

JBC

The Soldering Co.



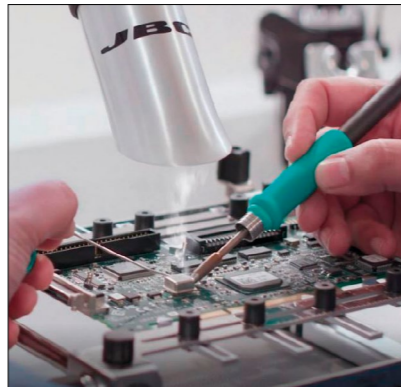
Fume Extractor

A healthy workplace is our priority

Matronic
ELECTRONIC PRODUCTION TECHNOLOGY



Most efficient solution. FAE only operates when soldering and features a unique 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

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

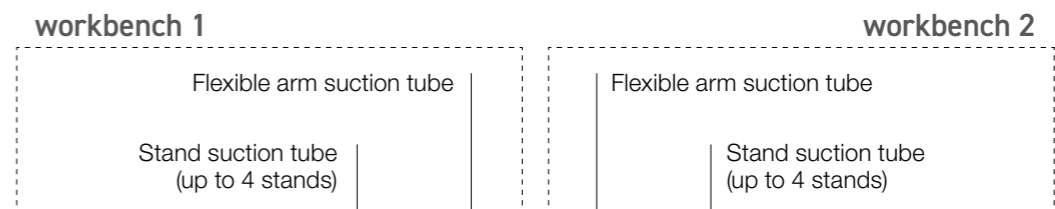
When activated, the four aspiration intakes are opened and Fume Extractor suction is operating.

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.

Filter saturation indicator

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



Connections

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

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.

Stand suction 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 suction accessory to Compact Stations. Length: 106 mm / 4.17 in.

FAE050 Fume Inlet Duct for Modular Stands

Connect the stand suction accessory to Stands. Length: 106 mm / 4.17 in.

Flexible Arm

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

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 Suction

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 Suction

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

FAE040 Accessory for Stand Suction + clamp

Includes a clamp to fix it in place.

FAE010 Flexible Hose Ø50 mm

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



Specifications

Dimensions	560 x 320 x 590 mm / 22.05 x 12.59 x 23.23 in
Weight	33.6 Kg (74.08 lb)
Ref.	FAE2-5B
Voltage (AC)	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

FAE2 Fume Extractor for 2 workbenches

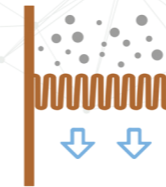
Max. Flow rate	290 m ³ / h (10241.25 f ³ / h)
Max. Vacuum	6.1 KPa / 0.88 psi
Filters	Pre-filter M5 (according to Norm EN 779)* HEPA H13 (according to Norm EN 1822)** Carbon
Work areas	2 or 4
Noise	54 dB
*M5 Quality according to Norm EN779	
**Delivered with a test certificate according to Norm EN 1822-4	

Specifications

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

FAE1 Fume Extractor for 1 workbench

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.

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 H13 filter and extend its lifetime.

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

HEPA filter H13

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, 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

Big particulates are held by M5 pre-filter

Medium-sized particulates are held by 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.