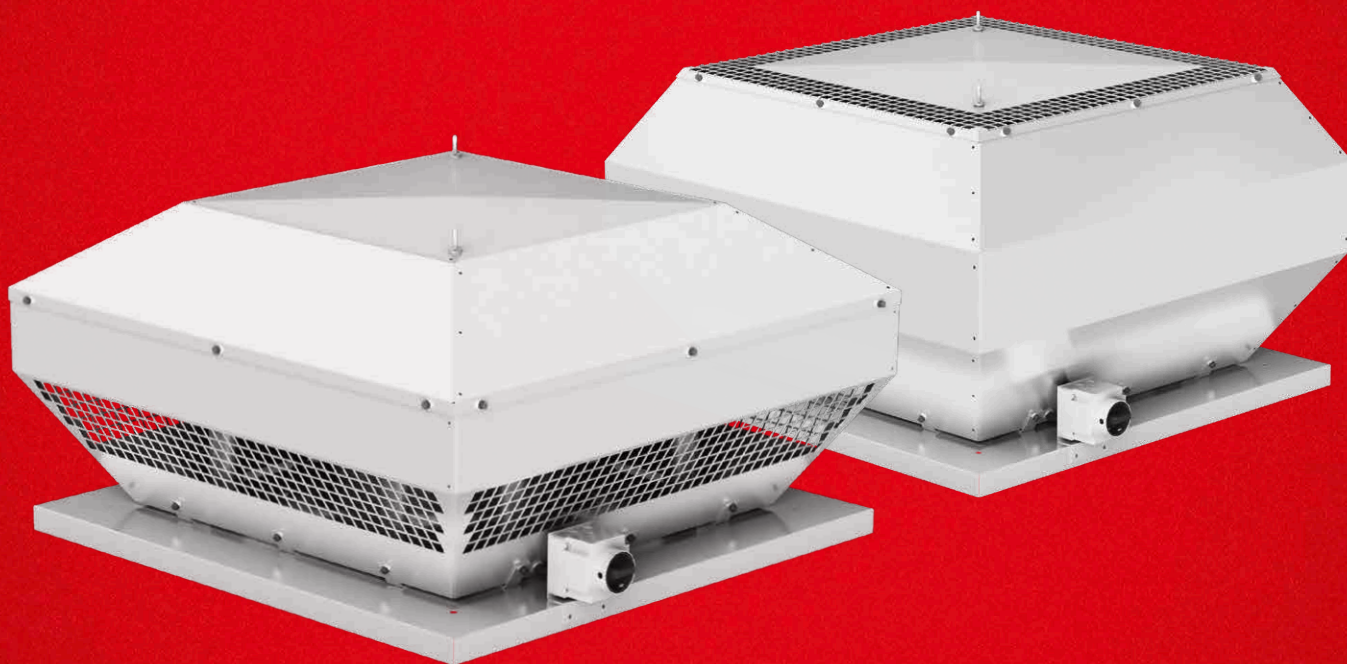


# Firmly at the top: Helios Roof Fans.\*



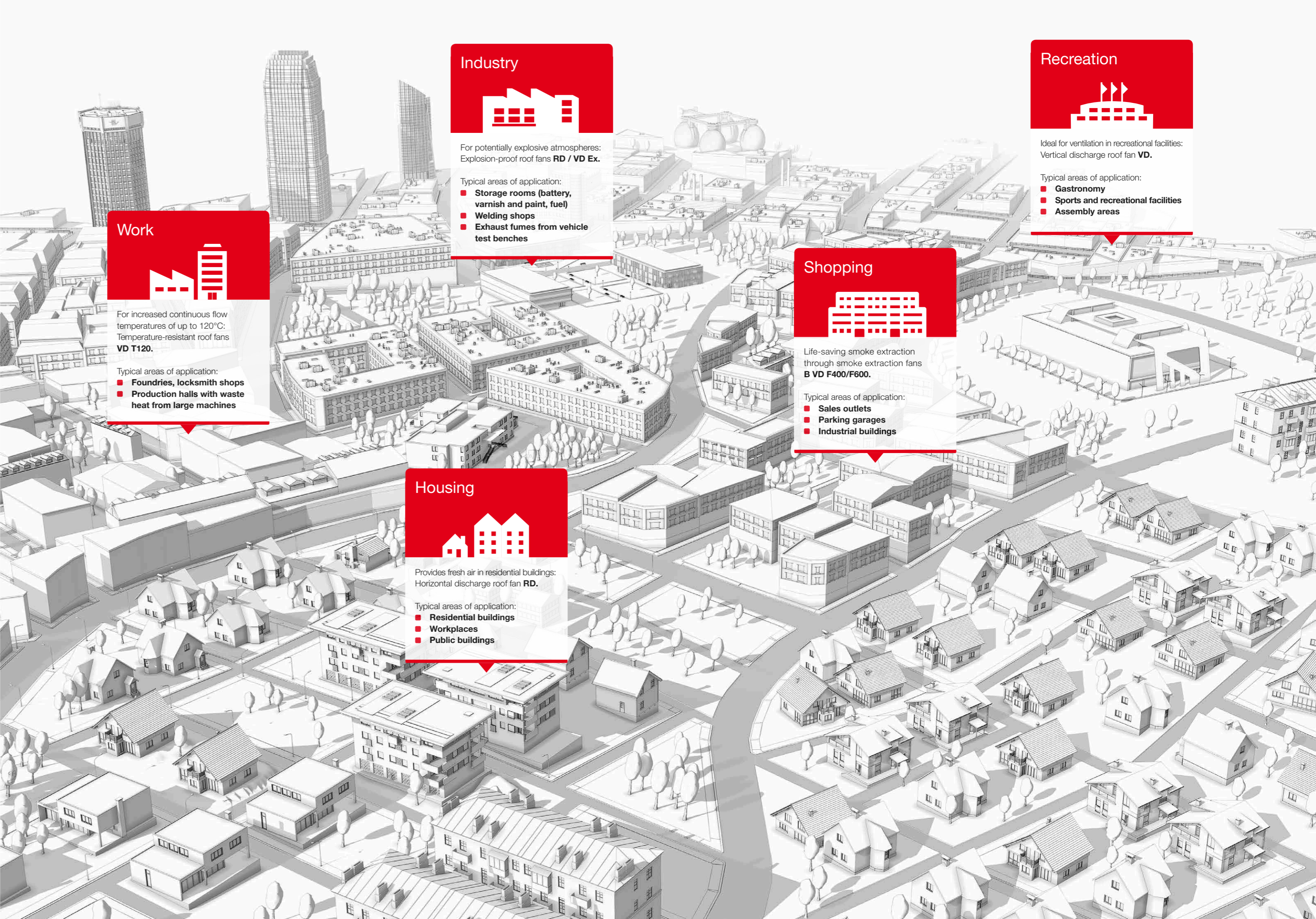
\* Solutions and application examples  
from systems provider Helios.



Each construction project is individual. Therefore, we at Helios do not simply have great products, we also offer perfectly coordinated system solutions. **Always a good choice for your next project.\***



Our new roof fans are also available on Youtube:



**Industry**

For potentially explosive atmospheres:  
Explosion-proof roof fans **RD / VD Ex.**

- Typical areas of application:
- Storage rooms (battery, varnish and paint, fuel)
  - Welding shops
  - Exhaust fumes from vehicle test benches

**Recreation**

Ideal for ventilation in recreational facilities:  
Vertical discharge roof fan **VD.**

- Typical areas of application:
- Gastronomy
  - Sports and recreational facilities
  - Assembly areas

**Shopping**

Life-saving smoke extraction through smoke extraction fans **B VD F400/F600.**

- Typical areas of application:
- Sales outlets
  - Parking garages
  - Industrial buildings

**Work**

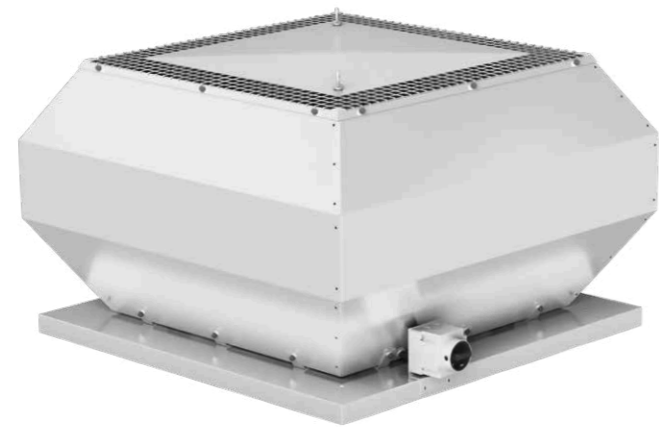
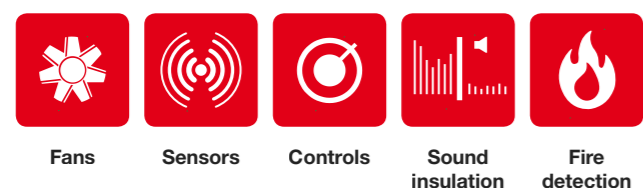
For increased continuous flow temperatures of up to 120°C:  
Temperature-resistant roof fans **VD T120.**

- Typical areas of application:
- Foundries, locksmith shops
  - Production halls with waste heat from large machines

**Housing**

Provides fresh air in residential buildings:  
Horizontal discharge roof fan **RD.**

- Typical areas of application:
- Residential buildings
  - Workplaces
  - Public buildings



\* For all **airflows from 540 to 70,000 m³/h** and practically all conceivable tasks through to sensitive applications, for example, with particular temperature loads or even explosion hazards. Of course, Helios offers individual system solutions for large and small commercial enterprises or apartments and buildings in all dimensions, for all construction and installation situations, in any location and even under difficult environmental conditions. Whichever ventilation solution you are looking for, you are always optimally positioned with Helios roof fans.

It is not only the more than **150 different types in five series** which ensure good air quality. This also involves an **unparalleled system** consisting of precisely coordinated and tested accessories from air quality and temperature sensors through to controllers and sound attenuators. And, naturally, all of this in the quality that only Helios can offer.

As you can see, you are always firmly at the top with Helios.

# 5 series with unlimited possibilities.

## Complete package

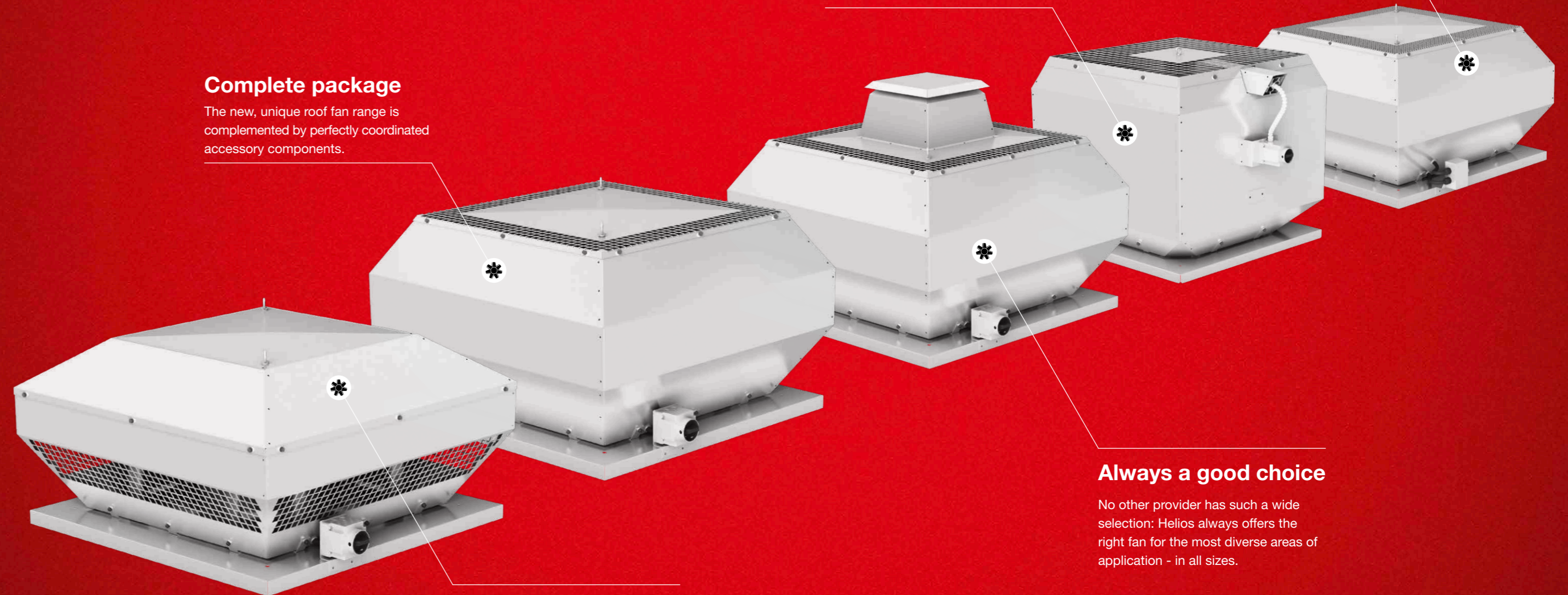
The new, unique roof fan range is complemented by perfectly coordinated accessory components.

## Clever

Power is supplied quickly and easily through the direct connection to the freely accessible isolator switch.

## ErP Ready

Helios roof fans are energy-saving and comply with the new EU Ecodesign directives.



## Efficient

High power density for low operating costs thanks to state-of-the-art technology.

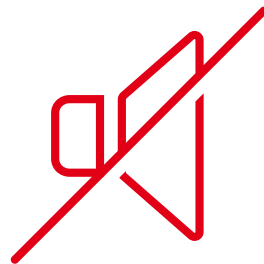
## Always a good choice

No other provider has such a wide selection: Helios always offers the right fan for the most diverse areas of application - in all sizes.



- \* The newly designed casings made of **high-quality aluminium** make the new series up to 40% lighter than the predecessor models. Nevertheless, all Helios roof fans offer the perfect combination of high quality, superior and uniform design with maximum stability.

## Top performance in all disciplines:



- \* In combination with the specially adapted, voltage-controllable motors, the fans have the highest **efficiency level** and **minimal operating noise** – they are up to 12 dB quieter than the predecessor models. Various base and roof fan attenuators are available for maximum comfort, depending on requirements.




- \* Installation is particularly simple and well thought-out. On the one hand, this is due to the use of lightweight aluminium, and on the other hand, it is also due to the perfectly coordinated accessories. All Helios roof fans are **ready for connection, installable without additional installation steps** and delivered complete with all installation materials. This saves time and costs in daily practice.

## Lightweight, quiet and robust.



- \* The robust casings made of seawater-resistant aluminium withstand even the most adverse weather conditions and extreme temperatures – thus, they are ideally suited for outdoor installation on the roof in any case. This is what we at Helios mean by **premium quality and workmanship** for reliable continuous operation.

# Which series suits you best?



The range which offers you an individual solution for every requirement with certainty.



## VD

- The vertical discharge series VD is the perfect partner for various applications in residential, commercial and public buildings.
- The vertical discharge direction promises the reduction of solid deposits on roofs, roof skylights and dome lights.

→ Page 12



## RD

- The new roof fans in series RD discharge horizontally and they are ideal for central ventilation without heat recovery in residential buildings or workplaces.

→ Page 14



## VD T120

- The series VD T120 is perfectly suited for the special operating conditions which prevail in process technology.
- Operationally reliable, even under the harshest conditions and continuous flow temperatures up to 120 °C.

→ Page 16



## B VD F400/F600

- Maximum safety in case of fire: Uniquely high air flow rates up to 70,000 m<sup>3</sup>/h for temperature classes F400 and F600.
- Ideal for smoke extraction in assembly areas and sales outlets.

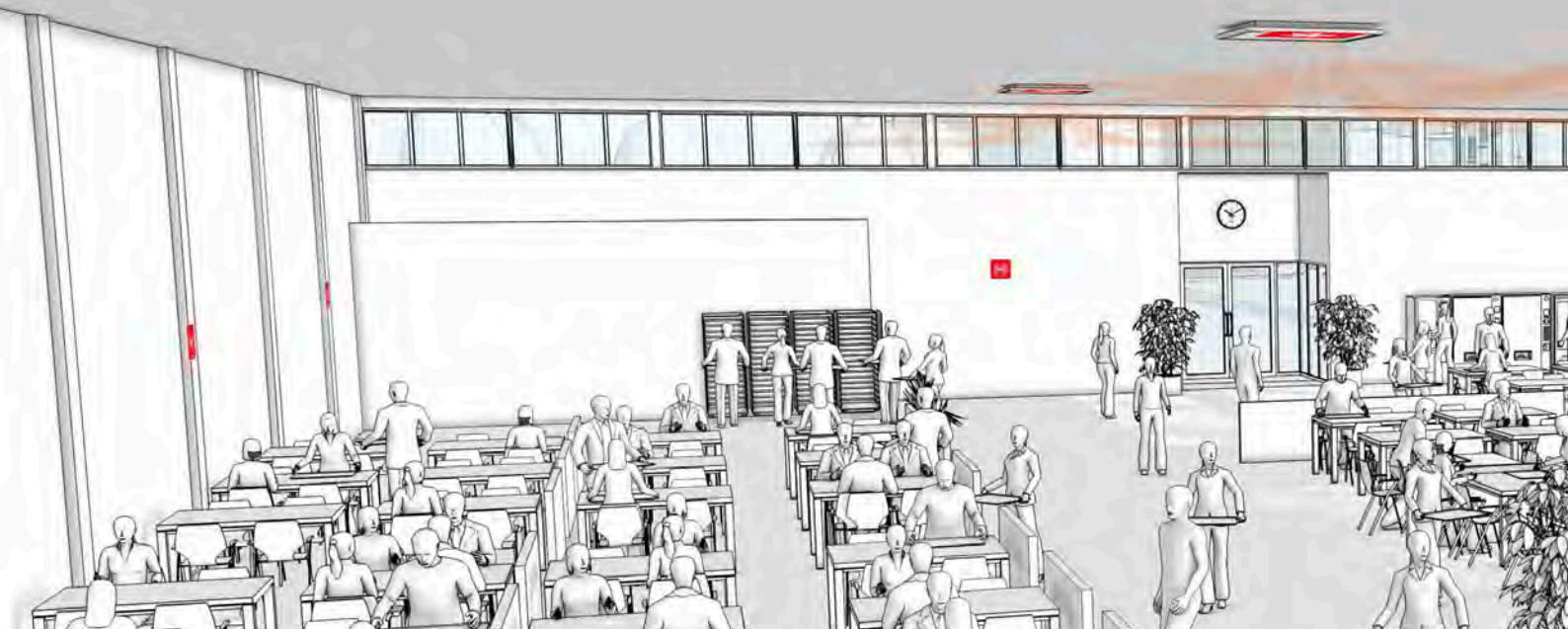
→ Page 18



## RD / VD Ex

- Wide range of explosion-proof fans.
- Optimal for potentially explosive atmospheres.

→ Page 20



For particularly busy rooms:  
**Series VD.**



The vertical discharge series VD is the perfect partner for various applications in residential, commercial and public buildings. Especially in highly frequented areas, VD demonstrates its advantages and it can be ideally integrated in a comprehensive Helios ventilation system.

#### **Application example Canteen:**

The **Roof fan VD** reliably ensures permanent basic ventilation. The air quality declines in busy periods. The **VOC sensors** register this change and send a signal to the **control system EUR**. The ventilation performance is then adapted in this respect. This guarantees the demand-oriented and energy-efficient regulation of the fan performance at all times. The efficient sound insulation concept consisting of **base and roof fan attenuators** also ensures the undisturbed usage of the rooms and pleasant tranquility in the fan installation area itself.



**Everything from a single source.  
Helios system example Canteen.**



**Fans**  
Series **VD** in  
system with:



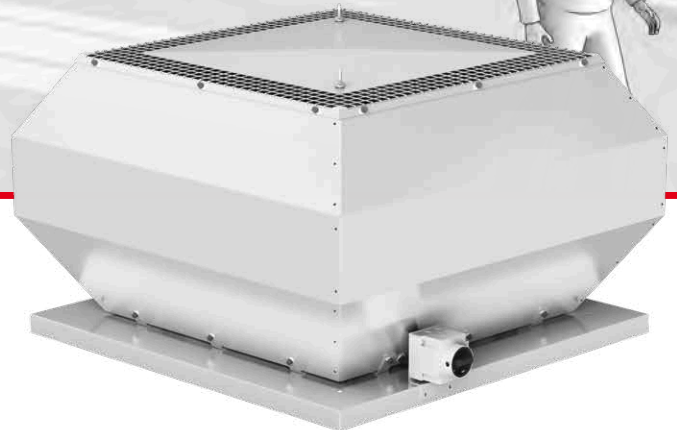
**Sensors**  
VOC sensors or  
temperature sensors



**Controls**  
Control system  
Helios EUR



**Sound insulation**  
Base and roof fan atten-  
nuators



**Outstanding properties:**

- 18 EC-types from 670 to 15,960 m<sup>3</sup>/h.
- 22 AC-types from 540 to 23,800 m<sup>3</sup>/h.
- Ideal area of application: Gastronomy, sports and recreational facilities, assembly areas.
- Minimisation of solid deposits through vertical discharge.
- Pre-mounted isolator switch (up to DN 250: terminal box) and integrated motor protection as standard.
- Clear cost advantage: all types are speed controllable with demand-based operation thanks to a variety of sensors.



**Everything from a single source.  
Helios system example  
Apartment building.**



**Fans**  
Series **RD** in  
system with:



**Sensors**  
Extract air element  
**AE Hygro**



**Controls**  
Differential pressure  
controller **EDR**



**Auto. supply air elements**  
Automatic supply air  
element **ZLA**

The new roof fans in series RD discharge horizontally and they are also characterised by extremely flexible applications. Ideal for residential, workplaces or public buildings. Application example: Central residential ventilation without heat recovery in an apartment building with multiple units and internal bathrooms.

**Application example Apartment building:**

If a shower is taken in an apartment, for example, the Helios **Extract air element AE Hygro** measures the increasing humidity and regulates the air volume via the opening valve. The **Fan RD** increases the speed and airflow accordingly with the help of the **Helios Differential pressure controller EDR**. The Helios **Supply air element ZLA** quietly supplies the required filtered fresh air from outside. The moisture is removed immediately. This is registered by the **AE Hygro** sensor. The roof fan then switches back to basic ventilation. This takes place at low speed and it is extremely energy-efficient due to the variably controllable and economical EC motors. The efficient system of sensors and constant pressure control always ensures the exact amount of air for the entire building, individually for each residential unit.



Maximum flexibility and automatically good air quality: **Series RD.**



**Outstanding properties:**

- 18 EC-types from 670 to 17,750 m<sup>3</sup>/h.
- 22 AC-types from 550 to 26,100 m<sup>3</sup>/h.
- Ideal area of application: Residential buildings, workplaces, public buildings.
- Horizontal discharge direction.
- Pre-mounted isolator switch (up to DN 250: terminal box) and integrated motor protection as standard.
- All types are speed controllable with demand-based operation thanks to a variety of sensors.

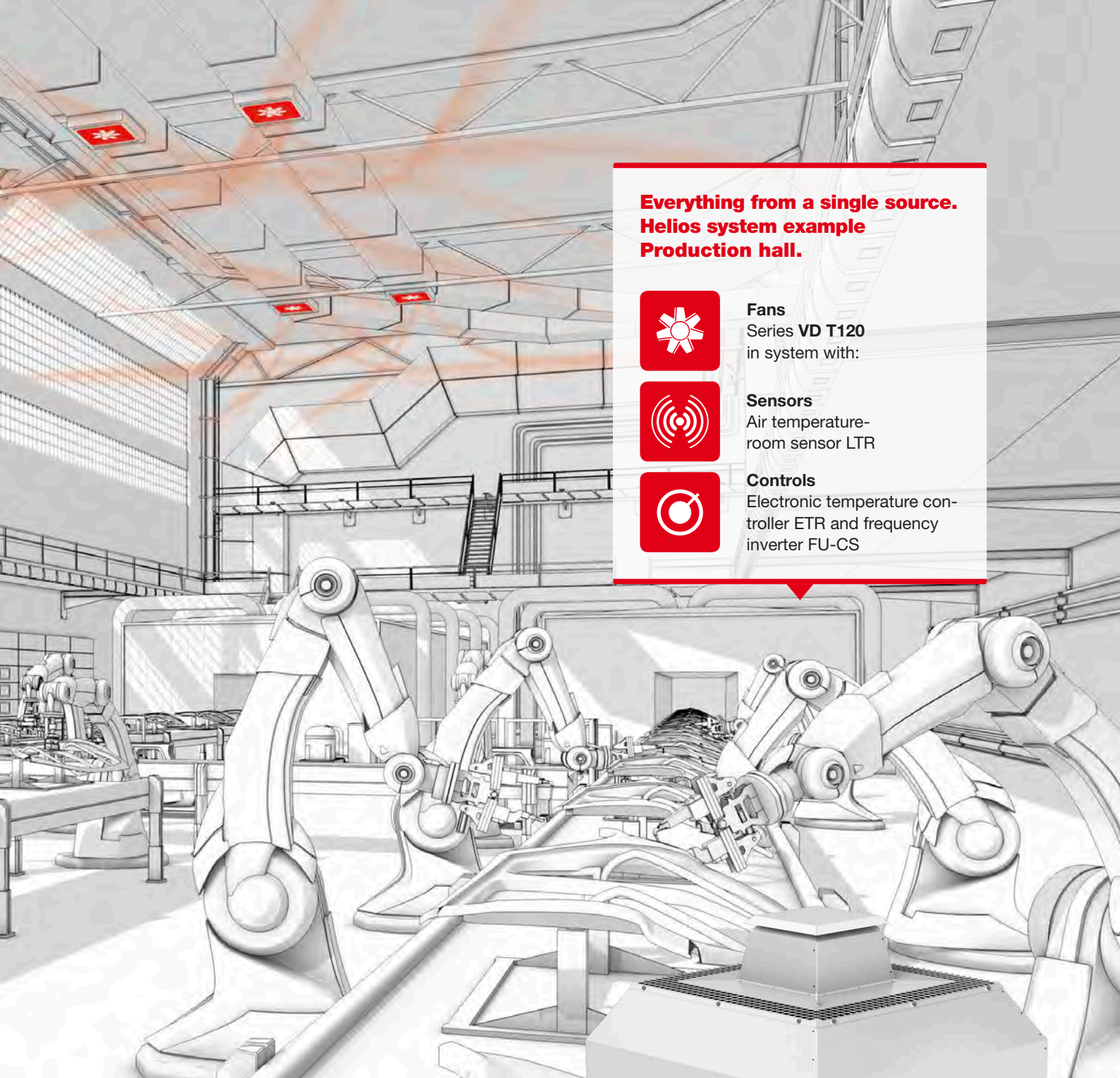


## Our hottest models: VD T120.

Specialising in increased temperatures, the series VD T120 is predestined for areas with high levels of waste heat. The Helios system principle even guarantees the seamless interplay of all components here – for the best ventilation result, even under harsh operating conditions. In this respect, the VD T120 can be used in continuous operation for flow temperatures up to 120 °C.

### **Application example Production hall:**

**Roof fans VD T120** are perfect for use in production halls with welding robots and machines. VD T120 ensures permanent basic ventilation. As soon as the welding robots and machines are in operation and generating waste heat, the **Air temperature-room sensor LTR** registers the increase in hot air and sends a signal to the electronic **Temperature controller ETR**. In combination with the **Frequency inverter FU-CS**, the airflow of the **Fan VD T120** is increased accordingly. This ensures demand-oriented ventilation, even in sensitive application areas.



**Everything from a single source.  
Helios system example  
Production hall.**



**Fans**  
Series **VD T120**  
in system with:



**Sensors**  
Air temperature-  
room sensor LTR



**Controls**  
Electronic temperature con-  
troller ETR and frequency  
inverter FU-CS

**Outstanding properties:**

- 12 types from 3,670 to 23,800 m<sup>3</sup>/h.
- Ideal area of application: Foundries, locksmith shops, production halls with waste heat from large machines.
- Operationally reliable, even under the harshest conditions and continuous flow temperatures up to 120 °C.



**Everything from a single source.  
Helios system example Shopping centre:**



**Fans**  
Smoke extraction fans  
Series **B VD** in system with:



**Fire detection**  
Smoke detector **RMR**



**Controls**  
Smoke extraction fan controller  
**EVS** in combination with **Frequency inverter FU-CS**



**Safety**  
Bearing condition diagnostic system **LZD**



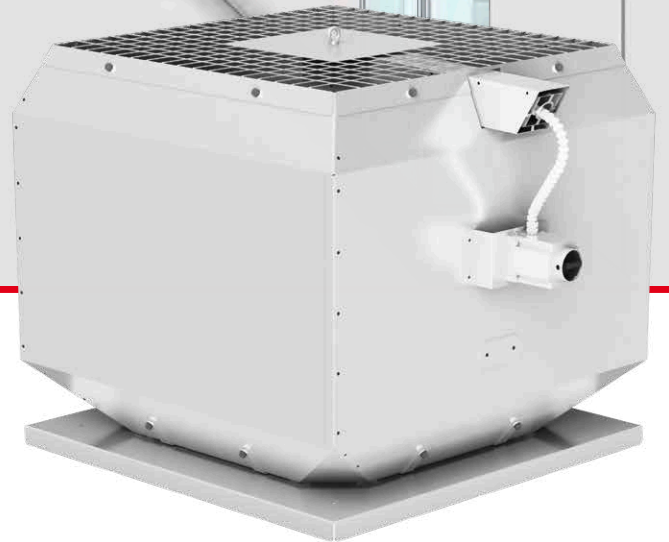
Developed to withstand the most extreme conditions, the series **B VD F400/F600** are invaluable lifesavers in case of fire. Like all series, they fulfil the requirements of the Ecodesign directive and they can be optimally integrated in the Helios system environment. Thanks to their dual functionality, they can be used for everyday ventilation, e.g. in assembly areas and sales outlets, in addition to smoke extraction.

**Application example Shopping centre:**

The **Smoke exhaust roof fans B VD** ensure basic ventilation, for example, in shopping malls. If a fire is registered by the **Smoke detector RMR** in a service unit, the **Smoke extraction controller EVS in combination with the Frequency inverter FU-CS** will send a signal to the fans, which will switch to smoke extraction mode within fractions of a second. This ensures both quick and reliable smoke extraction and thus the safe evacuation of employees and visitors, as well as free access for the fire service. Another special feature of series **B VD**: The Helios **Bearing condition diagnostic system LZD** guarantees safe operation in case of emergency, even with long standstill periods.

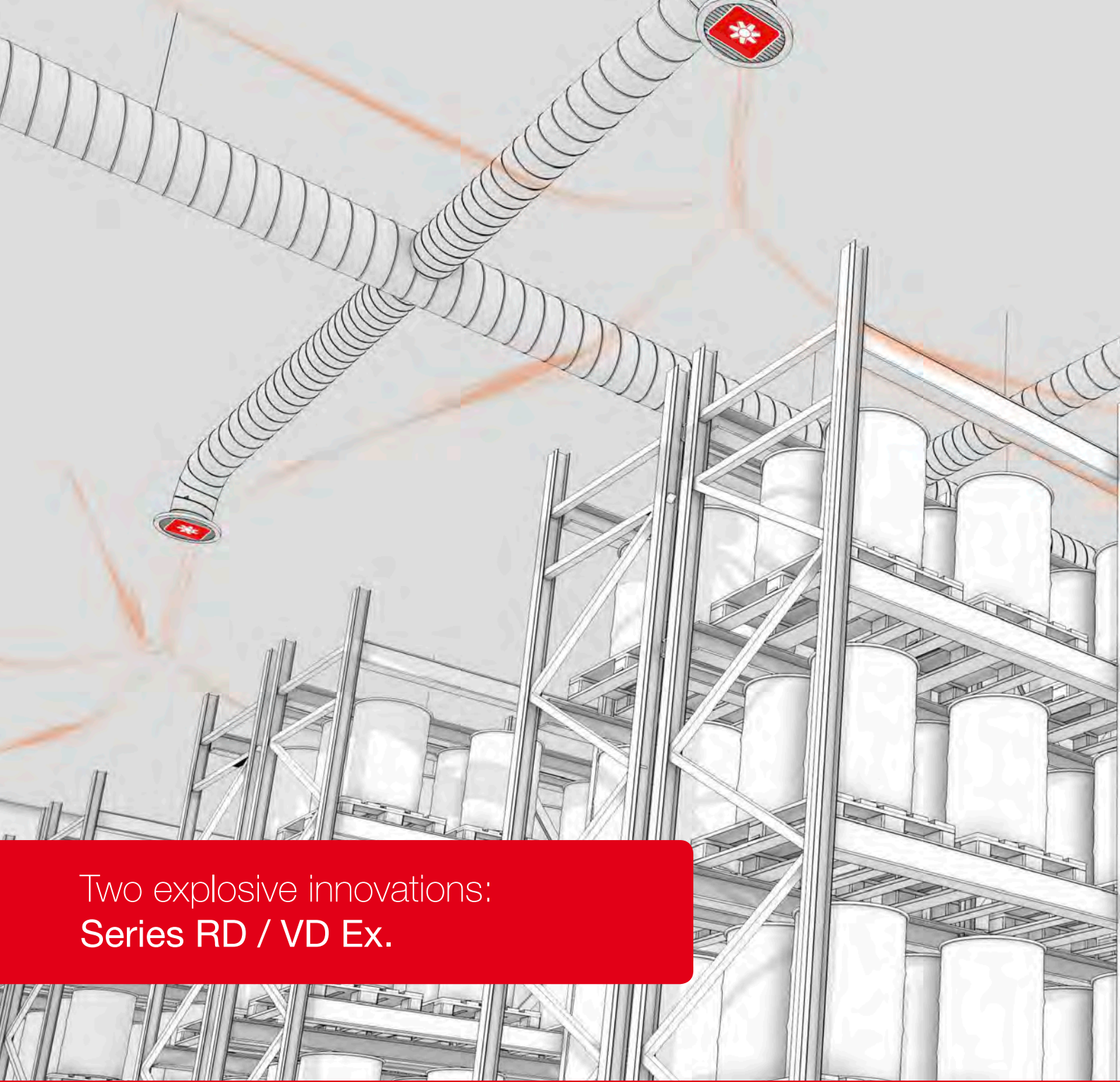


Available without fail in case of fire:  
**Series B VD F400/F600.**



**Outstanding properties:**

- 40 types from 1,000 to 70,000 m<sup>3</sup>/h.
- Ideal area of application: Assembly areas and sales outlets.
- Dual function for ventilation and smoke extraction operation due to frequency inverter.
- Innovative design with patented cooling concept.
- Numerous accessory components for maximum system diversity.
- Reliable, even in case of increased snow loads: Deflector B DEF for requirements of snow load class 3000.



## Two explosive innovations: Series RD / VD Ex.

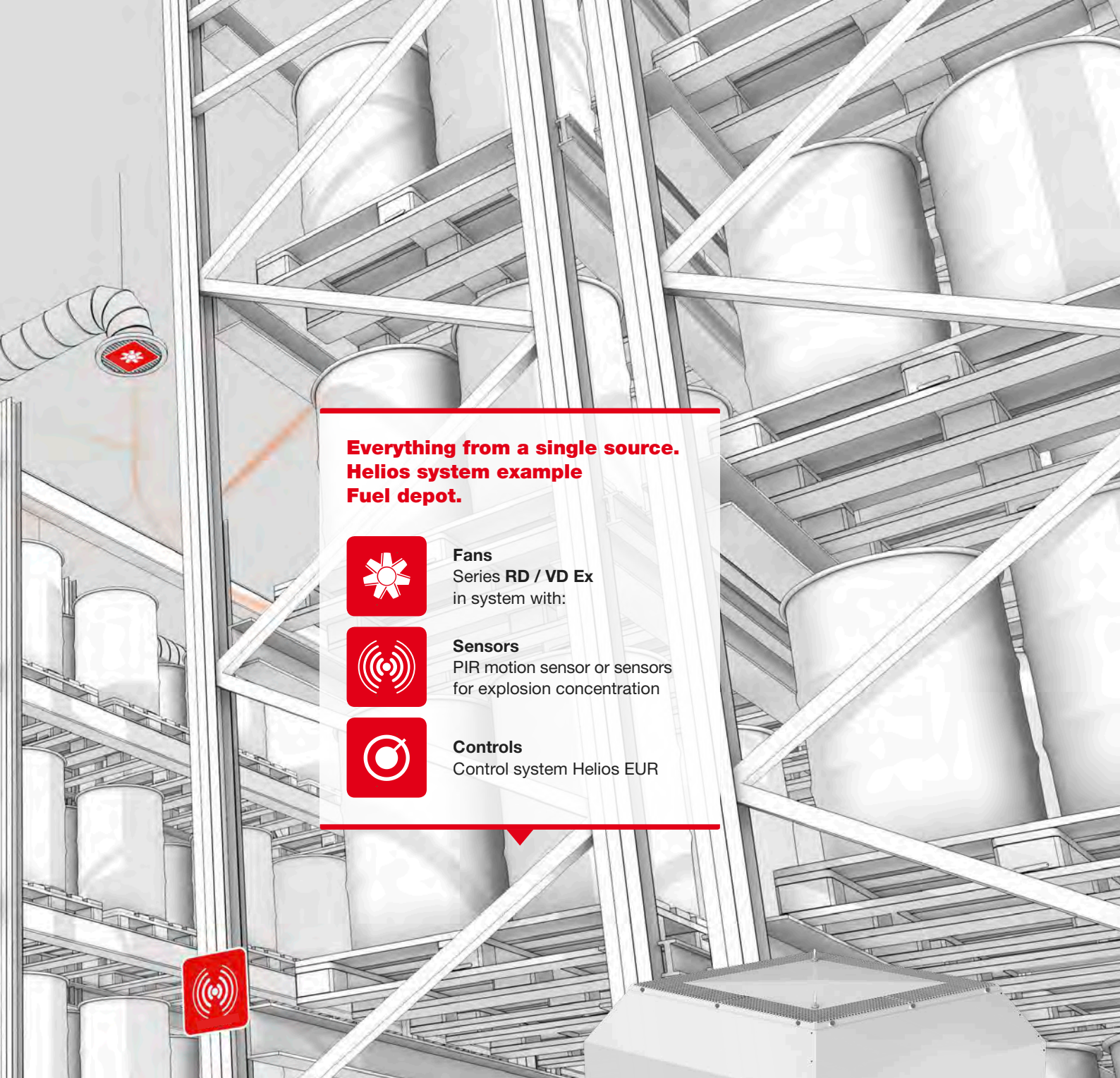
The advanced properties of a Helios roof fan combined with the required properties for highly sensitive areas - these are the properties of series RD / VD Ex. Whether it is fuel depots, battery production or other potentially explosive atmospheres: RD / VD Ex are reliable solutions and they can also be perfectly integrated in the Helios system environment with coordinated sensors, control technology and sound insulation.

### **Application example Fuel depot:**

**RD / VD Ex** ensure permanent basic ventilation. Various **sensors**, which react to e.g. movement or explosion concentration, send a signal to the **Control system EUR** and control the fan in a targeted way.

This ensures demand-oriented ventilation, even in highly sensitive fuel depots.





**Everything from a single source.  
Helios system example  
Fuel depot.**



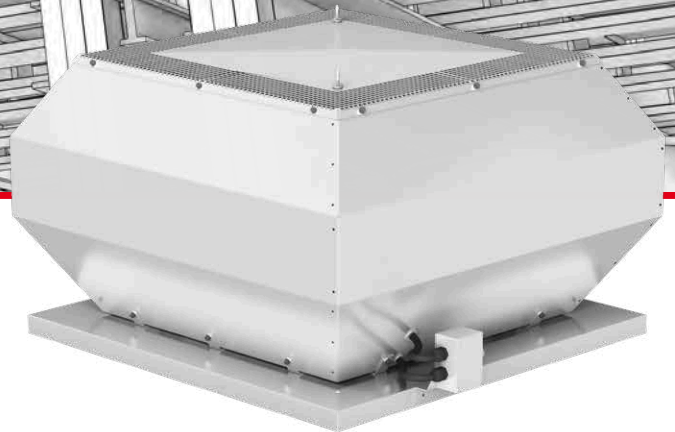
**Fans**  
Series **RD / VD Ex**  
in system with:



**Sensors**  
PIR motion sensor or sensors  
for explosion concentration



**Controls**  
Control system Helios EUR



**Outstanding properties:**

- 26 types from 580 to 16,500 m<sup>3</sup>/h
- Example area of application:  
Fuel depot, battery production
- Standard explosion-proof terminal box on  
outside of casing.
- Perfectly coordinated accessory components  
for individual systems.



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