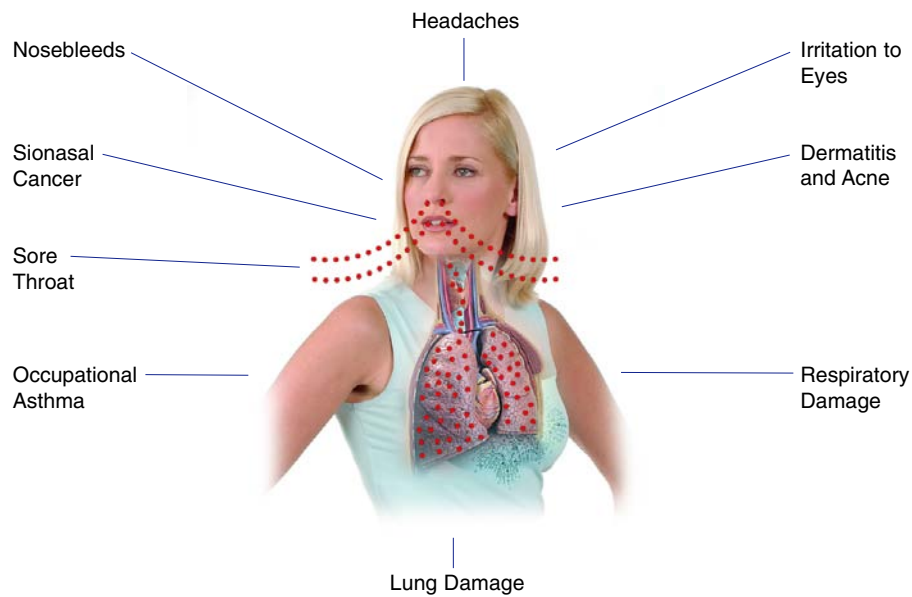


WHY DO YOU NEED EXTRACTION?

Potential Medical Conditions Caused by Dust and Fume.



Why do people need fume extraction systems?

Many types of dust and fume are hazardous to health if inhaled. People can become permanently sensitised to fumes which means that continued exposure, even to very small amounts of fume, may cause asthma attacks and the person affected may never be able to carry out that work again!

Because of this, employees should be protected by the best fume extraction systems available.

Why fume extraction is essential:

- Prevents serious conditions such as occupational asthma and cancer.
- Reduces absenteeism and improves employer relations.
- Improves the working environment.

Why does the employer need fume extraction systems?

Many industrial processes such as soldering, laser processing and welding all produce dust and fumes which are hazardous to health and which can also reduce productivity or spoil the product. Fumes can also damage expensive production equipment and cause extensive downtime for repair and/or cleaning.

Local and International health and safety regulations require the employer to protect personnel from hazardous dust and fumes. Failure to do so can result in expensive compensation claims and fines.

Why fume extraction is essential:

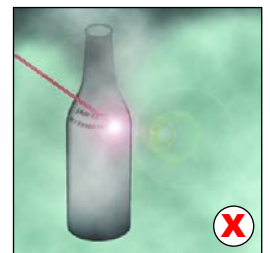
- To comply with COSHH, OSHA or equivalent local regulations.
- To avoid expensive health compensation claims from employees.
- To comply with local environmental legislation.
- To prevent damage to products or equipment.
- To prevent expensive downtime.

Why do OEMs need fume extraction systems?

Manufacturers of lasers, soldering, welding and other equipment need to ensure that their equipment is not damaged and that the performance of their equipment is not impaired by dust and fumes.

Why fume extraction is essential:

- OEM equipment will perform better and will not be damaged by dust and fume.
- OEMs can increase sales by selling the fume extractors to their customer.
- OEMs prevent production problems for their customer by supplying the fume extraction.
- OEMs generate aftersales revenue by supplying filters to their customers.



Without good extraction fumes can damage equipment, increase reject rates and cause downtime for cleaning / repairs.



Purex fume extraction ensures maximum productivity, excellent product quality and reduced downtime.

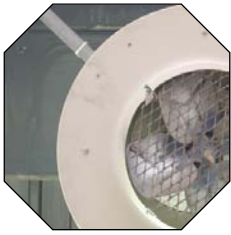


Purex fume extraction ensures compliance with local and international health and safety legislation.

WHY RECIRCULATE?

Purex - The better alternative to pumping fumes outside.

Many people who are looking for fume extraction may consider pumping their dust and fumes outside into the atmosphere. This method has many problems associated with it (see below).



System Failure

External: If a fixed centralised system fails then the extraction for the whole factory can go down causing severe problems and downtime.

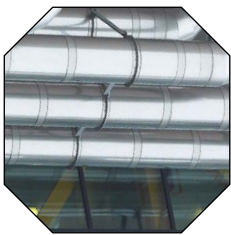
Purex: Purex machines very rarely go wrong. On the rare occasion they do, then replacement parts can easily be fitted in minutes.



Risks and Hazards

External: Long runs of ducting can harbour contaminants and material which could cause a fire risk. Ducting may also need to be periodically cleaned which can be expensive and disruptive.

Purex: Purex machines use either a short piece of hose or pipe to connect to the process which can usually be installed in minutes and which can be easily cleaned.



Expensive Installation

External: Ducting for external venting may require long runs to be installed in the ceiling. This requires specialist installation using scaffold etc. and can be very disruptive to work and can also be expensive.

Purex: No long ducting required, simply connect to the process using short lengths of pipe or hose.



Holes in Buildings

External: Installing ducting usually means that large holes need to be specially cut in either the walls or roof. They also need to be sealed. All this can be expensive as specialised contractors and equipment are often required.

Purex: No holes required! Simply connect a hose to the process and that's it. Done.

The alternative is a Purex Recirculating Filter System. The Purex extractor captures dust and fumes in specialised filters and returns clean, purified air to the workplace.

The Purex extractor is simply connected next to the process. If the process moves, the extractor easily moves with it.

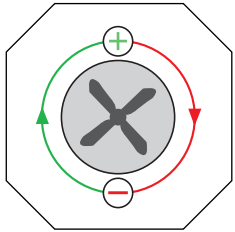
| Question. | Venting into the environment | Recirculation System (Purex) |
|--|---|---|
| How long will the system take to install? | Several days on average. | In many cases just minutes. |
| Will there be any disruption in the workplace? | Scaffold etc may be required in several places, disrupting work for lengthy periods. | Minor if any. |
| Can the system be moved? | Only with scaffold etc. and disruption to work. | Yes. Simply unplug and push to new location. |
| Are holes in the building required? | Yes. They need to be specially cut and sealed. | No. |
| Are external emissions regulations a problem? | Company must investigate and obey local laws. | Not applicable. No problem. |
| Is there any energy lost e.g. heating costs? | Money & Energy is wasted when heated or conditioned air is pumped outside. | No energy or heat is lost as the air is recycled. So costs are lowered. |
| Are there any ducting / installation costs? | Expensive - as ducting needs to be purchased and specialist installation is required. | Minimal if any, depending on process. |
| Are there any cleaning costs? | Specialist cleaning required to prevent risk of fire or contamination. Again scaffold/disruption. | Minimal if any. |
| Are there any decontamination costs? | Specialist decontamination may be required. | None. |
| Can fumes be drawn back into the workplace? | Yes. Through windows or vents. | Not possible as all fumes are locked into filters. |
| Could there be disputes with my neighbours? | Yes. Over hazardous fumes and odours. | Not applicable. No problem. |

WHY CHOOSE PUREX?

Purex - The most cost effective fully featured extractors available.

For more than 20 years, Purex have listened to the concerns of their customers and have designed extractors to solve the everyday problems that customers face. The latest 'Digital' range of machines are the pinnacle of this design process.

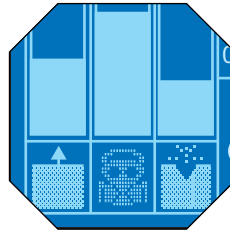
Q & A



Flow Control

Q: As a filter gets blocked the airflow begins to fall. This affects product quality and production and fumes can leak into the workplace. How do I prevent this?

A: Purex systems incorporate 'Automatic Flow Control' which speeds up the motor when required to maintain a constant airflow throughout the life of the filter.



Gas & Particle Sensors

Q: My employees could be exposed to hazardous fumes if a filter is damaged or not fitted correctly. How do I make sure this doesn't happen?

A: Purex 'Digital' systems use sensors to constantly monitor exhaust air so if hazardous fumes escape the filters then audible and visual alarms are triggered to warn employees and keep them safe.



Pre-filter life

Q: I have been told that some pre-filters do not last very long and so running some extraction machines is expensive. How do Purex cut down on this cost?

A: Purex patented 'Labyrinth' pre-filters are made from deep multi-grade media which has tremendous dust holding capacity, meaning they capture more dust when compared to other filters. Also, they fold flat and weigh very little, so the carriage cost can be half that of other filters.



Downtime to change filters

Q: Changing filters on my current extractor is a hassle as I have to change them frequently and it's not easy to do. How can this be made easier with Purex?

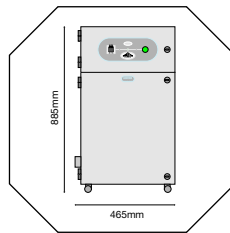
A: Purex filters last much longer and so do not need to be changed as often. Also, changing them couldn't be simpler - stop the machine, open the door on the front and change the filter. Simple.



Extractor Noise Problem

Q: Some extractors run on full power all the time and are very noisy. This could annoy and distract my employees. How can this be prevented with a Purex?

A: Purex machines use 'Whisper Stream' blowers which are extremely quiet. Flow Control machines also run slowly at first and only increase speed to overcome filter blockage. This feature also makes filters last even longer.



The extractor is too big.

Q: I only have a small space for an extractor to fit into. Plus, once it is installed I don't want to have to move it to change filters or for maintenance.

A: Purex extractors are as small as possible (e.g. less than 500mm²!) All filters are changed from the front in seconds and maintenance access is from the top with few or even no tools required to carry out most part replacements.



PVC Problems

Q: How do I stop PVC fumes corroding my extractor? I cannot find a solution anywhere.

A: Purex PVC extractors are manufactured from specialist materials and are coated to prevent corrosion. Hundreds of Purex PVC machines are out in the field dealing with this problematic material.



How do I set the correct airflow?

Q: Many machines I have seen run at a fixed speed is this a problem? Also how do I set the correct airflow?

A: The correct airflow can be set on a Purex machine quickly and easily. Filters also last longer if the machine is set up correctly and does not run at 100% all the time. (see flow control)

We've Designed the Digital with you in mind.

The latest 'Digital' extraction systems have some very powerful features built in, such as - Automatic Flow Control, Gas & Particle Sensors, Electronic Interfacing, Filter Blocked Warnings, Filter Exhausted Warning, Precise Electronic Airflow Readings, Temperature Warnings, Real Time System Monitoring and Filter Change Icons.

All this automatically works behind the scenes... All you have to do is ...

- Plug the machine in...
- Connect to the process...
- Set the airflow...
- and that's it! Your Purex will look after the rest.

User friendly engineering designed to save you money.

Purex 'Digital' fume extractors are designed to give you the longest filter life and one of the most comprehensive monitoring systems available.

Money saving features:

- **Flow Control System** - Constantly monitors airflow and adjusts motor speed automatically to keep the extraction rate at the level you have set. This extends filter life because particles are not compacted into filters at high speeds.

It also ensures that fumes are extracted correctly throughout the life of the filter. This ensures product quality and prevents downtime and expensive damage to equipment caused by debris.

- **Labyrinth™** - patented pre-filters have exceptional life and work with a wide variety of dust and fumes. This means you buy less filters and a single machine can cover a variety of tasks. (Particularly useful for engraving lasers.)
- **HEPA Filtration** - 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.
- **WhisperStream™** - powerful high pressure motors pull air through partially blocked filters, increasing filter life even further and reducing your costs.
- **Reverse Airflow** principal forces larger particles out of the airstream which extends filter life even further.
- **Air Equalisation** - Special plates are used to slow the airflow to the speed at which the filters are most effective. This prevents premature HEPA blockage and ensures gases can be adsorbed in the chemical layer. If air was allowed to pass through the chemical layer too quickly then hazardous gas would enter the workplace unfiltered!
- **Unburstable Filters** - All Purex filters are specially pressure tested to ensure that they will not fail in service.
- **Hood / Extraction and Pipework Design** - Purex engineers ensure you get the right connection set up with your machine to ensure it operates at peak efficiency.

