



KEMPER
WeldFit Compact

Filter cartridges



Properties

- Large pleat distance while having the same filter area per cartridge
- Flexible filter pleats support filter cleaning
- Even and gentle cleaning using rotating nozzle
- Vertical installation in filter systems

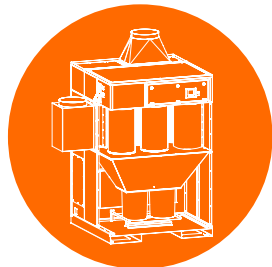
Benefits

- Less choking up of the filter pleats due to larger distance between pleats
- Very long service life of the filter elements and rotating nozzles
- Cost savings through optimal cleaning properties
- Less dust deposition due to being vertically installed

Automatic cleaning

- Pressure-controlled breath-responsive cleaning by compressed air
- A blast of compressed air from the integrated compressed air tank sets the rotating nozzle in motion
- The rotational movement of the rotating nozzle creates an even flow
- This achieves optimal cleaning performance of the KemTex® ePTFE filter cartridges

Central extraction and filter systems in detail



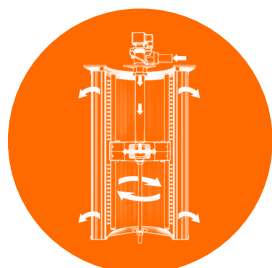
How it works

The polluted air is extracted via a duct, while the dust is separated on the surface of the filter medium. When the filters are saturated, the filters are automatically cleaned by compressed air as required. The repelled dust falls in a connection into a dust collection container and the clean air is returned back to room again.



The filter technology

Our KemTex® ePTFE membrane filters with special ePTFE layer are used in central filter systems. They have an excellent cleaning process and long filter service life. The unique microstructure of billions of randomly arranged pores also ensures the separation of ultrafine nanoparticles down to 100 nanometres.



The cleaning

The surface filtration enables an efficient cleaning of the used filter cartridges. The filter cartridges are cleaned automatically and as required by means of compressed air, while the dust sitting on the surface separates from the filter medium and falls into a dust collection container.



Other special features

- Intelligent control with touch screen
- Diagnostic system and analysis function with various sensors to monitor the proper functioning of the installation
- Potential-free contacts for receiving an external on/off signal
- WeldFil Compact Plug & Play ready for connection with 16A CEE plug



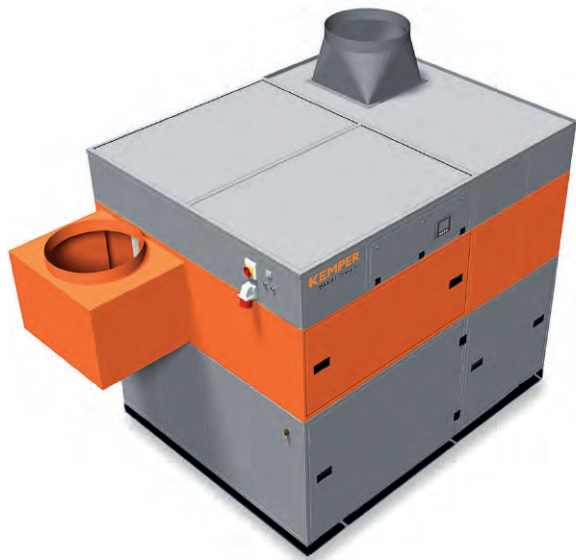
WeldFil-/ Compact



For many workplaces



Extraction capacity up to 26400 m³/h



Applications

- High levels of smoke and dust
- Welding and grinding shops
- Training centres and robotic welding lines
- Laser, plasma and flame cutting systems
- Can be installed outdoors

Benefits

- Contamination-free dust collection due to compressed air fixation of dust collection containers
- Uninterrupted continuous operation due to automatic differential pressure-controlled filter cleaning
- Little noise emission due to a low noise level
- Quick and simple set up, delivered ready to plug in with forklift pockets and lifting eyes *¹
- Considerable energy cost savings by using the automatic extraction volume control
- Flexible integration of the control system into third-party systems such as cutting equipment due to potential-free contacts *²
- Best health protection for employees by use of KemTex® ePTFE cartridges with surface filtration

Properties

- Automatic filter cleaning, pressure-controlled
- Control via touch screen
- KemTex® ePTFE filter cartridges
- Dust collection container with pneumatic lifting device
- Preassembled and ready to plug in *¹
- Forklift bags *¹

Accessories

- Automatic dust disposal - DustEvac
- Automatic extraction volume control
- External On/Off
- Fleet management, remote maintenance and pre-noise maintenance using autarkic networking via mobile radio to the KEMPER cloud
- Spark separator – SparkTrap
- Weatherproof housing for outdoor installation

Order information WeldFil Compact (Plug & Play pre-assembled)

Art. No.	Extraction capacity	Vacuum	Filter surface total	Motor power	Dimensions (w x h x t)
34 20	1250 - 1800 m³/h	2600-2280 Pa	30 m²	3 kW	962 x 962 x 2110 mm
34 30	2000 - 2880 m³/h	2550-2000 Pa	40 m²	3 kW	962 x 1413 x 2110 mm
34 40	2750 - 3960 m³/h	2700-2050 Pa	60 m²	4 kW	1413 x 1413 x 2110 mm
34 50	3500 - 5040 m³/h	2650-2100 Pa	70 m²	5,5 kW	1413 x 1864 x 2110 mm
34 65	4500 - 6480 m³/h	2750-2000 Pa	90 m²	5,5 kW	1413 x 1864 x 2110 mm
34 75	3750 - 7500 m³/h	2550-1900 Pa	100 m²	7.5 kW	1413 x 1413 x 2784 mm
34 85	6000 - 8640 m³/h	2500-2050 Pa	120 m²	7.5 kW	2378 x 1864 x 2110 mm

*1 only with WeldFil Compact

Order Data WeldFil

Art. No.	Extraction capacity	Vacuum	Filter surface total	Motor power	Dimensions (w x h x t)
34 110	7500 - 10800 m³/h	2600-2000 Pa	140 m²	11 kW	2826 x 1864 x 2670 mm
34 130	9000 - 12960 m³/h	2250-1500 Pa	180 m²	11 kW	2826 x 1864 x 2670 mm
34 160	11000 - 15840 m³/h	2330-1600 Pa	220 m²	11 kW	4239 x 1864 x 2670 mm
34 180	12000 - 17280 m³/h	2550-1800 Pa	240 m²	15 kW	4239 x 1864 x 2670 mm
34 200	13500 - 19440 m³/h	2250-1600 Pa	260 m²	15 kW	4239 x 1864 x 2670 mm
34 220	15000 - 21600 m³/h	2550-1800 Pa	300 m²	18.5 kW	4239 x 1864 x 2670 mm
34 240	16500 - 23760 m³/h	2250-1800 Pa	320 m²	18.5 kW	4239 x 1864 x 2670 mm
34 270	18500 - 26640 m³/h	2250-1800 Pa	360 m²	22 kW	4239 x 1864 x 2670 mm

*2 only with WeldFil





The centrepiece: High performance extraction with WeldFil

All signs pointed to a positive business development. A new production site was needed. In addition to a new, state-of-the-art machine park, RIKA also focused on protective welding equipment for its employees. Extraction systems for various working areas were already in use. What was missing was an overall concept for air pollution control. KEMPER put together a tailor-made air pollution control concept for the new local conditions. The centrepiece of the system is the WeldFil central suction and filter unit.

**"Thanks to KEMPER technology,
we are now breathing extremely
clean indoor air"**

Reinhard Trippacher
Managing Director at RIKA Blechkomponenten.

Central link of all extraction systems

KEMPER adapted the extraction technology to the special occupational safety requirements of individual working areas – even with the high degree of automation in the new RIKA production facility. In the central WeldFil filter system, all extraction elements from the individual working areas converge into a ducting system. The system is capable of removing more than 99.9 percent of the welding fumes from the contaminated air. To save space, it was positioned on a gallery specially set up for this purpose.

In order to connect the filter system with the extraction elements, the company laid more than 150 metres of ducting in the new production hall.

KEMPER installed the extraction technology for the detection of hazardous substances in three robot cells, nine manual welding stations plus reserve station, four spot welding systems, one stud welding system, two manual grinding stations and one robotic grinding cell. Thanks to the automatic volume flow regulation, the entire system is capable of extracting hazardous substances at a constant level of performance, even if a large part of the work is carried out in parallel.

Whereas the elementary filtering process takes place at a central point within the WeldFil system, the hazardous substances are extracted in situ. Whether manual or automated: The extraction elements are precisely matched to the respective processes. In addition to air pollution control, various partitions create a clear structure inside the hall. This clear organisational separation of the individual working areas completes the comprehensive occupational safety concept.

But what would centralised extraction be if possible risks were not taken into account. In order to prevent filter fires, KEMPER integrated its SparkTrap spark pre-separator. It prevents coarse particles, sparks and other impurities from penetrating the filter system, thus protecting the sensitive WeldFil filter medium and, ultimately, even preventing unwanted filter fires.