CE EMC
ISO 9002 REGISTERED FIRM

Purex
Arm Purification Systems

The Superflow 8000™ 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 8000™ 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
By carefully matching the correct combination of extraction unit, arm layout, pre-filter and main filter a Purex system can be used to extract and purify hazardous fumes and dust which are generated during: -

▲ 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...

2a

The System Features...

▲ **IQ2000 Intelligent Purification Control Program**
▲ **Upgradeable filter and pump modules**
▲ **Reverse flow configuration which prolongs filter life**
▲ **Compactness and quiet operation**
▲ **Continuous exhaust air monitoring with audible alarm**
▲ **Interchangeable specialist gas sensors**
▲ **Corrosion resistant stainless steel cabinet**
▲ **Easy maintenance design**

For more information visit
www.purexltd.co.uk


PUREX

PUREX

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
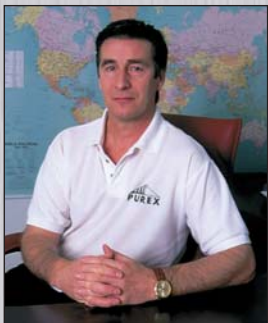
Phil Mullins
**Managing Director**

HEALTH AND SAFETY IS PARAMOUNT

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 8000™ 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.
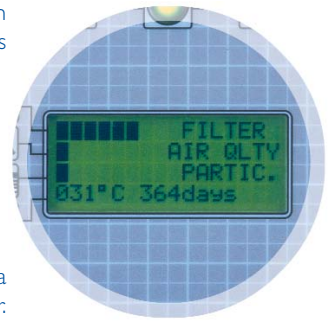
Constant Monitoring System with LCD Display
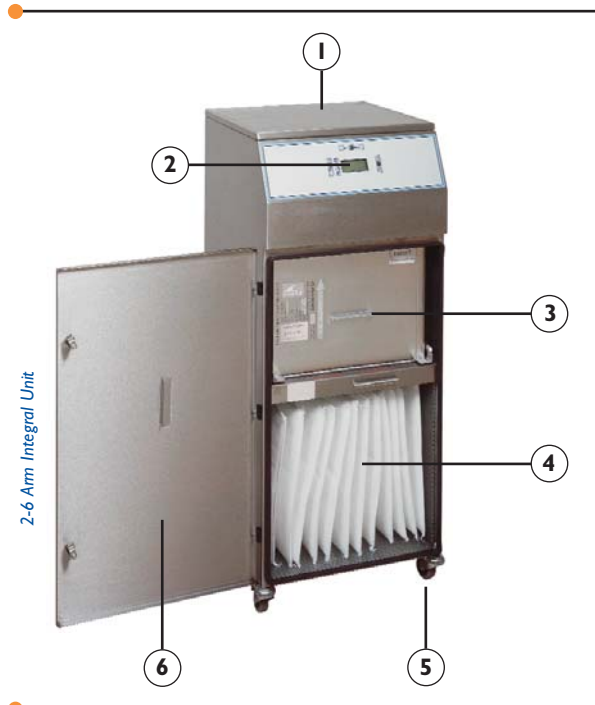
2-6 Arm Integral Unit

Integral Unit Features:

1. **IQ2000** control system

2. LCD display

3. Quick change main filters

4. Patented concertina pre-filter

5. Castors for mobility

6. Easy access door

LOW COST OF OWNERSHIP

Regularly stopping production to change filters can be a time consuming and expensive process. Filter life is directly proportional to the area of filter media used and the level of vacuum. Filters become blocked more quickly in low pressure extraction systems due to their limited ability to sustain adequate airflow through a partially blocked filter.

Purex HEPA filters utilise a pleated design which offers greater life than normal filters and a reinforcing membrane is employed which allows the use of high pressure pumps that are able to draw air through partially blocked filters for much longer, vastly increasing their life.

In independent tests, the 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 any 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.
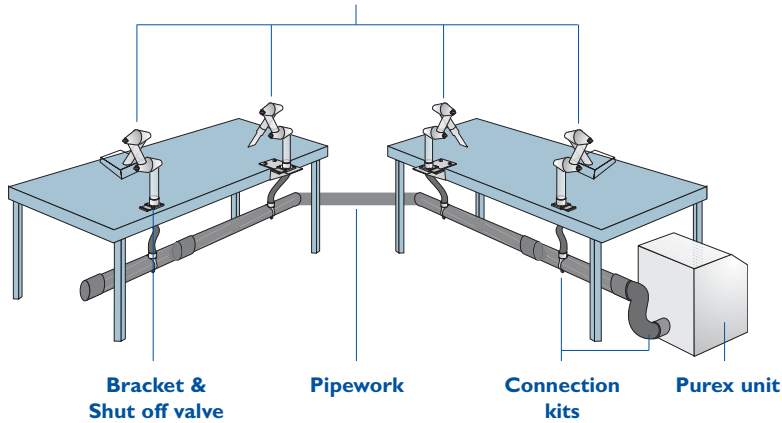
The Purex patented concertina pre-filter offers around ten times the life of a normal pre-filter and prevents premature blockage of the main filter by removing larger particles from the airstream.

Patented Concertina Pre-filter

Purex **Superflow 8000**™
Arm Extraction System

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TYPICAL LAYOUT

Arms and accessories

**Bracket &
Shut off valve**   **Pipework**   **Connection
kits**   **Purex unit**

IQ2000 Control System
Purex units employ an electronic control system with an LCD 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.

Integral units
Should be used in applications that generate large amounts of particulate as they utilise long life cuboid or concertina 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

**Arms: (2-6) (4-10)
Standard unit**

**Arms: (2-6) (4-10)
Integral unit**

**Arms: (8-20) (10-25)
Standard unit**

**Arms: (8-20) (10-25)
Integral unit**

**Arms: 20-50
Standard unit**

TECHNICAL SPECIFICATION

Unit	2-6 Arm		4-10 Arm	8-20 Arm	10-25 Arm		20-50 Arm	
Part number (standard unit)	080026	081026	080410	021820	022120	022121	0442500	0442510
Part number (integral unit)	080026i	081026i	080410i	021820i	022120i	022121i	-	-
Voltage	230V ±10%	120V ±10%	230V ±10%	230V ±10%	400V 3ph+N	220V 3ph	400V 3ph+N	220V 3ph
Wattage	0.35kW	0.8kW	1.2kW	1.5kW	3.0kW	3.0kW	5.5kW	5.5kW
Sound rating	52dBA	55dBA	52dBA	59dBA	59dBA	59dBA	59dBA	59dBA
Max stations	6 × 25mm • 1'' arms		10 × 25mm • 1'' arms	20 × 25mm • 1'' arms	25 × 25mm • 1'' arms		50 × 25mm • 1'' arms	
	4 × 32mm • 1,1/4'' arms		8 × 32mm • 1,1/4'' arms	16 × 32mm • 1,1/4'' arms	20 × 32mm • 1,1/4'' arms		40 × 32mm • 1,1/4'' arms	
	3 × 38mm • 1,1/2'' arms		6 × 38mm • 1,1/2'' arms	12 × 38mm • 1,1/2'' arms	15 × 38mm • 1,1/2'' arms		30 × 38mm • 1,1/2'' arms	
	2 × 54mm • 2,1/4'' arms		4 × 54mm • 2,1/4'' arms	8 × 54mm • 2,1/4'' arms	10 × 54mm • 2,1/4'' arms		20 × 54mm • 2,1/4'' arms	
	2 × Cleancabs™		4 × Cleancabs™	8 × Cleancabs™	10 × Cleancabs™		20 × Cleancabs™	
	2 × Plenum cowls		4 × Plenum cowls	8 × Plenum cowls	10 × Plenum cowls		20 × Plenum cowls	
	-		1 × 100mm • 4'' arms	4 × 100mm • 4'' arms	5 × 100mm • 4'' arms		9 × 100mm • 4'' arms	
Frequency	50Hz / 60Hz		50Hz / 60Hz	50Hz / 60Hz	50Hz / 60Hz		50Hz / 60Hz	
Cabinet width (not inc hose)	455mm • 18''		455mm • 18''	690mm • 27,1/4''	690mm • 27,1/4''		1210mm • 47,1/2''	
Cabinet depth (not inc hose)	480mm • 19''		480mm • 19''	710mm • 28''	710mm • 28''		885mm • 35''	
Hose (recommended)	82mm • 3,1/4''		82mm • 3,1/4''	150mm • 6''	150mm • 6''		150/200mm • 6/8''	
Standard unit								
Cabinet height (inc castors)	720mm • 28,1/2''		720mm • 28,1/2''	1100mm • 43,1/4''	1100mm • 43,1/4''		1810mm • 71,3/4''	
Cabinet weight (inc filters)	47Kg • 104lbs		47Kg • 104lbs	112Kg • 247lbs	112Kg • 247lbs		340Kg • 750lbs	
Integral unit								
Cabinet height (inc castors)	1040mm • 41''		1040mm • 41''	1400mm • 55,1/8''	1400mm • 55,1/8''		-	
Cabinet weight (inc filters)	55Kg • 121lbs		55Kg • 121lbs	134Kg • 296lbs	134Kg • 296lbs		-	

Controls	IQ2000 intelligent control program monitors critical safety parameters and ensures that the system runs at optimum power levels.
Optional management	IPN intelligent purification network when fitted allows real time monitoring and control of up to 31 machines from a central PC. FDD software allows remote monitoring and diagnosis through a modem.
Interfacing	J4 and J7 ports allow two way control of associated machinery.
Construction	All machines are constructed of corrosion resistant stainless steel and are mounted on four castors for increased mobility.

Purex **Superflow 8000**™ Filters and Accessories

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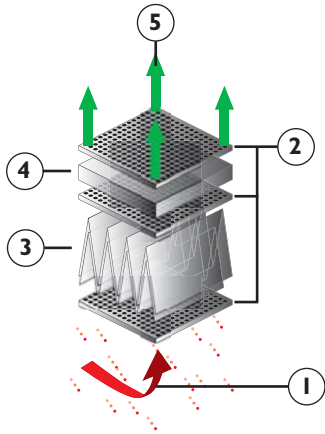
Example of a main filter

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 drastically 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 completely 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
	Cuboid	Concertina	

Unit	2-6 Arm	4-10 Arm	8-20 Arm	10-25 Arm	20-50 Arm
Main filters (all units)					
HEPA filter	-	-	-	-	110633
HEPA/Chemical filter	113500	113495	110600	110600	-
HEPA/Double chemical filter	113505	113505	110615	110615	-
Chemical filter (Standard)	113520	113520	110610	110610	110627
Chemical filter (Heavy duty)	113508	113508	-	-	-
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)					
Cuboid pre-filter	111058	111058	111012	111012	-
Concertina pre-filter	111057	111057	111037	111037	-

VERTICAL INLINE FILTER UNITS (to upgrade standard units only)

These units can be added to a *standard machine* to increase the life of the main filter in applications where high levels of gas or particles are produced

Unit	2-6 Arm		4-10 Arm		8-20 Arm	10-25 Arm
Vertical inline filter unit	107023	107025	107023	107025	107035	107035
part number	(Particle)	(Gas)	(Particle)	(Gas)	(Particle)	(Particle)
Cuboid filter	111058	-	111058	-	111012	111012
Concertina filter	111057	-	111057	-	111037	111037
Chemical filter (Heavy duty)	-	113508	-	113508	-	-
Cabinet height (not inc castors)	495mm • 19,1/2''		495mm • 19,1/2''		487mm • 19,1/4''	487mm • 19,1/4''
Cabinet width (not inc hose)	455mm • 18''		455mm • 18''		690mm • 27,1/4''	690mm • 27,1/4''
Cabinet depth (not inc hose)	480mm • 19''		480mm • 19''		650mm • 25,1/2''	650mm • 25,1/2''
Cabinet weight (inc filters)	18Kg • 40lbs		18Kg • 40lbs		37Kg • 82lbs	37Kg • 82lbs

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