

# Flexible Arm Fume Extraction Product Guide

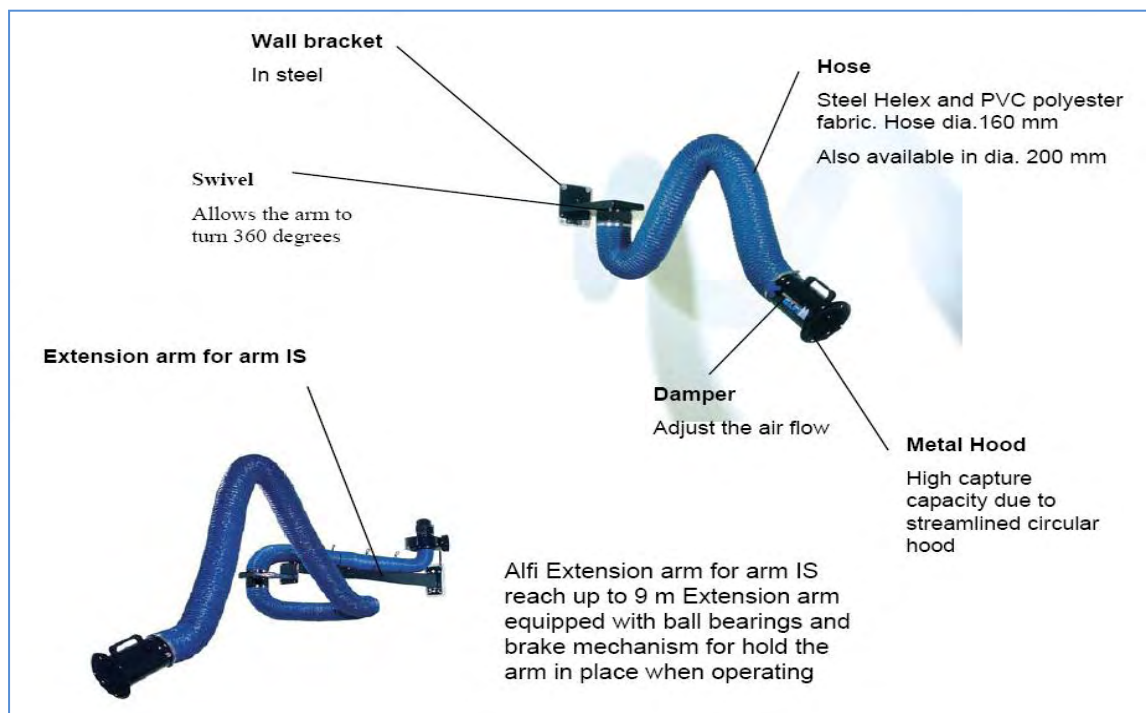


# Flexible Extraction Arm

## Alfi IS Arm - constructed with flexible internal support system

Available in three models - all with 360° rotation

- ▶ with steel bracket for wall mounting (as standard)
- ▶ ceiling mount - from a hanging position
- ▶ ready for table mounting



**Alf IS** spring balanced extraction arms offer the easiest positioning available. The unique design not only moves the arm easily, but also holds in place once positioned.

**Flexible** and high temperature resistant hose combined with a metal hood makes the lightweight arm the best choice for professional and heavy duty applications for fume and dust.

**Accessories** Fans, automatic start/stop, spotlight, extension hoses with magnet, hood, bracket 1m and 2m for mounting on roof or floor

## Product List

| Wall mounted with 160mm diam. Duct |        | Wall mounted with 200mm diam. Duct |        |
|------------------------------------|--------|------------------------------------|--------|
| 1.5m                               | 110061 | 1.5m                               | 111421 |
| 2.0m                               | 110072 | 2.0m                               | 111432 |
| 3.0m                               | 110083 | 3.0m                               | 111443 |
| 4.0m                               | 110094 | 4.0m                               | 111454 |
| 5.0m                               | 110105 | 5.0m                               | 111465 |

# Flexible Extraction Arms

with external support system



- ▶ **Self Supporting** flexible arm with external support construction, easy to clean with precise manoeuvrability. Unique spring controlled lock to hold the arm steady under operation.
- ▶ **Finger tip control** flexible arms hold their place by parallelogram and gas spring support mechanism. Double horizontal joints with roller bearing for easy positioning.
- ▶ **In fact** the only arm in the market worth the name “flexible”. Designed for professional workers. Extremely easy to move and stay where you park.
- ▶ **Hoses** are free from internal support components to minimise accumulation of particles and dust inside of the hose. This also reduces air pressure drop for higher air flow and lower noise level
- ▶ **Two designs** available and many models - all with 360° rotation

## Alfi ES extraction arm

Alfi extraction arm with External Support systems. All include wall bracket.

Wide range of hose diameters:  
63 and 75 mm (high pressure hose) for high vacuum systems.

100; 125; 160 and 200 mm for low and medium vacuum systems

## Alfi EST extraction arm

Alfi extraction arm with hose and tubing. Distribution channels are made in smooth tubing to minimise pressure drop - maximize air flow and reduce sound level.

Flexible parallelogram construction has an encapsulated mechanism.

With extra tension discs as standard equipped to handle special designed hoods up to 10 kg weight.

## Extension arms available

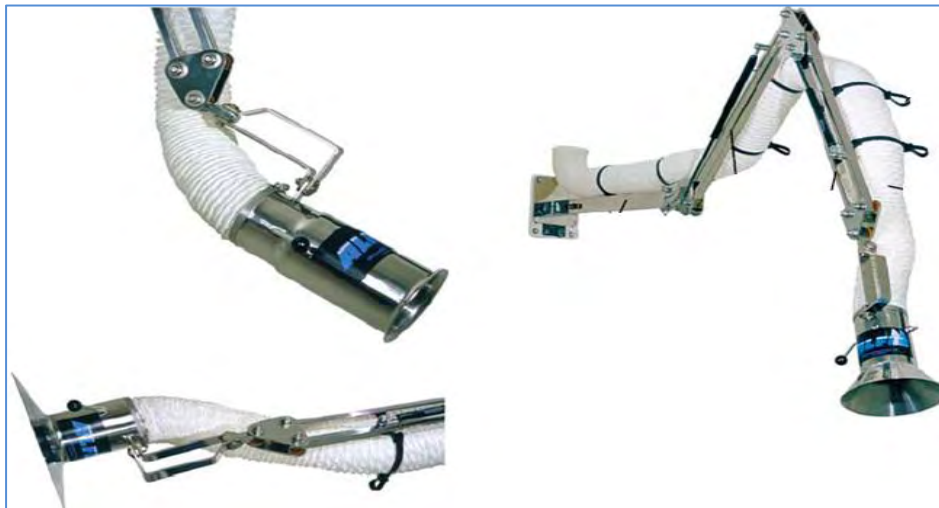
The flexible ES and EST arms can easily be connected to extension arms for reach up to 8 metres. The extension arms could be equipped with a suspension rail

## Accessories

Light kits  
Transformers  
Extension hoses with magnet  
Brackets for mounting arms on ceiling/floor  
Automatic start/stop

# Hygienic Extraction Arms

- ▶ **Hygienic Design** - hose is mounted to flexible support arms by straps and simply detach for cleaning
- ▶ **Hoses** are free from internal support components to minimise accumulation of particles and dust inside of the hose. This also reduces air pressure drop for higher air flow and lower noise level.
- ▶ **ESH** a totally sealed, powder coated profile and hood for hygienic applications
- ▶ **ESSH** powder coated arm with acid proof - mirror polished stainless steel hood & handle
- ▶ **ESS** all supports, handle & hood are mirror polished stainless steel, to deal with the toughest working environments in process and chemical industry
- ▶ **Horizontally** pivoted boom for extra reach.
- ▶ **Self Supporting** flexible arm with external support construction, easy to clean with precise manoeuvrability
- ▶ **Hoods** are available with different types of hoods due to application and particle sizes.
  - Hood A** straight -for large particles (dust)
  - Hood B** the 150° hood develops a tornado effect to enhance its capacity to extract Very Fine Particles (gas particles)
  - Hood C** angled at 67° to suit a mix of large and fine particles (smoke)



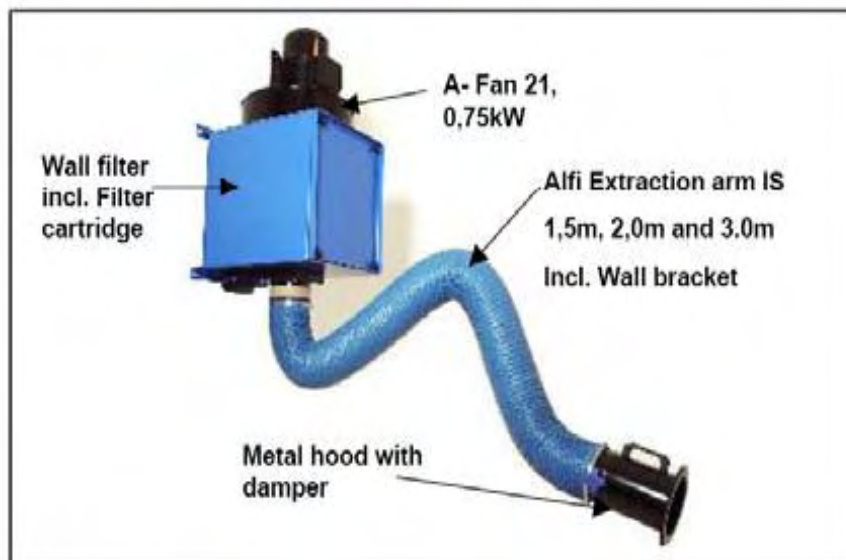
## Product List

| ESS - 110mm diam. Duct Straight Hood |        | ESS - 110mm diam. Duct 67 degree Hood |        | ESS - 110mm diam. Duct 150 degree Hood |        | ESS - 160mm diam. Duct 120 degree hood |        |
|--------------------------------------|--------|---------------------------------------|--------|--|--------|--|--------|
| 2.0m                                 | 123342 | 2.0m                                  | 123402 | 2.0m                                   | 123462 | 2.0m                                   | 121812 |
| 3.0m                                 | 123353 | 3.0m                                  | 123413 | 3.0m                                   | 123473 | 3.0m                                   | 121823 |
| 4.0m                                 | 123364 | 4.0m                                  | 123424 | 4.0m                                   | 123484 | 4.0m                                   | 121834 |
| Damper tight acid proof              | 124830 | Damper tight acid proof               | 124820 | Damper tight acid proof                | 124820 | Damper tight acid proof                | 124840 |

## Stationary Wall Filter

**Alfi SWF cartridge filters** are designed for use with Alfi's IS (Internally Supported) flexible extractor arms. With high filtration efficiency they clean the premises of welding fumes, light grinding dust and other airborne particles.

- ▶ Solve your pollution problems simply, quickly and for a very small investment
- ▶ Easy to mount in combination with Alfi's wide range of flexible arms
- ▶ Saves energy when air is permitted to recirculate back into the premise
- ▶ Reusable filter cartridge is easily accessed for cleaning
- ▶ Activated carbon filter for gases is also available
- ▶ Air flow of 1200m<sup>3</sup>/h with new filter



### Product List

|  |        |
|--|--------|
| Stationary Wall Filter including filter cartridge            | 500260 |
| A- Fan 2100 / 0.75 kW / 3 phase                              | 200132 |
| A- Fan 2100 / 0.75 kW / 1 phase                              | 200152 |
| Replacement filter   | 451601 |
| Holder for activated carbon filter                           | 450850 |
| Activated carbon filter set of 10 filters                    | 451070 |
| Alfi IS Extraction Arm 1.5 m; 160mm diam. incl. wall bracket | 110061 |
| Alfi IS Extraction Arm 2.0 m; 160mm diam. incl. wall bracket | 110072 |
| Alfi IS Extraction Arm 3.0 m; 160mm diam. incl. wall bracket | 110083 |

## Portable Extraction Unit

- ▶ **Filtering welding dust and fume** or for light dust applications such as grinding and process dust
  
- ▶ **Alfi IS Mobile** is a mobile extractor fan and internally supported flexible arm with filter cartridge. Ideal for filtering welding fumes and light dust. Alfi IS Mobile is compact and offers an economical and flexible solution for light engineering and repair shops.
  
- ▶ **Robust and easy to use** Powder coated steel body (no plastic) for professional use. Dirt is collected inside the filter cartridge. Removing the cartridge is clean and safe. Alfi IS Mobile is robust, yet the easily manoeuvrable wheels and handles make it easy to reposition. Add an adjustable Alfi IS Arm and you have a versatile and flexible filtration unit which can be moved between different work stations.
  
- ▶ **Profitable investment** Alfi IS Mobile reduces the need for general ventilation, and reduces the amount of dust and fumes in the air. Cleaner air in the workshop means healthier people and higher productivity.



### Technical Data

Capacity: 1200m<sup>3</sup>/h  
 Filtration efficiency: > 99 % (Welding fumes)  
 Action radius: 2 or 3 m due to arm  
 Swivelling arm: 360° Fan: 0.75 kW.  
 Filter Cartridge: Dust free replacement  
 Measure: H 990 x W 530 x D 640 mm  
 Weight: 55 kg + 15 Kg

### Product List

|   |        |
|---|--------|
| Alfi IS Mobile 240V 1Ph 0.75 kW for 1200m <sup>3</sup> /h | 400010 |
| 2m Alfi Arm IS  | 110022 |
| 3m Alfi Arm IS  | 110033 |
| Carbon filter holder                                      | 450040 |
| Set of activated carbon 10 pcs                            | 450050 |
| Replacement filter - 14m <sup>2</sup> cartridge           | 451601 |

## MF-Eco Jet Pulse Portable Extraction Unit



**Welding Fume and Dust** MF-Eco Jet Pulse is a mobile extractor fan and internally supported flexible arm combined with cartridge filter and built in Jet Pulse Cleaning system. No expensive replacement filters needed! It's the most economical filtering solution available for welding fumes and light dust.

**Jet Pulse Cleaning** Cartridge filter has "better than 99.9%" efficiency with extra cleaning convenience. Simply connect the hose to a compressed air line and it is clean in a minute with the built in Jet Pulse system.

**Flexible and economical** MF-Eco Jet Pulse is robust, yet easily manoeuvrable. Add to this the adjustable Alfi IS Extractor Arm, and you have a supremely versatile and flexible filtration unit - it can easily be moved between different work stations.

### Product List

|  |       |
|--|-------|
| MF-Eco Jet Pulse mobile filter 1-phase; 220volt; 50Hz. Extractor arm not included. | A-540 |
| MF-Eco Jet Pulse mobile filter 3-phase; 400volt; 50Hz. Extractor arm not included. | A-543 |
| Alfi Flexible IS Extractor Arm FLF 2m/160mm diam.                                  | A-002 |
| Alfi Flexible IS Extractor Arm FLF 3m/160mm diam.                                  | A-003 |
| MF-Eco Replacement Filter Cartridge, Polyester                                     | A-541 |
| Holder for 2 Flexi Extractor Arms 160mm diam. (max.3m)                             | A-086 |

## MF-Grinder with Jet-Pulse Filter Cartridge Cleaning

**Complete Welding/Grinding Booth - Ready to use!** MF-Grinder is a complete working booth. Just plug it in and start welding, or grinding. It is a working booth with side walls and 6mm heavy duty steel table (900x600mm) and built in down draft grid which exhausts 2000m<sup>3</sup>/h. The fume or dust is filtered and recycled. For extra convenience, the filter cartridge is equipped with a Jet-Pulse pneumatic cleaning system.

**Combined Water Filter and Spark Trap** MF-Grinder is equipped with an expansion chamber and two water filters that filter away the larger particles and, in a safe way, take care of sparks!

**Filter Cartridge with Jet-Pulse Cleaning** The filter cartridge inside the MF-Grinder is efficiently cleaned by the built in Jet-Pulse pneumatic cleaning system

**Legs or Wheels** MF-Grinder is equipped with either 125mm legs or with wheels so the MF-Grinder can easily be moved around to where it is best needed.



### Accessories

- ▶ Lights
- ▶ Electric Outlet
- ▶ Welding Gun Holder
- ▶ Earth Connection

### Product List

|   |       |
|---|-------|
| MF-Grinder with light and legs 125mm: 1.1kW/1Phase/230V/50Hz    | P-565 |
| MF-Grinder with light and legs 125mm: 1.1kW/3Phase/400V/50Hz    | P-566 |
| Mobile MF-Grinder with light and wheels: 1.1kW/1Phase/230V/50Hz | P-567 |
| Mobile MF-Grinder with light and wheels: 1.1kW/3Phase/400V/50Hz | P-568 |
| Replacement filter cartridge. Polyester                         | P-541 |

## JET-Cleaner

**NEW!**



### JET-Cleaner Filter Cartridge Cleaner

The JET-Cleaner is a machine that fast and efficiently cleans cartridge filters. It is made for cleaning Mobi-Flex and Wall-Flex filter cartridges (P-160). When you lose airflow, take out the filter cartridge and put it into the JET-Cleaner. It only takes 30 second and airflow is back to normal.

**JET-Pulse cleaning** system is a combination of normal back pulse and shaking. It is a very efficient and fast way of cleaning dirty cartridges.

**100 times longer life** The JET-Cleaner will give your normal filter cartridges up to 100 times longer life. It is a substantial saving!



### 30 Years experience!

30 years experience of design and manufacturing combine to bring you well-proven techniques and progressive new ideas.

### Product List

JET-Cleaner for Mobi-Flex and Wall-Flex filter cartridge (P-160)

P-555

## Vehicle Exhaust Extraction



### Hose Reels

- ▶ Drum 650, 1000, 1250 mm
- ▶ Spring operated with locking mechanism
- ▶ Hoses in 75mm, 125mm and 150mm diam.
- ▶ The reels are available with or without hose
- ▶ The reel can be combined with our fans
- ▶ 7.5m or 10m of hose - more available if required.

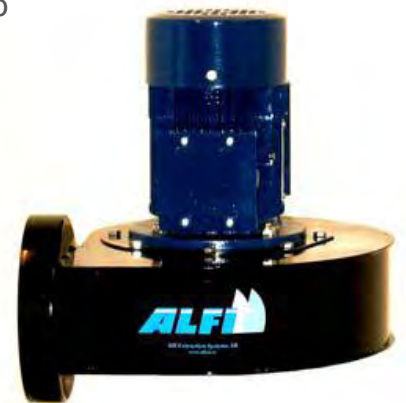
## Alfi Fans and Motors

For use with Extraction Arms: A-fan 14; A-Fan 21; A-Fan 21 Turbo

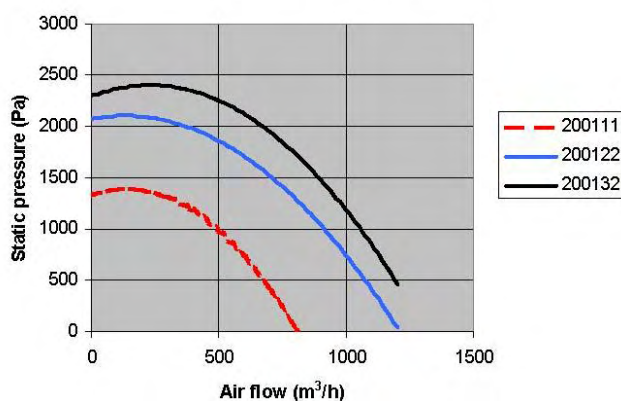
Designed for optimal extraction air flow and highest reliability

The fans fit directly to the Extractor arm or together with a mounting bracket. Outlet is round with a 200mm diameter

The A-Fan 21 Turbo is recommended for extension arms and is supplied with all filtered extraction systems



A fans Static pressure vs. Air flow



### Mounting:

The A- fans fit directly onto the wall bracket of Alfi Extraction Arm IS.

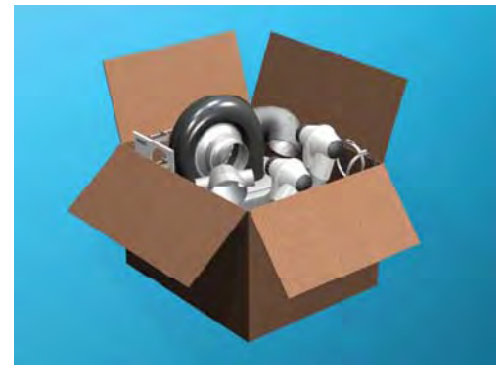
For installations with Extension Arms use fan bracket with swivel.

# Local Filter Kits

## LFK

This latest range of Local Filter Kits is the complete solution for removing dust, fume and gases from your work place.

Your solution - delivered in a box!

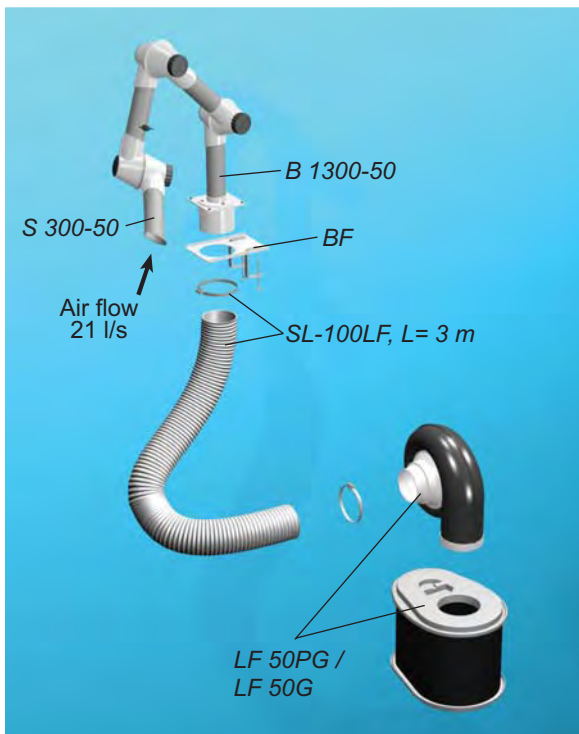


Single or double headed

For a wide range of industries



## LFK 150



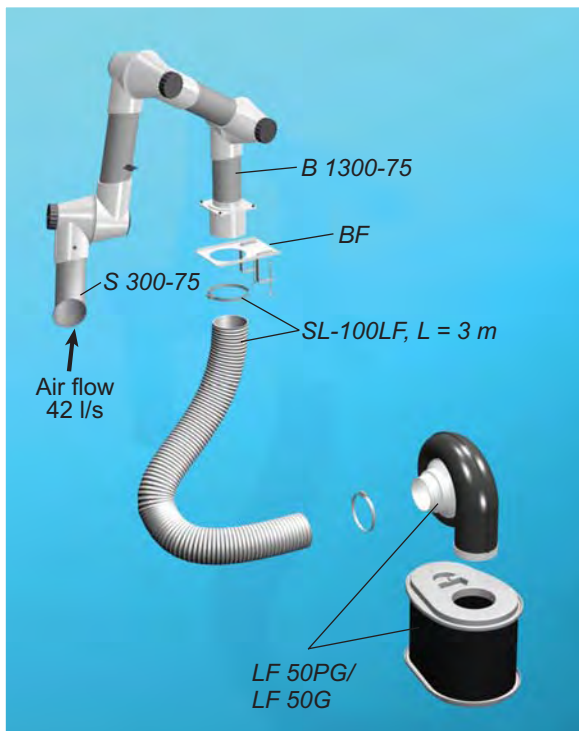
The LFK 150 is a single arm system, ideal for stand alone workstations, based on the Terfu 50 mm diameter arm.

## LFK 250



The LFK 250 is a twin arm system, utilising the Terfu 50 mm diameter arms. The system is supplied with interconnecting ductwork, hose adaptors, and table brackets.

## LFK 175



The LFK 175 is a single station system utilising the Terfu 75 mm diameter; this delivers higher air volumes for greater capture performance.

## Accessories

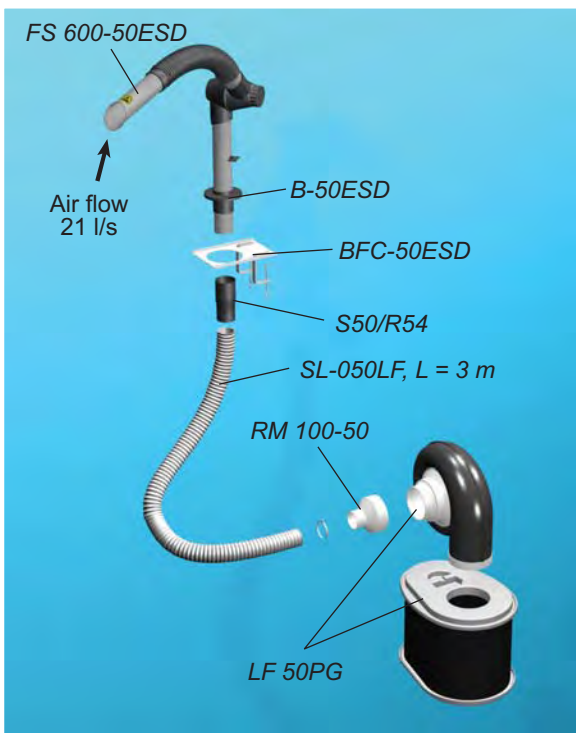


**FLAT SCREEN HOOD**  
The best extraction efficiency at table and bench work.  
Part number:  
PH 300-50 (Ø50 mm)  
PH 300-75 (Ø75 mm)

**DOME HOOD**  
Capture vapours from open vessels.  
Part number:  
K 350-50 (Ø50 mm)  
K 350-75 (Ø75 mm)

**SQUARE HOOD**  
Used to capturing gases from above or the sides of the workarea.  
Part number:  
SH 300-50 (Ø50 mm)  
SH 300-75 (Ø75 mm)

## LFK 150F



The LFK 150F is a single station system using the new flex arm, providing a lower cost solution with superb flexibility. The arm and flex nozzle is antistatic (ESD) and is ideal for electronic assembly.

## LFK 250F



The LFK 250F is a twin station system using the new flex arm, providing a lower cost solution with superb flexibility for two workstation. The system is supplied with the hose adaptors and interconnecting ductwork.

## LFK 350C



The LFK 350C is a unique system using a polycarbonate cabinet, for maximum peace of mind. When working within the cabinet you are assured that effective capture is always there. Ideal for open glue pots, analytical equipment or test areas.



### Portable filter unit

**Part.no: LF 50PG-230 particle/gas filter**

**Part.no: LF 50G-230 gas filter**

A fan and filter combination with a quiet running, high power compact fan, with integrated speed controller. The LF 50PG is equipped with a multistage filter comprising HEPA and gas filter. The LF 50G filter is equipped with a gas filter



### Speed control fan

**Part.no: FF 50-230**

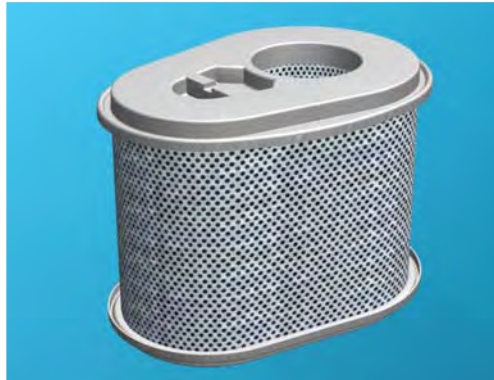
The integrated speed control allows you to infinitely vary the airflow to ensure maximum user control. The fan has been aerodynamically designed for optimum performance with minimal pressure drop. This creates a low noise unit with excellent air capacity.



### Particle/Gas filter

**Part.no: FHC 50**

A two stage filter that separates dust and fume particles with the initial HEPA section. This is followed by a Activated Carbon filter for adsorption of VOC's, gases and odours.



### Gasfilter

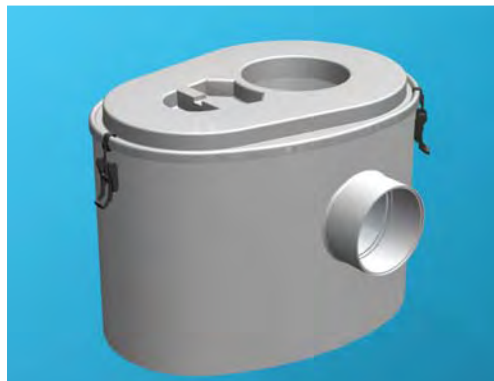
**Part.no: FC 50**

A high capacity (6.5 Kg) filter for applications needing gas filtration only. The high quality granulated activated carbon is suitable for the adsorption of VOC's, gases and odours. Please see application guide for more information.

### VTA adaptor

**Part.no: LF VTA**

A specially designed sleeve to enable the filtered air to be vented to atmosphere, e.g. connection to a existing duct system.



**Dynamic Engineering Australia Pty Ltd**

7/52 Kent Street Cannington WA 6107 | Ph: (08) 9356 7633 | Fax: (08) 9356 7644  
Email: sales@dynamiceng.com.au | www.dynamiceng.com.au

# Application guide line

| Type of application    | Hazard substances  | Rec. LFK         | Rec. filter  |
|------------------------|--|------------------|--------------|
| Soldering (Electronic) | Resin, Lead, Terpene, Limonene, Borneol, Isosyanates   | LFK 150F/250F    | Particle/Gas |
| Solder Pot             | Resin, Lead, Terpene   | LFK 175          | Particle/Gas |
| Gluing / Bonding       | VOC <sup>1</sup> , Methylmetacrylate (MMA), Toluene, Ethyl-2-cyanoacrylate, Tetrahydrofuran, Cyklohexanone | LFK 150/175      | Gas          |
| Screen printing        | Methyl ethyl ketone (MEK), Toluene   | LFK 150          | Gas          |
| Cleaning / degreasing  | Acetone, Toluene, MEK, VOC's <sup>1</sup>  | LFK 350C         | Gas          |
| Dental Lab             | Dust, MMA  | LFK 175          | Particle/Gas |
| Nail salon             | 2-Hydroxyethyl methacrylate (HEMA), MMA, Acetone, buffing dust   | LFK 150          | Particle/Gas |
| Laser cutting          | Dust, metal particulate, odour   | LFK 150          | Particle/Gas |
| Moulding               | Epoxi, Styrene   | LFK 175          | Gas          |
| Conservation           | VOC's <sup>1</sup>   | LFK 175/LFK 350C | Particle/Gas |
| Precision TIG welding  | Welding fume, Gases, Ozone   | LFK 175          | Particle/Gas |
| Stained Glass working  | Lead fume, VOC's <sup>1</sup>  | LFK 175          | Particle/Gas |
| Botany research        | VOC's <sup>1</sup>   | LFK 175          | Gas          |
| Sculpturing            | VOC's <sup>1</sup> , silica dust, sealants   | LFK 150/LFK 175  | Particle/Gas |

<sup>1</sup> Volatile Organic compounds

## Health aspects

### Particles from fume and dust.

Some particles from substances such as quartz can enter and remain in the lungs. Other particles can enter the blood stream and are transported to other organs and areas of the body. If the fume for instance includes lead the particles can enter the alveolus in the lungs and then transferred to the blood stream and can be transported to the skeleton.

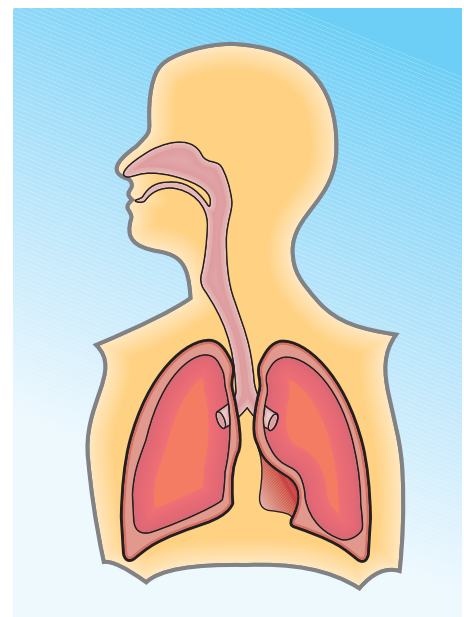
### Vapour from solvents (VOC).

Nearly all solvents are Volatile Organic Compounds or liquids. They are used in a many every day applications, such as component cleaning, degreasing, and to dissolve products that are not able to be dissolved in water. They also form the drying agent in products such as adhesives, paints, and varnishes. Vapours from these solvents typically have a narcotic effect that courses tiredness, dizziness and intoxication. Vapour and gases from solvents can also enter your body by the respiratory system and then spread to the brain and liver. The vapours from solvents are also irritating your eyes and respiratory system.

### Save your lungs!

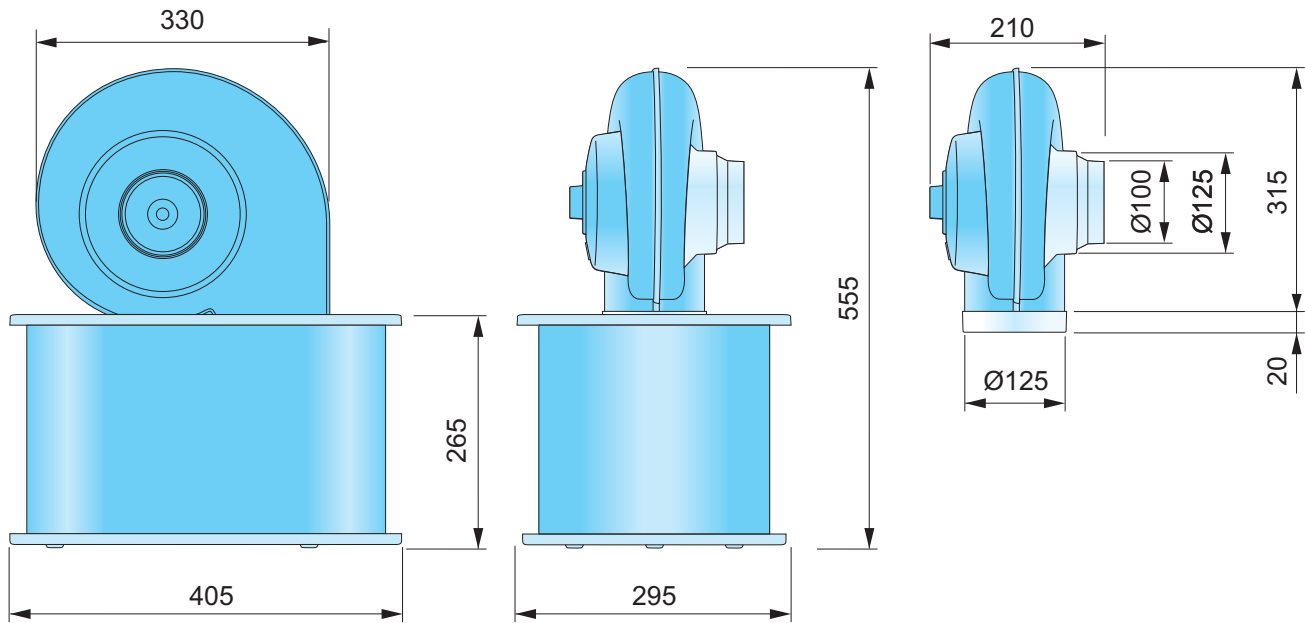
By using a suitable and effective extraction solution combined with an efficient filter system, you can reduce or even eliminate the risk of working with airborne hazards.

Particles smaller than 5 µm enter your lungs through the alveolus and can harm you in a many ways. It is best practice to prevent the airborne hazard entering the breathing zone by capturing it at source.



**Dynamic Engineering Australia Pty Ltd**

7/52 Kent Street Cannington WA 6107 | Ph: (08) 9356 7633 | Fax: (08) 9356 7644  
 Email: sales@dynamiceng.com.au | www.dynamiceng.com.au



## Technical description

### Technical Data LF 50

Airflow 0-80 l/s (max)  
 Weight 8 Kg  
 Noise level (1 m) 60 dB(a)  
 Power 195 W, 230 V 50Hz

#### Particle / Gasfilter

FHC 50 HEPA filter H13\*/Activated carbon filter

#### Gasfilter

FC 50 Carbon filter 6.5 Kg activated carbon  
 FCC 50 Carbon filter 7.2 Kg chemical carbon

\*Filter efficiency for a H13 filter is 99.997% for 0.3 µm particles

