

PUREX Superflow™ Arm Purification Systems

The Superflow™ Arm Purification System is designed to protect personnel from inhaling hazardous fumes and dust that are produced during a wide range of manual and automated processes. These harmful emissions can cause serious long term illnesses such as sionasal cancer and occupational asthma.

The Superflow™ system can cater for up to 50 x 25mm extraction arms or (for increased flexibility) a combination of different diameter arms, Cleancabs™, and plenum extraction chambers depending on the type of applications.

Typical Applications

- Chemical and biological treatments
- Medical procedures
- Pharmaceutical production
- Manual and automated soldering
- Etching, marking and cutting metals or plastics
- Welding
- Powder handling and packaging
- and many more...

Features

- **Digital control program with Graphic Display**
- **Upgradeable filter and pump modules**
- **Reverse flow configuration which prolongs filter life**
- **Patented filter designs**
- **Small footprint**
- **Quiet operation**
- **Continuous exhaust air monitoring with audible and visible alarm**
- **Interchangeable specialist gas sensors**
- **Corrosion resistant stainless steel cabinet**
- **Easy maintenance design**

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For more
information visit
www.purexLtd.co.uk



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The Ideal Partner to Industry

Purex is the leading name in the field of dust & fume extraction and purification technology.

Thousands of systems have been installed worldwide by our experienced team. Our dedicated people are available to help, should you require a standard unit or a bespoke solution.

We also offer an unrivalled service to our OEM partners, including full back up with:

- Design
- Installation
- Maintenance
- Sales
- Marketing
- Training

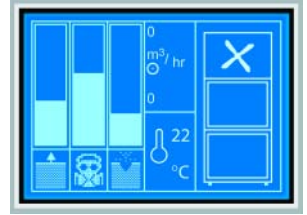


Phil Mullins
Managing Director

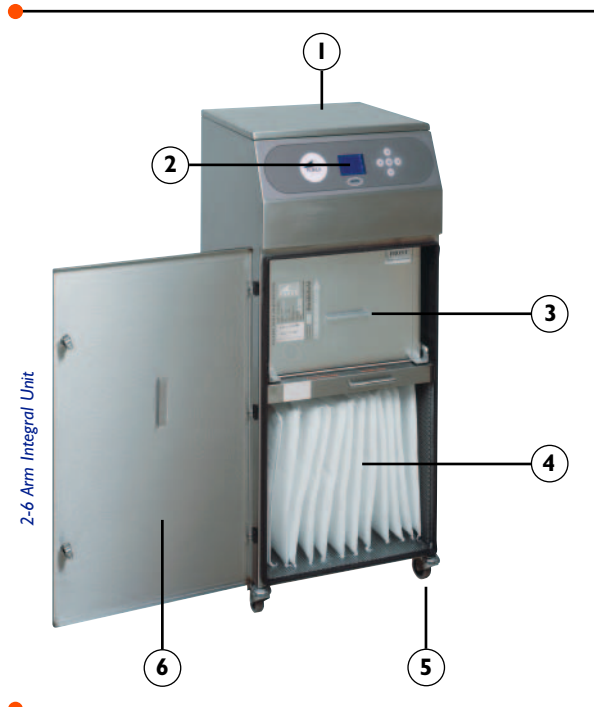
IMPORTANT: HEALTH AND SAFETY

Many health and safety regulations such as **COSHH** and **OSHA** state that “the employer must not expose personnel to substances that are hazardous to health” and “should constantly monitor process exhaust fume for gas and particulate levels”. Unfortunately many fume extraction units only indicate when a filter is blocked and have no safety features to prevent contaminated air being pumped into the workplace should a problem occur.

Purex Superflow™ systems ensure the safety of personnel and ensure legal compliance with health and safety regulations by employing gas and particulate sensors to monitor exhaust air. These sensors **constantly monitor** the quality of the air and give audible and visible alerts if a filter is missing, blocked, saturated, damaged or where a seal is compromised. This means that no hazardous material can get through a Purex system without alerting the user.



Digital Control Program with Graphic Display



Integral Unit Features:

1. Digital™ control system
2. Graphic display
3. Quick change main filters
4. Patented Labyrinth™ pre-filter
5. Castors for mobility
6. Easy access door

LOW COST OF OWNERSHIP

Regularly stopping production to change blocked filters can be a time consuming and expensive process, so long filter life is essential to keep costs low.

The lifespan of a filter depends on its ability to capture dust particles without restricting airflow through the filter. The more dust a filter can hold without blocking, the longer it will last.

The patented Purex Labyrinth™ pre-filter prevents premature blockage of the main filter by removing larger dust particles from the airstream before they enter the main filter. The Labyrinth™ offers around ten times the life of a normal pre-filter by capturing dust in a graduated fibre density matrix. This matrix has excellent dust holding capacity while still allowing air to flow through the filter.

Purex main HEPA filters utilise a reinforced pleated design which offers greater life than normal filters as reinforcement allows the use of high pressure blowers that are able to draw air through partially blocked filters for much longer, vastly increasing their life.

In independent tests, Purex main HEPA filters removed 99.997% of all particles above 0.3 microns and 95% down to 0.01 microns. A chemical layer is also used to remove hazardous gas from the airstream.

To reduce downtime, all Purex filters are easily accessible and can be changed (independently) in seconds without the use of any tools.

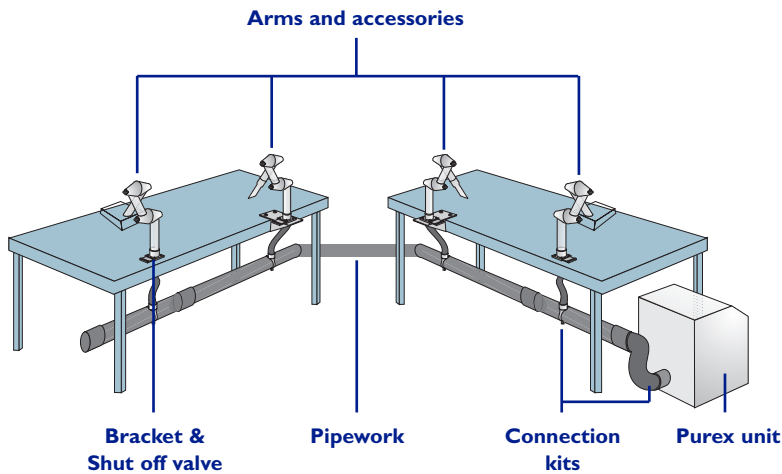


Patented Labyrinth™ Pre-filter

Purex Superflow™ Arm Extraction System



TYPICAL LAYOUT



Digital™ Control System

Purex units employ an electronic control system with a Graphic Display that allows the operator to set the airflow rate exactly.

Flow Control

To reduce operating costs, Purex arms include airflow shut off valves which are closed when the arm is not in use. The unique Flow Control System then reduces the motor speed yet maintains the correct airflow which also increases filter life.

Integral units

Should be used in applications that generate large amounts of particulate as they utilise long life Labyrinth™ pre-filters.

Arms and Accessories

- Up to 50 extraction arms can be connected to one Purex unit depending on the diameter of the arm.
- Multiple units can be used if more arms are required.
- See datasheet (3) for arms and accessories.

PRODUCT RANGE

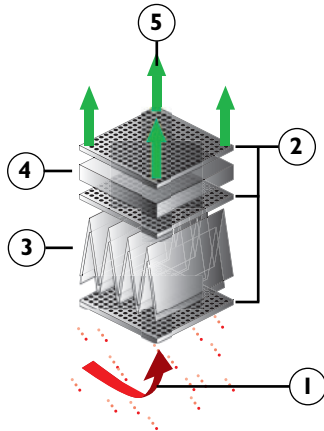


TECHNICAL SPECIFICATION

Unit	2-6 Arm		4-10 Arm	6-15 Arm		8-20 Arm	10-25 Arm		20-50 Arm	
Part number (standard unit)	080026D	081026D	080410D	080505D *	080507D *	021820D	022120D	022121D	-	-
Part number (integral unit)	080026iD	081026iD	080410iD	080504D #	080506D #	021820iD	022120iD	022121iD	0442500D	0442510D
Voltage	230V ±10%	120V ±10%	230V ±10%	230V ±10%	120V ±10%	230V ±10%	400V 3ph+N	220V 3ph	400V 3ph+N	220V 3ph
Wattage	0.45 kW	1.0 kW	1.2 kW	2.4 kW	2.0 kW	1.5 kW	3.0 kW	3.0 kW	5.5 kW	5.5 kW
Sound rating	52 dBA	55 dBA	52 dBA	65 dBA	65 dBA	59 dBA	59 dBA	59 dBA	59 dBA	59 dBA
Max stations										
25mm arms	6		10		15	20		25		50
32mm arms	4		8		12	16		20		40
38mm arms	3		6		9	12		15		30
54mm arms	2		4		6	8		10		20
Cleancabs™	2		4		6	8		10		20
Plenum cowls	2		4		6	8		10		20
100mm arms	-		1		2	4		5		9
Frequency	50 Hz / 60 Hz		50 Hz / 60 Hz	50 Hz / 60 Hz		50 Hz / 60 Hz	50 Hz / 60 Hz		50 Hz / 60 Hz	
Cabinet width (not inc hose)	455 mm		455 mm	540 mm		690 mm	690 mm		1210 mm	
Cabinet depth (not inc hose)	480 mm		480 mm	670 mm		710 mm	710 mm		885 mm	
Hose (recommended)	82 mm		82 mm	100 mm		150 mm	150 mm		150/200 mm	
Standard unit										
Cabinet height (inc castors)	720 mm		720 mm	-		1100 mm	1100 mm		1810 mm	
Cabinet weight (inc filters)	47 Kg		47 Kg	-		112 Kg	112 Kg		340 Kg	
Integral unit										
Cabinet height (inc castors)	1040 mm		1040 mm	1150 mm		1400 mm	1400 mm		-	
Cabinet weight (inc filters)	55 Kg		55 Kg	80 Kg		134 Kg	134 Kg		-	

Controls	Digital™ intelligent control program monitors critical safety parameters and ensures that the system runs at optimum power levels.
Interfacing	J101 - ON/OFF Control: Extraction unit starts/stops when the associated machinery is switched ON/OFF. J201 - Filter Blocked Warning: A signal is sent to associated machinery to trigger an alert or to shut the associated machinery down.
Construction	All machines are constructed of corrosion resistant stainless steel and are mounted on four castors for increased mobility.
*	Integral unit - 2-tier
#	Integral unit - 3-tier

Purex Superflow™ Filters and Accessories



Example of a main filter

1. Reverse air flow system

Slows and turns the contaminated air through 90 degrees which forces larger particles out of the airstream thus preventing premature blockage of the main filter.

2. Air equalisation plates

Reinforce the filter and increase filter life by ensuring the whole of the filter media is used.

3. Reinforced HEPA element

A membrane that is 100 times stronger than the HEPA media itself is used to ensure that the filter cannot split under high pressure.

4. Chemical layer

A chemical layer ensures that hazardous gases are removed from the airstream.

5. Purified air returned to workplace

The exhaust air from a Purex unit is usually cleaner than the ambient air in the workplace.

Replacement Filters

The lifespan of any filter depends on several key factors such as the area of media employed, the quality of design and the type of media used. Purex engineers ensure that the correct filters are specified for a particular application so that the downtime required to change filters is minimal and that consumable costs are kept low.

Features:

- Guaranteed to be unburstable
- Exceptional filter life
- Excellent construction quality
- Interchangeable filters for different processes
- Low consumable costs

REPLACEMENT FILTERS



Main filter



Pleated bag



Pad



Labyrinth™

Unit	(Number of arms)					
	2-6	4-10	6-15	8-20	10-25	20-50
Main filters (all units)						
HEPA filter	-	-	113650#	-	-	110633
HEPA/Chemical filter	113505	113505	113652*	110615	110615	-
Chemical filter	113508	113508	113651#	110610	110610	110627
Cleanroom filter	113530	113530	-	110632	110632	-
Castellated carbon filter	-	-	-	110620	110620	-
Pre-filters (standard units)						
Pleated bag filter	-	-	-	-	-	111144
Pre-filter pad (Pack of 4)	202260	202260	-	200280	200280	200310
Pre-filters (integral units)						
Labyrinth™ pre-filter	111057	111057	111098* 111101#	111037	111037	111072†
* 2-Tier • # 3-Tier • † Alternative pre-filter						