

Volume Fume Extraction System

[VFX-1000]

Why Fume Extraction?

Solder smoke is more than just an irritant. It can reduce worker productivity through a loss of concentration and fatigue. These and other health concerns, occupational asthma as an example, may be a result of exposure to solder fumes during the production process. As an employer, you are responsible for properly managing the health risks associated with solder fumes, and take appropriate precautionary measures. Solder fume extraction is a simple way to manage the risks to employees and your organization.

The VFX-1000 Fume Extraction unit is Metcal's next-generation under-the-bench fume extraction unit. Its improved pre-filter provides higher efficiency, and its enhanced gas filter that is a 50/50 mix of Activated Aluminum Potassium Permanganate and Active Carbon allows for a wider range of fume extraction.



Features & Benefits

- **Digital Speed Control**
- **Deep Pleat Pre-Filter**
- **Blower with high airflow and pressure**
- **3 stage filtration**
- **Built in silencing**
- **Long life filters with low replacement costs**
- **Remote speed control**
- **Remote Start/Stop Interface**

VFX Volume Fume Extraction Systems

VFX-1000-H	VFX-1000 with Pre-, HEPA/Gas-Filter
VFX-1000-G	VFX-1000 with Pre-, Deep Bed Gas Filter

System Specifications - VFX-1000

Voltage	100 - 240 VAC, 50 - 60 Hz
Rated Power	12.5 amp / 1.1 kW, grounded circuit
Duct run	10 m
Max. Number of Arms Ø 32 mm	7
Max. Number of Arms Ø 50 mm	5
Fan Capacity	350 m ³ /h (206 cfm) / 96 mbar
HEPA Efficiency	99.997 % at 0.3 micron
Noise Level (Typical at low speed)	< 58 dBA
Dimensions (W x D x H)	590 x 375 x 415 mm (23.2 x 14.8" x 16.3")
Weight	35 kg (77 lb)
Certification/Marking	CE, REACH, RoHS Compliant

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Configure Your System

The selection of the fume capture device should be guided by your application and work habits.

System performance is a function of the following factors and will decrease if

- Hose Diameters decrease
- Length of ducting increases
- Number of 90° bend increases
- Number of arms increases

All exhaust arms are made of ESD material and are supplied with appropriate mounting accessories. The design allows for mounting the arms to a variety of surfaces.

Nozzle Selection

Round/Funnel	Point and small area extraction for: • Soldering, • Gluing/Bonding, • Laser marking Fumes
Oval	Point extraction for: • Soldering under a microscope, • Laser marking Fumes
Rectangular	Area extraction for: • Soldering, • Gluing/Bonding
Large Rectangular/ Large Hood	Large area extraction for: • Soldering of large boards, • Large Solder Pots
Plenum/Funnel	Area extraction for: • Soldering, • Gluing/Bonding
Cabinet	Area extraction for: • Volatile gases, • Toxic gases, • Odors

Configure your System

1	Determine # of Users and Application Requirement	
2	Select System	VFX-1000-H, Fume Extraction with Pre-, HEPA/Gas-Filter VFX-1000-G, Fume Extraction with Pre-, Deep Bed Gas Filter
3	Select Arm(s) or Cabinet	
4	Add 1 x ESD-Arm-Kit AC-VFX-HK75 per arm for 32 and 50 mm Ø arms Add 1 x ESD-Tube-Kit AC-VFX-HK7563 per arm Ø 63 mm and 1 x AC-VFX-YAD63 for 2 arms Ø 63 mm Add 2 x ESD-Tube AC-VFX-HS7525, Ø 75 mm per AC-VFX-CAB-75 (Fume Extraction Cabinet)	
5	Select optional accessories, as needed	

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Fume Extraction Accessories

Fume Extraction Cabinet

AC-VFX-CAB-75	Fume Extraction Cabinet with 2 LED-lights, 2 x 1.5 mm long hoses x Ø 75 mm and hose clamps
AC-VFX-75X75	Adapter Ø 75 mm to connect 2 tubes Ø 75 mm
AC-VFX-HS7525	Hose, Ø 75 mm x 2.5 m long

Arms Ø 32 mm

AC-VFX-ARM-32F	Arm, Ø 32 mm x 650 mm long with round funnel
AC-VFX-ARM-32N	Arm, Ø 32 mm x 650 mm long with oval nozzle

Arms Ø 50 mm

AC-VFX- ARM-RF	Arm, Ø 50 mm x 650 mm long with round funnel
AC-VFX- ARM-PF	Arm, Ø 50 mm x 650 mm long with plenum funnel
AC-VFX- ARM-LF	Arm, Ø 50 mm x 650 mm long, LED with round funnel, Power adapter
AC-VFX- HK75	Hose Kit Adapter, Ø 75 mm to 50 mm

Note: Each AC-VFX-ARM-xx requires one hose kit

VFX Filters

AC-VFX-FIL-PRE

Deep Pleat Pre-Filter for VFX-1000



AC-VFX-FIL-HEPA

Combined HEPA/Gas Filter for VFX-1000

AC-VFX-FIL-GAS

Deep Bed Gas Filter for VFX-1000



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Fume Extraction Systems (continued)

OMNIFLEX ARMS Ø 63 mm	
AC-VFX-ARM-ORN	Ø 63 mm Omniflex arm with rectangular nozzle, 150 x 88 mm bracket, C-clamps and hose clamp
AC-VFX-ARM-OTN	Ø 63 mm Omniflex arm with oval nozzle, bracket, C-clamps and hose clamp
AC-VFX-ARM-OLH	Ø 63 mm Omniflex arm with large hood, 350 x 212 mm bracket, C-clamps and hose clamp
AC-VFX-HK7563	Ø 75 mm to 63mm Hose Kit adapter
Note: Each AC-VFX- ARM-xx Omniflex requires one hose kit (AC-VFX-HK7563)	
AC-VFX-YAD63	Y Adapter, Ø 63 mm with hose (305 mm) and 3x hose clamps
Q-AD426530	Replacement Nozzle - Rectangular, 150 x 88 mm
Q-AD426550	Replacement Nozzle - Tapered
Q-AD426560	Replacement Nozzle - Large Hood, 350 x 212 mm
AC1101	Damper for Omniflex arms Ø 63 mm
AC1102	Omniflex arm extension, Ø 63 mm x 30 cm length (12")
CH0251	Connection hose, Ø 63 mm x length 2.5 m (8')
CH0252	Connection hose, Ø 63 mm x length 3.5 m (12')
CH0253	Connection hose, Ø 63 mm x length 7.5 m (25')
AC2025	Y Adapter, Ø 63 mm and hose Ø 63 mm x length 305 mm with 3 clamps

Additional Accessories

AC-VFX-HK75CONN	Arm connection receptacle with seal and hardware for Arms with Ø 32/50 mm
AC-VFX-HK75BRK	Bracket with (2) clamps
AC-VFX-HK75RED	Reducer, Ø 50/40 mm
AC-VFX-HK75HC	Hose clamp
AC-VFX-HK75CL	50 mm Hose clip
AC-VFX-HK75H50	Flexible Hose, Ø 50 mm x length 1 m
AC-VFX-HK75H75	Flexible Hose, Ø 75 mm x length 2.5 m
AC-VFX-HK75TCONN	Ø 75 x 50 mm x 75mm T-Connector and cover
AC-VFX-HK75CAP	Ø 75 mm End Cap
AC-VFX-HK75CUFF75	Ø 75 mm Connection cuff
AC-VFX-HK75CUFF50	Ø 50 mm Connection cuff

Replacement Filters

AC-VFX- FIL-PRE	Deep Pleat Pre-Filter for VFX-1000
AC-VFX- FIL-HEPA	Combined HEPA/Gas filter for VFX-1000
AC-VFX- FIL-GAS	Deep Bed Gas Filter for VFX-1000

Arms and Hose Kits

AC-VFX-ARM-RF

Arm Ø 50 x length 650 mm, w/ round funnel



AC-VFX-ARM-PF

Arm Ø 50 x length 650 mm, w/plenum funnel



AC-VFX-ARM-LF

Arm Ø 50 x length 650 mm, LED w/funnel



AC-VFX-HK75

Ø 75 mm to 50 mm Hose Kit for VFX-1000



AC-VFX-HK7563

Hose Kit Adapter, Ø 75/63 mm x length 2 m for VFX-1000

