



Operating Instructions

Typ

TEKA-FILTERCUBE 2

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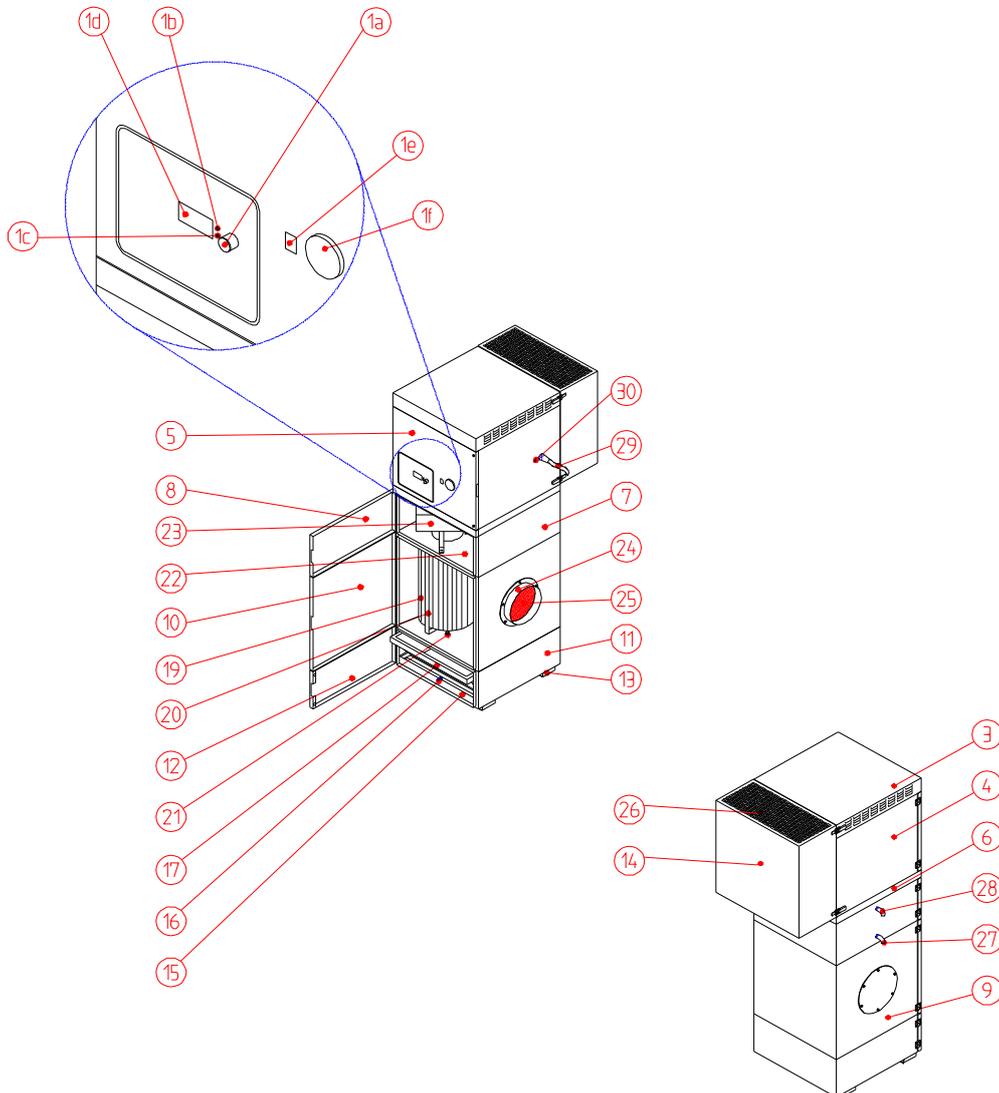


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1 Drawing / Description of components

Filtercube 2N



Pos.1a Joggle button (as an option)

Pos.1b Status indicator, green

Pos.1c Warning indicator, red

Pos.1d Display

Pos.1e Unit switch

Pos.1f Stroboscope flash

Pos.3 Housing cover

Pos.4 Ventilator housing

Pos.5 Ventilator door

Pos.6 Interim cover

Pos.7 Pneumatic housing

Pos.8 Pneumatic access door

Pos.9 Cartridge housing

Pos.10 Cartridge access door

Pos.11 Drawer housing

Pos.12 Drawer access door

Pos.13 Base

Pos.14 Noise insulation housing

Pos.15 Lifting mechanism

Pos.16 Locking screw for dust collecting bin

Pos.17 Dust collecting bin

Pos.19 Filter cartridge

Pos.20 Cartridge bracket

Pos.21 Locking screw for filter cartridge

Pos.22 Intermediate plate with cartridge guidance

Pos.23 Compressed air tank

Pos.24 Intake stub

Pos.25 Aluminium knit-filter

Pos.26 Exhaust outlet

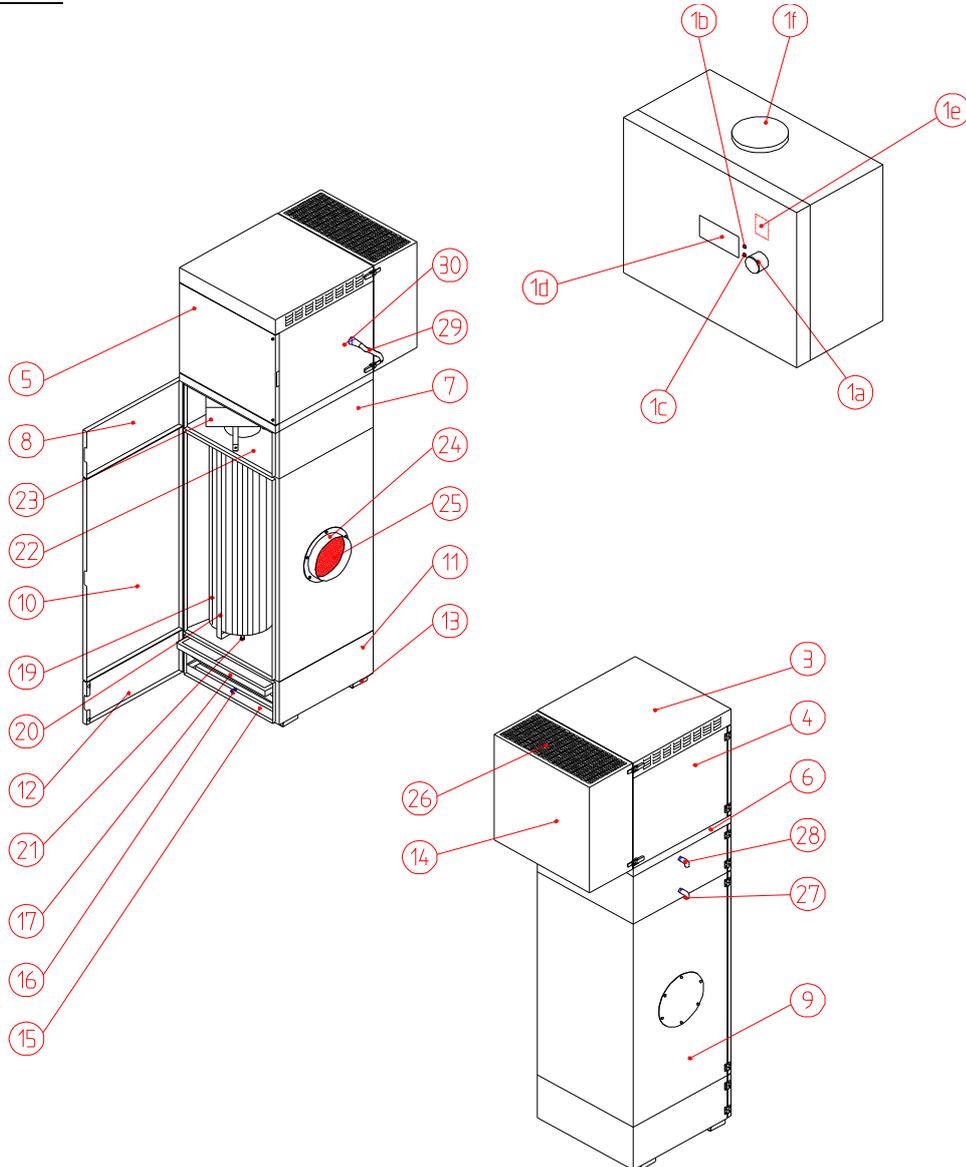
Pos.27 Ball valve

Pos.28 End piece nozzle

Pos.29 Mains cable with plug

Pos.30 Blind screw connection

Filtercube 2H



Pos.1a	Joggle button (as an option)	Pos.14	Noise insulation housing
Pos.1b	Status indicator, green	Pos.15	Lifting mechanism
Pos.1c	Warning indicator, red	Pos.16	Locking screw for dust collecting bin
Pos.1d	Display	Pos.17	Dust collecting bin
Pos.1e	Unit switch	Pos.19	Filter cartridge
Pos.1f	Stroboscope flash	Pos.20	Cartridge bracket
Pos.3	Housing cover	Pos.21	Locking screw for filter cartridge
Pos.4	Ventilator housing	Pos.22	Intermediate plate with cartridge guidance
Pos.5	Ventilator door	Pos.23	Compressed air tank
Pos.6	Interim cover	Pos.24	Intake stub
Pos.7	Pneumatic housing	Pos.25	Aluminium knit-filter
Pos.8	Pneumatic access door	Pos.26	Exhaust outlet
Pos.9	Cartridge housing	Pos.27	Ball valve
Pos.10	Cartridge access door	Pos.28	End piece nozzle
Pos.11	Drawer housing	Pos.29	Mains cable with plug
Pos.12	Drawer access door	Pos.30	Blind screw connection
Pos.13	Base		



2 Introduction

One sector of welding fume extraction equipment has become very significant in recent years. The filtering of extracted welding fumes and the recycling of filtered air to the working area.

This is a surely a sign that the environmental consciousness of every one of us has altered very strongly in favour of our environment. For a long time now, no one has denied that pollution occurs during welding. However, the type of pollutants depends on the welding process that is used. One can basically distinguish between gases and fumes (smoke). Fumes could also really be described as dust. If you examine this dust under a microscope, you will find that they consist of very fine particles, often with a size of 0.001 mm or smaller, that can enter the lungs.

The classical method of trying to improve the working conditions of polluted workplaces is general ventilation. In this case, the general rule is a multiple change of air in the welding hall, i.e. the complete volume of air in the hall is replaced. However, this method only achieves a small reduction in the level of pollution within the breathing space of the welder.

The same applies to so-called "overhead" extraction, i.e. the installation of large extractor hoods above the welding workplaces. This is the worst airflow imaginable, since the pollutants first pass through the breathing space of the welder and only afterwards are they contained and extracted. This is surely not the point of the exercise. A much more effective method than overhead/wide-area extraction is the removal of pollutants directly at their source, with localised extraction. Both the investments and the operating costs are much, much lower if localised extraction is used.

The environmental and workplace-safety measures are especially important requirements for successful application of a welding technology, in addition to the technological optimisation of the processing method. In a time of increasing sensitivity and tougher legislation, the task therefore lies in making an early assessment of the potential hazards for the workplace and the environment, and reducing them as appropriate.



3 Function of the TEKA – FILTERCUBE 2

The filter unit TEKA – FILTERCUBE 2 is mainly used for localised extraction of welding fumes. For this purpose, the unit must be equipped with corresponding application-specific fittings.

The polluted air is extracted via a specific extraction fitting and gets through the intake stub into the filter unit. Here, the rough dust particles are collected in the aluminium knit-filter. The particle-shaped pollutants are collected on the surface of the following filter cartridges. The clean air passes the ventilator and is returned into the room via the exhaust outlet.

Caution:

The filter cake is removed through the installed pneumatic cleaning which evenly distributes the compressed air over the filter surface. (see chapter 13.1 *Cleaning of the filter cartridges*)
The removed dust is gathered in the tank from which it can be removed. (see chapter 13.3 *Emptying of dust collecting bin*)

4 Safety instructions

The following basic safety measures must be observed to prevent electric shocks, injury or fire when using electrical devices:

- Read and follow these instructions before you use the unit!
- Store the operating and service instructions in a secure place!
- Limits of application:
welding fumes containing oil mist, aluminium dust, grinding dust, metallic dusts, gases, water, not for EX-zones, etc. (If there is any doubt about the application, please contact the manufacturer!)
- Do not employ the unit for the extraction of easily combustible or explosive gases and/or dust mixtures!
- Do not employ the unit in explosive zones, e.g. zone 0, zone 1, zone 2, zone 20, zone 21, zone 22!
- Do not employ the unit for sucking burning or glowing materials, e.g. cigarettes, matches, metallic types of dust and/or splinters, paper, cleaning cloths, oils or oil mist, greases, separating agents (e.g. silicon spray), cleaning agents, etc.!
- Do not use the unit for the extraction of aggressive media!
- Do not use the unit for sucking liquids of any kind!
- Do not use the unit for extraction of any organic matters without the written permission of the manufacturer!
- Protect the connecting lead from heat, moisture, oils and sharp edges!
- Pay attention to the correct voltage! (Observe the information on the nameplate!)
- Only use original TEKA spare parts!
- Do not operate the unit without a filter cartridge installed!
- Disconnect the filter unit from the mains supply before opening the unit and secure against it being switched on again!
- The compressed air tank is to be emptied before carrying out all maintenance and repair work.



- The exhaust outlet must not be obstructed or blocked in any way!
- Always take care that the unit stands secured and that the caster brakes are set!
- Disconnect from the mains supply when cleaning or servicing the unit, when exchanging any parts or when changing machine settings for a different function and secure it against being switched on again!
- The filter cartridges cannot be regenerated for repeated use!
- The filters must be disposed of according to relevant legislation and directives!
- At regular intervals inspect the mains supply lead for signs of damage!
- The unit must not be used if there is any damage or irregularity to the mains supply lead!
- Use only dry and oil-free compressed air with pressure ratings from minimum 1 bar to 6 bar maximum.
- Do not use the filter unit if any one or more components of the system are defective, missing or damaged. In any one of these instances please contact the TEKA Service Department: Phone no.: +49 (0) 28 63 / 92 82 - 0
- When extracting carcinogenic welding fumes as from the processing of nickel or chrome alloys, the requirements of the directives on clean air of the German TRGS 560 "Return of process air when working with carcinogenic media" must be observed!
- Further information regarding the TRGS 560 can be obtained from the "BIA - Berufsgenossenschaftliches Institut für Arbeitssicherheit" (Institute for work safety of the employers' liability insurances) at D-53754 Sankt Augustin, Germany.
- Additional authorized protective equipment is to be used when working on the unit or collecting such as e.g. respiratory mask, eye protectors, noise protection. We recommend using a respiratory mask according to DIN EN 141/143 - Protection class P3.

5 Transport

- Transport the machine on a pallet intended for this purpose, secure against falling over and shifting.
- Lift the machine and transport with a hand lift truck or fork lift truck.
- Lifting trucks or fork lift trucks must have a minimum load bearing capacity of 2000 kg.
- Do not stand below and/r besides the load when lifting and putting down.
- Remove all persons who are standing around from the danger zone.
- Observe the manufacturer's instructions or contact the manufacturer.

6 Installation

- Wear safety shoes with steel caps!
- Remove all persons who are not required for installation from the danger zone.
- Stipulate instructions for surface and load-bearing capacity.
- The machine must be easily accessible from all sides.
- Observe the manufacturer's instructions or contact the manufacturer.



7 Initial operation

- Observe the information on the nameplate.
- The machine may only be connected by authorized and skilled electricians.
- Remove all persons who are not required for connecting the power supply from the danger zone.
- The extraction elements and if applicable other accessories, must be mounted or installed to the unit prior to initial operation.
- The filter cartridges must be pre-coated before initial operation if these have not already been pre-coated by the plant. (If there is any doubt about the application, please contact the manufacturer!)
- The machine must be easily accessible from all sides.
- Observe the manufacturer's instructions or contact the manufacturer.

7.1 Mounting of extraction and suction elements

- The assembly may only be carried out by qualified staff.
- The extraction element is to be fastened to the intake stub by means of a suction pipe or suction hose (Pos.24).
- The exhaust air element is to be fastened to the exhaust outlet (Pos. 26) using a suction pipeline.
- Remove all persons who are not required for assembling the extraction or exhaust element from the danger zone.
- Only use TEKA – extraction elements and TEKA – exhaust elements.
- The machine must be easily accessible from all sides.
- Observe the manufacturer's instructions or contact the manufacturer.

7.2 Electrical connection

- Observe the information on the nameplate.
- The machine may only be connected by authorized and skilled electricians.
- Remove all persons who are not required for connecting the unit from the danger zone.
- Connect the filter unit to the mains supply.
- The machine must be easily accessible from all sides.
- Observe the manufacturer's instructions or contact the manufacturer.

Caution:

Work on the electrical components may only be carried out by authorized personnel!
Observe the information on the nameplate!

7.3 Pre-coating of the filter cartridges

The filter cartridges only have to be pre-coated if these have not already been pre-coated by the plant. (If there is any doubt about the application, please contact the manufacturer!)



- Observe the information on the nameplate.
- The pre-coating may only be carried out by qualified personnel.
- Remove all persons who are not required for the pre-coating of the filter cartridges from the danger zone.

Caution:

There must be no compressed air in the compressed air tank.

- Start the system without the work process.
- Apply the pre-coat (10g per square metre of filter surface area) over the extraction point which is nearest to the filter system in the suction line.
- Observe the manufacturer's instructions or contact the manufacturer.

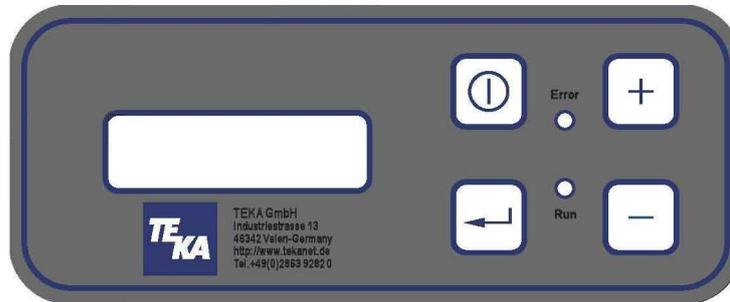
7.4 Connection of the compressed air supply

- External supply only using an authorized compressed air hose!
- The assembly may only be carried out by qualified staff.
- The compressed air may not be connected until the filter differential pressure value is reached, which is set in the ControlUnit2 when cleaning begins (*see separate operating instructions of the software*).
- Remove all persons who are not required for connecting the compressed air supply from the danger zone.
- The compressed air must be dry and oil-free.
- Connect the compressed air hose by means of a quick coupling line to the end piece nozzle (Pos.28).
- The supplied operating pressure must have a minimum 1 bar and a maximum 6 bar and must be set dependent on the process.
- The external compressed air supply must be designed to the extent that the compressed air tank reaches the operating pressure again within the valve idletime (see operating instructions of the ControlUnit2).
- The machine must be easily accessible from all sides.
- Observe the manufacturer's instructions or contact the manufacturer.

Caution:

The compressed air tank must be emptied before carrying out all service and repair work and the filter unit disconnected from the power supply and secured against being switched on again! In case of leakage to the pneumatic system, the filter unit must not be put into operation anymore. Without compressed air supply the filter cartridge gets dirty very fast and the device switches to disturbance (filter full)!

8 Operation of the unit



Attention:

For setting options, menu navigation etc. of the system please see the attached independent manual "ControlUnit 2".

9 Test run

- All protective equipment has to be affixed before the trial run.
- Observe the information on the nameplate.
- The trial run of the machine may only be carried out by qualified personnel.
- All persons who are not required for the trial run are removed from the danger zone.
- The machine must be easily accessible from all side.
- Observe the manufacturer's instructions or contact the manufacturer.

10 Set extraction elements

- The elements must be positioned directly on or as close as possible to the point of production (localised extraction).
- For the protection of the health the industrial safety act (ArbSchG) stipulates that the dangers involved with the work for the employees must be determined, assessed and corresponding industrial safety measures be carried out.
- If not otherwise possible use additional authorized protective equipment for the user such as e.g. respiratory mask, eye protectors, noise protection. We recommend using a respiratory mask according to DIN EN 141/143 - Protection class P3.
- Remove all persons who are not required for the work which is directly to be carried out from the danger zone or if applicable additionally equip with protective equipment.
- The machine must be easily accessible from all side.
- Observe the manufacturer's instructions or contact the manufacturer.



11 Other extraction elements

- Observe the manufacturer's instructions or obtain release of the manufacturer.
- Consult application technicians.

12 Operation

- Observe the correct position of the extraction element and details on the nameplate.
- Follow the manufacturer's instructions.
- Remove all persons who are not required for the work which is directly to be carried out from the danger zone or if applicable additionally equip with protective equipment.
- If not otherwise possible use additionally authorized protective equipment for the user such as e.g. respiratory mask, eye protectors, noise protection. We recommend using a respiratory mask according to DIN EN 141/143 - Protection class P3.
- Caution: Only use original TEKA products!

13 Maintenance and service

The accumulation of extracted particles on the filter cartridge will eventually lead to a reduction of the suction / extraction performance.

The level of saturation of the filter cartridge is monitored electronically. The filter cartridge is cleaned automatically in order to retain the admissible suction performance of the unit. (see *chapter 13.1 Cleaning of the filter cartridges*)

The accumulated dust particles are blown off the filter by applying compressed air from the clean side. The released filter cake will drop into the dust collecting bin. (see *chapter 13.3 Emptying of dust collecting bin*)

The useful service life of the filter cartridge greatly depends on the operational environment. For this reason, it cannot be predicted. Should after cleaning the filter cartridge the operating pressure of the filter system no longer be reached, the red indicator lamps will illuminate (see *separate operating instructions of the ControlUnit2*) and the filter cartridge must be replaced. (see *chapter 13.7 Replacement of the filter cartridges*)

Caution:

Disconnect from the mains supply when cleaning or servicing the unit, when exchanging any parts or when changing machine settings for a different function and secure against being switched on again.

The operation of the filter unit must be interrupted while cleaning and service. The compressed air tank is to be emptied before carrying out all maintenance and repair work. Exchange of the filter cartridge and the disposal of the element may be executed only in amply ventilated environments and when using an appropriate protective respiratory mask! We recommend using: A respiratory mask according to DIN EN 141/143 - Protection class P3. The task of changing the filter elements should be executed by trained personnel only.



13.1 Cleaning of the filter cartridges

The level of saturation of the filter cartridges is monitored electronically. The filter cartridge is cleaned automatically in order to retain the admissible suction performance of the unit. (see *separate operating instructions of the ControlUnit2*)

The filter unit remains in operation status during automatic cleaning.

Should the cleaning process no longer manage to clean the filter cartridge at its operating pressure then the filter cartridge must be replaced. (see chapter 13.7 Replacement of the filter cartridges)

13.2 Compressed air supply

A suitable compressed air supply must be proved to ensure the correct function of the suction unit.

- The compressed air supply may only be checked by qualified personnel.
- Remove all persons who are not required for the work which is directly to be carried out from the danger zone or if applicable additionally equip with protective equipment.
- The compressed air must be dry and oil-free.
- The resulting condensation in the compressed air tank (Pos.23) is to be emptied at regular intervals.
- If an upstream water trap should be used (available as an option), this is also to be controlled at regular intervals and emptied if necessary.
- The pneumatic components are to be checked regularly for tightness.
- The external compressed air must be supplied via an authorized compressed air hose.
- The supplied operating pressure must be a minimum 1 bar and maximum 6 bar and must be set dependent on the process.
- As buffer - reserve a compressed air tank is installed in the pneumatics housing. Contents are sufficient for one cleaning-session.
- The external compressed air supply must be designed to the extent that the compressed air tank reaches the operating pressure again within the valve idletime (see separate operating instructions of the ControlUnit2).

Caution:

The compressed air tank is to be emptied before carrying out all maintenance and repair work. In case of leakage of the pneumatic system the suction unit must not be put into operation anymore. Without compressed air supply the filter cartridge gets dirty very fast, and the device switches to disturbance (filter full)!



13.3 Emptying of dust collecting bin

The dust collecting bin must be emptied after a certain number of operating hours. This is determined according to the incurred volume of dust, the dust collecting bin must however be emptied at least once a week. Here the dust collecting bin may be filled however to a maximum 25%! (If there is any doubt about the application, please contact the manufacturer!)

- The dust collecting bin may only be emptied by qualified personnel.
- Remove all persons who are not required for the work which is directly to be carried out from the danger zone or if applicable additionally equip with protective equipment.
- Disconnect the machine from the power supply and secure against being switched on again.
- Disconnect the filter unit from the external compressed air supply.
- Empty the compressed air tank (Pos. 23) by opening the ball valve (Pos. 27).
(Condensation can leak by opening the ball valve.)
- Close the ball valve again (Pos.27) when the compressed air tank (Pos. 23) is completely empty.
- Suitable respiratory protection and eye protectors are to be worn when servicing the unit.
We recommend using: A respiratory mask according to DIN EN 141/143 - Protection class P3.
- Open the drawer access door (Pos.12).
- Lower the lifting mechanism (Pos.15) by turning the locking screw (Pos.16) downward.
- Pull out the dust collecting bin (Pos.17).
- The dust must be stored properly in a suitable container and disposed of according to pertinent directives.
- Push the dust collecting bin (Pos.17) all the way back into the drawer housing (Pos.15).
- Raise the lifting mechanism (Pos.15) by turning the locking screw (Pos.16) until the dust collecting bin (Pos.17) sits tight. (Also check for possible damage of the sealing gasket under the cartridge housing (Pos.9).
- Close the drawer access door (Pos.12).
- Connect the filter unit to the external compressed air supply.
- Connect the filter unit to the mains supply.
(Observe the information on the nameplate!)

Caution:

We recommend using: A respiratory mask according to DIN EN 141/143 - Protection class P3.
The work processes specified above may only be carried out by a correspondingly trained employee! The dust must be disposed of according to relevant legislation and directives!



13.4 Discharging the condensation

The resulting condensation in the compressed air tank (Pos.25) is to be emptied at regular intervals, at least however once a month.

- The condensation may only be discharged by qualified personnel.
- Remove all persons who are not required for the work which is directly to be carried out from the danger zone or if applicable additionally equip with protective equipment.
- Disconnect the machine from the power supply and secure against being switched on again.
- Disconnect the filter unit from the external compressed air supply.
- Open the ball valve (Pos.27) and fill the condensation into a suitable container. (by opening the ball valve compressed air stored in the compressed air tank (Pos.23) will escape.)
- Properly store the discharged condensation in a suitable container and dispose of according to the regulations.
- Close the ball valve (Pos.27).
- Connect the filter unit to the external compressed air supply.
- Connect the filter unit to the mains supply. (Observe the information on the nameplate!)

Caution:

The work processes specified above may only be carried out by a correspondingly trained employee!
Dispose of the condensation according to the statutory regulations!

13.5 Cleaning of aluminium knit filter

The aluminium knit filter must be cleaned after a certain number of operating hours. This is determined according to the produced quantity of dust, the aluminium knit filter must however be cleaned at least once a week. (If there is any doubt about the application, please contact the manufacturer!)

- The aluminium knit filter may only be cleaned by qualified personnel.
- Remove all persons who are not required for the work which is to be directly carried out from the danger zone or if applicable additionally equip with protective equipment.
- Disconnect the machine from the power supply and secure against being switched on again.
- Disconnect the filter unit from the external compressed air supply.
- Empty the compressed air tank (Pos. 23) by opening the ball valve (Pos. 27). (Condensation can leak by opening the ball valve.)
- Suitable respiratory and eye protectors are to be worn when servicing the unit. We recommend using: A respiratory mask according to DIN EN 141/143 - Protection class P3.
- Open the cartridge door (Pos.10).
- Unscrew the mounting plate from the knit filter intake in the cartridge housing and pull out the aluminium knit filter (Pos.25).
- Clean the aluminium knit filter in a container which complies with the statutory regulations.



Caution:

Check the aluminium knit filter for damages after cleaning and if applicable replace the filter. Only use original TEKA replacement filter!

- Push the aluminium knit filter into the knit filter intake.
- Screw the mounting plate on tight again.
- Close the cartridge door (Pos.10).
- Connect the filter unit to the external compressed air supply.
- Connect the filter unit to the mains supply.
(Observe the information on the nameplate!)

Caution:

Exchange of the filter and the disposal may be executed only in amply ventilated rooms and when using an appropriate protective respiratory mask! The compressed air tank is to be emptied before carrying out all maintenance and repair work. We recommend using: A respiratory mask according to DIN EN 141/143 - Protection class P3. The work processes specified above may only be carried out by a trained employee. The filters must be disposed of according to relevant legislation and directives!

13.6 Replacement of aluminium knit filter

The aluminium knit filter must be changed after a certain number of operating hours. This is determined according to the produced quantity of dust, the aluminium knit filter must however be exchanged no later than when the filter cartridges are replaced. (If there is any doubt about the application, please contact the manufacture!)

- The aluminium knit filter may only be serviced by qualified personnel.
- Remove all persons who are not required for the work which is to be directly carried out from the danger zone or if applicable additionally equip with protective equipment.
- Disconnect the machine from the power supply and secure against being switched on again.
- Disconnect the filter unit from the external compressed air supply.
- Empty the compressed air tank (Pos. 23) by opening the ball valve (Pos. 27). (Condensation can leak by opening the ball valve.)
- Close the ball valve again (Pos.27) when the compressed air tank (Pos. 23) is completely empty.
- Suitable respiratory protection and eye protectors are to be worn when servicing the unit. We recommend using: A respiratory mask according to DIN EN 141/143 - Protection class P3.
- Open the cartridge door (Pos.10).
- Unscrew the mounting plate from the knit filter intake in the cartridge housing and pull out the aluminium knit filter (Pos.25).
- Push the new aluminium knit filter into the knit filter intake.

Caution:

Only use original TEKA replacement filter!

- Screw the mounting plate on tight again.
- Close the cartridge door (Pos.10).



- Connect the filter unit to the external compressed air supply.
- Connect the filter unit to the mains supply.
(Observe the information on the nameplate!)

Caution:

Exchange of the filter and the disposal may be executed only in amply ventilated rooms and when using an appropriate protective respiratory mask! The compressed air tank is to be emptied before carrying out all maintenance and repair work. We recommend using: A respiratory mask according to DIN EN 141/143 - Protection class P3. The work processes specified above may only be carried out by a trained employee. The filters must be disposed of according to relevant legislation and directives!

13.7 Replacement of the filter cartridges

When the red warning signal lamp (see *separate operating instructions of the ControlUnit2*) illuminates the filter cartridges must be changed as follows:

- The filter cartridges may only be replaced by qualified personnel.
- Remove all persons who are not required for the work which is directly to be carried out from the danger zone or if applicable additionally equip with protective equipment.
- Disconnect the machine from the power supply and secure against being switched on again.
- Disconnect the filter unit from the external compressed air supply.
- Empty the compressed air tank (Pos. 23) by opening the ball valve (Pos. 27).
(Condensation can leak by opening the ball valve.)
- Close the ball valve again (Pos.27) when the compressed air tank (Pos. 23) is completely empty.
- Suitable respiratory protection and eye protectors are to be worn when opening the machine.
We recommend using: A respiratory mask according to DIN EN 141/143 - Protection class P3.
- Open the cartridge door (Pos.10).
- Release the locking screw (Pos.21) of the cartridge bracket (Pos.20).
- Pull out the filter cartridge (Pos.19).
- Push the new filter cartridge into the cartridge intake which is mounted under the shim (Pos.22).

Caution:

Only use original TEKA replacement filter!

- Tighten the locking screw (Pos.21) of the cartridge bracket (Pos.20).
- Close the cartridge door (Pos.10).
- The compressed air may not be connected until the filter differential pressure value was reached, which is set in the ControlUnit2 when cleaning begins (see *separate operating instructions of the ControlUnit2*).
- Connect the filter unit to the mains supply.
(Observe the information on the nameplate!)



Caution:

Exchange of the filter and the disposal may be executed only in amply ventilated rooms and when using an appropriate protective respiratory mask! The compressed air tank is to be emptied before carrying out all maintenance and repair work. We recommend using: A respiratory mask according to DIN EN 141/143 - Protection class P3. The work processes specified above may only be carried out by a trained employee. The filters must be disposed of according to relevant legislation and directives!

14 Error search

- Contact manufacturer.
- Remove all unauthorized persons from the danger zone.

14.1 No function

- The machine or electrical system, electrical line may only be checked by qualified electricians.
- Disconnect the machine from the power supply before opening and secure against being switched on again and disconnect the machine from the external compressed air supply. The compressed air tank must be emptied.
- Suitable protection equipment such as e.g. respiratory mask and eye protectors must be worn when opening the filter part.
We recommend using a respiratory mask according to DIN EN 141/143 - Protection class P3.

14.2 Suction performance too low

- The machine or electrical system, electrical line may only be checked by qualified electricians.
- Disconnect the machine from the power supply before opening and secure against being switched on again and disconnect the machine from the external compressed air supply. The compressed air tank must be emptied.
- Suitable protection equipment such as e.g. respiratory mask and eye protectors must be worn when opening the filter part.
We recommend using a respiratory mask according to DIN EN 141/143 - Protection class P3.

14.3 Insufficient extraction

- The extraction device must be designed to the extent that its extraction elements are adjusted to the local conditions and the dimensions take into account the volume of air pollution.
- Contact manufacturer, if applicable application technician.
- Consultancy on site.



15 Disassembly / disposal

- The machine or electrical system, electrical line may only be dismantled by qualified electricians.
- Before disassembly disconnect the machine from the power supply and from the external compressed air supply. The compressed air tank must be emptied.
- Suitable respiratory protection and protective clothing are to be worn with all work. We recommend using a respiratory mask according to DIN EN 141/143 - Protection class P3.
- The pollutants or the filter media must be disposed of properly.
- Observe the manufacturer's instructions or contact the manufacturer.

To ensure an efficient and orderly operation of your TEKA-FILTERCUBE 2 extraction unit and for compliance with the correct disposal of the collected dust media, we offer the following services:

- Assistance in looking for a local waste disposal company.
- A list of disposal companies in Germany can be provided upon request at no extra cost.
- A maintenance and service contract
- Our customer services by phone

Feel free to contact our Service Department where you will be assisted 24 hours a day.

Phone: 0 28 63 / 92 82 - 0

Fax: 0 28 63 / 92 82 72



16 Technical Data

Caution:

Observe the information on the nameplate!

Filter unit		TEKA - FILTERCUBE			
		2 N 2500	2 N 3500	2 H 4000	2 H 5000
Supply voltage	V	400			
Frequency	Hz	50			
Type of current	Ph	3			
Motor power	kW	1.5	2.2	3.0	4.0
Airflow volume	m ³ /h	1900	4400	4600	5400
Max vacuum	Pa	3100	3000	3300	3600
Protection class		IP 54			
ISO - class		F			
Control voltage	V	230			
Duty cycle	%	100			
Width x Depth x Height	mm	665 x 983 x 2070 (2670)			
Weight	kg	180-350			
Filter insert		aluminium knit-filter, filter cartridges			
Filter area of filter cartridge	m ²	15,6 - 50			
Rate of extraction	%	>99			
Mode of cleaning		Pulse-Jet			
Noise level (Measured as per DIN 45635 T1 in free air at 1m distance from the surface of the machine, max. airflow volume.)	dB(A)	76			
Pressure external, min.	bar	1			
Pressure external, max.	bar	6			
Compressed air supply		dry / oil-free			



17 List of spare parts

Designation:	Article no:
Motor 1.5 kW 400V 3 Ph 50 Hz	20000002
Motor 2.2 kW 400V 3 Ph 50 Hz	20000011
Motor 3.0 kW 400V 3 Ph 50 Hz	20000006
Motor 4.0 kW 400V 3 Ph 50 Hz	20000005
Filter cartridge 7.5m ²	10025075
Filter cartridge 10m ²	10025
Star filter cartridge, Type easy clean + 12.5m ²	100050125
Filter cartridge 15m ²	10027
Filter cartridge 20m ²	100090200
Star filter cartridge, Type easy clean + 25m ²	100050250



18 Declaration of conformity TEKA-FILTERCUBE 2



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We herewith declare in sole responsibility that the above-mentioned product, starting from machine No.: 110000000, conforms to the following standards:

Directives on machine building:	2006/42/EG
Electromagnetic compatibility:	2004/108/EG
Directives on pressure device:	97/23/EG
Directives on low voltage:	2006/95/EG

Applied harmonised standards:

- DIN EN 349
- DIN EN 983
- DIN EN 12100 part 1 and part 2
- DIN EN 60204 part 1
- DIN EN ISO 13857
- DIN EN ISO 14121

plus further national standards and specifications:

- DIN 45635 part 1

This declaration will become void if changes are effected to the suction and filter systems which were not agreed upon in writing by the manufacturer.

A handwritten signature in black ink, appearing to be 'Riggen' followed by a stylized flourish.

Velen, 17 December 2009

TEKA
Absaug - und Entsorgungstechnologie GmbH