JBC

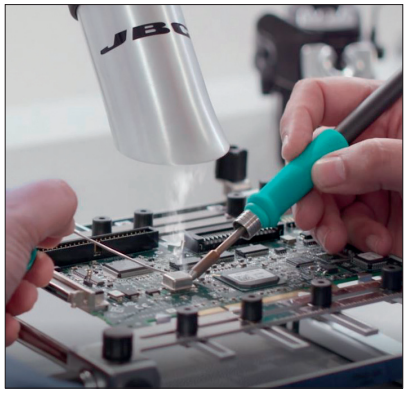
The Soldering Co.

Fume Extractor

A healthy worplace is our priority

Most efficient solution.

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



Aspiration in use

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

Aspiration 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.

4 working modes

- **Station**
  The valve in the working area opens when the tool is lifted from the stand.
  Once the tool is returned to the stand and goes to Sleep Mode, the valve in the work area closes and the stand valve opens.
  After a period of inactivity on both ports, the unit stops.
- **Pedal**
  You can activate the vacuum system with the pedal without a connection to a JBC Station.
- **Continuous mode**
  When activated, the four aspiration intakes are opened and Fume Extractor suction is operating.

Intelligent control when connected to JBC Stations

2 separate aspiration inlets
can be used simultaneously in 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.

Connections
· RJ12 Premium Station Connections
· USB-B Compact Station Connection

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

Robust unit fitted with wheels and brakes to move around easily.

For a basic working system

Connect up to four stations through RJ12 connector. Compact Stations can be connected using RJ12-USB-A adapter included.

Flexible arm
The fume extractor automatically regulates the airflow depending on the number of aspiration tubes in use and the filter saturation.

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

FAE060 **Fume Inlet Duct for Compact Stations**
Connect the stand aspiration accessory to Compact Stations.
Length: 106 mm / 4.17 in.

FAE050
Fume Inlet Duct for Modular Stands
Connect the stand aspiration accessory to Stands.
Length: 106 mm / 4.17 in.

Specifications

FAE2 **Fume Extractor for 2 workbenches**

Dimensions	560 x 320 x 590 mm / 22.05 x 12.59 x 23.23 in
Weight	33,6 Kg (74.08 lb)
Ref. Voltage (AC)	**FAE2-5B** 100 V - 120 V - 230 V 50 / 60 Hz
Nominal Power	500 W (120 - 230 V) 320 W (100V)
Fuse	8 AT
Blower type	Brushless

Max. Flow rate	290 m^3 / h (10241.25 f^3 / h)
Max. Vacuum	6,1 KPa / 0.88 psi
Filters	Pre-filter M5 (according to Norm EN 779)* HEPA H13 (according to Norm EN 1822)** Carbon
Work areas	2 or 4
Noise	54 dB

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

FAE020 Flexible Arm Ø50 mm
Completely flexible arm to be fitted to your workbench (hole drilling required).
Length: 0.94 m / 37 in (compressed).

FAE070 Flexible Arm Ø50 mm + clamp
Includes a clamp to fix it in place.

Accessory for stand aspiration
This robust unit can be used simultaneously in two work areas. You can also connect up to 4 tool stands per port to avoid solder fumes when the tool is not being used.

FAE030 Accessory for Stand Aspiration
Aspiration for up to 4 stands (hole drilling required).

FAE040 Accessory for Stand Aspiration + clamp
Includes a clamp to fix it in place.

FAE010 Flexible Hose Ø50 mm
Flexible extraction hose wich connects Fume Extractor to FAE020 / FAE070 and FAE030 / FAE040
Length: 1.5 m / 59 in (unfolded).

Specifications

FAE1 Fume Extractor for 1 workbench

Dimensions	558 x 292 x 562 mm (22 x 11.5 x 22.1 in)
Weight	33,6 Kg (74.08 lb)
Ref. / Voltage (AC)	**FAE1-1B** / 100 V - 120 V 50 / 60 Hz **FAE1-2B** / 230 V 50 / 60 Hz
Nominal Power	105 W - 135 W (100 - 120 V) 115 W (230V)
Fuse	8 AT
Blower type	Brushless

Max. Flow rate	180 m^3 / h (106 CFM)
Max. Vacuum	3.2 KPa (0.46 psi)
Filters	Pre-filter M5 (according to Norm EN 779)* HEPA H13 (according to Norm EN 1822)** Carbon
Work areas	1 or 2
Noise	55 dB @ 1m

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

Why use JBC Fume Extractor ?

Avoid exposure to solder fumes

Health risks come with extended exposure to solder fumes, so it is **important to use the correct safety equipment** to remove these hazardous substances.

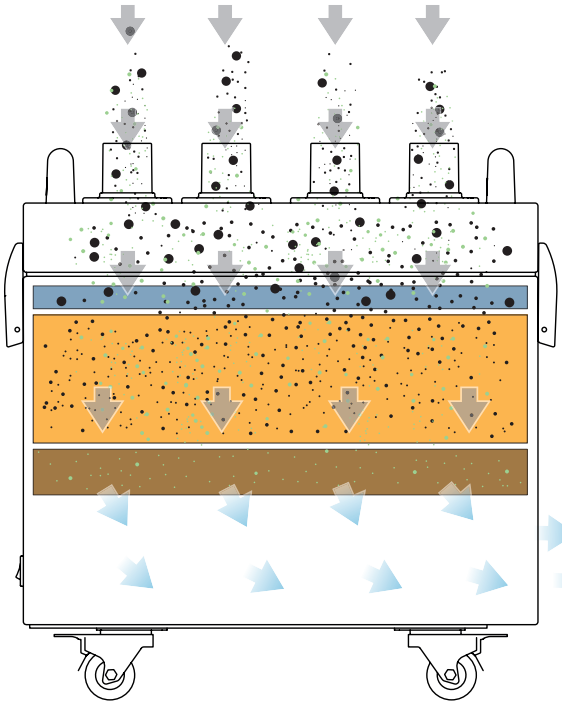
Depending on the particle size, the fume can affect different parts of the respiratory system.

- This is one of the main causes for occupational asthma.
- It may cause eye and throat irritation.
- The flux may cause dermatological problems.

Big particulates are held by the pre-filter M5

Medium-sized particulates are held by the H13 Filter

Harmful gases are held by the active carbon filter



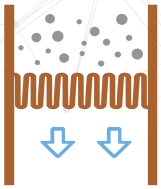
99.95% Clean Air

Clean air is circulated back into the workplace

- Pre-filter (M5)
- HEPA H13 filter
- Active Carbon filter
- Clean air
- Contaminated air
- Particulates
- Harmful gases

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-layered filter system reaches a certified filtering efficiency of soldering fumes up to 99.95% in accordance with norm EN 1822-4.

Pre-filter M5
It retains **large solid particles** in order to protect the H13 filter and extend its lifetime.

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

HEPA filter H13
The HEPA filter (High-Efficiency Particulate Air) **filters out the remaining solid particles.** Efficiency for MPPS * ≥ 99.95% (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.

Active Carbon filter
The active carbon filter **absorbs those gas molecules** which, due to their size, the 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.

FAE2110
Pre-Filter for FAE2

FAE2100
Filter for FAE2

ESD safe

www.jbctools.com

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