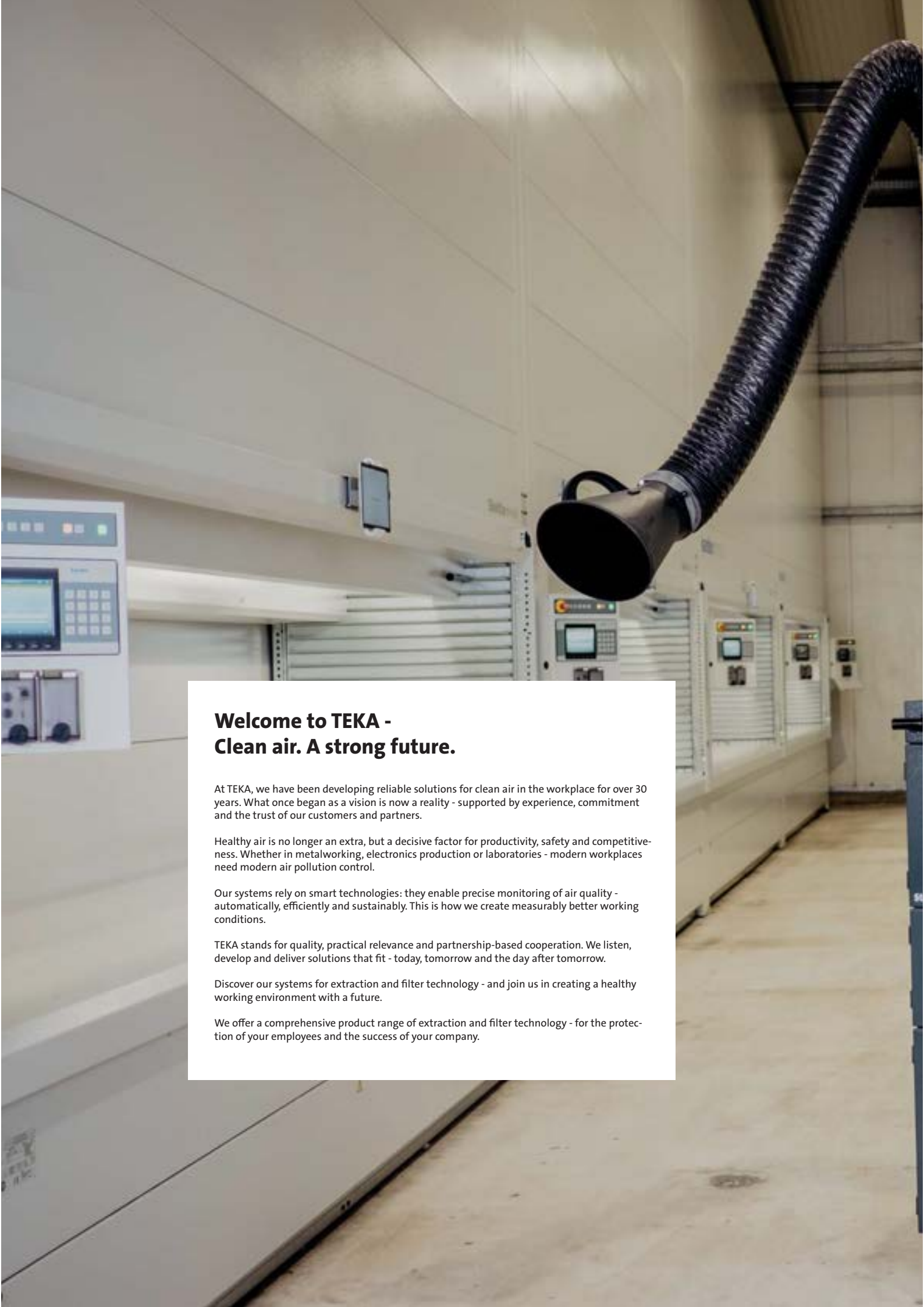




FILTER SYSTEMS

FUMES | DUST | VAPORS





Welcome to TEKA - Clean air. A strong future.

At TEKA, we have been developing reliable solutions for clean air in the workplace for over 30 years. What once began as a vision is now a reality - supported by experience, commitment and the trust of our customers and partners.

Healthy air is no longer an extra, but a decisive factor for productivity, safety and competitiveness. Whether in metalworking, electronics production or laboratories - modern workplaces need modern air pollution control.

Our systems rely on smart technologies: they enable precise monitoring of air quality - automatically, efficiently and sustainably. This is how we create measurably better working conditions.

TEKA stands for quality, practical relevance and partnership-based cooperation. We listen, develop and deliver solutions that fit - today, tomorrow and the day after tomorrow.

Discover our systems for extraction and filter technology - and join us in creating a healthy working environment with a future.

We offer a comprehensive product range of extraction and filter technology - for the protection of your employees and the success of your company.



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Good to know

What is dust/fume?

Dust/fume is finely distributed solid particles in the air, which are caused by thermal processes such as welding.

What causes dust/fume?

In welding technology dust/ fume and thus hazardous substances are produced

due to the use of

- ▶ base materials
- ▶ filler materials
- ▶ impurities
- ▶ ambient air

during processes such as

- ▶ evaporation
- ▶ condensation
- ▶ oxidation
- ▶ decomposition
- ▶ pyrolysis
- ▶ combustion

Why is dust/fume dangerous?

In general, every kind of dust/fume can lead to respiratory diseases (bronchitis, obstructive bronchitis) resulting from the inhaling of dust in a high concentration and for a longer period. Dust/fume is particularly dangerous if it contains hazardous substances (see table on page 8).

German framework regulation Ordinance on Hazardous Substances (GefStoffV) ¹

When it came into effect on January 1st, 2005, the Ordinance on Hazardous Substances restructured the occupational safety for activities involving hazardous substances as implementation of several EC directives. Welding fume is considered a hazardous substance, thus the Ordinance on Hazardous Substances applies.

Particles contained in welding fume are inhalable and respirable and in case of chromium-nickel steel, they are carcinogenic. The Ordinance on Hazardous Substances ¹ requires a local extraction: „Dusts shall be collected and disposed of safely at the place of its origin. The extracted air shall be conducted in such a way that as little dust as possible passes into the workers' breathing air.

The extracted air may only be returned to the working area if it has been adequately cleaned." Furthermore it says: „Equipment to separate, collect and precipitate dusts must be state of the art. When these devices are first put into operation, it must be checked if they are sufficiently effective. At least once a year the devices must be inspected with respect to their proper functioning, serviced and, if relevant, repaired. The results of the inspections according to the sentences 1 and 2 shall be preserved." (Annex I No. 2, § 2.3(5,7))

**Medical illustration:
Internalisation of particles
of different sizes into the human body**

Mucous membrane of the nose and throat (> 10 µm)

Larynx (4,7 - 5,8 µm)

Trachea and main bronchi (3,3 - 4,7 µm)

Secondary and tertiary bronchi (1,1 - 3,3 µm)

Alveoli (< 1,1 µm)

Air circulation when dealing with carcinogenic substances

"If activities involving carcinogenic, mutagenic, or fertility-damaging hazardous substances of categories 1 and 2 are carried out in a work area, the air extracted from that area must not be returned to the work area. This does not apply if the air is sufficiently cleaned of such substances using procedures or equipment recognized by the authorities or by the statutory accident insurance institutions... ". As there is currently no recognized procedure, this means that only filter systems with W3 approval from the IFA (Institute for Occupational Safety and Health of the German Social Accident Insurance) may be used for recirculation operation.

If the welding fumes contain carcinogenic parts – such as nickel compounds or chromates – the exhaust air has to be led to the outside. In exceptional cases, the cleaned air can be returned if the requirements of the TRGS 560 ³ „Technical Rules for Hazardous Substances - Air return when handling carcinogenic, mutagenic substances and substances toxic to reproduction“ are met. According to this, the concentration of hazardous substances in the air which is returned into the working area (returned cleaned air) must not exceed a tenth of the former TRK (technical guideline concentration) value.

Tips for users

To comply with the regulations, operators have access to both mobile dust collectors and central stationary systems that are approved by the statutory accident insurance providers in accordance with TRGS 528. These are devices and systems that have been tested and certified by the IFA in accordance with the international standard DIN EN ISO 21904 Parts 1 and 2 ².

Extract from TRGS 528 ²

4.5 Air recirculation

(1) Extracted air may only be recirculated into the work area if it has been sufficiently cleaned.

.

.

(4) At workplaces where welding work involving the emission of carcinogenic, germ cell mutagenic or reprotoxic substances of category 1A or 1B is carried out (in particular when using materials containing chromium and nickel), the extracted air must not be recirculated there. Where possible, the extracted air in these cases must be discharged to the outside, e.g. at stationary workplaces. If welding fume extraction devices have to be operated in recirculation mode, e.g. at mobile workplaces, only devices approved by the authorities or by the statutory accident insurance institutions may be used, which have been tested in accordance with DIN EN ISO 21904 Parts 1 and 2 and are marked W3. ...

TRGS

The **Technical Rules for Hazardous Substances (TRGS)** reflect the **state of the art, occupational medicine and occupational hygiene**, as well as other established ergonomic findings for activities involving hazardous substances, including their classification and labelling. They are drawn up by the **Committee for Hazardous Substances (AGS)** with the participation of the Committee for Occupational Medicine (AfAMed) and published by the **Federal Ministry of Labour and Social Affairs (BMAS)** in the Joint Ministerial Gazette (GMBI).



1 Ordinance on Hazardous Substances

<http://www.teka.eu/gefstoffv>



2 TRGS 528 (Welding work)

<http://www.teka.eu/trgs528>



3 TRGS 560 (Air recirculation)

<http://www.teka.eu/trgs560>

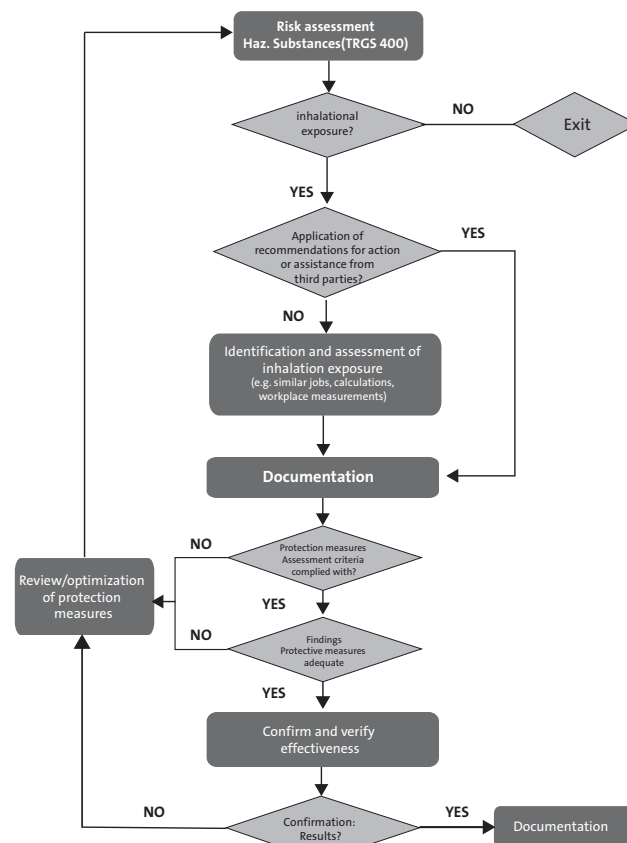
Good to know

Occupational exposure limits

Occupational exposure limits serve to **protect the employees and their health** against the dangers of inhalation of substances (TRGS 900). They came into effect in 2005 and replaced the maximum workplace concentration values that applied until then.

TRGS 400 clearly states that the **employer** needs to carry out an **assessment of the risks** and that the necessary protective measures must be taken **before starting the work** with hazardous substances (§ 3.1(2)). **The employer always has the overall responsibility** (§ 3.1(6)).

TRGS 402 informs about the measures which can be taken by an employer in order to comply with the occupational exposure limits. The decision tree on the right can be used as a first clue.



(Source: TRGS 402)

Hazardous substance	Chemical symbol	Occupat. exposure limit * (in mg/m ³)	Health risk*
Aluminium oxide	Al ₂ O ₃	1,25 (A) / 10 (E) **	Fibrosis, neuropsychic symptoms
Barium compounds	Ba	0,5 (E)	Acute toxicity
Chromium (III) compounds	Cr	2	Skin damage
Chromium (VI) compounds	Cr (VI)	0,001 (E) ****	Carcinogenic
Cobalt (compounds)	Co	0,005mg/m ³ (A) ****	Carcinogenic
Ferric oxide	Fe ₂ O ₃	1,25 (A) / 10 (E) **	Siderosis
Formaldehyde	CH ₂ O	0,37	Potentially carcinogenic
Carbon dioxide	CO ₂	9100	Damage to nervous and circulatory system
Carbon monoxide	CO	23	Damage to cardiovascular system
Manganese oxide	Mn	0,02 (A) / 0,2 (E)	Damage to central nervous system/resp. tract
Nickel and nickel metal	Ni	0,006 (A) / 0,03 (E)	Potentially carcinogenic/skin damage
Nickel compounds	NiO u.a.	0,006 (A) ****	
Phosgene	COCl ₂	0,41	Damage to lung
Nitrogen dioxide	NO ₂	0,95	Lung-function abnormalities
Nitrogen monoxide	NO	2,5	Impact on vascular and nervous system
Zinc oxide	ZnO	0,1 (A) / 2 (E) *****	Metal fume fever/ skin damage
Tin compounds	Sn	8 (E) *****	Toxicity

* The information is taken from GESTIS substances database of the Institute for occupational safety and health (Institut für Arbeitsschutz – IFA) of the German Social Accident Insurance. We do not assume any liability for the accuracy of the data and for possible typing and transmission errors. In case of doubt, please consult the GESTIS database and/or a member of the IFA.

** General occupat. exposure limit

*** Biological limit value (BGW) according to TRGS 505

**** Tolerance concentration (TK) after TRGS 561

***** Recommendation of the MAK Commission

Good to know

Types of filters

Prefilters and particulate filters are classified into 17 different filter classes according to their separation efficiency ranging from the coarsest filter to the finest filter U17:

■ **ISO Coarse: COARSE DUST FILTERS**

■ **ePM10, ePM2.5, ePM 1: FINE DUST FILTERS**

■ **E10, E11, E12, H13, H14, U15, U16, U17: PARTICULATE FILTERS**

(ISO 16890 and EN 1822-1:1998)

Depending on the norm the initial separation efficiency or the fractional separation efficiency are used as a performance criterion under standard load.

Initial separation efficiency: Ratio between the passing and

the filtered material with a new filter.

Fractional separation efficiency: Separation efficiency of a filter concerning the particles of one specific size group (fraction).



Directly relevant norms			
DIN EN ISO 16890	DIN EN ISO 16890	DIN EN 1822	DIN EN 60335-2-69 Anhang AA
Coarse dust filter	Fine dust filter	EPA, HEPA, ULPA Initial separation efficiency A DEHS, MPPS approx. 0,1-0,3 µm	Heavy particle filter Transmission factor D
ISO Coarse ePM10 <50%	ISO ePM10 ePM10 ≥ 50%	E10 A (integral) > 85%	L Quartz dust 90% 0,2 - 2µm D < 1%
	ISO ePM2,5 ePM2,5,min ≥ 50%	E11 A (integral) > 95%	M Quartz dust 90% 0,2 - 2µm D < 0,1%
	ISO ePM1 ePM1,min ≥ 50%	E12 A (integral) > 99,5%	H Paraffin oil mist 90% < 1µm D < 0,005%
		H13 A (integral) > 99,95%	
		H14 A (integral) > 99,995%	
		U15 A (integral) > 99,9995%	
		U16 A (integral) > 99,99995%	
		U17 A (integral) > 99,999995%	

EN 779:2012	ePM 1	ePM 2,5	ePM 10
M5	5% - 35%	10% - 45%	40% - 70%
M6	10% - 40%	20% - 50%	60% - 80%
F7	40% - 65%	65% - 75%	80% - 90%
F8	65% - 90%	75% - 95%	90% -> 100%
F9	80% - 90%	85% - 95%	90% -> 100%

(Source: Eurovent Recommendation 4/23 (2017))

The previous standard EN 779 has been replaced by the new standard ISO 16890. The adjacent table shows how the old filter classes carry over into the new standard.

Good to know

Particle sizes

Particles having a size between 1 mm and 0.1 mm can often be seen with the naked eye. Particles smaller than 100 μm (= 0.1 mm) are only visible by means of an optical microscope. These particle sizes correspond to the filter classes G3 and G4.



Coarse ($>10\ \mu\text{m}$)



Fine ($<10\ \mu\text{m}$)



Ultra fine ($0,1\ \mu\text{m}$)

Particles which are smaller than 1 μm (= 0.001 mm) do not sink, but keep on floating almost permanently. Dust and oil mist produced during metal processing belong to this category. Filters of the filter classes ePM 10 thru ePM 1 are intended to be used for particles between 0.1 μm and 1 μm .

Smaller particles can only be seen with the help of a scanning electron microscope. To filter these particles the finest filters of the classes E10-U17 must be

used. Furthermore, activated carbon filters must be used for particles of 0.01 μm (= 0.00001 mm) and smaller.

As the right choice of filters depends on many other factors such as the quantity and composition of pollutants and the operating conditions, a professional consultation and perhaps an assessment of the situation on site should take place. For this matter feel free to contact our team by using info@teka.eu.

Our Hotline

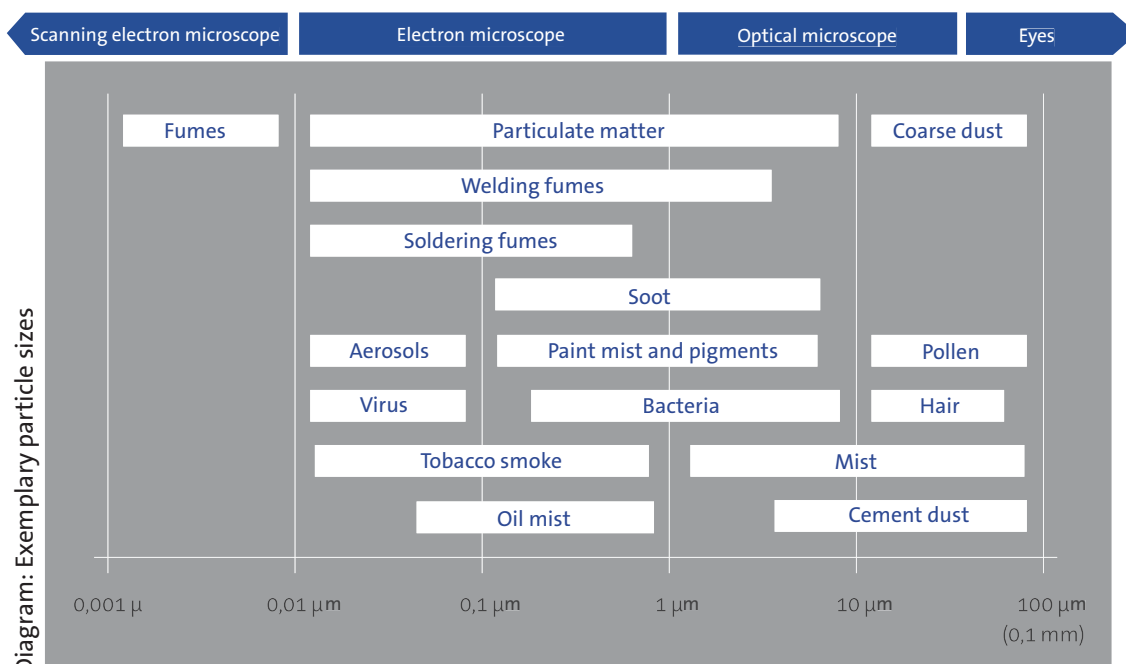
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PLEASE NOTE:

The employer must determine and evaluate the material-specific, process-specific, workplace-specific, and activity-specific factors, combine them into an overall assessment, and define the necessary protective measures in accordance with Section 4 of this TRGS. The overall assessment must also take into account the risk to other employees.

(TRGS 528 Section 3.2.5, August 2020 edition)



Settling times

Decisive for the settling time of particles are in particular their size and Weight. Small, light particles are held in the air by air vortices. Very small particles are in a permanent state of floating and may be inhaled if they are not extracted.

Inhalation may result in significant damage to the health or even cancer. The chart on the right shows the approximate settling times of particles.

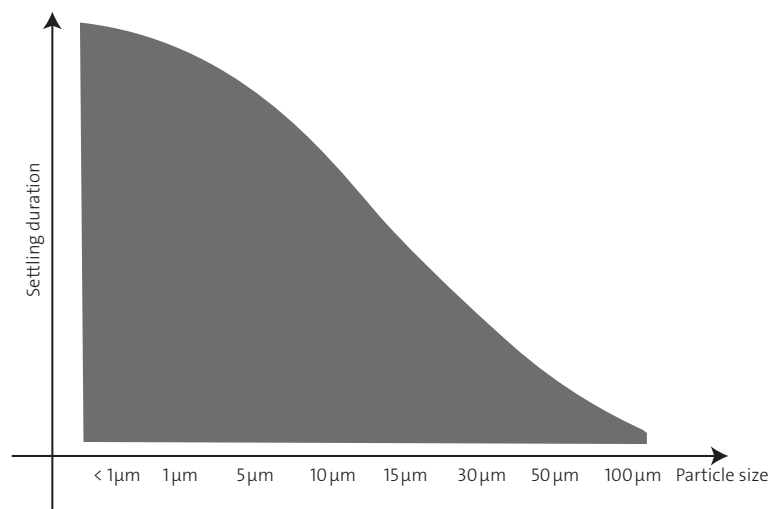


Diagram: The smaller the particles, the slower they settle.

Hazard classes of welding processes

Processes	Emission rate ³ (mg/s)	Emission group
Submerged arc welding	< 1	low
Gas welding (autogenous process)	< 1	low
TIG	< 1	low
Laser beam welding without filler material	1 to 2	medium
MIG/MAG (low-energy gas-shielded welding)	1 to 4	medium to high
Laser beam welding with filler material	2 to 5	high
MIG (solid wire, nickel, nickel-based alloys)	2 to 6	high
MIG (aluminum materials)	0,8 to 29	low to very high
MAG (solid wire)	2 to 12	high
LBH	2 to 22	high
MAG (flux-cored wire welding with shielding gas)	6 to > 25	high to very high
MAG (flux-cored wire welding without shielding gas)	> 25	very high
Soft soldering	< 1	low
Hard soldering	1 to 4	medium to high
MIG soldering	1 to 9	medium to high
Laser beam cutting	9 bis 25	high to very high
Oxy-fuel cutting	> 25	very high
Plasma cutting	> 25	very high
Arc spraying	> 25	very high
Flame spraying	> 25	very high

Source: Technical Rules for Hazardous Substances/Welding work/TRGS 528, Issue February 2009

Good to know

IFA test certificate

Filter systems with an IFA certificate may be operated in recirculation mode if the air is captured at the source.

IFA
Institut für Arbeitsschutz der
Deutschen Gesetzlichen Unfallversicherung
Prüf- und Zertifizierungsstelle im DGVU Test

DGVU Test - Zertifikat

Name und Anschrift des
Zertifizierungsinhabers:
TEKA Absa
Milenka

DGVU Test - Zertifikat

Name und Anschrift des
Zertifizierungsinhabers:
TEKA Absa
Milenka

202122828/1140 vom 16.09.2021, IFA

mercube 4H (Motorleistung 2,2 kW,
Filtercube 4H (Motorleistung 5,5 kW,
DIN EN ISO 21904-1 (06/2020)
DIN EN ISO 21904-2 (06/2020)



Safety tested by IFA certificate!



Heating cost savings through recirculation!



The Institute for occupational safety and health of the German Social Accident Insurance (Institut für Arbeitsschutz – IFA) – former BGIA – is a research and testing institute of the statutory accident insurance institutes in Germany. It is based in Sankt Augustin near Bonn.

Maximum health protection in the workplace – thanks to tested separation efficiency $\geq 99\%$.



Gefahrstoffgeprüft
Schweißrauch-
abscheideklasse W3

IFA test
certificate

IFA certified products in this brochure

(all the systems are certified for the welding fume category W3)



filtoo® Welding fume filter, IFA certified

Suitable for: short-term fume and dust extraction.



CareMaster-IFA Mechanical filter unit with 1 suction elements

Suitable for: Fume extraction during welding work with unalloyed and stainless steel.



StrongMaster-IFA Cartridge filter unit with 1 suction elements

Suitable for: Long-lasting fume extraction during welding involving unalloyed and stainless steel, galvanized material and aluminium involving a strong fume production.



CartMaster-IFA Cartridge filter unit with 1 suction elements

Suitable for: Long-lasting fume extraction during welding involving unalloyed and stainless steel, galvanized material and aluminium involving a strong fume production.



CartMaster-IFA Stationary cartridge filter unit from 1.5 up to 2.0 kW compatible with 1 or 2 suction elements

Suitable for: Long-lasting fume extraction during welding involving unalloyed and stainless steel, galvanized material and aluminium involving a strong fume production (professional solution).



FilterCube 2-IFA Central filter units

Suitable for: Various suction problems at several working places at the same time for work involving unalloyed and stainless steel, galvanized material and aluminium.



FilterCube 4-IFA Central filter units

Suitable for: Various suction problems at several working places at the same time for work involving unalloyed and stainless steel, galvanized material and aluminium.



ZPF 9H-IFA Central suction and filter units

Suitable for: Various suction problems at several working places at the same time for work involving unalloyed and stainless steel, galvanized material and aluminium. Especially suitable for larger amounts of air.



AirTech P10/P18/P24/P30

Suitable for: Filtration of hall air containing pollutants as a supplementary measure.



EcoCube

Suitable for: Almost all tasks in the field of smoke and dust filtration



Industry 4.0 stands for the networking of industrial production with state-of-the-art IT and communication technology. Digitalization is bringing about lasting change to the economy and the world of work.

Smart factories enable largely self-organized production through networked systems in which people, machines, and products communicate with each other. This makes production and logistics processes more efficient and flexible.

Real-time data allows for early responses to missing parts or malfunctions. TEKA sensors and actuators optimize production processes and save resources and energy.

Intelligent networking increases cost-effectiveness, competitiveness, and flexibility. TEKA – Industry 4.0 – The future is TODAY.





AirTracker Room monitoring system

Suitable for

Monitoring of air quality in the hall or workroom and control of the connected extraction and filter system.



*AirTracker
Room monitoring system*

Description

The European branch of the World Health Organisation (WHO) has called on the EU to tighten its air quality standards.

This is where TEKA's innovative, intelligent solution comes in.

The second generation of the TEKA AirTracker is a consistent further development at the highest level. It is used for precise monitoring of air quality in halls and workrooms and can automatically control a connected extraction and filter system from the TEKA series. The integrated screen enables convenient and quick initial commissioning. If an older AirTracker is already in use, the existing plug connection can continue to be used – the new AirTracker is backwards compatible.

It measures respirable PM2.5 particles relevant to fine dust with a display accuracy of 0.01 mg/m³. In addition, high-precision sensors for measuring air temperature and humidity are integrated as standard. The recorded values can be conveniently displayed in real time via smartphone, tablet or PC.

Limit values can be freely configured, allowing both legal national limits and individual company thresholds to be programmed. As soon as the specified threshold value is reached, the sensor signals the current status of the fine dust concentration via two large, clearly visible LED frames with a traffic light function. Optionally, this visual display can also be used to show freely definable temperature or humidity limits.

Technical Data

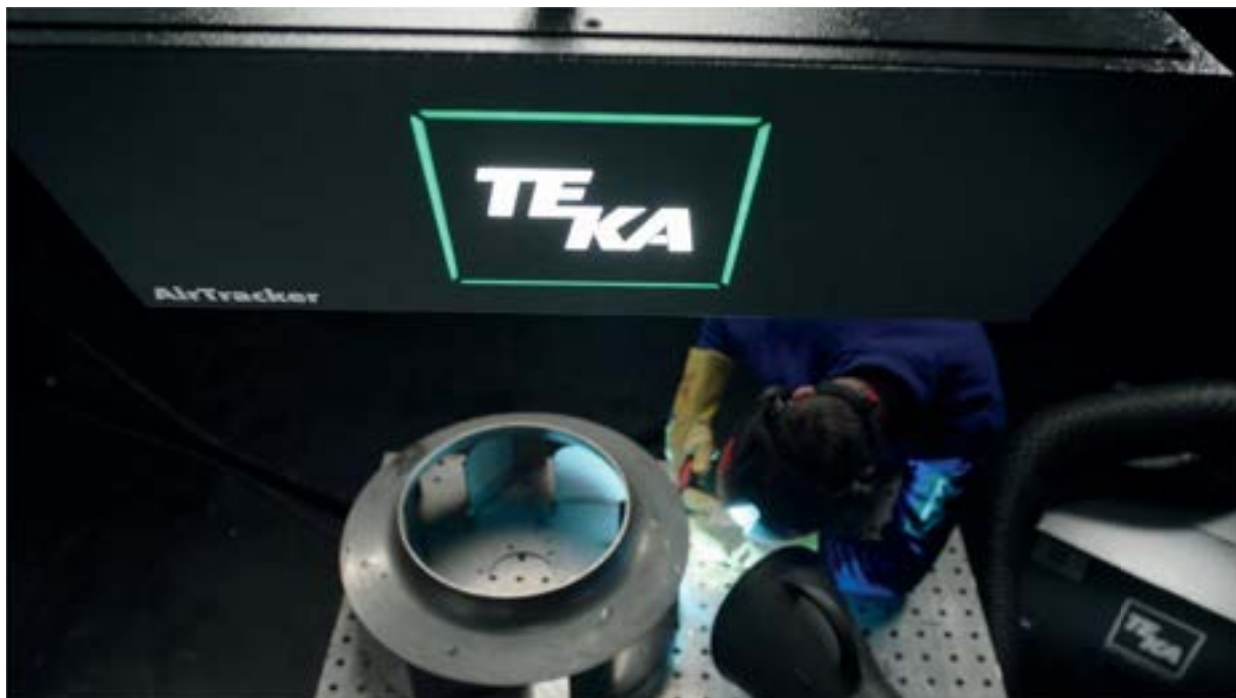
AirTracker Room monitoring system

Wireless standard	WLAN interface 802.11b/g/n compliant wireless standard
Security	128-bit AES Encryption
Connections	Ethernet / Wifi / 4G
Interfaces	3 potential-free contacts for external devices
Data transfer	Data logger
Remote access	Via mobile device
Display	HMI - Touch Display 4,3"
Resolution	480 x 272 px
Voltage	230 V / 110 AC
Casing	Metal powder coated
Weight	approx. 12 kg
Measures (W x D x H)	574 x 285 x 446 mm
Temperature	-10°C to + 50°C
Humidity	0% to 90%
Fine dust	0,0 mg/m ³ to 6,0 mg/m ³

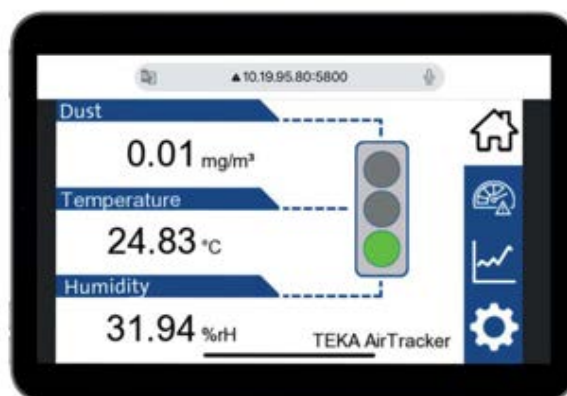


Our Hotline

+49 25 41 84 84 1 300



With the AirTracker, companies can document compliance with occupational health and safety regulations – manually or via the optionally available data logger – and thus transparently demonstrate their commitment to prevention and occupational safety. Industry 4.0 – Ready-to-Go with the TEKA AirTracker. An investment in safety, health and the future.



Available versions

AirTracker Room monitoring system

RGF

201701402024



TEKA mobile suction and filter units make it possible for you to flexibly adapt to changing conditions. For situations that require dust and smoke extraction, we offer adequate solutions for metal processing (welding/laser), electronic industry (soldering), dental and medical technology.

The TEKA HandyCart, for instance, is a compact, space-saving unit used for welding of small components. In a special version, this filter unit can be used for torch extraction.

On the other hand, the mobile TEKA cartridge filter units StrongMaster and CartMaster are a high-end solution in the field of mobile suction and filter units. These professional systems make it possible to realize long-lasting fume extraction during welding work involving non alloyed and stainless steel, especially with strong smoke production.

1. Mobile and wall-mounted suction and filtering systems





dustoo Mobile high-vacuum suction and filter system

Suitable for

Use on welding guns with integrated extraction or selective collection via extraction nozzle



dustoo

Description

Mobile high-vacuum cartridge filter in portable and mobile versions.

The system is particularly suitable for use with welding guns with integrated extraction. The housing is made of sturdy sheet steel and has a powder coating on the inside and outside.

The device has an integrated spark arrestor. The dust is collected in a dust collection tray and can then be easily disposed of. The filter cartridge works on the principle of surface filtration, i.e. the particles are deposited on the filter cartridge and do not penetrate the filter material.

The extraction unit has a continuously variable speed control via a potentiometer for adjusting the suction power. The extraction unit is equipped with two powerful high-pressure turbines.

The system is equipped with automatic filter cleaning. If the system is connected to compressed air, cleaning takes place at appropriately set intervals via a timer.

A filter monitoring system signals when a certain pressure value is reached, indicating that the filter cartridge should be replaced. The device is delivered ready to plug in with a IEC power cord.

Standard equipment

- ▶ Speed control
- ▶ 2 intake manifolds $\varnothing$ 50 mm
- ▶ 1 cover for intake
- ▶ Optical filter monitoring
- ▶ Automatic filter cleaning
- ▶ 5 m power cord
- ▶ 2.5 metre suction hose
- ▶ Round nozzle with magnetic base

Technical Data

dustoo Mobile high-vacuum suction and filter system

Max. volumetric flow of the fan	0-340 m ³ /h
Max. pressure	20.000 Pa
Motor performance	1,6 (2x 0,8) kW
Separation efficiency	≥ 99%
Sound level	approx. 74 dB(A)
Inlet nozzle	2 × $\varnothing$ 50 mm
Filter equipment	Filter cartridge
Drive type	Carbon brushes motor
Dimensions	W: 300 mm D: 300 mm H: 810 mm
Weight	25 kg

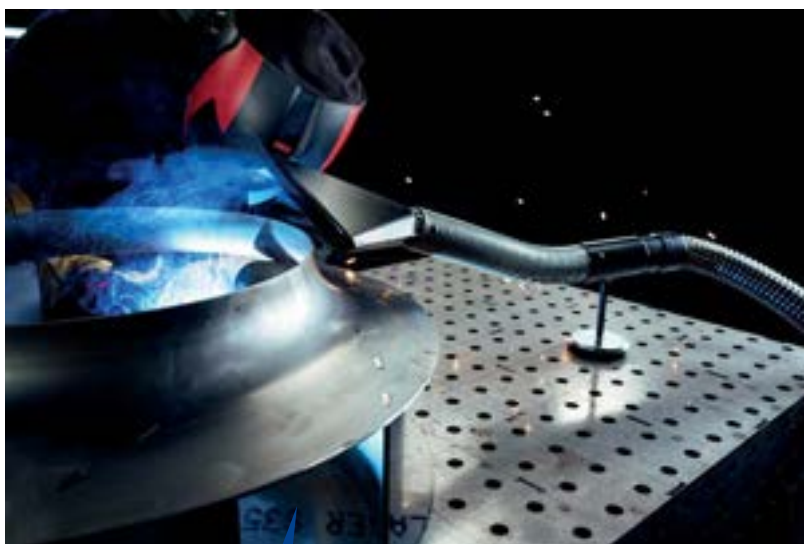
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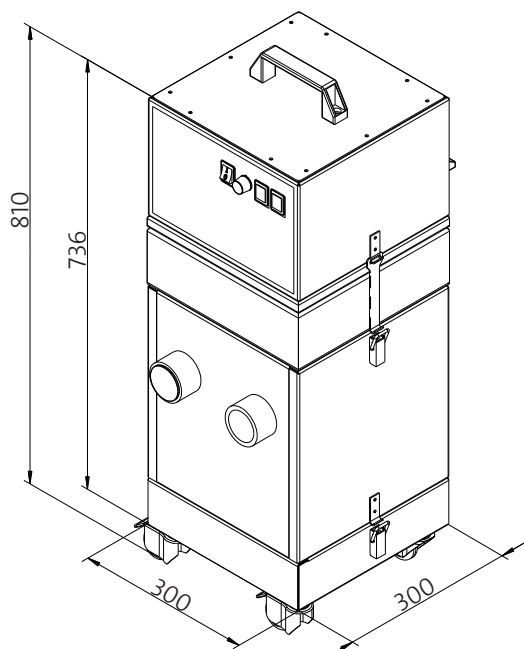


Available as an option

- Extensive selection of suction nozzles and hoses



Application example: Funnel nozzle



dustoo in
Action



Available versions

dustoo Mobile high-vacuum suction and filter system

RGF

98 701



dustoo Accessories



Filter cartridge PTFE

9870003

RGF



Set carbon brushes for turbine

9870004

RGB

Suction hose with two rigid connectors
Ø45 mm

Length 2,5 m

9631925

RGB

Length 5 m

9631950

RGB

Length 10 m

9631910

RGB

Funnel nozzle Ø45 mm, flexible, with
magnetic base

96317

RGB

Round nozzle Ø45 mm,
flexible, with magnetic base

963171

RGB

Slot nozzle Ø45 mm,
with magnetic base

Width 300 mm

96318

RGB

Width 600 mm

938186

RGB

*Our Hotline***+49 25 41 84 84 1 300**

Floor suction nozzle, Ø45, width 500 mm

12201

RGB

Suction pipe for floor suction nozzle,
Ø45,
length 1250mm

12202

RGB

Coupling sleeve for hose
Ø45 mm

12203

RGB

Set: Floor suction nozzle, suction pipe,
coupling sleeve

12200 10

RGB



Pack of 10 PE-dust bags

10030252

RGB



HandyCart Cartridge filter unit

Suitable for

Extraction of welding fumes and dusts at frequently changing places (construction sites, shipbuilding, small parts welding stations, motor vehicle workshops)



Description

Mobile portable high-vacuum extraction unit with manual dedusting or fully automatic pneumatic dedusting.

The filter cartridge remains in the unit to prevent dust from reaching the workplace. The filter cartridge guarantees a separation efficiency $\geq 99\%$.

The extracted dusts are collected in the dust tray. They can be disposed of by means of an inlaid polyethylene bag (optionally available).

Standard equipment

- ▶ Automatic speed control
- ▶ High quality PTFE filter cartridge
- ▶ 2 suction connections $\varnothing 50$ mm
- ▶ 1 temporary cover for suction connection
- ▶ Service-friendly maintenance door
- ▶ Dust collecting tray
- ▶ Operating hours metres
- ▶ Optical filter monitoring
- ▶ 1,8 m power cord

Available as an option

- ▶ Outlet silencer
- ▶ Adaptable activated carbon cell (use for gases)
- ▶ Large number of accessories



Device with torch extraction includes fully automatic dedusting (Art.-No. 97904666)

Technical Data

HandyCart Cartridge filter unit

Max. volumetric flow of the fan	320 m ³ /h
Max. pressure	21000 Pa
Motor performance	1,2 kW
Separation efficiency	$\geq 99\%$
Sound level	approx. 62 dB(A)
Inlet nozzle	2 x $\varnothing 50$ mm
Filter equipment	PTFE filter cartridge
Drive type	continuous running turbine
Dimensions	W: 300 mm D: 300 mm H: 679 mm
Weight	approx. 28 kg

Our Hotline

+49 25 41 84 84 1 300

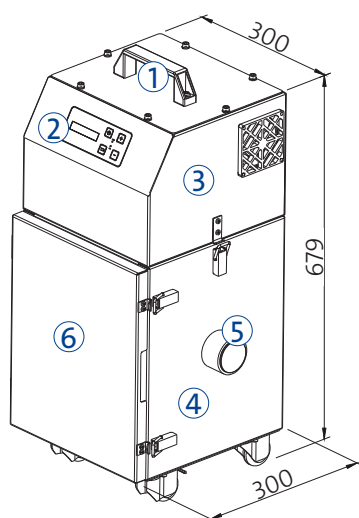
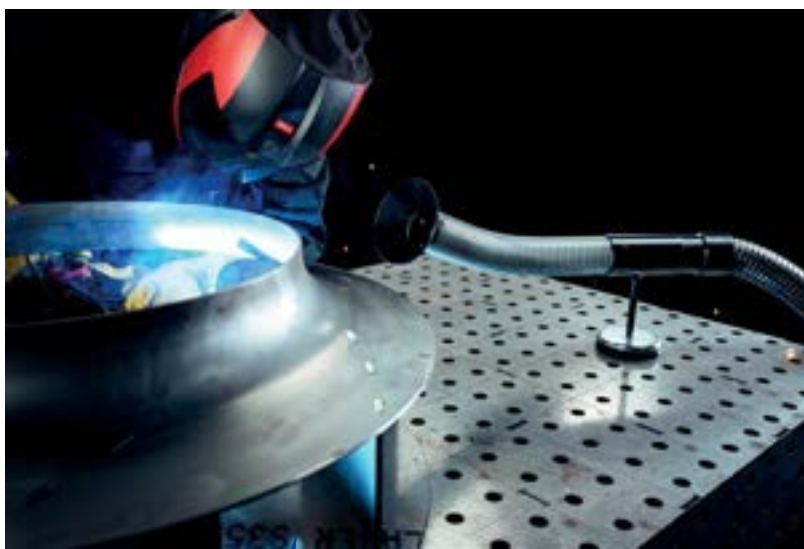


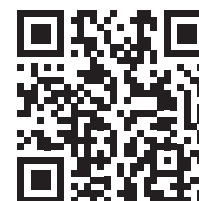
Illustration without automatic dedusting

- 1) Handle
- 2) Display control
- 3) Motor housing
- 4) Cartridge housing
- 5) Suction nozzle
- 6) Maintenance door



Application example: Round nozzle

HandyCart in
Action



Available versions

HandyCart Cartridge filter unit

RGC

		Type of dedusting	
		manual Height: 670 mm	automatic Height: 797 mm
HandyCart HD		97902666	97904666



HandyCart Accessories



Filter cartridge PTFE
0,8 m²

(Units from
September 2003 on)

100281

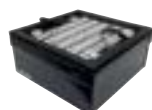
RGB



Activated-carbon filter,
Conversion set

97901120

RGB



Activated-carbon filter

250 x 250 x 100 mm

97901125

RGB



Suction hose Ø45 mm
with hard connection
pieces

Length 2,5m

9631925

RGB

Length 5m

9631950

RGB

Length 10m

96319 10

RGB



Funnel nozzle Ø45 mm,
flexible, with magnetic
base

96317

RGB



Round nozzle Ø45 mm,
flexible, with magnetic
base

96317 1

RGB



Slot nozzle Ø45 mm,
with magnetic base

Width 300 mm

96318

RGB

Width 600 mm

938186

RGB

*Our Hotline***+49 25 41 84 84 1 300**

Floor suction nozzle,
Ø45, width 500 mm

12201

RGB



Suction pipe for floor
suction nozzle, Ø45,
length 1250mm

12202

RGB



Coupling sleeve for hose
Ø45 mm

12203

RGB



Set: Floor suction nozzle,
suction pipe, coupling
sleeve

12200 10

RGB



Silencer

97801130

RGB



Pack of 10 PE-dust bags

10030252

RGB

filtoo® Mechanical filter unit with 1 suction element, IFA-certified

Suitable for

Welding fumes, cutting dust, laser fumes, plasma fumes, grinding dust, adhesive vapors, drilling dust and much more



*filtoo with suction arm
(Art.-No. 978100)*

Description

The device can be used for numerous fields of application. The mobile suction and filter unit filters fume and dust and neutralizes odors. The suction arm (alternatively with hose) extracts polluted air exactly where it is produced. The device filters particles or gases in a four-level filter process including a gross filter, a prefilter, an activated carbon filter and a main filter.

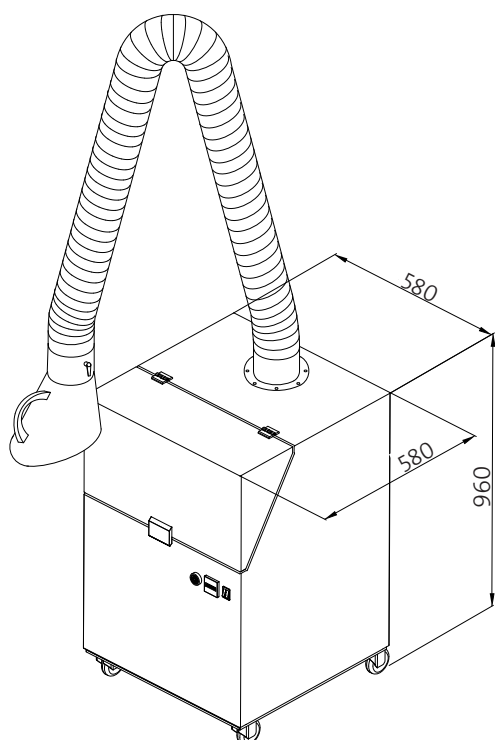
The unit meets the security requirements of units of the welding fume category W3 (high alloy steels). If you handle the unit correctly, you can use it for circulating air operation because it fulfills the requirements of the exceptional rules according to the German Hazardous Substances Ordinance (GefStoffV).

Standard equipment

- ▶ Gross filter with a large surface
- ▶ Prefilter
- ▶ Activated carbon filter
- ▶ Main filter with separation efficiency of $\geq 99\%$
- ▶ Electronic filter monitoring
- ▶ Operating hours metre
- ▶ 5 m power cord
- ▶ Suction arm 3 m in hose version with internal joints
- or**
- ▶ Suction hose 3 m with hood and magnetic base

Available as option

- ▶ Dust pre-separator StaVo
- ▶ Protection grille for extraction hood



Technical Data

filtoo® Mechanical filter unit

Max. volumetric flow of the fan	1600 m ³ /h
Max. pressure	1800 Pa
Motor performance	1,1 kW
Separation efficiency	$\geq 99\%$
Sound level	approx. 72 dB(A)
Dimensions (WxDxH)	580 × 580 × 900 mm
Weight	approx. 80 kg

Our Hotline

+49 25 41 84 84 1 300



filtoo in
Action



Available versions

filtoo® Mechanical filter unit with 1 suction element, IFA-certified		RGF
Suction arm <i>hose, internal joints, 3 metres</i>	978100	
Hose <i>with hood and magnetic base, 3 metres</i>	978200	

Accessories: **StaVo** Dust-pre-separator for filtoo

Suitable for

Retrofitting of filtoo® to increase filter life; serves as a spark arrester; easy installation



Description

This kit is used for preliminary dust separation in the filtoo®. The inserted baffle directs the airflow toward the dust collecting drawer. Possibly suctioned sparks are also captured effectively.

In the collecting drawer most of the dust is already pre-separated. The following 4 filter steps will be relieved and their lifetime will be increased. The collection charge can regularly be emptied in a simple manner.

- ▶ Longer filter life and thus very economical
- ▶ Easy removal of dust particles via dust collecting drawer
- ▶ Uncomplicated installation
- ▶ Can be retrofitted for each filtoo®
- ▶ Patented



The StaVo can be easily installed in just a few simple steps.

Available versions

Accessories: StaVo Dust-pre-separator for filtoo®

RGB

978013

Our Hotline

+49 25 41 84 84 1 300



Accessories for **filtoo®**

	Gross filter, set of 10, 490 x 490 x 20 mm	978003	RGE
	Prefilter 484 x 484 x 48 mm	978004	RGE
	Activated carbon filter 484 x 484 x 20 mm	978006	RGE
	Main filter 520 x 520 x 250 mm	978005	RGE
	Dust pre-separator StaVo	978013	RGB
	Protection grille for exhaust hood	10372	RGB
	Standard exhaust hood incl. throttle Ø 150	66200	RGB
	300x360 mm PVC, black	66210	RGF
	Adapter for exhaust hood round, 400mm PVC, black	66220	RGF



filtoo® WorkTable

Suitable for

Variable workplaces in workshops and in the metalworking industry. For welding, grinding and cutting with low amounts of fumes and dust.



Description

The filtoo® WorkTable is a variant of our leading product, filtoo®, with an extraction arm. Customers not only receive a mobile workbench with downward extraction, but also a built-in particle pre-separator.

Thanks to the five-stage filter system, all hazardous particles are effectively filtered out of the air in the work area. The filtoo® WorkTable stands out thanks to its high-quality workmanship, designed by German engineers, and its unbeatable price.

Standard equipment

- ▶ StaVo
- ▶ Large coarse filter
- ▶ Pre-filter
- ▶ Activated carbon filter
- ▶ Main filter
- ▶ Electronic filtration control
- ▶ Operating hours counter
- ▶ 5m power cord

Available as option

- ▶ Expansion kit incl. replacement aluminium mesh filter
- ▶ Replacement aluminium mesh filter



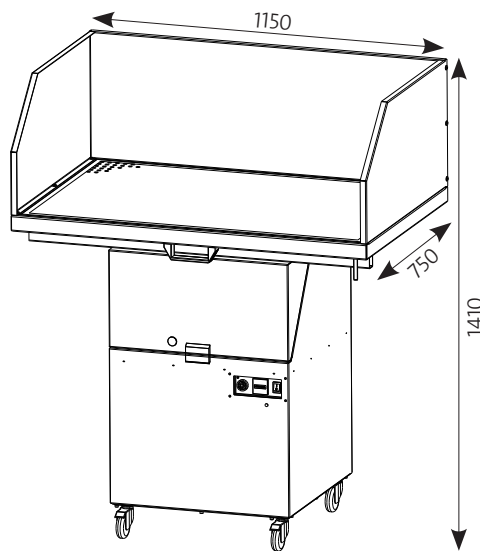
filtoo® WorkTable



incl. pre separator

StaVo

filtoo® WorkTable
in **Action**



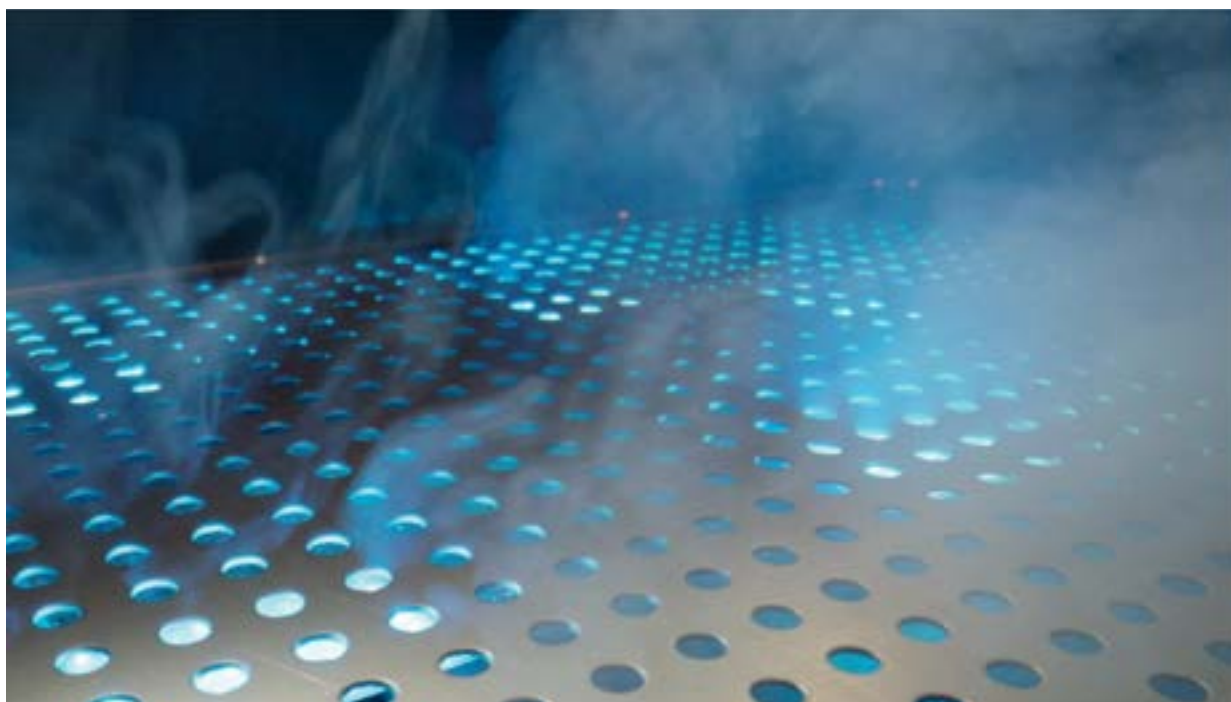
Technical Data

filtoo® WorkTable

Max. volumetric flow of the fan	1600 m³/h
Max. pressure	1800 Pa
Motor performance	1,1 kW
Separation efficiency	≥ 99 %
Sound level	approx. 68 dB(A)
Dimensions (W×D×H)	1150 x 750 x 1410 mm
Weight	approx. 120 kg

Our Hotline

+49 25 41 84 84 1 300



Accessories for **filtoo® WorkTable**

	Coarse filter set, Set of 10, 490 x 490 x 20 mm	978003	RGE
	Pre-filter 484 x 484 x 48 mm	978004	RGE
	Activated carbon filter 484 x 484 x 20 mm	978006	RGE
	Main filter 520 x 520 x 250 mm	978005	RGE
	Extension set for working surface incl. alu mesh filter	978018	RGB
	Replacement alu mesh filter for extension set	978017	RGE

Available versions

filtoo® WorkTable

RGF

978300



CareMaster-IFA Mechanical filter unit with 1 suction element

Suitable for

*Smoke extraction during welding work with unalloyed and stainless steel.
The device is IFA-tested for welding fume class W3.*



Description

This mobile welding fume filter is IFA certified in combination with all TEKA suction arms ($\varnothing 150$ mm). The separation efficiency is $\geq 99\%$.

The unit meets the security requirements of units of the welding fume category W3 (highly alloyed steels). If you handle the unit correctly, you can use it for circulating air operation because it fulfills the requirements of the exceptional rules according to the new German Hazardous Substances Ordinance (GefStoffV).

A stable construction made of steel plate with consistent powder coating guarantees a low maintenance operation even under rough conditions.

The gross particles are separated in the pre-filter. Afterwards the air is guided through the particle filter where even finest fumes and dusts are separated. The tight lifting device guarantees an absolute impermeability and therefore the separation efficiency of the filter unit.

The air is let out on the backside of the unit through an outlet grill and rises up. Thus, at a distance of 1 m you cannot perceive a disturbing air flow any more.

The unit is fitted with a high-capacity fan with high negative pressure which guarantees a high volumetric flow even if the filter is saturated.

Standard equipment

- ▶ Baffle plate
- ▶ Extensive pre-filter mat
- ▶ Particle filter with separation efficiency $\geq 99\%$
- ▶ Optical and acoustic filter monitoring
- ▶ Sealing device
- ▶ Operating hours meter
- ▶ Operation control lamp
- ▶ Suction arm $\varnothing 150$ mm or suction hose 12 m $\varnothing 150$ mm
- ▶ 5 m power cord

Available as an option

- ▶ Automatic start/stop system
- ▶ Lighting kit
- ▶ On/off switch via suction hood
- ▶ Aluminium mesh pre-filter
- ▶ Protection grille for extraction hood

Technical Data

CareMaster-IFA Mechanical filter unit

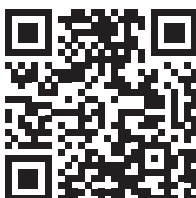
Max. volumetric flow of the fan	2 500 m ³ /h
Max. pressure	2 500 Pa
Motor performance	1,1 kW
Separation efficiency	$\geq 99\%$
Sound level	approx. 70 dB(A)
Dimensions (WxDxH)	665 x 681 x 995 mm
Weight	approx. 122 kg



CareMaster-IFA
(Art.-Nr. 97300101)



CareMaster
in **Action**



Our Hotline

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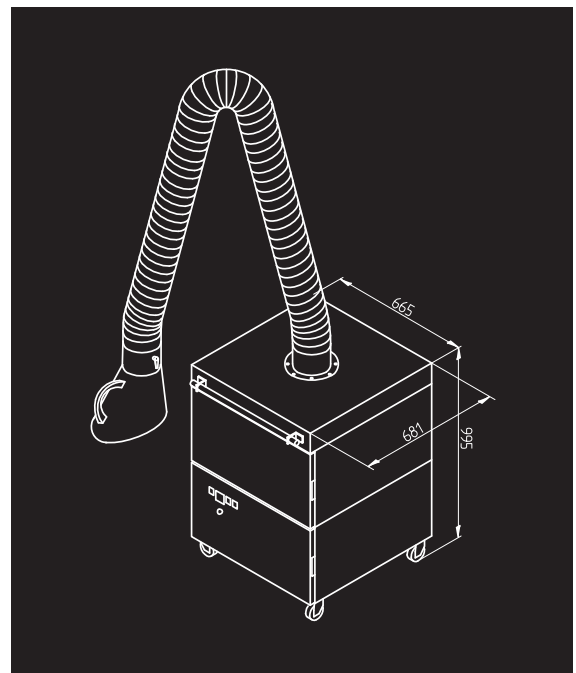


Image shows optional equipment with activated carbon filter

Available versions

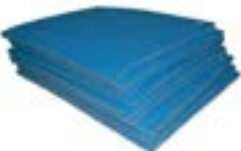
CareMaster-IFA Mechanical filter unit with 1 suction element

RGA

		Length		
		3 metres	4 metres	12 metres
Arm, hose type	Internal joints	97300101	97300102	
	External joints	97300111	97300112	
Hose with hood and magnetic base				97300140



Accessories for CareMaster mobile

	Pre-filter mats 10 pieces per set	610x610x20 mm	10032	RGE
	Particle filter F9 (Standard)	610x610x292 mm	10029	RGE
	Particle filter H13 (Optionally usable instead of particle filter F9)	610x610x292 mm	10030	RGE
	Particle filter H13	610x610x186 mm (when used with activated carbon cassette, Art.-No. 97053)	100357	RGE
	Activated carbon filter in replaceable housing	610x610x100 mm (only in conjunction with particle filter H13, Art.-No. 100357)	97053	RGE
	Aluminium wire mesh filter	610x610x15 mm	100008	RGB
	Protection grille for exhaust hood (not in conjunction with lighting kit)		10372	RGB

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	Standard exhaust hood incl. throttle	Ø 150	66200	RGB
	Metal exhaust hood incl. throttle	Ø 150	104901	RGB
	On/off switch via exhaust hood, preassembled	only on initial order	96313321	RGB
	Lighting kit, pre-assembled (not in conjunction with protection grille)	only on initial order	96323	RGB
	Adapter for exhaust hood angular (only for plastic hoods)	300x360 mm PVC, black	66210	RGF
	Adapter for exhaust hood round (only for plastic hoods)	400mm PVC, black	66220	RGF



StrongMaster-IFA Mobile cartridge filter unit, 1 suction element

Suitable for

Long-lasting fume extraction involving unalloyed and stainless steel, galvanized material and aluminium involving a strong fume production. This unit is IFA certified for welding fume class W3.



Description

Mobile cartridge filter unit, IFA certified in combination with all TEKA suction arms for the welding fumes class W3. The separation efficiency is $\geq 99\%$.

As the filter cartridge is dedustable, the unit only generates minimal follow up costs. The filter cartridge remains within the unit during dedusting which makes sure that no dust can reach the working space.

The unit meets the security requirements of the welding fume category W3 (highly alloyed steels). If you handle the unit correctly, you can use it in recirculation mode because it fulfills the requirements of the exceptional rules according to the new German Hazardous Substances Ordinance (GefStoffV).

A stable sheet steel construction with consistent powder coating ensures a low maintenance operation even under rough conditions.

A baffle plate serves to pre-separate gross particles. Afterwards, the filter cartridge separates the remaining dusts and fumes. The filter is dedusted via a maintenance door by means of a compressed air pistol on the clean air side. The particles are collected in a dust collecting tray and can be disposed of afterwards.

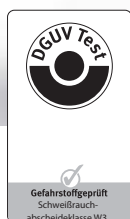
The air is exhausted on the backside of the unit through an outlet grill and rises up. Thus, at a 1 m distance, no disturbing air flow can be perceived any more.

The unit is fitted with a high-capacity snail fan with high negative pressure that guarantees a high volumetric flow even if the filter is saturated.

The filter cartridge (dust category M) is precoated with a special powder that increases its lifetime compared to regular filter cartridge enormously.



StrongMaster-IFA
(Art.-Nr. 97030101)



StrongMaster
in **Action**



Technical Data

StrongMaster-IFA Cartridge filter unit

Max. volumetric flow of the fan	1860 m ³ /h
Max. pressure	2900 Pa
Motor performance	1,1 kW
Separation efficiency	$\geq 99\%$
Sound level	approx. 70 dB(A)
Dimensions (W×D×H)	665×820×1365 mm
Weight	approx. 130 kg

Our Hotline

+49 25 41 84 84 1 300

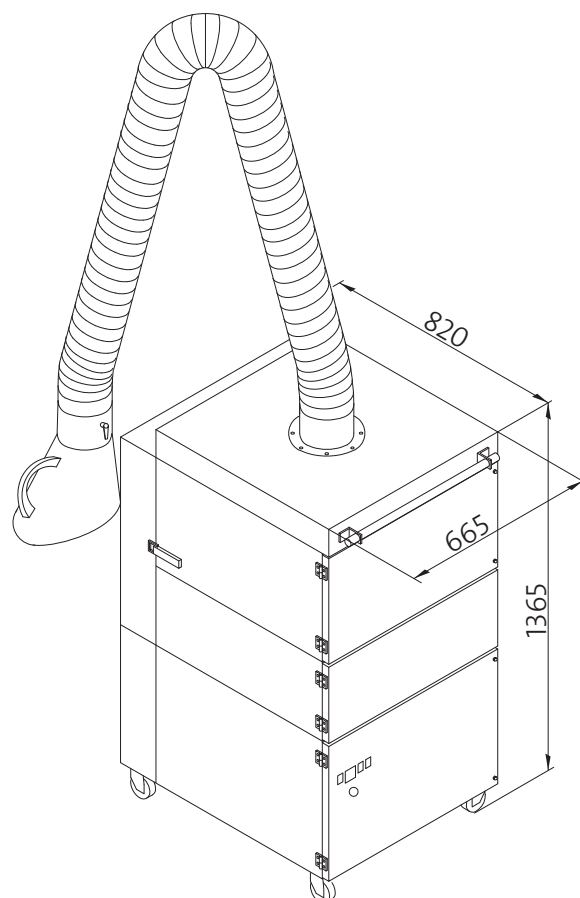


Standard equipment

- ▶ Baffle plate
- ▶ Long lasting, dedustable filter cartridge
- ▶ Optical and acoustic filter monitoring
- ▶ Sealing device
- ▶ Operating hours meter
- ▶ Suction arm Ø 150 mm or
12 m suction hose Ø 150 mm
- ▶ 5 m power cord
- ▶ PE bag for the dust collecting tray

Available as an option (with IFA Certificate)

- ▶ Automatic start/stop system
- ▶ On/off switch via suction hood
- ▶ Lighting kit
- ▶ Protection grille for extraction hood



Available versions

StrongMaster-IFA Cartridge filter unit, 1 suction element

RGA

		Length		
		3 metres	4 metres	12 metres
Arm, hose type	Internal joints	97030101	97030102	
	External joints	97030111	97030112	
Hose with exhaust hood and magnetic base				97030140



Accessories for StrongMaster-IFA



Filter cartridge, filter area 10m²
327×600 mm,
10m², dust class M
(Standard)

6160600110008

RGD



Filter cartridge, type easy clean
plus, 327 x 600 mm, 12,5 m²

6160600212508

RGD



Protection grille for exhaust
hood (not in conjunction with
lighting kit)

10372

RGB



PE bags (pack of 10)

10030250

RGB



NANNOX P50, 100 g
(in bucket)

68130000100

RGB



Standard exhaust hood incl.
throttle

NW 150

66200

RGB

Our Hotline

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	Metal exhaust hood incl. throttle	Ø 150		104901		RGB
	On/off switch via exhaust hood, preassembled	only on initial order		96313321		RGB
	Lighting kit, pre-assembled (not in conjunction with protection grille)	only on initial order	only on initial order	only on initial order		RGB
	Adapter for exhaust hood angular (only for plastic hoods)	300x360 mm PVC, black	300x300mm PVC, black	300x300mm PVC, black		RGF
	Adapter for exhaust hood round (only for plastic hoods)	400mm PVC, black	400mm PVC, black	400mm PVC, black		RGF



CartMaster-IFA Mobile Cartridge filter unit, 1 suction element and automatic dedusting

Suitable for

Long-lasting fume extraction involving unalloyed and stainless steel, galvanized material and aluminium involving a strong fume production. This unit is IFA certified for welding fume class W3.



Description

Mobile cartridge filter unit with suction arm or 12 m suction hose.

The specially developed dedusting system guarantees optimal separation efficiency during the whole operation. The advantage of the POWER SPRAY-SYSTEM is not only its low maintenance construction without rotating jets (which wear off easily) but also the low dedusting pressure respectively low consumption of compressed air. The dedusted particles are collected in the dust collecting tray and can be disposed of afterwards.

The control contains a subsequent cleaning when the fan stands still.

A stable steel plate construction with consistent powder coating guarantees a low maintenance operation even under rough conditions.

A baffle plate serves as pre-separator for gross particles. The filter cartridge of the filter category BIA M separates the remaining fumes and dusts (separation efficiency $\geq 99\%$). The cartridge is coated ex works with a special filter medium. Thus, the lifetime increases considerably compared to that of standard filter cartridges.

The enormous advantage of this unit is its user-friendly construction with maintenance doors for all control areas and very low consequential costs because the cartridge is dedustable.

Standard equipment

- ▶ Fully automatic, contamination-related dedusting via POWER SPRAY-SYSTEM
- ▶ Pre-separator
- ▶ Durable filter cartridge with large filter surface
- ▶ Control with display
- ▶ Compressed air container
- ▶ Optical filter monitoring
- ▶ Sealing device
- ▶ Operating hours meter

CartMaster
(Art.-Nr. 97000101)



INCLUDING



Further information
on page 54

CartMaster
in **Action**



Technical Data

CartMaster-IFA Cartridge filter unit

Max. volumetric flow of the fan	1860 m ³ /h
Max. pressure	2900 Pa
Motor performance	1,1 kW
Separation efficiency	$\geq 99\%$
Sound level	approx. 70 dB(A)
Dimensions (W×D×H)	665×1100×1495 mm
Weight	approx. 160 kg

Our Hotline

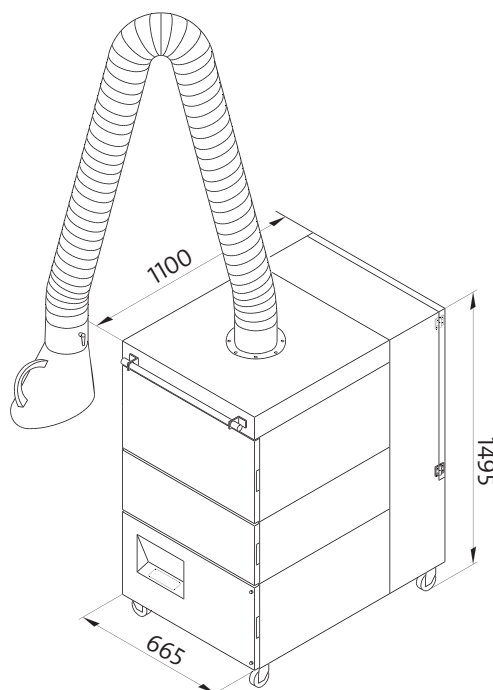
+49 25 41 84 84 1 300



- ▶ Suction arm Ø 150 mm or
12 m suction hose Ø 150 mm
- ▶ 5 m power cord
- ▶ PE bag for the dust collecting try

Available as an option

- ▶ Lighting kit
- ▶ On/off switch via suction hood
- ▶ Protection grille for extraction hood



Available versions

CartMaster Cartridge filter unit with 1 suction element

RGA

		Length		
		3 metres	4 metres	12 metres
Arm, hose type	Internal joints	97000101	97000102	
	External joints	97000111	97000112	
Hose with exhaust hood and magnetic base				97000140



Accessories for CartMaster-IFA



Filter cartridge, filter area 10m²
327×600 mm,
10m², dust class M
(Standard)

6160600110008

RGB



Filter cartridge, type easy clean
plus, 327 x 600 mm, 12,5 m²

6160600212508

RGB



Protection grille for exhaust
hood

10372

RGB



PE bags (pack of 10)

10030250

RGB



NANNOX P50 for
filter cartridges, 100 g (in
bucket)

68130000100

RGB



Standard exhaust hood incl.
throttle

Ø 150

66200

RGB

*Our Hotline***+49 25 41 84 84 1 300**

	Metal exhaust hood incl. throttle	Ø 150	104901	RGB
	On/off switch via exhaust hood, preassembled	only on initial order	96313321	RGB
	Lighting, preassembled	only on initial order	96323	RGB
	Adapter for exhaust hood angular (only for plastic hoods)	300x360 mm PVC, black	66210	RGF
	Adapter for exhaust hood round (only for plastic hoods)	400mm PVC, black	66220	RGF

CareMaster Wall-mounted mechanical filter unit with 1 or 2 suction elements

Suitable for

Fume extraction involving unalloyed steels



Description

A stable steel plate construction with consistent powder coating guarantees a low maintenance operation even under rough conditions.

The gross particles are separated in the pre-filter. Afterwards the air is guided through the particle filter where even finest fumes and dusts are separated. The sealing device guarantees an absolute impermeability and therefore the separation efficiency of the filter unit.

The unit is fitted with a high-capacity fan with high negative pressure which guarantees a high volumetric flow even if the filter is saturated.

From a length of 5 m on, the suction arm/crane is equipped with an additional wall bracket.

Standard equipment

- ▶ Extensive pre-filter mat
- ▶ Particle filter with separation efficiency $\geq 99\%$
- ▶ Optical filter monitoring
- ▶ Sealing device
- ▶ Operating hours meter
- ▶ External control
- ▶ Wall mount
- ▶ 5m connection cable
- ▶ 1 or 2 suction arm $\varnothing 150$ mm with hood (synthetics) incl. throttle valve
- or**
- ▶ nozzle $\varnothing 160$ mm

Available as an option

- ▶ Aluminium mesh pre-filter
- ▶ Activated carbon filter cartridge
- ▶ Automatic start/stop system
- ▶ Lighting kit
- ▶ On/off switch via suction hood
- ▶ Exhaust air connection
- ▶ Protection grille for suction hood

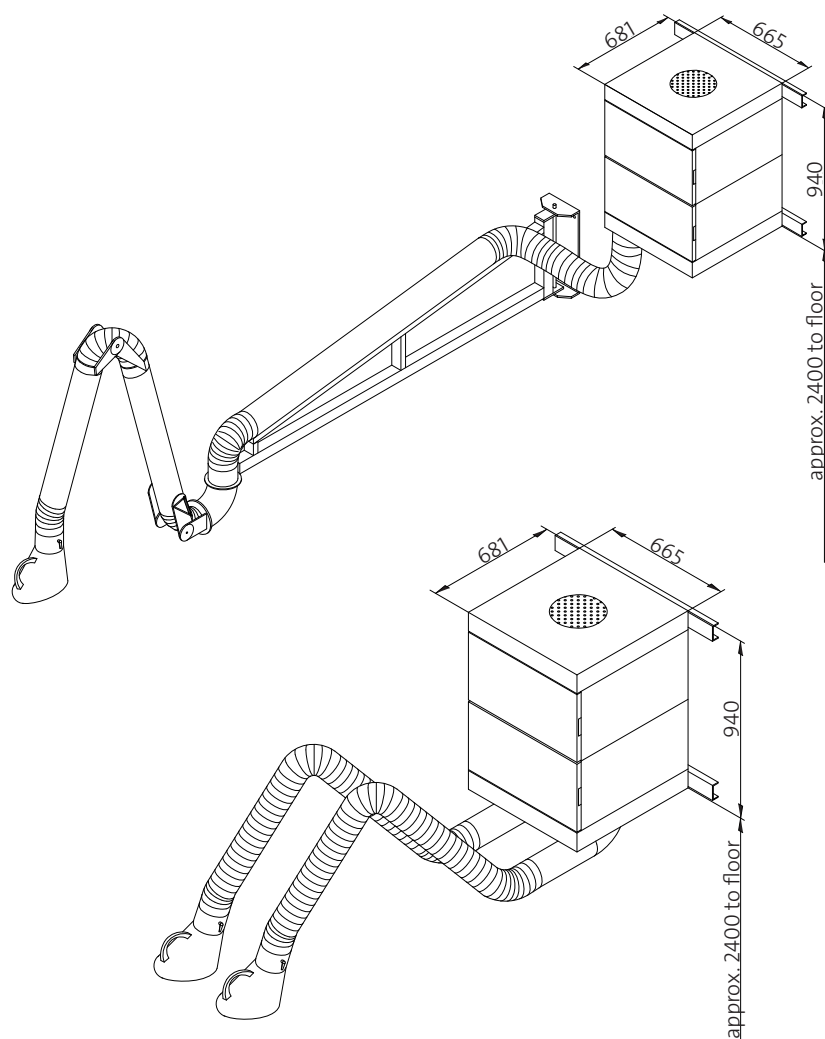
CareMaster
(Art.-Nr. 97400101)

CareMaster
(Art.-Nr. 97420101)

Technical Data

CareMaster Wall-mounted mechanical filter unit

Max. volumetric flow of the fan	1800–3500 m ³ /h
Max. pressure	2500 –3000 Pa
Motor performance	1,5–2,2 kW
Separation efficiency	$\geq 99\%$
Sound level	approx. 70 dB(A)
Dimensions (W×D×H)	665×681×940 mm
Weight	approx. 122 - 142 kg



Our Hotline
+49 25 41 84 84 1 300



Example of application: CareMaster wall mounted with additional nozzle plate attached to the suction hood

Available versions

CareMaster Wall-mounted mechanical filter unit with 1 suction element

RGA

		Length					
		3 metres	4 metres	5 metres	6 metres	7 metres	8 metres
1 x Arm, hose type with 3500 m³/h, 1,5 kW	Internal joints	97400101	97400102	97400103	97400104	97400105	97400106
	External joints	97400111	97400112	97400113	97400114	97400115	97400116
Nozzle	Ø 160	97430 with 3500 m³/h, 1,5 kW					

CareMaster Wall-mounted mechanical filter unit with 2 suction elements

RGA

		Length					
		3 metres	4 metres	5 metres	6 metres	7 metres	8 metres
2 x Arm, hose type with 3500 m³/h, 2,2 kW	Internal joints	97420101	97420102	97420103	97420104	97420105	97420106
	External joints	97420111	97420112	97420113	97420114	97420115	97420116
Nozzle	2 x Ø 160	97440					
	1 x Ø 250	97443					



Accessories for CareMaster wall-mounted

	Pre-filter mats 10 pieces per set	610x610x20 mm	10032	RGE
	Particle filter F9 (Standard)	610x610x292 mm	10029	RGE
	Particle filter H13 (Optionally usable instead of particle filter F9)	610x610x292 mm	10030	RGE
	Particle filter H13	610x610x186 mm (when used with activated carbon cassette, Art.-No. 97053)	100357	RGE
	Activated carbon filter in replaceable housing	610x610x100 mm (only in conjunction with particle filter H13, Art.-No. 100357)	97053	RGE
	Aluminium wire mesh filter	610x610x15 mm	100008	RGB
	Protection grille for exhaust hood		10372	RGB
	Standard exhaust hood incl. throttle	Ø 150	66200	RGB

Our Hotline

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	Metal exhaust hood incl. throttle	NW 150	104901	RGB
	On/off switch via exhaust hood, preassembled	only on initial order	96313321	RGB
	Lighting, preassembled (only on initial order)	for one arm	96323	RGB
		for two arms	96324	RGB
	Adapter for exhaust hood angular (only for plastic hoods)	300x360mm PVC, black	66210	RGF
	Adapter for exhaust hood round (only for plastic hoods)	400mm PVC, black	66220	RGF
	Master-Slave-Control 400V / 16A	automatic powering of a filter unit by connected devices	150010016	RGB
	Master-Slave-Control 400V / 32A	automatic powering of a filter unit by connected devices	150010032	RGB
	Master-Slave-Control 230V / 16A	automatic powering of a filter unit by connected devices	15001001602	RGB
	Master slave junction box	for the control of up to 3 master-slave controllers simultaneously	15001001604	RGB



CartMaster-IFA Wall-mounted cartridge filter unit, for up to 2 suction elements

Suitable for

Long-lasting fume extraction for welding involving unalloyed and stainless steel, galvanized material and aluminium involving a strong fume production. The unit is IFA certified for welding fume class W3.



Description

Stationary cartridge filter unit which is IFA-certified in combination with all TEKA suction arms or cranes according to DIN EN ISO 21904-1/-2.

The separation efficiency is $\geq 99\%$.

The unit corresponds to the security requirements of units of the welding fume category W3 (highly alloyed steels). If you handle the unit correctly, you can use it in a recirculation mode because it fulfills the requirements of the exceptional rules according to the new German Hazardous Substances Ordinance (GefStoffV).

A stable sheet steel construction with consistent powder coating guarantees a low maintenance operation even under rough conditions.

The specially developed dedusting system guarantees optimal separation efficiency during the whole operation. The advantage of the POWER SPRAY-SYSTEM is not only its low maintenance construction without rotating jets which are susceptible to wear, but also the low dedusting pressure and low consumption of compressed air.

The cleaned particles are collected in a freely accessible dust bin and can then be disposed of.

A baffle plate serves as protection device for the filter cartridges. The fumes and dusts are separated from the filter cartridges. They are coated ex works with a special filter agent. This increases their lifetime considerably compared to standard filter cartridges.

From a length of 5 m on, the suction arm/crane is equipped with an additional wall bracket.

Standard equipment

- ▶ Automatic filter monitoring
- ▶ Operating hours meter
- ▶ Fully automatic cleaning via POWER SPRAY-SYSTEM
- ▶ 2 durable filter cartridges (10 m² filter surface each)
- ▶ Dust collection bin
- ▶ Compressed air container
- ▶ Wall bracket
- ▶ Silencer



CartMaster-IFA
(Assembly example)



Technical Data

CartMaster-IFA Wall-mounted cartridge filter unit

Max. volumetric flow of the fan	3500 m ³ /h
Max. pressure	3000 Pa
Motor performance	2,2 kW
Separation efficiency	$\geq 99\%$
Sound level	approx. 72 dB(A)
Dimensions (W×D×H)	665 × 681 × 2100 mm
Weight	approx. 200 kg

Our Hotline

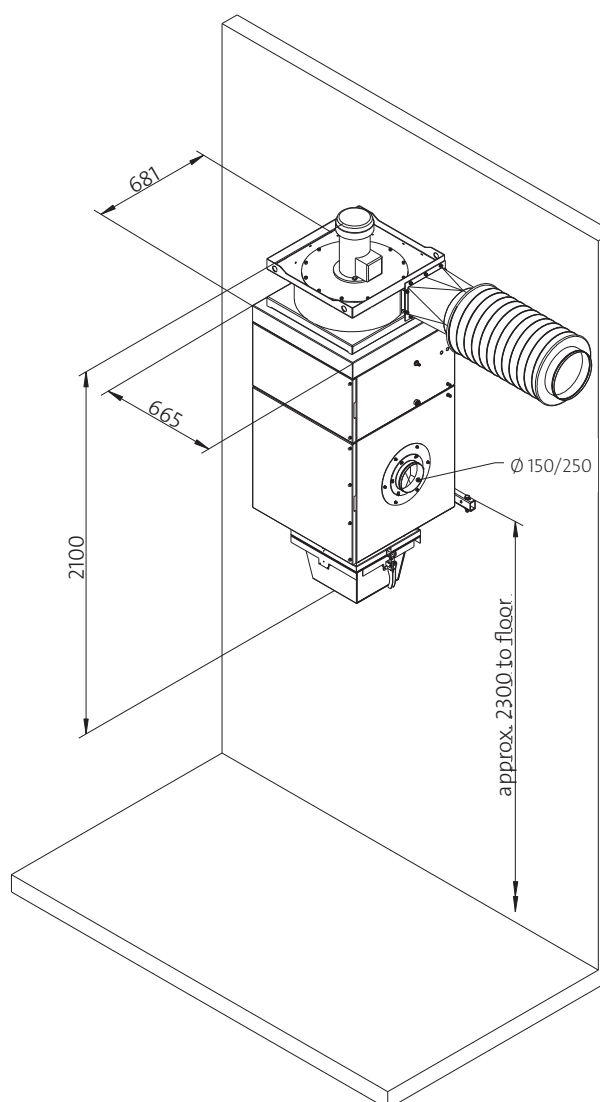
+49 25 41 84 84 1 300



- ▶ 2 suction nozzles $\varnothing$ 150 mm or
1 suction nozzle $\varnothing$ 250 mm
- ▶ PE bag for the dust collecting tray

Available as an option (with IFA Certificate)

- ▶ Automatic start/stop system
- ▶ Lighting kit
- ▶ On/off switch via suction hood
- ▶ Protection grille for
suction hood



suitable suction
elements can be
found on
page 125

Available versions

CartMaster-IFA Wall-mounted cartridge filter unit, for up to 2 suction elements

RGA

Nozzle	2x $\varnothing$ 150	97530
	1x $\varnothing$ 250	97532



Accessories for CartMaster wall-mounted



1x suction arm, length 4m
(additional extraction
elements can be found on
page 125)

Ø 150mm

97603

RGF



Filter cartridge, filter area
10m² 327×600 mm,
10m², dust class M
(Standard)

6160600110008

RGD



Filter cartridge, type easy
clean plus, 327 x 600 mm,
12,5 m²

6160600212508

RGD



PE bags (pack of 10)

10030251

RGB



NANNOX P50, 100 g
(in bucket, per m² of filter
surface 10g are required)

68130000100

RGB



Standard exhaust hood
incl. throttle

Ø 150

66200

RGB



Metal exhaust hood
incl. throttle

Ø 150

104901

RGB



Protection grille for ex-
haust hood (not in conjunc-
tion with a lighting kit)

10372

RGB



On/off switch
via exhaust hood,
preassembled

only on initial order

96313321

RGB

Our Hotline

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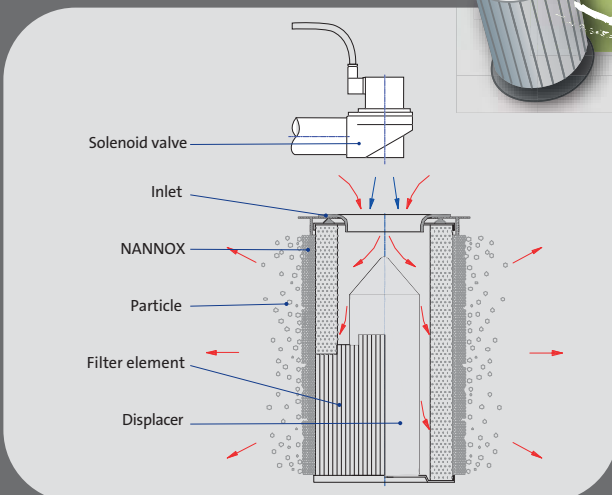
	Lighting, preassembled (only on initial order, not in conjunction with a protection grille)	for one arm	96323	RGB
		for two arms	96324	RGB
	Adapter for exhaust hood angular (only for plastic hoods)	300x360mm PVC, black	66210	RGF
	Adapter for exhaust hood round (only for plastic hoods)	only on initial order	66220	RGF
	Master-Slave-Control 400V / 16A	for one arm	150010016	RGB
	Master-Slave-Control 400V / 32A	for two arms	150010032	RGB
	Master-Slave-Control 230V / 16A	Automated control of the filter system by upstream devices	15001001602	RGB
	Master slave junction box	for controlling up to 3 master-slave controls simultaneously	15001001604	RGB



In the field of large-scale air pollution control systems, we offer devices for medium and high emission levels with fully automatic cleaning.

In addition, you will find high-performance systems in this area that can be installed at fixed locations in production halls and enable simultaneous extraction at several workstations via pipes or hoses. Our technicians optimally coordinate the various components for each customer.

TEKA POWER SPRAY-SYSTEM – Fully automatic dedusting



TEKA implements a fully automated dedusting systems for almost all units in the following category: the microprocessor-controlled POWER SPRAY-SYSTEM! Instead of the usual 8 bar with jet-/rotating nozzles this system requires barely 4 bar pressure. There are no follow-up costs for worn out rotating nozzles.

This intelligently developed system dispenses the air within the filter cartridge optimally.

If the filter has to be changed after extensive use at some point, the filter cartridge with the displacer is easily removable (common jet-/rotating nozzles have to be disassembled tediously).

The core piece of the POWER SPRAY-SYSTEM is the displacer within the filter cartridge. This displacer dispenses the incoming air evenly onto the Filter surface.

The cartridge is dedusted gently and effectively.



3. Large-scale air pollution control systems

TEKA® FIBER CUBE



FilterCube 2-IFA Central filter units

Suitable for

Various suction problems at several working places at the same time for work involving unalloyed metals and stainless steel, galvanized material and aluminium. The units are IFA certified for welding fume class W3.



Description

The stationary filter units FilterCube 2 is certified according to DIN EN ISO 21904-1/-2. The separation efficiency is $\geq 99\%$.

The unit meets the security requirements of units of the welding fume category W3 (highly alloyed steels). If you handle the unit correctly, you can use it for circulating air operation because it fulfills the requirements of the exceptional rules according to the new German Hazardous Substances Ordinance (GefStoffV).

The smoke and dust released are collected by suitable collection elements and fed into the filter system. A copper deflector plate serves as a pre-separator.

All filter units are fitted with hanging filter cartridges. Thus, the admission of the cartridges is carried out on the side. Heavy particles fall down directly into the dust container. The filter cartridges are precoated ex works with a special filter medium. This increases their lifetime compared to standard cartridges considerably.

The dedusting is controlled by a microprocessor by means of the display control via the POWER SPRAY-SYSTEM.

Standard equipment

- ▶ Fully automatic dedusting via POWER SPRAY-SYSTEM
- ▶ Display control unit
- ▶ 2 large filter cartridges, each 600 or 1,200 mm long
- ▶ Dust collecting tray with sealing device
- ▶ Fan within a soundproof housing
- ▶ Integrated compressed air container
- ▶ Control unit for the fan
- ▶ Maintenance doors for all operating areas
- ▶ Suction nozzle according to type $\varnothing 160 - 280$ mm
- ▶ PE bag for the dust collecting tray

Available as an option (with IFA-Certificate)

- ▶ Safety device with particle sensor, extinguishing device and door with viewing window(s)
- ▶ Continuous precoating device
- ▶ Spark pre-separator
- ▶ Easy-Clean-Plus filter cartridges



FilterCube 2H with safety upgrade (available as an option)



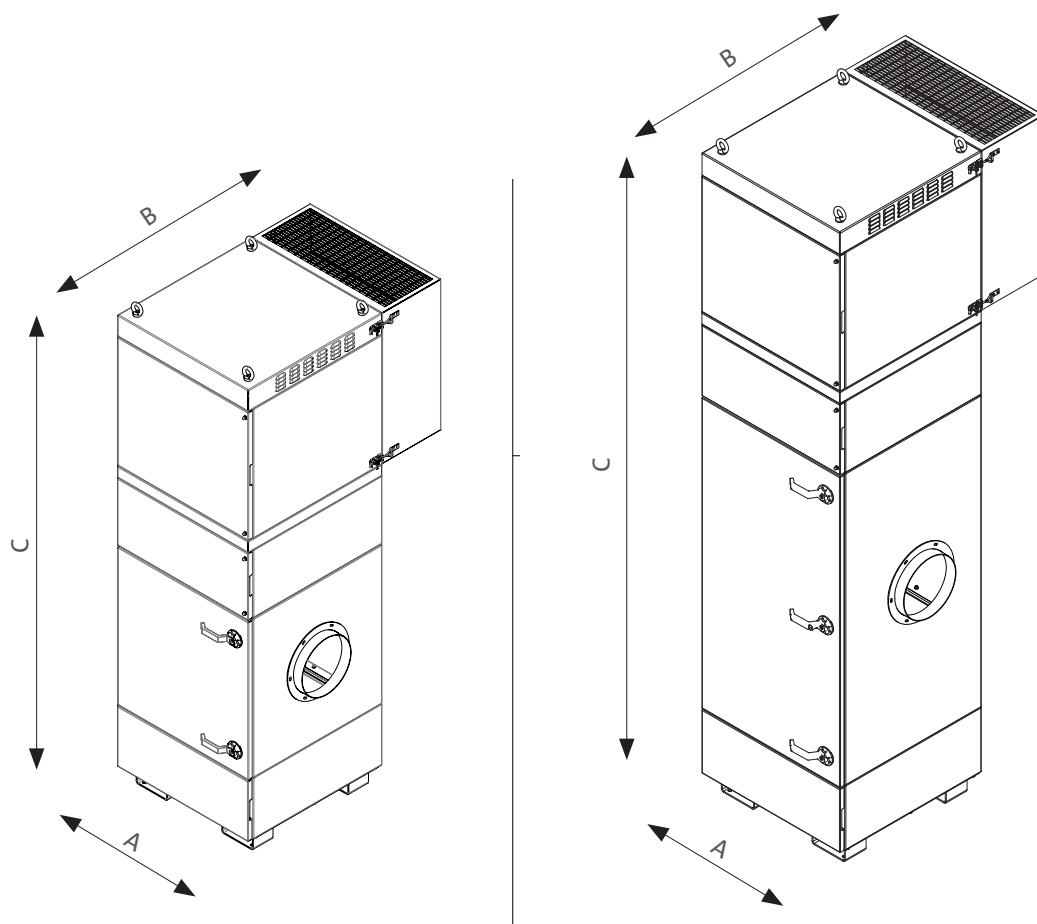
Technical Data

FilterCube 2 Central filter units

Max. volumetric flow of the fan	2500 – 5000 m ³ /h
Max. pressure	2900 – 3600 Pa
Motor performance	1,5 – 4,0 kW
Separation efficiency	$\geq 99\%$
Sound level	approx. 72 dB(A)
Dimensions (W×D×H)	665 x 982 x 2.129–2.729 mm

Our Hotline

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		1,5 kW	2,2 kW	3,0 kW	4,0 kW
FilterCube 2N	A	665 mm	665 mm	-	-
	B	982 mm	982 mm	-	-
	C	2129 mm	2129 mm	-	-
FilterCube 2H	A	-	-	665 mm	665 mm
	B	-	-	982 mm	982 mm
	C	-	-	2729 mm	2729 mm

Available versions

FilterCube 2 Central filter units, IFA-certified

RGC

Type	Motor performance	Filter cartridge	Max. volumetric flow of the fan	Max. pressure	Item number
FilterCube 2N	1,5 kW	2x 7,8 m ²	2500 m ³ /h	2900 Pa	9501420015015300
FilterCube 2N	2,2 kW	2x 10,0 m ²	3500 m ³ /h	2900 Pa	9501420022020300
FilterCube 2H	3,0 kW	2x 15,6 m ²	4000 m ³ /h	3300 Pa	9501421030031300
FilterCube 2H	4,0 kW	2x 20,0 m ²	5000 m ³ /h	3600 Pa	9501421040040300

FilterCube 4-IFA Central filter units

Suitable for

Various suction problems at several working places at the same time for work involving unalloyed metals and stainless steel, galvanized material and aluminium. The units are IFA certified for welding fume class W3.



Description

The stationary filter units FilterCube 4 is certified according to DIN EN ISO 21904-1/-2. The separation efficiency is $\geq 99\%$.

The unit meets the security requirements of units of the welding fume category W3 (highly alloyed steels). If you handle the unit correctly, you can use it for circulating air operation because it fulfills the requirements of the exceptional rules according to the new German Hazardous Substances Ordinance (GefStoffV).

The released fumes and dusts are extracted via appropriate suction elements and guided into the filter unit. A perforated plate with large surface serves as pre-separator and distributes the particles on the whole filter surface.

All filter units are fitted with hanging filter cartridges. Thus, the admission of the cartridges is carried out on the side. Heavy particles fall down directly into the dust container. The filter cartridges are precoated ex works with a special filter medium. This increases their lifetime compared to standard cartridges considerably.

The dedusting is controlled by a microprocessor by means of the display control via the POWER SPRAY-SYSTEM.

Standard equipment

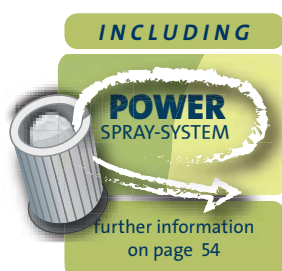
- ▶ Fully automatic dedusting via POWER SPRAY-SYSTEM
- ▶ Display control unit
- ▶ 4 large filter cartridges, each 600 or 1,200 mm long
- ▶ Dust collecting tray with sealing device
- ▶ Fan with silencer
- ▶ Integrated compressed air container
- ▶ Control unit for the fan
- ▶ Maintenance door in the filter cartridge housing
- ▶ Suction nozzle according to type $\varnothing 160 - 315$ mm
- ▶ PE bag for the dust collecting tray

Available as an option (with IFA Certificate)

- ▶ Safety device with particle sensor, extinguishing device and door with viewing window(s)
- ▶ Continuous precoating device
- ▶ Spark pre-separator
- ▶ Easy-Clean-Plus filter cartridges
- ▶ Silence module for ventilator
- ▶ Soundproof housing (only in conjunction with silence module, only for 4H)



FilterCube 4H with safety upgrade (available as an option)



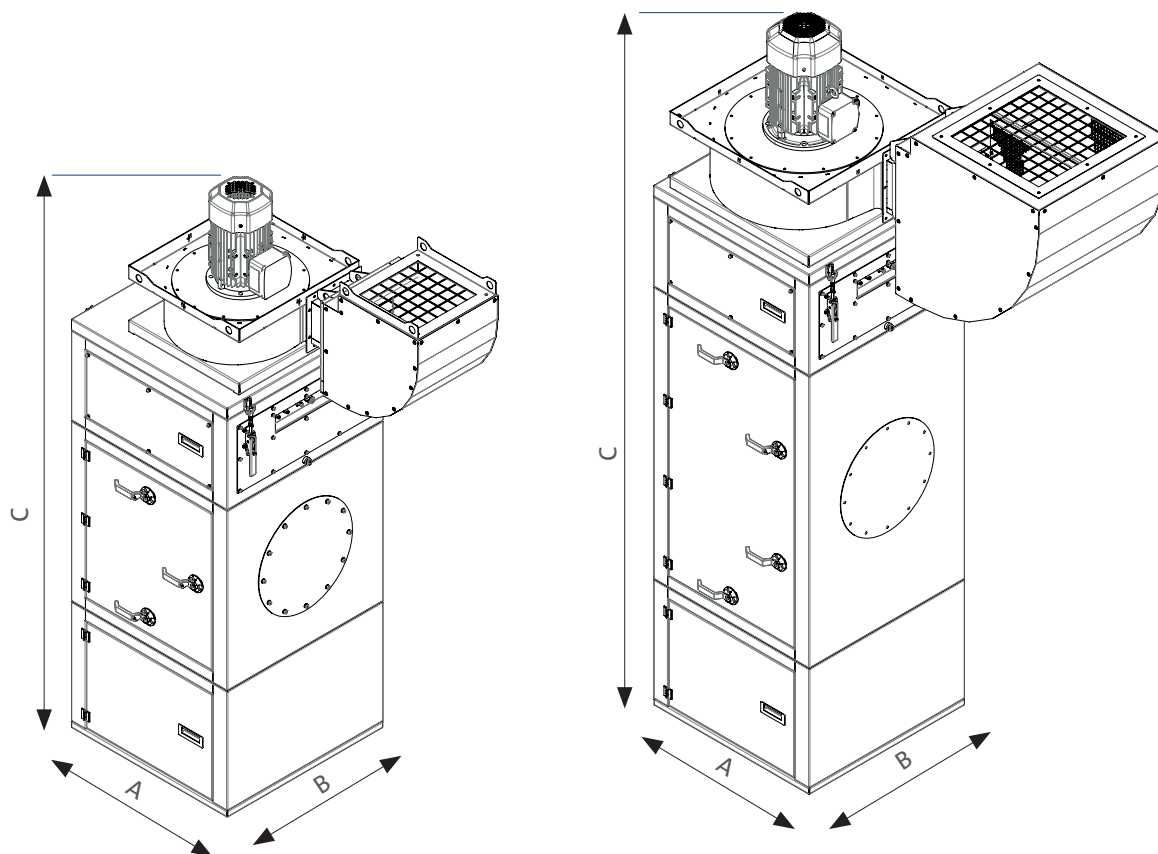
Technical Data

FilterCube 4 Central filter units

Max. volumetric flow of the fan	3.500–10.000 m ³ /h
Max. pressure	2.700–4.600 Pa
Motor performance	2,2–11,0 kW
Separation efficiency	$\geq 99\%$
Sound level	approx. 72 dB(A)
Dimensions (W×D×H)	800 x 800 x 2.590–3.170 mm

Our Hotline

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		2,2 kW	3,0 kW	4,0 kW	5,5 kW	7,5 kW	11,0 kW
FilterCube 4N	A	800 mm	800 mm	800 mm	-	-	-
	B	800 mm	800 mm	800 mm	-	-	-
	C	2590 mm	2590 mm	2590 mm	-	-	-
FilterCube 4H	A	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm
	B	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm
	C	3040 mm	3040 mm	3040 mm	3170 mm	3170 mm	3170 mm

Available versions

FilterCube 4 Central filter units, IFA-certified



Typ	Motor performance	Filter cartridges	Max. volumetric flow of the fan	Max. pressure	Item No.
FilterCube 4N	2,2 kW	4x 7,8 m ²	3.500 m ³ /h	2.900 Pa	9501440022031100
FilterCube 4N	3,0 kW	4x 10,0 m ²	4.000 m ³ /h	3.300 Pa	9501440030040100
FilterCube 4N	4,0 kW	4x 10,0 m ²	5.000 m ³ /h	3.600 Pa	9501440040040100
FilterCube 4H	2,2 kW	4x 7,8 m ²	3.500 m ³ /h	2.900 Pa	9501441022031100
FilterCube 4H	3,0 kW	4x 7,8 m ²	4.000 m ³ /h	3.300 Pa	9501441030031100
FilterCube 4H	4,0 kW	4x 10,0 m ²	5.000 m ³ /h	3.600 Pa	9501441040040100
FilterCube 4H	5,5 kW	4x 15,6 m ²	6.000 m ³ /h	4.100 Pa	9501441055062100
FilterCube 4H	7,5 kW	4x 20 m ²	7.500 m ³ /h	3.950 Pa	9501441075080100
FilterCube 4H	11,0 kW	4x 25 m ²	10.000 m ³ /h	4.600 Pa	9501441110100100



Accessories for FilterCube-IFA

		4H	4N	2H	2N		
Standard	 Filter Cartridge 7,8 m² Standard, 327 x 600 mm (Standard for 4H: 2,2 kW/3,0 kW - 4N: 2,2 kW - 2N: 1,5 kW)	2,2 kW 3,0 kW	2,2 kW	-	1,5 kW	6160600107808	RGD
	 Filter Cartridge 10 m² Standard, 327 x 600 mm (Standard for 4H: 4,0 kW - 4N: 2,2 kW/3,0 kW - 2N: 2,2 kW)	4,0 kW	3,0 kW 4,0 kW	-	2,2 kW	6160600110008	RGD
	 Filter Cartridge 15,6 m² Standard, 327 x 1200 mm (Standard for 4H: 5,5 kW - 2H: 3,0 kW)	5,5 kW	-	3,0 kW	-	6161200115608	RGD
	 Filter Cartridge 20 m² Standard, 327 x 1200 mm (Standard for 4H: 7,5 kW - 2H: 4,0 kW)	7,5 kW	-	4,0 kW	-	6161200120008	RGD
	 Filter Cartridge 25,3 m², Easy Clean Plus, 327 x 1200 mm (Standard for 4H: 11,0 kW)	11,0 kW	-	-	-	6161200225308	RGD
Cartridges, Length 600 mm							
Length 600 mm	 Filter cartridge, Type easy clean plus, Dim.: 327 x 600 mm, Filter surface: 7,7m²	2,2 kW 3,0 kW 4,0 kW	2,2 kW 3,0 kW 4,0 kW	-	1,5 kW 2,2 kW	6160600207706	RGD
	 Filter cartridge, Type easy clean nano, Dim.: 327 x 600 mm, Filter surface: 7,7m²	2,2 kW 3,0 kW 4,0 kW	2,2 kW 3,0 kW 4,0 kW	-	1,5 kW 2,2 kW	6160600307706	RGD
	 Filter cartridge, Type easy clean plus, Dim.: 327 x 600 mm, Filter surface: 12,5m²	2,2 kW 3,0 kW 4,0 kW	2,2 kW 3,0 kW 4,0 kW	-	1,5 kW 2,2 kW	6160600212508	RGD
	 Filter cartridge, Type easy clean nano, Dim.: 327 x 600 mm, Filter surface: 12,6m²	2,2 kW 3,0 kW 4,0 kW	2,2 kW 3,0 kW 4,0 kW	-	1,5 kW 2,2 kW	6160600312606	RGD
Cartridges, Length 1200 mm							
Length 1200 mm	 Filter cartridge, Type easy clean plus, Dim.: 327 x 1200 mm, Filter surface: 15,6 m² (for FilterCube 4 mit 5,5 kW/7,5 kW/11,0kW)	5,5 kW 7,5 kW 11,0 kW	-	3,0 kW 4,0 kW	-	6161200215606	RGD
	 Filter cartridge, Type easy clean nano, Dim.: 327 x 1200 mm, Filter surface: 15,6m² (for FilterCube 4 mit 5,5 kW/7,5 kW/11,0kW)	5,5 kW 7,5 kW 11,0 kW	-	3,0 kW 4,0 kW	-	6161200315606	RGD
	 Filter cartridge, Type easy clean plus, Dim.: 327 x 1200 mm, Filter surface: 25,3m² (for FilterCube 4 mit 5,5 kW/7,5 kW/11,0kW)	5,5 kW 7,5 kW 11,0 kW	-	3,0 kW 4,0 kW	-	6161200225308	RGD
	 Filter cartridge, Type easy clean nano, Dim.: 327 x 1200 mm, Filter surface: 25,3m² (for FilterCube 4 mit 5,5 kW/7,5 kW/11,0kW)	5,5 kW 7,5 kW 11,0 kW	-	3,0 kW 4,0 kW	-	6161200325308	RGD



	4H	4N	2H	2N		
 Extension set H13 filter Silence module with maintenance door, unit height increases by approx. 500 mm	■	■			4000950144002	RG C
 Extension set for activated carbon filter, only on initial order, Filter housing with maintenance door, Unit height increases by approx. 602 mm, suitable for all FilterCubes	■	■			40009501440	RG C
 Cartridge protection NANNOX, 100g (in bucket, per m² filter surface 10g is required)	■	■	■	■	68130000100	RG B
 Cartridge protection NANNOX, 400g (in bucket, per m² filter surface 10g is required)	■	■	■	■	68130000400	RG B
Cartridge protection NANNOX, 10kg (in bag, per m² filter surface 10g is required)	■	■	■	■	68130010000	RG B
 PE-bags (pack of 10)	■	■			10030251	RG B
			■	■	10030250	RG B
Frequency converter with pressure transmitter incl. intelligent filter control	■	■			962002009022	RG C
	■	■			962002009030	RG C
	■	■			962002009040	RG C
	■				962002009055	RG C
	■				962002009075	RG C
	■				962002009110	RG C
 Option silence module, blowing left	■	■			950144194712	RG C
 Option silence module, blowing right	■	■			950144194718	RG C
 Option silence module with soundproof housing on the back	2,2 kW 4,0 kW				950144194012	RG C
 Option silence module with soundproof housing on the back	5,5 kW 7,5 kW 11,0 kW				950144194011	RG C
Adapter (soundproof housing) to diam. 500mm, required when venting to atmosphere	■				9501441940111	RG C
Safety system with particle sensor, extinguishing device and door with viewing window(s)	■				99920441	RG C
		■			99920440	RG C
			■		99920421	RG C
				■	99920420	RG C



Accessories for FilterCube-IFA

	4H	4N	2H	2N		
 Master-Slave Control, 400V / 16A	■	■	■	■	150010016	RGB
 Master-Slave Control, 400V / 32A	■	■	■	■	150010032	RGB
 Master-Slave Control, 230V / 16A	■	■	■	■	15001001602	RGB
 Master slave junction box 24 V DC / 230 V AC	■	■			15001001604	RGB
 Dust discharge system "barrel", with hand flap, barrel included (requires additional frame Art. No. 8000950140203)	■				20189501401	RGC
 Dust discharge system "barrel", with rotary gate barrel included (requires additional frame Art. No. 8000950140203)	■				20189501402	RGC
 Frame for Dust discharge system "barrel" (Unit height increases by 1615 mm)	■				8000950140203	RGC
 Dust discharge system "BigBag", with rotary gate (requires additional frame Art. No. 8000950140204)	■				20189501404	RGC



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Frame for dust discharge system "BigBag"
(Unit height increases by 1615 mm)

4H

4N

2H

2N

8000950140204

RGC

Disposable BigBag with 4 slings,
Dim. 910 x 910 x 850 mm

■

5030909185

RGB

Steel sheet barrel 200 l,
RAL 7035, incl. lid

■

80000583

RGB

Protection system with particle sensor and
shutdown system for filter damages
(e.g. because of a fire)

■

99920401

RGF

Galvanized housing and heat tracing for the
solenoid valves for outdoor installation

■

on request



Transition piece for for TEKA
elbow silencer

300 x 300 to
dia. 280 mm

2,2 kW

2,2 kW

7045040001

RGC

300 x 300 to
dia. 315 mm

3,0 kW

3,0 kW

7045050001

RGC

300 x 300 to
dia. 355 mm

4,0 kW

4,0 kW

7045060001

RGC

450 x 450 to
dia. 400 mm

5,5 kW

7045010001

RGC

450 x 450 to
dia. 450 mm

7,5 kW

7045020001

RGF

450 x 450 to
dia. 500 mm

11,0 kW

7045030001

RGC

Stand console for electrical cabinet, color:
RAL 7035

■

■

96200300

RGC



Variants of the FilterCube 4H-IFA

Motor performance [kW]

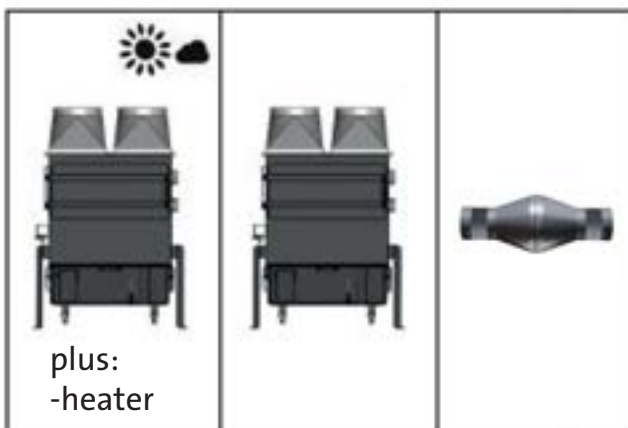
2,2 - 11,0

Add-On: Protection against sparks

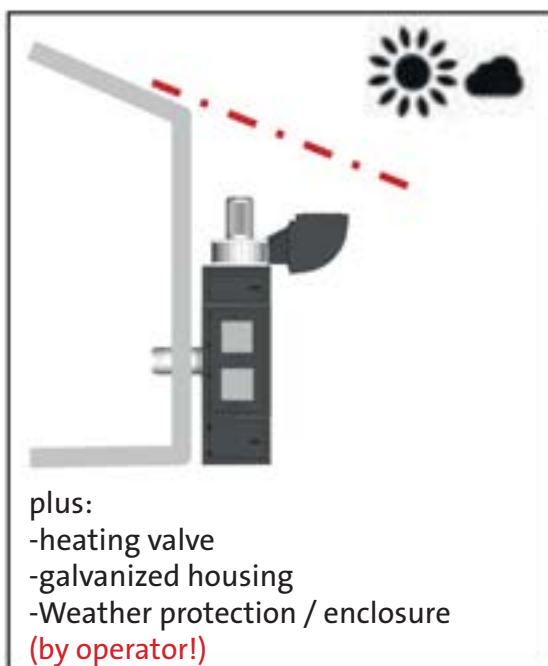
#1

#2

#3



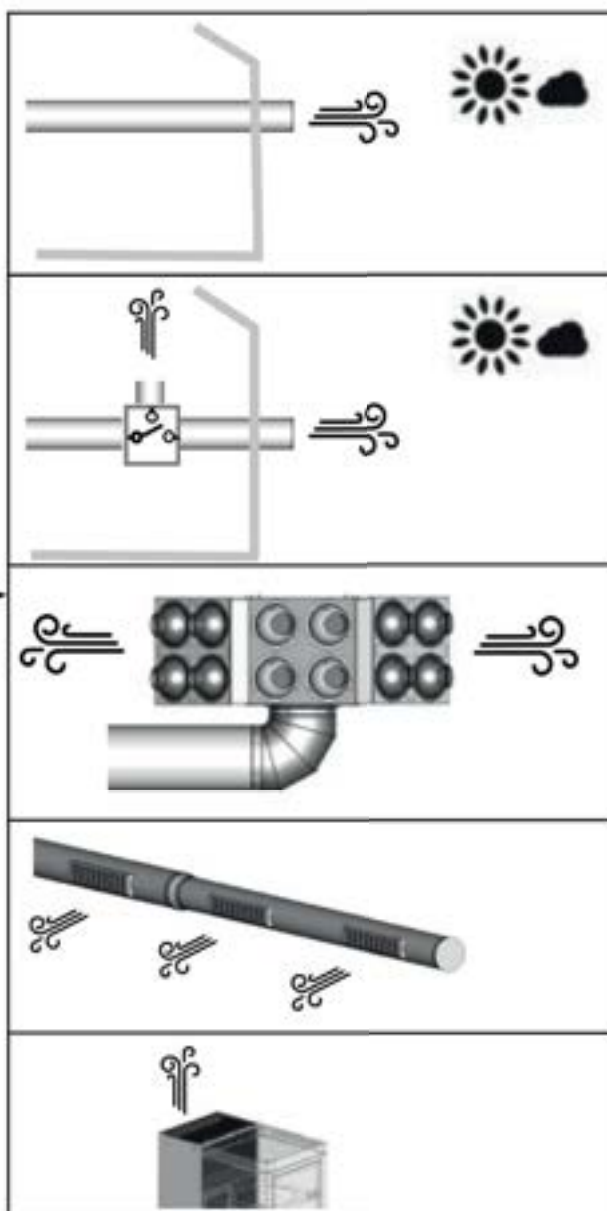
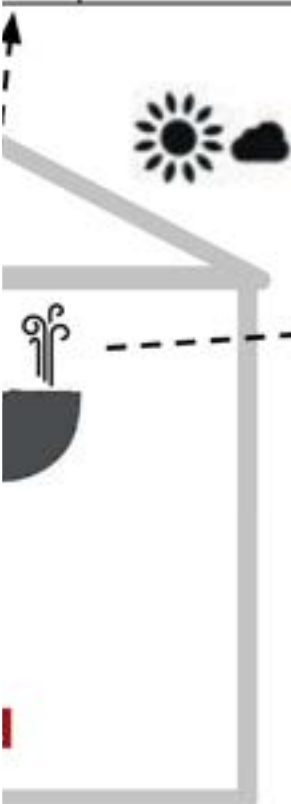
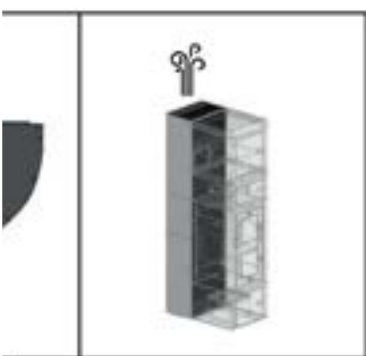
Outdoor use



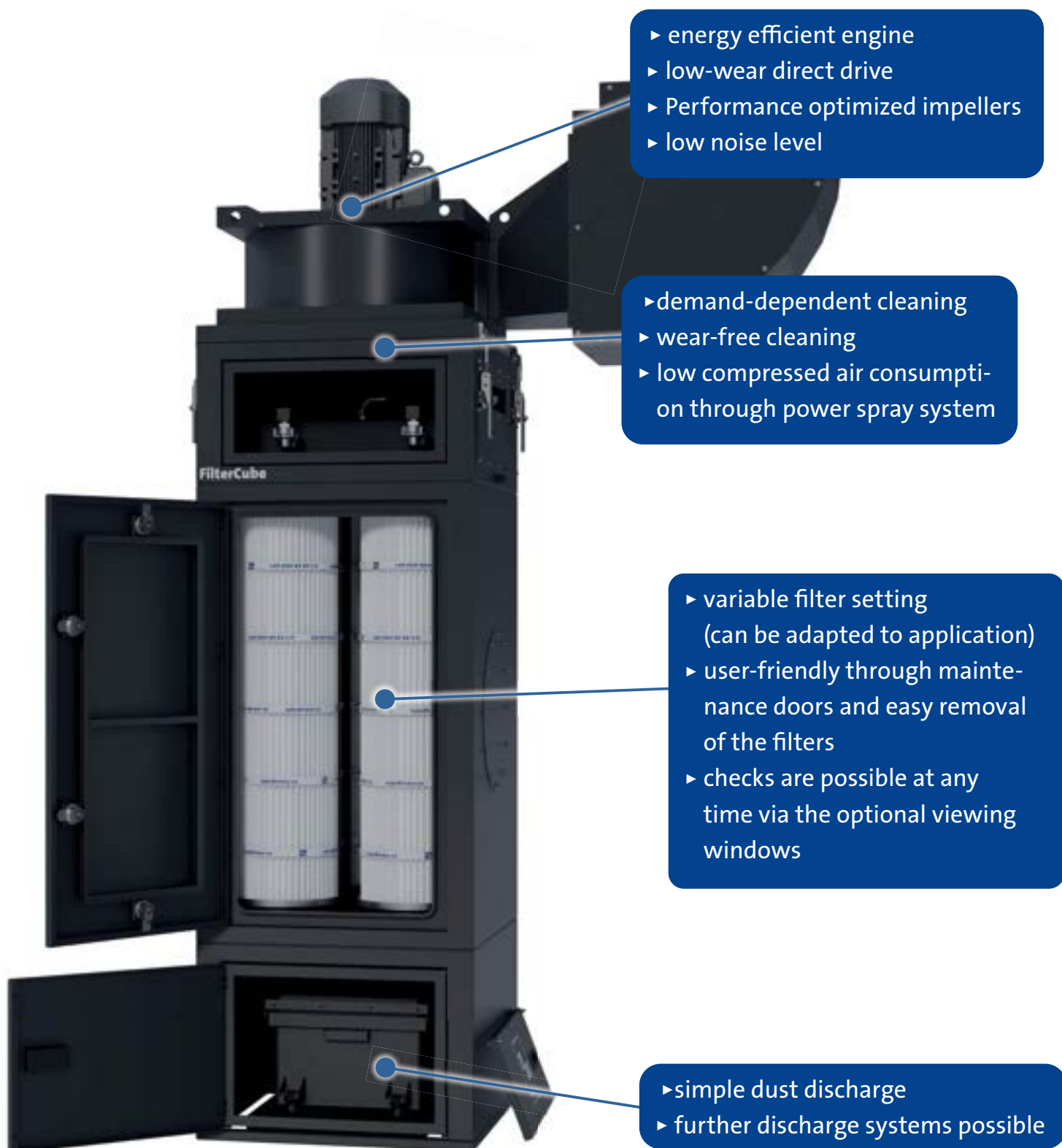


Our Hotline

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Advantages of the FilterCube 4H-IFA



- ▶ energy efficient engine
- ▶ low-wear direct drive
- ▶ Performance optimized impellers
- ▶ low noise level

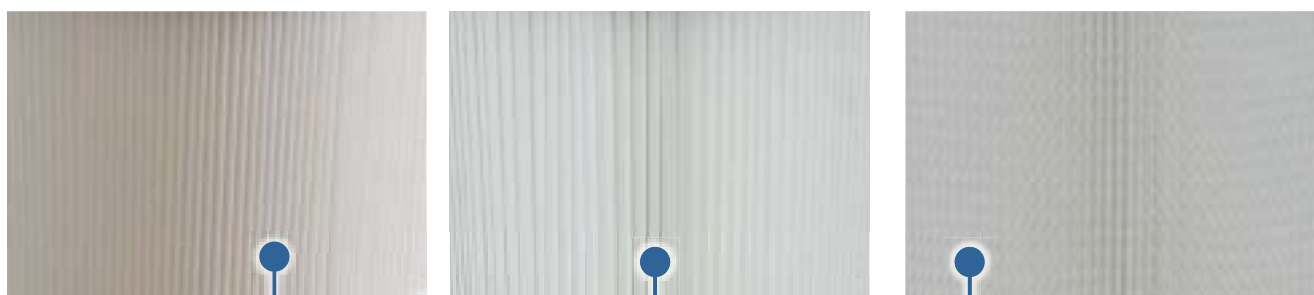
- ▶ demand-dependent cleaning
- ▶ wear-free cleaning
- ▶ low compressed air consumption through power spray system

- ▶ variable filter setting (can be adapted to application)
- ▶ user-friendly through maintenance doors and easy removal of the filters
- ▶ checks are possible at any time via the optional viewing windows

- ▶ simple dust discharge
- ▶ further discharge systems possible

*Our Hotline***+49 25 41 84 84 1 300**

Advantages of our filter cartridges



- ▶ different filter materials for a variety of applications
- ▶ high separation efficiency with low pressure loss
- ▶ mechanical stability through use of support belts and support cage
- ▶ self-extinguishing
- ▶ washable
- ▶ no cellulose material
- ▶ long service life





ZPF Central suction and filter unit

Suitable for

Various extraction tasks at several working places at the same. Especially suitable for large amounts of air. This unit is IFA certified for welding fume class W3.



ZPF with fan on top

Description

The central, self-dedusting cartridge filter system cleans the polluted air that is guided by an extraction element suitable for practical application through a specially designed ducting system.

All filter units are equipped with hanging filter cartridges of the dust category M (separation efficiency $\geq 99\%$). Thus, the cartridges are admitted on the side. Heavy particles immediately fall into the dust collecting container.

The filter cartridges are coated ex works with a special filter medium. This increases their lifetime compared to standard cartridges.

The advantages of this self-dedusting system are the optimal dedusting performance (high lifetime of the cartridges, high extraction performance), the user-friendliness and the low maintenance. The dedusting is controlled by a microprocessor by means of the display control via the POWER SPRAY-SYSTEM.

Standard equipment

- ▶ Fully automatic cleaning via POWER SPRAY system
- ▶ 6 to 27 large filter cartridges with 25 m² filter surface
- ▶ Dust bin with snap closures
- ▶ Powerful fan with control
- ▶ Integrated compressed air tank
- ▶ Maintenance doors for all operating areas
- ▶ Display control
- ▶ Filter protection NANNOX
- ▶ PE bags for the dust collection unit

Available as an option

- ▶ Silence module
- ▶ Spark pre-separator
- ▶ Safety device with particle sensor, extinguishing device and door with viewing window(s)

INCLUDING

POWER SPRAY-SYSTEM

further information
on page 54

Technical Data

ZPF Central suction and filter unit

Max. volumetric flow of the fan	5000–42000 m ³ /h
Max. pressure	2500–5600 Pa
Motor performance	5,5–55,0 kW
Separation efficiency	$\geq 99\%$
Filter surface	150 m ² - 675 m ²

Let us configure
your ZPF version!

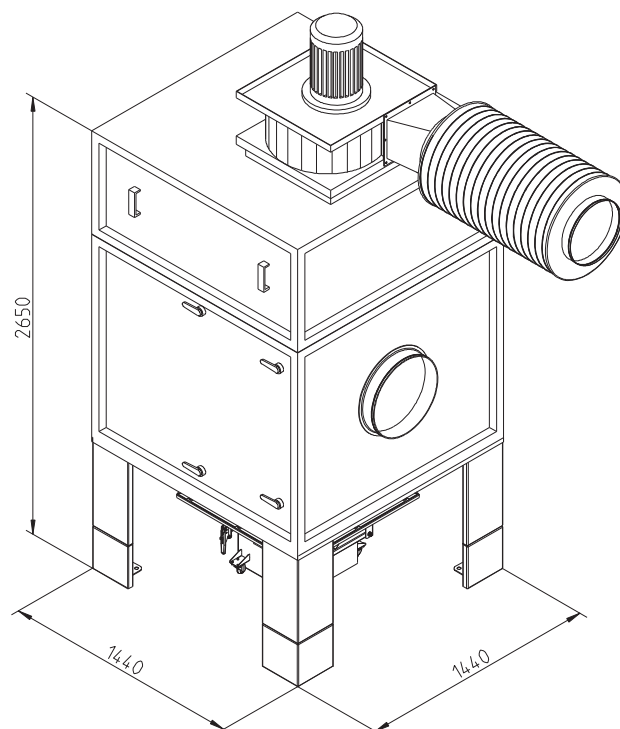




ZPF with adjacent fan in a soundproof housing



ZPFs set up modularly with increased suction power and filter surface

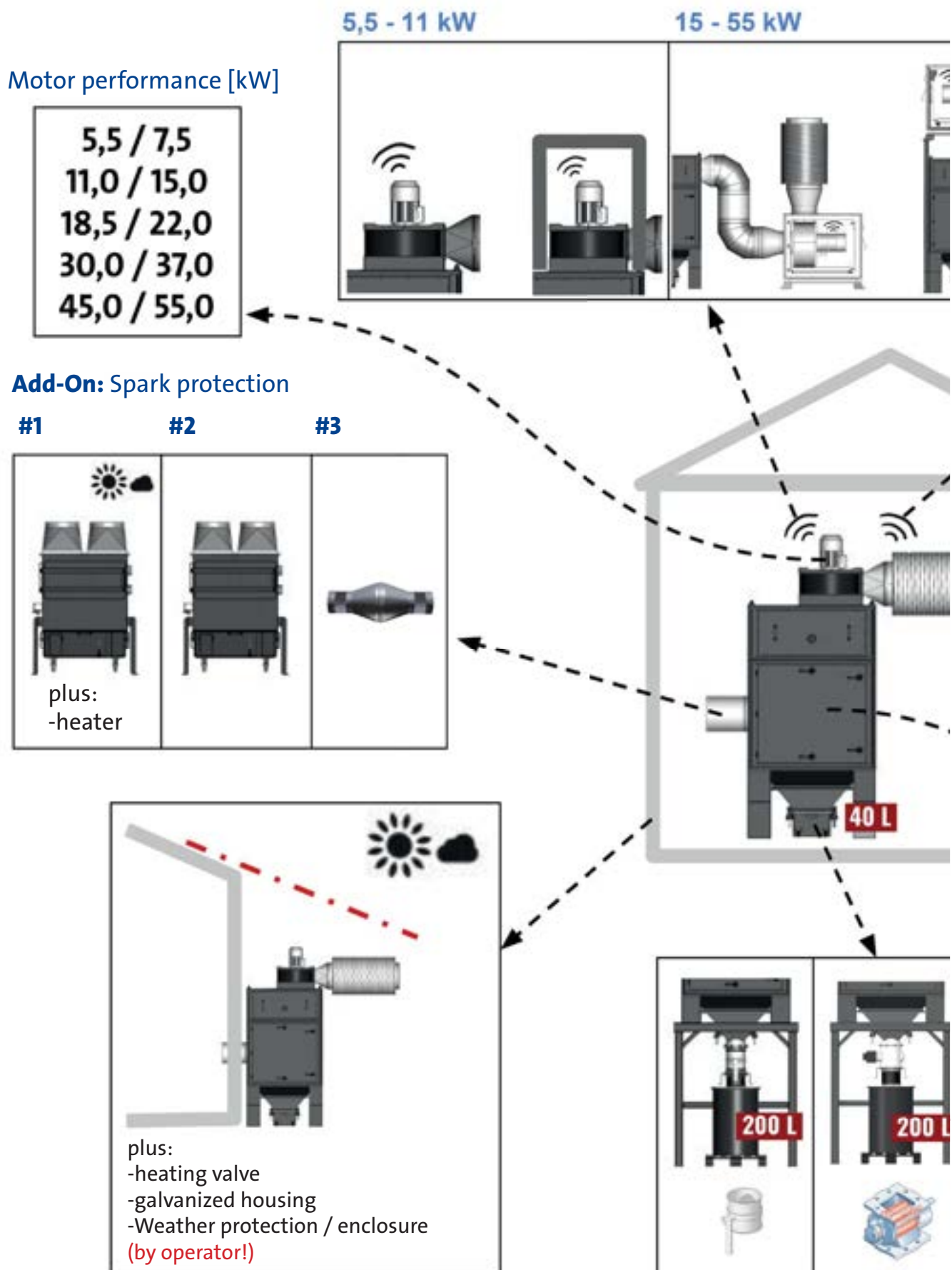


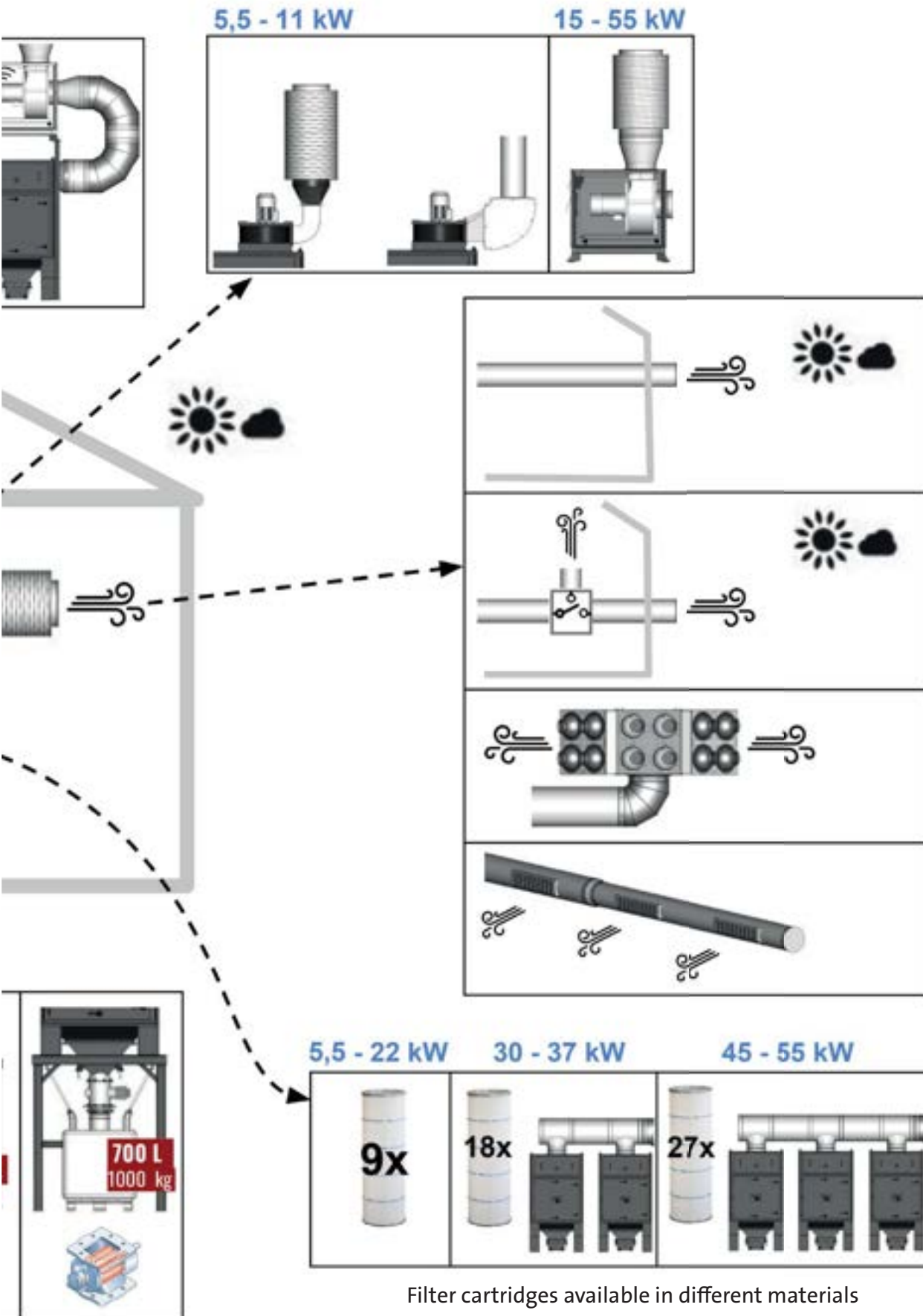
Accessories for ZPF

	Filter cartridges 15,6 m², 327 x 1200 mm 6 to 9 cartridges per module		6161200115608	RGD
	Filter cartridges 20 m², 327 x 1200 mm 6 to 9 cartridges per module		6161200120008	RGD
	Filter cartridge 25,3 m², Easy Clean Plus, 327 x 1200 mm 6 to 9 cartridges per module		6161200225308	RGD
	Master-Slave- Control 400V / 16A	valve control and automatic powering of a filter unit by connected devices	150010016	RGB
	Master-Slave- Control 400V / 32A	valve control and automatic powering of a filter unit by connected devices	150010032	RGB
	Master-Slave- Control 230V / 16A	valve control and automatic powering of a filter unit by connected devices	15001001602	RGB
	Master-Slave connection unit	for the control of up to 3 master-slave controllers simultaneously	15001001604	RGB



Variants of ZPF



*Our Hotline***+49 25 41 84 84 1 300**

Filter cartridges available in different materials

CleanAirCube

Suitable for

Supplementary room ventilation system



Description

The CleanAirCube is a room ventilation extraction and filtration system with disposable filter. It is mainly used in industrial plants, in particular in welding shops. The standalone unit removes dust and smoke, for example, and is suitable as a supplement to the point extraction systems.

The CleanAirCube serves as a preventive measure, which takes effect before there is any danger from dangerous dust. As an alternative, the CleanAirCube can also be used to keep the hall air clean.



CleanAirCube



CleanAirCube-Filter



Clear controls with operating hours counter and signal horn

Technical Data

CleanAirCube

Max. volumetric flow of the fan	8000 m ³ /h
Motor performance	550 W
Voltage	230 V / 50 Hz
Separation efficiency	> 99%
Current consumption	4 A
Noise level	65 dB(A)
Dimensions (W x D x H)	865 x 682 x 2778 mm

Our Hotline

+49 25 41 84 84 1 300



Application example: CleanAirCube in a storage area

Available versions

CleanAirCube

20170201

RGC

OctaVent

Suitable for

Supplementary room ventilation system



Description

The OctaVent is an effective room ventilation, extraction and filter system. It was developed to reliably clean the air within a radius of up to 9 m, which corresponds to an area of approximately 250 m².

The air is extracted at a height of 4 m. The inlet is equipped with baffle plates that removes coarse particles directly and increase the service life of the filter.

The air is cleaned of contaminants by four large filter cartridges. In addition, the OctaVent contains an activated carbon afterfilter to remove unpleasant odours.

The OctaVent blows the purified air out near the floor, creating a circulating air flow. The underlying operating principle here is layer ventilation.

The system enables low-dust disposal via a sealable dust container. The filter cartridges are cleaned automatically.

A 7-inch touchscreen with user-friendly software allows easy control of the OctaVent.

The system has built-in sensors that measure dust levels, temperature, humidity, CO₂, NOx and VOC.

Standard equipment

- ▶ Environmental sensors
- ▶ Four nano filter cartridges with 20m² filter surface each
- ▶ Local area network connectivity
- ▶ Wifi connectivity
- ▶ GSM Mobile connectivity, worldwide accessibility
- ▶ USB-A and USB-C charge connections
- ▶ Signal horn
- ▶ Activated Carbon Post-Filter
- ▶ 10 l dust bin
- ▶ EC-Motor (electronically commutated)
- ▶ Pressure reducer
- ▶ Pressure sensor
- ▶ Integrated baffle plate



OctaVent

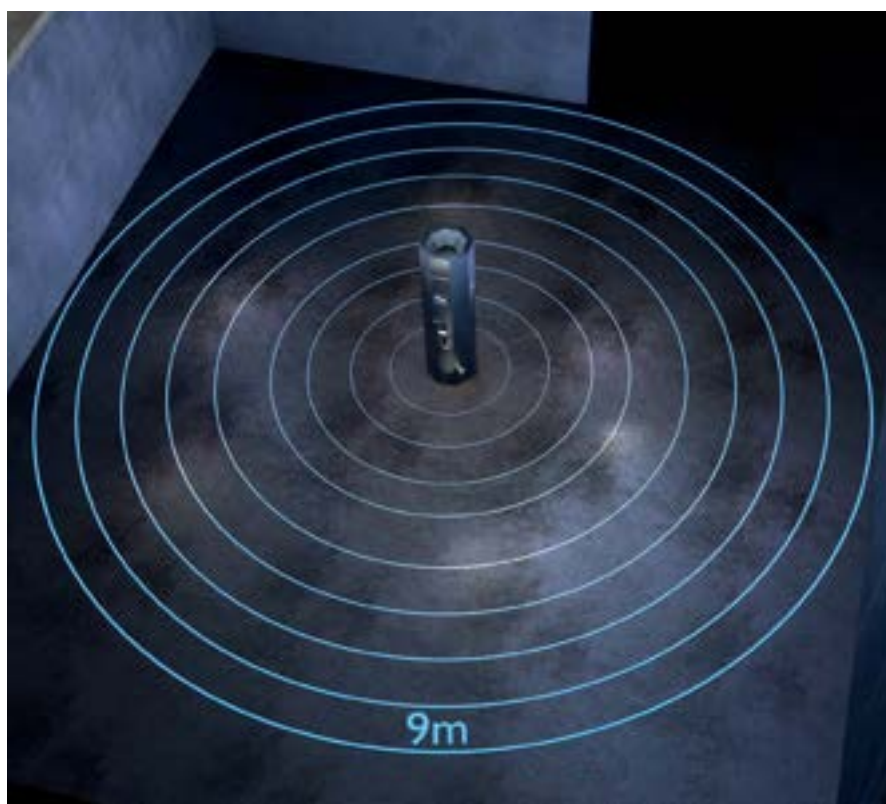
Technical Data

OctaVent

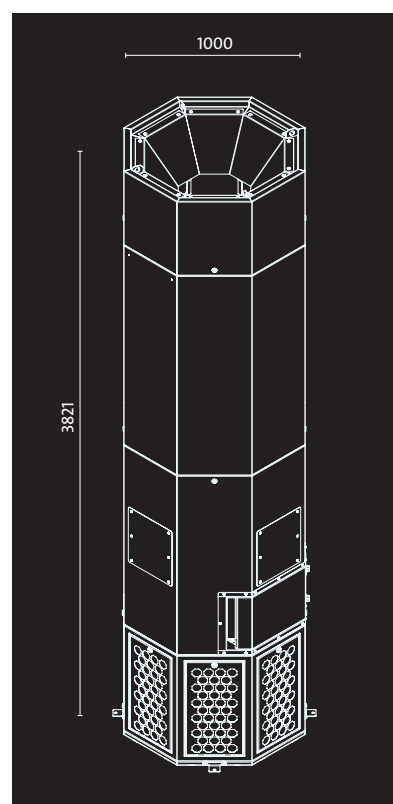
Max. volumetric flow of the fan	6.500 m ³ /h
Max. pressure	2.800 Pa
Motor performance	6,0 kW
Voltage	380-480 V, 50/60 Hz
Separation efficiency	> 99%
Current consumption	12 A
Dimensions (W x D x H)	1.000 x 1.000 x 3.821 mm



Airflow schematic



OctaVent coverage

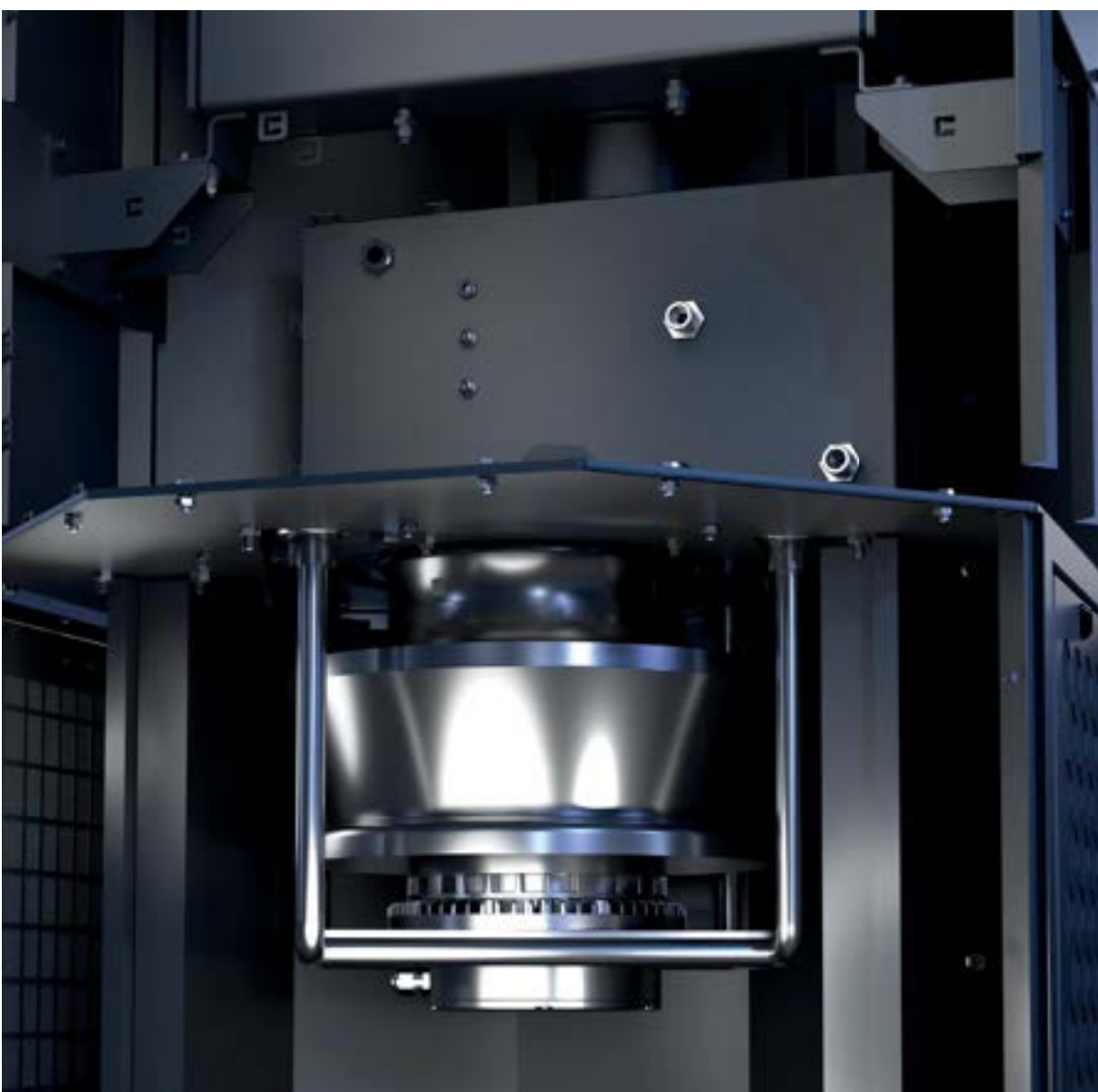


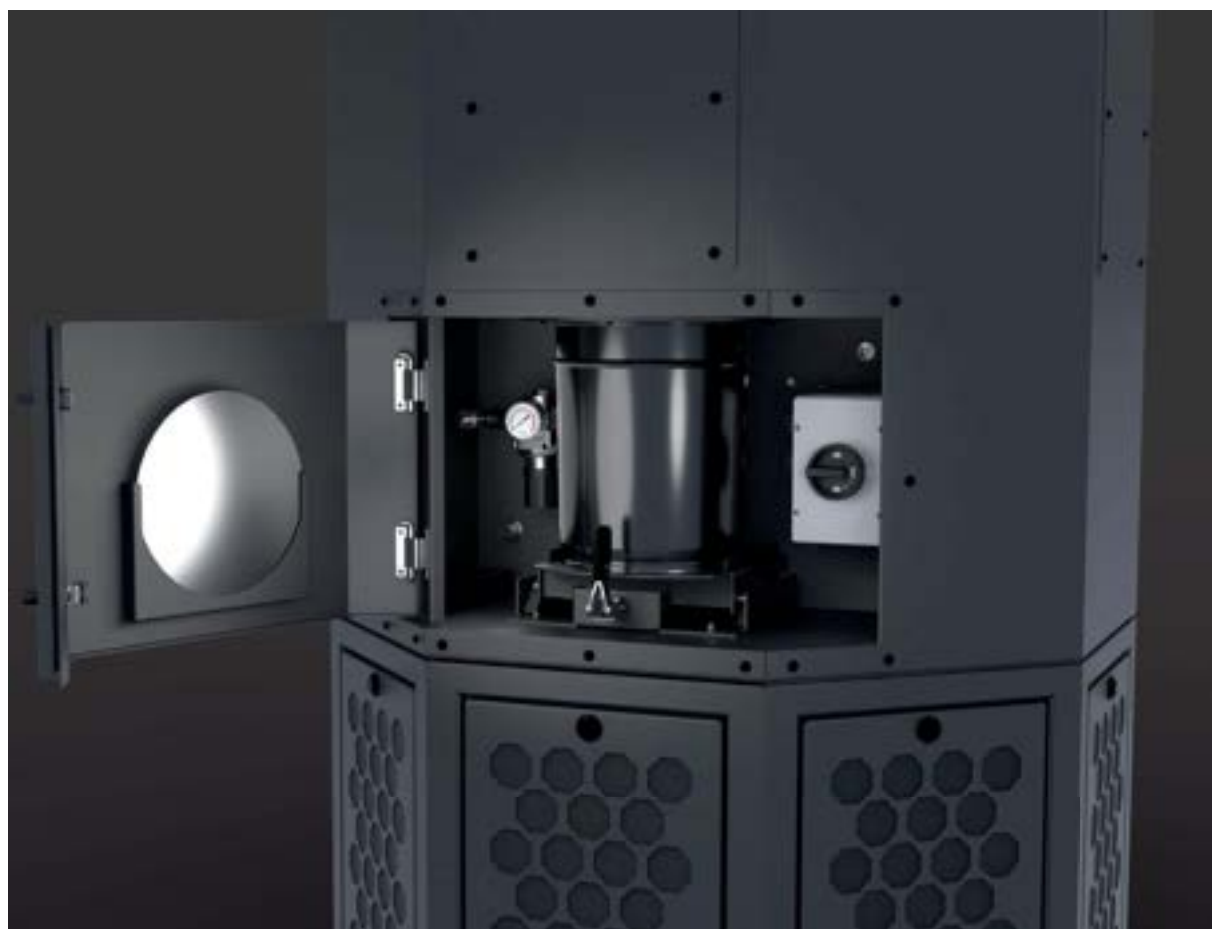
Available versions

OctaVent

952020055

RGF





AirTech P10

Suitable for

Circulation of large volumes of air



Description

The main areas of application are industrial plants/welding shops where localised extraction is not possible and/or where the AirTech system is to be used in addition to keeping the air in the hall clean.

The polluted air is sucked in through the side-mounted intake ducts, whose collection point is located at a height of approx. 3 m, and fed into the filter section. Here, the particulate pollutants are deposited on the surface of the filter cartridges.

The filter cartridges are cleaned fully automatically at the required intervals using compressed air. The particles adhering to the cartridges are loosened by the compressed air blast and collected in a dust collection container. The cleaned air is fed back into the work area via individually adjustable long-range nozzles. This also directs the polluted air towards the intake ducts.

In the event of an error message, the fan is automatically switched off. At the same

time, the system control unit emits a visual and acoustic signal to warn the user.

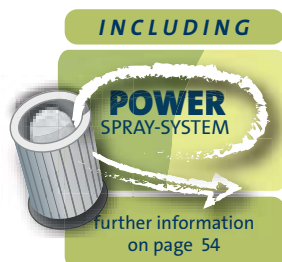
The AirTech series is certified in accordance with DIN EN ISO 21904-1/-2 and has been tested for hazardous substances by the IFA (Institute for Occupational Safety and Health of the German Social Accident Insurance - formerly BGIA) and approved for welding fume class W3 as a stationary welding fume extraction device. However, this approval is only valid if the system is used to capture fumes at the point of origin.

Many types of dust, including welding fume particles, are combustible when exposed to ignition sources. The user must take appropriate measures to avoid these specific hazards. In particular, care must be taken to ensure that no ignition sources are sucked in during operation of the system. For explosive substances, please request a separate quote in accordance with ATEX.

Systems that serve as welding fume extraction systems do not release the system operator from the obligation to provide



*AirTech P10
(image
includes options)*



Technical Data

AirTech P10

Max. volumetric flow of the fan	10 000 m ³ /h
Motor performance	11,0 kW
Separation efficiency	≥ 99 %
Dimensions (W x D x H)	800 x 1200 x 3990 mm (Width incl. canals 5130 mm, depth incl. jets 1455 mm)

Our Hotline

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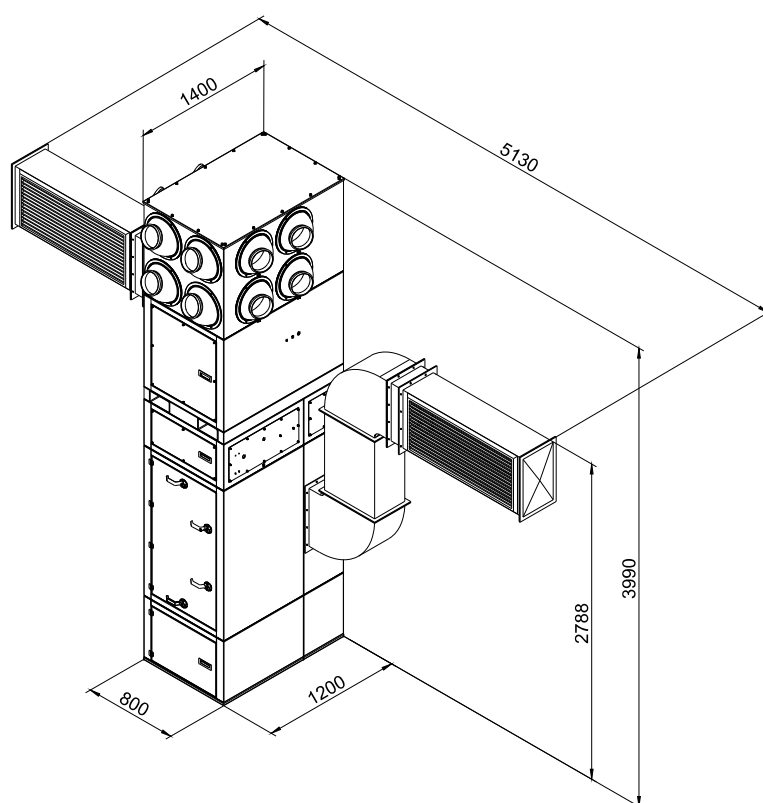
appropriate personal protective equipment for his employees.
When processing stainless steels, collection elements must be used.

Standard equipment

- ▶ Housing made of sturdy sheet steel (powder-coated inside and outside)
- ▶ Wear- and maintenance-free, fully automatic cleaning via POWER-SPRAY system
- ▶ Filter housing with air inlet openings on both sides
- ▶ Cleaning system with compressed air tank
- ▶ Fan with soundproof housing
- ▶ Filter cartridges of dust class M
- ▶ Intake ducts
- ▶ Display control
- ▶ NANNOX filter aid
- ▶ PE bag for the dust collection tray

Available as an option

- ▶ Frequency converter
- ▶ Spark trap (set of 2)
- ▶ Safety system with particle sensor, extinguishing device and door with viewing windows



Available versions

AirTech P10

950141610

Spark latches, set of 2

9501491906



AirTech Central suction and filter unit

Suitable for

Circulation of large volumes of air



Description

The filter system is IFA-tested in accordance with DIN EN ISO 21904-1/-2. However, the IFA certificate is only valid if the system is used to capture fumes at the point of origin.

In many cases, local exhaust ventilation alone is not sufficient to fall below the legally prescribed workplace limits and thus eliminate any danger to humans. In such cases, it is necessary to additionally ventilate the room.

The polluted air is sucked in through grilles at a height of approx. 3-4 m and then filtered. The purified air is returned to the room via nozzles at ceiling height.

The advantages of the AirTech system lie in its optimal suction performance of the filter system (long cartridge service life, excellent suction power), user-friendliness and low maintenance requirements.

Since no piping is required, the location of the system is flexible.

Heating costs can be significantly reduced by recirculating air into the workroom. However, the provisions of the new Hazardous Substances Ordinance (GefStoffV) must be taken into account.

The filter systems are equipped with dust class M filter cartridges (separation efficiency $\geq 99\%$) and feature a specially developed cleaning system consisting of a combination of display control and the POWER-SPRÜH system. This combination ensures excellent cleaning performance of the filter cartridges, guaranteeing optimum extraction performance throughout the entire operation.



AirTech P30

INCLUDING



Technical Data

AirTech Central suction and filter unit

Max. volumetric flow of the fan	18000–30000 m ³ /h
Motor performance	11,0–22,0 kW
Separation efficiency	$\geq 99\%$

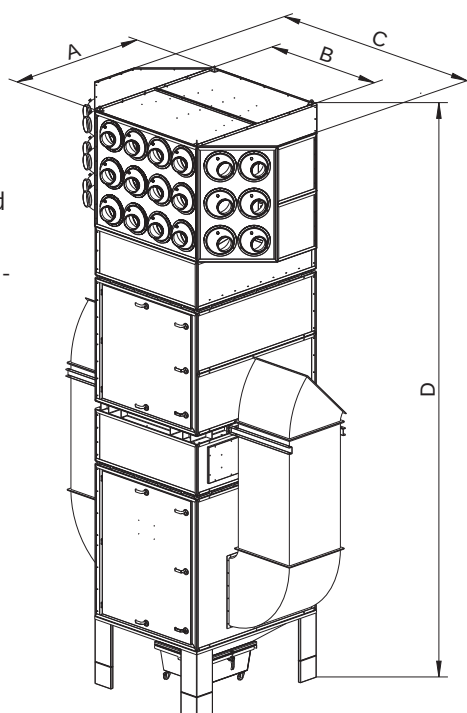
Our Hotline

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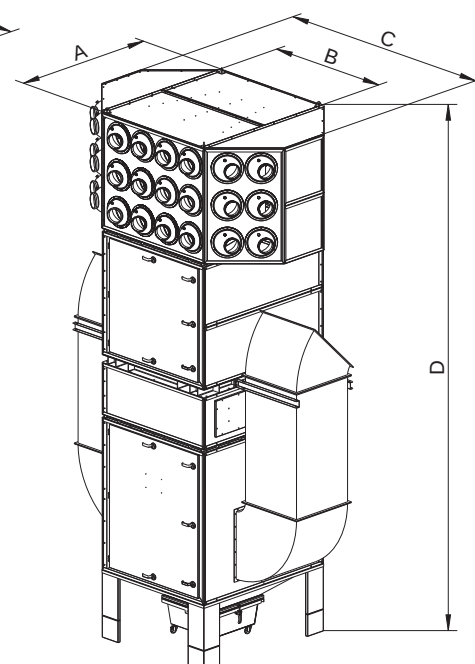


Standard equipment

- ▶ Sturdy sheet steel housing (powder-coated inside and out)
- ▶ Wear- and maintenance-free, fully automatic cleaning via POWER-SPRAY system
- ▶ Filter housing with air inlet openings on both sides
- ▶ Cleaning system with compressed air tank
- ▶ Fan with soundproof housing
- ▶ Filter cartridges of dust class M
- ▶ Intake ducts
- ▶ Display control
- ▶ NANNOX filter aid
- ▶ PE bag for the dust collection tray



Unit with silencer housing



Unit without silencer housing

Available as an option

- ▶ Intake pipe
- ▶ Device for connecting pipes
- ▶ Frequency converter
- ▶ Safety system with particle sensor, extinguishing device and door with viewing windows

Dimensions		A	B	C	D	Amount of nozzles
with silencer housing	AirTech P18	1440 mm	1440 mm	3200 mm	6570 mm	17
	AirTech P24	1880 mm	1600 mm	3510 mm	6810 mm	20
	AirTech P30	1880 mm	1600 mm	3510 mm	6810 mm	24
without silencer housing	AirTech P18	1440 mm	1440 mm	3200 mm	6000 mm	17
	AirTech P24	1880 mm	1600 mm	3510 mm	6240 mm	20
	AirTech P30	1880 mm	1600 mm	3510 mm	6240 mm	24

Available versions

AirTech Central suction and filter unit for clean indoor air			
Max. volumetric flow of the fan	18000 m³/h	24000 m³/h	30000 m³/h
Motor performance	11,0 kW	15,0 kW	22,0 kW
Filter surface	324 m² (9 x 36 m²)	324 m² (9 x 36 m²)	432 m² (12 x 36 m²)
	AirTech P18 940141618	AirTech P24 940141624	AirTech P30 940141630

Replacement cartridges for **AirTech** (standard P18/P24 = 9 cartridges, P30 = 12 cartridges)



Filter cartridge 36 m²,
327 x 1715 mm

6161720136008

RGD

BlowTec Central suction and filter unit

Suitable for

Cleaning of polluted room air in a modular design for perfect adjustment to the architecture of the room. The unit is IFA certified for welding fume class W3.



Example: BlowTec

Description

BlowTec is a modular, space-saving extraction system. This central suction and filter unit is the perfect solution for every kind of work that requires more than extraction right at the source.

The biggest advantage: the efficient use of energy and reduction of cost. During heating times the energy costs are considerably reduced by recirculating the cleaned, warm air back into the working area. Alternatively it can also be led outside.

The modular setup of the BlowTec is perfectly adaptable to the architecture of the room. The ducting that extracts the air and guides it to the movable jets can vary in height and length.

Standard equipment

- ▶ Housing made of stable steel plate (powder coating inside and outside)
- ▶ Fully automatic dedusting via POWER SPRAY-SYSTEM
- ▶ Fan with soundproof housing
- ▶ Filter cartridges, category M
- ▶ Filter unit
- ▶ Fan section
- ▶ Control (filter/motor)
- ▶ Nozzle head
- ▶ Silencer
- ▶ Connection between filter unit fan unit and nozzle head
- ▶ NANNOX filter aid
- ▶ PE-Beutel for die Staubsammellade

Available as an option

- ▶ Extraction ducting
- ▶ Frequency converter
- ▶ Safety system with particle sensor, extinguishing device and door with viewing window(s)

NOTE:

The ducting installation is designed to project requirements!

INCLUDING

POWER SPRAY-SYSTEM

further information on page 54

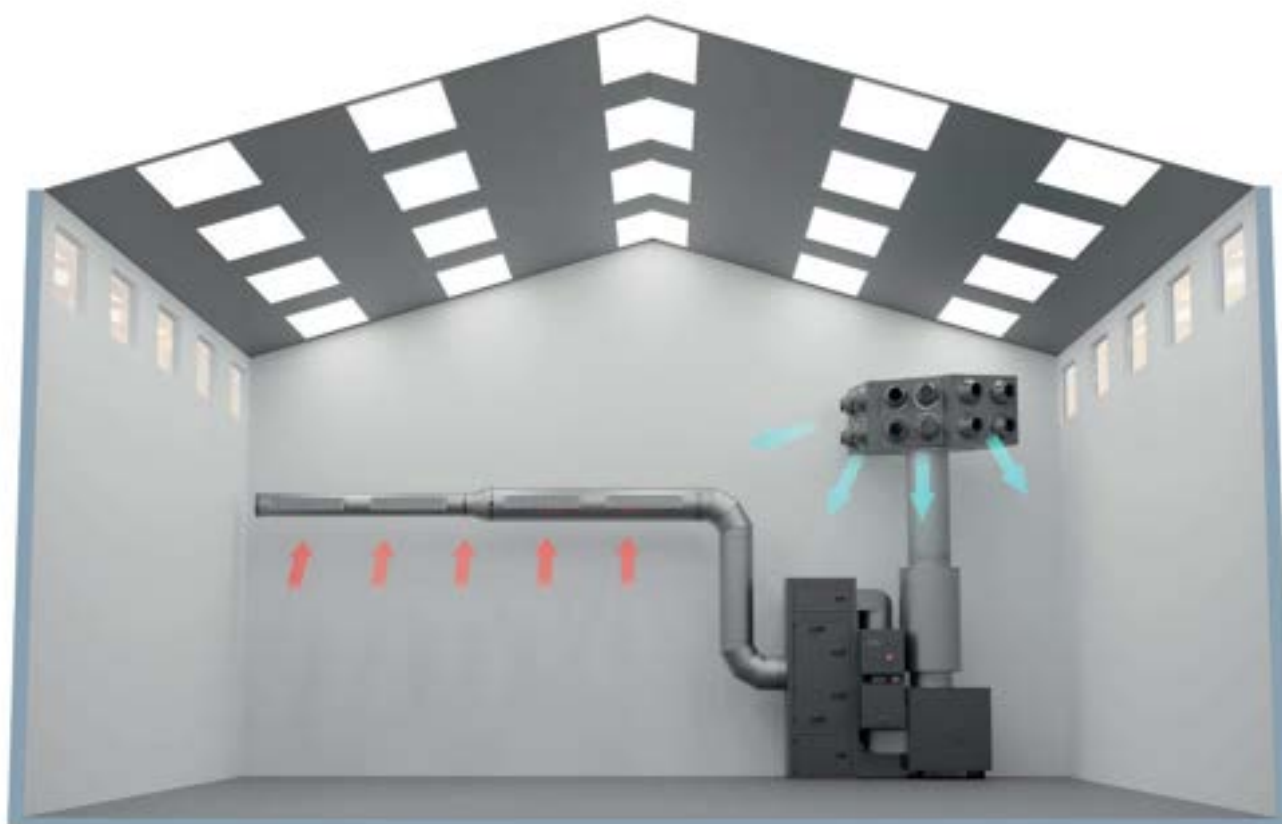
Technical Data

BlowTec Central suction and filter unit

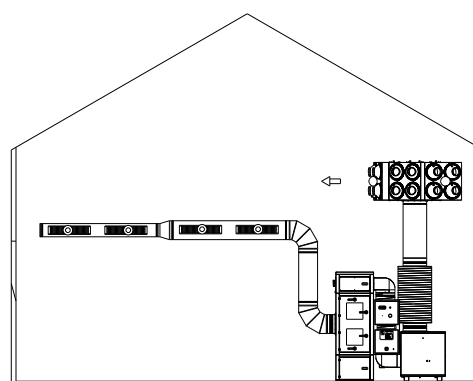
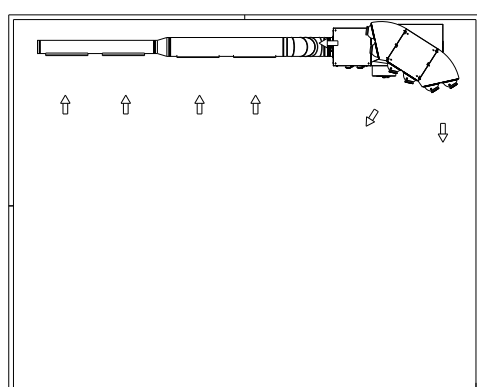
Max. volumetric flow of the fan	7500–10000 m³/h
Motor performance	7,5–11,0 kW
Separation efficiency	≥ 99 %

Our Hotline

+49 25 41 84 84 1 300



Installation example: BlowTec system in a hall



Available versions

BlowTec Central suction and filter unit		
Max. volumetric flow of the fan	7500 m ³ /h	10000 m ³ /h
Motor performance	7,5 kW	11,0 kW
Filter surface	100 m ² (4 x 25 m ²)	100 m ² (4 x 25 m ²)
	BlowTec 7,5 9501441075100358	BlowTec 10 9501441110100358



Layer ventilation Central suction and filter unit

Suitable for

Cleaning of contaminated indoor air



*ZPF from
System Layer Ventilation*

Description

In many cases, localised extraction at the workplace is not sufficient to filter the polluted air adequately. In this case, the layered ventilation system from TEKA Absaug- und Entsorgungstechnologie GmbH offers a useful addition.

Pipes along the centre of the hall extract the warm, rising, polluted air and direct it to one or more ZPFs or FilterCubes. After being cleaned by the filter system, the purified air is directed to the sides of the hall and released via so-called source outlets near the floor.

This creates an air flow in which the particle-laden air is carried upwards and the purified air is distributed throughout the working environment.

Standard equipment

- ▶ Fully automatic cleaning via POWER-SPRÜH system
- ▶ 6 to 27 large filter cartridges with 25 m² filter area each
- ▶ Dust collection container with quick-release fasteners
- ▶ Powerful fan
- ▶ Integrated compressed air tank
- ▶ Maintenance doors for all operating areas
- ▶ Display control
- ▶ Filter aid NANNOX
- ▶ PE bag for the dust collection drawer

Technical Data

Layer ventilation Central suction and filter unit

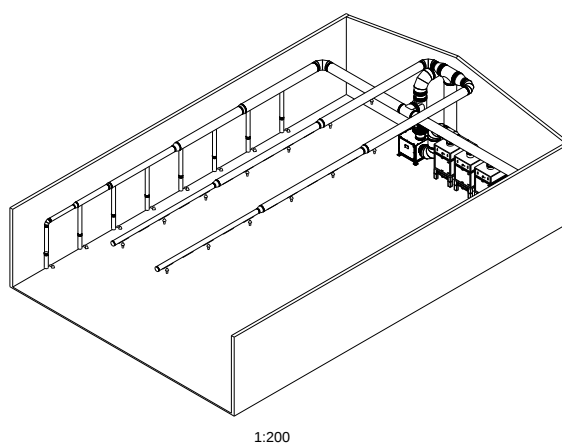
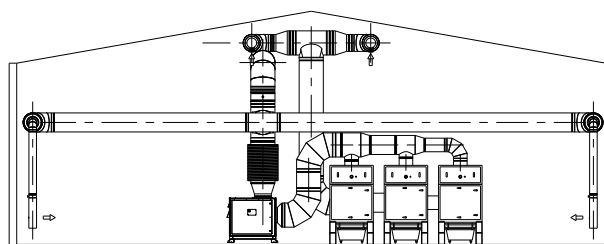
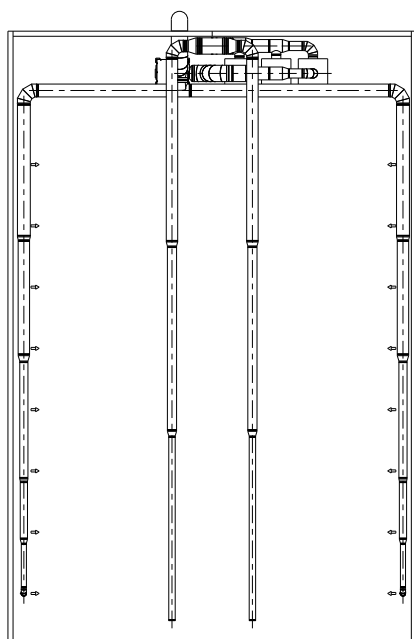
Max. volumetric flow of the fan	10.000–42.000 m ³ /h
Motor performance	11 kW–55 kW
Separation efficiency	≥ 99 %

Our Hotline

+49 25 41 84 84 1 300



Installation example: Layered ventilation system in a hall



1:200

Available versions

Layer ventilation Central suction and filter unit

Max. volumetric flow of the fan	10.000 m ³ /h	42.000 m ³ /h
Motor performance	11 kW	55,0 kW
Filter surface	150 m ² (6x25 m ²)	675 m ² (27x25 m ²)

PushPull Central suction and filter unit

Suitable for

Cleaning of polluted ambient air in a production hall



FilterCube 4H from System PushPull
(with options)

Description

A suction at the source often is not enough to undercut the occupational exposure limits for working places and thus to exclude any risk for humans. Therefore it is necessary to additionally ventilate the room.

The pollutants on one side of the hall are extracted by sufficiently dimensioned ventilation grilles and filtered afterwards. On the other side of the hall, the cleaned air is returned into the room – either via ventilation grilles or via nozzles.

Die FilterCube is certified from the Institute of Work Safety (IFA, formerly BGIA) and approved for the welding fume class W3 as a stationary welding fume suction device. A big advantage: the automated filter control allows for a filter cleaning on demand.

Standard equipment

- ▶ Fully automatic dedusting via POWER SPRAY-SYSTEM
- ▶ Display control unit
- ▶ Maintenance doors for all operational areas
- ▶ Maintenance door for the filter cartridges housing with inspection window made of laminated safety glass
- ▶ Filter medium NANNOX
- ▶ PE bag for the dust collecting tray

NOTE:

The ducting installation is designed to project requirements!

INCLUDING



further information
on page 54

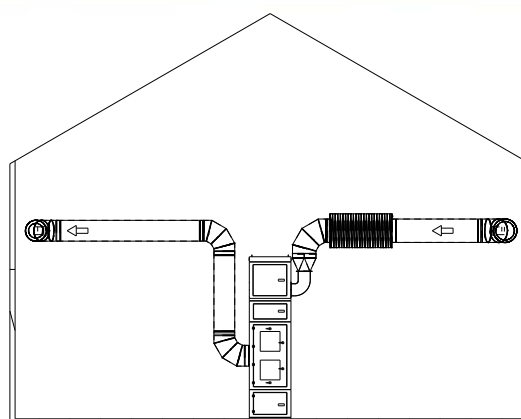
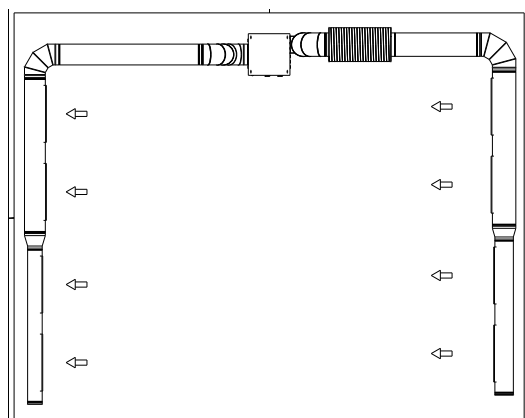
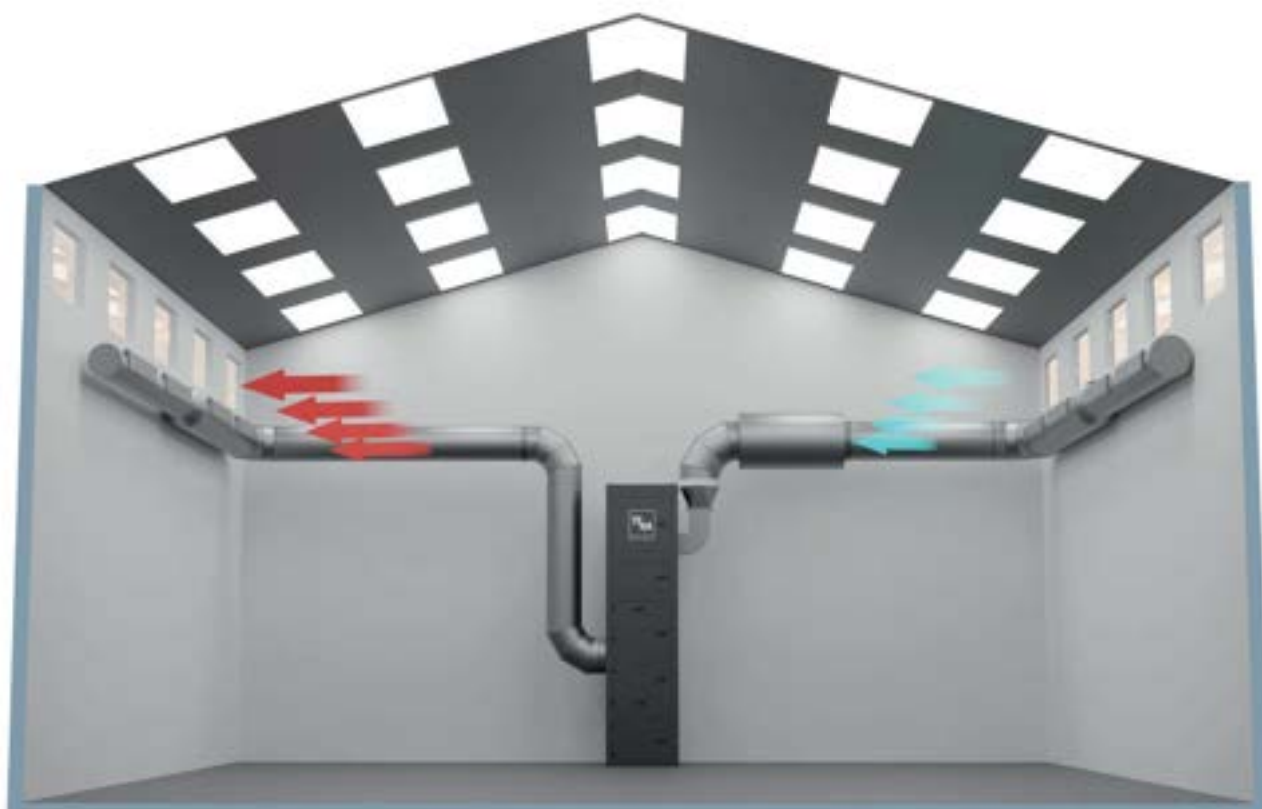
Technical Data

PushPull Central suction and filter unit

Max. volumetric flow of the fan	7500–10000 m ³ /h
Motor performance	7,5–11,0 kW
Separation efficiency	≥ 99 %

Our Hotline

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Example of set up: PushPull system in a production hall

Available versions

PushPull Central suction and filter unit		
Max. volumetric flow of the fan	7500 m ³ /h	10000 m ³ /h
Motor performance	7,5 kW	11,0 kW
Filter surface	100 m ² (4 x 25 m ²)	100 m ² (4 x 25 m ²)



Wet Cyclone Separator

Suitable for

Extraction of grinding dust – in special version also suitable to extract aluminium dust



*Wet cyclone separator,
Example with connected exhaust
pipe*

Description

The advantages of the unit are its simple and trouble-free operation. Pumps or jets which could create troubles are not used.

The air is cleaned by swirling the dust with water. The particles in the air flow are enclosed by water and bonded.

The extracted dust particles set down in the lower water tank and can be discharged by the ball valve which is installed at the lowest position of the unit and can be removed through a maintenance flap.

The fan is suitable for continuous operation and is placed onto the unit by standard.

The engine of the wet cyclone separator requires very low maintenance

Standard equipment

- ▶ Stable, high performance fan with silencer
- ▶ Housing made of galvanized steel
- ▶ Ball valve for water outlet
- ▶ Water tanks
- ▶ Level control
- ▶ Shut-off valve
- ▶ Adjustable feet, 420 mm (use optional)

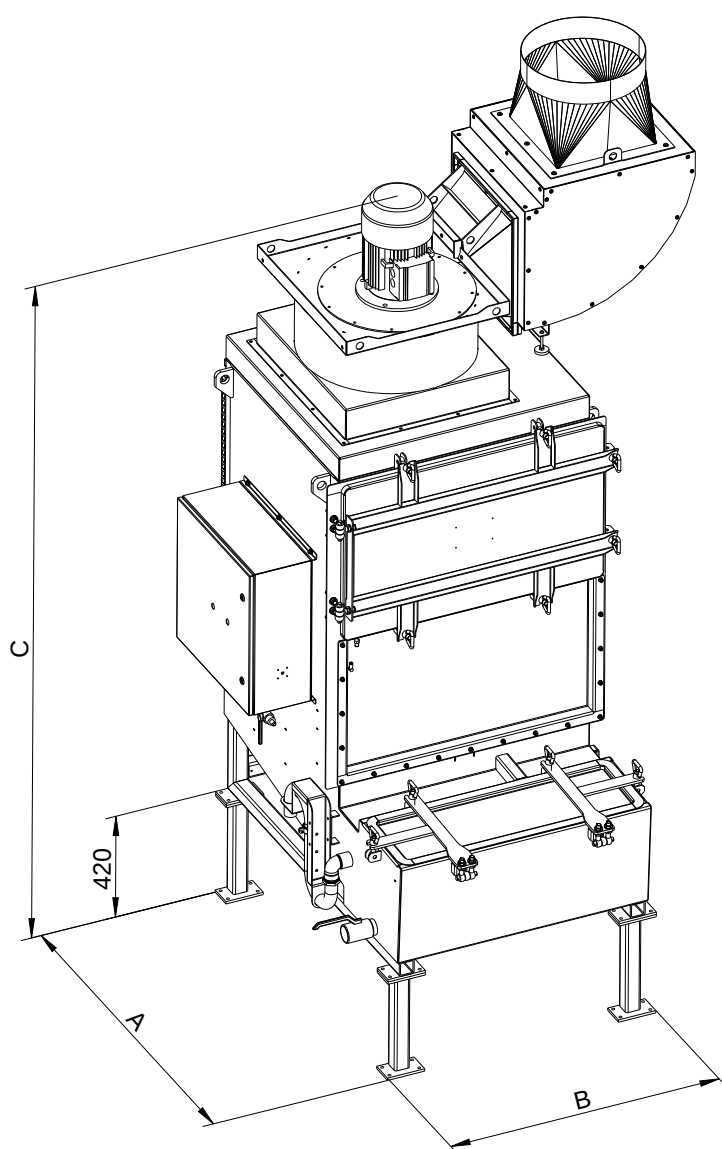
Technical Data

Wet cyclone separator

Max. volumetric flow of the fan	1500–9 000 m ³ /h
Max. pressure	1400–2700 Pa
Motor performance	1,5–11,0 kW

Our Hotline

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Dimensions

	A	B	C
WNA 1500	1160 mm	850 mm	2660 mm
WNA 2000	1360 mm	1050 mm	2575 mm
WNA 3000	1360 mm	1050 mm	2625 mm
WNA 3500	1360 mm	1050 mm	2635 mm
WNA 5000	1560 mm	1250 mm	3220 mm
WNA 7500	1760 mm	1450 mm	3310 mm
WNA 9000	1760 mm	1550 mm	3320 mm

Available versions

Wet cyclone separator							
	RGC						
Max. volumetric flow of the fan	1500 m³/h	2000 m³/h	3000 m³/h	3500 m³/h	5000 m³/h	7500 m³/h	9000 m³/h
Motor performance	1,5 kW	2,2 kW	3,0 kW	4,0 kW	5,5 kW	7,5 kW	11,0 kW
Standard	WNA 1500 200350015	WNA 2000 200350022	WNA 3000 200350030	WNA 3500 200350040	WNA 5000 200350055	WNA 7500 200350075	WNA 9000 20035001502
For aluminium dust	WNA-AL 1500 20035001577	WNA-AL 2000 20035002277	WNA-AL 3000 20035003077	WNA-AL 3500 20035004077	WNA-AL 5000 20035005577	WNA-AL 7500 20035007577	WNA-AL 9000 2003500150277



Accessories for Wet Cyclone Separator



Recirculating air filter attachment for
WNA-1500 / WNA-1500-AL

20035015007

RG C



Recirculating air filter attachment for
WNA und WNA AL 2000/3000

20035025007

RG C



Recirculating air filter attachment for
WNA-3500 / WNA-3500-AL

20035035007

RG C



Recirculating air filter attachment for
WNA und WNA AL 5000/7500

20035045007

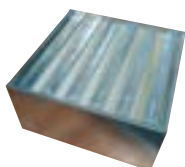
RG C



Recirculating air filter attachment for
WNA-9000 / WNA-9000-AL

20035055007

RG C



Replacement filter for post-filter:
Hepa filter H13 for Recirculating air filter
attachment for WNA

(up to WNA 3500 one
cassette is required, as of
WNA 5000 two cassettes
are required)

10030200350

RG C



Wire mesh filter in aluminium
295 x 595 x 50 mm
for WNA-1500 / WNA-1500-AL

Two filters per unit

200351500

RG C



Wire mesh filter in aluminium
405 x 795 x 50 mm
for WNA and WNA AL 2000/3000/3500

Two filters per unit

200353500

RG C

*Our Hotline***+49 25 41 84 84 1 300**

Wire mesh filter in aluminium
995 x 515 x 50 mm
for WNA-5000 / WNA-5000-AL

Two filters per unit

200355000



Wire mesh filter in aluminium
625 x 1195 x 50 mm
for WNA und WNA AL 7500

Two filters per unit

200357500



Wire mesh filter in aluminium
680 x 1195 x 50 mm
for WNA-9000 / WNA-9000-AL

Two filters per unit

200359000



VarioCube

Suitable for

Robust extraction for welding work in shipyards and large halls for up to twelve extraction points. The system can be used flexibly, stationary or mobile, since it is easy to move over skids and crane eyelets.



VarioCube



Description

This unit is specially designed for the shipbuilding industry and can be used as a central or mobile unit thanks to its design.

The advantages of this self-dedusting filter system are the optimum dedusting performance (long service life of the cartridges, good extraction capacity), the ease of operation and the minimal need for maintenance.

The housing is made of a massive sheet steel construction and gets an undercoat and a paint coating on the outside - the inner side is prime-coated. The individual unit parts are equipped with user-friendly maintenance doors or masks for optimum and fast maintenance. The switch cabinet doors can be opened with conventional switch cabinet keys.

The filter units are equipped with filter cartridges of the filter category BIA M. These cartridges are precoated with a special filter aid at the factory. This procedure considerably extends the service life compared to standard filter cartridges.

The units have a specially developed dedusting system consisting of a combination of a Siemens control (S7) and the power spray system. This combination provides a very good dedusting performance of the filter cartridges which ensures an optimal extraction capacity during the entire operation. The advantage of this system is not only its low-maintenance design without rotating nozzles subject to wear but also the use of low dedusting pressure and low consumption of compressed air. The control is supplied completely preset.

If you want to change the control parameters it can be done with an external control unit with Siemens S7 menu navigation. This control unit will then be connected to a Harting interface. This control unit is not included in the delivery and can be purchased separately. Set parameters can only be displayed and changed with the help of the control unit.

The pressure difference of the filters as well as the negative pressure at the clean-air side are measured in the filter unit. The filters are permanently monitored. When a preset

Technical Data

VarioCube-IFA

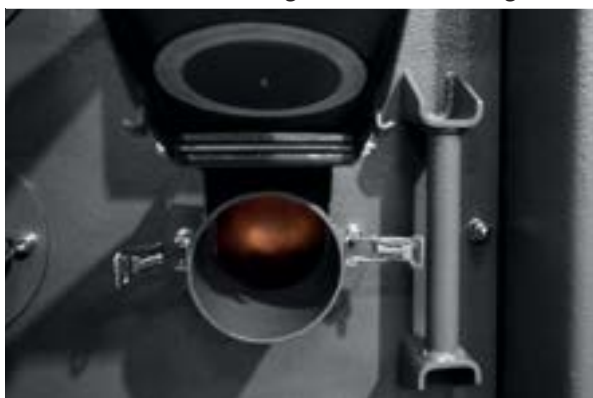
Max. volumetric flow of the fan	2000 m ³ /h
Max. pressure	10000 Pa
Motor performance	11,0 kW
Supply voltage	400 V/50 Hz
Motor control	Star-delta circuit
Sound level	approx. 78 dB(A)
Separation efficiency	≥ 99 %
Dimensions (W x D x H)	800 x 1200 x 2900 mm

Our Hotline

+49 25 41 84 84 1 300



pressure difference is reached, pulses are consecutively sent to the individual magnet valves. The magnet



Front connections for up to 6 hoses

valves open briefly and supply compressed air to the individual filter cartridge at the clean-air side. The dust particles (dust cake) adhering at the raw gas side are detached and get into the dust collector. This dedusting process is repeated until a preset bottom switching value is reached. Furthermore, the dedusting can be started according to a certain time interval or manually. When a fault occurs the red signal lamp lights up. The unit is equipped with an on/off switch as well as with an emergency stop switch and a connector is supplied.

Standard equipment

- ▶ pressure regulator with a manometer 1/2" for 0.5-10 bar
- ▶ pressure controller which gives a signal if the pressure in the compressed air tank is below 2 bar and which then switches off the system
- ▶ timer with battery module to automatically start and stop the unit

- ▶ dust sensor for the dust collector to mechanically monitor the dust fill level in the container
- ▶ signal lamp for compressed air
- ▶ signal lamp dedusting alarm / filter condition
- ▶ signal lamp engine malfunction



Easily accessible controls

- ▶ signal lamp to show full dust collector
- ▶ Harting interface to connect the external control unit
- ▶ button for the manual dedusting of the cartridges
- ▶ on/off switch with an integrated signal lamp
- ▶ main switch (supplies the unit with voltage)
- ▶ emergency stop switch
- ▶ strobe lights to signal malfunctions

Available as an option

- ▶ Hoses and suction hoods
- ▶ Mobile control unit

Available versions

VarioCube-IFA

RGC

9501442110201402

Accessories for VarioCube



Filter cartridge 10 m²,
327 x 600 mm
(4 cartridges required by default)

6160600110008



External Siemens S7 control unit

15000007

ExCube

Suitable for

Extra safety thanks to protection against explosive substances of class ST1. A significantly cleaner solution compared to the cyclone wet separator.



ExCube

Description

The advantages of the ExCube lie in its high safety standard and reliable dry extraction, especially for explosive substances of class ST1.

Explosive particles are safely separated using modern filter technology with an antistatic surface. The filter cartridges used offer a large filter area with high separation efficiency. The fan is directly driven and designed for continuous operation. A frequency converter controls the motor efficiently.

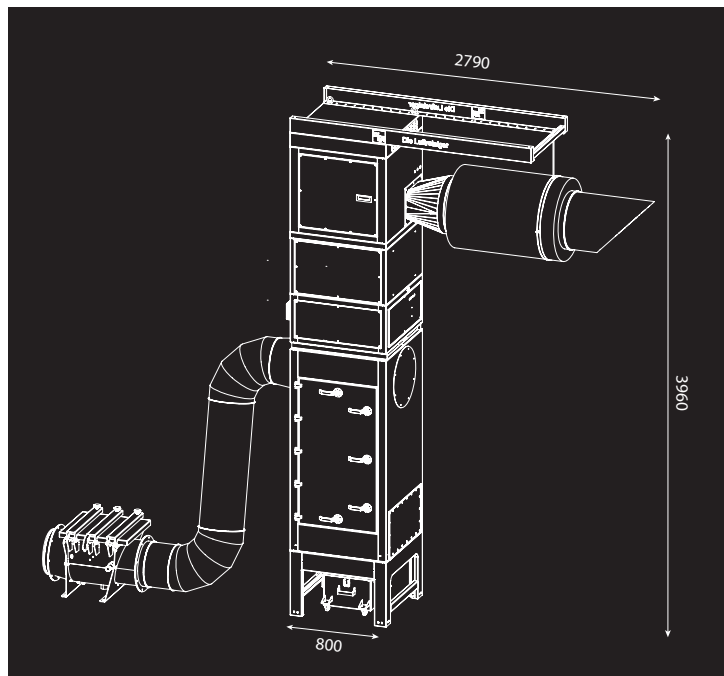
The system meets the highest explosion protection requirements and is equipped with an ATEX check valve that provides additional protection in case of an emergency. The housing is made of extra-strong materials for extreme durability in industrial use.

Standard equipment

- ▶ High-performance fan, direct drive
- ▶ Silencer on the outlet nozzle (NW 400 mm)
- ▶ Antistatic filter cartridges (4x 25 m²)
- ▶ Control via Siemens S7
- ▶ Frequency converter for motor control
- ▶ ATEX non-return valve
- ▶ Ready for connection to 3Ph+N+PE, 50/60 Hz

Technical Data

ExCube	
Max. volumetric flow of the fan	5.000 - 10.000 m³/h
Max. pressure	3.500 - 4.600 Pa
Motor performance	4,0 - 11,0 kW
Voltage	380 V/480 V
Motor control	Frequency converter
Sound level	approx. 73 dB(A)
Separation efficiency	≥ 99 %
Dimensions (W x D x H)	800 x 800 x 3.960 mm

*Our Hotline***+49 25 41 84 84 1 300****Available versions****ExCube****ExCube 4,0 kW**
950EX41040100300**ExCube 5,5 kW**
950EX41055100300**ExCube 7,5 kW**
950EX41075100300**ExCube 11,0 kW**
950EX41110100300



At TEKA we use intelligently designed filter systems and high-quality filter materials to reduce the risk of fire.

However, it can never be completely ruled out that a spark will cause the process dust to ignite. We have therefore developed a multi-stage fire protection concept that works preventively but can also minimise damage in the event of a fire.

Our Hotline

+49 25 41 84 84 1 300





sparktoo

Suitable for

Additional fire prevention for your extraction system; spark separator for installation in pipes



sparktoo

Description

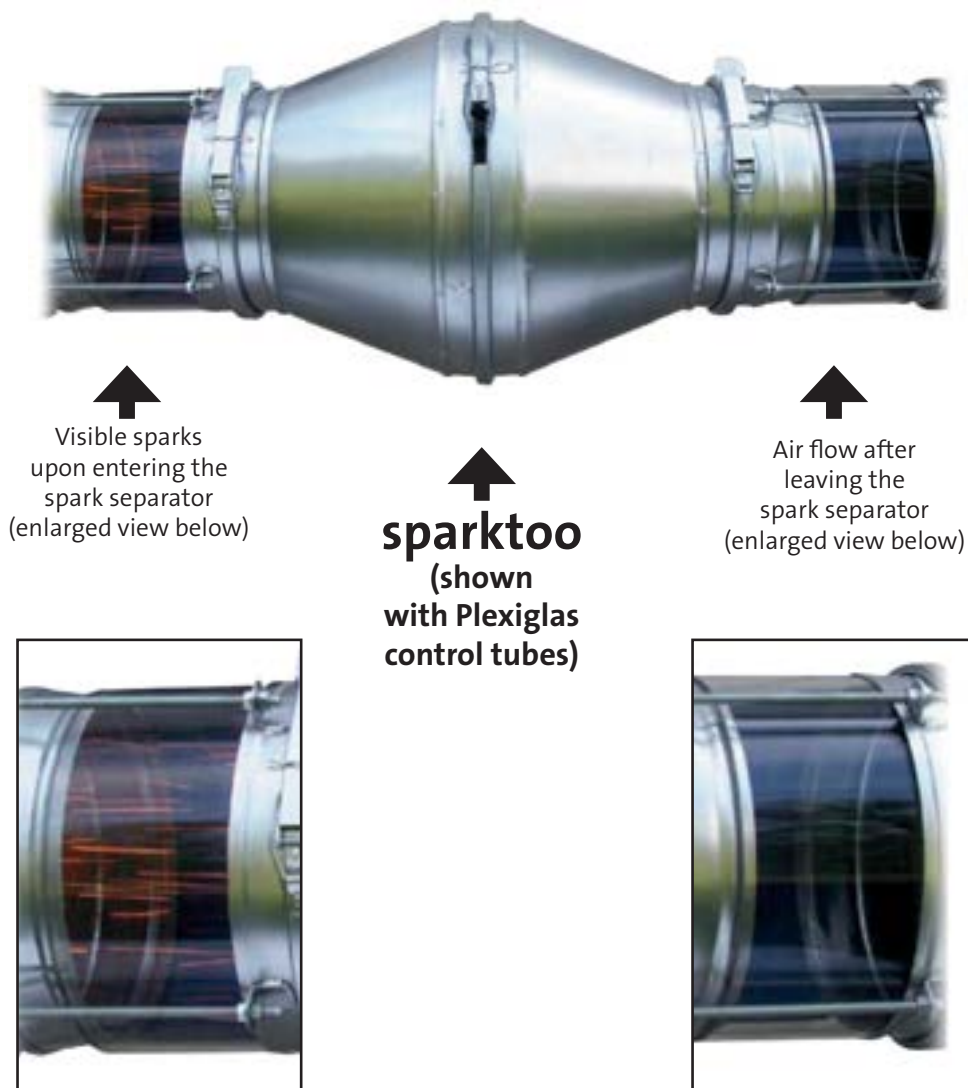
Installed in the pipe system as part of the extraction system, the sparktoo greatly reduces the risk of fire in the filter system by minimising the sparks that reach the separator through the pipe network. The effectiveness of the spark separator is based on the simple principle of interrupting the air flow to cool and extinguish sparks before they reach the separator.

The spark separator is easy to remove and clean. Calibration of the spark separator by a service technician is not necessary.

sparktoo
in **Action**



Diameter mm	Item no.	Pressure loss at 15 m/sec	Height mm	Length mm	Weight kg
Ø 100	80001920100	212	180	466	2,8
Ø 125	80001920125	212	224	466	3,2
Ø 160	80001920160	224	280	546	3,7
Ø 200	80001920200	274	350	606	5,0
Ø 250	80001920250	299	400	606	5,9
Ø 315	80001920315	336	500	676	6,8
Ø 400	80001920400	361	630	766	7,3
Ø 450	80001920450	299	710	826	15
Ø 500	80001920500	311	810	926	21
Ø 560	80001920560	300	920	1026	26
Ø 630	80001920630	315	1020	1086	33
Ø 710	80001920710	320	1150	1186	39



How the sparktoo works

On one side, the sparks enter the spark separator. They hit a cone that deflects the air flow, including the sparks and dust particles, to the sides.

outlet is swirled, sparks are deflected several times and extinguished.

The risk of ignition of the filter material is minimised.

On the opposite side, the pipe is pushed a short distance into the sparktoo, ensuring that the air around the air

Available versions

sparktoo							
Nozzle	Ø 100 mm	Ø 125 mm	Ø 160 mm	Ø 200 mm	Ø 250 mm	Ø 315 mm	Ø 355 mm
	80001920100	80001920125	80001920160	80001920200	80001920250	80001920315	80001920355
	Ø 400 mm	Ø 450 mm	Ø 500 mm	Ø 560 mm	Ø 630 mm	Ø 710 mm	
	80001920400	80001920450	80001920500	80001920560	80001920630	80001920710	



Spark pre-separator

Suitable for

Central suction and filter units. Ideal protection device against fire risk of filter units.



Description

Metal working produces not only respirable pollutants, but also sparks and glowing parts – such as during grinding or cutting.

The special diversion of the polluted air inside the unit guides heavy and especially glowing parts into the water.

Available as an option

- ▶ Housing made of stainless steel
- ▶ Collecting container made of stainless steel

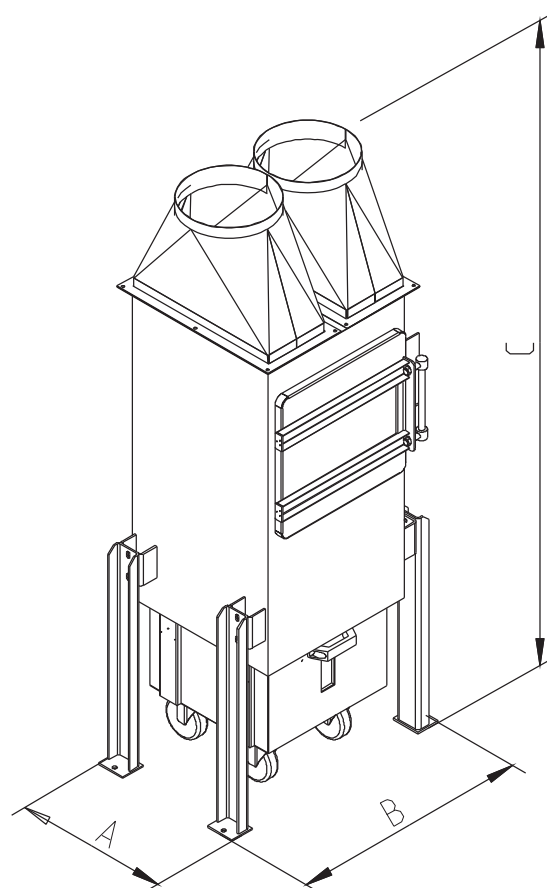
Standard equipment

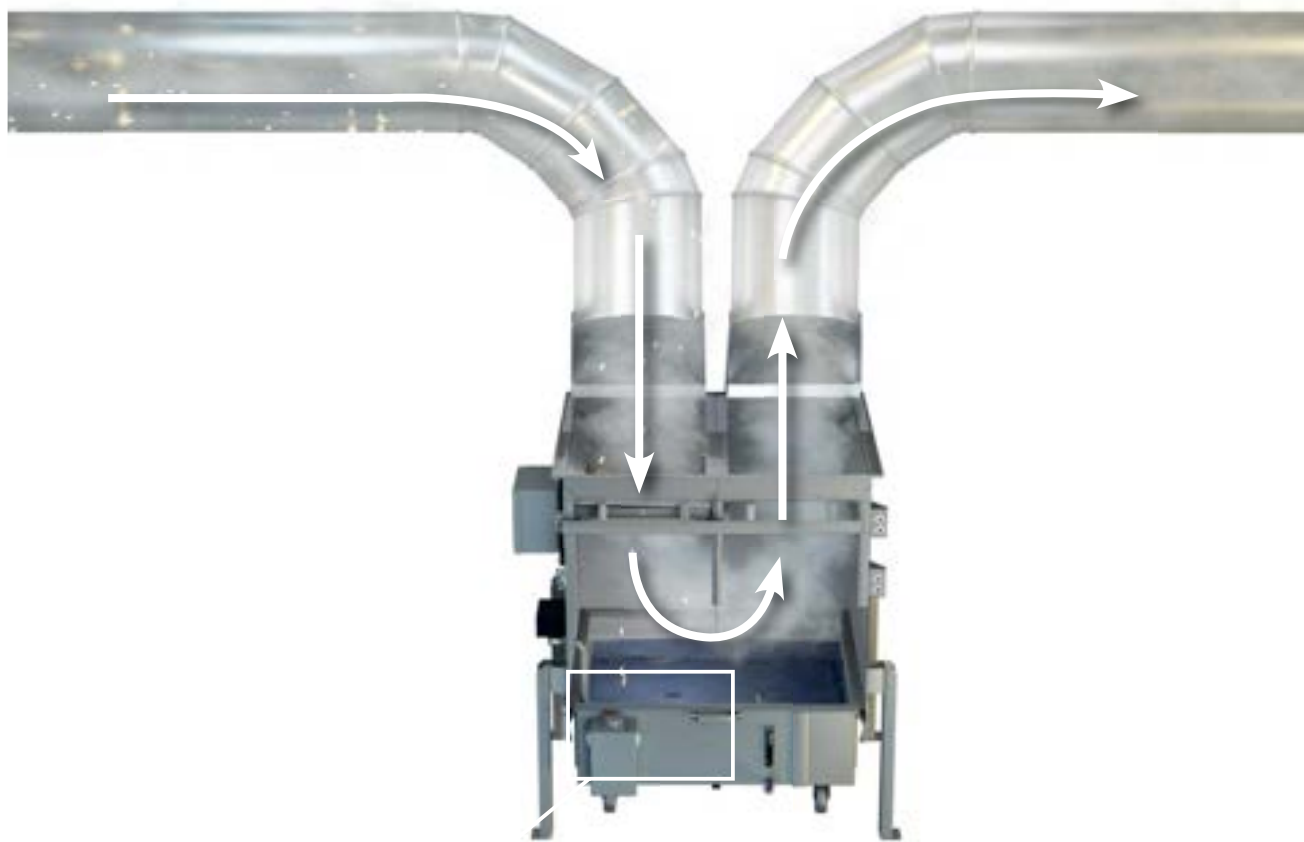
- ▶ Level control
- ▶ Housing made of galvanized steel
- ▶ Inspection glass for monitoring the water level
- ▶ Control and maintenance door with snap-fasteners
- ▶ Collecting container
- ▶ Water connection
- ▶ Transition piece for ducting
- ▶ Shut-off valve



Spark pre-separator

	A	B	C
FVS 1000 - 3000	560 mm	760 mm	1430 mm
FVS 4000 - 6000	760 mm	960 mm	1445 mm
FVS 7000 - 12000	1060 mm	1260 mm	1433 mm
FVS 12000 - 15000	1230 mm	1500 mm	1980 mm





The sparks drop into the water and extinguish

Functional principle of the spark pre-separator

The mixture of sparks and grinding, cutting or welding smoke is fed through the pipe to the spark pre-separator. Inside the housing, the air flow is deflected by 180 degrees. Due to their own weight, the sparks fall into the water bath of the spark pre-separator and extinguish.

What remains is an air flow that can usually be safely led to the filter section of the following extraction system.

Available versions

Spark pre-separator			
max. volumetric flow			
up to 3000 m ³ /h	up to 5000 m ³ /h	up to 12000 m ³ /h	up to 15000 m ³ /h
FVS 1000 - 3000	FVS 4000 - 6000	FVS 7000 - 12000	FVS 12000 - 15000
201010205	201040205	201080205	201150205



TEKA fire protection concept

There are different ways to equip a filter system with options that make a system safer overall. It is important to realize that there is no 100% protection to prevent a filter fire.

The measures that can be taken should always be in proportion to the effort involved.

In most cases, the listed preventive measures already offer very good protection; depending on the main application, it can be useful to supplement the preventive measures with further sensor, detection and extinguishing systems and thus minimise the risk of greater damage.

Note: TEKA extraction and filter systems are designed for smoke detection in thermal and mechanical metalworking. The systems must not be used for other purposes.

PREVENTIVE MEASURES

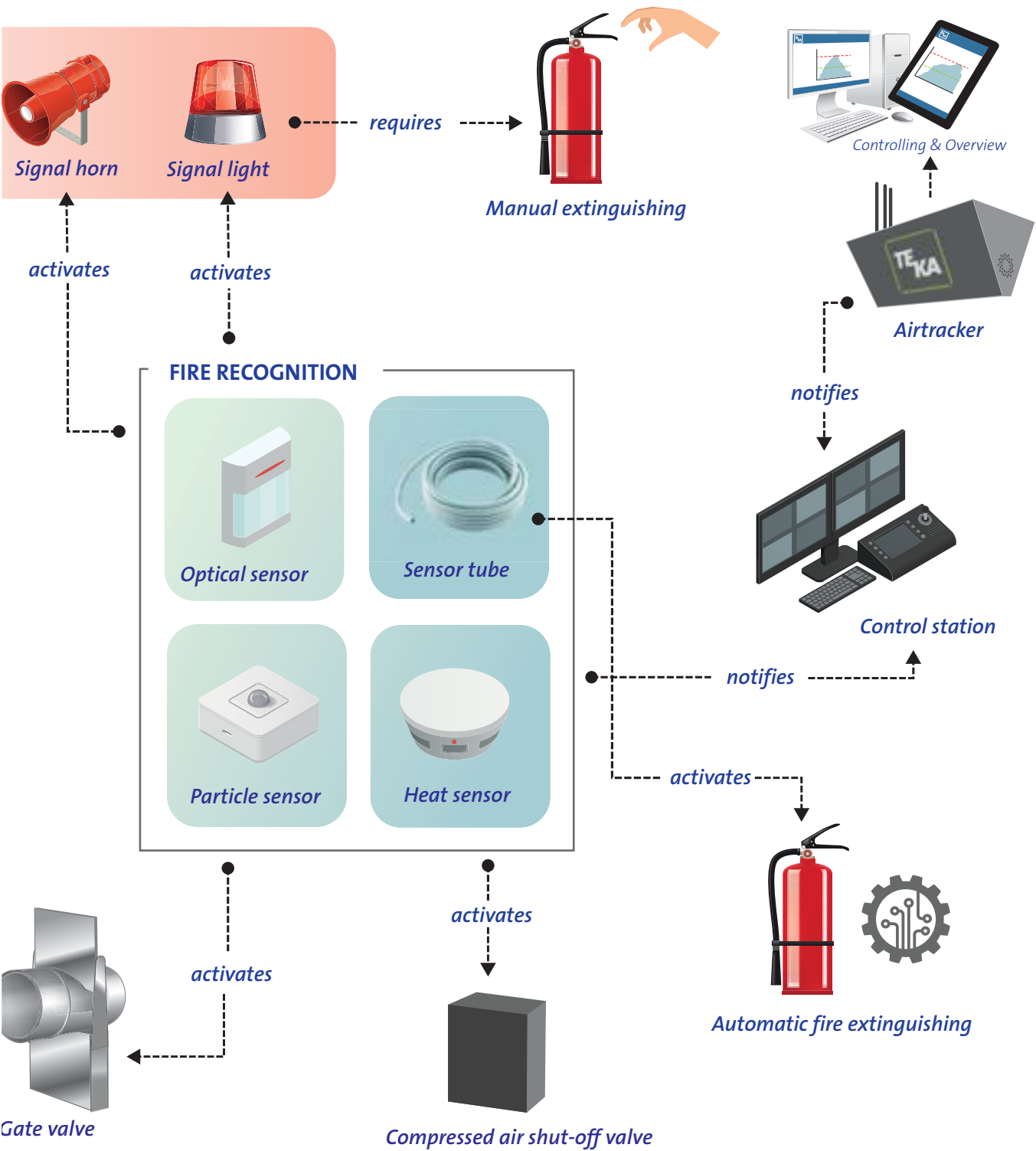


Spark pre-separator



Sparktoo

are supplemented by



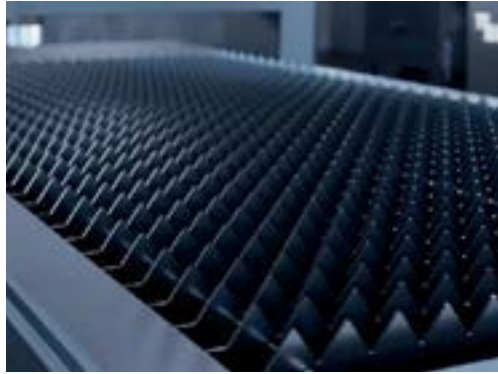


The TEKA AirCut plasma cutting system offers an efficient and precise solution for the metalworking industry. The set consists of a stable cutting table, intuitive controls and the TEKA EcoCube filter system.

The TEKA AirCut offers user-friendliness at a moderate cost. The robust construction and precise rack and pinion drive guarantee stability and durability. The advantages include:

- *Plug & Play ready to cut within one day*
- *CAD/CAM software included*
- *High cutting quality at an attractive purchase price*

5. Thermal cutting systems



AirCut Plasma cutting table with EcoCube

Suitable for

Powerful cutting of steel and stainless steel at high cutting speeds with precise cutting results

Description

The TEKA AirCut plasma cutting system offers an efficient and precise solution for the metalworking industry. With a stable cutting table, intuitive controls and the TEKA EcoCube filter system, it impresses with its quality and user-friendliness at a moderate cost.

The cutting table ensures high load capacity, while the intuitive controls make it easy to operate, even for less experienced users.

Equipped with the innovative TEKA EcoCube filter system, the system not only ensures clean cutting results, but also a healthy working environment. The robust construction, combined with a precise rack and pinion drive, guarantees durability, stability and reliable results – all at a moderate cost.

This complete solution meets the highest standards of quality and cost-effectiveness.

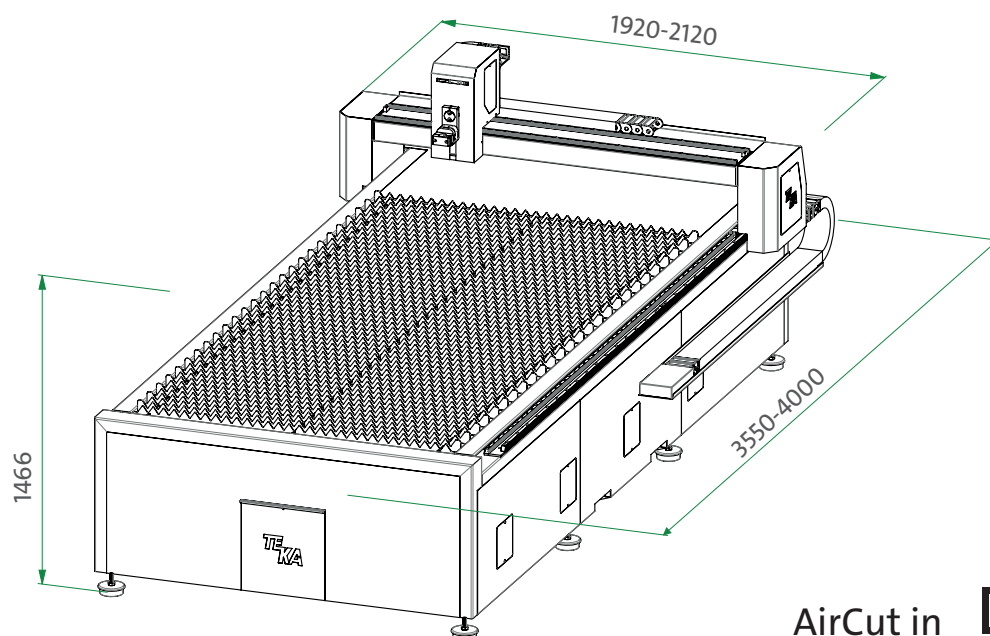
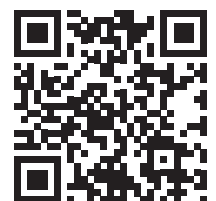
Standard equipment

- ▶ Hiwin linear rails
- ▶ Powerful servo motors
- ▶ Steel cutting grid surface with quick-change system
- ▶ CPC connector interface for remote start and power supply to the filter system
- ▶ Free-standing control terminal with industrial PC, 19" screen and I5 processor
- ▶ CAD CAM software
- ▶ Status LED display
- ▶ Collision protection system
- ▶ CPC connector interface for Hypertherm and Kjellberg
- ▶ Panasonic I4C InfoHub with cloud access
- ▶ Industry 4.0 connection via OPC-UA and MQTT services



Technical Data

AirCut Plasma cutting table		
	Medium format	Large format
Effective cutting area	1250mm x 2500mm	1500mm x 3000mm
Positioning speed	up to 21.000 mm/min	
Positioning accuracy (DIN 28206)	≤ 0,15 mm/m	
Drive / guide Z-axis	ball screw	
Main control panel	Ergonomic 19" touchscreen control panel	
Connection voltage	400 V/50 Hz	
Current consumption	11,5 A	14,5 A
Colour	RAL 7016	

*Our Hotline***+49 25 41 84 84 1 300****AirCut in
Action****Available versions****AirCut Plasma cutting table with EcoCube**

Medium format	924500
Large format	927000

LasCut Pro Compact CNC fibre laser with EcoCube

Suitable for

Highly precise cutting of metals at high cutting speeds with excellent cutting results

Description

The compact LasCut Pro fibre laser from TEKA is one of the most advanced laser cutting systems on the market. With proven laser technology in the power range from 3.0 to 6.0 kW and high-end software from Raycus, it enables fast, precise and efficient processing of a wide variety of metals.

The LasCut Pro series sets new standards in fibre laser cutting technology: with up to 6 kW of power, it meets demanding manufacturing requirements and offers a highly efficient alternative to plasma and flame cutting processes.

The design concept is based on a compact construction: minimum space requirements with maximum processing performance – and thus noticeable advantages for everyday production. Thanks to intelligent CNC CAD/

CAM control, the LasCut Pro is stable, reliable and particularly user-friendly. It is conveniently operated via a panel and an additional handheld device. The system is well prepared for Industry 4.0: interfaces such as Modbus or OPC UA enable seamless integration into cross-manufacturer systems.

In addition, Airtracker sensor units and state-of-the-art EcoCube filter technology ensure maximum production reliability, clean exhaust air and improved operating efficiency.

The LasCut Pro series impresses with its high cost-effectiveness, strong performance and attractive investment and operating costs.



Technical Data

LasCut Pro Compact CNC fibre laser with EcoCube

Large format	
Effective cutting area	3000 mm x 1500 mm
Cutting table	Included as standard
Number of tools	1
Cutting process	Fibre laser
Transverse speed	Up to 120 m/min
Positioning accuracy	+/- 0,03 mm/m
X-Y-Z axis	Linear guide, Panasonic servo, driven on both sides and with helical racks
Portal	Solid steel portal
Control & software	Integrated CNC CAD/CAM software, Raycus control, Windows, Intel Core I5
Main control panel	Ergonomic 24" touchscreen control panel
Filter system interface	Available
Connection voltage	400 V / 50 Hz
Power type	3Ph+N+PF
Colour	RAL 7016/RAL 7035

*Our Hotline***+49 25 41 84 84 1 300**

Available versions

LasCut Compact CNC fibre laser with EcoCube

Performance	Structural steel (St)	Stainless steel (VA)	Aluminium (Al)	Brass (CuZn)	Copper (Cu)	Item No.
3 kW	18 mm	10 mm	12 mm	6 mm	5 mm	93270003
6 kW	25 mm	20 mm	20 mm	15 mm	10 mm	93270006

Select sheet metal formats corresponding to the maximum permissible workpiece weight. Additional laser sources/power ratings up to 12 kW are possible.

EcoCube

Suitable for

Almost all tasks in the field of smoke and dust filtration



Description

The EcoCube is supplied as a standard filter system in a package with the AirCut, but can also be ordered without the plasma cutting table. The filter system complies with the EN 21904-1/-2 standard. This gives the end user the assurance of being protected from hazardous substances and reduces operating costs for the operator compared to exhaust air operation. Air is drawn in via a side intake duct with a NW 400 connection. The system is equipped with a spark labyrinth.

Dust separation is achieved using four self-cleaning cartridge filters of class BIA M. The filter surface area and geometry, as well as the use of Power Jet cleaning, enable optimum cleaning, ensure a long service life and contribute to energy savings due to lower compressed air consumption. Filter replacement is quick and easy, facilitated by maintenance doors.

During the plant design phase, attention was paid to ensuring easy access to important plant areas, thereby emphasising user-friendliness.

The actual cleaning of the dust is carried out by a compressed air pulse from a storage tank, which knocks the dust off the surface. This is controlled fully automatically by a PLC control system. All relevant plant parameters can be read out, displayed or adjusted if necessary. The use of a touch screen display is optional.

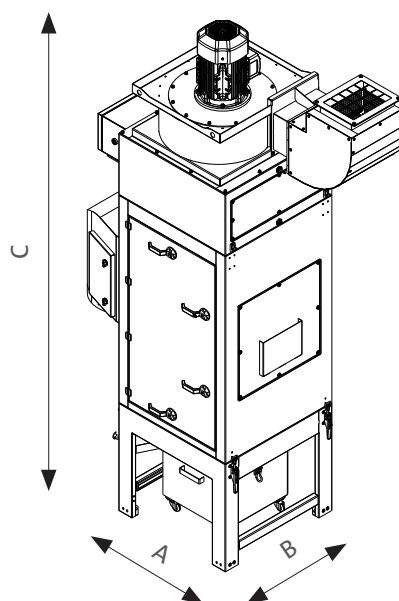
The cleaned dust is temporarily stored in a dust container. After filtration, the clean air is fed through the fan, which is located at the top of the system in an open design, and directed into the workroom via a silencer elbow. Thanks to its compact design, this system can be set up quickly and easily. Transport by crane is possible because of the mandatory crane eyes.

Technical Data

EcoCube	
Max. volumetric flow of the fan	6.000–10.000 m ³ /h
Motir performance	5,5 kW–11 kW
Voltage	400–480V; 50/60Hz
Separation efficiency	≥ 99 %
Sockets	5,5 kW: 315 mm
	7,5 kW: 355 mm
	11 kW: 400 mm
Sound level	approx. 75 dB(A)
Weight	approx. 470–480 kg

Our Hotline

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		5,5 kW	7,5 kW	11 kW
EcoCube	A	800 mm	800 mm	800 mm
	B	800 mm	800 mm	800 mm
	C	3174 mm	3174 mm	3229 mm

Standard equipment

- ▶ 4 latest-generation filter cartridges
- ▶ Siemens PLC control system
- ▶ Integrated spark labyrinth
- ▶ Maintenance flaps
- ▶ Intelligent eco-management
- ▶ Quick assembly system
- ▶ Ready-to-go 4.0
- ▶ Interface for sensor technology
- ▶ Frequency converter

Available versions

EcoCube		RGC
EcoCube 5,5 kW	20170050	
EcoCube 7,5 kW	20170070	
EcoCube 11,0 kW	20170090	



We offer different welding benches, among others a special welding bench for education purposes that is often applied in companies with a training programme and can be used flexibly.

Our grinding benches are characterized by rear wall extraction and extraction from below and are optionally fitted with lamellas. Since there are no metal side walls, it is also possible to handle long and bulky objects in an ergonomic way.

6. Welding and grinding benches

Our Hotline

+49 25 41 84 84 1 300



Suction table

Suitable for

Extraction from below of fumes and dusts – e.g. for manual plasma arc cutting



Description

Stable construction for extraction from below. A baffle plate distributes the pollutants inside the bench and calms the air flow.

We would be glad to advise you regarding the choice of the appropriate filter units or fans.

Standard equipment

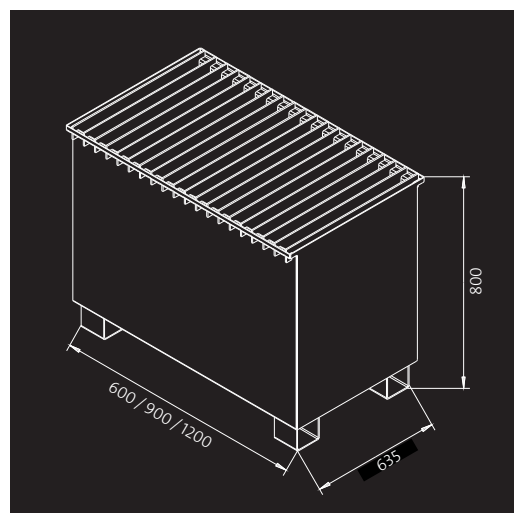
- ▶ Support made of flat iron
- ▶ Baffle plate

Available as an option

- ▶ Support made of refractory bricks
- ▶ Special dimensions on request



Suction table 900mm



Technical Data / Available versions

Suction table

RGF

Depth: 635 mm · Height: 800 mm

Width	Required volumetric flow of the fan	Suction nozzle	
600 mm	1500 m ³ /h	Ø 160 mm	56200
900 mm	2000 m ³ /h	Ø 200 mm	56210
1200 mm	2500 m ³ /h	Ø 250 mm	56220

Welding bench

Suitable for

Education and training centres as well as industrial plants

Our Hotline

+49 25 41 84 84 1 300



Description

Stable welding bench made of sectional steel. A simple assembly is ensured.

Available as an option

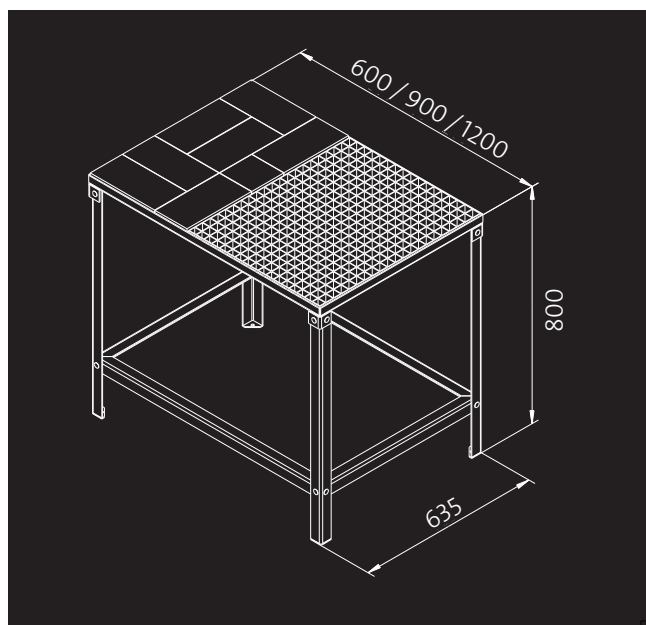
- ▶ Downhand welding device
- ▶ Special dimensions on request

Standard equipment

- ▶ Bar iron grating
- ▶ Refractory bricks



Welding bench



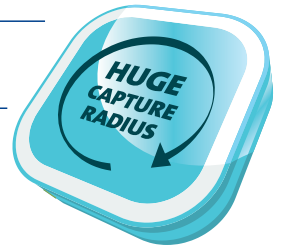
Technical Data / Available versions

Welding bench		RGF
Depth: 635 mm · Height: 800 mm		
Width		
600 mm	56100	
900 mm	56110	
1200 mm	56120	

Grinding bench

Suitable for

Rear wall extraction and extraction from below for grinding tasks.



Description

Here you find a selection of standard grinding benches.

The dusts are extracted on the back and below. 90 % of the extracted particles are already extracted by the rear wall and can safely and easily be disposed of by means of the dust collecting tray.

We gladly advise you regarding the choice of filter units or fans.

Available as an option

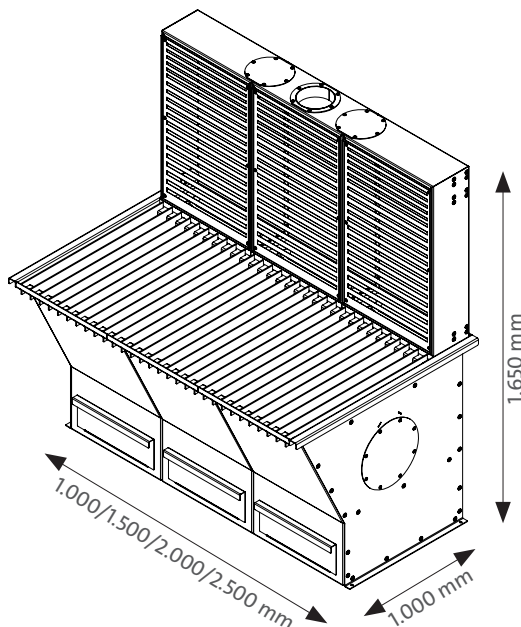
- ▶ Side panels
- ▶ Lamella curtains folding type
- ▶ Partial roof with lighting
- ▶ Special dimensions on request
- ▶ Wooden bars (set of 10)

Standard equipment

- ▶ Rear wall extraction
- ▶ Flat iron support or wooden support
- ▶ Pre-separator
- ▶ Dust collecting tray
- ▶ 2 temporary covers for nozzles



Modular extraction wall for floor mounting 500 mm
(Item no. 182350019)



Modular extraction wall for wall mounting 750 mm
(Item no. 182375023)

Our Hotline

+49 25 41 84 84 1 300



Installation example: Two grinding tables (2000 mm) with a wet cyclone separator

Item no.	Type	Dimensions	Rear panel connection	Connection at the table	Required air volume
56400	Grinding bench	1000 x 1000 x 1650 mm	1x Ø 150 mm	1x Ø 200 mm	1650 - 3150 m³/h
56410	Grinding bench	1500 x 1000 x 1650 mm	1x Ø 150 mm	1x Ø 200 mm	1950 - 3150 m³/h
56420	Grinding bench	2000 x 1000 x 1650 mm	2x Ø 150 mm	1x Ø 200 mm	3450 - 4300 m³/h
56430	Grinding bench	2500 x 1000 x 1650 mm	2x Ø 150 mm	1x Ø 200 mm	3900 - 4300 m³/h

Item no.	Type	Dimensions	Connection	Required air volume
182350023	Extraction wall for wall mounting	500 x 200 x 1000 mm	1x Ø 150 mm	1000 - 1300 m³/h
182350019	Extraction wall for floor mounting	500 x 200 x 1000 mm	1x Ø 150 mm	1000 - 1300 m³/h
182375023	Extraction wall for wall mounting	750 x 200 x 1000 mm	1 x Ø 150 mm	1000 - 1300 m³/h
182375019	Extraction wall for floor mounting	750 x 200 x 1000 mm	1 x Ø 150 mm	1000 - 1300 m³/h

Technical Data / Available versions

Grinding bench

RGF

		Width			
		1000 mm	1500 mm	2000 mm	2500 mm
Grinding bench	with rear panel	56400	56410	56420	56430



Our Hotline

+49 25 41 84 84 1 300



Accessories

		Welding bench	Grinding table		
	Clamp welding device	■		56130	RGF
	Pivotable side panels (2 pieces)		■	999200040	RGF
	Rib suspension, pivotable (2 pieces)		■	999200005	RGF
	Roof with lighting 1 m		■	999200016	RGF
	Roof with lighting 1,5 m		■	999200014	RGF
	Roof with lighting 2 m		■	999200012	RGF
	Roof with lighting 2,5 m		■	999200018	RGF
	Wooden bars for grinding benches (set of 10, fitting for 500 mm surface area)		■	819194	RGF

Manual cutting table

Suitable for

Fixing and processing workpieces, for example for plasma hand cutting, can be combined with air filter systems

Description

The manual cutting table is particularly suitable for manual flame cutting and is ideal for teaching, testing and training facilities as well as for training departments in companies. Thanks to the innovative foot pedal mechanism of the workpiece clamping device, it is possible to work freely with both hands, which increases flexibility and precision. The robust material support ensures safe working, while the integrated slag drawer allows for easy disposal of the deposited particles.

The ergonomically adapted sheet steel construction also contributes to a comfortable working environment.

Special features include the workpiece clamping device with foot mechanism for secure mounting of flame cutting equipment, the integrated slag drawer and the suitability for connection to central extraction and filter systems.

The robust sheet steel construction ensures high stability and durability of the device.

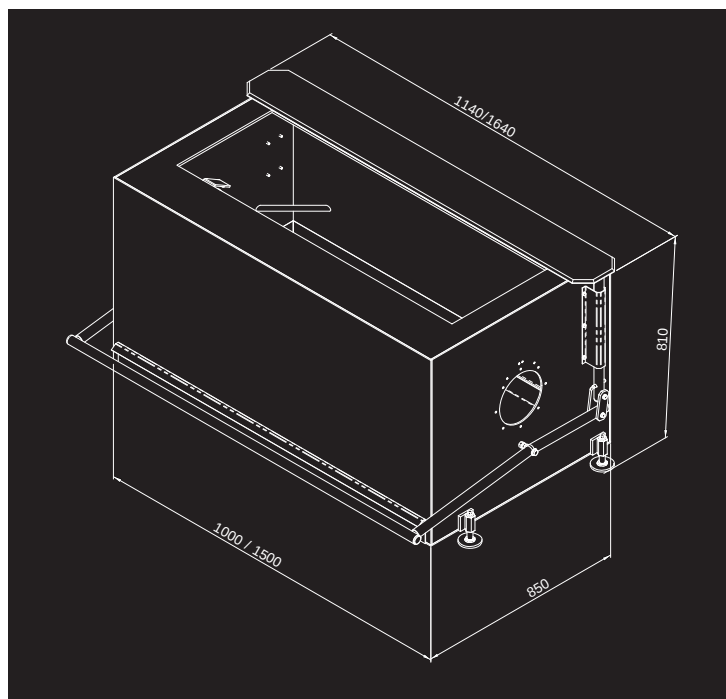
Standard equipment

- ▶ Slag drawer
- ▶ Two extraction openings Ø 200 mm
- ▶ One blind cover for the second extraction opening



Our Hotline

+49 25 41 84 84 1 300



Technical Data / Available versions

Manual cutting table

RGF

Depth: 850 mm · Height: 810 mm · Recommended air volume: 1.800 m³/h

Width	
1000 mm	56819201000
1500 mm	56819201500



TEKA offers a wide range of suction and-collecting elements for various solutions. Our suction arms range from small diameters, e.g. 50 mm for laboratories, dentistry or beauty salons up to large diameters for the extraction of high amounts of welding fume.

Additionally, the TEKA product portfolio consists of suction arms, cranes and hoses made of materials which are optimized for different applications such as arms made of aluminium that are chemically resistant or antistatic.

A hood is installed at the tip of every suction element to make sure of an efficient extraction. You can choose between different versions.

Our extraction elements are available for table, wall or ceiling attachment, or they are connected directly to the filter unit and positioned by means of joints or jib cranes. It would be our pleasure to advise you in finding the appropriate solution for you.



7. Suction and collecting elements

Our Hotline

+49 25 41 84 84 1 300



Suction arm $\varnothing$ 150 mm

Suitable for

Welding fume extraction – The arms can either be connected to individual fans or to central suction and filter systems



Suction arm (Art.-No. 97621)

Description

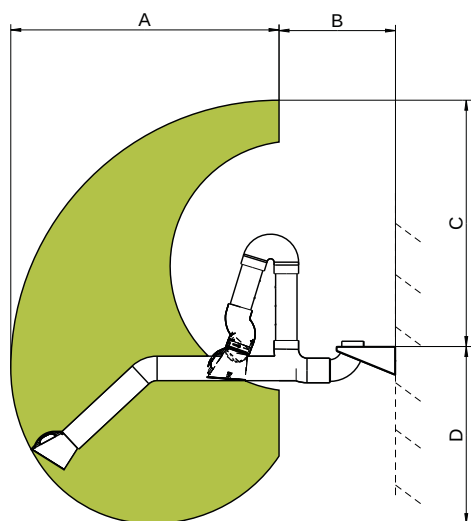
The suction arms $\varnothing$ 150 mm are available in different versions and lengths.

Due to the spring-support, all arms are easily positioned and self-supporting in the adjusted position.

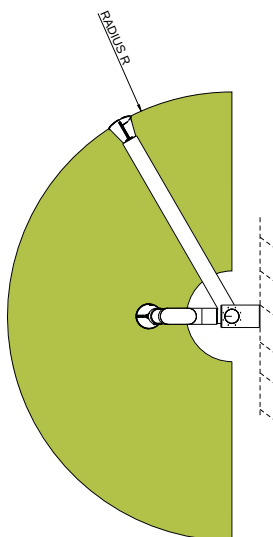
The volumetric flow can be individually regulated via a throttle valve that is integrated in the suction hood.

Standard equipment

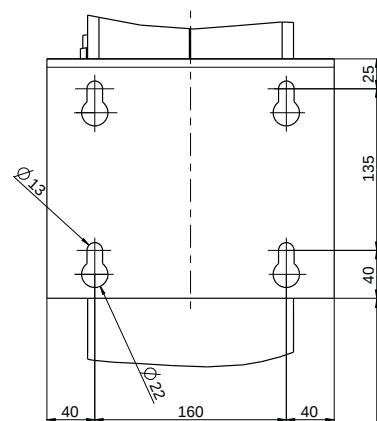
- ▶ Oval suction hood $\varnothing$ 270 mm made of synthetics with throttle valve
- ▶ From a length of 5 m on, additional wall bracket with C-rail
- ▶ Stable wall bracket made of powder-coated steel plate
- ▶ Connection nozzle $\varnothing$ 160 mm
- ▶ Wall bracket with support for ducting connection
- ▶ 3 joints with spring control and friction plates
- ▶ Flexible suction hose (PVC) with welded steel wire spiral (temperature-resistant up to +120°C)



Side view



Top view



Dimensions

		Art. No.	A	B	C	D	R
Hose	internal joints	97601	1900 mm	815 mm	1730 mm	1242 mm	2410 mm
	external joints	97620	1800 mm	750 mm	1640 mm	1150 mm	2315 mm

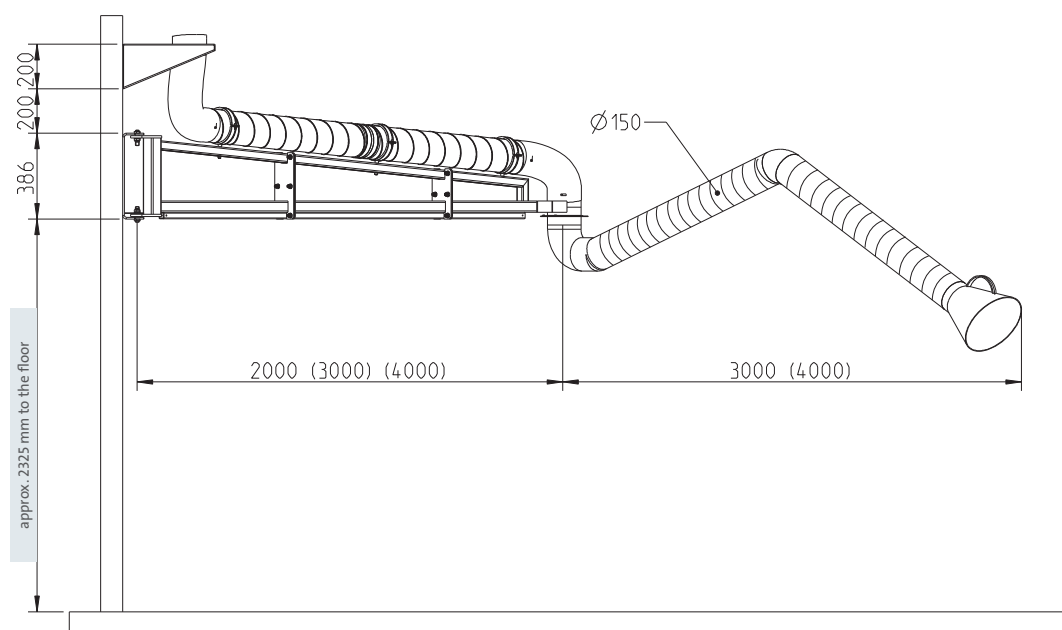


Available as an option

- ▶ Other arm lengths on request
- ▶ Suction hood made of metal
- ▶ Nozzle plate for an even more effective extraction of fumes and dusts
- ▶ Lighting kit for suction hood
- ▶ High-temperature hoses
- ▶ Spark arrester grill
- ▶ Spark arrester grill made of aluminium including metal hood
- ▶ Wall bracket with counter nozzles for TEKA fans



Suction arm with wall bracket and guide rail



Available versions

Suction arm Ø 150 mm

RGF

			Length						
			2 metres	3 metres	4 metres	5 metres	6 metres	7 metres	8 metres
<i>recommended volumetric flow of the fan:</i>			1000–2000 m³/h	2000 m³/h	2000 m³/h	2000–2500 m³/h	2000–2500 m³/h	2500 m³/h	2500–3000 m³/h
for wall assembly	Hose	<i>Internal joints</i>	97601	97602	97603	976022	976032	976024	976034
		<i>External joints</i>	97 620	97 621	97 622	97 621 2	97 622 2	97 621 4	97 622 4
for mobile units	Hose	<i>Internal joints</i>	976010001	976020001	976030001				
		<i>External joints</i>	976200001	976210001	976220001				



Suction arm Ø 200 mm

Suitable for

Larger amounts of air, e.g. for flux-cored arc welding with high tensions or gross welding rod



Description

The suction arms Ø 200 mm are available in different versions and lengths.

Due to the spring-support, all arms are easily positioned and self-supporting in the adjusted position.

The volumetric flow can individually be regulated via the throttle valve integrated in the suction hood.

- ▶ 3 joints with spring support
- ▶ Flexible suction hose (PVC) with welded steel wire spiral (temperature-resistant up to +120°C)

Available as an option

- ▶ Other lengths on request
- ▶ Lighting kit for suction hood
- ▶ Spark arrester grill
- ▶ Wall mount with counter-pipe for TEKA fans

Standard equipment

- ▶ Oval suction hood made of metal (Ø 315 mm) with throttle valve
- ▶ From a length of 5 m on with an additional wall bracket
- ▶ Stable wall bracket made of powder-coated sheet steel
- ▶ Connection nozzle
- ▶ Wall bracket with counter nozzle for TEKA fans



Suction arm (Art.-No. 97622)

Available versions

Suction arm Ø 200 mm

RGF

			Length					
			2 metres	3 metres	4 metres	5 metres	6 metres	7 metres
recommended volumetric flow of the fan:			3000 m³/h	3000 m³/h	3000 m³/h	3500 m³/h	3500 m³/h	3500 m³/h
for wall assembly	Hose	Internal joints	97661	97662	97663	976622	976632	976624
for mobile units	Hose	Internal joints	976610001	976620001	976630001			

Suction crane

Suitable for

Connection to central units and individual fans



Description

Suction cranes are available in different versions and lengths.

Regarding suction cranes Ø 160 mm up to a reach of 6 meters, it is possible to attach tools due to the two part supporting construction. At the first outrigger, you can attach charges up to a weight of 50 kg (e.g. a mechanical wire travel). The second outrigger can be charged with up to 10 kg (e.g. tube package).

The internal construction of the telescopic arm allows a smooth adjustment at every height.

Available as an option

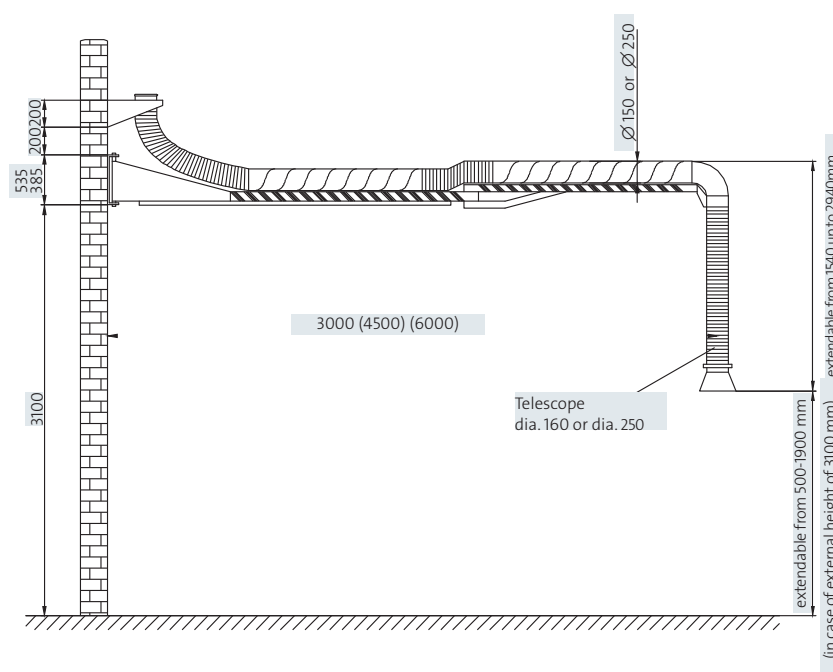
- ▶ Lighting kit for suction hood
- ▶ High-temperature hoses
- ▶ Spark arrester grill



Suction crane (Art.-No. 97641)

Standard equipment

- ▶ Pivoted, powder-coated supported construction made of sectional steel
- ▶ Adjustable brakes for the joints
- ▶ Connection of the suction pipes to flexible hoses at the joints
- ▶ Smoothly telescopic extension with suction hood situated at the front outrigger
- ▶ Wall bracket incl. pipe elbow and drive flange



Available versions

Suction crane			
	Length		
	3 metres	4,5 metres	6 metres
Ø 160	97640	97641	97642
Ø 250	97649	97650	97651

Telescopic suction arm

Suitable for

Connection to central units and individual fans. Ideal to extract pollutants produced by fixed welding benches, e.g. in welding booths.



Telescopic suction arm
(Art.-No. 97616)

Description

The telescopic suction arms are available in different versions. Due to the little space required, they are optimally appropriate to be applied in training and education centres.

The version fitted with external joints guarantees a fume extraction with considerably lower fan performance. This reduces the noise level.

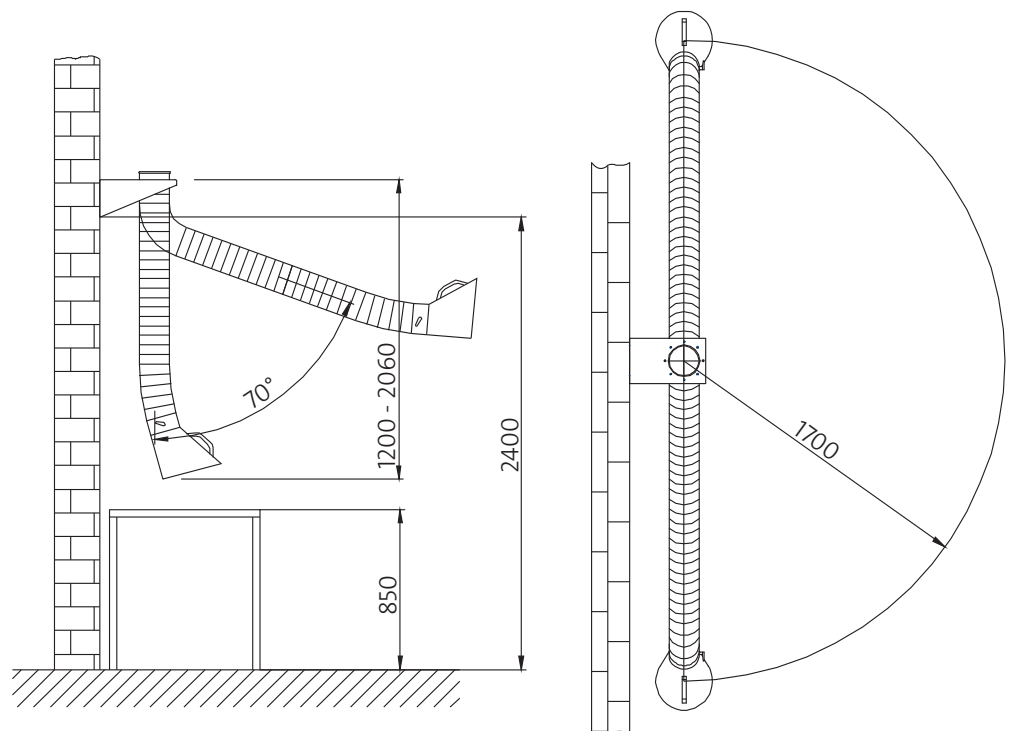
- ▶ Suction hood $\varnothing$ 150 mm made of synthetics with integrated throttle valve
- ▶ Suction hoods $\varnothing$ 100 mm and $\varnothing$ 200 mm made of metal with integrated throttle valve
- ▶ Wall bracket with support for ducting connection
- ▶ Connection nozzle $\varnothing$ 160 mm
- ▶ Suction hood

Standard equipment

- ▶ Smoothly vertically adjustable
- ▶ Pivoted to the front
- ▶ Rotating by 180°
- ▶ Extendable from a length of 1.20 to 2.06 m
- ▶ Low wear telescopic function (without counterweight)

Available as an option

- ▶ Lighting kit for suction hood
- ▶ High temperature hoses
- ▶ Spark arrester grill
- ▶ Wall bracket with spigot for TEKA fans





Example of application: Telescopic suction arm in a welding booth

Available versions

Telescopic suction arm				RGF
Length: 1,2–2,06 m				
		Ø		
		100	150	
Hose	Internal joints	97616100	97616	
	External joints	97626100	97626	



Accessories

for suction arms, cranes and telescopic arms

Description			Art.-No.	Suction arm Ø 150 mm	Suction arm Ø 200 mm	Suction crane	Telescopic suction arm
	Nozzle plate, angular 300 × 360 mm, PVC, black	RGF	66210	■			
	Nozzle plate, round Ø 400 mm, PVC, black	RGF	66220	■			
	Connection material Ø 160 mm (nozzle, flange and hose clamp)	RGB	96301	■			
	Outlet air hose, multilayer aluminium foil, length for delivery 1,25 m, extendable up to 5,0 m	Ø 160 mm	RGB	96303	■		
		Ø 250 mm	RGB	96304	■	■	■
	Lighting kit incl. transformer unit	RGB	96313	■	■	■	■
	Support column for arm 2 - 4 m long, with base plate, height 2 500 mm	RGB	900000005	■			
	Spare hose for arm, pipe type, incl. rubber bands	RGB	100043	■			
	Spare hose for arm, hose type (Dia 150)	Length 2,0 m	RGB	101925	■		■
		Length 3,0 m	RGB	101926	■		
		Length 4,0 m	RGB	101927	■		
	Spare hose for arm, hose type (Dia 200)	Length 2,0 m	RGB	101925200		■	■
		Length 3,0 m	RGB	10192620030		■	
		Length 4,0 m	RGB	10192620040		■	
	Suction hood PVC, incl. throttle valve	RGB	66200	■			
	Protective grille (fine-meshed) for integration in suction hood	RGB	10372	■			



Description			Art.-No.	Suction arm Ø 150 mm	Suction arm Ø 200 mm	Suction crane	Telescopic suction arm
	Suction hood PVC incl. throttle valve and integrated spark protection grille	RGB	662000003	■			
	Suction hood (metal), incl. throttle valve	RGB	104901	■			
	Fan 3 000 m³/h, 1,5 kW incl. fixing plate and snap fastener	RGB	9610341		■		
	Fan 3 500 m³/h, 2,2 kW incl. wall bracket and flexible aluminium ducting	RGB	9610441		■		

Extraction hood/plate extraction

Suitable for

Application above booths and welding robots

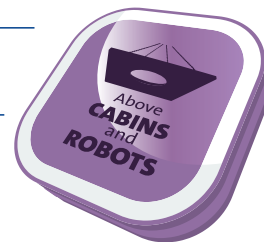


Plate extraction with lamellas

Description

The suction hoods operate according to the principle of the nozzle plate. Due to this, the necessary air amount is applied much more effectively.

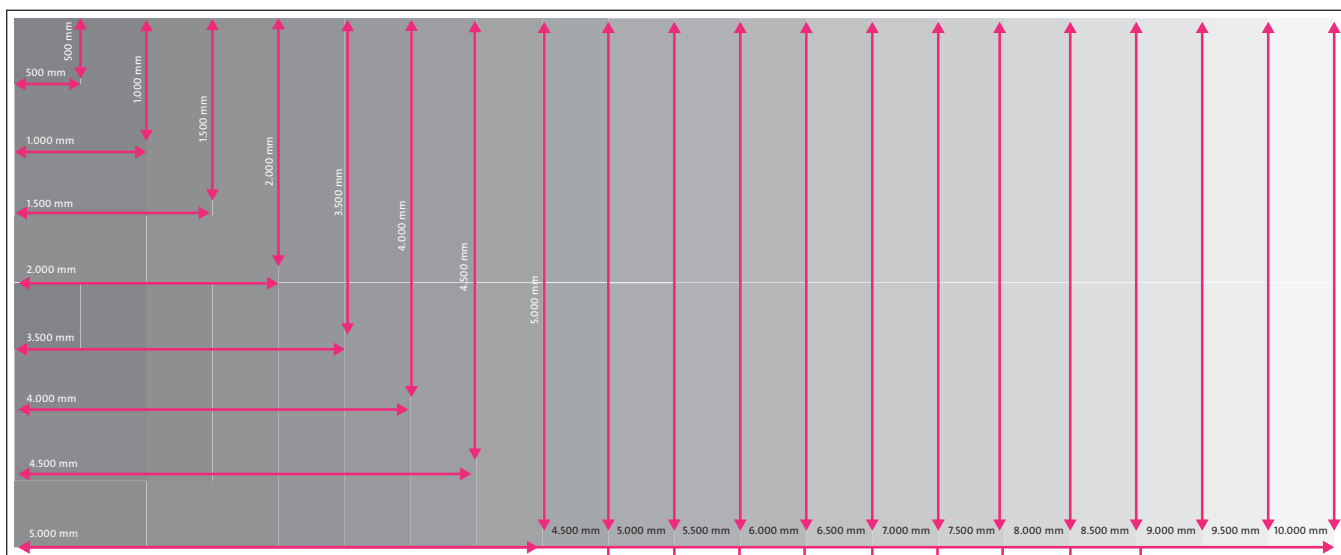
Special versions can be realized at every time. Our employees would be glad to advise you in your request, also regarding required curtains and lamellas.

Standard equipment

- ▶ Stable steel plate
- ▶ Suction nozzles
- ▶ Eye hooks

Available as an option

- ▶ Different dimensions on request
- ▶ Curtains
- ▶ Lamellas
- ▶ Different versions (e.g. brim extraction) on request
- ▶ Made of galvanised steel plate



Thanks to our modular design, we offer panel extraction systems in almost any size.



Available versions

Extraction hood/plate extraction

RGF

Inlet nozzle	Required volumetric flow of the fan	Dimensions (W x D)	
Ø 200 mm	1700 m³/h	1000 × 1000 mm	56610
Ø 250 mm	2600 m³/h	1500 × 1500 mm	56611
Ø 2×200 mm	3400 m³/h	2500 × 1500 mm	56612



TEKA fans are efficiently applicable for aeration and ventilation of working places and halls. Polluted air can be extracted by means of a hose or a pipe fitted with an extraction element at the suction nozzle and can afterwards be guided outside by means of the outlet nozzle and the connected ducting. Optionally, the air can be guided from outside to inside in order to provide working places or spaces with fresh air.

Our high-quality fans that are made of steel plate or silumin casting are stable and thus suitable for continuous operation. Additionally, a very calm operation is made sure by the static and dynamic balance.

The fans are also integrated in our economical, universally applicable exhaust fans. They are the central part of our filter devices, in this case in combination with disposable filters or filter cartridges.

The air is guided via the ducting from the working places to the unit with almost no loss. If required, the ducting can easily and professionally be installed by our technicians.

7. Fans and ducting

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Fan

Suitable for

Connection to suction arms, in order to evacuate pollutants from the extraction point



Description

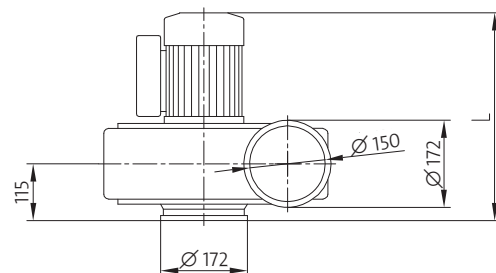
The fans are available in different versions and performances. Due to the stable construction, they are suitable for continuous operation.

Available as an option

- ▶ Wall bracket
- ▶ Protective grating
- ▶ Silencer box
- ▶ Connection material

Standard equipment

- ▶ Up to 3 000 m³/h made of silumin casting (with snap fastener)
- ▶ From 3 500 m³/h on made of silumin casting (with vibration absorber)
- ▶ Static and dynamic balanced impellers (guarantees a calm operation)
- ▶ Low maintenance engine

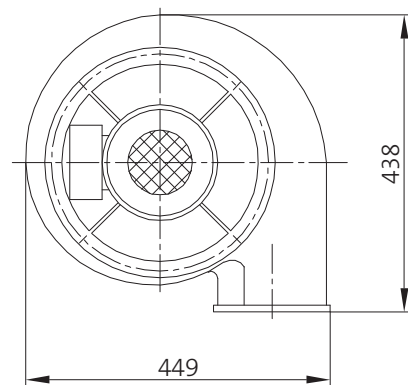
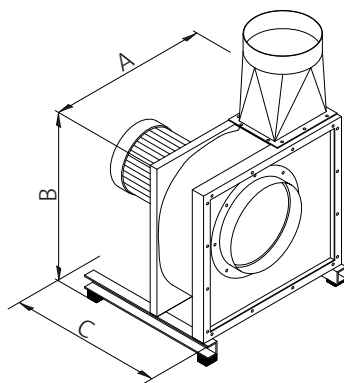


Silumin fan

Fan made of steel sheet

Dimensions

	A	B	C
Fan 3 500 m ³ /h	615 mm	650 mm	550 mm
Fan 4 000 m ³ /h	615 mm	650 mm	550 mm
Fan 5 000 m ³ /h	615 mm	650 mm	570 mm
Fan 6 000 m ³ /h	740 mm	770 mm	720 mm
Fan 7 500 m ³ /h	740 mm	770 mm	720 mm
Fan 10 000 m ³ /h	740 mm	770 mm	720 mm



Available versions

Fan										RGB
		Volumetric flow of the fan								
		2000 m ³ /h	2500 m ³ /h	3000 m ³ /h	3500 m ³ /h	4000 m ³ /h	5000 m ³ /h	6000 m ³ /h	7500 m ³ /h	10000 m ³ /h
	Motor performance	0,75 kW	1,1 kW	1,5 kW	2,2 kW	3,0 kW	4,0 kW	5,5 kW	7,5 kW	11,0 kW
	Dimensions in mm	449×438×410	449×438×410	449×438×438	615×650×550	615×650×550	615×650×570	740×770×720	740×770×720	740×770×720
	Connection nozzle	Ø 160 mm	Ø 160 mm	Ø 160 mm	Ø 250 mm	Ø 250 mm	Ø 315 mm	Ø 355 mm	Ø 400 mm	Ø 450 mm
	Weight	approx. 27 kg	approx. 27 kg	approx. 27 kg	approx. 45 kg	approx. 60 kg	approx. 50 kg	approx. 100 kg	approx. 107 kg	approx. 160 kg
Voltage	230 V / 50 Hz	9610123	9610223	9610323						
	400 V / 50 Hz	961014	961024	961034	961044	961054	961064	961074	961084	961094

Mobile exhaust fan

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Suitable for

Evacuation of pollutants from the extraction point, e.g. fresh air supply for containers, pipes and boxes. Also suitable for the extraction of emissions



Description

The mobile exhaust fan can be used very flexibly due to its low design and the low weight.

Connected to a suction hose, the exhaust fan is suitable for the application to workplaces which are difficult to access (e.g. shipbuilding).

Standard equipment

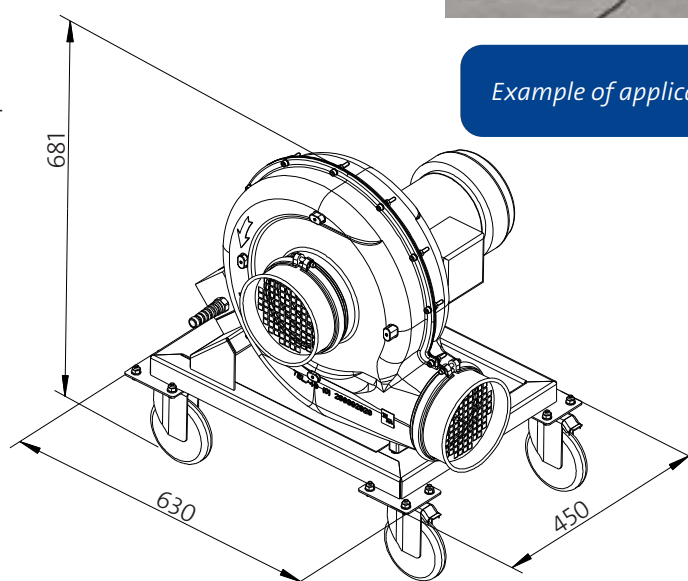
- ▶ Housing and impeller made of resistant aluminium casting (up to 1,5 kW) or steel plate (from 1,5 kW on)
- ▶ Powder-coated housing and chassis
- ▶ Ready to plug in
- ▶ Protective grating on the suction and pressure side
- ▶ Motor circuit breaker
- ▶ 5 m mains cable

Available as an option

- ▶ Suction hose with suction hood and magnetic base
- ▶ Other voltages on request
- ▶ Exhaustion hose



Example of application: Mobile exhaust fan



Available versions

Mobile exhaust fan

RGB

		Volumetric flow of the fan				
		2000 m³/h	2500 m³/h	3000 m³/h	3500 m³/h	4000 m³/h
Voltage	Motor performance	0,75 kW	1,1 kW	1,5 kW	2,2 kW	3,0 kW
	Suction nozzle	Ø 160 mm	Ø 160 mm	Ø 160 mm	Ø 250 mm	Ø 250 mm
	230 V / 50 Hz		97102230	97103230		
	400 V / 50 Hz	97101	97102	97103	97104	97105



Accessories

Description		Art.-No.	Fan 2000 m³/h, 0,75 kW	Fan 2500 m³/h, 1,1 kW	Fan 3000 m³/h, 1,5 kW	Fan 3500 m³/h, 2,2 kW	Fan 4000 m³/h, 3,0 kW	Fan 5000 m³/h, 4,0 kW	Fan 6000 m³/h, 5,5 kW	Fan 7500 m³/h, 7,5 kW	Fan 10000 m³/h, 11,0 kW	Mobile exhaust fan
Wall bracket	RGB	96010	■	■	■							
		96015				■	■	■				
		96020							■	■	■	
Protective grille	RGB	41501	■	■	■							
		41502				■	■	■				
		41503							■	■		
		41504									■	
Silencer box for upright version	RGB	960101	■	■	■							
		960151				■	■	■				
		960201							■			
		960251								■		
		960301									■	
Automatic start/stop system with field sensor Maxi-Control	RGB	963131220123	230 V	230 V	230 V	230 V						
		963131220140	400 V	400 V	400 V	400 V						
		963131220141					400 V	400 V				
Automatic start/stop system with magnetic field sensor for electropneumatic slide valve or motor shut-off valve		963131220224	■	■	■	■	■	■	■	■	■	
Motor circuit breaker	RGB	9620100	500 V									
		9620101	400 V	500 V								
		9620102		400 V	400 V 500 V	500 V						
		9620103	230 V			400 V	500 V					
		9620104		230 V	230 V		400 V	400 V 500 V	500 V			



Hoses and accessories

Hoses and accessories							
Field of application	High vacuum		Mid vacuum		High temperature	Mid vacuum	Hose clip
Type	Superflex		Klimaflex		Klimaflex HT	Aluflex	
Temperature resistance	0° to +85°C		-30° to +80°C		-85° to +310°C	-50° to +200°C	
							
Length	10 metres	15 metres	6 metres	12 metres	4 metres	5 metres	1 piece
Ø 35 mm	51100	511001	51120	511201	51140		51180
Ø 45 mm	51101	511011	51121	511211	51141		51181
Ø 50 mm	51102	511021	51122	511221	51142	51162	51182
Ø 75 mm	51103	511031	51123	511231	51143	51163	51183
Ø 100 mm	51104	511041	51124	511241	51144	51164	51184
Ø 125 mm	51105	511051	51125	511251	51145	51165	51185
Ø 150 mm	51106	511061	51126	511261	51146	51166	51186
Ø 160 mm			51127	511271	51147	51167	51187
Ø 180 mm			51128	511281	51148	51168	51188
Ø 200 mm			51129	511291	51149	51169	51189
Ø 250 mm			51130	511301	51150	51170	51190
Ø 300 mm			51131	511311	51151	51171	51191
Ø 355 mm			51132	511321		51172	
Ø 400 mm			51133	511331		51173	
Ø 450 mm			51134	511341		51174	
Ø 500 mm			51135	511351		51175	

Pipes, moulded parts and acc.

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Pipes, moulded parts and accessories							
	Roof cowl	Deflection cowl	Outlet nozzle with protective grille	Shut off valve airtight	Regulating valve	Flange collar	Flange ring
							
Ø 63 mm					40360	40390	
Ø 80 mm			40301		40361	40391	
Ø 100 mm	40242	40272	40302	40332	40362	40392	40422
Ø 125 mm	40243	40273	40303	40333	40363	40393	40423
Ø 150 mm	40244	40274	40304	40334	40364	40394	40424
Ø 160 mm	40245	40275	40305	40335	40365	40395	40425
Ø 180 mm	40246	40276	40306	40336	40366	40396	40426
Ø 200 mm	40247	40277	40307	40337	40367	40397	40427
Ø 224 mm	40248	40278	40308	40338		40398	40428
Ø 250 mm	40249	40279	40309	40339	40369	40399	40429
Ø 315 mm	40250	40280	40310	40340	40370	40400	40430
Ø 355 mm	40251	40281	40311	40341	40371	40401	40431
Ø 400 mm	40252	40282	40312	40342	40372	40402	40432
Ø 450 mm	40253	40283	40313	40343		40403	40433
Ø 500 mm	40254	40284	40314	40344		40404	40434

Pipes, moulded parts and accessories

Pipes, moulded parts and accessories									
	Bow 15°	Bow 30°	Bow 45°	Bow 60°	Bow 90°	Nipple for pipes	Sleeve for moulded parts	End cap for pipes	Endcap for moulded parts
									
Ø 63 mm	40000	40015	40030	40060	40090	40120	40150	40180	40210
Ø 80 mm	40001	40016	40031	40061	40091	40121	40151	40181	40211
Ø 100 mm	40002	40017	40032	40062	40092	40122	40152	40182	40212
Ø 125 mm	40003	40018	40033	40063	40093	40123	40153	40183	40213
Ø 150 mm	40004	40019	40034	40064	40094	40124	40154	40184	40214
Ø 160 mm	40005	40020	40035	40065	40095	40125	40155	40185	40215
Ø 180 mm	40006	40021	40036	40066	40096	40126	40156	40186	40216
Ø 200 mm	40007	40022	40037	40067	40097	40127	40157	40187	40217
Ø 224 mm	40008	40023	40038	40068	40098	40128	40158	40188	40218
Ø 250 mm	40009	40024	40039	40069	40099	40129	40159	40189	40219
Ø 315 mm	40010	40025	40040	40070	40100	40130	40160	40190	40220
Ø 355 mm	40011	40026	40041	40071	40101	40131	40161	40191	40221
Ø 400 mm	40012	40027	40042	40072	40102	40132	40162	40192	40222
Ø 450 mm	40013	40028	40043	40073	40103	40133	40163	40193	40223
Ø 500 mm	40014	40029	40044	40074	40104	40134	40164	40194	40224

Pipes, silencers and accessories

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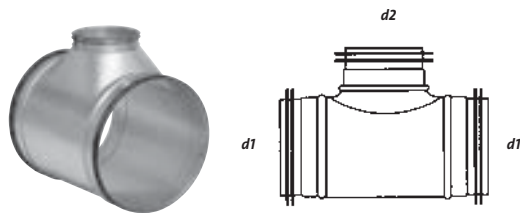


Pipes, silencers and accessories

Type	Pipe		Silencer				Pipe clip
							
Length	3 metres	6 metres	300 mm	600 mm	900 mm	1200 mm	
Ø 63 mm	41300	41301					
Ø 80 mm	41302	41303	41351				41411
Ø 100 mm	41304	41305	41352				41412
Ø 125 mm	41306	41307	41353				41413
Ø 150 mm	41308	41309	41354				41414
Ø 160 mm	41310	41311	41355				41415
Ø 180 mm	41312	41313		41356			41416
Ø 200 mm	41314	41315		41357			41417
Ø 224 mm	41316	41317		41358			41418
Ø 250 mm	41318	41319		41359			41419
Ø 315 mm	41320	41321			41360		41420
Ø 355 mm	41322	41323			41361		41421
Ø 400 mm	41324	41325				41362	41422
Ø 450 mm	41326	41327				41363	41423
Ø 500 mm	41328	41329				41364	41424



T-pieces

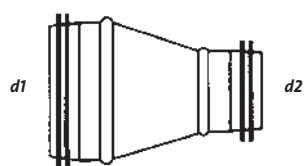


T-pieces												
$d1 \backslash d2$	Ø 63 mm	Ø 80 mm	Ø 100 mm	Ø 125 mm	Ø 150 mm	Ø 160 mm	Ø 180 mm	Ø 200 mm	Ø 224 mm	Ø 250 mm	Ø 315 mm	Ø 355 mm
Ø 63 mm	40870	40900	40930									
Ø 80 mm	40871	40901	40931	40961								
Ø 100 mm	40872	40902	40932	40962	40992	41022	41052	41082	41112	41142		
Ø 125 mm	40873	40903	40933	40963	40993	41023	41053	41083	41113	41143		
Ø 150 mm	40874	40904	40934	40964	40994	41024	41054	41084	41114	41144		
Ø 160 mm	40875	40905	40935	40965	40995	41025	41055	41085	41115	41145		
Ø 180 mm	40876	40906	40936	40966	40996	41026	41056	41086	41116	41146		
Ø 200 mm	40877	40907	40937	40967	40997	41027	41057	41087	41117	41147	41207	
Ø 224 mm		40908	40938	40968	40998	41028	41058	41088	41118	41148	41208	41238
Ø 250 mm		40909	40939	40969	40999	41029	41059	41089	41119	41149	41209	41239
Ø 315 mm		40910	40940	40970	41000	41030	41060	41090	41120	41150	41210	41240
Ø 355 mm			40941	40971	41001	41031	41061	41091	41121	41151	41211	41241
Ø 400 mm			40942	40972	41002	41032	41062	41092	41122	41152	41212	41242
Ø 450 mm				40973	41003	41033	41063	41093	41123	41153	41213	41243
Ø 500 mm						41034	41064	41094	41124	41154	41214	41244

Reductions

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Reductions												
d2 \ d	Ø 63 mm	Ø 80 mm	Ø 100 mm	Ø 125 mm	Ø 150 mm	Ø 160 mm	Ø 180 mm	Ø 200 mm	Ø 224 mm	Ø 250 mm	Ø 315 mm	Ø 355 mm
Ø 80 mm	40481											
Ø 100 mm	40482	40512										
Ø 125 mm	40483	40513	40543									
Ø 150 mm	40484	40514	40544	40574								
Ø 160 mm	40485	40515	40545	40575	40605							
Ø 180 mm		40516	40546	40576	40606	40636						
Ø 200 mm		40517	40547	40577	40607	40637	40667					
Ø 224 mm			40548	40578	40608	40638	40668	40698				
Ø 250 mm		40519	40549	40579	40609	40639	40669	40699	40729			
Ø 315 mm			40550	40580	40610	40640	40670	40700	40730	40760		
Ø 355 mm					40611	40641	40671	40701	40731	40761	40821	
Ø 400 mm						40642	40672	40702	40732	40762	40822	40852
Ø 450 mm								40703	40733	40763	40823	40853
Ø 500 mm										40764	40824	40854



100% SERVICE, 100% SAFETY

360°-SERVICE CONTRACT

Your advantages

**Save costs in the long term**

Service conditions are more favourable than maintenance on request

**Get the most out of your service**

Benefit from our 360° service offering all year round

**Maximum operational reliability**

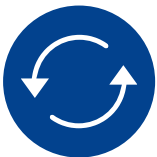
Reduction of unnecessary downtime and outages

**We make the appointments**

No more worries about upcoming maintenance

**Premium support**

Prioritised appointment scheduling when things need to be done quickly

**Warranty extension**

We increase the warranty to 36 months

Do you have any questions or would you like to secure the benefits of the 360° service package?

Then get in touch with us!

Tel. +49 2541 84 84 1-428

service@teka.eu





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YOUR CATALOGUE**

Your TEKA-Partner:



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