

Fume extraction system FEC

Weld fume extraction with cyclone technology!



Easy handling! Highest suction power



Fume extraction system FEC

Harmful welding gases are created during welding. The new FEC (Fume Extraction Cyclone) weld fume extractor with innovative cyclone technology is the ideal system supplement for ABICOR BINZEL fume extraction torches such as the new RAB GRIP HE 2 (High Efficiency). It combines the highest suction output and intelligent, energy-efficient functions with simple handling.

Mobile high vacuum extraction system

As a mobile extractor the FEC is considerably more flexible and efficient than stationary, central or hall extractors. It extracts fumes that are created during welding with a high vacuum of 19,000 Pa, a market-leading suction output. Thanks to its low weight, stable base, secure stand, and the robust rollers with solid rubber tyres, the FEC is particularly suitable for everyday industrial use. The new FEC can be transported comfortably and quickly wherever needed.

New cyclone technology for a longer service life

The FEC works with the highly efficient cyclone technology. This guides the extracted air through the filter container in an optimised flow and in circles. Particles contained in the air are pressed against the

Mobile, flexible, efficient! Clean solutions for tough industrial use



container wall through the centrifugal force, separating them upstream from the filter and depositing them in the FEC's dust collecting drawer to reduce filter cleaning. The filter remains efficient for longer periods, and requires less cleaning.

Cleaning the permanent filter easily and quickly

The new filter cleaning concept with an LED display makes the FEC particularly efficient. Instead of expensive disposable filters, a permanent filter is used that can be cleaned quickly and simply with a rotating cleaning lance operated by compressed air. The lance only has to be moved up and down a few times in the housing to remove the weld fume particles from the filter surface. These then fall down into the dust collecting drawer and can be disposed of as

domestic waste. To prevent contaminated air from entering the hall, the exhaust duct of the filter cleaning system has a special bypass airflow with an integrated additional filter.

Integrated start-stop system for quiet operation

The FEC extractor can be connected to all standard air- or water-cooled fume extraction torches. It is coupled directly to the welding process via a standard integrated measuring shunt at the earth cable and an automatic start-stop system. When the user starts the welding process, extraction starts automatically. This reduces noise emission, saves energy, and lowers electricity costs.

Clear arguments! Mobile welding fume extraction in a class of its own



Clear arguments

The mobile fume extraction system FEC combines the highest suction output and intelligent energy-efficient functions with simple handling and also offers numerous advantages over standard suction devices:

- Cyclone technology for particle pre-separation to protect the filter surface – reduced cleaning intervals
- With 25 kg and smooth-running full-cushion wheels perfect for variable application sites
- Integrated filter cleaning concept – permanent filter can be cleaned easily and quickly
- Robust & quiet due to thick-walled plastic case
- Contamination-free waste disposal of the welding dust by encapsulated de-dusting system and bag
- Integrated automatic start-stop system reduces operation expenses and wear
- Optional with start-stop-measuring caliper

Highly efficient cyclone technology! Reduced cleaning intervals

FEC in detail



Rotating cleaning lance
operated by compressed air

Connection
suction hose

Main filter cartridge

Integrated automatic
start-stop system

LED
Display*

* As soon as the negative pressure in the filter due to contamination is too high, the LED display signals the need for cleaning.

Efficient extraction and simple handling ...

The FEC works with the highly efficient cyclone technology and separates particles upstream from the filter. Therefore, requires less cleaning.



Control element FEC

At a glance!

Order overview and technical data

Fume extraction system FEC (Order overview)



Pos.	Designation	Part.-No.
1	Carbon brushes 230 V	601.0005.1
2	Carbon brushes 115 V	601.0063.1
3	Main filter cartridge	601.0075.1
4	Main filter cartridge H13 / carbonated poly.	601.0076.1
5	Exhaust air filter	601.0077.1
not ill.	Dust collection bag	601.0021.10
6	Suction hose with sleeves, L = 5.00 m	601.0015.1
7	Connector for suction hose	601.0046.1
8	Adapter ring RAB Plus (50/44 mm)	601.0031.1
9	Flexible funnel nozzle, magnetic with base	601.0016.1
10	Start-stop-measuring caliper, 4-pole	601.0041.1

Description	Part.-No.
FEC (230 V)	601.0071.1
FEC (115 V)	601.0072.1
FEC W3 (230 V)	601.0073.1
FEC W3 (115 V)	601.0074.1

Fume extraction system FEC (Technical data)

Weight:	approx. 25 kg
Max. air flow:	230 m ³ /h
Connection diameter:	60 mm
Max. vacuum:	19,000 Pa
Noise level:	76 dB (A)
Voltage:	115 V, 50/60 Hz 230 V, 50 Hz
Engine performance:	1.1 kW
Filter:	permanent filter dust class M, 0.8 m ²
Dimensions:	length 590 mm; width 425 mm; height 825 mm



Ideal system solution! FEC and Fume extraction torches RAB GRIP HE 2



Fume extraction torch RAB GRIP HE 2

The ideal supplements for the FEC extraction system are the new RAB GRIP HE 2 fume extraction torches from ABICOR BINZEL. Together, these perfectly coordinated systems set new standards in extraction.

The new RAB GRIP HE 2 torches capture fumes where they are created: directly at the gas nozzle. To prevent an extractor nozzle hindering accessibility at the component and a clear view of the arc, the RAB GRIP HE 2 captures the fumes approx. 45 mm downstream from the gas nozzle.

Thanks to the new tapered nozzle geometry, new cable assemblies and extraction tubes, as well as the optimised machine connection, the RAB GRIP HE 2

captures weld fumes optimally even in difficult working positions. For example, extraction efficiency in the flat position is over 95%, which places the system in the top range of extraction torches.

The system solution with FEC and RAB GRIP HE 2 fume extraction torches combines effective health protection with the best possible working conditions and is eminently suitable for demanding industrial use.

Our product range

MANUAL

- MIG/MAG welding torches
- TIG welding torches
- Plasma cutting torches
- Plasma welding torches

EXTRACTION TECHNOLOGY

- Fume extraction systems
- Fume extraction torches
- Fume extraction & power source combination system

ROBOTIC SYSTEMS

- Robot torches MIG/TIG/Plasma
- Robot switch-off protections
- Torch cleaning stations
- Wire cutting devices
- Robot power source
- System solutions for cobots
- Pipe welding robot
- Wire feeder systems
- Seam tracking sensors
- Gas management systems

LASER SYSTEMS

- Remote laser scanner
- Tactile laser optics
- Wire feeder systems
- Process monitoring tools
- Weld seam inspection

ORBITAL WELDING

- Orbital welding systems
- Positioning bands
- Coated contact tips

HARD AUTOMATION

- Welding tractors
- Welding tractor & power source combination system
- MIG/MAG automatic torches
- Plasma automatic welding and cutting torches

WELDING ACCESSORIES

- Wear parts MIG/TIG/Plasma
- Intermediate cable
- Sockets and plugs
- Electrode holders
- Gouging torches
- Gouging electrodes
- Utilities and tools
- Cooling units
- Wire feeding units
- Equipment for weld seam treatment
- Anti-spatter agents, sprays and pastes



Alexander Binzel Schweisstechnik GmbH & Co. KG
Kiesacker · 35418 Buseck · GERMANY
T +49 64 08 / 59-0
F +49 64 08 / 59-191
info@binzel-abicor.com

www.binzel-abicor.com