYCLONE® in Compliance with Protective Regulations

Protection of personnel and machines

BREATHING
gases, vapours, dusts, aerosols

SWALLOWING
dusts and fluids

SKIN RESORPTION
dusts and fluids



Scientific research proved that fine dust and airborne aerosols with a droplet diameter of less than 5.0 µm constitute an increased health hazard to exposed personnel. When breathed in, the particles enter the lungs and can cause severe respiratory ailments such as asthma or pulmonary fibrosis. Fine particles are also risk factors for various cancer types. The fine particles do not only enter the body via the respiratory tract, they can also be ingested via the oesophagus or absorbed by the skin.

Possible harm to sensitive plant and machinery, buildings and the environment should not be forgotten either.

Interview with Sven Rentschler

Excerpt on the topic of WELs

What are the limits of pollutant concentrations in air treated with air cleaners?

The fine dust pollution in the outside air has been a matter of discussion for several years now. Vehicle and industry emissions are the focus of attention. The term ‘fine dust’ refers to the mass of all particles with a diameter of less than 10 micrometres included in the total dust quantity. According to the findings of the World Health Organisation, respiratory and cardiovascular ailments increase with exposure to high concentrations of these fine particles. In order to ensure health protection, exposure limits for out-

side air concentrations have been introduced by the authorities. Since 2005, a limiting value for daily exposure of 50 micrograms per cubic metre of air has been adopted throughout Europe. In the wake of this regulation, the badge system for urban traffic was one of the measures introduced in Germany.

And which exposure limits apply at the workplace?

The permissible air pollution WEL is 10 milligrams per cubic metre for cooling lubricant vapours and aerosols with a flash point above 100 degrees Celsius that are emitted during metal processing. The same exposure limit applies to processing machines with a minimum lubrication system. This WEL is two hundred times higher than the limit for outdoor air pollution!

Is fine dust always the same?

Fine dust in city traffic pollution is certainly not the same as that generated on processing machines. The latter is not fine dust in the traditional sense. It consists of cooling lubricant particles that are emitted during machining processes. However, those cooling lubricant vapours and aerosols are very similar to fine dust with regard to the particle sizes and the health hazards involved. With a diameter of less than 10 micrometres, these cooling lubricant particles enter the vascular system via the lungs. They are therefore considered particularly harmful. Even though several studies have proven that a fine dust load of 50 micrograms in the outdoor air measurably reduces the life expectancy of exposed people, we still allow processing machine operators to be exposed to indoor levels that are 200 times higher. I can hardly understand that. These regulations are not consistent.

Is there only a health risk in the immediate proximity of the machine?

No. In metal processing workshops, the indoor air is extracted frequently, cleaned and returned to the workshop. In our experience, many of these extraction systems achieve a filtering performance of only two milligrams of cooling lubricant vapours and aerosols per cubic metre of cleaned air. The concentration of pollutants imposed on the operators is still 40 times higher than the permissible limit concentration for outdoor air. Professional associations should take the matter in hand without delay and update and harmonise the WEL regulations to a reasonable level.

You also conduct measurements in companies. What are your findings there?

The total bandwidth of air pollution can be found, from the proper manufacturing company with clinically clean workplace air to factories where the WEL of 10 milligrams is exceeded by far. The processing machines may have the CE label applied to them, but they can still be put into operation without an efficient filter because many manufacturers offer the filters as an optional extra. I cannot understand that.

Are there positive examples too?

Yes, of course. Groups of companies increasingly adopt their own standards and apply them to their sites all over the world. Volkswagen, for instance, maintains a very high level of air purity in their factories. I also know that GM and Ford have internal guidelines that go far beyond government regulations.

Interview in Germany's leading mechanical engineering magazine "maschine + werkzeug", edition 08/2011, page 72

Test Stand for Flame Exposure Testing

Flame exposure testing in accordance with DIN 18869-5 and DIN EN 16282-6

In connection with manufacturing and finishing processes in mechanical engineering and the food industry, high concentrations of highly inflammable aerosols often have to be extracted and separated.

If the aerosols ignite in the exhaust air duct, the flames can spread into the whole building via the duct and set entire building complexes on fire within a few minutes.

In order to prevent rapid flame propagation, the flame-arresting capability of all our X-CYCLONE® basic aerosol separator elements is tested in accordance with national and international standards.

REVEN® Oil Mist Separators Successfully Pass Explosion Tests

This is why all our X-CYCLONE® basic elements comply with all German and European requirements with regard to their flame-arresting capability.
Even their behaviour in explosive environments has been tested and documented.

Compact Systems

Compact air cleaners ready for connection

REVENO
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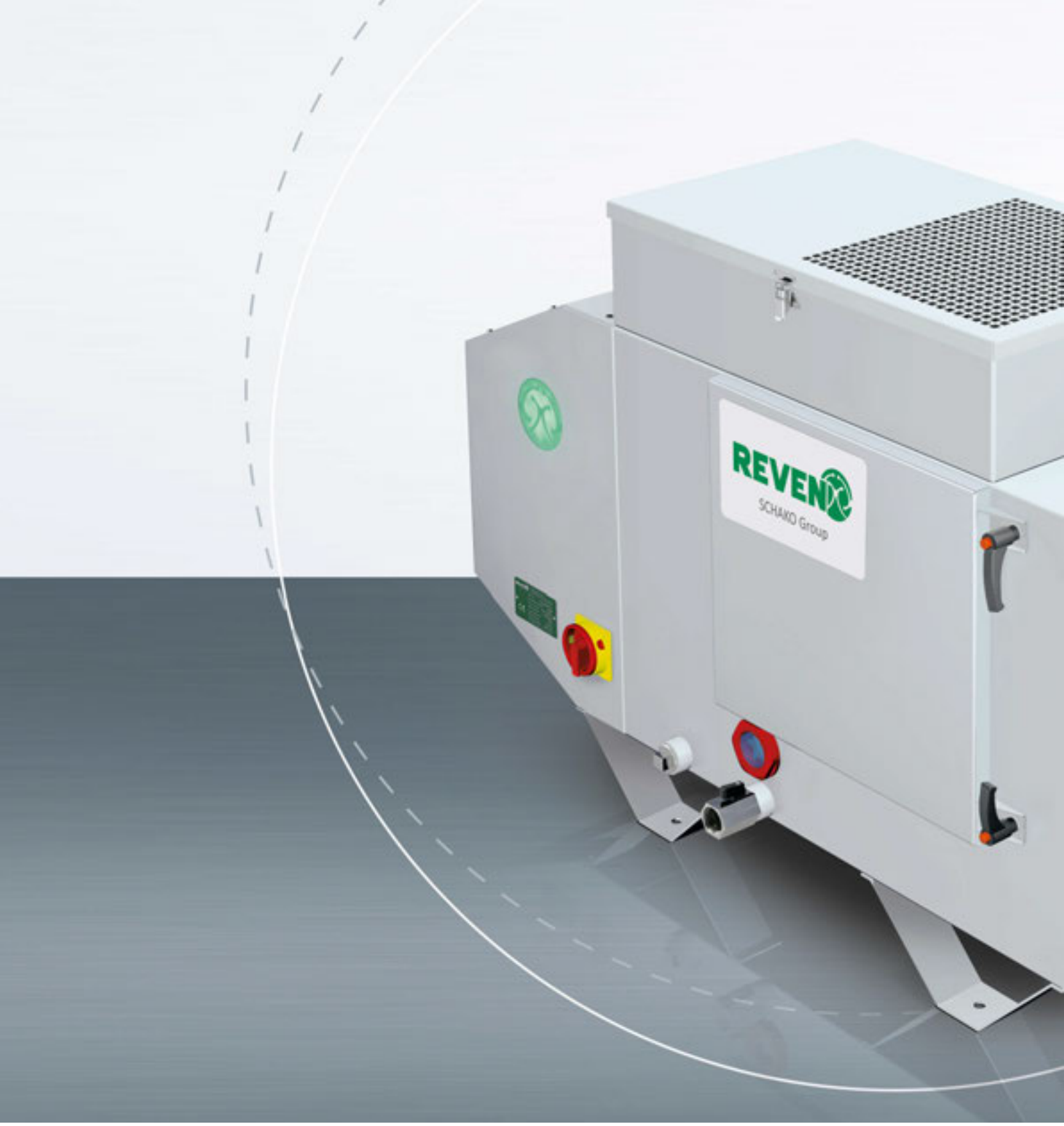
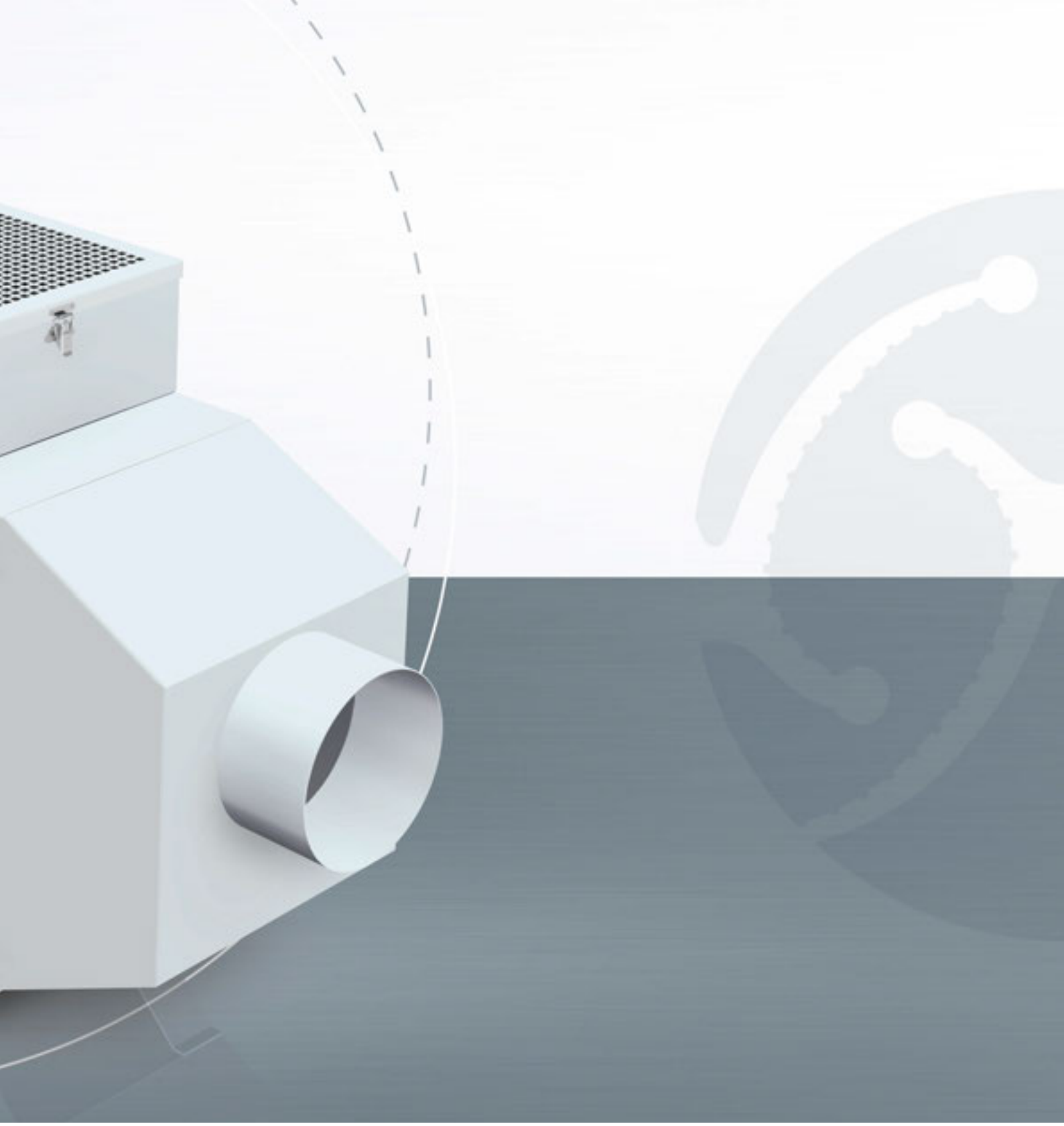


X-CYCLONE® C-XSC Series

Compact air cleaners for water-based aerosols



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X-CYCLONE® C-XSC Series

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating plants or food-processing lines. Separation of water-based aerosols such as cooling lubricants or spray mist.

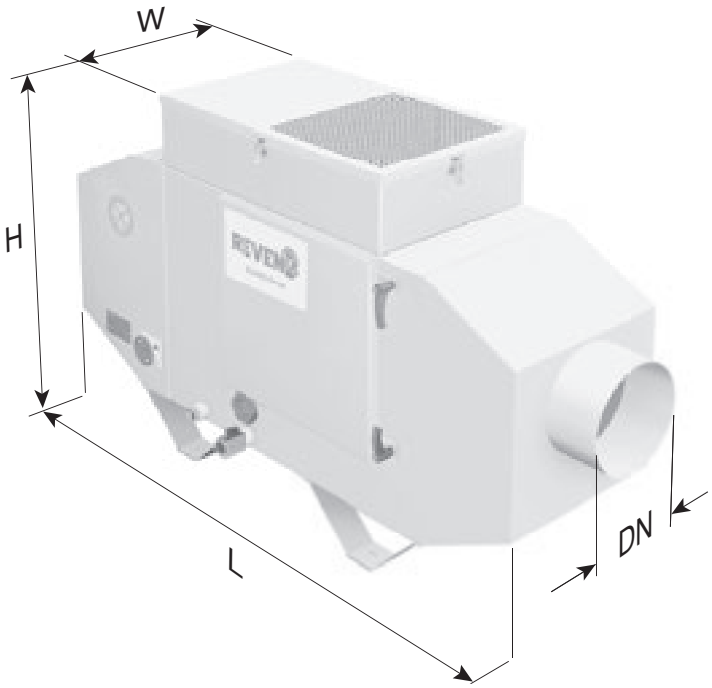
TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Digital fan module XSC for fast commissioning, flexibility and high performance.
- Fan impeller and motor with energy-efficient eco-design in accordance with the European Directive on Energy-related Products (ErP). Energy-saving potential of up to Euro 2,000 per year compared to traditional air cleaners.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Agglomeration system made of stainless steel, suitable for the removal of $PM_{2.5}$.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Intelligent functional display.
- Designed, constructed and produced in Germany.
- State-of-the-art design protected by international design patent rights.

Further information

www.reven.de (Technologien → zur Regelung und Steuerung)

- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.



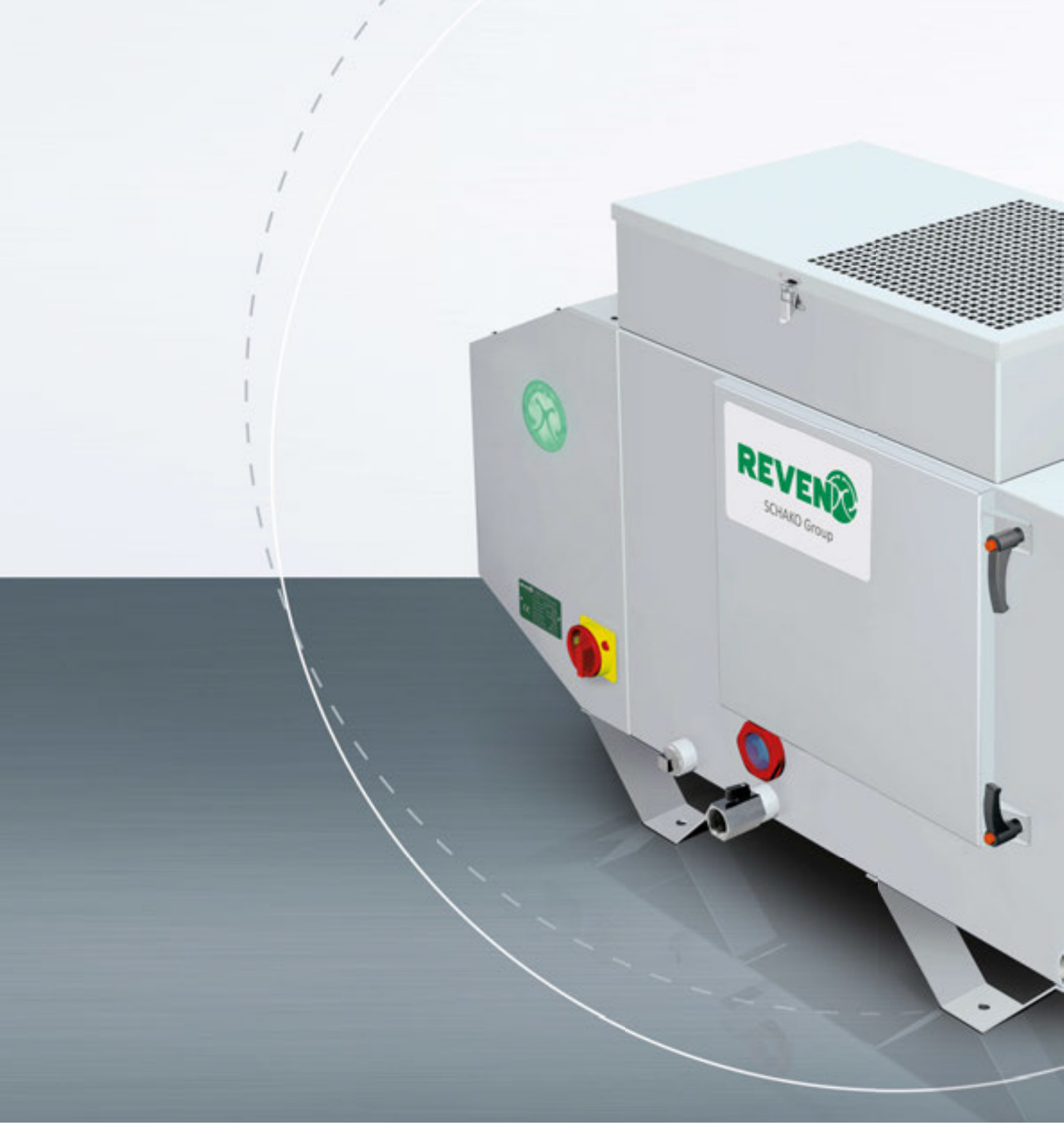
ACCESSORIES

- REVEN® Pipe.
- EUREVEN® F2011 filter made of moisture-repelling, synthetic material, easy to clean; suitable for low smoke generation.
- Particulate air filter top unit, suitable for processes with high smoke emission.
- Self-cleaning REVEX® HEPA filters, suitable for aerosols with ultrafine solid and liquid particles.
- Honeycomb agglomerator, suitable for high steam concentrations.
- Chip protection, activated carbon filter and bag filter.
- Extraction hoses, capture hoods and brackets.

TECHNICAL DATA – X-CYCLONE® C-XSC SERIES

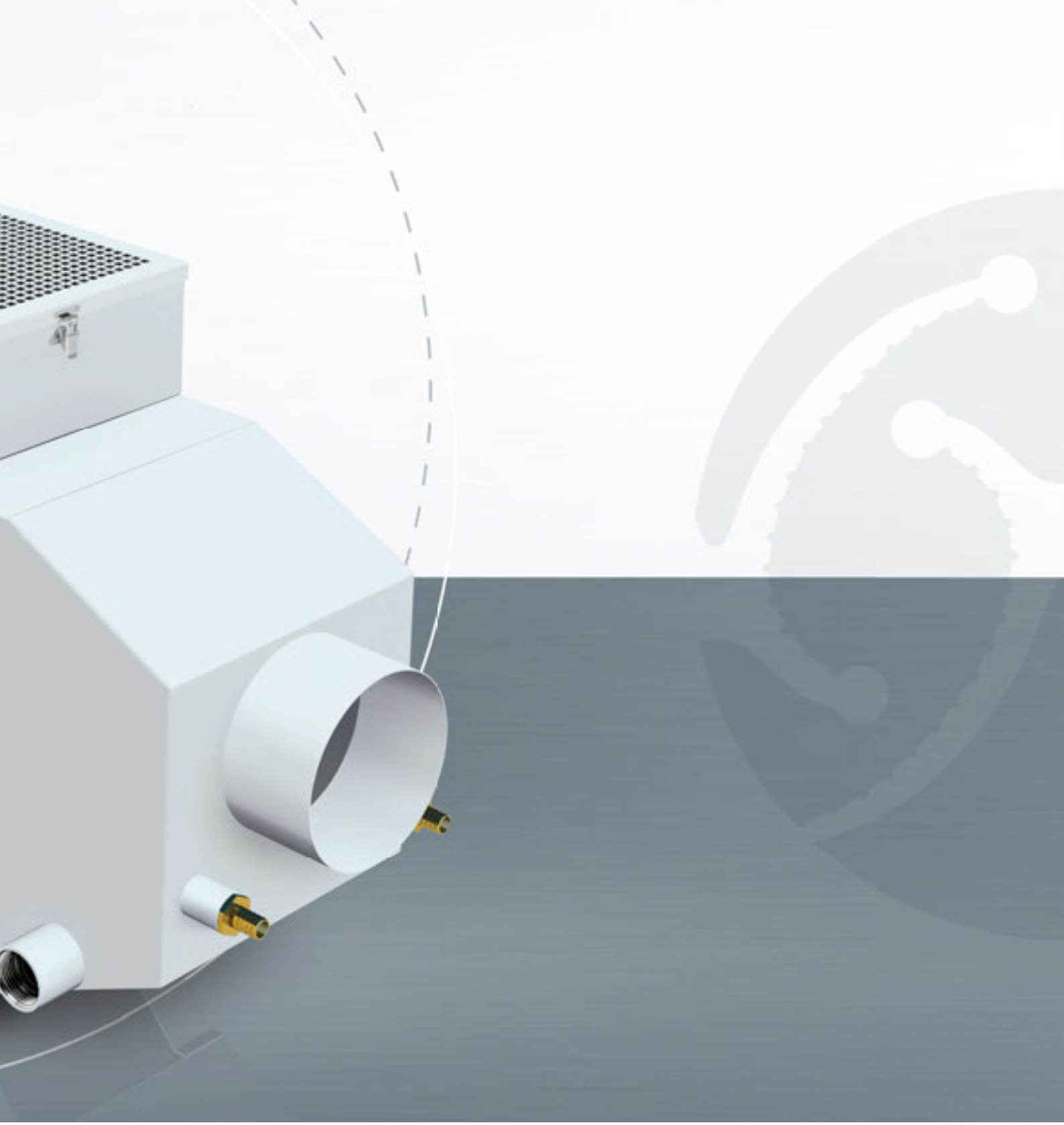
Type of device	Extraction volume [m³/h]		Electrical data						Dimensions				Weight [kg]	Noise level [dB(A)]
			Voltage [V]		Current [A]		Power 3* [W]		Length [mm]	Width [mm]	Height [mm]	Connecting diameter DN [mm]		
	1*	2*	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz						
C-1-XSC	500	1000	3~400	3~460	0.42	0.42	232	267	1016	360	765	150	40	50
C-2-XSC	800	1500	3~400	3~460	0.50	0.50	298	343	1065	360	765	150	46	63
C-3-XSC	1200	2600	3~400	3~460	0.80	0.80	466	535	1200	370	765	200	54	65
C-4-XSC	1700	4000	3~400	3~460	1.90	1.90	1106	1272	1250	450	845	300	78	67
C-5-XSC	2500	4500	3~400	3~460	2.10	2.10	1208	1472	1280	550	925	300	110	67
C-6-XSC	4000	6800	3~400	3~460	3.90	3.90	2405	2765	1360	655	1045	400	152	72
C-7-XSC	6500	10500	3~400	3~460	6.20	6.20	3823	4396	1400	820	1205	500	240	72

1* Extraction volume when connected to the extraction system with two filters installed.
2* Extraction volume in unconnected, free-blowing state without filter(s).
3* Power data referring to the operational power.
Other voltages on request!



X-CYCLONE® CR-XSC Series

Compact air cleaners with REVEX® spraying technology



REVENO
SCHAKO Group

X-CYCLONE® CR-XSC Series

RANGE OF APPLICATION

Cleaning of the exhaust air from cleaning facilities, cast machining tools, hardening furnaces, carbon fibre and plastics processing plants. Separation of dry, adhesive, solid and vaporous substances

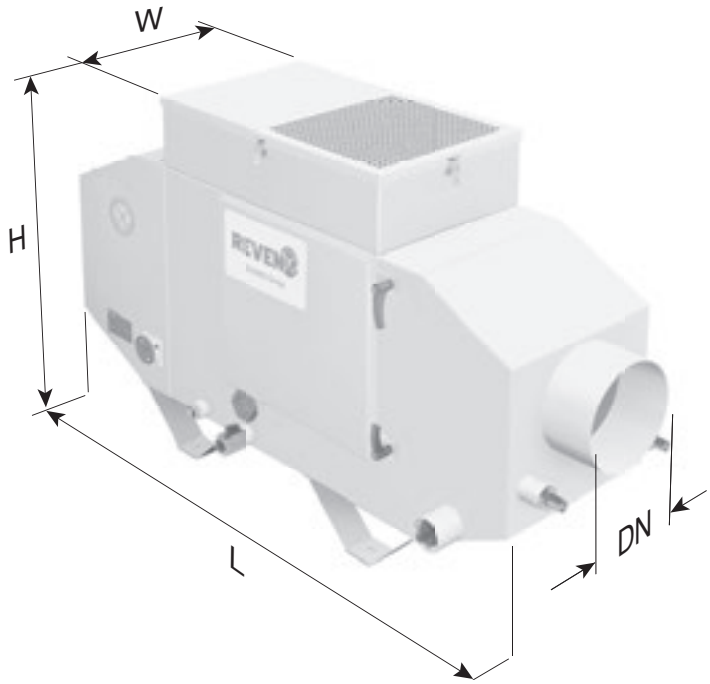
TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Patented REVEX® spraying technology with cleaning and air washing function.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Digital fan module XSC for fast commissioning, flexibility and high performance.
- Fan impeller and motor with energy-efficient eco-design in accordance with the European Directive on Energy-related Products (ErP). Energy-saving potential of up to Euro 2,000 per year compared to traditional air cleaners.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Agglomeration system made of stainless steel, suitable for the removal of $PM_{2.5}$.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Intelligent functional display.
- Designed, constructed and produced in Germany.

Further information

www.reven.de (Technologies → for adjustment and control)
www.reven.de (Technologies → for cleaning and desinfection)

- State-of-the-art design protected by international design patent rights.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.



ACCESSORIES

- EUREVEN® F2011 filter made of moisture-repelling, synthetic material, easy to clean; suitable for low smoke generation.
- Particulate air filter top unit, suitable for processes with high smoke emission.
- Self-cleaning REVEX® HEPA filters, suitable for aerosols with ultrafine solid and liquid particles.
- Honeycomb agglomerator, suitable for high steam concentrations.
- Chip protection, activated carbon filter and bag filter.
- Extraction hoses, capture hoods and brackets.

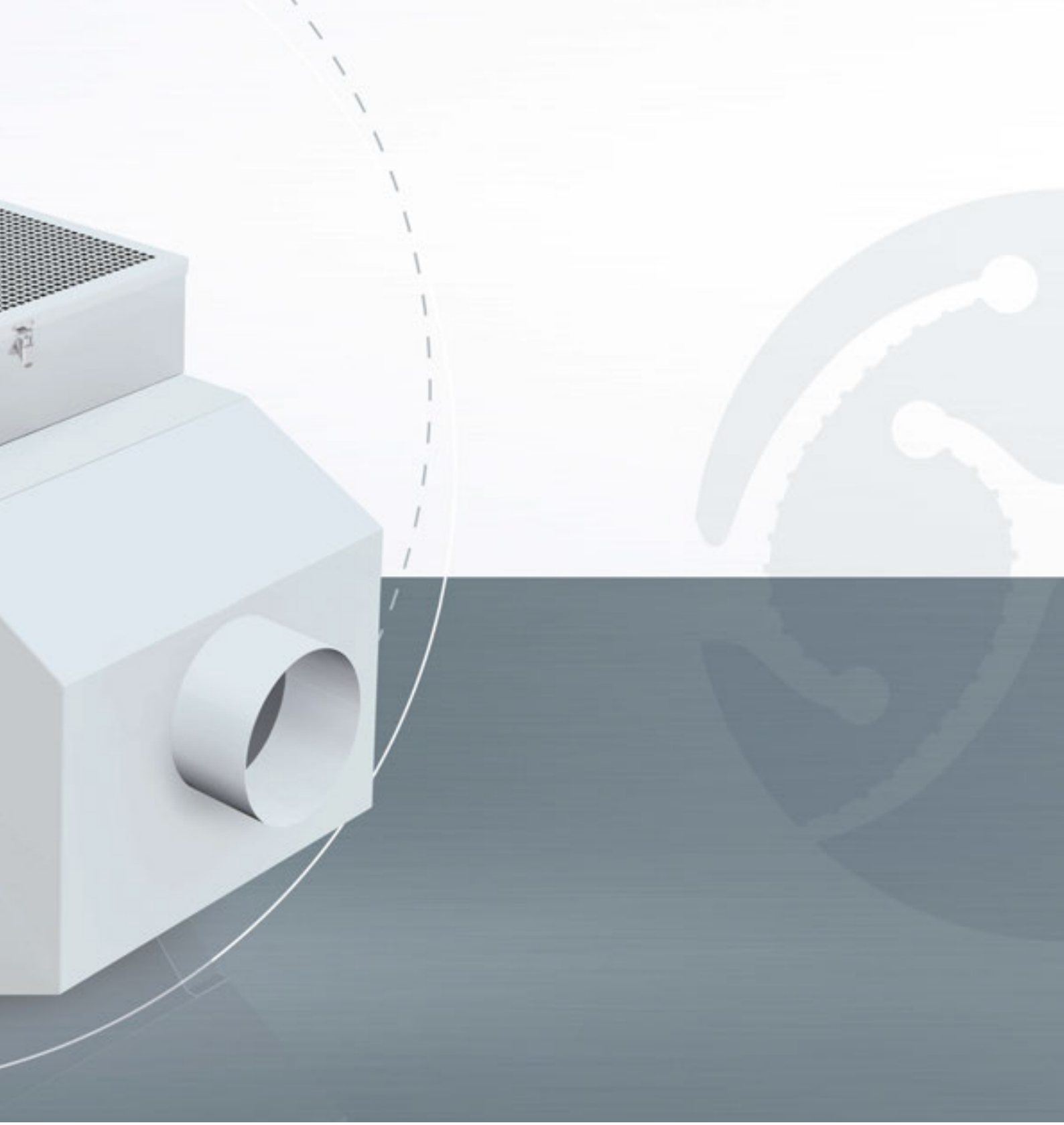
TECHNICAL DATA – X-CYCLONE® CR-XSC SERIES

Type of device	Extraction volume [m³/h]		Electrical data						Dimensions				Weight [kg]	Noise level [dB(A)]
			Voltage [V]		Current [A]		Power 3* [W]		Length [mm]	Width [mm]	Height [mm]	Connecting diameter DN [mm]		
	1*	2*	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz						
CR-2-XSC	700	1500	3~400	3~460	0.50	0.50	298	343	1065	360	765	150	52	63
CR-3-XSC	1100	2600	3~400	3~460	0.80	0.80	466	535	1200	370	765	200	60	65
CR-4-XSC	1600	4000	3~400	3~460	1.90	1.90	1106	1272	1250	450	845	300	84	67
CR-5-XSC	2400	4500	3~400	3~460	2.10	2.10	1208	1472	1280	550	925	300	116	67
CR-6-XSC	3800	6800	3~400	3~460	3.90	3.90	2405	2765	1360	655	1045	400	158	72
CR-7-XSC	6300	10500	3~400	3~460	6.20	6.20	3823	4396	1400	820	1205	500	246	72

1* Extraction volume when connected to the extraction system with three filters installed.
2* Extraction volume in unconnected, free-blowing state without filter(s).
3* Power data referring to the operational power.
Other voltages on request!

X-CYCLONE® CE-XSC Series

Electrostatic air cleaners for oil-based aerosols



REVENTA
SCHAKO Group

X-CYCLONE® CE-XSC Series

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating plants or food-processing lines. Separation of oil-based aerosols such as cooling lubricants or spray mist.

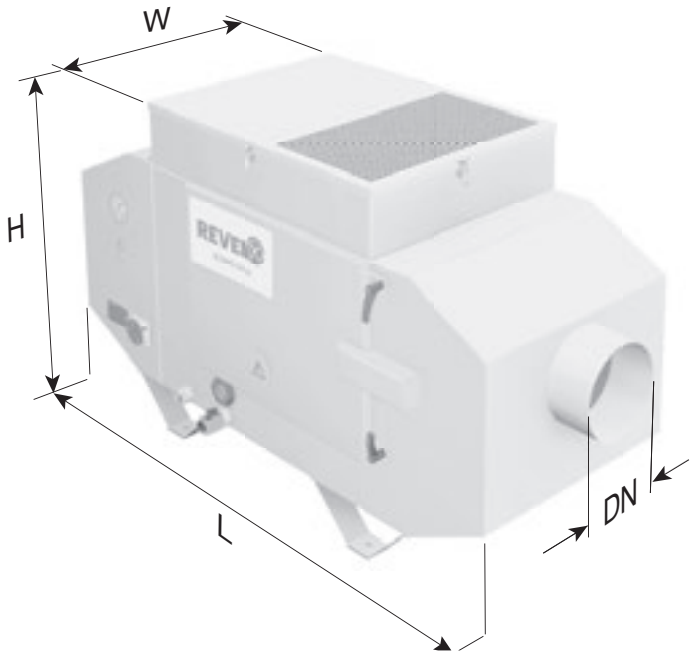
TECHNICAL HIGHLIGHTS

- Combination of the patented high-performance X-CYCLONE® separating system and an electrostatic precipitator with an efficiency rate of up to 99.9999 %.
- Compliance with ozone exposure limits.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Digital fan module XSC for fast commissioning, flexibility and high performance.
- Fan impeller and motor with energy-efficient eco-design in accordance with the European Directive on Energy-related Products (ErP). Energy-saving potential of up to Euro 2,000 per year compared to traditional air cleaners.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Agglomeration system made of stainless steel, suitable for the removal of $PM_{2.5}$.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Intelligent functional display and high-voltage module.
- Designed, constructed and produced in Germany.

Further information

www.reven.de (Technologies → for adjustment and control)
www.reven.de (Technologies → for cleaning and desinfection)

- State-of-the-art design protected by international design patent rights.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.



ACCESSORIES

- REVEN® Pipe.
- Particulate air filter top unit, suitable for processes with high smoke emission.
- Self-cleaning REVEX® HEPA filters, suitable for aerosols with ultrafine solid and liquid particles.
- Agglomeration system made of stainless steel, suitable for the removal of $PM_{1.0}$.
- Chip protection, activated carbon filter and bag filter.
- Extraction hoses, capture hoods and brackets.

TECHNICAL DATA – X-CYCLONE® CE-XSC SERIES

Type of device	Extraction volume [m³/h]		Collectors	Electrical data						Dimensions				Weight [kg]	Noise level [dB(A)]
				Voltage [V]		Current [A]		Power 3* [W]		Length [mm]	Width [mm]	Height [mm]	Connecting diameter DN [mm]		
	1*	2*		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz						
CE10-1-XSC	1000	1500	1	3~400	3~460	0.60	0.60	357	411	1335	560	810	200	117	65
CE10-2-XSC	1000	1500	2	3~400	3~460	0.60	0.60	357	411	1540	560	810	200	143	65
CE10-3-XSC	1000	1500	3	3~400	3~460	0.60	0.60	357	411	1755	560	810	200	169	65
CE17-1-XSC	1700	2600	1	3~400	3~460	1.05	1.05	611	703	1375	525	900	200	121	67
CE17-2-XSC	1700	2600	2	3~400	3~460	1.05	1.05	611	703	1590	525	900	200	148	67
CE17-3-XSC	1700	2600	3	3~400	3~460	1.05	1.05	611	703	1800	525	900	200	175	67
CE25-1-XSC	2500	4500	1	3~400	3~460	1.99	1.99	1213	1395	1375	650	900	300	150	70
CE25-2-XSC	2500	4500	2	3~400	3~460	1.99	1.99	1213	1395	1590	650	900	300	185	70
CE25-3-XSC	2500	4500	3	3~400	3~460	1.99	1.99	1213	1395	1800	650	900	300	219	70

1* Extraction volume when connected to the extraction system with the filter(s) installed.
2* Extraction volume in unconnected, free-blowing state without filter.
3* Power data referring to the operational power.
Other voltages on request!

X-CYCLONE® RJ Series

Inexpensive compact air cleaners for water-based aerosols

REVENO
SCHAKO Group

X-CYCLONE® RJ Series

RANGE OF APPLICATION

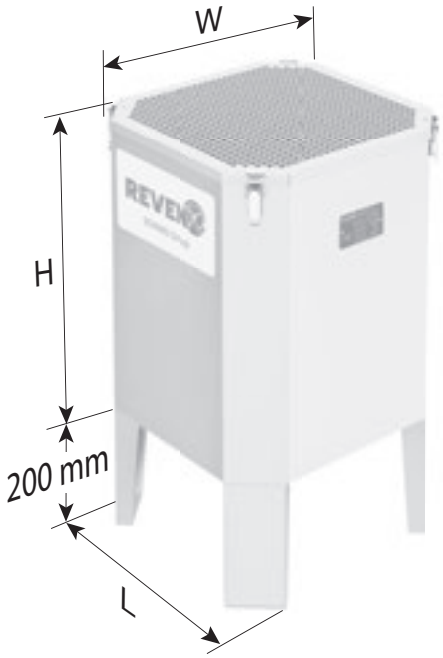
Cleaning of the exhaust air from processing machines, coating plants or food-processing lines. Separation of water-based aerosols such as cooling lubricants or spray mist.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Fan impeller and motor with energy-efficient eco-design in accordance with the European Directive on Energy-related Products (ErP). Energy-saving potential of up to Euro 1,000 per year compared to traditional air cleaners.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

ACCESSORIES

- EUREVEN® F2011 filter top unit with moisture-repelling, synthetic filter material, easy to clean; suitable for low smoke generation.
- Particulate air filter top unit, suitable for high smoke generation.
- Agglomeration system made of stainless steel, suitable for the removal of $PM_{2.5}$.
- Honeycomb agglomerator, suitable for high steam concentrations.
- REVEN® TEC Pipe for the condensation of steam and oil vapours.
- Chip protection, activated carbon filter and bag filter.
- Extraction hoses, capture hoods and brackets.
- Set of device supports.



TECHNICAL DATA – X-CYCLONE® RJ SERIES

Type of device	Extraction volume [m³/h]		Electrical data						Dimensions				Weight [kg]	Noise level [dB(A)]
			Voltage [V]		Current [A]		Power 3* [W]		Length [mm]	Width [mm]	Height [mm]	Connecting diameter DN [mm]		
	1*	2*	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz						
RJ-1	400	700	1~230	1~115	0.80	1.20	84		300	300	230	100	10	40
RJ-2	1000	1500	3~400	3~460	0.90	0.77	400		410	410	480	160	26	63
RJ-3	1400	2600	3~400	3~460	1.61	1.43	650		410	410	480	160	30	65

1* Extraction volume when connected to the extraction system with the filter(s) installed.
2* Extraction volume in unconnected, free-blowing state without filter.
3* Power data referring to the operational power.
Other voltages on request!

Emulsion Mist Separator SARA® Ultra-Eco Compact (UEC 1000)

Inexpensive compact air cleaner for water-based aerosols

CLEAN AIR THANKS TO A SOPHISTICATED DESIGN AND SPEZIAL FILTERS

The new emulsion mist separator SARA® Ultra-Eco compact (abbreviated to “UEC 1000”, formerly “REVEN® SH”) is an outstanding product among the currently available industrial air cleaners and is distinguished by a favourable price-performance ratio, a compact and environmentally sound design and low energy consumption.

Exclusively available at https://www.saratools.com

REVEN®
SCHAKO Group

SARA® UEC 1000

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating plants and food processing lines. Separation of water-based aerosols such as cooling lubricants or spray mist.

TECHNICAL HIGHLIGHTS

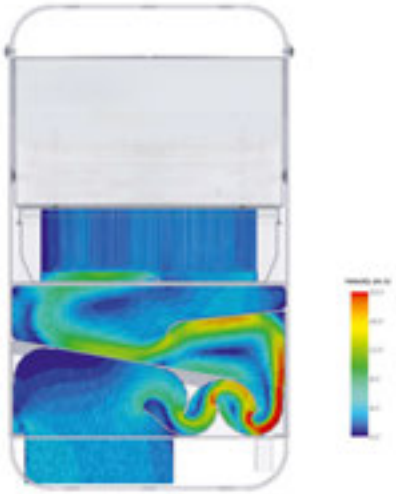
- CFD-optimised, high-performance separating system with a separating efficiency of up to 99.9999 %.
- Particulate air filter integrated with the housing.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Long-term use of filters with long replacement intervals thanks to REVEN® LTH particulate filters (LTH = Long-Term HEPA).
- Sustainable air-cleaning concept due to the use of a cleanable, high-performance separating system.
- Fan impeller and motor with energy-efficient eco-design in accordance with the European Directive on Energy-related Products (ErP). Energy-saving potential of up to Euro 1,000 per year compared to traditional air cleaners.
- Housing 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the high-performance separating system and the corrosion resistance of the housing.

Further information

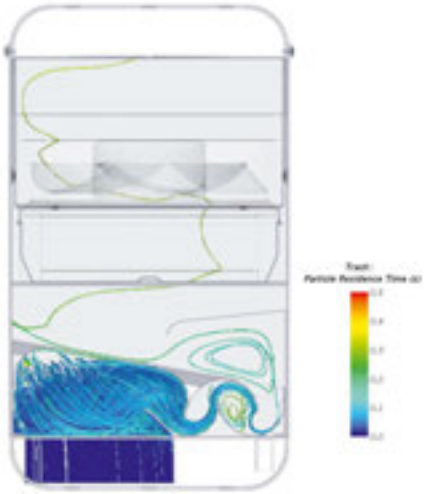
www.saratools.com

SCIENTIFIC TESTING AND OPTIMISATION WITH THE HELP OF CFD

Rentschler REVEN uses computational fluid dynamics technology to analyse airflow behaviour and optimise separating efficiency in industrial air cleaning. The computer software simulates the airflow behaviour, and the design of the device is continuously improved until the best possible separating efficiency for pollutant particles is achieved.



CFD figure 1:
airflow simulation



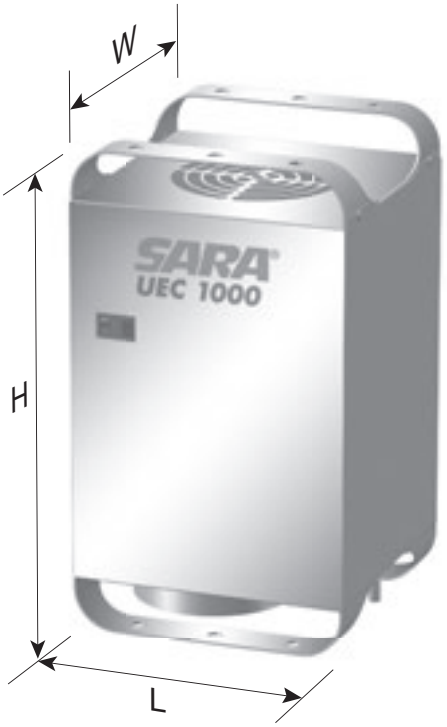
CFD figure 2:
behaviour of the pollutant particles

TECHNICAL DATA – SARA® UEC 1000

Extraction volume [m³/h]		Dimensions				Weight [kg]
1*	2*	Length [mm]	Width [mm]	Height [mm]	Connecting diameter DN [mm]	
500	1000	345	345	595	200	27

1* Extraction volume when connected to the extraction system with filter installed.
2* Extraction volume in unconnected, free-blowing state without filter.

Electrical data						Noise level [dB(A)]
Voltage [V]		Current [A]		Power [W]		
50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	
1~230	1~115	1.40	2.50	168		67



X-CYCLONE® RJD Series

Compact air cleaner for fine dust

REVENX
SCHAKO Group

X-CYCLONE® RJD Series

RANGE OF APPLICATION

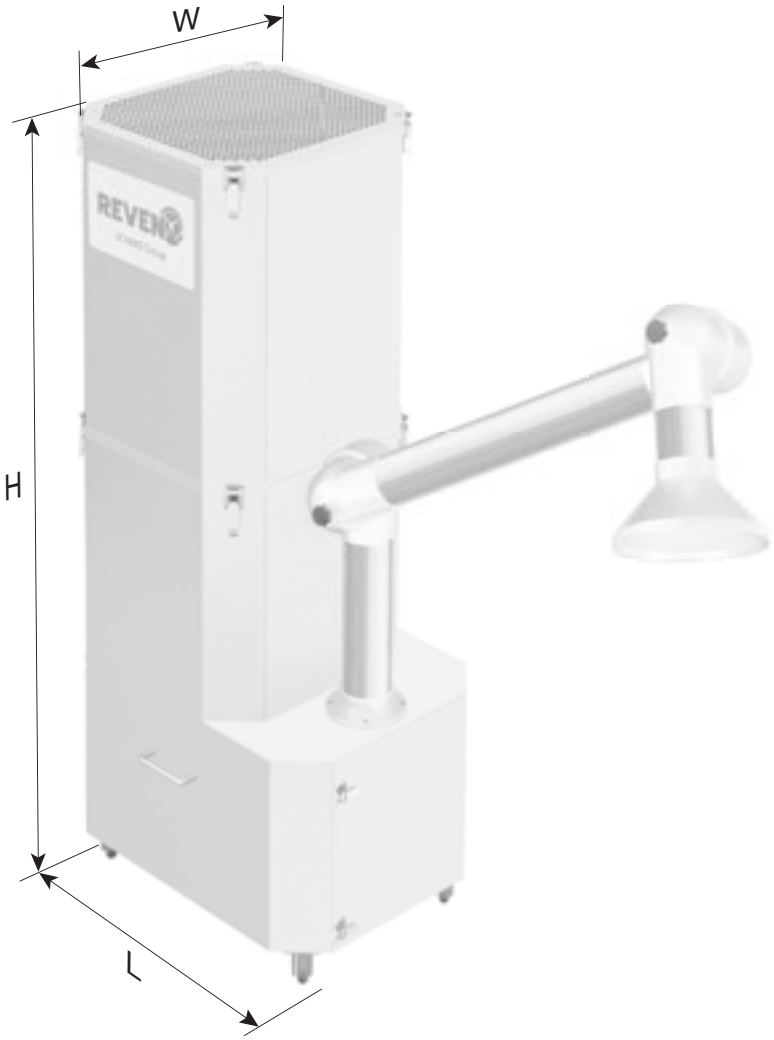
Cleaning of extracted air from dry fine dust such as grinding and graphite dust or soldering and brazing fumes.

TECHNICAL HIGHLIGHTS

- High-performance EUREVEN® F2011 separating system with an efficiency rate of up to 99.9999 %. Filter module with moisture-repelling and cleanable, synthetic filter material.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Fan impeller and motor with energy-efficient eco-design in accordance with the European Directive on Energy-related Products (ErP). Energy-saving potential of up to Euro 1,000 per year compared to traditional air cleaners.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the corrosion resistance of the enclosure.

ACCESSORIES

- Flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Particulate air filter top unit, suitable for processes with high smoke and dust emissions.
- Activated carbon filter top unit for the reduction of odour nuisance.



TECHNICAL DATA – X-CYCLONE® RJD SERIES

Type of device	Extraction volume [m³/h]	Electrical data						Dimensions			Weight [kg]	Noise level [dB(A)]
		Voltage [V]		Current [A]		Power 1* [W]		Length [mm]	Width [mm]	Height [mm]		
		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz					
RJD-1	500	3~400	3~460	1.61	1.43	650		560	410	1220	70	65

1* Power data referring to the operational power.
Other voltages on request!

REVEN® T Series

Powerless air cleaner tables with REVEN® air-induction system

REVENO
SCHAKO Group

RANGE OF APPLICATION

Compact cleaning table with integrated air cleaner for cleaning and inspection work. Suitable for a wide range of applications because it does not require an electric power supply. Cleaning is performed by compressed air.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system, integrated into the table, efficiency rate of up to 99.9999 %.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Powerless system requiring only a compressed air supply.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

Further information

https://flic.kr/s/aHsknefZ6B

ACCESSORIES

- Activated carbon filter module, suitable for fitting to the air outlet.
- Filter mat at the air outlet for post-filtering and noise reduction.
- Table extension with washing facility and sink (TW-1).

TECHNICAL DATA – REVEN® T SERIES

Type of device	Dimensions			Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	
T-1	300	300	1300	26
T-2	400	500	1300	40
T-3	500	500	1300	48
T-4	1000	500	1300	82
TW-1	1200	500	1300	96

REVEN® UCOH2 Series

Air cleaners for offices, private homes, hotel rooms and smoking areas

REVEN

SCHAKO Group

RANGE OF APPLICATION

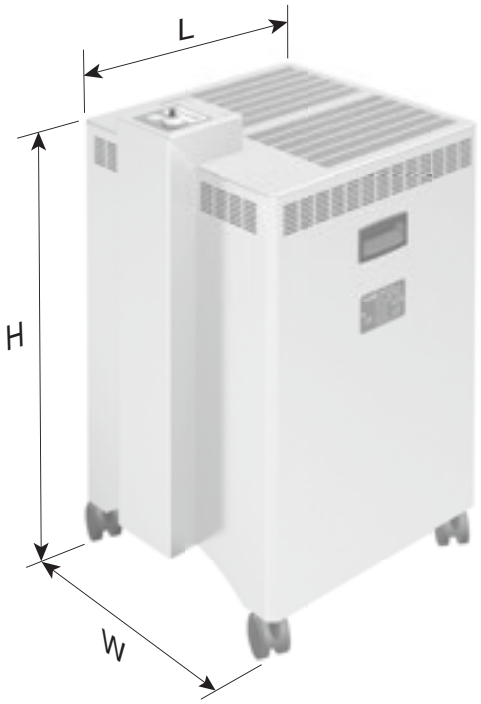
Compact air cleaner, ready for connection; suitable for cleaning and refreshing indoor air and improving indoor air quality; removal of fungal spores, fine dust, pollen, allergens and odour particles.

TECHNICAL HIGHLIGHTS

- High-performance EUREVEN® F2011 separating system with an efficiency rate of up to 99.9999 %. Easy-to-clean filter module with moisture-repelling, synthetic filter material.
- Thorough air cleaning and refreshing thanks to a EUREVEN® gas filter for odour reduction and a high-performance HEPA® H13 particle and fine-dust filter.
- Sustainable air-cleaning concept thanks to the use of cleanable separators and filters with extended service life.
- Fan impeller and motor with energy-efficient eco-design in accordance with the European Directive on Energy-related Products (ErP).
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the corrosion resistance of the enclosure.

ACCESSORIES

- Available with high-grade piano lacquer finish in black, particularly suitable for cigar lounges.

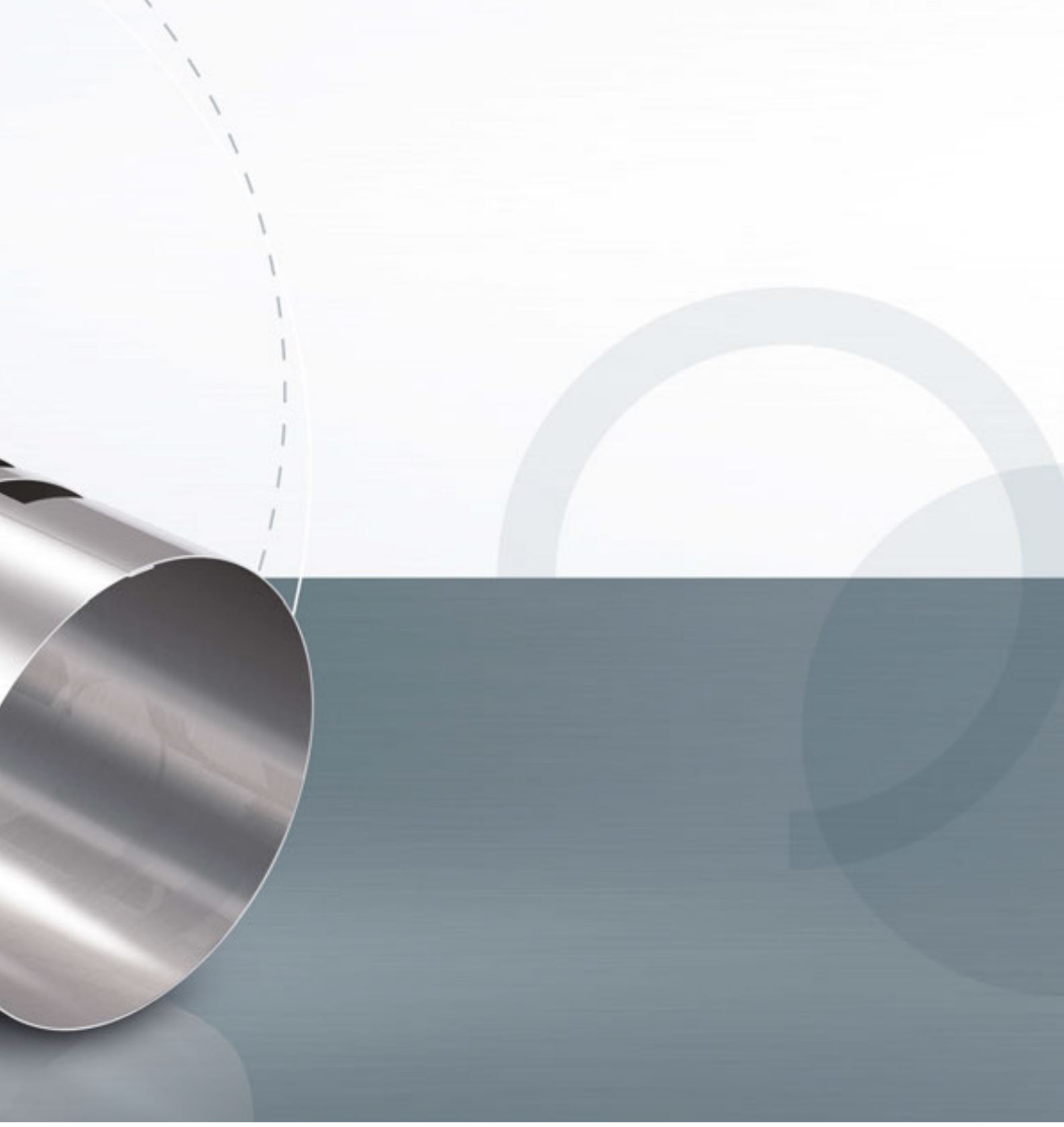


TECHNICAL DATA – REVEN® UCOH2 SERIES

Type of device	Extraction volume [m³/h]	Electrical data						Dimensions			Weight [kg]	Noise level [dB(A)]
		Voltage [V]		Current [A]		Power [W]		Length [mm]	Width [mm]	Height [mm]		
		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz					
UCOH2	500	1~230	1~115	1.40	2.50	168		455	400	690	30	≤ 50

REVEN® Pipe Series

Condenser for the X-CYCLONE® C-XSC and CE-XSC series



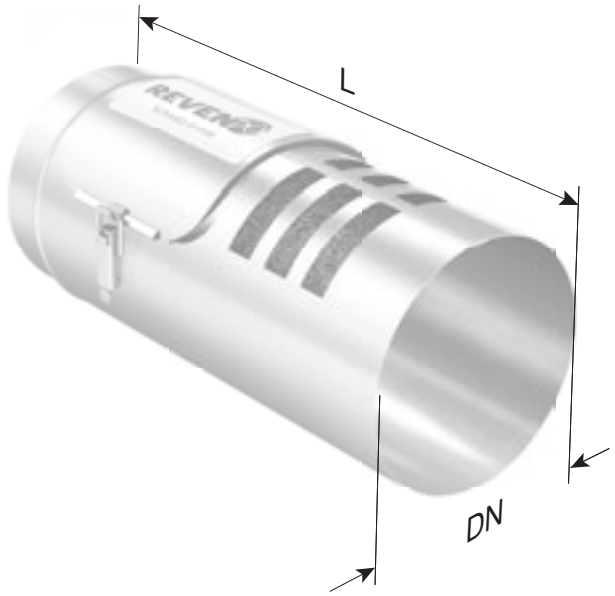
REVENX
SCHAKO Group

RANGE OF APPLICATION

Compact condensation system for steam and oil vapours, suitable accessory for the X-CYCLONE® C-XSC and CE-XSC series.

TECHNICAL HIGHLIGHTS

- Efficient condensation system made of stainless steel.
- Efficient air guidance straight to the condenser.
- Sustainable air-cleaning concept thanks to the use of cleanable components.
- Enclosure, condenser and all control elements 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the corrosion resistance of the enclosure.



TECHNICAL DATA – REVEN® PIPE SERIES

Type of device	Extraction volume [m³/h]	Length [mm]	Connecting diameter [mm]	Weight [kg]
Pipe 1	800	400	150	3
Pipe 2	1700	400	200	5
Pipe 3	4000	400	300	8
Pipe 4	5000	400	400	12

Smoke filters

Air Cleaners for smoke, dust and gas generated in the electrical, photovoltaic, laser and metal industries

REVENO
SCHAKO Group

X-CYCLONE® WM Series

Compact mobile air cleaners for smoke extraction during welding and laser-machining processes

THE BENEFITS OF X-CYCLONE® WELDING SMOKE EXTRACTION DEVICES

- The sturdy housing made of corrosion-proof stainless steel offers considerably higher stability and durability than less expensive versions made of steel sheet or plastic.
- The extraction arm with integrated mechanics and the capture nozzle comply with industry's state-of-the-art requirements.
- The particulate air filter is fitted with a high-grade glass fibre medium and offers a large filter surface. It is distinguished by a considerably longer service life than traditional welding smoke filters.
- All filters are fitted with robust stainless steel frames and provide much more stability than lower priced products with paper, wood or plastic frames.
- The device reliably resists flame and spark penetration in compliance with international standards. The spark- and flame-arresting capability has been proven in tests. The system offers much more safety than non-certified baffle plate separators.
- The medium-pressure fan is encapsulated in a flow-dynamic optimized housing of cast aluminium. There are no exposed electrical components or motor parts.
- The air-handling capacities specified in the documentation are achieved over the entire service life.
- The intelligent monitoring system with electronic flow sensors ensures permanent functional monitoring of extraction.

REVENO
SCHAKO Group

X-CYCLONE® WM Series

RANGE OF APPLICATION

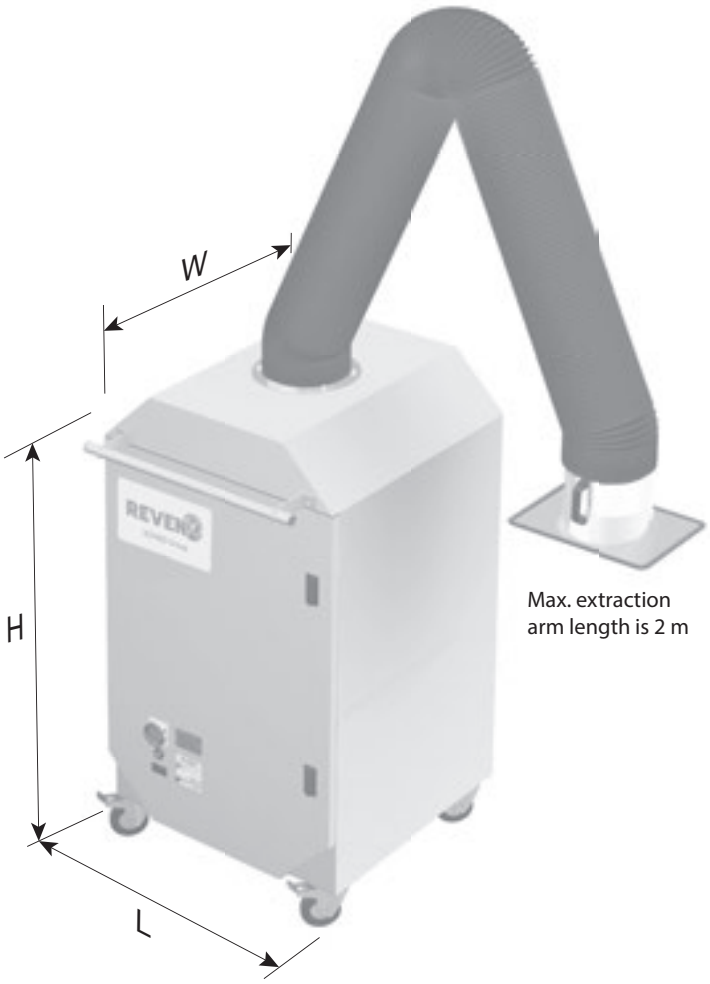
Cleaning of air extracted from welding work.
Also suitable for cutting, marking and laser welding in the electrical and metal-processing industries.

TECHNICAL HIGHLIGHTS

- Air-handling capacity of 2,000 m^3/h; the extraction arm with integrated mechanics has a diameter of 200 mm and a maximum length of 2 m. Two extraction arms with a diameter of 160 mm each are optionally available.
- Long maintenance intervals due to REVEN® LTH (Long-Term HEPA) particulate air filters with a filter surface of 30 m^2.
- Long-life REVEN® LT HEPA filters with a service life of up to three years.*
- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- X-CYCLONE® basic elements with flame- and spark-arresting capability, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Sustainable air-cleaning concept thanks to the use of cleanable separators and filters with an extended service life.
- Fan impeller and electric motor encapsulated in a separate, flow-optimized pressure casing; energy-efficient eco-design in accordance with the European Directive on Energy-related Products (ErP). Energy-saving potential of up to Euro 2,000 per year compared to traditional air cleaners.

* Depends on the air load to be handled and the daily operating periods (one or more shifts).

- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Housing 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Intelligent functional display.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the housing.



Max. extraction arm length is 2 m

TECHNICAL DATA – X-CYCLONE® WM SERIES

Type of device	Number of extraction arms	Airflow rate [m³/h]	Electrical data					
			Voltage [V]		Current [A]		Power 1* [W]	
			50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
WM-1	1	2000	3~400	3~480	4.40		2000	
WM-2	2	2000	3~400	3~480	4.40		2000	

Type of device	Number of extraction arms	Dimensions					Weight [kg]	Noise level [dB(A)]
		Device			Extraction arm			
		Length [mm]	Width [mm]	Height [mm]	Max. length [mm]	Diameter [mm]		
WM-1	1	720	700	1360	2000	200	187	75
WM-2	2	720	700	1360	2000	160	197	75

1* Power data referring to the operational power.
Other voltages on request!

X-CYCLONE® MO Series

Flexible compact air cleaners “all-in-one” suitable for the extraction of welding fumes and laser smoke as well as of liquid-based aerosols

BENEFITS OF THE ALL-IN-ONE X-CYCLONE® AIR CLEANER

- The air cleaner is suitable for simultaneous separation of aerosols with solid particles and liquid-based aerosols.
- The stainless steel housing is robust and resists perfectly to corrosion.
- The extraction arm with integrated mechanics and the capture nozzle comply with industry's state-of-the-art requirements.
- The particulate air filter is fitted with a high-grade glass fibre medium and offers a large filter surface. It is distinguished by a considerably longer service life than traditional welding smoke filters.
- All filters are fitted with robust stainless steel frames and provide much more stability than lower priced products with paper, wood or plastic frames.
- The device reliably resists flame and spark penetration in compliance with international standards. The spark- and flame-arresting capability has been proven in tests. The system offers much more safety than non-certified baffle plate separators.
- The medium-pressure fan is encapsulated in a flow-dynamic optimized housing of cast aluminium.
  There are no exposed electrical components or motor parts.
- The air-handling capacities specified in the documentation are achieved over the entire service life.
- The intelligent monitoring system with electronic flow sensors ensures permanent functional monitoring of extraction.

REVEN
SCHAKO Group

X-CYCLONE® MO Series

RANGE OF APPLICATION

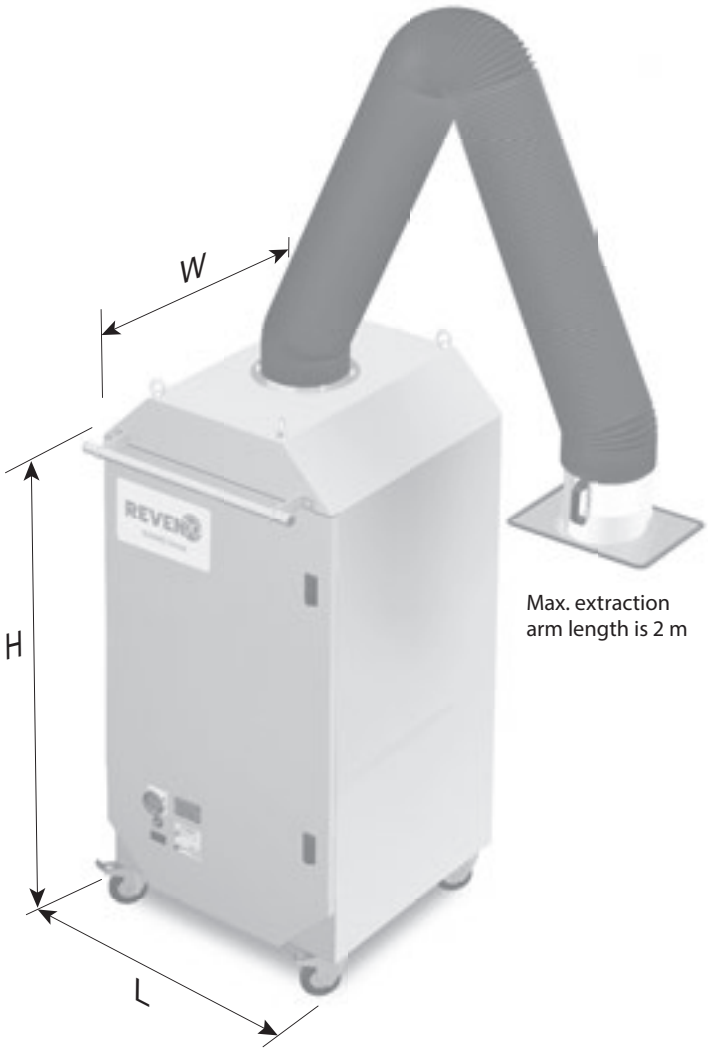
Cleaning of exhaust from welding work.
Also suitable for the simultaneous separation of aerosols with solid particles and liquid-based aerosols, such as spray mists and other exhausts in the metal-processing sector and the electrical industry.

TECHNICAL HIGHLIGHTS

- Air-handling capacity of 2,000 m^3/h; the extraction arm with integrated mechanics has a diameter of 200 mm and a maximum length of 2 m. Two extraction arms with a diameter of 160 mm each are optionally available.
- Long maintenance intervals due to REVEN® LTH (Long-Term HEPA) particulate air filters with a filter surface of 30 m^2.
- Long-life REVEN® LT HEPA filters with a service life of up to three years.*
- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- X-CYCLONE® basic elements with flame- and spark-arresting capability, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Sustainable air-cleaning concept thanks to the use of cleanable separators and filters with an extended service life.
- Fan impeller and electric motor encapsulated in a separate, flow-optimized pressure casing; energy-efficient eco-design in accordance with the European Directive on Energy-related Products (ErP). Energy-saving potential of up to Euro 2,000 per year compared to traditional air cleaners.

* Depends on the air load to be handled and the daily operating periods (one or more shifts).

- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Housing 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Intelligent functional display.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the housing.



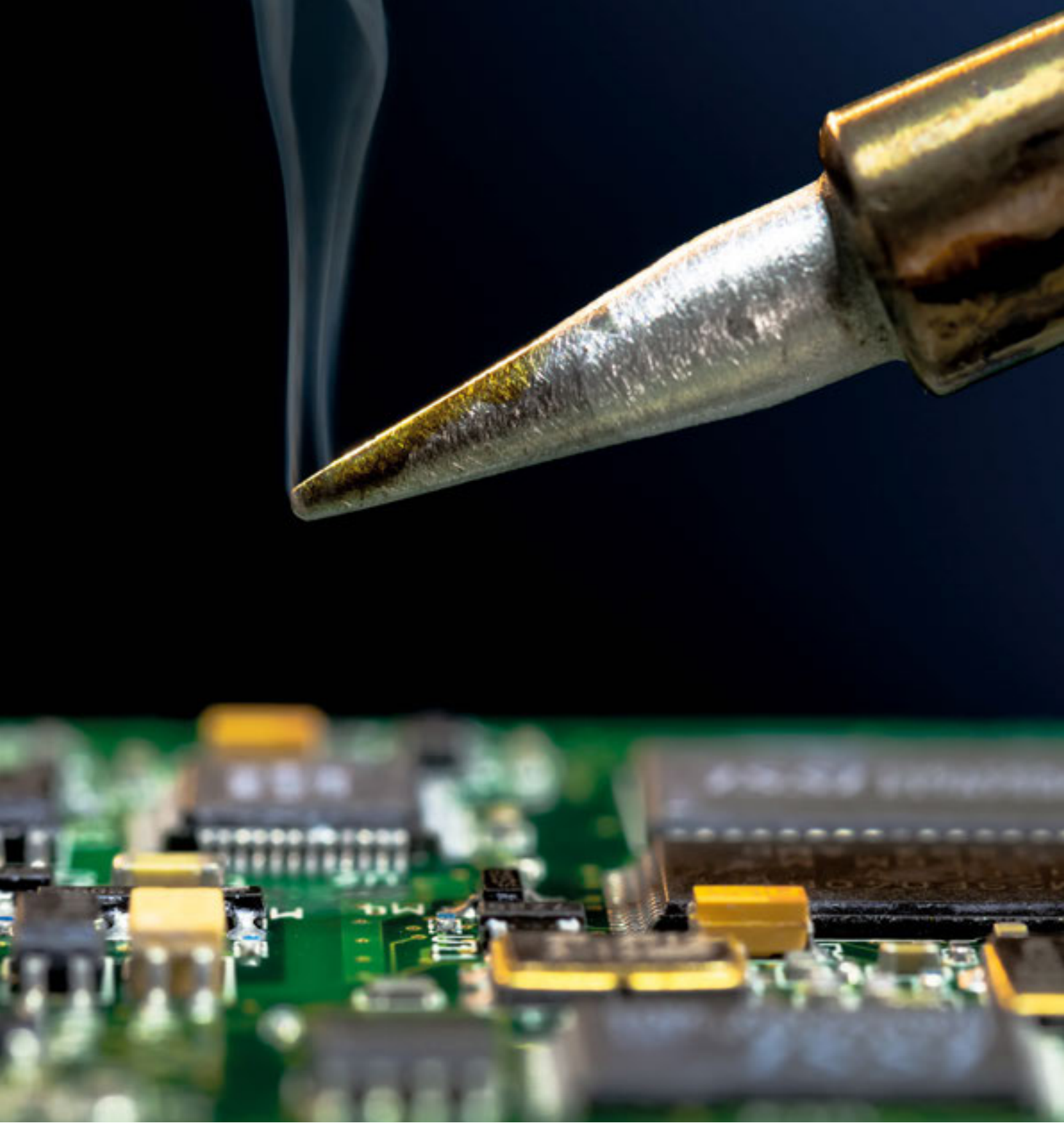
Max. extraction arm length is 2 m

TECHNICAL DATA – X-CYCLONE® MO SERIES

Type of device	Number of extraction arms	Airflow rate [m³/h]	Electrical data					
			Voltage [V]		Current [A]		Power 1* [W]	
			50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
MO-1	1	2000	3~400	3~480	4.40		2000	
MO-2	2	2000	3~400	3~480	4.40		2000	

Type of device	Number of extraction arms	Dimensions					Weight [kg]	Noise level [dB(A)]
		Device			Extraction arm			
		Length [mm]	Width [mm]	Height [mm]	Max. length [mm]	Diameter [mm]		
MO-1	1	750	750	1760	2000	200	259	75
MO-2	2	750	750	1760	2000	160	268	75

1* Power data referring to the operational power.
Other voltages on request!



X-CYCLONE® LM Series

Compact mobile air cleaners for smoke extraction during welding, soldering and brazing processes

THE BENEFITS OF X-CYCLONE® LASER SMOKE EXTRACTION DEVICES

- The sturdy housing made of corrosion-proof stainless steel offers considerably higher stability and durability than less expensive versions made of steel sheet or plastic.
- The particulate air filter is fitted with a high-grade glass fibre medium and offers a large filtering surface. It is distinguished by a considerably longer service life than traditional laser smoke filters.
- All filters are fitted with robust stainless steel frames and provide much more stability than lower priced products with paper, wood or plastic frames.
- The fan is made in Germany and designed for low energy consumption. It has been constructed to avoid exposing electrical components and motor parts.
- The air-handling capacities specified in the documentation are achieved over the entire service life.
- The intelligent monitoring system with electronic flow sensors ensures permanent functional monitoring of extraction.

REVEN
SCHAKO Group

X-CYCLONE® LM Series

RANGE OF APPLICATION

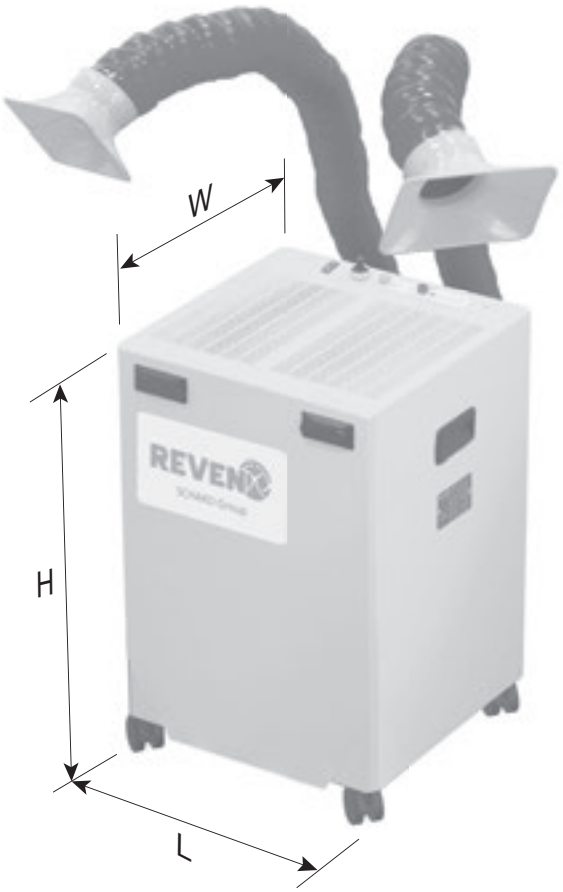
Removal of smoke, vapours, odours and gas from the exhaust air of processes such as 3D printing, laser engraving, laser marking, laser cutting, wafer processing, eroding and soldering.

TECHNICAL HIGHLIGHTS

- High-performance EUREVEN® F2011 separating system with an efficiency rate of up to 99.9999 %. Easy-to-clean filter module with moisture-repelling, synthetic filter material.
- Thorough air cleaning and room refreshing thanks to EUREVEN® F2011 gas filters for odour reduction and HEPA H13 high-performance filters for the separation of airborne particles and fine dust.
- Sustainable air-cleaning concept thanks to the use of cleanable separators and filters with an extended service life.
- Fan impeller and motor with energy-efficient eco-designs as required by the European Directive on Energy-related Products (ErP).
- Housing 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the corrosion resistance of the housing.

ACCESSORIES

- Connection pipe socket according to the customer's specifications.
- Powder coating in special colour.



TECHNICAL DATA – X-CYCLONE® LM SERIES

Type of device	Airflow rate [m³/h]	Electrical data						Dimensions				Weight [kg]	Noise level [dB(A)]
		Voltage [V]		Current [A]		Power [W]		Length [mm]	Width [mm]	Height [mm]	Con-nection DN [mm]		
		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz						
LM-1	0 - 500*	1~230	1~115	1.40	2.50	168		400	400	622	2 x 70	33	≤ 50

* Airflow rate continuously adjustable from 0 to 500 m³/h.

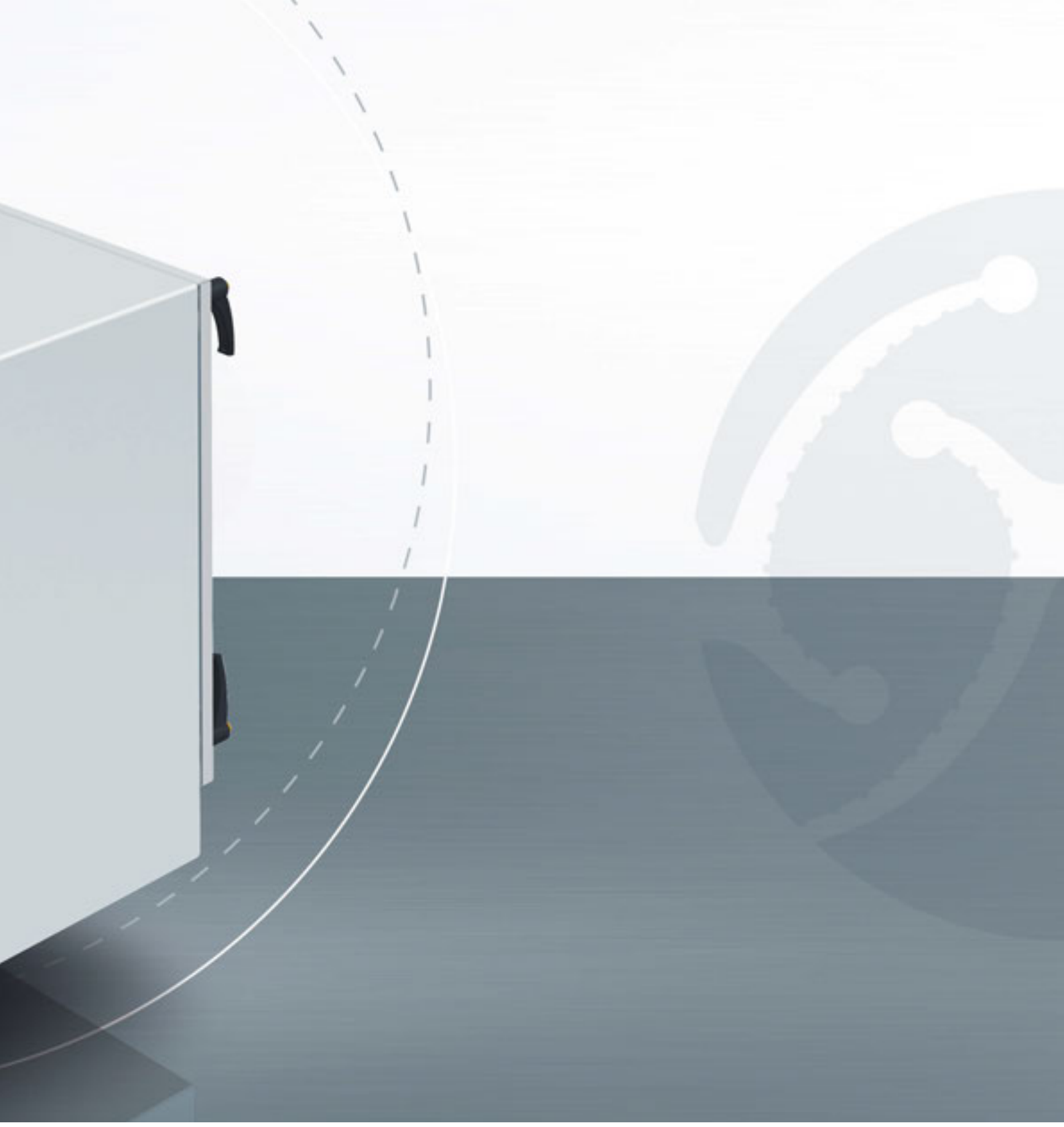
Duct-mounting Systems

Air cleaners suitable for installation in exhaust ducts

REVENO
SCHAKO Group

X-CYCLONE® RKV1 Series

Duct air cleaners for pre-separation right at the machining process



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X-CYCLONE® RKV1 Series

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating facilities, food-production plants and cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as cooling lubricants, spray mist or cooking fumes.

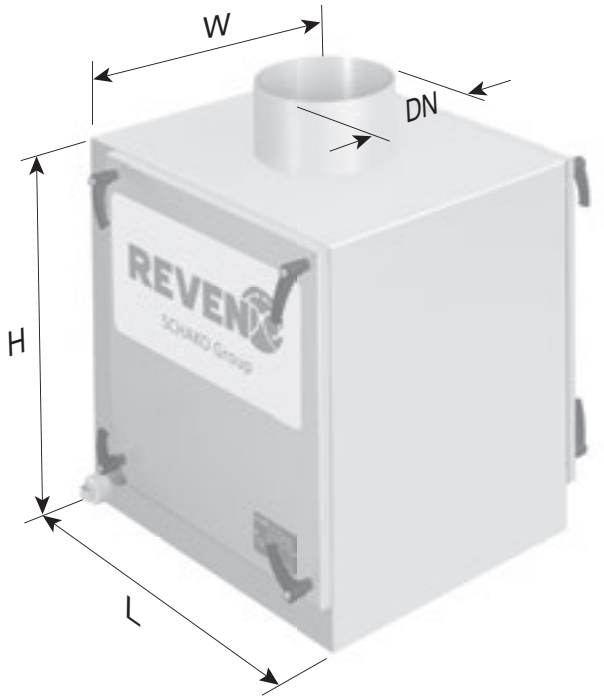
Suitable as pre-separator directly at the production area. Installation in horizontal or vertical exhaust ducts.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Effective protection of the exhaust duct against contamination.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

ACCESSORIES

- Differential pressure indicator to monitor the duct air cleaner.
- Adapters and reducers for connection to the exhaust ducts.
- Siphons, drain lines, connecting sleeves and shut-off valves for the separated liquids.



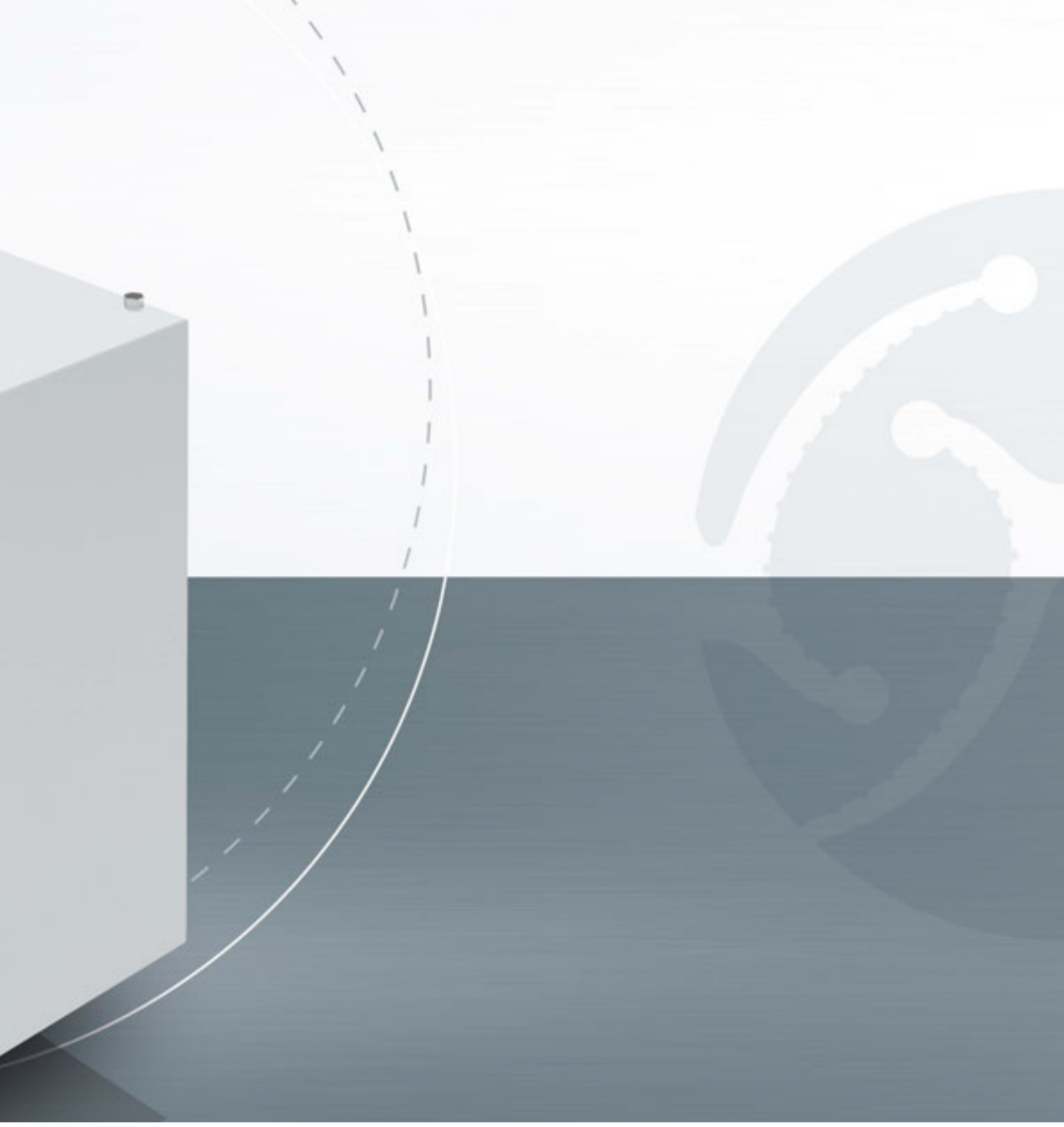
TECHNICAL DATA – X-CYCLONE® RKV1 SERIES

Type of device	Extraction volume [m³/h]	Dimensions				Pressure drop, total [Pa]	Weight [kg]
		Length [mm]	Width [mm]	Height [mm]	Connecting diameter DN [mm]		
RKV1-1	500	370	380	370	140	400	12
RKV1-2	1200	520	460	520	200	400	27
RKV1-3	2000	600	540	600	250	400	43
RKV1-4	3500	800	660	800	355	400	91
RKV1-5	5000	870	820	870	450	400	134

* Attention: The specified pressure drops are based on the assumption of an unobstructed air inflow into the X-CYCLONE® duct system and out of it. The air intake and outlet of the duct must be three times, better five times, as long as the diameter of the connection to the X-CYCLONE® duct system.

X-CYCLONE® RKV2 Series

Duct air cleaners for pre-separation right at the machining process



REVENX
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X-CYCLONE® RKV2 Series

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating facilities, food-production plants and cooking appliances in commercial kitchens. Separation of water-based aerosols such as cooling lubricants, spray mist or cooking fumes.

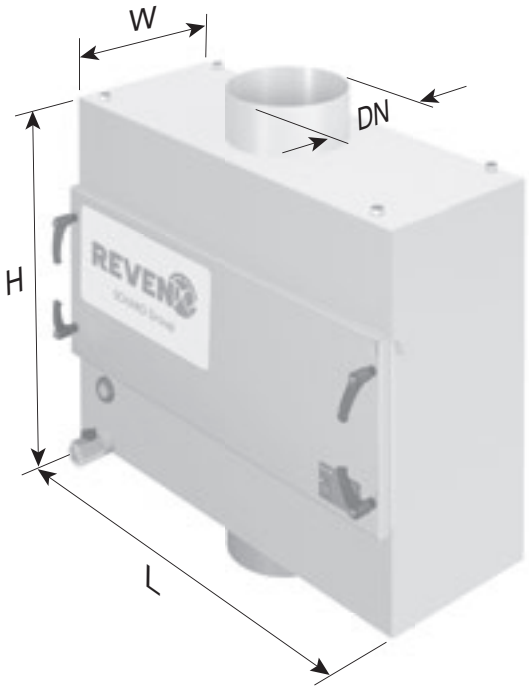
Suitable for installation in vertical exhaust ducts.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Agglomeration system made of stainless steel, suitable for the removal of $PM_{2.5}$.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Effective protection of the exhaust duct against contamination.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

ACCESSORIES

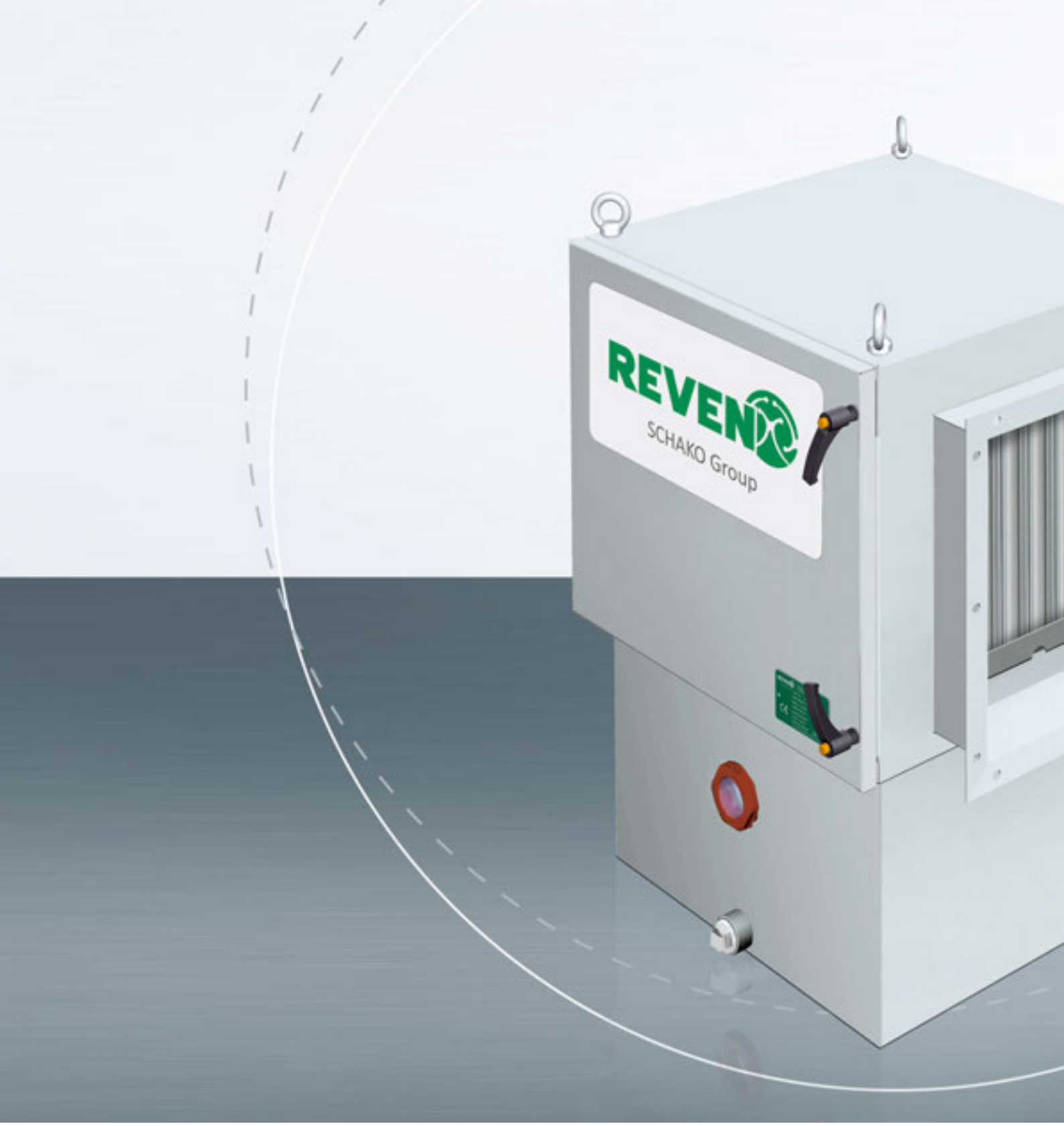
- Differential pressure indicator to monitor the duct air cleaner.
- Adapters and reducers for connection to the exhaust ducts.
- Siphons, drain lines, connecting sleeves and shut-off valves for the separated liquids.



TECHNICAL DATA – X-CYCLONE® RKV2 SERIES

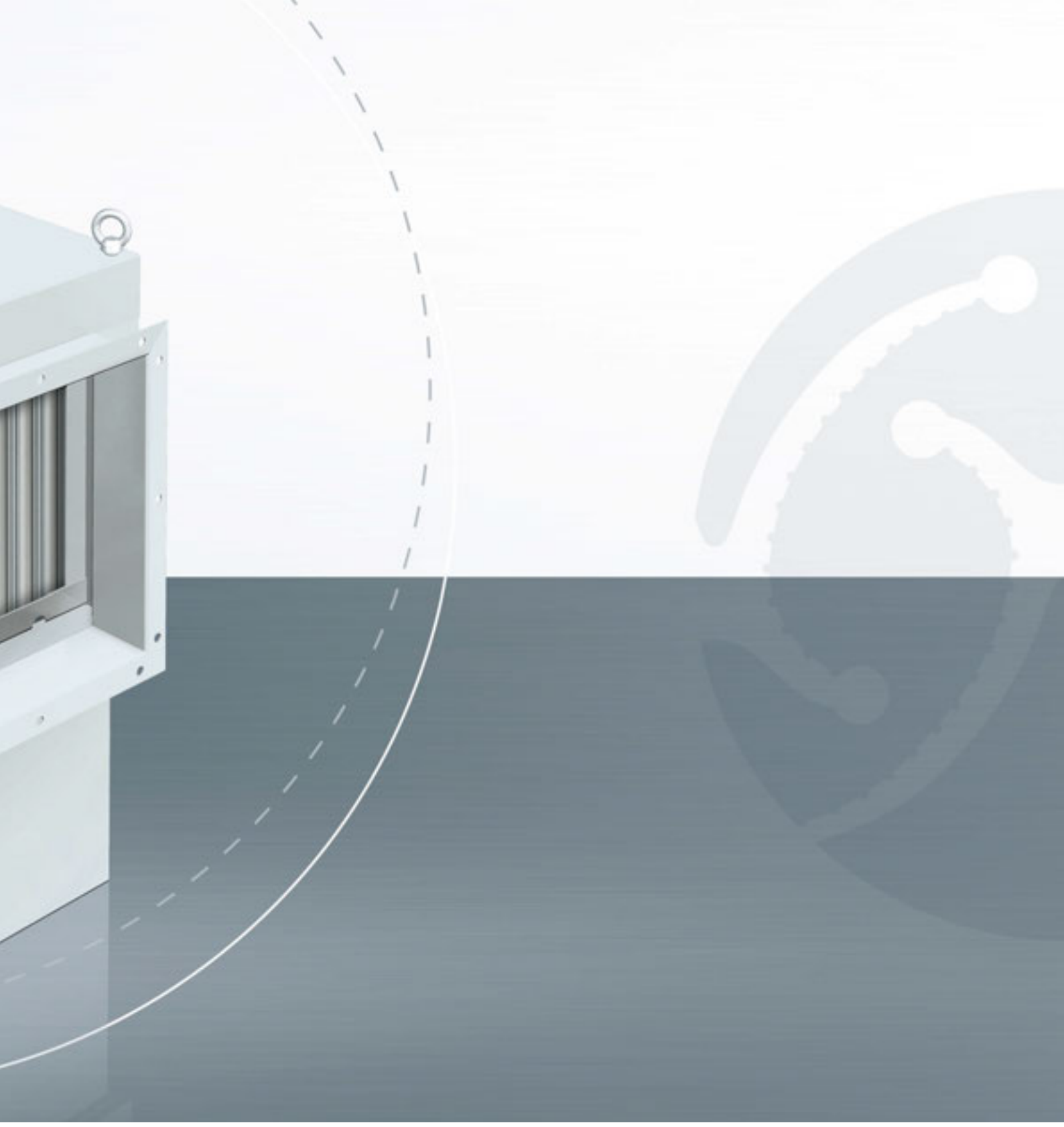
Type of device	Extraction volume [m³/h]	Dimensions				Pressure drop, total [Pa]	Weight [kg]
		Length [mm]	Width [mm]	Height [mm]	Connecting diameter DN [mm]		
RKV2-1	500	660	200	490	100	800	50
RKV2-2	1000	760	300	590	200	800	70
RKV2-3	2000	960	340	790	300	800	90
RKV2-4	3500	1160	540	830	500	800	150

* Attention: The specified pressure drops are based on the assumption of an unobstructed air inflow into the X-CYCLONE® duct system and out of it. The air intake and outlet of the duct must be three times, better five times, as long as the diameter of the connection to the X-CYCLONE® duct system.



X-CYCLONE® RK2 Series

Duct air cleaners for water-based aerosols



REVENO
SCHAKO Group

X-CYCLONE® RK2 Series

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating facilities, food-production plants and cooking appliances in commercial kitchens. Separation of water-based aerosols such as cooling lubricants, spray mist or cooking fumes.

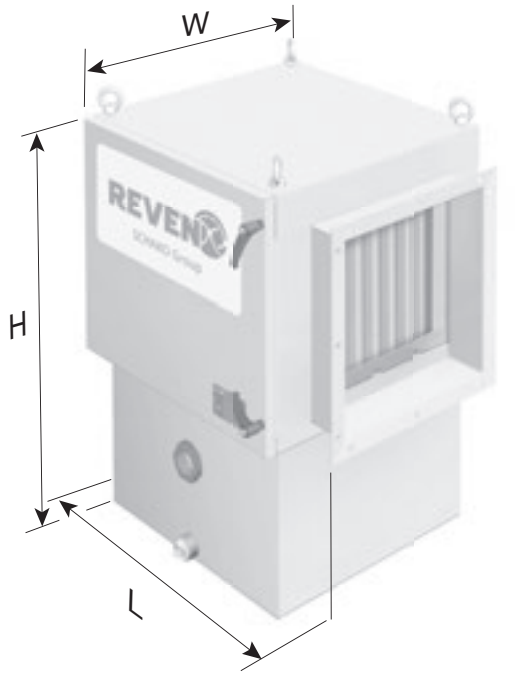
Suitable for installation in horizontal exhaust ducts.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Agglomeration system made of stainless steel, suitable for the removal of $PM_{2.5}$.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Effective protection of the exhaust duct against contamination.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

ACCESSORIES

- Bag filter for aerosols containing plasticizer, varnish or oil particles.
- Differential pressure indicator to monitor the duct air cleaner.
- Adapters and reducers for connection to the exhaust ducts.
- Siphons, drain lines, connecting sleeves and shut-off valves for the separated liquids.



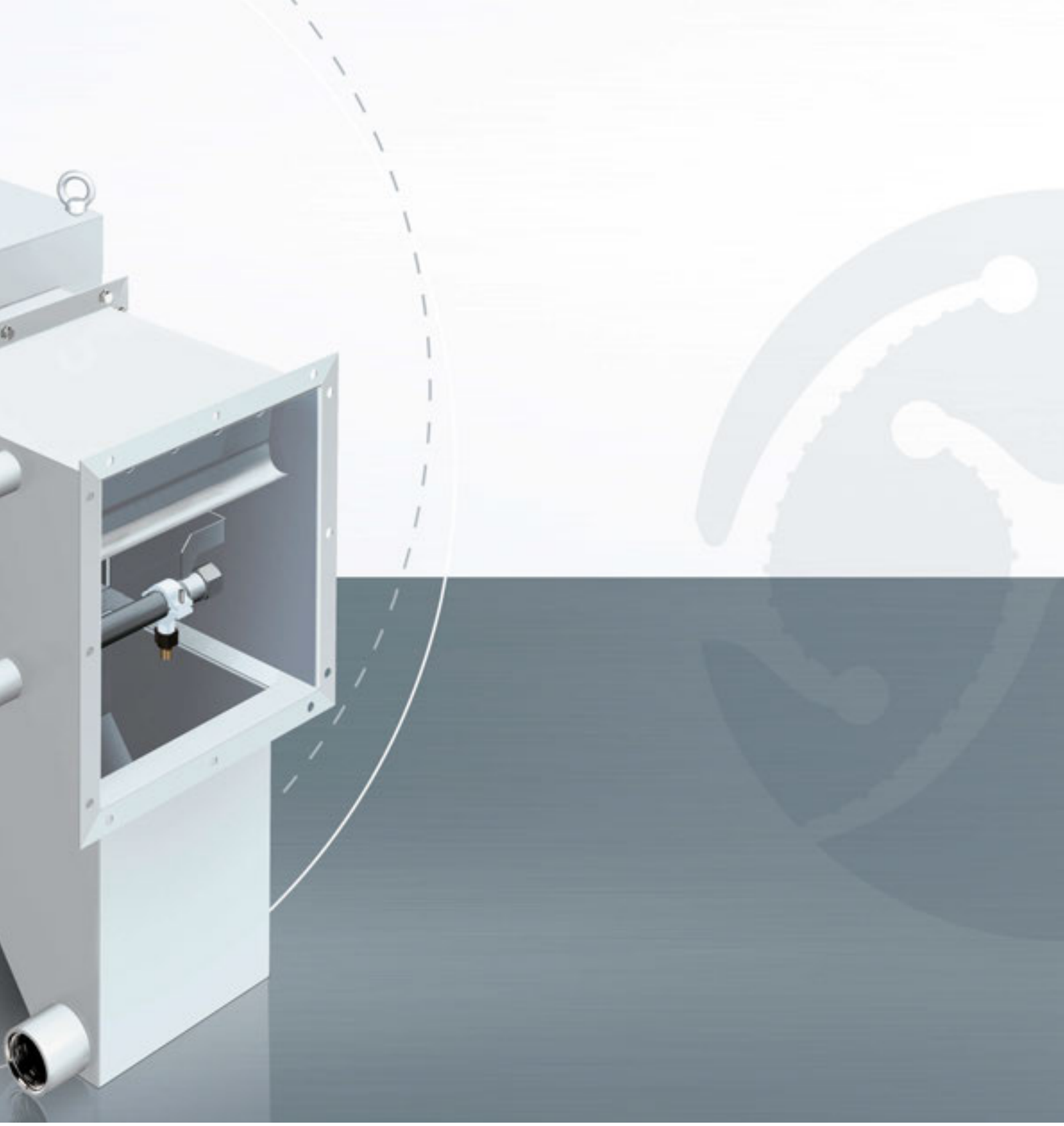
TECHNICAL DATA – X-CYCLONE® RK2 SERIES

Type of device	Extraction volume [m³/h]	Dimensions				Pressure drop, total [Pa]	Weight [kg]
		Length [mm]	Width [mm]	Height [mm]	Duct connection [mm]		
RK2-1	1200	660	490	710	320 x 320	1000	50
RK2-2	1600	660	650	710	490 x 320	1000	55
RK2-3	2400	660	650	880	490 x 490	1000	65
RK2-4	3300	660	750	1120	620 x 620	1000	95
RK2-5	6000	660	990	1240	840 x 840	1000	125
RK2-6	10000	660	1240	1510	1160 x 1160	1000	160

* Attention: The specified pressure drops are based on the assumption of an unobstructed air inflow into the X-CYCLONE® duct system and out of it. The air intake and outlet of the duct must be three times, better five times, as long as the diameter of the connection to the X-CYCLONE® duct system.

X-CYCLONE® RK2R Series

Duct air cleaners with REVEX® spraying technology



REVENO
SCHAKO Group

X-CYCLONE® RK2R Series

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating facilities, food-production plants and cooking appliances in commercial kitchens. Separation of dry, adhesive, solid and vaporous substances.

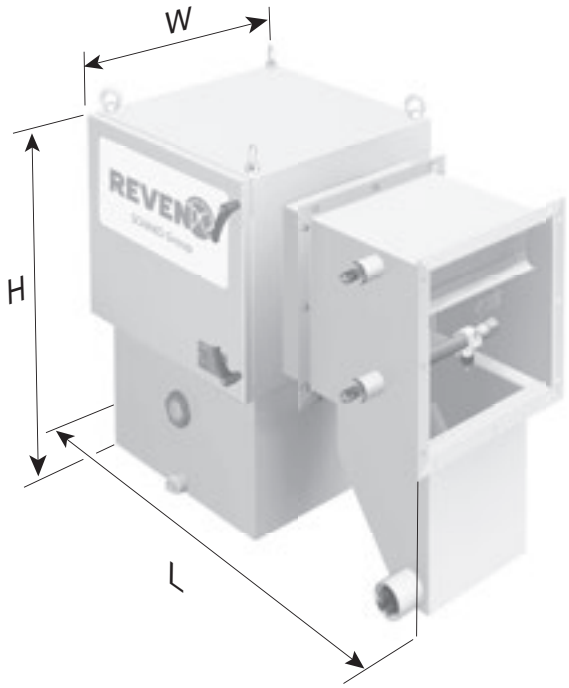
Suitable for installation in horizontal exhaust ducts.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Patented REVEX® spraying technology with cleaning and air-washing function.
- Agglomeration system made of stainless steel, suitable for the removal of $PM_{2.5}$.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Effective protection of the exhaust duct against contamination.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

ACCESSORIES

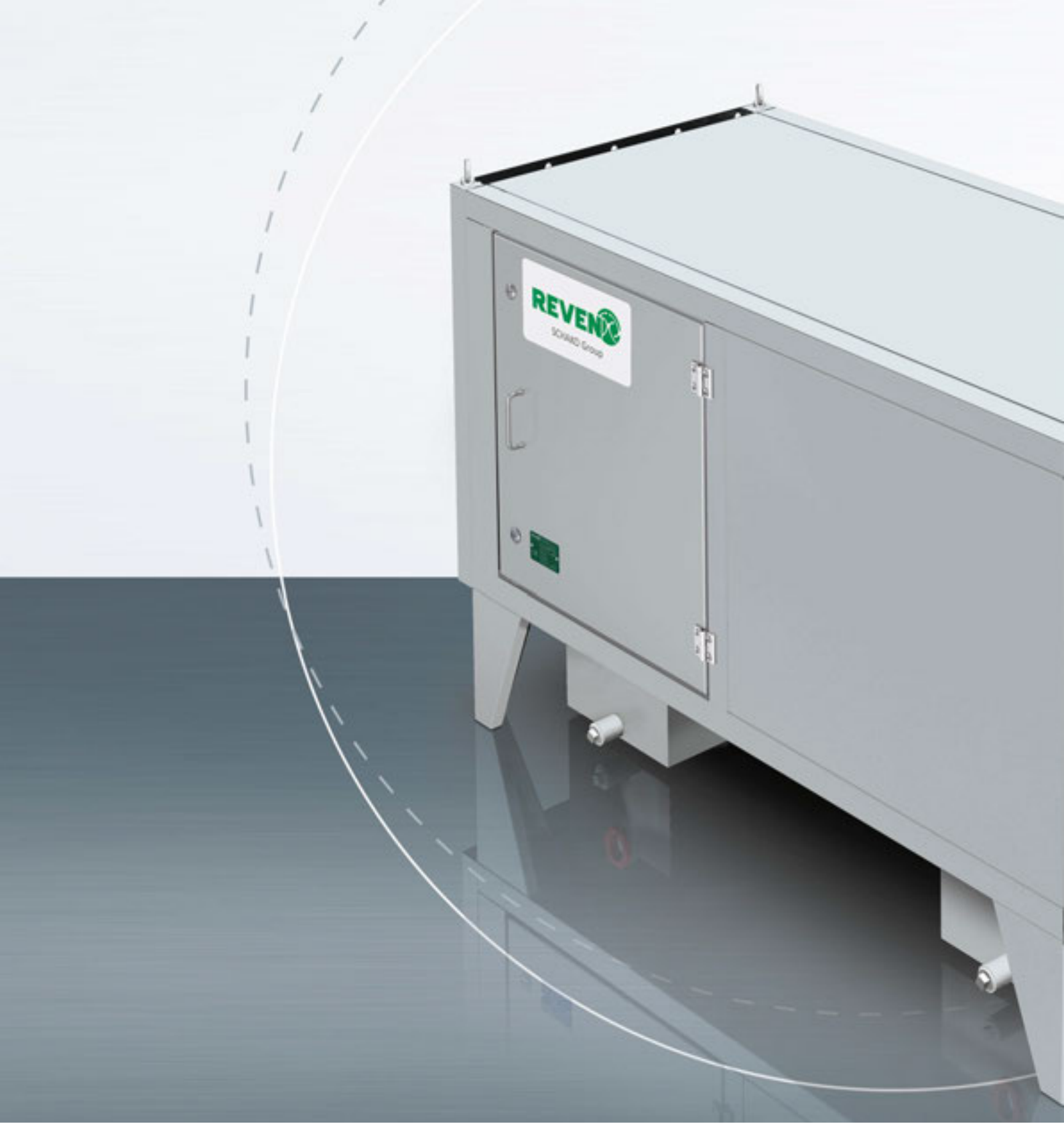
- Differential pressure indicator to monitor the duct air cleaner.
- Adapters and reducers for connection to the exhaust ducts.
- Siphons, drain lines, connecting sleeves and shut-off valves for the separated liquids.



TECHNICAL DATA – X-CYCLONE® RK2R SERIES

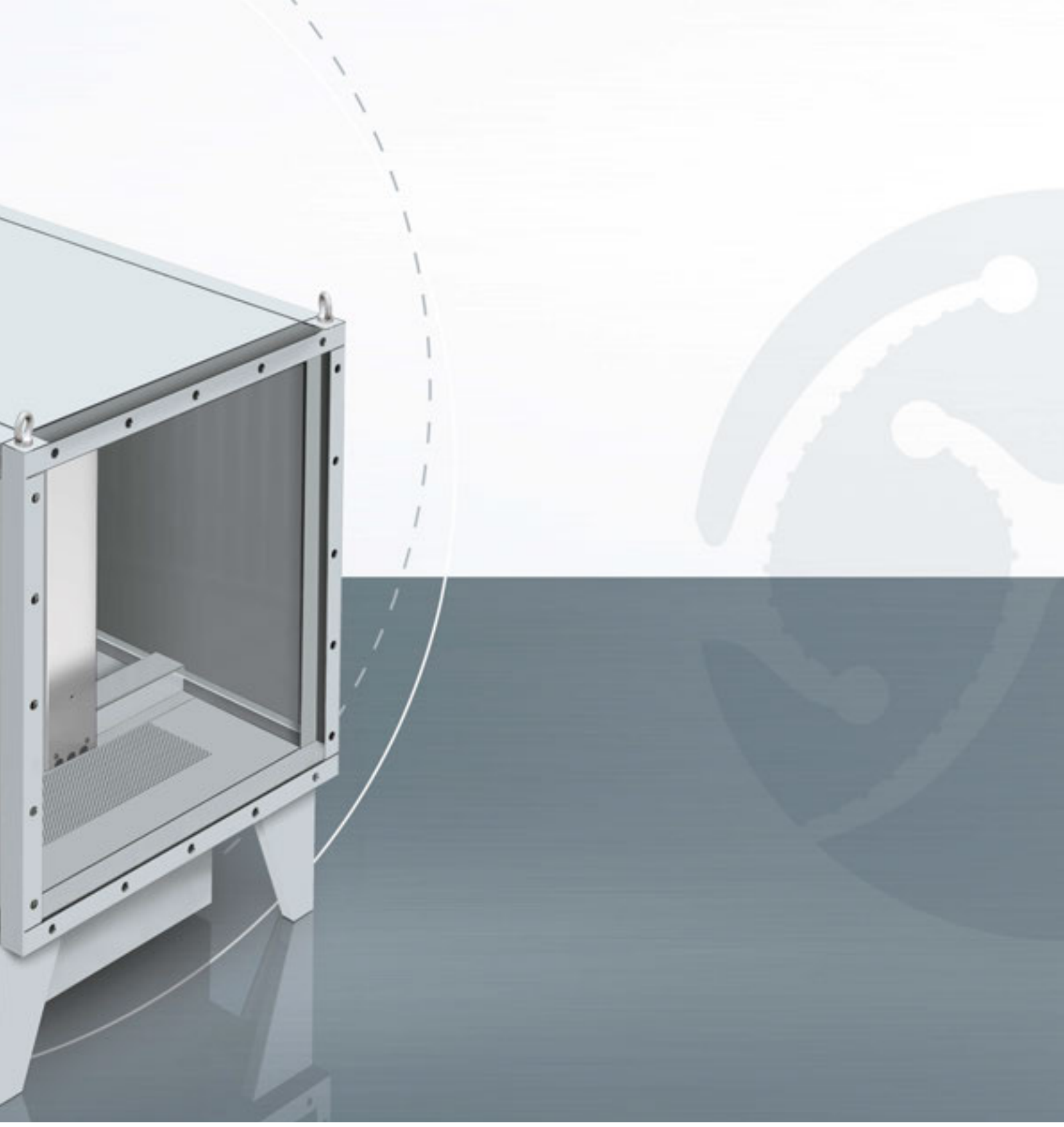
Type of device	Extraction volume [m³/h]	Dimensions				Pressure drop, total [Pa]	Weight [kg]
		Length [mm]	Width [mm]	Height [mm]	Duct connection [mm]		
RK2R-1	1200	960	380	710	320 x 320	1100	75
RK2R-2	1600	960	550	710	490 x 320	1100	83
RK2R-3	2400	960	550	880	490 x 490	1100	100
RK2R-4	3300	960	680	1120	620 x 620	1100	140
RK2R-5	6000	960	900	1240	840 x 840	1100	180
RK2R-6	10000	960	1220	1510	1160 x 1160	1100	250

* Attention: The specified pressure drops are based on the assumption of an unobstructed air inflow into the X-CYCLONE® duct system and out of it. The air intake and outlet of the duct must be three times, better five times, as long as the diameter of the connection to the X-CYCLONE® duct system.



X-CYCLONE® RKM Series

Duct air cleaners for water-based aerosols and high extraction volumes



REVENO
SCHAKO Group

X-CYCLONE® RKM Series

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating facilities, food-production plants and cooking appliances in commercial kitchens. Separation of water-based aerosols such as cooling lubricants, spray mist or cooking fumes.

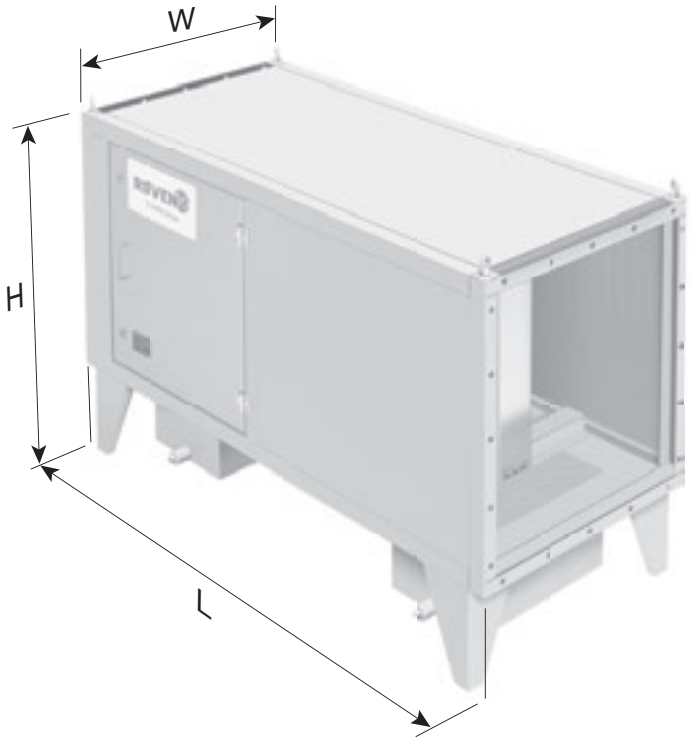
For high extraction volumes; suitable for installation in horizontal exhaust ducts.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Agglomeration system made of stainless steel, suitable for the removal of $PM_{2.5}$.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Effective protection of the exhaust duct against contamination.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

ACCESSORIES

- REVEX® spraying technology, see X-CYCLONE® RKMR series.
- Differential pressure indicator to monitor the duct air cleaner.
- Siphons, drain lines, connecting sleeves and shut-off valves for the separated liquids.



TECHNICAL DATA – X-CYCLONE® RKM SERIES

Type of device	Extraction volume [m³/h]	Dimensions				Pressure drop, total [Pa]	Weight [kg]
		Length [mm]	Width [mm]	Height [mm]	Duct connection [mm]		
RKM-01	5000	1600	720	990	645 x 665	800	162
RKM-02	7500	1600	1030	990	955 x 665	800	213
RKM-03	10000	1600	1340	990	1265 x 665	800	264
RKM-04	10000	1600	720	1610	645 x 1285	800	274
RKM-05	15000	1600	1030	1610	955 x 1285	800	356
RKM-06	20000	1600	1340	1610	1265 x 1285	800	428
RKM-07	30000	1600	1340	2230	1265 x 1905	800	582
RKM-08	30000	1600	1960	1610	1885 x 1285	800	602
RKM-09	45000	1600	1960	2230	1885 x 1905	800	808
RKM-10	60000	1600	2580	2230	2505 x 1905	800	1064
RKM-11	60000	1600	1960	2850	1885 x 2525	800	1064
RKM-12	80000	1600	2580	2850	2505 x 2525	800	1332

* Attention: The specified pressure drops are based on the assumption of an unobstructed air inflow into the X-CYCLONE® duct system and out of it. The air intake and outlet of the duct must be three times, better five times, as long as the diameter of the connection to the X-CYCLONE® duct system.

X-CYCLONE® RKMR Series

Duct air cleaners with REVEX® spraying technology for high extraction volumes

REVENO
SCHAKO Group

X-CYCLONE® RKMR Series

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating facilities, food-production plants and cooking appliances in commercial kitchens. Separation of dry, adhesive, solid and vaporous substances.

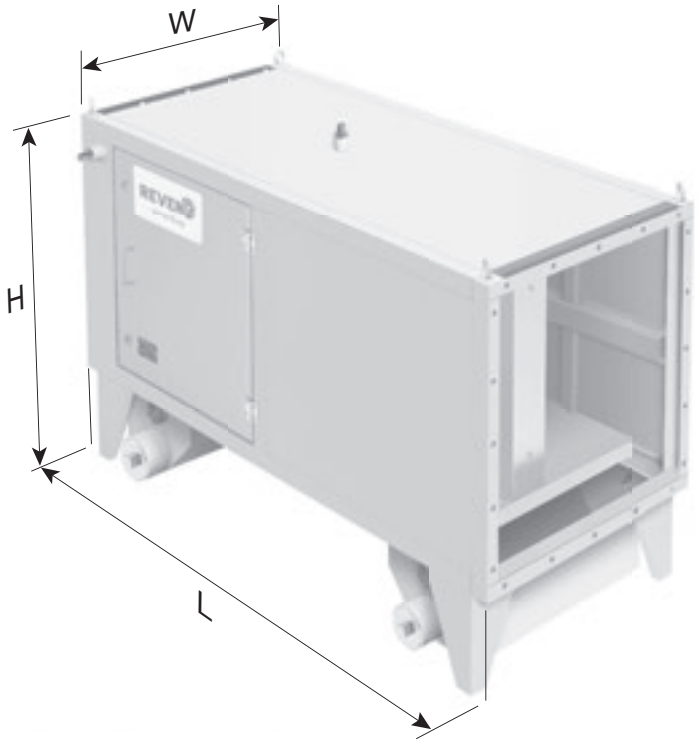
Suitable for installation in horizontal exhaust ducts.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Patented REVEX® spraying technology with cleaning and air-washing function.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Effective protection of the exhaust duct against contamination.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

ACCESSORIES

- Differential pressure indicator to monitor the duct air cleaner.
- Siphons, drain lines, connecting sleeves and shut-off valves for the separated liquids.



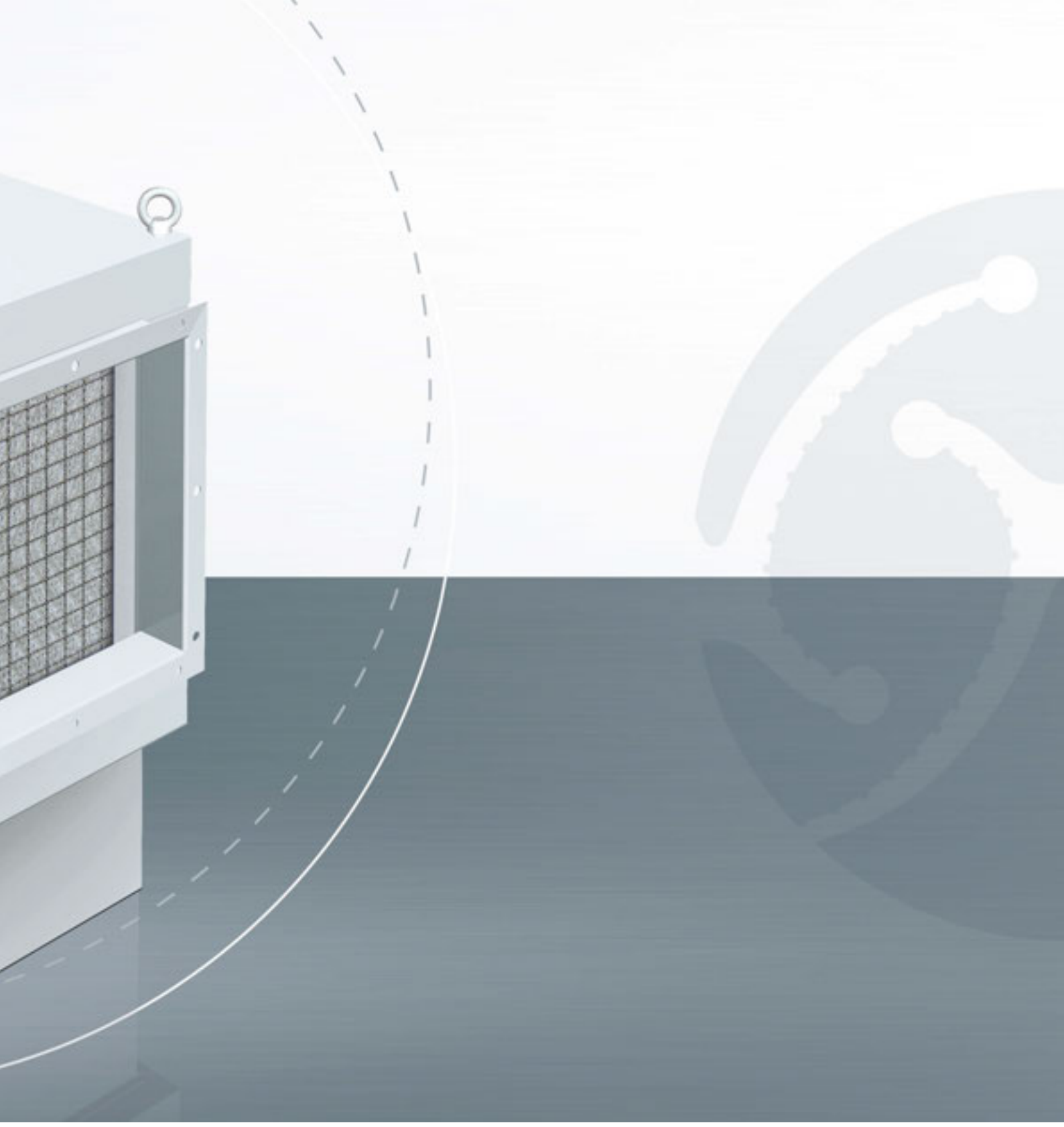
TECHNICAL DATA – X-CYCLONE® RKMR SERIES

Type of device	Extraction volume [m³/h]	Dimensions				Pressure drop, total [Pa]	Weight [kg]
		Length [mm]	Width [mm]	Height [mm]	Duct connection [mm]		
RKMR-01	5000	1600	720	990	645 x 665	600	162
RKMR-02	7500	1600	1030	990	955 x 665	600	213
RKMR-03	10000	1600	1340	990	1265 x 665	600	264
RKMR-04	10000	1600	720	1610	645 x 1285	600	274
RKMR-05	15000	1600	1030	1610	955 x 1285	600	356
RKMR-06	20000	1600	1340	1610	1265 x 1285	600	428
RKMR-07	30000	1600	1340	2230	1265 x 1905	600	582
RKMR-08	30000	1600	1960	1610	1885 x 1285	600	602
RKMR-09	45000	1600	1960	2230	1885 x 1905	600	808
RKMR-10	60000	1600	2580	2230	2505 x 1905	600	1064
RKMR-11	60000	1600	1960	2850	1885 x 2525	600	1064
RKMR-12	80000	1600	2580	2850	2505 x 2525	600	1332

* Attention: The specified pressure drops are based on the assumption of an unobstructed air inflow into the X-CYCLONE® duct system and out of it. The air intake and outlet of the duct must be three times, better five times, as long as the diameter of the connection to the X-CYCLONE® duct system.

X-CYCLONE® RKE Series

Duct air cleaners for oil-based aerosols



REVENO
SCHAKO Group

X-CYCLONE® RKE Series

RANGE OF APPLICATION

Cleaning of the exhaust air from processing machines, coating facilities, food-production plants and cooking appliances in commercial kitchens. Separation of oil-based aerosols such as cooling lubricants or spray and oil mists.

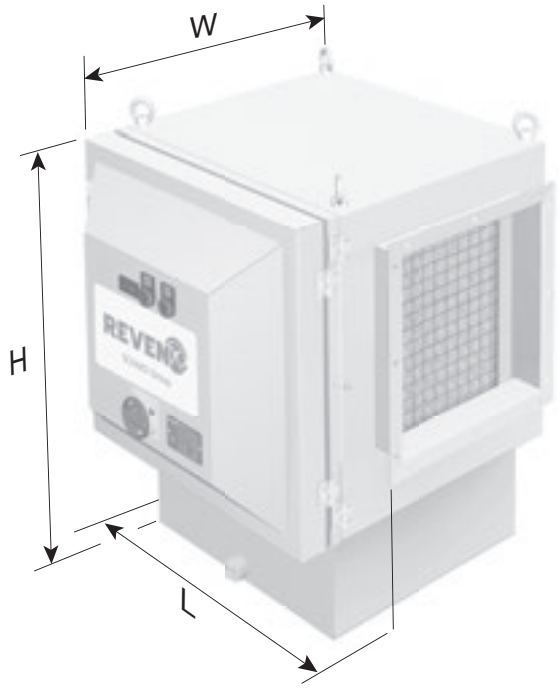
Suitable for installation in horizontal exhaust ducts.

TECHNICAL HIGHLIGHTS

- Combination of the patented high-performance X-CYCLONE® separating system and an electrostatic precipitator with an efficiency rate of up to 99.9999 %.
- Odour reduction in the exhaust air by means of high-voltage plasma.
- Agglomeration system made of stainless steel, suitable for the removal of oil-based $PM_{2.5}$.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Effective protection of the exhaust duct against contamination.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

ACCESSORIES

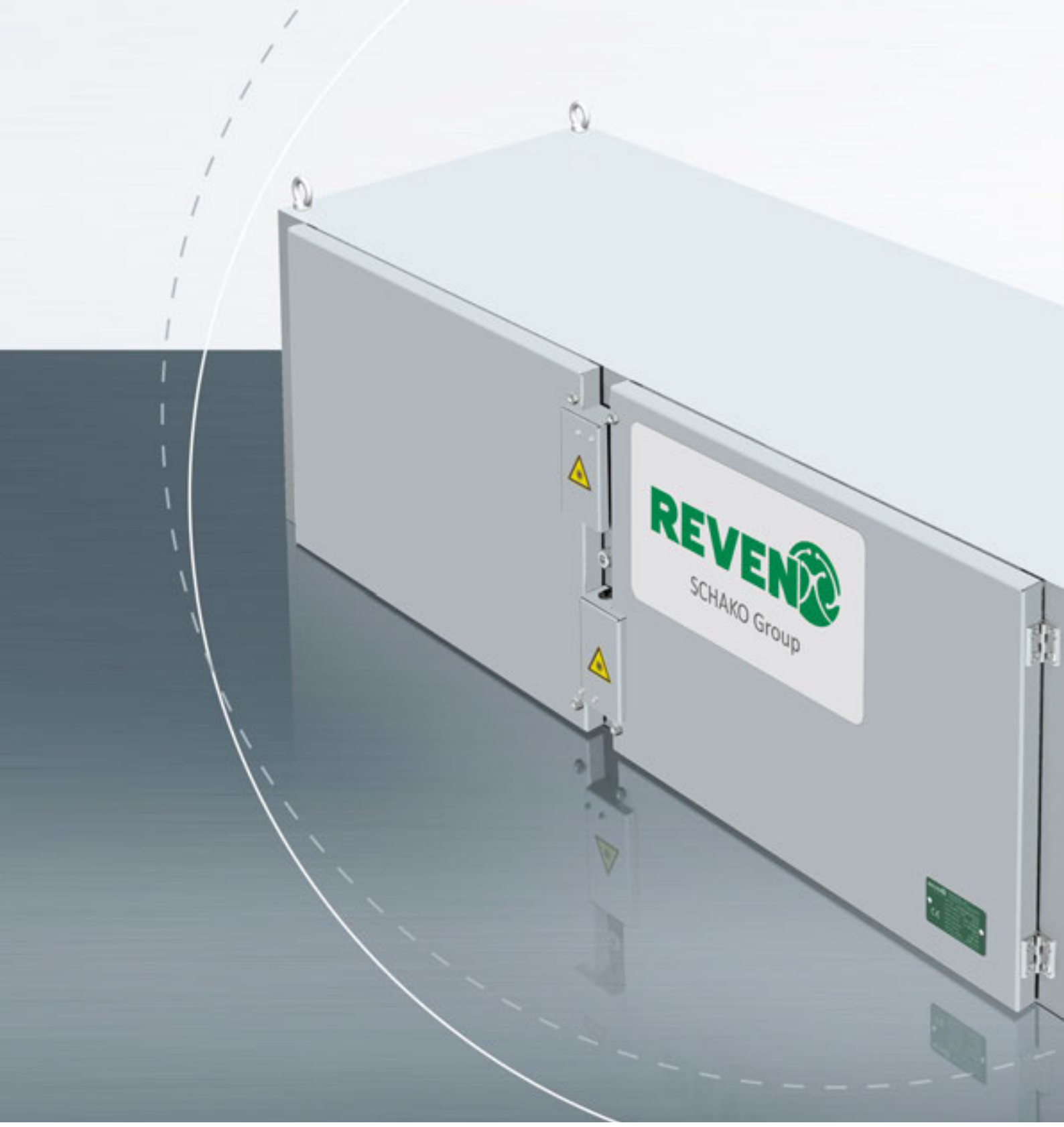
- Agglomeration system made of glass-fibre fabric, suitable for the removal of oil-based $PM_{1.0}$.
- Differential pressure indicator to monitor the duct air cleaner.
- Adapters and reducers for connection to the exhaust ducts.
- Siphons, drain lines, connecting sleeves and shut-off valves for the separated liquids.



TECHNICAL DATA – X-CYCLONE® RKE SERIES

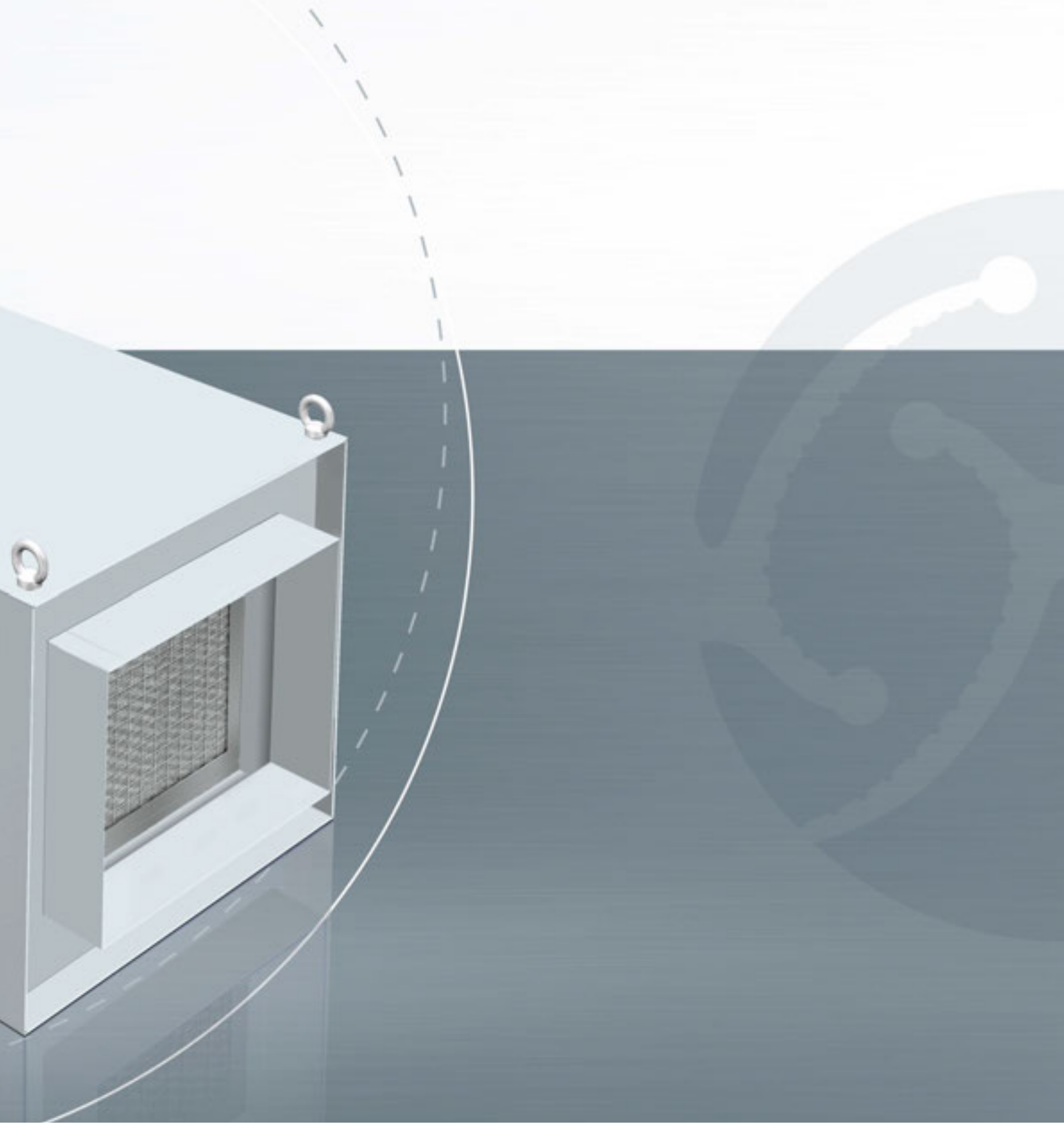
Type of device	Extraction volume [m³/h]	Electrical data			Dimensions				Pressure drop, total [Pa]	Weight [kg]
		Voltage [V] 50/60 Hz	Current [A] 50/60 Hz	Power [W] 50/60 Hz	Length [mm]	Width [mm]	Height [mm]	Duct connection [mm]		
RKE-1	1200	1~230	0.70	160	660	630	710	320 x 320	800	75
RKE-2	1600	1~230	0.70	160	660	790	710	490 x 320	800	80
RKE-3	2400	1~230	0.70	160	660	790	880	490 x 490	800	95
RKE-4	3300	1~230	1.40	320	660	890	1120	620 x 620	800	135
RKE-5	6000	1~230	1.40	320	660	1130	1240	840 x 840	800	170
RKE-6	10000	1~230	1.40	320	660	1380	1510	1160 x 1160	800	210

* Attention: The specified pressure drops are based on the assumption of an unobstructed air inflow into the X-CYCLONE® duct system and out of it. The air intake and outlet of the duct must be three times, better five times, as long as the diameter of the connection to the X-CYCLONE® duct system.



X-CYCLONE® RKUV Series

Duct air cleaners for the reduction of organic and synthetic odour pollution



REVENO
SCHAKO Group

X-CYCLONE® RKUV Series

RANGE OF APPLICATION

Cleaning of the exhaust air from commercial kitchens, food-production or manufacturing facilities and control of synthetic and organic odour pollution by means of UV oxidation.

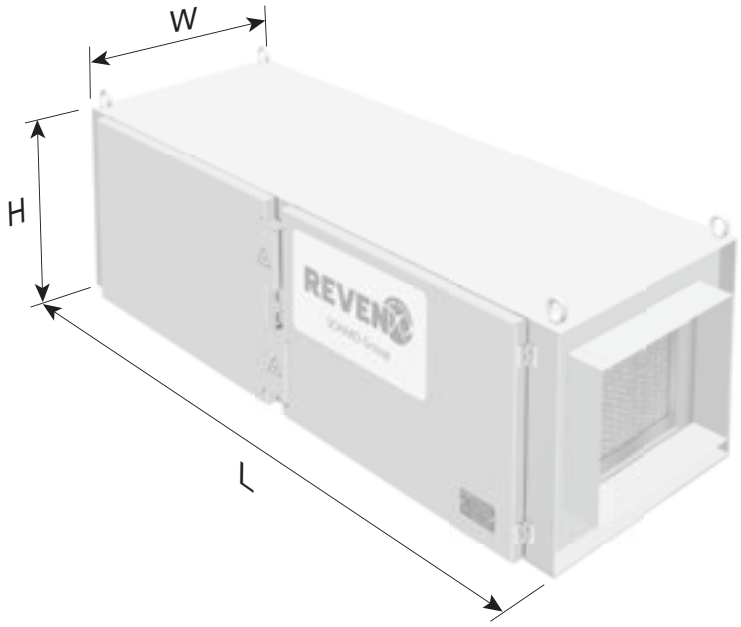
Suitable for installation in horizontal exhaust ducts.

TECHNICAL HIGHLIGHTS

- Combination of the patented high-performance X-CYCLONE® separating system and REVEN® Longlife UV tubes with an efficiency rate of up to 99.9999 %.
- Exhaust air treatment with UV-C and VUV radiation. UV-C radiation at a wavelength of 254 nm for the destruction of microorganisms (bacteria, fungi and viruses). Vacuum ultraviolet radiation (VUV) at a wavelength of 185 nm to generate ozone for the oxidation of airborne odorous matter.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Effective protection of the exhaust duct against contamination.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.

ACCESSORIES

- Differential pressure indicator to monitor the duct air cleaner.
- Adapters and reducers for connection to the exhaust ducts.



TECHNICAL DATA – X-CYCLONE® RKUV SERIES

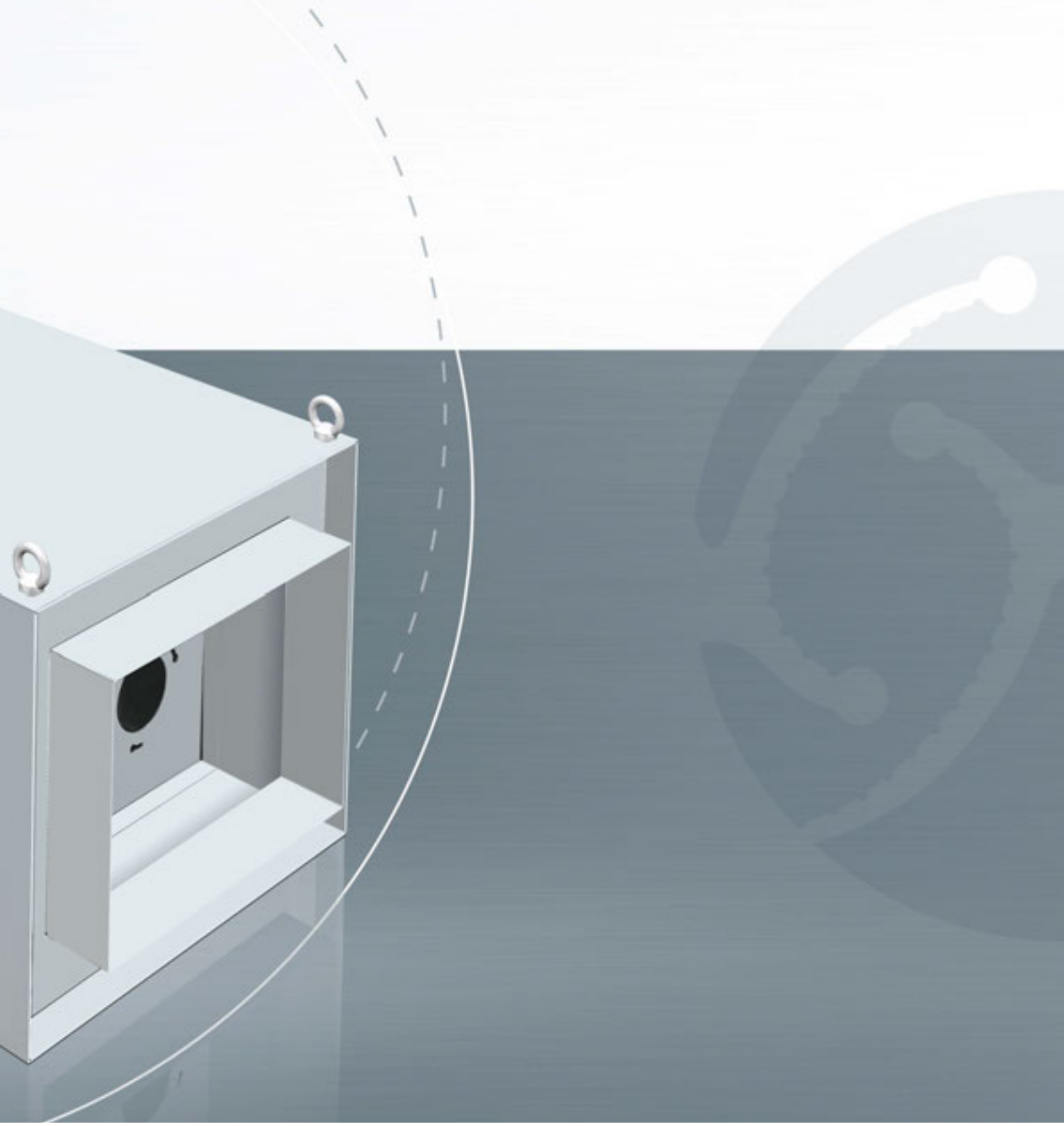
Type of device	Extraction volume [m³/h]	Electrical data			Dimensions				Pressure drop, total [Pa]	Weight [kg]
		Voltage [V] 50/60 Hz	Current [A] 50/60 Hz	Power [W] 50/60 Hz	Length [mm]	Width [mm]	Height [mm]	Duct connection [mm]		
RKUV-1	800	1~230	1.80	345	1500	460	460	300 x 300	600	65
RKUV-2	1600	1~230	2.50	500	1500	700	540	400 x 300	600	100
RKUV-3	2400	1~230	3.20	655	1500	700	650	550 x 450	600	150
RKUV-4	3200	1~230	6.00	1275	1500	700	700	550 x 550	600	160
RKUV-5	4800	1~230	8.80	1895	1500	1190	810	1040 x 660	600	260

* Attention: The specified pressure drops are based on the assumption of an unobstructed air inflow into the X-CYCLONE® duct system and out of it. The air intake and outlet of the duct must be three times, better five times, as long as the diameter of the connection to the X-CYCLONE® duct system.

Note:
When choosing the place of installation, make sure that the air needs at least two seconds to flow from the inlet of the duct-mounting system RKUV to the outlet into the open.

X-CYCLONE® RKGN Series

Duct air cleaners for the reduction of organic odour pollution



REVENX
SCHAKO Group

X-CYCLONE® RKGN Series

RANGE OF APPLICATION

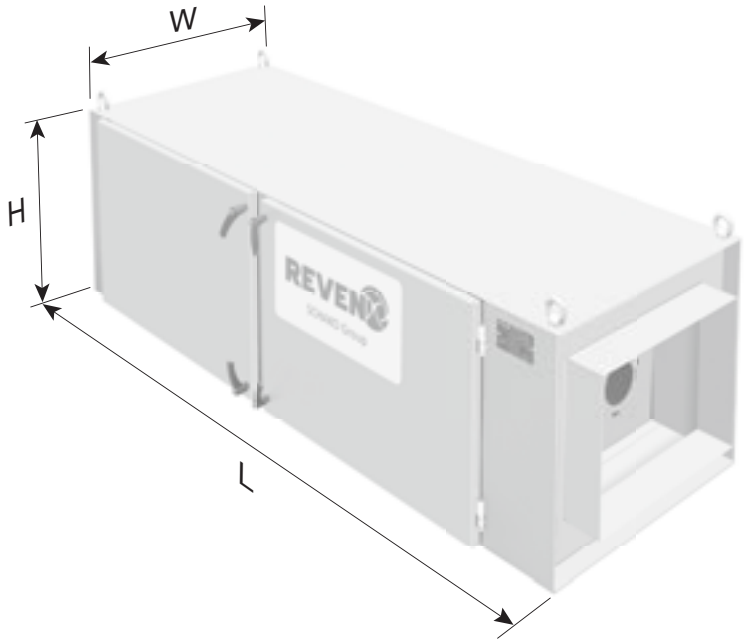
Cleaning of grease-polluted exhaust air from food-production facilities, commercial kitchens or industrial bakeries and control of organic odour pollution by means of oxidation.

Suitable for installation in horizontal exhaust ducts.

TECHNICAL HIGHLIGHTS

- Combination of the patented high-performance X-CYCLONE® separating system and a RGN99 odour filter with an efficiency rate of up to 99.9999 %.
- RGN99 high-performance granulate, a food-compliant alternative to activated carbon. Odour reduction by oxidation of odour molecules in the exhaust air.
- Oxidation with potassium permanganate and volcanic rock zeolite. Odours are eliminated by the reaction with potassium permanganate; residual odour particles are trapped in the molecular sieve provided by the volcanic zeolite carrier material.
- Sustainable air-cleaning concept thanks to the use of cleanable separators.
- Efficiency and function of the air cleaner proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Enclosure 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Effective protection of the exhaust duct against contamination.

- Designed, constructed and produced in Germany.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the enclosure.



ACCESSORIES

- Differential pressure indicator to monitor the duct air cleaner.
- Adapters and reducers for connection to the exhaust ducts.

TECHNICAL DATA – X-CYCLONE® RKGN SERIES

Type of device	Extraction volume [m³/h]	Dimensions				Pressure drop, total [Pa]	Weight [kg]
		Length [mm]	Width [mm]	Height [mm]	Duct connection [mm]		
RKGN-1	800	1500	460	460	300 x 300	800 – 1200	95
RKGN-2	1200	1500	540	460	400 x 300	800 – 1200	115
RKGN-3	1600	1500	700	460	550 x 300	800 – 1200	135
RKGN-4	2400	1500	700	650	550 x 450	800 – 1200	175
RKGN-5	3200	1500	700	700	550 x 550	800 – 1200	200
RKGN-6	4800	1500	1190	810	1040 x 660	800 – 1200	325
RKGN-7	7200	1500	1190	1120	1040 x 970	800 – 1200	370

* Attention: The specified pressure drops are based on the assumption of an unobstructed air inflow into the X-CYCLONE® duct system and out of it. The air intake and outlet of the duct must be three times, better five times, as long as the diameter of the connection to the X-CYCLONE® duct system.

Capture Systems

Air cleaners suitable for installation above production systems

REVENO
SCHAKO Group

X-CYCLONE® EVN-W Series

Capture hood with REVEN® air-induction system

Peripheral version

Also available with REVEN® efficiency air-induction system!*

REVEN
SCHAKO Group

X-CYCLONE® EVN-W Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- New, internationally patented air-induction nozzle for the efficient capture and cleaning of the exhaust air.
- Efficiency and function of the REVEN® air-induction nozzle, capture hood and separators proven by CFD flow analyses.
- Integrated air-induction system preventing draughts and ensuring compliance with the maximum permissible supply flow rates.*
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested in accordance with DIN and DIN EN test standards.

Further information

www.reven.de (Technologies → for fume capture)

www.reven.de (Technologies → for adjustment and control)

* Optionally available with the improved REVEN® efficiency air-induction system – improves the capturing of the exhaust air without any supply air directly blown in.

- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.

TECHNICAL DATA – X-CYCLONE® EVN-W SERIES

Width [mm]	1000	1100	1200	1300	1400	1500	1600	1700	1800
Height [mm]	450	450	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air dampers [mm]	Exhaust air socket [mm]
1000	1000	20	1 x 750 x 150	1 x 750 x 150
1200	1000	20	1 x 750 x 150	1 x 750 x 150
1400	1500	20	1 x 750 x 150	1 x 750 x 150
1600	1500	40	1 x 750 x 150	1 x 750 x 150
1800	1500	40	1 x 750 x 150	1 x 750 x 150
2000	2000	50	1 x 750 x 150	1 x 750 x 150
2200	2000	50	1 x 750 x 150	1 x 750 x 150
2400	2500	50	1 x 750 x 150	1 x 750 x 150
2600	2500	50	2 x 750 x 150	2 x 750 x 150
2800	3000	50	2 x 750 x 150	2 x 750 x 150
3000	3000	40	2 x 750 x 150	2 x 750 x 150

TECHNICAL DATA – X-CYCLONE® EVN-W SERIES

Width [mm]	1000	1100	1200	1300	1400	1500	1600	1700	1800
Height [mm]	450	450	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air dampers [mm]	Exhaust air socket [mm]
3200	3500	40	2 x 750 x 150	2 x 750 x 150
3400	3500	40	2 x 750 x 150	2 x 750 x 150
3600	3500	40	2 x 750 x 150	2 x 750 x 150
3800	4000	40	2 x 750 x 150	2 x 750 x 150
4000	4000	50	2 x 750 x 150	2 x 750 x 150

Create your capture hood online using the REVEN Configurator and download the BIM data:
https://bim.reven.de/#/configurator?SelectedElementID=1000

TECHNICAL DATA – X-CYCLONE® EVN-W SERIES

Length [mm]	Weight [kg]								
	Width [mm]								
	1000	1100	1200	1300	1400	1500	1600	1700	1800
1000	87	95	99	108	118	129	133	138	143
1200	98	106	110	119	130	142	146	151	157
1400	109	117	122	133	142	154	158	164	170
1600	120	130	134	145	157	170	174	178	184
1800	132	142	145	158	170	183	187	191	197
2000	146	157	162	174	183	203	207	211	217
2200	157	169	173	186	197	217	221	225	231
2400	168	179	183	200	214	231	235	239	245
2600	180	192	196	212	227	244	248	252	257
2800	191	203	209	225	242	258	262	266	271
3000	202	214	222	237	254	272	276	281	287
3200	214	226	233	250	267	286	290	294	300
3400	225	239	245	254	281	300	304	308	314
3600	237	250	259	262	294	314	318	322	328
3800	250	264	274	284	310	329	333	337	343
4000	260	276	288	300	324	346	350	357	363

X-CYCLONE® EVN-M Series

Capture hood with REVEN® air-induction system

Central version

Also available with REVEN® efficiency air-induction system!*

REVEN
SCHAKO Group

X-CYCLONE® EVN-M Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- New, internationally patented air-induction nozzle for the efficient capture and cleaning of the exhaust air.
- Efficiency and function of the REVEN® air-induction nozzle, capture hood and separators proven by CFD flow analyses.
- Integrated air-induction system preventing draughts and ensuring compliance with the maximum permissible supply flow rates.*
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested in accordance with DIN and DIN EN test standards.

Further information

www.reven.de (Technologies → for fume capture)

www.reven.de (Technologies → for adjustment and control)

* Optionally available with the improved REVEN® efficiency air-induction system – improves the capturing of the exhaust air without any supply air directly blown in.

- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.

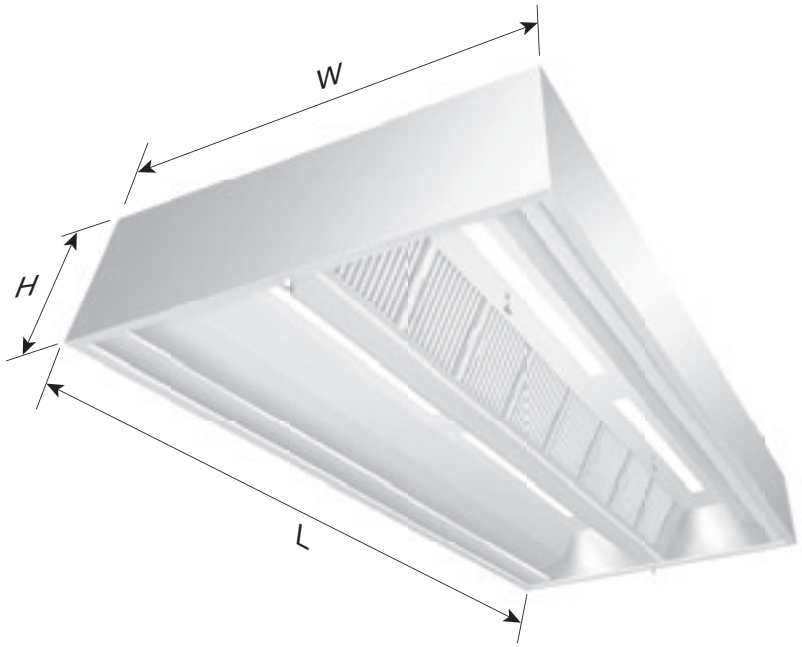
ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.

TECHNICAL DATA – X-CYCLONE® EVN-M SERIES

Width [mm]	2000	2200	2400	2600	2800	3000	3200
Height [mm]	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air dampers [mm]	Exhaust air socket [mm]
1000	2000	20	2 x 750 x 150	1 x 750 x 500
1200	2000	20	2 x 750 x 150	1 x 750 x 500
1400	3000	20	2 x 750 x 150	1 x 750 x 500
1600	3000	40	2 x 750 x 150	1 x 750 x 500
1800	3000	40	2 x 750 x 150	1 x 750 x 500
2000	4000	50	2 x 750 x 150	1 x 750 x 500
2200	4000	50	2 x 750 x 150	1 x 750 x 500
2400	5000	50	2 x 750 x 150	1 x 750 x 500
2600	5000	50	4 x 750 x 150	2 x 750 x 500
2800	6000	50	4 x 750 x 150	2 x 750 x 500
3000	6000	40	4 x 750 x 150	2 x 750 x 500



TECHNICAL DATA – X-CYCLONE® EVN-M SERIES

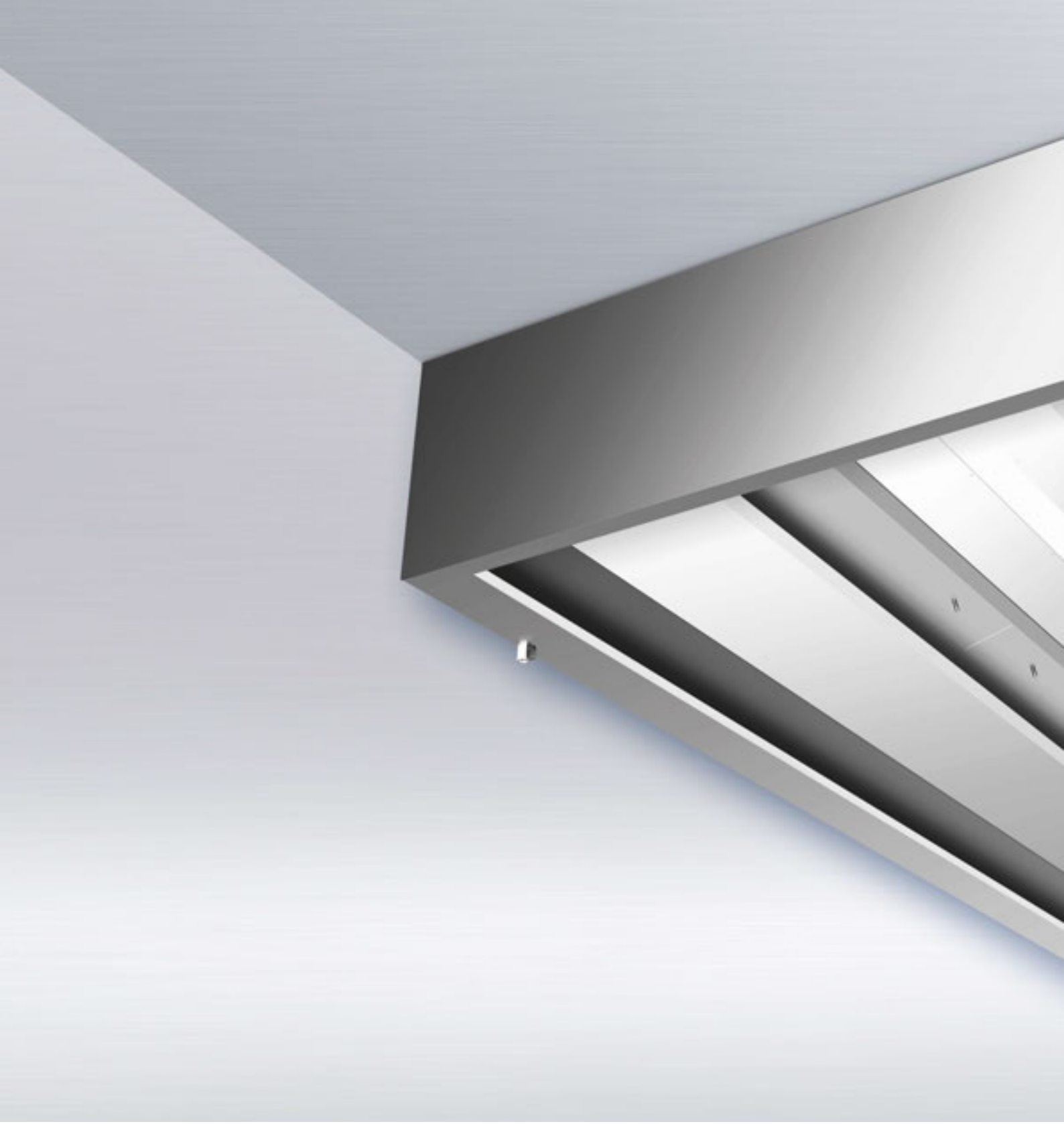
Width [mm]	2000	2200	2400	2600	2800	3000	3200
Height [mm]	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air dampers [mm]	Exhaust air socket [mm]
3200	7000	40	4 x 750 x 150	2 x 750 x 500
3400	7000	40	4 x 750 x 150	2 x 750 x 500
3600	7000	40	4 x 750 x 150	2 x 750 x 500
3800	8000	40	4 x 750 x 150	2 x 750 x 500
4000	8000	50	4 x 750 x 150	2 x 750 x 500

Create your capture hood online using the REVEN Configurator and download the BIM data:
https://bim.reven.de/#/configurator?SelectedElementID=1001

TECHNICAL DATA – X-CYCLONE® EVN-M SERIES

Length [mm]	Weight [kg]						
	Width [mm]						
	2000	2200	2400	2600	2800	3000	3200
1000	174	190	198	216	236	258	266
1200	196	212	220	238	260	284	292
1400	218	234	244	266	284	308	316
1600	240	260	268	290	314	340	348
1800	264	284	290	316	340	366	374
2000	292	314	324	348	366	406	414
2200	314	338	346	372	394	434	442
2400	336	358	366	400	428	462	470
2600	360	384	392	424	454	488	496
2800	382	406	418	450	484	516	524
3000	404	428	444	474	508	544	552
3200	428	452	466	500	534	572	580
3400	450	478	490	508	562	600	608
3600	474	500	518	524	588	628	636
3800	500	528	548	568	620	658	666
4000	520	552	576	600	648	692	700



X-CYCLONE® EVNR-W Series

Capture hood with REVEN® air-induction and REVEX® spraying system

Peripheral version

Also available with REVEN® efficiency air-induction system!*

REVENO
SCHAKO Group

X-CYCLONE® EVNR-W Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Integrated, patented REVEX® spraying system for fully automatic cleaning and disinfection of the aerosol separators on both sides.
- New, internationally patented air-induction nozzle for the efficient capture and cleaning of the exhaust air.
- Efficiency and function of the REVEN® air-induction nozzle, capture hood and separators proven by CFD flow analyses.
- Integrated air-induction system preventing draughts and ensuring compliance with the maximum permissible supply flow rates.*
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested

* Optionally available with the improved REVEN® efficiency air-induction system – improves the capturing of the exhaust air without any supply air directly blown in.

Further information

www.reven.de (Technologies → for fume capture)
www.reven.de (Technologies → for adjustment and control)
www.reven.de (Technologies → for cleaning and desinfection)

in accordance with DIN and DIN EN test standards.

- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.

TECHNICAL DATA – X-CYCLONE® EVNR-W SERIES

Width [mm]	1200	1300	1400	1500
Height [mm]	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air dampers [mm]	Exhaust air socket [mm]
1000	1000	20	1 x 750 x 150	1 x 750 x 150
1200	1000	20	1 x 750 x 150	1 x 750 x 150
1400	1500	20	1 x 750 x 150	1 x 750 x 150
1600	1500	40	1 x 750 x 150	1 x 750 x 150
1800	1500	40	1 x 750 x 150	1 x 750 x 150
2000	2000	50	1 x 750 x 150	1 x 750 x 150
2200	2000	50	1 x 750 x 150	1 x 750 x 150
2400	2500	50	1 x 750 x 150	1 x 750 x 150
2600	2500	50	2 x 750 x 150	2 x 750 x 150
2800	3000	50	2 x 750 x 150	2 x 750 x 150
3000	3000	40	2 x 750 x 150	2 x 750 x 150

TECHNICAL DATA – X-CYCLONE® EVNR-W SERIES

Width [mm]	1200	1300	1400	1500
Height [mm]	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air dampers [mm]	Exhaust air socket [mm]
3200	3500	40	2 x 750 x 150	2 x 750 x 150
3400	3500	40	2 x 750 x 150	2 x 750 x 150
3600	3500	40	2 x 750 x 150	2 x 750 x 150
3800	4000	40	2 x 750 x 150	2 x 750 x 150
4000	4000	50	2 x 750 x 150	2 x 750 x 150

Other sizes on request!

TECHNICAL DATA – X-CYCLONE® EVNR-W SERIES

Length [mm]	Weight [kg]			
	Width [mm]			
	1200	1300	1400	1500
1000	155	169	185	201
1200	173	186	204	221
1400	190	208	223	241
1600	209	226	245	265
1800	226	246	266	286
2000	253	273	286	318
2200	270	291	308	339
2400	286	313	335	361
2600	306	331	355	381
2800	326	351	378	404
3000	346	370	398	425
3200	364	390	418	448
3400	383	396	439	469
3600	405	409	459	491
3800	428	428	485	514
4000	450	469	506	541

X-CYCLONE® EVNR-M Series

Capture hood with REVEN® air-induction and REVEX® spraying system

Central version

Also available with REVEN® efficiency air-induction system!*

REVEN
SCHAKO Group

X-CYCLONE® EVNR-M Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Integrated, patented REVEX® spraying system for fully automatic cleaning and disinfection of the aerosol separators on both sides.
- New, internationally patented air-induction nozzle for the efficient capture and cleaning of the exhaust air.
- Efficiency and function of the REVEN® air-induction nozzle, capture hood and separators proven by CFD flow analyses.
- Integrated air-induction system preventing draughts and ensuring compliance with the maximum permissible supply flow rates.*
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested

* Optionally available with the improved REVEN® efficiency air-induction system – improves the capturing of the exhaust air without any supply air directly blown in.

Further information

www.reven.de (Technologies → for fume capture)
www.reven.de (Technologies → for adjustment and control)
www.reven.de (Technologies → for cleaning and desinfection)

in accordance with DIN and DIN EN test standards.

- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.

TECHNICAL DATA – X-CYCLONE® EVNR-M SERIES

Width [mm]	2400	2600	2800	3000
Height [mm]	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air dampers [mm]	Exhaust air socket [mm]
1000	2000	20	2 x 750 x 150	1 x 750 x 500
1200	2000	20	2 x 750 x 150	1 x 750 x 500
1400	3000	20	2 x 750 x 150	1 x 750 x 500
1600	3000	40	2 x 750 x 150	1 x 750 x 500
1800	3000	40	2 x 750 x 150	1 x 750 x 500
2000	4000	50	2 x 750 x 150	1 x 750 x 500
2200	4000	50	2 x 750 x 150	1 x 750 x 500
2400	5000	50	2 x 750 x 150	1 x 750 x 500
2600	5000	50	4 x 750 x 150	2 x 750 x 500
2800	6000	50	4 x 750 x 150	2 x 750 x 500
3000	6000	40	4 x 750 x 150	2 x 750 x 500

TECHNICAL DATA – X-CYCLONE® EVNR-M SERIES

Width [mm]	2400	2600	2800	3000
Height [mm]	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air dampers [mm]	Exhaust air socket [mm]
3200	7000	40	4 x 750 x 150	2 x 750 x 500
3400	7000	40	4 x 750 x 150	2 x 750 x 500
3600	7000	40	4 x 750 x 150	2 x 750 x 500
3800	8000	40	4 x 750 x 150	2 x 750 x 500
4000	8000	50	4 x 750 x 150	2 x 750 x 500

Other sizes on request!

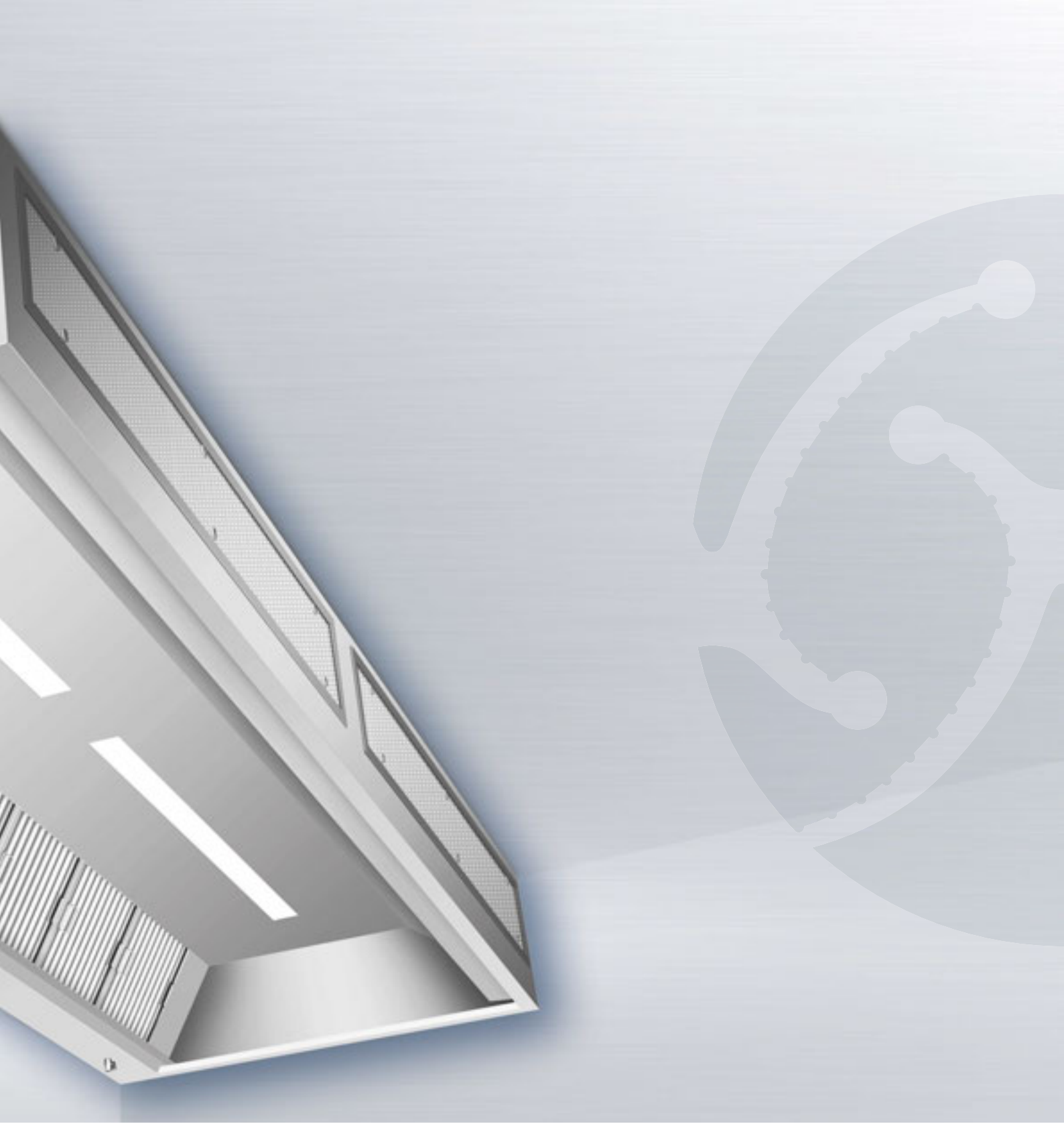
TECHNICAL DATA – X-CYCLONE® EVNR-M SERIES

Length [mm]	Weight [kg]			
	Width [mm]			
	2400	2600	2800	3000
1000	310	338	370	403
1200	345	373	408	443
1400	380	415	445	483
1600	418	453	490	530
1800	453	493	533	573
2000	505	545	573	635
2200	540	585	615	678
2400	573	625	670	723
2600	613	663	710	763
2800	653	703	755	808
3000	693	740	795	850
3200	728	780	835	895
3400	765	793	878	938
3600	810	818	918	983
3800	855	855	970	1028
4000	900	938	1013	1083

X-CYCLONE® EJET-W Series

Capture hood with REVEN® air-induction system and integrated air supply

Peripheral version



REVENO
SCHAKO Group

X-CYCLONE® EJET-W Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- New, internationally patented air-induction nozzle for the efficient capture and cleaning of the exhaust air.
- Integrated low-velocity air outlets for additional control of air management.
- Efficiency and function of the REVEN® air-induction nozzle, capture hood and separators proven by CFD flow analyses.
- Integrated air-induction system preventing draughts and ensuring compliance with the maximum permissible supply flow rates.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested in accordance with DIN and DIN EN test standards.
- Lifetime guarantee on the X-CYCLONE® basic separator

Further information

www.reven.de (Technologies → for fume capture)
www.reven.de (Technologies → for adjustment and control)

elements and the corrosion resistance of the hood frame.

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.

TECHNICAL DATA – X-CYCLONE® EJET-W SERIES

Width [mm]	1000	1100	1200	1300	1400	1500	1600	1700	1800
Height [mm]	450	450	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air socket [mm]	Exhaust air socket [mm]
1000	1000	20	2 x Ø 200	1 x 500 x 250
1200	1000	20	2 x Ø 200	1 x 500 x 250
1400	1500	20	2 x Ø 200	1 x 500 x 250
1600	1500	40	2 x Ø 200	1 x 500 x 250
1800	1500	40	2 x Ø 200	1 x 500 x 250
2000	2000	50	2 x Ø 200	1 x 500 x 250
2200	2000	50	2 x Ø 200	1 x 500 x 250
2400	2500	50	2 x Ø 200	1 x 500 x 250
2600	2500	50	3 x Ø 200	2 x 500 x 250
2800	3000	50	3 x Ø 200	2 x 500 x 250
3000	3000	40	3 x Ø 200	2 x 500 x 250

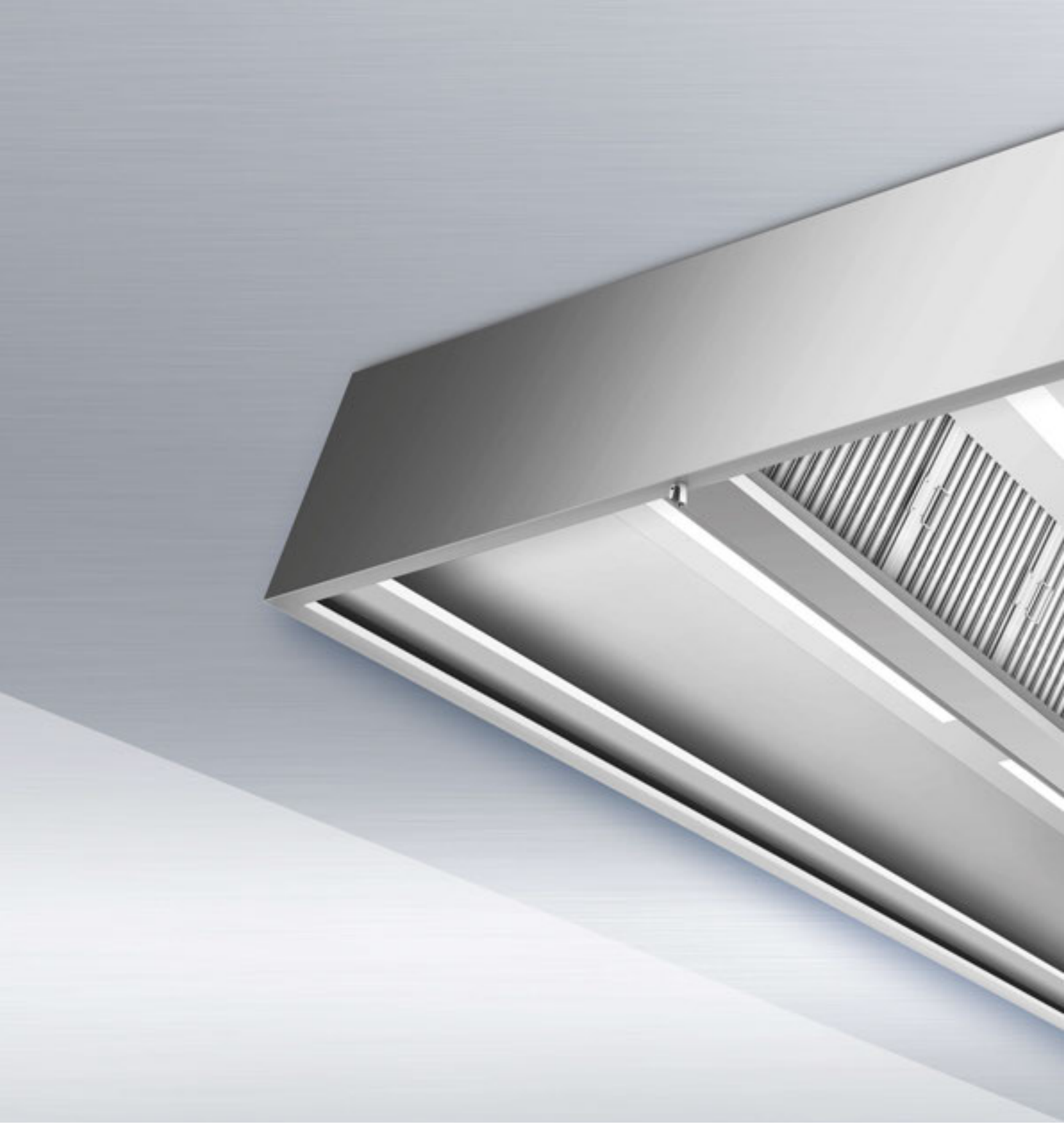
TECHNICAL DATA – X-CYCLONE® EJET-W SERIES

Width [mm]	1000	1100	1200	1300	1400	1500	1600	1700	1800
Height [mm]	450	450	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air socket [mm]	Exhaust air socket [mm]
3200	3500	40	3 x Ø 200	2 x 500 x 250
3400	3500	40	3 x Ø 200	2 x 500 x 250
3600	3500	40	3 x Ø 200	2 x 500 x 250
3800	4000	40	3 x Ø 200	2 x 500 x 250
4000	4000	50	3 x Ø 200	2 x 500 x 250

TECHNICAL DATA – X-CYCLONE® EJET-W SERIES

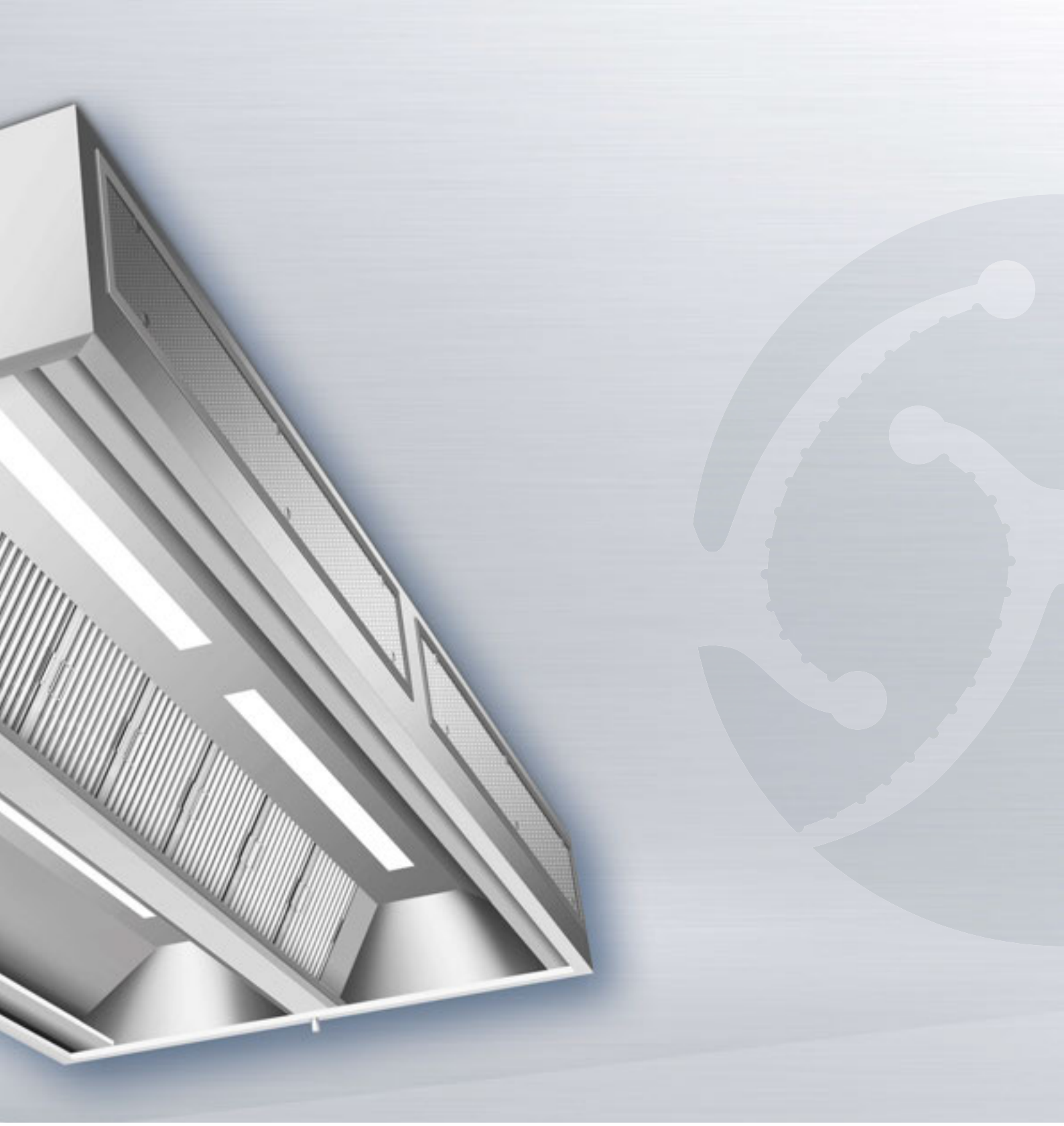
Length [mm]	Weight [kg]								
	Width [mm]								
	1000	1100	1200	1300	1400	1500	1600	1700	1800
1000	57	60	63	65	67	70	74	80	84
1200	66	68	71	73	76	78	82	88	92
1400	74	77	79	81	84	87	91	97	101
1600	83	85	87	90	92	95	99	105	109
1800	91	93	96	98	101	103	107	113	117
2000	100	102	104	107	109	111	115	121	125
2200	108	110	112	115	117	120	124	130	134
2400	117	118	120	123	125	128	132	138	142
2600	124	126	129	132	134	136	140	146	150
2800	133	135	137	140	142	144	148	154	158
3000	142	144	146	148	150	153	157	163	167
3200	150	152	154	156	158	161	165	171	175
3400	158	161	162	165	167	169	173	177	181
3600	167	169	171	173	175	178	182	188	192
3800	175	177	179	181	183	186	190	196	200
4000	183	185	187	190	192	194	198	204	208



X-CYCLONE® EJET-M Series

Capture hood with REVEN® air-induction system and integrated air supply

Central version



REVENO
SCHAKO Group

X-CYCLONE® EJET-M Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- New, internationally patented air-induction nozzle for the efficient capture and cleaning of the exhaust air.
- Integrated low-velocity air outlets for additional control of air management.
- Efficiency and function of the REVEN® air-induction nozzle, capture hood and separators proven by CFD flow analyses.
- Integrated air-induction system preventing draughts and ensuring compliance with the maximum permissible supply flow rates.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested in accordance with DIN and DIN EN test standards.
- Lifetime guarantee on the X-CYCLONE® basic separator

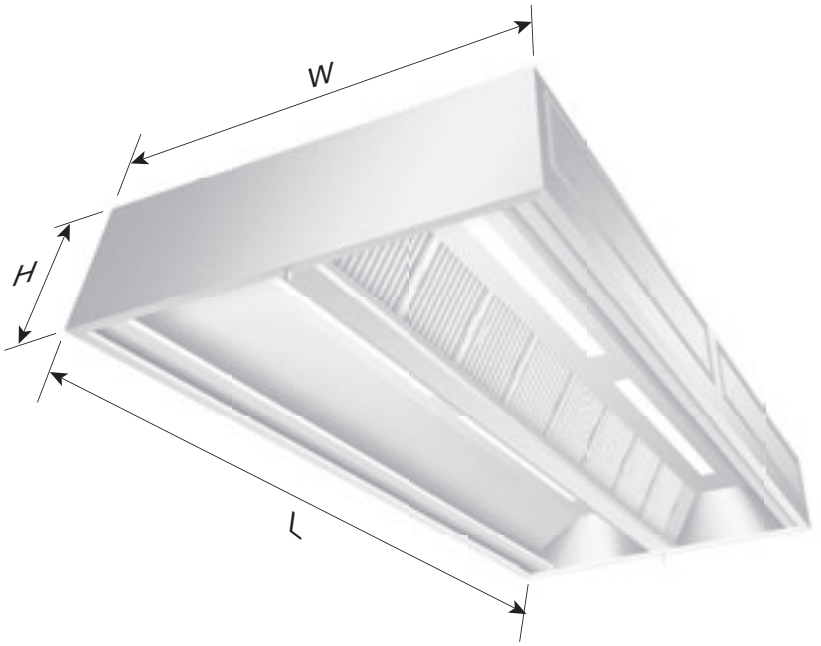
Further information

www.reven.de (Technologies → for fume capture)
www.reven.de (Technologies → for adjustment and control)

elements and the corrosion resistance of the hood frame.

ACCESSORIES

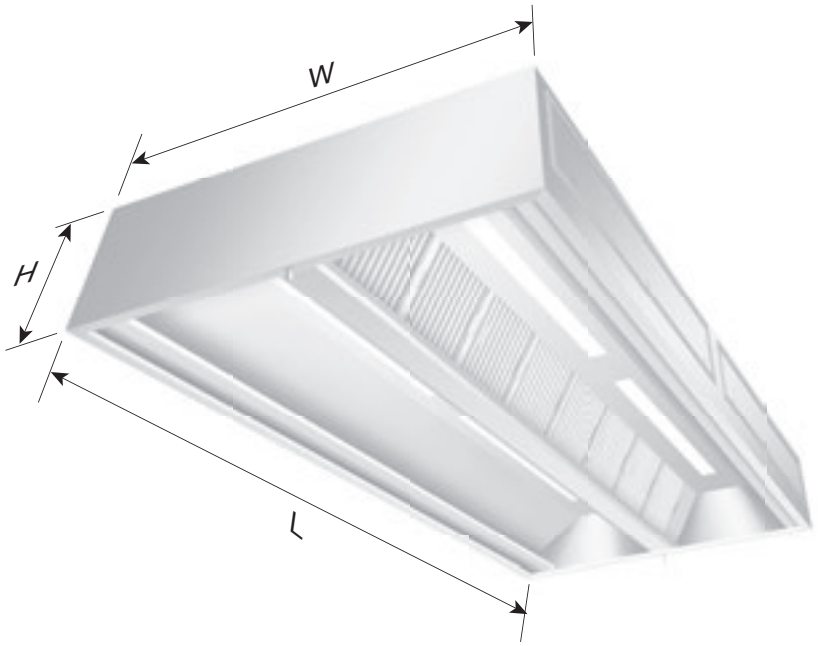
- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.



TECHNICAL DATA – X-CYCLONE® EJET-M SERIES

Width [mm]	2000	2200	2400	2600	2800	3000	3200
Height [mm]	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air socket [mm]	Exhaust air socket [mm]
1000	2000	20	4 x Ø 200	1 x 500 x 500
1200	2000	20	4 x Ø 200	1 x 500 x 500
1400	3000	40	4 x Ø 200	1 x 500 x 500
1600	3000	40	4 x Ø 200	1 x 500 x 500
1800	4000	50	4 x Ø 200	1 x 500 x 500
2000	4000	50	4 x Ø 200	1 x 500 x 500
2200	4000	50	4 x Ø 200	1 x 500 x 500
2400	5000	50	4 x Ø 200	1 x 500 x 500
2600	5000	50	6 x Ø 200	2 x 500 x 500
2800	6000	40	6 x Ø 200	2 x 500 x 500
3000	6000	40	6 x Ø 200	2 x 500 x 500



TECHNICAL DATA – X-CYCLONE® EJET-M SERIES

Width [mm]	2000	2200	2400	2600	2800	3000	3200
Height [mm]	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air socket [mm]	Exhaust air socket [mm]
3200	7000	40	6 x Ø 200	2 x 500 x 500
3400	7000	40	6 x Ø 200	2 x 500 x 500
3600	8000	50	6 x Ø 200	2 x 500 x 500
3800	8000	50	8 x Ø 200	2 x 500 x 500
4000	8000	50	8 x Ø 200	2 x 500 x 500

TECHNICAL DATA – X-CYCLONE® EJET-M SERIES

Length [mm]	Weight [kg]						
	Width [mm]						
	2000	2200	2400	2600	2800	3000	3200
1000	118	121	125	130	135	139	147
1200	134	138	141	146	152	156	164
1400	150	154	158	163	168	172	180
1600	166	171	175	180	185	189	197
1800	183	187	191	196	201	205	213
2000	200	204	208	213	218	223	231
2200	216	220	225	230	235	239	247
2400	234	237	241	247	252	256	264
2600	250	254	258	263	268	272	280
2800	267	270	275	280	284	289	297
3000	284	287	292	296	300	306	314
3200	300	304	308	313	316	323	331
3400	317	321	325	330	333	340	348
3600	333	337	342	347	349	356	364
3800	349	354	359	363	366	373	381
4000	366	370	374	380	384	389	397

X-CYCLONE® EQA-W Series

Capture hood with integrated air supply system

Peripheral version

REVENO
SCHAKO Group

X-CYCLONE® EQA-W Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

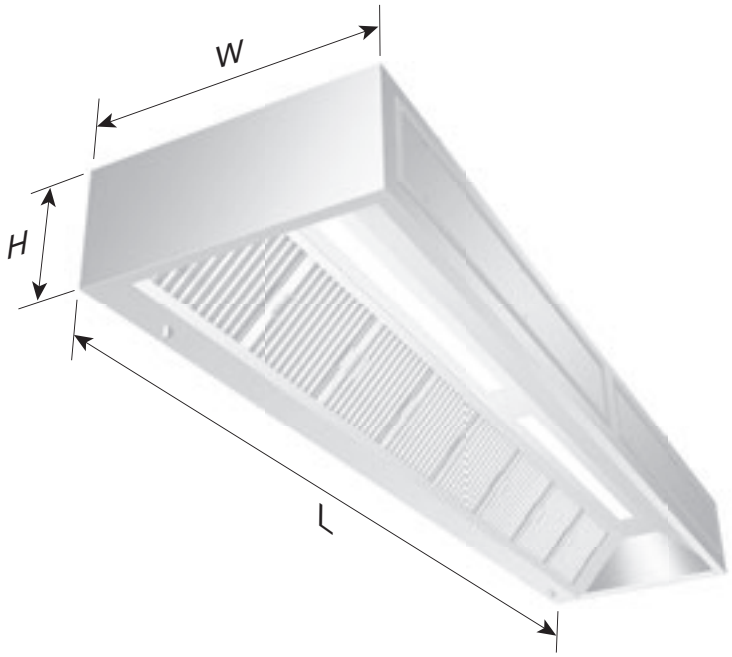
- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Integrated low-velocity air outlets for additional control of air management.
- Efficiency and function of the separators proven by CFD flow analysis.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested in accordance with DIN and DIN EN test standards.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- The hood and all materials used for its production are 100 % rustproof in accordance with the require-

Further information

www.reven.de (Technologies → for adjustment and control)

ments of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.

- Designed, constructed and produced in Germany.



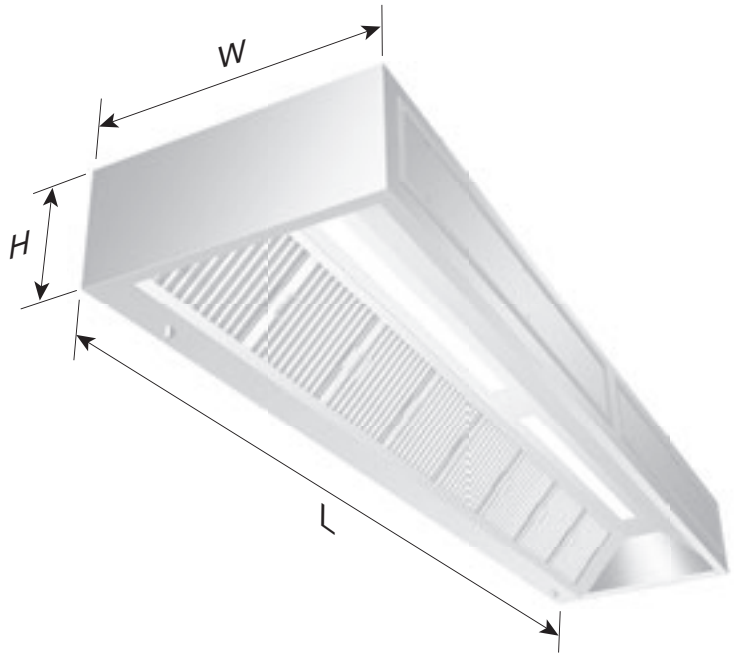
ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.

TECHNICAL DATA – X-CYCLONE® EQA-W SERIES

Width [mm]	1100	1200	1300	1400	1500	1600
Height [mm]	420	420	420	420	420	420

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air socket [mm]	Exhaust air socket [mm]
1000	1000	20	2 x Ø 200	1 x 500 x 250
1200	1000	20	2 x Ø 200	1 x 500 x 250
1400	1500	20	2 x Ø 200	1 x 500 x 250
1600	1500	40	2 x Ø 200	1 x 500 x 250
1800	1500	40	2 x Ø 200	1 x 500 x 250
2000	2000	50	2 x Ø 200	1 x 500 x 250
2200	2000	50	2 x Ø 200	1 x 500 x 250
2400	2500	50	2 x Ø 200	1 x 500 x 250
2600	2500	50	3 x Ø 200	2 x 500 x 250
2800	3000	50	3 x Ø 200	2 x 500 x 250
3000	3000	40	3 x Ø 200	2 x 500 x 250



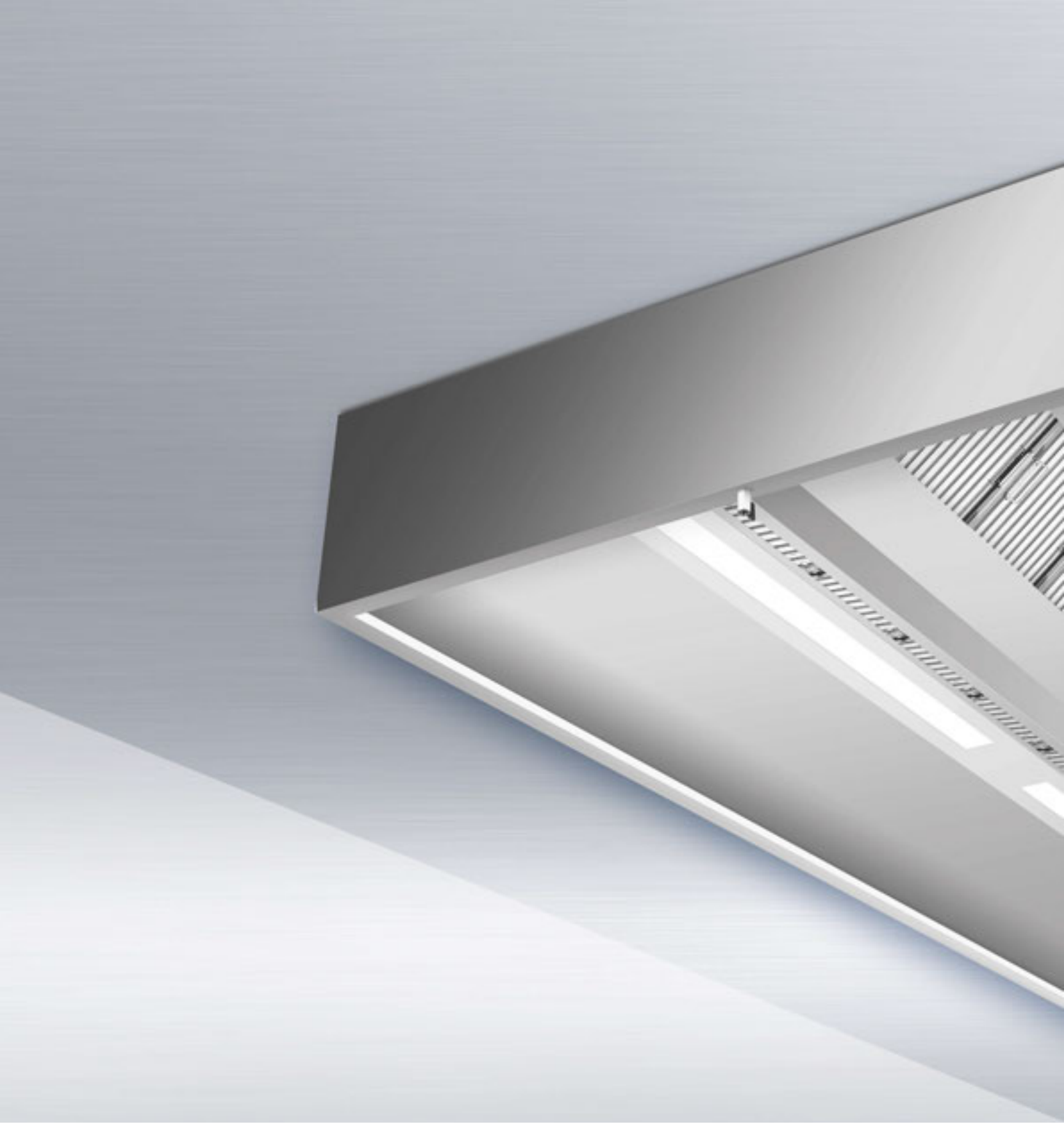
TECHNICAL DATA – X-CYCLONE® EQA-W SERIES

Width [mm]	1100	1200	1300	1400	1500	1600
Height [mm]	420	420	420	420	420	420

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air socket [mm]	Exhaust air socket [mm]
3200	3500	40	3 x Ø 200	2 x 500 x 250
3400	3500	40	3 x Ø 200	2 x 500 x 250
3600	3500	40	3 x Ø 200	2 x 500 x 250
3800	4000	40	3 x Ø 200	2 x 500 x 250
4000	4000	50	3 x Ø 200	2 x 500 x 250

TECHNICAL DATA – X-CYCLONE® EQA-W SERIES

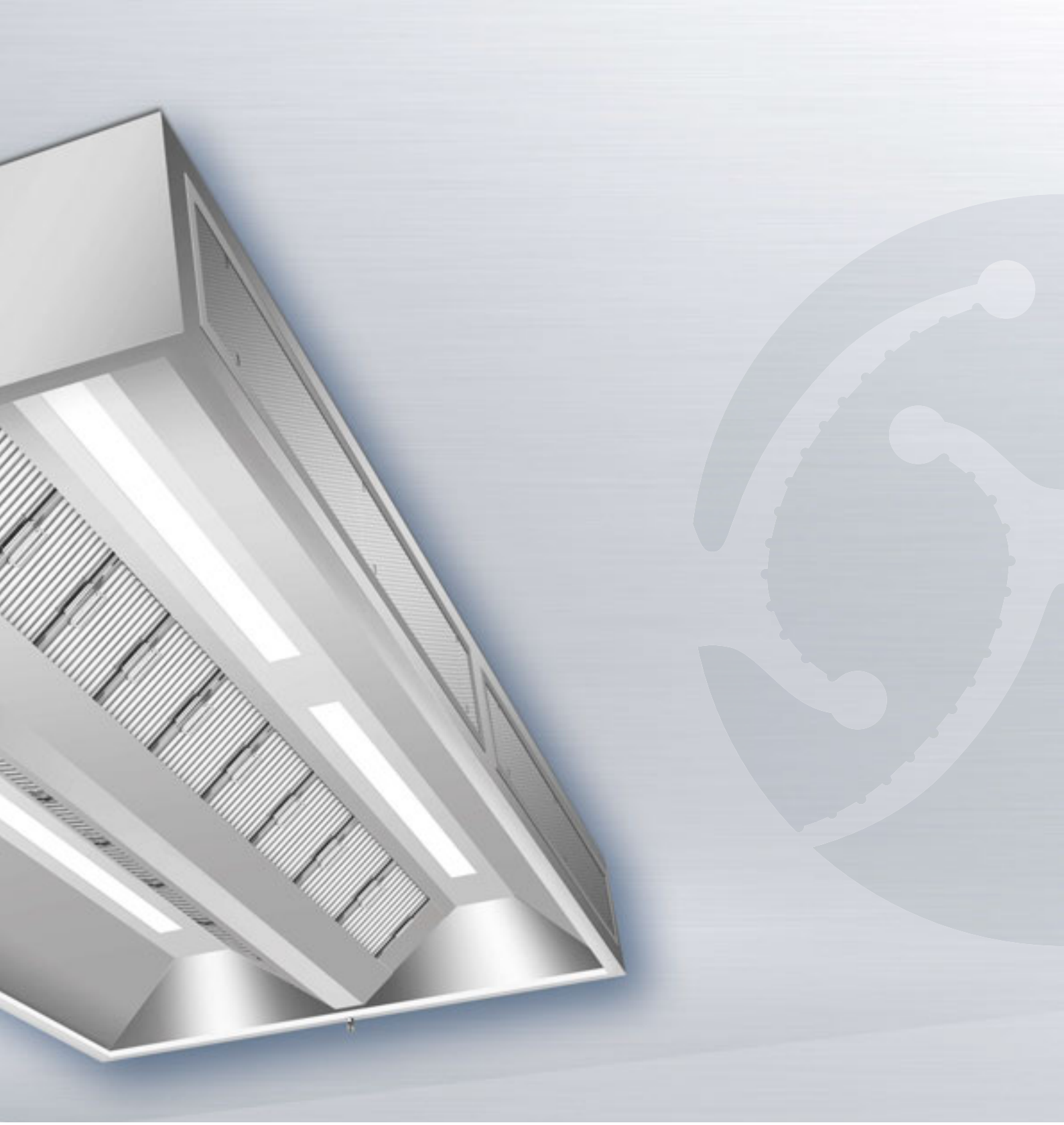
Length [mm]	Weight [kg]					
	Width [mm]					
	1100	1200	1300	1400	1500	1600
1000	40	43	46	49	51	55
1200	45	49	51	54	58	62
1400	52	56	58	62	66	70
1600	58	61	65	68	72	76
1800	63	67	70	75	78	82
2000	68	73	77	81	85	89
2200	74	78	83	87	92	96
2400	80	85	89	94	99	103
2600	85	90	95	101	105	109
2800	92	97	103	108	114	118
3000	97	103	109	114	121	125
3200	103	109	115	121	128	132
3400	108	114	121	128	134	138
3600	113	120	127	133	140	144
3800	122	125	132	140	147	151
4000	125	132	140	148	155	159



X-CYCLONE® EQA-M Series

Capture hood with integrated air supply system

Central version



REVENO
SCHAKO Group

X-CYCLONE® EQA-M Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Integrated low-velocity air outlets for additional control of air management.
- Efficiency and function of the separators proven by CFD flow analysis.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested in accordance with DIN and DIN EN test standards.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- The hood and all materials used for its production are 100 % rustproof in accordance with the require-

Further information

www.reven.de (Technologies → for adjustment and control)

ments of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.

- Designed, constructed and produced in Germany.

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.

TECHNICAL DATA – X-CYCLONE® EQA-M SERIES

Width [mm]	2100	2200	2400	2600	2800	3000
Height [mm]	420	420	420	420	420	420

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air socket [mm]	Exhaust air socket [mm]
1000	2000	20	4 x Ø 200	1 x 500 x 500
1200	2000	20	4 x Ø 200	1 x 500 x 500
1400	3000	20	4 x Ø 200	1 x 500 x 500
1600	3000	40	4 x Ø 200	1 x 500 x 500
1800	4000	40	4 x Ø 200	1 x 500 x 500
2000	4000	50	4 x Ø 200	1 x 500 x 500
2200	4000	50	4 x Ø 200	1 x 500 x 500
2400	5000	50	4 x Ø 200	1 x 500 x 500
2600	5000	50	6 x Ø 200	2 x 500 x 500
2800	6000	50	6 x Ø 200	2 x 500 x 500
3000	6000	40	6 x Ø 200	2 x 500 x 500

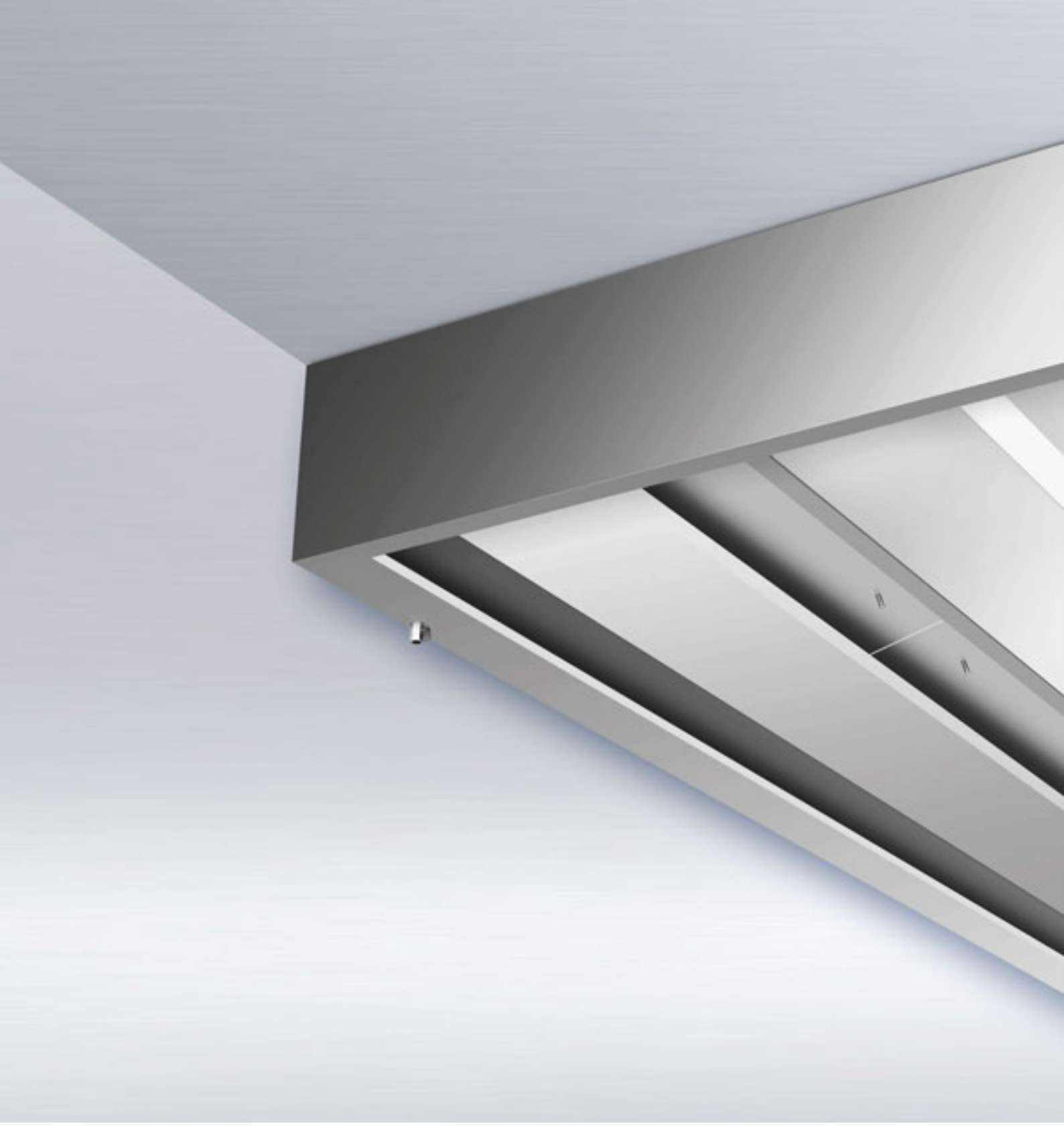
TECHNICAL DATA – X-CYCLONE® EQA-M SERIES

Width [mm]	2100	2200	2400	2600	2800	3000
Height [mm]	420	420	420	420	420	420

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Supply air socket [mm]	Exhaust air socket [mm]
3200	7000	40	6 x Ø 200	2 x 500 x 500
3400	7000	40	6 x Ø 200	2 x 500 x 500
3600	8000	40	6 x Ø 200	2 x 500 x 500
3800	8000	40	8 x Ø 200	2 x 500 x 500
4000	8000	50	8 x Ø 200	2 x 500 x 500

TECHNICAL DATA – X-CYCLONE® EQA-M SERIES

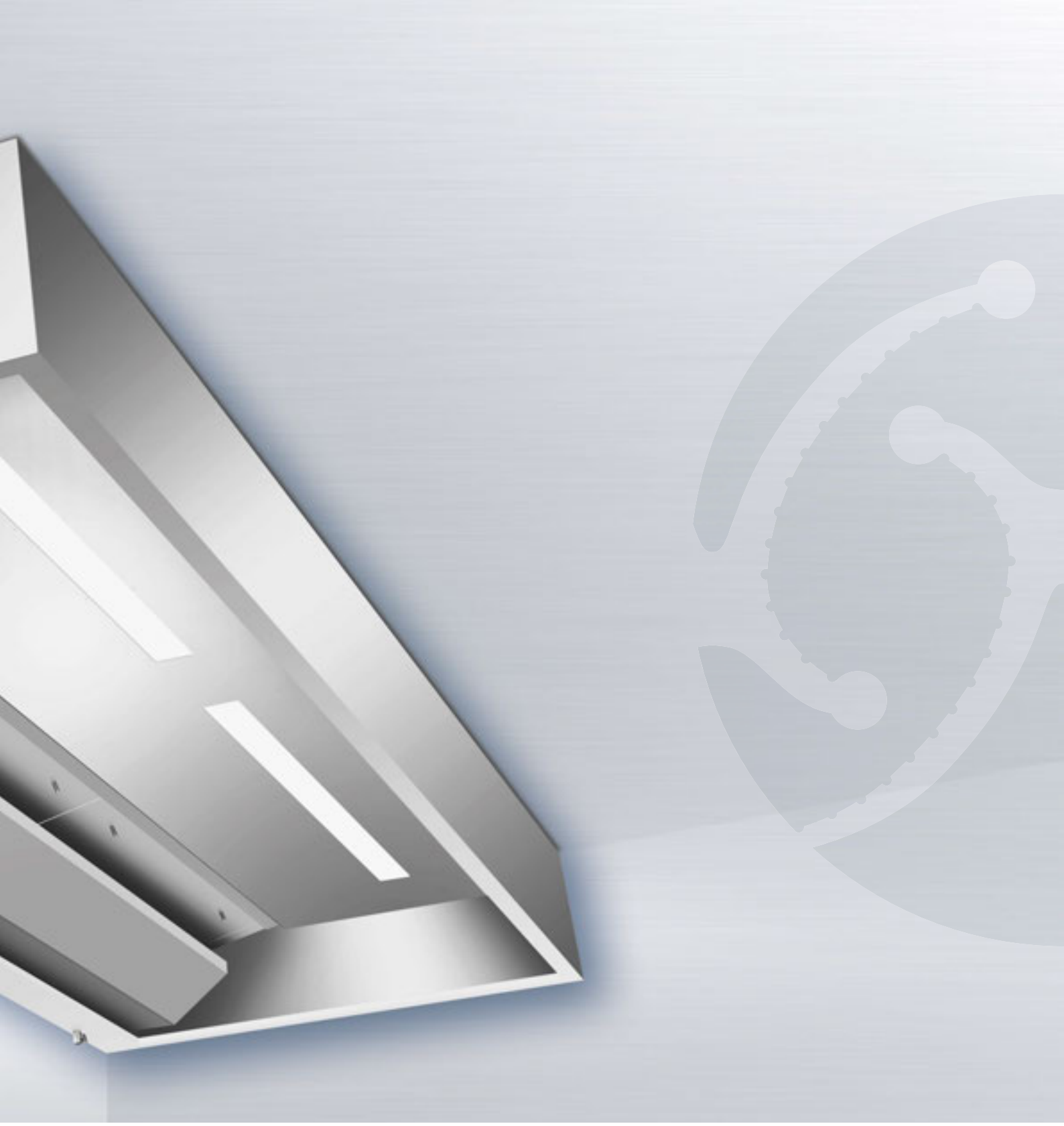
Length [mm]	Weight [kg]					
	Width [mm]					
	2100	2200	2400	2600	2800	3000
1000	87	90	96	102	108	114
1200	97	100	108	114	120	128
1400	112	116	124	130	138	146
1600	124	128	136	144	152	160
1800	135	140	148	156	166	174
2000	148	152	162	172	180	190
2200	159	164	174	184	194	204
2400	172	178	188	198	210	220
2600	183	188	200	212	224	234
2800	200	204	216	228	240	254
3000	212	216	228	242	254	268
3200	224	228	242	256	270	284
3400	236	240	254	270	284	298
3600	248	252	266	282	296	312
3800	268	272	278	294	310	326
4000	274	278	294	312	328	344



X-CYCLONE® EVSR-W Series

Capture hood with X-CYCLONE® air-cleaning and REVEX® spraying system

Peripheral version



REVENO
SCHAKO Group

X-CYCLONE® EVSR-W Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

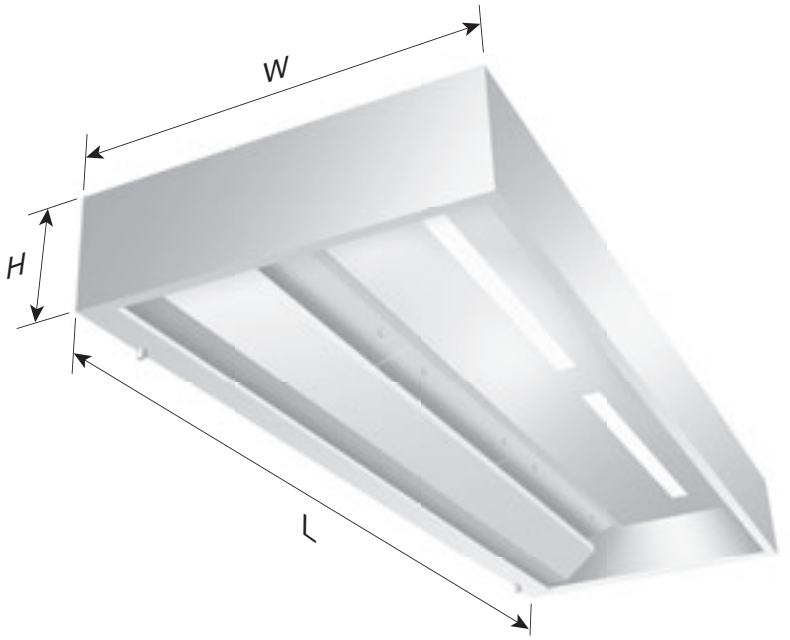
- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Integrated, patented REVEX® spraying system for fully automatic cleaning and disinfection of the aerosol separators on both sides.
- Efficiency and function of the separators proven by CFD flow analysis.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- The hood and all materials used for its production are 100 % rustproof in accordance with the requirements of the German trademark

Further information

www.reven.de (Technologies → for fume capture)
www.reven.de (Technologies → for adjustment and control)

association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.

- Designed, constructed and produced in Germany.



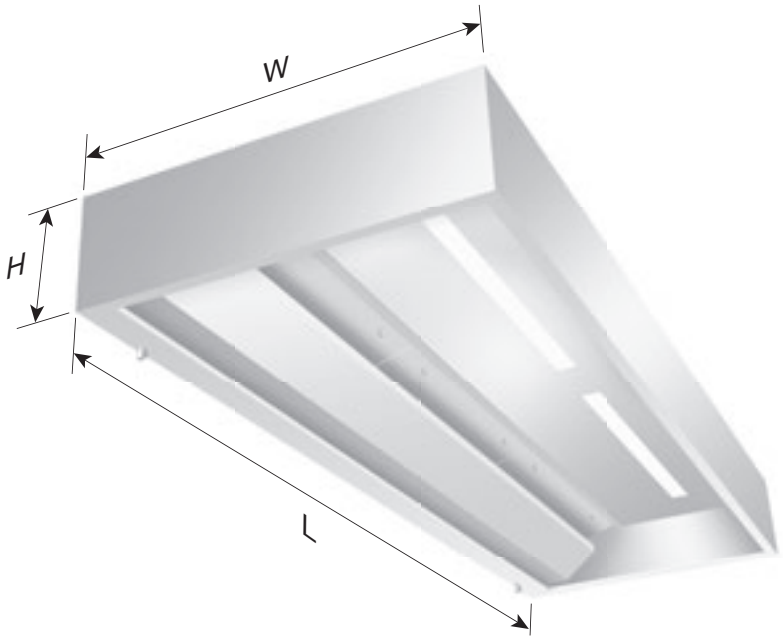
ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.

TECHNICAL DATA – X-CYCLONE® EVSR-W SERIES

Width [mm]	1000	1100	1200	1300	1400	1500	1600	1700	1800
Height [mm]	450	450	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
1000	800	20	1 x 500 x 250
1200	800	20	1 x 500 x 250
1400	1200	20	1 x 500 x 250
1600	1200	40	1 x 500 x 250
1800	1200	40	1 x 500 x 250
2000	1600	50	1 x 500 x 250
2200	1600	50	1 x 500 x 250
2400	2000	50	1 x 500 x 250
2600	2000	50	2 x 500 x 250
2800	2400	50	2 x 500 x 250
3000	2400	40	2 x 500 x 250



TECHNICAL DATA – X-CYCLONE® EVSR-W SERIES

Width [mm]	1000	1100	1200	1300	1400	1500	1600	1700	1800
Height [mm]	450	450	450	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
3200	2800	40	2 x 500 x 250
3400	2800	40	2 x 500 x 250
3600	2800	40	2 x 500 x 250
3800	3200	40	2 x 500 x 250
4000	3200	50	2 x 500 x 250

Other sizes on request!

TECHNICAL DATA – X-CYCLONE® EVSR-W SERIES

Length [mm]	Weight [kg]								
	Width [mm]								
	1000	1100	1200	1300	1400	1500	1600	1700	1800
1000	84	90	96	102	108	114	118	124	128
1200	84	100	108	114	120	128	132	138	142
1400	108	116	124	130	138	146	150	156	160
1600	120	128	136	144	152	160	164	170	174
1800	130	140	148	156	166	174	178	184	188
2000	144	152	162	172	180	190	194	200	204
2200	154	164	174	184	194	204	208	214	218
2400	166	178	188	198	210	220	224	230	234
2600	178	188	200	212	224	234	238	244	248
2800	192	204	216	228	240	254	258	264	268
3000	202	216	228	242	254	268	272	278	282
3200	216	228	242	256	270	284	288	294	298
3400	226	240	254	270	284	298	302	308	312
3600	236	252	266	282	296	312	316	322	326
3800	248	272	278	294	310	326	330	336	340
4000	262	278	294	312	328	344	348	354	358

X-CYCLONE® EVSR-M Series

Capture hood with X-CYCLONE® air-cleaning and REVEX® spraying system

Central version

REVENX
SCHAKO Group

X-CYCLONE® EVSR-M Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

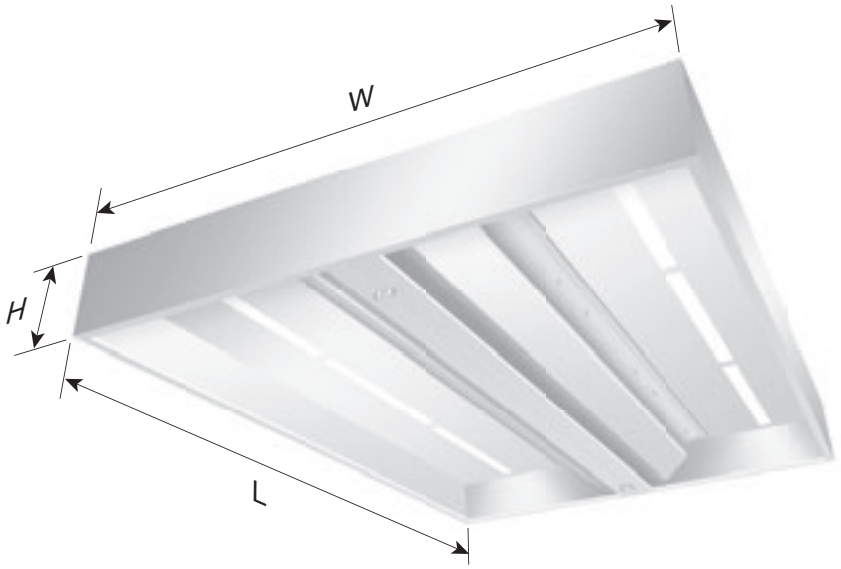
- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Integrated, patented REVEX® spraying system for fully automatic cleaning and disinfection of the aerosol separators on both sides.
- Efficiency and function of the separators proven by CFD flow analysis.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- The hood and all materials used for its production are 100 % rustproof in accordance with the requirements of the German trademark

Further information

www.reven.de (Technologies → for fume capture)
www.reven.de (Technologies → for adjustment and control)

association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.

- Designed, constructed and produced in Germany.



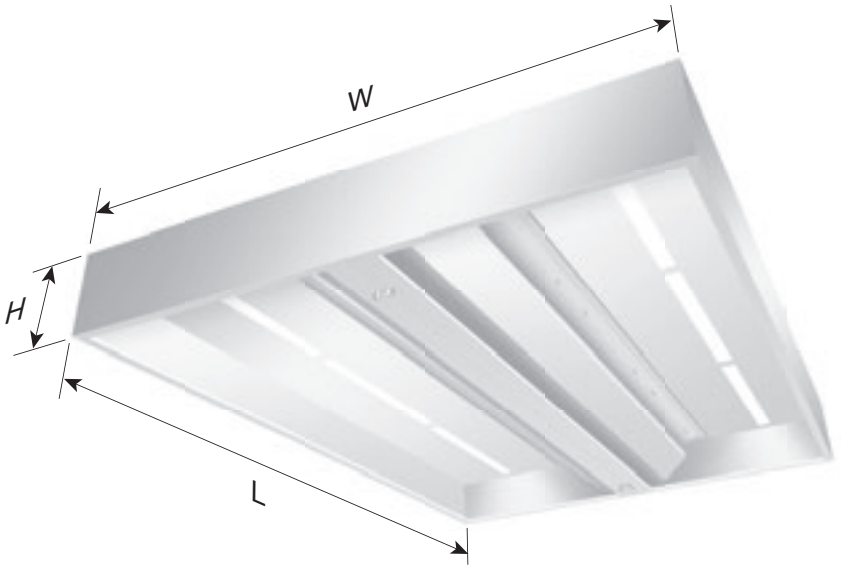
ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.

TECHNICAL DATA – X-CYCLONE® EVSR-M SERIES

Width [mm]	2000	2200	2400	2600	2800	3000
Height [mm]	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
1000	1600	20	2 x 500 x 250
1200	1600	20	2 x 500 x 250
1400	1600	20	2 x 500 x 250
1600	2400	40	2 x 500 x 250
1800	2400	40	2 x 500 x 250
2000	3200	50	2 x 500 x 250
2200	3200	50	2 x 500 x 250
2400	4000	50	2 x 500 x 250
2600	4000	50	2 x 500 x 500
2800	4800	50	2 x 500 x 500
3000	4800	40	2 x 500 x 500



TECHNICAL DATA – X-CYCLONE® EVSR-M SERIES

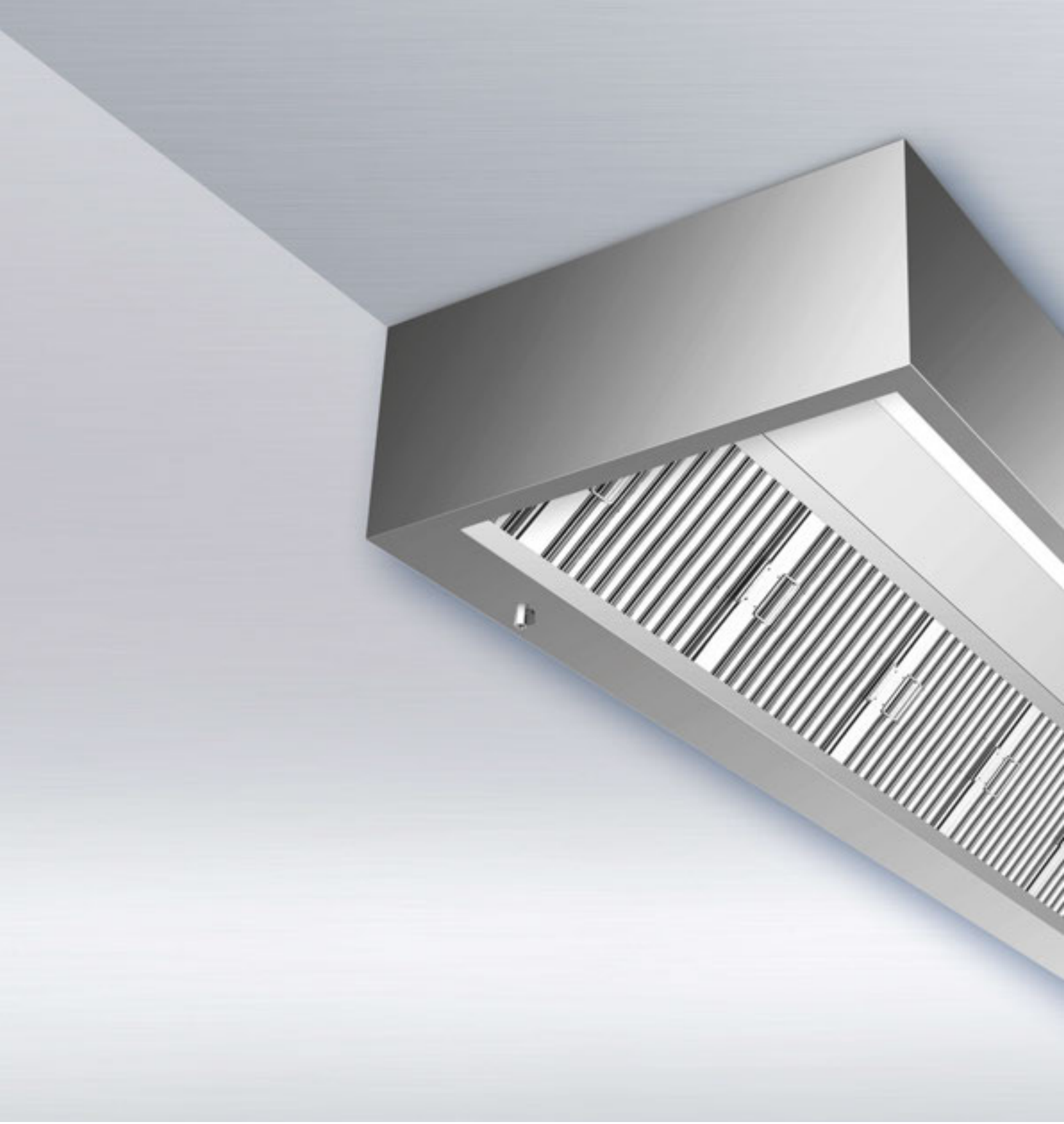
Width [mm]	2000	2200	2400	2600	2800	3000
Height [mm]	450	450	450	450	450	450

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
3200	5600	40	2 x 500 x 500
3400	5600	40	2 x 500 x 500
3600	5600	40	2 x 500 x 500
3800	6400	40	2 x 500 x 500
4000	6400	50	2 x 500 x 500

Other sizes on request!

TECHNICAL DATA – X-CYCLONE® EVSR-M SERIES

Length [mm]	Weight [kg]					
	Width [mm]					
	2000	2200	2400	2600	2800	3000
1000	168	180	192	204	216	228
1200	188	200	216	228	240	256
1400	216	232	248	260	276	292
1600	240	256	272	288	304	320
1800	260	280	296	312	332	348
2000	288	304	324	344	360	380
2200	308	328	348	368	388	408
2400	332	356	376	396	420	440
2600	356	376	400	424	448	468
2800	384	408	432	456	480	508
3000	404	432	456	484	508	536
3200	432	456	484	512	540	568
3400	452	480	508	540	568	596
3600	472	504	532	564	592	624
3800	496	544	556	588	620	652
4000	524	556	588	624	656	688



X-CYCLONE® EVS-W Series

Capture hood with X-CYCLONE® air-cleaning system

Peripheral version

REVENO
SCHAKO Group

X-CYCLONE® EVS-W Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the separators proven by CFD flow analysis.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- The hood and all materials used for its production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.

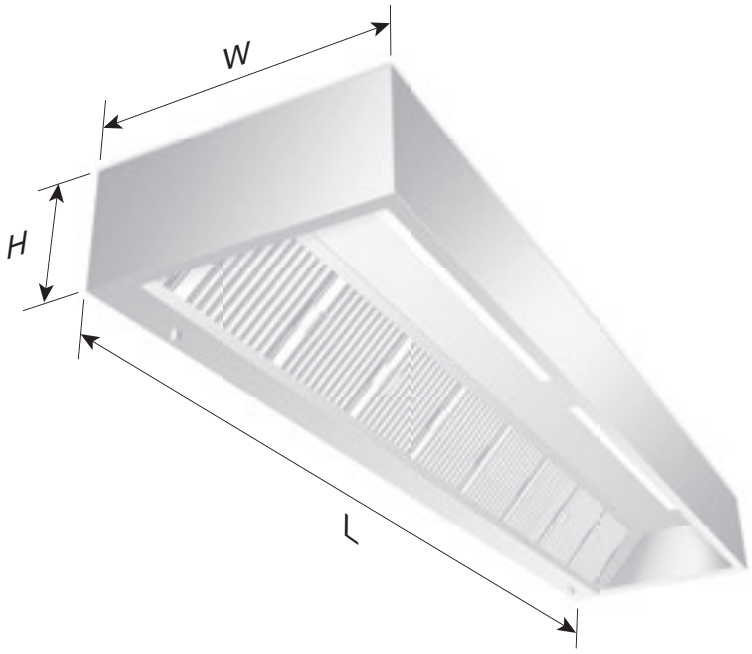
Further information

www.reven.de (Technologies → for adjustment and control)

- Designed, constructed and produced in Germany.

ACCESSORIES

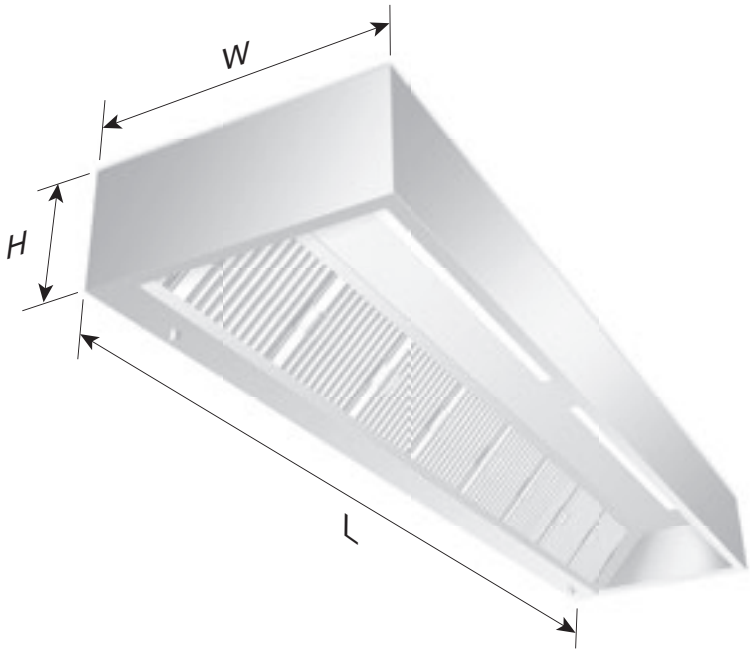
- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.



TECHNICAL DATA – X-CYCLONE® EVS-W SERIES

Width [mm]	900	1000	1100	1200	1300	1400	1500	1600
Height [mm]	420	420	420	420	420	420	420	420

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
1000	1000	20	1 x 500 x 250
1200	1000	20	1 x 500 x 250
1400	1500	20	1 x 500 x 250
1600	1500	40	1 x 500 x 250
1800	2000	40	1 x 500 x 250
2000	2000	50	1 x 500 x 250
2200	2000	50	1 x 500 x 250
2400	2500	50	1 x 500 x 250
2600	2500	50	2 x 500 x 250
2800	3000	50	2 x 500 x 250
3000	3000	40	2 x 500 x 250



TECHNICAL DATA – X-CYCLONE® EVS-W SERIES

Width [mm]	900	1000	1100	1200	1300	1400	1500	1600
Height [mm]	420	420	420	420	420	420	420	420

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
3200	3500	40	2 x 500 x 250
3400	3500	40	2 x 500 x 250
3600	4000	40	2 x 500 x 250
3800	4000	40	2 x 500 x 250
4000	4000	50	2 x 500 x 250

Create your capture hood online using the REVEN Configurator and download the BIM data:
https://bim.reven.de/#/configurator?SelectedElementID=1004

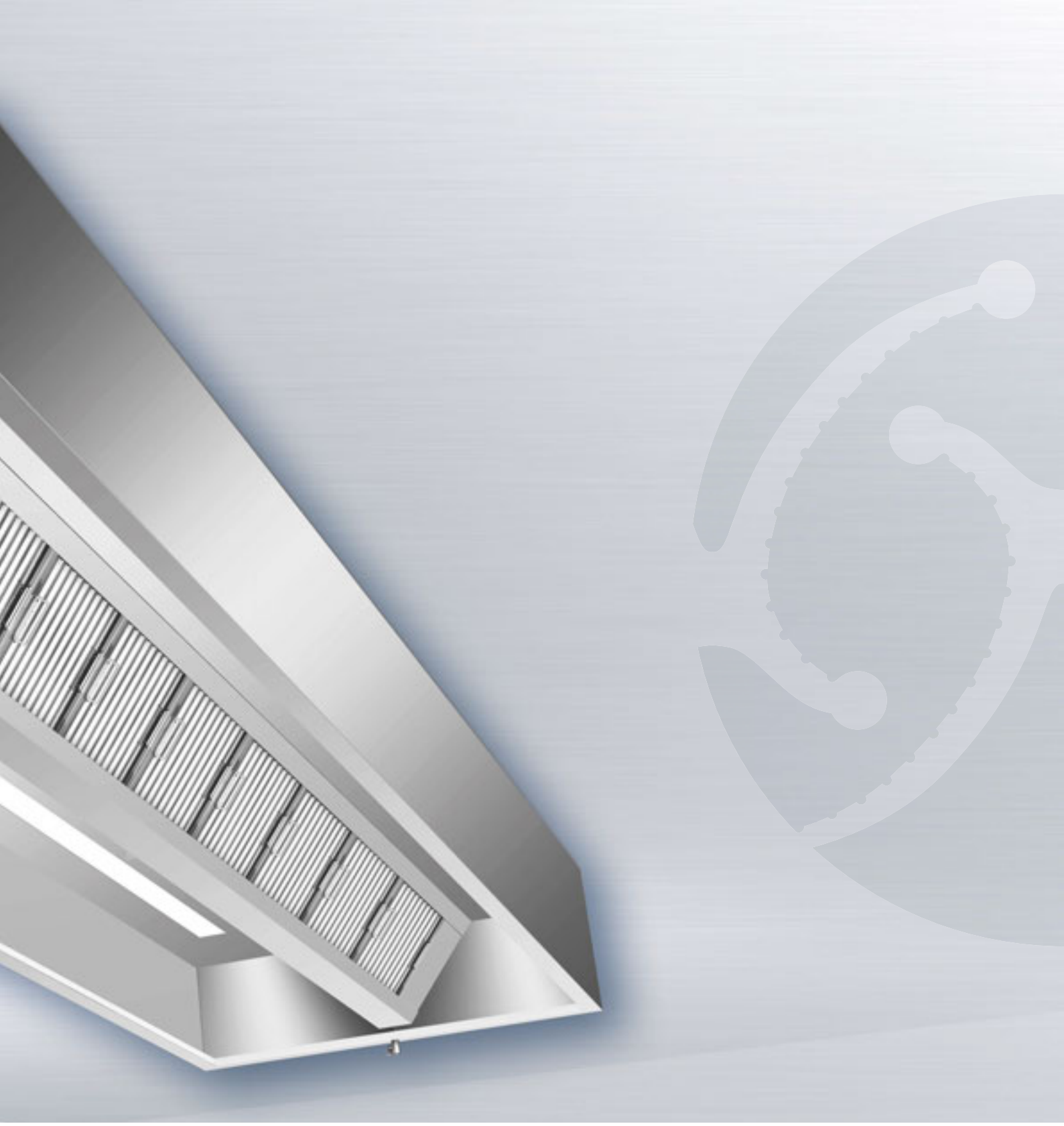
TECHNICAL DATA – X-CYCLONE® EVS-W SERIES

Length [mm]	Weight [kg]							
	Width [mm]							
	900	1000	1100	1200	1300	1400	1500	1600
1000	39	42	45	48	51	54	57	60
1200	44	47	50	54	57	60	64	68
1400	51	54	58	62	65	69	73	77
1600	56	60	64	68	72	76	80	85
1800	61	65	70	74	78	83	87	93
2000	67	72	76	81	86	90	95	101
2200	72	77	82	87	92	97	102	108
2400	78	83	89	94	99	105	110	116
2600	83	89	94	100	106	112	117	124
2800	90	96	102	108	114	120	127	135
3000	95	101	108	114	121	127	134	141
3200	101	108	114	121	128	135	142	149
3400	106	113	120	127	135	142	149	156
3600	111	118	126	133	141	148	156	163
3800	116	124	136	139	147	155	163	171
4000	123	131	139	147	156	164	172	179

X-CYCLONE® EVS-M Series

Capture hood with X-CYCLONE® air-cleaning system

Central version



REVENO
SCHAKO Group

X-CYCLONE® EVS-M Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the separators proven by CFD flow analysis.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- The hood and all materials used for its production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.

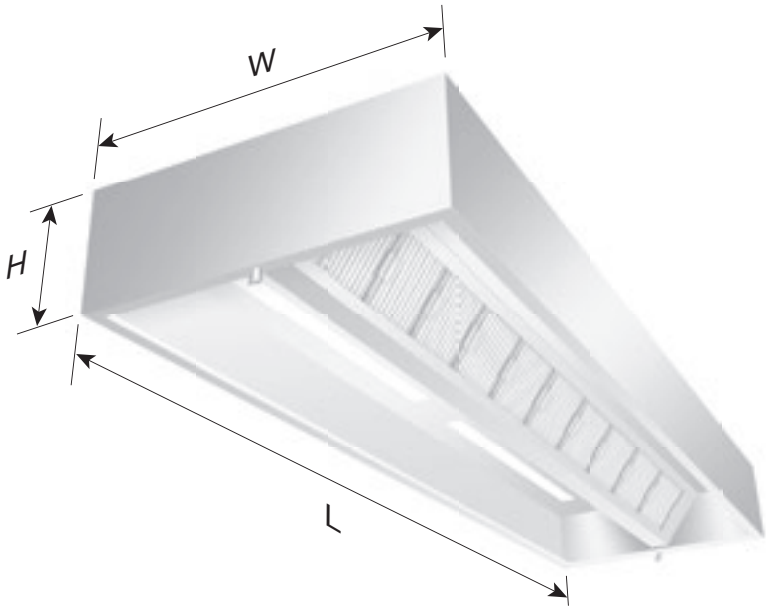
Further information

www.reven.de (Technologies → for adjustment and control)

- Designed, constructed and produced in Germany.

ACCESSORIES

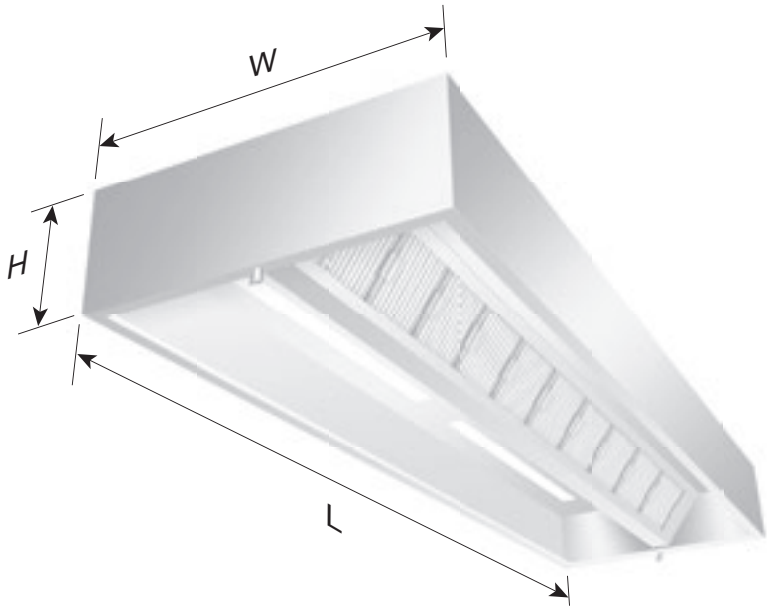
- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.



TECHNICAL DATA – X-CYCLONE® EVS-M SERIES

Width [mm]	1600	1800	2000	2200	2400	2600	2800	3000
Height [mm]	420	420	420	420	420	420	420	420

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
1000	2000	20	1 x 500 x 500
1200	2000	20	1 x 500 x 500
1400	3000	20	1 x 500 x 500
1600	3000	40	1 x 500 x 500
1800	4000	40	1 x 500 x 500
2000	4000	50	1 x 500 x 500
2200	4000	50	1 x 500 x 500
2400	6000	50	1 x 500 x 500
2600	6000	50	2 x 500 x 500
2800	7000	50	2 x 500 x 500
3000	7000	40	2 x 500 x 500



TECHNICAL DATA – X-CYCLONE® EVS-M SERIES

Width [mm]	1600	1800	2000	2200	2400	2600	2800	3000
Height [mm]	420	420	420	420	420	420	420	420

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
3200	8000	40	2 x 500 x 500
3400	8000	40	2 x 500 x 500
3600	9000	40	2 x 500 x 500
3800	9000	40	2 x 500 x 500
4000	9000	50	2 x 500 x 500

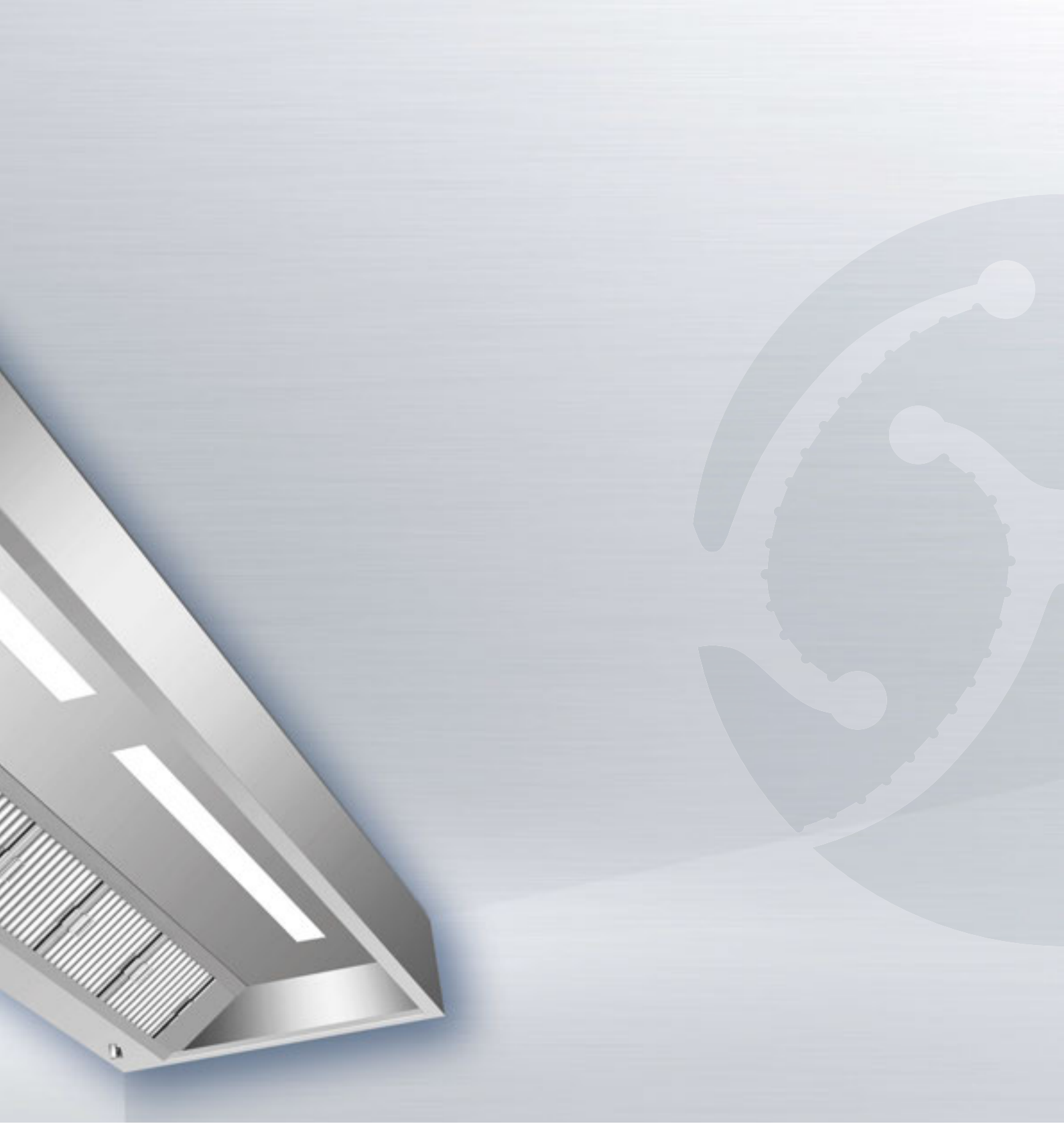
Create your capture hood online using the REVEN Configurator and download the BIM data:
https://bim.reven.de/#/configurator?SelectedElementID=1005

TECHNICAL DATA – X-CYCLONE® EVS-M SERIES

Length [mm]	Weight [kg]							
	Width [mm]							
	1600	1800	2000	2200	2400	2600	2800	3000
1000	72	78	84	90	96	102	108	114
1200	80	86	93	101	109	118	127	137
1400	94	102	110	118	128	138	149	161
1600	104	112	121	131	141	153	165	178
1800	112	121	131	141	152	165	178	192
2000	124	134	145	156	169	182	197	213
2200	134	145	156	169	182	197	213	230
2400	156	168	181	196	212	229	247	247
2600	154	166	180	194	210	226	244	264
2800	168	181	196	212	229	247	267	288
3000	176	190	205	222	239	259	279	302
3200	188	203	219	237	256	276	298	322
3400	198	214	231	249	269	291	314	339
3600	206	222	240	260	280	303	327	353
3800	216	233	252	272	294	317	343	370
4000	230	248	268	290	313	338	365	394

X-CYCLONE® EAS Series

Inexpensive compact capture hood with X-CYCLONE® air-cleaning system



REVENO
SCHAKO Group

X-CYCLONE® EAS Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the separators proven by CFD flow analysis.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- The hood and all materials used for its production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.

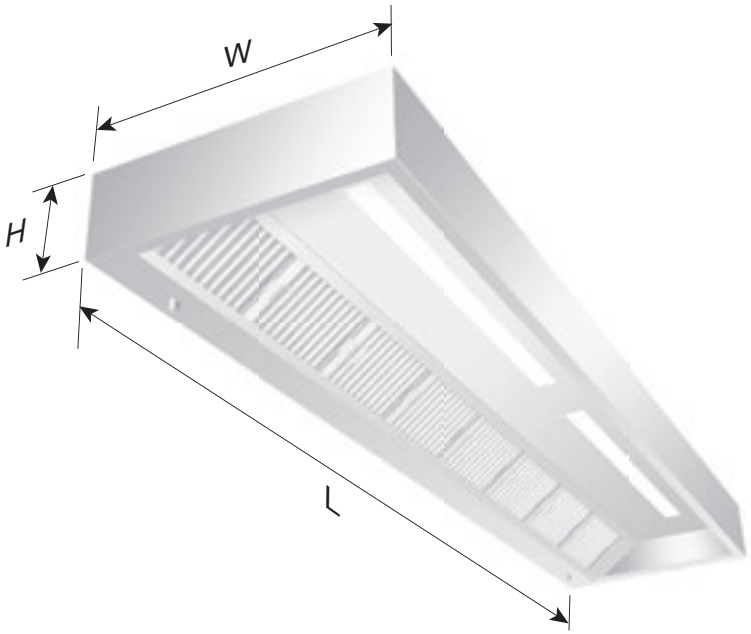
Further information

www.reven.de (Technologies → for adjustment and control)

- Designed, constructed and produced in Germany.

ACCESSORIES

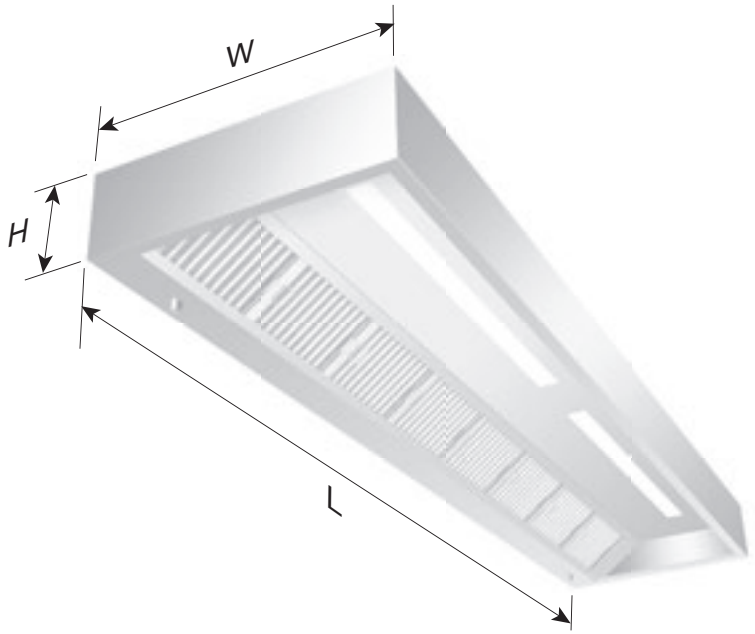
- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.



TECHNICAL DATA – X-CYCLONE® EAS SERIES

Width [mm]	900	1000	1100	1200	1300	1400	1500	1600
Height [mm]	300	300	300	300	300	300	300	300

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
1000	640	20	1 x 500 x 250
1200	640	20	1 x 500 x 250
1400	960	20	1 x 500 x 250
1600	960	40	1 x 500 x 250
1800	1280	40	1 x 500 x 250
2000	1280	50	1 x 500 x 250
2200	1280	50	1 x 500 x 250
2400	1600	50	1 x 500 x 250
2600	1600	50	2 x 500 x 250
2800	1920	50	2 x 500 x 250
3000	1920	40	2 x 500 x 250



TECHNICAL DATA – X-CYCLONE® EAS SERIES

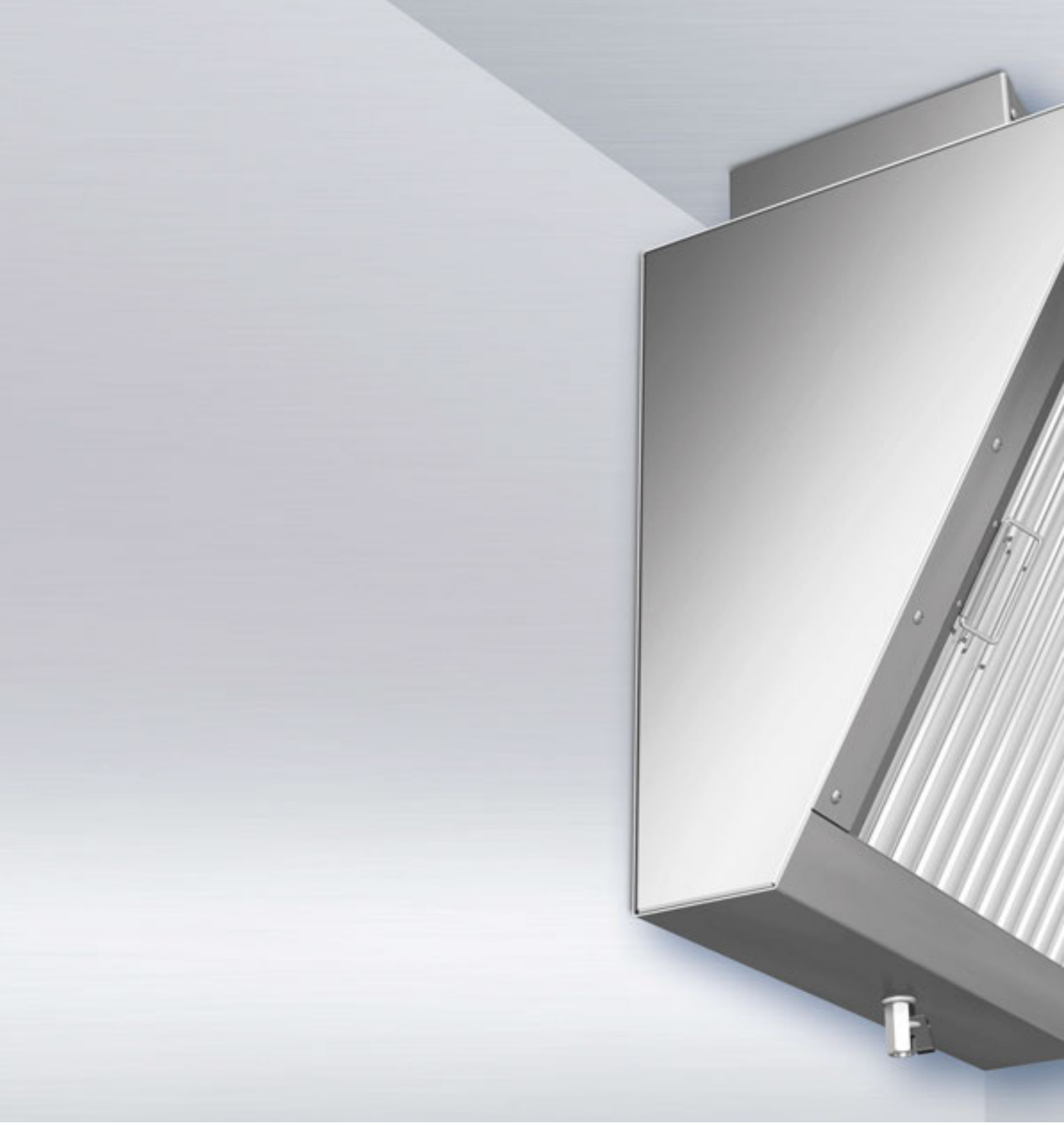
Width [mm]	900	1000	1100	1200	1300	1400	1500	1600
Height [mm]	300	300	300	300	300	300	300	300

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Exhaust air socket [mm]
3200	2240	40	2 x 500 x 250
3400	2240	40	2 x 500 x 250
3600	2560	40	2 x 500 x 250
3800	2560	40	2 x 500 x 250
4000	2560	50	2 x 500 x 250

Create your capture hood online using the REVEN Configurator and download the BIM data:
https://bim.reven.de/#/configurator?SelectedElementID=1006

TECHNICAL DATA – X-CYCLONE® EAS SERIES

Length [mm]	Weight [kg]							
	Width [mm]							
	900	1000	1100	1200	1300	1400	1500	1600
1000	37	42	47	53	60	67	75	85
1200	42	47	53	59	67	75	84	95
1400	48	54	61	68	77	86	97	109
1600	53	60	67	76	85	96	107	121
1800	57	65	73	82	92	104	116	131
2000	64	72	81	91	102	115	129	145
2200	68	77	87	97	109	123	138	155
2400	73	83	93	105	118	132	149	167
2600	79	89	100	112	126	142	159	179
2800	85	96	108	121	136	153	172	193
3000	89	101	113	128	143	161	181	203
3200	95	108	121	136	153	172	193	217
3400	100	113	127	143	160	180	202	227
3600	104	118	133	149	167	188	211	237
3800	110	124	139	157	176	198	222	250
4000	116	131	147	165	186	209	235	264



X-CYCLONE® E1S Series

Single-side capture module with X-CYCLONE® air-cleaning system

REVENX
SCHAKO Group

X-CYCLONE® E1S Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from processing machines, food production facilities and cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as cooling lubricants, spray mist or cooking fumes.

The module is suitable as pre-separator located above the production area; fitted to the exhaust duct.

TECHNICAL HIGHLIGHTS

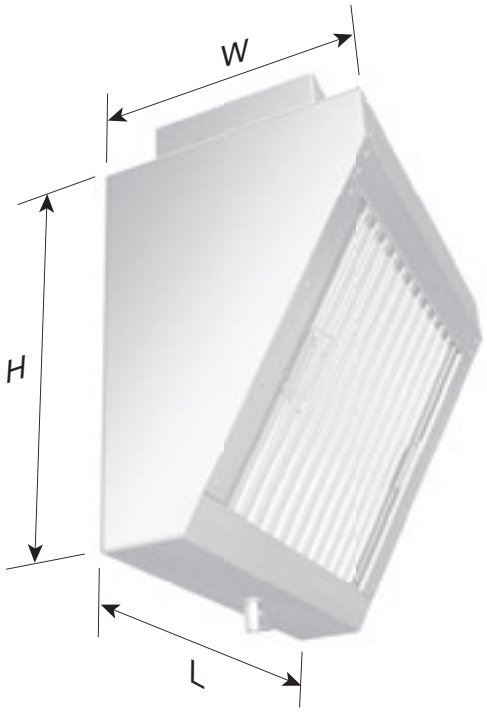
- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the separators proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested in accordance with DIN and DIN EN test standards.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- All materials of the capture module and the materials used for its production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.

Further information

www.reven.de (Technologies → for adjustment and control)

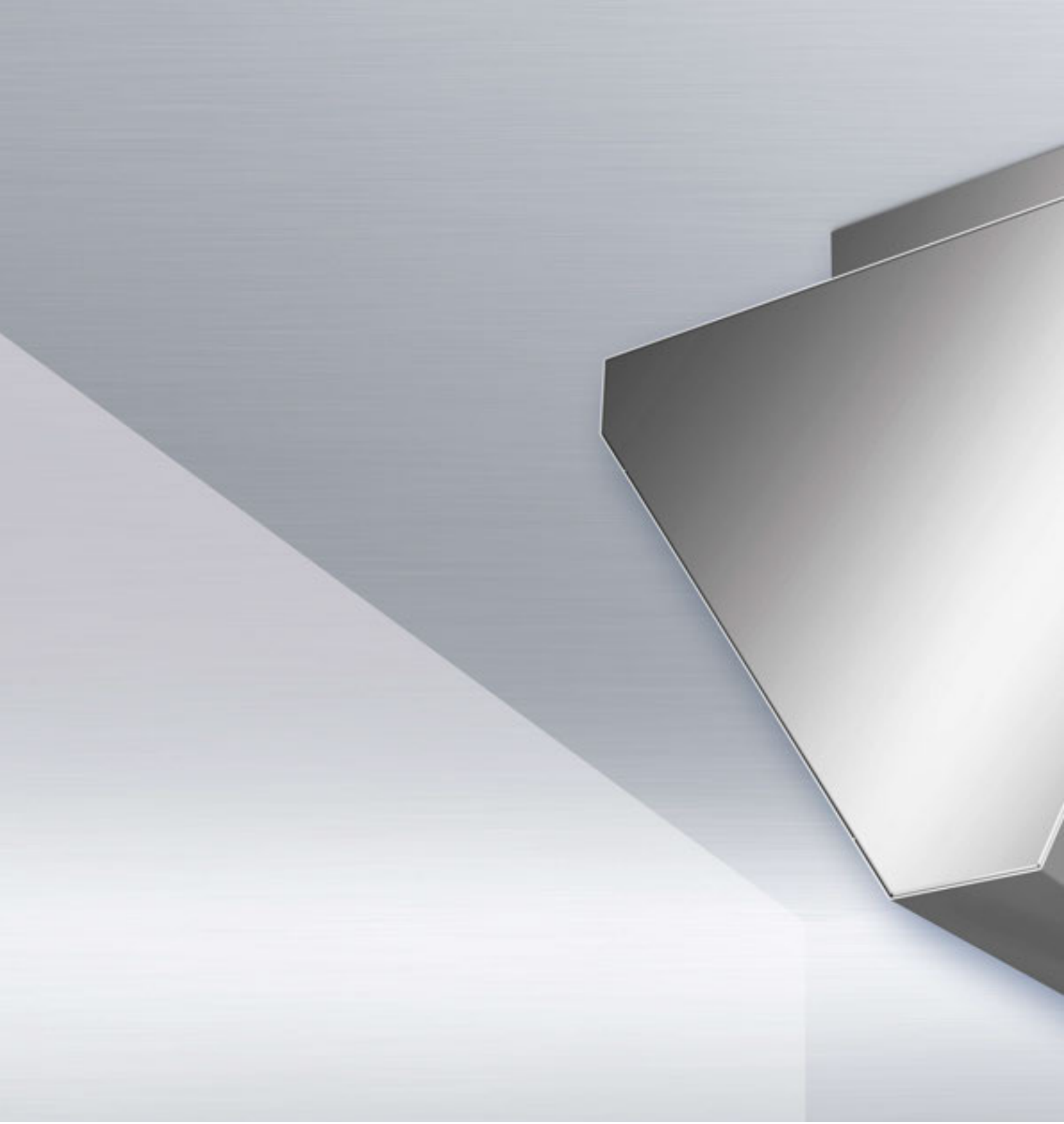
ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.



TECHNICAL DATA – X-CYCLONE® E1S SERIES

Type of device	Extraction volume [m³/h]	Dimensions			Weight [kg]
		Length [mm]	Width [mm]	Height [mm]	
E1S-01	1500	605	380	550	29
E1S-02	3000	1095	380	550	52
E1S-03	2000	605	440	660	33
E1S-04	4000	1095	440	660	57
E1S-05	6000	1585	440	660	85
E1S-06	2250	605	480	720	38
E1S-07	4750	1095	480	720	61
E1S-08	7250	1585	480	720	86
E1S-09	7500	1495	520	790	87
E1S-10	11000	2185	520	790	113
E1S-11	8500	1495	575	885	92
E1S-12	12500	2185	575	885	133
E1S-13	16500	2875	575	885	163
E1S-14	9500	1495	645	1005	104
E1S-15	14500	2185	645	1005	144
E1S-16	19500	2875	645	1005	192



X-CYCLONE® E2S Series

Two-side capture module with X-CYCLONE® air-cleaning system

REVENO
SCHAKO Group

X-CYCLONE® E2S Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from processing machines, food production facilities and cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as cooling lubricants, spray mist or cooking fumes.

The module is suitable as pre-separator located above the production area; fitted to the exhaust duct.

TECHNICAL HIGHLIGHTS

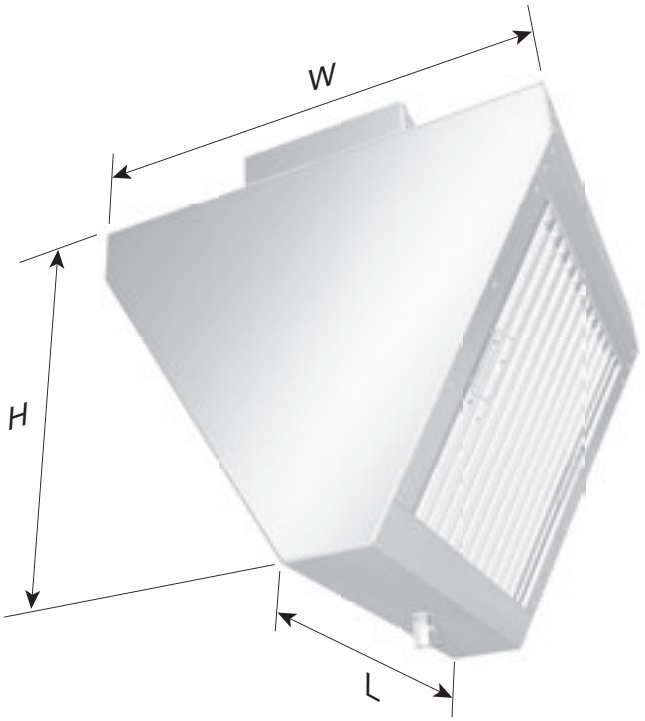
- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the separators proven by CFD flow analysis.
- Fire protection in the exhaust duct by flame-arresting X-CYLONE® basic elements, tested in accordance with DIN and DIN EN test standards.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- All materials of the capture module and the materials used for its production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.

Further information

www.reven.de (Technologies → for adjustment and control)

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.



TECHNICAL DATA – X-CYCLONE® E2S SERIES

Type of device	Extraction volume [m³/h]	Dimensions			Weight [kg]
		Length [mm]	Width [mm]	Height [mm]	
E2S-01	3000	605	650	550	35
E2S-02	6000	1095	650	550	65
E2S-03	4000	605	770	660	42
E2S-04	8000	1095	770	660	74
E2S-05	12000	1585	770	660	122
E2S-06	4500	605	850	720	45
E2S-07	9500	1095	850	720	82
E2S-08	14500	1585	850	720	132
E2S-09	15000	1495	930	790	116
E2S-10	22000	2185	930	790	167
E2S-11	17000	1495	1040	885	130
E2S-12	25000	2185	1040	885	182
E2S-13	33000	2875	1040	885	233
E2S-14	19000	1495	1180	1005	162
E2S-15	29000	2185	1180	1005	199
E2S-16	39000	2875	1180	1005	253

X-CYCLONE® EGJ Series

Stand-alone capture hood with REVEN® air-induction system

Also available with REVEN® efficiency air-induction system!*

REVEN
SCHAKO Group

X-CYCLONE® EGJ Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

The hood is suitable for installation at the food production or preparation area.

TECHNICAL HIGHLIGHTS

- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- New, internationally patented air-induction nozzle for the efficient capture and cleaning of the exhaust air.
- Efficiency and function of the separators proven by CFD flow analysis.
- Integrated air-induction system preventing draughts and ensuring compliance with the maximum permissible supply flow rates.*
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- Fire protection in the exhaust duct due to flame-arresting X-CYLONE® basic elements, tested in accordance with DIN and DIN EN test standards.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.

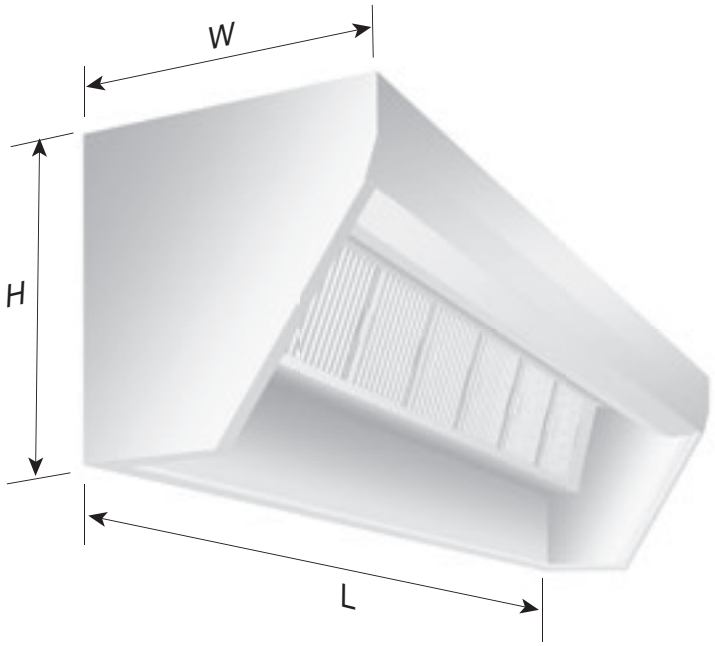
Further information

www.reven.de (Links/Speed Control Videos)

* Optionally available with the improved REVEN® efficiency air-induction system – improves the capturing of the exhaust air without any supply air directly blown in.

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.



TECHNICAL DATA – X-CYCLONE® EGJ SERIES

Extraction volume [m³/h]	Dimensions					Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Supply air dampers [mm]	Exhaust air socket [mm]	
1000	1000	750	810	1 x 750 x 125	1 x 750 x 150	87
1000	1200	750	810	1 x 750 x 125	1 x 750 x 150	98
1500	1400	750	810	1 x 750 x 125	1 x 750 x 150	109
1500	1600	750	810	1 x 750 x 125	1 x 750 x 150	120
2000	1800	750	810	1 x 750 x 125	1 x 750 x 150	132
2000	2000	750	810	1 x 750 x 125	1 x 750 x 150	146
2000	2200	750	810	1 x 750 x 125	1 x 750 x 150	157
2500	2400	750	810	1 x 750 x 125	1 x 750 x 150	168
2500	2600	750	810	2 x 750 x 125	2 x 750 x 150	180
3000	2800	750	810	2 x 750 x 125	2 x 750 x 150	191
3000	3000	750	810	2 x 750 x 125	2 x 750 x 150	202
3500	3200	750	810	2 x 750 x 125	2 x 750 x 150	214
3500	3400	750	810	2 x 750 x 125	2 x 750 x 150	225
4000	3600	750	810	2 x 750 x 125	2 x 750 x 150	237
4000	3800	750	810	2 x 750 x 125	2 x 750 x 150	250
4000	4000	750	810	2 x 750 x 125	2 x 750 x 150	260

X-CYCLONE® EGS Series

Stand-alone capture hood with X-CYCLONE® air-cleaning system

REVENO
SCHAKO Group

X-CYCLONE® EGS Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

The hood is suitable for installation at the food production or preparation area.

TECHNICAL HIGHLIGHTS

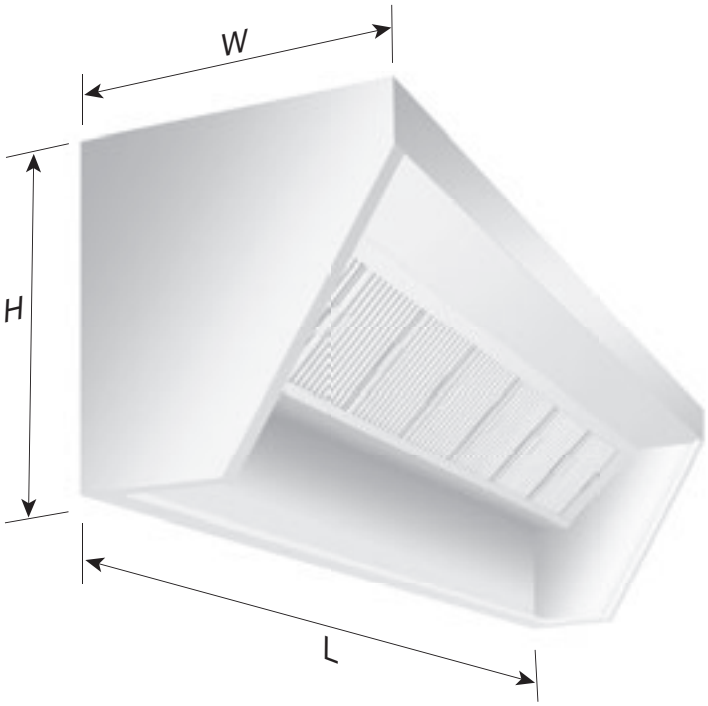
- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the separators proven by CFD flow analysis.
- Fire protection in the exhaust duct due to flame-arresting X-CYCLONE® basic elements, tested in accordance with DIN 18869-5 and DIN EN 16282.
- Effective protection of the exhaust duct against contamination.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- The hood and all materials used for its production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.

Further information

www.reven.de (Technologies → for adjustment and control)

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and micro-organisms.
- REVEN® ECOJET low-velocity air outlet for additional control of air management when operating capture hoods.

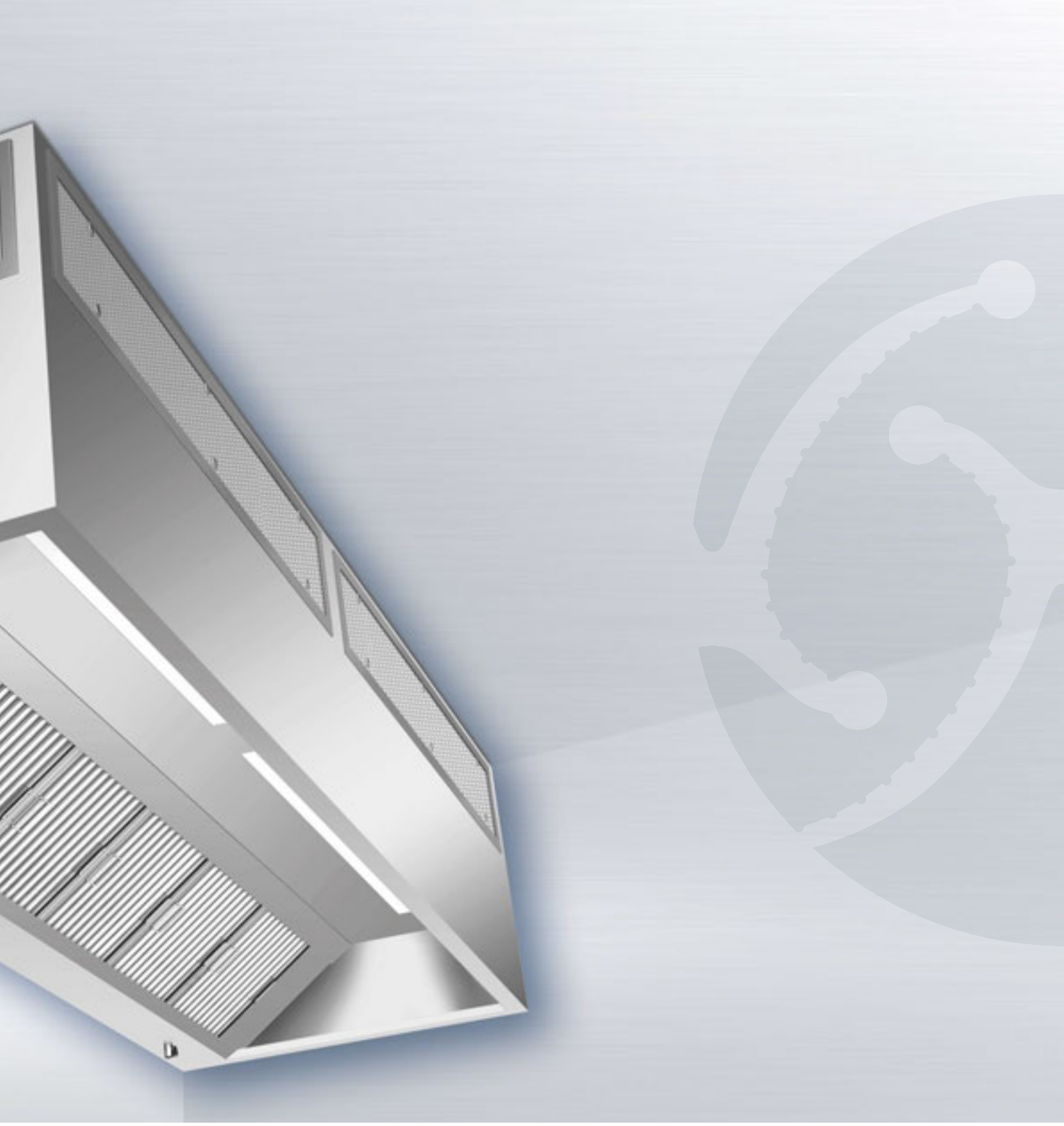


TECHNICAL DATA – X-CYCLONE® EGS SERIES

Extraction volume [m³/h]	Dimensions				Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Exhaust air socket [mm]	
1000	1000	750	810	1 x 750 x 150	48
1000	1200	750	810	1 x 750 x 150	54
1500	1400	750	810	1 x 750 x 150	62
1500	1600	750	810	1 x 750 x 150	68
2000	1800	750	810	1 x 750 x 150	74
2000	2000	750	810	1 x 750 x 150	81
2000	2200	750	810	1 x 750 x 150	87
2500	2400	750	810	1 x 750 x 150	94
2500	2600	750	810	2 x 750 x 150	100
3000	2800	750	810	2 x 750 x 150	108
3000	3000	750	810	2 x 750 x 150	114
3500	3200	750	810	2 x 750 x 150	121
3500	3400	750	810	2 x 750 x 150	127
4000	3600	750	810	2 x 750 x 150	133
4000	3800	750	810	2 x 750 x 150	139
4000	4000	750	810	2 x 750 x 150	147

X-CYCLONE® EGU Series

Recirculation hood with X-CYCLONE® air-cleaning system for the reduction of organic odour pollution



REVENO
SCHAKO Group

X-CYCLONE® EGU Series

RANGE OF APPLICATION

Capture and cleaning of the exhaust air from production machines in the food industry and from cooking appliances in commercial kitchens with a recirculation system. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

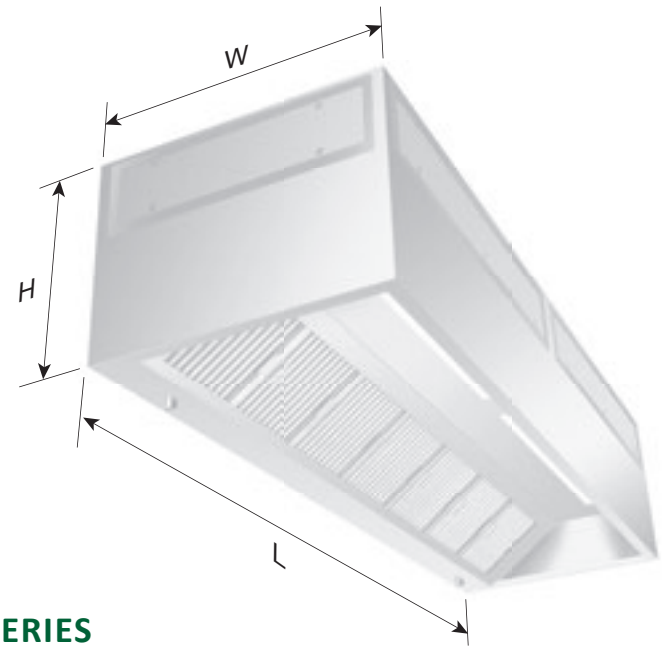
- Combination of the patented REVEN® air-induction technology and the high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- RGN99 high-performance granulate, a food-compliant alternative to activated carbon. Odour reduction by oxidation of odour molecules in the exhaust air.
- Oxidation with potassium permanganate and volcanic rock zeolite. Odours are eliminated by the reaction with potassium permanganate; residual odour particles are trapped in the molecular sieve provided by the volcanic zeolite carrier material.
- Integrated low-velocity air outlets for additional control of air management.
- Efficiency and function of the separators proven by CFD flow analysis.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the hood frame.

Further information

www.reven.de (Technologies → for adjustment and control)

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.



TECHNICAL DATA – X-CYCLONE® EGU SERIES

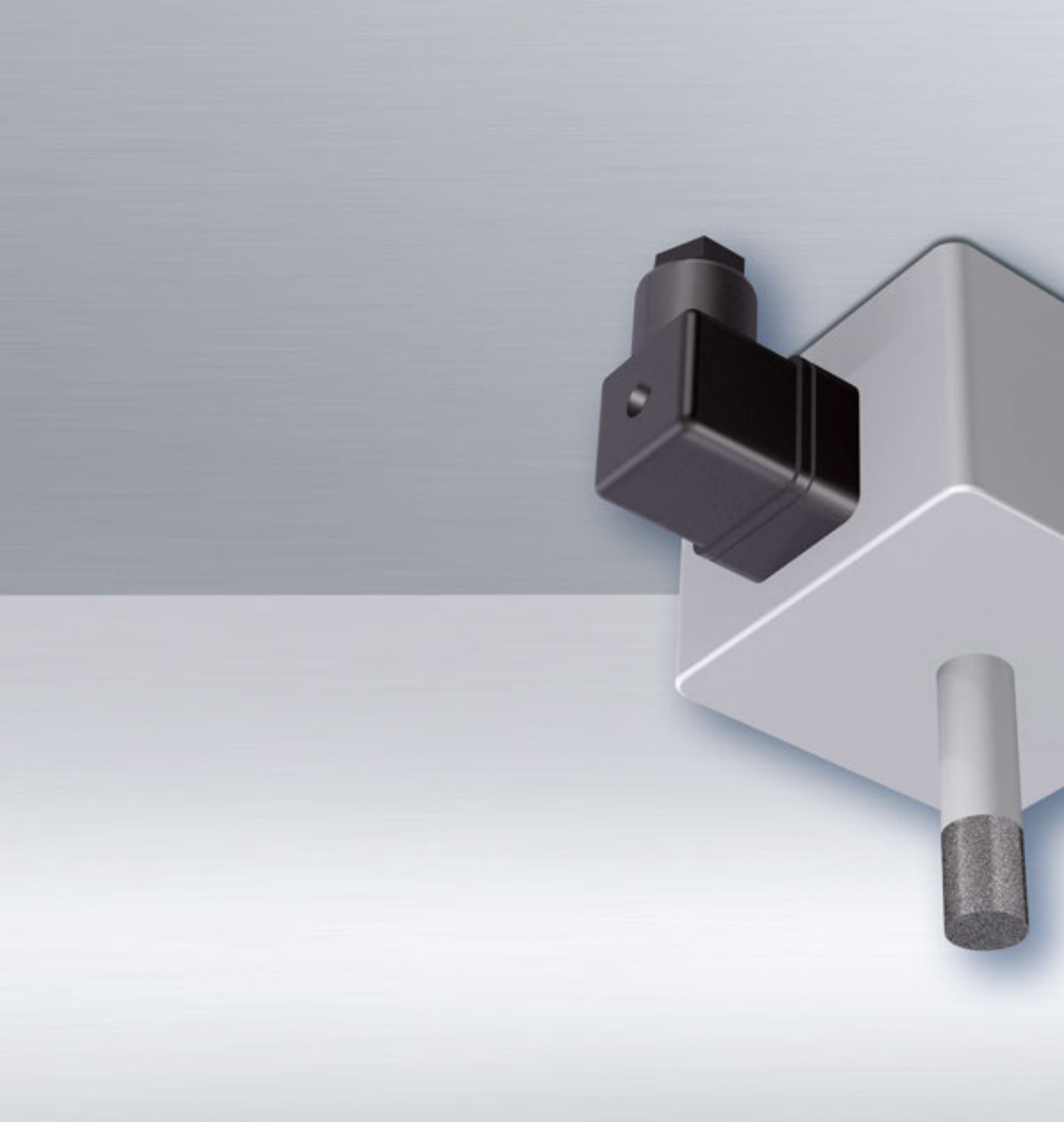
Width [mm]	1000	1100	1200	1300	1400	1500
Height [mm]	720	720	720	720	720	720

Length [mm]	Extraction volume [m³/h]	Connected load illumination [W]	Connected load fan [W]
850	500	–	355 – 400
900	1000	–	355 – 400
1000	1000	20	355 – 400
1200	1000	20	355 – 400
1400	1200	20	355 – 400
1600	1200	40	355 – 400
1800	1200	40	355 – 400

Create your capture hood online using the REVEN Configurator and download the BIM data:

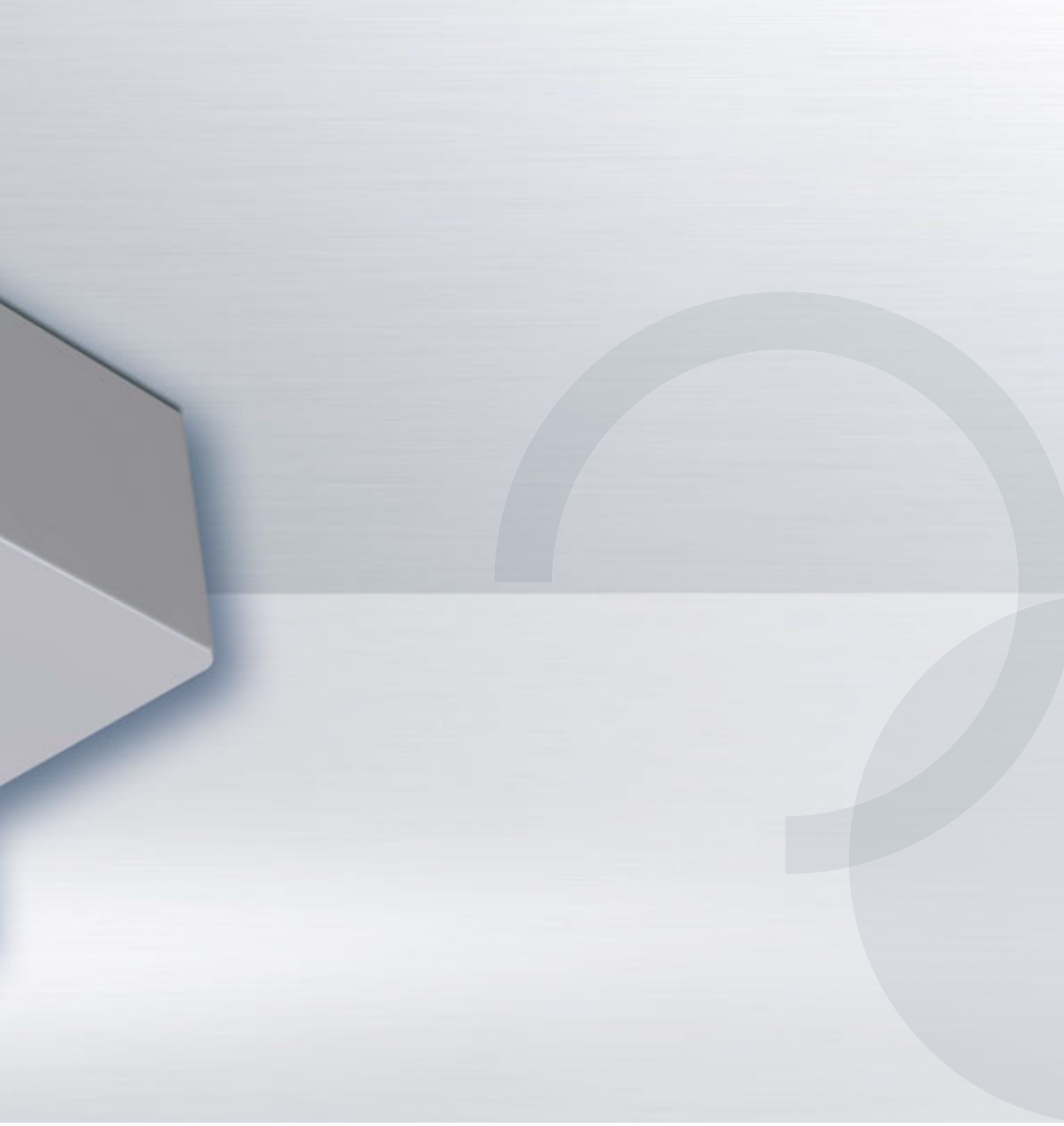
https://bim.reven.de/#/configurator?SelectedElementID=1007

Length [mm]	Weight [kg]					
	Width [mm]					
	1000	1100	1200	1300	1400	1500
850	73	79	84	90	96	102
900	79	85	90	96	102	108
1000	84	90	96	102	108	114
1200	94	100	108	114	120	128
1400	108	116	124	130	138	146
1500	114	122	130	137	145	153
1600	120	128	135	140	150	160
1800	132	146	158	165	178	186



REVEN® RSC Series

Energy-saving sensor for capture hoods and ceiling-mounted extractors



REVENX
SCHAKO Group

RANGE OF APPLICATION

Monitoring, control and adjustment of the exhaust airflow in duct air cleaners, capture hoods and ceiling-mounted extractors.

TECHNICAL HIGHLIGHTS

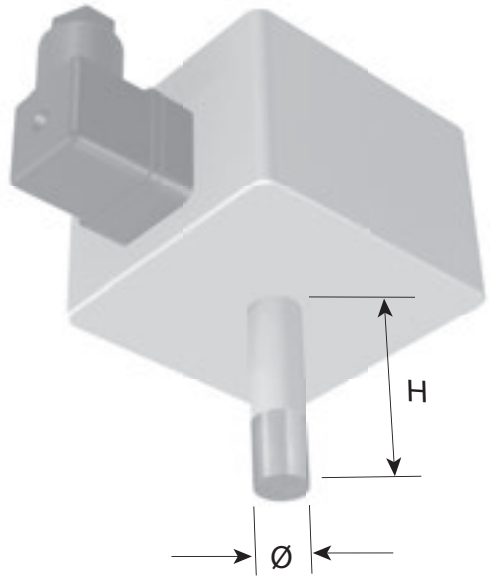
- Automatic demand-driven control of the exhaust air volume flow depending on ambient temperature and moisture.
- Continuous automatic control via variable output signals between 0 and 10 volts. Response time to changes in the ambient conditions (temperature and humidity) is two seconds maximum.
- Limitation of the airflow volume to the minimum value to ensure efficient separation.
- Adjustable maximum and minimum values for temperature and humidity. Output signal of 0 V at minimum and 10 V at maximum.
- Humidity and temperature sensors protected against contamination by easy-to-clean, sintered metal sleeves.
- Voltage supply via special power unit with smoothed output voltage:
  input voltage 230 V ~
  output voltage 25 V =

Further information

www.reven.de (Technologies → for adjustment and control)

ACCESSORIES

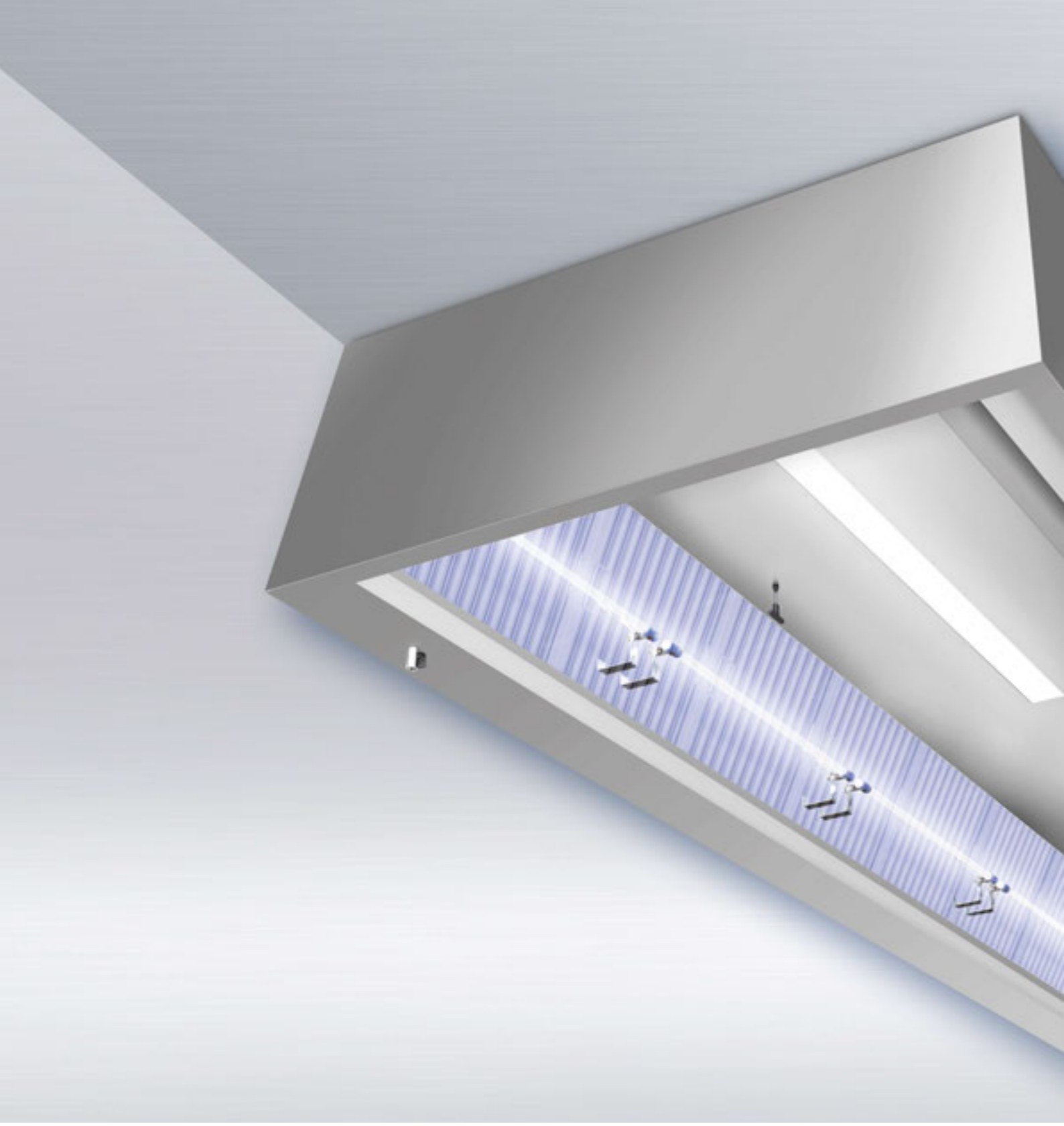
- REVEN® Software and SIEMENS® SIMATIC® control module for the interpretation of sensor signals and the control of equipment by customer such as frequency converters, fans and MSR systems.



TECHNICAL DATA – REVEN® RSC SERIES

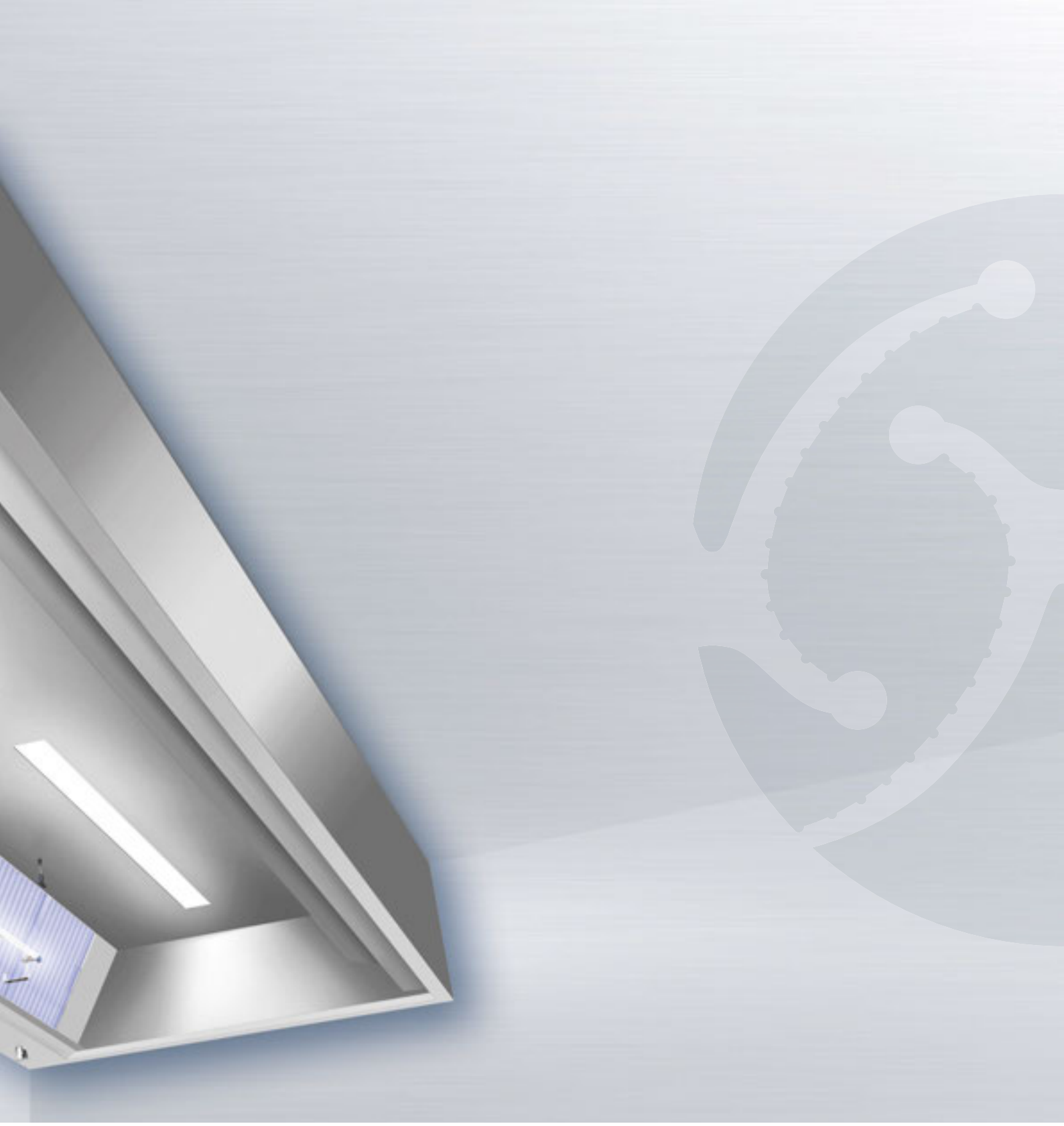
Type of device	Voltage [V]	Signale		Dimensions	
		Humidity [V]	Temperature [V]	Height [mm]	Diameter [mm]
RSC-Sensor	24	0 – 10	0 – 10	50	14

Note:
Please observe the information on page 32.



X-CYCLONE® UV Series

UV system for the treatment of exhaust air from capture hoods and ceiling-mounted extractors



REVENO
SCHAKO Group

X-CYCLONE® UV Series

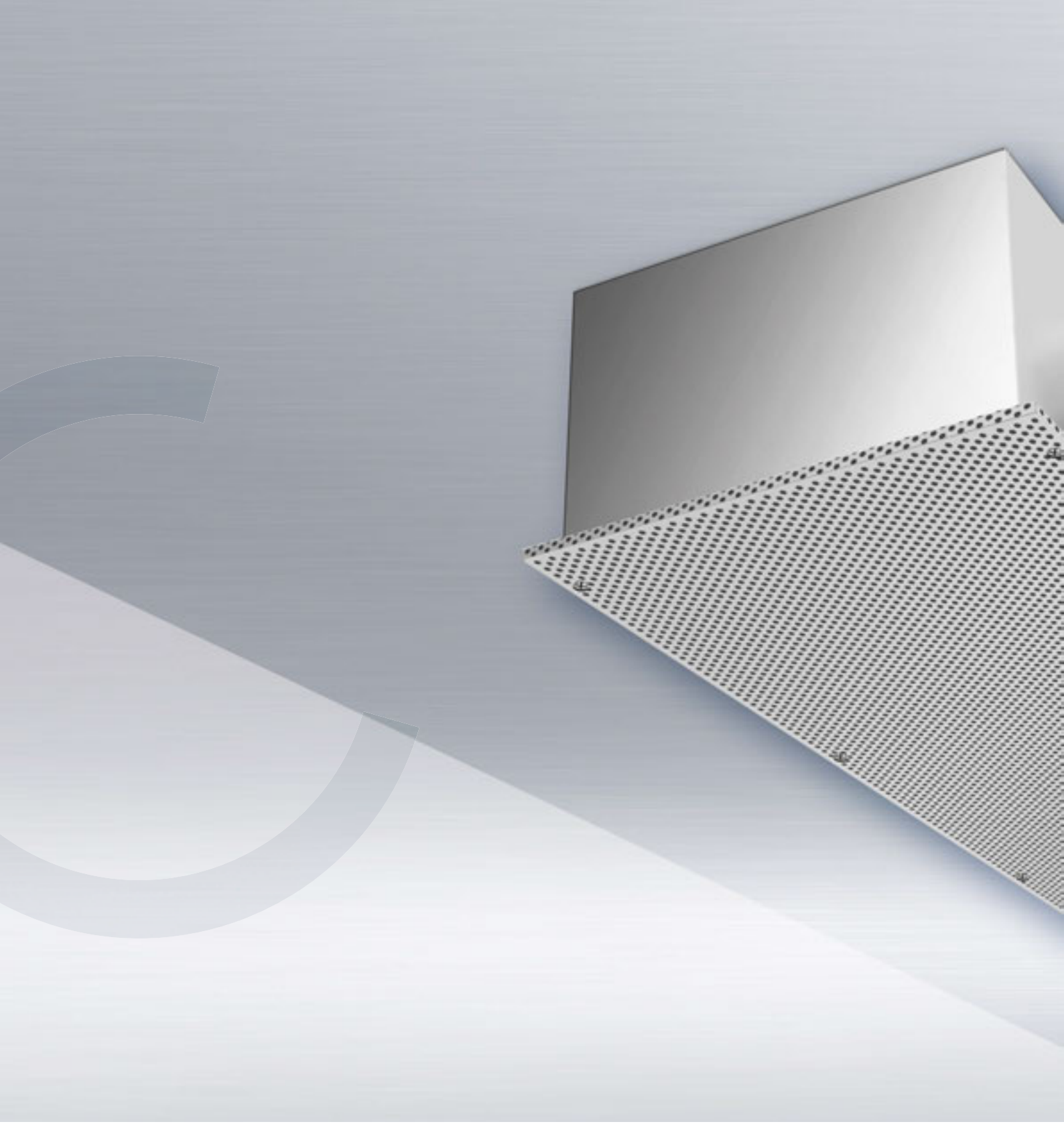
RANGE OF APPLICATION

Elimination of organic odour pollution in the exhaust air from food production plants or from cooking appliances in commercial kitchens by means of UV radiation.

TECHNICAL HIGHLIGHTS

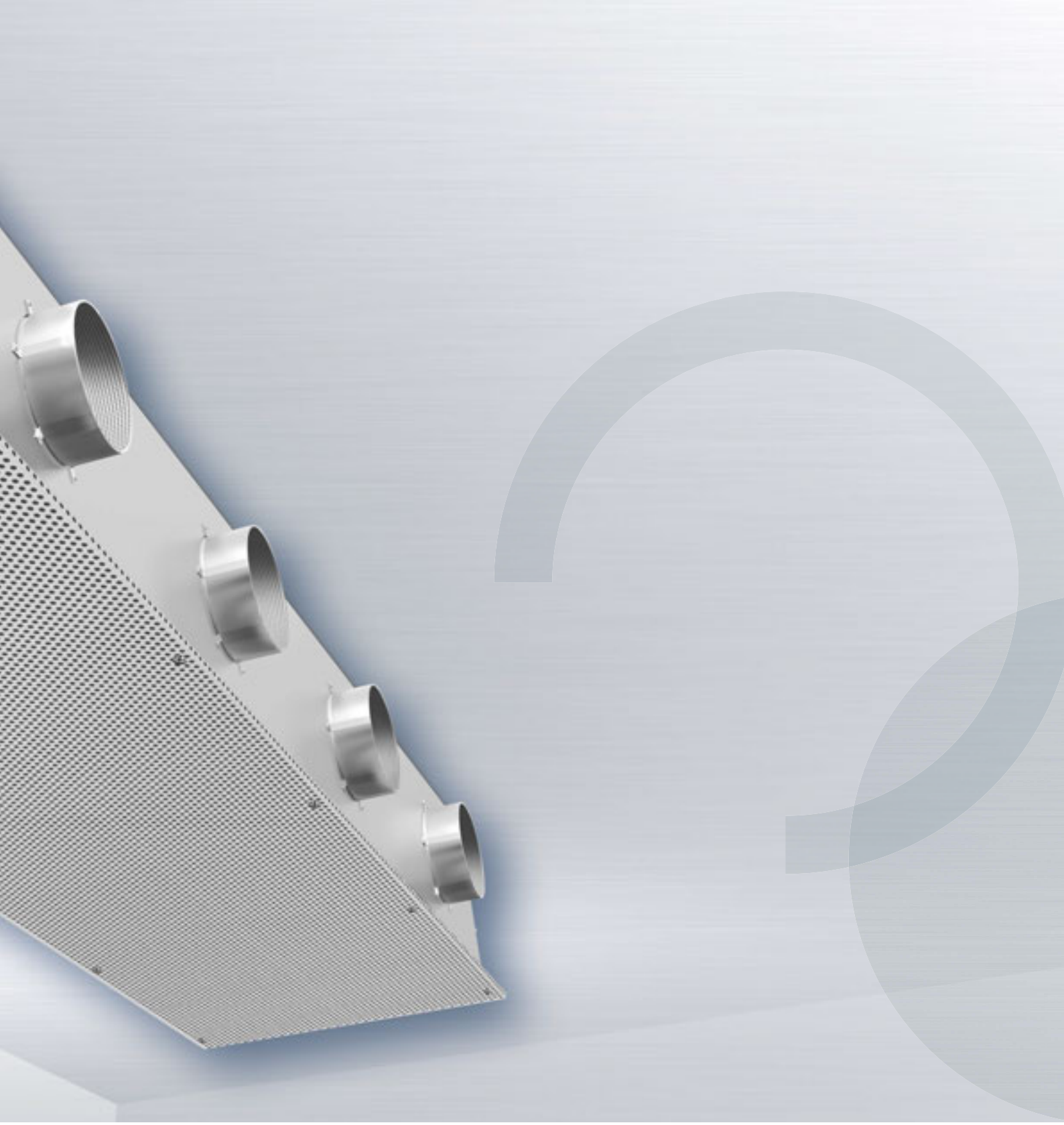
- Built-in system with mercury-free REVEN® Longlife UV tubes generating ozonic radiation at a wavelength of 185 nm. Tube material made of synthetic quartz. Special interior coating for long-lasting transparency and prevention of contamination and discolouring.
- Exhaust air treatment with UV-C and VUV radiation. UV-C radiation at a wave length of 254 nm to eliminate microorganisms (bacteria, fungi and viruses). Vacuum ultraviolet radiation (VUV) at a wavelength of 185 nm to generate ozone for the oxidation of airborne odorous matter.
- Safety and functional monitoring via electronic differential pressure control without any mechanical components. Interpretation by monitoring modules in the switch cubicle.
- Fully integrated system, installed in the manufacturer's factory when the capture and duct-mounting equipment is first assembled. No subsequent addition as practised by other manufacturers.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- Built-in components, 100 % rust-proof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.

Note:
When choosing the place of installation, make sure that the air needs at least two seconds to flow from the inlet of the capture system UV to the outlet into the open.



REVEN® ECOJET Series

Low-velocity air outlet for the control of air management when operating capture hoods

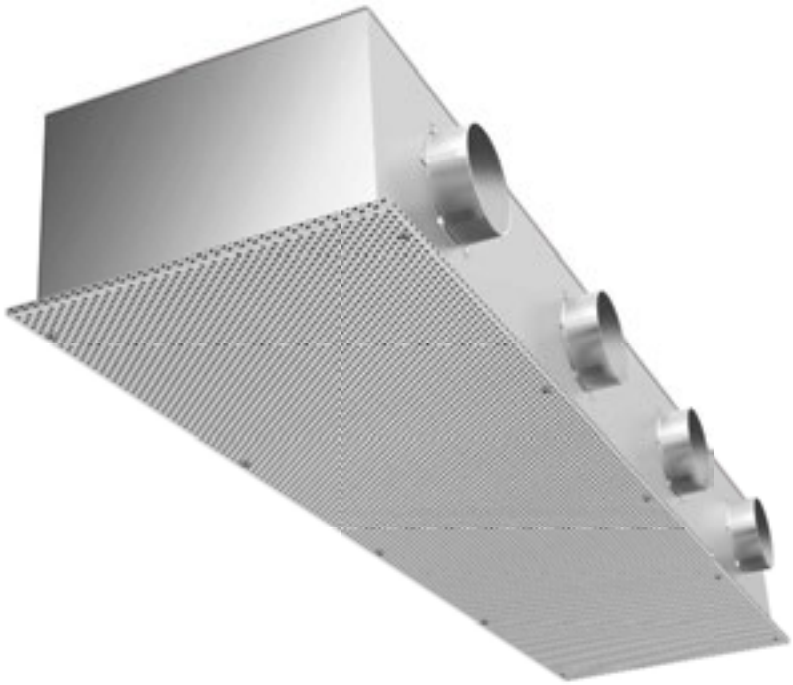


REVENO
SCHAKO Group

RANGE OF APPLICATION

Supplementary control of air management when operating capture and air-cleaning systems for food production and commercial kitchens.

Suitable for point-type integration into existing ceilings.



TECHNICAL HIGHLIGHTS

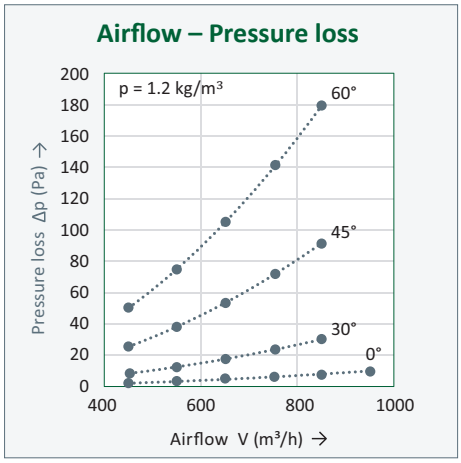
- Low-velocity supply air outlet with enclosure, lateral socket and control unit.
- Perforated metal sheets, optionally available in stainless steel or powder-coated aluminium.
- Efficiency and function proven by CFD flow analysis.
- Flow-optimised design, suitable for food production facilities and commercial kitchens. Deep penetration of fresh air down to the floor area of the kitchen or production shop.
- Minimum pressure drop in the unit.
- Very quiet even at maximum power.
- Lower perforated sheet panel removable for adjusting work.
- Lifetime guarantee on the corrosion resistance of the enclosure.
- The perforated sheet coffers and all the materials used for their production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.

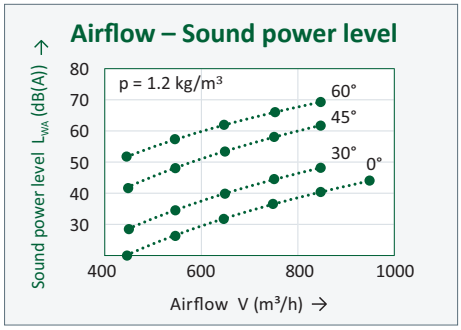
ACCESSORIES

- Custom-made angle brackets available on request for perfect connection to existing ceilings.

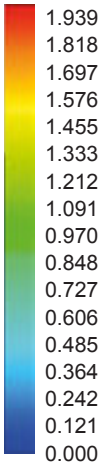
SCIENTIFIC TESTING AND OPTIMISATION WITH THE HELP OF CFD

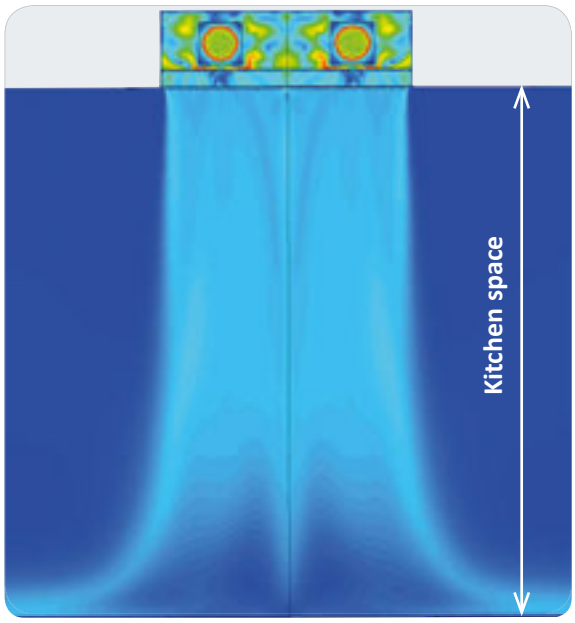
Rentschler REVEN has used CFD technology to optimise the airflow behaviour of supply air units (see figure on the right). The pressure loss in the supply air unit and the associated noise development were also tested in relation to the amount of air blown in (see figure below).



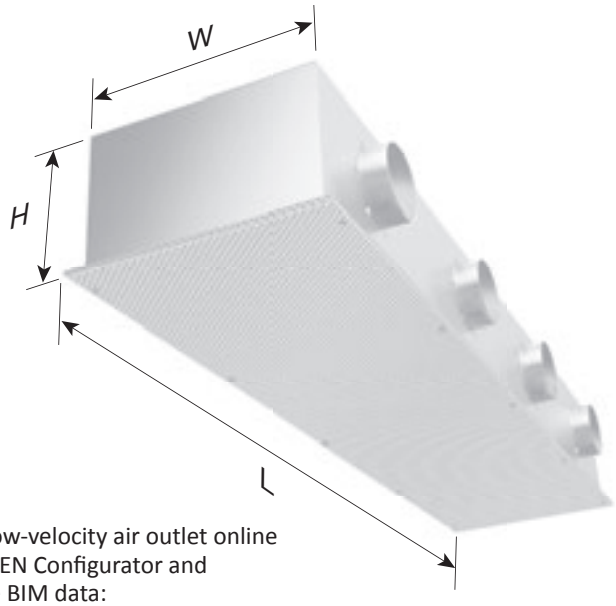


Specifications for different positions of the adjusting device (at 0°, 30°, 45° and 60°), unit (1500 x 500 mm).





Vertical cross-section of the REVEN® ECOJET, including the kitchen space below: The CFD analysis shows an optimal, almost vertical air flow from the low-velocity air outlet to the kitchen floor.



Create your low-velocity air outlet online using the REVEN Configurator and download the BIM data:

https://bim.reven.de/#/configurator?SelectedElementID=1008

TECHNICAL DATA – REVEN® ECOJET SERIES

Extraction volume [m³/h]	Dimensions				Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Supply air socket [mm]	
250	500	500 / 625	290	1 x Ø 150	7
500	1000	500 / 625	290	2 x Ø 150	14
750	1500	500 / 625	290	3 x Ø 150	21
1000	2000	500 / 625	290	4 x Ø 150	28

Ceiling Extractors

Air cleaners suitable for room-spanning installation

REVENX
SCHAKO Group

X-CYCLONE® DVN Series

Ceiling-mounted extractor with REVEN® air-induction system

Peripheral and central versions

Also available with REVEN® efficiency air-induction system!*

REVENT
SCHAKO Group

REVEN® DVN Supply Air Series

RANGE OF APPLICATION

Room-spanning ceiling-mounted extractor modules with supply air-induction system, suitable for the capture and cleaning of exhaust air from food-production plants and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- New, internationally patented REVEN® air-induction nozzle for the efficient capture and cleaning of the exhaust air.
- Efficiency and function of the air-induction nozzle proven by CFD flow analysis.
- Integrated air-induction system preventing draughts and ensuring compliance with the maximum permissible supply flow rates.*
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.

* Optionally available with the improved REVEN® efficiency air-induction system – improves the capturing of the exhaust air without any supply air directly blown in.

Further information

www.reven.de (Technologies → for fume capture)

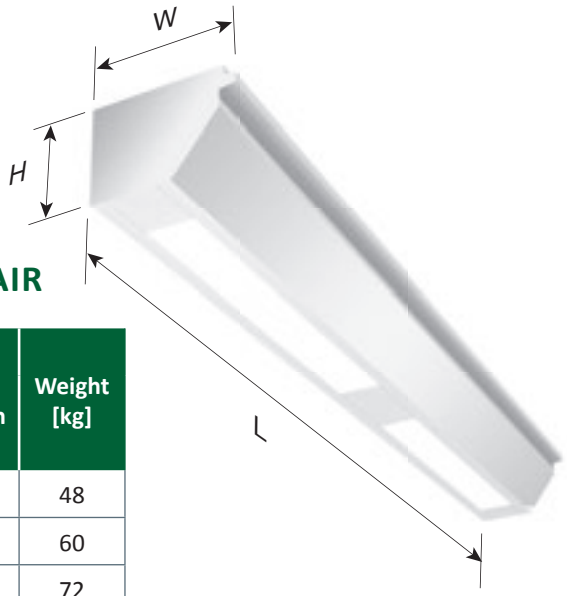
www.reven.de (Technologies → for adjustment and control)

- Lifetime guarantee on the corrosion resistance of the ceiling-mounted extractor module.

and adjustment of the exhaust air volume flow.

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control

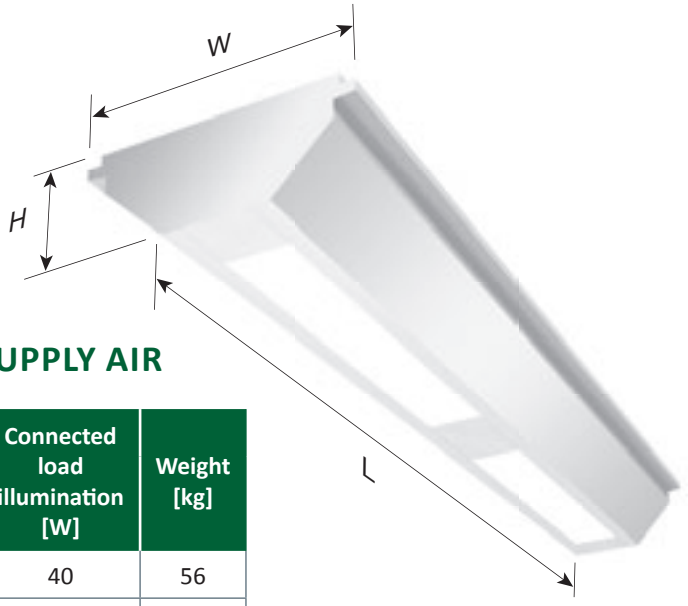


TECHNICAL DATA – REVEN® DVN-W SUPPLY AIR

Extraction volume [m³/h]	Dimensions				Connected load illumination [W]	Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Supply air dampers [mm]		
480	1500	520	360	1 x 500 x 250	40	48
640	2000	520	360	1 x 500 x 250	50	60
800	2500	520	360	1 x 500 x 250	50	72
960	3000	520	360	2 x 500 x 250	40	90
1120	3500	520	360	2 x 500 x 250	40	102
1280	4000	520	360	2 x 500 x 250	50	120

Create your ceiling-mounted extractor online using the REVEN Configurator and download the BIM data:

https://bim.reven.de/#/configurator?SelectedElementID=1010



TECHNICAL DATA – REVEN® DVN-M SUPPLY AIR

Extraction volume [m³/h]	Dimensions				Connected load illumination [W]	Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Supply air dampers [mm]		
960	1500	750	360	1 x 500 x 250	40	56
1280	2000	750	360	1 x 500 x 250	50	70
1600	2500	750	360	1 x 500 x 250	50	84
1920	3000	750	360	2 x 500 x 250	40	105
2240	3500	750	360	2 x 500 x 250	40	120
2560	4000	750	360	2 x 500 x 250	50	140

X-CYCLONE® DVN Exhaust Air Series

RANGE OF APPLICATION

Room-spanning ceiling-mounted extractor modules with exhaust air-induction system, suitable for the capture and cleaning of exhaust air from food-production plants and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the separators proven by CFD flow analysis.
- More efficient separation through condensation of the vapour molecules in the separator supported by air-induction.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the ceiling-mounted extractor module.

Further information

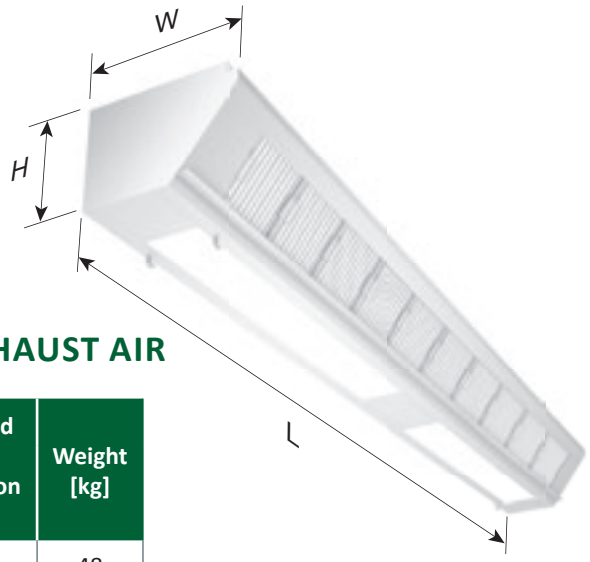
www.reven.de (Technologies → for adjustment and control)

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control

and adjustment of the exhaust air volume flow.

- REVEN® UV system for the elimination of odorous matter and microorganisms.

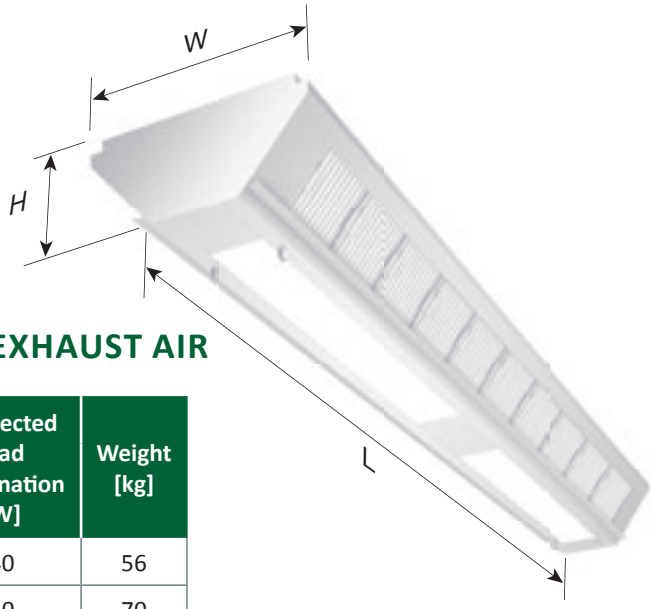


TECHNICAL DATA – X-CYCLONE® DVN-W EXHAUST AIR

Extraction volume [m³/h]	Dimensions				Connected load illumination [W]	Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Exhaust air socket [mm]		
960	1500	520	360	1 x 510 x 260	40	48
1280	2000	520	360	1 x 510 x 260	50	60
1600	2500	520	360	1 x 510 x 260	50	72
1920	3000	520	360	2 x 510 x 260	40	90
2240	3500	520	360	2 x 510 x 260	40	102
2560	4000	520	360	2 x 510 x 260	50	120

Create your ceiling-mounted extractor online using the REVEN Configurator and download the BIM data:

https://bim.reven.de/#/configurator?SelectedElementID=1009



TECHNICAL DATA – X-CYCLONE® DVN-M EXHAUST AIR

Extraction volume [m³/h]	Dimensions				Connected load illumination [W]	Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Exhaust air socket [mm]		
1920	1500	750	360	1 x 510 x 260	40	56
2560	2000	750	360	1 x 510 x 260	50	70
3200	2500	750	360	1 x 510 x 260	50	84
3840	3000	750	360	2 x 510 x 260	40	105
4480	3500	750	360	2 x 510 x 260	40	120
5120	4000	750	360	2 x 510 x 260	50	140

X-CYCLONE® DR Series

Ceiling-mounted extractor with REVEX® spraying system

Peripheral and central versions

REVENX
SCHAKO Group

X-CYCLONE® DR Exhaust Air Series

RANGE OF APPLICATION

Room-spanning REVEX® ceiling-mounted extractor modules, suitable for the capture and cleaning of exhaust air from food-production plants and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Integrated, patented REVEX® spraying system for fully automatic cleaning and disinfection of the aerosol separators on both sides.
- Efficiency and function of the separators proven by CFD flow analysis.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the ceiling-mounted extractor module.

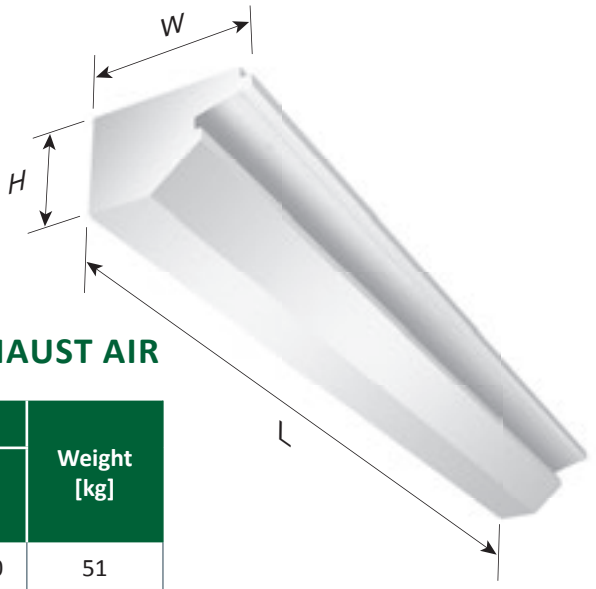
ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.

Further information

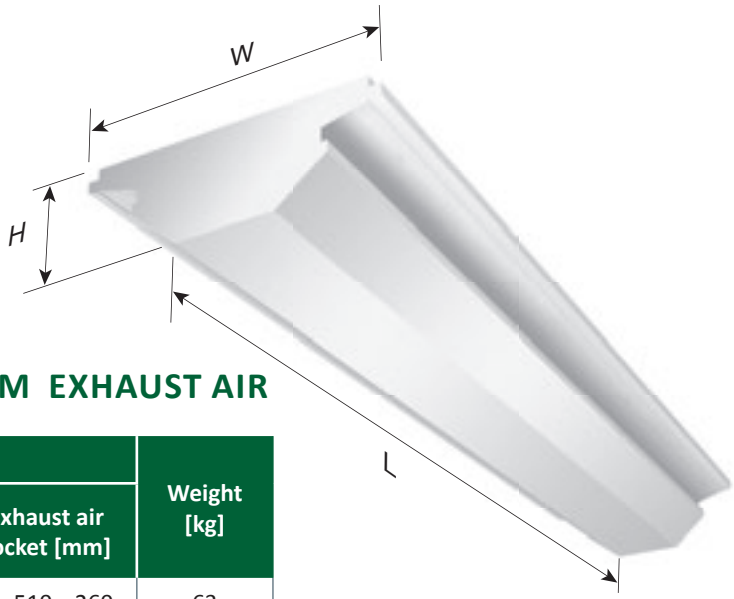
www.reven.de (Technologies → for adjustment and control)
www.reven.de (Technologies → for cleaning and desinfection)

- REVEN® UV system for the elimination of odorous matter and micro-organisms.



TECHNICAL DATA – X-CYCLONE® DR-W EXHAUST AIR

Extraction volume [m³/h]	Dimensions				Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Exhaust air socket [mm]	
960	1500	570	360	1 x 510 x 260	51
1280	2000	570	360	2 x 510 x 260	64
1600	2500	570	360	2 x 510 x 260	77
1920	3000	570	360	2 x 510 x 260	96
2240	3500	570	360	2 x 510 x 260	109
2560	4000	570	360	3 x 510 x 260	128



TECHNICAL DATA – X-CYCLONE® DR-M EXHAUST AIR

Extraction volume [m³/h]	Dimensions				Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Exhaust air socket [mm]	
1920	1500	1044	360	1 x 510 x 260	63
2560	2000	1044	360	2 x 510 x 260	78
3200	2500	1044	360	2 x 510 x 260	94
3840	3000	1044	360	2 x 510 x 260	117
4480	3500	1044	360	2 x 510 x 260	133
5120	4000	1044	360	3 x 510 x 260	150

X-CYCLONE® DLD Series

Ceiling-mounted extractor with X-CYCLONE® air-cleaning system

Peripheral and central versions

REVENO
SCHAKO Group

X-CYCLONE® DLD Exhaust Air Series

RANGE OF APPLICATION

Room-spanning ceiling-mounted extractor modules, suitable for the capture and cleaning of exhaust air from food-production plants and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the separators proven by CFD flow analysis.
- State-of-the-art integrated LED fixture with dimmer, reduction of the energy consumption by up to 50 % in comparison to conventional T5 and T8 fixtures.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the ceiling-mounted extractor module.

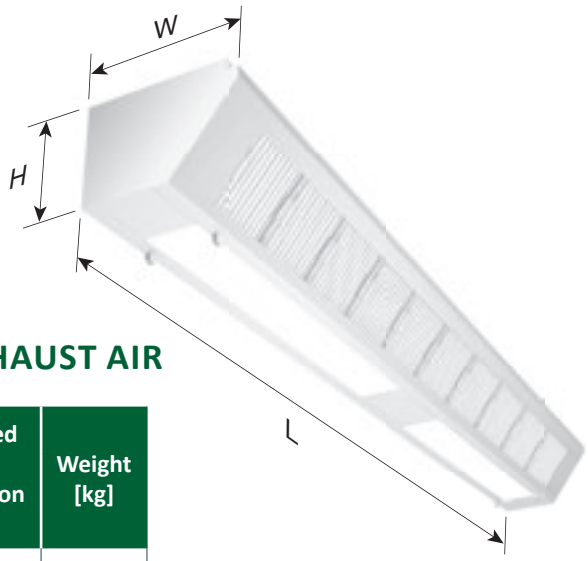
ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.

Further information

www.reven.de (Technologies → for adjustment and control)

- REVEN® UV system for the elimination of odorous matter and micro-organisms.

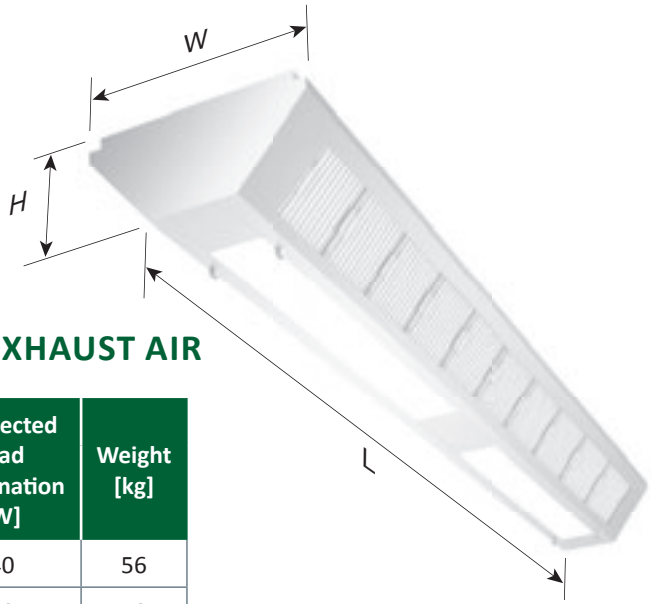


TECHNICAL DATA – X-CYCLONE® DLD-W EXHAUST AIR

Extraction volume [m³/h]	Dimensions				Connected load illumination [W]	Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Exhaust air socket [mm]		
960	1500	520	360	1 x 510 x 260	40	42
1280	2000	520	360	1 x 510 x 260	50	60
1600	2500	520	360	1 x 510 x 260	50	78
1920	3000	520	360	2 x 510 x 260	40	90
2240	3500	520	360	2 x 510 x 260	40	102
2560	4000	520	360	2 x 510 x 260	50	120

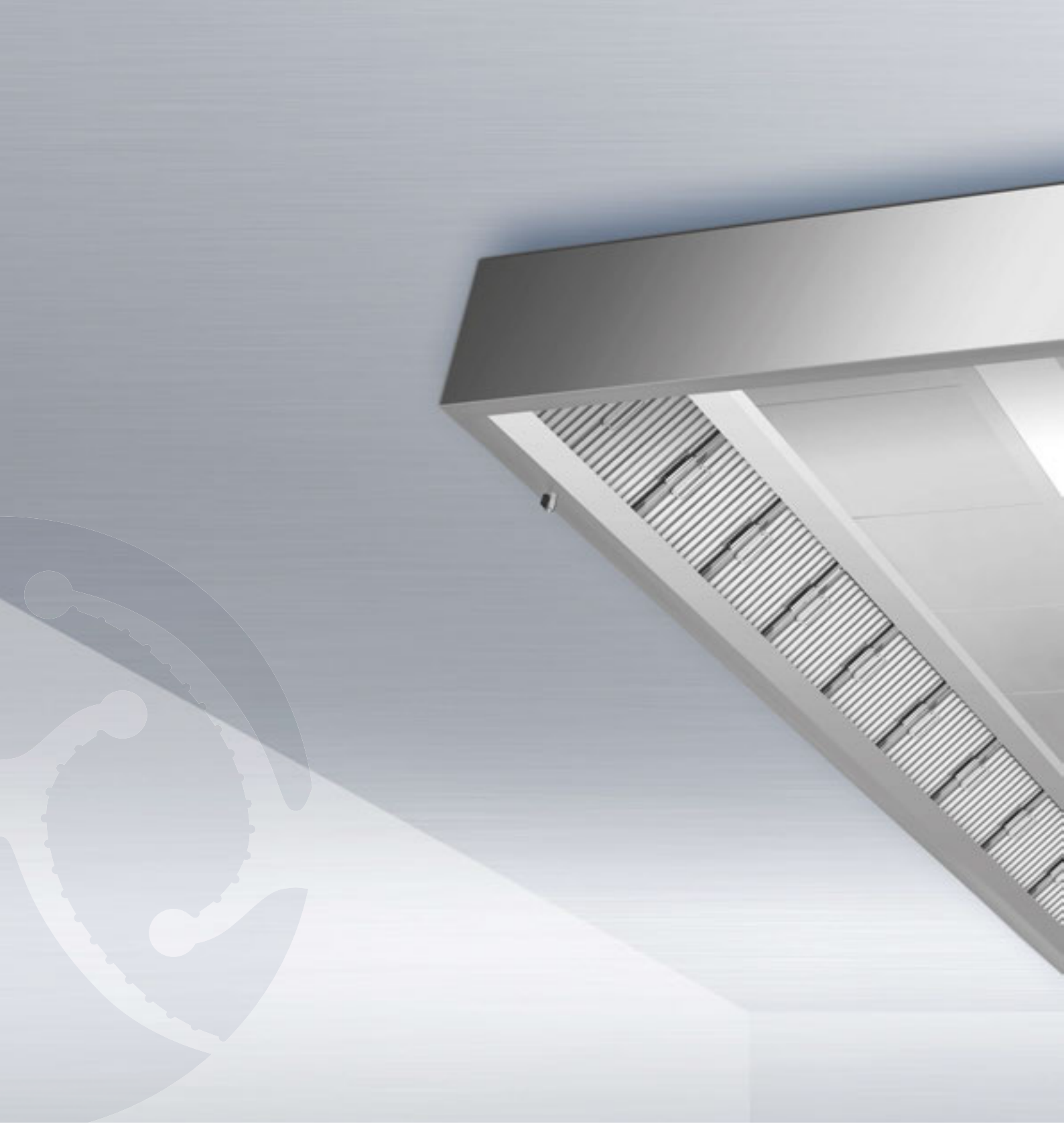
Create your ceiling-mounted extractor online using the REVEN Configurator and download the BIM data:

https://bim.reven.de/#/configurator?SelectedElementID=1011



TECHNICAL DATA – X-CYCLONE® DLD-M EXHAUST AIR

Extraction volume [m³/h]	Dimensions				Connected load illumination [W]	Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Exhaust air socket [mm]		
1920	1500	750	360	1 x 510 x 260	40	56
2560	2000	750	360	1 x 510 x 260	50	70
3200	2500	750	360	1 x 510 x 260	50	84
3840	3000	750	360	2 x 510 x 260	40	105
4480	3500	750	360	2 x 510 x 260	40	120
5120	4000	750	360	2 x 510 x 260	50	140



X-CYCLONE® DGH Series

Ceiling-mounted extractor with X-CYCLONE® air-cleaning system without illumination

Peripheral version

REVENT
SCHAKO Group

X-CYCLONE® DGH Exhaust Air Series

RANGE OF APPLICATION

Compact ceiling-mounted extractor module, suitable for the capture and cleaning of exhaust air from food-production plants and from cooking appliances in commercial kitchens. Separation of water- and oil-based aerosols such as spray mist or cooking fumes.

TECHNICAL HIGHLIGHTS

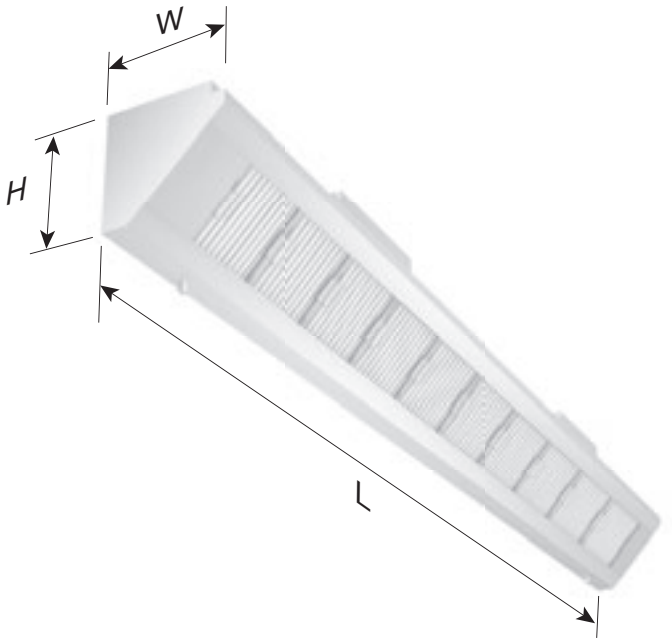
- Patented high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the separators proven by CFD flow analysis.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- Lifetime guarantee on the X-CYCLONE® basic separator elements and the corrosion resistance of the ceiling-mounted extractor.

ACCESSORIES

- REVEN® energy-saving sensors for fully automatic monitoring, control and adjustment of the exhaust air volume flow.
- REVEN® UV system for the elimination of odorous matter and microorganisms.

Further information

www.reven.de (Technologies → for adjustment and control)



TECHNICAL DATA – X-CYCLONE® DGH-W EXHAUST AIR

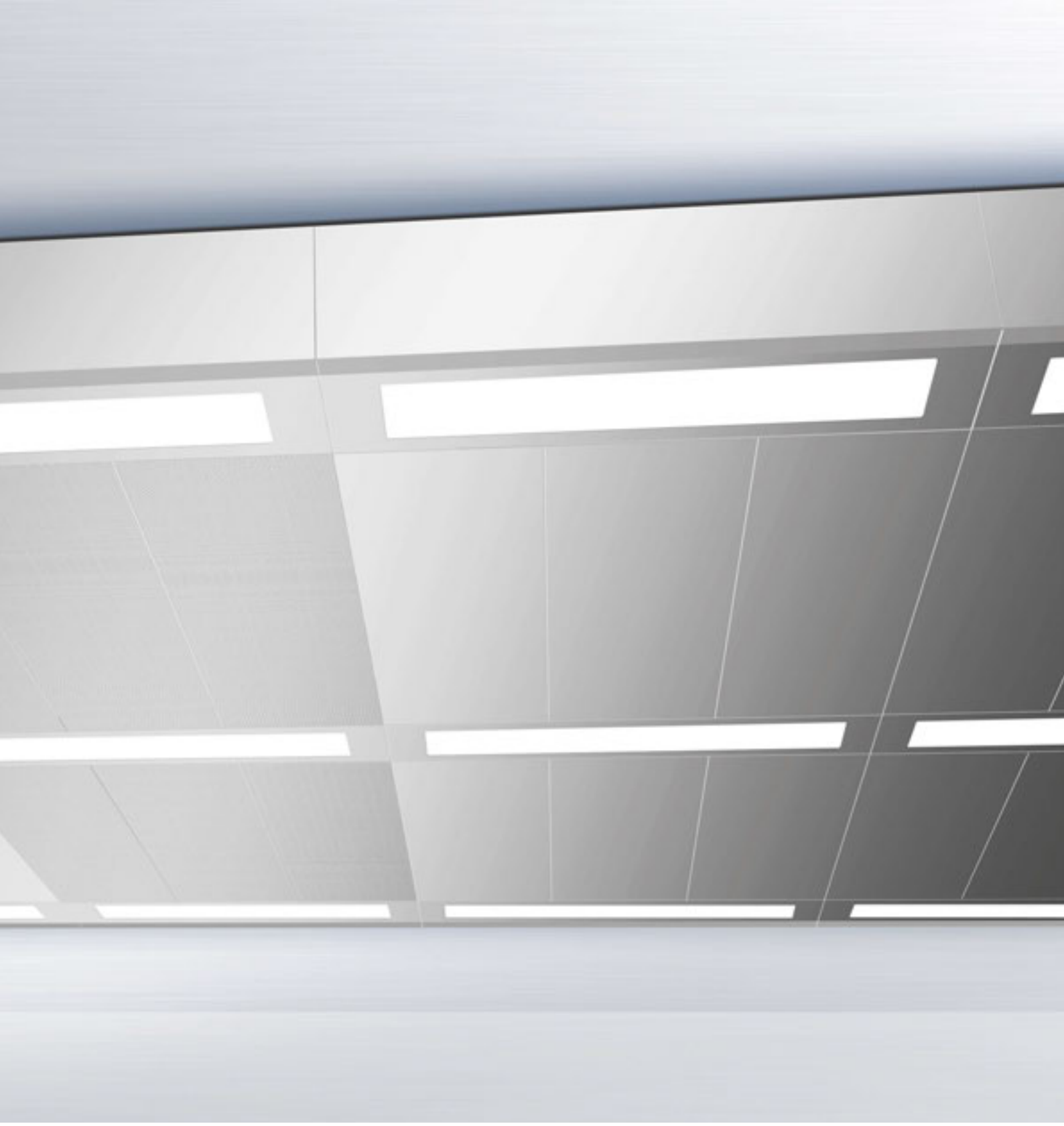
Extraction volume [m³/h]	Dimensions				Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Exhaust air socket [mm]	
960	1500	360	360	1 x 510 x 260	24
1280	2000	360	360	1 x 510 x 260	30
1600	2500	360	360	1 x 510 x 260	39
1920	3000	360	360	2 x 510 x 260	44
2240	3500	360	360	2 x 510 x 260	53
2560	4000	360	360	2 x 510 x 260	60

Create your ceiling-mounted extractor online using the REVEN Configurator and download the BIM data:

https://bim.reven.de/#/configurator?SelectedElementID=1012

REVEN® DFD and DSD Series

Flame-arresting and sound-absorbing coffered ceiling



REVENX
SCHAKO Group

RANGE OF APPLICATION

Flame-arresting and waterproof coffer system for the protection of the building structure and the room-wide capturing of exhaust air from food-production plants and from cooking appliances in commercial kitchens.

TECHNICAL HIGHLIGHTS

- Flame-arresting coffered ceiling.
- Easy removal of the coffers without any tools.
- Circumferential wall junction profile.
- The ceiling coffers and all materials used for their production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Optionally available in aluminium.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the corrosion resistance of the ceiling coffers.

Create your coffer system online using the REVEN Configurator and download the BIM data:
https://bim.reven.de/#/configurator?SelectedElementID=1013

RANGE OF APPLICATION

Sound-absorbing and splash-water proof coffer system for the protection of the building structure and the room-wide capturing of exhaust air from food-production plants and cooking appliances in commercial kitchens.

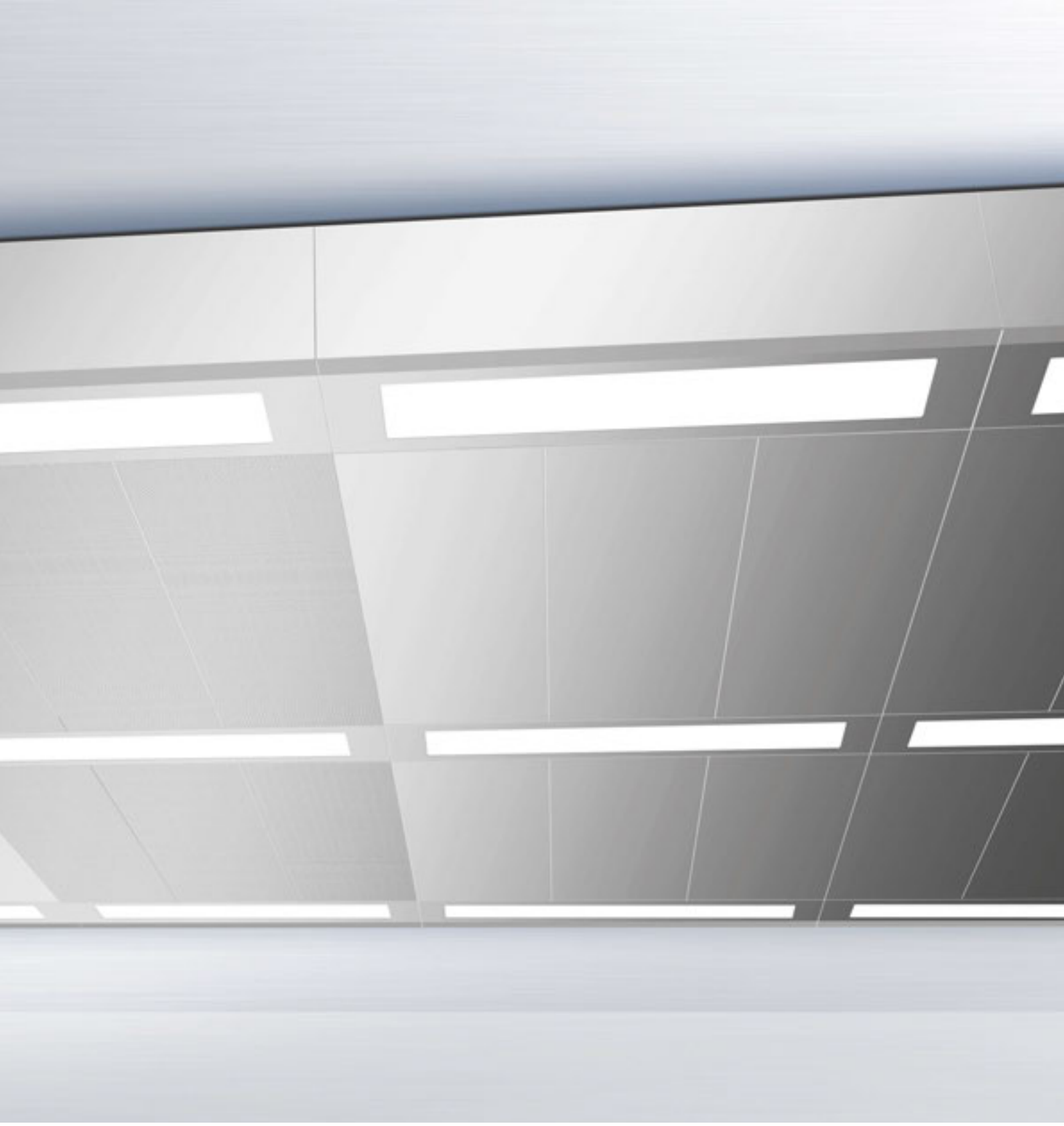
TECHNICAL HIGHLIGHTS

- Sound-absorbing coffered ceiling with noise abatement certified by accredited institute.
- Integrated sound-absorbing mats with waterproof and vapour-tight film sleeve, film thickness below 50 microns to increase sound permeability.
- Sound-absorbing panels satisfy the requirements of fire-protection class A thanks to special mineral wool.
- Easy removal of the coffers without any tools.
- Circumferential wall junction profile.
- The ceiling coffers and all materials used for their production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Optionally available in aluminium.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the corrosion resistance of the ceiling coffers.

Create your coffer system online using the REVEN Configurator and download the BIM data:
https://bim.reven.de/#/configurator?SelectedElementID=1013

X-CYCLONE® DAK and REVEN® DQA Series

Exhaust air box filter and low-velocity supply air outlet



REVENX
SCHAKO Group

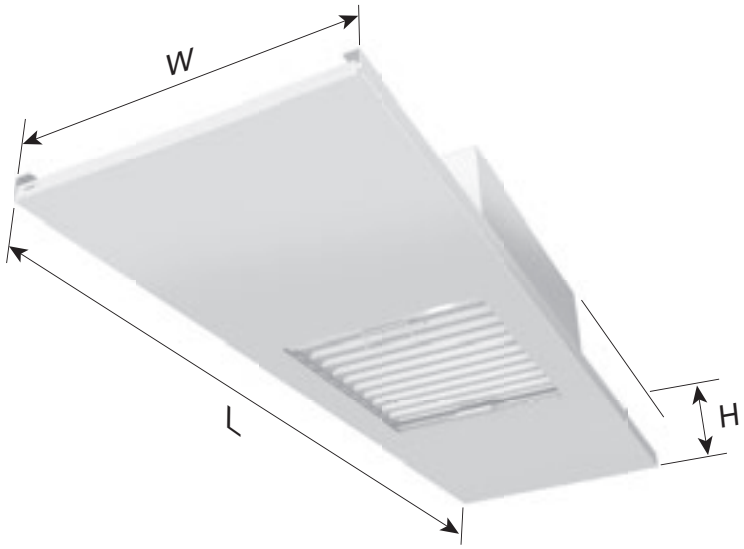
RANGE OF APPLICATION

Exhaust air box filter for additional capturing and cleaning of exhaust air from food-production plants and from cooking appliances in commercial kitchens. Suitable for operation in combination with REVEN® ceiling extractors.

Capture and cleaning of steam and hot air with low intensity.

TECHNICAL HIGHLIGHTS

- Exhaust air box filter with integrated high-performance X-CYCLONE® separating system with an efficiency rate of up to 99.9999 %.
- Efficiency and function of the box filter separators proven by CFD flow analysis.
- Sustainable air-cleaning concept thanks to efficient separators and scientifically sound technologies.
- The box filter and all materials used for its production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the corrosion resistance of the enclosure.



TECHNICAL DATA – X-CYCLONE® DAK SERIES

Extraction volume [m³/h]	Dimensions				Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Exhaust air socket [mm]	
500	500	500	290	1 x Ø 200	13
1000	1000	500	290	2 x Ø 200	16
1500	1500	500	290	3 x Ø 200	19
2000	2000	500	290	4 x Ø 200	21

Create your exhaust air box filter online using the REVEN Configurator and download the BIM data:

https://bim.reven.de/#/configurator?SelectedElementID=1014

RANGE OF APPLICATION

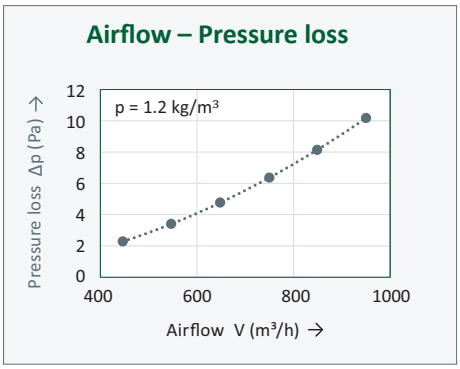
Low-velocity supply air outlet to support air management in food production facilities and commercial kitchens. Suitable for operation in combination with REVEN® ceiling extractors.

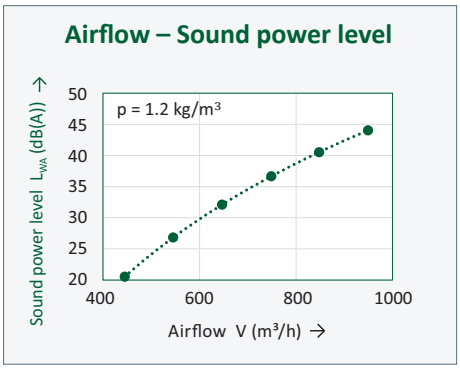
TECHNICAL HIGHLIGHTS

- Box-type enclosure with integrated flow rectifier for a fresh air supply that is free of draughts.
- Perforated metal sheets, optionally available in stainless steel or powder-coated aluminium.
- Efficiency and function proven by CFD flow analysis.
- Flow-optimised design, suitable for food production facilities and commercial kitchens. Deep penetration of fresh air down to the floor area of the kitchen or production shop.
- Minimum pressure loss in the unit.
- Whisper quiet even at maximum power.
- The perforated sheet coffers and all materials used for their production are 100 % rustproof in accordance with the requirements of the German trademark association for stainless steel Warenzeichenverband Edelstahl Rostfrei e.V.
- Designed, constructed and produced in Germany.
- Lifetime guarantee on the corrosion resistance of the enclosure.

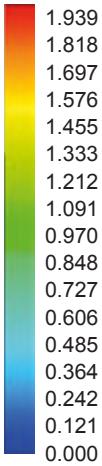
SCIENTIFIC TESTING AND OPTIMISATION WITH THE HELP OF CFD

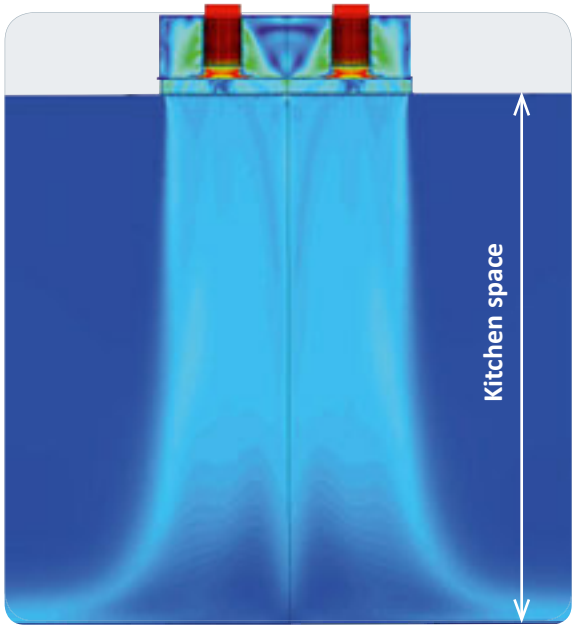
Rentschler REVEN has used CFD technology to optimise the airflow behaviour of supply air units (see figure on the right). The pressure loss in the supply air unit and the associated noise development were also tested in relation to the amount of air blown in (see figure below).



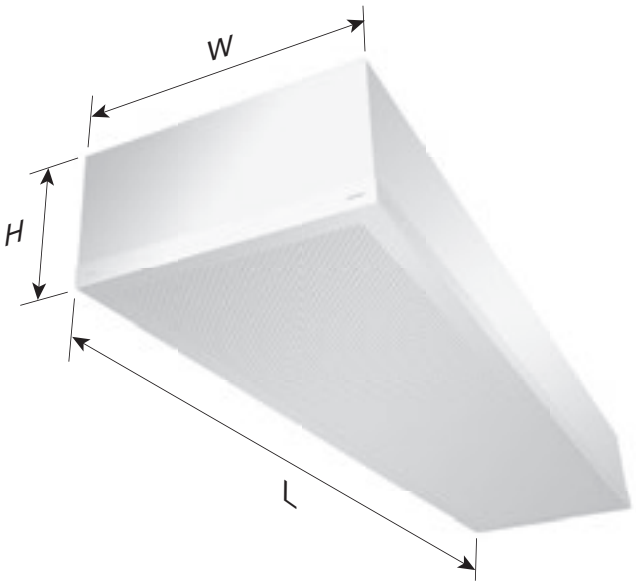


Pressure loss and noise level development with increasing flow rate, unit (1500 x 500 mm).





Vertical cross-section of the REVEN® ECOJET, including the kitchen space below: The CFD analysis shows an optimal, almost vertical air flow from the low-velocity air outlet to the kitchen floor.

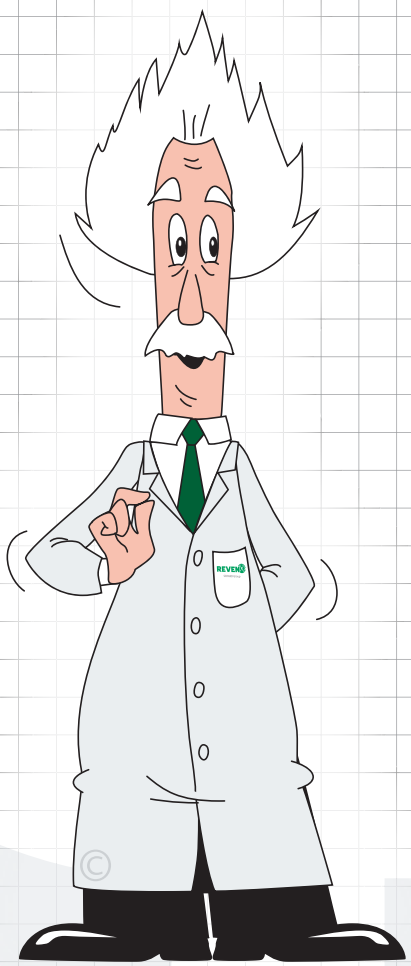


TECHNICAL DATA – REVEN® DQA SERIES

Extraction volume [m³/h]	Dimensions				Weight [kg]
	Length [mm]	Width [mm]	Height [mm]	Connecting diameter [mm]	
250	500	500	250	1 x 150	7
500	1000	500	250	2 x 150	14
750	1500	500	250	3 x 150	21
1000	2000	500	250	4 x 150	28

Create your low-velocity supply air outlet online using the REVEN Configurator and download the BIM data:

https://bim.reven.de/#/configurator?SelectedElementID=1015



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Légtisztítók a feldolgozóipar és az élelmiszeripar számára

Subject to technical changes! Errors excepted!
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