

- Kitchen ventilation technology
- Ventilation towers
- Ventilation components for clean room areas



# SÜDLUFT SYSTEMTECHNIK IN PLATTLING (BAVARIA)





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# INTRODUCTION TO AN INNOVATIVE COMPANY

The name SÜDLUFT stands for quality in the area of ventilation technology – as it has done for decades. This is where industry-specific innovation meets practical design know-how and impressive technology. This fact is impressively underlined by the large number of successfully completed projects and the satisfaction of our customers. As a reliable partner to builders, developers and planners, we know the requirements of modern ventilation technology and fulfil them time and time again. We fulfil the environmental concept and the future-oriented philosophy of SÜDLUFT with energy-saving, sustainable and high-quality products.





Your projects in good hands

- We are certified in accordance
with ISO 9001:2015



## **OUR BUSINESS AREAS**

#### KITCHEN VENTILATION TECHNOLOGY (VENTILATION CEILINGS / VENTILATION HOODS)

The main focus in this area is on the production, delivery and installation of ventilation ceilings for commercial kitchens that are individually adapted to the structural conditions. Ventilation hoods for commercial kitchens are manufactured with both standard designs and also as individual solutions.

#### VENTILATION TOWERS AND VENTILATION COMPONENTS FOR CLEAN ROOM AREAS

This area includes exhaust and outside air intake towers, particulate filters for clean room areas, personnel airlocks for clean rooms and laser, edging and welding work.

#### AIR DUCTING SYSTEMS

This area is determined by the "duct module". A patented gas-tight duct system which has been specially developed for routing the exhaust air in paint shops in the automotive industry and fulfils the highest of demands with regard to leaktightness, corrosion resistance, ease of installation and also visual appearance. Pipeline construction for hot gas pipes as well as for smaller steel construction work and the complete installation thereof are included in the product range as accessories for these systems, which are built with complete engineering. The main customers are plant and mechanical engineering companies.









# **VENTILATION CEILING SYSTEMS**

#### COMPLETE SOLUTIONS FOR THE BEST KITCHEN AIR.

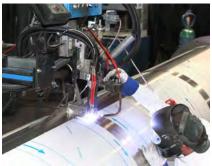
A ventilation system for commercial kitchens has to fulfil many requirements: Creating good air, saving energy, ensuring long-lasting and trouble-free operation, fulfilling aesthetic standards and making the systems expandable and retrofittable.

Only someone who has been able to gain experience with the specific requirements in commercial kitchens over decades and combine it with innovative techniques can provide the basis for impressive holistic results. Anyone who provides direct proximity to the customer thanks to having a powerful sales network can provide real solutions.

SÜDLUFT therefore offers complete solutions that are precisely tailored to the respective space and usage situations. With components that have been tried and tested in practice for many years, such as aerosol separators, lighting











#### SOPHISTICATED TECHNOLOGY, IMPRESSIVE EFFECT.

SÜDLUFT kitchen ventilation ceiling systems are individually planned and adapted to fulfil all requirements with the greatest of care and the best know-how. The main focus is on flexibility and attention to detail.

SÜDLUFT offers the highest possible quality standard with closed ceiling systems which prevent greasy exhaust air from coming into contact with the building structure. The risk of harmful bacterial growth in the building is excluded.

The flush-mounted lighting under Sekurit safety glass has been specially developed for use in kitchens. The IP55 protection class that is achieved for the entire lamp installation box is almost unique.

From the analysis of the spatial conditions to the planning, consulting and selection of suitable modules to installation and adjustments during cooking operations, you get everything from a single source – and what's more, it is "Made in Germany"!



#### PLEASE NOTE:

In order to create an attractive overall appearance, various appropriate backgrounds have been added. It does not purport to represent complete projects.

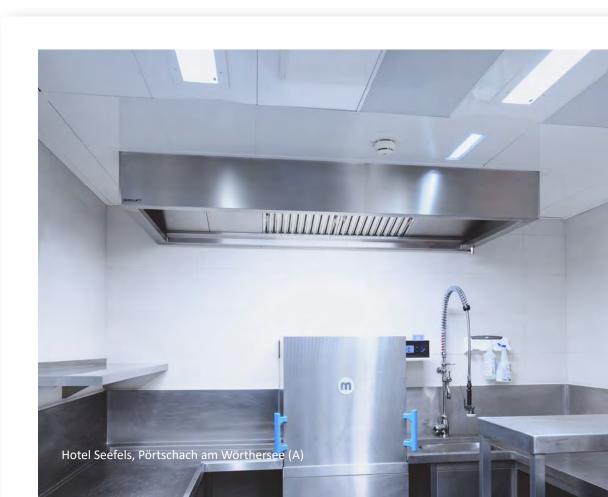
# SYSTEMS AT A GLANCE

#### STRONG PRODUCT LINES.

There are three different standard equipment lines to choose from. Each with specific advantages and with proven SÜD-LUFT quality: All for large-scale ventilation including flexible, focused exhaust air collection above the cooking areas, in the active areas with exhaust air trapezoidal ducts and in the passive areas, consisting of a flat panel ceiling, optionally with flush-mounted single recessed luminaires, lighting strips or downlights. Supply air is fed in via displacement air outlets with connection boxes or optionally as a so-called pressurised ceiling with perforated ceiling panels.

The following section introduces you to our three product lines:

- SL-COLOR
- SL-CRONIS
- SL-DESIGN





# **SL-COLOR**

This ceiling system, which has been specially developed for architecturally challenging areas, can be designed in various RAL colours. Thanks to the wide range of design options for this product line in terms of shape and colour, even the most unusual customer requirements can be fulfilled.





Welaspark, Wels (A)

Hotel Vier Jahreszeiten, Hamburg

The coloured coating is specially adapted to demanding commercial kitchen operations, and therefore provides a long-lasting and hygienic ceiling and ventilation solution. With regard to lighting, you can choose between various LED lighting systems which are suitable for kitchen exhaust air.





# **SL-CRONIS**

This ventilation ceiling impresses with the use of high-quality 1.4307 grade stainless steel with a K240 duplex finish. The exhaust air trapezoidal ducts are welded in such a way that they are completely leak-tight, and have a brushed surface. This makes them particularly suitable in situations involving high thermal or mechanical loads.



Burghotel Oberlech, Lech (A)

Daimler, Mettingen



# **SL-DESIGN**

Individual product lines and variants are combined here. We fulfil your individual ideas. A combination of materials and an individual colour design are possible, as well as an interplay of extractor hoods and ventilation ceiling systems.





Firmament, Rankweil (A)

Firmament, Rankweil (A)





# Design variant for our product lines

#### IN THIS CASE THE FOLLOWING APPLIES: FLAT IS GOOD.

The recessed design has a homogeneous view from below. If required, it is implemented flush with the ceiling with integrated flush-mounted extraction fields. All other functional elements are also installed flat, providing an attractive overall appearance.



BMW, Leipzig

ENBW, Stuttgart



THE DESIGN VARIANT CAN BE
IMPLEMENTED
IN ALL SÜDLUFT
PRODUCT LINES.







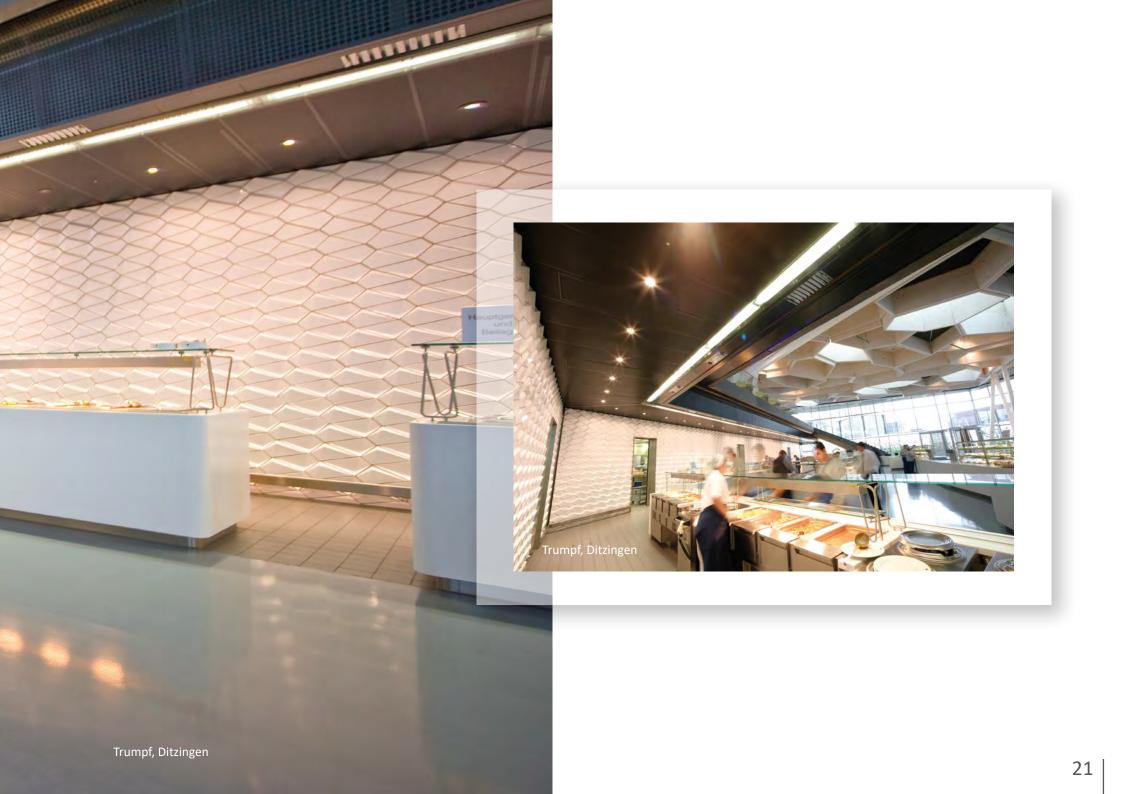












# **VENTILATION HOODS**

The core business of SÜDLUFT SYSTEMTECHNIK has been ventilation hoods since the very beginning.

That which began more than 40 years ago as the showcase product of a small family-run business has been perfected by SÜDLUFT with entrepreneurial foresight. The technical maturity thereof is impressive, as is the variety of specifications for the standard "hood" product.

Good air in the kitchen area and excellent separation efficiency of the aerosol separators in the ventilation hood are the key requirements for kitchen ventilation.

It goes without saying that all products from SÜDLUFT are compliant with the currently applicable regulations in every respect, particularly VDI 2052 / 04-2017 and DIN EN 16282-2.

Your wishes and ideas are our specifications for the construction of ventilation hoods. We are pleased to implement these, taking all of the usual common standards and regulations into consideration.





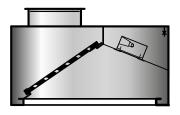
# **WALL-MOUNTED HOODS**

The wall-mounted hood is suitable for use for exhaust air capture above thermal kitchen appliances and units on the wall.

This hood is manufactured in the following designs:

TYPE E-K

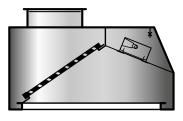
In accordance with DIN EN 16282-2 B1



Single-row wall-mounted hoods with a box-type design

#### TYPE E

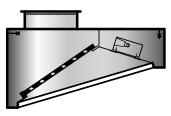
In accordance with DIN EN 16282-2 B1



Single-row wall-mounted hoods with a trapezoidal design and an angled front

#### TYPE F-K

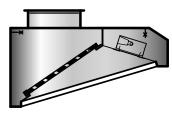
In accordance with DIN EN 16282-2 B1



Single-row ceiling-mounted hoods with a raised box-type design – ideal for low rooms or restricted installation situations. This design ensures that there is an optimum amount of headroom at the operating side.

#### TYPE F

In accordance with DIN EN 16282-2 B1



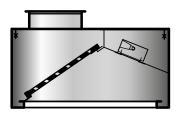
Single-row ceiling-mounted hoods with a raised trapezoidal design and an angled front – ideal for low rooms or restricted installation situations. This design ensures that there is an optimum amount of headroom at the operating side.

# **CEILING-MOUNTED HOODS**

Whether free-standing cooking suites, double-row cooking blocks, serving blocks or cooking islands, SÜDLUFT offers a customised ceiling-mounted hood solution - made to measure! The following hood types complete the SÜDLUFT-range and make the difference:

TYPE H-K

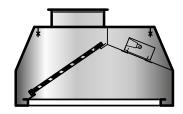
In accordance with DIN EN 16282-2 B1



Narrow single-row ceiling-mounted hoods with a box-type design

#### TYPE H

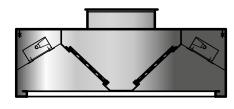
In accordance with DIN EN 16282-2 B1



Narrow single-row ceiling-mounted hoods with a trapezoidal design and an angled front

#### TYPE C-K

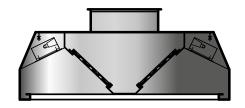
In accordance with DIN EN 16282-2 B6



Double-row ceiling hoods with a V-shaped separator row with a boxtype design

#### TYPE C

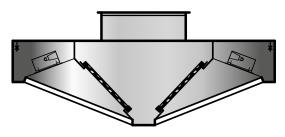
In accordance with DIN EN 16282-2 B6



Double-row ceiling hoods with a V-shaped separator row with a trapezoidal design

#### TYPE D-K

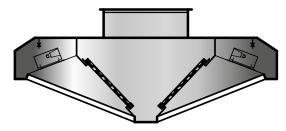
In accordance with DIN EN 16282-2 B6



Double-row ceiling-mounted hoods with a raised box-type design – ideal for low rooms or restricted installation situations. This design ensures that there is an optimum amount of headroom at the operating sides.

#### TYPE D

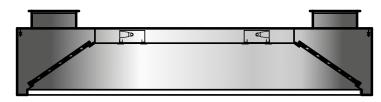
In accordance with DIN EN 16282-2 B6



Double-row ceiling-mounted hoods with a raised trapezoidal design – ideal for low rooms or restricted installation situations. This design ensures that there is an optimum amount of headroom at the operating sides.

#### TYPE C-K/GF

In accordance with DIN EN 16282-2 B7



Double-row ceiling hoods with edge extraction on the long sides

# **PRODUCT VARIATIONS**

#### SOFTLINE

Stylish and hygienic.

At SÜDLUFT, the commitment to quality becomes visible at first glance and also upon closer inspection. You decide whether the ventilation hood should be the visual highlight of the kitchen or fit discreetly into the overall appearance. The stainless steel surfaces themselves radiate high quality. The hood designs with a softline edge are the icing on the cake. The rounded corners and edges create a gentle design accent and enhance the hygiene standard.

Almost all hood models are available with a softline edge. With an all-round aerosol collection channel by request. Easy cleaning and fewer deposits.



# DISPLACEMENT AIR HOOD in accordance with DIN EN 16282-2 B5

The all-rounder among hoods saves space and reduces costs!

Ventilation hoods with an integrated supply air intake in the form of displacement air outlets on the front. Ideal as a compact component, taking care of the focused collection of exhaust air fumes above the cooking area as well as the low-draught and low-induction supply air intake in the kitchen.

A perforated front plate with a 40% free cross-section, hole spacing of 6.0 mm and a hole diameter of 4.0 mm permits the temperature-controlled supply air to flow uniformly into the kitchen area through an insulated pressure chamber inside the hood. Due to the possibility of combining with almost any type of hood (except TYPES F-K, F, D-K, D and CK/GF), this type of hood is considered an all-purpose appliance for the most versatile applications.



# INJECTION in accordance with DIN EN 16282-2 B10/B4

In order to counteract cross-flow and specifically detect the rising cooking vapours, hoods with stabilising jet technology are used.

The injection hood is available both as a wall-mounted and ceiling-mounted hood. The pre-tempered outside air is blown into the hood within the insulated supply air pressure chamber via diffuser plates and the stabilising jet nozzles to stabilise the thermal flow.

Stabilising jet nozzles can be adjusted to the respective air volume and generate a high stabilising effect with as little as  $30 - 50 \, \text{m}^3/\text{h}$  per running metre of hood length.



#### SL-KDH COMBINATION STEAM HOOD

- ✓ Flexible, focused collection of exhaust air via thermal kitchen appliances
- ✓ Variable arrangement within the aerosol separator line in the trapezoidal exhaust air duct
- ✓ Arrangement of the aerosol separators using a simple hanging system
- ✓ Tightly welded collecting hood with an all-round, internal aerosolate collecting channel and an aerosolate drain cock







Illustration of the IP65 membrane button flush with the surface, installed on the front for operating the lighting in kitchen ventilation hoods.

# **CAF** TECHNOLOGY

#### SL-CAF TECHNOLOGY (CompactAirFlow)

The SL-CAF is a patent-pending stand-alone system for ventilation ceilings and extractor hoods.

The reduction of the kitchen surface areas in conjunction with the increase in the performance of the kitchen appliances gives us and the specialist planners with the challenge of introducing large volumes of air without draughts and with little noise every day. The SL-CAF technology is the solution here!

The targeted use of stabilising jet technology makes it possible to reduce the calculated exhaust air volume flow by up to 40%. The effectiveness of the technology can be proven by taking measurements.

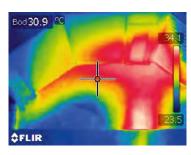
The SL-CAF technology achieves improved capture efficiency on the thermal flow. This technology does not require a supply air connection, since it uses ambient air. It is infinitely adjustable, and easily accessible for maintenance purposes.

#### **ADVANTAGES**

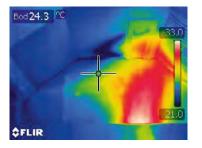
- ✓ Air volume reduction by up to 40%
- ✓ Comfort maintained in the working area by means of targeted heat dissipation
- ✓ Reduction in operating costs by reducing the fan power and the heating requirement
- ✓ Optimal vapour capture, even during intensive cooking operations

#### **FEATURES**

- ✓ No supply air connection required
- ✓ Individual retrofitting possible using a kit
- ✓ Compact and stand-alone system
- ✓ Can be combined with additional systems such as aerosol aftertreatment systems, extinguishing systems, etc. at any time

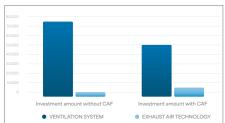


Ventilation hood without SL-CAF



Ventilation hood with SL-CAF

### Economic assessment



Economic advantages: Savings in the areas of:

- Exhaust air duct network
- Supply air duct network
- Ventilation unit
- Heat supply
- Cooling supply

This is a situational illustration. Direct investment sums must be determined on a project-by-project basis.







# **SL-THERMO**

#### HEAT RECOVERY SAVES ENERGY.

Do you want to minimise your ventilation energy costs?

The SL-THERMO makes it possible to reduce the energy consumption of standard hoods (to up to 30%). The heat exchanger is installed right above the cooking suite where the exhaust air temperatures are highest. The cold outside air is routed to the warm kitchen exhaust air in a flat tube heat exchanger and pre-heated in the cross-flow. The reheater behind it only comes into action in extremely cold conditions to bring the air to the required temperature. And all with very little energy consumption.

- ✓ Huge reduction in heating and electricity costs
- ✓ Summer-winter changeover, either automatically or manually
- ✓ Applied conservation of resources and significant cost savings



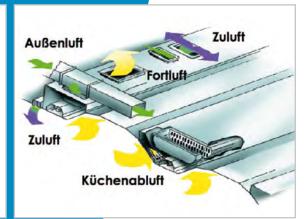
Because of the special design, this development is particularly suitable for exhaust air containing aerosolates and solves the problems of a central system. The distance between the flat tubes in the heat exchanger is sufficient to avoid any blockage or excessive contamination, so that the service life and pressure loss are not adversely affected. The cold outside air and the hot exhaust air converge to cause condensate to form on the surface of the exchanger tubes inside the hood. This condensate automatically "flushes" the grease particles out of the heat exchanger and can enter the condensate collecting channel via the rear of the aerosol separators, where it can be drained. It is therefore referred to as a self-cleaning effect, since the heat exchanger keeps itself clean without any additional equipment.

A performance calculation with regard to the heat return coefficient and design of the reheaters or the heating output can be created individually for each case.

SL-THERMO – A COMPACT, HIGH-EFFICIENCY HEAT RECOVERY SYSTEM INTEGRATED INTO THE HOOD OR CEILING.



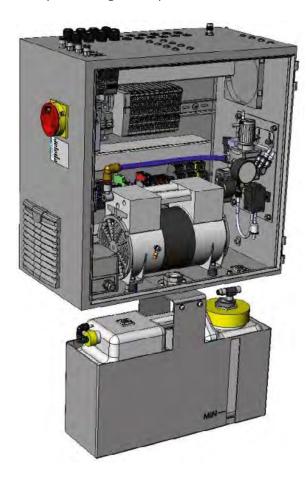




# SL-MICROmatic 2.0

BIOLOGICAL AEROSOLATE AFTERTREATMENT IN ACCORDANCE WITH DIN EN 16282-8 – FOR CEILINGS AND HOODS.

Your ventilation system will be freed almost automatically of aerosolate deposits thoroughly, conveniently and energy-efficiently in a biodegradable process.



The SL-MICROmatic uses the behaviour of natural enzymes for the biological degradation of aerosolate and grease particles in the extractor hood. Spray nozzles in the exhaust air chamber downstream of the aerosol separators create a fine spray mist. This mist mixes with the thermal

air stream from the kitchen exhaust air.

This distributes the mist evenly throughout the entire system and wets the surfaces



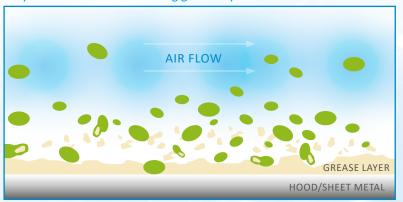


of the exhaust air components. This biofilm dissolves aerosolate deposits and prevents new deposits from occurring. The cultures break down the molecular chains of the aerosols. Water and carbon dioxide are produced, which are simply removed by the exhaust air flow. The spraying procedure is repeated automatically. The frequency thereof can be individually tailored to the kitchen operation.

- ✓ Aerosolate aftertreatment by 100% biodegradable enzymes
- ✓ Convenient automatic program for optimising spray frequencies
- ✓ Work is made easier: The cleaning cycles are extended many times over. There is no need for laborious, manual cleaning.
- ✓ Aerosolate aftertreatment system in accordance with DIN EN 16282-8

#### CERTIFIED SAFETY FOR INDIVIDUAL REQUIREMENTS

#### Enzymes break down an existing grease layer



Formation of a biofilm to prevent the formation of grease



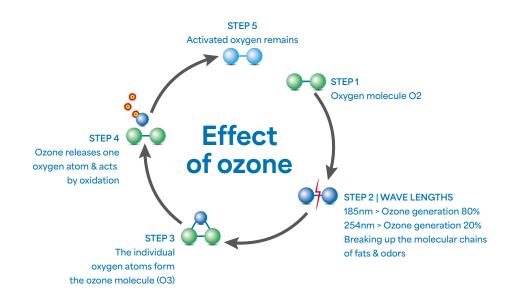
The SL-MICROmatic is available made to measure for your ventilation ceiling and extractor hoods, and can also be retrofitted, of course.

Of course, all the materials that are used with the SL-MICROmatic are subject to the current strict legal regulations.

We would be pleased to advise you on which SL-MICROmatic solution is suitable for your individual requirements.

# SL-UV-PRO+

#### AEROSOL AND AEROSOLATE AFTERTREATMENT IN ACCORDANCE WITH DIN EN 16282 PART 8, ANNEX A





SL-UV-PRO+ BASIC

#### EFFECTS CAUSED BY THE OPERATION OF THE SL-UV-PRO+ SYSTEM

- ✓ Effective reduction of the aerosol deposits in the separator housing
- ✓ Effective reduction of the aerosol deposits on the rear of the separator
- ✓ Effective reduction of the aerosol deposits in the exhaust air duct system
- ✓ Substantial reduction in the risk of fire in the exhaust air system
- ✓ Significant reduction in exhaust air noise emissions

#### **TECHNOLOGY VARIANTS:**

#### **SL-UV-PRO+ BASIC:**

BASIC DESIGN = BASIC VERSION

SL-UV-PRO+ PREMIUM:
PREMIUM DESIGN =
ADVANCED FUNCTIONS

#### SL-UV-PRO+ PREMIUM

✓ Single module version

Individual monitoring of the UV-C emitters and operating hours and faults

✓ Zone control module version

Control and connection of up to 5 separate exhaust air zones

✓ Power control module version

Power control of the UV-C emitters (adaptation of the ozone generation)

✓ Energy-saving mode module version

Energy-saving mode by limiting the time of the operation of the UV-C emitters

#### Technical data:

- ✓ UV-C emitters: single tube with clamping system
- ✓ UV-C-emitters: expected service life of 12,000 hours
- ✓ Total connectivity of up to a maximum of 160 x UV-C emitters
- ✓ Control module with BUS coupler and ballast for UV-C emitters
- ✓ Control centre with integrated or separate 7-inch control panel
- ✓ Display and parametrisation on 7-inch control panel, tablet or smartphone
- ✓ Patented safety locking system
- ✓ Flow monitor
- ✓ GLT connection / remote maintenance via the Internet







SL-UV-PRO+ PREMIUM

# **SL-ECOcontrol**

#### SL-ECOcontrol – DEMAND-ORIENTED VENTILATION SYSTEM





#### SAVES ENERGY

- ✓ Intelligent control management of the air conditioning
- ✓ Only the required volume of air is replaced

#### **RESULT**

- ✓ Reduction in heating and energy costs for fresh air
- ✓ Outstanding operating comfort by means of automation
- ✓ Conservation of resources

#### **TECHNOLOGY**

- ✓ Sensor technology with real-time response
- ✓ Consolidation in cooking zones in accordance with requirements
- ✓ Signal value acquisition and preparation
- ✓ Provision of the data to the building control system

#### SL-ECOcontrol-PREMIUM

- ✓ Intelligent control management for on-demand air conditioning
- ✓ Sensor technology with real-time response to detect the accumulation of vapours and temperature
- ✓ Signal value acquisition and provision for the on-site control system or building control system
- ✓ Variable consolidation in cooking zones in accordance with requirements

# VAPOUR SENSOR Positioned directly upstream of the aerosol SENSOR BOX separators Signal provision for on-site transfer **TEMPERATURE SENSOR** No signal processing Positioned directly at the air vent **VENTILATION CON-BUILDING CON-TROL UNIT** TROL SYSTEM (on-site) (on-site)

- ✓ Intelligent control management for on-demand air conditioning
- ✓ Sensor technology with real-time response for detecting the accumulation of vapours and temperature
- ✓ Detection of up to 8 exhaust air zones separately as required
- ✓ Signal value acquisition and signal value processing for the on-site control system
- ✓ Signal value processing of temperature sensors to the average or maximum value per zone
- ✓ Individual testing of sensors with regard to their connection and function
- ✓ Sensor technology fault diagnostics

**SENSORS** 

#### **CONTROL PANEL** On-site visualisation for signal processing - Assignment of sensors for the zone VENTILATION Individual testing of sensors with regard to their con-**CONTROL UNIT** nection and function Signal value processing of temperature sensors to the (on-site) average or maximum value per zone Sensor technology fault diagnostics **CENTRAL BOX** SIGNAL PROCESSING **BUILDING CON-**Transfer of control signals per zone for ventilation control TROL SYSTEM 1 x vapour occurrence > potential-free contact (on-site) 1 x temperature increase > standard signal 0-10 V **BUS NODES** SIGNAL RECORDING **EXHAUST AIR EXHAUST AIR EXHAUST AIR** ZONE 2 ZONE max. 8 ZONE 1

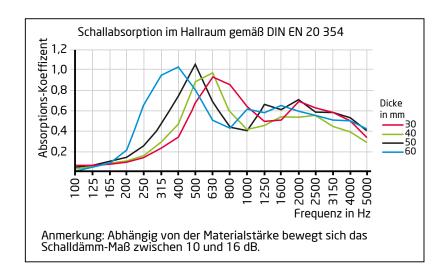
**SENSORS** 

**SENSORS** 

# **SL-AKUSTIK**

A ceiling provides peace of mind – high noise levels cause additional burdens on employees. This leads to an increased risk of accidents, dissatisfaction and often illness. A good working atmosphere in commercial kitchens therefore needs appropriate sound insulation. This is exactly why SÜDLUFT developed SL-AKUSTIK: a ceiling with excellent sound insulation properties – certified by the Fraunhofer Institute. The insulation is also perfectly hygienic and classified as "flame retardant".

- ✓ High efficiency sound attenuation and absorption
- ✓ Noticeably more pleasant ambient sound
- ✓ Available in different colours and tailored to individual requirements
- ✓ Can also be retrofitted to existing panel ceilings
- ✓ Dimensionally stable, hygienic, resilient, lightweight





# RECESSED LED LUMINAIRES

#### LED CIRCUIT BOARD

Energy efficiency class: A++

Design: 230 V AC
Design: DALI dimmable

Cover frame: RAL 9010 aluminium / anodised
Glass panel: Ornament 504 tempered safety glass

Protection class: IP 55 at the room side

Light colour: 4000 K
Service life: > 50,000 h
Colour rendering CRI: > 80 Ra
Colour tolerance: Mac Adam 3
230 V AC connection: Wieland GST 18i3
Dali connection: Wieland GST 18i5



#### LED DOWNLIGHT

Energy efficiency class: A+

Design: DALI dimmable
Cover frame: RAL 9006 / RAL 9016

Glass panel: PC clear

Protection class: IP 54 at the room side

Light colour: 4000 K
Service life: > 50,000 h
Colour rendering CRI: > 80 Ra
Connection: Terminal box



# **SEPARATOR TYPES**



## SL-WV-R WHIRLER-TYPE SEPARATOR - separation rate up to 94%

		Volume flow at 0.7 m/s	
Dimensions L x W in mm	Pressure loss in Pa	inflow velocity Exhaust air volume in m³/h	Separator noise in dB(A)
500 x 500	53	600	54
500 x 350	53	450	54
500 x 250	53	300	54
500 x 200	53	250	54

- ✓ Flameproof in accordance with UL 1046\*
- ✓ Testing of the acoustic characteristics
- ✓ Construction and functionality in accordance with DIN EN 16282-6
- ✓ Material: Chrome-nickel steel 1.4307



## SL-WVFV-RE-A COMBINATION SEPARATOR - separation rate up to 98%

Dimensions L x W in mm	Pressure loss in Pa	Volume flow at 0.7 m/s inflow velocity Exhaust air volume in m³/h	Separator noise in dB(A)
500 x 500	72	600	55
500 x 350	72	450	55
500 x 250	72	300	55
500 x 200	72	250	55

- ✓ Flameproof in accordance with DIN EN 16282-6
- ✓ Flameproof in accordance with UL 1046\*
- ✓ Testing of the acoustic characteristics
- ✓ Construction and functionality in accordance with DIN EN 16282-6
- ✓ Material: Chrome-nickel steel 1.4307



## SL-WV-R/WV-R E-A DUPLEX-SEPARATOR - separation rate up to 98%

		<del>.</del>	
Dimensions L x W in mm	Pressure loss in Pa	Volume flow at 0.7 m/s inflow velocity Exhaust air volume in m³/h	Separator noise in dB(A)
500 x 500	80	600	55
500 x 350	80	450	55
500 x 250	80	300	55
500 x 200	80	250	55

- ✓ Flameproof in accordance with DIN EN 16282-6
- ✓ Flameproof in accordance with UL 1046\*
- ✓ Testing of the acoustic characteristics
- ✓ Construction and functionality in accordance with DIN EN 16282-6
- ✓ Material: Chrome-nickel steel 1.4307

<sup>\*</sup> With the same technical data by request

# **MATERIAL**

#### V2A CHROME NICKEL STEEL 1.4307 WITH A K240 DUPLEX FINISH

This material is outstanding because of its high degree of corrosion resistance to humidity, water, and the majority of acids and alkaline solutions. The risk of contamination from negative hygiene factors such as germs, bacteria, viruses or fungi is eliminated by the optimal material properties.

#### ANODISED AND COATED ALUMINIUM

Anodically oxidised (anodised) aluminium is a metal with a silver-white gloss. The corrosion resistance is based on a hard, cohesive and transparent oxide layer which is just a few molecule layers thick and forms on freshly scored aluminium sheets in the air and also in water within just a few seconds. The resistance to acids and alkalis and the corrosion resistance do not pose a risk to food hygiene.

# THE FOLLOWING COLOUR SCHEMES ARE STANDARD IN THE SÜDLUFT PRODUCT RANGE:

#### **ALUMINIUM CEILING**

- anodised
- RAL 9010 coating (standard colour)

#### STAINLESS STEEL CEILING

- Stainless steel 1.4307 with a K240 duplex finish

It goes without saying that all colour shades in deviation from the standard are possible to fulfil customer requirements. A longer delivery time must be taken into consideration.



Ventilation towers from SÜDLUFT are convincing proof that functionality and an impressive design do not have to be mutually exclusive.

On the contrary, the SL-SFERA opens up a new dimension in building planning.

Ventilation towers as elements harmoniously integrated into the overall architecture – or as accentuating, stand-alone "works of art". A brilliant enrichment of the planning possibilities in the truest sense of the word. The use of geothermal energy is interesting from an energy point of view.



ALDI Campus, Essen



# SL-SFERA - THE VENTILATION TOWER

#### AN IMPRESSIVE DESIGN ELEMENT AND IMPRESSIVE FUNCTIONALITY.

Be it rising up on the outer wall, enthroned on the roof or as an eye-catcher on company premises or in front and inner courtyards, with the SL-SFERA you will create distinctive architecture and set visible accents from afar. The interior of the SL-SFERA towers are impressive in terms of technology, ease of maintenance and durability. SL-SFERA: Ventilation towers that are as good as they look!

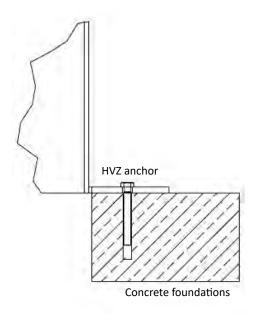
The SL-SFERA incorporates what constitutes good outside and exhaust air towers. For example, more than 40 years of product experience, proven materials and high processing quality. A choice of stainless steel or standard steel, alternatively with a coating to fulfil customer requirements, and with or without lamellae. The technical design of the ventilation towers ensures excellent ventilation performance without interfering flow noise. Verifiable statics in accordance with DIN are available for all of the required load cases.

Design, functionality and quality from SÜDLUFT – a well-rounded solution!



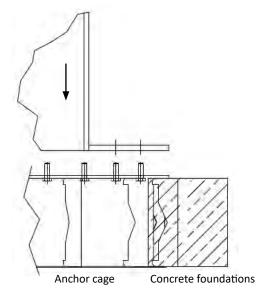


# **KEY TECHNICAL DATA**



#### **MOUNTING VARIANTS:**

Tower pipe with flange Mounting in concrete foundations with an HVZ anchor Quantity and dimensioning in accordance with static calculation

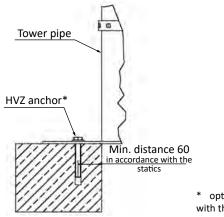


Tower pipe with flange Bolted connection with anchor cage

Anchor cage encased flush into concrete and reinforced with bracing in the concrete foundations

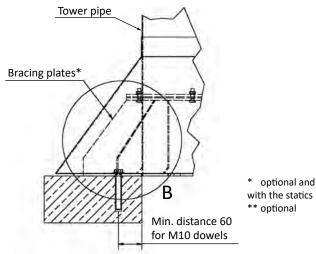
## SEALING VARIANTS FOR VENTILATION TOWERS -MOUNTING ON A CONCRETE CEILING

#### **Standard variant**



- \* optional and in accordance with the statics
- \*\* optional

#### Alternative



- \* optional and in accordance

Outside and exhaust air towers are construction products in accordance with EN 1090-1. The "technical rules" required therein must be complied with in accordance with the applicable state building regulations. Planning, dimensioning, construction and manufacturing take place exclusively in accordance with Eurocodes.

They can only be marketed and may only be used if they are labelled with the manufacturer's CE mark in accordance with DIN EN 1090.



Ausführklasse EXC 3

2451

Südluft Systemtechnik GmbH, Plattling

2451-CPR-EN1090-2013.0304.001

#### EN 1090-1

Lüftungsturm SL-SFERA
Südluft Systemtechnik GmbH, Plattling,
Robert-Bosch-Straße 6
Geometrische Toleranzen: EN 1090-2 / Klasse 1
Schweißeignung: 1.4307 nach EN 10088-2
Brandverhalten: Material in Klasse A1 eingestuft
Freisetzung von Cadmium: KLF
Freisetzung von radioaktiver Strahlung: KLF
Dauerhaftigkeit: Oberflächenvorbereitung nach
EN1090-2, Vorbereitungsgrad P1
Tragfähigkeit: Bemessung nach DIN EN 1993-3-2 und
DIN EN 1991-1
Herstellung: Nach Bauteilspezifikation und EN 1090-2,





Ventilation towers from the SL-SFERA series can be used universally.



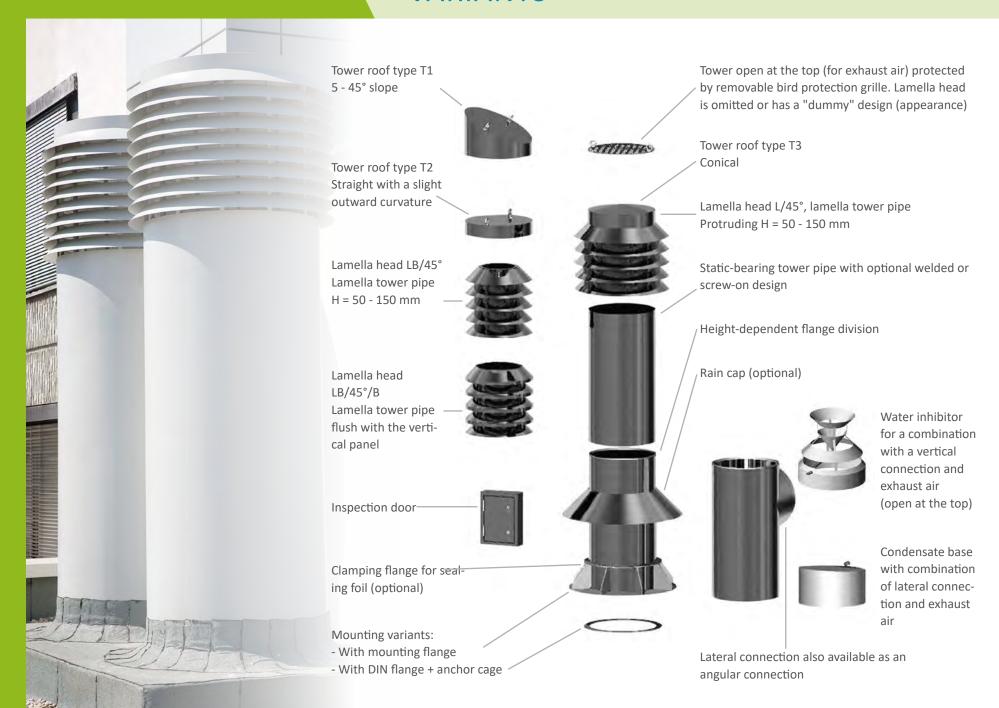




Dreifachsporthalle sport venue, Altötting Red Bull, Fuschl (A)



# **VARIANTS**



# **GEOTHERMAL TOWERS**



#### INTAKE TOWER FOR GEOTHERMAL ENERGY

Designed specifically for the intake of fresh air from geothermal energy systems with maximum ventilation and acoustic requirements. Variable connection options to all geothermal energy sys-

#### **ACCESSORIES**

- Connector junction for HT pipes
- Replacement filter mat, filter class G3
- Velcro strip for filter attachment
- HVZ anchor for tower mounting
- Stainless steel care products



Laser-cut filter basket for holding the filter mat. This is mounted using clamping rings or Velcro strips. With sealing profile at bottom - therefore no intake of unfiltered fresh air possible.

Name	AF	Lam.	Filter ring	ΔP Filter	ΔP Total
EWT-260	0.17 m <sup>2</sup>	1.23 m/s	6 m/s	30	50
EWT-330	0.27 m <sup>2</sup>	1.49 m/s	4 m/s	35	65
EWT-415	0.36 m <sup>2</sup>	1.8 m/s	5 m/s	35	65
EWT-520	0.47 m <sup>2</sup>	1.73 m/s	4 m/s	35	65

# VENTILATION COMPONENTS FOR CLEAN ROOM AREAS

#### THE AIR IS CLEAN. FOR SURE!

Clean air as a key success criterion. Our air is interspersed with the finest dirt and dust particles. In many areas, this does not seem to be worth mentioning, provided that this does not affect our quality of life. The situation is different where clean air is a decisive criterion for the desired results. Clean air can be particularly important for survival in the medical sector. Operations performed in contaminated air pose an enormous health risk. Operating theatres, clinics and hospitals depend on reliable filter technology to ensure the success of the operation or the patient's recovery. The same applies to modern production facilities in the pharmaceutical, microelectronics and semiconductor industries. Clean rooms are a basic prerequisite for the production of sensitive products in these industries.



# PARTICULATE FILTERS

The air is interspersed with the finest dirt and dust particles. In some areas, this poses high risks to the quality of production or it can affect our quality of life. SL-particulate filters in

SÜDLUFT ventilation ducts provide a remedy in these cases.



The sturdy stainless steel frames of the particulate filters are machined from a single piece and are fitted with a fine wire mesh in accordance with DIN ISO 4783.

Mesh size 0.5 x 0.32 mm. Secured knurled screws made from stainless steel secure the mounting frame (20 mm rim and an additional 10 mm back-fold).

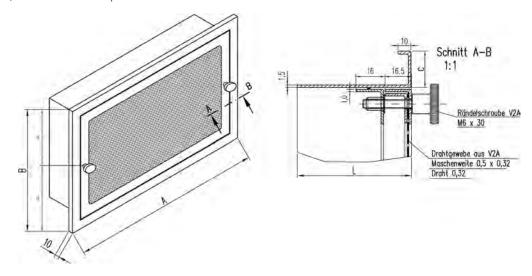
SL-particulate filters fulfil the requirements of DIN 1946,

Part 4.

#### SELECTION TABLE - NOMINAL AIR FLOW VOLUMES

Height (dimension B) in mm	Width (dimension A) in mm					
	225	325	425	525	625	725
125	58 m³/h	98 m³/h	140 m³/h	180 m³/h	220 m³/h	262 m³/h
225	190 m³/h	325 m³/h	450 m³/h	580 m³/h	705 m³/h	838 m³/h
325	325 m³/h	540 m³/h	760 m³/h	980 m³/h	1200 m³/h	1430 m³/h
425	450 m³/h	760 m³/h	1075 m³/h	1380 m³/h	1700 m³/h	2005 m³/h
525	580 m³/h	980 m³/h	1380 m³/h	1780 m³/h	2180 m³/h	2885 m³/h
625	705 m³/h	1200 m³/h	1700 m³/h	2180 m³/h	2670 m³/h	3164 m³/h
725	838 m³/h	1430 m³/h	2005 m³/h	2885 m³/h	3164 m³/h	3745 m³/h
825	975 m³/h	1645 m³/h	2315 m³/h	2986 m³/h	3655 m³/h	4325 m³/h

Installation depth L = variable from 40 - 120 mm, dimension C = 20 mm, specified air flow volume relates to a 2.5 m/s inflow velocity in connection dimensions, with a maximum pressure loss of 25 Pa in the cleaned condition.



# PARTICULATE DUCT/ PARTICULATE CABINET

There is a service door with stainless steel hinges and rotary latches on the front of the continuously visible stainless steel ventilation duct with brushed and ground weld seams. This allows easy cleaning of the completely accessible inner sides. The duct is equipped with two particulate filters, with an arc at the bottom, and an end flange at the top. The standard sheet thicknesses are 1.0 - 1.5 mm. Different installation variants are available for tiles or plaster walls.

The system can be individually tailored to the conditions in the respective rooms.

Your requirements and demands are in good hands at SÜDLUFT.



#### SL-PARTICULATE FILTERS: SHEER QUALITY!

- ✓ The material and workmanship of all components are extremely high-quality
- ✓ The cleaning effect that is needed today and tomorrow
- ✓ High functionality, easy to clean
- ✓ Can also be integrated into existing systems

SÜDLUFT quality and SÜDLUFT expertise: an unbeatable combination!

# LET US IMPRESS YOU WITH OUR SERVICES!

## KITCHEN VENTILATION TECHNOLOGY

(Ventilation ceiling systems, ventilation hoods)

**VENTILATION TOWERS** 

**VENTILATION COMPONENTS FOR CLEAN ROOM AREAS** 

YOUR RELIABLE, INNOVA-TIVE PARTNER FOR VEN-TILATION TECHNOLOGY



#### SÜDLUFT SYSTEMTECHNIK GMBH

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