



*Clean air
in sight. . .*



***Suction and filter units
for printers (plotters)***

Modern inkjet printers working on the basis of solvent inks that release harmful and irritating gases. These hazardous gases must be extracted and removed. Our new suction and filter units for printers (plotters) reliably filter out these substances from the air stream. The cleaned air can be passed back into the working area without any loss of energy.

We use highly effective carbon to filter out the pollutants. This activated carbon was especially sensitised by us to allow the maximum possible adsorption capacity (one gram of this carbon corresponds to the filter area of more than two football fields) and thus ensures a long life for the used filter material.

The producers use a wide range of inks. We offer especially selected types of activated carbon to deal with relating to the various gases.

We design the filtering devices to meet with your requirements!

A description of the already installed suction and filtering units for printers are given below.

Airfilter IC

This shown model directly extracts the irritating gases during the printing process. There is the possibility either to expel the cleaned air outside or to blow it into an existing air extraction system.



Photo 2.1

The filter unit is equipped with a start-stop automation system. On starting the printing operation the extraction and filtering units also starts up automatically and stops after a run-on time that can be set beforehand up to your requirements / desires. The display shows all these data that can be amended after entering a passcode.



Photo 2.2

The unit is powder-coated inside and even outside. The filter cassette is to be replaced via a big service door. As a standard, all units are equipped with our well-proven sealing device that ensures an absolute extraction of the gases through the activated carbon.

On request, the filtering unit can also be supplied in special colours – up to your requirements and desires. E.g. please refer to photos 2.2 and 2.3.



Photo 2.3

Technical data Filter unit Airfilter IC:

Max. volume flow (continuously variable):	180 m ³ /h
Motor:	1,2 kW, 230 V 50 Hz or 110 V 60 Hz
Noise level:	52 dB (A)
Dimensions (wxdxh):	365 x 496 x 797 mm
activated carbon:	in replaceable cassettes
Filling of activated carbon:	15 kg
Inlet spigots:	2 x 100 mm
Outlet spigot:	1 x 100 mm
Weight:	42 kg

Airfilter for printers

Airfilter Ink S1

This unit has an air volume flow of up to 850 m³/h. This makes it possible to extract gases from printers that have not got a factory-option for extraction. Therefore, we offer - as an option - a range of various nozzles connecting hoses and collection elements.



All units type Airfilter Ink S1 are delivered - as a standard - along with:

- hour meter
- filter monitoring
- additional pre-filter mat in a changeable frame
- silencer

Photo 3.1



Photo 3.2

The air is led back into the room via the blowing out lattice. As an alternative – we offer an outlet spigot that enables to lead the air outside via a connecting hose.



Photo 3.3

Technical data Filter unit Airfilter Ink S1:

Max. volume flow:	850 m ³ /h
Motor:	1,1 kW, 230 V 50 Hz or 110 V 60 Hz
Noise level:	60 dB (A)
Dimensions (wxdxh):	665 x 1.010 x 1.280 mm
Activated carbon:	in replaceable cassettes
Filling of activated carbon:	30 kg
Inlet spigot:	1 x 250 mm
Outlet spigot:	1 x 250 mm
Weight:	150 kg

The above shown printer has got a width of 2.500 mm. The released gases are collected by means of 2 mobile coverings that are connected to our suction- and filtering device.

Airfilter Ink S2

This unit has a maximum volume flow of up to 1250 m³/h and is thus designed for very large printers that have an extraction built-in as a standard by the producer. The pollutants are simply passed to the suction and filtering unit via a flexible hose.



Photo 4.1

The example given below shows the suction at a nearly closed plotter. This building method facilitates substantially the collection of the arisen pollutants. It is possible to suck off the gases upward with a closed system, although these are more heavy than air is. The existing suction hood is connected to the filtering unit by means of a ducting. The filtered air is led back into the working room through an outlet spigot. As an alternative, the air can be led to the outside by means of an attached hose.



Photo 4.2

The adjacent printer has got a width of 2500 mm. The gases that are released are collected by the extraction hood that is provided. All units type Airfilter Ink S2 are delivered - as a standard - along with:

- hour meter
- filter monitoring
- additional pre-filter mat in a changeable frame
- silencer

Technical data

Filter unit Airfilter Ink S2:

Max. volume flow:	1.250 m ³ /h
Motor:	1,5 kW, 230 V 50 Hz or 110 V 60 Hz
Noise level:	60 dB (A)
Dimensions (wxdxh):	665 x 1.010 x 1.650 mm
Activated carbon:	in replaceable cassettes
Filling of activated carbon:	60 kg
Inlet spigot:	1 x 250 mm
Outlet spigot:	1 x 250 mm
Weight:	300 kg



Photo 4.3

Airfilter for printers

Airfilter IC II

We developed the unit type Airfilter IC II in cooperation with a big American producer. The units are completely powder-coated inside and even outside. The filter mediums can be taken off in an easy way via a big service door. As a standard, all our units are equipped with our well-proven sealing device ensuring that any collected pollutants are led automatically through the filter mediums.



Photo 5.1

The operation of the plant is done by a screen-display with transparency keyboard and prompting.

Printers are often in small rooms. Therefore, a bearable, acceptable noise level is extremely important. All our units are delivered along with a high-effective silencer.

The filtered air is led back into the working room through an outlet spigot. Alternatively, the air can be led to the outside through an attached hose.



Photo 5.2

Technical data Filter unit Airfilter IC II:

Max. volume flow (steplessly adjustable):	360 m ³ /h
Motor:	2,4 kW, 230 V 50 Hz or 110 V 60 Hz
Noise level:	60 dB (A)
Dimensions (wxdxh):	365 x 801 x 797 mm
Activated carbon:	in Wechselkassette
Filling of activated carbon:	24 kg
Inlet spigot:	2 x 100 mm
Outlet spigot:	1 x 125 mm
Weight:	66 kg

The shown unit was coated - according to the request of the customer - in the house colour of the printer manufacturer. The big service door is especially user-friendly, easy and safe in the handling.



Photo 5.3

Collection elements

Pollutants arising during production processes load humans. Therefore, it is prescribed legally that the MAK-values (maximum job concentration) are not exceeded. The pollutants should be collected directly on arising - before they reach into the breath range of humans. Thus a fast and effective protection is possible.

There are printers that are already equipped with an intake spigot for the collection of the pollutants - that means the collection is naturally very simple. However, particularly larger printers are built frequently without any connection possibility. We developed standardized solutions for these printers.



Photo 6.1

These collection elements / coverings have got a width of 1,500 mm. They are provided with an intake spigot of 100 mm. The element is put simply in front of the plotter. The air is sucked off in an optimal way over the entire width of the printer via a perforated plate. In case of larger printers simply 2 coverings are switched one behind the other

The elements are extremely flexible and adjustable in height.

The unit type Airfilter IC is normally sufficient for one element. For several elements the larger suction units type Airfilter Ink S1 such as Airfilter Ink S2 are available.

Technical data Collection element:

Dimensions (wxd):	1.500 x 600 mm
Height (adjustable):	1.000 up to 1.200 mm
Dimensions of collection:	650 x 200 mm
Inlet spigot:	100 mm
Weight:	45 kg



Photo 6.2
 Standard-collection element with Airfilter IC



Photo 6.3
 Standard-collection element with Airfilter Ink S1

Collection elements

The following solution we developed in cooperation with a Japanese manufacturer of plotters.

The accompanying printer has a width of 2,500 mm. The released pollutants are collected via 2 mobile coverings that are connected to a suction- and filtering device.

For operation of the printer the coverings can be pushed simply to the side onto roles. The plexiglass cover makes it possible for the operator to control constantly the prints.

This is one of many possibilities in order to collect pollutants.



Photo 7.1

The coverings are stored on roles and can be moved very simply.



Photo 7.2

The picture shows the finished connections for the suction behind the printer.



Photo 7.3

You see the condition ready for operation.



Photo 7.4

The air is captured via a distributor such as via inserted regulating flaps on the entire width of the printer.

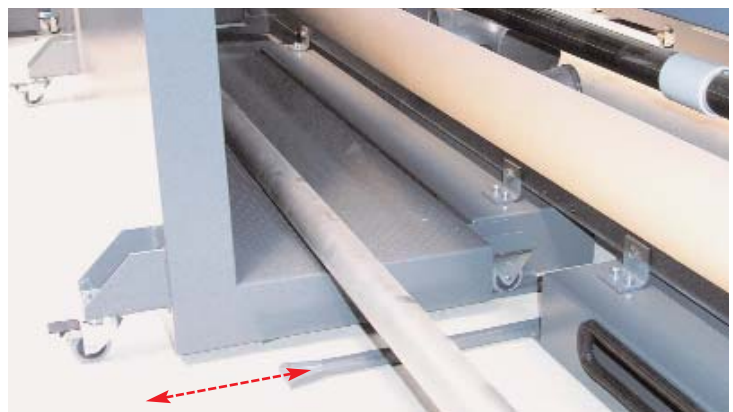


Photo 7.5

The guide rail allow the correct positioning of the coverings.



*Planning - Manufacturing -
Service and more . . .*

- Suction- and filter-systems for:
 - Welding, cutting and grinding
 - Soldering- and laser dust
 - Plotter
- Construction of special systems
 - Solutions for special problems
 - Air- and air-conditioning technology
 - Disposal

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