

The Extraction & Filtration Solution for Ink Jet Fumes

inkjet
Fume Extraction System

for small character
C.I.J printers

These units are designed to capture and filter hazardous solvent fumes from inkjet printers then return clean air to the workplace without the need for an expensive and disruptive vent to atmosphere ducting system.

Inkjet printers are used widely throughout manufacturing and packaging industries to apply information, identification codes and best before dates etc. onto products made from various materials such as glass, card and metal.

Various organic solvents are used as carriers for the ink pigment such as Methyl Ethyl Ketone (M.E.K.) which can cause eye irritation and CNS depression, it is also a skin irritant and is harmful by ingestion or inhalation.

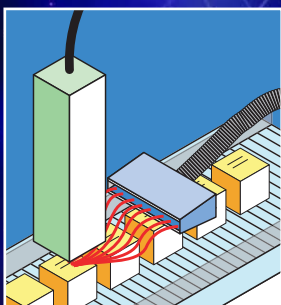
Purex Solution

The Purex Inkjet extraction and purification system effectively captures fumes from both the print head and vents in the control unit, therefore protecting personnel from inhaling the solvent fumes.

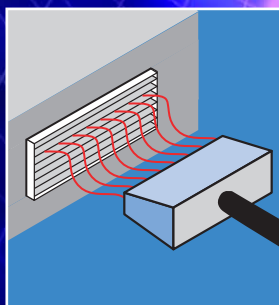
Fumes are then drawn through a Purex Solvent-Lock filter which utilises a specialized blend of filter media to adsorb and oxidise the solvent safely before clean air is returned to the workplace.

Features and Benefits

- Protects personnel.
- Ensures you comply with health and safety legislation.
- Prevents medical conditions such as fatigue, headaches, nausea.
- Reduces absenteeism.
- Removes solvent odours.
- Completely mobile.
- Compact and quiet in operation.
- Easily maintained.
- Long filter life.



Efficiently captures fumes from the print head.



Can also capture fumes from the control unit vent.

- **Protect Personnel**
- **Remove Solvent Odour**
- **Comply with Legislation**
- **Have a Cleaner, Safer Environment**

The Problem

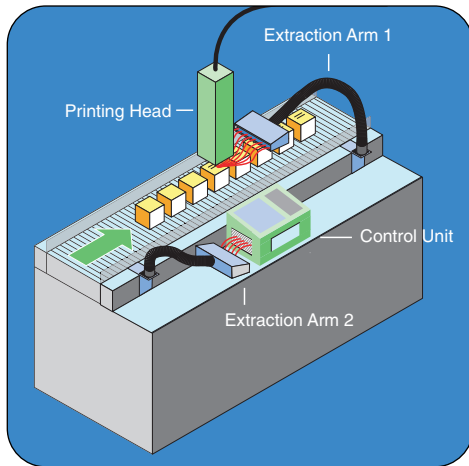
Evaporating solvents from injet processes can be harmful to health if inhaled. Therefore a suitable extraction system is required in order to comply with health and safety regulations.

The Solution

The Purex Inkjet Fume Extraction System extracts solvent vapours from the printing process (and the control unit) then removes the hazardous vapour by using a unique Solvent-Lock filter.

2-Point Extraction

Purex Systems utilise two specially designed Delta Cowls, one to extract fumes from the print



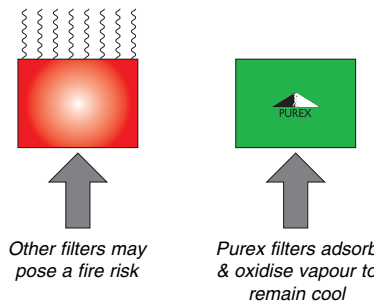
head and the other to extract from the vents on the control unit itself. This 2-point approach ensures that fumes are not allowed to pollute the work area.

The delta cowls are attached to 38mm flexible stainless steel arms which are easy to position yet remain in place once installed. The arms are supplied with a valve which allows adjustment to the airflow and a robust and secure clamp fixing bracket* is also supplied.

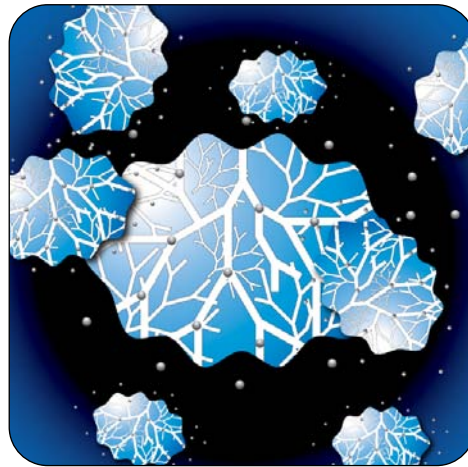


Unique Solvent-Lock Filters

Standard carbon filters used in other types of filter systems should not be used with solvent fumes as there is a danger of an exothermic reaction between the carbon and the fumes which may cause a fire risk.



Purex solve this problem by utilising a unique blend of porous filter media which adsorbs solvent vapour in thousands of variable sized channels throughout its structure. Molecules of solvents or other contaminants are adsorbed on to the extended surfaces of the media, form bonds at a molecular level and are then retained



1 gm of Purex Filter Media has a surface area larger than an Olympic Swimming Pool !

within its structure. To give you an idea of how much surface area this blended filter media has to adsorb vapour - 1gm has a surface area larger than an olympic swimming pool !

* other extraction arms available to suit application



Multi Stage Filtration



Whisper Stream™
Quiet Operation



VariColour™
Warning System



Unique
Solvent-Lock Filters

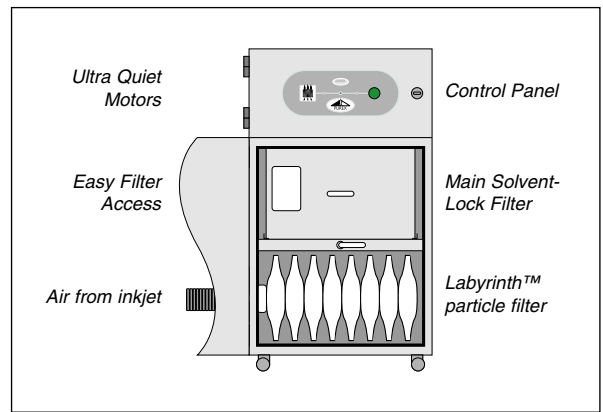


Labyrinth™
Patented Pre-Filter



Standard Features...

- Labyrinth™ pre-filter protects the main filter from particles.
- Unique Solvent-Lock main filters adsorb inkjet vapour.
- Whisper Stream™ ultra quiet motors.
- Exceptionally low capital and running costs.
- Minimal installation required.
- Excellent filter life reduces consumable costs.
- Castors for extra mobility.



Upgrade packs for extra performance...



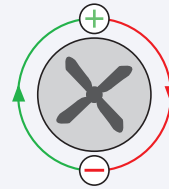
Upgrade Pack 1 - Automatic Electronic Airflow Control

Flow Control

Once set, the Closed Loop Flow Control system automatically adjusts the speed of the motor to maintain a constant airflow throughout the life of the pre-filter.

VariColour™ Warning System

Indicates when the particle filter needs replacing.



Upgrade Pack 2 - Inkjet Interfacing

ON/OFF control

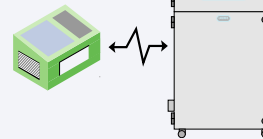
Extraction unit starts/stops when the inkjet is switched on/off.

Run on Timer

Extractor briefly runs on after inkjet is switched off to ensure all fume is removed.

Particle Filter Blocked Warning

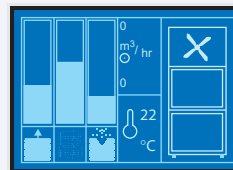
A signal is sent to the inkjet to either trigger an alert or to shut down the printer.



Upgrade Pack 3 - Digital Control System and Full Sensing Package

The addition of a Purex Digital Control Board delivers the full features and benefits of upgrade packs 1 and 2, plus:

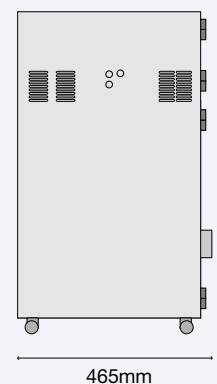
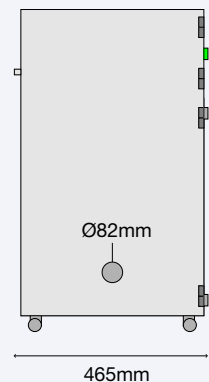
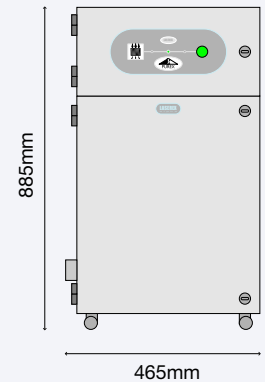
- **Gas / Particle Sensor:** Alerts the user if solvent or particles are escaping the system.
- **Filter Alert:** Triggers audible and visible alarms if either the particle or chemical filter is blocked / saturated.
- **Plus:** Motor run indicator, Temperature sensor, Filter life bars, Filter change graphics, Hose blocked alert.



Simple, clear, illuminated graphic display shows the real time status of the system without the need for text and different languages.

Unit	Specification			
	Inkjet-200		Inkjet-400	
Voltage	230V ±10%	120V ±10%	230V ±10%	120V ±10%
Part number	0AL2104	0AL2105	0AL4105	0AL4106
Wattage	0.14 kW	0.27 kW	0.24 kW	0.48 kW
Max flowrate	200 m³/hr	125 cf/m	400 m³/hr	235 cf/m

Replacement Solvent-Lock filter (#113513) • Replacement Labyrinth™ pre-filter (#111085)



50/60 Hz

41 Kg

45 dBA

Purex Product Range



Datasheet 1

FumeCube™ multi purpose arm extraction unit for 1 or 2 users.



Datasheet 2

SuperFlow™ multi purpose arm extraction unit for up to 50 users.



Datasheet 3

Fume extraction arms and accessories.



Datasheet 4

CleanCab™ extraction cabinets.



Datasheet 5

FumeBuster™ multi purpose arm extraction unit for up to 4 users.



Datasheet 6

Portable fume extractors for up to 10 soldering iron users.



Datasheet 7

SuperFlow™ fume extractors for up to 50 soldering iron users.



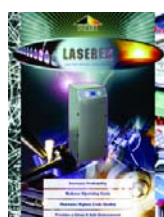
Datasheet 8

Tip extraction accessories.



Datasheet 9a

PowerFlow™ systems for wave and reflow soldering and other automated processes.



Datasheet 9b

Laserex™ systems to extract fumes from laser marking, engraving, cutting and welding applications.



Datasheet 9c

Laserex™ Alpha systems to extract fumes from light laser marking and engraving applications.



Brochure

Contains pictures and specifications of all Purex systems.

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