
JBC
The Soldering Co.
Fume Extractor
A healthy workplace is our priority
Matronic
ELECTRONIC PRODUCTION TECHNOLOGY

Most efficient solution.

FAE only operates when soldering and features a unique vacuum system integrated into the stand.

Suction in use

Fume Extractor **starts up when the tool is lifted from the stand**. This function saves power and extends filter life.

Suction in the stand

JBC Fume Extractor has an integrated vacuum system that detects **when the tool is returned to the stand and automatically absorbs excess of fumes**.

3 working modes

Station

When the tool is lifted from the stand, the fume extractor starts aspirating. Once the tool is returned to the stand and goes into Sleep Mode, the stand absorbs the excess fumes.

Pedal

You can activate the vacuum system with the pedal without a connection to a JBC Station.

Continuous Mode

The fume extractor's aspiration remains active, independently of the tool or pedal status.

Intelligent control when connected to JBC Stations

2 flexible arm suction tubes
can be used simultaneously on two workbenches.

4 levels of aspiration
depending on requirements: low, medium, high & customized.

Auto-control of the airflow
depending on the number of aspiration tubes in use and filter saturation.

Process Screen

Set up and control the equipment through an intuitive menu.
There are many connection posibilities to suit your working needs.

Connections

· RJ12 Connector (control unit and station connections)
· USB-B Connector (firmware update)
· Jack Connector (pedal connection)

Filter saturation indicator

The unit has a LED warning to know when it's time to replace the pre-filter or the compact filter.
If the unit is connected to a station, the warning message will also appear on the station's display.

Green: Filter OK
Yellow: ≤ 20% Carbon lifetime or about to saturate
Red: End of Carbon lifetime or filter saturated.

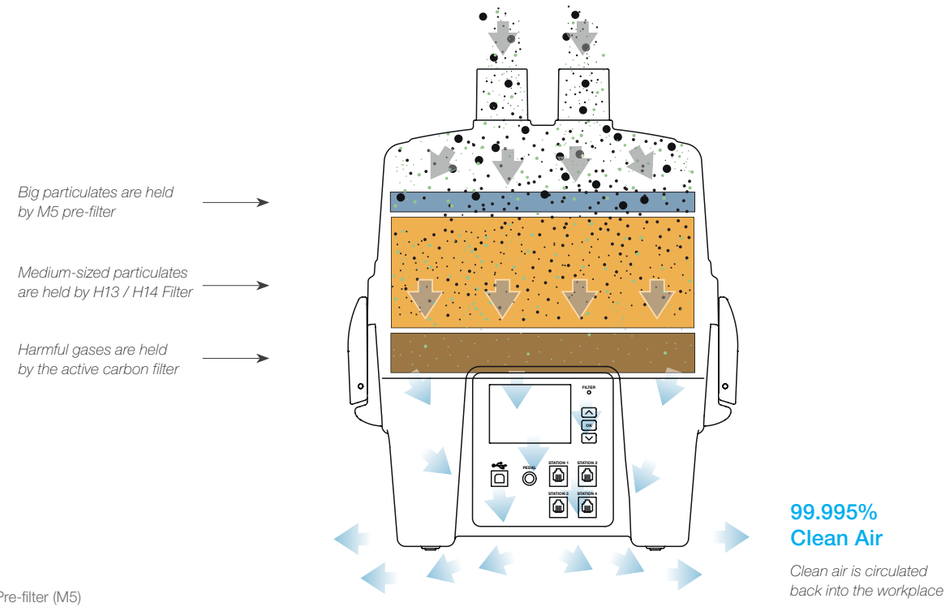
Why use JBC Fume Extractor?

Avoid exposure to solder fumes

Health risks come with extended exposure to solder fumes.

Depending on the particle size, the fume can affect different parts of the respiratory system.

It is **important to use the correct safety equipment** to remove these hazardous substances.



Solid particles represent almost 90% of total fumes. They contain sublimation of rosin and other substances of thermal decomposition, both predominant of diterpens acid mixture.

The remaining percentage corresponds to other gases, composed of low-weight organic molecular compounds including acetone, methyl alcohol, aliphatic aldehydes and other hydrocarbons.

High-efficiency filters to remove even the smallest particles

The combination of the three-layer filter system achieves a certified filtering efficiency of up to 99.995% for soldering fumes in accordance with the EN 1822 standard.

There are two filter options available depending on your needs:

FAE1100 Filter
(FAE1110 Pre-Filter + HEPA H13 + Carbon)

FAE1200 Filter
(FAE1110 Pre-Filter + HEPA H14 + Carbon)

Pre-Filter

FAE1110 Pre-Filter retains **large solid particles** in order to protect H13 or H14 filters and extend its lifetime.

Average efficiency for particles of 0.4 µm: 40-60% (in accordance with EN 779).

Active Carbon filter

It **absorbs those gas molecules** which, due to their size, HEPA filter is not able to filtrate.

Active carbon is a good filter aid because of its highly porous structure. In order to improve efficiency, different factors are taken into account. Generally, the lower the air flow rate, the more times the fumes have to diffuse into a pore and be absorbed.

HEPA filter

HEPA filter (High-Efficiency Particulate Air) **filters out the remaining solid particles.**

HEPA H13 - it has an efficiency for MPPS * ≥ 99.95% (in accordance with EN 1822).

HEPA H14 is used in environments demanding exceptionally high levels of air purification, such as clean rooms. Efficiency for MPPS * ≥ 99.995% (in accordance with EN 1822).

* MPPS (Most Penetrating Particle Size) corresponds to the particle size at which the filter has a lower efficiency. The MPPS depends on the filter and the air flow, although usually it lies between 0.1-0.3 µm.

For a basic working system

Each aspiration arm independently offers 80m³/h aspiration, providing optimal fume extraction for two workbenches simultaneously.

FAE1 KIT1 Fume Extractor Kit for 1 workbench

Accessory for Stand Suction

You can connect up to 4 tool stands per port to avoid solder fumes when the tool is not being used.

FAE030
Colletor Flange
Suction for up to 4 stands (hole drilling required).

FAE040
Colletor Flange with clamp
Includes a clamp to fix it in place.

Stand Suction Duct

The system detects when the tool is returned to the stand and the vent absorbs the fumes automatically.

FAE060
Fume Aspiration Duct for Compact Stations
Length: 106 mm / 4.17 in.

FAE050
Fume Aspiration Duct for Modular Stands
Length: 106 mm / 4.17 in.

FAE010
Flexible Hose
Flexible extraction hose which connects Fume Extractor to FAE020 / FAE070 and FAE030 / FAE040
Length: 1.5 m / 59 in (unfolded).

FAE1
Fume Extractor with FAE1100 for 1 Workbench
Achieves a certified efficiency of 99.95% in filtering soldering fumes, meeting EN 1822 standards.

FAE1P
Fume Extractor with FAE1200 for 1 Workbench
The best solution to avoid exposure to solder fumes where extremely high air purification is required (efficiency of 99.995% in filtering soldering fumes, meeting EN 1822 standards).

FAE1 KIT2 Fume Extractor Kit for 2 workbenches

Flexible Arm

Completely flexible arm to be adjusted to your workbench

FAE020
Flexible Arm
Hole drilling is required.
Length: 0.94 m / 37 in (compressed).

FAE022
Flexible Arm
Hole drilling is required.
Length: 1.2 m / 47.24 in (compressed).

FAE070
Flexible Arm with clamp
Includes a clamp to fix it in place.

FAE072
Flexible Arm with clamp
Greater coverage and increased durability.

Specifications

Dimensions	380 x 340 x 475 mm / 14.9 x 13.3 x 18.7 in
Weight	10.87 Kg / 23.96 lb
Ref. / Voltage (AC)	**FAE1-1C / FAE1-1PC** - 120 V 50 / 60 Hz. Fuse 4A **FAE1-2C / FAE1-2PC** - 230 V 50 / 60 Hz. Fuse 2.5A **FAE1-9C / FAE1-9PC** -100 V 50 / 60 Hz. Fuse 4A
Input power	270 W - 120 V 300 W - 230 V 200 W - 100 V
Work areas (Workbenches)	1 or 2

Blower type	Brushless
Flow rate	230 m³ / h (135 CFM)
Vacuum	4.3 kPa (0.62 psi) - 120V 6 kPa (0.87 psi) - 230 V 3.2 kPa (0.46 psi) - 100V
Filters	Pre-filter M5 (according to Norm EN 779)* HEPA H13 / H14 (according to Norm EN 1822)** Activated Carbon Filter
Noise	55 dB @ 1m

**M5 Quality according to Norm EN779*
***Delivered with a test certificate according to Norm EN 1822-4*